# STOCKTON DIAMOND

Unlocking Northern California's Freight and Passenger Rail Potential

## FINAL ENVIRONMENTAL ASSESSMENT – APPENDICES I July 2022



San Joaquin Regional Rail Commission'

The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being or have been carried out by the State of California pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated July 23, 2019, and executed by the Federal Railroad Administration and the State of California.





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#### Appendices Volume I

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### Appendix A. Alternatives Eliminated from Further Consideration



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Proposed Tracks Existing UP Tracks Existing BNSF Tracks - Proposed Retaining Wall Proposed Track Removal



### **CONCEPT 1C: Eliminated from Further Consideration**







### **CONCEPT 1D: Eliminated from Further Consideration**







**CONCEPT 1E: Eliminated from Further Consideration** 







**CONCEPT 2A: Eliminated from Further Consideration** 









**CONCEPT 2B: Eliminated from Further Consideration** 









**CONCEPT 2C: Eliminated from Further Consideration** 





RMON YARD TRACK LENGTH SUMMARY			
	EX. CLEAR	CHANGE	
AST LEAD	4,495'	-1,403'	
	4,488'	-1,524'	
	4,462'	-1,465'	
	4,584'	-1,465'	
	4,575'	-1,273'	
	4,418'	-1,228'	
	4,074'	-1,316'	
	2,655'	-860'	
	3 421'	-9 069'	



**CONCEPT 2D: Eliminated from Further Consideration** 





BNSF MORMON YARD TRACK LENGTH SUMMARY			
TRACK	EX. CLEAR	WEST	
YARD 1/EAST LEAD	4,495'	-843'	
YARD 2	4,488'	-665'	
YARD 3	4,462'	-434'	
YARD 4	4,584'	-356'	
YARD 5	4,575'	-629'	
YARD 6	4,418'	-640'	
YARD 7	4,074'	-583'	
YARD 8	2,655'	-264'	
TOTAL		-4,414	

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### Appendix B. Applicable Federal, State, and Local Plans, Policies, and Regulations



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#### B.1 Federal and State Plans, Policies, and Regulations

The following discussion describes the adopted federal and State plans, policies, and regulations that are applicable to the Project. A list of local plans, policies, and regulations is identified in Table B-1.

#### CEQ 1978 Regulations (40 CFR parts 1500-1508)

CEQ regulations, which established the steps necessary to comply with NEPA, require evaluation of the potential environmental effects of all proposed federal activities and programs. The following Federal laws are applicable to each resource area of the Final EA.

#### National Environmental Policy Act of 1969, as amended (42 U.S.C. 4321–4347)

NEPA, enacted on January 1, 1970, requires the consideration of potential environmental effects and a discussion of inconsistencies or conflicts between a proposed undertaking and federal, state, regional, or local plans and laws.

#### FHWA, FRA, and FTA - Environmental Impact and Related Procedures (23 CFR Part 771)

23 CFR 771, Environmental Impact and Related Procedures, prescribes the policies and procedures of FHWA, FRA, and FTA for implementing NEPA and provides the regulations and requirements for processing highway, public transportation, and railroad actions under NEPA. USDOT published a final rule in the Federal Register on November 28, 2018, that includes 23 CFR Part 771 and was considered effective for projects initiated on or after that date.

#### B.1.1 LAND USE AND PLANNING

The following federal and State plans, policies, and regulations inform the evaluation of land use and planning in this Final EA. A list of local plans, policies, and regulations is identified in Table B-1.

State Plans, Policies, and Regulations

#### California State Planning and Zoning Law

The 2011 Edition of the California State Planning and Zoning Law specifies how the state delegates most of the state's local land use and development decisions to the respective city or county and identifies the laws pertaining to land use regulations set by the local government's general plan requirements, specific plans, and zoning.

#### Sustainable Communities and Climate Protection Act (Senate Bill 375)

The Sustainable Communities and Climate Protection Act, Senate Bill (SB) 375, was signed into law on September 30, 2008, and requires that regional planning agencies include a Sustainable Communities Strategy (SCS) or alternative planning strategy in regional transportation plans. This SCS provides guidance on the coordination of land use and GHG planning in order to meet regional GHG emissions reduction targets set by the California Air Resources Board (CARB).



#### B.1.2 COMMUNITY EFFECTS AND GROWTH

The following federal and State plans, policies, and regulations inform the evaluation of community effects and growth in this Final EA. A list of local plans, policies, and regulations is identified in Table B-1.

#### Federal Plans, Policies, and Regulations

Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (42 U.S.C. 4601-4655). See the description under B.1.3, *Relocation and Real Property Acquisition*.

#### National Environmental Policy Act Requirements to Analyze Growth

Positive and negative growth (i.e., change) is a potential impact of the Project alternatives. CEQ regulations include a requirement to examine both direct and indirect effects. Direct growth effects include any jobs directly associated with the Project alternatives, as well as any displacement of housing or commercial or industrial businesses related to the construction and operation of the proposed rail facility. Indirect growth effects may occur in areas beyond the immediate influence of a proposed action and at some time in the future, which may include growth-inducing effects and other effects related to induced changes in the pattern of land use, population density, or growth rate, and related effects on air, water, and other natural systems, including ecosystems. Cumulative growth effects, it may still induce cumulative effects by permitting other development activities that have significant effects on environmental resources at a regional or national scale, and are viewed as "connected actions."

#### State Plans, Policies, and Regulations

#### Senate Bill 375 and Regional Transportation Plan/Sustainable Communities Strategy

SB 375 was signed into law on September 30, 2008, and requires California's 18 metropolitan planning organizations (MPO) to adopt an SCS. The SCS must demonstrate an ambitious and achievable approach on how land use development and transportation can work together to reduce GHG emissions from automobiles and light trucks within each region to meet emissions targets set by CARB as part of their Regional Transportation Plan (RTP). If an MPO is unable to meet the targets through the SCS, then an alternative planning strategy must be developed that demonstrates how targets could be achieved.

SJCOG, as the MPO and RTP agency of San Joaquin County, has developed an RTP/SCS. The foundation of the RTP/SCS is comprised of recent household and job growth forecasts, market demand and economic studies, and transportation studies including SJCOG's Smart Growth Transit Oriented Development Plan, Goods Movement Study, and Regional Bike/Pedestrian Master Plan, which are used to understand the transportation network, economic, geographic, and regulatory setting of the San Joaquin region and provide projections on population, housing, and employment. The latest version of the RTP/SCS was approved on June 28, 2018, by the SJCOG Board. The 2018 RTP/SCS meets and exceeds the 5 percent in 2020 and 10 percent in 2035 GHG reduction targets set by CARB.



#### B.1.3 RELOCATIONS AND REAL PROPERTY ACQUISITION

The following federal and State plans, policies, and regulations inform the evaluation of relocations and real property acquisition in this Final EA. A list of local plans, policies, and regulations is identified in Table B-1.

#### Federal Plans, Policies, and Regulations

### Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (42 U.S.C. 4601-4655, 49 CFR Part 24)

The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (Uniform Act) establishes a policy for the fair and equitable treatment of persons displaced as a result of federal and federally assisted programs and ensures that relocation services and payments will be made available to eligible residents, businesses, and nonprofit organizations displaced as a direct result of a project.<sup>1</sup>

The Uniform Act also sets minimum standards of benefits and compensation for relocation advisory and financial benefits and established basic standards and requirements for appraisal and acquisition to be followed in acquiring real property. The Uniform Act is not an entitlement program, but rather a reimbursement program to assist in relocating to a new site.

The purpose of the Uniform Act, and its implementing regulations at Title 49 CFR Part 24, is:

"To provide for uniform and equitable treatment of persons displaced from their homes, businesses, or farms by federal and federally assisted programs and to establish uniform and equitable land acquisition policies for federal and federally assisted programs."

The relocation services and benefits provision is administered without regard to race, color, national origin, or sex in compliance with Title VI of the Civil Rights Act (42 USC 2000d, et seq.).

#### State Plans, Policies, and Regulations

### California Relocation Assistance Act and California Code of Regulations (Cal. Gov't Code 7260 et seq.)

Under the provision of Government Code 7260 et seq., all public entities adopt rules and regulations to administer relocation assistance and to implement the payments. The rules and regulations are to conform to CCR 6000 et seq., the implementing regulation of Government Code 7260 et seq., also known as the "Guideline." CCR 6000 et seq. as adopted pursuant to the provisions of Section 41135, Health and Safety Code, in order to implement, interpret, and make specific provisions relating to relocation assistance, last resort housing, and real property acquisition.

#### B.1.4 PARKS, RECREATION, AND SECTION 4(F) RESOURCES

The following federal and State plans, policies, and regulations inform the evaluation of parks, recreation, and Section 4(f) resources in this Final EA. A list of local plans, policies, and regulations is identified in Table B-1.

<sup>&</sup>lt;sup>1</sup> Federal regulations implementing the Uniform Act are contained in 49 CFR Part 24.



#### Federal Plans, Policies, and Regulations

### Section 4(f) of the Department of Transportation Act of 1966, as amended (49 USC 303, 23 USC 138, 23 CFR Part 774)

Requirements under Section 4(f) of the Department of Transportation Act of 1966, stipulate USDOT agencies cannot approve the use of land from publicly owned parks, recreational areas, wildlife and waterfowl refuges, or public and private historical sites unless there is no feasible and prudent avoidance alternative to the use of that land; and the action includes all possible planning to minimize harm to the property resulting from such use or that it is determined that the use of the property will have a *de minimis* impact.

#### Section 6(f) Land and Water Conservation Fund Act (PL 88-578, 16 USC 460I-4-460I-11)

Section 6(f) of the Land and Water Conservation Act of 1965 requires coordination with and approval from the National Park Service (NPS) prior to converting any lands or facilities acquired with Land and Water Conservation Act funds under the State Assistance program.

According to the official Land and Water Conservation Fund list for California, located on the California Department of Parks and Recreation website, there are no Section 6(f) properties within the Stockton Diamond Grade Separation RSA for parks or recreational facilities that could be affected by the Project. Therefore, Section 6(f) is not applicable and does not require impact analysis.

#### State Plans, Policies, and Regulations

#### California Public Park Preservation Act of 1971 (Cal PCR 5400 et seq.)

The California Public Park Preservation Act of 1971 requires that any public agency that acquires public park areas for non-park or recreational use must either pay compensation that is equivalent to the park area value or provide another park area of the same value and characteristics. The Project will not acquire any public park areas for non-park use; thus, the California Public Park Preservation Act is not applicable to this Project and does not require an impact analysis.

#### B.1.5 ENVIRONMENTAL JUSTICE

The following federal and State plans, policies, and regulations inform the evaluation of EJ in this Final EA. A list of local plans, policies, and regulations is identified in Table B-1.

Federal Plans, Policies, and Regulations

#### Title VI of the Civil Rights Act (42 U.S.C. 2000d et seq)

Title VI of the Civil Rights Act of 1964 prohibits discrimination on the basis of race, color, or national origin in programs and activities receiving federal financial assistance.

#### Federal Actions to Address EJ in Minority Populations (Executive Order 12898)

EO 12898, effective February 11, 1994, focuses federal attention on the environmental and human health effects of federal actions placed on minority and low-income populations with the goal of



achieving environmental protection for all communities. Agencies are required to identify and address the disproportionate effects on minority and low-income populations due to project actions, to develop an EJ strategy during the planning phase, and to ensure that there are mitigation measures and opportunities for public input and participation during the planning process.

#### Presidential Memorandum Accompanying Executive Order 12898

The Presidential Memorandum dated February 11, 1994, emphasizes the importance of existing laws, such as Title VI of the Civil Rights Act of 1964 and NEPA, that can assist with implementation of the principles of the order. The memorandum provides that, in accordance with Title VI, "each Federal agency shall ensure that all programs or activities receiving Federal assistance that affect human health or the environment do not directly, or through contractual or other arrangements, use criteria, methods, or practices that discriminate on the basis of race, color, or national origin."

### Actions to Address EJ in Minority Populations and Low-Income Populations (US Department of Transportation Order 5610.2c)

USDOT Order 5610.2c effective May 16, 2021, requires the consideration of EJ principles in all USDOT programs, policies and activities. It describes how the objectives of EJ will be integrated into planning and programming, rulemaking, and policy formulation. It sets forth steps to identify and address, as appropriate, disproportionally high and adverse effects on minority populations or low-income populations through EJ analysis conducted as part of the planning and project delivery process for federally funded or approved transportation projects; it specifies the measures to be taken to address instances of disproportionally high and adverse effects; and requires consideration of the benefits of transportation programs, policies, and other activities where minority populations and low-income populations benefit, at a minimum to the same level as the general population as a whole when determining effect on minority and low-income populations.

### *Improving Access to Services for Persons with Limited English Proficiency (Executive Order* 13166)

EO 13166, signed on August 11, 2000, requires federal agencies to examine the services they provide, identify any need for services to those with limited English proficiency (LEP), and develop and implement a system to provide those services so people with LEP can have meaningful access to them.

State Plans, Policies, and Regulations

### Uniform Relocation Assistance and Real Property Acquisition Policies Act (42 U.S.C. 4601-4655)

Please see description under Section B.1.2, Community Effect and Growth. California Government Code 65040.12(e)

California Government Code 65040.12(e) states that EJ is the "fair treatment and meaningful involvement of people of all races, cultures, incomes, and national origins, with respects to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies."



#### California Government Code 11135(a)

California Government Code 11135(a) states no one shall be discriminated to receive full and equal access to the benefits of any programs or activities conducted, operated or administered by the state or by any state agency.

#### B.1.6 UTILITIES AND EMERGENCY SERVICES

The following federal and State plans, policies, and regulations inform the evaluation of utilities and emergency services in this Final EA. A list of local plans, policies, and regulations is identified in Table B-1.

#### Federal Plans, Policies, and Regulations

#### Water Conservation Act (SB X7-7)

The Water Conservation Act of 2009 requires all water suppliers to increase efficiency in water use. Since the Project involves operational improvements to an existing transportation facility, it is not anticipated that water use would increase. Therefore, this act is not applicable to the Project.

#### State Plans, Policies, and Regulations

#### California Integrated Waste Management Act of 1989 (AB 939)

The California Integrated Waste Management Act of 1989 requires local jurisdictions to adopt an Integrated Waste Management Plan that addresses waste disposal, management, source reduction, and recycling and ultimately leads to a reduction of waste. The California Department of Resources Recycling and Recovery (CalRecycle) is the agency responsible for leading the initiative. Solid waste reduction would be part of the Project construction plans.

#### California Government Code (Section 4216)

The California Government Code (Section 4216) mandates that any person must notify and coordinate with relevant stakeholders prior to construction activities that involve ground disturbance. Contractors are required to mark any area that is to be disturbed with paint and notify Underground Service Alert (USA) North, at least 2 days prior to the start of any digging activities. After receiving the notification, USA North would transmit the information regarding the construction to all participating members.

#### B.1.7 TRAFFIC AND TRANSPORTATION/PEDESTRIAN AND BICYCLE FACILITIES

The following federal and State plans, policies, and regulations inform the evaluation of traffic and transportation/pedestrian and bicycle facilities in this Final EA. A list of local plans, policies, and regulations is identified in Table B-1.

#### Federal Plans, Policies, and Regulations

#### Federal Passenger Rail Investment and Improvement Act (Public Law No. 110-432, Division B)

In accordance with the Federal Passenger Rail Investment and Improvement Act of 2008, the State of California adopted the 2018 California State Rail Plan in September 2018 (Caltrans 2018a).



Federal law requires the State of California to update its California State Rail Plan every 5 years as a condition of eligibility for federal funding for rail programs.

#### State Plans, Policies, and Regulations

#### Title 23 of the USC for Highways, Statewide Planning

Title 23 of the USC for Highways and Statewide Planning provides the general requirements for statewide planning to encourage and promote the safe and efficient management, operation, and development of the surface transportation system.

#### SJCOG Regional Transportation Plan and Sustainable Communities Strategy

At the statewide level, the Project is included in the 2020 California Freight Mobility Plan, and the Project's design and ROW phases are programmed in the interregional portion of the 2020 State Transportation Improvement program (STIP). The Project is included in the 2018 San Joaquin County RTP/SCS, as well as the current SJCOG 2021 Federal Transportation Improvement Program (FTIP), which was adopted at the February 25, 2021, SJCOG Board Meeting.

The State of California requires each transportation planning agency to prepare and adopt a RTP directed at achieving a coordinated and balanced regional transportation system.

The 2018 RTP/SCS provides a "sustainability vision" through year 2042 that recognizes the significant impact the transportation network has on the region's public health, mobility, and economic vitality. As the region's comprehensive long-range transportation planning document, the Plan serves as a guide for achieving public policy decisions that will result in balanced investments for a wide range of multimodal transportation improvements.

#### San Joaquin Regional Rail Commission Plans

SJRRC's ACE*forward* project is relevant to the Project because of its proposed improvements in Stockton and use of the UP Fresno line and Stockton Diamond. Additionally, Valley Rail<sup>2</sup> implements two new daily round-trips for the Amtrak San Joaquin's service to better connect San Joaquin Valley travelers with the Sacramento Area, and an extension of ACE between Sacramento and Ceres/Merced.

#### B.1.8 VISUAL QUALITY AND AESTHETICS

The following federal and State plans, policies, and regulations inform the evaluation of visual quality and aesthetics in this Final EA. A list of local plans, policies, and regulations is identified in Table B-1.

#### Federal Plans, Policies, and Regulations

#### National Environmental Policy Act of 1969, as amended (42 U.S.C. 4321–4347)

NEPA requires the consideration of potential environmental effects, including potential aesthetic and visual effects, in the evaluation of any proposed federal agency action. NEPA also obligates federal

<sup>&</sup>lt;sup>2</sup> Valley Rail includes "ACE forward" and San Joaquin's expansion.



agencies to consider the environmental consequences of their projects and programs as part of the planning process.

#### State Plans, Policies, and Regulations

There are no applicable state plans, policies, or regulations related to this resource topic.

#### B.1.9 CULTURAL RESOURCES

The following federal and State plans, policies, and regulations inform the evaluation of cultural resources in this Final EA. A list of local plans, policies, and regulations is identified in Table B-1.

#### National Environmental Policy Act 1969, as amended (42 U.S.C. 4321–4347)

NEPA requires the consideration of potential environmental effects, including potential effects on cultural resources, in the planning of any proposed federal action. According to the NEPA regulations, in considering whether an action may "significantly affect the quality of the human environment," an agency must consider, among other things, unique characteristics of the geographic area such as proximity to historic or cultural resources and the degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the NRHP.

The NEPA regulations also require that, to the fullest extent possible, agencies integrate NEPA review concurrently with the requirements of other environmental regulations, including NHPA, which requires federal agencies to consider the effects of their actions on historic properties. When Section 106 of NHPA and NEPA are integrated, adverse project effects under Section 106 are considered to be adverse under NEPA.

