

Draft Supplemental Environmental Impact Report

Sacramento to Roseville Third Main Track



Capitol Corridor Joint Powers Authority
2150 Webster Street, 3rd Floor
Oakland, CA 94612

October 2023

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Appendix

Appendix A: Notice of Preparation Materials

Appendix B: Air Quality/Greenhouse Gase Technical Memorandum

List of Acronyms and Abbreviations

AB	Assembly Bill
ADL	Aerially Deposited Lead
ALUC	Airport Land Use Commission
ALUCP	Airport Land Use Compatibility Plan
APE	Area of Potential Effects
bgs	below ground surface
BMP	Best Management Practice
BSA	Biological Study Area
CAAQS	California Ambient Air Quality Standards
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CCJPA	Capitol Corridor Joint Powers Authority
CDHS	California Department of Health Services
CEQA	California Environmental Quality Act
CGS	California Geology Survey
CHMIRS	California Hazardous Material Incident Reporting System
CLUP	Comprehensive Land Use Plan
CMP	Congestion Management Process
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CO	carbon monoxide
CPRR	First Transcontinental Railroad
CRHR	California Register of Historical Resources
CWA	Federal Clean Water Act
DPM	diesel particulate matter
EPA	(United States) Environmental Protection Agency
FHWA	Federal Highway Administration
FRA	Federal Railroad Administration
FTA	Federal Transit Administration

GHG	greenhouse gas
HCP	Habitat Conservation Plan
HI	Hazard Index
HRA	Health Risk Assessment
in/sec	inches per second
KVP	Key Viewpoint
MCL	Maximum Contaminant Level
MMRP	Mitigation Monitoring and Reporting Plan
MP	Mile Post
MRZ	Mineral Resource Zone
MTP	Metropolitan Transportation Plan
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NCCP	Natural Community Conservation Plan
NHRP	National Register of Historic Places
NHS	National Highway System
NO ₂	nitrogen dioxide
NOA	Naturally Occurring Asbestos
NOP	Notice of Preparation
NO _x	nitrogen oxide
NPDES	National Pollutant Discharge Elimination System
OPR	Office of Planning and Research
PCAPCD	Placer County Air Pollution Control District
PIA	Project Impact Area
PM	particulate matter
PM ₁₀	particulate matter less than or equal to 10 microns in diameter
PM _{2.5}	particulate matter less than or equal to 2.5 microns in diameter
ppm	parts per million
PRC	Public Resources Code
Project	Sacramento to Roseville Third Main Track Project
RC	reinforced concrete

ROG	reactive organic gases
ROW	Right-of-Way
RWQCB	Regional Water Quality Control Board
SACOG	Sacramento Area Council of Governments
SB	Senate Bill
SCS	Sustainable Communities Strategy
SEIR	Supplemental Environmental Impact Report
SIP	State Implementation Plan
SLF	Sacred Lands File
SMAQMD	Sacramento Metropolitan Air Quality Management District
SO ₂	sulfur dioxide
SPRR	Southern Pacific Railroad
SR3T	Sacramento to Roseville Third Main Track Project
SVAB	Sacramento Valley Air Basin
SWPPP	Storm Water Pollution Prevention Plan
TAC	Toxic Air Contaminant
TAG	Transportation Analysis Guidelines
TCE	Temporary Construction Easement
TCM	Transportation Control Measure
TCR	Tribal Cultural Resource
UP	Union Pacific
UPRR	Union Pacific Railroad
USACE	United States Army Corps of Engineers
VMT	Vehicle Miles Traveled

Executive Summary

This Draft Supplemental Environmental Impact Report (SEIR) was prepared in accordance with the California Environmental Quality Act (CEQA) and the State CEQA Guidelines §15132. The Capitol Corridor Joint Powers Authority (CCJPA) is the Lead Agency for the environmental review of the Sacramento to Roseville Third Main Track (Project or SR3T Project). The SEIR examines the potential effects of the proposed revised Project, which involves two components – the Railroad Bridge Crossings and the Passenger Train Layover Facility.

The revised Project would constitute a change to the previously approved SR3T Project. Therefore, the Draft SEIR evaluates whether any new or substantially more severe impacts on the environment would result from the proposed modifications on these two components, compared to the environmental impacts disclosed in the previously certified SR3T Project EIR. The Draft SEIR also incorporates the applicable mitigation measures that were identified in the previously certified EIR.

ES.1 Project Location and Description

The original SR3T Project is located in Sacramento County and Placer County between the existing Sacramento Valley Station and the existing City of Roseville Station (Figures 1-1 and 1-2). The SR3T Project proposed the construction and operation of approximately 17.8 miles of new main track within the existing rail corridor and identified the following improvements:

- Minor reconfiguration of the City of Roseville Station to accommodate increased Capitol Corridor service in the future.
- Grading and installation of new subgrade and drainage
- Placement of new rail and ties
- Special track work with turnouts, crossovers and associated switches and equipment
- New wayside track signals
- Eleven replaced railroad bridges, including a new bridge across the American River in Sacramento

The Final EIR for the SR3T Project was certified on November 18, 2015 (State Clearinghouse No. 2014072005). This supplement to the certified EIR will contain only the information necessary to make the previously certified EIR adequate for the Project as revised, would be given the same notice and public review as was given to the original draft EIR as per 14 CCR § 15087, and would be circulated by itself without re-circulating the previous draft or final EIR.

Subsequent to that original CEQA certification, CCJPA is seeking to accommodate changes in design associated with the SR3T Project. The SR3T Project SEIR covers two revised Project components:

- *Railroad Bridge Crossings*: Supplemental analysis for up to three railroad bridge crossings across Business I-80 to accommodate changes in project design. This includes

modifications (replacement and realignment) to the existing Elvas Underpass (Caltrans Bridge 24-0031) and to the existing B Street Underpass (Caltrans Bridge 24-0023) (Figure 1-3). The modified Elvas Underpass would consist of Elvas East Underpass and Elvas West Underpass. Elvas East Underpass would be a single track structure on the existing Union Pacific (UP) Fresno Subdivision. Elvas West Underpass would consist of a two track structure on the UP Martinez Subdivision. The modified B Street Underpass would consist of two separate track structures (e.g., two track and one single track structure) on the UP Martinez Subdivision.

- *Passenger Train Layover Facility:* The original SR3T EIR contemplated a passenger train layover facility adjacent to Old Town Roseville, located along the west leg of the Union Pacific (UP) wye track connecting the UP Roseville Subdivision with the UP Valley Subdivision. Subsequent to certification of the Final EIR for the SR3T Project, supplemental analysis would be conducted for a revised location of the proposed passenger train layover facility (Figure 1-4).

ES.2 Summary of Impacts and Mitigation Measures

An analysis of the environmental impacts associated with implementation of the revised Project has been conducted and is contained in this Supplemental EIR. Eleven issue areas are analyzed in detail and presented in Chapter 3 of this SEIR. Table ES-1 provides a summary of the potentially significant environmental impacts that would result during construction and operation of the revised Project, mitigation measures that would lessen potential environmental impacts, and the level of significance of the environmental impacts that would remain after implementation of the proposed mitigation, if necessary.

Table ES-1. Summary of Environmental Impacts and Mitigation Measures			
Potential Environmental Impact	Significance Determination (Before Mitigation)	2015 EIR Mitigation Measures	Significance Determination (After Mitigation)
Aesthetics and Visual Resources			
Threshold 3.1-A: Would the revised Project have a substantial adverse effect on a scenic vista? Threshold 3.1-B: Would the revised Project substantially damage scenic resources, including, not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<i>Railroad Bridge Crossings and Passenger Train Layover Facility</i> No Impact. The railroad bridge crossings and revised passenger train layover facility would not be located within a scenic vista or state designated scenic highway. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.	Not Applicable	Not Applicable
Threshold 3.1-C: Would the revised Project, in 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 points). If in an urbanized area, conflict with applicable zoning and other regulations governing scenic quality?	<i>Railroad Bridge Crossings</i> Potentially Significant. During construction, viewers in the open space/recreation and residential visual assessment units would see construction activities for limited periods. <i>Passenger Train Layover Facility</i> Potentially Significant. During construction, viewers adjacent to the site would see construction activities for limited periods. The revised location of the proposed	<i>Railroad Bridge Crossings and Passenger Train Layover Facility</i> AES-2a: Minimize visual disruption through vegetation retention and placement of staging areas. To minimize visual disruption, construction activities would implement the following measures. - Limit preconstruction vegetation removal to that necessary for construction. - Where possible, preserve existing vegetation, particularly along the edge of construction areas, to help screen views.	<i>Railroad Bridge Crossings</i> Less than Significant. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR. <i>Passenger Train Layover Facility</i> Less than Significant. The revised Project would not change the significance conclusions or result in any

Table ES-1. Summary of Environmental Impacts and Mitigation Measures			
Potential Environmental Impact	Significance Determination (Before Mitigation)	2015 EIR Mitigation Measures	Significance Determination (After Mitigation)
	tracks and access road would be visible, but would be visually consistent with existing UPRR tracks. While the majority of the proposed layover tracks and access road would not be visible to nearby residences due to existing landscaping, fencing, and intervening businesses, some adjacent uses would see railcars and locomotives stored at the site.	- After construction, regrade and revegetate areas disturbed by construction and staging to pre-project conditions. - To the extent feasible, do not site construction staging areas immediately adjacent to existing residential, recreational, or other sensitive visual receptors. AES-2b: Minimize fugitive light from portable sources used for construction. The construction contractor shall minimize fugitive light from portable lighting sources used during construction by adhering to the following practices. - Project-related light and glare shall be minimized to the maximum extent feasible within the constraints of safety considerations. - Color-corrected halide lights shall be used. - Portable lights shall be operated at the lowest allowable wattage and height and shall be raised to no more than 20 feet above ground level. - All lights shall be screened and directed down toward work activities and away from the night sky and nearby residents to the maximum extent within the constraints of safety considerations. - The number of nighttime lights used shall be minimized to the greatest extent possible. Implementation of this measure will reduce—to the extent feasible as governed by site-specific safety requirements—the overall amount of nighttime light and glare introduced to the Project vicinity during construction.	new significant impacts not previously identified in the 2015 Draft EIR.

Table ES-1. Summary of Environmental Impacts and Mitigation Measures			
Potential Environmental Impact	Significance Determination (Before Mitigation)	2015 EIR Mitigation Measures	Significance Determination (After Mitigation)
		<i>Passenger Train Layover Facility</i> AES-2c: Screen Ancillary Project Facilities. Ancillary Project facilities shall not be sited near residences, parks, or other sensitive visual receptors. Where avoidance is not feasible, facilities shall be screened with perimeter landscape screening.	
Threshold 3.1-D: Would the revised Project create a new source of light or glare that would adversely affect day or nighttime views in the area?	<i>Railroad Bridge Crossings and Passenger Train Layover Facility</i> Potentially Significant. Sensitive receptors, including residential uses would be exposed to higher levels of lighting during the nighttime hours for a temporary duration throughout project construction.	<i>Railroad Bridge Crossings and Passenger Train Layover Facility</i> AES-2b: Minimize fugitive light from portable sources used for construction. <i>Passenger Train Layover Facility</i>	<i>Railroad Bridge Crossings and Passenger Train Layover Facility</i> Less than Significant. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

Table ES-1. Summary of Environmental Impacts and Mitigation Measures			
Potential Environmental Impact	Significance Determination (Before Mitigation)	2015 EIR Mitigation Measures	Significance Determination (After Mitigation)
<i>Air Quality/Climate Change/Greenhouse Gases</i>			
Threshold 3.2-A: Would the revised Project conflict with or obstruction of implementation of the applicable air quality plan?	<i>Railroad Bridge Crossings and Passenger Train Layover Facility</i> No Impact. The revised Project would not conflict with or obstruct implementation of applicable air quality plans. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.	Not Applicable	Not Applicable
Threshold 3.2-B: Would the revised Project result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is a nonattainment area for a applicable federal or state ambient air quality standard?	<i>Railroad Bridge Crossings and Passenger Train Layover Facility</i> Potentially Significant. Emissions associated with the revised Project would exceed the SMAQMD's and PCAPCD's daily NOx threshold.	<i>Railroad Bridge Crossings and Passenger Train Layover Facility</i> Mitigation Measure AQ-2a: Implement air district–recommended basic and enhanced best management practices to reduce construction-related NOX emissions (SMAQMD and PCAPCD). CCJPA shall require construction contractors to implement basic and enhanced NOX construction mitigation measures recommended by SMAQMD and PCAPCD. Emission reduction measures shall include, at a minimum, the following applicable measures (additional measures may be identified by SMAQMD, PCAPCD, or the contractor, as appropriate). All measures shall be included in the final design and contractor specifications for the Project. Minimize idling time either by shutting equipment off when not in use or by reducing the time of idling to 5 minutes [required by California Code of Regulations,	<i>Railroad Bridge Crossings and Passenger Train Layover Facility</i> Less than Significant. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

Table ES-1. Summary of Environmental Impacts and Mitigation Measures			
Potential Environmental Impact	Significance Determination (Before Mitigation)	2015 EIR Mitigation Measures	Significance Determination (After Mitigation)
		Title 13, sections 2449(d)(3) and 2485]. Provide clear signage that posts this requirement for workers at the entrances to the site. Many construction companies comply with the idling restriction through equipment inspection and maintenance programs. • Maintain all construction equipment in proper working condition in accordance with manufacturer's specifications. The equipment must be checked by a certified mechanic and determined to be running in proper condition before it is operated. • Submit to SMAQMD and PCAPCD a comprehensive inventory of all offroad construction equipment of 50 or more horsepower that shall be used an aggregate of 40 or more hours during any portion of construction. ○ The inventory shall include the horsepower rating, engine model year, and projected hours of use for each piece of equipment. ○ The Project representative shall provide the anticipated construction timeline including start date, and name and phone number of the project manager and onsite foreman. ○ This information shall be submitted at least 4 business days prior to the use of subject heavy-duty offroad equipment. ○ The inventory shall be updated and submitted monthly throughout the duration of the Project, except that an inventory shall not be required for any 30-day period in which no construction activity occurs. • Provide a plan for approval by SMAQMD and PCAPCD demonstrating that the heavy-duty offroad vehicles (50	

Table ES-1. Summary of Environmental Impacts and Mitigation Measures			
Potential Environmental Impact	Significance Determination (Before Mitigation)	2015 EIR Mitigation Measures	Significance Determination (After Mitigation)
		horsepower or more) to be used in Project construction, including owned, leased, and subcontractor vehicles, shall achieve a Project-wide fleet-average 20 percent NOX reduction and 45 percent particulate reduction compared to the most recent ARB fleet average. ○ This plan shall be submitted in conjunction with the equipment inventory. ○ Acceptable options for reducing emissions may include use of late model engines, low emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, and/or other options as they become available. • Ensure that emissions from all offroad diesel powered equipment used on the project site do not exceed 40 percent opacity for more than three minutes in any one hour. ○ Any equipment found to exceed 40 percent opacity (or Ringelmann 2.0) shall be repaired immediately. ○ Noncompliant equipment shall be documented and a summary provided to SMAQMD and PCAPCD monthly. ○ A visual survey of all in-operation equipment shall be made at least weekly. ○ A monthly summary of the visual survey results shall be submitted throughout the duration of the Project, except that the monthly summary shall not be required for any 30-day period in which no construction activity occurs. The monthly summary shall include the quantity and type of	

Table ES-1. Summary of Environmental Impacts and Mitigation Measures			
Potential Environmental Impact	Significance Determination (Before Mitigation)	2015 EIR Mitigation Measures	Significance Determination (After Mitigation)
		vehicles surveyed as well as the dates of each survey. - SMAQMD, PCAPCD, and/or other officials may conduct periodic site inspections to determine compliance. Mitigation Measure AQ-2b: Use modern fleet for on-road material delivery and haul trucks during construction to reduce NOX emissions (SMAQMD and PCAPCD). CCJPA shall ensure that construction contracts stipulate that all on road heavy-duty diesel trucks with a gross vehicle weight rating of 19,500 pounds or greater used at the project site shall comply with EPA 2007 on road emission standards for PM10 and NOX (0.01 and 0.20 grams per break horsepower-hour, respectively). These PM10 and NOX standards were phased in through the 2007 and 2010 model years on a percent of sales basis (50 percent of sales in 2007–2009 and 100 percent of sales in 2010). This mitigation measure assumes that all on road heavy-duty diesel trucks are compliant with EPA 2007 on road emission standards. Mitigation Measure AQ-2c: Reduce construction emissions to below SMAQMD and PCAPCD NOX thresholds (SMAQMD and PCAPCD). CCJPA shall ensure that construction-related emissions do not exceed SMAQMD's construction NOX threshold of 85 pounds per day. Potential measures in addition to those listed in Mitigation Measures AQ-2a and AQ-2b include but are not limited to those listed below. - Require the usage of EPA-rated Tier 3 or higher rated construction equipment. In general, the following NOX reductions can be achieved when replacing Tier 2 equipment (fleet average) with higher rated engine tiers.	

Table ES-1. Summary of Environmental Impacts and Mitigation Measures			
Potential Environmental Impact	Significance Determination (Before Mitigation)	2015 EIR Mitigation Measures	Significance Determination (After Mitigation)
		• Tier 3—38 percent NOX reduction. • Tier 4 interim—68 percent NOX reduction. • Tier 4 final—94 percent NOX reduction. • Work with SMAQMD to purchase NOX credits to offset remaining NOX construction emissions exceeding SMAQMD thresholds. <u>CCJPA shall also ensure that construction-related emissions do not exceed PCAPCD's construction NO_x threshold of 82 pounds per day. Potential measures include but are not limited to those listed below.</u> • <u>Require the usage of EPA-rated Tier 4 Final rated construction equipment. In general, replacing Tier 2 equipment with Tier 4 Final equipment can result in a 94% reduction in NO_x emissions.</u> • <u>Require the usage of EPA-rated Tier 4 locomotives for ballast hauling between quarries and the Project site.</u> • <u>Work with PCAPCD to purchase NO_x credits to offset remaining NO_x construction emissions exceeding PCAPCD thresholds.</u>	
Threshold 3.2-C: Would the revised Project expose sensitive receptors to substantial pollutant concentrations?	<i>Railroad Bridge Crossings and Passenger Train Layover Facility</i> No Impact. CO hot spots are not anticipated to occur. Construction activities would not result in exceedance of SMAQMD or PCAPCD health risk thresholds. Operational activities are not anticipated to	Not Applicable	Not Applicable

Table ES-1. Summary of Environmental Impacts and Mitigation Measures			
Potential Environmental Impact	Significance Determination (Before Mitigation)	2015 EIR Mitigation Measures	Significance Determination (After Mitigation)
	expose sensitive receptors to substantial pollutant concentrations. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.		
Threshold 3.2-D: Would the revised Project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<i>Railroad Bridge Crossings and Passenger Train Layover Facility</i> No impact. The proposed Project would not create objectionable odors affecting a substantial number of people. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.	Not Applicable	Not Applicable

Table ES-1. Summary of Environmental Impacts and Mitigation Measures			
Potential Environmental Impact	Significance Determination (Before Mitigation)	2015 EIR Mitigation Measures	Significance Determination (After Mitigation)
Threshold 3.2-E: Would the revised Project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<i>Railroad Bridge Crossings and Passenger Train Layover Facility</i> Less than Significant. GHG emissions generated by the revised Project would not exceed any published draft emissions thresholds or the net zero threshold used for this analysis. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.	Not Applicable	Not Applicable
Threshold 3.2-F: Would the revised Project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<i>Railroad Bridge Crossings and Passenger Train Layover Facility</i> Less than Significant. Implementation of the revised Project would support CARB and SACOG strategies to reduce single-occupancy vehicle usage and increase alternative transportation, as well as attainment of regional and statewide GHG policies and reduction targets. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.	Not Applicable	Not Applicable

Table ES-1. Summary of Environmental Impacts and Mitigation Measures			
Potential Environmental Impact	Significance Determination (Before Mitigation)	2015 EIR Mitigation Measures	Significance Determination (After Mitigation)
Biological Resources			
Threshold 3.3-A: Would the revised Project 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 or U.S. Fish and Wildlife Service?	<i>Railroad Bridge Crossings and Passenger Train Layover Facility</i> Potentially Significant. Implementation of the revised Project has the potential to impact several sensitive or special status species and associated habitats during construction activities.	<i>Railroad Bridge Crossings</i> Mitigation Measure BIO-1a: Install fencing and/or flagging to protect sensitive biological resources. Prior to construction, UPRR's contractor shall install high-visibility orange construction fencing and/or flagging, as appropriate, along the perimeter of the work area adjacent to Environmentally Sensitive Areas (e.g., sensitive habitats and elderberry shrubs). Where specific buffer distances are required for sensitive biological resources, they shall be specified under the corresponding measures below. UPRR shall ensure that the final construction plans show the locations where fencing will be installed. The plans shall also define the fencing installation procedure. UPRR or contractor (at the discretion of UPRR) shall ensure that the fencing is maintained throughout the duration of the construction period. If the fencing is removed, damaged, or otherwise compromised during the construction period, construction activities shall cease until the fencing is repaired or replaced. The Project's special provisions package shall provide clear language regarding acceptable fencing material and prohibited construction-related activities, vehicle operation, material and equipment storage, and other surface-disturbing activities within Environmentally Sensitive Area. Mitigation Measure BIO-1b: Implement a worker environmental awareness training program for construction personnel. Before any equipment staging, grading, or tree removal is undertaken in the PIA, UPRR shall prepare and implement a worker environmental awareness training program. The training program shall be provided to all construction personnel (contractors and subcontractors) to brief them on the need to avoid effects	<i>Railroad Bridge Crossings and Passenger Train Layover Facility</i> Less than Significant. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

Table ES-1. Summary of Environmental Impacts and Mitigation Measures			
Potential Environmental Impact	Significance Determination (Before Mitigation)	2015 EIR Mitigation Measures	Significance Determination (After Mitigation)
		on sensitive biological resources (e.g., riparian habitat, active bird nests, bat roosts) located in the PIA and the penalties for not complying with applicable state and federal laws and permit requirements. The training program shall be delivered by a biologist who will inform all construction personnel about the life history and habitat requirements of special-status species with potential for occurrence onsite, the importance of maintaining habitat, and the terms and conditions of the BOs and other permits. The training program shall also cover general restrictions and guidelines that must be followed by all construction personnel to reduce or avoid effects on sensitive biological resources during construction of the Build alternative. Mitigation Measure BIO-1c: Retain a qualified biologist to conduct periodic monitoring during construction in sensitive habitats. UPRR shall retain a qualified biologist to implement the worker environmental awareness training program and to conduct periodic site visits during construction activities that involve ground disturbance (e.g., vegetation removal, grading, excavation, bridge construction) within or adjacent to Environmentally Sensitive Areas. The timing and frequency shall be determined through coordination with UPRR, but monitoring shall take place at least weekly. The purpose of the monitoring is to ensure that measures identified in this report are properly implemented to avoid and minimize effects on sensitive biological resources and to ensure that the Project complies with all applicable permit requirements and agency conditions of approval. The biologist shall ensure that fencing around Environmentally Sensitive Areas remains in place during construction and that no construction personnel, equipment, or runoff/sediment from the construction area enters Environmentally Sensitive Areas. The monitor shall	

Table ES-1. Summary of Environmental Impacts and Mitigation Measures			
Potential Environmental Impact	Significance Determination (Before Mitigation)	2015 EIR Mitigation Measures	Significance Determination (After Mitigation)
		complete a monitoring log for each site visit, and a final monitoring report shall be prepared at the end of construction for submittal to CCJPA, the Federal Railroad Administration (FRA), and other overseeing agencies (i.e., CDFW, USFWS, and NMFS), as appropriate. Mitigation Measure BIO-3: Implement measures to avoid long-term effects on special-status plants documented in the Project impact area. If special-status plant species are found during the floristic survey, to the extent practicable and in consideration of other design requirements and constraints (e.g., meeting Project objectives and needs, avoidance of other sensitive resources) UPRR shall design the third track alignment to avoid or minimize potential impacts on special-status plants. If special-status plants cannot be avoided, UPRR shall consult with CDFW and USFWS (if federally listed species are found) to determine the appropriate compensatory measures for direct and indirect impacts that could result from Build Alternative construction. Measures may include preserving and enhancing existing populations, creation of offsite populations on Project mitigation sites through seed collection or transplantation, and restoring or creating suitable habitat in sufficient quantities to achieve no net loss of occupied habitat or individuals. A mitigation and monitoring plan shall be developed that describes how unavoidable effects on special-status plants will be compensated. Mitigation Measure BIO-4: Implement measures to avoid and minimize impacts on valley elderberry longhorn beetles and their habitat. A buffer zone of 100 feet or more shall be established and maintained around elderberry shrubs within the PIA, as feasible. Complete avoidance may be assumed when a 100-foot (or wider) buffer is established and maintained around elderberry	

Table ES-1. Summary of Environmental Impacts and Mitigation Measures			
Potential Environmental Impact	Significance Determination (Before Mitigation)	2015 EIR Mitigation Measures	Significance Determination (After Mitigation)
		plants with stems measuring 1 inch or more in diameter at ground level. In addition, the following avoidance and minimization efforts shall be implemented for construction operations in the vicinity of any elderberry shrubs that are not removed. • All areas to be avoided during construction activities, specifically the 100-foot buffer zone around elderberry shrubs, shall be fenced and flagged. In areas where encroachment on the 100-foot buffer has been approved by USFWS, a minimum setback of at least 20 feet from the dripline of each elderberry shrub shall be provided to the extent practicable. In some cases, construction activity may be required within 20 feet of a shrub; in such cases, k-rails shall be placed at the greatest possible distance from the shrubs. • Signage shall be erected every 50 feet along the edge of avoidance areas with the following information: "This area is habitat of the valley elderberry longhorn beetle, a federally listed threatened species, and must not be disturbed. This species is protected by the Endangered Species Act of 1973, as amended. Violators are subject to prosecution, fines, and imprisonment." The signage shall be clearly readable from a distance of 20 feet and shall be maintained for the duration of construction. • Preconstruction surveys shall be conducted for elderberry shrubs in the PIA and within 100 feet of the PIA. Preconstruction surveys shall be conducted to comply with mitigation measures. • Temporary construction impacts within the buffer area (i.e., within 100 feet of elderberry shrubs) shall be restored. If any portion of the buffer area is temporarily disturbed during construction, it shall be revegetated	

Table ES-1. Summary of Environmental Impacts and Mitigation Measures			
Potential Environmental Impact	Significance Determination (Before Mitigation)	2015 EIR Mitigation Measures	Significance Determination (After Mitigation)
		with native plants and erosion control shall be provided. - No insecticides, herbicides, fertilizers, or other chemicals that might harm the beetle or its host plant shall be used within 100 feet of any elderberry plant with one or more stems measuring 1 inch or more in diameter at ground level. All drainage water during and following construction shall be diverted away from elderberry shrubs. - A written description of how buffer areas are to be restored, protected, and maintained after construction is completed shall be provided to USFWS. Mowing of grass can occur from July through April to reduce fire hazard; however, no mowing should occur within 5 feet of elderberry shrub stems. Mowing shall be conducted in a manner to avoid damaging shrubs. - Dirt roadways and other areas of disturbed bare ground within 100 feet of elderberry shrubs shall be watered at least twice a day to minimize dust emissions. Water shall not be sprayed directly on elderberry shrubs to avoid attracting Argentine ants. - For those shrubs that require being moved, direct impacts on valley elderberry longhorn beetles could occur during transplanting. Transplanting of elderberry shrubs has the potential to result in take of individual beetles because larvae or adults, if present in the stems, could be crushed or dislodged from the stems and become separated from the shrub. Transplanted elderberry shrubs may also experience stress, decline in health, or die due to changes in soil, hydrology, microclimate, or associated vegetation. The following measures shall be implemented in the event that	

Table ES-1. Summary of Environmental Impacts and Mitigation Measures			
Potential Environmental Impact	Significance Determination (Before Mitigation)	2015 EIR Mitigation Measures	Significance Determination (After Mitigation)
		transplantation or replacement of existing elderberry shrubs is required. ○ The transplantation guidelines outlined in the Conservation Guidelines for the Valley Elderberry Longhorn Beetle (U.S. Fish and Wildlife Service 1999) shall be followed. These transplantation guidelines dictate the necessary timing and details of the transplanting. At the discretion of USFWS, shrubs that are unlikely to survive transplantation because of poor condition or location, or plants that would be extremely difficult to move because of access problems, may be exempted from transplantation. ○ The loss of elderberry shrubs that must be transplanted or removed to facilitate construction of the Project shall be mitigated according to the requirements contained in the Conservation Guidelines for the Valley Elderberry Longhorn Beetle (U.S. Fish and Wildlife Service 1999). Elderberry shrubs shall be transplanted to or replaced in an offsite conservation area along with the appropriate number of elderberry seedlings/cuttings and associative native species as described in the Guidelines. ○ In cases where transplantation is not possible, minimization ratios shall be increased to offset the additional habitat loss. ○ Each elderberry stem measuring 1 inch or more in diameter at ground level that is adversely affected (i.e., transplanted, removed, or trimmed) shall be replaced, in the conservation area, with elderberry seedlings or cuttings at a ratio ranging from 1:1 to 8:1 (new plantings to affected stems) depending	

Table ES-1. Summary of Environmental Impacts and Mitigation Measures			
Potential Environmental Impact	Significance Determination (Before Mitigation)	2015 EIR Mitigation Measures	Significance Determination (After Mitigation)
		on the size class of the affected stem, presence or absence of exit holes, and whether the shrub is located in a riparian or a nonriparian area. Mitigation Measure BIO-10a: Implement measures to avoid and minimize impacts on Swainson's hawk and other nesting raptors. UPRR shall implement the following measures to avoid and minimize impacts on Swainson's hawk and other nesting raptors. • If construction activities occur during the Swainson's hawk nesting period (February 15– September 15), UPRR shall retain a qualified biologist to conduct preconstruction surveys to identify active nests in accessible areas within 0.5 mile of the PIA according to the Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley established by the Swainson's Hawk Technical Advisory Committee (2000). The surveys shall be conducted before the approval of grading and/or improvement plans (as applicable) and no more than 14 days before the beginning of construction for all Project phases. If no nests are found, no further measures are required. • If active nests are found, impacts on nesting Swainson's hawk shall be avoided by establishment of a 1,000-foot no-disturbance buffer between the nest and Project activities. No Project activity shall commence within the buffer area until a qualified biologist confirms that any young have fledged and the nest is no longer active. The size of the buffer may be adjusted if a qualified biologist and the City of Sacramento, in consultation with CDFW, determine that such an adjustment would not be likely to adversely affect the nesting hawks. If the buffer distance is reduced, nest monitoring may be required	

Table ES-1. Summary of Environmental Impacts and Mitigation Measures			
Potential Environmental Impact	Significance Determination (Before Mitigation)	2015 EIR Mitigation Measures	Significance Determination (After Mitigation)
		by CDFW to ensure that the Project does not result in adverse effects (nest failure). - If construction begins during the typical breeding season for other raptors (February 15– September 15), preconstruction surveys shall be conducted by a qualified biologist within 72 hours prior to commencement of construction to determine presence/absence of nests in and directly adjacent to the BSA. If no nests are found during the survey, no further actions are necessary. If construction begins outside the breeding season, no preconstruction surveys are necessary. - If active nests for other raptors are identified during the preconstruction surveys, they shall be protected during the breeding season while the nest is occupied by adults or young. The occupied nest shall be monitored by a qualified biologist to determine when the nest is no longer in use. Protection will include the establishment of a 500-foot no-disturbance buffer around the nest, and highly visible temporary construction fencing will delineate the identified buffer zone. This buffer may be reduced in areas with dense vegetation, buildings, or other habitat features between Project activities and the active nest, or as determined by a qualified biologist coordinating with CDFW. No construction shall take place within this buffer zone unless approved by CDFW. Mitigation Measure BIO-11: Implement measures to avoid and minimize impacts on other migratory birds. UPRR shall implement the following measures to avoid and minimize impacts to other migratory birds. - If construction begins during the typical breeding season for migratory birds (February 15– September	

Table ES-1. Summary of Environmental Impacts and Mitigation Measures			
Potential Environmental Impact	Significance Determination (Before Mitigation)	2015 EIR Mitigation Measures	Significance Determination (After Mitigation)
		15), preconstruction surveys shall be conducted by a qualified biologist within 72 hours prior to commencement of construction to determine presence/absence of nests in and directly adjacent to the BSA. If no nests are found during the survey, no further actions are necessary. If construction begins outside the breeding season, no preconstruction surveys are necessary. - If active bird nests are identified during the preconstruction surveys, they shall be protected during the breeding season while the nest is occupied by adults or young. The occupied nest shall be monitored by a qualified biologist to determine when the nest is no longer in use. Protection shall include the establishment of a minimum 50- foot no-disturbance buffer around the nest and highly visible temporary construction fencing will delineate the identified buffer zone. The extent of the buffer shall be determined by a qualified biologist, coordinating with USFWS as necessary, and shall be based on the species, type of construction activity, presence of barriers between the nest and Project activities, and ambient noise levels. The following additional avoidance and minimization measures shall be incorporated if nesting barn or cliff swallows, black phoebes, purple martins, or song sparrows are identified in the BSA. Swallows, black phoebes, and purple martins could attempt to establish nests and/or occupy existing nests under bridges in the BSA prior to construction. The following measures shall be followed to prevent impacts on bridge-nesting swallows, black phoebes, or other migratory birds. - All existing unoccupied swallow and black phoebe nests found on the undersides of the bridges shall be	

Table ES-1. Summary of Environmental Impacts and Mitigation Measures			
Potential Environmental Impact	Significance Determination (Before Mitigation)	2015 EIR Mitigation Measures	Significance Determination (After Mitigation)
		removed between September 16 and February 14 prior to the year of construction. Exclusionary netting shall be installed around the undersides of the bridges before February 15 of the construction year to prevent new nests from being constructed and to prevent the reoccupation of existing nests that were not removed. Netting will remain in place until the end of the typical nesting season (September 15) or the completion of construction activities, whichever is first. During the nesting season, the netting shall be monitored weekly to ensure that it remains intact and does not entrap birds. More frequent monitoring visits shall be made as necessary, especially in areas with high foot-traffic. <i>Passenger Train Layover Facility</i> Mitigation Measure BIO-1a: Install fencing and/or flagging to protect sensitive biological resources. Mitigation Measure BIO-1b: Implement a worker environmental awareness training program for construction personnel. Mitigation Measure BIO-1c: Retain a qualified biologist to conduct periodic monitoring during construction in sensitive habitats. Mitigation Measure BIO-3: Implement measures to avoid long-term effects on special-status plants documented in the Project impact area. Mitigation Measure BIO-5: Compensate for direct and indirect effects on vernal pool fairy shrimp and vernal pool tadpole shrimp habitat. UPRR shall compensate for direct and indirect effects on vernal pool fairy shrimp and vernal pool tadpole shrimp habitat by implementing habitat	

Table ES-1. Summary of Environmental Impacts and Mitigation Measures			
Potential Environmental Impact	Significance Determination (Before Mitigation)	2015 EIR Mitigation Measures	Significance Determination (After Mitigation)
		preservation and creation as mitigation. Mitigation credits shall be purchased prior to commencement of any Project activities that could result in habitat loss or degradation. Habitat preservation: UPRR shall compensate for the direct permanent and temporary loss of habitat and indirect (habitat degradation) impacts on habitat for vernal pool fairy shrimp and vernal pool tadpole shrimp at a ratio of 2:1 by purchasing vernal pool preservation credits from a USFWS-approved conservation bank. Habitat creation: UPRR shall compensate for the direct permanent or temporary loss of habitat for vernal pool fairy shrimp and vernal pool tadpole shrimp at a ratio of 1:1 by purchasing vernal pool creation credits from a USFWS-approved conservation bank. Mitigation Measure BIO-11: Implement measures to avoid and minimize impacts on other migratory birds.	
Threshold 3.3-B: Would the revised Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? Threshold 3.3-C: Would the revised Project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of	<i>Railroad Bridge Crossings and Passenger Train Layover Facility</i> Potentially Significant. Implementation of the revised Project sensitive habitats during construction activities.	<i>Railroad Bridge Crossings and Passenger Train Layover Facility</i> Mitigation Measure BIO-1a: Install fencing and/or flagging to protect sensitive biological resources. Mitigation Measure BIO-1b: Implement a worker environmental awareness training program for construction personnel. Mitigation Measure BIO-1c: Retain a qualified biologist to conduct periodic monitoring during construction in sensitive habitats. Mitigation Measure BIO-1d: Compensate for temporary and permanent impacts on waters of the United States, including wetlands. To compensate for temporary and permanent Project impacts on waters of the United States,	<i>Railroad Bridge Crossings and Passenger Train Layover Facility</i> Less than Significant. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

Table ES-1. Summary of Environmental Impacts and Mitigation Measures			
Potential Environmental Impact	Significance Determination (Before Mitigation)	2015 EIR Mitigation Measures	Significance Determination (After Mitigation)
the Clean Water Act (including, but not limited to, marshes, vernal pools, coastal wetlands, etc.) through direct removal, filling, hydrological interruption, or other means?		UPRR shall purchase credits at an approved mitigation bank to ensure no net loss of wetland functions and values. The acreage or value of compensatory mitigation for the loss of aquatic habitat for vernal pool crustaceans and giant gartersnake (discussed in Impacts BIO-5 and BIO-7) may be counted toward compensatory mitigation for waters of the United States. The minimum compensation ratio for wetlands and other waters shall be 1:1 (1 acre of wetland or other waters habitat credit for every 1 acre of impact) to ensure no net loss of habitat functions and values.	
Threshold 3.3-D: Would the revised Project 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?	<i>Railroad Bridge Crossings and Passenger Train Layover Facility</i> Less Than Significant. The revised Project is not located within an established wildlife corridor or wildlife nursery site. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.	Not Applicable	Not Applicable
Threshold 3.3-E: Would the revised Project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<i>Railroad Bridge Crossings and Passenger Train Layover Facility</i> Less Than Significant. Construction of the revised Project may require the removal of existing trees. However, the revised Project would be required to comply with local tree ordinances. The revised Project	Not Applicable.	Not Applicable.

Table ES-1. Summary of Environmental Impacts and Mitigation Measures			
Potential Environmental Impact	Significance Determination (Before Mitigation)	2015 EIR Mitigation Measures	Significance Determination (After Mitigation)
	would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.		
Threshold 3.3-F: Would the revised Project conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan?	<i>Railroad Bridge Crossings and Passenger Train Layover Facility</i> No Impact. The revised Project is not located within a HCP, NCCP, or other local, regional, or state HCP. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.	Not Applicable.	Not Applicable.
Cultural Resources			
Threshold 3.4-A: Would the revised Project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5? Threshold 3.4-B: Would the revised Project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<i>Railroad Bridge Crossings and Passenger Train Layover Facility</i> Potentially Significant. Ground disturbing activities associated with the revised Project may cause a substantial adverse change of a previously unidentified historical or archaeological cultural resource.	<i>Railroad Bridge Crossings and Passenger Train Layover Facility</i> Mitigation Measure CUL-1a: Conduct archaeological presence/absence testing in areas of the APE adjacent to the American River prior to final design. Prior to completion of final design, CCJPA shall retain a qualified archaeologist meeting the Secretary of Interior's Standards for archeological documentation, to conduct archaeological presence/absence testing in areas of the APE adjacent to the American River where bridge construction activities shall occur. The purpose of the testing will be to determine whether buried archaeological resources are present in these portions of the APE. The study shall include	<i>Railroad Bridge Crossings and Passenger Train Layover Facility</i> Less than Significant. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

Table ES-1. Summary of Environmental Impacts and Mitigation Measures			
Potential Environmental Impact	Significance Determination (Before Mitigation)	2015 EIR Mitigation Measures	Significance Determination (After Mitigation)
		contacting the NAHC and interested parties, conducting presence/absence testing, and reporting. The testing shall consist of at least six mechanically excavated trenches, three on each side of the American River where the proposed bridge would be constructed. All attempts shall be made to place trenches in those locations where the proposed bridge footings would be located. Trenches shall measure at least 15 feet long and shall be excavated with a backhoe equipped with a bucket at least 3 feet wide. Trenches shall be excavated to at least 2 feet below the maximum depth of ground disturbance that would result from bridge construction, or until trenching is no longer feasible or safe. An archaeologist shall study excavated sediments placed in backfill piles on a backhoe bucket-by-bucket basis and shall examine trench sidewalls for evidence of archaeological deposits. When potential archaeological material is observed in either excavated sediments or trench sidewalls, an archaeologist shall enter trenches to better view the material and determine its nature. Buried archaeological material can range from a single flake (lithic debitage) or discolored soil to an obvious buried midden component. Indicators of archaeological sensitivity or the presence of archaeological deposits may include patches of reddish oxidized soils, fire affected rock (FAR), carbon, bone, shell, or artifacts. The location and potential extent of the site shall be taken into consideration to determine appropriate next steps. For the purposes of the subsurface survey, the threshold for terminating the investigation and requiring either	

Table ES-1. Summary of Environmental Impacts and Mitigation Measures			
Potential Environmental Impact	Significance Determination (Before Mitigation)	2015 EIR Mitigation Measures	Significance Determination (After Mitigation)
		avoidance measures or archaeological evaluative testing shall be the identification of more than three pieces of lithic debitage per trench, any midden soil, formal tools, any culturally associated prehistoric faunal remains, any discrete prehistoric or historic-period features, or historic-period refuse with multiple artifact types. The archaeologist shall document the results of the testing in a cultural resources technical report. The report shall include: (1) a summary of relevant background information; (2) a complete discussion of methods and results; (3) recommendations of NRHP and CRHR eligibility for any identified resources; (4) assessment of Project impacts on the resources; and (5) recommended mitigation measures for any identified resources, if applicable. If a site is determined to be eligible for listing in the NHRP, further consultation with SHPO will be necessary for treatment of this site. Examples of potential treatment measures include modifying Project design for avoidance of identified archaeological resources and additional archaeological testing of the archaeological resources to evaluate them for NRHP-eligibility, eligibility as a historical resource pursuant to CEQA Guidelines Section 15064.5, and eligibility as a unique archaeological resource pursuant to PRC Section 21083.2. Mitigation Measure CUL-1b: Conduct archaeological construction monitoring during ground-disturbing activities in archaeologically sensitive areas and halt work if previously unrecorded cultural resources are encountered and determined to be NRHP eligible. CCJPA shall retain an archaeologist to conduct archaeological construction monitoring during ground-disturbing construction activities in previously undisturbed soil in archaeologically sensitive areas as identified in the	

Table ES-1. Summary of Environmental Impacts and Mitigation Measures			
Potential Environmental Impact	Significance Determination (Before Mitigation)	2015 EIR Mitigation Measures	Significance Determination (After Mitigation)
		cultural resources inventory and evaluation report (ICF International 2014). The monitoring shall be supervised by an archaeologist that meets the Secretary of Interior's Standards for archeological documentation. The onsite archaeological monitor shall observe the ground-disturbing activities to ensure that no archaeological material is present or disturbed during those activities. CCJPA may invite, and retain if so desired, a Native American monitor to assist in the archaeological monitoring. If potential archaeological material is observed, all work within 100 feet of the find shall cease, and the archaeologist and (if appropriate) a Native American representative shall assess the significance of the find. If the find is determined to be potentially (1) NRHP-eligible; (2) a historical resource pursuant to CEQA Guidelines Section 15064.5; or (3) a unique archaeological resource pursuant to PRC Section 21083.2, CCJPA shall consult with SHPO, appropriate Native American tribes, and other appropriate interested parties to determine treatment measures pursuant to 36 CFR 800.13.	
Threshold 3.4-C: Would the revised Project disturb any human remains, including those interred outside of formal cemeteries?	<i>Railroad Bridge Crossings and Passenger Train Layover Facility</i> Potentially Significant. Ground disturbing activities associated with construction may encounter previously unidentified or unmarked burials containing human remains.	<i>Railroad Bridge Crossings and Passenger Train Layover Facility</i> Mitigation Measure CUL-3: Conduct archaeological construction monitoring during ground-disturbing activities in archaeologically sensitive areas and halt work if human remains are encountered. CCJPA shall retain an archaeologist to conduct archaeological construction monitoring during ground-disturbing construction activities in previously undisturbed soil in archaeologically sensitive areas as identified in the cultural resources inventory and evaluation report (ICF International 2014). The monitoring shall be supervised by an archaeologist that meets the Secretary of Interior's Standards for Archeology. The onsite archaeological	<i>Railroad Bridge Crossings and Passenger Train Layover Facility</i> Less than Significant. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

Table ES-1. Summary of Environmental Impacts and Mitigation Measures			
Potential Environmental Impact	Significance Determination (Before Mitigation)	2015 EIR Mitigation Measures	Significance Determination (After Mitigation)
		monitor shall observe the ground-disturbing activities to ensure that no human remains are present or disturbed during those activities. CCJPA may invite, and retain if so desired, a Native American monitor to assist in the archaeological monitoring. During any Project excavation, regardless of the presence of an archaeological monitor, if human remains (or remains that are suspected to be human) are discovered, all work shall cease in the vicinity of the find (within a minimum of 100 feet) and the appropriate county coroner shall be notified immediately. If the coroner determines the remains to be Native American in origin, the coroner shall be responsible for notifying the NAHC, which will appoint a most-likely descendant (MLD) (PRC Section 5097.99). The archaeologist, CCJPA, lead federal agency, SHPO, and MLD shall make all reasonable efforts to develop an agreement for the dignified treatment of human remains and associated or unassociated funerary objects (CCR Title 14 Section 15064.5[d]). The agreement shall take into consideration the appropriate excavation, removal, recordation, analysis, custodianship, curation, and final disposition of the human remains and associated or unassociated funerary objects. The MLD shall have 24 hours after notification by the NAHC to make their recommendation (PRC Section 5097.98). If the MLD does not agree to the reburial method, the Project shall follow PRC Section 5097.98(b), which states, “the landowner or his or her authorized representative shall reinter the human remains and items associated with Native American burials with appropriate dignity on the property in a location not subject to further subsurface disturbance.”	

Table ES-1. Summary of Environmental Impacts and Mitigation Measures			
Potential Environmental Impact	Significance Determination (Before Mitigation)	2015 EIR Mitigation Measures	Significance Determination (After Mitigation)
Threshold 3.4-D: Would the revised Project cause a substantial adverse change in the significance of a tribal cultural resource, as defined by PRC §21074, and that is listed or eligible for listing in the California Register of Historical Resources or in a local register of historical resources as defined by PRC §5024.1? Threshold 3.4-E: Would the revised Project cause a substantial adverse change in the significance of a tribal cultural resource, as defined by PRC §21074, and that is determined by the lead agency, in its discretion and supported by substantial evidence, to be significant to a California Native tribe pursuant to PRC §5024.1?	<i>Railroad Bridge Crossings and Passenger Train Layover Facility</i> Potentially Significant. While there are no known tribal cultural resources located in or near where the improvements would occur, there is still a possibility that tribal cultural resources may be encountered during ground-disturbing activities.	<i>Railroad Bridge Crossings and Passenger Train Layover Facility</i> Mitigation Measure CUL-1a: Conduct archaeological presence/absence testing in areas of the APE adjacent to the American River prior to final design. Mitigation Measure CUL-1b: Conduct archaeological construction monitoring during ground-disturbing activities in archaeologically sensitive areas and halt work if previously unrecorded cultural resources are encountered.	<i>Railroad Bridge Crossings and Passenger Train Layover Facility</i> Less than Significant. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.
Geology and Soils			
Threshold 3.5-A: Would the revised Project result in exposure of people or structures to potential substantial adverse effects involving rupture of a known earthquake fault, strong	<i>Railroad Bridge Crossings and Passenger Train Layover Facility</i> Less Than Significant. The revised Project is not located near a known earthquake fault and geotechnical hazards (landslides, embankment	Not Applicable.	Not Applicable.

Table ES-1. Summary of Environmental Impacts and Mitigation Measures			
Potential Environmental Impact	Significance Determination (Before Mitigation)	2015 EIR Mitigation Measures	Significance Determination (After Mitigation)
seismic ground shaking, seismic-related ground failure, including liquefaction, or landslides? Threshold 3.5-C: Would the revised Project be located on a geologic unit that is unstable, or would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, liquefaction, or collapse? Threshold 3.5-D: Would the revised Project be located on expansive soils, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	failures, ground subsidence, or collapse) are not anticipated due to the existing topography. The revised Project the railroad would still be required to adhere to applicable federal, State, and local laws and regulations, including, but not limited to those set forth by federal, state, and local policies, such as the preparation of a soil subsurface investigation seismic design recommendations. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.		
Threshold 3.5-B: Would the revised Project result in substantial soil erosion or loss of topsoil?	<i>Railroad Bridge Crossings and Passenger Train Layover Facility</i>	Not Applicable.	Not Applicable.

Table ES-1. Summary of Environmental Impacts and Mitigation Measures			
Potential Environmental Impact	Significance Determination (Before Mitigation)	2015 EIR Mitigation Measures	Significance Determination (After Mitigation)
	Less Than Significant. Adherence to BMPs and measures identified as part of NPDES permit requirements would minimize construction impacts to a less than significant level. Operation of the revised Project would not result in additional soil erosion impacts. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.		
Threshold 3.5-E: Would the revised Project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<i>Railroad Bridge Crossings and Passenger Train Layover Facility</i> No Impact. No septic systems or alternative wastewater disposal systems are proposed as part of the revised Project. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.	Not Applicable.	Not Applicable.
Threshold 3.5-F: Would the revised Project 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?	<i>Railroad Bridge Crossings and Passenger Train Layover Facility</i> No Impact. No mineral extraction zones or resources are identified as occurring in the area of the revised Project. The revised Project would not change the	Not Applicable.	Not Applicable.

Table ES-1. Summary of Environmental Impacts and Mitigation Measures			
Potential Environmental Impact	Significance Determination (Before Mitigation)	2015 EIR Mitigation Measures	Significance Determination (After Mitigation)
Threshold 3.5-G: Would the revised Project 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?	significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.		
Threshold 3.5-H: Would the revised Project directly or indirectly destroy a unique paleontological resource or site or unique geologic features?	<i>Railroad Bridge Crossings and Passenger Train Layover Facility</i> Potentially Significant. While there are no known paleontological resources located in or near where the improvements would occur, there is still a possibility that previously undiscovered paleontological resources may be encountered during ground-disturbing activities.	<i>Railroad Bridge Crossings and Passenger Train Layover Facility</i> Mitigation Measure GEO-8a: Educate construction personnel in recognizing fossil material. Prior to construction, UPRR shall ensure that all construction personnel receive training provided by a qualified professional paleontologist who is experienced in teaching non specialists to ensure that construction personnel can recognize fossil materials in the event any are discovered during construction. Mitigation Measure GEO-8b: Stop work if substantial fossil remains are encountered during construction. If substantial fossil remains (particularly vertebrate remains) are discovered during earth disturbing activities, the construction contractor shall stop activities immediately until a State registered professional geologist or qualified professional paleontologist can assess the nature and importance of the find and a qualified professional paleontologist can recommend appropriate treatment. Treatment may include preparation and recovery of fossil materials so that they can be housed in an appropriate museum or university collection and may also include preparation of a report for publication describing the finds. UPRR shall be responsible for ensuring that	<i>Railroad Bridge Crossings and Passenger Train Layover Facility</i> Less than Significant. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

Table ES-1. Summary of Environmental Impacts and Mitigation Measures			
Potential Environmental Impact	Significance Determination (Before Mitigation)	2015 EIR Mitigation Measures	Significance Determination (After Mitigation)
		recommendations regarding treatment and reporting are implemented. Mitigation Measure GEO-8c: Retain a qualified professional paleontologist to monitor significant ground-disturbing activities. Prior to construction, UPRR shall retain a qualified professional paleontologist as defined by SVP's Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources (2010) to monitor activities with the potential to disturb sensitive paleontological resources. Data gathered during detailed Project design shall be used to determine the activities that will require the presence of a monitor. In general, these activities include any ground-disturbing activities involving excavation deeper than 3 feet in areas with high potential to contain sensitive paleontological resources. Recovered fossils shall be prepared so that they can be properly documented. Recovered fossils shall then be curated at a facility that will properly house and label them, maintain the association between the fossils and field data about the fossils' provenance, and make the information available to the scientific community.	

Table ES-1. Summary of Environmental Impacts and Mitigation Measures			
Potential Environmental Impact	Significance Determination (Before Mitigation)	2015 EIR Mitigation Measures	Significance Determination (After Mitigation)
Hazards and Hazardous Materials			
Threshold 3.6-A: Would the revised Project result in the creation of a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? Threshold 3.6-B: Would the revised Project result in the creation of 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? Threshold 3.6-D: Would the revised Project result in the placement of Project-related facilities on a site that is included on a list of hazardous materials sites, and resulting creation of a significant hazard to the public or the environment?	<i>Railroad Bridge Crossings and Passenger Train Layover Facility</i> Potentially Significant. Construction and operational activities associated with the revised Project would use limited quantities of miscellaneous hazardous materials (e.g., petroleum-based and could result in accidental spills of hazardous materials. Contaminants could be present in soils in areas of proposed improvements and released through Project-related construction activities.	<i>Railroad Bridge Crossings and Passenger Train Layover Facility</i> Mitigation Measure HAZ-1: Ensure safe handling and storage of hazardous materials. Before the commencement of Project construction, the construction contractor shall ensure that any employee handling hazardous materials is trained in the safe handling and storage of hazardous materials per all applicable regulations (e.g., OSHA hazardous materials standards listed in 29 CFR 1910 Subpart H), and staging areas where hazardous materials would be stored during construction shall be identified in accordance with applicable state and federal regulations. Similarly, during operations, UPRR and CCJPA personnel shall be likewise trained in the safe handling and storage of hazardous materials. Mitigation Measure HAZ-2a: Conduct Phase II Environmental Site Assessment studies. Prior to construction of the Build Alternative, Phase II soil studies shall be conducted to assess areas of proposed improvements to provide site-specific data upon which to rely when developing the Soil Management Plan (discussed in Mitigation Measure HAZ-3). The Phase II studies can include but are not limited to the following. A scope of work consisting of prefield activities, such as preparation of a Health and Safety Plan (HASP), marking boring locations, and obtaining utility clearance; and field activities, such as identifying appropriate sampling procedures, health and safety measures, chemical testing methods, and quality	<i>Railroad Bridge Crossings and Passenger Train Layover Facility</i> Less than Significant. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

Table ES-1. Summary of Environmental Impacts and Mitigation Measures			
Potential Environmental Impact	Significance Determination (Before Mitigation)	2015 EIR Mitigation Measures	Significance Determination (After Mitigation)
		assurance/quality control (QA/QC) procedures in accordance with the ASTM Standard. - Necessary permits for boring advancement. - A Sampling and Analysis Plan (SAP) in accordance with the scope of work. - Laboratory analyses conducted by a state-certified laboratory. Mitigation Measure HAZ-2b: Prepare a Soil Management Plan. The Soil Management Plan (SMP) shall address the concerns associated with releases of contaminated soil within and adjacent to the railroad ROW and railyard areas. The SMP shall include specifications for procedures to manage affected soil during construction.	
Threshold 3.6-C: Would the revised Project result in the emission of hazardous emissions or handling of hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?	<i>Railroad Bridge Crossings and Passenger Train Layover Facility</i> Potentially Significant. One school (Courtyard Private School) was identified as being within 0.25 mile of the Project corridor for the railroad bridge crossing component in the 2015 Draft EIR. The modifications associated with the railroad bridge crossings as part of the revised Project does not change the existing school facilities located in the area. In the 2015 Draft EIR, one school (Adelante High School) was	<i>Railroad Bridge Crossings and Passenger Train Layover Facility</i> Mitigation Measure HAZ-1: Ensure safe handling and storage of hazardous materials Mitigation Measure HAZ-2a: Conduct Phase II Environmental Site Assessment studies Mitigation Measure HAZ-2b: Prepare a Soil Management Plan	<i>Railroad Bridge Crossings and Passenger Train Layover Facility</i> Less than Significant. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

Table ES-1. Summary of Environmental Impacts and Mitigation Measures			
Potential Environmental Impact	Significance Determination (Before Mitigation)	2015 EIR Mitigation Measures	Significance Determination (After Mitigation)
	identified and is located adjacent to the originally proposed passenger train layover facility site. With the change in passenger train layover facility site, two additional school facilities (Roseville Joint Union High School and Independence High School) were identified and are located within 0.25 mile of the revised passenger train layover facility. Construction and operation of the revised passenger train layover facility would not change the type or handling of materials that would be used. Construction and operational activities would still be required to adhere to applicable federal, State, and local laws and regulations, including, but not limited to those set forth by federal, state, and local policies.		
Threshold 3.6-F: Would the revised Project result the placement of Project-related facilities in the vicinity of a private airstrip, resulting in a safety hazard for people residing or working in the Project corridor?	<i>Railroad Bridge Crossings and Passenger Train Layover Facility</i> No Impact. The revised Project is not located in the vicinity of a private airstrip. The revised Project would not change the significance conclusions or result in any new significant impacts	Not Applicable.	Not Applicable.