### National Historic Preservation Act of 1966, as amended (80 Stat. 915, [former] 16 U.S.C. 470 et seq.) [see 54 U.S.C. 300101 et seq)

The NHPA of 1966 establishes the federal government policy on historic preservation and the programs, including NRHP, through which this policy is implemented. Under the NHPA, significant cultural resources, referred to as historic properties, include any prehistoric or historic district, site, building, structure, or object included in or eligible for inclusion in the NRHP. A property is considered historically significant if it meets one or more of the NRHP criteria and retains sufficient historic integrity to convey its significance. The Advisory Council on Historic Preservation (ACHP) is responsible for implementing Section 106 of the NHPA and has developed regulations to protect cultural resources included in or eligible for inclusion in the NRHP, published in 36 CFR 60, 63, and 800.

### Implementing Regulations for Section 106 of the National Historic Preservation Act (98\$27232\$\$74:54<-

Section 106 requires that effects on historic properties be taken into consideration in any federal undertaking. The process has five steps: (1) initiating the Section 106 process, (2) identifying historic properties, (3) assessing adverse effects, (4) resolving adverse effects, and (5) implementing stipulations in an agreement document.



Compliance with the act requires that federal agencies must identify and evaluate NRHP eligibility of properties within the APE and evaluate the effect of the undertaking on historic properties. The APE is defined as the area in which historic properties may be affected by the undertaking.

Section 106 affords the ACHP and the State Historic Preservation Office (SHPO), as well as other consulting parties, a reasonable opportunity to comment on any undertaking that would adversely affect historic properties. SHPOs administer the national historic preservation program at the state level, which includes consulting with federal agencies during Section 106 review.

The NRHP uses the NRHP eligibility criteria (36 CFR 60.4) to evaluate historic significance of cultural resources within the undertaking's APE. The criteria for evaluation are as follows:

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

Properties of traditional religious and cultural importance to a Native American tribe can be determined eligible for NRHP inclusion (54 USC Section 302706(a)). A broader range of traditional cultural properties may also be determined eligible for or listed in the NRHP. These are places associated with the cultural practices or beliefs of a living community that may be eligible because of their association with cultural practices or beliefs that (a) are rooted in that community's history, and (b) are important in maintaining its continuing cultural identity.

### Section 4(f) of the Department of Transportation Act of 1966, as amended (49 USC 303, 23 USC 138, 23 CFR Part 774)

Please see description under Section B.1.24, Parks, Recreation, and Section 4(f) Resources.

State Plans, Policies, and Regulations

#### California Register of Historic Resources (CA PRC Section 51024.1)

Section 5024.1 of the California PRC established CRHR. Generally, a resource is considered by the lead agency to be "historically significant" if the resource meets the criteria for listing in the CRHR (CCR, Title 14(3), Section 15064.5(a)(3)). The eligibility criteria for the CRHR are similar to those of the NRHP, and a resource that meets one of more of the eligibility criteria of the NRHP will be eligible for the CRHR.



#### B.1.10 HYDROLOGY, FLOODPLAINS, AND WATER QUALITY

The following federal and State plans, policies, and regulations inform the evaluation of hydrology, floodplains, and water quality in this Final EA. A list of local plans, policies, and regulations is identified in Table B-1.

Federal Plans, Policies, and Regulations

Clean Water Act of 1972, as amended (33 U.S.C 1251-1387)

Important CWA sections are as follows:

- Sections 303 and 304 require states to establish water quality standards, criteria, and guidelines.
- Section 401 requires an applicant for a federal license or permit to conduct any activity that may
  result in a discharge to waters of the US to obtain certification from the state that the project will
  be in compliance with state water quality standards. The 401 certifications are obtained from the
  appropriate RWQCB, dependent on the project location, and are required before USACE issues
  a Section 404 permit (see below).
- Section 402 establishes NPDES, a permitting system for the discharges (except for dredge or fill material) of any pollutant into waters of the US, including regulating municipal and industrial discharges to surface waters of the US. The US Environmental Protection Agency (EPA) delegated the implementation and administration of the NPDES program in California to the California SWRCB.
- Section 404 establishes a permit program for the discharge of dredge or fill material into waters of the US, including wetlands. This permit program is administered by the US Army Corps of Engineers (USACE).

#### Executive Order 11988

EO 11988 (Floodplain Management) directs all federal agencies to refrain from conducting, supporting, or allowing actions in floodplains unless it is the only practicable alternative. FHWA requirements for compliance are outlined in 23 CFR 650 Subpart A.

#### State Plans, Policies, and Regulations

#### Porter-Cologne Water Quality Control Act (Water Code, §13000 et seq.)

California's Porter-Cologne Water Quality Control Act, enacted in 1969, provides the legal basis for water quality regulation in California. This act requires a "Report of Waste Discharge" for any discharge of waste (liquid, solid, or gaseous) to land or surface waters that may impair beneficial uses for surface and/or groundwater of the state. Additionally, it prohibits discharges of "waste" as defined, and this definition is broader than the CWA definition of "pollutant." Discharges under the Porter-Cologne Act are permitted by Waste Discharge Requirements (WDR) and may be required even when the discharge is already permitted or exempt under the CWA. If an RWQCB determines that waters are impaired for one or more constituents and that the standards cannot be met through point source or non-point source controls (NPDES permits or WDRs), the CWA requires the establishment of a total maximum daily load (TMDL). TMDLs specify allowable pollutant loads from all sources (point, nonpoint, and natural) for a given watershed.



#### State Water Resources Control Board and Regional Water Quality Control Board

The SWRCB adjudicates water rights, sets water pollution control policy, issues water board orders on matters of statewide application, and oversees water quality functions throughout the state by approving Basin Plans, TMDLs, and NPDES permits. RWCQBs are responsible for protecting beneficial uses of water resources within their regional jurisdiction using planning, permitting, and enforcement authorities to meet this responsibility.

### Construction General Permit (NPDES No. CAS000002, SWRCB Order No. 2009-0009-DWQ, as amended)

The CGP (NPDES No. CAS000002, SWRCB Order No. 2009-0009-DWQ, adopted on November 16, 2010) became effective on February 14, 2011, and was amended by Order No. 2010-0014-DWQ and Order No. 2012-0006-DWQ. The CGP authorizes the discharge of stormwater (and certain unauthorized non-stormwater discharges) from construction sites that disturb 1 acre or more of land, and from smaller sites that are part of a larger, common plan of development. For all projects subject to the CGP, the applicant is required to develop and implement an effective SWPPP, to implement soil erosion and pollution prevention control measures, and to obtain coverage under the CGP.

#### Industrial General Permit

On November 6, 2018, the State Water Board amended the Industrial General Permit (NDPES No. CAS000001; Order 2014-0057-DWQ as amended by Order 2015-0122-DWQ). The IGP regulates industrial storm water discharges and authorized non-storm water discharges from industrial facilities in California. The IGP is called a general permit because many industrial facilities are covered by the same permit but comply with its requirements at their individual industrial facilities. The State Water Resources Control Board (State Water Board) and Regional Water Quality Control Boards (collectively, the Water Boards) implement and enforce the IGP.

#### Central Valley Regional Water Quality Control Board

The Central Valley RWQCB's Waste Discharge Requirements/Monitoring & Reporting Program (Order No. R5 2015 0024, NPDES No. CAS083470) was adopted on April 17, 2015. The Waste Discharge Requirements/Monitoring and Reporting Program regulates and monitors waste discharge and establishes water discharge requirements.

#### B.1.11 GEOLOGY, SOILS, SEISMICITY, AND PALEONTOLOGY

The following federal and State plans, policies, and regulations inform the evaluation of geology, soils, seismicity, and paleontology in this Final EA. A list of local plans, policies, and regulations is identified in Table B-1.

Federal Plans, Policies, and Regulations

#### Clean Water Act of 1972, as amended (33 U.S.C 1251-1387)

The CWA establishes several major integrated regulatory programs, standards, and plans. Relevant items include the following:



NPDES Program – Establishes an effluent permit system for point source (e.g., pipe, ditch, sewer) discharges of pollutants into waters of the US. The NPDES permit system requires those permitted to maintain records and report on the amount and nature of discharged effluent waste components. The stormwater program is a part of the NPDES program and is designed to reduce or eliminate the discharge of contaminated stormwater into waters of the US. The US. The program requires the following stormwater discharges to be covered by an NPDES permit:

- discharge associated with industrial activity
- discharge from a large or medium municipal separate storm sewer system
- discharge that EPA or the state/tribe determines contributes to a violation of a water quality standard or which is a significant contributor of pollutants to waters of the US.

National and Local Pretreatment Standards – Requires new and existing industrial users to pre-treat wastewater discharged to Publicly-Owned Treatment Works (POTW) to prevent pollutants in excess of certain limits from passing through POTWs, causing interference in the operation of the treatment works and to protect the quality of sludge generated by these plants (§ 307).

Dredge or Fill Discharge Permit Program – Establishes a permit system, administered by USACE, for regulating the placement of dredge or fill material into waters of the US, including wetlands (§ 404).

#### Paleontological Resources Preservation Act (16 U.S.C. 470aaa)

The Paleontological Resources Preservation Act (PRPA) of 2009 codified the generally accepted practice of limited vertebrate fossil collection and limited collection of other rare and scientifically significant fossils by qualified researchers. Researchers must obtain a permit from the appropriate state or federal agency and agree to donate any materials recovered to recognized public institutions, where they will remain accessible to the public and to other researchers. Both the US Forest Service and BLM have adopted implementation policies for PRPA.

#### American Antiquities Act (16 U.S.C. 431-433)

The American Antiquities Act of 1906 is the first law of the United States to protect the cultural and natural heritage of the US, providing legal protection of cultural and natural resources of historic or scientific interest on federal lands. Some federal agencies include fossils in their interpretation of "antiquities."

State Plans, Policies, and Regulations

#### Alquist-Priolo Earthquake Fault Zoning Act (CA PRC § 2621)

The Alquist-Priolo Earthquake Fault Zoning Act (Alquist-Priolo Act) was enacted in 1972 to reduce the hazard of surface faulting to structures designed for human occupancy. The main purpose of the law is to prevent the construction of buildings used for human occupancy on the surface trace of active faults.



#### California Public Resources Code

The California PRC (Chapter 1.7, Sections 5097, 5097.5, and 30244) includes state requirements for the assessment and management of paleontological resources. Section 21000 et seq. (CEQA) addresses potential effects to paleontological resources under Appendix G, Section VII(f).

#### Seismic Hazards Mapping Act of 1990 (CA PRC, Chapter 7.8, § 2690-2699.6)

The Seismic Hazards Mapping Act of 1990 (SHMA) directs the California Department of Conservation, California Geological Survey to identify and map areas prone to earthquake liquefaction hazards, earthquake-induced landslides, and amplified ground shaking. SHMA requires the State Geologist to establish regulatory zones (Zones of Required Investigation) and to issue appropriate maps (Seismic Hazard Zone maps).

#### National Pollutant Discharge Elimination System Permit

In California, the SWRCB administers regulations that are mandated by EPA and requires the permitting of stormwater-generated pollution under NPDES. See Section B.1.10, *Hydrology/Floodplains and Water Quality*, for more information about NPDES and SWPPP as they pertain to water pollution and runoff BMPs.

#### California Building Code (Title 24 CCR)

Title 24 of the CCR, known as the California Building Standards Code (CBC) or "Title 24," contains the regulations that govern the construction of buildings in California. The CBC contains general building design and construction requirements relating to fire and life safety, structural safety, and access compliance (Division of the State Architect 2018). Chapter 18, Soils and Foundations, of the CBC regulates the excavation of foundations and retaining walls, including the preparation of preliminary soil, geologic, geotechnical, and supplemental ground-response reports. Chapter 18 also regulates expansive soils analysis and the depth to groundwater table determination.

#### B.1.12 HAZARDOUS WASTE AND MATERIALS

The following federal and State plans, policies, and regulations inform the evaluation of hazardous waste and materials in this Final EA. A list of local plans, policies, and regulations is identified in Table B-1.

#### Federal Plans, Policies, and Regulations

#### Clean Air Act (42 U.S.C. 7609)

The federal Clean Air Act (FCAA) is intended to protect the public from hazardous airborne contaminants that can affect human health. The National Emissions Standards for hazardous air pollutants were established under the FCAA. These emissions standards include the regulation of asbestos.

#### Clean Water Act, Section 402(p) (33 U.S.C. 1342(p))

The CWA regulates discharges and spills of pollutants, including hazardous materials, to surface waters and groundwater.



#### Safe Drinking Water Act (42 U.S.C. 300(f) et seq.)

The Safe Drinking Water Act regulates discharges of pollutants to underground aquifers and establishes standards for drinking water quality.

### Federal Insecticide, Fungicide and Rodenticide Act (7 U.S.C. 136 and 40 C.F.R. Parts 152 to 171)

The Federal Insecticide, Fungicide, and Rodenticide Act regulates the manufacturing, distribution, sale, and use of pesticides.

### *Emergency Planning and Community Right to Know Act (42 U.S.C. 11001 et seq. and 40 C.F.R. Parts 350.1 et seq.)*

The Emergency Planning and Community Right to Know Act regulates facilities that use hazardous materials in quantities that require reporting to emergency response officials.

#### Executive Order 12088, Federal Compliance with Pollution Control

US Presidential EO 12088 requires federal agencies to take necessary actions to prevent, control, and abate environmental pollution from facilities and activities under the control of federal agencies.

#### Comprehensive Environmental Response, Compensation, and Liability Act (Superfund)

CERCLA of 1980, commonly known as Superfund, provides broad federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. CERCLA establishes requirements concerning closed and abandoned hazardous waste sites, provides for the liability of persons responsible for releases of hazardous waste at these sites, and establishes a trust fund to provide for cleanup when no responsible party can be identified.

EPA compiles a list of national priorities among the known releases or threatened releases of hazardous substances, pollutants, or contaminants throughout the US and its territories, known as NPL.

#### The Hazardous Materials Transportation Act (49 U.S.C. 5101-5127)

The Hazardous Materials Transportation Act in Chapter 51 of Title 49 of the United States Code was enacted in 1975 with the purpose of providing adequate protection against the risks to life and property in the commercial transportation of hazardous material by improving the Secretary of Transportation's regulatory and enforcement authority.

USDOT, along with the California Highway Patrol (CHP) and Caltrans, regulates hazardous materials transportation between states. FRA enforces the Hazardous Materials Regulations, which include requirements that railroads and other hazardous materials transporters, as well as shippers, have and adhere to security plans and also train their employees on both the safety and security matters involved in offering, accepting, or transporting hazardous materials.



#### National Oil and Hazardous Substances Pollution Contingency Plan (40 CFR Part 300 et seq.)

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) is the federal plan for responding to oil spills and hazardous substances releases.

#### Oil Pollution and Prevention Regulation

EPA's oil spill prevention program includes the Spill Prevention, Control, and Countermeasure (SPCC) and the Facility Response Plan rules. The SPCC rule helps facilities prevent an oil discharge into navigable waters or adjoining shorelines. The Facility Response Plan rule requires certain facilities to submit a response plan and prepare to respond to a worst-case oil discharge.

#### Occupational Safety and Health Act (29 U.S.C. §§ 651–678)

The Occupational Safety and Health Act of 1970, which is implemented by the Occupational Safety and Health Administration (OSHA), contains requirements, as set forth in Title 29 of the CFR Section 1910, that are designed to promote worker safety, worker training, and a worker's right-to-know. OSHA requirements would be in effect during the Project's construction and operation to ensure worker safety.

#### Resource Conservation and Recovery Act (42 U.S.C. ch. 82 § 6901 et seq.)

RCRA provides EPA the authority to control hazardous waste including its generation, transportation, treatment, storage, and disposal. Under RCRA, EPA has the authority to control the generation, transportation, treatment, storage, and disposal of hazardous waste by large-quantity generators (1,000 kilograms/month or more). Under the RCRA regulations, hazardous wastes must be tracked from the time of generation to the point of disposal. In California, EPA has delegated RCRA enforcement to California Environmental Protection Agency Department of Toxic Substances Control (Cal/EPA DTSC).

#### Toxic Substances Control Act (15 U.S.C. §2601 et seq)

TSCA of 1976 provides EPA with authority to require reporting, record-keeping, and testing requirements and restrictions related to chemical substances and/or mixtures.

#### Atomic Energy Act of 1946, as amended (42 U.S.C. §2011 et seq.)

In addition to the acts listed above, EO 12088, Federal Compliance with Pollution Control Standards, mandates that necessary actions be taken to prevent and control environmental pollution when federal activities or federal facilities are involved.

California regulates hazardous materials, waste, and substances under the authority of the CA Health and Safety Code and is also authorized by the federal government to implement RCRA in the state. California law also addresses specific handling, storage, transportation, disposal, treatment, reduction, cleanup, and emergency planning of hazardous waste. The Porter-Cologne Water Quality Control Act also restricts disposal of wastes and requires cleanup of wastes that are below hazardous waste concentrations but could impact ground and surface water quality. California regulations that address waste management and prevention and cleanup of contamination include



Title 22 Division 4.5 Environmental Health Standards for the Management of Hazardous Waste, Title 23 Waters, and Title 27 Environmental Protection.

#### State Plans, Policies, and Regulations

#### Cal/EPA Plans, Policies, and Regulations

Cal/EPA and the SWRCB establish rules governing hazardous materials use and hazardous waste management. Within Cal/EPA, DTSC has primary regulatory responsibility, with delegation of enforcement to local jurisdictions that enter into agreements with the state agency, for hazardous materials management and hazardous waste generation, transport, and disposal under the authority of the Hazardous Waste Control Law.

#### Hazardous Materials Release Response Plans and Inventory Act (Business Plan Act)

The Business Plan Act passed in 1986, requires businesses using hazardous materials to prepare a plan that describes their facilities, inventories, emergency response plans, and training programs. A business plan includes an inventory of hazardous materials handled, facility floor plans showing where hazardous materials are stored, an emergency response plan, and provisions for employee training in safety and emergency response procedures (California Health and Safety Code, Division 20, Chapter 6.95, Article 1). Since the Project involves operational improvements to an existing transportation facility, it is not anticipated a new Hazardous Materials Business Plan would be needed. Therefore, this act is not applicable to the Project.

#### Hazardous Materials Transportation, CCR Title 26

The State of California has adopted DOT regulations for the intrastate movement of hazardous materials. State regulations are contained in CCR Title 26. In addition, the State of California regulates the transportation of hazardous waste originating in the state and passing through the state (26 CCR).

#### CEQA (PRC Section 21000 et seq.) and CEQA Guidelines (Section 15000 et seq.)

CEQA requires state and local agencies to identify the significant environmental effects of their actions, including potential significant hazardous materials and wastes effects, and to avoid or mitigate those effects, when feasible.