Table ES-1. Summary of Environmental Impacts and Mitigation Measures			
Potential Environmental Impact	Significance Determination (Before Mitigation)	2015 EIR Mitigation Measures	Significance Determination (After Mitigation)
	not previously identified in the 2015 Draft EIR.		
Threshold 3.6-G: Would the revised Project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<i>Railroad Bridge Crossings and Passenger Train Layover Facility</i> Potentially Significant. During construction activities, the revised Project could interfere with traffic through movement of construction vehicles and while improvements are being installed.	Mitigation Measure TRA-2: Implement site-specific construction traffic management plan (TMP).	<i>Railroad Bridge Crossings and Passenger Train Layover Facility</i> Less than Significant. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.
Threshold 3.6-G: Would the revised Project expose people or structures either directly or indirectly to a significant risk of loss, injury or death involving wildland fires?	<i>Railroad Bridge Crossings and Passenger Train Layover Facility</i> Potentially Significant. During construction activities, equipment and vehicles containing flammable fuels may come in contact with vegetated areas and could accidentally spark and ignite the vegetation.	Mitigation Measure HAZ-4: Minimize risk of wildland fire. Before the commencement of construction of the Build Alternative, the construction contractor shall ensure that staging areas, welding areas, or other areas slated for construction equipment are cleared of dried vegetation or other materials that could serve as fire fuel. Any construction equipment that normally includes a spark arrester shall be equipped with an arrester in good working order.	<i>Railroad Bridge Crossings and Passenger Train Layover Facility</i> Less than Significant. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

Table ES-1. Summary of Environmental Impacts and Mitigation Measures			
Potential Environmental Impact	Significance Determination (Before Mitigation)	2015 EIR Mitigation Measures	Significance Determination (After Mitigation)
Hydrology and Water Quality			
Threshold 3.7-A: Would the revised Project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality? Threshold 3.7-E: Would the revised Project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<i>Railroad Bridge Crossings and Passenger Train Layover Facility</i> Potentially Significant. Ground-disturbing activities would disturb existing vegetation cover and soils, would expose areas of disturbed ground that could be subject to rainfall and erosion, and could cause temporary discharges of sediment and other contaminants into receiving waters or onto the ground where they can be carried into receiving waters.	<i>Railroad Bridge Crossings and Passenger Train Layover Facility</i> Mitigation Measure HAZ-1: Ensure safe handling and storage of hazardous materials. Mitigation Measure HAZ-2a: Conduct Phase II Environmental Site Assessment studies Mitigation Measure HAZ-2b: Preparation of a Soil Management Plan	<i>Railroad Bridge Crossings and Passenger Train Layover Facility</i> Less than Significant. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.
Threshold 3.7-B: Would the revised Project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<i>Railroad Bridge Crossings and Passenger Train Layover Facility</i> Less Than Significant. The revised Project would not require the use of groundwater supplies during construction or operation and is not located in an area identified for groundwater recharge. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.	Not Applicable.	Not Applicable.

Table ES-1. Summary of Environmental Impacts and Mitigation Measures			
Potential Environmental Impact	Significance Determination (Before Mitigation)	2015 EIR Mitigation Measures	Significance Determination (After Mitigation)
Threshold 3.7-C: Would the revised Project 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 a substantial erosion or siltation on- or off-site. ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite. iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. iv. Impede or redirect flood flows.	<i>Railroad Bridge Crossings and Passenger Train Layover Facility</i> Less Than Significant. The revised Project would not substantially alter existing drainage patterns in a manner that would result in erosion, siltation, or flooding on or offsite. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.	Not Applicable.	Not Applicable.
Threshold 3.7-D: Would the revised Project be located in flood hazard, tsunami, or seiche zones, risk release of	<i>Railroad Bridge Crossings and Passenger Train Layover Facility</i> No Impact. The revised Project geographically removed from areas where the potential for	Not Applicable.	Not Applicable.

Table ES-1. Summary of Environmental Impacts and Mitigation Measures			
Potential Environmental Impact	Significance Determination (Before Mitigation)	2015 EIR Mitigation Measures	Significance Determination (After Mitigation)
pollutants due to project inundation?	inundation by seiche, tsunami, or mudflow could occur. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR,		
Land Use and Planning			
Threshold 3.8-A: Would the revised Project physically divide an established community?	<i>Railroad Bridge Crossings and Passenger Train Layover Facility</i> No Impact. The revised Project would not physically divide an established community. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.	Not Applicable.	Not Applicable.
Threshold 3.8-B: Would the revised Project 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	<i>Railroad Bridge Crossings and Passenger Train Layover Facility</i> No Impact. The revised Project would not conflict with any land use plan, policy, or regulation of an agency with jurisdiction over the Project. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.	Not Applicable.	Not Applicable.

Table ES-1. Summary of Environmental Impacts and Mitigation Measures			
Potential Environmental Impact	Significance Determination (Before Mitigation)	2015 EIR Mitigation Measures	Significance Determination (After Mitigation)
Threshold 3.8-C: Would the revised Project conflict with any applicable habitat conservation plan or natural community conservation plan?	<i>Railroad Bridge Crossings and Passenger Train Layover Facility</i> No Impact. The revised Project is not located within an applicable habitat conservation plan or natural community conservation plan. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.	Not Applicable.	Not Applicable.
Noise and Vibration			
Threshold 3.9-A: Would the revised Project expose persons to or generate noise levels in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies? Threshold 3.9-C: Would the revised Project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project? Threshold 3.9-D: Would the revised Project result in a substantial temporary or periodic increase in ambient	<i>Railroad Bridge Crossings and Passenger Train Layover Facility</i> Potentially Significant. Noise-sensitive receivers are present within the impact distance for all construction scenarios. Construction and operational activities have the potential to exceed noise level standards at noise-sensitive receivers.	<i>Railroad Bridge Crossings and Passenger Train Layover Facility</i> Mitigation Measure NOI-1a: Implement Noise Control Plan and noise-reducing construction practices. The construction contractor shall implement noise-reducing construction practices to limit construction noise to the maximum levels recommended by FTA. On days when work is limited to the hours of 7:00 a.m. to 10:00 p.m., the 1-hour Leq at any noise-sensitive receiver shall be limited to 77 dBA where feasible. On days when work will include nighttime activity, the 1-hour Leq at any noise sensitive receiver shall be limited to 69 dBA. The construction contractor shall prepare a Noise Control Plan that demonstrates how the contractor will comply with the noise limits specified above. Measures that can be implemented to control noise include but are not limited to the following.	<i>Railroad Bridge Crossings and Passenger Train Layover Facility</i> Less than Significant. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

Table ES-1. Summary of Environmental Impacts and Mitigation Measures			
Potential Environmental Impact	Significance Determination (Before Mitigation)	2015 EIR Mitigation Measures	Significance Determination (After Mitigation)
noise levels in the project vicinity above levels existing without the project?		• Use specialty equipment with enclosed engines and/or high-performance mufflers. • Locate equipment and staging areas as far from noise-sensitive receivers as possible. • Limit unnecessary idling of equipment. • Install temporary noise barriers between noise sources and noise sensitive uses. • Route construction-related truck traffic away from residential streets to the extent permitted by the relevant jurisdiction. • Avoid impact pile driving when possible (the current construction plans do not include any impact pile driving). Mitigation Measure NOI-1b: Relocate special trackwork farther from sensitive receivers or install low-impact frog. One of the two noise mitigation options below shall be implemented to reduce predicted noise levels near crossovers to below the FTA/FRA moderate noise impact threshold. • Relocate the special trackwork so that it is farther from sensitive receivers. • If the special trackwork cannot be relocated away from sensitive receivers, install a low-impact frog.	

Table ES-1. Summary of Environmental Impacts and Mitigation Measures			
Potential Environmental Impact	Significance Determination (Before Mitigation)	2015 EIR Mitigation Measures	Significance Determination (After Mitigation)
Threshold 3.9-B: Would the revised Project expose persons to or generate excessive groundborne vibration or groundborne noise levels?	<i>Railroad Bridge Crossings and Passenger Train Layover Facility</i> Potentially Significant. Construction associated with the revised Project would involve site grading, foundation work, and trackwork along portions of the Project corridor that are adjacent to sensitive receptors which may generate vibration levels greater than the 0.016 in/sec threshold for annoying and intrusive vibration.	<i>Railroad Bridge Crossings and Passenger Train Layover Facility</i> Mitigation Measure NOI-2a: Implement vibration-reducing construction practices. In the event that vibration generated by soil compaction and other high-vibration construction processes cause vibration inside residences that is intrusive to building occupants, one or more of the measures below shall be implemented to reduce the potential for annoyance from construction vibration. • Avoid performing high-vibration construction activities such as soil compaction and pile driving near residences. For example, use drilled piles instead of impact pile driving. • Alert residents and building owners when there will be construction activities that could cause vibration amplitudes sufficient to be intrusive to building occupants. An understanding as to what is causing vibration can often reduce the potential for annoyance. • Provide residents and building owners a liaison to contact for reporting vibration levels that are annoying. If a sufficient number of complaints are made, measure the vibration levels to determine if vibration reduction efforts are required.	<i>Railroad Bridge Crossings and Passenger Train Layover Facility</i> Less than Significant. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.
Threshold 3.9-E: Would the revised Project be located within an airport land use plan area, or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport and expose people residing or working in	<i>Railroad Bridge Crossings and Passenger Train Layover Facility</i> No Impact. The revised Project is not located within the vicinity of a public or private airstrip, construction or operation of the revised Project would not result	Not Applicable.	Not Applicable.

Table ES-1. Summary of Environmental Impacts and Mitigation Measures			
Potential Environmental Impact	Significance Determination (Before Mitigation)	2015 EIR Mitigation Measures	Significance Determination (After Mitigation)
the project area to excessive noise levels? Threshold 3.9-F: Would the revised Project be located in the vicinity of a private airstrip and expose people residing or working in the project area to excessive noise levels?	in the exposure of people working in the Project corridor to excessive noise levels. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.		
Population and Housing			
Threshold 3.10-A: Would the revised Project result in the displacement of a large number of people, housing, or businesses, necessitating the construction of replacement housing or business space elsewhere?	<i>Railroad Bridge Crossings</i> Less Than Significant. No housing or businesses would be displaced with the replacement and realignment of the Elvas railroad bridge crossings. However, the replacement and realignment of the B Street railroad bridge crossing would require the demolition of one building associated with a self-storage facility and two buildings associated with the existing Caltrans maintenance yard facilities. It is anticipated that the existing self-storage activities would continue to operate and that the business would not be required to relocate. It is also anticipated that maintenance activities and employees at the existing	Not Applicable.	Not Applicable.

Table ES-1. Summary of Environmental Impacts and Mitigation Measures			
Potential Environmental Impact	Significance Determination (Before Mitigation)	2015 EIR Mitigation Measures	Significance Determination (After Mitigation)
	Caltrans maintenance yard facility would be relocated to other Caltrans maintenance facilities. Therefore, the revised Project would not result in the displacement of existing housing or businesses that would necessitate the construction of replacement facilities elsewhere. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR. <i>Passenger Train Layover Facility</i> Less Than Significant. Construction of the revised passenger train layover facility would occur within existing UPRR ROW which would require the removal of uses associated with two existing UPRR tenants,. It is anticipated that operations associated with these two existing UPRR tenants would shift over to other existing locations. The revised Project would not result in the displacement of existing housing or a substantial number of businesses that would necessitate the construction of		

Table ES-1. Summary of Environmental Impacts and Mitigation Measures			
Potential Environmental Impact	Significance Determination (Before Mitigation)	2015 EIR Mitigation Measures	Significance Determination (After Mitigation)
	replacement facilities elsewhere. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.		
Threshold 3.10-B: Would the revised Project induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)? Threshold 3.10-C: Would the revised Project cause a substantial change in local employment or the labor force (e.g., through extension of roads or other infrastructure)?	<i>Railroad Bridge Crossings and Passenger Train Layover Facility</i> Construction activities associated with the revised Project are not anticipated to induce substantial unplanned population growth, as construction activities are temporary and would be filled by those who reside within the region. Operation of the revised Project components would not result in changes in land use that would result in or indirectly influence population growth. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.	Not Applicable.	Not Applicable.
Threshold 3.10-D: Would the revised Project result in a substantial reduction in community cohesion?	<i>Railroad Bridge Crossings and Passenger Train Layover Facility</i> No impact. The revised Project would occur within an area designated for transportation uses and would not result in the physical division of an established community or result	Not Applicable.	Not Applicable.

Table ES-1. Summary of Environmental Impacts and Mitigation Measures			
Potential Environmental Impact	Significance Determination (Before Mitigation)	2015 EIR Mitigation Measures	Significance Determination (After Mitigation)
	in changes of community character or cohesion in the Project study area. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.		
Transportation			
Threshold 3.11-A: Would the revised Project generate more VMT than accounted for in the MTP/SCS?	<i>Railroad Bridge Crossings and Passenger Train Layover Facility</i> No Impact. The revised Project would not result in generation of VMT greater than accounted for in the MTP/SCS. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.	Not Applicable.	Not Applicable.
Threshold 3.11-B: Would the revised Project cause traffic delays or detours during construction activities?	<i>Railroad Bridge Crossings and Passenger Train Layover Facility</i> Potentially Significant. While most of the construction activity would occur within the UPRR right-of-way (ROW), construction of certain elements of the revised Project could affect drivers, transit service users, bicyclists,	<i>Railroad Bridge Crossings and Passenger Train Layover Facility</i> Mitigation Measure TRA-2: Implement site-specific construction traffic management plan (TMP). CCJPA, in coordination with UPRR, shall prepare site-specific TMPs for each road crossing prior to the initiation of construction. UPRR shall be responsible for project management or may contract with one or more construction management firms to in ensure that construction contractors' crews and schedules are coordinated and that the plans and TMP	<i>Railroad Bridge Crossings and Passenger Train Layover Facility</i> Less than Significant. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

Table ES-1. Summary of Environmental Impacts and Mitigation Measures			
Potential Environmental Impact	Significance Determination (Before Mitigation)	2015 EIR Mitigation Measures	Significance Determination (After Mitigation)
	and pedestrians during construction activities.	specifications are being followed. The TMPs shall address the specific steps to be taken before, during, and after construction to minimize transportation impacts on all modes, including the mitigation measures and environmental commitments identified in this environmental document. Such measures include but are not limited to signage, flagging, limits on periods of closure, and provision for passage of emergency vehicles during construction. UPRR shall be responsible for developing the TMPs in consultation with the applicable transportation entities listed below. • Caltrans for state and federal roadway facilities. • Local agencies including City of Sacramento, County of Sacramento, City of Citrus Heights, and City of Roseville for local transportation facilities such as roads and bike paths. • Transit providers, including but not limited to, Regional Transit and Roseville Transit. • Rail operators. • U.S. Coast Guard. • City and county parks departments. • California Department of Parks and Recreation (DPR) for work in the American River Parkway. UPRR shall ensure that the TMPs are implemented prior to beginning construction at any given site, including in-water construction sites. If necessary to minimize unexpected operational impacts or delays experienced during real-time construction, UPRR shall be responsible for modifying the	

Table ES-1. Summary of Environmental Impacts and Mitigation Measures			
Potential Environmental Impact	Significance Determination (Before Mitigation)	2015 EIR Mitigation Measures	Significance Determination (After Mitigation)
		TMP in coordination with the appropriate transportation entities to address these effects. Each TMP shall include the following provisions, as applicable to the conditions. • Description and deployment of signage warning of roadway surface conditions such as loose gravel, steel plates, or similar conditions that could be hazardous to road cycling activity on roadways open to bicycle traffic. • Description and deployment of signage and barricades to be used around the work sites. • Description and deployment of buoys, signage, or other effective means to warn boaters of in-water work areas and restrictions on access. Description of warning devices and signage (e.g., buoys labeled “boats keep out” or “no wake zone”) in compliance with U.S. Coast Guard Private Aid to Navigation requirements and effective during non-daylight hours and periods of dense fog. • Use of flag people or temporary traffic signals/signage as necessary to slow or detour traffic. • Notifications for the public, emergency service providers, cycling organizations, bike shops, schools, the U.S. Coast Guard, boating organizations, marinas, city and county parks departments, and DPR, where applicable, describing construction activities that could affect transportation and water navigation.	

Table ES-1. Summary of Environmental Impacts and Mitigation Measures			
Potential Environmental Impact	Significance Determination (Before Mitigation)	2015 EIR Mitigation Measures	Significance Determination (After Mitigation)
		• Outreach (through public meetings and/or flyers and other advertisements). • Procedures for construction area evacuation in the case of an emergency declared by county or other local authorities. • Designation of alternate access routes via detours and bridges to maintain continual circulation for local travelers in and around construction zones, including bicycle riders, pedestrians, and boaters, where applicable. • Description of construction staging areas, material delivery routes, and specification of construction vehicle travel hour limits. • Notifications to commercial and leisure boating communities of proposed operations in the waterways, including posting notices at local marinas and public launch ramps. This information shall provide details regarding construction site location(s); construction schedules; and identification of no-wake zones, speed-restricted zones, and detours, where applicable • No-wake zones and speed restrictions shall be established as part of development of the site-specific plans and shall be designated to protect the safety of construction workers and recreationists.	

Table ES-1. Summary of Environmental Impacts and Mitigation Measures			
Potential Environmental Impact	Significance Determination (Before Mitigation)	2015 EIR Mitigation Measures	Significance Determination (After Mitigation)
		- Scheduling for oversized material deliveries to the work site to minimize peak hour traffic conflicts, and location of haul routes. - Provisions that direct haulers pull over in the event of an emergency. If an emergency Vehicle is approaching on a narrow two-way roadway, specify measures to ensure that appropriate maneuvers shall be conducted by the construction vehicles to allow continual access for the emergency vehicles at the time of an emergency. - Control for any temporary road closure, detour, or other disruption to traffic circulation, including any temporary partial closures of the water channel. - Designation and posting of offsite vehicle staging and parking areas. - Posting of information for contact in case of emergency or complaint. - Designation of daily construction time windows during which construction is restricted or rail operations would need to be suspended for any activity within the UPRR ROW. - Coordination with rail providers (i.e., Amtrak, UPRR) to develop alternative interim transportation modes (e.g., trucks or buses) that could be used to provide freight and/or passenger service during any longer term railroad closures. - Coordination with transit providers (i.e., RT, Roseville Transit) to develop, where feasible, daily construction time windows during which transit	

Table ES-1. Summary of Environmental Impacts and Mitigation Measures			
Potential Environmental Impact	Significance Determination (Before Mitigation)	2015 EIR Mitigation Measures	Significance Determination (After Mitigation)
		operations would not be either detoured or substantially slowed. • Routine posting of information to the 511.org website regarding construction delays and detours • Other actions to be identified and developed as necessary by the construction manager/resident engineer to ensure that temporary impacts on transportation facilities are minimized.	
Threshold 3.11-C: Would the revised Project generate future parking demand that exceeds available supply in the vicinity of the Sacramento Valley Station or Roseville Station?	<i>Railroad Bridge Crossings</i> No Impact. The railroad bridge crossings are not located near the Sacramento Valley Station or Roseville Station. Therefore construction or operation of these railroad bridges would not generate future parking demand that exceeds available supply in the vicinity of the Sacramento Valley Station or Roseville Station. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR. <i>Passenger Train Layover Facility</i> No Impact. Although the passenger train layover facility is located near the Roseville Station, construction workers would park their vehicles at	Not Applicable.	Not Applicable.

Table ES-1. Summary of Environmental Impacts and Mitigation Measures			
Potential Environmental Impact	Significance Determination (Before Mitigation)	2015 EIR Mitigation Measures	Significance Determination (After Mitigation)
	worksite and would not use station parking facilities. Once operational, the revised passenger train layover facility location also provides up to 22 employee parking spaces for train crews to start or finish their daily shifts. Therefore, operational activities associated with the revised passenger train layover facility would not contribute to parking shortages at the Roseville Station. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.		
Threshold 3.11-D: Would the revised Project cause vehicle queues at crossings to extend beyond available storage on the public roadway approaches?	<i>Railroad Bridge Crossings</i> No Impact. The railroad bridge crossings are existing grade separated rail bridges that span over the Business I-80. The modifications proposed for these bridge crossings would continue to remain grade separated bridges. Therefore, construction or operational activities associated with the railroad bridge crossings would not result in impacts associated with vehicle queues at at-grade crossings or result in any new	<i>Railroad Bridge Crossings</i> Not Applicable. <i>Passenger Train Layover Facility</i> Mitigation Measure TRA-2: Implement site-specific construction traffic management plan (TMP).	<i>Railroad Bridge Crossings</i> Not Applicable. <i>Passenger Train Layover Facility</i> Less than Significant. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

Table ES-1. Summary of Environmental Impacts and Mitigation Measures			
Potential Environmental Impact	Significance Determination (Before Mitigation)	2015 EIR Mitigation Measures	Significance Determination (After Mitigation)
	significant impacts not previously identified in the 2015 Draft EIR. <i>Passenger Train Layover Facility</i> Potentially Significant. Implementation of the revised Project would require additional modifications to the existing at-grade crossing at Tiger Way to accommodate rail layover track infrastructure. No additional modifications are anticipated to the existing at-grade crossing at Yosemite Street. The revised Project could contribute to short-term vehicle queues at the Tiger Way at-grade crossing while construction activities are underway at that location.		
Threshold 3.11-E: Would the revised Project disrupt existing public transit service or interferes with the implementation of planned public transit services? Threshold 3.11-F: Would the revised Project disrupt existing bicycle and pedestrian facilities or interferes with the implementation of planned facilities?	<i>Railroad Bridge Crossings</i> <i>Potentially Significant.</i> The existing railroad bridge crossings are not located near any existing stations and would not impact transit services currently provided or planned at existing stations. Modifications to the existing UPRR track for the bridge crossing located near the wye do cross the Two Rivers Trail, which is considered a bicycle/pedestrian facility. While not anticipated, construction	<i>Railroad Bridge Crossings and Passenger Train Layover Facility</i> Mitigation Measure TRA-2: Implement site-specific construction traffic management plan (TMP).	<i>Railroad Bridge Crossings and Passenger Train Layover Facility</i> Less than Significant. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

Table ES-1. Summary of Environmental Impacts and Mitigation Measures			
Potential Environmental Impact	Significance Determination (Before Mitigation)	2015 EIR Mitigation Measures	Significance Determination (After Mitigation)
	activities may temporarily impact this bicycle/pedestrian facility. <i>Passenger Train Layover Facility</i> Potentially Significant. The revised passenger train layover facility would not be located at the existing Roseville Station and would not directly impact transit services currently provided at the existing Roseville Station. While not anticipated, construction activities may require temporary road detours within the Project area, which may impact existing public transit service and bicycle/pedestrian facilities adjacent to the revised passenger train layover facility.		

1.0 Introduction

This Draft Supplemental Environmental Impact Report (SEIR) was prepared in accordance with the California Environmental Quality Act (CEQA) and the State CEQA Guidelines §15132. The Capitol Corridor Joint Powers Authority (CCJPA) is the Lead Agency for the environmental review of the Sacramento to Roseville Third Main Track (Project or SR3T Project). The SEIR examines the potential effects of the proposed revised Project, which involves two components – the Railroad Bridge Crossings and the Passenger Train Layover Facility.

The proposed revised Project is described in detail in Section 2.0, Project Description. This section describes: (1) the general background of the revised Project; (2) the purpose and legal authority of the SEIR; (3) the scope and content of the SEIR; (4) lead, responsible, and trustee agencies; and, (5) the environmental review process required under CEQA.

1.1 Purpose and Use of this Draft SEIR

CCJPA has prepared this Draft SEIR to disclose to decision makers, public agencies, and the general public information about the potential environmental effects of the revised Project. As set forth in the provisions of CEQA and implementing regulations, public agencies are charged with the duty to consider the environmental impacts of proposed development and to minimize these impacts where feasible while carrying out an obligation to balance a variety of public objectives, including economic, environmental, and social factors.

CEQA Guidelines §15121(a) states that an EIR is an informational document for decision-makers and the general public that analyzes the significant environmental effects of a project, identifies possible ways to minimize significant effects and describes reasonable alternatives to the project that could reduce or avoid its adverse environmental impacts. Public agencies with discretionary authority are required to consider the information in the EIR, along with any other relevant information, in making decisions on the project.

CEQA requires the preparation of an environmental impact report prior to approving any project which may have a significant effect on the environment. For the purposes of CEQA, the term “project” refers to the whole of an action which has the potential for resulting in a direct physical change or a reasonably foreseeable indirect physical change in the environment (CEQA Guidelines §15378[a]). With respect to the SR3T Project, CCJPA has determined that the proposed revisions are considered a “project” within the definition of CEQA.

In determining the level of environmental review needed for the revised Project, CCJPA as the Lead Agency reviewed CEQA Guidelines §15162 Subsequent EIRs and Negative Declarations, and §15163 Supplement to an EIR. These sections of the Guidelines provide direction with regard to when additional environmental review is appropriate.

The original SR3T Project is located in Sacramento County and Placer County between the existing Sacramento Valley Station and the existing City of Roseville Station (Figures 1-1 and 1-

1.0 Introduction

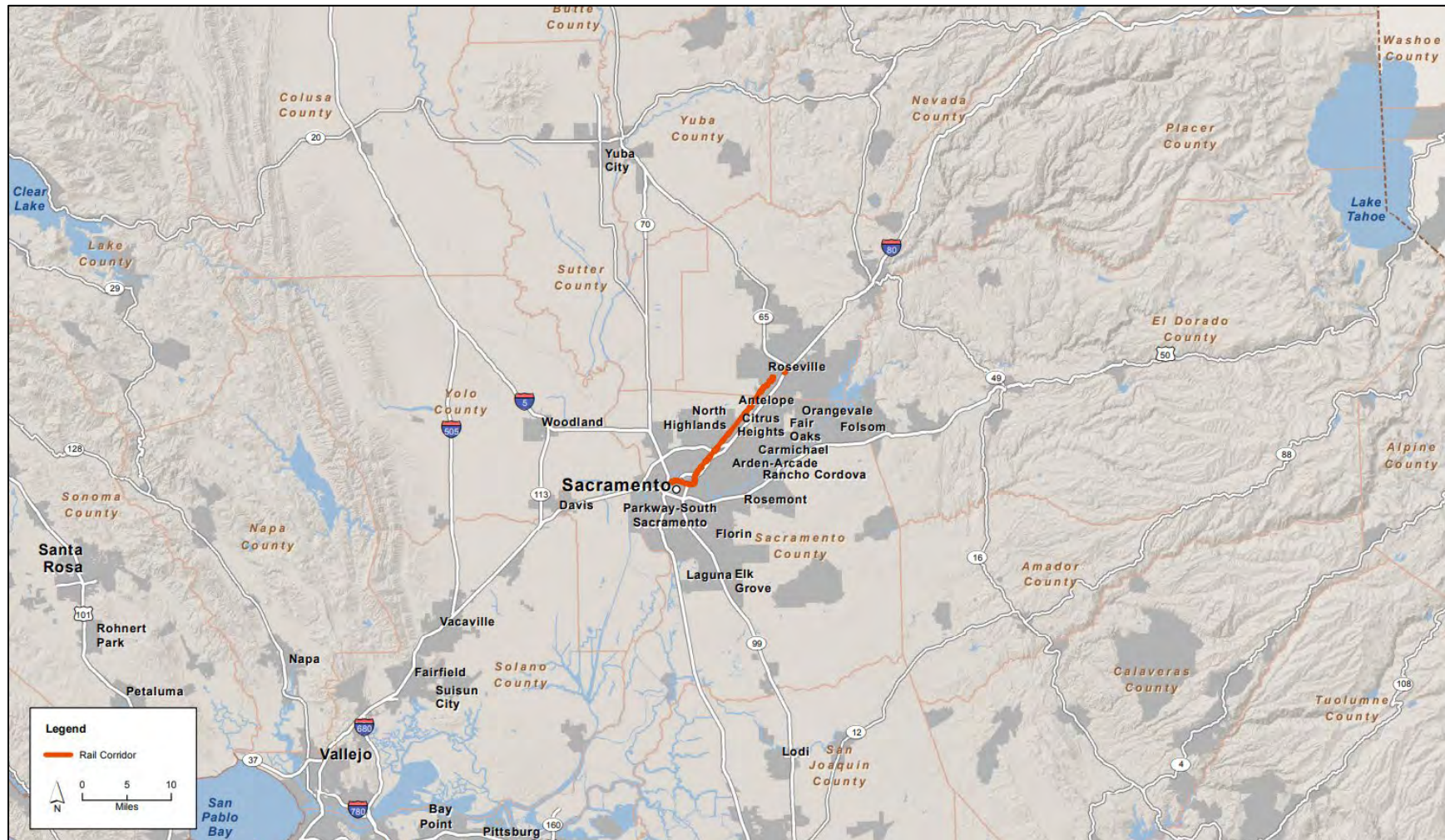
2). The SR3T Project proposed the construction and operation of approximately 17.8 miles of new main track within the existing rail corridor and identified the following improvements:

- Minor reconfiguration of the City of Roseville Station to accommodate increased Capitol Corridor service in the future.
- Grading and installation of new subgrade and drainage
- Placement of new rail and ties
- Special track work with turnouts, crossovers and associated switches and equipment
- New wayside track signals
- Eleven replaced railroad bridges, including a new bridge across the American River in Sacramento

Based on a preliminary review of the proposed modifications to the original Project, it has been determined that a SEIR would need to be prepared for CEQA compliance. The Final EIR for the SR3T Project was certified on November 18, 2015 (State Clearinghouse No. 2014072005). This supplement to the certified EIR will contain only the information necessary to make the previously certified EIR adequate for the Project as revised, would be given the same notice and public review as was given to the original draft EIR as per 14 CCR § 15087, and would be circulated by itself without re-circulating the previous draft or final EIR. Subsequent to that original CEQA certification, CCJPA is seeking to accommodate changes in design associated with the SR3T Project. The SR3T Project SEIR covers two revised Project components:

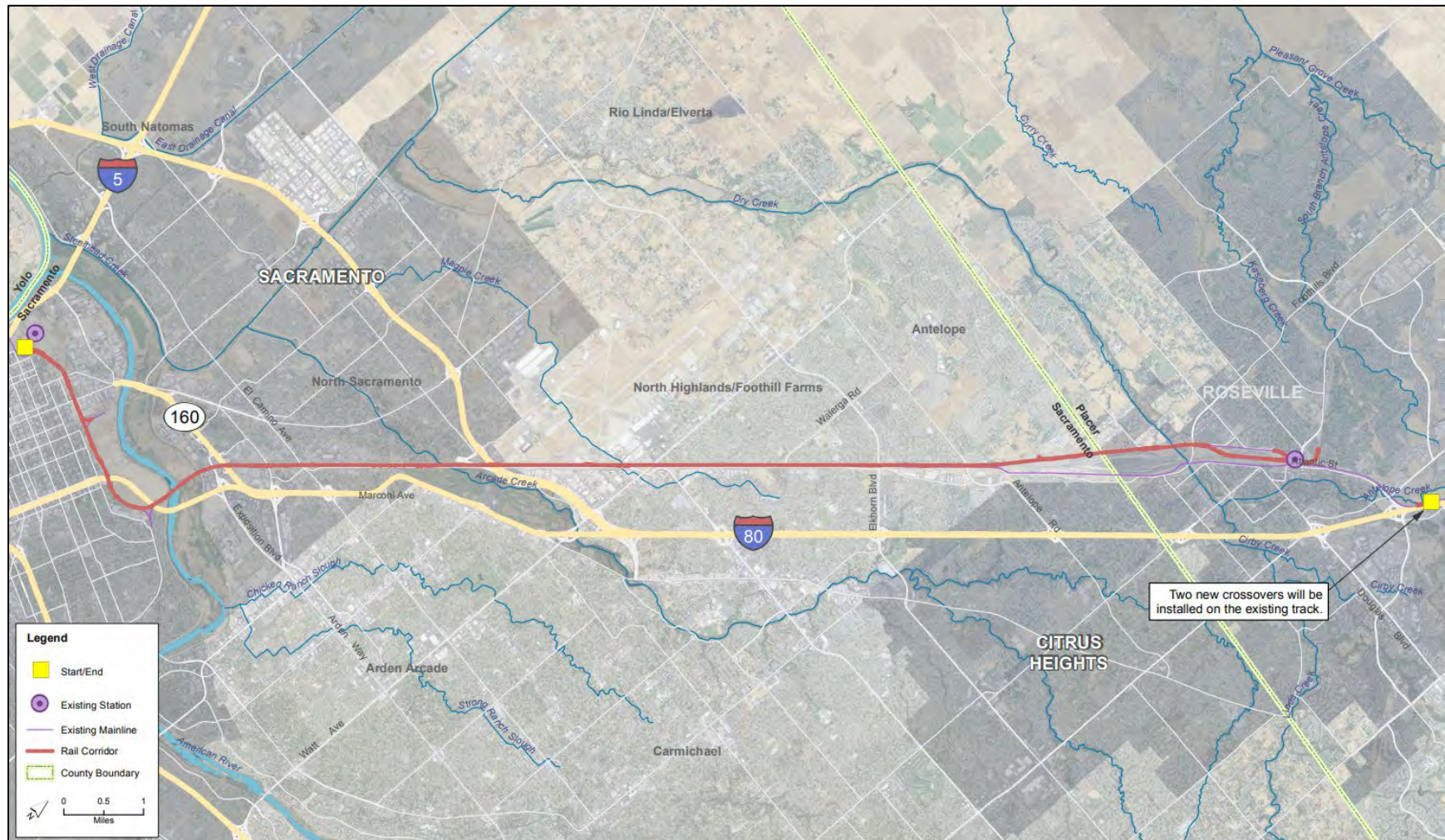
- *Railroad Bridge Crossings:* Supplemental analysis for railroad bridge crossings at two locations across Business I-80 to accommodate changes in project design. This includes modifications (replacement and realignment) to the existing Elvas Underpass (Caltrans Bridge 24-0031) and to the existing B Street Underpass (Caltrans Bridge 24-0023) (Figure 1-3). The modified Elvas Underpass would consist of Elvas East Underpass and Elvas West Underpass, which would be separate structures, but closely spaced to one another. The Elvas East Underpass would be a new structure on the existing Union Pacific (UP) Fresno Subdivision. The Elvas West Underpass would be a new structure on the UP Martinez Subdivision. The modified B Street Underpass would, similarly, consist of two separate but also closely spaced structures on the UP Martinez Subdivision.
- *Passenger Train Layover Facility:* The 2015 Draft EIR contemplated a passenger train layover facility adjacent to Old Town Roseville, located along the west leg of the Union Pacific (UP) wye track connecting the UP Roseville Subdivision with the UP Valley Subdivision. Subsequent to certification of the Final EIR for the SR3T Project, a revised location of the proposed passenger train layover facility was selected adjacent to the UP Roseville Subdivision, east of the originally proposed location, with the majority of the revised layover facility located between Tiger Way and Galleria Boulevard (Figure 1-4).

Figure 1-1. Regional Map



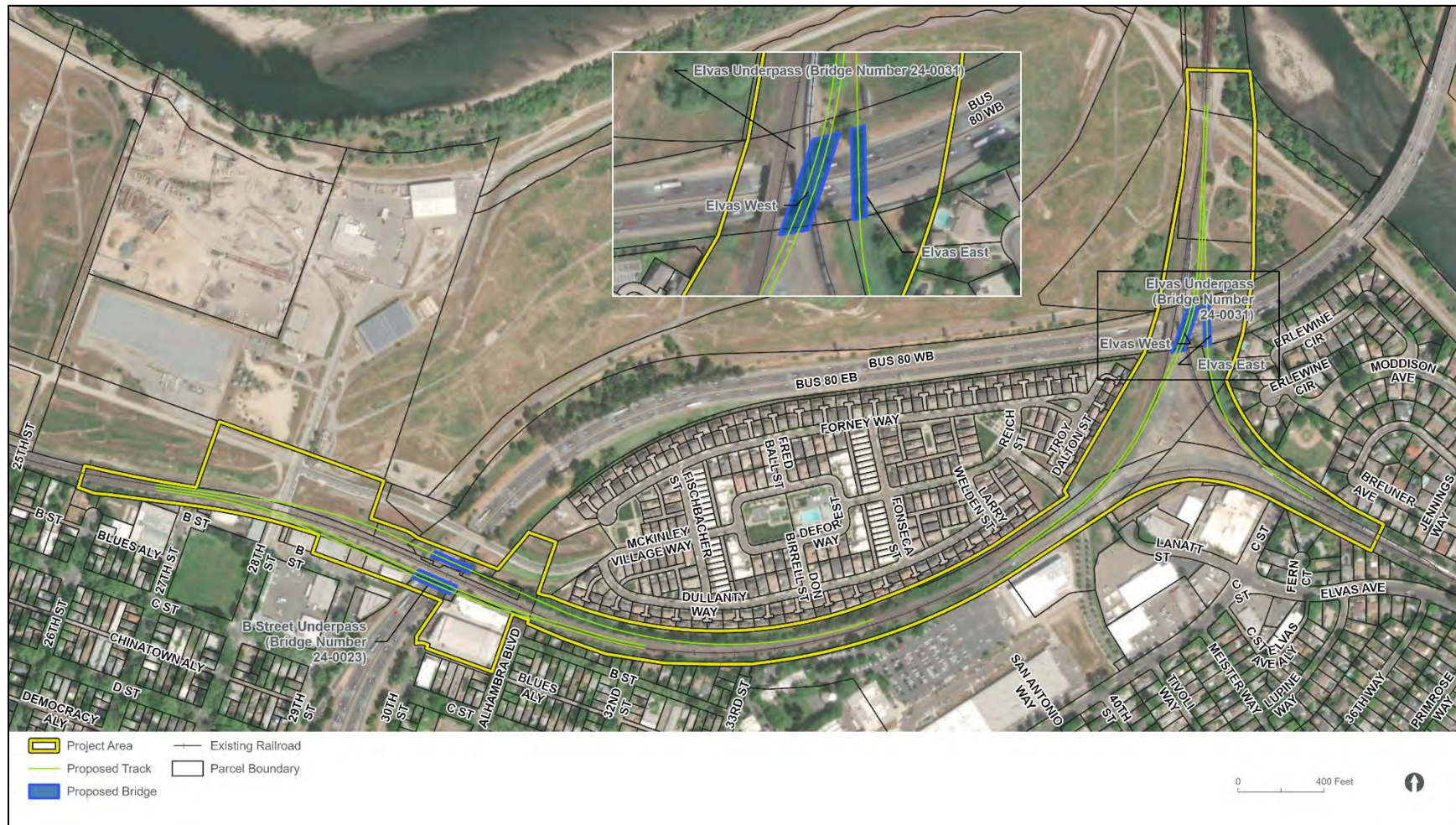
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Figure 1-2. Previously Certified Project Overview Location Map



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Figure 1-3. Railroad Bridge Crossings Location Map



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Figure 1-4. Passenger Train Layover Facility Location Map



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1.2 Terminology

To assist reviewers in understanding this Draft SEIR, the following terms are defined:

- Project means the whole of an action that has the potential for resulting in a physical change in the environment, directly or indirectly.
- Environment means the physical conditions that exist in the area and that would be affected by a proposed project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historical or aesthetic significance. The area involved is where significant direct or indirect impacts would occur as a result of the project. The environment includes both natural and artificial conditions.
- Significant impact on the environment means a substantial, or potentially substantial, adverse change in any of the physical conditions in the area affected by the revised Project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historical or aesthetic significance. An economic or social change by itself is not considered a significant impact on the environment. A social or economic change related to a physical change may be considered in determining whether the physical change is significant.
- Mitigation consists of measures that avoid or substantially reduce the revised Project's significant environmental impacts by:
 - o Avoiding the impact altogether by not taking a certain action or parts of an action;
 - o Minimizing impacts by limiting the degree or magnitude of the action and its implementation;
 - o Rectifying the impact by repairing, rehabilitating, or restoring the affected environment;
 - o Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action; or
 - o Compensating for the impact by replacing or providing substitute resources or environment.
- Cumulative impacts are two or more individual impacts that, when considered together, are considerable or that compound or increase other environmental impacts. The following statements also apply when considering cumulative impacts:
 - o The individual impacts may be changes resulting from a single project or separate projects.
 - o The cumulative impact from several projects is the change in the environment that results from the incremental impact of the project when added to other closely

1.0 Introduction

related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over time.

This Draft SEIR uses a variety of terms to describe the level of significance of adverse impacts. These terms are defined as follows:

- **No Impact.** This level of significance is used for impacts where there is clearly no impact on the environment.
- **Less than Significant.** This level of significance is used for impacts where there would be an impact, but the degree of the impact would not meet or exceed the identified thresholds. Less than significant impacts do not require mitigation.
- **Less than Significant with Mitigation Incorporated.** This level of significance is used for impacts that would meet or exceed the identified thresholds but would be reduced to a less-than-significant level through the implementation of mitigation measures.
- **Significant and unavoidable.** This level of significance describes significant impacts for which mitigation to reduce the significant impact to a less-than-significant level is not available or feasible.

1.3 Logical Termini and Independent Utility

The CEQA Guidelines define a project under CEQA as “the whole of the action” that may result directly or indirectly in physical changes to the environment. Segmenting a project into two or more pieces to then assess impacts is prohibited as evaluating projects separately may have a less than significant impact than when taken as a whole. In contrast, conducting environmental review on a single component of a larger plan is appropriate when each component retains its own independent utility and provides benefit and use regardless of completion of the other components.

As part of project development, project definition involves the need to address “logical termini” and “independent utility.” “Logical termini” may be defined as rational end points for a transportation improvement, and rational end points for a review of environmental impacts. “Independent utility” means that a transportation improvement can stand alone without forcing or requiring other improvements that may have their own impacts. Defining a project with logical termini and independent utility requires that the project be well defined in terms of its project limits and purpose. The following describes how the revised Project studied in this environmental document would meet the three criteria for defining logical termini and independent utility:

- The project exhibits traits associated with logical termini and is of sufficient length to address environmental matters on a broad scope.

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- The project exhibits traits associated with independent utility or independent significance (e.g., the project is usable and would be a reasonable expenditure even if no additional transportation improvements in the area are made).
- The project does not restrict consideration of alternatives for other reasonably foreseeable transportation improvements.

As shown in Figure 1-3 and Figure 1-4, the revised Project possesses logical termini because it connects two logical endpoints for both of the revised Project components (e.g., the railroad bridge crossings and the revised passenger layover facility).

Once operational, the railroad bridge crossings and the revised passenger layover facility would function without requiring additional improvements outside the project area. In addition, a project area of sufficient length and scope was developed to ensure that implementation of the revised Project would not restrict consideration of other design features or alternatives associated with reasonably foreseeable transportation improvements in the area. Continued coordination between CCJPA, Caltrans, and UP would avoid potential conflicts with other planned transportation improvements in the area.

1.4 Public Participation in the Environmental Review

As part of the environmental process, there will be several opportunities for the public and agencies to comment on the environmental document.:

1.4.1 Notice of Preparation

In accordance with §15082 of the CEQA Guidelines, CCJPA released a Notice of Preparation (NOP) for the SEIR on June 28, 2023. An NOP postcard was sent to over 4,000 agencies, residents, and businesses which provided details on the revised Project, where to obtain additional information on the revised Project, and details associated with the virtual scoping meeting. An amended NOP postcard was released to the same mailing list of contacts on July 18, 2023, which included amended information associated with the rescheduled virtual scoping meeting. The purpose of the notice was to solicit comments on the revised Project; therefore, it was circulated to interested parties as well as to the public, local, state, and federal agencies.

Comments regarding environmental impacts focused on the following areas:

Railroad Bridge Crossings component:

- American River Parkway impacts
- Recreational trail impacts during construction
- Utility relocations or removal that may be required
- Biological resource impacts

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Passenger Train Layover Facility component:

- Construction impacts to Roseville Heights neighborhood
- Change in access and parking on adjacent streets in the Roseville Heights neighborhood
- Air quality impacts on residents within the Roseville Heights neighborhood
- Traffic impacts on adjacent streets in the Roseville Heights neighborhood
- Alternative locations for the proposed passenger train layover facility
- Train speed within the Roseville Heights neighborhood
- Biological resource impacts
- Noise impacts within the Roseville Heights neighborhood

The comment letters received on the scope and content of the Draft SEIR are included in Appendix A of the Draft SEIR. Four comment letters were received after the close of the NOP scoping period on June 28, 2023. Although received after the close of the NOP scoping period, these comment letters have also been included in Appendix A of the Draft SEIR.

1.4.2 Scoping Meeting

Pursuant to §15082 (c)(1) of the CEQA Guidelines, the lead agency is required to conduct at least one scoping meeting for all projects of statewide, regional, or area-wide significance. The scoping meeting is for jurisdictional agencies and interested persons or groups to provide comments regarding, but not limited to, the range of actions, alternatives, mitigation measures, and environmental effects to be analyzed. CCJPA hosted a virtual scoping meeting at 6:00 p.m. on July 24, 2023, via Zoom.

1.4.3 Availability of the Draft SEIR

A Draft SEIR is circulated for review and comment to appropriate agencies and additional individuals and interest groups who have requested to be notified of EIR projects. Per §15105 of the State CEQA Guidelines, CCJPA will provide for a 45-day public review period on the Draft SEIR from October 27 to December 11, 2023.

CCJPA will subsequently respond to each comment on the Draft SEIR received in writing through a Response to Comments chapter in the Final SEIR. Responses will be provided to each agency or person who provided written comments on the Draft SEIR 10 days before the scheduled CCJPA Board hearing on the Final SEIR for the revised Project. Documents relating to the revised Project are available for review online at <https://www.capitolcorridor.org/sac-roseville-third-track/> and <http://sactoroseville3rdtrack.com/>.

1.0 Introduction

1.4.4 Certification of the SEIR

The Draft SEIR, together with responses to comments on the Draft SEIR and any modifications or corrections to the Draft SEIR, will constitute the Final SEIR. The CCJPA Board of Directors will review the Final SEIR, the 2015 Final EIR, and any public testimony or comments. Based on that information and all other substantial evidence, the CCJPA Board of Directors will decide whether to certify the Final SEIR and approve the proposed changes to the previously approved Project. As CEQA Guideline Section 15163(e) requires, the CCJPA Board of Directors will make a finding for each potentially significant impact identified in the 2015 Final EIR as revised, as well as the Final SEIR.

1.5 Draft SEIR Contents and Organization

The content and organization of this Draft SEIR are designed to meet the requirements of CEQA and the CEQA Guidelines, as well as to present issues, analysis, mitigation, and other information in a logical and understandable way. This Draft SEIR is organized into the following sections:

- **1.0 Introduction.** This section describes the purpose and intended use of the SEIR, background and context of previous environmental reviews (Final EIR), content and organization of the SEIR, the changed circumstances that are the subject of the SEIR, and the environmental topic areas to be addressed in the SEIR.
- **2.0 CEQA Revised Project – Detailed Description.** This section provides a thorough description of the revised Project, environmental setting, and changed circumstances.
- **3.0 Introduction to Environmental Analysis.** This section provides an introduction to the environmental topic areas that are being analyzed. In addition, this section discusses effects found not to be significant from the changed circumstances and includes a summary of why the changed circumstances would not result in any changes to the conclusions of the 2015 Final EIR.
 - **Environmental Analysis, Impacts, and Mitigation.** This section discusses applicable updates to the environmental setting and regulatory context including any changes to the methodology used for the supplemental analysis, and the detailed analysis of potential impacts, and where necessary, a discussion of potentially feasible mitigation measures. The analysis of each environmental resource topic in Chapter 3 is organized as follows:
 - **Regulatory Framework.** This subsection identifies if the original Final EIR regulatory framework are still applicable, or if any relevant updates to the regulatory framework as well as other policies or guidelines are needed for that environmental topic area.
 - **Environmental Setting.** This subsection identifies if the original Final EIR environmental setting are still applicable, or if any relevant updates to the environmental setting are part of the supplemental analysis. If updates are

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applicable, the discussion includes a description of the changes in physical environmental conditions in the vicinity of the revised Project.

- **Summary of Prior Analysis.** This subsection provides a summary of impacts, relevant mitigation measures and CEQA environmental determinations before and after implementation of mitigation from the original Final EIR and to provide a basis for the SEIR evaluation.
 - **Thresholds of Significance.** This subsection presents the environmental checklist questions that are included in Appendix G of the 2023 CEQA Guidelines that are used in the evaluation of the revised Project. For each environmental topic area, impacts would be considered significant if the revised Project would result in new significant impacts or substantially more severe effects than previously analyzed in the original Final EIR.
 - **Environmental Analysis.** This subsection describes the anticipated environmental changes to existing physical environmental conditions that may occur if the revised Project is implemented.
- **4.0 Other Statutory Considerations.** This section discusses several issues required to be include in the SEIR, significant irreversible environmental changes, the potential for the revised Project to cause or induce urban growth and development.
 - **5.0 Alternatives Considered.** This section states that no additional alternatives were considered in this SEIR as the 2015 Final EIR evaluated a range of alternatives for the previously approved Project.
 - **6.0 References.** This section identifies the documents (printed references) consulted in preparing this SEIR.
 - **7.0 SEIR Preparers and Organizations Consulted.** This section lists the individuals involved in preparing this SEIR and any organizations consulted to prepare the CEQA documentation.

1.6 Responsible and Trustee Agencies

Projects or actions undertaken by the lead agency, in this case CCJPA, may require subsequent oversight, approvals, or permits from other public agencies in order to be implemented. Other such agencies are referred to as responsible agencies and trustee agencies. Pursuant to §15381 and §15386 of the CEQA Guidelines, as amended, responsible agencies and trustee agencies are defined as follows:

- A responsible agency is a public agency that proposes to carry out or approve a project, for which a lead agency is preparing or has prepared an EIR or Negative Declaration. For the purposes of CEQA, the term responsible agency includes all public agencies other than the lead agency that have discretionary approval power over the project (§15381).

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- A trustee agency is a state agency having jurisdiction by law over natural resources affected by a project that are held in trust for the people of the State of California (§15386).

The various public agencies and jurisdictions with a particular interest in the revised Project, include but are not limited to the following:

1.6.1 State Agencies

- California Department of Fish and Wildlife
- California Department of Transportation (Caltrans)

1.6.2 Local Agencies

- Central Valley Regional Water Quality Control Board
- City of Sacramento
- City of Roseville
- County of Sacramento Department of Regional Parks
- Placer County Air Pollution Control District
- Placer County Transportation Planning Agency
- Sacramento Metropolitan Air Quality Management District
- Sacramento Municipal Utility District

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2.0 Changes to the Approved Project

This section describes the approved Project that was certified in the 2015 Final EIR and discusses CCJPA's proposed changes to that Project. In addition, this section discusses changes in circumstances and introduces new information since the approval of environmental documentation prepared for the Project (e.g., the 2005 Draft and Final Environmental Impact Report.)

2.1 Approved Project

The approved Project would expand the number of daily passenger trains operating between the Sacramento Valley Station and downtown Roseville from its current single daily roundtrip (2 CCJPA trains per day) to up to 10 roundtrips per day (20 total CCJPA trains per day). The primary infrastructure improvements are the construction of approximately 17.8 miles of new main track adjacent to the existing UPRR main tracks between the Sacramento Valley Station at Milepost (MP) 89 and downtown Roseville at MP 106, construction of a new railroad bridge across the American River, construction of nine smaller bridges to accommodate the new main track, and construction of a layover facility (including tracks and an operations and maintenance building) near the Roseville Station to store passenger trains overnight. Figure 1-2 shows the general location of the approved Project described in the 2015 Draft EIR.

2.2 Changes to the Approved Project

CCJPA is proposing changes to certain components of the approved Project, which are discussed in detail in this section. The general location and overall components of the proposed changes to the approved Project are shown in Figures 1-3 and 1-4 of this SEIR and include the following.

Railroad Bridge Crossings. The revised Project includes supplemental analysis for railroad bridge crossings at two locations across Business I-80 (also known as SR-51) to accommodate changes in project design. This includes modifications (replacement and realignment) to the existing Elvas Underpass (Caltrans Bridge 24-0031) and to the existing B Street Underpass (Caltrans Bridge 24-0023). As shown in Figure 1-3, the modified Elvas Underpass would consist of the Elvas East Underpass and Elvas West Underpass, which would be separate structures, but closely spaced to one another. The Elvas East Underpass would be a new structure on the existing Union Pacific (UP) Fresno Subdivision. The Elvas West Underpass would be a new structure on the UP Martinez Subdivision. The modified B Street Underpass would, similarly, consist of two separate but also closely spaced structures on the UP Martinez Subdivision.

The replacement of the existing Elvas railroad bridge crossing would include permanently shifting the railroad tracks at the current bridges' location. Two (separate) two-span structures would be constructed, one at the location of the existing Elvas East Underpass and another to the east of the Elvas West Underpass. A new permanent rail underpass would also be constructed west of the (new) Elvas West underpass. The alignment of the railroad tracks would shift only enough to

enable the construction of the new railroad bridge structures. The Elvas East Underpass would shift 95 to 105 feet while the Elvas West Underpass would shift 28 to 42 feet to the east. In the southbound direction, the alignment of the Elvas East Underpass would shift approximately 11 degrees to the east with small ratios curves and will taper back to the existing at an approximate 7 degrees angle. The alignment of the Elvas West Underpass would shift 11 degrees to the east with a horizontal curve starting north of Business I-80, continuing southwesterly across Business I-80, and tapering back at a 7-degree angle. The construction of the Elvas East Underpass would affect approximately 2,100 feet of the railroad segment, while construction of the Elvas West Underpass would affect approximately 2,000 feet of railroad segment.

The replacement and realignment of the B Street Underpass would result in the construction of two railroad bridges. The railroad tracks would be first shifted onto temporary shoofly during construction and then permanently relocated onto the newly constructed railroad bridges. The new B Street railroad bridges would replace the current B Street railroad bridge and require a slight realignment of the existing railroad track segment. Construction of the B Street Underpass would affect approximately 2,250 to 3,600 feet of the railroad segment.

Construction would take place in stages to provide working clearance for the railroad, each stage enabling the construction of the Elvas and B Street railroad bridge structures, shifting of rail traffic, removing old underpasses, and constructing the new railroad bridge structures. The replacement and realignment of these railroad bridge crossings would require temporary rail tracks (a shoofly) to ensure continued railroad traffic/service during construction. Retaining walls in reinforced concrete, 20 to 24 feet high, and embankments with a 2:1 slope are also proposed to be constructed at either end of the new structures, extending east and west, parallel to the new track alignment. The existing railroad bridge structure are proposed to be ultimately demolished and removed. The new railroad bridges would retain the same aesthetic as the existing railroad bridges but with longer spans and deeper girders. The embankments would also retain a 2:1 slope, remaining similar to the existing embankments.

Revised Passenger Train Layover Facility. The 2015 Draft EIR contemplated a passenger train layover facility adjacent to Old Town Roseville, located along the west leg of the Union Pacific (UP) wye track connecting the UP Roseville Subdivision with the UP Valley Subdivision. Subsequent to certification of the 2015 Final EIR for the SR3T Project, a revised location of the proposed passenger train layover facility was identified along the UP right-of-way between Yosemite Street and Galleria Boulevard.

The passenger train layover facility would occupy approximately 9.5 acres and serve as an endpoint where passenger trains begin and end their runs in Roseville, California. Similar to what was identified in the 2015 Draft EIR, the passenger train layover facility would also be used for storage and light maintenance of up to four full passenger train sets at any one time. Typical activities at the passenger train layover facility would include the storage of passenger trains, cleaning the interiors of the passenger trains, emptying of sanitary retention tanks, and light maintenance. Locomotives may also receive fuel from trucks. The passenger train layover facility would also include an approximately 8,000 square foot layover yard building that would include a

break room, a training room, administrative spaces, a small storage area, rest rooms, a locker room, and up to 22 employee parking spaces for train crews to start or finish their daily shifts. The passenger train layover facility also includes the construction of an internal access road and modifications to the existing railroad tracks within the UP right-of-way.

2.3 Introduction of New Information

Regulations that have gone into effect since the 2015 Draft and Final EIR, and to which the proposed changes to the Project are subject, include Assembly Bill (AB) 52, case law regarding how existing environmental conditions will impact a project's future users or residents, various air quality regulations, and Senate Bill (SB) 215.

Assembly Bill 52. Effective July 1, 2015, AB 52 formally established new requirements under CEQA to protect tribal cultural resources. Specifically, the bill requires a lead agency to begin consultation with a California Native American tribe, if requested, and be informed of projects in the geographic area prior to determining if environmental documentation is required. Compliance with AB 52 is discussed in Section 3.4, Cultural Resources, of this SEIR.

California Building Industry Assoc. v. Bay Area Air Quality Management District Case Law. In December 2015, the California Supreme Court found that "CEQA generally does not require an analysis of how existing environmental conditions will impact a project's future users or residents" unless the project "could exacerbate hazards that are already present." The Supreme Court identified several exceptions to this general rule in which CEQA could apply to impacts of the environment on the project, all of which are statutory provisions in CEQA that specifically require consideration of impacts of the environment, such as consideration of projects near airports, school construction projects, and statutory exemptions for housing and transit priority projects. None of these exceptions apply to the proposed changes to the approved Project. (California Building Industry Assoc. v. Bay Area Air Quality Management District (2015) 62 Cal. 4th 369).

Air Quality Regulations. SB 350 (Clean Energy and Pollution Reduction Act of 2015) was approved by the California legislature in September 2015 and signed by Governor Brown in October 2015. Its key provisions are to require the following by 2030: (1) a renewables portfolio standard of 50 percent and (2) a doubling of energy efficiency (electrical and natural gas) by 2030, including improvements to the efficiency of existing buildings. These mandates will be implemented by future actions of the California Public Utilities Commission and California Energy Commission.

SB 32 requires the California Air Resources Board (ARB) to ensure that statewide greenhouse gas (GHG) emissions are reduced to at least 40 percent below 1990 levels by 2030. The companion bill, AB 197, creates requirements to form a Joint Legislative Committee on Climate Change Policies, requires the ARB to prioritize direct emission reductions and consider social costs when adopting regulations to reduce GHG emissions beyond the 2020 statewide limit, requires ARB to prepare reports on sources of GHGs and other pollutants, establishes 6-year terms for voting members of ARB, and adds two legislators as non-voting members of ARB.

Pursuant to SB 32, ARB updated the prior AB 32 Scoping Plan to address implementation of GHG reduction strategies to meet the 2030 reduction target. The Final Plan was approved in December 2017. The 2017 plan continues the discussion from the original scoping plan and 2014 update of identifying scientifically backed policies to reduce GHGs within six of the state's economic sectors. The updated Scoping Plan includes various elements, including doubling energy efficiency savings, increasing the low carbon fuel standard from 10 to 18 percent, adding 4.2 million zero-emission vehicles on the road, implementing the Sustainable Freight Strategy, implementing a post-2020 Cap-and-Trade Program, creating walkable communities with expanded mass transit and other alternatives to traveling by car, and developing an Integrated Natural and Working Lands Action Plan to protect land-based carbon sinks. Compliance with the air quality regulations summarized above is discussed in Section 3.2, Air Quality/Climate Change/GHG, of this SEIR.

Traffic Regulations. State CEQA Guidelines Section 15064.3 was added on December 28, 2018, to address the determination of significance for transportation impacts, which requires vehicle miles traveled as the basis of transportation analysis instead of congestion (such as level of service). The change in the focus of transportation analysis is intended to shift the focus from congestion to, among other things, reduction in GHG emissions, the development of multimodal transportation networks, and encouraging a diversity of land uses. Under CEQA Guidelines Section 15064.3(b), the Project's impact on a roadway network would be significant if the Project would result in a net increase in vehicle miles traveled over baseline conditions, or otherwise conflict with CEQA Guidelines Section 15064.3(b). Compliance with the traffic regulations summarized above is discussed in Section 3.11, Transportation, of this SEIR.

3.0 Environmental Analysis

Twelve environmental topic areas require additional analysis due to the nature of the revised Project. The environmental topic areas addressed in this SEIR are as follows:

- Aesthetics and Visual Resources
- Air Quality/Climate Change/Greenhouse Gases
- Biological Resources
- Cultural Resources
- Geology, Soils, Seismicity, Minerals, and Paleontological Resources
- Hydrology and Water Resources
- Hazards and Hazardous Materials
- Hydrology and Water Resources
- Land Use
- Noise and Vibration
- Population and Housing
- Traffic and Transportation

This Draft SEIR describe substantial changes in the environmental setting, impacts, and mitigation measures for each of the environmental resource areas that were evaluated in the 2005 Draft EIR. Within each environmental resource area, only the proposed changes to the approved Project that have the potential to result in an environmental effect or a change in adopted mitigation measures are discussed. For a detailed discussion of the existing setting at the time each prior environmental document was prepared, impacts (including the thresholds of significance), and mitigation measures, refer to Chapter 3 of the 2005 Draft EIR.

Environmental Topic Areas Adequately Addressed in the 2015 Draft EIR: All of the potential impacts within the following environmental topic areas listed in Appendix G of the CEQA Guidelines have been identified as not being significantly affected by the identified changed circumstances as compared to the 2015 Draft EIR and therefore are not discussed in detail in this Draft SEIR. Those environmental topic areas include:

- Agriculture and Forestry Resources
- Energy
- Public Services
- Recreation
- Utilities and Service Systems
- Wildfire

Supplemental EIR Environmental Evaluation: The environmental thresholds outlined in Appendix G of the State CEQA Guidelines (CCR Title 14, Chapter 3, Sections 15000-15397) are used to determine if the identified changed circumstances would result in a substantial change in impacts over those impacts identified in the 2015 Draft EIR. Consistent with the 2015 Draft EIR, the SEIR environmental evaluation uses the following terminology to denote the significance of environmental impacts of the changed circumstances:

- No Impact
- Less than Significant Impact
- Significant Impact
- Unavoidable Significant Impact

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3.1 Aesthetics and Visual Resources

3.1 Aesthetics and Visual Resources**3.1.1 Regulatory Framework**

The regulatory framework, which includes applicable state and local laws, regulations, and plans relative to aesthetics and visual resources, are identified in the 2015 Draft EIR (Chapter 3.12, Aesthetics and Visual Resources). The regulatory framework for aesthetics and visual resources for this SEIR is the same as presented in 2015 Draft EIR.

3.1.2 Environmental Setting

The 2015 Draft EIR addressed visual impacts associated with the introduction of new linear infrastructure elements to the visual landscape within the Project study area. Simulation vantage points were selected to provide representative public views from which proposed Project components would be most visible to the various viewer groups that are representative of the visual assessment units. The analysis included specific viewer groups that could be exposed to the potential changes in the Project corridor including rail users, motorists, residents, workers, and recreational users.

As part of the 2015 Draft EIR analysis, computer-generated photo simulations were prepared using digital photographs and computer modeling techniques to document the visual changes that would result from implementation of the proposed Project. Determination of aesthetic impacts resulting from implementation of the proposed Project were based on direct field observation from multiple vantage points, including neighboring properties and roadways; photographic documentation of key views of the Project corridor; evaluation of existing visual character; review of Project plans and features, including construction and staging areas; and evaluation of photo simulations depicting the proposed Project components from nine key viewpoints (KVPs).

Figure 3.1-1 and Figure 3.1-2 shows the location of applicable key views associated with the 2015 Draft EIR as well as the key viewpoints associated with the revised Project. Figure 3.1-3 shows the changes at the Elvas Railroad Bridge near the UPRR Wye as envisioned in the 2015 Draft EIR. Figures 3.1-4 and 3.1-5 provide additional viewpoints of the modifications to both the Elvas Railroad Bridge and B Street Railroad Bridge crossings as proposed in this SEIR.

Figure 3.1-6 shows the changes at the passenger train layover facility site as identified in the 2015 Draft EIR. As shown in Figures 3.1-6 through 3.1-10, the revised passenger train layover facility site is adjacent to a mixture of vacant land, commercial land uses, and residences along Roseville Street, Atlantic Street, and Tiger Way.

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Figure 3.1-1. Railroad Bridge Crossings Locations of Key Views Considered



Figure 3.1-2. Passenger Train Layover Facility Locations of Key Views Considered



3.1 Aesthetics and Visual Resources

*Figure 3.1-3. Key Viewpoint #2 - Existing and Simulated Views of Elvas Railroad Bridge Crossing near UPRR Wye
(view looking southeast from westbound shoulder of Capital City Freeway)*



SOURCE: SACRAMENTO TO ROSEVILLE THIRD MAIN TRACK 2015 DRAFT EIR

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*Figure 3.1-4. Key Viewpoint #2a – Existing and Simulated View of B Street Railroad Bridge Crossing
(view looking north from eastbound shoulder of Capital City Freeway)*



Source: Caltrans 2020

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3.1 Aesthetics and Visual Resources

*Figure 3.1-5. Key Viewpoint #2b – Existing and Simulated Views of Elvas Railroad Bridge Crossing near UPRR Wye
(view looking southwest from unmanned aerial vehicle above Capital City Freeway)*



Source: Caltrans 2020

3.1 Aesthetics and Visual Resources

*Figure 3.1-6. Key Viewpoint #9 - Existing and Simulated Views of 2015 EIR Passenger Train Layover Facility Site
(view looking southeast from Sierra Boulevard overpass)*



Source: Sacramento to Roseville Third Main Track 2015 Draft EIR

3.1 Aesthetics and Visual Resources

*Figure 3.1-7. Key Viewpoint #9a – Existing View of Revised Passenger Train Layover Facility Site
(view looking southeast from intersection of Berry Street and Tiger Way)*



Source: Google Earth Street View

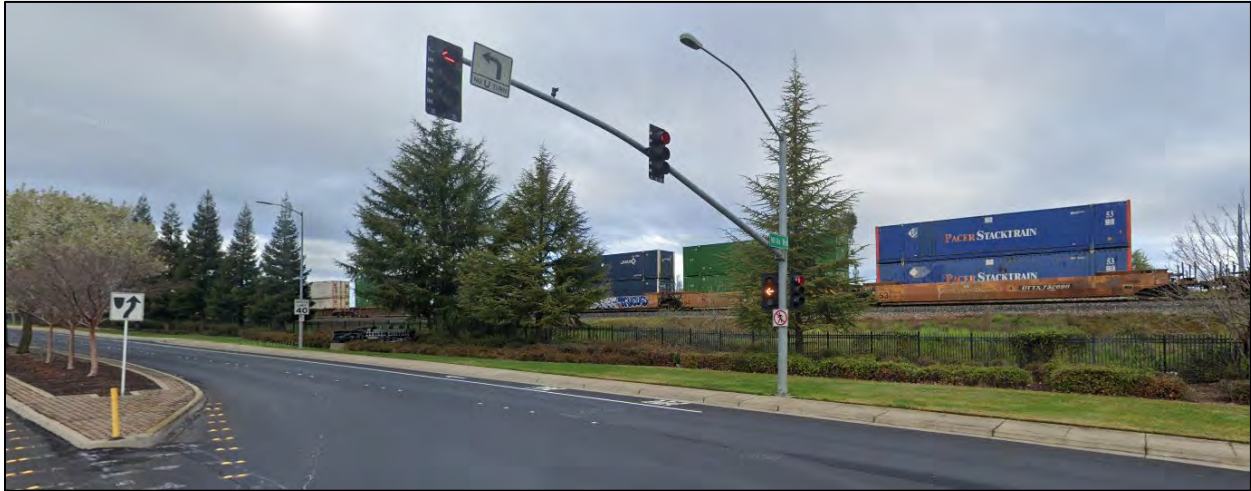
*Figure 3.1-8. Key Viewpoint #9b – Existing View of Revised Passenger Train Layover Facility Site
(view looking northwest from Atlantic Street)*



Source: Google Earth Street View

3.1 Aesthetics and Visual Resources

*Figure 3.1-9. Key Viewpoint #9c – Existing View of Revised Passenger Train Layover Facility Site
(view looking northwest from intersection of Willis Road and Atlantic Street)*



Source: Google Earth Street View

3.1.3 Summary of Prior Analysis

To provide a basis for the SEIR evaluation, Table 3.1-1 summarizes the impacts, relevant mitigation measures, and CEQA environmental determinations before and after implementation of mitigation as reflected in the 2015 Draft EIR.

3.1 Aesthetics and Visual Resources

Table 3.1-1. Summary of 2015 Draft EIR Impacts and Proposed Mitigation Measures – Aesthetics and Visual Resources

Potential Environmental Impact	Significance Determination (Before Mitigation)	Proposed Mitigation Measures	Significance Determination (After Mitigation)
Threshold AES-1: Potential to have a substantial adverse effect on a scenic highway <i>Construction and Operation</i> No designated or eligible state scenic highways are located in the Project vicinity.	<i>Construction</i> No Impact <i>Operation</i> No Impact	Not Applicable	Not Applicable
Threshold AES-2: Substantially degrade the existing visual character or quality of the site or its surroundings, including scenic vistas <i>Construction</i> During construction, viewers in the open space/recreation and residential visual assessment units would see construction activities for limited periods. <i>Operation</i> Some nearby viewers could perceive the introduction of	<i>Construction</i> Potentially Significant <i>Operation</i> Potentially Significant	<i>Construction</i> AES-2a: Minimize visual disruption through vegetation retention and placement of staging areas. To minimize visual disruption, construction activities would implement the following measures. • Limit preconstruction vegetation removal to that necessary for construction. • Where possible, preserve existing vegetation, particularly along the edge of construction areas, to help screen views. • After construction, regrade and revegetate areas disturbed by construction and staging to pre-project conditions. • To the extent feasible, do not site construction staging areas immediately adjacent to existing residential, recreational, or other sensitive visual receptors. AES-2b: Minimize fugitive light from portable sources used for construction. The construction contractor shall minimize fugitive light from portable lighting sources used during construction by adhering to the following practices.	<i>Construction</i> Less than Significant <i>Operation</i> Less than Significant



3.1 Aesthetics and Visual Resources

Table 3.1-1. Summary of 2015 Draft EIR Impacts and Proposed Mitigation Measures – Aesthetics and Visual Resources

Potential Environmental Impact	Significance Determination (Before Mitigation)	Proposed Mitigation Measures	Significance Determination (After Mitigation)
new structures as a significant visual impact.		- Project-related light and glare shall be minimized to the maximum extent feasible within the constraints of safety considerations. - Color-corrected halide lights shall be used. - Portable lights shall be operated at the lowest allowable wattage and height and shall be raised to no more than 20 feet above ground level. - All lights shall be screened and directed down toward work activities and away from the night sky and nearby residents to the maximum extent within the constraints of safety considerations. - The number of nighttime lights used shall be minimized to the greatest extent possible. Implementation of this measure will reduce—to the extent feasible as governed by site-specific safety requirements—the overall amount of nighttime light and glare introduced to the Project vicinity during construction. <i>Operation</i> AES-2c: Screen Ancillary Project Facilities. Ancillary Project facilities shall not be sited near residences, parks, or other sensitive visual receptors. Where avoidance is not feasible, facilities shall be screened with perimeter landscape screening.	
Threshold AES-3: Create a new source of light or glare that would adversely affect day or nighttime views in the area <i>Construction</i>	<i>Construction</i> Potentially Significant <i>Operation</i> Less than Significant	<i>Construction</i> AES-2b: Minimize fugitive light from portable sources used for construction. The construction contractor shall minimize fugitive light from portable lighting sources used during construction by adhering to the following practices. Project-related light and glare shall be minimized to the maximum extent feasible within the constraints of safety considerations.	<i>Construction</i> Less than Significant <i>Operation</i> Not Applicable



3.1 Aesthetics and Visual Resources

Table 3.1-1. Summary of 2015 Draft EIR Impacts and Proposed Mitigation Measures – Aesthetics and Visual Resources

Potential Environmental Impact	Significance Determination (Before Mitigation)	Proposed Mitigation Measures	Significance Determination (After Mitigation)
The Residential Visual Assessment Unit would be exposed to higher levels of lighting during the nighttime hours for a temporary duration throughout project construction. <i>Operation</i> The Project corridor already contains existing lighting from urban development and transportation infrastructure. Operation of the proposed Project would not result in a new source of lighting or glare.		- Color-corrected halide lights shall be used. - Portable lights shall be operated at the lowest allowable wattage and height and shall be raised to no more than 20 feet above ground level. - All lights shall be screened and directed down toward work activities and away from the night sky and nearby residents to the maximum extent within the constraints of safety considerations. - The number of nighttime lights used shall be minimized to the greatest extent possible. - Implementation of this measure will reduce—to the extent feasible as governed by site-specific safety requirements—the overall amount of nighttime light and glare introduced to the Project vicinity during construction. <i>Operation</i> Not Applicable	

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3.1 Aesthetics and Visual Resources

3.1.4 Thresholds of Significance

In accordance with Appendix G of the 2023 CEQA Guidelines, the revised Project would have a significant impact related to aesthetics and visual resources if it were to:

- 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 resources within a state scenic highway.
- c) In nonurbanized 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 points). If in an urbanized area, conflict with applicable zoning and other regulations governing scenic quality.
- d) Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area.

3.1.5 Environmental Analysis

THRESHOLD 3.1-A	Have a substantial adverse effect on a scenic vista
THRESHOLD 3.1-B	Substantially damage scenic resources, including, not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway

The 2015 Draft EIR identified that the Project study area was not located within any scenic vistas or state designated scenic highways. Therefore, the 2015 Draft EIR concluded that no impacts associated with this topic would occur.

Railroad Bridge Crossings

The segment of Business I-80 that the railroad bridge crossings are located on is not designated as a state scenic highway. Therefore, the replacement or realignment of the railroad bridge crossings would not be located within a scenic vista or state designated scenic highway. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

Passenger Train Layover Facility

Adjacent roadways to the revised passenger train layover facility include Roseville Street, Atlantic Street, and Tiger Way, none of which are considered a state designated scenic highway. Therefore, construction and operation of the revised passenger train layover facility would not be located within a scenic vista or state designated scenic highway. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

3.1 Aesthetics and Visual Resources

THRESHOLD 3.1-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 points). If in an urbanized area, conflict with applicable zoning and other regulations governing scenic quality
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The 2015 Draft EIR addressed visual impacts associated with temporary construction activities which were anticipated to entail partial or complete road and lane closures at bridges and at-grade crossings, vehicle and pedestrian detours, construction material deliveries, and transport of construction equipment. However, the 2015 Draft EIR also identified that such conditions are common due to construction and maintenance activities that normally occur in the Project vicinity, specifically in the rail corridor and industrial/commercial visual assessment units.

Railroad Bridge Crossings

During construction, viewers in the open space/recreation visual assessment units (which include Sutter's Landing Regional Park and the American River Parkway) would see construction activities for limited periods as the replacement and realignment of the railroad bridges are constructed and construction activities progress along the alignment. Vegetation removal is likely to be necessary to accommodate railroad bridge crossings; however, such removal would be limited to a short distance on either side of the alignment, and is consequently not anticipated to substantially alter the visual quality or character of those areas. In addition, construction staging areas would be restored to pre-project conditions after construction is completed. The 2015 Draft EIR concluded that although visual impacts associated with construction would be temporary, visual impacts could be potentially significant as recreationists are considered a sensitive viewer group. The inclusion of Mitigation Measure AES-2a, which requires minimization of visual disruption through vegetation retention and placement of staging areas, resulted in impacts being reduced to a less than significant level for existing viewers in the open space/recreation visual assessment units.

The 2015 Draft EIR also identified that Project-related construction activities could be more noticeable in areas adjacent to residences, especially if nighttime construction and associated lighting is undertaken near residences. Although visual impacts associated with construction would be temporary, because residents are considered a sensitive viewer group, these impacts could be potentially significant. The inclusion of Mitigation Measures AES-2a (which requires minimization of visual disruption through vegetation retention and placement of staging areas) and AES-2b (which requires the minimization of fugitive light from portable sources used for construction) resulted in impacts being reduced to a less than significant level for existing residential receptors within the Project Study Area.

The railroad bridge crossings are adjacent to industrial, commercial, and residential uses as well as vacant land. It is anticipated that the railroad bridge crossings would have similar construction activities that could temporarily impact adjacent visual sensitive receptors. Mitigation Measures

3.1 Aesthetics and Visual Resources

AES-2a and AES-2b, which was previously identified in the 2015 Draft EIR for the overall Project and incorporated as part of the 2015 Final EIR Mitigation Monitoring and Reporting Plan (MMRP), would also be implemented for the railroad bridge crossings component. Similar to what was originally identified in the 2015 Draft EIR, implementation of Mitigation Measures AES-2a and AES-2b would minimize potential construction impacts to sensitive receptors to a less than significant level. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR. Construction impacts would remain less than significant with mitigation incorporated.

For operational impacts, the 2015 Draft EIR analyzed representative changes associated with potential changes at the existing Elvas railroad bridge crossing through KVP 2. The primary viewer group at this location would be motorists on the highway. There would be a relatively large number of viewers, but views would be from vehicles traveling at highway speeds. As shown in Figure 3.1-3, the structural aspects of the proposed bridge crossing would be visually consistent with the existing features. The 2015 Draft EIR concluded that the modifications associated with the existing Elvas railroad bridge crossing at Business I-80 would not substantially obstruct long distance views or substantially alter the existing visual character or quality resulting in a less than significant impact.

The railroad bridge crossings are located in the same Visual Assessment Unit as the original railroad bridge crossing of Business I-80 identified in the 2015 Draft EIR. The identified modifications associated with the revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR. Impacts would remain less than significant.

Passenger Train Layover Facility

Temporary changes to the visual landscape would occur during construction of the passenger train layover facility regardless of where the facility would be constructed. These temporary changes would include views of construction equipment, dust, material stockpiling, nighttime construction lighting, and construction and detour signage.

Mitigation Measures AES-2a and AES-2b, which was previously identified in the 2015 Draft EIR for the overall Project and incorporated into the 2015 Final EIR MMRP, would be implemented to address the visual quality and aesthetic impacts associated with the revised passenger train layover facility. Similar to what was originally identified in the 2015 Draft EIR, implementation of Mitigation Measures AES-2a and AES-2b would minimize potential construction impacts to sensitive receptors to a less than significant level. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

The 2015 Draft EIR identified that the passenger train layover facility would consist of trailers that would not exceed heights of 10 to 12 feet. While some residences would not be able to see the trailers at the passenger train layover facility because of mature landscaping, other residences along Roseville Road and Lincoln Street would have unobstructed views of the trailers from side

3.1 Aesthetics and Visual Resources

yards or sidewalks. However, the 2015 Draft EIR identified that rail cars are often stored in this area, and the trailers would be near existing development and consistent with the existing industrial visual character. New tracks associated with the passenger train layover facility would be visible, especially from the Sierra Boulevard overpass, but would be visually consistent with existing UPRR tracks. The 2015 Draft EIR concluded that although the passenger train layover facility would not substantially alter the visual character or quality in this area, some nearby viewers could perceive the introduction of new structures as a potentially significant visual impact. The 2015 Draft EIR concluded that with implementation of Mitigation Measure AES-2c, impacts would be reduced to a less than significant level.

The revised passenger train layover facility site contains similar adjacent land uses (e.g., a mix of residential, commercial, and industrial uses adjacent to the UPRR right of way) as those identified in the 2015 Draft EIR for the original passenger train layover facility site. Although the revised Project component would result in the construction of a new layover yard building, the building would be similar in height to existing one-story commercial and industrial buildings in the Project area. The revised location of the proposed tracks and access road would be visible, especially from the Galleria Boulevard overpass, but would be visually consistent with existing UPRR tracks. In addition, the majority of the proposed layover tracks and access road would not be visible to nearby residences due to existing landscaping, fencing, and intervening businesses. Passenger railcars and locomotives would be stored at the revised layover site; this rail equipment would be approximately 16 feet tall.

Mitigation Measure AES-2c, which was previously identified in the 2015 Draft EIR for the overall Project and incorporated into the 2015 Final EIR MMRP, would be implemented to address the visual impacts associated with the revised passenger train layover facility. Similar to what was originally identified in the 2015 Draft EIR, implementation of Mitigation Measure AES-2c would minimize potential visual operational impacts to sensitive receptors to a less than significant level. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR. Impacts would remain less than significant with mitigation incorporated.

THRESHOLD 3.1-D	Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area
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The 2015 Draft EIR addressed temporary lighting impacts associated with nighttime construction activities at existing residential receptors throughout the Project study area. The 2015 Draft EIR identified that nearby residences in proximity to the construction work zone would be exposed to higher levels of lighting for a temporary duration throughout Project construction, resulting in a potentially significant impact. To address potentially significant impacts, the 2015 Draft EIR identified Mitigation Measure AES-2b, which requires the minimization of nighttime construction activities near residential areas and the screening of construction lighting away from residential

3.1 Aesthetics and Visual Resources

areas. The 2015 Draft EIR concluded that with implementation of Mitigation Measure AES-2b, impacts on existing residential receptors would be reduced to a less than significant level.

The 2015 Draft EIR identified that implementation of the proposed Project would result in a slight increase in the amount of light within the Project study area due to an increased number of trains traveling through the Project corridor. However, the additional lighting would be within an existing railroad ROW not anticipated to significantly impact residents in the area. The 2015 Draft EIR concluded that a less than significant impact associated with operational lighting impacts on residential receptors would occur within the Project study area.

Railroad Bridge Crossings

The railroad bridge crossings are located in the same Visual Assessment Unit as the original railroad bridge crossing of Business I-80 identified in the 2015 Final EIR. Mitigation Measure AES-2b, which was previously identified in the 2015 Draft EIR for the overall Project and incorporated into the 2015 Final EIR MMRP, would also be implemented to address the nighttime construction lighting impacts identified for the railroad bridge crossing component. Similar to what was originally identified in the 2015 Draft EIR, implementation of Mitigation Measure AES-2b would minimize nighttime construction lighting impacts to a less than significant level. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR. Impacts would remain less than significant with mitigation incorporated.

It is anticipated that the additional lighting associated with the railroad bridge crossings would be similar to existing conditions (e.g., bridge crossing is within an existing transportation corridor). The inclusion of lighting for the bridge crossings would be within an existing railroad ROW and is not anticipated to significantly impact residents in the area. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR. Impacts would remain less than significant.

Passenger Train Layover Facility

Mitigation Measure AES-2b, which was previously identified in the 2015 Draft EIR for the overall Project and incorporated into the 2015 Final EIR MMRP, would also be implemented to address the nighttime construction lighting impacts identified for the revised passenger train layover facility. Similar to what was originally identified in the 2015 Draft EIR, implementation of Mitigation Measure AES2b would minimize nighttime construction lighting impacts to a less than significant level. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

As previously mentioned, the 2015 Draft EIR identified that the Project corridor already contains existing lighting from urban development and transportation infrastructure. Given the types of uses in the vicinity of the passenger train layover facility, nighttime lighting consists of surrounding residential, commercial, and industrial uses- which utilize exterior lighting for security, signage, parking, architectural building lighting, and landscaping. Other exterior lighting sources include

3.1 Aesthetics and Visual Resources

pole-mounted streetlights as well as vehicle headlights along adjacent streets (e.g., Atlantic Street, Tahoe Avenue, and Tiger Way). Similar to other uses in the immediate project vicinity, the passenger train layover facility would utilize exterior lighting for security, parking, and building uses. It is anticipated that lighting provided within the passenger train layover facility would follow the 2023 City of Roseville Design and Construction Standards which require all lighting to be designed with appropriate shielding to prevent unnecessary glare. Therefore, the revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

3.2 Air Quality/Climate Change/Greenhouse Gases

3.2.1 Regulatory Framework

The 2015 Draft EIR addressed the regulatory setting for the analysis of potential impacts related to air quality, GHGs, and climate change within Chapter 3.2, *Air Quality/Climate Change/Greenhouse Gases* of the 2015 Draft EIR. The regulatory framework for air quality, GHG, and climate change for this SEIR is generally the same as presented in the 2015 Draft EIR.

3.2.2 Environmental Setting

The Project study area for the 2015 Draft EIR included the 17.8-mile-long Project corridor, as well as the greater Sacramento Valley Air Basin (SVAB), which encompasses Butte, Colusa, Glenn, Sacramento, Shasta, Sutter, Tehama, Yolo and Yuba counties. Additionally, the valley portion of Placer County to and including Auburn, as well as the northern and eastern portions of Solano County were included within the boundaries of the SVAB.

The Project is located within Sacramento Metropolitan Air Quality Management District (SMAQMD) and Placer County Air Pollution Control District (PCAPCD). Criteria air pollutants are regulated through both national and state ambient air quality standards and emissions limits for individual sources. Regulations implementing the federal Clean Air Act and its subsequent amendments established national ambient air quality standards (national standards) for six criteria pollutants: ozone, nitrogen dioxide (NO₂), sulfur dioxide (SO₂), particulate matter (PM, including PM₁₀, PM_{2.5}), carbon monoxide (CO), and lead. California has adopted more stringent state standards for most of the criteria air pollutants. In addition, California has established state ambient air quality standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. Because of the meteorological conditions in the state, there is considerable difference between some of the state and federal standards in California. For example, the federal primary standard for 8-hour ozone is now 0.070 parts per million (ppm), which is a reduction from the 0.075 ppm standard that was in place at the time of the 2015 Final EIR. All other ambient air quality standards are essentially the same as they were at the time of the 2015 Final EIR.

Under amendments to the Federal Clean Air Act, United States Environmental Protection Agency (U.S. EPA) has classified air basins or portions thereof as either “attainment” or “non-attainment” for each criteria air pollutant, based on whether the national standards have been achieved, referred to as National Ambient Air Quality Standards (NAAQS). The California Clean Air Act, which is patterned after the Federal Clean Air Act, also requires areas to be designated as “attainment” or “non-attainment” for the state standards (referred to as California Ambient Air Quality Standards [CAAQS]). Thus, areas in California have two sets of attainment/non-attainment designations: NAAQS and CAAQS. Under current conditions the area is CAAQS nonattainment for ozone and PM less than or equal to 10 microns in diameter (PM₁₀) and NAAQS nonattainment for ozone and PM less than or equal to 2.5 microns in diameter (PM_{2.5}). For all other pollutants, the area is designated as Unclassifiable/Attainment.

3.2 Air Quality/Climate Change/Greenhouse Gases

As discussed above, federal and state agencies have established NAAQS and CAAQS for six criteria pollutants: ozone, lead, CO, NO₂, SO₂, and PM₁₀ and PM_{2.5}. Ozone and NO₂ are considered regional pollutants because they (or their precursors) affect air quality on a regional scale. Pollutants such as CO, SO₂, and lead are considered local pollutants that tend to accumulate in the air locally. The primary criteria pollutants of concern in the Project vicinity were ozone (including nitrogen oxide [NO_x] and reactive organic gases [ROG]), CO, and PM. The Project is located near sources that emit priority Mobile Source Air Toxics, including non-mobile sources. The primary sources are traffic and stationary sources.

3.2.3 Summary of Prior Analysis

To provide a basis for the SEIR evaluation, Table 3.2-1 summarizes the impacts, relevant mitigation measures, and CEQA environmental determinations before and after implementation of mitigation as reflected in the 2015 Draft EIR.

Table 3.2-1. Summary of 2015 Draft EIR Impacts and Proposed Mitigation Measures – Air Quality, Climate Change and GHG			
Potential Environmental Impact	Significance Determination (Before Mitigation)	Proposed Mitigation Measures	Significance Determination (After Mitigation)
Threshold AQ-1: Conflict with or obstruction of implementation of the applicable air quality plan. <i>Construction and Operation</i> The proposed Project would not conflict with or obstruct implementation of applicable air quality plans.	<i>Construction</i> Less than Significant <i>Operation</i> Less than Significant	Not Applicable	Not Applicable
Threshold AQ-2: Violation of any California or regional air quality standard or substantial contribution to an existing or projected air quality violation. <i>Construction</i> Construction emissions associated with the proposed Project would exceed the SMAQMD's and PCAPCD's daily NOx threshold. <i>Operation</i> Operational emissions associated with the proposed Project would not exceed the SMAQMD's and PCAPCD's daily criteria pollutant thresholds.	<i>Construction</i> Potentially Significant <i>Operation</i> Less than Significant	<i>Construction</i> Mitigation Measure AQ-2a: Implement air district–recommended basic and enhanced best management practices to reduce construction-related NOX emissions (SMAQMD and PCAPCD). CCJPA shall require construction contractors to implement basic and enhanced NOX construction mitigation measures recommended by SMAQMD and PCAPCD. Emission reduction measures shall include, at a minimum, the following applicable measures (additional measures may be identified by SMAQMD, PCAPCD, or the contractor, as appropriate). All measures shall be included in the final design and contractor specifications for the Project. Minimize idling time either by shutting equipment off when not in use or by reducing the time of idling to 5 minutes [required by California Code of Regulations, Title 13, sections 2449(d)(3) and 2485]. Provide clear signage that posts this requirement for workers at the entrances to the site. Many construction companies comply with the idling restriction through equipment inspection and maintenance programs.	<i>Construction</i> Less than Significant <i>Operation</i> Not Applicable

Table 3.2-1. Summary of 2015 Draft EIR Impacts and Proposed Mitigation Measures – Air Quality, Climate Change and GHG			
Potential Environmental Impact	Significance Determination (Before Mitigation)	Proposed Mitigation Measures	Significance Determination (After Mitigation)
		- Maintain all construction equipment in proper working condition in accordance with manufacturer's specifications. The equipment must be checked by a certified mechanic and determined to be running in proper condition before it is operated. - Submit to SMAQMD and PCAPCD a comprehensive inventory of all offroad construction equipment of 50 or more horsepower that shall be used an aggregate of 40 or more hours during any portion of construction. - The inventory shall include the horsepower rating, engine model year, and projected hours of use for each piece of equipment. - The Project representative shall provide the anticipated construction timeline including start date, and name and phone number of the project manager and onsite foreman. - This information shall be submitted at least 4 business days prior to the use of subject heavy-duty offroad equipment. - The inventory shall be updated and submitted monthly throughout the duration of the Project, except that an inventory shall not be required for any 30-day period in which no construction activity occurs. - Provide a plan for approval by SMAQMD and PCAPCD demonstrating that the heavy-duty offroad vehicles (50 horsepower or more) to be used in Project construction, including owned, leased, and subcontractor vehicles, shall achieve a Project-wide fleet-average 20 percent NOX	

Table 3.2-1. Summary of 2015 Draft EIR Impacts and Proposed Mitigation Measures – Air Quality, Climate Change and GHG			
Potential Environmental Impact	Significance Determination (Before Mitigation)	Proposed Mitigation Measures	Significance Determination (After Mitigation)
		reduction and 45 percent particulate reduction compared to the most recent ARB fleet average. - o This plan shall be submitted in conjunction with the equipment inventory. - o Acceptable options for reducing emissions may include use of late model engines, low emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, and/or other options as they become available. • Ensure that emissions from all offroad diesel powered equipment used on the project site do not exceed 40 percent opacity for more than three minutes in any one hour. - o Any equipment found to exceed 40 percent opacity (or Ringelmann 2.0) shall be repaired immediately. - o Noncompliant equipment shall be documented and a summary provided to SMAQMD and PCAPCD monthly. - o A visual survey of all in-operation equipment shall be made at least weekly. - o A monthly summary of the visual survey results shall be submitted throughout the duration of the Project, except that the monthly summary shall not be required for any 30-day period in which no construction activity occurs. The monthly summary shall include the quantity and type of vehicles surveyed as well as the dates of each survey.	

Table 3.2-1. Summary of 2015 Draft EIR Impacts and Proposed Mitigation Measures – Air Quality, Climate Change and GHG			
Potential Environmental Impact	Significance Determination (Before Mitigation)	Proposed Mitigation Measures	Significance Determination (After Mitigation)
		- SMAQMD, PCAPCD, and/or other officials may conduct periodic site inspections to determine compliance. Mitigation Measure AQ-2b: Use modern fleet for on-road material delivery and haul trucks during construction to reduce NOX emissions (SMAQMD and PCAPCD). CCJPA shall ensure that construction contracts stipulate that all on road heavy-duty diesel trucks with a gross vehicle weight rating of 19,500 pounds or greater used at the project site shall comply with EPA 2007 on road emission standards for PM10 and NOX (0.01 and 0.20 grams per break horsepower-hour, respectively). These PM10 and NOX standards were phased in through the 2007 and 2010 model years on a percent of sales basis (50 percent of sales in 2007–2009 and 100 percent of sales in 2010). This mitigation measure assumes that all on road heavy-duty diesel trucks are compliant with EPA 2007 on road emission standards. Mitigation Measure AQ-2c: Reduce construction emissions to below SMAQMD NOX thresholds (SMAQMD). CCJPA shall ensure that construction-related emissions do not exceed SMAQMD’s construction NOX threshold of 85 pounds per day. Potential measures in addition to those listed in Mitigation Measures AQ-2a and AQ-2b include but are not limited to those listed below. - Require the usage of EPA-rated Tier 3 or higher rated construction equipment. In general, the following NOX reductions can be achieved when replacing Tier 2 equipment (fleet average) with higher rated engine tiers. - Tier 3—38 percent NOX reduction. - Tier 4 interim—68 percent NOX reduction.	

Table 3.2-1. Summary of 2015 Draft EIR Impacts and Proposed Mitigation Measures – Air Quality, Climate Change and GHG			
Potential Environmental Impact	Significance Determination (Before Mitigation)	Proposed Mitigation Measures	Significance Determination (After Mitigation)
		- o Tier 4 final—94 percent NOX reduction. • Work with SMAQMD to purchase NOX credits to offset remaining NOX construction emissions exceeding SMAQMD thresholds. <i>Operation</i> Not Applicable	
Threshold AQ-3: Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is a nonattainment area for a applicable federal or state ambient air quality standard. <i>Construction and Operation</i> Project emissions would exceed SMAQMD's and PCAPCD's daily threshold for NO_x.	<i>Construction</i> Potentially Significant <i>Operation</i> Potentially Significant	<i>Construction and Operations</i> Mitigation Measure AQ-2a: Implement air district–recommended basic and enhanced best management practices to reduce construction-related NOX emissions (SMAQMD and PCAPCD) Mitigation Measure AQ-2b: Use modern fleet for on-road material delivery and haul trucks during construction to reduce NOX emissions (SMAQMD and PCAPCD) Mitigation Measure AQ-2c: Reduce construction emissions to below SMAQMD NOX thresholds (SMAQMD)	<i>Construction</i> Less than Significant <i>Operation</i> Significant and Unavoidable (Placer County Only)
Threshold AQ-4: Expose Sensitive Receptors to Substantial Pollutant Concentrations <i>Construction</i> Earthmoving activities during construction would expose nearby sensitive receptors to increased health risk associated with localized fugitive PM emissions. CO hot spots are not anticipated to occur. Construction activities	<i>Construction</i> Potentially Significant <i>Operation</i> Less than Significant	<i>Construction</i> Mitigation Measure AQ-4: Implement air district–recommended basic best management practices to reduce construction-related fugitive dust emissions (SMAQMD and PCAPCD). CCJPA shall require construction contractors to implement basic fugitive dust construction mitigation measures recommended by SMAQMD and PCAPCD. Emission reduction measures shall include, at a minimum, the following applicable measures (additional	<i>Construction</i> Less than Significant <i>Operation</i> Not Applicable

Table 3.2-1. Summary of 2015 Draft EIR Impacts and Proposed Mitigation Measures – Air Quality, Climate Change and GHG			
Potential Environmental Impact	Significance Determination (Before Mitigation)	Proposed Mitigation Measures	Significance Determination (After Mitigation)
would not result in exceedance of SMAQMD or PCAPCD health risk thresholds. <i>Operations</i> Operational activities are not anticipated to expose sensitive receptors to substantial pollutant concentrations.		measures may be identified by SMAQMD, PCAPCD, or the contractor, as appropriate). - Water all exposed surfaces two times daily. Exposed surfaces include but are not limited to soil piles, graded areas, unpaved parking areas, staging areas, and access roads. - Cover or maintain at least 2 feet of freeboard space on haul trucks transporting soil, sand, or other loose material on the site. Any haul trucks that travel along freeways or major roadways shall be covered. - Use wet power vacuum street sweepers to remove any visible trackout mud or dirt onto adjacent public roads at least once a day. Use of dry power sweeping is prohibited. - Limit vehicle speeds on unpaved roads to 15 miles per hour (mph). All roadways, driveways, sidewalks, and parking lots to be paved shall be completed as soon as possible. In addition, building pads shall be laid as soon as possible after grading unless seeding or soil binders are used. <i>Operation</i> Not Applicable	

Table 3.2-1. Summary of 2015 Draft EIR Impacts and Proposed Mitigation Measures – Air Quality, Climate Change and GHG			
Potential Environmental Impact	Significance Determination (Before Mitigation)	Proposed Mitigation Measures	Significance Determination (After Mitigation)
Threshold AQ-5: Create objectionable odors affecting a substantial number of people <i>Construction and Operation</i> The proposed Project would not create objectionable odors affecting a substantial number of people.	<i>Construction</i> Less than Significant <i>Operation</i> Less than Significant	Not Applicable	Not Applicable
Threshold AQ-6: Generation of greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment <i>Construction and Operation</i> Although the proposed Project would generate GHG emissions, those emissions would not have a significant impact on the environment.	<i>Construction</i> Less than Significant <i>Operation</i> Less than Significant	Not Applicable	Not Applicable
Threshold AQ-7: Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases <i>Construction and Operation</i> The proposed Project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions.	<i>Construction</i> Less than Significant <i>Operation</i> Less than Significant	Not Applicable	Not Applicable

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3.2.4 Thresholds of Significance

The Project as analyzed in the 2015 Draft EIR would have a significant impact related to air quality and GHGs if it would:

- a) Conflict with or obstruct implementation of the applicable air quality plan.
- b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation.
- c) Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is a nonattainment area for an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors).
- d) Expose sensitive receptors to substantial pollutant concentrations.
- e) Create objectionable odors affecting a substantial number of people.
- f) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.
- g) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

Updates to Appendix G of the CEQA Guidelines that were finalized in December 2018 made non-substantive revisions to these significance criteria. Specifically, the content of criteria b) and c) have been combined and are now reflected as criterion b), and the odors criterion has been refined to include reference to “other emissions.”

The 2018 revised criteria address the same types of impacts that are addressed in the 2015 Draft EIR and are included in Appendix G of the 2023 CEQA Guidelines. Accordingly, the 2023 CEQA Guidelines are relevant to this Draft SEIR’s consideration of whether the revised Project components would cause any new significant impacts or a substantial increase in the severity of previously identified significant impacts than were disclosed in the 2015 Draft EIR. The revised Project would have a significant impact related to air quality and GHG if it were to:

- a) Conflict with or obstruct implementation of the applicable air quality 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.
- 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.

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- e) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.
- f) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

3.2.5 Environmental Analysis

THRESHOLD 3.2-A	Conflict with or obstruct implementation of the applicable air quality plan
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As identified in the 2015 Draft EIR, the SMAQMD and PCAPCD have adopted various strategies necessary for emissions reductions through regulatory controls. Emissions projections are based on population, vehicle, and land use trends typically identified by the local cities, counties, and air districts, as well as by the Sacramento Area Council of Governments (SACOG). The proposed Project would increase service and ridership on the Capitol Corridor system. The Project vicinity is well developed. Accordingly, increased passenger rail service would not materially increase the overall growth pressure in the communities served by CCJPA. While the proposed Project would create four additional operation and maintenance positions at the Roseville Station, the new jobs would represent less than 0.1 percent of total employment in the Roseville area. The number of new jobs created by the proposed Project would therefore be within the growth projections of PCAPCD, SMAQMD, and SACOG for the region. Based on this analysis, the 2015 Draft EIR concluded that the proposed Project would be consistent with recent growth projections for the region and would not conflict with the current air quality plans.

While short-term emissions would be generated during construction, these would be mitigated to below air district significance thresholds. Likewise, long-term operation of the proposed Project would result in a net reduction of all criteria pollutant emission except NO_x under design year (2035) conditions. While NO_x emissions would not be reduced, the NO_x emissions would also not exceed air district thresholds for NO_x. The 2015 Draft EIR identified that the design concept and scope of the proposed Project also consistent with SACOG's Metropolitan Transportation Plan/ Sustainable Communities Strategy (MTP/SCS).

Operation of the proposed Project would contribute to SACOG's goals to improve long-term air quality, reduce on-road vehicle miles traveled (VMT), and increase alternative transportation. The 2015 Draft EIR concluded that the proposed Project would not conflict with or obstruct implementation of any applicable land use plan or policy and that impacts would be less than significant.

Railroad Bridge Crossings

Transportation Conformity applies in areas that are "nonattainment" or "attainment-maintenance" for the NAAQS, and only for the standards that are or previously were violated. Conformity analysis and determinations are done at regional and project-level scales. From a practical viewpoint, the pollutant analyses addressed by project-level conformity focus on CO and PM hot-



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spots. Regional conformity pollutant analyses can involve CO, PM, and O₃ precursors (ROG and NO_x) emissions. The railroad bridge crossings are located within the SVAB, which is designated as a nonattainment area for the O₃ and PM_{2.5} NAAQS and an attainment area for PM₁₀ NAAQS. However, the area is still considered maintenance for the PM₁₀ NAAQS.

Since O₃ impacts are regional in nature, projects that are included in a Regional Transportation Plan and Transportation Improvement Project regional emissions analysis do not require project-level analysis for conformity. The SMAQMD adopted the *Sacramento Regional 2008 NAAQS 8-Hour Ozone Attainment Plan and Reasonable Further Progress Plan* (i.e., O₃ State Implementation Plan [SIP]) to plan for and achieve compliance with the federal and state O₃ standards. The railroad bridge crossings would not interfere with the control measures described in the O₃ SIP. Furthermore, the revised Project would provide transportation benefits that reduce pollutant emissions, including O₃ precursors, by improving traffic operations and efficiency.

Passenger Train Layover Facility

The revised passenger train layover facility would not increase passenger train frequency beyond the additional service evaluated in the 2015 Draft EIR. Implementation of the revised Project would result in the relocation of the proposed passenger train layover facility, resulting in minor additional locomotive travel of approximately two minutes per train. Therefore, the revised Project would not increase the overall growth pressure in the communities served by CCJPA, and the revised Project would be consistent with recent growth projections for the region and would not conflict with the current air quality plans. As a result, operation of the revised Project would contribute to SACOG's goals to improve long-term air quality, reduce VMT, and increase alternative transportation. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

THRESHOLD 3.2-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
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The 2015 Draft EIR identified that construction emissions associated with the proposed Project would exceed both the SMAQMD's and PCAPCD's daily NO_x thresholds of 85 pounds per day and 82 pounds per day, respectively. To reduce NO_x emissions generated by construction activities associated with the proposed Project, the 2015 Draft EIR identified implementation of Mitigation Measures AQ-2a and AQ-2b. Mitigation Measure AQ-2a requires the proposed Project to implement enhanced construction best management practices to reduce construction related NO_x emissions while Mitigation Measure AQ-2b requires the use of modern fleet vehicles for on-road material delivery and haul trucks. With implementation of Mitigation Measures AQ-2a and AQ-2b, NO_x construction emissions that would occur within PCAPCD's jurisdiction would not exceed PCAPCD's daily NO_x threshold of 82 pounds per day.

With implementation of Mitigation Measures AQ-2a and AQ-2b, NO_x construction emissions that would occur within SMAQMD's jurisdiction would still exceed SMAQMD's daily NO_x threshold of 85 pounds per day. The 2015 Draft EIR identified Mitigation Measure AQ-2c to further reduce

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NO_x construction emissions. Mitigation Measure AQ-2c requires the usage of EPA-rated Tier 3 or higher rated construction equipment and the purchase of NO_x credits to offset remaining NO_x emissions. With implementation of Mitigation Measures AQ-2a through AQ-2c, NO_x construction emissions that would occur within SMAQMD's jurisdiction would not exceed SMAQMD's daily NO_x threshold of 85 pounds per day.

The 2015 Draft EIR also identified that operations emissions associated with the proposed Project has the potential to create air quality impacts through increased train activity and maintenance activities. However, the proposed Project would also improve existing passenger rail opportunities, in turn removing single-occupancy vehicles from the transportation network. Long-term operation of the proposed Project would result in a net reduction of all criteria pollutant emissions except for NO_x under Project design year (2035) conditions. The estimated emissions reductions would be a regional air quality benefit. While NO_x emissions would slightly increase with implementation of the proposed Project, the net change in emissions under Project design year (2035) conditions would not exceed SMAQMD or PCAPCD thresholds.

The 2015 Draft EIR also identified that Sacramento and Placer Counties are in a nonattainment area for the federal ozone and PM_{2.5} standards. SMAQMD's emissions thresholds represent the maximum emissions a project may generate in SMAQMD before contributing to a cumulative impact on regional air quality. Therefore, exceedances of the SMAQMD project-level thresholds would be cumulatively considerable for project activities occurring in Sacramento County.

Project construction emissions generated in Sacramento County would not exceed SMAQMD's project-level thresholds with implementation of Mitigation Measures AQ-2a through AQ-2c. Project operation emissions would result in a net reduction of all criteria pollutant emission except NO_x. However, while NO_x emissions would slightly increase, the minor increase in NO_x emissions would not exceed SMAQMD daily thresholds. With implementation of Mitigation Measures AQ-2a through AQ-2c, neither construction nor operation of the proposed Project would result in a cumulatively considerable or cumulative air quality impact in Sacramento County.

PCAPCD has developed a dual approach for evaluating cumulative air quality impacts. Construction emissions would be cumulatively considerable if they exceed the project-level thresholds identified by the PCAPCD. However, operational emissions are evaluated against a unique cumulative threshold: 10 pounds per day of ROG and NO_x. As discussed previously, with implementation of Mitigation Measures AQ-2a and AQ-2b, construction emissions in Placer County would not exceed PCAPCD's project-level thresholds.

Project operation emissions would result in a net reduction of all criteria pollutant emission except NO_x. However, project operation emissions of NO_x would exceed 10 pounds per day threshold for cumulatively considerable impacts. Since operational NO_x emissions would exceed PCAPCD's cumulative threshold, implementation of the proposed Project would result in a cumulatively considerable air quality impact in Placer County under CEQA. As part of the 2015 Final EIR certification, CCJPA adopted a statement of overriding considerations associated with operational emissions exceeding the NO_x cumulative emissions threshold set by the PCAPCD. CCJPA found that the Project benefits (improving rail service reliability and operational efficiency

3.2 Air Quality/Climate Change/Greenhouse Gases

within the Capitol Corridor, a reduction in VMT by nearly 12 million and lower emissions in the transportation study area) outweighed this significant and unavoidable impact.

Railroad Bridge Crossings

Site preparation and construction would involve clearing, cut-and-fill activities, grading, removing, or improving existing roadways and bridges, and paving roadway surfaces. 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 and on-road vehicles powered by gasoline and diesel engines are also anticipated and would include CO, NO_x, ROG, directly emitted PM₁₀ and PM_{2.5}, and toxic air contaminants (TACs) such as diesel exhaust particulate matter. Construction activities in the area may temporarily increase traffic congestion and slow the speed of traffic, resulting in a temporary increase in on-road emissions. These emissions would be limited to the immediate area impacted by construction-related traffic.

Passenger Train Layover Facility

The revised passenger train layover facility would still be located in Roseville, which is part of Placer County. Air quality within this air basin would continue to be governed by PCAPCD air quality rules and regulations. Table 3.2-2 summarizes the results of the emissions modeling, which are compared to PCAPCD's criteria pollutant numeric thresholds for construction emissions (PCAPCD 2017a).

The emissions shown in Table 3.2-2 are the maximum daily emissions that would occur, consistent with PCAPCD guidance. Maximum daily emissions are conservative, because they capture the emissions that would occur on the worst-case day of construction, whereas the use of average daily thresholds in other air districts results in lower emissions values that are averaged across the construction period.

It should be noted that the emissions presented in Table 3.2-2 are also conservative, because the 2015 Draft EIR included emissions for construction of a new 4,600-square-foot maintenance facility, which would be replaced by the revised passenger train layover facility. However, it is not feasible to adjust the emissions disclosed in the 2015 EIR to subtract the contribution from the original maintenance facility construction. As such, the revised Project's emissions are summed with emissions in the third year of construction associated with the original Sacramento to Roseville Third Main Track Project. As a result, there may be some unavoidable double counting of emissions between the original maintenance facility and the revised passenger train layover facility. Although double counting may occur, summing emissions in this way is a conservative approach and allows for a comprehensive evaluation of the Sacramento to Roseville Third Main Track Project with the revised passenger train layover facility.

Table 3.2-2. Estimated Construction Emissions for the Revised Project (pounds per day)			
Year/Condition	ROG	NO _x	PM ₁₀
Unmitigated Construction Emissions			
Construction – Year 1 (2015 EIR)	2	24	12
Construction – Year 2 (2015 EIR)	9	96	50
Construction – Year 3 (2015 EIR)	24	30	19
Revised Passenger Train Layover Facility	44	593	50
Subtotal	68	623	69
PCAPCD Threshold	82	82	82
Exceeds PCAPCD Threshold?	No	Yes	No
Mitigated Construction Emissions			
Construction – Year 1 (2015 EIR)	2	19	12
Construction – Year 2 (2015 EIR)	9	77	50
Construction – Year 3 (2015 EIR)	24	24	19
Revised Passenger Train Layover Facility	16	129	24
Subtotal	40	153	43
PCAPCD Threshold	82	82	82
Exceeds PCAPCD Threshold?	No	Yes	No

Notes: PCAPCD = Placer County Air Pollution Control District; ROG= reactive organic gases; NO_x = nitrogen oxide;
PM₁₀ = particulate matter no more than 10 microns in diameter.