#### Well Safety Devices for Critical Wells (CCR, Title 14, Section 1724.3)

This regulation governs safety devices required on "critical wells" within 100 feet of an operating railway. Since the Project involves operational improvements to an existing transportation facility, it is not anticipated that any new or additional "critical wells" would be identified within 100 feet of an operating railway that have not already been identified. Therefore, this act is not applicable to the Project.



Gas Monitoring and Control at Active and Closed Disposal Sites (CCR, Title 27, Section 20917 et seq.)

The regulations within Article 6 set forth the performance standards and the minimum substantive requirements for landfill gas monitoring and control as it relates to active solid waste disposal sites and to proper closure, post-closure maintenance, and ultimate reuse of solid waste disposal sites to ensure that public health and safety and the environment are protected from pollution caused by the disposal of solid waste. The Project does not involve the opening, closing, or reuse of landfill sites; thus, the Gas Monitoring and Control at Active and Closed Disposal Sites is not applicable to this Project and does not require an impact analysis.

#### Closure and Post Closure Maintenance of Landfills (CCR, Title 27, Subchapter 5)

This regulation provides post closure maintenance guidelines, including requirements for an emergency response plan and site security. It also regulates post-closure land use, requiring protection of public health and safety and the built environment, as well as the prevention of gas explosions. Construction on the site must maintain the integrity of the final cover, drainage and erosion control systems, and gas monitoring and control systems. Post-closure land use within 1,000 feet of a landfill site must be approved by the local enforcement agency. The Project does not involve the closing or post closure maintenance of landfills; thus, the Closure and Post Closure Maintenance of Landfills is not applicable to this Project and does not require an impact analysis.

#### California PRC Section 21151.4

This code requires the lead agency to consult with a school district with jurisdiction over a school within 0.25 mile of the project about potential effects on the school if the project might reasonably be anticipated to emit hazardous air emissions or handle an extremely hazardous substance or a mixture containing an extremely hazardous substance.

#### Porter-Cologne Water Quality Control Act (California Water Code Section 13000 et seq.)

The Porter-Cologne Water Quality Control Act regulates water quality through SWRCB and RWQCB, including oversight of water monitoring and contamination cleanup and abatement.

#### Hazardous Waste Control Act (California Health and Safety Code, Section 25100 et seq.)

This act is similar to RCRA on the federal level in regulating the identification, generation, transportation, storage, and disposal of materials deemed hazardous by the State of California.

### Safe Drinking Water and Toxic Enforcement Act (Proposition 65, California Health and Safety Code, Section 25249.5 et seq.)

The Safe Drinking Water and Toxic Enforcement Act is similar to the Safe Drinking Water Act and CWA on the federal level in regulating the discharge of contaminants to groundwater.

#### Cortese List Statute (California Government Code Section 65962.5)

This regulation requires DTSC to compile and maintain lists of potentially contaminated sites throughout the state of California (includes the Hazardous Waste and Substances Sites List).



### Unified Hazardous Waste and Hazardous Materials Management Regulatory Program (Unified Program)

The Unified Program consolidates the following hazardous materials and waste programs:

- 1. Aboveground Petroleum Storage Act Program
- 2. Area Plans for Hazardous Materials Emergencies
- 3. California Accidental Release Prevention (CalARP) Program
- 4. Hazardous Materials Release Response Plans and Inventories (Business Plans)
- 5. HMMP and Hazardous Material Inventory Statements (HMIS)
- 6. Hazardous Waste Generator and Onsite Hazardous Waste Treatment (tired permitting) Programs

#### Underground Storage Tank Program

CalEPA oversees California's Unified Program. The Unified Program protects Californians from hazardous waste and hazardous materials by ensuring local regulatory agencies consistently apply statewide standards when they issue permits, conduct inspections and engage in enforcement activities. A Certified Unified Program Agency (CUPA) is a local agency certified by CalEPA to implement the Unified Program elements in the CUPA's jurisdiction.

The Environmental Health Department is the CUPA for San Joaquin County and is responsible for implementing the aforementioned program elements in the county.

#### State of California Emergency Plan

California has developed an emergency response plan to coordinate emergency services provided by federal, state, and local government and private agencies. Responding to hazardous materials incidents is one part of this plan. The plan is administered by the State Office of Emergency Services (OES), which coordinates the responses of other agencies, including Cal/EPA, CHP, CDFW, the Central Valley RWQCB (Water Board), and Stockton Fire Department (SFD). SFD provides first response capabilities, if needed, for hazardous materials releases and environmental emergencies within the Project site vicinity. Additionally, SFD coordinates with state and local authorities to prepare for, prevent, respond to, mitigate, and determine the responsibility of a variety of hazardous materials releases.

#### B.1.13 AIR QUALITY

The following federal and State plans, policies, and regulations inform the evaluation of air quality in this Final EA. A list of local plans, policies, and regulations is identified in Table B-1.

#### Federal Plans, Policies, and Regulations

#### Clean Air Act and National Ambient Air Quality Standards (42 U.S.C. 7609)

The FCAA, promulgated in 1963 and amended several times thereafter, including the 1990 FCAA amendments, establishes the framework for modern air pollution control in the US. The FCAA is


regulated by EPA, which sets standards for the concentration of pollutants in the air. At the federal level, these standards are called NAAQS. NAAQS standards have been established for six transportation-related criteria air pollutants that have been linked to potential health concerns: carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), ozone (O<sub>3</sub>), particulate matter, which is broken down for regulatory purposes into particles of 10 micrometers or smaller (PM<sub>10</sub>) and particles of 2.5 micrometers or smaller (PM<sub>2.5</sub>), and sulfur dioxide (SO<sub>2</sub>). In addition, national standards exist for lead (Pb). The NAAQS standards are set at levels that protect public health with a margin of safety and are subject to periodic review and revision. Toxic air contaminants (TAC) are covered, as well.

Federal air quality standards and regulations provide the basic requirements for Project-level air quality analysis under NEPA. In addition to this environmental analysis, a parallel Conformity requirement applies under FCAA.

The FCAA requires EPA to designate areas as attainment, nonattainment, or unclassified for each criteria air pollutant based on whether the NAAQS have been achieved. The federal standards are summarized in Table K-1 in Appendix K. EPA has designated SJVAB as a nonattainment area for O<sub>3</sub> and PM<sub>2.5</sub> and as a maintenance area for PM<sub>10</sub>. A maintenance area is an area that was formerly in nonattainment and currently under a maintenance plan.

# General Conformity Rule (40 CFR 93)

The General Conformity Rule applies to all federal actions in areas that either: (1) do not meet NAAQS that are not exempt from the General Conformity Rule, covered by a Presumed-to-Conform approved list<sup>3</sup>, or (2) do not meet the *de minimis* emission levels established in the General Conformity Rule (40 CFR 93.153). The General Conformity Rule applies only to direct and indirect emissions generated by a federal action that are subject to New Source Review for which a federal permitting agency has directly caused or initiated, has continued program responsibility for, or can practically control. The rule does not include stationary industrial sources requiring air quality permits from local air pollution control agencies. Because the Project will likely require and/or receive one or more federal approvals, or future federal construction funding, the Project is subject to the implementing regulations of Section 176 of the FCAA.

The evaluation of whether the total direct and indirect emissions exceed the requirements of 40 CFR Section 93.158(c) is performed by comparing the total annual emissions to the applicable *de minimis* emissions level listed in 40 CFR Section 93.153(b). If the evaluation indicates that emissions exceed General Conformity *de minimis* thresholds, FRA must perform a conformity determination. The method for determining conformity depends on the pollutant and the circumstances surrounding the federal action. Most conformity demonstrations either mitigate the emission increases or demonstrate that the emissions have been or will be included in the SIP. If the evaluation indicates that the emissions do not exceed the *de minimis* thresholds, the action is exempt from a conformity determination and FRA must prepare a RONA.

<sup>&</sup>lt;sup>3</sup> Category of activities designated by a federal agency as having emissions below *de minimis* levels or otherwise do not interfere with the applicable State Implementation Plans or the attainment and maintenance of the NAAQS.



### State Plans, Policies, and Regulations

# California Clean Air Act and California Ambient Air Quality Standards

The California Clean Air Act (CCAA) is administered by CARB at the State level and by the air quality management districts and air pollution control districts at the regional and local levels. The CCAA requires all air districts in the State to endeavor to achieve and maintain the CAAQS. CAAQS are generally more stringent than the corresponding federal standards and incorporate additional standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles.

CARB regulates mobile air pollution sources, such as motor vehicles. CARB oversees the functions of local air pollution control districts and air quality management districts, which, in turn, administer air quality activities at the regional and county levels.

The State standards are summarized in Table K-1 located in Appendix K. The CCAA requires CARB to designate areas within California as either attainment or nonattainment for each criteria air pollutant based on whether the CAAQS have been achieved. Under the CCAA, areas are designated as nonattainment for a pollutant if air quality data shows that a State standard for the pollutant was violated at least once during the previous three calendar years. Exceedances that are affected by highly irregular or infrequent events are not considered violations of a State standard and are not used as a basis for designating areas as nonattainment. Under the CCAA, the SJVAB is designated as a nonattainment area for O<sub>3</sub>, PM<sub>2.5</sub>, and PM<sub>10</sub>.

### California State Implementation Plan

Federal clean air laws require areas with unhealthy levels of ozone, inhalable particulate matter, carbon monoxide, nitrogen dioxide, and sulfur dioxide to develop SIP. SIPs are comprehensive plans that describe how an area will attain the NAAQS. SIPs are not single documents, but rather a compilation of new and previously submitted plans, programs, district rules, State regulations, and federal controls.

Many of California's SIPs rely on the same core set of control strategies, including emission standards for cars and heavy trucks, fuel regulations, and limits on emissions from consumer products. State law makes CARB the lead agency for all purposes related to the SIPs. Local air districts and other agencies prepare SIP elements and submit them to CARB for review and approval. CARB then forwards SIP revisions to EPA for approval and publication in the Federal Register.

### Assembly Bill 617

In 2017, Governor Brown signed Assembly Bill (AB) 617 to develop a new community focused program to reduce exposure to air pollution more effectively and preserve public health. This bill directs CARB and all local air districts to develop and implement CERPs to protect communities disproportionally affected by air pollution.

In 2019, Stockton was nominated by SJVAPCD and selected by CARB as a monitoring community. The Stockton CERP was adopted by SJVAPCD in March 2021 and has been forwarded to CARB for adoption consideration. The Stockton CERP identified a wide range of measures designed to reduce



air pollution and exposure, including several partnership strategies to be implemented in between agencies and local organizations.

# B.1.14 NOISE AND GROUND-BORNE VIBRATION

The following federal and State plans, policies, and regulations inform the evaluation of noise and ground-borne vibration in this Final EA. A list of local plans, policies, and regulations is identified in Table B-1.

# Federal Plans, Policies, and Regulations

# Occupational Noise Exposure Standard (29 CFR § 1910.95)

The Occupational Noise Exposure Standard is noise standards set by OSHA. The standards set noise exposure protection for when the sound levels exceed the measurements set by OSHA.

# United States Environmental Protection Agency Railroad Noise Emission Standards (42 U.S.C. 4916)

Interstate rail carriers (such as freight railroads) must comply with EPA noise emission standards which are expressed as maximum measured noise levels and applicable to locomotives manufactured after 1979.

# Federal Railroad Administration Guidelines and Noise Emission Compliance (49 CFR 210)

FRA has regulations governing compliance with noise emissions from interstate railroads. FRA's Railroad Noise Emission Compliance Regulation (49 CFR 210) prescribes compliance requirements for enforcing railroad noise emission standards adopted by USEPA (40 CFR 201).

### Federal Transit Administration Guidelines

Similar to FRA, FTA developed a guidance manual in September 2018 entitled Transit Noise and Vibration Impact Assessment Manual (guidance manual) for assessing noise and ground-borne vibration effects from major rail projects intended to satisfy environmental review requirements and assist Project sponsors in addressing predicted construction and operation noise and ground-borne vibration during the design process. The FTA guidance manual noise and ground-borne vibration impact criteria for rail projects and their associated fixed facilities, such as storage and maintenance yards, passenger stations and terminals, parking facilities, and substations are described in Section 3.14, *Noise and Ground-borne Vibration*, and are the primary noise criteria used for the Project. FTA guidance is accepted by FRA.

### State Plans, Policies, and Regulations

# California Noise Control Act (Cal H.S.C. 46010 et. seq)

At the state level, the California Noise Control Act, enacted in 1973 (Health and Safety Code 46010 et seq.), requires the Office of Noise Control in the Department of Health Services to provide assistance to local communities developing local noise control programs. The Office of Noise Control also works with the Office of Planning and Research to provide guidance for preparing required noise elements in city and county general plans, pursuant to Government Code Section



65302(f). In preparing the noise element, a city or county must identify local noise sources and analyze and quantify, to the extent practicable, current and projected noise levels for various sources, such as passenger and freight railroad operations, including commuter rail alignments. The California Noise Control Act stipulates the mapping of noise-level contours for these sources, using community noise metrics appropriate for environmental impact assessment as defined in Section 3.14.3. Cities and counties use these as guides to making land use decisions to minimize the community residents' exposure to excessive noise.

# B.1.15 BIOLOGICAL RESOURCES

The following federal and State plans, policies, and regulations inform the evaluation of biological resources in this Final EA. A list of local plans, policies, and regulations is identified in Table B-1.

# Federal Plans, Policies, and Regulations

# Endangered Species Act (16 USC Section 1531, et seq., 50 CFR Part 402)

ESA of 1973 provides protective measures for federally listed endangered or threatened species and their habitats, from unlawful take. The ESA defines "take" to mean to "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." In 50 CFR Part 222, harm is further defined as an act that actually kills or injures fish or wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures fish or wildlife by significantly impairing essential behavioral patterns, including feeding, spawning, rearing, migrating, feeding, or sheltering.

ESA Section 7(a)(1) requires federal agencies to use their authority to further the conservation of listed species. ESA Section 7(a)(2) requires consultation with US Fish and Wildlife Service (USFWS) or NMFS if a federal agency undertakes, funds, permits, or authorizes any action that may affect endangered or threatened species or designated critical habitat (referred to as a federal nexus).

### Magnuson-Stevens Fishery Conservation and Management Act of 1976 (16 U.S.C. 1801 et seq)

Magnuson-Stevens Fishery Conservation and Management Act of 1976 (revised in 1996 and reauthorized 2007) is the primary law governing marine fisheries management in US federal waters.

Among other items, the Sustainable Fisheries Act revision in 1996 specifically outlined the responsibility of the US to conserve and facilitate long-term protection of EFH, defined as "those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity" (16 USC 1801). The 1996 revision also designated Habitat Areas of Particular Concern (HAPC), which are subsets of EFH for more focused consideration.

Under the act, federal agencies that fund, permit, or carry out activities that may adversely affect EFH or HAPCs are required to consult with NMFS regarding the potential adverse effects of proposed project activities, as well as to respond in writing to NMFS project-specific recommendations.



# Clean Water Act Section 404 (33 U.S.C. 1344)

The basis of CWA was enacted in 1948 and was called the Federal Water Pollution Control Act, but the Act was significantly reorganized and expanded in 1972. "Clean Water Act" became the Act's common name with amendments in 1972. CWA Section 404 established the program to regulate the discharge of dredged or fill material into waters of the US, including wetlands. Under this regulation, certain activities proposed in waters of the US, such as the placement of fill for the purposes of development, require a permit prior to initiation. The primary objective of this program is to stipulate that the discharge of dredged or fill material is not permitted if a practicable alternative to the proposed activities exists that would result in less effects on waters of the US, or if the proposed activity would result in significant adverse effects on these waters. To comply with these objectives, a permittee must document the measures taken to avoid and minimize effects on waters of the US and provide compensatory mitigation for any unavoidable effects.

# Clean Water Act Section 401 (33 U.S.C. 1341)

Under CWA Section 401, federal agencies are not authorized to issue a permit or license for any activity that may result in discharges to waters of the US unless a state or tribe where the discharge originates either grants or waives CWA Section 401 certification. Decisions made by states or tribes are based on the Project's compliance with EPA water quality standards as well as applicable effluent limitations guidelines, new source performance standards, toxic pollutant restrictions, and any other appropriate requirements of state or tribal law. In California, SWRCB is the primary regulatory authority for CWA Section 401 requirements.

# Bald and Golden Eagle Protection Act (16 U.S.C. 668-668c)

The Bald and Golden Eagle Protection Act (16 U.S.C. 668-668c), enacted in 1940 and amended several times since, prohibits anyone, without a permit issued by the Secretary of the Interior, from "taking" bald or golden eagles, including their parts, nests, or eggs. The Act provides criminal penalties for persons who "take, possess, sell, purchase, barter, offer to sell, purchase or barter, transport, export or import, at any time or any manner, any bald eagle ... [or any golden eagle], alive or dead, or any part, nest, or egg thereof." The Act defines "take" as "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb."

### Migratory Bird Treaty Act (16 U.S.C. 703-712)

Migratory birds are protected under the Migratory Bird Treaty Act of 1918 (MBTA). A list of species protected by the MBTA is currently codified in 50 CFR 10.13. In its current form, section 2(a) of the MBTA provides in relevant part that, unless permitted by regulations, it is unlawful:

At any time, by any means of in any manner, to pursue, hunt, take, capture, kill, attempt to take, capture, or kill, possess, offer for sale, sell, offer to barter, barter, offer to purchase, purchase, deliver for shipment, ship, export, import, cause to be shipped, exported, or imported, deliver for transportation, transport or cause to be transported, carry or cause to be carried, or receive for shipment, transportation, carriage, or export, any migratory bird, any part, nest, or egg of any such bird, or any product, whether or not manufactured, which consists, or is composed in whole or part, of any such bird or any part, nest, or egg thereof.



# Fish and Wildlife Coordination Act (16 U.S.C. 661-666c)

The Fish and Wildlife Coordination Act of 1958 requires that whenever any body of water is proposed or authorized to be impounded, diverted, or otherwise controlled or modified, the lead federal agency must consult with USFWS, the state agency responsible for fish and wildlife management, and NMFS. Section 662(b) of the act requires the lead federal agency to consider the recommendations of USFWS and other agencies.

# Executive Order 13112 – Invasive Species

EO 13112 was signed on Feb 3, 1999, directing all federal agencies to refrain from authorizing, funding, or carrying out actions or projects that may spread invasive species.

# National Invasive Species Act (Public Law 104-332)

The National Invasive Species Act of 1996 reauthorized and amended the Nonindigenous Aquatic Nuisance Prevention and Control Act of 1990 with a number of findings that highlighted a need for additional management measures to prevent further introduction and infestation of destructive species.

# Executive Order 11990 - Protection of Wetlands

EO 11990, signed on May 24, 1977, requires federal agencies to provide leadership and take action to minimize destruction, loss, or degradation of wetlands and to preserve and enhance the natural qualities of these lands.

# State Plans, Policies, and Regulations

There are no applicable State plans, policies, or regulations related to this resource topic.