Source: ICF 2023

As shown in Table 3.2-2, the revised Project's unmitigated construction activities would generate NO_x emissions that exceed the applicable PCAPCD numeric threshold of 82 pound per day. The primary reason for the exceedance of the emissions threshold is from the use of locomotives to haul ballast from quarries to the Project site. The ballast-hauling locomotives are high-horsepower and thus emissions-intensive equipment, but the use of the locomotives would occur for only 4 days during the construction period. On these days, the maximum daily emissions scenario would occur, and the threshold would be exceeded; however, for the majority of days during construction the emissions of NO_x would be substantially lower. The average emissions during construction would thus result in lower emissions than those presented in Table 3.2-2.

3.2 Air Quality/Climate Change/Greenhouse Gases

With implementation of previously identified Mitigation Measures AQ-2a and AQ-2b, NO_x construction emissions that would occur within PCAPCD's jurisdiction would still exceed PCAPCD's daily NO_x threshold of 82 pounds per day. Similar to what was identified in the 2015 Draft EIR for construction emission that would exceed SMAQMD daily thresholds, the revised Project would modify 2015 Draft EIR Mitigation Measure AQ-2c to include additional PCAPCD requirements to further reduce NO_x construction emissions as follows:

Mitigation Measure AQ-2c: Reduce construction emissions to below SMAQMD and PCAPCD NO_x thresholds (SMAQMD and PCAPCD). CCJPA shall ensure that construction-related emissions do not exceed SMAQMD's construction NO_x threshold of 85 pounds per day. Potential measures in addition to those listed in Mitigation Measures AQ-2a and AQ-2b include but are not limited to those listed below.

- Require the usage of EPA-rated Tier 3 or higher rated construction equipment. In general, the following NO_x reductions can be achieved when replacing Tier 2 equipment (fleet average) with higher rated engine tiers.
 - o Tier 3—38 percent NO_x reduction.
 - o Tier 4 interim—68 percent NO_x reduction.
 - o Tier 4 final—94 percent NO_x reduction.
- Work with SMAQMD to purchase NO_x credits to offset remaining NO_x construction emissions exceeding SMAQMD thresholds.

CCJPA shall also ensure that construction-related emissions do not exceed PCAPCD's construction NO_x threshold of 82 pounds per day. Potential measures include but are not limited to those listed below.

- Require the usage of EPA-rated Tier 4 Final rated construction equipment. In general, replacing Tier 2 equipment with Tier 4 Final equipment can result in a 94% reduction in NO_x emissions.
- Require the usage of EPA-rated Tier 4 locomotives for ballast hauling between quarries and the Project site.
- Work with PCAPCD to purchase NO_x credits to offset remaining NO_x construction emissions exceeding PCAPCD thresholds.

Modified Mitigation Measure AQ-2c would require the revised Project to utilize EPA-rated Tier 4 rated construction equipment and the purchase of NO_x credits to offset remaining NO_x emissions. The use of offsets would only apply to days when the NO_x threshold is exceeded. As indicated above, the number of days that emissions would be exceeded would be limited to the days that locomotive ballast hauling would occur (i.e., 3-4 days). With implementation of Mitigation Measures AQ-2a and AQ-2b and Modified Mitigation Measure AQ-2c, NO_x construction emissions that would occur as a result of the construction of the revised passenger train layover facility would not exceed PCAPCD's daily NO_x threshold of 82 pounds per day.

Table 3.2-3 summarizes the results of the emissions modeling, which are compared to PCAPCD's criteria pollutant numeric thresholds for operational emissions (PCAPCD 2017a).

**Table 3.2-3. Operational Emissions – Revised Project Design Conditions (2035)
(pounds per day)**

Source	ROG	NO _x	CO	PM ₁₀	PM _{2.5}	SO ₂
Train Operation	0.9	21.9	28.1	0.3	0.3	0.1
Public Vehicles	- 2.7	- 5.9	- 29.1	- 6.2	- 1.9	- 0.2
Public Buses – Thruway	< - 0.1	< - 0.1	< - 0.1	< - 0.1	< - 0.1	< - 0.1
Public Buses – Roseville	< - 0.1	< - 0.1	< - 0.1	< - 0.1	< - 0.1	< - 0.1
O&M at Roseville Station	< - 0.1	< - 0.1	< - 0.1	< - 0.1	< - 0.1	< - 0.1
O&M at Roseville Layover Facility	< - 0.1	< - 0.1	0.3	0.1	< - 0.1	< - 0.1
Total Net Change	- 1.6	16.1	- 0.6	-5.8	-1.6	-0.1
PCAPCD Threshold	55	55	-	82	-	-
Exceeds PCAPCD Threshold?	No	No	N/A	No	N/A	N/A

*Notes: PCAPCD = Placer County Air Pollution Control District; ROG= reactive organic gases; NO_x = nitrogen oxide;
PM₁₀ = particulate matter no more than 10 microns in diameter.
Source: ICF 2023*

Emissions are shown for various sources in Table 3.2-3, including those that are not affected by the Project (e.g., public on-road vehicles and buses), because the location of the revised passenger train layover facility does not affect ridership (and thus on-road vehicle travel) or bus service. As shown in Table 3.2-3, operation of the revised Project would not generate ROG, NO_x, or particulate matter that would exceed the applicable PCAPCD numeric thresholds. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

THRESHOLD 3.2-C	Expose sensitive receptors to substantial pollutant concentrations
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The 2015 Draft EIR analyzed various air quality pollutants that could be generated by implementing the proposed Project including PM₁₀ fugitive dust emissions, CO concentrations, diesel particulate matter (DPM) exhaust emissions, and exposure to Naturally Occurring Asbestos.

PM₁₀ Fugitive Dust Emissions. As identified in the 2015 Draft EIR, earthmoving activities during construction would generate fugitive PM emissions that could expose nearby sensitive receptors to increased health risk. SMAQMD has adopted the PM₁₀ CAAQS as a threshold for the evaluation of construction-related fugitive dust emissions. Because PM_{2.5} is a subset of PM₁₀, the SMAQMD

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assumes that projects in excess of the PM₁₀ CAAQS would also result in a significant impact associated with PM_{2.5} emissions (SMAQMD 2014).

SMAQMD's CEQA guidelines consider projects that implement all SMAQMD-required BMPs and disturb less than 15 acres per day (i.e., grading, excavation, cut and fill) to not have the potential to exceed the PM₁₀ CAAQS. The 2015 Draft EIR made the assumption that construction activities in SMAQMD would not disturb more than 15 acres on a daily basis. With implementation of Mitigation Measure AQ-4, which requires implementation of air quality-related BMPs recommended by SQAQMD and PCAPCD, the 2015 Draft EIR concluded that the Project would not result in the exceedance of SMAQMD's PM threshold. This impact would be less than significant after implementation of Mitigation Measure AQ-4.

CO Concentrations. The 2015 Draft EIR identified that increased passenger traffic near the Sacramento and Roseville stations would have the potential to create CO hot spots. As part of the 2015 Draft EIR, a screening-level analysis was conducted for existing (2013) and design year (2035) conditions. The screening-level analysis confirmed that CO concentrations would not contribute to any new localized violations of the 1-hour or 8-hour ambient air quality standards. Since the screening-level analysis assumed that all Project-generated traffic would use only two intersections, actual CO concentrations that would be generated at multiple intersections surrounding the transit stations would not result in CO hot spots. The 2015 Draft EIR concluded that this impact would be less than significant.

DPM Exhaust Emissions. Construction activities would generate DPM exhaust emissions from the use of heavy-duty equipment within the Project corridor. Cancer health risks associated with exposure to diesel exhaust are typically associated with chronic exposure, in which a 70-year exposure period is assumed. Multiple sensitive receptors (e.g., residences) are located within 0.5 mile of the Project corridor with the closest nearest receptor located within 25 feet from the existing Roseville station. As identified in the 2015 Draft EIR, construction associated with the proposed Project would not result in chronic non-cancer or cancer risk in excess of SMAQMD or PCAPCD health risk thresholds. In addition, the analysis contained in the 2015 Draft EIR does not account for potential DPM reductions achieved by tier 4 engines incorporated into the construction fleet as part of Mitigation Measure AQ-2c. To the extent that CCJPA elects to use tier 4 engines to meet required NOX reductions, health risks would be even lower than those identified in the 2015 Draft EIR. The 2015 Draft EIR concluded that this impact would be less than significant.

The 2015 Draft EIR also identified that there would be increased DPM emissions generated by expanded locomotive activity both along the rail line and during idling at the Roseville station. Cancer health risk from exposure to diesel exhaust is associated with chronic exposure, in which a 70-year exposure period was assumed in the 2015 Draft EIR. Under Project design year (2035) conditions, health risks associated with locomotive operation and idling at the Roseville station are below the SMAQMD's and PCAPCD's risk thresholds for chronic non-cancer hazard index (HI) and DPM cancer risk. This reduction in risk is primarily due to the use of Tier 4 engines. Since health risks at all locations under design year conditions would not exceed applicable air district thresholds, the 2015 Draft EIR concluded that this impact would be less than significant.



3.2 Air Quality/Climate Change/Greenhouse Gases

Naturally Occurring Asbestos (NOA). Disturbance of rock and soil that contains NOA can result in consequent exposure to the public. Asbestos most commonly occurs in serpentine rock and its parent material, ultramafic rock. According to hazard identification maps, NOA in Sacramento County is limited to eastern areas near the city of Folsom (Higgins and Clinkenbeard 2006). Therefore, the 2015 Draft EIR concluded that the proposed Project would have no potential to expose receptors to NOA in Sacramento County. The Naturally Occurring Asbestos Hazard map for Placer County indicates that the Placer County portion of the Project corridor is in an area “least likely to contain NOA” (California Geological Survey 2008). The 2015 Draft EIR identified that the submission of an NOA mitigation plan is not required for the proposed Project, but compliance with PCAPCD Rule 228 is required. The 2015 Draft EIR concluded that this impact would be less than significant.

Railroad Bridge Crossings

The railroad bridge crossings are located within the city of Sacramento, which is a densely populated urban area. The areas adjacent to the SR 51/I-80/CapCity corridor primarily include both single-family and multi-family residential developments, a regional park (i.e., Sutter’s Landing Regional Park), commercial developments (i.e., restaurants, retail spaces, and offices), and some light industrial uses. The SMAQMD defines sensitive receptors to include residential dwellings (including single-family houses and multi-family residential buildings, townhouses, and apartments), schools, daycare centers, hospitals, and senior-care facilities.

PM₁₀ Fugitive Dust Emissions/CO Concentrations/DPM Exhaust Emissions. As identified in the 2015 Draft EIR, earthmoving activities during construction would generate fugitive PM emissions that could expose nearby sensitive receptors to increased health risk. SMAQMD has adopted the PM₁₀ CAAQS as a threshold for the evaluation of construction-related fugitive dust emissions. Because PM_{2.5} is a subset of PM₁₀, the SMAQMD assumes that projects in excess of the PM₁₀ CAAQS would also result in a significant impact associated with PM_{2.5} emissions (Sacramento Metropolitan Air Quality Management District 2014).

Per federal transportation conformity regulations (40 CFR 93.123(c)(5)), construction-related activities that cause temporary increases in emissions do not require a hot-spot analysis. Construction emissions are defined as those that occur only during the construction phase of the project and last five years or less at any individual site. They typically fall into two main categories:

- *Fugitive Dust:* Emissions from construction due to ground disturbance. All air districts and the California Health and Safety Code (Sections 41700–41701) prohibit “visible emissions” exceeding three minutes in one hour – this applies not only to dust but also to engine exhaust. In general, this is interpreted as visible emissions crossing the right-of-way line.

Sources of fugitive dust include disturbed soils at the construction site and trucks carrying uncovered loads of materials. Unless properly controlled, vehicles leaving the site may deposit mud on the interstate or local streets, which could be an additional source of airborne dust after it dries. PM₁₀ emissions may vary from day to day, depending on the nature and magnitude of construction activity and local weather conditions. PM₁₀ emissions depend on soil moisture, silt content of soil, wind speed, and the amount of

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equipment operating. Larger dust particles would settle near the source, while fine particles would be dispersed over greater distances from the construction site.

- *Construction equipment emissions:* Diesel exhaust particulate matter is a California-identified TAC, and localized issues may exist if diesel-powered construction equipment is operated near sensitive receptors.

Project-level conformity requires project sponsors demonstrate their transportation project will not cause or contribute to any new localized CO, PM₁₀, and/or PM_{2.5} violations, increase the frequency or severity of any existing CO, PM₁₀, and/or PM_{2.5} violations, or delay timely attainment of any NAAQS or any required interim emission reductions or other SIP milestones. This is demonstrated through a hot-spot analysis where emissions are modeled, both with and without any mitigation measures committed to in the MTP.

The railroad bridge crossings are located in an attainment area for CO, maintenance for PM₁₀, and a nonattainment area for PM_{2.5}. Therefore, a project-level conformity analysis applies to the Project for particulate matter (PM₁₀ and PM_{2.5}) under 40 CFR 93.109. Hot-spot analysis for particulate matter is only required for projects found to meet the definition of a POAQC through interagency consultation with the MPO's the Project Level Conformity Group (PLCG). The railroad bridge crossings were found not to be a POAQC by SACOG's PLCG on January 19, 2021. Therefore, a particulate matter (i.e., PM₁₀ and/or PM_{2.5}) hot-spot analysis is not required.

40 CFR 93.123(c)(5) states that: "CO, PM₁₀, and PM_{2.5} hot-spot analyses are not required to consider construction-related activities which cause temporary increases in emissions. Each site which is affected by construction-related activities shall be considered separately, using established 'Guideline' methods. Temporary increases are defined as those which occur only during the construction phase and last five years or less at any individual site." Since construction of the railroad bridge crossings is expected to last less than five years, an evaluation of CO, PM₁₀, and PM_{2.5} emissions during Project construction is not required for project-level conformity determination.

Naturally Occurring Asbestos (NOA). As identified in the 2015 Draft EIR, NOA in Sacramento County is limited to eastern areas near the city of Folsom. The replacement or realignment of the railroad bridge crossings would be located in the City of Sacramento. Therefore, the construction or operation of the railroad bridge crossings would have no potential to expose receptors to NOA. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

Passenger Train Layover Facility

PM₁₀ Fugitive Dust Emissions. As identified in the 2015 Draft EIR, earthmoving activities during construction would generate fugitive PM emissions that could expose nearby sensitive receptors to increased health risk. However, as noted in Table 3.2-2, construction emissions associated with the revised passenger train layover facility would not exceed the daily PM₁₀ threshold. Therefore, no impacts are anticipated to occur with this topic.

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CO Concentrations. As noted in the 2015 Draft EIR, increased passenger traffic near the Sacramento and Roseville stations would have the potential to create CO hot spots. The revised Project would not result in additional motor vehicles to travel to the Sacramento or Roseville transit stations, because ridership is not affected by the specific location of a passenger train layover facility. Therefore, the revised Project would not have the potential to create CO hot spots at the intersections surrounding the revised passenger train layover facility site. The revised Project would not change the significance conclusions or result in any new significant CO hot spot impacts not previously identified in the 2015 Draft EIR.

DPM Exhaust Emissions. Construction activities would generate emissions of DPM from the use of heavy-duty off-road equipment, including ballast-hauling locomotives, and trucks used for hauling materials. During the Project's operational phase, increased DPM emissions would be generated by locomotive activity along the rail line covering the additional distance to the proposed layover facility, locomotive idling at the layover facility, and the proposed diesel-fueled emergency generator. Sensitive receptors in the Project area include Roseville High School and multiple residences located directly adjacent to the Project boundary.

Because the Project would introduce DPM emissions in an area near existing sensitive receptors, a Health Risk Assessment (HRA) was conducted in accordance with PCAPCD guidelines. The HRA uses EPA's most recent air dispersion model, AERMOD (version 22112), and risk assessment methodologies for DPM provided by the Office of Environmental Health Hazard Assessment (OEHHA 2015). The HRA consists of three parts: an emissions inventory, air dispersion modeling, and risk calculations.

Exposure to DPM emissions from construction activities and locomotive movement and idling during Project operation was assessed by predicting the health risks in terms of excess cancer, non-cancer hazard impacts, and elevated DPM concentrations. Cancer health risk from exposure to diesel exhaust is associated with chronic exposure, in which a 30-year exposure period is assumed. DPM exposure and associated health risks are dependent on several factors, including variation in receptor behavior and physiology, as well as meteorological conditions and the release characteristics of the engine exhaust. Depending on the release height and other variables, the highest exposure may not be at locations nearest to the track. Note that DPM concentrations, and thus cancer risks, dissipate as a function of distance from the emissions source. The results of the HRA are summarized in Table 3.2-4 and compared to PCAPCD's health risk thresholds (PCAPCD 2017b).

Table 3.2-4. Mitigated and Unmitigated Health Risks Resulting from Revised Passenger Train Layover Facility Construction and Operation

Condition	DPM Cancer Risk	Chronic Non-Cancer HI
Construction – Unmitigated	2.3	< 0.01
Construction – Mitigated	1.0	< 0.01
Operation	6.5	< 0.01
Cumulative – Unmitigated (Construction + Operation)	8.8	-
Cumulative – Mitigated (Construction + Operation)	7.5	-
<i>PCAPCD Threshold</i>	<i>10</i>	<i>1</i>
Exceed?	No	No

*Notes: Data represent maximum health risks at evaluated receptor locations; DPM = diesel particulate matter
Source: ICF 2023*

As shown in Table 3.2-4, DPM emissions generated by the revised passenger train layover facility construction, operation, and the cumulative total of both would not result in chronic non-cancer or cancer risks that exceed PCAPCD health risk thresholds under the unmitigated condition. The mitigated construction health risk estimates account for reductions in DPM emissions achieved by using Tier 4 Final construction equipment, as outlined in modified 2015 Draft EIR Mitigation Measure AQ-2c. However, this mitigation measure is not required to prevent health risks from exceeding the cancer risk threshold. The revised Project would not change the significance conclusions or result in any new significant HRA impacts not previously identified in the 2015 Draft EIR.

Naturally Occurring Asbestos. The 2015 Draft EIR evaluated the potential for construction in Placer County to expose sensitive receptors to NOA. Similar to what was identified for the original passenger train layover facility, the revised passenger train layover facility is located in an area “least likely to contain NOA” according to the *Naturally Occurring Asbestos Hazard* map for Placer County (California Geological Survey 2008). Therefore, the submission of an NOA mitigation plan is not required for the revised Project, but compliance with PCAPCD Rule 228 would be required. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

THRESHOLD 3.2-D	Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people
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The 2015 Draft EIR addressed the potential for odors to be generated during construction and operation of the Project. Sources of odor that could be generated during construction activities would include diesel exhaust from construction equipment and asphalt paving. However, odors from equipment exhaust would be localized and generally confined to the immediate area

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surrounding the construction site. The 2015 Draft EIR identified that operation of the Project would not include any uses identified by Air Resources Board as being associated with odors and would not produce objectionable odors. Any odors resulting from diesel fuel combustion along the extended track would be short term, occurring as trains pass by, and would not be significant during operations.

Railroad Bridge Crossings

The replacement or realignment of the railroad bridge crossings would still require the same type of construction activities previously identified in the 2015 Draft EIR. Therefore, similar impacts associated with the generation of odors would occur during construction activities in the form of diesel exhaust and asphalt paving. Operation of the railroad bridge crossings would not result in new sources of odors. Therefore, the revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

Passenger Train Layover Facility

Construction of the passenger train layover facility at its revised location would still require the same type of construction activities previously identified in the 2015 Draft EIR. Therefore, similar impacts associated with the generation of odors would occur during construction activities in the form of diesel exhaust, asphalt paving, and application of paints. Operation of the passenger train layover facility at its revised location would not result in new sources of odors that would not already exist in the area. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

THRESHOLD 3.2-E	Generate greenhouse gas emissions, either directly, or indirectly, that may have a significant impact on the environment
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Construction of the proposed Project would generate direct emissions of CO₂, CH₄, and N₂O from mobile and stationary construction equipment exhaust, as well as employee vehicle and haul truck exhaust. The 2015 Draft EIR identified that construction of the proposed Project would generate a total of 3,573 metric tons of CO₂e. This is equivalent to adding almost 750 typical passenger vehicles per year to the road during construction. As described further below, these short-term emissions would be offset through long-term GHG savings achieved during Project operation.

Operation of the proposed Project has the potential to generate long-term GHG emissions from transit operations and changes in regional traffic patterns. Transit operations would generate GHGs through use of locomotive diesel fuel. Changes in regional traffic would primarily affect emissions levels through changes in gasoline consumption associated with the diversion of private automobile trips to passenger rail. Reductions in passenger bus service and standby electricity usage would also affect GHG emissions levels relative to existing conditions. The 2015 Draft EIR identified that GHG benefits achieved through operation of the proposed Project would offset the short-term construction emissions in approximately 8 years. Emissions savings

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achieved thereafter would contribute to reductions in GHG emissions. This would be an environmental benefit. The 2015 Draft EIR concluded that GHG emission impacts were determined to be less than significant.

Railroad Bridge Crossings

It is anticipated that modifications at these railroad bridge crossings would require the same construction activities as those identified in the 2015 Draft EIR. The realignment or replacement of the existing railroad bridge crossings would generate some additional emissions of CO₂, CH₄, and N₂O from mobile and stationary construction equipment exhaust, as well as employee vehicle and haul truck exhaust. However, these short-term emissions would be offset through long-term GHG savings achieved during Project operation. Implementation of the revised Project would also reduce operational GHG emissions under design year conditions. GHG benefits achieved through operation of the revised Project would offset the short-term construction emissions. Emissions savings achieved thereafter would contribute to reductions in GHG emissions, which would be an environmental benefit. Accordingly, GHG emissions generated by the revised Project would not exceed any published draft emissions thresholds or the net zero threshold used for this analysis.

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Table 3.2-5 summarizes the revised Project's estimated construction GHG emissions.

Table 3.2-5. Estimated Construction GHG for the Revised Project (metric tons per year)					
Year	CO₂	CH₄	N₂O	Other	CO₂e
Construction – Year 1 (2015 EIR)	1,716	< 1	< 1	3	1,739
Construction – Year 2 (2015 EIR)	1,675	< 1	< 1	3	1,698
Construction – Year 3 (2015 EIR)	133	< 1	< 1	< 1	135
Revised Passenger Train Layover Facility	494	< 1	< 1	< 1	508
Total	4,018	< 1	< 1	6	4,080

Notes: CO₂ = carbon dioxide; CH₄ = methane; N₂O = nitrous oxide; CO₂e = carbon dioxide equivalents; other = emissions associated with on road gasoline vehicles, including CO₂, CH₄, N₂O, and HFCs; and SF₆ emissions from electricity usage.

Source: ICF 2023

As shown in Table 3.2-6, Project construction would result in GHG emissions that would generate approximately 4,080 metric tons of CO₂e for each year of construction associated with the revised passenger train layover facility. This estimate is conservative, because as previously noted, some unavoidable double counting may occur between these proposed layover facility emissions and the construction emissions from the maintenance facility from the 2015 Draft EIR. As noted in the 2015 Draft EIR, short-term emissions during construction would be offset through long-term GHG savings achieved during operations. This conclusion would still apply to the revised Project.

Table 3.2-6. Estimated Operational GHG for the Revised Project (metric tons per year)

Design Year Conditions (2035)	CO ₂	CH ₄	N ₂ O	Other	CO ₂ e
Train operation	3,147.9	0.2	0.1	-	3,176.1
Public vehicles	- 3,387.8	-	-	- 40.7	- 3,428.5
Public Buses – Thruway	- 18.4	< -0.1	< -0.1	-	- 18.4
Public Buses – Roseville	7.1	0.1	< 0.1	-	7.1
O&M at Roseville Station	18.0	0.1	< 0.1	0.1	21.2
Standby Electricity Usage	- 36.2	< -0.1	< -0.1	< -0.1	- 36.7
O&M at Roseville Layover Facility	95.3	0.3	< 0.1	-	104.1
Total Net Change	- 174.1	0.6	0.1	- 40.6	- 175.1

Notes: CO₂ = carbon dioxide; CH₄ = methane; N₂O = nitrous oxide; CO₂e = carbon dioxide equivalents; other = emissions associated with on road gasoline vehicles, including CO₂, CH₄, N₂O, and HFCs; and SF₆ emissions from electricity usage.

Source: ICF 2023

Table 3.2-6 summarizes the revised Project's estimated operational GHG emissions. The emissions shown in Table 3.2-6 represent the entire Sacramento to Roseville Third Main Track Project with the revised location of the passenger train layover facility. The only difference in emissions between what is shown in Table 3.2-6 and what is shown in the 2015 Draft EIR is the additional run-time of approximately two minutes that would occur from the revised passenger train layover facility location. Idling emissions would remain the same as in the 2015 Draft EIR and are thus not included in Table 3.2-6. As previously noted, the emissions shown in Table 3.2-6 are conservative because of the potential overlap between the proposed passenger train layover facility emissions and the 2015 Draft EIR maintenance facility emissions, which the proposed layover facility would likely replace.

As shown in Table 3.2-6, implementation of the Project would reduce operational GHG emissions under design year conditions. GHG benefits achieved through operation of the Project would offset the short-term construction emissions in approximately 23 years.¹ This timeframe is conservative, however, because of the overlap in emissions described above. In reality, the offset time is likely to be less than this value. Emissions savings achieved thereafter would contribute to reductions in GHG emissions, which would be an environmental benefit. Accordingly, GHG

¹ Calculated by dividing short-term construction emissions by the annual long-term emissions savings (4,080 metric tons CO₂e/ 175 metric tons CO₂e per year = 23 years).

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emissions generated by the revised Project would not exceed any published draft emissions thresholds or the net zero threshold used for this analysis.

THRESHOLD 3.2-F	Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.
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The 2015 Draft EIR addressed the potential impacts associated with the Project's consistency with the Global Warming Solutions Act of 2006, City of Sacramento CAP, and SACOG 2016 MTP/SCS. These benefits of the Project were determined to support implementation of SACOG's 2016 MTP/SCS and facilitate attainment of regional and statewide GHG policies and reduction targets of 7 percent for 2020 and 16 percent for 2035 through the reduction of single-occupancy vehicle usage and the provision of alternative transportation options within the Project corridor. The 2015 Draft EIR concluded that impacts associated with this topic area would be less than significant.

Railroad Bridge Crossings

SB 375 requires SACOG include SCSs in their regional transportation plan updates to describe how the GHG emissions reductions set by CARB would be met through land-use and transportation planning. In 2015, the SACOG Board adopted the *Sacramento Region Transportation Climate Adaptation Plan* as part of an update to the 2016 MTP/SCS. The plan provides high-level action and identifies key vulnerabilities to climate change in the region's transportation infrastructure and provides recommendations for best practices and strategies to meet the state targets for reducing GHG emissions from light-duty vehicles. In 2019, SACOG approved and adopted the *2020 MTP/SCS* and accompanying documents. 2020 MTP/SCS is the most recent update to its MTP, which includes implementation of transportation projects and Climate Initiatives Program that, together, would result in emissions from light-duty vehicles that meet the region's GHG reduction targets, per SB 375.² It provides for both priority and timely completion/implementation of the transportation control measures (TCMs).

CARB's Scoping Plan and SACOG's MTP/SCS include strategies to reduce single-occupancy vehicle usage and to increase alternative transportation (CARB 2022; SACOG 2019). The revised Project would result in additional realignment or replacement of existing railroad bridge overcrossings located on the I-80 which would support the overall Project efforts to expand passenger rail service and accommodate increased ridership throughout the Project corridor. As a result, implementation of the revised Project would support CARB and SACOG strategies to reduce single-occupancy vehicle usage and increase alternative transportation, as well as attainment of regional and statewide GHG policies and reduction targets.

² SACOG. 2019. *Draft Environmental Impact Report for the 2020 Metropolitan Transportation Plan/Sustainable Communities Strategy SCH# 2019049139*. September.

Passenger Train Layover Facility

California has adopted statewide legislation addressing various aspects of climate change and GHG emissions mitigation, including SB 32 and AB 1279. In December 2022, CARB adopted its Final 2022 Scoping Plan Update for Achieving Carbon Neutrality (2022 Scoping Plan), which identifies a technologically feasible, cost-effective and equity-focused path to achieve carbon neutrality by 2045, pursuant to AB 1279, as well as the GHG emissions reduction goal called for in SB 32. In addition, SACOG has adopted the 2020 MTP/SCS to reduce transportation-related emissions throughout the region. Consistency with these documents is evaluated below.

CARB's Scoping Plan and SACOG's MTP/SCS include strategies to reduce single-occupancy vehicle usage and to increase alternative transportation (CARB 2022; SACOG 2019). The revised Project would result in minor additional locomotive travel of approximately two minutes per train, but it would support efforts to expand passenger rail service and accommodate increased ridership, as the proposed passenger train layover facility would be used for maintenance of passenger trains. As a result, implementation of the revised Project would support CARB and SACOG strategies to reduce single-occupancy vehicle usage and increase alternative transportation, as well as attainment of regional and statewide GHG policies and reduction targets.

3.3 Biological Resources

3.3.1 Regulatory Framework

The regulatory framework, which includes applicable state and local laws, regulations, and plans relative to biological resources, are identified in the 2015 Draft EIR (Chapter 3.3, Biological Resources). The regulatory framework for biological resources for this SEIR is the same as presented in 2015 Draft EIR.

3.3.2 Environmental Setting

The Project corridor crosses the eastern Sacramento Valley into the lower Sierra Nevada foothills. As part of the 2015 Draft EIR, a biological study area (BSA) was defined to encompass a 250-foot radius from the Project corridor centerline to capture resources that could be indirectly affected by construction activities. A smaller corridor, defined as the Project impact area (PIA) was defined for the assessment of direct effects. The PIA includes 15 feet either side of the Project corridor centerline. Because the Project would be constructed almost entirely within the existing UPRR right-of-way (ROW), the PIA itself exhibits the characteristics of a heavily utilized rail corridor traversing a predominantly urban environment, and is subject to regular and intensive disturbance associated with freight trains.

The BSA traverses the city of Sacramento, unincorporated areas of Sacramento County, and the city of Roseville. Land use in the Project vicinity consists primarily of developed land under a variety of commercial, industrial, and residential uses, as well as recreational uses. Land uses in and adjacent to the BSA are characterized by a high level of human disturbance. Habitat types within the BSA both aquatic (i.e., waters of the United States, including wetlands) and terrestrial. All aquatic habitats are considered sensitive, and some of the terrestrial habitats (primarily riparian habitats) are considered sensitive.

The following upland terrestrial habitat types are present in the BSA: annual grassland, blue oak woodland, elderberry savannah (blue elderberry stand), eucalyptus, Great Valley cottonwood riparian forest (Fremont cottonwood forest), Great Valley mixed riparian forest (Fremont cottonwood forest), montane hardwood, and urban. Of these upland terrestrial habitat types, three are considered terrestrial habitats of concern: Great Valley cottonwood riparian forest, Great Valley mixed riparian forest, and elderberry savannah. Several aquatic habitat types have been identified in the BSA: detention basin, isolated seasonal wetland, fresh emergent wetland, seasonal wetland, and other waters. All aquatic habitat types are considered habitats of concern.

3.3.3 Summary of Prior Analysis

To provide a basis for the SEIR evaluation, Table 3.3-1 summarizes the impacts, relevant mitigation measures, and CEQA environmental determinations before and after implementation of mitigation as reflected in the 2015 Draft EIR.

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3.3 Biological Resources

Table 3.3-1. Summary of 2015 Draft EIR Impacts and Proposed Mitigation Measures – Biological Resources

Potential Environmental Impact	Significance Determination (Before Mitigation)	Proposed Mitigation Measures	Significance Determination (After Mitigation)
Threshold BIO-1: Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service <i>Construction</i> Construction of the proposed Project has the potential to impact several sensitive or special status species and associated habitats including: - Plant species (woolly rose-mallow, Sanford's arrowhead, and dwarf downingia) - Animal species (valley elderberry longhorn beetle, vernal pool fairy shrimp, vernal pool tadpole shrimp, Central Valley steelhead, Central Valley Chinook salmon, Sacramento winter-run Chinook salmon, giant gartersnake, western pond turtles, tricolored blackbird, Swainson's hawk and other raptors, burrowing owl, and pallid bats) <i>Operation</i> Operation and maintenance activities are unlikely to have impacts on special-status plant or animal species because these activities would occur where the vegetation communities (e.g., areas with potential habitat	<i>Construction</i> Potentially Significant <i>Operation</i> Less than Significant	Mitigation Measure BIO-1a: Install fencing and/or flagging to protect sensitive biological resources. Prior to construction, UPRR's contractor shall install high-visibility orange construction fencing and/or flagging, as appropriate, along the perimeter of the work area adjacent to Environmentally Sensitive Areas (e.g., sensitive habitats and elderberry shrubs). Where specific buffer distances are required for sensitive biological resources, they shall be specified under the corresponding measures below. UPRR shall ensure that the final construction plans show the locations where fencing will be installed. The plans shall also define the fencing installation procedure. UPRR or contractor (at the discretion of UPRR) shall ensure that the fencing is maintained throughout the duration of the construction period. If the fencing is removed, damaged, or otherwise compromised during the construction period, construction activities shall cease until the fencing is repaired or replaced. The Project's special provisions package shall provide clear language regarding acceptable fencing material and prohibited construction-related activities, vehicle operation, material and equipment storage, and other surface-disturbing activities within Environmentally Sensitive Area. Mitigation Measure BIO-1b: Implement a worker environmental awareness training program for construction personnel. Before any equipment staging, grading, or tree removal is undertaken in the PIA, UPRR shall prepare and implement a worker environmental awareness training program. The training program shall be provided to all construction personnel (contractors and subcontractors) to brief them on the need to avoid effects on sensitive biological resources (e.g., riparian habitat, active bird nests, bat roosts) located in the PIA and the penalties for not complying with applicable state and federal laws and permit requirements. The training program shall be delivered by a biologist who will inform all construction personnel about the life history and habitat	<i>Construction</i> Less than Significant <i>Operation</i> Not Applicable



Table 3.3-1. Summary of 2015 Draft EIR Impacts and Proposed Mitigation Measures – Biological Resources			
Potential Environmental Impact	Significance Determination (Before Mitigation)	Proposed Mitigation Measures	Significance Determination (After Mitigation)
for special-status plant and animal species) has already been removed or disturbed during construction activities.		requirements of special-status species with potential for occurrence onsite, the importance of maintaining habitat, and the terms and conditions of the BOs and other permits. The training program shall also cover general restrictions and guidelines that must be followed by all construction personnel to reduce or avoid effects on sensitive biological resources during construction of the Build alternative. Mitigation Measure BIO-1c: Retain a qualified biologist to conduct periodic monitoring during construction in sensitive habitats. UPRR shall retain a qualified biologist to implement the worker environmental awareness training program and to conduct periodic site visits during construction activities that involve ground disturbance (e.g., vegetation removal, grading, excavation, bridge construction) within or adjacent to Environmentally Sensitive Areas. The timing and frequency shall be determined through coordination with UPRR, but monitoring shall take place at least weekly. The purpose of the monitoring is to ensure that measures identified in this report are properly implemented to avoid and minimize effects on sensitive biological resources and to ensure that the Project complies with all applicable permit requirements and agency conditions of approval. The biologist shall ensure that fencing around Environmentally Sensitive Areas remains in place during construction and that no construction personnel, equipment, or runoff/sediment from the construction area enters Environmentally Sensitive Areas. The monitor shall complete a monitoring log for each site visit, and a final monitoring report shall be prepared at the end of construction for submittal to CCJPA, the Federal Railroad Administration (FRA), and other overseeing agencies (i.e., CDFW, USFWS, and NMFS), as appropriate. Mitigation Measure BIO-3: Implement measures to avoid long-term effects on special-status plants documented in	

Table 3.3-1. Summary of 2015 Draft EIR Impacts and Proposed Mitigation Measures – Biological Resources			
Potential Environmental Impact	Significance Determination (Before Mitigation)	Proposed Mitigation Measures	Significance Determination (After Mitigation)
		the Project impact area. If special-status plant species are found during the floristic survey, to the extent practicable and in consideration of other design requirements and constraints (e.g., meeting Project objectives and needs, avoidance of other sensitive resources) UPRR shall design the third track alignment to avoid or minimize potential impacts on special-status plants. If special-status plants cannot be avoided, UPRR shall consult with CDFW and USFWS (if federally listed species are found) to determine the appropriate compensatory measures for direct and indirect impacts that could result from Build Alternative construction. Measures may include preserving and enhancing existing populations, creation of offsite populations on Project mitigation sites through seed collection or transplantation, and restoring or creating suitable habitat in sufficient quantities to achieve no net loss of occupied habitat or individuals. A mitigation and monitoring plan shall be developed that describes how unavoidable effects on special-status plants will be compensated. Mitigation Measure BIO-4: Implement measures to avoid and minimize impacts on valley elderberry longhorn beetles and their habitat. A buffer zone of 100 feet or more shall be established and maintained around elderberry shrubs within the PIA, as feasible. Complete avoidance may be assumed when a 100-foot (or wider) buffer is established and maintained around elderberry plants with stems measuring 1 inch or more in diameter at ground level. In addition, the following avoidance and minimization efforts shall be implemented for construction operations in the vicinity of any elderberry shrubs that are not removed. All areas to be avoided during construction activities, specifically the 100-foot buffer zone around elderberry shrubs, shall be fenced and flagged. In areas where	

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Potential Environmental Impact	Significance Determination (Before Mitigation)	Proposed Mitigation Measures	Significance Determination (After Mitigation)
		encroachment on the 100-foot buffer has been approved by USFWS, a minimum setback of at least 20 feet from the dripline of each elderberry shrub shall be provided to the extent practicable. In some cases, construction activity may be required within 20 feet of a shrub; in such cases, k-rails shall be placed at the greatest possible distance from the shrubs. • Signage shall be erected every 50 feet along the edge of avoidance areas with the following information: "This area is habitat of the valley elderberry longhorn beetle, a federally listed threatened species, and must not be disturbed. This species is protected by the Endangered Species Act of 1973, as amended. Violators are subject to prosecution, fines, and imprisonment." The signage shall be clearly readable from a distance of 20 feet and shall be maintained for the duration of construction. • Preconstruction surveys shall be conducted for elderberry shrubs in the PIA and within 100 feet of the PIA. Preconstruction surveys shall be conducted to comply with mitigation measures. • Temporary construction impacts within the buffer area (i.e., within 100 feet of elderberry shrubs) shall be restored. If any portion of the buffer area is temporarily disturbed during construction, it shall be revegetated with native plants and erosion control shall be provided. • No insecticides, herbicides, fertilizers, or other chemicals that might harm the beetle or its host plant shall be used within 100 feet of any elderberry plant with one or more stems measuring 1 inch or more in diameter at ground level. All drainage water during and following construction shall be diverted away from elderberry shrubs.	

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Potential Environmental Impact	Significance Determination (Before Mitigation)	Proposed Mitigation Measures	Significance Determination (After Mitigation)
		- A written description of how buffer areas are to be restored, protected, and maintained after construction is completed shall be provided to USFWS. Mowing of grass can occur from July through April to reduce fire hazard; however, no mowing should occur within 5 feet of elderberry shrub stems. Mowing shall be conducted in a manner to avoid damaging shrubs. - Dirt roadways and other areas of disturbed bare ground within 100 feet of elderberry shrubs shall be watered at least twice a day to minimize dust emissions. Water shall not be sprayed directly on elderberry shrubs to avoid attracting Argentine ants. - For those shrubs that require being moved, direct impacts on valley elderberry longhorn beetles could occur during transplanting. Transplanting of elderberry shrubs has the potential to result in take of individual beetles because larvae or adults, if present in the stems, could be crushed or dislodged from the stems and become separated from the shrub. Transplanted elderberry shrubs may also experience stress, decline in health, or die due to changes in soil, hydrology, microclimate, or associated vegetation. The following measures shall be implemented in the event that transplantation or replacement of existing elderberry shrubs is required. - The transplantation guidelines outlined in the Conservation Guidelines for the Valley Elderberry Longhorn Beetle (U.S. Fish and Wildlife Service 1999) shall be followed. These transplantation guidelines dictate the necessary timing and details of the transplanting. At the discretion of USFWS, shrubs that are unlikely to survive transplantation because of poor condition or location, or plants that would be extremely	

Table 3.3-1. Summary of 2015 Draft EIR Impacts and Proposed Mitigation Measures – Biological Resources			
Potential Environmental Impact	Significance Determination (Before Mitigation)	Proposed Mitigation Measures	Significance Determination (After Mitigation)
		difficult to move because of access problems, may be exempted from transplantation. - o The loss of elderberry shrubs that must be transplanted or removed to facilitate construction of the Project shall be mitigated according to the requirements contained in the Conservation Guidelines for the Valley Elderberry Longhorn Beetle (U.S. Fish and Wildlife Service 1999). Elderberry shrubs shall be transplanted to or replaced in an offsite conservation area along with the appropriate number of elderberry seedlings/cuttings and associative native species as described in the Guidelines. - o In cases where transplantation is not possible, minimization ratios shall be increased to offset the additional habitat loss. - o Each elderberry stem measuring 1 inch or more in diameter at ground level that is adversely affected (i.e., transplanted, removed, or trimmed) shall be replaced, in the conservation area, with elderberry seedlings or cuttings at a ratio ranging from 1:1 to 8:1 (new plantings to affected stems) depending on the size class of the affected stem, presence or absence of exit holes, and whether the shrub is located in a riparian or a nonriparian area. Mitigation Measure BIO-5: Compensate for direct and indirect effects on vernal pool fairy shrimp and vernal pool tadpole shrimp habitat. UPRR shall compensate for direct and indirect effects on vernal pool fairy shrimp and vernal pool tadpole shrimp habitat by implementing habitat preservation and creation as mitigation. Mitigation credits shall be purchased prior to commencement of any Project activities that could result in habitat loss or degradation.	

Table 3.3-1. Summary of 2015 Draft EIR Impacts and Proposed Mitigation Measures – Biological Resources			
Potential Environmental Impact	Significance Determination (Before Mitigation)	Proposed Mitigation Measures	Significance Determination (After Mitigation)
		• Habitat preservation: UPRR shall compensate for the direct permanent and temporary loss of habitat and indirect (habitat degradation) impacts on habitat for vernal pool fairy shrimp and vernal pool tadpole shrimp at a ratio of 2:1 by purchasing vernal pool preservation credits from a USFWS-approved conservation bank. • Habitat creation: UPRR shall compensate for the direct permanent or temporary loss of habitat for vernal pool fairy shrimp and vernal pool tadpole shrimp at a ratio of 1:1 by purchasing vernal pool creation credits from a USFWS-approved conservation bank. Mitigation Measure BIO-6: Implement avoidance and minimization measures to reduce potential impacts on special-status fish. UPRR shall comply with all water pollution protection provisions and conditions established by all regulatory authorities with jurisdiction over the Project. These measures include but are not limited to those listed below. • Risk of direct take of special-status fish species will be minimized by avoiding in-channel construction on the main channel of the American River during the peak migration period (November through May). • Prior to excavation activities at abutments, temporary sediment control structures shall be placed downslope of the area where disturbance of native soil is anticipated. Excavated soil shall be hauled away from the job site and disposed of at an appropriately permitted disposal facility. • All disturbed areas that will not be covered by paving shall be stabilized to prevent erosion by using temporary soil stabilization BMPs. • An erosion control and water quality protection plan shall be prepared subject to review and approval by the Central	

Table 3.3-1. Summary of 2015 Draft EIR Impacts and Proposed Mitigation Measures – Biological Resources			
Potential Environmental Impact	Significance Determination (Before Mitigation)	Proposed Mitigation Measures	Significance Determination (After Mitigation)
		Valley Water Board. The plan will include but not be limited to the following measures to protect water quality during construction. - o Construction activities within the area delineated by the OHWM on both sides shall be limited to the period from May 30 to October 1 of each construction year. - o Construction activities that take place between October 15 and May 15 within the leveed floodway, but above the OHWM, shall be limited to those actions that can adequately withstand high river flows without resulting in the inundation of and entrainment of materials during flood flows. - o Temporary stockpiling of construction material, including vehicles, portable equipment, supplies, fuels and chemicals, and stockpiled or exposed soils, shall be restricted to designated construction staging areas within the PIA. - o Sheet metal cofferdams shall be used for all areas of extended in-water work, and pumped water will be routed to either: (1) a sedimentation pond located on a flat stable area above the OHWM that prevents silt-laden runoff to enter the river, or (2) a sedimentation tank/holding facility that allows only clear water to return to the river, with settled solids disposed of at an appropriate offsite location. - o Erosion control measures that prevent soil or sediment from entering the river shall be implemented, monitored for effectiveness, and maintained throughout construction operations. - o Refueling of construction equipment and vehicles within the leveed floodway shall only occur where	

Table 3.3-1. Summary of 2015 Draft EIR Impacts and Proposed Mitigation Measures – Biological Resources			
Potential Environmental Impact	Significance Determination (Before Mitigation)	Proposed Mitigation Measures	Significance Determination (After Mitigation)
		conditions meet all the following criteria: above the OHWM; within designated, paved, bermed areas where possible spills shall be readily contained; and away from all wetlands avoidance areas. - o Truck and cement equipment shall not be cleaned within the leveed floodway. Equipment and vehicles operated within the leveed floodway shall be checked and maintained daily prior to operation to prevent leaks of fuels, lubricant, or other fluids to the river. - o Litter and construction debris shall be removed from below the OHWM daily and disposed of at an appropriate site. All litter, debris, unused materials, equipment, and supplies shall be removed from construction staging areas above the OHWM at the end of each summer construction season. - o No onsite harvesting of in-situ gravels shall be allowed for temporary landings and ramps. Where additional earth material is required below the OHWM, clean gravels (from an offsite commercial/permitted source) shall be the preferred material. If another type of engineered fill is required, it shall likewise be obtained from an offsite permitted source, and all excess earth material shall be properly disposed of outside the leveed floodway upon completion of the construction phase. If CDFW determines that the excess gravels used for fill would benefit fisheries, these gravels may be left onsite, consistent with an approved CDFW Streambed Alteration Agreement. • An effluent monitor plan that includes routine monitoring and reporting of discharge water and receiving water conditions must be prepared by the contractor and approved by the Central Valley Water Board.	

Table 3.3-1. Summary of 2015 Draft EIR Impacts and Proposed Mitigation Measures – Biological Resources

Potential Environmental Impact	Significance Determination (Before Mitigation)	Proposed Mitigation Measures	Significance Determination (After Mitigation)
		- All tailings and drilling fluids from the construction of any cast-in-hole pilings for the new railroad bridge shall be contained and end-hauled from the site for proper disposal. - To avoid or minimize potential impacts on listed salmonids related to increased turbidity and sedimentation, turbidity increases associated with Project construction activities should not exceed the Central Valley Water Board water quality objectives for turbidity in the Sacramento River Basin (California Regional Water Quality Control Board Central Valley Region 2011). Turbidity levels are defined in nephelometric turbidity units (NTUs). The current threshold for turbidity levels in the American River, as listed in the Water Quality Control Plan for the Central Valley, is 10 NTUs. Increases in turbidity attributable to controllable water quality factors in response to Project activities may not exceed the following limits. - Where natural turbidity is between 0 and 5 NTUs, increases shall not exceed 1 NTU. - Where natural turbidity is greater than 5 NTUs, increases shall not exceed 20 percent. To ensure that turbidity levels do not exceed these thresholds during instream Project construction activities, UPRR shall retain a qualified water quality specialist to monitor turbidity levels from 50 feet upstream to 300 feet downstream of the point of in-stream construction activities. When construction activities potentially have the greatest water quality impact (e.g., during installation of temporary construction platform), water samples shall be collected four times daily or as outlined by the agencies. In the event of a detectable plume, work shall halt until the plume has dissipated to satisfactory levels.	

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Potential Environmental Impact	Significance Determination (Before Mitigation)	Proposed Mitigation Measures	Significance Determination (After Mitigation)
		Mitigation Measure BIO-7: Implement avoidance and minimization measures to reduce potential impacts on giant gartersnake. In areas that are identified as suitable upland and aquatic habitat for giant gartersnake, the following avoidance and minimization measures shall be implemented in accordance with the programmatic consultation. - Minimize disturbed areas to only those required to complete Project construction. - Limit construction windows to warm months (May 1–October 1) when snakes are more likely to be active and able to avoid construction activities. - Use exclusionary fencing to avoid wetland and other areas outside the proposed construction ROW. - Survey for giant gartersnakes in suitable aquatic or upland habitat in the PIA and within 200 feet of the PIA within 24 hours prior to the onset of construction and any time activities are halted for more than 2 weeks thereafter. - Allow any giant gartersnakes encountered to move away from construction activities on their own. - Prohibit the use of plastic, monofilament, jute, or similar erosion control matting that could entangle snakes in the PIA. - In giant gartersnake habitat, restore temporary impact areas to preproject conditions within the same season or, at most, the same calendar year. Monitor restored habitat and the construction zone for 1 calendar year, including a photo documentation report containing pre- and postconstruction photos, for submittal to USFWS 1 year from the date the restoration is completed.	

Table 3.3-1. Summary of 2015 Draft EIR Impacts and Proposed Mitigation Measures – Biological Resources			
Potential Environmental Impact	Significance Determination (Before Mitigation)	Proposed Mitigation Measures	Significance Determination (After Mitigation)
		- Permanent Project-related impacts on aquatic and upland GGS habitat shall be replaced at a minimum ration of 3:1 (acres preserved to acres affected). Mitigation Measure BIO-8: Implement measures to avoid and minimize impacts on western pond turtles. UPRR shall implement the following measures to avoid and minimize impacts on western pond turtle. - Preconstruction surveys for western pond turtle shall be conducted within the BSA by a CDFW-approved biologist prior to the initiation of construction activities. If western pond turtle is found in the BSA during preconstruction surveys, CDFW shall be notified within 72 hours to determine the appropriate measures to prevent impacts on the species. - A qualified biologist shall be present during initial construction activities in Dry Creek, Magpie Creek, and the American River and during any dewatering activities. If any western pond turtles are observed in the construction area, including any dewatered areas, they shall be captured and relocated to an appropriate location up or downstream of the construction area. Mitigation Measure BIO-9: Implement measures to avoid and minimize impacts on tricolored blackbirds during the breeding season. If construction is scheduled to start during the breeding season (February 15–September 15), UPRR shall retain a CDFW-approved biologist to conduct preconstruction surveys for tricolored blackbird in the BSA. If tricolored blackbird nesting colonies are found in the BSA during preconstruction surveys, CDFW shall be notified within 72 hours to determine the appropriate measures to prevent impacts on the species. At a minimum, a 250-foot no disturbance buffer shall be established between the nesting colony and Project activities.	

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Potential Environmental Impact	Significance Determination (Before Mitigation)	Proposed Mitigation Measures	Significance Determination (After Mitigation)
		The buffer distance may be modified based on coordination with CDFW and additional avoidance measures, such as periodic monitoring, may be required to ensure that the buffer distance is sufficient to avoid adverse effects. Mitigation Measure BIO-10a: Implement measures to avoid and minimize impacts on Swainson’s hawk and other nesting raptors. UPRR shall implement the following measures to avoid and minimize impacts on Swainson’s hawk and other nesting raptors. • If construction activities occur during the Swainson’s hawk nesting period (February 15– September 15), UPRR shall retain a qualified biologist to conduct preconstruction surveys to identify active nests in accessible areas within 0.5 mile of the PIA according to the Recommended Timing and Methodology for Swainson’s Hawk Nesting Surveys in California’s Central Valley established by the Swainson’s Hawk Technical Advisory Committee (2000). The surveys shall be conducted before the approval of grading and/or improvement plans (as applicable) and no more than 14 days before the beginning of construction for all Project phases. If no nests are found, no further measures are required. • If active nests are found, impacts on nesting Swainson’s hawk shall be avoided by establishment of a 1,000-foot no-disturbance buffer between the nest and Project activities. No Project activity shall commence within the buffer area until a qualified biologist confirms that any young have fledged and the nest is no longer active. The size of the buffer may be adjusted if a qualified biologist and the City of Sacramento, in consultation with CDFW, determine that such an adjustment would not be likely to adversely affect the nesting hawks. If the buffer distance is reduced, nest	

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Potential Environmental Impact	Significance Determination (Before Mitigation)	Proposed Mitigation Measures	Significance Determination (After Mitigation)
		monitoring may be required by CDFW to ensure that the Project does not result in adverse effects (nest failure). - If construction begins during the typical breeding season for other raptors (February 15– September 15), preconstruction surveys shall be conducted by a qualified biologist within 72 hours prior to commencement of construction to determine presence/absence of nests in and directly adjacent to the BSA. If no nests are found during the survey, no further actions are necessary. If construction begins outside the breeding season, no preconstruction surveys are necessary. - If active nests for other raptors are identified during the preconstruction surveys, they shall be protected during the breeding season while the nest is occupied by adults or young. The occupied nest shall be monitored by a qualified biologist to determine when the nest is no longer in use. Protection will include the establishment of a 500-foot no-disturbance buffer around the nest, and highly visible temporary construction fencing will delineate the identified buffer zone. This buffer may be reduced in areas with dense vegetation, buildings, or other habitat features between Project activities and the active nest, or as determined by a qualified biologist coordinating with CDFW. No construction shall take place within this buffer zone unless approved by CDFW. Mitigation Measure BIO-10b: Implement measures to avoid and minimize impacts on burrowing owls. The following avoidance and minimization measures for western burrowing owl shall be implemented to reduce potential impacts on the species. - A qualified biologist shall conduct western burrowing owl surveys inside and adjacent to the PIA to identify burrow	

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Potential Environmental Impact	Significance Determination (Before Mitigation)	Proposed Mitigation Measures	Significance Determination (After Mitigation)
		locations within 14 days prior to site mobilization in accordance with the 2012 Staff Report on Burrowing Owl Mitigation (California Department of Fish and Wildlife 2012). If construction is delayed or suspended for more than 30 days after the survey, the area shall be resurveyed. • Surveys for occupied burrows shall be completed within all construction areas and within 250 feet from the proposed Project work areas (where possible and appropriate based on habitat). All occupied burrows will be mapped on an aerial photo. At least 15 days prior to the expected start of any Project-related ground-disturbing activities or the restart of activities, UPRR shall report any western burrowing owl observations to the CNDDDB. • If no burrowing owls are detected during the preconstruction survey, no further action is necessary. • Based on the burrowing owl survey results, the following actions shall be taken by UPRR to offset impacts on occupied burrows during construction (as outlined in the 2012 Staff Report on Burrowing Owl Mitigation). - o During the nonbreeding season (September 1–January 31), no disturbance shall occur within an approximately 160-foot radius of an occupied burrow. During the nesting season (February 1–August 31), occupied burrows shall not be disturbed within an 820- foot radius unless a CDFW-approved biologist verifies through noninvasive methods that either (1) the birds have not begun egg-laying and incubation, or (2) that juveniles from the occupied burrows are foraging independently and are capable of independent survival. - o If owls must be moved away from the disturbance area, passive relocation techniques (as outlined by	

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Potential Environmental Impact	Significance Determination (Before Mitigation)	Proposed Mitigation Measures	Significance Determination (After Mitigation)
		CDFW [i.e., use of one-way doors]) rather than trapping should be used. At least 1 or more weeks will be necessary to accomplish this and allow the owls to acclimate to alternate burrows. - o If unpaired or paired owls are present in or adjacent to areas scheduled for disturbance or degradation (e.g., grading) and nesting is not occurring, owls are to be removed per CDFW-approved passive relocation protocols. Passive relocation requires the use of one-way exclusion doors, which must remain in place at least 48 hours prior to site disturbance to ensure that owls have left the burrow prior to construction. For active burrows with nonbreeding owls that are outside the PIA but within 150 of Project activities, CDFW shall be consulted to determine if relocation is necessary. An exclusion plan shall be required subject to CDFW approval. - o If paired owls are nesting in areas scheduled for disturbance or degradation, nest(s) shall be avoided from February 1 through August 31 by establishing a minimum 500- foot no-disturbance buffer or until fledging has occurred. Following fledging, owls may be passively relocated. This buffer may be reduced in areas with dense vegetation, buildings, or other habitat features between Project activities and the active nest, or as determined by a qualified biologist coordinating with CDFW. Mitigation Measure BIO-11: Implement measures to avoid and minimize impacts on other migratory birds. UPRR shall implement the following measures to avoid and minimize impacts to other migratory birds.	