# B.1.16 CUMULATIVE EFFECTS

The following federal and State plans, policies, and regulations inform the evaluation of cumulative effects in this Final EA. A list of local plans, policies, and regulations is identified in Table B-1.

Federal Plans, Policies, and Regulations

National Environmental Policy Act of 1969, as amended (42 U.S.C. 4321–4347)

# CEQ 1978 Regulations (40 CFR part 1508)

As defined under CEQ's NEPA Regulations under 40 CFR Section 1508.7," cumulative impact' is the impact on the environment that results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over time."

# State Plans, Policies, and Regulations

There are no applicable State plans, policies, or regulations related to this resource topic.



# B.1.17 CONSISTENCY WITH FEDERAL, STATE, REGIONAL, AND REGIONAL LOCAL PLANS AND PROGRAMS

Federal, state, regional, and local plans and regulatory documents applicable to the Project were reviewed for goals and policies applicable to the Project. Table B-1 analyzes the consistency of the Project with the identified goals and policies.





# Table B-1. Consistency with Goals and Policies

### **Goals and Policies**

#### Land Use and Planning

### FHWA, FRA, and FTA - Environmental Impact and Related Procedures (23 CFR Part 771)

23 CFR Part 771 Environmental Impact and Related Procedures prescribes the policies and procedures of the FHWA, FRA, and FTA for implementing the NEPA and provides the regulations and requirements for processing highway, public transportation, and railroad actions under NEPA. USDOT published a final rule in the Federal Register that includes 23 CFR Part 771, that was considered effective on November 28, 2018.

### California State Planning and Zoning Law

The 2011 Edition of the California State Planning and Zoning Law specifies how the state delegates most of the state's local land use and development decisions to the respective city or county and identifies the laws pertaining to land use regulations set by the local government's general plan requirements, specific plans, and zoning. **Consistent.** The Project's goal is to improve regional passenger travel efficiency by reducing conflicting train movements. Additionally, the Project would improve roadway access, safety, and mobility at the existing railway crossing for bicyclists and pedestrians. Therefore, the Project is consistent with 23 CFR Part 771, CEQ.

Consistency

**Consistent.** The Project will result in the permanent conversion of 10.87 acres of industrial zoned parcels for transportation use. However, the Project will implement Measure MM-1 (General Plan Amendment), in Section 3.1, *Land Use and Planning*, which requires that SJRRC, in coordination with CHSRA, will coordinate with the City to ensure that the City's General Plan is amended to reflect the new land use designations. Therefore, the Project is consistent with California State Planning and Zoning Law.

### Sustainable Communities and Climate Protection Act (SB 375)

SB 375, signed into law on September 30, 2008, requires that regional planning agencies include a SCS or alternative planning strategy in RTPs. This SCS provides guidance on the coordination of land use and GHG planning in order to meet regional GHG emissions reduction targets set by the CARB.

### San Joaquin County General Plan

**Goal LU-1.8:** Support for Alternative Transportation Modes: The County shall encourage land use patterns that promote walking and bicycling and the use of public transit as alternatives to the personal automobile. **Consistent.** The Project is intended to improve regional passenger and freight rail efficiency and travel reliability by reducing conflicting train movements; and thus, would result in long-term reductions in criteria pollutant emissions and an overall benefit to the community surrounding the air quality RSA. Therefore, the Project is consistent with SB 375.

**Consistent.** The Project's goal is to improve regional passenger travel efficiency by reducing conflicting train movements. Additionally, the Project would improve roadway access, safety, and mobility at the existing railway crossing for bicyclists and pedestrians. Therefore, the Project is consistent with this general plan goal.



### City of Stockton General Plan

**Policy LU-3.2:** Retain narrower roadways and reallocate ROW space to preserve street trees and mature landscaping and enhance the pedestrian and bicycle network within and adjacent to residential neighborhoods.

**Policy LU-3.3:** Maintain or expand the amount of public park and open space area currently available in each neighborhood.

Action LU-6.3C: Coordinate, to the extent possible, upgrades and repairs to roadways with utility needs, infrastructure upgrades, and bicycle and pedestrian improvements.

**Policy LU-6.2**: Prioritize development and redevelopment of vacant, underutilized, and blighted infill areas.

**Consistent.** The Project's goal is to improve regional passenger travel efficiency by reducing conflicting train movements. Additionally, the Project would improve roadway access, safety, and mobility at the existing railway crossing for bicyclists and pedestrians.

Aesthetic treatments, such as trees, will be incorporated if the viaduct or retaining wall design option is chosen, included as BMP AES-2 (Coordinate Design Elements to Reduce Visual Effects) in Table 3.8-1, in Section 3.8, *Visual Quality and Aesthetics*. Therefore, the Project is consistent with this general plan policy.

**Consistent.** The Project would not require any permanent full or partial acquisitions of existing open space resources. A TCE at Union Park would be required as part of the Project. However, this impact would be temporary, and the portion of the park used as a TCE would be reverted its original condition after Project completion. Therefore, the Project is consistent with this general plan policy.

**Consistent.** The Project's goal is to improve regional passenger travel efficiency by reducing conflicting train movement. Additionally, the Project would improve roadway access, safety, and mobility at the existing railway crossing for bicyclists and pedestrians. During construction, SJRRC would coordinate, to the extent possible, any potential upgrades and repairs to roadways with utility needs, infrastructure upgrades, and bicycle and pedestrian movements. Therefore, the Project is consistent with this general plan action.

**Consistent.** As discussed in Section 3.3, *Relocations and Real Property Acquisitions*, remnant parcels may result from full and partial acquisitions as a result of the Project. As stated in Section 3.3, these moderate adverse effects from these remnant parcels will be mitigated through the implementation of Measure MM RLC-2 (Property Ownership and Agreement Coordination Efforts). Therefore, with the implementation of Measure MM RLC-2, the Project would be consistent with Policy LU-6.2.



**Policy LU-6.3**: Ensure that all neighborhoods have access to well-maintained public facilities and utilities that meet community service needs.

**Policy CH-1.1:** Maintain walking and wheeling facilities and parks that are safe and accessible in all areas of Stockton.

**Goal TR-1:** Provide an integrated transportation system that enables safe and efficient movement of people and goods for all modes of travel.

**Policy TR-1.2:** Enhance the use and convenience of rail service for both passenger and freight movement.

As discussed in Section 3.4, *Parks and Recreation and Section 4(f) Resources*, 3.7 *Traffic and Transportation*, the Project would implement permanent sidewalk and street improvements within the Project Study Area, and return areas temporarily affected by the Project to existing or better conditions once construction is complete. Therefore, short-term effects to community resources and access would be minimized and long-term effects would be beneficial to the neighboring community. Therefore, the Project is consistent with this general plan policy.

**Consistent.** The Project's goal is to improve regional passenger travel efficiency by reducing conflicting train movements. Additionally, the Project would improve roadway access, safety, and mobility at the existing railway crossing for bicyclists and pedestrians.

In conjunction with the SJRRC Cabral Station Expansion Project, the Stockton Diamond Grade Separation Project extends sidewalk improvements to Union Street on East Weber Avenue, East Main Street, East Market Street, and East Scotts Avenue. The at-grade rail crossings and sidewalk improvements will be constructed to Americans with Disabilities Act (ADA) standards and will be designed to current California Public Utilities Commission (CPUC), City, and Union Pacific (UP) Railroad standards. Improvements will also include required lighting and multimodal warning devices and will be coordinated with the City, CPUC, and UP. Therefore, the Project is consistent with this general plan policy.

**Consistent.** The Project's purpose is to reduce passenger and freight rail delays and associated congestion, maintain key community connections, improve multimodal access, provide local and regional environmental and economic benefits, and address safety by closures and enhancements at key roadway-rail grade crossings. Therefore, the Project is consistent with this general plan goal.

**Consistent.** The Project's goal is to improve regional passenger travel efficiency by reducing conflicting train movements, which would also improve freight rail travel efficiency. Therefore, the Project is consistent with this general plan policy.



**Goal TR-3:** Design transportation infrastructure to help reduce pollution and vehicle travel and its associated policies and actions.

**Consistent.** The Project will replace at-grade crossing with a grade separated crossing at East Hazelton Avenue and East Scotts Avenue. Further, as discussed in Section 3.13, *Air Quality*, the improved freight mobility would reduce the total daily occupancy of the roadway crossings by approximately 30 percent in 2045. The reduction in crossing occupancy would improve on-road traffic flow and reduce vehicle idling in the Project Study Area. Therefore, the Project is consistent with this general plan goal.

### **Community Effects and Growth**

# Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (42 U.S.C. 4601-4655)

Provide for uniform and equitable treatment of persons displaced from their homes, businesses, or farms by federal and federally assisted programs and to establish uniform and equitable land acquisition policies for federal and federally assisted programs. **Consistent.** As discussed in Section 3.3, *Relocations and Real Property Acquisition*, the Project will implement Measure MM RLC-1 (Relocation Assistance) to ensure uniform and equitable treatment or persons displaced from their businesses and ensure that they are fairly compensated for private property that is acquired as part of the Project. Therefore, no adverse effects on the community related to acquisition of private property would occur and the Project is consistent with the Uniform Act.

### 2018 Regional Transportation Plan/Sustainable Communities Strategy

**Policy:** Enhance the environment for existing and future generations and conserve energy

Policy: Maximize mobility and Accessibility

Policy: Increase safety and security

**Policy:** Preserve the efficiency of the existing transportation system

Policy: Support economic vitality

**Consistent.** As discussed in Chapter 1, *Project Description*, the Project's purpose is to reduce passenger and freight rail delays and associated congestion, maintain key community connections, improve multimodal access, provide local and regional environmental and economic benefits, and address safety by closures and enhancements at key roadway-rail grade crossings. Thereby, also improving roadway access, safety, and mobility at the existing railway crossing for bicyclists and pedestrians and resulting in long-term reductions in criteria pollutant emissions. Therefore, the Project is consistent with these RTP/SCS policies.



**Policy:** Promote interagency coordination and public participation for transportation decision making and planning efforts

Policy: Improve quality of life for residents

### San Joaquin County General Plan

**Goal TM-1.17:** The County shall minimize social and economic disruptions to communities resulting from the maintenance and construction of the transportation system.

**Goal ED-3.3:** Ensure Adequate Transportation Improvements. The County shall strive to provide an adequate circulation system to support job growth and economic development, connecting critical goods movement facilities and minimizing conflict with other transportation needs. **Consistent.** As discussed in Chapter 4, *Comments and Coordination*, Project Development (PDT) meetings between representatives from CHSRA, SJRRC, SJCOG, and the City have been held to discuss the status of the Project. In addition, the Final EA will be circulated for public comments from community stakeholders, local agencies, regional agencies, and utility providers. Therefore, the Project is consistent with this 2018 RTP/SCS policy.

**Consistent.** As discussed above, the Project would reduce passenger and freight rail, enhance community connections, improve multimodal access, and address safety at key roadway-rail grade crossings. Therefore, with the improvements, the quality of life for residents would be improved upon as well. Therefore, the Project is consistent with this 2018 RTP/SCS policy.

**Consistent.** As discussed in Section 3.2, *Community Effects and Growth,* and Section 3.3, *Relocations and Real Property Acquisition,* the Project will incorporate Measures BMP TR-7 (Transportation Management Plan) in Table 3.7-6, and BMP COM-1 (Outreach and Engagement Plan) in Table 3.2-2, which would address effects associated with local communities during construction. Therefore, the Project is consistent with this general plan goal.

**Consistent.** The Project's purpose is to reduce passenger and freight rail delays and associated congestion, maintain key community connections, improve multimodal access, provide local and regional environmental and economic benefits, and address safety by closures and enhancements at key roadway-rail grade crossings. Therefore, the implementation of the Project would support the goal of providing an adequate circulation system to support community needs. Additionally, as discussed in Appendix A, Alternatives Considered but Eliminated from *Further Consideration*, the alternative developed for the Project was the alternative that would result in the least amount of effects to local circulation. Thus, the Project is consistent with this general plan goal.



### San Joaquin County Community Response to Homelessness Strategic Plan 2020

**Goal 1:** Establish a coordinated and engaged regional system of care.

**Goal 2:** Increase access and reduce barriers to homeless crisis response services.

**Goal 3:** Ensure households experiencing homelessness have access to affordable and sustainable permanent housing.

**Consistent.** As discussed in Section 3.2, *Community Effects and Growth*, the Project will incorporate BMP COM-1 (Outreach and Engagement Plan) in Table 3.2-2, which would address the homeless encampments that are present within the Mormon Slough area and to provide relocation assistance for transient populations. Therefore, the Project is consistent with these San Joaquin County Community Response to Homelessness Strategic Plan 2020 goals.



### City of Stockton General Plan

Action CH-1.1A: Plant and maintain appropriate shade trees along all City streets to reduce heat exposure, prioritizing areas of the city with significantly less tree canopy; provide a buffer between the travel way and bicycle and pedestrian facilities; and provide other amenities like well-marked crosswalks, bulb-outs, and pedestrian scale street lighting. **Consistent.** The Project plans to incorporate street tree planting, as identified in BMP AES-3, in Table 3.8-1, in Section 3.8, *Visual Quality and Aesthetics* in the Final EA. BMP AES-3 requires that SJRRC, in coordination with CHSRA, ensure coordination with the City of Stockton on the incorporation of trees along the west side of South Union Street for the viaduct and retaining wall design options. The incorporation of trees would improve the visual quality of the proposed flyover structure. SJRRC will coordinate with the City of Stockton and UP on the locations and types of plantings along the street to provide the visual screening of the viaduct or retaining wall structures.

Additionally, as discussed in Chapter 2.0, *Project Description*, the Project extends sidewalk improvements to Union Street on East Weber Avenue, East Main Street, East Market Street, and East Scotts Avenue. The at-grade rail crossings and sidewalk improvements will be constructed to ADA standards and will be designed to current CPUC, City, and UP Railroad standards. Improvements will also include required lighting and multimodal warning devices and will be coordinated with the City, CPUC, and UP. Therefore, the Project is consistent with this general plan action.



**Policy CH-2.1**: Prioritize maintenance of streets and improvement of sidewalks, parks, and other infrastructure in areas of the city that historically have historically been comparatively underserved by public facilities, including implementation of complete streets where needed, especially in conjunction with infrastructure maintenance and improvement projects. **Consistent.** As discussed in *Section 2.0, Project Description*, the Project extends sidewalk improvements to Union Street on East Weber Avenue, East Main Street, East Market Street, and East Scotts Avenue. The at-grade rail crossings and sidewalk improvements will be constructed to ADA standards and will be designed to current CPUC, City, and UP Railroad standards. Improvements will also include required lighting and multimodal warning devices and will be coordinated with the City, CPUC, and UP.

Additionally, as discussed in Section 3.4, *Parks* and *Recreation*, the Project would require only the temporary storage of equipment on-site at Union Park, and this area (approximately 0.03-acre, or 1,316 square feet) would be restored to its existing condition, if not better, after the completion of construction. During construction activities, none of the Park's recreational features will be affected, and access to Union Park will be maintained throughout construction. Therefore, the Project is consistent with this general plan action.



Action CH-2.1A: When considering parks and infrastructure maintenance and improvement projects, consider the following through an open and engaging process inclusive of community residents:

- Whether the affected community is underserved or disadvantaged.
- What the priority needs of the community are and whether the project would address those needs.
- Whether the project would negatively impact the community, such as through increased exposure to pollutants or displacement of residents or local businesses.

**Consistent.** As discussed in Section 3.5, *Environmental Justice*, it is acknowledged that the Project is located within predominately minority and low-income EJ populations. The Project's goal is to improve regional passenger travel efficiency by reducing conflicting train movements in the Project Study Area, which would thereby provide an overall beneficial effect on the community, specifically EJ populations.

The Project would include improvements in transportation access to employment, recreational, shopping, educational, and community resources; safety enhancement at roadway-rail grade crossings; as well as improvement in air quality through the reduction of idling trains and vehicles.

By providing these improvements to the predominantly EJ communities in the Project Study Area, the Project will assist in improving conditions for historically disenfranchised populations.

Further, extensive targeted stakeholder outreach for EJ populations was conducted as part of the Project EIR and summarized under *Stakeholder Outreach*, in Section 3.5, Environmental Justice. Similar comprehensive targeted public outreach efforts detailed in Chapter 4, *Public Outreach*, were also conducted as part of the Draft EA.

During the EIR and EA efforts, the Project team made extensive efforts to reach EJ communities as part of the Project's Communications Plan. The Project team understands that EJ populations should be represented continually throughout Project phases and will continue to conduct targeted outreach efforts during final design and construction phases. Therefore, the Project is consistent with this general plan action.



Action CH-2.1F: Work with transit agencies, non-profit organizations, and communities to maintain and improve transit service in underserved and disadvantaged neighborhoods to connect residents with jobs, shopping, and services. **Consistent.** The Project team has coordinated actively with transit agencies such as the San Joaquin Regional Transit District (RTD), SJCOG, CPUC, UP, Caltrans and the City's Department of Public Works in the process of Project design and planning.

Additionally, extensive targeted stakeholder outreach for EJ populations was conducted as part of the Project EIR and summarized under Stakeholder Outreach, in Section 3.5, Environmental Justice. Similar comprehensive, targeted public outreach efforts detailed in Chapter 4, Public Outreach, were also conducted as part of the Draft EA. Non-profit and community organizations that were invited to participate in Project meetings included local organizations and community business owners, including the Nor Cal Carpenters Union. Imagen LLC. Catholic Charities of Stockton, Environmental Coalition for Water Justice, Café Coop, African American Chamber of Commerce, and Downtown Stockton Alliance.

As discussed in Section 3.5, *Environmental Justice*, it is acknowledged that the Project is located within predominately minority and low-income EJ populations. The Project's goal is to improve regional passenger travel efficiency by reducing conflicting train movements in the Project Study Area, which would thereby provide an overall beneficial effect on the community, specifically EJ populations.

Further, the Project would include improvements in transportation access to employment, recreational, shopping, educational, and community resources; safety enhancement at roadway-rail grade crossings; as well as improvement in air quality through the reduction of idling trains and vehicles. Therefore, the Project is consistent with this general plan action.



**Policy CH-2.2:** Prioritize maintenance of streets and improvement of sidewalks, parks, and other infrastructure in areas of the city that historically have been comparatively underserved by public facilities, including implementation of complete streets where needed, especially in conjunction with infrastructure maintenance and improvement projects.

**Policy CH-2.3:** Focus on reducing the unique and compounded environmental impacts and risk in disadvantaged communities.

Action CH-2.3A: Build strong ties with disadvantaged communities to ensure that local residents can make significant contributions to planning decisions through the following:

- Use culturally appropriate approaches.
- Consider the convenience of the timing and locations of meetings to community members. Use social media and other communication techniques for those without time to attend public meetings.
- Provide translation services and translated materials when needed.
- Partner with non-profit organizations who are already active within the community.

**Policy CH-4.2:** Support homeless members of the Stockton community with programs to improve quality of life.

Action CH-4.2A: Coordinate with local and regional agencies and community organizations to address the needs of homeless people, including shelter, food, clothing, health care, mental health, and transportation.

Action CH-4.2B: Provide information about shelter and food assistance programs via the range of the City's communication tools.

**Consistent.** As discussed in Section 3.4, *Parks* and Recreation and Section 4(f) Resources, 3.7 *Traffic and Transportation*, the Project would implement sidewalk and street improvements and return area temporarily impacted by the Project to preconstruction conditions once construction is complete. Therefore, effects to community resources and access would be minimized and improved. The Project is consistent with this general plan policy.

**Consistent.** As analyzed throughout Chapter 3, effects resulting from the Project would be reduced or mitigated for through the implementation of BMP and mitigation measures. Therefore, as summarized in Section 3.2, *Community Effects and Growth*, and Section 3.5, *Environmental Justice*, and 3.16, *Cumulative*, compounded environmental effects to disadvantaged communities would not be adverse. Therefore, the Project is consistent with this general plan policy.

**Consistent.** During the EIR and EA, the Project team made extensive efforts to reach EJ communities as part of the Project's Communications Plan. This included targeting stakeholder organizations with access to low-income, minority, and transient populations. A complete list of targeted activities is included in and summarized under *Stakeholder Outreach*, in Section 3.5, Environmental Justice. Similar comprehensive targeted public outreach efforts detailed in Chapter 4, *Public Outreach*, were also conducted as part of the Draft EA. Therefore, the Project is consistent with this general plan action.

**Consistent.** As stated above, the Project incorporates BMP COM-1 (Outreach and Engagement Program). Therefore, the Project is consistent with this general plan policy and related actions.



### **Relocations and Real Property Acquisition**

### California Relocation Assistance Act and CCRs (Cal. Gov't Code 7260 et seq.)

Under the provision of Government Code 7260 et seq., all public entities adopt rules and regulations to administer relocation assistance and to implement the payments. The rules and regulations are to conform to CCR 6000 et seq., the implementing regulation of Government Code 7260 et seq.—also known as the "Guideline". The Guideline is adopted pursuant to the provisions of Section 41135, Health and Safety Code, in order to implement, interpret, and make specific provisions relating to relocation assistance, last resort housing, and real property acquisition. **Consistent.** As discussed in Section 3.3, *Relocations and Real Property Acquisition*, the Project will implement Measure MM RLC-1 (Relocation Assistance) to ensure fair compensation of private property that is acquired as part of the Project. Therefore, no adverse effect to private property would occur and the Project is consistent with the California Relocation Assistance Act and CCRs.

### Parks, Recreation, and Section 4(f) Resources

# Section 4(f) of the Department of Transportation Act of 1966, as amended (49 USC 303, 23 USC 138, 23 CFR Part 774)

Requirements under Section 4(f) of the Department of Transportation Act of 1966, stipulate USDOT agencies cannot approve the use of land from publicly owned parks, recreational areas, wildlife and waterfowl refuges, or public and private historical sites unless there is no feasible and prudent avoidance alternative to the use of that land; and the action includes all possible planning to minimize harm to the property resulting from such use or that it is determined that the use of the property will have a *de minimis* impact. **Consistent.** As discussed in Section 3.4, *Parks* and Recreation and Section 4(f) Resources and Appendix D, Section 4(f) and 6(f) Evaluation, the parks identified within the resource study areas would not be permanently impacted. Although a portion of Union Park would be temporarily affected by a TCE during construction, this would be considered a temporary occupancy exemption from use of the Section 4(f) resource, and the area used for the TCE would be restored in its original condition after completion of construction activities.

Further, the Stockton Downtown Commercial Historic District would be a historic Section 4(f) resource affected by the Project due to temporary construction areas proposed in the eastern edge of the district necessary for utility relocation, protection in place, and/or removal.

All modifications to utilities would be conducted within the public ROW and there would be no permanent encroachment into the district or construction activity within any historic property boundary of the district's contributing buildings.

In accordance with the Section 106 process and after consultation with interested Native American tribes, on December 9, 2021, SHPO agreed with the project finding of "no adverse effect." For the purposes of Section 4(f), CHSRA has used SHPO's written concurrence in the FOE to



preliminarily determine that the TCE for utilities in the Stockton Downtown Historic District would have *de minimis* impacts. On April 11, 2022, CHSRA informed the SHPO, per CFR 774.5(b)(1), of its intent to make a preliminary *de minimis* impact determination based on SHPO's December 9, 2021, concurrence on the Section 106 finding of "no adverse effect."

Therefore, the Project is consistent with the Section 4(f) of the Department of Transportation Act.

# **Consistent.** As discussed in Section 3.4, *Parks and Recreation and Section 4(f) Resources* and Appendix D, *Section 4(f) and 6(f) Evaluation*, the parks identified within the resource study areas would not be permanently impacted and would be protected from conversion from the Project as Section 4(f) properties. Although a portion of Union Park would be temporarily affected by a TCE during construction, all parks within the Project Study Area would continue to operate during construction. Therefore, the Project is consistent with the San Joaquin County General Plan goal.

**Consistent.** The Project would not result in the conversion of open space and agricultural lands to urban uses. As previously stated, a portion of Union Park will be temporarily affected by a TCE; however, once construction is complete, the affected portion would be returned to preconstruction conditions. Therefore, the Project is consistent with this general plan goal.

### San Joaquin County General Plan

**Goal LU-8:** Protect open space for its recreational, agricultural, safety, and environmental value and provide adequate parks and open space areas throughout the County.

**Goal LU-8.1:** The County shall limit, to the extent feasible, the conversion of open space and agricultural lands to urban uses and place a high priority on preserving open space lands for recreation, habitat protection and enhancement, flood hazard management, public safety, water resource protection, and overall community benefit.



**Goal LU-8.3:** The County shall encourage the conservation and restoration of rivers, creeks, and sloughs as multi-functional open space corridors that complement adjoining development and connect city and County recreation facilities (e.g., parks).

Consistent. The Project would entail a crossing over the Mormon Slough. As discussed in Section 3.15, Biological Resources, the Project will incorporate BMP BIO-5 (Restoration of Temporarily Affected Areas) and BMP BIO-6 (Vehicle Access and Speed Limits). The Project will also implement mitigation through Measures MM BIO-2 (National Oceanic and Atmospheric Administration Consultation), MM BIO-3 (Mitigation for Aquatic Resources), MM BIO-4 (Compliance with Permitted Mitigation Measures), and BIO-5 (Preparation of Formal Jurisdictional Delineation). Therefore, no direct or indirect longterm adverse effects would occur as a result of the Project related to the Mormon Slough. Additionally, as previously stated, the temporarily affected portion of Union Park by a TCE, would be returned to preconstruction conditions once construction is complete. Therefore, the Project is consistent with this general plan goal.





### City of Stockton General Plan

**Policy LU-5.2.** Protect natural resource areas, fish and wildlife habitat, scenic areas, open space areas, agricultural lands, parks, and other cultural/historic resources from encroachment or destruction by incompatible development.

**Policy LU-6.3.** Ensure that all neighborhoods have access to well-maintained public facilities and utilities that meet community service needs.

**Consistent.** As discussed in Section 3.15 *Biological Resources*, the Project will incorporate all BMP measures identified in Table 3.15-2. Further, the Project will implement mitigation in the form of Measures MM BIO-1 (Compliance with SJMSCP), MM BIO-2 (National Oceanic and Atmospheric Administration Consultation), MM BIO-3 (Mitigation of Aquatic Resources), MM BIO-4 (Compliance with Permitted Mitigation Measures), and MM BIO-5 (Preparation of Formal Jurisdictional Delineation). Therefore, no direct or indirect long-term effects to natural resources and habitat would be considered adverse.

Additionally, the temporarily affected portion of Union Park by a TCE, would be returned to preconstruction conditions once construction is complete. No scenic areas, open space areas, agricultural lands, parks would be adversely impacted.

Further as discussed in Section 3.9, *Cultural Resources*, the Project would not affect existing built historic property features or character, or archaeological resources within the Project Study Area. During construction BMP CUL-1 (Archaeological and Tribal Monitoring), BMP CUL-2 (Worker Environmental Awareness Protection Training), BMP CUL-3 (Archaeological and Tribal Monitor), and CUL-3 (Inadvertent Discovery of Remains During Construction), will require monitoring and proper handling of unanticipated discoveries. Therefore, the Project is consistent with this general plan policy.

**Consistent.** Please refer to the consistency discussion under the topic of *Land Use and Planning*. Based on that discussion, the Project is consistent with this general plan goal under this topic, *Parks, Recreation, and Section 4(f) Resources*.



### **Environmental Justice**

### Federal Actions to Address EJ in Minority Populations (EO 12898)

EO 12898 effective February 11, 1994, focuses federal attention on the environmental and human health effects of federal actions placed on minority and low-income populations with the goal of achieving environmental protection for all communities. Agencies are required to identify and address the disproportionate effects on minority and low-income populations due to project actions, to develop an EJ strategy during the planning phase, and to ensure that there are mitigation measures and opportunities for public input and participation during the planning process.

**Consistent.** As discussed in Section 3.2, Community Effects and Growth, and Section 3.5, Environmental Justice, no direct or indirect longterm effects on residents would occur within the community effects and growth study area, which is comprised primarily of EJ populations, as there would be no acquisition of residential properties as part of the Project. The Project would reduce train congestion that causes vehicle delays at roadway-rail crossings and creates potential motor vehicle, rail, bicycle, and pedestrian conflicts. The reliability of rail operation is also essential for those residing and working in the region who need improved access to essential services and economic centers. Additionally, on top of the extensive public outreach efforts aimed at EJ communities during the EIR process, the Project team has implemented a similar public outreach plan aimed for EJ communities during the EA process. Therefore, the Project is consistent with the Federal Actions to Address EJ in Minority Populations EO 12898.

### Presidential Memorandum Accompanying EO 12898

The Presidential Memorandum dated February 11, 1994, emphasizes the importance of existing laws, such as Title VI of the Civil Rights Act of 1964 and NEPA, that can assist with implementation of the principles of the order. The memorandum provides that, in accordance with Title VI, "each Federal agency shall ensure that all programs or activities receiving Federal assistance that affect human health or the environment do not directly, or through contractual or other arrangements, use criteria, methods, or practices that discriminate on the basis of race, color, or national origin." **Consistent.** As discussed in Section 3.5, *Environmental Justice*, the Project would not result in disproportionately high and adverse human health and environmental effects, including social and economic effects, on EJ minority and low-income populations. Therefore, the Project is consistent with this Presidential Memorandum Accompanying EO 12898.



# Actions to Address EJ in Minority Populations and Low-Income Populations, USDOT Order 5610.2c

USDOT Order 5610.2c effective May 16, 2021, requires the consideration of EJ principles in all USDOT programs, policies and activities. It describes how the objectives of EJ will be integrated into planning and programming, rulemaking, and policy formulation. It sets forth steps to identify and address, as appropriate, disproportionally high and adverse effects on minority populations or low-income populations through EJ analysis conducted as part of the planning and project delivery process for federally funded or approved transportation projects; it specifies the measures to be taken to address instances of disproportionally high and adverse effects; and requires consideration of the benefits of transportation programs, policies, and other activities where minority populations and low-income populations benefit, at a minimum to the same level as the general population as a whole when determining impacts on minority and low-income populations.

**Consistent.** As discussed in Section 3.5, *Environmental Justice*, the Project would not result in disproportionately high and adverse human health and environmental effects, including social and economic effects, on EJ minority and low-income populations. Therefore, the Project is consistent with the Actions to Address EJ in Minority Populations and Low-Income Populations, USDOT Order 5610.2c.

# Improving Access to Services for Persons with Limited English Proficiency (EO 13166)

EO 13166 signed on August 11, 2000, requires federal agencies to examine the services they provide, identify any need for services to those with LEP, and develop and implement a system to provide those services so people with LEP can have meaningful access to them. **Consistent.** As discussed in Section 3.5, *Environmental Justice*, on top of the extensive public outreach efforts aimed at EJ communities during the EIR process, the Project team has implemented a similar public outreach plan aimed for EJ communities during the EA process. Therefore, the Project is consistent with the Improving Access to Services with LEP EO 13166.

### California Government Code 11135(a)

No one shall be discriminated to receive full and equal access to the benefits of any programs or activities conducted, operated or administered by the state or by any state agency. **Consistent.** As discussed in Section 3.5, *Environmental Justice*, the Project would not result in disproportionately high and adverse human health and environmental effects, including social and economic effects, on EJ minority and low-income populations. Thus, there would be full and equal access to the long-term improvements provided by the Project, and the Project is consistent with California Government Code 11135(a).



### **Utilities and Emergency Services**

### California Integrated Waste Management Act of 1989 (AB 939)

The California Integrated Waste Management Act of 1989 requires local jurisdictions to adopt an Integrated Waste Management Plan that addresses waste disposal, management, source reduction, and recycling and ultimately leads to a reduction of waste. CalRecycle is the agency responsible for leading the initiative. Solid waste reduction would be part of the Project construction plans. **Consistent.** As discussed in Section 3.6, *Utilities and Emergency Services*, construction of the Project would generate solid waste from construction activities. The solid waste created would be reused or recycled where possible, the remainder would be disposed of in local solid waste landfills in accordance with the Project's specific Waste Management Plan. Therefore, the Project is consistent with the California Integrated Waste Management Act.

### California Government Code (Section 4216)

The California Government Code (Section 4216) mandates that any person must notify and coordinate with relevant stakeholders prior to construction activities that involve ground disturbance. Contractors are required to mark any area that is to be disturbed with paint and notify USA North, at least 2 days prior to the start of any digging activities. After receiving the notification, USA North would transmit the information regarding the construction to all participating members.

### San Joaquin County General Plan

**Objective IS-1.8.** Infrastructure Financing, Design, and Construction: The County shall require new development to fund the initial financing, design, and construction of required infrastructure facilities. All financing (including operation and maintenance) and improvement plans shall be subject to County review and approval. Consistent. As discussed in Section 3.6, *Utilities* and Emergency Services, the Project will incorporate BMP UTL-3 (Utility Avoidance Coordination), which requires a coordination with the City and other utility providers during final design to address utility relocation effects. Standard best practices such as identify and marking any areas to be disturbed by paint prior to digging will be incorporated. Therefore, the Project is consistent with the California Government Code.

**Consistent.** As discussed in Section 3.6, *Utilities and Emergency Services*, during final design SJRRC in coordination with CHSRA, will coordinate with the governing bodies and utility providers to ensure utility infrastructure and required relocations will be completed as a part of the Project and limit service interruptions to existing customers. Therefore, the Project is consistent with general plan Objective IS-1.8.



# City of Stockton General Plan

**Policy LU-6.3:** Ensure that all neighborhoods have access to well-maintained public facilities and utilities that meet community service needs.

Action LU-6.3C: Coordinate, to the extent possible, upgrades and repairs to roadways with utility needs, infrastructure upgrades, and bicycle and pedestrian improvements.

# Stockton Municipal Code

Chapter 8.28 Construction and Demolition Debris Waste Reduction

Chapter 13.36 Regulations and Procedures for the Removal of Overhead Utility Facilities and the Installation of Underground Facilities in Underground Utility Districts **Consistent.** The Project's goal is to improve regional passenger travel efficiency by reducing conflicting train movement, maintain key community connections, improve multimodal access, and address safety by closures and enhancements at key roadway-rail grade crossings. As discussed in Section 3.2, *Community Effects and Growth*, the Project will incorporate BMP TR-7 (Transportation Management Plan), which would provide continuous access within the neighborhoods within Project Study Area. Therefore, the Project is consistent with this general plan policy.

**Consistent.** Please refer to the consistency discussion under the topic of *Land Use and Planning*. Based on that discussion, the Project is consistent with this general plan action under this topic, *Utilities and Emergency Services*.

**Consistent.** As discussed in Section 3.6, *Utilities* and Emergency Services, construction debris would be disposed by an industrial waste collector or a commercial recyclable material collector that is authorized by the City with a necessary solid waste hauling permit. Solid waste will be taken the Forward Landfill in Manteca, the North County Landfill and Recycling Center in Lodi, or the Foothill Sanitary Landfill in Linden; and construction material will be processed at the East Stockton Transfer Station. Therefore, the Project is consistent with Chapter 8.28 of the Stockton Municipal Code.

**Consistent.** As part of project approval and permits needed for construction, the Project would be required to be designed according to local regulations as well as coordinate with utility providers that may be impacted. Therefore, the Project is consistent with Chapter 13.36 of the Stockton Municipal Code.



### Traffic and Transportation/Pedestrian and Bicycle Facilities

### Federal Passenger Rail Investment and Improvement Act (Public Law No. 110-432, Division B)

Federal law requires the State of California to update its California State Rail Plan every 5 years as a condition of eligibility for federal funding for rail programs **Consistent.** The Project is currently planned and programmed in the California State Rail Plan; and thus, eligible for federal funding for rail programs. Therefore, the Project is consistent with the Federal Passenger Rail Investment and Improvement Act.

### Title 23 of the USC for Highways, Statewide Planning

Title 23 of the USC for Highways and Statewide Planning provides the general requirements for statewide planning to encourage and promote the safe and efficient management, operation, and development of the surface transportation system. **Consistent.** The Project's goal is to improve regional passenger travel efficiency by reducing conflicting train movement, maintain key community connections, improve multimodal access, and address safety by closures and enhancements at key roadway-rail grade crossings. Therefore, the Project is consistent with Title 23 of the USC for Highways and Statewide Planning.

### SJCOG RTP and SCS

At the statewide level, the Project is included in the 2020 California Freight Mobility Plan, and the Project's design and ROW phases are programmed in the Interregional portion of the 2020 STIP. The Project is included in the 2018 San Joaquin County RTP/SCS, as well as the current SJCOG 2021 FTIP, which was adopted at the February 25, 2021, SJCOG Board Meeting.

The State of California requires each transportation planning agency to prepare and adopt an RTP directed at achieving a coordinated and balanced regional transportation system.

The 2018 RTP/SCS provides a "sustainability vision" through year 2042 that recognizes the significant impact the transportation network has on the region's public health, mobility, and economic vitality. As the region's comprehensive long-range transportation planning document, the Plan serves as a guide for achieving public policy decisions that will result in balanced investments for a wide range of multimodal transportation improvements.

**Consistent.** The Project is included in the 2020 California Freight Mobility Plan, and the Project's design and ROW phases are programmed in the Interregional portion of the 2020 STIP. Further, the Project is included in the 2018 San Joaquin County RTP/SCS as well as the current SJCOG 2021 FTIP.

Additionally, the Project's goal is to improve regional passenger travel efficiency by reducing conflicting train movement, maintain key community connections, improve multimodal access, and address safety by closures and enhancements at key roadway-rail grade crossings. Therefore, the Project is consistent with the SJCOG RTP/SCS.