Table 3.3-1. Summary of 2015 Draft EIR Impacts and Proposed Mitigation Measures – Biological Resources

Potential Environmental Impact	Significance Determination (Before Mitigation)	Proposed Mitigation Measures	Significance Determination (After Mitigation)
		- If construction begins during the typical breeding season for migratory birds (February 15– September 15), preconstruction surveys shall be conducted by a qualified biologist within 72 hours prior to commencement of construction to determine presence/absence of nests in and directly adjacent to the BSA. If no nests are found during the survey, no further actions are necessary. If construction begins outside the breeding season, no preconstruction surveys are necessary. - If active bird nests are identified during the preconstruction surveys, they shall be protected during the breeding season while the nest is occupied by adults or young. The occupied nest shall be monitored by a qualified biologist to determine when the nest is no longer in use. Protection shall include the establishment of a minimum 50- foot no-disturbance buffer around the nest and highly visible temporary construction fencing will delineate the identified buffer zone. The extent of the buffer shall be determined by a qualified biologist, coordinating with USFWS as necessary, and shall be based on the species, type of construction activity, presence of barriers between the nest and Project activities, and ambient noise levels. The following additional avoidance and minimization measures shall be incorporated if nesting barn or cliff swallows, black phoebes, purple martins, or song sparrows are identified in the BSA. Swallows, black phoebes, and purple martins could attempt to establish nests and/or occupy existing nests under bridges in the BSA prior to construction. The following measures shall be followed to prevent impacts on bridge-nesting swallows, black phoebes, or other migratory birds. - All existing unoccupied swallow and black phoebe nests found on the undersides of the bridges shall be removed	

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		between September 16 and February 14 prior to the year of construction. - Exclusionary netting shall be installed around the undersides of the bridges before February 15 of the construction year to prevent new nests from being constructed and to prevent the reoccupation of existing nests that were not removed. Netting will remain in place until the end of the typical nesting season (September 15) or the completion of construction activities, whichever is first. During the nesting season, the netting shall be monitored weekly to ensure that it remains intact and does not entrap birds. More frequent monitoring visits shall be made as necessary, especially in areas with high foot-traffic. Mitigation Measure BIO-12: Implement measures to avoid and minimize impacts on pallid bats. UPRR shall implement the following measures to avoid and minimize impacts on bats. - Preconstruction visual bat surveys shall be conducted by a bat specialist to inspect the undersides of bridges and potential roost trees in the BSA for roosting bats within 72 hours prior to commencement of construction. If no potential bat roosts are found, no further actions are necessary. - If construction activities in the vicinity of potential roosting sites stop for a period of 2 weeks or longer, surveys shall be repeated prior to reinitiating construction activities. - If an active bat roost is identified during the preconstruction survey but the structure or tree will not be disturbed, then the roost shall be identified as a sensitive resource and will be avoided; no additional measures are necessary.	

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Potential Environmental Impact	Significance Determination (Before Mitigation)	Proposed Mitigation Measures	Significance Determination (After Mitigation)
		• If it is determined that bats are using bridges/structures or trees that will be removed or disturbed, the bat specialist shall consult with CDFW to identify protective measures to avoid and minimize impacts on roosting bats based on the type of roost and timing of activities. These measures could include but are not limited to the following. - o If feasible, tree removal/trimming and removal or modification of structures containing an active roost shall be avoided between April 15 and September 15 (the maternity period) to avoid impacts on reproductively active females and dependent young. - o If a nonmaternity roost is located within a structure that would be removed or modified in a manner that would expose the roost, bats shall be excluded from the structure by a qualified wildlife management specialist working with a bat biologist. An exclusion plan shall be developed in coordination with CDFW that identifies the type of exclusion material/devices to be used, the location and method for installing the devices, and a monitoring schedule for checking the effectiveness of the devices. Because bats are expected to tolerate temporary construction noise and vibrations, bats will not be excluded from structures if no direct impacts on the roost are anticipated. - o If a maternity roost is located, whether solitary or colonial, that roost shall remain undisturbed until September 15 or until a qualified biologist has determined that the roost is no longer active. - o If avoidance of nonmaternity roost trees is not possible, tree removal or trimming shall be monitored by a qualified biologist. Prior to removal/trimming, the tree will be gently shaken, and several minutes should	

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		pass before felling trees or trimming limbs to allow bats time to arouse and leave the tree. The tree then will be removed in pieces, rather than felling the entire tree. At the discretion of UPRR, additional bat boxes could be installed along Dry and Magpie Creeks and the American River to provide alternate roost sites for any bats displaced by construction activities. <i>Operation</i> Not Applicable	
Threshold BIO-2: Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service. <i>Construction</i> Construction of the proposed Project has the potential to result in the loss or disturbance of 2.1 acres of riparian communities within the Project corridor. <i>Operation</i> Operation and maintenance activities are unlikely to have impacts on sensitive natural communities because these activities would occur where the vegetation communities has already been removed or disturbed during construction activities.	<i>Construction</i> Potentially Significant <i>Operation</i> Less than Significant	<i>Construction</i> Mitigation Measure BIO-1a: Install fencing and/or flagging to protect sensitive biological resources. Mitigation Measure BIO-1b: Implement a worker environmental awareness training program for construction personnel. Mitigation Measure BIO-1c: Retain a qualified biologist to conduct periodic monitoring during construction in sensitive habitats. Mitigation Measure BIO-2a: Minimize potential for the long-term loss of riparian communities. To the extent possible, UPRR shall ensure that the contractor minimizes the potential for the long-term loss of riparian vegetation by trimming vegetation rather than removing entire shrubs. Shrubs that need to be trimmed shall be cut at least 1 foot above ground level to leave the root systems intact and allow for more rapid regeneration. Cutting shall be limited to the minimum area necessary within the construction zone. Cutting shall be allowed only for shrubs (all trees shall be avoided) in areas that do not provide habitat for special-status species.	<i>Construction</i> Less than Significant <i>Operation</i> Not Applicable

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		Disturbance or removal of vegetation shall not exceed the minimum necessary to complete construction and future operations. Except for the vegetation specifically identified for trimming and/or removal in the notification, no native oak trees with a trunk diameter at breast height (dbh) greater than 6 inches will be removed or damaged without prior consultation and approval. Using hand tools (e.g., clippers, chainsaw), trees may be trimmed to the extent necessary to gain access to the work sites. All cleared material/vegetation shall be removed out of the riparian/stream zone. SRA habitat or natural woody riparian habitat shall be avoided or preserved to the maximum extent practicable. Emergent and submergent vegetation shall be retained where feasible. Mitigation Measure BIO-2b: Compensate for the loss of riparian communities (including SRA cover). UPRR shall compensate for temporary and permanent impacts on riparian communities and the associated SRA cover by preparing and implementing a riparian mitigation plan. The primary goals of the plan will be to compensate for Project-related loss or degradation of riparian habitats toward achieving no net loss of habitat acreage and functions over the long term through vegetation planting, habitat enhancement, and/or offsite compensation (mitigation bank credit purchase). The plan shall consider and incorporate the applicable policies (CO- 58, CO-59, CO-60, CO-61, CO-62, CO-138, CO-139, CO-140, and CO-141) in the Sacramento County 2030 General Plan (Sacramento County 2011) and their associated implementation measures. The following compensatory mitigation options shall be described in detail in the plan. • Mitigation bank credit purchase. UPRR may choose to purchase mitigation bank credits for non-SRA riparian	

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Potential Environmental Impact	Significance Determination (Before Mitigation)	Proposed Mitigation Measures	Significance Determination (After Mitigation)
		communities if this approach is determined to be appropriate and is acceptable to the resource agencies. UPRR shall provide written evidence to the resource agencies that compensation has been established through the purchase of mitigation credits. The amount to be paid will be the fee that is in effect at the time the fee is paid. The mitigation will be approved by CDFW and may be modified during the permitting process. Onsite and/or offsite restoration in the local watersheds. Restoration activities shall be undertaken for both SRA communities and non-SRA communities as specified below. Onsite restoration shall be required for all areas temporarily disturbed by construction. For onsite or offsite replacement plantings, UPRR shall prepare a mitigation planting plan that specifies the species list, number of each species, planting locations, and maintenance requirements. Plantings shall consist of cuttings taken from local plants or plants grown from local material. Planted species for mitigation plantings shall be similar to those removed from the PIA and shall include native species such as valley oak, Fremont cottonwood, Oregon ash, black willow, red willow, and arroyo willow. All plantings shall be fitted with exclusion cages or other suitable protection from herbivory. Plantings shall be irrigated for up to 3 years or until established. Onsite restoration efforts should occur in the same year as construction impacts. Plantings shall be monitored annually for 3 years or as required in the Project permits. If 75 percent of the plants survive at the end of the monitoring period, the revegetation shall be considered successful. If the survival criterion is not met at the end of the monitoring period, planting and monitoring shall be repeated after mortality causes have been identified and corrected.	

Table 3.3-1. Summary of 2015 Draft EIR Impacts and Proposed Mitigation Measures – Biological Resources			
Potential Environmental Impact	Significance Determination (Before Mitigation)	Proposed Mitigation Measures	Significance Determination (After Mitigation)
		Riparian forest compensation shall be consistent with the requirements of the local tree ordinances to ensure compensation for losses of individual protected trees. To provide a more accurate estimate of tree loss, an arborist survey shall be conducted upon completion of 90 percent design plans for the Project. In addition to a description of the potentially affected trees, the arborist survey report shall include the precise location of the trunk and the size of the dripline for all trees whose trunk or canopy overlap with the PIA. To satisfy NMFS and compensate for the loss of SRA cover, this measure includes the following provisions. - o Replace affected SRA cover vegetation at a 2:1 linear replacement ratio by planting native riparian trees in temporary impact areas and along existing unshaded banks (i.e., 2 linear feet replaced for every 1 foot affected). This ratio will be confirmed with NMFS and should be consistent with the BO issued for the Project. - o Plant native riparian trees onsite to the maximum extent practicable, followed by planting on adjacent reaches of affected streams to minimize the need for offsite mitigation. - o Plant riparian trees that are intended to provide SRA cover along the water's edge at summer low flows and at levels sufficiently dense to provide shade along at least 85 percent of the bank's length when the plant reaches maturity. - o Ensure that riparian plantings intended for SRA cover mitigation are planted within 10 feet (horizontal distance) of the summer wetted channel. This	

Table 3.3-1. Summary of 2015 Draft EIR Impacts and Proposed Mitigation Measures – Biological Resources			
Potential Environmental Impact	Significance Determination (Before Mitigation)	Proposed Mitigation Measures	Significance Determination (After Mitigation)
		maximum planting distance will ensure that riparian plantings will contribute to SRA cover once they approach maturity. o Monitor and evaluate the revegetation success of riparian plantings intended for SRA cover mitigation as described above. <i>Operation</i> Not Applicable	
Threshold BIO-3: Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marshes, vernal pools, coastal wetlands, etc.) through direct removal, filling, hydrological interruption, or other means <i>Construction</i> Construction of the proposed Project would involve the placement of permanent fill into a portion of the 9.4 acres of waters of the United States, including wetlands. <i>Operation</i> Operation and maintenance activities are unlikely to have impacts because these activities would occur where the wetland areas has already been disturbed during construction activities.	<i>Construction</i> Potentially Significant <i>Operation</i> Less than Significant	<i>Construction</i> Mitigation Measure BIO-1a: Install fencing and/or flagging to protect sensitive biological resources. Mitigation Measure BIO-1b: Implement a worker environmental awareness training program for construction personnel. Mitigation Measure BIO-1c: Retain a qualified biologist to conduct periodic monitoring during construction in sensitive habitats. Mitigation Measure BIO-1d: Compensate for temporary and permanent impacts on waters of the United States, including wetlands. To compensate for temporary and permanent Project impacts on waters of the United States, UPRR shall purchase credits at an approved mitigation bank to ensure no net loss of wetland functions and values. The acreage or value of compensatory mitigation for the loss of aquatic habitat for vernal pool crustaceans and giant gartersnake (discussed in Impacts BIO-5 and BIO-7) may be counted toward compensatory mitigation for waters of the United States. The minimum compensation ratio for wetlands and other waters shall be 1:1 (1 acre of wetland or other waters	<i>Construction</i> Less than Significant <i>Operation</i> Not Applicable

3.3 Biological Resources

Table 3.3-1. Summary of 2015 Draft EIR Impacts and Proposed Mitigation Measures – Biological Resources

Potential Environmental Impact	Significance Determination (Before Mitigation)	Proposed Mitigation Measures	Significance Determination (After Mitigation)
		habitat credit for every 1 acre of impact) to ensure no net loss of habitat functions and values. <i>Operation</i> Not Applicable	
Threshold BIO-4: Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites <i>Construction</i> The proposed Project has the potential to interfere with the movement of migratory fish in areas where in-water work would occur. <i>Operation</i> Operation and maintenance activities are unlikely to have impacts because these type of resources would have already been disturbed during construction activities.	<i>Construction</i> Potentially Significant <i>Operation</i> Less than Significant	<i>Construction</i> Mitigation Measure BIO-6: Implement avoidance and minimization measures to reduce potential impacts on special-status fish. <i>Operation</i> Not Applicable	<i>Construction</i> Less than Significant <i>Operation</i> Not Applicable
Threshold BIO-5: Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance <i>Construction</i> Construction of the proposed Project would require the removal or disturbance (e.g., work within the trees' driplines) of native trees that	<i>Construction</i> Potentially Significant <i>Operation</i> No Impact	<i>Construction</i> Mitigation Measure BIO-1a: Install fencing and/or flagging to protect sensitive biological resources. Mitigation Measure BIO-1b: Implement a worker environmental awareness training program for construction personnel.	<i>Construction</i> Less than Significant <i>Operation</i> Not Applicable

3.3 Biological Resources**Table 3.3-1. Summary of 2015 Draft EIR Impacts and Proposed Mitigation Measures – Biological Resources**

Potential Environmental Impact	Significance Determination (Before Mitigation)	Proposed Mitigation Measures	Significance Determination (After Mitigation)
are protected by Sacramento County, the City of Sacramento, and the City of Roseville. <i>Operation</i> Operation and maintenance activities are unlikely to have impacts because these types of resources would have already been disturbed during construction activities.		Mitigation Measure BIO-1c: Retain a qualified biologist to conduct periodic monitoring during construction in sensitive habitats. <i>Operation</i> Not Applicable	
Threshold BIO-6: Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan. <i>Construction and Operation</i> No HCP, NCCP, or other local, regional, or state HCP is in effect in the Project vicinity.	<i>Construction</i> No Impact <i>Operation</i> No Impact	Not Applicable.	Not Applicable.
Threshold BIO-8: Result in the introduction or spread of an invasive species. <i>Construction</i> The proposed Project has the potential to spread invasive species during construction activities. <i>Operation</i> It is unlikely that the proposed Project during operational activities would result in the introduction or spread of invasive species.	<i>Construction</i> Potentially Significant <i>Operation</i> No Impact	<i>Construction</i> Mitigation Measure BIO-14: Avoid and minimize the spread of invasive plant species during Project construction. UPRR or its contractor shall be responsible for avoiding and minimizing the introduction of new invasive plants and the spread of invasive plants previously documented in the BSA. Two or more of the BMPs listed below shall be written into the construction specifications and implemented during Project construction. Retain all fill material onsite to prevent the spread of invasive plants to uninfested areas.	<i>Construction</i> Less than Significant <i>Operation</i> Not Applicable

Table 3.3-1. Summary of 2015 Draft EIR Impacts and Proposed Mitigation Measures – Biological Resources			
Potential Environmental Impact	Significance Determination (Before Mitigation)	Proposed Mitigation Measures	Significance Determination (After Mitigation)
		- Use a weed-free source for erosion control materials (e.g., straw wattles for erosion control that are weed-free or contain less than 1 percent weed seed). - Prevent invasive plant contamination of Project materials during transport and when stockpiling (e.g., by covering soil stockpiles with a heavy-duty, contractor-grade tarpaulin). - Use sterile wheatgrass seed and native plant stock during revegetation. - Revegetate and/or mulch disturbed soils within 30 days of completion of ground-disturbing activities to reduce the likelihood of invasive plant establishment. <i>Operation</i> Not Applicable	

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3.3.4 Thresholds of Significance

In accordance with Appendix G of the 2023 CEQA Guidelines, the revised Project would have a significant impact related to biological resources if it were to:

- 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 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, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.
- c) Have a substantial adverse effect on state or federal federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruptions, or other means.
- d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or within 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.

3.3.5 Environmental Analysis

Most effects related to biological resources would occur during construction when sensitive plant communities or habitat is disturbed from clearing for construction; placement of permanent structures (e.g., track, stations); staging of equipment; and stockpiling of soil, ballast, or other construction materials. Other short-term construction-related effects on adjacent habitats and corresponding wildlife could be caused by noise, vibration, and air pollution from construction equipment and activities. Operational effects on biological resources could result in an increased strike risk to wildlife from the additional rail traffic along the rail line. Additionally, construction of new tracks on railbeds elevated above areas crossing floodplains could create barriers to wildlife movement.

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THRESHOLD 3.3-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 or U.S. Fish and Wildlife Service
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The 2015 Draft EIR identified that impacts on special-status plant species may result from the removal of vegetation for the placement of new permanent rail infrastructure or facilities within the Project corridor. Additional construction impacts may result from construction vehicles and personnel disturbing vegetation (e.g., trampling, covering, and crushing individual plants, populations, or suitable potential habitat for special-status plant species). Other construction impacts identified included the clearing, grubbing, covering, undercutting and damaging roots, or unearthing of individual plants. Dust and airborne soil, which may settle on plants, particularly herbs, may inhibit their ability to photosynthesize or reproduce through pollination. Soil compaction and the placement of fill may directly affect special-status plant species by causing decreased fitness or death by root compaction, decreased germination from the seed bank, and/or the plants being covered with soil. In addition, chemical spills have the potential to contaminate the soil and groundwater, resulting in mortality, habitat degradation, or reduced reproductive success of special-status plant species.

To address potential construction impacts to special-status plant species, the 2015 Draft EIR identified Mitigation Measure BIO-1a (which requires the installation of fencing and/or flagging to protect sensitive biological resources), Mitigation Measure BIO-1b (which requires the implementation of a worker environmental awareness training program for construction personnel), Mitigation Measure BIO-1c (which requires the retention of a qualified biologist to conduct monitoring during construction in sensitive habitats), and Mitigation Measure BIO-3 (which requires development of design requirements and constraints to avoid or minimize impacts on special-status plants). The 2015 Draft EIR concluded that with implementation of Mitigation Measures BIO-1a through BIO-1C and Mitigation Measure BIO-3, impacts to special-status plant species would be reduced to a less than significant level.

Operation and maintenance activities are unlikely to have impacts on special-status plant species because these activities would occur where the vegetation communities (e.g., areas with potential habitat for special-status plant species) has already been removed or disturbed during construction activities. Maintenance of rail infrastructure provides additional opportunities for establishment and/or spread of invasive species. Soil erosion, sedimentation, oil and lubricant runoff from rail infrastructure and station facilities could result in these substances entering adjacent drainage channels and exposing special-status plant species to chemicals. However, operational maintenance requires vegetation and pest control through a variety of methods, including the application of herbicides and pesticides. Pesticides and herbicides would be applied by certified pesticide applicators in accordance with all requirements of the California Department of Pesticide Regulation and County Agricultural Commissioners. The 2015 Draft EIR did not

3.3 Biological Resources

identify significant impacts resulting from operational and maintenance activities on special-status plant species.

The 2015 Draft EIR identified that construction activities associated with the proposed Project could potentially result in disturbance to, and mortality of, special-status wildlife species. Staging areas, access roads, vegetation removal, ground clearing, placement of fill material, new, replaced, or extended culverts and bridges could result in permanent loss of habitat or reduction of habitat values. Disturbance during construction, and later reclamation of such areas, would result in a temporary loss of habitat.

As identified in the 2015 Draft EIR, there are multiple special-status wildlife species with the potential to occur within the Project corridor. These special-status wildlife species include invertebrates, fish, amphibians, reptiles, birds, and mammals, each with a specific set of habitat requirements. Depending on the location of the rail infrastructure improvements and facilities, there is the potential for construction activities to affect these special-status wildlife species.

For special-status aquatic species (invertebrates, fish, amphibians), construction activities may result in aquatic habitats being disturbed, penetrated, filled, polluted, or otherwise destroyed or degraded by construction equipment, siltation, and sedimentation. Construction equipment traveling off road in suitable aquatic habitats could cause erosion, soil compaction, increased siltation, destruction of native vegetation, and alteration of hydrology, which could negatively affect special-status aquatic species through loss of the acreage and quality of suitable habitat. Construction impacts on special-status aquatic species may also consist of physical disturbance, temporary interruptions to fish passage, sedimentation, turbidity, altered water temperatures, oxygen depletion, and contaminants.

Construction of bridges would likely require work below the ordinary high-water mark of water bodies that support, or have the potential to support, special-status aquatic species. Dewatering during construction, if needed, may result in the stranding and mortality of special-status aquatic species. Pile driving in areas when surface water is present could lead to behavioral changes, injury, and possible mortality as a result of vibrations. Changes in sedimentation and nutrient loading caused by soil eroding into occupied habitat related to construction disturbance of channel sediments and adjacent soils may result in habitat degradation or reduced reproductive success. Chemical spills from construction equipment (e.g., fuel, transmission fluid, lubricating oil, and motor oil) could contaminate the water column, resulting in habitat degradation or reduced reproductive success of special-status aquatic species in downstream habitats.

For special-status terrestrial species (invertebrates, reptiles, birds, mammals), the 2015 Draft EIR identified that construction activities may result in effects on suitable habitat that could cause mortality, injury, or harassment of adults or juveniles. Construction activities may also result in the temporary destruction, degradation, or pollution of habitat and the temporary loss of nesting areas, burrows, or other refugia. Construction impact also include the permanent conversion of occupied habitat to rail infrastructure improvement or station facility use and fragmentation of habitats and landscapes resulting from construction of the Project. Mortality, injury, or harassment

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may also occur if these special-status terrestrial species become trapped in open, excavated areas or are stuck by construction vehicles driving on and off roads.

Vibration from construction equipment could collapse inhabited burrows located within or in the vicinity of the construction site. Construction activities requiring soil compaction and the placement of fill in suitable habitat may also affect special-status terrestrial species by prohibiting burrowing or changing the frequency of vegetative cover. Construction activities could result in temporary shifts in foraging patterns or territories and the use of daily or seasonal refugia. Impacts during the construction period may include the permanent or temporary displacement of special-status terrestrial species to avoid disturbance (e.g., noise, vibration, visual stimuli); such displacement could also result from fragmentation of the landscape caused by the construction of Project features (e.g., security fences, elevated structures, railbeds, and associated facilities).

Construction impacts on special-status terrestrial species may occur either through direct mortality or habitat modifications if there would be a permanent reduction in the acreage and quality of suitable habitat for these species. For special-status avian and bat species, construction activities could result in the removal or disturbance of potential nesting habitat, mortality or injury; the permanent conversion of occupied nesting and foraging habitat to rail or station infrastructure; and fragmentation of habitats resulting from construction of the Project.

To address potential construction impacts to special-status animal species, the 2015 Draft EIR identified Mitigation Measure BIO-1a through BIO-1c as well as Mitigation Measures BIO-4 through BIO-12 (which outlines specific mitigation requirements for each special-status animal species that could be impacted by the Project). The 2015 Draft EIR concluded that with implementation of Mitigation Measures BIO-1a through BIO-1C and Mitigation Measures BIO-4, through BIO-12, impacts to special-status animal species would be reduced to a less than significant level.

Operational impacts are anticipated to be limited to maintenance of culverts, bridges, and embankments. The number of structural features, such as culverts and bridges may influence the frequency and nature of maintenance activities, the removal of vegetation from the ROW, and disturbances due to the presence of maintenance crews and equipment. Soil erosion, sedimentation, oil and lubricant runoff from rail infrastructure and facilities, and the potential for spills during maintenance activities, could result in these substances entering adjacent drainage channels and exposing wildlife to toxic chemicals. Efforts during the design phase to avoid sensitive vegetation communities or critical habitat would help to minimize potential operational impacts on special-status wildlife species. The 2015 Draft EIR did not identify significant impacts resulting from operational and maintenance activities on special-status animal species.

Railroad Bridge Crossings

The railroad bridge crossings are located within the 2015 Draft EIR BSA and would be situated near where special-status plant species and sensitive habitats could occur. These include potential California Natural Diversity Database (CNDDB) sightings of Sanford's arrowhead, and Elderberry Savanna.

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Mitigation Measures BIO-1a through BIO-1c and Mitigation Measure BIO-3, which were previously identified in the 2015 Draft EIR for the overall Project and incorporated into the 2015 Final EIR MMRP, would also be implemented to address the potential for construction activities to impact special-status plant species and sensitive habitats. Similar to what was originally identified in the 2015 Draft EIR, implementation of the identified mitigation measures would minimize impacts to a less than significant level.

The railroad bridge crossings are located within the 2015 Draft EIR BSA and would be situated near where special-status animal species could occur. These include potential CNDDDB sightings of valley elderberry longhorn beetle, Cooper's hawk, Swainson's hawk, and the purple martin. Mitigation Measures BIO-1a through BIO-1c and Mitigation Measures BIO-4, BIO-10a, and BIO-11, which were previously identified in the 2015 Draft EIR for the overall Project and incorporated into the 2015 Final EIR MMRP, would also be implemented to address the potential for construction activities to impact special-status animal species. Similar to what was originally identified in the 2015 Draft EIR, implementation of the identified mitigation measures would minimize impacts to a less than significant level.

Once constructed, the revised Project would result in the operation of multiple rail bridges with operations conducted in accordance with current UPRR management practices similar to what was identified in the 2015 Final EIR. Therefore, the revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

Passenger Train Layover Facility

The revised passenger train layover facility site would be located within an urbanized part of the City of Roseville. The site would be located within the existing rail ROW, which is developed with paved surfaces and railroad tracks. However, there are portions of the site that contain vegetated areas. Although the location of the passenger train layover facility has changed, it is anticipated that construction of the facility would require the same construction activities as those identified for the original passenger train layover facility. The revised passenger train layover facility site is located within the 2015 Draft EIR BSA and is situated near where special-status plant species and sensitive habitats could occur. These include potential CNDDDB sightings of dwarf downingia, Boggs Lake hedge-hyssop, Northern Hardpan vernal pool, and Northern Volcanic Mud Flow vernal pool.

Mitigation Measures BIO-1a through BIO-1c and Mitigation Measure BIO-3, which were previously identified in the 2015 Draft EIR for the overall Project and incorporated into the 2015 Final EIR MMRP, would also be implemented to address the potential for construction activities to impact special-status plant species and sensitive habitats. Similar to what was originally identified in the 2015 Draft EIR, implementation of the identified mitigation measures would minimize impacts to a less than significant level.

The revised passenger train layover facility site is located within the 2015 Draft EIR BSA and is situated near where special-status animal species could occur. These include potential CNDDDB

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sightings of vernal pool fairy shrimp and the purple martin. Mitigation Measures BIO-1a through BIO-1c and Mitigation Measures BIO-5, BIO-10a, and BIO-11, which were previously identified in the 2015 Draft EIR for the overall Project and incorporated into the 2015 Final EIR MMRP, would also be implemented to address the potential for construction activities to impact special-status plant species and sensitive habitats. Similar to what was originally identified in the 2015 Draft EIR, implementation of the identified mitigation measures would minimize impacts to a less than significant level.

Once constructed, the revised Project would result in the operation of a passenger train layover facility with operations conducted in accordance with current UPRR management practices similar to what was identified in the 2015 Final EIR. Therefore, the revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

THRESHOLD 3.3-B	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service
THRESHOLD 3.3-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 interruptions, or other means

The 2015 Draft EIR addressed the potential for impacts associated with the construction and operation of new railroad infrastructure on state or federal protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.). The 2015 Draft EIR identified that construction activities would result in the placement of permanent fill in 9.4 acres of waters of the United States, including wetlands, that occur within the Project corridor.

All wetland and water features identified within the Project site may be regulated by the United States Army Corps of Engineers (USACE) as waters of the U.S. through Section 404 of the Federal Clean Water Act (CWA) and by the Regional Water Quality Control Board (RWQCB) as waters of the State through Section 401 of the CWA and/or the State Porter-Cologne Act. All ecological systems associated with drainages (e.g., riparian wetlands), and drainage features with bed and bank topography may be regulated by Sections 1600–1616 of the California Fish and Game Code. In conjunction with the Section 404 permit, impacts to wetlands and waters will likely require a Section 401 Water Quality Certification or Waste Discharge Requirement from RWQCB and CDFW Section 1602 Streambed Alteration Agreement. Effects on wetlands and other waters would be considered permanent if construction activities would result in placement of permanent fill into these features. Temporary impacts on wetlands and other waters, including placement of temporary fill, could occur during access for construction activities. Indirect impacts caused by sedimentation or modification of hydrology could occur in portions of wetlands or other waters that lie outside the PIA.

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To address impacts, the 2015 Draft EIR included Mitigation Measures BIO-1a through BIO-1d, which requires special construction considerations, such as training for construction personnel, the retention of a qualified biologist to monitor construction activities, and installation of protective fencing, as well as compensation for any temporary or permanent impacts to waters of the United States (including wetlands). The 2015 Draft EIR concluded that with implementation of the identified mitigation measures impacts were reduced to a less than significant level.

Railroad Bridge Crossings

While it is anticipated that the replacement or realignment of the existing railroad bridge crossings would not result in the temporary or permanent fill of wetlands, in the event that jurisdictional waters are impacted by construction activities, Mitigation Measures BIO-1a through BIO-1d would be implemented.

Mitigation Measures BIO-1a through BIO-1d, which was previously identified in the 2015 Draft EIR for the overall Project and adopted and incorporated into the 2015 Final EIR MMRP, would be implemented to address impacts to jurisdictional waters that could be located within the vicinity of the railroad bridge crossings. Similar to what was originally identified in the 2015 Draft EIR, implementation of Mitigation Measures BIO-1a through BIO-1d would minimize potential impacts to jurisdictional resources to a less than significant level. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR. Impacts would remain less than significant with mitigation incorporated.

Passenger Train Layover Facility. The revised passenger train layover facility site is located near the existing Roseville Station, which contains identified isolated seasonal wetlands, seasonal wetlands, and other waters. It is anticipated that the passenger train layover facility would have similar construction activities that could result in a temporary or permanent loss of state or federally protected wetlands.

Mitigation Measures BIO-1a through BIO-1d, which was previously identified in the 2015 Draft EIR for the overall Project and adopted and incorporated into the 2015 Final EIR MMRP, would be implemented to address impacts to jurisdictional waters that could be located within the vicinity of the passenger train layover facility component. Similar to what was originally identified in the 2015 Draft EIR, implementation of Mitigation Measures BIO-1a through BIO-1d would minimize potential impacts to jurisdictional resources to a less than significant level. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR. Impacts would remain less than significant with mitigation incorporated.

THRESHOLD 3.3-D	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or within established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites
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3.3 Biological Resources

Construction of rail infrastructure improvements within the Project corridor has the potential to result in impediments to the movement of wildlife across the landscape. The existing rail alignment crosses drainages, roadways, and culverts that could serve as crossing structures for wildlife movement corridors. Construction activities often deter wildlife from entering construction work areas, and work occurring near existing crossing structures—such as underpasses, overpasses, or culverts—could deter use of those structures by wildlife.

The presence of construction personnel and the operation of construction equipment would result in increased noise, dust, vehicle traffic, and human activity, which could temporarily deter wildlife from using movement corridors that may be located within a specific site. Additionally, the removal of vegetation in temporary work areas near existing and proposed undercrossings would have temporary effects on wildlife movement for some species by leaving them exposed as they approach the underpasses and potentially deterring them from using the crossings until the vegetation has regenerated. However, impacts on wildlife movement corridors would be dependent on the placement of new rail infrastructure (tracks, ballast, embankments, stations, etc.) in relation to existing wildlife movement corridors.

During operation, existing maintenance activities that would occur within the ROW along the Project corridor would be in areas where the natural ecosystem has already been disturbed. Wildlife present in the vicinity of these existing railroad lines within the Project corridor have been exposed, to some degree, to disturbances associated with railroad operations and vehicular traffic on the interstates and highways. The 2015 Draft EIR did not identify significant impacts on wildlife movement corridors resulting from construction, operational and maintenance activities with the Project corridor.

Railroad Bridge Crossings

It is anticipated that the replacement or realignment of the existing railroad bridge crossings would require the same construction activities as those identified for the original bridge overcrossing. The existing railroad bridge crossings are not identified as a native resident or migratory wildlife corridors or a wildlife nursery sites. However, there is the potential for the existing railroad bridge crossings to provide roosting for sensitive bat species. The 2015 Draft EIR identified mitigation measures that would be applied in the event that a bat roost is discovered during Project construction and operation. Once constructed, the revised Project would result in the operation of a passenger train layover facility with operations conducted in accordance with current UPRR management practices similar to what was identified in the 2015 Final EIR. Therefore, the revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

Passenger Train Layover Facility

The revised passenger train layover facility site would be located within an urbanized part of the City of Roseville. The site would be located within the existing rail ROW, which is developed with paved surfaces and railroad tracks. However, there are portions of the site that contain vegetated areas. Although the location of the passenger train layover facility has changed, it is anticipated

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that construction of the facility would require the same construction activities as those identified for the original passenger train layover facility. While the revised passenger train layover facility site is located within the 2015 Draft EIR BSA, the site is not identified as a native resident or migratory wildlife corridors or a wildlife nursery sites.

Once constructed, the revised Project would result in the operation of a passenger train layover facility with operations conducted in accordance with current UPRR management practices similar to what was identified in the 2015 Final EIR. Therefore, the revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

THRESHOLD 3.3-E	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance
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The 2015 Draft EIR identified that implementation of the proposed Project would require the removal or disturbance (e.g., work within the trees' driplines) of native trees that are protected by Sacramento County, the City of Sacramento, and the City of Roseville. To address potential impacts associated with applicable tree preservation policies and ordinances, the 2015 Draft EIR identified that prior to construction, a certified arborist shall assess any trees with the potential to be affected by the proposed Project and a report prepared that would provide information on location, size, and health of each tree. If it is determined that a protected tree cannot be avoided, a tree permit shall be obtained from the appropriate jurisdiction. The 2015 Draft EIR concluded that because UPRR will comply with the local ordinances and implement the compensation required by the Cities and the County, this impact is less than significant. However, the 2015 Draft also identified that implementation of Mitigation Measures BIO-1a through BIO-1c would provide for further protection of native trees.

Railroad Bridge Crossings

The railroad bridge crossing sites contain trees that would be removed to accommodate the replacement or realignment of the existing railroad bridge structures. Similar to what was identified in the 2015 Draft EIR, the revised Project would require that a certified arborist assess any trees with the potential to be affected by the revised Project and a report prepared that would provide information on location, size, and health of each tree. If it is determined that a protected tree cannot be avoided, a tree permit shall be obtained from the City of Sacramento. Therefore, the revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

Passenger Train Layover Facility

The revised passenger train layover facility site contains trees that would be removed to accommodate the proposed uses on the site. Similar to what was identified in the 2015 Draft EIR, the revised Project would require that a certified arborist assess any trees with the potential to be affected by the revised Project and a report prepared that would provide information on location,

3.3 Biological Resources

size, and health of each tree. If it is determined that a protected tree cannot be avoided, a tree permit shall be obtained from the City of Roseville. Therefore, the revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

THRESHOLD 3.3-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
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The 2015 Draft EIR identified that there are no habitat conservation plans (HCPs), natural community conservation plans (NCCPs), or other approved local, regional, or state HCP in effect within the Project corridor. Therefore, the 2015 Draft EIR concluded that no impacts associated with this topic area would occur with implementation of the proposed Project.

Railroad Bridge Crossings

The replacement or realignment of the existing railroad bridge crossings is not located within an HCP, NCCP, or other local, regional, or state HCP. Therefore, the revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

Passenger Train Layover Facility

The revised passenger train layover facility site is not located within an HCP, NCCP, or other local, regional, or state HCP. Therefore, the revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

3.4 Cultural Resources

3.4 Cultural Resources

This section presents an analysis of potential impacts on cultural resources and tribal cultural resources that would result from the railroad bridge crossings and the passenger train layover facility associated with the revised Project (described in Chapter 2.0, Project Description). As identified in the 2015 Draft EIR, cultural resources consist of historic-period and pre-historical period archeological resources, built environment resources, and tribal cultural resources (TCRs).

Archaeological resources are the physical remains of past human activity that have been preserved in the ground but no longer take the form of a standing structure (e.g., a house or building). Archaeological remains may occur in the same place as standing structures but are considered a distinct element (called a component) of the larger resource.

Built environment resources consist of buildings, structures, objects, sites, or districts. Typically, built environment resources must be 50 years of age or older to qualify as cultural resources. Where these resources form a landscape unified by a coherent historical or design theme, they may qualify as a rural historic landscape (National Park Service 1999:1).

TCRs are defined as sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either included or determined to be eligible for inclusion in the California Register of Historical Resources (CRHR) or included in a local register of historical resources, or a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant. A cultural landscape that meets these criteria is a tribal cultural resource to the extent that the landscape is geographically defined in terms of the size and scope of the landscape. Historical resources, unique archaeological resources, or non-unique archaeological resources may also be tribal cultural resources if they meet these criteria.

3.4.1 Regulatory Framework

Since the certification of the 2015 Final EIR, AB 52 was created in addition to CEQA. The purpose of the legislation was to create a new resource category, TCRs. This new category would require a lead agency to consult with interested California Native American tribes who request formal consultation regarding impacts to tribal cultural resources. As defined by AB 52 in PRC section 21074, tribal cultural resources are sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are included or determined to be eligible for inclusion in the CRHR, or in a local register of historical resources as defined in PRC section 5020.1.

A TCR can be 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 PRC Section 5024.1. When applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

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AB 52 creates a consultation process between lead agencies and California Native American tribes to identify and protect tribal cultural resources. In accordance with AB 52, Native American groups who wish to be consulted on projects within their traditional geographic area are required to request in writing that lead agencies notify them of upcoming projects within their geographic areas. No California Native American tribes have requested notification for environmental review projects under CEQA within CCJPA's jurisdiction. However, as part of the 2015 EIR process, coordination with Native American tribes identified by the Native American Heritage Commission (NAHC) was conducted and input on the proposed Project received.

The regulatory setting for cultural resources, which includes applicable state and local laws, regulations, and plans relative to cultural resources, are identified in the 2015 Draft EIR (Chapter 3.13, Cultural Resources), and are applicable to the revised Project.

3.4.2 Environmental Setting

The 2015 Draft EIR addressed cultural resource impacts associated with the introduction of new linear rail infrastructure elements within the Project study area. The revised Project is located within the existing railroad right of way (ROW) owned, operated, and maintained by UPRR. CCJPA's current passenger service operates on a shared track within the railroad ROW. The majority of the Area of Potential Effects (APE) consist of existing railroad tracks and ballast. However, there are portions of the APE that consist of disturbed vegetated areas within the railroad ROW. The railroad bridge crossings are adjacent to industrial, commercial, and residential uses as well as vacant land. The revised passenger train layover facility site contains similar adjacent land uses (e.g., a mix of residential, commercial, and industrial uses adjacent to the UPRR ROW) as those identified in the 2015 Draft EIR for the original passenger train layover facility site.

3.4.3 Summary of Prior Analysis

To provide a basis for the SEIR evaluation, Table 3.4-1 summarizes the impacts, relevant mitigation measures, and CEQA environmental determinations before and after implementation of mitigation as reflected in the 2015 Final EIR.

3.4 Cultural Resources

Table 3.4-1. Summary of 2015 Draft EIR Impacts and Proposed Mitigation Measures – Cultural Resources

Potential Environmental Impact	Significance Determination (Before Mitigation)	Proposed Mitigation Measures	Significance Determination (After Mitigation)
Threshold CUL-1: Direct or indirect alteration of the characteristics of a cultural resource that qualify it for inclusion in the NRHP. <i>Construction</i> Ground-disturbing activities may cause a substantial adverse change of a previously unidentified cultural resource that qualifies for inclusion in the NRHP. <i>Operation</i> Operation of the Project does not include any characteristics that would impact a cultural resources that qualifies for inclusion in the NRHP.	<i>Construction</i> Potentially Significant <i>Operation</i> No Impact	<i>Construction</i> Mitigation Measure CUL-1a: Conduct archaeological presence/absence testing in areas of the APE adjacent to the American River prior to final design. Prior to completion of final design, CCJPA shall retain a qualified archaeologist meeting the Secretary of Interior's Standards for archeological documentation, to conduct archaeological presence/absence testing in areas of the APE adjacent to the American River where bridge construction activities shall occur. The purpose of the testing will be to determine whether buried archaeological resources are present in these portions of the APE. The study shall include contacting the NAHC and interested parties, conducting presence/absence testing, and reporting. The testing shall consist of at least six mechanically excavated trenches, three on each side of the American River where the proposed bridge would be constructed. All attempts shall be made to place trenches in those locations where the proposed bridge footings would be located. Trenches shall measure at least 15 feet long and shall be excavated with a backhoe equipped with a bucket at least 3 feet wide. Trenches shall be excavated to at least 2 feet below the maximum depth of ground disturbance that would result from bridge construction, or until trenching is no longer feasible or safe. An archaeologist shall study excavated sediments placed in backfill piles on a backhoe bucket-by-bucket	<i>Construction</i> Less than Significant <i>Operation</i> Not Applicable

3.4 Cultural Resources

Table 3.4-1. Summary of 2015 Draft EIR Impacts and Proposed Mitigation Measures – Cultural Resources

Potential Environmental Impact	Significance Determination (Before Mitigation)	Proposed Mitigation Measures	Significance Determination (After Mitigation)
		basis and shall examine trench sidewalls for evidence of archaeological deposits. When potential archaeological material is observed in either excavated sediments or trench sidewalls, an archaeologist shall enter trenches to better view the material and determine its nature. Buried archaeological material can range from a single flake (lithic debitage) or discolored soil to an obvious buried midden component. Indicators of archaeological sensitivity or the presence of archaeological deposits may include patches of reddish oxidized soils, fire affected rock (FAR), carbon, bone, shell, or artifacts. The location and potential extent of the site shall be taken into consideration to determine appropriate next steps. For the purposes of the subsurface survey, the threshold for terminating the investigation and requiring either avoidance measures or archaeological evaluative testing shall be the identification of more than three pieces of lithic debitage per trench, any midden soil, formal tools, any culturally associated prehistoric faunal remains, any discrete prehistoric or historic-period features, or historic-period refuse with multiple artifact types. The archaeologist shall document the results of the testing in a cultural resources technical report. The report shall include: (1) a summary of relevant background information; (2) a complete discussion of methods and results; (3) recommendations of NRHP and CRHR eligibility for any identified resources; (4) assessment of Project impacts on the resources; and (5) recommended mitigation measures for any identified	

3.4 Cultural Resources

Table 3.4-1. Summary of 2015 Draft EIR Impacts and Proposed Mitigation Measures – Cultural Resources

Potential Environmental Impact	Significance Determination (Before Mitigation)	Proposed Mitigation Measures	Significance Determination (After Mitigation)
		resources, if applicable. If a site is determined to be eligible for listing in the NHRP, further consultation with SHPO will be necessary for treatment of this site. Examples of potential treatment measures include modifying Project design for avoidance of identified archaeological resources and additional archaeological testing of the archaeological resources to evaluate them for NRHP-eligibility, eligibility as a historical resource pursuant to CEQA Guidelines Section 15064.5, and eligibility as a unique archaeological resource pursuant to PRC Section 21083.2. Mitigation Measure CUL-1b: Conduct archaeological construction monitoring during ground-disturbing activities in archaeologically sensitive areas and halt work if previously unrecorded cultural resources are encountered and determined to be NRHP eligible. CCJPA shall retain an archaeologist to conduct archaeological construction monitoring during ground-disturbing construction activities in previously undisturbed soil in archaeologically sensitive areas as identified in the cultural resources inventory and evaluation report (ICF International 2014). The monitoring shall be supervised by an archaeologist that meets the Secretary of Interior's Standards for archeological documentation. The onsite archaeological monitor shall observe the ground-disturbing activities to ensure that no archaeological material is present or disturbed during those activities. CCJPA may invite, and retain if so desired, a Native American monitor to assist in the archaeological monitoring. If potential archaeological material is observed, all work within 100 feet of the find shall cease, and the archaeologist and (if appropriate) a Native American representative shall	

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Table 3.4-1. Summary of 2015 Draft EIR Impacts and Proposed Mitigation Measures – Cultural Resources

Potential Environmental Impact	Significance Determination (Before Mitigation)	Proposed Mitigation Measures	Significance Determination (After Mitigation)
		assess the significance of the find. If the find is determined to be potentially (1) NRHP-eligible; (2) a historical resource pursuant to CEQA Guidelines Section 15064.5; or (3) a unique archaeological resource pursuant to PRC Section 21083.2, CCJPA shall consult with SHPO, appropriate Native American tribes, and other appropriate interested parties to determine treatment measures pursuant to 36 CFR 800.13. <i>Operation</i> Not Applicable	
Threshold CUL-2: Cause a substantial adverse change in the significance of a cultural resource that is a historic resource or a unique archaeological resource. <i>Construction</i> If an archaeological resource is encountered and determined to be a historical resource pursuant to CEQA Guidelines Section 15064.5 or a unique archaeological resource pursuant to PRC Section 21083.2, inadvertent damage to it could result in an adverse effect if the damage were to modify the resource to the extent that it would no longer convey the reasons for its significance and key aspects of integrity. <i>Operation</i>	<i>Construction</i> Potentially Significant <i>Operation</i> No Impact	<i>Construction</i> Mitigation Measure CUL-1a: Conduct archaeological presence/absence testing in areas of the APE adjacent to the American River prior to final design. Mitigation Measure CUL-1b: Conduct archaeological construction monitoring during ground-disturbing activities in archaeologically sensitive areas and halt work if previously unrecorded cultural resources are encountered. <i>Operation</i> Not Applicable	<i>Construction</i> Less than Significant <i>Operation</i> Not Applicable

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Table 3.4-1. Summary of 2015 Draft EIR Impacts and Proposed Mitigation Measures – Cultural Resources

Potential Environmental Impact	Significance Determination (Before Mitigation)	Proposed Mitigation Measures	Significance Determination (After Mitigation)
Operation of the Project does not include any characteristics that would cause a substantial adverse change in the significance of a cultural resource that is a historic resource or a unique archaeological resource.			
Threshold CUL-3: Disturb any human remains, including those interred outside of formal cemeteries. <i>Construction</i> Ground disturbing activities associated with construction may encounter previously unidentified or unmarked burials containing human remains. <i>Operation</i> Operation of the Project does not include any characteristics that would disturb human remains.	<i>Construction</i> Potentially Significant <i>Operation</i> No Impact	<i>Construction</i> Mitigation Measure CUL-3: Conduct archaeological construction monitoring during ground-disturbing activities in archaeologically sensitive areas and halt work if human remains are encountered. CCJPA shall retain an archaeologist to conduct archaeological construction monitoring during ground-disturbing construction activities in previously undisturbed soil in archaeologically sensitive areas as identified in the cultural resources inventory and evaluation report (ICF International 2014). The monitoring shall be supervised by an archaeologist that meets the Secretary of Interior's Standards for Archeology. The onsite archaeological monitor shall observe the ground-disturbing activities to ensure that no human remains are present or disturbed during those activities. CCJPA may invite, and retain if so desired, a Native American monitor to assist in the archaeological monitoring. During any Project excavation, regardless of the presence of an archaeological monitor, if human remains (or remains that are suspected to be human) are discovered, all work shall cease in the vicinity of the find (within a minimum of 100 feet) and the appropriate county coroner shall be notified immediately. If the coroner determines the remains to be Native American in origin, the coroner shall be responsible for notifying the NAHC,	<i>Construction</i> Less than Significant <i>Operation</i> Not Applicable

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Table 3.4-1. Summary of 2015 Draft EIR Impacts and Proposed Mitigation Measures – Cultural Resources

Potential Environmental Impact	Significance Determination (Before Mitigation)	Proposed Mitigation Measures	Significance Determination (After Mitigation)
		which will appoint a most-likely descendant (MLD) (PRC Section 5097.99). The archaeologist, CCJPA, lead federal agency, SHPO, and MLD shall make all reasonable efforts to develop an agreement for the dignified treatment of human remains and associated or unassociated funerary objects (CCR Title 14 Section 15064.5[d]). The agreement shall take into consideration the appropriate excavation, removal, recordation, analysis, custodianship, curation, and final disposition of the human remains and associated or unassociated funerary objects. The MLD shall have 24 hours after notification by the NAHC to make their recommendation (PRC Section 5097.98). If the MLD does not agree to the reburial method, the Project shall follow PRC Section 5097.98(b), which states, “the landowner or his or her authorized representative shall reinter the human remains and items associated with Native American burials with appropriate dignity on the property in a location not subject to further subsurface disturbance.” <i>Operation</i> Not Applicable	

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3.4.4 Thresholds of Significance

In accordance with Appendix G of the 2023 CEQA Guidelines, the changed circumstances would have a significant impact related to cultural or tribal cultural resources if they were to:

- 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, or
- c) Disturb any human remains, including those interred outside of dedicated cemeteries
- d) Cause a substantial adverse change in the significance of a tribal cultural resource, as defined by PRC §21074, and that is listed or eligible for listing in the California Register of Historical Resources or in a local register of historical resources as defined by PRC §5024.1.
- e) Cause a substantial adverse change in the significance of a tribal cultural resource, as defined by PRC §21074, and that is determined by the lead agency, in its discretion and supported by substantial evidence, to be significant to a California Native tribe pursuant to PRC §5024.1.

3.4.5 Environmental Analysis

THRESHOLD 3.4-A	Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5
THRESHOLD 3.4-B	Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5

Impacts as a result of implementing the proposed Project can be broadly classified into construction and operational impacts. Most impacts related to cultural resources would occur during construction when the ground is disturbed. Operation or long-term impacts are unlikely to impact cultural resources as maintenance activities along the rail corridor do not typically involve ground disturbance activities. As summarized in Table 3.4-2, the 2015 Draft EIR identified eight cultural resources (six built environment resources and two archaeological resources) within the APE that could be impacted by the proposed Project.

3.4 Cultural Resources**Table 3.4-2. Summary of 2015 EIR Cultural Resources within the APE**

Name	Previously Recorded	Previous Designation Status	2015 EIR Update to Designation
First Transcontinental Railroad Segment (CA-PLA-814H/CA-SAC-478H)	Yes	Not eligible	No change – not eligible
American River Railroad Bridge (CA-SAC-478H Feature C-Sacramento East-B-4)	Yes	NRHP-eligible (A and C)	No change – eligible
Sacramento Northern Railroad Segment (CA-SAC-571H)	Yes	Not eligible	No change – not eligible
American River Levee Segment (CA-SAC-481H/CA-SAC-482H)	Yes	Not eligible	No change – not eligible
State Route 160 Segment (P-34-001663)	Yes	Not eligible	No change – not eligible
Roseville Switching Yards (CA-PLA-1847H)	Yes	Not eligible	No change - buildings no longer exist on the site
7 th Street Railroad Trestle (CA-SAC-941H)	Yes	NRHP-eligible (A and C)	No change – eligible
Refuse Deposit (CA-SAC-942H)	Yes	Not eligible	No change – not eligible

Source: Sacramento to Roseville Third Main Track 2015 Draft EIR

As summarized above, two cultural resources, the American River Railroad Bridge (CA-SAC-487H Feature C-Sacramento East-B-4) and 7th Street Railroad Trestle (CA-SAC-941H), were previously recommended eligible for listing in the National Register of Historic Places (NRHP) under Criteria A and C and would remain eligible under the 2015 EIR Project.

The 2015 Draft EIR identified that implementation of the proposed Project would not result in impacts to the American River Railroad Bridge that would change the historical significance or key aspects of historical integrity associated with the resource. The 2015 Draft EIR concluded that impacts to the American River Railroad Bridge would be less than significant. For the 7th Street Railroad Trestle, the 2015 Draft EIR identified no impacts to the resource as the proposed Project does not involve any ground disturbing activities at the resource's location. Therefore, implementation of the proposed Project would not alter any of the resource's characteristics that qualify it for inclusion in the NRHP.

Although there would be no significant impacts to identified cultural resources, the 2015 Draft EIR identified that there is a possibility that unidentified cultural resources could be encountered during ground disturbing activities. The 2015 Draft EIR indicated that the potential for discovery of cultural resources is higher in areas adjacent to rivers and streams that would be subject to deep

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ground disturbance (e.g., bridge-related pilings). The 2015 Draft EIR concluded that if a potential NRHP-eligible cultural resource is encountered during ground disturbing activities, inadvertent damage to the resource could occur if the damage were to alter the characteristics of the resource that qualify it for inclusion in the NRHP.

The inclusion of Mitigation Measures CUL-1a, (which requires archaeological presence/absence testing in areas of the APE adjacent to the American River prior to final design) and CUL-2a (which requires archaeological construction monitoring during ground disturbing activities) would reduce construction related impacts to a less than significant level.

Railroad Bridge Crossings

A review of additional literature, prior studies, and maps on file at Caltrans District 3 as well as the Caltrans Cultural Resource Inventory of Caltrans District 3 Rural Conventional Highways (Leach-Palm et. al. 2008), the Native American Ethnogeography, Geography, History, Traditional Resources, Contemporary Communities, and Concerns (Blount, Davis-King, and Milliken 2008), and the Geoarchaeological Overview and Assessment of Caltrans District 3 (Meyer and Rosenthal 2008) were also consulted. In addition, the following databases were reviewed as part of the literature review: NHRP (NPS 1998a, 1998b & updates), California Points of Historical Interest (OHP 1992 & updates), California Inventory of Historic Resources (OHP 1976 & updates), California Historical Landmarks (OHP 1990 & updates), California Register of Historical Resources (OHP 1997 & updates), Historic Property Data File (OHP 1998 & updates), Caltrans State and Local Bridge Survey (Caltrans 2014), and Historic Spots in California (Kyle et. al. 2002).

Based on a review of these databases, two cultural resources intersect or cross through the revised Project APE: the Central Pacific Railroad (also called The First Transcontinental Railroad and the Union Pacific Railroad, CA-SAC-478H) and the Sacramento Branch of the Southern Pacific Railroad (SPRR).