### San Joaquin Regional Rail Commission Plans

SJRRC's ACE*forward* project is relevant to the Project because of its proposed improvements in Stockton and use of the UP Fresno line and Stockton Diamond. Additionally, Valley Rail<sup>4</sup> implements two new daily round-trips for the Amtrak San Joaquin's service to better connect San Joaquin Valley travelers with the Sacramento Area, and an extension of ACE between Sacramento and Ceres/Merced. **Consistent.** The Project's goal is to improve regional passenger travel efficiency by reducing conflicting train movement, maintain key community connections, improve multimodal access, and address safety by closures and enhancements at key roadway-rail grade crossings, which will directly assist SJRRC's ACE*forward* project objectives by providing better connections within the San Joaquin Valley. Therefore, the Project is consistent with the San Joaquin Regional Rail Commission Plans.

### San Joaquin County General Plan

San Joaquin County adopted the San Joaquin County General Plan in December 2016. The General Plan provides a comprehensive framework to address the current issues in the County, the vision for the future, and strategies to achieve such visions.

### City of Stockton General Plan

The City of Stockton's General Plan was adopted on December 4, 2018. The General Plan provides a tool for the city to plan for the future. It contains goals, policies, and actions that can boost the economy and improve community facilities and well-being. **Consistent.** The Project's goal is to improve regional passenger travel efficiency by reducing conflicting train movement, maintain key community connections, improve multimodal access, and address safety by closures and enhancements at key roadway-rail grade crossings, which would address San Joaquin County's General Plan and policies for transportation. Therefore, the Project is consistent with the San Joaquin County General Plan.

**Consistent.** The Project's goal is to improve regional passenger travel efficiency by reducing conflicting train movement, maintain key community connections, improve multimodal access, and address safety by closures and enhancements at key roadway-rail grade crossings, which would address City of Stockton's General Plan's goals and policies for transportation. Therefore, the Project is consistent with the City's general plan.

### City of Stockton Bicycle Master Plan

The City of Stockton adopted the Bicycle Master Plan in December 2017. This update to the City of Stockton Bicycle Master Plan is "intended to not only envision a future for Stockton where bicycling is a viable option for people of all ages and abilities, but to also serve as an implementation roadmap for elected officials and City staff to achieve that goal". **Consistent.** The Project would not preclude the implementation of any of the master bicycle plans within the City as identified in the City of Stockton Bicycle Master Plan. Therefore, the Project is consistent with the City of Stockton Bicycle Master Plan.

<sup>&</sup>lt;sup>4</sup> Valley Rail includes "ACE forward" and San Joaquin's expansion.\_



### **Visual Quality and Aesthetics**

### City of Stockton Municipal Code

**Chapter 15.32.** Neglected, vacant and abandoned properties create nuisance conditions that must be remedied by owners of the property.

**Consistent.** As discussed in Section 3.3, *Relocations and Real Property Acquisitions*, remnant portions of existing parcels from the permanent acquisition of existing parcels may result in indirect long-term moderate adverse effects from large open space areas becoming voids in the Downtown area fabric.

These direct effects on real property from remnant properties will be mitigated through the implementation of Measure MM RLC-2 (Property Ownership and Agreement Coordination Efforts). Therefore, with the implementation of Measure MM RLC-2, the Project would be consistent with Chapter 15.32 of the City's Municipal Code.

### City of Stockton General Plan

Action LU-1.3B. Work with transportation agency partners and private property owners to improve maintenance, code enforcement, screening, and landscaping of viewsheds along major transportation routes into Stockton, including rail corridors, Highway 99, Highway 4, and Interstate 5.

Action LU-5.1C. Require landscape plans to incorporate native and drought-tolerant plants in order to preserve the visual integrity of the landscape, conserve water, provide habitat conditions suitable for native vegetation, and ensure that a maximum number and variety of well adapted plants are maintained.

Action LU-5.3A. At the interface between development and rural landscapes, use landscaping and other attractive edging instead of soundwalls and similar utilitarian edges of developments to maintain the visual integrity of open space. **Consistent.** The Project will incorporate BMP AES-1 through BMP AES-3, in Table 3.8-1, in Section 3.8, *Visual Quality and Aesthetics*. BMP AES-1 (Lighting Plan) will ensure lighting is selected and installed to minimize glare on adjacent properties or into the night sky to maintain visual integrity within the Project Study Area. BMP AES-2 (Coordinate Design Elements to Reduce Visual Effects) and BMP AES-3 (Street Tree Planting) will add additional visual interest with cultural or natural elements to improve the visual quality in the Visual Quality and Aesthetics RSA. Therefore, with the incorporation of these BMPs, the Project would be consistent with these general plan actions.



### Action LU-6.3D.

Design public facilities and infrastructure to maintain and improve the visual quality of the urban environment, including through the following approaches:

- Designing buildings and infrastructure to fit into and complement their ultimate surroundings.
- Buffering buildings and infrastructure from their surroundings as appropriate to shield unsightly areas from public view.
- Providing appropriate landscaping.

### **Cultural Resources**

### NEPA 1969, as amended (42 U.S.C. 4321-4347)

Determine if action may "significantly affect the quality of the human environment," an agency must consider, among other things, unique characteristics of the geographic area such as proximity to historic or cultural resources and the degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the NRHP. **Consistent.** No archaeological resources have been identified within the APE; therefore, none have been identified as significant under Section 106 of the NHPA. Ground disturbing activities associated with the Project, however, may affect unknown buried cultural resources.

Therefore, the Project will incorporate BMP CUL-1 through BMP CUL-4, in Table 3.9-3, in Section 3.9, *Cultural* Resources, which will assist in the avoidance and minimizations of such effects. With the incorporation of BMP CUL-1 through BMP CUL-4, no direct or indirect short-term adverse effects on archeological properties will be anticipated under the Project. Therefore, with Project would be consistent with NEPA.

### Section 106 of the NHPA (54 U.S.C. § 306108)

Identify and evaluate NRHP eligibility of properties within the APE and evaluate the effect of the undertaking on historic properties.

ACHP and SHPO, as well as other consulting parties, must have a reasonable opportunity to comment on any undertaking that would adversely affect historic properties. SHPOs administer the national historic preservation program at the state level, which includes consulting with federal agencies during Section 106 review. **Consistent.** As discussed in Section 3.9, *Cultural Resources*, the Project would have no adverse effect on built historic properties within the APE. The Project Finding of Effect (FOE) Report was submitted to SHPO on August 4, 2021; SHPO concurred with the finding of no adverse effect on December 9, 2021.Therefore, the Project is consistent with Section 106 of the NHPA.



# Section 4(f) of the Department of Transportation Act of 1966, as amended (49 USC 303, 23 USC 138, 23 CFR Part 774)

Prohibits the use of a publicly owned park, recreation area, wildlife or waterfowl refuge, or publicly or privately owned historic sites of national, state, or local significance listed in or determined eligible for listing in the NRHP for a transportation project unless the Secretary of Transportation has determined that there is no feasible and prudent alternative to such use. A de minimis impact to a Section 4(f) historic property can be made when there is a Section 106 finding of no adverse effect on a historic property, a Section 106 finding of no effect or a finding of no historic properties affected. **Consistent.** Based on the evaluation of potential permanent incorporation, temporary occupancy, or constructive use of the Stockton Downtown Historic District discussed in Section 3.4 *Parks and Recreation and Section 4(f) Resources*, and Appendix D, *Final Section 4(f) and Section 6(f)*, of this Final EA, the Project would have *de minimis* impacts to the Stockton Downtown Historic District.

On April 11, 2022, CHSRA informed the SHPO per CFR 774.5(b)(1) of its intent to make a preliminary *de minimis* impact determination based on SHPO's December 9, 2021, concurrence on the Section 106 finding of "no adverse effect." <u>A copy of the letter sent by</u> <u>CHSRA to SHPO on April 11, 2022, is provided in</u> <u>Attachment A of Appendix D, *Final Section 4(f)* <u>and Section 6(f) Evaluation.</u></u>

Therefore, the Project is consistent with Section 4(f) of the Department of Transportation Act.

### California Register of Historical Resources

**Section 5024.1.** Generally, a resource is considered by the lead agency to be "historically significant" if the resource meets the criteria for listing in the CRHR (CCR, Title 14(3), Section 15064.5(a)(3)).

**Consistent.** As discussed in Section 3.9, *Cultural Resources*, the Project would not affect the existing character or use of any built historic property within the APE, as there are no direct physical effects to the resources. Therefore, the Project is consistent with Section 5024.1 of the CRHR.



### City of Stockton General Plan

**Goal LU-5:** Protect, maintain, and restore natural and cultural resources.

**Policy LU-5.2:** Protect natural resource areas, fish and wildlife habitat, scenic areas, open space areas, agricultural lands, parks, and other cultural/historic resources from encroachment or destruction by incompatible development.

Action LU-5.2D: Require the following tasks by a qualified archaeologist or paleontologist prior to project approval: 1) Conduct a record search at the Central California Information Center located at California State University Stanislaus, the University of California Museum of Paleontology at Berkeley, and other appropriate historical or archaeological repositories, 2) conduct field surveys where appropriate, 3) prepare technical reports, where appropriate, meeting California Office of Historic Preservation or other appropriate standards, and 4) where development cannot avoid an archaeological or paleontological deposit, prepare a treatment plan in accordance with appropriate standards, such as the Secretary of the Interior's Standards for Treatment of Archaeological Sites.

**Consistent.** As discussed above, the Project will incorporate BMP measures identified in Table 3.13-2, in Section 3.13, *Biological Resources*, which includes Measures BMP BIO-1 through BIO-8, and mitigation of biological resources effect through Measures MM BIO-1 (Compliance with SJMSCP), MM BIO-2 (National Oceanic and Atmospheric Administration Consultation), MM BIO-3 (Mitigation of Aquatic Resources), MM BIO-4 (Compliance with Permitted Mitigation Measures), and MM BIO-5 (Preparation of Formal Jurisdictional Delineation).

Additionally, the Project will incorporate all BMP measures identified in Table 3.9-3, in Section 3.9, *Cultural Resources*, which includes Measures BMP CUL-1 through BMP CUL-4. Therefore, short-term or long-term Project effects on natural resources and effect to known or undiscovered cultural resources within the Project Study Area, would not be considered adverse. Therefore, the Project is consistent with this general plan goal.

**Consistent.** Please refer to the consistency discussion under the topic of *Parks, Recreation, and Section 4(f) Resources*. Based on that discussion, the Project is consistent with this general plan goal under this topic, *Cultural Resources*.

**Consistent.** As discussed in Section 3.9, *Cultural Resources*, based on an archaeological and records search, site visit, and the technical report analysis, no archaeological resources have been identified within the APE. Ground disturbing activities associated with the Project, however, may affect unknown buried cultural resources. Therefore, the Project will incorporate BMP CUL-1 through BMP CUL-4, in Table 3.9-3, in Section 3.9, *Cultural* Resources, which will assist in the avoidance and minimizations of such effects.

With the incorporation of BMP CUL-1 through BMP CUL-4, no direct or indirect short-term adverse effects on archeological resources would be anticipated under the Project. Therefore, the Project is consistent with this action in relation to archaeological resources. For paleontological requirements that have been met under this action, please refer to the discussion under *Geology, Soils, Seismicity, and Paleontology*.



Action LU-5.2E: Continue to consult with Native American representatives, including through early coordination, to identify locations of importance to Native Americans, including archaeological sites and traditional cultural properties.

Action LU-5.2F: If development could affect a tribal cultural resource, require the developer to contact an appropriate tribal representative to train construction workers on appropriate avoidance and minimization measures, requirements for confidentiality and culturally appropriate treatment, other applicable regulations, and consequences of violating State laws and regulations.

Action LU-5.2G: Comply with appropriate State and federal standards to evaluate and mitigate impacts to cultural resources, including tribal, historic, archaeological, and paleontological resources. **Consistent.** As discussed in Section 3.9, *Cultural Resources*, outreach letters were sent to tribal governments providing information about the Project and seeking input from the tribal community. Section 106 consultation with the tribes was formally initiated in December 2020.

Representatives of CHRSA met with a representative of the North Valley Yokuts Tribe and the Confederated Villages of Lisjan in January and February 2021, respectively. BMP Measures to ensure proper treatment of any inadvertent discoveries of interest to tribal representatives during Project construction activities were discussed and have since been agreed to and included in Table 3.9-3, which includes Measures BMP CUL-1 through BMP CUL-4. Therefore, the Project is consistent with these general plan actions.

**Consistent.** Part of the Project's approval is contingent upon consistency with all applicable federal, state, and local standards. Further, as discussed above, the Project representatives of CHSRA have consulted with interested tribes and the Project will incorporate BMP measures, identified as Measures BMP CUL-1 through BMP CUL-4, in Table 3.9-3 of Section 3.9, *Cultural Resources*.

Additionally, the Project will incorporate BMP GEO-4 (Preparation and Implementation of Paleontological Resources Management Plan) from Table 3.11-2, in Section 3.11, *Geology, Soils, Seismicity, and Paleontology*, to address short-term and long-term effect to paleontological resources. Therefore, the Project would not result in effect to cultural resources, including tribal, historic, archaeological, and paleontological resources, and Project is consistent with this general plan action.



# Hydrology, Floodplains, and Water Quality

# CWA of 1972, as amended (33 U.S.C 1251-1387)

Important CWA sections are as follows:

- Sections 303 and 304 require states to establish water quality standards, criteria, and guidelines.
- Section 401 requires an applicant for a federal license or permit to conduct any activity that may result in a discharge to waters of the US to obtain certification from the state that the project will be in compliance with state water quality standards. The 401 certifications are obtained from the appropriate RWQCB, dependent on the project location, and are required before USACE issues a Section 404 permit (See below).
- Section 402 establishes the NPDES, a permitting system for the discharges (except for dredge or fill material) of any pollutant into waters of the US, including regulating municipal and industrial discharges to surface waters of the US. The US EPA delegated the implementation and administration of the NPDES program in California to the California SWRCB.
- Section 404 establishes a permit program for the discharge of dredge or fill material into waters of the U.S., including wetlands. This permit program is administered by the USACE.

### EO 11988

EO 11988 (Floodplain Management) directs all federal agencies to refrain from conducting, supporting, or allowing actions in floodplains unless it is the only practicable alternative. FHWA requirements for compliance are outlined in 23 CFR 650 Subpart A. As discussed in Section 3.10, *Hydrology, Floodplain, and Water Quality*, though Mormon Slough is dry and fed mainly through intermittent surface runoff, Mormon Slough is listed on the Final 2014/2016 California Integrated Report (CWA Section 303[d] List / 305[b] Report) (SWRCB 2017) for the pollutants listed in Table 3.10-1, 303(d) Listed Pollutants.

Additionally, a large portion of the Project falls within the Mormon Slough Stockton Diverting Canal to Commerce Street segment. This segment is outside the Stockton Urban Water Bodies Pathogen TMDL; however, the downstream segment (Mormon Slough from Commerce Street to Stockton Deep Water Channel) is on the 303[d] list for indicator bacteria and organic enrichment/low dissolved oxygen. Therefore, the Project is consistent with the CWA.

**Consistent.** The Project would not alter Mormon Slough and will require an encroachment permit (BMP HYD-2) from CVFPB for work in and adjacent to Mormon Slough. A drainage report (BMP HYD-5) will be prepared during final design for the permanent structure over Mormon Slough. The Project would be constructed to be consistent with the standards set by CVFPB. Additionally, the Project would be designed to allow for current and both projected future flow cases but would leave the existing Fresno Subdivision culverts in place. Therefore, the Project is consistent with EO 11988.



### Porter-Cologne Water Quality Control Act (Water Code, §13000 et seq.)

California's Porter-Cologne Water Quality Control Act, enacted in 1969, provides the legal basis for water quality regulation in California. This act requires a "Report of Waste Discharge" for any discharge of waste (liquid, solid, or gaseous) to land or surface waters that may impair beneficial uses for surface and/or groundwater of the state. Additionally, it prohibits discharges of "waste" as defined, and this definition is broader than the CWA definition of "pollutant." Discharges under the Porter-Cologne Act are permitted by WDR and may be required even when the discharge is already permitted or exempt under the CWA. If a RWQCB determines that waters are impaired for one or more constituents and that the standards cannot be met through point source or non-point source controls (NPDES permits or WDRs), the CWA requires the establishment of a TMDL. TMDLs specify allowable pollutant loads from all sources (point, nonpoint, and natural) for a given watershed.

### SWRCB and RWQCB

The SWRCB adjudicates water rights, sets water pollution control policy, issues water board orders on matters of statewide application, and oversees water quality functions throughout the state by approving Basin Plans, TMDLs, and NPDES permits. RWCQBs are responsible for protecting beneficial uses of water resources within their regional jurisdiction using planning, permitting, and enforcement authorities to meet this responsibility. **Consistent.** The Project will incorporate BMP HYD-3 (Construction SWPPP and BMP HYD-4 (Industrial Stormwater Prevention Plan), identified in Table 3.10-2 in Section 3.10, *Hydrology*, *Floodplain, and Water Quality,* which will ensure that during construction the Project will comply with thresholds and standards set forth in the NPDES permit and the TMDLs, and other applicable plans for discharges from the Project construction limits. Therefore, the Project is consistent with the Porter-Cologne Water Quality Control Act.

**Consistent.** Please see the response above, Porter-Cologne Water Quality Control Act. The Project will incorporate BMPs HYD-3 (Construction SWPPP) and HYD-4 (Industrial SWPPP) to ensure consistency with regulatory permits and plans. The Project is consistent with the SWRCB and RWQCB.



### CGP (NPDES No. CAS000002, SWRCB Order No. 2009-0009-DWQ, as amended)

The CGP (NPDES No. CAS000002, SWRCB Order No. 2009-0009-DWQ, adopted on November 16, 2010) became effective on February 14, 2011, and was amended by Order No. 2010-0014-DWQ and Order No. 2012-0006-DWQ. The CGP authorizes the discharge of stormwater (and certain unauthorized nonstormwater discharges) from construction sites that disturb 1 acre or more of land, and from smaller sites that are part of a larger, common plan of development. For all projects subject to the CGP, the applicant is required to develop and implement an effective SWPPP, to implement soil erosion and pollution prevention control measures, and to obtain coverage under the CGP.

### **RWQCB Basin Plan**

The Project is under the jurisdiction of the Central Valley RWQCB. The Central Valley RWQCB implements the Basin Plan for the Sacramento River Basin and the San Joaquin River Basin (2018) to regulate surface and groundwater quality in the region

**Consistent.** As previously stated in Section 3.10, *Hydrology, Floodplains, and Water Quality*, the Project will incorporate BMP HYD-3 (Construction SWPPP) and BMP HYD-4 (Industrial SWPPP) to prepare a construction SWPPP and an industrial SWPPP which will incorporate sediment, erosion, and pollution prevention best management practices and to obtain coverage under the CGP. Therefore, the Project will be consistent with the CGP.

**Consistent.** The Project would result in construction in and adjacent to the Mormon Slough. The Central Valley RWQCB's Basin Plan for the Central Valley Region does not list beneficial uses for Mormon Slough; however, the Lower Calaveras Hydrologic Area with a Hydrologic Sub-Area number of 531.30 as having beneficial uses for cold freshwater habitat, fish spawning, and fish migration that occurs outside of the RSA.

BMP HYD-1 (Stormwater Treatment Prevention Plan), BMP HYD-3 (Construction SWPPP) and BMP HYD-4 (Industrial SWPPP) will be incorporated as a part of the Project to ensure compliance with the Central Valley RWQCB Basin Plan. Therefore, the Project is consistent with the RWQCB Basin Plan.

### CVFPB (California Code Regs. Title 23, Division 1)

CVFPB exercises regulatory authority within its jurisdiction to maintain the integrity of the existing flood control system and designated floodways by issuing permits for encroachments. The CVFPB has mapped designated floodways along more than 60 streams and rivers in the Central Valley. **Consistent.** The Project would not alter Mormon Slough and will require an encroachment permit from CVFPB for work in and adjacent to Mormon Slough as identified in BMP HYD-1 (Stormwater Management Prevention Plan). Therefore, the Project would be consistent with the CVFPB.


#### City of Stockton – Mormon Channel Specific Plan

The City of Stockton adopted and approved the Mormon Channel Specific Plan in August of 1989. The specific plan was created to facilitate minor improvements to provide 100-year flood protection as well as identify the channel's rightof-way, westerly from SR 99 to the Stockton Channel. The plan identifies the future 500-year flood hydraulic capacity of 3000 cubic feet per second within the Mormon Channel and includes implementation techniques for the City's General Plan with regard to drainageways and floodways. **Consistent.** The Project would result in a permanent structure over Mormon Slough. A drainage report, as identified in BMP HYD-5 will be prepared during final design that will include hydraulic analysis for the structure over Mormon Slough.

The hydraulic analysis would include the criteria set forth in the City of Stockton Mormon Channel Specific Plan of a future flow of 3,000 cubic feet per second for Mormon Slough. Therefore, the Project is consistent with the City of Stockton Mormon Channel Specific Plan.



# Geology, Soils, Seismicity, and Paleontology

### CWA

The CWA establishes several major integrated regulatory programs, standards, and plans. Relevant items include the following:

The NPDES Program - Establishes an effluent permit system for point source (e.g., pipe, ditch, sewer) discharges of pollutants into waters of the US. The NPDES permit system requires those permitted to maintain records and report on the amount and nature of discharged effluent waste components. The stormwater program is a part of the NPDES program and is designed to reduce or eliminate the discharge of contaminated stormwater into waters of the US. The program requires the following stormwater discharges to be covered by an NPDES permit:

- discharge associated with industrial activity
- discharge from a large or medium municipal separate storm sewer system, or
- discharge which EPA or the state/tribe determines contributes to a violation of a water quality standard or which is a significant contributor of pollutants to waters of the United States

National and Local Pretreatment Standards -Requires new and existing industrial users to pretreat wastewater discharged to POTWs to prevent pollutants in excess of certain limits from passing through POTWs, causing interference in the operation of the treatment works and to protect the quality of sludge generated by these plants (§ 307).Dredge or Fill Discharge Permit Program -Establishes a permit system, administered by USACE, for regulating the placement of dredge or fill material into waters of the US, including wetlands (§ 404). **Consistent.** The Project will incorporate the City of Stockton's Municipal Code Section 15.48.050, *Construction and Application* to address potential adverse effects related to erosion.

In addition, the Project will incorporate BMP GEO-1 (Geologic Hazards) identified in Table 3.11-2, and BMP HYD-3 (Construction SWPPP), identified in Table 3.10-2 in Section 3.10, *Hydrology, Floodplain, and Water Quality*. With the incorporation of BMP GEO-1 and BMP HYD-3, no direct or indirect short-term or long-term adverse effects on geology, soils, and seismicity as it relates to erosion is anticipated under the Project. Therefore, the Project is consistent with the CWA.





# PRPA (16 U.S.C. 470aaa)

The PRPA of 2009 codified the generally accepted practice of limited vertebrate fossil collection and limited collection of other rare and scientifically significant fossils by qualified researchers. Researchers must obtain a permit from the appropriate state or federal agency and agree to donate any materials recovered to recognized public institutions, where they will remain accessible to the public and to other researchers. Both the US Forest Service and the BLM have adopted implementation policies for the PRPA.

### American Antiquities Act (16 U.S.C. 431-433)

The American Antiquities Act of 1906 is the first law of the United States to protect the cultural and natural heritage of the US, providing legal protection of cultural and natural resources of historic or scientific interest on federal lands. Some federal agencies include fossils in their interpretation of "antiquities." Consistent. The Project utilized the BLM adopted implementation policies for the PRPA. As discussed in section 3.11, Geology, Soils, Seismicity, and Paleontology, the BLM Potential Fossil Yield Classification (PFYC) system (BLM 2016) was used to complete a paleontological sensitivity analysis of the RSA using the results of data reviews and field survey. As stated in that section, PFYC is a commonly used predictive resource management tool that classifies geologic units on their likelihood to contain paleontological resources using a scale of 1 (very low potential) to 5 (very high potential). The PFYC ranking system is summarized in Table 3.11-1 of that section. Therefore, the Project is consistent with the PRPA.

**Consistent.** As discussed in Section 3.11, Geology, Soils, Seismicity, and Paleontology, although there are no documented paleontological localities within the boundaries of the paleontological RSA, construction activities for the Project may result in effects on paleontological resources if the early Holocene- to late Pleistocene-age Modesto Formation is encountered during excavations. The Project will incorporate BMP GEO-4 (Preparation and Implementation of a Paleontological Resources Management Plan), identified in Table 3.11-2. With incorporation of BMP GEO-4, no direct or indirect short-term adverse effects on paleontological resources would occur under the Project. Further, by employing the same BMP measures, no direct or indirect long-term adverse effects on paleontological resources would result. Therefore, the Project would be able to help protect AQA antiquities, and the Project would be consistent with the American Antiquities Act.





# Alquist-Priolo Act (CA PRC § 2621)

The Alquist-Priolo Act was enacted in 1972 to reduce the hazard of surface faulting to structures designed for human occupancy. The main purpose of the law is to prevent the construction of buildings used for human occupancy on the surface trace of active faults.

# California PRC

The California PRC (Chapter 1.7, Sections 5097, 5097.5, and 30244) includes state requirements for the assessment and management of paleontological resources. Section 21000 et seq. (CEQA) addresses potential effect to paleontological resources under Appendix G, Section VII(f).

**Consistent.** As discussed in Section 3.11, *Geology, Soils, Seismicity, and Paleontology*, the Project is not located within an Alquist-Priolo Earthquake Fault Zone. Therefore, no direct or indirect short-term or long-term effects on geology, soils, and seismicity as it relates to fault rupture would be anticipated and the Project is consistent with the Alquist-Priolo Act.

**Consistent.** As discussed in Section 3.11, *Geology, Soils, Seismicity, and Paleontology,* although there are no documented paleontological localities within the boundaries of the paleontological RSA, construction activities for the Project may result in effects on paleontological resources if the early Holocene- to late Pleistocene-age Modesto Formation is encountered during excavations.

The Project will incorporate BMP GEO-4 (Preparation and Implementation of a Paleontological Resources Management Plan), identified in Table 3.11-2. With incorporation of BMP GEO-4, no direct or indirect short-term adverse effects on paleontological resources would occur under the Project and short-term impacts on paleontological resources would be considered less than significant under CEQA.

Further, by employing the same BMP measures, no direct or indirect long-term adverse effects on paleontological resources would result, and longterm impacts on paleontological resources would be considered less than significant. Therefore, the Project would be consistent with the California PRC.



# SHMA of 1990 (CA PRC, Chapter 7.8, § 2690-2699.6)

The SHMA of 1990 directs the California Department of Conservation, California Geological Survey to identify and map areas prone to earthquake liquefaction hazards, earthquake-induced landslides, and amplified ground shaking. SHMA requires the State Geologist to establish regulatory zones (Zones of Required Investigation) and to issue appropriate maps (Seismic Hazard Zone maps). **Consistent.** As discussed in Section 3.11, *Geology, Soils, Seismicity, and Paleontology*, no active faults have been mapped on the Project site and the Project is not located within an Alquist-Priolo Earthquake Fault Zone. Therefore, no direct or indirect short-term or long-term effects on geology, soils, and seismicity as it relates to fault rupture is anticipated under the Project.

Additionally, the Project will incorporate BMP GEO-1 (Geologic Hazards) and BMP GEO-2 (Geology and Soils) identified in Table 3.11-2. With the incorporation of BMP GEO-1 and BMP GEO-2, no direct or indirect short-term or longterm adverse effects to geology, soils, and seismicity as it relates to the City's vulnerability to seismic activity due to its proximity to major earthquake faults or any seismic hazards are anticipated under the Project. Further, the Project will incorporate BMP GEO-3 (Implement Geotechnical Recommendations), in Table 3.11-2. With the incorporation of BMP GEO-3, no direct or indirect short-term or longterm adverse effects on geology, soils, and seismicity as it relates to the earthquake-induced liquefaction is anticipated under the Project.

Based on the discussion above, with the incorporation of BMP GEO-1 through BMP GEO-3, the Project would be consistent with the SHMA.



# **NPDES Permit**

In California, the SWRCB administers regulations that are mandated by EPA and requires the permitting of stormwater-generated pollution under NPDES. See Section 3.9,

Hydrology/Floodplains and Water Quality, for more information about NPDES and SWPPP as they pertain to water pollution and runoff BMPs.

# CBC (Title 24 CCR)

Title 24 of the CCR, known as the CBC or "Title 24," contains the regulations that govern the construction of buildings in California. The CBC contains general building design and construction requirements relating to fire and life safety, structural safety, and access compliance (Division of the State Architect 2018). Chapter 18, Soils and Foundations, of the CBC regulates the excavation of foundations and retaining walls, including the preparation of preliminary soil, geologic, geotechnical, and supplemental ground-response reports. Chapter 18 also regulates expansive soils analysis and the depth to groundwater table determination.

Consistent. The Project will incorporate the City of Stockton's Municipal Code Section 15.48.050, Construction and Application to address potential adverse effects related to erosion, which contributes to stormwater-generated pollution. The Project will also incorporate BMP GEO-1 (Geologic Hazards) identified in Table 3.11-2, and BMP HYD-3 (Construction SWPPP), identified in Table 3.10-2 in Section 3.10, Hydrology, Floodplain, and Water Quality. With the incorporation of BMP GEO-3 and BMP HYD-3, no direct or indirect short-term or long-term adverse effects on geology, soils, and seismicity as it relates to erosion and its contributions to stormwater run-off is anticipated under the Project. Therefore, the Project is consistent with the NPDES permit.

**Consistent.** As discussed in Section 3.11, *Geology, Soils, Seismicity, and Paleontology*, the Project will incorporate BMP GEO-1 through BMP GEO-3, identified in Table 3.11-2. With the incorporation of BMP GEO-1 through BMP GEO-3, no direct or indirect short-term or long-term adverse effects on geology, soils, and seismicity, as it relates to the Project's exposure to underlying expansive soils consisting of expansive clay are anticipated under the Project. Therefore, the Project would be consistent with the CBC.



# Stockton Municipal Code—Section 15.48.050, Construction and Application

The Stockton Municipal Code—Section 15.48.050, Construction and Application, requires that construction activities be designed and conducted to minimize the runoff of sediment and all other pollutants onto public properties, other private properties, and into the waters of the United States. Section 15.48.110, Erosion Control Requirements, contains specific provisions for erosion control for those construction projects where a grading permit is not required. Section 15.48.070, Permit Requirements, includes requirements for a grading permit that apply to most construction projects. Such permits require implementation of erosion control measures, often referred to as BMPs.

# City of Stockton General Plan

**Action LU-5.2D**. Require the following tasks by a qualified archaeologist or paleontologist prior to project approval:

- Conduct a record search at the Central California Information Center located at California State University Stanislaus, the University of California Museum of Paleontology at Berkeley, and other appropriate historical or archaeological repositories.
- Conduct field surveys where appropriate.
- Prepare technical reports, where appropriate, meeting California Office of Historic Preservation or other appropriate standards.
- Where development cannot avoid an archaeological or paleontological deposit, prepare a treatment plan in accordance with appropriate standards, such as the Secretary of the Interior's Standards for Treatment of Archaeological Sites.

**Consistent.** The Project will incorporate the City of Stockton's Municipal Code Section 15.48.050, *Construction and Application* to address potential adverse effects related to erosion. The Project will also incorporate BMP GEO-1 (Geologic Hazards) identified in Table 3.11-2, and BMP HYD-3 (Construction SWPPP), identified in Table 3.10-2 in Section 3.10, *Hydrology, Floodplain, and Water Quality.* With the incorporation of BMP GEO-3 and BMP HYD-3, no direct or indirect short-term or long-term adverse effects on geology, soils, and seismicity as it relates to erosion is anticipated under the Project. Therefore, the Project is consistent with the Stockton Municipal Code – Section 14.48.050.

**Consistent.** Based on the review of literature and available databases for paleontological resources were conducted, as discussed in Section 3.11 *Geology, Soils, Seismicity, and Paleontology*, the Project will incorporate BMP GEO-4 (Preparation and Implementation of a Paleontological Resources Management Plan). With the incorporation of BMP GEO-4, no direct or indirect short-term or long-term adverse effects on paleontological resources would be anticipated under the Project. Therefore, the Project is consistent with this general plan action.

For the Project's consistency with the archaeological resource elements of this action, please refer to the previous discussion under *Cultural Resources*.



#### **Hazardous Waste and Materials**

# FCAA (42 U.S.C. 7609)

The FCAA is intended to protect the public from hazardous airborne contaminants that can affect human health. The National Emissions Standards for hazardous air pollutants were established under the FCAA. These emissions standards include the regulation of asbestos.

### CWA Section 402(p) (33 U.S.C. 1342(p))

The CWA regulates discharges and spills of pollutants, including hazardous materials, to surface waters and groundwater.

**Consistent.** As discussed in Section 3.12, *Hazardous Waste and Materials*, the Project will incorporate BMP HAZ-8 (Pre-Demolition Investigation), which will require surveys of hazardous building materials, such as asbestos, prior to demolition of any structures. If such materials are discovered, a plan for proper removal shall be prepared in accordance with applicable OSHA and San Joaquin County Environmental Health Department requirements. Therefore, the Project is consistent with the FCAA.

**Consistent:** As discussed in Section 3.12. Hazardous Waste and Materials, the Project will incorporate BMP HAZ-1 (Prepare a Construction HMMP), BMP HAZ-2 (Property Acquisition Phase I and Phase II ESAs), BMP HAZ-3 (Prepare a General Construction Soil Management Plan), BMP HAZ-4 (Prepare Parcel-Specific Soil Management Plans and HASPs), BMP HAZ-5 (Prepare a Project Construction HASP), BMP HAZ-6 (LUST Sites and Coordination with DTSC), BMP HAZ-7 (Halt Construction Work if Potentially Hazardous Materials/Abandoned Oil Wells are Encountered), and BMP HAZ-8 (Pre-Demolition Investigation). Implementation of these measures would aim to protect the environment, including surface waters and groundwater resources, from spills and release incidents. The handling, storage, transport, and disposal of any hazardous waste or materials would be subject to federal and state regulations and local health and safety requirements (those specified by SJRRC, railroad operators, or property owners on a case-by-case basis). Therefore, the Project is consistent with the CWA.



# Safe Drinking Water Act (42 U.S.C. 300(f) et seq.)

The Safe Drinking Water Act regulates discharges of pollutants to underground aquifers and establishes standards for drinking water quality. Consistent: As discussed in Section 3.12, Hazardous Waste and Materials, the Project will incorporate BMP HAZ-1 (Prepare a Construction HMMP), BMP HAZ-2 (Property Acquisition Phase I and Phase II ESAs), BMP HAZ-3 (Prepare a General Construction Soil Management Plan), BMP HAZ-4 (Prepare Parcel-Specific Soil Management Plans and HASPs), BMP HAZ-5 (Prepare a Project Construction HASP), BMP HAZ-6 (LUST Sites and Coordination with DTSC), BMP HAZ-7 (Halt Construction Work if Potentially Hazardous Materials/Abandoned Oil Wells are Encountered), and BMP HAZ-8 (Pre-Demolition Investigation). Implementation of these measures will aim to protect the environment, including underground aguifers, from spills and release incidents. The handling, storage, transport, and disposal of any hazardous waste or materials would be subject to federal and state regulations and local health and safety requirements (those specified by SJRRC, railroad operators, or property owners on a case-by-case basis). Therefore, the Project is consistent with the Safe Drinking Water Act.

#### Federal Insecticide, Fungicide and Rodenticide Act (7 U.S.C. 136 and 40 C.F.R. Parts 152 to 171)

The Federal Insecticide, Fungicide and Rodenticide Act regulates the manufacturing, distribution, sale, and use of pesticides. **Consistent:** As discussed in Section 3.12, *Hazardous Waste and Materials,* the Project would require the use of routine hazardous materials and substances, including pesticides. The handling, storage, transport, and disposal of any hazardous waste or materials would be subject to federal and state regulations and local health and safety requirements (those specified by SJRRC, railroad operators, or property owners on a case-by-case basis). Therefore, the Project is consistent with the Federal Insecticide, Fungicide and Rodenticide Act.



# *Emergency Planning and Community Right to Know Act (42 U.S.C. 11001 et seq. and 40 C.F.R. Parts 350.1 et seq.)*

The Emergency Planning and Community Right to Know Act regulates facilities that use hazardous materials in quantities that require reporting to emergency response officials. **Consistent:** As discussed in Section 3.12, *Hazardous Waste and Materials,* the Project would require the use of routine hazardous materials and substances. The handling, storage, transport, and disposal of any hazardous waste or materials would be subject to federal and state regulations and local health and safety requirements (those specified by SJRRC, railroad operators, or property owners on a case-by-case basis). Therefore, the Project is consistent with the Emergency Planning and Community Right to Know Act.

#### EO 12088, Federal Compliance with Pollution Control

US Presidential EO 12088 requires federal agencies to take necessary actions to prevent, control, and abate environmental pollution from facilities and activities under the control of federal agencies.