For the purposes of this analysis, the First Transcontinental Railroad (CPRR) is assumed eligible for listing in the NRHP under Criterion A as a nationally significant transportation resource. Its assumed character-defining features are the alignment, the standard gauge track, elevated berm, ballast, wooden ties, iron tie plates, and iron nails. The segment of the CPRR within the revised Project limits is part of an alignment constructed in 1863 as a result of the Pacific Railroad Act for the creation of railroad line to link the United States from east to west. The First Transcontinental Railroad was completed in 1869 when the westbound UPRR and eastbound CPRR construction crews met at Promontory Point in Utah.

Within the revised Project footprint, the CPRR tracks extend easterly, cross over Business I-80 supported by the existing B Street railroad bridge crossing (Bridge number 24-0023) and proceed along the southern edge of McKinley Village. The three-track railroad narrows to a two-track corridor just south of the American River and split-two tracks north and one south. The two tracks heading north crossover Business I-80 at the southeastern corner of Sutter's Landing Regional Park, supported by the existing Elvas railroad bridge crossing (Bridge number 24-0031).



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The railroad bridge crossings consists of two steel deck plate girder structures with reinforced concrete (RC) decks on three RC column frame bents and RC closed-end backfilled cantilever abutments on concrete piles. Constructed between 1951-1954, the current railroad bridges replaced earlier structures. Overall, the alignment of the tracks is the only extant feature of the original CPRR railway infrastructure.

While the existing railroad bridge crossings are considered to be a contributing element of the larger resource for the purposes of this revised Project (for carrying the railroad line over Business I-80); the realigned railroad bridge crossings would serve the same purpose and would be designed in coordination with, and pending approval from, the UPRR. The alignment and grade modification to this segment of the CPRR would have no discernible impact on the qualities for which the resource is assumed eligible. Realigning the tracks and replacing the crossing would not significantly impact any of the qualities for which this resource is assumed eligible for listing in the NRHP/CRHR and would not diminish the ability of the resource to convey its significance. Railroad lines are continuously maintained, requiring regular replacement of tracks, rails, ballast, etc., to ensure safety and reliability. Therefore, the revised Project would not have an adverse effect on the former CPRR.

Within the revised Project limits, the former Central Pacific Railroad-Sacramento Branch of the Southern Pacific Railroad alignment intersects and is supported by the Elvas crossing. The construction of this branch began in 1906 and was completed in 1912 when it was merged and became part of the SPRR. The railroad was abandoned in 1978 when it became part of the Southern Pacific system.

The revised Project includes replacing the overhead structures associated with both the Elvas and B Steet railroad bridge crossings. The replacement of the overhead structures would increase Business I-80's overhead vertical clearance and require temporary rail tracks (shoofly) to maintain railroad operations/traffic during construction. The modification of the railroad bridge crossings involves raising the CPRR's track profile by approximately one foot for approximately 8,898 linear feet (1.68 miles) on the CPRR-Sacramento Branch of the Southern Pacific Railroad's tracks. The revised Project would only affect 8,898 linear feet (1.68 miles) of a resource originally measuring over 200 miles. The materials used to reconstruct the tracks on the new alignments would be in-kind replacements with the modified railroad bridge crossings meeting current design standards. All railroad features would be designed in coordination with and pending approval from the UPRR. Therefore, the revised Project would not have an adverse effect on this segment of the Central Pacific Railroad.

Although the railroad realignment is subject to approval by UPRR, this supplemental analysis provides a conservative assumption that acquisitions may be required adjacent to the existing railroad. The replacement and realignment of the existing railroad bridge crossings would require the construction of temporary shoofly structures in order to maintain railroad operations during construction. Based on preliminary design for the railroad bridge crossings, the replacement and realignment of the B Street railroad bridge crossing would require the demolition of buildings associated with a self-storage facility (Extra Space Storage) and existing Caltrans maintenance

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yard facilities. As previously defined, built environment resources consist of buildings, structures, objects, sites, or districts and typically must be 50 years of age or older to qualify as cultural resources.

Extra Space Storage is a self-storage facility located at 3000 B Street, at the corner of Alhambra Boulevard and B Street, east of Business I-80. The reconstruction of the B Street railroad bridge crossing would require the acquisition and demolition of an existing building on the north side of the Extra Space Storage parcel adjacent to the railroad tracks. Although this existing building would be demolished, the building was constructed in 2019 and does not meet the criteria for a built environment cultural resource.

Acquisition and demolition of Caltrans maintenance yard facilities may also be required to provide adequate space for the ballast of the new permanent railroad alignment or required for the temporary railroad shoofly and retaining walls. To accommodate the proposed railroad work, two warehouse buildings (approximately 6,000 and 21,000 square feet) owned and operated Caltrans would be demolished. The 6,000 square foot warehouse building was constructed by Caltrans in 2013. Although this existing building would be demolished, the building was constructed in 2013 and does not meet the criteria as qualify for a built environment cultural resource.

The 21,000 square foot warehouse building (commonly known as the Caltrans Sunrise Region Annex) was constructed in 1962-1963 and has been evaluated in accordance with Section 15064.5(a)(2)- (3) of the CEQA Guidelines, using the criteria outlined in Section 5024.1 of the California Public Resources Code. The warehouse building does not appear to meet the criteria for listing in the NRHP or CRHR, nor is it an historical resource for the purposes of CEQA as summarized in Table 3.4-3.

Table 3.4-3. NRHP/CRHR Criteria Summary for Caltrans Sunrise Region Annex

NRHP/CRHR Criterion	Evaluation
NRHP Criterion A: Associated with events that have made a significant contribution to the broad patterns of our history CRHR Criterion 1: Associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States	This resource does not have important associations with significant events or trends and does not appear to be eligible under NRHP Criterion A or CRHR Criterion 1. This building was constructed in the early 1960s to serve as the office and warehouse of the local contracting firm of Kaufman & Reynolds Construction Company. One of many such commercial buildings constructed as infill construction with the already developed core of Sacramento during mid twentieth, it is not significant within the context of Sacramento County's or the City of Sacramento's mid-twentieth century commercial or industrial development.
NRHP Criterion B: Associated with the lives of persons significant in our past	Under NRHP Criterion B or CRHR Criterion 2, this resource does not have any direct and important associations with the lives of persons important to history. While Paul Kaufman and Frank Reynolds Jr. operated a successful and

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Table 3.4-3. NRHP/CRHR Criteria Summary for Caltrans Sunrise Region Annex

NRHP/CRHR Criterion	Evaluation
CRHR Criterion 2: Associated with the lives of persons important to local, California, or national history	prolific construction company, it does not appear that either made any significant contributions to their established industry on the local, state or national level. Therefore, this resource does not appear eligible under these criteria.
NRHP Criterion C: Embodies the distinctive characteristics of a type, period, or method of construction, or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components may lack individual distinction CRHR Criterion 3: Embodies the distinctive characteristics of a type, period, region or method of construction or represents the work of a master or possesses high artistic values	Architecturally, the original building is a typical and ubiquitous example of a mid-twentieth century industrial/commercial building designed by Butler Manufacturing Company. During and after World War II, Butler buildings were readily used throughout the nation because they were easily adaptable for various uses because they had "clear span" interior spaces that provided more vertical room, were easily and quickly constructed, and were relatively resistant to fire compared similar wood-framed buildings of the time. As such, they are ubiquitous on farms throughout California and in industrial and commercial development since the mid-twentieth century. Therefore, this building is not significant under NRHP Criterion C or CRHR 3 for embodying the distinctive characteristics of a type, period, or method of construction. While Kaufman & Reynolds Construction Company constructed hundreds of commercial, residential, and industrial buildings throughout the Sacramento region during nearly 40 years of history, the contracting firm does not appear to be a master in its field.
NRHP Criterion D: Has yielded, or maybe likely to yield, information important in history or prehistory CRHR Criterion 4: Has yielded, or has the potential to yield, information important to the prehistory of history of the local area, California or the nation.	The building does not appear to have any likelihood of yielding important information about historic construction materials or technologies. Under NRHP Criterion D or CRHR Criterion 4, this resource has not yielded and is not likely to yield data important to the understanding of history.

Based on the background research conducted, the entirety of the Caltrans right-of-way where the railroad bridge crossings are located have been previously surveyed for archaeological resources as part of various Caltrans projects. In addition, most of the area outside Caltrans right-of-way but within the revised Project footprint has been previously surveyed for cultural resources with no new cultural resources found.

Similar to what was identified in the 2015 Draft EIR, although there would be no significant impacts to identified cultural resources with implementation of the revised Project, there is a possibility that unidentified cultural resources could be encountered during ground disturbing activities. If a potential NRHP-eligible cultural resource is encountered during ground disturbing activities,

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inadvertent damage to the resource could occur if the damage were to alter the characteristics of the resource that qualify it for inclusion in the NRHP.

Mitigation Measures CUL-1a and CUL-2a, which were previously identified in the 2015 Draft EIR for the overall Project and incorporated into the 2015 Final EIR MMRP, would be implemented. Similar to what was originally identified in the 2015 Draft EIR, implementation of Mitigation Measures CUL-1a and CUL-2a would minimize impacts to a less than significant level. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

Passenger Train Layover Facility

A review of additional literature, prior studies, maps and databases were reviewed and include: National Register of Historic Places (NPS 1998a, 1998b & updates), California Points of Historical Interest (OHP 1992 & updates), California Inventory of Historic Resources (OHP 1976 & updates), California Historical Landmarks (OHP 1990 & updates), California Register of Historical Resources (OHP 1997 & updates), Historic Property Data File (OHP 1998 & updates), Caltrans State and Local Bridge Survey (Caltrans 2014), and Historic Spots in California (Kyle et. al. 2002), City of Roseville General Plan EIR (City of Roseville 2020). Based on a review of these databases, one cultural resource intersects or crosses through the revised Project APE: First Transcontinental Railroad Segment (CA-PLA-841H/CA-SAC-478H).

As identified in the 2015 Draft EIR, most of the 18-mile Project corridor consists of double-tracked, standard gauge rails (4 feet 8.5 inches between rail heads) resting on timber ties and a raised bed of crushed stone ballast. At points, the segment includes side tracks, grade separation structures (bridges or trestles), and drainage features such as culverts and ditches. The two sets of parallel tracks remain in overall good physical condition and are still used to carry freight traffic by the current owner, UPRR. Additionally, Amtrak uses the tracks for passenger service.

The general setting of the Project corridor (i.e., the area outside the APE) consists of modern transportation infrastructure and both modern and historic-era commercial and residential buildings. The Central Pacific Transcontinental Railroad is listed in the CRHR as State Historic Landmark No. 780. It appears in the California Historical Resources Inventory Database under the resource name "First Transcontinental Railroad" and has a status code of 1CL, indicating that it was automatically listed in the CRHR, but not listed in the NRHP. A significant number of individual segments of the Transcontinental Railroad have been previously recorded and evaluated, though at the time of this update, no study evaluating the entire route and appurtenant features for NRHP eligibility exists.

The 2015 Draft EIR determined that the subject segment exists predominantly as it did when previously recorded and evaluated for the NRHP in 2013. Accordingly, the 2015 Draft EIR concluded that the subject segment still falls short of meeting the minimum criteria for listing in the NRHP, individually or as a contributing element to a historic district, due to its lack of sufficient historical integrity. Therefore, it is not considered a historic property pursuant to the NHPA.

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However, as a listed CRHR resource, the subject railroad segment is considered a historical resource for the purposes of CEQA.

The revised passenger layover facility would result in the installation of additional layover facility tracks within the UPRR ROW as well as a proposed layover yard building and access roads. The layover facility tracks would tie into the existing UPRR tracks. Similar to what was identified in the 2015 Draft EIR, the passenger train layover facility would also be used for storage and light maintenance of up to four full passenger train sets at any one time. Typical activities at the passenger train layover facility would include the storage of passenger trains, cleaning the interiors of the passenger trains, emptying of sanitary retention tanks, and light maintenance. The modification to this segment of the CPRR would have no discernible impact on the qualities for which the resource is assumed eligible. The tie in of the additional layover facility tracks to the existing UPRR tracks would not significantly impact any of the qualities for which this resource is listed as a CRHR resource and would not diminish the ability of the resource to convey its significance. Therefore, the revised Project would not have an adverse effect on the former CPRR.

Similar to what was identified in the 2015 Draft EIR, although there would be no significant impacts to identified cultural resources with implementation of the revised Project, there is a possibility that unidentified cultural resources could be encountered during ground disturbing activities. If a potential NRHP-eligible cultural resource is encountered during ground disturbing activities, inadvertent damage to the resource could occur if the damage were to alter the characteristics of the resource that qualify it for inclusion in the NRHP.

Mitigation Measures CUL-1a and CUL-2a, which were previously identified in the 2015 Draft EIR for the overall Project and incorporated into the 2015 Final EIR MMRP, would be implemented. Similar to what was originally identified in the 2015 Draft EIR, implementation of Mitigation Measures CUL-1a and CUL-2a would minimize impacts to a less than significant level. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

THRESHOLD 3.4-C	Disturb any human remains, including those interred outside of dedicated cemeteries
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The 2015 Draft EIR identified that no human remains are known to be located in or near the APE. However, there is a possibility that unmarked burials or human remains may be encountered during ground-disturbing activities. With the inclusion of Mitigation Measure CUL-3 (which requires archaeological construction monitoring during ground disturbing activities and halting work if human remains are encountered), impacts would be reduced to a less than significant level.

Railroad Bridge Crossings

The railroad bridge crossings are located in a transportation corridor adjacent to residential uses as well as vacant land. The replacement or realignment of the railroad bridge crossings would

3.4 Cultural Resources

occur within an area designated for transportation uses. While there are no known human remains located in or near where the bridge crossing improvements would occur, there is still a possibility that unmarked burials or human remains may be encountered during ground-disturbing activities. Mitigation Measure CUL-3, which was previously identified in the 2015 Draft EIR for the overall Project and incorporated into the 2015 Final EIR MMRP, would be implemented. Similar to what was originally identified in the 2015 Draft EIR, implementation of Mitigation Measure CUL-3 would minimize impacts to a less than significant level. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

Passenger Train Layover Facility

The revised passenger train layover facility site contains similar adjacent land uses (e.g., a mix of residential, commercial, and industrial uses adjacent to the UPRR right of way) as those identified in the 2015 Draft EIR for the original passenger train layover facility site. It is anticipated that improvements proposed as part of the revised passenger train layover facility would be within the existing UPRR ROW. While there are no known human remains located in or near where the improvements would occur, there is still a possibility that unmarked burials or human remains may be encountered during ground-disturbing activities. Mitigation Measure CUL-3, which was previously identified in the 2015 Draft EIR for the overall Project and incorporated into the 2015 Final EIR MMRP, would be implemented. Similar to what was originally identified in the 2015 Draft EIR, implementation of Mitigation Measure CUL-3 would minimize impacts to a less than significant level. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

THRESHOLD 3.4-D	Cause a substantial adverse change in the significance of a tribal cultural resource, as defined by PRC §21074, and that is listed or eligible for listing in the California Register of Historical Resources or in a local register of historical resources as defined by PRC §5024.1.
THRESHOLD 3.4-E	Cause a substantial adverse change in the significance of a tribal cultural resource, as defined by PRC §21074, and that is determined by the lead agency, in its discretion and supported by substantial evidence, to be significant to a California Native tribe pursuant to PRC §5024.1.

As part of the 2015 Draft EIR analysis, a search of the NAHC's Sacred Lands File (SLF) was conducted. Results from the NAHC SLF did not indicate the presence of Native American cultural resources within the immediate project area. In addition, the NAHC provided a contact list of eleven potentially interested Native American representatives. Letters were sent with information on the proposed Project to those Native American contacts provided by the NAHC. Requests from Native American representatives included copies of reports prepared for the proposed Project and notification if burials or significant resources were identified.

Based on the information obtained through coordination with the identified Native American representatives, the 2015 Draft EIR did not identify any known tribal cultural resources that would

3.4 Cultural Resources

be impacted with implementation of the proposed Project. Although there would be no significant impacts to identified tribal cultural resources, the 2015 Draft EIR identified that there is a possibility that unidentified cultural resources could be encountered during ground disturbing activities. The 2015 Draft EIR indicated that the potential for discovery of cultural resources is higher in areas adjacent to rivers and streams that would be subject to deep ground disturbance (e.g., bridge-related pilings). The 2015 Draft EIR concluded that if a cultural resource is encountered during ground disturbing activities, inadvertent damage to the resource could occur.

The inclusion of Mitigation Measures CUL-1a, (which requires archaeological presence/absence testing in areas of the APE adjacent to the American River prior to final design) and CUL-2a (which requires archaeological construction monitoring during ground disturbing activities) would reduce construction related impacts to a less than significant level.

Railroad Bridge Crossings

The railroad bridge crossings are located in a transportation corridor adjacent to commercial, industrial, and residential uses as well as vacant land. The replacement or realignment of the railroad bridge crossings would occur within an area designated for transportation uses. While there are no known tribal cultural resources located in or near where the railroad bridge crossing improvements would occur, there is still a possibility that tribal cultural resources may be encountered during ground-disturbing activities. Mitigation Measures CUL-1a and CUL-2a, which was previously identified in the 2015 Draft EIR for the overall Project and incorporated into the 2015 Final EIR MMRP, would be implemented. Similar to what was originally identified in the 2015 Draft EIR, implementation of Mitigation Measures CUL-1a and CUL-2a would minimize impacts to a less than significant level. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

Passenger Train Layover Facility

The revised passenger train layover facility site contains similar adjacent land uses (e.g., a mix of residential, commercial, and industrial uses adjacent to the UPRR right of way) as those identified in the 2015 Draft EIR for the original passenger train layover facility site. Improvements proposed as part of the revised passenger train layover facility would be within the existing UPRR ROW. While there are no known tribal cultural resources located in or near where the improvements would occur, there is still a possibility that previously unidentified cultural resources may be encountered during ground-disturbing activities. Mitigation Measures CUL-1a and CUL-2a, which was previously identified in the 2015 Draft EIR for the overall Project and incorporated into the 2015 Final EIR MMRP, would be implemented. Similar to what was originally identified in the 2015 Draft EIR, implementation of Mitigation Measures CUL-1a and CUL-2a would minimize impacts to a less than significant level. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

3.5 Geology, Soils, Seismicity, Mineral Resources, and Paleontological Resources

3.5.1 Regulatory Framework

The regulatory framework, which includes applicable state and local laws, regulations, and plans relative to geology and soils, are identified in the 2015 Draft EIR (Chapter 3.7, Geology, Soils, Seismicity, Minerals, and Paleontological Resources). The regulatory framework for geology and soils, seismicity, mineral resources, and paleontological resources for this SEIR is the same as presented in 2015 Draft EIR.

3.5.2 Environmental Setting

Information about the existing environmental conditions related to geology, soils, seismicity, mineral resources, and paleontological resources in the Project study area was included in the 2015 Draft EIR (Section 3.7, Geology, Soils, Seismicity, Minerals, and Paleontological Resources). The Project corridor is underlain by Holocene floodplain alluvial deposits and older Pleistocene alluvial deposits. The 2015 Draft EIR divided the Project corridor into four segments based on similarity of existing surface conditions and/or specific structures proposed along the corridor.

- Segment 1: Sacramento Yard to Elvas Way (mile post [MP] 89.04–MP 91.67).
- Segment 2: Elvas Way to Arden Way (includes American River Crossing) (MP 91.67–MP 93.57).
- Segment 3: Arden Way to Walerga Road (MP 93.57–MP 100.33).
- Segment 4: Walerga Road to Roseville Yard/Downtown Station (MP 100.33 to MP 106.84).

The railroad bridge crossings are located in Segments 1 and 2. The revised Passenger Train Layover Facility is located in Segment 4.

Segments 1 and 2 are underlain primarily by alluvial floodplain deposits. These are young deposits of Holocene age made up of sand, gravel, and silt that are poorly to moderately sorted. Segment 4 is underlain primarily by the Turlock Lake Formation. This formation is of Pleistocene age and made up of arkosic sand and silt with minor gravel.

In terms of seismicity, the 2015 Draft EIR identified that the Project corridor is in a region of California characterized by relatively low seismic activity and the risk of surface fault rupture in the Project corridor is low. In addition, the Project corridor is not located within an Alquist-Priolo Earthquake Fault Zone and there are no known active or potentially active faults that cross any segments of the Project corridor.

3.5.3 Summary of Prior Analysis

To provide a basis for the SEIR evaluation, Table 3.5-1 summarizes the impacts, relevant mitigation measures, and CEQA environmental determinations before and after implementation of mitigation as reflected in the 2015 Draft EIR.

3.5.4 Thresholds of Significance

In accordance with Appendix G of the 2023 CEQA Guidelines, the revised Project would have a significant impact related to geology and soils, seismicity, mineral and paleontological resources if it were to:

- 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.
 - ii. Strong seismic ground shaking.
 - iii. Seismic related ground failure including liquefaction.
 - iv. Landslides.
- b) Result in substantial soil erosion or loss of topsoil.
- c) Be located on a geologic unit that is unstable, or would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading liquefaction, or collapse.
- d) Be located on expansive soils, 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 wastewater disposal systems where sewers are not available for the disposal of waste water.
- f) 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.
- g) 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.
- h) Directly or indirectly destroy a unique paleontological resource or site or unique geologic features.

Table 3.5-1. Summary of 2015 Draft EIR Impacts and Proposed Mitigation Measures – Geology and Soils

Potential Environmental Impact	Significance Determination (Before Mitigation)	Proposed Mitigation Measures	Significance Determination (After Mitigation)
Threshold GEO-1: Exposure of people or structures to potential substantial adverse effects involving rupture of a known earthquake fault, strong seismic ground shaking, seismic related ground failure, including liquefaction, or landslides <i>Construction and Operation</i> The Project corridor is not located in an Alquist-Priolo Earthquake Fault Zone, and no known active or potentially active faults cross the corridor.	<i>Construction</i> Less than Significant <i>Operation</i> Less than Significant	Not Applicable	Not Applicable
Threshold GEO-2: Potential to result in substantial soil erosion or the loss of topsoil <i>Construction</i> Ground disturbance associated with the proposed Project has the potential to increase erosion and sedimentation rates above existing conditions. Compliance with NPDES permit requirements during construction would address erosion impacts. <i>Operation</i> Operation of the Project does not include any characteristics that would result in substantial soil erosion.	<i>Construction</i> Less than Significant <i>Operation</i> Less than Significant	Not Applicable	Not Applicable

Table 3.5-1. Summary of 2015 Draft EIR Impacts and Proposed Mitigation Measures – Geology and Soils

Potential Environmental Impact	Significance Determination (Before Mitigation)	Proposed Mitigation Measures	Significance Determination (After Mitigation)
Threshold GEO-3: Placement of Project-related facilities on a geologic unit or soil that is unstable or that would become unstable as a result of the Project and potentially result in an onsite or offsite landslide, lateral spreading, subsidence, or collapse <i>Construction</i> The Project corridor is relatively flat and risk of landslide or collapse is low. Prior to construction, geotechnical investigations would be conducted and proper design of cuts, fills, and foundations for Project features developed. <i>Operation</i> Operation of the Project would be similar to the activities currently carried out under existing conditions.	<i>Construction</i> Less than Significant <i>Operation</i> Less than Significant	Not Applicable	Not Applicable
Threshold GEO-4: Placement of Project-related facilities on expansive soil, creating substantial risks to life or property <i>Construction</i> The Project corridor is relatively flat and risk of landslide or collapse is low. Prior to construction, geotechnical investigations	<i>Construction</i> Less than Significant <i>Operation</i> Less than Significant	Not Applicable	Not Applicable

Table 3.5-1. Summary of 2015 Draft EIR Impacts and Proposed Mitigation Measures – Geology and Soils

Potential Environmental Impact	Significance Determination (Before Mitigation)	Proposed Mitigation Measures	Significance Determination (After Mitigation)
would be conducted and proper design of cuts, fills, and foundations for Project features developed. <i>Operation</i> Operation of the Project would be similar to the activities currently carried out under existing conditions.			
Threshold GEO-5: Placement of facilities on soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems in areas where sewers are not available for the disposal of wastewater <i>Construction and Operation</i> The Project would not use septic tanks or alternative wastewater systems.	<i>Construction</i> No Impact <i>Operation</i> No Impact	Not Applicable	Not Applicable
Threshold GEO-6: Contribution to the loss of availability of a known mineral resource that would be of value to the region and the residents of the state <i>Construction and Operation</i> Implementation of the Project would not result in a loss of known mineral resources, either by being constructed on top of a	<i>Construction</i> Less than Significant <i>Operations</i> Less than Significant	Not Applicable	Not Applicable

Table 3.5-1. Summary of 2015 Draft EIR Impacts and Proposed Mitigation Measures – Geology and Soils

Potential Environmental Impact	Significance Determination (Before Mitigation)	Proposed Mitigation Measures	Significance Determination (After Mitigation)
mineral resource or by creating a land use inconsistent with mining activities.			
Threshold GEO-7: Contribution to 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 <i>Construction and Operation</i> The Project would not result in loss of availability of a locally important mineral resource.	<i>Construction</i> Less than Significant <i>Operations</i> Less than Significant	Not Applicable	Not Applicable
Threshold GEO-8: Direct or indirect destruction of a unique paleontological resource or site or unique geologic feature <i>Construction</i> Construction of the Project could result in direct or indirect destruction of a unique paleontological resource or site. <i>Operation</i> Operation of the Project does not include any characteristics that would result in the direct or indirect destruction of a paleontological resource.	<i>Construction</i> Potentially Significant <i>Operation</i> No Impact	<i>Construction</i> Mitigation Measure GEO-8a: Educate construction personnel in recognizing fossil material. Prior to construction, UPRR shall ensure that all construction personnel receive training provided by a qualified professional paleontologist who is experienced in teaching non specialists to ensure that construction personnel can recognize fossil materials in the event any are discovered during construction. Mitigation Measure GEO-8b: Stop work if substantial fossil remains are encountered during construction. If substantial fossil remains (particularly vertebrate remains) are discovered during earth disturbing activities, the construction contractor shall stop activities immediately until a State registered professional geologist or qualified professional paleontologist can assess the nature and importance of the find and a qualified professional paleontologist can recommend	<i>Construction</i> Less than Significant <i>Operation</i> Not Applicable

Table 3.5-1. Summary of 2015 Draft EIR Impacts and Proposed Mitigation Measures – Geology and Soils

Potential Environmental Impact	Significance Determination (Before Mitigation)	Proposed Mitigation Measures	Significance Determination (After Mitigation)
		appropriate treatment. Treatment may include preparation and recovery of fossil materials so that they can be housed in an appropriate museum or university collection and may also include preparation of a report for publication describing the finds. UPRR shall be responsible for ensuring that recommendations regarding treatment and reporting are implemented. Mitigation Measure GEO-8c: Retain a qualified professional paleontologist to monitor significant ground-disturbing activities. Prior to construction, UPRR shall retain a qualified professional paleontologist as defined by SVP's Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources (2010) to monitor activities with the potential to disturb sensitive paleontological resources. Data gathered during detailed Project design shall be used to determine the activities that will require the presence of a monitor. In general, these activities include any ground-disturbing activities involving excavation deeper than 3 feet in areas with high potential to contain sensitive paleontological resources. Recovered fossils shall be prepared so that they can be properly documented. Recovered fossils shall then be curated at a facility that will properly house and label them, maintain the association between the fossils and field data about the fossils' provenance, and make the information available to the scientific community. <i>Operation</i> Not Applicable	

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3.5.5 Environmental Analysis

THRESHOLD 3.5-A	Exposure of people or structures to potential substantial adverse effects involving rupture of a known earthquake fault, strong seismic ground shaking, seismic-related ground failure, including liquefaction, or landslides
THRESHOLD 3.5-C	Be located on a geologic unit that is unstable, or would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, liquefaction, or collapse
THRESHOLD 3.5-D	Be located on expansive soils, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property

The 2015 Draft EIR identified that the Project corridor was not located within in an Alquist-Priolo Earthquake Fault Zone, and no known active or potentially active faults cross the Project corridor. Therefore, impacts associated with surface fault rupture were determined to be less than significant. While the Project corridor is not likely to be affected by surface fault rupture, the Project corridor could be subject to secondary seismic hazards. Specifically, the 2015 Draft EIR identified that the unconsolidated alluvial deposits along portions of the Project corridor could be potentially liquefiable during a seismic event.

Prior to the initiation of construction activities, geotechnical investigations would be conducted along the Project corridor and at proposed structures and associated facilities to provide analysis of materials encountered to quantify susceptibility for liquefaction. The investigation would include recommendations for the design of appropriate foundations for Project features to meet building standards. With the preparation of geotechnical investigations, the 2015 Draft EIR concluded that seismic hazards, including the potential for lateral spreading, liquefaction, soil collapse, would be reduced to a less than significant level.

Railroad Bridge Crossings

The location of the railroad bridge crossings does not fall within an Alquist-Priolo Fault Rupture Hazard Zones and is not within 1,000 feet of a Holocene or younger fault. The surface fault rupture potential at the railroad bridge crossing sites are considered low. In addition, based on the existing subsurface investigations completed and the flat nature of the surrounding topography, it is anticipated that geotechnical hazards due to landslides, embankment failures, ground subsidence, or collapse would not be an issue at the railroad bridge crossings.

Based on the as-built information available, it appears that risk for liquefaction is high in the area. The replacement or realignment of the railroad bridge crossings would still be required to adhere to applicable federal, State, and local laws and regulations, including, but not limited to those set forth by federal, state, and local policies, such as the preparation of a soil subsurface investigation seismic design recommendations. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

Passenger Train Layover Facility

Similar to what was identified in the 2015 Draft EIR, a site specific geotechnical investigation for the revised passenger train layover facility would be prepared prior to construction commencing. The geotechnical investigation would characterize underlying materials within the passenger train layover facility and identify the proper design of cuts, fills, and foundations. Operation and maintenance activities for the revised passenger train layover facility would be similar to those activities currently carried out under existing conditions. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

THRESHOLD 3.5-B	Result in substantial soil erosion or loss of topsoil
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The 2015 Draft EIR identified that ground disturbance caused by construction activities would have the potential to increase erosion and sedimentation rates above existing conditions. The 2015 Draft EIR concluded that with best management practices (BMPs) and measures implemented in compliance with National Pollutant Discharge Elimination System (NPDES) permit requirements, construction impacts associated with soil erosion would be reduced to a less than significant level.

Railroad Bridge Crossings

The replacement or realignment of the existing railroad bridge crossings would still require the same type of construction activities previously identified in the 2015 Draft EIR. Therefore, similar impacts associated with soil erosion could occur during ground-disturbing construction activities. Similar to what was originally identified in the 2015 Draft EIR, adherence to BMPs and measures identified as part of NPDES permit requirements would minimize construction impacts to a less than significant level. Operation of the railroad bridge crossings would not result in additional soil erosion impacts. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

Passenger Train Layover Facility

Construction of the passenger train layover facility at its revised location would still require the same type of construction activities previously identified in the 2015 Draft EIR. Therefore, similar impacts associated with soil erosion could occur during ground-disturbing construction activities. Similar to what was originally identified in the 2015 Draft EIR, adherence to BMPs and measures identified as part of NPDES permit requirements would minimize construction impacts to a less than significant level. Operation of the passenger train layover facility at its revised location would not result in additional soil erosion impacts. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

THRESHOLD 3.5-E	Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater
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No septic systems or alternative wastewater disposal systems were proposed as part of the proposed Project. The 2015 Draft EIR concluded that no impacts would occur.

Railroad Bridge Crossings

The replacement or realignment of the existing railroad bridge crossings would not require septic systems or alternative wastewater disposal systems. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

Passenger Train Layover Facility

Construction and operation of the revised passenger train layover facility does not propose the use of septic systems or alternative wastewater disposal systems. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

THRESHOLD 3.5-F	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
THRESHOLD 3.5-G	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

Minerals are defined as any naturally occurring chemical elements or compounds, formed from inorganic processes and organic substances. Mineable minerals or an ore deposit is defined as a deposit of ore or mineral having a value materially in excess of the cost of developing, mining, and processing the mineral and reclaiming the project area. The conservation, extraction, and processing of mineral resources are an integral part of development and economy within California.

The California Geology Survey (CGS) provides information about California's non-fuel mineral resources and classifies lands throughout the state that contain regionally significant mineral resources, as mandated by the Surface Mining and Reclamation Act of 1975. Non-fuel mineral resources include metals such as gold, silver, iron, and copper; industrial metals such as boron compounds, rare-earth elements, clays, limestone, gypsum, salt, and dimension stone; and construction aggregate such as sand, gravel, and crushed stone. Development generally results in a demand for minerals, especially construction aggregate. The classification of these mineral resources is a joint effort of the state and the local governments and is based on geologic factors and requires that the State Geologist classify the mineral resources area as one of the four Mineral Resource Zone (MRZ) classifications.

3.5 Geology, Soils, Seismicity, Mineral, and Paleontological Resources

The 2015 Draft EIR identified Segments 1 and 2 of the Project corridor as being located in a MRZ-3 area. An MRZ-3 classification is considered to be an area that contains mineral deposits, but the significance of which cannot be evaluated from available data. Segment 4 of the Project corridor was identified as being located in a MRZ-4 area. An MRZ-4 classification is considered to be an area where available information is inadequate for assignment to another MRZ classification. The 2015 Draft EIR also disclosed that no mineral resources are identified within the Project corridor by either the Sacramento County or Placer County general plans. The 2015 Draft EIR concluded that a less than significant impact would occur with Project implementation.

Railroad Bridge Crossings

Although the area in which these existing railroad bridge crossings are located in has a MRZ-3 classification, there are no mineral extraction zones or activities present as the area is developed with transportation infrastructure (e.g., existing freeways and railroad tracks) and is adjacent to existing commercial, residential, and recreational uses. Therefore, implementation of the revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

Passenger Train Layover Facility

The revised passenger train layover facility site contains similar adjacent land uses (e.g., a mix of residential, commercial, and industrial uses adjacent to the UPRR right of way) as those identified in the 2015 Draft EIR for the original passenger train layover facility site. Although the area where the passenger train layover facility is located in has a MRZ-4 classification, there are no mineral extraction zones or activities present as the area is developed with transportation infrastructure (e.g., existing railroad tracks) and is adjacent to existing commercial, industrial, education, and residential uses. The revised Project would not result in a loss of known mineral resources, either by removing an area that could be mined for mineral resources or by creating a land use inconsistent with mining activities. Therefore, implementation of the revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

THRESHOLD 3.5-H	Directly or indirectly destroy a unique paleontological resource or site or unique geologic features
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The 2015 Draft EIR identified that geologic units present in the Project corridor have the potential to contain paleontological resources and concluded that if fossils are present in the Project corridor, they could be damaged during ground-disturbing construction activities associated with the proposed Project. Substantial damage to or destruction of significant paleontological resources would be a potentially significant impact. Due to the potential impacts that could occur on sensitive paleontological resources, Mitigation Measures GEO-8a through GEO-8c were identified.

Mitigation Measure GEO-8a requires paleontological training to be provided to construction personnel prior to construction activities. Mitigation Measure GEO-8b provides guidance on what

to do in the event that substantial fossil remains are encountered during construction activities. Mitigation Measure GEO-8c requires paleontological monitoring where construction would involve excavation of more than 3 feet. With implementation of Mitigation Measures GEO-8a through GEO-8c, impacts on paleontological resources during construction activities would be reduced to a less than significant level. Operational activities associated with the proposed Project would not require ground disturbing activities. The 2015 Draft EIR concluded that there would be no impact on paleontological resources.

Railroad Bridge Crossings

The replacement or realignment of the railroad bridge crossings would require deeper excavation of soil due to modifications or replacement of the existing bridge abutments and wingwalls. The existing railroad bridge crossings are located in an area mapped as Quaternary age Holocene Alluvium. The Holocene Alluvium are alluvial soil deposits consisting of clays, silts, sands and gravels deposited by flows within the American River. Just south of the Elvas Railroad Bridge Crossing the area is mapped as Quaternary age (Pleistocene) alluvial deposits of the River Bank Formation Middle Member which may be encountered in the subsurface depending on the thickness of the Holocene Alluvium deposits in the area.

Due to the nature of the construction activities that would be required for the replacement or realignment of the existing railroad bridge crossings, Mitigation Measures GEO-8a through GEO-8c, which were previously identified in the 2015 Draft EIR for the overall Project and incorporated into the 2015 Final EIR MMRP, would be implemented. Similar to what was originally identified in the 2015 Draft EIR, implementation of Mitigation Measures GEO-8a through GEO-8c would minimize impacts to a less than significant level. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

Passenger Train Layover Facility

Construction of the passenger train layover facility at its revised location would still require the same type of construction activities previously identified in the 2015 Draft EIR. Therefore, similar impacts to paleontological resources could occur during ground-disturbing construction activities. Mitigation Measures GEO-8a through GEO-8c, which were previously identified in the 2015 Draft EIR for the overall Project and incorporated into the 2015 Final EIR MMRP, would be implemented. Similar to what was originally identified in the 2015 Draft EIR, implementation of Mitigation Measures GEO-8a through GEO-8c would minimize construction impacts to a less than significant level. Operation of the passenger train layover facility at its revised location would not result in additional impacts to paleontological resources. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

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3.6 Hazards and Hazardous Materials

3.6 Hazards and Hazardous Materials**3.6.1 Regulatory Framework**

The regulatory framework, which includes applicable state and local laws, regulations, and plans relative to hazards and hazardous materials are identified in the 2015 Draft EIR (Chapter 3.8, Hazards and Hazardous Materials). The regulatory framework for hazards and hazardous materials for this SEIR is the same as presented in 2015 Draft EIR.

3.6.2 Environmental Setting

The 2015 Draft EIR addressed hazards and hazardous materials impacts associated with the introduction of new linear rail infrastructure elements within the Project study area. The Project is located within the existing railroad right of way owned, operated, and maintained by UPRR. CCJPA's current passenger service operates on a shared track within the railroad ROW. The 2015 Draft EIR identified that existing permits and maintenance practices of UPRR pertaining to the prevention of hazardous waste generation or spills would continue under Project construction and operation.

Numerous California Hazardous Material Incident Reporting System (CHMIRS) incidents have been documented within the existing UPRR rail corridor. Typically, railroad ROW is viewed as a potential area of soil contamination due to the presence of petroleum hydrocarbon or chemical conveyance pipelines within the ROW, as well as potential spills and weed abatement and other railroad operations involving chemicals within the ROW.

The 2015 Draft EIR also identified listed properties of concern within the Project corridor (see 2015 Draft EIR Figure 3.8-1). There are no listed properties of concern that were identified within the area where the railroad bridge crossings are located. There is one potential site of concern identified near the area where the revised passenger train layover facility site is proposed (Zap Termite & Pesticide Control located at 128 Brittain Street in Roseville). However, this is outside of the Project area identified for the revised passenger train layover facility site.

3.6.3 Summary of Prior Analysis

To provide a basis for the SEIR evaluation, Table 3.6-1 summarizes the impacts, relevant mitigation measures, and CEQA environmental determinations before and after implementation of mitigation as reflected in the 2015 Draft EIR.

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3.6 Hazards and Hazardous Materials

Table 3.6-1. Summary of 2015 Draft EIR Impacts and Proposed Mitigation Measures – Hazards and Hazardous Materials

Potential Environmental Impact	Significance Determination (Before Mitigation)	Proposed Mitigation Measures	Significance Determination (After Mitigation)
Threshold HAZ-1: Creation of a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials <i>Construction and Operation</i> Construction and operational activities would use limited quantities of miscellaneous hazardous materials (e.g., petroleum-based and could result in accidental spills of hazardous materials.	<i>Construction</i> Potentially Significant <i>Operation</i> Potentially Significant	<i>Construction and Operation</i> Mitigation Measure HAZ-1: Ensure safe handling and storage of hazardous materials. Before the commencement of Project construction, the construction contractor shall ensure that any employee handling hazardous materials is trained in the safe handling and storage of hazardous materials per all applicable regulations (e.g., OSHA hazardous materials standards listed in 29 CFR 1910 Subpart H), and staging areas where hazardous materials would be stored during construction shall be identified in accordance with applicable state and federal regulations. Similarly, during operations, UPRR and CCJPA personnel shall be likewise trained in the safe handling and storage of hazardous materials.	<i>Construction</i> Less than Significant <i>Operation</i> Less than Significant
Threshold HAZ-2: Creation of 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. <i>Construction</i> Contaminants could be present in soils in areas of proposed improvements and released through Project-related construction activities. <i>Operation</i>	<i>Construction</i> Potentially Significant <i>Operation</i> Potentially Significant	<i>Construction</i> Mitigation Measure HAZ-1: Ensure safe handling and storage of hazardous materials. Mitigation Measure HAZ-2a: Conduct Phase II Environmental Site Assessment studies. Prior to construction of the Build Alternative, Phase II soil studies shall be conducted to assess areas of proposed improvements to provide site-specific data upon which to rely when developing the Soil Management Plan (discussed in Mitigation Measure HAZ-3). The Phase II studies can include but are not limited to the following.	<i>Construction</i> Less than Significant <i>Operation</i> Less than Significant

3.6 Hazards and Hazardous Materials

Table 3.6-1. Summary of 2015 Draft EIR Impacts and Proposed Mitigation Measures – Hazards and Hazardous Materials

Potential Environmental Impact	Significance Determination (Before Mitigation)	Proposed Mitigation Measures	Significance Determination (After Mitigation)
Operational activities are expected to generate hazardous material waste through the use of lubricants, solvents, and other materials that, if improperly handled, could be accidentally released into the environment.		- A scope of work consisting of prefield activities, such as preparation of a Health and Safety Plan (HASP), marking boring locations, and obtaining utility clearance; and field activities, such as identifying appropriate sampling procedures, health and safety measures, chemical testing methods, and quality assurance/quality control (QA/QC) procedures in accordance with the ASTM Standard. - Necessary permits for boring advancement. - A Sampling and Analysis Plan (SAP) in accordance with the scope of work. - Laboratory analyses conducted by a state-certified laboratory. Mitigation Measure HAZ-2b: Prepare a Soil Management Plan. The Soil Management Plan (SMP) shall address the concerns associated with releases of contaminated soil within and adjacent to the railroad ROW and railyard areas. The SMP shall include specifications for procedures to manage affected soil during construction. <i>Operation</i> Mitigation Measure HAZ-1: Ensure safe handling and storage of hazardous materials.	
Threshold HAZ-3: Emission of hazardous emissions or handling of hazardous or acutely	<i>Construction</i> Potentially Significant	<i>Construction</i> Mitigation Measure HAZ-1: Ensure safe handling and storage of hazardous materials	<i>Construction</i> Less than Significant



3.6 Hazards and Hazardous Materials**Table 3.6-1. Summary of 2015 Draft EIR Impacts and Proposed Mitigation Measures – Hazards and Hazardous Materials**

Potential Environmental Impact	Significance Determination (Before Mitigation)	Proposed Mitigation Measures	Significance Determination (After Mitigation)
hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school <i>Construction</i> Several existing schools have been identified near the Project corridor. Construction and activities would use limited quantities of miscellaneous hazardous materials (e.g., petroleum-based and could result in accidental spills of hazardous materials. <i>Operation</i> Use of hazardous materials during maintenance activities for the proposed Project would be similar to activities required to maintain existing equipment within the Project corridor. Hazardous materials used and waste generated by the operations would be managed according to all applicable regulatory requirements, minimizing the exposure risk to the surrounding environment, including nearby schools.	<i>Operation</i> Less than Significant	Mitigation Measure HAZ-2a: Conduct Phase II Environmental Site Assessment studies Mitigation Measure HAZ-2b: Prepare a Soil Management Plan <i>Operation</i> Not Applicable	<i>Operation</i> Not Applicable
Threshold HAZ-4: Placement of Project-related facilities on a site that is included on a list of hazardous materials sites, and resulting creation of a significant hazard to the public or the environment <i>Construction</i> Construction activities could inadvertently result in a disturbance of sites with previously undocumented	<i>Construction</i> Potentially Significant <i>Operation</i> Less than Significant	<i>Construction</i> Mitigation Measure HAZ-2a: Conduct Phase II Environmental Site Assessment Studies Mitigation Measure HAZ-2b: Prepare a Soil Management Plan <i>Operation</i> Not Applicable	<i>Construction</i> Less than Significant <i>Operation</i> Not Applicable



3.6 Hazards and Hazardous Materials**Table 3.6-1. Summary of 2015 Draft EIR Impacts and Proposed Mitigation Measures – Hazards and Hazardous Materials**

Potential Environmental Impact	Significance Determination (Before Mitigation)	Proposed Mitigation Measures	Significance Determination (After Mitigation)
contamination or could disturb known sites with contaminated soil and groundwater. <i>Operation</i> Operational activities would consist of maintenance of the existing rail infrastructure and would be conducted in accordance with current UPRR management practices.			
Threshold HAZ-5: Placement of Project-related facilities within an airport land use plan area or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, resulting in a safety hazard for people residing or working in the Project corridor <i>Construction and Operation</i> The proposed Project would not result in hazards for people working or residing in the Project corridor within 2 miles of a public airport.	<i>Construction</i> Less than Significant <i>Operation</i> Less than Significant	Not Applicable	Not Applicable
Threshold HAZ-6: Placement of Project-related facilities in the vicinity of a private airstrip, resulting in a safety hazard for people residing or working in the Project corridor <i>Construction and Operation</i>	<i>Construction</i> No Impact <i>Operation</i> No Impact	Not Applicable	Not Applicable

3.6 Hazards and Hazardous Materials

Table 3.6-1. Summary of 2015 Draft EIR Impacts and Proposed Mitigation Measures – Hazards and Hazardous Materials

Potential Environmental Impact	Significance Determination (Before Mitigation)	Proposed Mitigation Measures	Significance Determination (After Mitigation)
The proposed Project would not result in the construction or operation of rail infrastructure within the vicinity of a private airstrip.			
Threshold HAZ-7: Impairment of implementation of or physical interference with an adopted emergency response plan or emergency evacuation plan <i>Construction</i> Construction activities could interfere with traffic through movement of construction vehicles and while track is being installed. <i>Operation</i> Operation of the Project does not include any characteristics that would physically impair or otherwise interfere with emergency response or evacuation in the Project vicinity.	<i>Construction</i> Potentially Significant <i>Operation</i> No Impact	<i>Construction</i> Mitigation Measure TRA-2: Implement site-specific construction traffic management plan (TMP). <i>Operation</i> Not Applicable	<i>Construction</i> Less than Significant <i>Operation</i> Not Applicable
Threshold HAZ-8: Exposure of people or structures to a significant risk involving wildland fires <i>Construction</i> During construction, equipment and vehicles containing flammable fuels may come in contact with	<i>Construction</i> Potentially Significant <i>Operation</i> Less than Significant	<i>Construction</i> Mitigation Measure HAZ-4: Minimize risk of wildland fire. Before the commencement of construction of the Build Alternative, the construction contractor shall ensure that staging areas, welding areas, or other areas slated for construction equipment are cleared of dried vegetation or other materials that could serve as fire fuel. Any construction equipment that normally includes a	<i>Construction</i> Less than Significant <i>Operation</i> Not Applicable

3.6 Hazards and Hazardous Materials**Table 3.6-1. Summary of 2015 Draft EIR Impacts and Proposed Mitigation Measures – Hazards and Hazardous Materials**

Potential Environmental Impact	Significance Determination (Before Mitigation)	Proposed Mitigation Measures	Significance Determination (After Mitigation)
vegetated areas and could accidentally spark and ignite the vegetation. <i>Operation</i> Operation of the Project would result in the same type of activities currently occurring within the Project corridor (e.g., regular maintenance of rail infrastructure).		spark arrester shall be equipped with an arrester in good working order. <i>Operation</i> Not Applicable	

3.6 Hazards and Hazardous Materials**3.6.4 Thresholds of Significance**

In accordance with Appendix G of the 2023 CEQA Guidelines, the revised Project would have a significant impact related to hazards and hazardous materials if it were to:

- 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.
- 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.

3.6.5 Environmental Analysis

THRESHOLD 3.6-A	Creation of a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials
THRESHOLD 3.6-B	Creation of 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
THRESHOLD 3.6-D	Placement of Project-related facilities on a site that is included on a list of hazardous materials sites, and resulting creation of a significant hazard to the public or the environment

Impacts as a result of implementing the revised Project can be broadly classified into construction and operational impacts. Most impacts related to hazards and hazardous materials would occur during construction when the ground is disturbed and when there could be temporary disturbance of hazardous materials. Operation or long-term impacts would include the additional hazardous waste, contaminated materials, and solid waste that are generated by the operation of the revised Project, including from hazardous wastes handled at existing maintenance facilities as a part of

3.6 Hazards and Hazardous Materials

routine operation and maintenance of passenger trains, and from minor spills and releases of non-acutely hazardous waste.

Construction activities identified in the 2015 Draft EIR would involve excavation of soils which increases the likelihood of encountering existing and unknown regulated materials. Hazardous material sites pose a safety risk to workers who might be exposed to contaminated soil, water, and vapor. In addition, vehicles and equipment used during construction activities, such as fuel storage tanks, have the potential to release hazardous materials (mainly petroleum products) and increase material spills. There is also the potential for an increase in hazardous conditions through the movement or dispersion of hazardous materials on site during construction.

The 2015 Draft EIR concluded that although construction activities could increase the potential for use, release, and exposure to hazardous materials or hazardous conditions, appropriate construction safety procedures and equipment stockpiling methods would be used to minimize the potential for unintended releases with all releases reported and addressed under appropriate regulatory guidance. Should contamination be encountered, construction activities would be temporarily halted until characterization, storage, disposal, and cleanup requirements are met.

The inclusion of Mitigation Measures HAZ-1 (which requires the safe handling and storage of hazardous materials), HAZ-2a (which requires the preparation of a Phase II Environmental Site Assessment), and HAZ-2b (which requires the preparation of a soil management plan) would reduce construction related impacts to a less than significant level.

The 2015 Draft EIR also concluded that although operational activities could increase the potential for use, release, and exposure to hazardous materials or hazardous conditions within the Project corridor, appropriate handling and safety procedures would be used to minimize the potential for unintended releases with all releases reported and addressed under appropriate regulatory guidance. The inclusion of Mitigation Measure HAZ-1 (which requires the safe handling and storage of hazardous materials) would reduce operational related impacts to a less than significant level.

Railroad Bridge Crossings

Construction and operation of the railroad bridge crossings would not change the type or handling of materials that would be used as previously identified in the 2015 Draft EIR. Since the railroad bridge crossings are located on Business I-80, there is the potential that aerially deposited lead (ADL) is present in the soil from the historical use of leaded gasoline along roadways throughout California. The replacement or realignment of the railroad bridge crossings would require excavation of soil approximately 3 feet from the edge of the existing pavement and approximately 0.5 feet below existing grade where ADL may exist. Construction and operational activities would still be required to adhere to applicable federal, State, and local laws and regulations, including, but not limited to those set forth by federal, state, and local policies. These include any specific California Department of Transportation (Caltrans) requirements, such as the preparation of a Project specific Lead Compliance Plan.

3.6 Hazards and Hazardous Materials

Mitigation Measures HAZ-1, HAZ-2a, and HAZ-2b, which were previously identified in the 2015 Draft EIR for the overall Project and incorporated into the 2015 Final EIR MMRP, would be implemented. Similar to what was originally identified in the 2015 Draft EIR, implementation of Mitigation Measures HAZ-1, HAZ-2a, and HAZ-2b would minimize impacts to a less than significant level. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

Passenger Train Layover Facility

Construction of the revised passenger train layover facility would not change the type or handling of materials that would be used as previously identified in the 2015 Draft EIR. Mitigation Measures HAZ-1, HAZ-2a, and HAZ-2b, which was previously identified in the 2015 Draft EIR for the overall Project and incorporated into the 2015 Final EIR MMRP, would be implemented to address the construction impacts associated with the routine use, transport, or disposal of hazardous materials. Similar to what was originally identified in the 2015 Draft EIR, implementation of Mitigation Measures HAZ-1, HAZ-2a, and HAZ-2b would ensure safe handling and storage of hazardous materials resulting in construction impacts being reduced to a less than significant level.

Hazardous waste would be generated from routine operation and maintenance of the passenger train layover facility and associated Project corridor infrastructure. Minor spills and releases of non-acutely hazardous waste (e.g., petroleum, oil, and lubricants) may also occur due to normal operation along the tracks, access roads, and at existing maintenance facilities. While petroleum, oils, and lubricants may be used in rail operations or maintenance, proper use, storage, and disposal practices would minimize the potential for accidental releases. Mitigation Measure HAZ-1, which was previously identified in the 2015 Draft EIR for the overall Project and incorporated into the 2015 Final EIR MMRP, would be implemented to address the operational impacts associated with the routine use, transport, or disposal of hazardous materials. Similar to what was originally identified in the Final EIR, implementation of Mitigation Measure HAZ-1 would ensure safe handling and storage of hazardous materials during operational activities and reduce impacts to a less than significant level. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

THRESHOLD 3.6-C	Emission of hazardous emissions or handling of hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school
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School locations are important to consider because individuals particularly sensitive to hazardous materials exposure use these facilities. Additional protective regulations apply to projects that could use or disturb potentially hazardous products near or at schools. The California Public Resources Code requires projects that might reasonably be expected to emit or handle hazardous materials within 0.25 mile of a school to discuss potential effects with the applicable school district.

The 2015 Draft EIR identified that during construction activities, any potential construction-related hazardous releases or emissions would be from commonly used materials such as fossil fuels,



3.6 Hazards and Hazardous Materials

solvents, and paints and would not include substances listed in 40 CFR 355 Appendix A: Extremely Hazardous Substances and Their Threshold Planning Quantities. In addition, compliance with all relevant federal, state, and local regulations would ensure that all hazardous materials are used, stored, and disposed of properly, thus minimizing potential impacts related to a hazardous materials release during construction activities. However, the 2015 Draft EIR concluded that unanticipated release of hazardous substances near a school could constitute a significant impact. To reduce impacts to a less than significant level, Mitigation Measure HAZ-1 (which requires the safe handling and storage of hazardous materials), HAZ-2a (which requires the preparation of a Phase II Environmental Site Assessment), and HAZ-2b (which requires the preparation of a soil management plan) were included and would reduce construction related impacts to a less than significant level.

During operational activities, use of hazardous materials during maintenance activities would be similar to activities required to maintain existing equipment. Similar to the construction impacts above, operational activities are not expected to include substances listed in 40 CFR 355 Appendix A: Extremely Hazardous Substances and Their Threshold Planning Quantities, and any hazardous material used is expected to be in the form of a commonly used material such as fossil fuels, solvents, and paints. Hazardous materials used and waste generated by the operations would be managed according to all applicable regulatory requirements, minimizing the exposure risk to personnel and the surrounding environment, including nearby schools. Therefore, the 2015 Draft EIR concluded that operation of the Project would not affect land uses outside of the Project corridor, including the aforementioned schools.

Railroad Bridge Crossings

One school (Courtyard Private School) was identified as being within 0.25 mile of the Project corridor for the railroad bridge crossing component in the 2015 Draft EIR. The modifications associated with the railroad bridge crossings as part of the revised Project does not change the existing school facilities located in the area.

As previously identified, construction and operation of the railroad bridge crossings would not change the type or handling of materials that would be used. Construction and operational activities would still be required to adhere to applicable federal, State, and local laws and regulations, including, but not limited to those set forth by federal, state, and local policies. Mitigation Measures HAZ-1, HAZ-2a, and HAZ-2b, which were previously identified in the 2015 Draft EIR for the overall Project and incorporated into the 2015 Final EIR MMRP, would be implemented. Similar to what was originally identified in the 2015 Draft EIR, implementation of Mitigation Measures HAZ-1, HAZ-2a, and HAZ-2b would minimize impacts to a less than significant level. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

Passenger Train Layover Facility

In the 2015 Draft EIR, one school (Adelante High School) was identified and is located adjacent to the originally proposed passenger train layover facility site. With the change in passenger train

3.6 Hazards and Hazardous Materials

layover facility site, two additional school facilities (Roseville Joint Union High School and Independence High School) were identified and are located within 0.25 mile of the revised passenger train layover facility.

Construction and operation of the revised passenger train layover facility would not change the type or handling of materials that would be used. Construction and operational activities would still be required to adhere to applicable federal, State, and local laws and regulations, including, but not limited to those set forth by federal, state, and local policies. Mitigation Measures HAZ-1, HAZ-2a, and HAZ-2b, which were previously identified in the 2015 Draft EIR for the overall Project and incorporated into the 2015 Final EIR MMRP, would be implemented. Similar to what was originally identified in the 2015 Draft EIR, implementation of Mitigation Measures HAZ-1, HAZ-2a, and HAZ-2b would minimize impacts to a less than significant level. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

THRESHOLD 3.6-E	Placement of Project-related facilities within an airport land use plan area or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, resulting in a safety hazard for people residing or working in the Project corridor
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Within California, airport land use compatibility is coordinated by an Airport Land Use Commission (ALUC). ALUCs protect public health, safety, and welfare by ensuring the orderly expansion of airports and the adoption of land use measures that minimize the public's exposure to excessive noise and safety hazards within areas around public airports. An Airport Land Use Compatibility Plan (ALUCP) is the basis for compatible planning within the vicinity of a public airport. The ALUCP may include land use measures specifying land use, height restrictions, and building standards. The planning boundary of the ALUCP is the airport influence area and is established by the ALUC after consultation with the involved agencies. Involved agencies are primarily the cities and the county, but also include special districts, school districts, and community college districts. An ALUCP must also address any military airport within the jurisdiction of the ALUC. The 2015 Final EIR identified that a portion of the Project corridor was within the McClellan Air Force Base Comprehensive Land Use Plan (CLUP) planning boundaries. However, the 2015 Draft EIR concluded that no Project features would affect airport operations since the features proposed would involve structures that would be of greater height than existing facilities within the Project corridor. Impacts were considered less than significant.

Since the certification of the 2015 Final EIR, the McClellan Air Force Base has undergone redevelopment as part of the base closure and is now known as McClellan Park with the known as the Sacramento McClellan Airport. The McClellan Park boundaries are the same as those identified for the McClellan Air Force Base CLUP boundaries.

Railroad Bridge Crossings

The railroad bridge crossings are located approximately 4.5 miles southwest of the nearest McClellan Air Force Base CLUP boundary. Since the railroad bridge crossings are not located



3.6 Hazards and Hazardous Materials

within an ALUCP, construction or operation of the revised Project would not result in a safety hazard for people residing or working in the Project corridor. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

Passenger Train Layover Facility

The revised passenger train layover facility is located approximately 2.7 miles northwest of the nearest McClellan Air Force Base CLUP boundary. Since the revised passenger train layover facility is not located within an ALUCP, construction or operation of the revised Project would not result in a safety hazard for people residing or working in the Project corridor. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

THRESHOLD 3.6-F	Placement of Project-related facilities in the vicinity of a private airstrip, resulting in a safety hazard for people residing or working in the Project corridor
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The 2015 Draft EIR identified that the Project corridor was not located within the vicinity of a private airstrip. The nearest private airstrip to the Project corridor is the California Highway Patrol Academy Airport approximately 7 miles west. Since there are no private airstrips within the Project corridor, the 2015 Draft EIR concluded that implementation of the Project would not affect operations of a private airstrip or result in a safety hazard for people residing or working in the Project corridor.

Railroad Bridge Crossings

The railroad bridge crossings are located approximately 5.3 miles east of the California Highway Patrol Academy Airport. Since the railroad bridge crossings are not located within the vicinity of a private airstrip, construction or operation of the revised Project would not result in a safety hazard for people residing or working in the Project corridor. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

Passenger Train Layover Facility

There are no private airstrips located within the vicinity of the revised passenger train layover facility. Since the revised passenger train layover facility is not located within the vicinity of a private airstrip, construction or operation of the revised Project would not result in a safety hazard for people residing or working in the Project corridor. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

3.6 Hazards and Hazardous Materials

THRESHOLD 3.6-G	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan
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The 2015 Draft EIR identified that construction of the proposed Project could interfere with traffic through movement of construction vehicles and required track work. Adherence to requirements of the Sacramento County Office of Emergency Services and Placer County Office of Emergency Services would ensure adequate response to emergencies and evacuation plans and therefore reduce the potential for interfering with local emergency plans. The 2015 Draft EIR concluded that with implementation of Mitigation Measure TRA-1, which requires the implementation of a site-specific construction management plan, impacts would be reduced to a less than significant level.

The 2015 Draft EIR also identified that operation of the Project does not include any characteristics that would physically impair or otherwise interfere with emergency response or evacuation in the Project vicinity. No impacts associated with this issue were identified in the 2015 Draft EIR.

Railroad Bridge Crossings

The replacement or realignment of the railroad bridge crossings would have construction activities that could require traffic detours and road closures in order to replace or realign the existing bridge structures. Mitigation Measure TRA-1, which was previously identified in the 2015 Draft EIR for the overall Project and incorporated into the 2015 Final EIR MMRP, would be implemented to address the potential construction access impacts during construction activities. Similar to what was originally identified in the 2015 Draft EIR, implementation of Mitigation Measure TRA-1 would reduce potential impacts to a less than significant level.

Once constructed, the railroad bridge crossings would continue to function as railroad bridges and would not result in permanent road closures which conflict or interfere with emergency response or evacuation plans. Implementation of the revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Final EIR.

Passenger Train Layover Facility

Construction of the passenger train layover facility at its revised location would have construction activities that could require traffic detours and road closures in order to construct the track work and roadway access. Mitigation Measure TRA-1, which was previously identified in the 2015 Draft EIR for the overall Project and incorporated into the 2015 Final EIR MMRP, would be implemented to address the potential construction access impacts during construction activities. Similar to what was originally identified in the 2015 Draft EIR, implementation of Mitigation Measure TRA-1 would reduce potential impacts to a less than significant level.

Operation of the passenger train layover facility at its revised location would not result in permanent road closures that would conflict or interfere with emergency response or evacuation plans. In addition, the passenger train layover facility would add additional access roads to ensure

3.6 Hazards and Hazardous Materials

adequate access to the new layover tracks. Similar to what was identified in the 2015 Draft EIR, the revised Project would not result in changes that would conflict or interfere with applicable emergency response plans or emergency evacuation plans. Implementation of the revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Final EIR.

THRESHOLD 3.6-H	Expose people or structures either directly or indirectly to a significant risk of loss, injury or death involving wildland fires
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The 2015 Draft EIR identified that the Project corridor is not located within a wildfire hazard zone. However, unincorporated areas of the County, especially in recreational areas such as the American River Parkway could provide fuel loads for wildfires. The proximity of construction activities to these areas could result in a potentially significant impact. The 2015 Draft EIR concluded that with implementation of Mitigation Measure HAZ-4, which requires removal of flammable vegetation and other materials prior to the commencement of construction, impacts related to wildfires would be reduced to a less than significant level. During operation of the Project, the 2015 Draft EIR concluded that because operational activities would be consistent with existing conditions, impacts would be less than significant for wildland fire hazards.

Railroad Bridge Crossings

The railroad bridge crossings cross over Business I-80, which consists of asphalt and concrete areas. However, there are vegetated areas located adjacent to these existing railroad bridge crossing. Therefore, there is a potential for construction equipment to accidentally spark and ignite the vegetation during construction activities.

Mitigation Measure HAZ-4, which was previously identified in the 2015 Draft EIR for the overall Project and incorporated into the 2015 Final EIR MMRP, would be implemented to address the potential wildfire impacts identified for the railroad bridge crossings during construction activities. Similar to what was originally identified in the 2015 Final EIR, implementation of Mitigation Measure HAZ-4 would minimize the potential impacts for construction activities to contribute to wildland fire risks to a less than significant level. Once constructed, the revised Project would result in the operation of the railroad bridge crossings with operations conducted in accordance with current UPRR management practices. Implementation of the revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Final EIR.

Passenger Train Layover Facility

The revised passenger train layover facility site would be located within an urbanized part of the City of Roseville. The site would be located within the existing rail ROW, which is developed with paved surfaces and railroad tracks. However, there are portions of the site that contain vegetated areas. Although the location of the passenger train layover facility has changed, it is anticipated that construction of the facility would require the same construction activities as those identified for the original passenger train layover facility. However, because there are vegetated areas

3.6 Hazards and Hazardous Materials

adjacent to this location, there is a potential for construction equipment to accidentally spark and ignite the vegetation during construction activities.

Mitigation Measure HAZ-4, which was previously identified in the 2015 Draft EIR for the overall Project and incorporated into the 2015 Final EIR MMRP, would also be implemented to address the potential for construction activities to contribute to wildfire risks. Similar to what was originally identified in the 2015 Draft EIR, implementation of Mitigation Measure HAZ-4 would minimize impacts to a less than significant level. Once constructed, the revised Project would result in the operation of a passenger train layover facility with operations conducted in accordance with current UPRR management practices similar to what was identified in the 2015 Final EIR. Therefore, the revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

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3.7 Hydrology and Water Resources

3.7.1 Regulatory Framework

The regulatory framework, which includes applicable state and local laws, regulations, and plans relative to hydrology, water quality, and water resources, are identified in the 2015 Draft EIR (Chapter 3.6, *Hydrology and Water Resources*). The regulatory framework for hydrology and water resources for this SEIR is the same as presented in 2015 Draft EIR.

3.7.2 Environmental Setting

The overall Project identified in the 2015 Draft EIR is located in the Sacramento River Hydrologic Region, which encompasses approximately 17.4 million acres and all or large portions of Modoc, Siskiyou, Lassen Shasta, Tehama, Glenn, Plumas, Butte, Colusa, Sutter, Yuba, Sierra Nevada, Placer, Sacramento, El Dorado, Yolo, Solano, Lake, and Napa Counties.

For surface water resources, the Project is located in the Sacramento River Basin, encompassing 27,210 square miles and comprising all watersheds tributary to the Sacramento River. In addition, the Project corridor traverses three major watersheds: American River, Steelhead Creek, and Dry Creek.

For groundwater resources, the Project is located in the Sacramento Valley groundwater basin, which makes up the northern part of the great Central Valley groundwater basin. The Sacramento Valley groundwater basin comprises 24 of 88 subbasins underlying the Sacramento River Hydrologic Region (Fugro 2014). The Project corridor overlies 2 of the 24 subbasins: the South American subbasin (from the Sacramento Railyard in Segment 1 to approximately MP 98), and the North American subbasin (from MP 98 to the northern extent of the Project corridor). The South American subbasin, with a surface area of 388 square miles, is in the southeastern portion of the Sacramento groundwater basin (Fugro 2014), south of the American River.

Existing groundwater levels are approximately 20 feet deep or less throughout the basin. The North American subbasin, with a surface area of 548 square miles, is in the eastern central portion of the Sacramento groundwater basin (Fugro 2014), north of the American River. Groundwater generally flows west-southwest at an average grade of approximately 5 percent. The upper aquifer system has a depth of 200 to 300 feet below the ground surface (bgs), and the lower aquifer system is deeper than 300 feet bgs.

3.7.3 Summary of Prior Analysis

To provide a basis for the SEIR evaluation, Table 3.7-1 summarizes the impacts, relevant mitigation measures, and CEQA environmental determinations before and after implementation of mitigation as reflected in the 2015 Draft EIR.

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3.7 Hydrology and Water Resources**Table 3.7-1. Summary of 2015 Draft EIR Impacts and Proposed Mitigation Measures – Hydrology and Water Quality**

Potential Environmental Impact	Significance Determination (Before Mitigation)	Proposed Mitigation Measures	Significance Determination (After Mitigation)
Threshold WQ-1: Violation of any water quality standards or waste discharge requirements <i>Construction</i> Ground-disturbing activities would disturb existing vegetation cover and soils, would expose areas of disturbed ground that could be subject to rainfall and erosion, and could cause temporary discharges of sediment and other contaminants into receiving waters or onto the ground where they can be carried into receiving waters. <i>Operation</i> Operation and maintenance activities could result in additional nonpoint source pollution discharging into waterways or into receiving waters.	<i>Construction</i> Potentially Significant <i>Operation</i> Potentially Significant	<i>Construction and Operation</i> Mitigation Measure HAZ-1: Ensure safe handling and storage of hazardous materials. Mitigation Measure HAZ-2a: Conduct Phase II Environmental Site Assessment studies Mitigation Measure HAZ-2b: Preparation of a Soil Management Plan	<i>Construction</i> Less than Significant <i>Operation</i> Less Than Significant
Threshold WQ-2: Substantial depletion of groundwater supplies or substantial interference with groundwater recharge <i>Construction</i> The Project would not require the use of groundwater supplies during construction. In addition, groundwater supplies and recharge capabilities would not be substantially impacted in the Project corridor.	<i>Construction</i> Less than Significant <i>Operation</i> Less than Significant	Not Applicable	Not Applicable

3.7 Hydrology and Water Resources**Table 3.7-1. Summary of 2015 Draft EIR Impacts and Proposed Mitigation Measures – Hydrology and Water Quality**

Potential Environmental Impact	Significance Determination (Before Mitigation)	Proposed Mitigation Measures	Significance Determination (After Mitigation)
<i>Operation</i> Operation and maintenance activities would not require the use of groundwater supplies. New impervious areas in the form of new platforms, bridge surfaces, and railroad tracks through urban areas, would not be located in areas designated for groundwater recharge.			
Threshold WQ-3: Substantial alteration of existing drainage patterns in a manner that would result in substantial erosion or siltation onsite or offsite <i>Construction and Operation</i> The proposed Project would not substantially alter existing drainage patterns in a manner that would result in erosion or siltation on or offsite.	<i>Construction</i> Less than Significant <i>Operation</i> Less than Significant	Not Applicable	Not Applicable
Threshold WQ-4: Substantial alteration of existing drainage patterns in a manner that would result in flooding onsite or offsite <i>Construction and Operation</i> The proposed Project would not substantially alter existing drainage patterns in a manner that would result in flooding on or offsite.	<i>Construction</i> Less than Significant <i>Operation</i> Less than Significant	Not Applicable	Not Applicable
Threshold WQ-5: Creation of or contribution to runoff water that would exceed the	<i>Construction</i>	Not Applicable	Not Applicable

3.7 Hydrology and Water Resources**Table 3.7-1. Summary of 2015 Draft EIR Impacts and Proposed Mitigation Measures – Hydrology and Water Quality**

Potential Environmental Impact	Significance Determination (Before Mitigation)	Proposed Mitigation Measures	Significance Determination (After Mitigation)
capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff <i>Construction and Operation</i> A Project SWPPP would be prepared and BMPs would be implemented to protect water quality in the Project vicinity	Less than Significant <i>Operations</i> Less than Significant		
Threshold WQ-6: Other substantial degradation of water quality <i>Construction</i> Construction of the proposed project would involve the placement of permanent fill into wetlands and other waters of the United States, which could significantly degrade water quality. <i>Operation</i> No placement of dredged or fill materials within waters of the United States would be associated with Project operation.	<i>Construction</i> Potentially Significant <i>Operation</i> No Impact	<i>Construction</i> Mitigation Measure BIO-1e: Compensate for the temporary and permanent impacts on waters of the United States, including wetlands Mitigation Measure BIO-2a: Minimize potential for the long-term loss of riparian forest communities <i>Operation</i> Not Applicable	<i>Construction</i> Less than Significant <i>Operation</i> Not Applicable
Threshold WQ-7: Placement of housing within a 100-year flood hazard area <i>Construction and Operation</i> The proposed Project would not place housing within a 100-year flood hazard area.	<i>Construction</i> No impact <i>Operation</i> No impact	Not Applicable	Not Applicable

Table 3.7-1. Summary of 2015 Draft EIR Impacts and Proposed Mitigation Measures – Hydrology and Water Quality			
Potential Environmental Impact	Significance Determination (Before Mitigation)	Proposed Mitigation Measures	Significance Determination (After Mitigation)
Threshold WQ-8: Placement of structures that would impede or redirect flood flows within a 100-year flood hazard area. <i>Construction</i> Construction of bridges would entail placement of equipment and temporary coffer dams in and near water bodies during in-water work. Any such impedances in flow would be temporary with in-water work conducted during the dry season during low flows. <i>Operation</i> Any structures located within the FEMA floodway must meet the no-rise criteria to ensure the area is open to convey flood waters downstream. The proposed Project would place structures within a floodway.	<i>Construction</i> Less than Significant <i>Operation</i> Potentially Significant	<i>Construction</i> Not Applicable <i>Operation</i> Mitigation Measure WQ-8: Implement bridge design modifications and field studies to minimize potential flood-related impacts. Additional design modifications to reduce the overall impact of the proposed bridge structures on the potential for flooding shall be considered in the design phase to reduce potential flood related impacts. Any additional changes to the bridge configuration during a future design process will need to be incorporated into the HEC-RAS (hydraulic modeling software) model and results recomputed. It is anticipated that additional field survey and bathymetry (i.e., underwater topography) data cross sections would be collected during a future design phase to verify HEC-RAS model results and help determine potential bridge design modifications.	<i>Construction</i> Not Applicable <i>Operation</i> Less than Significant
Threshold WQ-9: Exposure of people or structures to significant risk involving flooding, including flooding as a result of the failure of a levee or dam <i>Construction and Operation</i> In the event of levee or dam failure, there could be flooding of several areas of the Project corridor. However, the existing flooding potential would not be changed by the proposed Project.	<i>Construction</i> Less than Significant <i>Operation</i> Less than Significant	Not Applicable	Not Applicable

Table 3.7-1. Summary of 2015 Draft EIR Impacts and Proposed Mitigation Measures – Hydrology and Water Quality			
Potential Environmental Impact	Significance Determination (Before Mitigation)	Proposed Mitigation Measures	Significance Determination (After Mitigation)
Threshold WQ-10: Contribution to inundation by seiche, tsunami, or mudflow The proposed Project is geographically removed from areas where the potential for inundation by seiche, tsunami, or mudflow could occur.	<i>Construction</i> No impact <i>Operation</i> No impact	Not Applicable	Not Applicable

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3.7.4 Thresholds of Significance

In accordance with Appendix G of the 2023 CEQA Guidelines, the revised Project would have a significant impact related to hydrology and water quality if it were to:

- a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality.
- b) Substantially deplete 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 a substantial erosion or siltation on- or off-site.
 - ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite.
 - iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.
 - 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.

3.7.5 Environmental Analysis

THRESHOLD 3.7-A	Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality
THRESHOLD 3.7-E	Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan

Construction activities identified in the 2015 Draft EIR would involve excavation of soils which increases the likelihood of encountering existing and unknown regulated materials. In addition, vehicles and equipment used during construction activities, such as fuel storage tanks, have the potential to release contaminants (mainly petroleum products) into receiving waters and impact water quality in the area through:

3.7 Hydrology and Water Resources

- Increases in suspended sediment, hydrocarbons, oil and grease, and heavy metals during construction of bridge crossings located over water, with the potential to violate state and federal water quality standards.
- Increases in the potential for accidental spills of fuel and other toxic materials during construction that could result in inadvertent discharges of hazardous waste into receiving waters either in stormwater runoff or directly into open water. The water quality impacts from spills would be of short or long duration depending on the type of material, size of the spill, and seasonal timing.
- Increases in the potential for release of smelter slag, which is commonly used as a bed material for railroad tracks. It has not been verified that smelter slag is present along the Project corridor. Smelter slag contains high amounts of oxidized and environmentally available heavy metals. If slag is discharged into waters of the state, contaminants may exceed California Department of Health Services (CDHS) maximum contaminant levels (MCLs) for antimony, arsenic, barium, cadmium, copper, lead, mercury, selenium, silver, thallium, and zinc. Fine sediments contaminated with heavy metals from smelter slag could be distributed during grading and track-laying activities. It is anticipated that these contaminated sediments would be filtered from the water through vegetated stream channels; however, if a large amount of contaminated sediments were to spill into waters of the state, impairment to water quality would occur.
- Potential contamination of groundwater from dewatering activities during excavation for utility relocation, pile driving, or other excavation activities that could come in contact with water. Bridge construction would involve soil drilling for foundations of piers. Soil drilling could affect groundwater quality by enabling migration of surface water contaminants into the groundwater aquifer below the bridges.
- Potential for contaminated sites to be encountered during construction and associated contaminated soil to be discharged into surface waters through erosion or sedimentation or into groundwater via preferential pathways during pile drilling.

The 2015 Draft EIR concluded that construction activities could increase the potential for use and release of potential contaminants into receiving waters. However, with implementation of appropriate best management practices (BMPs) identified as part of NPDES permit requirements, water quality impacts would be reduced. In addition, the inclusion of Mitigation Measures HAZ-1 (which requires the safe handling and storage of hazardous materials), HAZ-2a (which requires the preparation of a Phase II Environmental Site Assessment), and HAZ-2b (which requires the preparation of a soil management plan) would further reduce construction related water quality impacts to a less than significant level.

Although the new track would be constructed adjacent to an existing track and within the existing ROW, the 2015 Draft EIR identified that the daily operation and maintenance of the proposed Project could increase nonpoint source pollution to the waterways and sensitive wetland areas

3.7 Hydrology and Water Resources

located along and downstream of the Project corridor. Nonpoint source pollution containing suspended solids, organic and inorganic compounds, oils and grease, and miscellaneous waste from train engine crank cases, lubricants used on tracks, and track maintenance activities could be conveyed to waterways. Locomotives commonly discharge a minor amount of oils, containing residual particulate matter from engine combustion, to the area between the two tracks. These pollutants can increase turbidity, stimulate algal growth, increase sedimentation of aquatic habitat, and introduce compounds that are toxic to humans and aquatic organisms. An accidental spill over any of the waterways in the Project corridor could potentially discharge hazardous chemicals or pollutants into the waterways and downstream water bodies, resulting in a violation of water quality standards and a threat to drinking water supplies. A method of catchment would be proposed for containment of spills related to crank case oils and other operational pollutants that may discharge directly to the waterway below to avoid water quality standards violation. Any such nonpoint source discharge or accidental spill would constitute a significant impact.

However, the 2015 Draft EIR concluded that with compliance with relevant regulations (e.g., Construction General Permit requiring implementation of a Storm Water Pollution Prevention Plan (SWPPP), compliance with the NPDES Low Threat Discharge Permit, State Small MS4 Permit, Sacramento MS4 Permit), and implementation of BMPs during operations and maintenance activities (good housekeeping practices) would minimize the risk of such occurrences. Compliance with these regulations and implementation of Mitigation Measures HAZ-1, HAZ-2a, and HAZ 2b would reduce operational water quality impacts to a less than significant level.

Railroad Bridge Crossings

Construction and operation of the railroad bridge crossings would not change the type of materials that would be used as previously identified in the 2015 Draft EIR. The replacement or realignment of the railroad bridge crossings would require construction and operational activities that could increase the potential for the release of potential contaminants into receiving waters. Construction and operational activities would still be required to adhere to applicable federal, State, and local laws and regulations, including, but not limited to those set forth by federal, state, and local policies, such as conditions contained in the Caltrans Statewide NPDES MS4 Permit.

Mitigation Measures HAZ-1, HAZ-2a, and HAZ-2b, which were previously identified in the 2015 Draft EIR for the overall Project and incorporated into the 2015 Final EIR MMRP, would be implemented. Similar to what was originally identified in the 2015 Draft EIR, implementation of Mitigation Measures HAZ-1, HAZ-2a, and HAZ-2b would minimize impacts to a less than significant level. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

Passenger Train Layover Facility

Construction of the revised passenger train layover facility would result in activities that would increase the potential for the release of potential contaminants into receiving waters. In addition, potential contaminants would be generated from routine operation and maintenance of the passenger train layover facility and associated Project corridor infrastructure. Minor spills and



3.7 Hydrology and Water Resources

releases of non-acutely hazardous waste (e.g., petroleum, oil, and lubricants) may also occur due to normal operation along the tracks, access roads, and at existing maintenance facilities. While petroleum, oils, and lubricants may be used in rail operations or maintenance, proper use, storage, and disposal practices would minimize the potential for accidental releases into receiving waters. Construction and operational activities would still be required to adhere to applicable federal, State, and local laws and regulations, including, but not limited to those set forth by federal, state, and local policies, including NPDES permitting requirements.

Mitigation Measures HAZ-1, HAZ-2a, and HAZ-2b, which were previously identified in the 2015 Draft EIR for the overall Project and incorporated into the 2015 Final EIR MMRP, would be implemented. Similar to what was originally identified in the 2015 Draft EIR, implementation of Mitigation Measures HAZ-1, HAZ-2a, and HAZ-2b would minimize impacts to a less than significant level. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

THRESHOLD 3.7-B	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin
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Groundwater supplies and groundwater recharge capability would not be substantially affected in the Project corridor during construction and operational activities. The 2015 Draft EIR identified that construction activities associated with the overall Project would not require the use of groundwater supplies. The need for dewatering is unlikely since maximum excavation depths of 10 feet bgs were identified for the proposed Project and existing groundwater levels are approximately 20 feet bgs or less in the South American subbasin and approximately 200 to 300 feet bgs in the North American subbasin. However, should dewatering be necessary, it would be minor and temporary.

Project operation would not require the use of groundwater. In addition, no dewatering activities are expected to occur as part of operation and maintenance activities. Groundwater recharge may be slightly affected by new impervious areas in small portions of the Project corridor (e.g., new platform, new bridge surfaces, track through urban areas). However, the main track will consist of compacted gravel, which will maintain perviousness and groundwater recharge capabilities along the Project corridor. Based on this information, the 2015 Draft EIR concluded impacts would be less than significant and no mitigation is required.

Railroad Bridge Crossings

Similar to what was identified in the 2015 Draft EIR, construction and operational activities associated with the railroad bridge crossings are not anticipated to substantially impact groundwater supplies and groundwater recharge as these crossings are located within an existing transportation corridor. Therefore, the revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

3.7 Hydrology and Water Resources***Passenger Train Layover Facility***

The revised passenger train layover facility site would be located within an urbanized part of the City of Roseville. The site would be located within the existing rail ROW, which is developed with paved surfaces and railroad tracks. However, there are portions of the site that contain vegetated areas. Although the location of the passenger train layover facility has changed, it is anticipated that construction of the facility would require the same construction activities as those identified for the original passenger train layover facility. Similar to what was identified in the 2015 Draft EIR, construction and operational activities associated with the revised passenger train layover facility are not anticipated to substantially impact groundwater supplies and groundwater recharge. Therefore, the revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

THRESHOLD 3.7-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 a substantial erosion or siltation on- or off-site. ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite. iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. iv. Impede or redirect flood flows.
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The 2015 Draft EIR identified that ground disturbance caused by construction activities could temporarily alter drainage patterns and would have the potential to increase erosion and sedimentation rates above existing conditions. The 2015 Draft EIR concluded that with BMPs and measures implemented in compliance with NPDES permit requirements, construction impacts associated with soil erosion would be reduced to a less than significant level.

Implementation of the proposed Project would result in a small increase in the amount of impervious surface area along portions of the Project corridor (e.g., new platform, new bridge surfaces). Because the Project features would result in only minor incremental changes in runoff, the proposed Project is not expected to substantially alter on- or offsite erosion or siltation. The 2015 Draft EIR concluded that this impact would be less than significant with no mitigation required.

The 2015 Draft EIR identified that the proposed Project would involve temporary alterations in drainage patterns in or near rivers, creeks, and storm drains. However, as specified in the SWPPP and permit requirements, construction activities in these areas would halt during rain events, and drainage would be properly diverted during utility relocations and earthwork to minimize obstructions and the potential for onsite or offsite flooding. The 2015 Draft EIR concluded that this impact would be less than significant with no mitigation required.

3.7 Hydrology and Water Resources

During operation, the proposed Project would result in a minor increase in impervious surface in the Project corridor. Accordingly, a minor increase in runoff is expected. This increase, however, would be less than significant when compared to the total flow in each storm drain and waterway, and would not substantially alter the existing drainage pattern of the site or area or substantially increase the rate or amount of surface runoff such that it might result in flooding on- or offsite. The 2015 Draft EIR concluded that this impact would be less than significant with no mitigation required.

The 2015 Draft EIR identified that a Project SWPPP would be prepared and BMPs would be implemented to protect water quality in the Project vicinity. Accordingly, construction of the proposed Project is not expected to substantially degrade water quality. The 2015 Draft EIR concluded that this impact would be less than significant with no further mitigation required.

As discussed in the 2015 Draft EIR, some storm drains may need to be relocated along the Project corridor, and new drainage features would be constructed. In addition, the proposed Project would result in a minor increase in impervious surfaces, slightly increasing the volume of runoff entering storm drains. However, the relocated storm drains would be sized appropriately to accommodate any additional runoff volumes. Potential additional sources of polluted runoff associated with increased impervious area would be minimized with implementation of BMPs, such as good housekeeping practices, in compliance with municipal stormwater requirements. The 2015 Draft EIR concluded that this impact would be less than significant with no further mitigation required.

Railroad Bridge Crossings

Similar to what was identified in the 2015 Draft EIR, construction and operational activities associated with the railroad bridge crossings are not anticipated to substantially alter the existing drainage pattern of the site that would result in erosion or siltation on- or off-site. The railroad bridge crossings are not located in a FEMA floodway and would not substantially increase the rate or amount of surface runoff that would exceed the capacity of existing or planned stormwater drainage systems, result in additional sources of polluted runoff, or increase the rate or amount of surface runoff that would result in flooding on- or offsite. Similar to what was identified in the 2015 Draft EIR, implementation of BMPs, such as good housekeeping practices, in compliance with municipal stormwater requirements, would reduce water quality impacts during construction and operational activities to a less than significant level. Therefore, the revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

Passenger Train Layover Facility

The revised passenger train layover facility site would be located within an urbanized part of the City of Roseville. The site would be located within the existing rail ROW, which is developed with paved surfaces, railroad tracks, vegetated areas, and buildings. Although the location of the passenger train layover facility has changed, it is anticipated that construction of the facility would require the same construction activities as those identified for the original passenger train layover facility. Similar to what was identified in the 2015 Draft EIR, construction and operational activities

3.7 Hydrology and Water Resources

associated with the revised passenger train layover facility are not anticipated to substantially alter the existing drainage pattern of the site that would result in erosion or siltation on- or off-site. The revised passenger train layover facility site is not located in a FEMA floodway and would not substantially increase the rate or amount of surface runoff that would exceed the capacity of existing or planned stormwater drainage systems, result in additional sources of polluted runoff, or increase the rate or amount of surface runoff that would result in flooding on- or offsite. Similar to what was identified in the 2015 Draft EIR, implementation of BMPs, such as good housekeeping practices, in compliance with municipal stormwater requirements, would reduce water quality impacts during construction and operational activities to a less than significant level. Therefore, the revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

THRESHOLD 3.7-D	In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation
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As identified in the 2015 Draft EIR, the proposed Project is geographically removed from areas where the potential for inundation by seiche, tsunami, or mudflow could occur. Therefore, the 2015 Draft EIR concluded that no impacts would occur for this topic area.

Railroad Bridge Crossings

The replacement or realignment of the railroad bridge crossings would not be located in an area susceptible to inundation by seiche, tsunami, or mudflow. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

Passenger Train Layover Facility

Construction and operation of the revised passenger train layover facility is not located in an area susceptible to inundation by seiche, tsunami, or mudflow. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

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3.8 Land Use and Planning

3.8.1 Regulatory Framework

The regulatory framework, which includes applicable state and local laws, regulations, and plans relative to land use and planning, are identified in the 2015 Draft EIR (Chapter 3.10, Land Use and Planning). The regulatory framework for land use for this SEIR is the same as presented in 2015 Draft EIR.

3.8.2 Environmental Setting

Overall, the Project study area is heavily developed with commercial, industrial, and residential land uses along both sides of the Project corridor. The Project study area analyzed in the 2015 Draft EIR is generally linear. Pedestrian and bicycle crossing is limited over or under the railroad, and crossing the tracks in public or private motorized transportation is permitted only at designated overpasses and intersections.

Large portions of the Project study area consist of industrial land uses and large-scale retail outlets adjacent to the Project corridor. Residential neighborhoods and associated churches, schools, and parks are generally located farther from the railroad corridor, beyond the industrial and commercial uses. In the Sacramento County portion of the Project corridor, land uses are primarily residential, industrial, and recreational. Since the certification of the 2015 Final EIR, minor changes in land use have occurred along the Project corridor, specifically the completion of the McKinley Village residential development.

Partway through the Roseville Yard, the Project corridor crosses the county line into Placer County and the city of Roseville. As the railyard narrows, Dry Creek crosses beneath the ROW. In Roseville, the land uses on both sides of the rail corridor are predominantly residential and commercial. The 2015 Draft EIR did not identify any known agricultural or forestry resources in the Project corridor.

3.8.3 Summary of Prior Analysis

To provide a basis for the SEIR evaluation, Table 3.9-1 summarizes the impacts, relevant mitigation measures, and CEQA environmental determinations before and after implementation of mitigation as reflected in the 2015 Draft EIR.

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3.8 Land Use and Planning**Table 3.8-1. Summary of 2015 Draft EIR Impacts and Proposed Mitigation Measures – Land Use and Planning**

Potential Environmental Impact	Significance Determination (Before Mitigation)	Proposed Mitigation Measures	Significance Determination (After Mitigation)
Threshold LU-1: Physically divide an established community <i>Construction and Operation</i> The proposed Project would not physically divide an established community.	<i>Construction</i> Less than Significant <i>Operation</i> Less than Significant	Not Applicable	Not Applicable
Threshold LU-2: Conflict with any land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect <i>Construction and Operation</i> The proposed Project would not conflict with any land use plan, policy, or regulation of an agency with jurisdiction over the Project.	<i>Construction</i> No Impact <i>Operation</i> No Impact	Not Applicable	Not Applicable
Threshold LU-3: Conflict with any applicable habitat conservation plan or natural community conservation plan <i>Construction and Operation</i> There are no applicable habitat conservation plans or natural community conservation plans located within the Project corridor.	<i>Construction</i> No Impact <i>Operation</i> No Impact	Not Applicable	Not Applicable

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3.8 Land Use and Planning**3.8.4 Thresholds of Significance**

In accordance with Appendix G of the 2023 CEQA Guidelines, the revised Project would have a significant impact related to land use and planning if it were to:

- 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.
- c) Conflict with any applicable habitat conservation plan or natural community conservation plan.

3.8.5 Environmental Analysis

THRESHOLD 3.8-A	Physically divide an established community
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The 2015 Draft EIR addressed the potential for new linear railroad infrastructure to result in the physical division of an established community and identified that the Project would be located almost entirely within the UPRR ROW, which already has established railroad infrastructure. The Project would require some property acquisitions including approximately 0.14 acre of land from the American River Parkway to construct the new bridge across the American River, approximately 0.04 to 0.09 acre of the parking lot at the corner of Lincoln Street and Pacific Street in downtown Roseville, and approximately 0.05 acre of the Moose Lodge parking lot at the corner of Lincoln Street and Sierra Boulevard in Roseville. However, because these three acquisitions would be adjacent to the existing ROW, the 2015 Draft EIR concluded that these acquisitions would not contribute to the physical division of an established community. Impacts were considered to be less than significant.

Railroad Bridge Crossings

The existing railroad bridge crossings are adjacent to industrial, commercial, and residential uses as well as vacant land. The replacement or realignment of the railroad bridge crossings would occur within an area designated for transportation uses and would not result in the physical division of an established community. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

Passenger Train Layover Facility

The revised passenger train layover facility site contains similar adjacent land uses (e.g., a mix of residential, commercial, and industrial uses adjacent to the UPRR right of way) as those identified in the 2015 Draft EIR for the original passenger train layover facility site. It is anticipated that improvements proposed as part of the revised passenger train layover facility would be within the existing UPRR ROW. While there may be some existing uses within the UPRR ROW that would require removal (e.g., storage and processing of sand and gravel), such uses are not considered

3.8 Land Use and Planning

to result in the physical division of an established community. Therefore, the revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

THRESHOLD 3.8-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
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The 2015 Draft EIR evaluated the potential for the Project against goals and policies identified in the Sacramento Area Council of Governments (SACOG) Metropolitan Transportation Plan (MTP), city and county general plans and municipal codes, and the American River Parkway Plan. Based on a review of these goals and policies, the 2015 Draft EIR concluded that the Project was consistent with the goals, policies, and implementation measures in the general plans for the cities and counties along the Project corridor, the SACOG MTP/SCS, and the American River Parkway Plan. Since the Project would not conflict with a land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect, no impacts were identified.

Railroad Bridge Crossings

The railroad bridge crossings would remain consistent with the goals, policies, and implementation measures in the City of Sacramento General Plan, Sacramento County General Plan, the American River Parkway Plan, and the SACOG MTP/SCS as it would still improve public transportation and support the expansion of the Capitol Corridor rail service, which is the purpose of the Project. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

Passenger Train Layover Facility

The revised passenger train layover facility site would remain consistent with the goals, policies, and implementation measures in the City of Roseville General Plan, Placer County General Plan, and the SACOG MTP/SCS as it would still improve public transportation and support the expansion of the Capitol Corridor rail service, which is the purpose of the Project. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

THRESHOLD 3.8-C	Conflict with any applicable habitat conservation plan or natural community conservation plan
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The 2015 Draft EIR identified no applicable habitat conservation plans or natural community conservation plans apply to the Project corridor. The Project study area is outside the limits of the South Sacramento Habitat Conservation Plan and the Placer County Conservation Plan. Since there are no applicable habitat conservation plans or natural community conservation plans within the Project corridor, the 2015 Draft EIR concluded no impacts would occur.

3.8 Land Use and Planning

Railroad Bridge Crossings

The replacement or realignment of the railroad bridge crossings is not located in an applicable habitat conservation plan or natural community conservation plan. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

Passenger Train Layover Facility

Construction and operation of the revised passenger train layover facility would not occur in an area governed by a habitat conservation plan or natural community conservation plan. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

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3.9 Noise and Vibration

3.9.1 Regulatory Framework

The regulatory framework, which includes applicable state and local laws, regulations, and plans relative to noise and vibration, are identified in the 2015 Draft EIR (Chapter 3.3, Noise and Vibration). The regulatory framework for noise and vibration for this SEIR is the same as presented in the 2015 Draft EIR.

3.9.2 Environmental Setting

The 2015 Final EIR addressed noise and vibration impacts associated with the introduction of new linear passenger rail infrastructure within an existing railroad right-of-way (ROW) owned, operated, and maintained by UPRR. As shown in Figure 3.9-1, noise and vibration measurements were performed at representative sensitive receivers in the Project corridor to establish the ambient noise levels at sensitive receivers and to characterize the noise and vibration from train events.

Eight long-term noise measurements which were performed over a duration of 24 hours, and 11 short-term vibration measurements, which included simultaneous noise measurements at six of the sites performed for durations ranging between one and two hours. These measurements were attended and details such as train type, track, and speeds were noted down during the measurements.

Based on the results, the existing dominant noise source in the Project corridor is the freight train noise from existing UPRR operations. During the 24-hour noise measurements, there were about 20 freight train events during the daytime hours (7 a.m. to 10 p.m.) and 20 freight train events during the nighttime hours (10 p.m. to 7 a.m.).

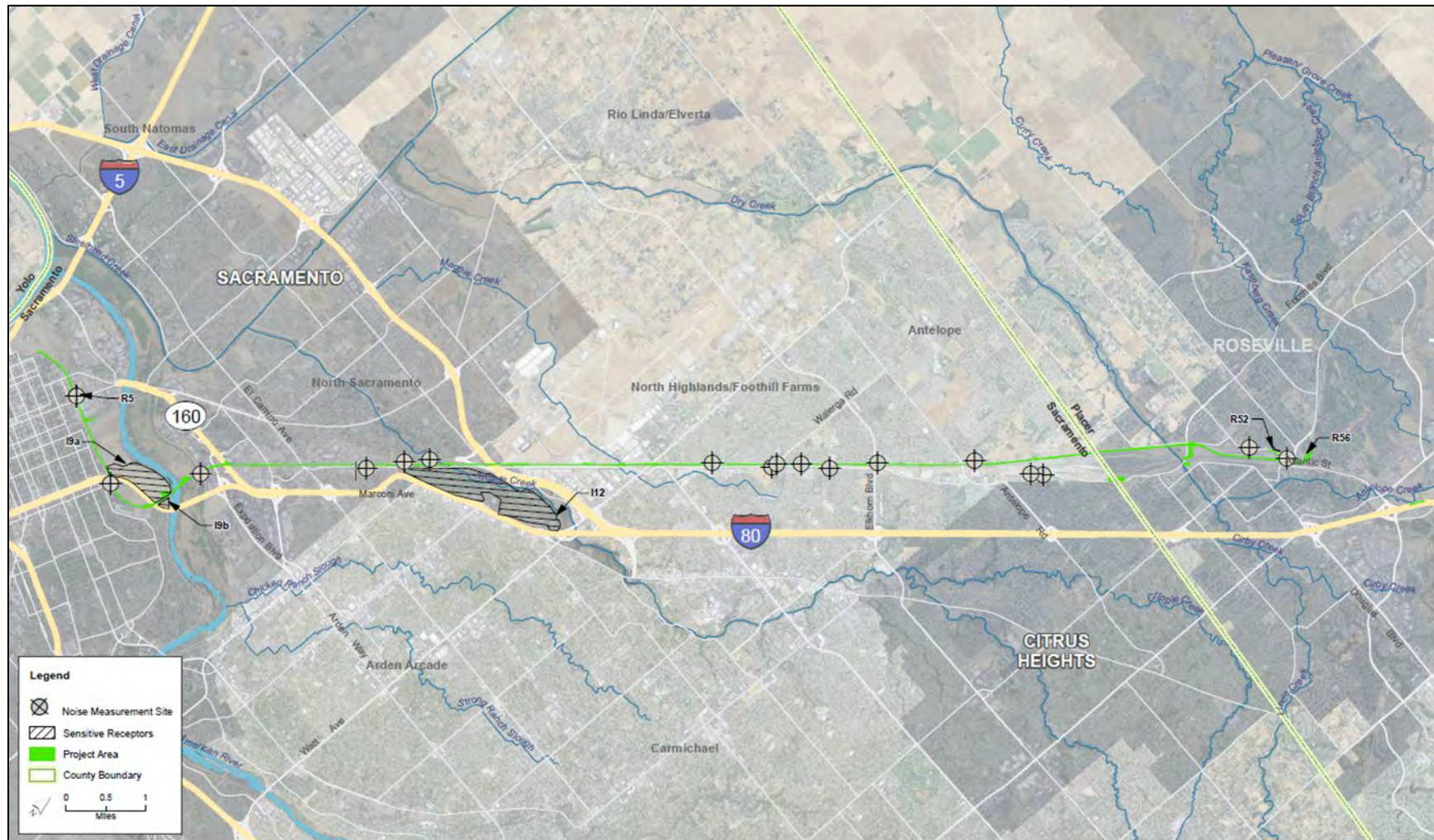
Existing passenger train traffic in the Project vicinity consists of two daytime CCJPA trains and two daytime California Zephyr trains (long-distance passenger heavy rail). The vibration measurement results showed that vibration levels decayed with distance at a similar rate along the entire Project corridor. Existing vibration levels from freight trains exceed the Federal Transit Administration (FTA)/Federal Railroad Administration (FRA) impact threshold of 72 VdB for Category 2 land uses (residential and other similar nighttime sensitive locations) that are within 200 feet of the existing tracks.

3.9.3 Summary of Prior Analysis

To provide a basis for the SEIR evaluation, Table 3.9-1 summarizes the impacts, relevant mitigation measures, and CEQA environmental determinations before and after implementation of mitigation as reflected in the 2015 Draft EIR.

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Figure 3.9-1. Noise Measurement Locations Map



3.9 Noise and Vibration

Table 3.9-1. Summary of 2015 Draft EIR Impacts and Proposed Mitigation Measures – Noise and Vibration

Potential Environmental Impact	Significance Determination (Before Mitigation)	Proposed Mitigation Measures	Significance Determination (After Mitigation)
Threshold NOI-1: Exposure of persons to, or generation of, noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. <i>Construction and Operation</i> Noise-sensitive receivers are present within the impact distance for all construction scenarios. Construction and operational activities have the potential to exceed noise level standards at noise-sensitive receivers.	<i>Construction</i> Potentially Significant <i>Operation</i> Potentially Significant	<i>Construction</i> Mitigation Measure NOI-1a: Implement Noise Control Plan and noise-reducing construction practices. The construction contractor shall implement noise-reducing construction practices to limit construction noise to the maximum levels recommended by FTA. On days when work is limited to the hours of 7:00 a.m. to 10:00 p.m., the 1-hour Leq at any noise-sensitive receiver shall be limited to 77 dBA where feasible. On days when work will include nighttime activity, the 1-hour Leq at any noise sensitive receiver shall be limited to 69 dBA. The construction contractor shall prepare a Noise Control Plan that demonstrates how the contractor will comply with the noise limits specified above. Measures that can be implemented to control noise include but are not limited to the following. • Use specialty equipment with enclosed engines and/or high-performance mufflers. • Locate equipment and staging areas as far from noise-sensitive receivers as possible. • Limit unnecessary idling of equipment. • Install temporary noise barriers between noise sources and noise sensitive uses. • Route construction-related truck traffic away from residential streets to the extent permitted by the relevant jurisdiction. • Avoid impact pile driving when possible (the current construction plans do not include any impact pile driving). <i>Operation</i>	<i>Construction</i> Less than Significant <i>Operation</i> Less than Significant

3.9 Noise and Vibration

Table 3.9-1. Summary of 2015 Draft EIR Impacts and Proposed Mitigation Measures – Noise and Vibration

Potential Environmental Impact	Significance Determination (Before Mitigation)	Proposed Mitigation Measures	Significance Determination (After Mitigation)
		Mitigation Measure NOI-1b: Relocate special trackwork farther from sensitive receivers or install low-impact frog. One of the two noise mitigation options below shall be implemented to reduce predicted noise levels near crossovers to below the FTA/FRA moderate noise impact threshold. - Relocate the special trackwork so that it is farther from sensitive receivers. - If the special trackwork cannot be relocated away from sensitive receivers, install a low-impact frog.	
Threshold NOI-2: Exposure of persons to, or generation of, excessive ground borne vibration noise levels. <i>Construction and Operation</i> Construction and operational activities, such as the use of tracked vehicles (e.g., bulldozers), drill rigs, and vibratory compactors, could result in perceptible levels of groundborne vibration.	<i>Construction</i> Potentially Significant <i>Operation</i> Potentially Significant	<i>Construction</i> Mitigation Measure NOI-2a: Implement vibration-reducing construction practices. In the event that vibration generated by soil compaction and other high-vibration construction processes cause vibration inside residences that is intrusive to building occupants, one or more of the measures below shall be implemented to reduce the potential for annoyance from construction vibration. - Avoid performing high-vibration construction activities such as soil compaction and pile driving near residences. For example, use drilled piles instead of impact pile driving. - Alert residents and building owners when there will be construction activities that could cause vibration amplitudes sufficient to be intrusive to building occupants. An understanding as to what is causing vibration can often reduce the potential for annoyance. - Provide residents and building owners a liaison to contact for reporting vibration levels that are annoying. If a sufficient number of complaints are made, measure the	<i>Construction</i> Less than Significant <i>Operation</i> Less than Significant

3.9 Noise and Vibration

Table 3.9-1. Summary of 2015 Draft EIR Impacts and Proposed Mitigation Measures – Noise and Vibration

Potential Environmental Impact	Significance Determination (Before Mitigation)	Proposed Mitigation Measures	Significance Determination (After Mitigation)
		vibration levels to determine if vibration reduction efforts are required. <i>Operation</i> Mitigation Measure NOI-2b: Install low-impact frog Install a low-impact frog at the crossover near cluster R5. A frog is the special insert used where two rails cross. Low-impact frogs are alternatives to typical frogs that provide a smoother transition through the gap in the rails, resulting in lower vibration levels. Examples of low impact frogs include monoblock frogs, flange-bearing frogs, and moveable point frogs.	
Threshold NOI-3: A substantial permanent increase ambient noise levels in the project vicinity above levels existing without the project. <i>Construction</i> Because construction would be temporary, it would not result in a permanent increase in ambient noise. <i>Operation</i> Permanent increases in train operational noise associated with implementation of the Project are predicted to result in moderate and severe noise impacts.	<i>Construction</i> Less than Significant <i>Operation</i> Potentially Significant	<i>Construction</i> Not Applicable <i>Operation</i> Mitigation Measure NOI-1b: Relocate special trackwork farther from sensitive receivers or install low-impact frog. Mitigation Measure NOI-2b: Install low-impact frog.	<i>Construction</i> Not Applicable <i>Operation</i> Less than Significant
Threshold NOI-4: A substantial temporary or periodic increase in ambient noise levels existing without the project <i>Construction</i>	<i>Construction</i> Potentially Significant	<i>Construction</i> Mitigation Measure NOI-1a: Implement Noise Control Plan and noise-reducing construction practices.	<i>Construction</i> Less than Significant <i>Operation</i>

3.9 Noise and Vibration

Table 3.9-1. Summary of 2015 Draft EIR Impacts and Proposed Mitigation Measures – Noise and Vibration

Potential Environmental Impact	Significance Determination (Before Mitigation)	Proposed Mitigation Measures	Significance Determination (After Mitigation)
Construction activities could result in temporary or periodic increases in noise levels that exceed the FTA construction noise threshold. <i>Operation</i> Increases in noise associated with Project operation would be permanent; there would be no temporary or periodic increases of existing ambient noise levels.	<i>Operation</i> Less than Significant	Mitigation Measure NOI-1b: Relocate special trackwork farther from sensitive receivers or install low-impact frog. <i>Operation</i> Not Applicable	Not Applicable
Threshold NOI-5: Be located within an airport land use plan area, or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport and expose people residing or working in the project area to excessive noise levels.	<i>Construction</i> Less than Significant <i>Operation</i> Less than Significant	Not Applicable	Not Applicable
Threshold NOI-6: Be located in the vicinity of a private airstrip and expose people residing or working in the project area to excessive noise levels. <i>Construction and Operation</i> The proposed Project would not result in the construction or operation of rail infrastructure within the vicinity of a private airstrip.	<i>Construction</i> No Impact <i>Operation</i> No Impact	Not Applicable	Not Applicable

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3.9 Noise and Vibration

3.9.4 Thresholds of Significance

In accordance with Appendix G of the 2023 CEQA Guidelines, the revised Project would have a significant impact related to noise if it were to:

- a) Expose persons to or generate noise levels in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies.
- b) Expose persons to or generate excessive groundborne vibration or groundborne noise levels.
- c) Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.
- d) Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.
- e) Be located within an airport land use plan area, or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport and expose people residing or working in the project area to excessive noise levels.
- f) Be located in the vicinity of a private airstrip and expose people residing or working in the project area to excessive noise levels.

3.9.5 Environmental Analysis

THRESHOLD 3.9-A	Expose persons to or generate noise levels in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies.
THRESHOLD 3.9-C	Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.
THRESHOLD 3.9-D	Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.

The 2015 Draft EIR addressed noise impacts associated with temporary construction activities which were anticipated to entail construction of bridges, overhead structures, and track work within the Project corridor. Predicted noise levels were calculated using general assumptions about the types of equipment likely to be used for different construction scenarios and duration of their operation. Table 3.9-2 shows the predicted “impact distance” based on FTA construction impact criteria for the various construction phases. Nighttime impact distance is greater than daytime distance because noise levels that are acceptable during the daytime are not acceptable at night when most people are sleeping.

3.9 Noise and Vibration

Table 3.9-2. Predicted Impact Distances for Major Construction Phases

Construction Activity	Impact Distance (feet)	
	Daytime Construction ^a	Nighttime Construction ^b
Demolition, clearing, and grubbing	130	320
Install drainage improvements	120	300
Site grading	130	310
Foundation work	140	360
Retaining walls	120	270
Overhead structures	160	400
Trackwork	160	400
Construct signal	90	220
Construct bridge	160	400
Road crossing	160	400
Construct stations	77	260

Source: ATS Consulting 2015

Note: The closest distance between the construction area and sensitive receivers receiver is 60 feet. Typical distance of sensitive receivers would range between 150 and 200 feet from the existing tracks.

^a Impact distance is based on an impact occurring when the work shift Leq would exceed 77 dBA at a sensitive receptor for more than 30 days (equivalent to Ldn exceeding 75 dBA when there is limited construction during the nighttime hours of 10 p.m. to 7 a.m.). Estimated impact distances have been rounded off to the nearest 10 feet.

^b Impact distance is based on an impact occurring when the work shift Leq would exceed 69 dBA at a sensitive receptor for more than 30 days (equivalent to Ldn exceeding 75 dBA when there is extensive construction during the nighttime hours of 10 p.m. to 7 a.m.). Estimated impact distances have been rounded off to the nearest 10 feet.

As shown in Table 3.9-2, because the nighttime threshold is lower, and because sound attenuation is associated with distance, the impact of a given activity type would extend farther at night than in the daytime. A significant noise impact would occur at any residential receiver closer to the construction site than the “impact distance” shown in the table.

During construction, the impact distance of nighttime construction was much greater than the impact distance for daytime construction, resulting in more sensitive receptors being impacted during nighttime construction. The 2015 Draft EIR concluded that because noise-sensitive receivers are present within the impact distance for all construction scenarios, a significant noise impact would occur during construction. The inclusion of Mitigation Measures NOI-1a and NOI-1b, which requires compliance with FTA construction noise standards through the use of barriers,

3.9 Noise and Vibration

setbacks, and other noise reduction methods, would result in impacts being reduced to a less than significant level at existing sensitive noise receptors.

The 2015 Draft EIR also addressed noise impacts associated with the increased operation of passenger trains within the Project corridor. The 2015 Draft EIR identified that project operation would increase noise levels at the five sensitive receptor clusters throughout the Project corridor (Sensitive Receiver Clusters R-5, R-52, I-9a, I-9b, and I-12). These locations are shown in Figure 3.9-1. Noise level increases would occur north and west of the existing tracks because the third track would be closer to the receivers than the existing tracks, and because CCJPA IPR service would increase from one round trip per day to 10 round trips per day. Existing freight operations would remain largely unchanged. At the sensitive receivers south and east of the existing tracks, there could be a slight increase in noise from additional train trips; however, would be offset by relocating existing passenger trains onto new track which is further away. The inclusion of Mitigation Measure NOI-1b, which requires relocation of special track work farther from sensitive receivers or to install a low-impact frog, would reduce operational impacts for existing sensitive receptors at these locations to a less than significant level.

The 2015 Draft EIR also addressed operational noise impacts associated with the proposed passenger train layover facility through various noise receiver cluster in the Project area including Clusters R-56 through R-61, which includes single-family residences located along Roseville Street, Tahoe Street, and Lincoln Street. The 2015 Draft EIR did not identify any moderate or severe noise impacts at Clusters R-56 through R-61.

Railroad Bridge Crossings

The railroad bridge crossings are adjacent to industrial, commercial, and residential uses as well as vacant land. It is anticipated that all railroad bridge crossings would have similar construction activities that could temporarily impact adjacent sensitive receptors. Mitigation Measure NOI-1a, which was previously identified in the 2015 Draft EIR for the overall Project and incorporated into the 2015 Final EIR MMRP, would be implemented to address the noise impacts identified for sensitive residential receptors for the railroad bridge crossings. Similar to what was originally identified in the 2015 Draft EIR, implementation of Mitigation Measure NOI-1a and NOI-1b would minimize potential construction impacts to sensitive receptors to a less than significant level.

The 2015 Draft EIR addressed operational noise impacts associated with the existing railroad bridge crossings through Sensitive Receiver Cluster I-9a and I-9b. Predicted operational noise impacts associated with the revised Project would be similar to the conclusions presented in the 2015 Draft EIR. Mitigation Measure NOI-1b, which was previously identified in the 2015 Final EIR for the overall Project and incorporated into the 2015 Final EIR MMRP, would be implemented to address the noise impacts identified for sensitive residential receptors. Similar to what was originally identified in the 2015 Final EIR, implementation of Mitigation Measure NOI-1b would minimize potential operational impacts to sensitive receptors to a less than significant level. Therefore, the revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

3.9 Noise and Vibration

Passenger Train Layover Facility

The revised passenger train layover facility is adjacent to Old Town Roseville, located along the west leg of the UPRR wye track connecting the UP-Roseville Subdivision with the UP-Valley Subdivision. Land uses in this segment consist of residential, commercial, and industrial uses. Additionally, there are residential buildings that are located next to retail and commercial buildings in the area. Mitigation Measure NOI-1a, which was previously identified in the 2015 Draft EIR for the overall Project and incorporated into the 2015 Final EIR MMRP, would be implemented to address the noise impacts identified for sensitive residential receptors for the revised passenger train layover facility. Similar to what was originally identified in the 2015 Draft EIR, implementation of Mitigation Measure NOI-1a would minimize potential construction impacts to sensitive receptors to a less than significant level.

The 2015 Draft EIR also addressed operational noise impacts associated with the proposed passenger train layover facility through various noise receiver cluster in the Project area including Clusters R-56 through R-61, which includes single-family residences located along Roseville Street, Tahoe Street, and Lincoln Street.

Predicted operational noise impacts associated with the revised Project would be similar to the conclusions presented in the 2015 Draft EIR. Mitigation Measure NOI-1b, which was previously identified in the 2015 Final EIR for the overall Project and incorporated into the 2015 Final EIR MMRP, would be implemented to address the noise impacts identified for sensitive residential receptors for the revised passenger rail layover facility. Similar to what was originally identified in the 2015 Final EIR, implementation of Mitigation Measure NOI-1b would minimize potential operational impacts to sensitive receptors to a less than significant level. Therefore, the revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

THRESHOLD 3.9-B	Expose persons to or generate excessive groundborne vibration or groundborne noise levels.
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The 2015 Draft EIR addressed the potential for vibration impacts associated with construction-related activities and the use of tracked vehicles (e.g., bulldozers), drill rigs, and vibratory compactors. However, these activities would be carried out for a short duration and would result in vibration levels well below thresholds for minor cosmetic damages to buildings. The 2015 Draft EIR concluded that vibration greater than 0.016 inches per second (in/sec) has the potential to result in annoying and intrusive vibration at nearby residences, resulting in a significant impact. To address potential vibration impacts during construction, the 2015 Draft EIR identified Mitigation Measure NOI-2a, which requires implementation of vibration-reducing construction practices. With implementation of Mitigation Measure NOI-2a, construction vibration impacts would be reduced to a less than significant level for existing sensitive receptors.

3.9 Noise and Vibration

Railroad Bridge Crossings

The replacement or realignment of the existing railroad bridge crossings could result in a vibration level of 0.09 in/sec, which is greater than the 0.016 in/sec threshold for annoying and intrusive vibration. As such, a significant impact could occur at nearby residences during modifications associated with railroad bridge crossings.

Mitigation Measure NOI-2a, which was previously identified in the 2015 Draft EIR for the overall Project and incorporated into the 2015 Final EIR MMRP, would be implemented to address the vibration impacts identified for sensitive residential receptors for the railroad bridge crossings. Similar to what was originally identified in the 2015 Draft EIR, implementation of Mitigation Measure NOI-2a would minimize potential impacts to sensitive receptors to a less than significant level. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

Passenger Train Layover Facility

Construction of the revised passenger train layover facility would involve site grading, foundation work, and trackwork along portions of the Project corridor that are adjacent to sensitive receptors. Specifically, vibration levels during construction could reach 0.21 in/sec, which is greater than the 0.016 in/sec threshold for annoying and intrusive vibration and would result in a significant impact.

Mitigation Measure NOI-2a, which was previously identified in the 2015 Draft EIR for the overall Project and incorporated into the 2015 Final EIR MMRP, would be implemented to address the vibration impacts identified for sensitive residential receptors. Similar to what was originally identified in the 2015 Draft EIR, implementation of Mitigation Measure NOI-2a would minimize potential impacts to sensitive receptors to a less than significant level. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

THRESHOLD 3.9-E	Be located within an airport land use plan area, or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport and expose people residing or working in the project area to excessive noise levels.
THRESHOLD 3.9-F	Be located in the vicinity of a private airstrip and expose people residing or working in the project area to excessive noise levels

The 2015 Draft EIR determined that a portion of the Project corridor is located at the south end of the McClellan Park Airport (approximately 4,300 feet in length) that would be exposed to aircraft noise in the range of 60-65 community noise equivalent level (CNEL); however, this level of sound exposure is not excessive and is consistent with noise levels associated with a typical urban environment. The 2015 Final EIR concluded that people working in the Project area during construction or operation would not be exposed to excessive noise levels associated with airport operations. Impacts would be less than significant with no mitigation required.



3.9 Noise and Vibration

The 2015 Draft EIR also identified that the Project corridor was not located within the vicinity of a private airstrip. The nearest private airstrip to the Project corridor is the California Highway Patrol Academy Airport approximately 7 miles west. Since there are no private airstrips within the Project corridor, the 2015 Draft EIR concluded that implementation of the Project would not expose people residing or working in the Project corridor to excessive noise levels.

Railroad Bridge Crossings

The existing railroad bridge crossings are located approximately 4.5 miles southwest of the nearest McClellan Air Force Base CLUP boundary and approximately 5.3 miles east of the California Highway Patrol Academy Airport. Since the railroad bridge crossings are not located within the vicinity of a public or private airstrip, construction or operation of the revised Project would not result in the exposure of people working in the Project corridor to excessive noise levels. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

Passenger Train Layover Facility

The revised passenger train layover facility is located approximately 2.7 miles northwest of the nearest McClellan Air Force Base CLUP boundary with no private airstrips located within the vicinity of the revised passenger train layover facility. Since the revised passenger train layover facility is not located within the vicinity of a public or private airstrip, construction or operation of the revised Project would not result in the exposure of people working in the Project corridor to excessive noise levels. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

3.10 Population and Housing**3.10 Population and Housing****3.10.1 Regulatory Framework**

The regulatory framework, which includes applicable state and local laws, regulations, and plans relative to population and housing are identified in the 2015 Draft EIR (Chapter 3.9, Population and Housing). The regulatory framework for population and housing for this SEIR is the same as presented in 2015 Draft EIR.

3.10.2 Environmental Setting

The 2015 Draft EIR addressed the changes in population growth between 2000 and 2010 to establish a baseline for the environmental analysis. Between 2000 and 2010, the growth rate in Sacramento and Placer County was 14.0 and 35.5 percent, respectively, which was greater than the overall growth rate for the State of California (8.20 percent). Since the certification of the 2015 Final EIR, the U.S. Census Bureau has published updated population and housing data for the year 2020. As shown in Table 3.10-1, between 2010 and 2020, the population within all geographic areas has continued to grow. The growth rate in Sacramento and Placer County was 13.9 percent and 22.5 percent, respectively, which was greater than the overall growth rate for the State of California (7.1 percent).

Table 3.10-1. Regional and Local Population Change Since the 2015 Draft EIR

Geographic Area	Population			2000 – 2010 Population Change	2010 – 2020 Population Change
	2000	2010	2020		
City of Roseville	79,921	113,977	151,902	+ 42.6%	+ 33.3%
City of Sacramento	407,018	466,488	525,028	+ 14.6%	+ 12.5%
Placer County	248,399	336,477	412,300	+ 35.5%	+ 22.5%
Sacramento County	1,223,499	1,395,144	1,588,921	+ 14.0%	+ 13.9%
State of California	33,871,648	36,637,290	39,237,836	+ 8.2%	+ 7.1%

Source: Sacramento to Roseville Third Main Track 2015 Draft EIR, U.S. Census Bureau 2020.

3.10.3 Summary of Prior Analysis

To provide a basis for the SEIR evaluation, Table 3.10-2 summarizes the impacts, relevant mitigation measures, and CEQA environmental determinations before and after implementation of mitigation as reflected in the 2015 Draft EIR.

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3.10 Population and Housing**Table 3.10-2. Summary of 2015 Draft EIR Impacts and Proposed Mitigation Measures – Population and Housing**

Potential Environmental Impact	Significance Determination (Before Mitigation)	Proposed Mitigation Measures	Significance Determination (After Mitigation)
Threshold POP-1: Result in displacement of a large number of people, housing, or businesses, necessitating the construction of replacement housing or business space elsewhere. <i>Construction and Operation</i> The proposed Project would not result in displacement of a large number of existing housing or businesses that would necessitate the construction of replacement facilities elsewhere.	<i>Construction</i> Less than Significant <i>Operation</i> Less than Significant	Not Applicable	Not Applicable
Threshold POP-2: Potential to induce substantial population growth either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure) <i>Construction and Operation</i> The proposed Project would not increase the overall growth in the communities served that the Project would provide transit services to.	<i>Construction</i> Less than Significant <i>Operation</i> Less than Significant	Not Applicable	Not Applicable
Threshold POP-3: Potential to cause a substantial change in local employment or the labor force (e.g., through extension of roads or other infrastructure) <i>Construction</i> Project construction would require up to 100 construction workers to be working at any given time. However, it is anticipated that these workers would come from the local labor force and not result in a substantial change in local employment or the labor force. <i>Operation</i>	<i>Construction</i> Less than Significant <i>Operation</i> Less than Significant	Not Applicable	Not Applicable

3.10 Population and Housing**Table 3.10-2. Summary of 2015 Draft EIR Impacts and Proposed Mitigation Measures – Population and Housing**

Potential Environmental Impact	Significance Determination (Before Mitigation)	Proposed Mitigation Measures	Significance Determination (After Mitigation)
Project operation would provide more options for commuters who already travel within the Project corridor and would not cause a substantial change in local employment or the labor force.			
Threshold POP-4: Potential to result in a substantial reduction in community cohesion <i>Construction and Operation</i> The construction and operation of a new main track and other rail infrastructure features would occur within the established rail ROW and is not anticipated to impact community character of cohesion in the area.	<i>Construction</i> Less than Significant <i>Operation</i> Less than Significant	Not Applicable	Not Applicable

3.10 Population and Housing

3.10.4 Thresholds of Significance

In accordance with Appendix G of the 2023 CEQA Guidelines, the revised Project would have a significant impact related to population and housing if it were to:

- a) Result in displacement of a large number of people, housing, or businesses, necessitating the construction of replacement housing or business space elsewhere, or
- b) Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure).

The 2015 Draft EIR also included two additional thresholds as part of the population and housing analysis. The revised Project would also have a significant impact related to population and housing if it were to:

- c) Cause a substantial change in local employment or the labor force (e.g., through extension of roads or other infrastructure), or
- d) Result in a substantial reduction in community cohesion.

3.10.5 Environmental Analysis

THRESHOLD 3.10-A	Displacement of a large number of people, housing, or businesses, necessitating the construction of replacement housing or business space elsewhere.
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The 2015 Draft EIR disclosed that property acquisitions would be required for the proposed Project. These property acquisitions would be in the form of partial acquisitions which would include approximately 0.14 acre of land from the American River Parkway, 0.04 to 0.09 acre from the parking lot at the corner of Lincoln Street and Pacific Street in downtown Roseville, and approximately 0.05 acre of the Moose Lodge parking lot from the corner of Lincoln Street and Sierra Boulevard in Roseville. The 2015 Draft EIR concluded that the land to be acquired would not result in the displacement of existing housing or businesses that would necessitate the construction of replacement facilities elsewhere and impacts would be less than significant.

Railroad Bridge Crossings

Although the railroad realignment is subject to approval by Union Pacific Railroad, this supplemental analysis provides a conservative assumption that acquisitions may be required adjacent to the existing railroad. The replacement and realignment of the existing railroad bridge crossings would require the construction of temporary shoofly structures in order to maintain railroad operations during construction. Based on preliminary design for the railroad bridge crossings, up to six full parcel acquisitions, three partial acquisitions and three temporary

3.10 Population and Housing

construction easements (TCEs) located adjacent to the existing railroad right-of-way would be required.

No housing or businesses would be displaced with the replacement and realignment of the Elvas railroad bridge crossings. However, the replacement and realignment of the B Street railroad bridge crossing would require the demolition of buildings that would result in an impact to one business (Extra Space Storage) and existing Caltrans maintenance yard facilities.

Extra Space Storage is a self-storage facility located at 3000 B Street, at the corner of Alhambra Boulevard and B Street, east of Business I-80. The reconstruction of the B Street railroad bridge crossing would require the acquisition and demolition of an existing building on the north side of the Extra Space Storage parcel adjacent to the railroad tracks. Although this existing building would be demolished, it is anticipated that the remaining building on the property would remain, the existing self-storage activities would continue to operate and that the business would not be required to relocate.

Acquisition and demolition of Caltrans maintenance yard facilities may also be required to provide adequate space for the ballast of the new permanent railroad alignment or required for the temporary railroad shoofly and retaining walls. To accommodate the proposed railroad work, two warehouse buildings (approximately 6,000 and 21,000 square feet) owned and operated Caltrans would be demolished. Based on coordination with Caltrans, maintenance activities and employees at the existing Caltrans maintenance yard facility would be relocated to other Caltrans maintenance facilities.

Based on the information provided, these property acquisitions would not result in the displacement of existing housing or businesses that would necessitate the construction of replacement facilities elsewhere. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR. Impacts would remain less than significant.

Passenger Train Layover Facility

Construction of the revised passenger train layover facility would occur within existing UPRR ROW which would require the removal of uses associated with two existing UPRR tenants, Hanford Sand and Gravel and Autonaton. The area that would revert back to UPRR uses is currently utilized for processing and storage of sand and gravel materials (Hanford Sand and Gravel) and for parking (Autonaton). It is anticipated that operations associated with Hanford Sand and Gravel would shift over to their Elk Grove location. Operational activities would include the maintenance of existing rail infrastructure and the layover yard building. Implementation of the revised Project would not result in additional land to be acquired as the revised passenger train layover facility would occur within existing UPRR ROW. The revised Project would not result in the displacement of existing housing or a substantial number of businesses that would necessitate the construction of replacement facilities elsewhere. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR. Impacts would remain less than significant.

3.10 Population and Housing

THRESHOLD 3.10-B	Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)
THRESHOLD 3.10-C	Cause a substantial change in local employment or the labor force (e.g., through extension of roads or other infrastructure)

The Project analyzed in the 2015 Draft EIR does not include the development of new homes or businesses. New infrastructure, primarily a third main track between Sacramento and Roseville, is not anticipated to indirectly influence population growth because it will provide an alternative travel mode along the corridor without increasing projected commuter numbers. The 2015 Draft EIR identified that increased passenger rail service would result in fewer passenger car trips between Sacramento and Roseville because commuters who already travel between the two cities would have the option to travel by train rather than passenger car. Therefore, the 2015 Draft EIR concluded that the proposed Project would not result in an increase in the overall growth pressure in the communities served by the Project and growth-inducing impacts would be less than significant.

The 2015 Draft EIR identified that Project construction would require up to 100 construction workers to be working at any given time throughout the Project corridor. However, it is anticipated that these workers would come from the local labor force and not result in a substantial change in local employment or the labor force. Project operation would provide more options for commuters who already travel within the Project corridor and would not cause a substantial change in local employment or the labor force. The 2015 Draft EIR concluded that impacts would be less than significant.

Railroad Bridge Crossings

Similar to what was identified in the 2015 Draft EIR, construction activities associated with the railroad bridge crossings are not anticipated to induce substantial unplanned population growth, as construction activities are temporary and would be filled by those who reside within the region. Operation of the revised Project component would not result in changes in land use that would result in or indirectly influence population growth. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

Passenger Train Layover Facility

Construction activities that are associated with the revised passenger train layover facility are not anticipated to induce substantial unplanned population growth, as construction activities are temporary and would be filled by those who reside within the region. Operation of the revised Project components would not result in changes in land use that would result in or indirectly influence population growth. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

3.10 Population and Housing

THRESHOLD 3.10-D	Result in a substantial reduction in community cohesion.
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The 2015 Draft EIR addressed the potential for new linear railroad infrastructure to result in the physical division of an established community and identified that the Project would be located almost entirely within the UPRR ROW, which already has established railroad infrastructure. The Project would require some property acquisitions including approximately 0.14 acre of land from the American River Parkway to construct the new bridge across the American River, approximately 0.04 to 0.09 acre of the parking lot at the corner of Lincoln Street and Pacific Street in downtown Roseville, and approximately 0.05 acre of the Moose Lodge parking lot at the corner of Lincoln Street and Sierra Boulevard in Roseville. However, because these three acquisitions would be adjacent to the existing ROW, the 2015 Draft EIR concluded that these acquisitions would not contribute to the physical division of an established community or result in changes of community character or cohesion in the Project study area. Impacts were considered to be less than significant.

Railroad Bridge Crossings

The existing railroad bridge crossings are adjacent to industrial, commercial, and residential uses as well as vacant land. The replacement or realignment of the railroad bridge crossings would occur within an area designated for transportation uses and would not result in the physical division of an established community or result in changes of community character or cohesion in the Project study area. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

Passenger Train Layover Facility

The revised passenger train layover facility site contains similar adjacent land uses (e.g., a mix of residential, commercial, and industrial uses adjacent to the UPRR right of way) as those identified in the 2015 Draft EIR for the original passenger train layover facility site. It is anticipated that improvements proposed as part of the revised passenger train layover facility would be within the existing UPRR ROW. While there may be some existing uses within the UPRR ROW that would require removal (e.g., storage and processing of sand and gravel), such uses are not considered to result in the physical division of an established community or result in changes of community character or cohesion in the Project study area. Therefore, the revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

3.11 Traffic and Transportation

3.11.1 Regulatory Framework

The regulatory framework, which includes applicable state and local laws, regulations, and plans relative to noise and vibration, are identified in the 2015 Draft EIR (Chapter 3.1, Traffic and Transportation). The following regulatory policies and documents have been updated since the certification of the 2015 Draft EIR.

State

Senate Bill 743

Subsequent to the certification of the 2015 Final EIR, the California Legislature adopted amendments to CEQA (Public Resources Code [PRC] §21099) directing the Governor's Office of Planning and Research (OPR) to develop and adopt amendments to the CEQA Guidelines using alternative measures for transportation impacts.

SB 743 establishes criteria for determining the significance of transportation impacts using a VMT metric intended to promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses. Specifically, SB 743 requires analysis of VMT in determining the significance of transportation impacts. Local jurisdictions were required by OPR to implement a VMT policy by July 1, 2020.

SB 743 did not authorize OPR to set specific VMT impact thresholds, but it did direct OPR to develop guidelines for jurisdictions to utilize. CEQA Guidelines Section 15064.3(b)(1) describes factors that might indicate whether a development project's VMT may be significant. Notably, projects located within 0.50 mile of transit should be considered to have a less than significant transportation impact based on OPR guidance.

The 2015 Final EIR conducted traffic analysis based on the anticipated changes to the existing modal transportation network as a result of project implementation prior to the application of CEQA Guidelines §15064.3 and SB 743.

Regional

Sacramento Area Council of Governments 2020 Congestion Management Process Update

SACOG's Congestion Management Process (CMP) is a systematic and regionally accepted approach for managing congestion that provides updated information on transportation system performance and assesses alternative strategies for congestion management that meet state and local needs (SACOG 2020). The Federal Highway Administration (FHWA) requires all metropolitan regions with a population of more than 200,000 to maintain a CMP. SACOG's 2020

3.11 Traffic and Transportation

CMP is part of its MTP/SCS and is updated every four years, in alignment with its MTP/SCS updates.

SACOG updated the CMP objectives for 2020 using the following principles:

- Follow policies and principles in SACOG's adopted 2020 MTP-SCS
- Align with the performance outcomes specified in SACOG's Funding Round
- Have review and agreement on objectives from members of the CMP Working Group
- Utilize the following approaches to address congestion, in descending order of priority:
 - Provide alternatives to traveling in congested conditions, such as telework, transit, cycling, carpooling, etc.
 - Reduce the distance people need to travel in congested conditions through promoting land use strategies that enable people to meet their travel needs with shorter trips.
 - Gain more effective capacity on existing roadways through softer, operational measures like real-time information, ramp metering, and other ITS-based solutions.
 - Where other strategies do not sufficiently address congestion, construct additional capacity.

With these principles in mind, the objectives of the 2020 CMP are:

1. Maintain or improve travel time reliability for freight and passenger vehicles.
2. Reduce traffic congestion for freight and passenger vehicles.
3. Promote development that encourages making trips by public transit.
4. Support proactive and innovative education and transportation demand management programs, covering all parts of the urbanized area, to offer a variety of choices to driving alone.
5. Prioritize investments in transit, bike, and pedestrian improvements that reduce greenhouse gas emissions and VMT.
6. Implement pilot projects aimed at making micro mobility (such as bike and scooter share) work for urban, suburban, and low-income areas of the region.

The defined transportation network for the CMP was developed as a subset of the National Highway System (NHS) roadway network by identifying segments that met the average daily volume above thresholds based on Caltrans functional classification groupings. Additionally, the

3.11 Traffic and Transportation

CMP has incorporated subset of transit routes that are relevant to the CMP roadway network are determined by a combination of relatively high ridership and proximity to the draft CMP roadway network. The CCPJA-operated, AMTRAK Capitol Corridor has been identified in the CMP as a CMP Priority Transit Route. Additionally, all passenger rail lines are included, as well as local bus routes serving more than 800 weekday boardings, and commuter buses averaging more than 20 weekday boardings per bus trip, with at least part of their service on the CMP road network.

2020 Metropolitan Transportation Plan/Sustainable Communities Strategy

The 2015 Draft EIR included a consistency analysis of the 2012-2035 *Metropolitan Transportation Plan/Sustainable Communities Strategy* (2016 MTP/SCS), which was the current regional transportation plan for the SACOG region at the time of 2015 Final EIR certification. Consistency with the MTP/SCS is critical for maintaining consistency with SB 375, which establishes reductions targets for automobiles and light trucks.

Subsequent to the certification of the 2015 Final EIR, and as required by law, SACOG adopted the 2020 MTP/SCS on November 18, 2019, which provides updates to the MTP/SCS and integrates land use, air quality, and transportation needs within the region through the year 2040. Both the 2016 MTP/SCS and the 2020 MTP/SCS identify the Project within the adopted MTP/SCS project list (SACOG 2012; 2019).

Local***Placer County Transportation Study Guidelines***

The Transportation Study Guidelines were published in November 2020 and are intended to provide a clear and consistent technical approach to preparing Transportation Studies in Placer County. They establish analysis techniques for transportation studies based on the current state-of-the-practice in transportation planning and engineering (Placer County 2020). For example, the Transportation Study Guidelines set forth a number of screening criteria that can be used to quickly identify whether sufficient evidence exists to presume a project will have a less than significant VMT impact without conducting a detailed study.

Active transportation projects, which are defined as projects involving active transportation such as bicycle paths, walking paths or sidewalks, and public transit can be presumed to have a less than significant VMT impact, absent substantial evidence that the project will lead to a significant impact.

County of Sacramento General Plan

The 2015 Final EIR provided a consistency analysis associated with the Sacramento County General Plan. Supporting policies included conducting planning for roads, parking, clean alternative fuel and low emission vehicles, and other methods consistent with achieving air quality goals; conducting land use and transportation planning with a regional perspective; and mitigating new development traffic impacts.



3.11 Traffic and Transportation

On October 7, 2020, the Sacramento County Board of Supervisors approved an amendment (Resolution Number 2020-0652) to the Sacramento County General Plan's Circulation Element to establish VMT significance thresholds as the metric to be utilized in order to analyze traffic impacts. For regional public facilities/services Goals and policies of the Sacramento County General Plan relating to traffic, circulation and transportation applicable to the revised Project are listed below:

Goal CI-3. Travel modes shall be interconnected to form an integrated, coordinated, and balanced multi-modal transportation system, planned and developed consistent with the land uses to be served.

Goal CI-5. Land use and transportation planning and development should be cohesive, mutually supportive, and complement the objective of reducing per capita vehicle miles traveled (VMT). The standards shown in Table CI-1 shall be used as thresholds of significance for all projects subject to CEQA. Where the VMT level standards of Table CI-1 are predicted to be exceeded, all feasible mitigation measures shall be included to reduce projected VMT levels.

County of Sacramento Transportation Analysis Guidelines

On October 6, 2020, the Board of Supervisors adopted revised significance thresholds for CEQA transportation analysis using VMT, in compliance with SB 743. In conjunction with OPR, the County's Department of Transportation has updated the Transportation Analysis Guidelines (TAG) to provide guidance on VMT analysis. The TAG outlines screening criteria, by which projects may be exempted from VMT analysis. If screening criteria are not met, a proponent must analyze the project's VMT, using methodologies outlined in the TAG. If a project is found to have a significant impact, VMT-reducing mitigation will be required (County of Sacramento 2010). The revised Project meets the TAG exemption as the overall Project was already analyzed in a prior certified EIR.

City of Roseville General Plan 2035

The 2035 General Plan for the City of Roseville was adopted by the Roseville City Council on August 5, 2020 and addresses recent State legislation. The 2035 General Plan serves as a long-term policy guide for physical, economic, and environmental growth. It is a statement of the community's vision of its ultimate physical growth. Policy CIRC3.4 within the Circulation Element, is to support and remain actively involved in planning for the expansion of Capitol Corridor rail service, as well as other regional linkages.

3.11.2 Environmental Setting

For the purposes of evaluating existing conditions and traffic impacts associated with Project implementation, the study area is defined as three areas surrounding the Sacramento Valley Station, the vicinity of the two at-grade crossings in the northeast portion of downtown Sacramento, and the vicinity of the Roseville Station. Details on existing transportation features



3.11 Traffic and Transportation

and services (e.g., streets and highways, rail crossings, public transit, bicycle facilities, and pedestrian facilities) within the study area are provided in the 2015 Draft EIR (Chapter 3.1, Traffic and Transportation).

3.11.3 Summary of Prior Analysis

To provide a basis for the SEIR evaluation, Table 3.11-1 summarizes the impacts, relevant mitigation measures, and CEQA environmental determinations before and after implementation of mitigation as reflected in the 2015 Draft EIR.

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3.11 Traffic and Transportation**Table 3.11-1. Summary of 2015 Draft EIR Impacts and Proposed Mitigation Measures – Traffic and Transportation**

Potential Environmental Impact	Significance Determination (Before Mitigation)	Proposed Mitigation Measures	Significance Determination (After Mitigation)
Threshold TRA-1: Generation of VMT level greater than accounted for in the MTP/SCS. <i>Construction and Operation</i> The project would not result in generation of VMT greater than accounted for in the MTP/SCS.	<i>Construction</i> No Impact <i>Operation</i> Beneficial Impact	Not Applicable	Not Applicable
Threshold TRA-2: Construction-related disruption of existing traffic patterns. <i>Construction</i> While most of the construction activity would occur within the UPRR right-of-way (ROW), construction of certain elements (e.g., construction of railroad bridges crossing I-80, SR-160, the American River Bike Trail, Exposition Boulevard, Watt Avenue and the third track at the 20th and 28th Street at-grade crossings could affect drivers, transit service users, bicyclists, and pedestrians during construction activities. <i>Operation</i> The project would not result in disruption of existing traffic patterns during operational activities.	<i>Construction</i> Potentially Significant <i>Operation</i> No Impact	<i>Construction</i> Mitigation Measure TRA-2: Implement site-specific construction traffic management plan (TMP). CCJPA, in coordination with UPRR, shall prepare site-specific TMPs for each road crossing prior to the initiation of construction. UPRR shall be responsible for project management or may contract with one or more construction management firms to ensure that construction contractors' crews and schedules are coordinated and that the plans and TMP specifications are being followed. The TMPs shall address the specific steps to be taken before, during, and after construction to minimize transportation impacts on all modes, including the mitigation measures and environmental commitments identified in this environmental document. Such measures include but are not limited to signage, flagging, limits on periods of closure, and provision for passage of emergency vehicles during construction. UPRR shall be responsible for developing the TMPs in consultation with the applicable transportation entities listed below. • Caltrans for state and federal roadway facilities. • Local agencies including City of Sacramento, County of Sacramento, City of Citrus Heights, and	<i>Construction</i> Less than Significant with Mitigation Incorporated <i>Operation</i> Not Applicable

3.11 Traffic and Transportation**Table 3.11-1. Summary of 2015 Draft EIR Impacts and Proposed Mitigation Measures – Traffic and Transportation**

Potential Environmental Impact	Significance Determination (Before Mitigation)	Proposed Mitigation Measures	Significance Determination (After Mitigation)
		City of Roseville for local transportation facilities such as roads and bike paths. - Transit providers, including but not limited to, Regional Transit and Roseville Transit. - Rail operators. - U.S. Coast Guard. - City and county parks departments. - California Department of Parks and Recreation (DPR) for work in the American River Parkway. UPRR shall ensure that the TMPs are implemented prior to beginning construction at any given site, including in-water construction sites. If necessary to minimize unexpected operational impacts or delays experienced during real-time construction, UPRR shall be responsible for modifying the TMP in coordination with the appropriate transportation entities to address these effects. Each TMP shall include the following provisions, as applicable to the conditions. - Description and deployment of signage warning of roadway surface conditions such as loose gravel, steel plates, or similar conditions that could be hazardous to road cycling activity on roadways open to bicycle traffic. - Description and deployment of signage and barricades to be used around the work sites. - Description and deployment of buoys, signage, or other effective means to warn boaters of in-water	

3.11 Traffic and Transportation**Table 3.11-1. Summary of 2015 Draft EIR Impacts and Proposed Mitigation Measures – Traffic and Transportation**

Potential Environmental Impact	Significance Determination (Before Mitigation)	Proposed Mitigation Measures	Significance Determination (After Mitigation)
		work areas and restrictions on access. Description of warning devices and signage (e.g., buoys labeled “boats keep out” or “no wake zone”) in compliance with U.S. Coast Guard Private Aid to Navigation requirements and effective during non-daylight hours and periods of dense fog. • Use of flag people or temporary traffic signals/signage as necessary to slow or detour traffic. • Notifications for the public, emergency service providers, cycling organizations, bike shops, schools, the U.S. Coast Guard, boating organizations, marinas, city and county parks departments, and DPR, where applicable, describing construction activities that could affect transportation and water navigation. • Outreach (through public meetings and/or flyers and other advertisements). • Procedures for construction area evacuation in the case of an emergency declared by county or other local authorities. • Designation of alternate access routes via detours and bridges to maintain continual circulation for local travelers in and around construction zones, including bicycle riders, pedestrians, and boaters, where applicable. • Description of construction staging areas, material delivery routes, and specification of construction vehicle travel hour limits.	

3.11 Traffic and Transportation**Table 3.11-1. Summary of 2015 Draft EIR Impacts and Proposed Mitigation Measures – Traffic and Transportation**

Potential Environmental Impact	Significance Determination (Before Mitigation)	Proposed Mitigation Measures	Significance Determination (After Mitigation)
		• Notifications to commercial and leisure boating communities of proposed operations in the waterways, including posting notices at local marinas and public launch ramps. This information shall provide details regarding construction site location(s); construction schedules; and identification of no-wake zones, speed-restricted zones, and detours, where applicable • No-wake zones and speed restrictions shall be established as part of development of the site-specific plans and shall be designated to protect the safety of construction workers and recreationists. • Scheduling for oversized material deliveries to the work site to minimize peak hour traffic conflicts, and location of haul routes. • Provisions that direct haulers pull over in the event of an emergency. If an emergency Vehicle is approaching on a narrow two-way roadway, specify measures to ensure that appropriate maneuvers shall be conducted by the construction vehicles to allow continual access for the emergency vehicles at the time of an emergency. • Control for any temporary road closure, detour, or other disruption to traffic circulation, including any temporary partial closures of the water channel. • Designation and posting of offsite vehicle staging and parking areas.	

3.11 Traffic and Transportation**Table 3.11-1. Summary of 2015 Draft EIR Impacts and Proposed Mitigation Measures – Traffic and Transportation**

Potential Environmental Impact	Significance Determination (Before Mitigation)	Proposed Mitigation Measures	Significance Determination (After Mitigation)
		• Posting of information for contact in case of emergency or complaint. • Designation of daily construction time windows during which construction is restricted or rail operations would need to be suspended for any activity within the UPRR ROW. • Coordination with rail providers (i.e., Amtrak, UPRR) to develop alternative interim transportation modes (e.g., trucks or buses) that could be used to provide freight and/or passenger service during any longer term railroad closures. • Coordination with transit providers (i.e., RT, Roseville Transit) to develop, where feasible, daily construction time windows during which transit operations would not be either detoured or substantially slowed. • Routine posting of information to the 511.org website regarding construction delays and detours • Other actions to be identified and developed as necessary by the construction manager/resident engineer to ensure that temporary impacts on transportation facilities are minimized. <i>Operation</i> Not Applicable	

3.11 Traffic and Transportation**Table 3.11-1. Summary of 2015 Draft EIR Impacts and Proposed Mitigation Measures – Traffic and Transportation**

Potential Environmental Impact	Significance Determination (Before Mitigation)	Proposed Mitigation Measures	Significance Determination (After Mitigation)
Threshold TRA-3: Generation of future parking demand that would exceed available supply in the vicinity of the Sacramento Valley Station or Roseville Station <i>Construction</i> Construction workers would not use station parking facilities. There would be no construction related impacts associated with generation of future parking demand. <i>Operation</i> Operation of the proposed Project could exacerbate parking shortfalls in downtown Roseville.	<i>Construction</i> Less than Significant <i>Operation</i> Potentially Significant	<i>Construction</i> Not Applicable. <i>Operation</i> Mitigation Measure TRA-3: Provide sufficient all-day and multi-day parking supply at the Roseville Station as Capitol Corridor service expands. CCJPA shall provide sufficient all-day and multi-day parking supply at the Roseville Station, preferably within a 5-minute walk, as CCJPA IPR service expands. This determination shall consider shared parking opportunities with adjacent land uses and would be made in consultation with the City of Roseville. Project completion is anticipated to occur in conjunction with increased economic activity (e.g., funding availability) and as land use development occurs in the DSP area. Parking is currently available near the Roseville Station, in surface lots near City Hall, and at the City's parking garage south of the UPRR tracks. CCJPA shall inform the City of Roseville about the timing of potential service expansion opportunities and the projected parking demand. CCJPA shall support efforts by the City to obtain grant or other funding that is necessary to construct parking supply or station access improvements.	<i>Construction</i> Not Applicable <i>Construction</i> Less than Significant with Mitigation Incorporated

3.11 Traffic and Transportation**Table 3.11-1. Summary of 2015 Draft EIR Impacts and Proposed Mitigation Measures – Traffic and Transportation**

Potential Environmental Impact	Significance Determination (Before Mitigation)	Proposed Mitigation Measures	Significance Determination (After Mitigation)
Threshold TRA-4: Extension of vehicle queues at crossings beyond available storage on the public roadway approaches. <i>Construction</i> Construction activities could contribute to short-term vehicle queues at the 20th and 28th Street at-grade crossings while construction activities are underway at those locations. <i>Operation</i> During operation, little to no traffic growth is projected at 20th or 28th Street. Queuing conditions are not anticipated to result in extension of vehicle queues at crossings beyond available storage on public roadway approaches.	<i>Construction</i> Potentially Significant <i>Operation</i> Less than Significant	<i>Construction</i> Mitigation Measure TRA-2: Implement site-specific construction traffic management plan (TMP). <i>Operation</i> Not Applicable	<i>Construction</i> Less than Significant with Mitigation Incorporated <i>Operation</i> Not Applicable.
Impact TRA-5: Disruption of existing public transit service or interference with the implementation of planned public transit services <i>Construction</i> Construction activity could contribute to short-term transit service disruptions at existing stations. <i>Operation</i> Operation of the proposed Project is designed to integrate into existing and future operations at the Sacramento Valley and Roseville Stations. Implementation of the proposed Project would not	<i>Construction</i> Potentially Significant <i>Operation</i> Less than Significant	<i>Construction</i> Mitigation Measure TRA-2: Implement site-specific construction traffic management plan (TMP). <i>Operation</i> Not Applicable	<i>Construction</i> Less than Significant with Mitigation Incorporated <i>Operation</i> Not Applicable

3.11 Traffic and Transportation**Table 3.11-1. Summary of 2015 Draft EIR Impacts and Proposed Mitigation Measures – Traffic and Transportation**

Potential Environmental Impact	Significance Determination (Before Mitigation)	Proposed Mitigation Measures	Significance Determination (After Mitigation)
interfere with existing or planned public transit service.			
Impact TRA-6: Disruption of existing bicycle and pedestrian facilities or interference with the implementation of planned facilities. <i>Construction</i> Construction activity could contribute to short-term disruptions to bicycle and pedestrian facilities, especially near stations and in the American River Parkway. <i>Operation</i> Operation of the proposed Project would not affect existing or future bicycle or pedestrian facilities.	<i>Construction</i> Potentially Significant <i>Operation</i> No Impact	<i>Construction</i> Mitigation Measure TRA-2: Implement site-specific construction traffic management plan (TMP). <i>Operation</i> Not Applicable	<i>Construction</i> Less than Significant with Mitigation Incorporated <i>Operation</i> Not Applicable

3.11 Traffic and Transportation

3.11.4 Thresholds of Significance

It is standard practice for an SEIR to use the same transportation analysis as the certified EIR that precedes it in order to ensure consistency in comparison and control for changes resulting from only the project modifications. However, given that the publication of this document follows the July 1, 2020, date on which CEQA Guidelines §15064.3 and SB 743 apply, this Draft SEIR applies VMT as the determining factor for CEQA impacts and does not consider LOS traffic delay to be an environmental impact under CEQA. The revised Project would have a significant impact related to traffic and transportation if it were to:

- a) Generate more VMT than accounted for in the MTP/SCS.
- b) Cause traffic delays or detours during construction activities.
- c) Generate future parking demand that exceeds available supply in the vicinity of the Sacramento Valley Station or Roseville Station.
- d) Causes vehicle queues at crossings to extend beyond available storage on the public roadway approaches.
- e) Disrupts existing public transit service or interferes with the implementation of planned public transit services.
- f) Disrupts existing bicycle and pedestrian facilities or interferes with the implementation of planned facilities.

3.11.5 Environmental Analysis

THRESHOLD 3.11-A	Generate more VMT than accounted for in the MTP/SCS.
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The 2015 Draft EIR addressed the Project's consistency with VMT forecasts presented in the SACOG 2016 MTP/SCS, as well as addressed consistency with relevant planning documents for the cities of Roseville and Sacramento, and the counties of Placer and Sacramento. The 2015 Draft EIR concluded that construction of the proposed Project would not result in any long-term changes in vehicular traffic with no significant increases in VMT during construction activities. The proposed Project is also included in the 2035 MTP/SCS and is part of the regional solution for minimizing GHG emissions from cars and light trucks. The 2015 Draft EIR identified that operation of the proposed Project would not generate more VMT than accounted for in the 2035 MTP/SCS and ultimately reduce VMT in the region by nearly 12 million VMT when compared to existing conditions, resulting in a beneficial impact.

Railroad Bridge Crossings

The 2015 Draft EIR identified no long-term changes in vehicular traffic associated with construction activities for the proposed Project, including the existing railroad bridge crossing located near the UPRR wye. The type of modifications proposed as part of the revised Project for

3.11 Traffic and Transportation

the other railroad bridge crossings are similar to those originally identified in the 2015 Draft EIR. Modifications to the existing railroad bridge crossings would have similar construction activities that would not result in long term changes in vehicular traffic and are not anticipated to result in VMT impacts. Operation of the revised Project would not generate more VMT than accounted for in the 2035 MTP/SCS. In addition, the revised Project would still contribute to an overall reduction of 12 million VMT in the region when compared to existing conditions, resulting in a beneficial impact. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

Passenger Train Layover Facility

The revised passenger train layover facility would not increase passenger train frequency beyond the additional service evaluated in the 2015 Draft EIR. Implementation of the revised Project would result in the relocation of the proposed passenger train layover facility. The revised passenger train layover facility would have similar construction activities that would not result in long term changes in vehicular traffic and is not anticipated to result in VMT impacts. Operation of the revised Project would not generate more VMT than accounted for in the 2035 MTP/SCS. In addition, the revised Project would still contribute to an overall reduction of 12 million VMT in the region when compared to existing conditions, resulting in a beneficial impact. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

THRESHOLD 3.11-B	Cause traffic delays or detours during construction activities.
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As identified in the 2015 Draft EIR, construction of the proposed Project would require the grading and installation of new subgrade and drainage, placement of new rail and ties, special track work with turnouts, crossovers, and associated switches and equipment, installation of new wayside track signals, construction of new railroad bridges and a new bridge across the American River in Sacramento. While most of the construction activity would occur within the UPRR ROW and would not affect the physical or operational condition of the transportation network, the certain construction elements could cause short-term impacts on local transportation networks including but not limited to:

- Construction of railroad bridges crossing Business I-80, SR 160, the American River Bike Trail, Exposition Boulevard, and Watt Avenue.
- Construction of a new bridge across the American River.
- Construction of a third track at the 20th and 28th Street at-grade crossings.

Disruptions and delays could affect drivers, transit service/riders, bicyclists, pedestrians, and American River users. These disruptions and delays would likely be caused by the movement of construction employees, equipment, and materials. The 2015 Draft EIR identified that with

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implementation of Mitigation Measure TRA-2, which requires implementation of site specific construction traffic management plans, impacts during construction activities would be reduced to a less than significant level.

Railroad Bridge Crossings

Modifications to the existing railroad bridge crossings would not change the type of construction activities previously identified in the 2015 Draft EIR. The replacement or realignment of the existing railroad bridge crossings would require still require the movement of construction employees, equipment, and materials within the Project area, which may cause temporary disruptions or delays within the existing transportation network. Mitigation Measure TRA-2, which was previously identified in the 2015 Draft EIR for the overall Project and incorporated into the 2015 Final EIR MMRP, would still be implemented. Similar to what was originally identified in the 2015 Draft EIR, implementation of Mitigation Measure TRA-2 would minimize impacts to a less than significant level. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

Passenger Train Layover Facility

Although there is a change in location of where the proposed passenger train layover facility would be located, implementation of the revised Project would not change the type of construction activities previously identified in the 2015 Draft EIR. The construction of the revised passenger train layover facility would require still require the movement of construction employees, equipment, and materials within the Project area. Although construction activities would occur within the rail ROW, there may be limited instances where the movement of construction employees, equipment and materials may cause temporary disruptions or delays within the existing transportation network. Mitigation Measure TRA-2, which was previously identified in the 2015 Draft EIR for the overall Project and incorporated into the 2015 Final EIR MMRP, would still be implemented. Similar to what was originally identified in the 2015 Draft EIR, implementation of Mitigation Measure TRA-2 would minimize impacts to a less than significant level. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

THRESHOLD 3.11-C	Generate future parking demand that exceeds available supply in the vicinity of the Sacramento Valley Station or Roseville Station.
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The 2015 Draft EIR identified that there would be no construction-related impact associated with generation of future parking demand in the vicinity of the Sacramento Valley Station or Roseville Station as construction workers typically park their vehicles at worksites and would not use station parking facilities. The 2015 Draft EIR also identified that operation of the proposed Project could result in future parking demands that exceed available parking supply in the vicinity of the Sacramento Valley Station and Roseville Station. Based on field observations and aerial imagery, the 2015 Draft EIR concluded that while new ridership would originate at the Sacramento Valley Station, that increase would be relatively small on a daily basis. The Sacramento Valley Station

3.11 Traffic and Transportation

was also identified as having sufficient parking supply nearby to accommodate substantial increases in new riders with more than 300 spaces that are available within a 5-minute walk of the station.

However, the 2015 Draft EIR also identified that the Roseville Station has a limited parking supply and that the City of Roseville has projected a shortfall of more than 950 spaces during peak evening hours (i.e., after 7 p.m.) in the downtown area associated with planned growth. This shortfall did not include potential parking demand contributed by additional Capitol Corridor riders. With up to 135,900 new annual riders, daily Capitol Corridor ridership boarding at the Roseville Station could be approximately 500 (i.e., based on 135,900 annual riders divided by 270 operational days). The 2015 Draft EIR identified that a range of approximately 200–400 additional parking spaces beyond the amount planned by the City of Roseville may be required to accommodate the additional Capitol Corridor riders. The 2015 Draft EIR concluded that with implementation of Mitigation Measure TRA-3, which requires the provision of all day and multi-day parking at the Roseville Station, impacts would be reduced to a less than significant level.

Railroad Bridge Crossings

The existing railroad bridge crossings are not located near the Sacramento Valley Station or Roseville Station. Therefore construction or operation of these railroad bridges would not generate future parking demand that exceeds available supply in the vicinity of the Sacramento Valley Station or Roseville Station. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

Passenger Train Layover Facility

The revised passenger train layover facility would not increase passenger train frequency beyond the additional service evaluated in the 2015 Draft EIR. Implementation of the revised Project would result in the relocation of the proposed passenger train layover facility, resulting in minor additional locomotive travel of approximately two minutes per train. Similar to what was identified in the 2015 Draft EIR, during construction activities, construction workers would park their vehicles at worksite and would not use station parking facilities. Once operational, the revised passenger train layover facility location also provides up to 22 employee parking spaces for train crews to start or finish their daily shifts. Therefore, operational activities associated with the revised passenger train layover facility would not contribute to parking shortages at the Roseville Station. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

THRESHOLD 3.11-D	Causes vehicle queues at crossings to extend beyond available storage on the public roadway approaches.
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The 2015 Draft EIR identified that the proposed Project could contribute to short-term vehicle queues at the 20th and 28th Street at-grade crossings while construction activities are underway at those locations. With implementation of Mitigation Measure TRA-2, which requires the

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implementation of site-specific construction traffic management plans, the 2015 Draft EIR concluded that impacts during construction would be reduced to a less than significant level.

During operation, the 2015 Draft EIR identified that the proposed Project would increase the frequency of passenger trains passing through the 20th and 28th Street at-grade crossings which could cause longer vehicle queues on 20th and 28th Street than currently experienced. Based on queue estimates conducted for the proposed Project, the increased number of passenger trains would not result in queues extending beyond available storage. 20th Street had very low traffic volumes in 2013 (approximately one vehicle trip per hour in the northbound analysis direction), while the northbound volume on 28th Street during morning and evening peak hours was approximately 50 vehicles per hour (or less than one vehicle per minute).

Because the 20th Street volume is so low, the 2015 Draft EIR determined that no further analysis was required to determine that queuing problems would not occur at this location under current conditions. At 28th Street, the gate closure time for passenger trains was measured to be about 36 seconds. The Project could result in up to 10 passenger trains per day, but not more frequently than one per hour. With less than one vehicle per minute and only one train per hour, the queue is not expected to extend beyond two vehicles, assuming random arrivals as under current conditions. Under cumulative 2035 conditions, traffic volumes are projected to increase up to 14.37 vehicles per minute, assuming the McKinley Village project is fully developed. At this arrival rate, vehicle queues at the crossing are projected to reach about 8 to 9 vehicles, or about 220 feet, which is less than the available storage of 550 feet. Because little to no traffic growth is projected at 20th Street, no queuing problems would occur at this location under 2035 conditions. The 2015 Draft EIR concluded that operation of the proposed Project would result in a less than significant impact on the vehicle crossings at public roadway approaches.

Railroad Bridge Crossings

The railroad bridge crossings are existing grade separated rail bridges that span over the Business I-80. The modifications proposed for these bridge crossings would continue to remain grade separated bridges. Therefore, construction or operational activities associated with the railroad bridge crossings would not result in impacts associated with vehicle queues at at-grade crossings or result in any new significant impacts not previously identified in the 2015 Draft EIR.

Passenger Train Layover Facility

The revised passenger train layover facility project area includes two at-grade crossings, one at Yosemite Street and one at Tiger Way. Both at-grade crossings include crossing arms, warning bells, flashing lights, pavement markings, and warning signs.

Implementation of the revised Project would require additional modifications to the existing at-grade crossing at Tiger Way to accommodate rail layover track infrastructure. No additional modifications are anticipated to the existing at-grade crossing at Yosemite Street. The revised Project could contribute to short-term vehicle queues at the Tiger Way at-grade crossing while construction activities are underway at that location. With implementation of Mitigation Measure

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TRA-2, which requires the implementation of site specific construction traffic management plans, impacts during construction would be reduced to a less than significant level. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

Operation of the revised Project would not result in changes in passenger train frequency beyond the additional service evaluated in the 2015 Draft EIR. Implementation of the revised Project would result in the relocation of the proposed passenger train layover facility, resulting in minor additional locomotive travel of approximately two minutes per train. The passenger train layover facility would serve as an endpoint where passenger trains begin and end their runs in the City of Roseville. Similar to what was identified in the 2015 Draft EIR, the passenger train layover facility would be used for the storage of passenger trains, cleaning the interiors of the passenger trains, emptying of sanitary retention tanks, and light maintenance. These activities would not impact queuing times at the at-grade crossings as these activities would be conducted in the layover facility yard. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

THRESHOLD 3.11-E	Disrupts existing public transit service or interferes with the implementation of planned public transit services.
THRESHOLD 3.11-F	Disrupts existing bicycle and pedestrian facilities or interferes with the implementation of planned facilities.

The 2015 Draft EIR identified that construction activities associated with the proposed Project could contribute to short-term transit service disruptions at existing stations and to bicycle/pedestrian facilities within the Project corridor. With implementation of Mitigation Measure TRA-2, which requires the implementation of site specific construction traffic management plans, the 2015 Draft EIR concluded that impacts on public transit services and to bicycle/pedestrian facilities during construction would be reduced to a less than significant level. Operation of the proposed Project would occur mostly within the rail ROW and is being designed to integrate into existing and future operations at the Sacramento Valley and Roseville Stations. However, the 2015 Draft EIR identified that with the potential expansion of Capitol Corridor IPR service, future AMTRAK Thruway buses and local Roseville Transit bus service may be impacted. Some AMTRAK Thruway bus service could be eliminated when train service is extended to Roseville. This would be a coordinated and planned change to future transit service that would not constitute an adverse change; to the contrary, the bus service would be upgraded to passenger rail service that does not require transfers.

The 2015 Draft EIR also disclosed that the Roseville Transit bus service could continue to operate as it does now, but the additional train service would create an opportunity for future route modification to provide new connections with arriving and departing trains. This opportunity would not interfere with planned public transit service, as CCJPA coordinate closely with Roseville Transit to ensure that they are aware of potential future train service that could better serve the Roseville Station passengers. The 2015 Draft EIR concluded that because these changes would

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be at the discretion of Roseville Transit as part of their future route planning and would not be directly required by the proposed Project, all operational impacts on existing and planned public transit would be less than significant.

Railroad Bridge Crossings

The existing railroad bridge crossings are not located near any existing stations and would not impact transit services currently provided or planned at existing stations. The railroad bridges are located within existing rail and highway ROW, with the majority of the improvements occurring where there are no existing bicycle/pedestrian facilities present. Modifications to the existing UPRR track for the bridge crossing located near the wye do cross the Two Rivers Trail, which is considered a bicycle/pedestrian facility. While not anticipated, construction activities may temporarily impact this bicycle/pedestrian facility. Mitigation Measure TRA-2, which requires implementation of site specific construction traffic management plans and was previously identified in the 2015 Draft EIR for the overall Project, would still be implemented. Similar to what was originally identified in the 2015 Draft EIR, implementation of Mitigation Measure TRA-2 would minimize impacts to a less than significant level. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

Passenger Train Layover Facility

The revised passenger train layover facility would not be located at the existing Roseville Station and would not directly impact transit services currently provided at the existing Roseville Station. Although there are existing bicycle/pedestrian facilities in the form of existing sidewalks on adjacent roadways, there are no existing bicycle/pedestrian facilities located within the revised passenger train layover facility location. While not anticipated, construction activities may require temporary road detours within the Project area, which may impact existing public transit service and bicycle/pedestrian facilities adjacent to the revised passenger train layover facility. Mitigation Measure TRA-2, which requires implementation of site-specific construction traffic management plans and was previously identified in the 2015 Draft EIR for the overall Project, would still be implemented. Similar to what was originally identified in the 2015 Draft EIR, implementation of Mitigation Measure TRA-2 would minimize impacts to a less than significant level. The revised Project would not change the significance conclusions or result in any new significant impacts not previously identified in the 2015 Draft EIR.

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4.0 Other CEQA Considerations

This section presents other environmental issues that are of particular significance to CEQA. It includes a discussion of significant and irreversible environmental changes, cumulative effects, and growth-inducing impacts.

4.1 Significant and Irreversible Environmental Changes

A commitment of a resource is considered irreversible when its use limits the future options for its use. Irreversible changes may include current or future uses of non-renewable resources, and secondary or growth-inducing impacts that commit future generations to similar uses. In accordance with CEQA Guidelines Section 15126.2(c), this section evaluates the effect of the proposed changes to the approved Project associated with three distinct categories of significant irreversible changes: changes in land use that would commit future generations to specific uses, consumption of nonrenewable resources, and irreversible changes from environmental actions.

The approved Project and the proposed changes to the approved Project would commit a similar amount of land resources due to the right-of-way needs within the corridor. The commitment of long-term land resources for the passenger rail system is consistent with the applicable land use plans for the City of Roseville and City of Sacramento, as discussed in Section 3.8, Land Use and Planning. The proposed changes would not commit future generations to or introduce changes in land use that would vary from the existing conditions or planned development by the City of Roseville or City of Sacramento.

Similar to the approved Project, the construction and operation of the proposed changes would entail the irreversible and irretrievable commitment of energy and human resources, including labor required for planning, design, construction, and operations. The use of these resources would be irrecoverable; however, they are not in short supply, and their use would not affect the continued availability and supply of these resources. Based on the analysis above, no new significant and irreversible effects or a substantial increase in the severity of previously identified significant and irreversible effects would occur.

4.2 Cumulative Effects

This section evaluates the incremental effect of the revised Project on the environment when considered in conjunction with closely related past, present, and reasonably foreseeable future projects. Cumulative impacts related to air quality and climate change, noise, and transportation, are described and evaluated in Section 3.2, Air Quality/Climate Change/GHG; Section 3.9, Noise and Vibration; and Section 3.11, Transportation, of this SEIR, respectively. It was determined that the proposed changes to the approved project would not result in new significant impacts or a substantial increase in the severity of previously identified significant cumulative impacts.

4.3 Growth-Inducing Impacts

Similar to the approved project, the proposed changes to the approved project are consistent with the projected and planned growth in the vicinity of the Project corridor. The proposed changes would not directly or indirectly induce economic, population, or housing growth in the surrounding environment. As a result, no new significant growth-inducing impacts or increase in the severity of previously identified significant growth-inducing impacts would occur as a result of the proposed changes to the approved Project.

5.0 Alternatives

5.1 Range of Alternatives Evaluated

The 2015 Draft EIR evaluated a range of alternatives to the approved Project. No additional alignment or facility alternatives are considered in this SEIR.

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