Consistent: As discussed in Section 3.12, Hazardous Waste and Materials, the Project will incorporate BMP HAZ-1 (Prepare a Construction HMMP), BMP HAZ-2 (Property Acquisition Phase I and Phase II ESAs), BMP HAZ-3 (Prepare a General Construction Soil Management Plan), BMP HAZ-4 (Prepare Parcel-Specific Soil Management Plans and HASPs), BMP HAZ-5 (Prepare a Project Construction HASP), BMP HAZ-6 (LUST Sites and Coordination with DTSC), BMP HAZ-7 (Halt Construction Work if Potentially Hazardous Materials/Abandoned Oil Wells are Encountered), and BMP HAZ-8 (Pre-Demolition Investigation). Implementation of these measures will aim to protect the health and safety of construction employees, the public, and the environment from spills and release incidents. In addition, BMP HAZ-2 and BMP HAZ-8 entails conducting environmental site assessments and hazardous materials surveys, which will help determine if any abatement of site contamination is needed. Therefore, the Project is consistent with EO 12088.



# CERCLA (Superfund)

CERCLA of 1980, commonly known as Superfund, provides broad federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. CERCLA establishes requirements concerning closed and abandoned hazardous waste sites, provides for the liability of persons responsible for releases of hazardous waste at these sites, and establishes a trust fund to provide for cleanup when no responsible party can be identified.

EPA compiles a list of national priorities among the known releases or threatened releases of hazardous substances, pollutants, or contaminants throughout the US and its territories, known as the NPL.

The Hazardous Materials Transportation Act (49 U.S.C. 5101-5127)

The Hazardous Materials Transportation Act in Chapter 51 of Title 49 of the United States Code was enacted in 1975 with the purpose of providing adequate protection against the risks to life and property in the commercial transportation of hazardous material by improving the Secretary of Transportation's regulatory and enforcement authority.

USDOT, along with the CHP and Caltrans, regulates hazardous materials transportation between states. FRA enforces the Hazardous Materials Regulations, which include requirements that railroads and other hazardous materials transporters, as well as shippers, have and adhere to security plans and also train their employees on both the safety and security matters involved in offering, accepting, or transporting hazardous materials.

# NCP (40 CFR Part 300 et seq.)

The NCP is the federal plan for responding to oil spills and hazardous substances releases.

**Consistent.** As discussed in Section 3.12, *Hazardous Waste and Materials,* the Project will incorporate BMP HAZ-2 (Property Acquisition Phase I and Phase II Environmental Site Assessments), which would require the preparation of Phase I ESAs for all acquisition parcels in accordance with standard ASTM methodologies that would meet "innocent landowner" provisions under CERCLA, which establish a defense for the purchase of real property. In addition, a Phase II ESA (subsurface investigations) would also be prepared for parcels recommended by the Phase I ESAs. Therefore, the Project is consistent with CERCLA.

**Consistent.** As discussed in Section 3.12, *Hazardous Waste and Materials,* the Project would be subject to federal and state regulations and local health and safety requirements (those specified by SJRRC, railroad operators, or property owners on a case-by-case basis) for the transportation of any hazardous waste and materials. Therefore, the Project is consistent with the Hazardous Materials Transportation Act.

**Consistent:** As discussed in Section 3.12, *Hazardous Waste and Materials,* the Project will incorporate BMP HAZ-1 (Prepare a Construction HMMP), BMP HAZ-4 (Prepare Parcel-Specific Soil Management Plans and HASPs), and BMP HAZ-5 (Prepare a Project Construction HASP). These plans would include emergency response procedures and contact information for spill/release incidents that is consistent with the *NCP*. Therefore, the Project is consistent with the NCP.



# **Oil Pollution and Prevention Regulation**

EPA's oil spill prevention program includes the SPCC and the Facility Response Plan rules. The SPCC rule helps facilities prevent an oil discharge into navigable waters or adjoining shorelines. The Facility Response Plan rule requires certain facilities to submit a response plan and prepare to respond to a worst-case oil discharge. Consistent: As discussed in Section 3.12, Hazardous Waste and Materials, the Project will incorporate BMP HAZ-1 (Prepare a Construction HMMP), BMP HAZ-4 (Prepare Parcel-Specific Soil Management Plans and HASPs), and BMP HAZ-5 (Prepare a Project Construction HASP), which will all include emergency response procedures for spill and release incidents. In addition, BMP HAZ-7 (Halt Construction Work if Potentially Hazardous Materials/Abandoned Oil Wells are Encountered.) will ensure that contractors will follow all applicable local, state, and federal regulations regarding discovery, notification, response, disposal, and remediation for hazardous materials and/or abandoned oil wells encountered during the construction process. Therefore, the Project is consistent with the Oil Pollution and Prevention Regulation.

# Occupational Safety and Health Act (29 U.S.C. §§ 651–678)

The Occupational Safety and Health Act of 1970, which is implemented by the OSHA, contains requirements, as set forth in Title 29 of the CFR Section 1910, that are designed to promote worker safety, worker training, and a worker's right-to-know.

# RCRA (42 U.S.C. ch. 82 § 6901 et seq.)

RCRA provides EPA the authority to control hazardous waste including its generation, transportation, treatment, storage, and disposal. Under RCRA, EPA has the authority to control the generation, transportation, treatment, storage, and disposal of hazardous waste by large-quantity generators (1,000 kilograms/month or more). Under the RCRA regulations, hazardous wastes must be tracked from the time of generation to the point of disposal. In California, EPA has delegated RCRA enforcement to Cal/EPA DTSC. **Consistent:** OSHA requirements would be in effect during the Project's construction and operation to ensure worker safety. Therefore, the Project is consistent with the Occupational Safety and Health Act.

**Consistent:** As discussed in Section 3.12, *Hazardous Waste and Materials,* the Project would require the handling, storage, transport, and disposal of hazardous waste or materials, which would be subject to federal and state regulations and local health and safety requirements (those specified by SJRRC, railroad operators, or property owners on a case-by-case basis). Therefore, the Project is consistent with RCRA.



# TSCA (15 U.S.C. §2601 et seq)

TSCA of 1976 provides EPA with authority to require reporting, record-keeping, and testing requirements and restrictions related to chemical substances and/or mixtures.

**Consistent:** As discussed in Section 3.12, *Hazardous Waste and Materials,* the Project would require the handling, storage, transport, and disposal of hazardous waste or materials, which would be subject to federal and state regulations and local health and safety requirements (those specified by SJRRC, railroad operators, or property owners on a case-by-case basis). Adherence to such regulations and requirements would require proper reporting, record-keeping, and testing requirements, from cradle to grave (from generation to disposal). Therefore, the Project is consistent with TSCA.

# Atomic Energy Act of 1946, as amended (42 U.S.C. §2011 et seq.)

In addition to the acts listed above, EO 12088, Federal Compliance with Pollution Control Standards, mandates that necessary actions be taken to prevent and control environmental pollution when federal activities or federal facilities are involved. Consistent: As discussed in Section 3.12, Hazardous Waste and Materials, the Project will incorporate BMP HAZ-1 (Prepare a Construction HMMP), BMP HAZ-2 (Property Acquisition Phase I and Phase II ESAs), BMP HAZ-3 (Prepare a General Construction Soil Management Plan), BMP HAZ-4 (Prepare Parcel-Specific Soil Management Plans and HASPs), BMP HAZ-5 (Prepare a Project Construction HASP), BMP HAZ-6 (LUST Sites and Coordination with DTSC), BMP HAZ-7 (Halt Construction Work if Potentially Hazardous Materials/Abandoned Oil Wells are Encountered), and BMP HAZ-8 (Pre-Demolition Investigation). Implementation of these measures would aim to protect the health and safety of construction employees, the public, and the environment from spills and release incidents. The handling, storage, transport, and disposal of any hazardous waste or materials would be subject to federal and state regulations and local health and safety requirements (those specified by SJRRC, railroad operators, or property owners on a case-by-case basis). Therefore, the Project is consistent with the Atomic Energy Act.



## Cal/EPA Plans, Policies, and Regulations

Cal/EPA and the SWRCB establish rules governing hazardous materials use and hazardous waste management. Within Cal/EPA, DTSC has primary regulatory responsibility, with delegation of enforcement to local jurisdictions that enter into agreements with the state agency, for hazardous materials management and hazardous waste generation, transport, and disposal under the authority of the Hazardous Waste Control Law **Consistent:** As discussed in Section 3.12, *Hazardous Waste and Materials,* the Project would require the handling, storage, transport, and disposal of hazardous waste or materials, which would be subject to federal and state regulations, including rules established by Cal/EPA, SWRCB, and DTSC. The Project would also be subject to local health and safety requirements (those specified by SJRRC, railroad operators, or property owners on a case-by-case basis). Therefore, the Project is consistent with Cal/EPA plans, policies, and regulations.

# Hazardous Materials Transportation, CCR Title 26

The State of California has adopted DOT regulations for the intrastate movement of hazardous materials. State regulations are contained in CCR Title 26. In addition, the State of California regulates the transportation of hazardous waste originating in the state and passing through the state (26 CCR). **Consistent.** As discussed in Section 3.12, *Hazardous Waste and Materials,* the Project would be subject to federal and state regulations and local health and safety requirements (those specified by SJRRC, railroad operators, or property owners on a case-by-case basis) for the transportation of any hazardous waste and materials. Therefore, the Project is consistent with the Hazardous Materials Transportation (CCR Title 26) regulations.



## CEQA (PRC Section 21000 et seq.) and CEQA Guidelines (Section 15000 et seq.)

CEQA requires state and local agencies to identify the significant environmental effects of their actions, including potential significant hazardous materials and wastes effects, and to avoid or mitigate those effects, when feasible.

### California PRC Section 21151.4

This code requires the lead agency to consult with a school district with jurisdiction over a school within 0.25 mile of the project about potential effects on the school if the project might reasonably be anticipated to emit hazardous air emissions or handle an extremely hazardous substance or a mixture containing an extremely hazardous substance.

Consistent: As discussed in Section 3.12, Hazardous Waste and Materials, the Project would involve the use of hazardous materials and the generation of waste during the construction and operation phase of the Project. The Project will incorporate the following avoidance and minimization measures: BMP HAZ-1 (Prepare a Construction HMMP), BMP HAZ-2 (Property Acquisition Phase I and Phase II ESAs), BMP HAZ-3 (Prepare a General Construction Soil Management Plan), BMP HAZ-4 (Prepare Parcel-Specific Soil Management Plans and HASPs), BMP HAZ-5 (Prepare a Project Construction HASP), BMP HAZ-6 (LUST Sites and Coordination with DTSC), BMP HAZ-7 (Halt Construction Work if Potentially Hazardous Materials/Abandoned Oil Wells are Encountered), and BMP HAZ-8 (Pre-Demolition Investigation). Implementation of these measures would aim to protect the health and safety of construction employees, the public, and the environment from spills and release incidents. The handling, storage, transport, and disposal of any hazardous waste or materials would be subject to federal and state regulations and local health and safety requirements (those specified by SJRRC, railroad operators, or property owners on a case-by-case basis). Therefore, the Project under CEQA (PRC Section 2100 et seq.) and CEQA Guidelines (Section 15000 et seq.).

**Consistent:** As discussed in Section 3.12, *Hazardous Waste and Materials,* there are seven schools located within 0.25 mile of the Project Study Area. The Project would involve the use of hazardous materials and the generation of waste during the construction and operation phase of the Project. The handling, storage, transport, and disposal of any hazardous waste or materials would be subject to federal and state regulations and local health and safety requirements (those specified by SJRRC, railroad operators, or property owners on a case-by-case basis). Therefore, the Project is consistent with California PRC Section 21151.4.



# Porter-Cologne Water Quality Control Act (California Water Code Section 13000 et seq.)

The Porter-Cologne Water Quality Control Act regulates water quality through SWRCB and RWQCBs, including oversight of water monitoring and contamination cleanup and abatement.

Consistent: As discussed in Section 3.12, Hazardous Waste and Materials, the Project will incorporate BMP HAZ-1 (Prepare a Construction HMMP), BMP HAZ-2 (Property Acquisition Phase I and Phase II ESAs), BMP HAZ-3 (Prepare a General Construction Soil Management Plan), BMP HAZ-4 (Prepare Parcel-Specific Soil Management Plans and HASPs), BMP HAZ-5 (Prepare a Project Construction HASP), BMP HAZ-6 (LUST Sites and Coordination with DTSC), BMP HAZ-7 (Halt Construction Work if Potentially Hazardous Materials/Abandoned Oil Wells are Encountered), and BMP HAZ-8 (Pre-Demolition Investigation). Implementation of these measures would aim to protect the environment, including water guality, from spills and release incidents. The handling, storage, transport, and disposal of any hazardous waste or materials would be subject to federal and state regulations and local health and safety requirements (those specified by SJRRC, railroad operators, or property owners on a case-by-case basis). Therefore, the Project is consistent the Porter-Cologne Water Quality Control Act.

# Hazardous Waste Control Act (California Health and Safety Code, Section 25100 et seq.)

This act is similar to RCRA on the federal level in regulating the identification, generation, transportation, storage, and disposal of materials deemed hazardous by the State of California. **Consistent:** As discussed in Section 3.12, *Hazardous Waste and Materials,* the Project would involve the use of hazardous materials and the generation of waste during the construction and operation phase of the Project. The handling, storage, transport, and disposal of any hazardous waste or materials would be subject to federal and state regulations, including the Hazardous Waste Control Act. In addition, the Project would be subject to local health and safety requirements (those specified by SJRRC, railroad operators, or property owners on a case-by-case basis). Therefore, the Project is consistent with the Hazardous Waste Control Act.



# Safe Drinking Water and Toxic Enforcement Act (Proposition 65, California Health and Safety Code, Section 25249.5 et seq.)

The Safe Drinking Water and Toxic Enforcement Act is similar to the Safe Drinking Water Act and CWA on the federal level in regulating the discharge of contaminants to groundwater. **Consistent:** As discussed in Section 3.12, Hazardous Waste and Materials, the Project will incorporate BMP HAZ-1 (Prepare a Construction HMMP), BMP HAZ-2 (Property Acquisition Phase I and Phase II ESAs), BMP HAZ-3 (Prepare a General Construction Soil Management Plan), BMP HAZ-4 (Prepare Parcel-Specific Soil Management Plans and HASPs), BMP HAZ-5 (Prepare a Project Construction HASP), BMP HAZ-6 (LUST Sites and Coordination with DTSC), BMP HAZ-7 (Halt Construction Work if Potentially Hazardous Materials/Abandoned Oil Wells are Encountered), and BMP HAZ-8 (Pre-Demolition Investigation). Implementation of these measures would aim to protect the environment, including groundwater resources, from spills and release incidents. The handling, storage, transport, and disposal of any hazardous waste or materials would be subject to federal and state regulations and local health and safety requirements (those specified by SJRRC, railroad operators, or property owners on a case-by-case basis). Therefore, the Project is consistent with the Safe Drinking Water and Toxic Enforcement Act.

### Cortese List Statute (California Government Code Section 65962.5)

This regulation requires the DTSC to compile and maintain lists of potentially contaminated sites throughout the state of California (includes the Hazardous Waste and Substances Sites List). **Consistent.** As discussed in Section 3.12, *Hazardous Waste and Materials,* the Project will incorporate BMP HAZ-6 (LUST Sites and Coordination with DTSC), which would require coordination with DTSC prior to construction on LUST sites. LUST sites may also be listed on the Cortese list. Coordination with DTSC on such properties would help them maintain the latest information for contaminated sites. Therefore, the Project is consistent with Cortese List Statute.



#### **Unified Program**

The Unified Program consolidates the following hazardous materials and waste programs:

- 1. Aboveground Petroleum Storage Act Program
- 2. Area Plans for Hazardous Materials Emergencies
- 3. CalARP Program
- 4. Response Plans and Inventories (Business Plans)
- 5. HMMP and HMIS
- Hazardous Waste Generator and Onsite Hazardous Waste Treatment (tired permitting) Programs
- 7. Underground Storage Tank Program

CalEPA oversees California's Unified Program. The Unified Program protects Californians from hazardous waste and hazardous materials by ensuring local regulatory agencies consistently apply statewide standards when they issue permits, conduct inspections and engage in enforcement activities. A CUPA is a local agency certified by CalEPA to implement the Unified Program elements in the CUPA's jurisdiction.

The Environmental Health Department is the CUPA for San Joaquin County and is responsible for implementing the aforementioned program elements in the county.

### State of California Emergency Plan

California has developed an emergency response plan to coordinate emergency services provided by federal, state, and local government and private agencies. Responding to hazardous materials incidents is one part of this plan. The plan is administered by the OES, which coordinates the responses of other agencies, including Cal/EPA, CHP, CDFW, the CVRWQCB, and SFD. SFD provides first response capabilities, if needed, for hazardous materials releases and environmental emergencies within the Project site vicinity. Additionally, SFD coordinates with state and local authorities to prepare for, prevent, respond to, mitigate, and determine the responsibility of a variety of hazardous materials releases.

**Consistent:** As discussed in Section 3.12, *Hazardous Waste and Materials*, the Project would involve the use of hazardous materials and the generation of waste during the construction and operation phase of the Project. The handling, storage, transport, and disposal of any hazardous waste or materials would be subject to federal and state regulations, including the Unified Program. In addition, the Project would be subject to local health and safety requirements (those specified by SJRRC, railroad operators, or property owners on a case-by-case basis). Therefore, the Project is consistent with the Unified Program.

**Consistent.** As discussed in Section 3.12, *Hazardous Waste and Materials,* the Project will incorporate BMP HAZ-1 (Prepare a Construction HMMP), BMP HAZ-4 (Prepare Parcel-Specific Soil Management Plans and Health and Safety Plans [HASP]), and BMP HAZ-5 (Prepare Project Construction HASP). These plans would include emergency response procedures and contact information for spill/release incidents that is consistent with the *State of California Emergency Plan.* Therefore, the Project is consistent with the State of California Emergency Plan.



#### San Joaquin County Emergency Operations Plan – Hazardous Material Area Plan Annex

The Hazardous Material Area outlines the areas of responsibility during a hazardous material incident and was developed using guidance and regulations from various local, state, and federal agencies and departments. **Consistent.** As discussed in Section 3.12, *Hazardous Waste and Materials,* the Project will incorporate BMP HAZ-1 (Prepare a Construction HMMP), BMP HAZ-4 (Prepare Parcel-Specific Soil Management Plans and HASP), and BMP HAZ-5 (Prepare Project Construction HASP). These plans would include emergency response procedures and contact information for spill/release incidents that is consistent with the *San Joaquin County Emergency Operations Plan* – *Hazardous Material Area Plan Annex*. Therefore, the Project is consistent with the San Joaquin County EOP.

#### San Joaquin County General Plan – Public Health and Safety Element

**Goal PHS-7:** To protect County residents, visitors, and property from hazardous materials and wastes.

Consistent: As discussed in Section 3.12, Hazardous Waste and Materials, the Project will incorporate BMP HAZ-1 (Prepare a Construction HMMP), BMP HAZ-2 (Property Acquisition Phase I and Phase II ESAs), BMP HAZ-3 (Prepare a General Construction Soil Management Plan), BMP HAZ-4 (Prepare Parcel-Specific Soil Management Plans and HASPs), BMP HAZ-5 (Prepare a Project Construction HASP), BMP HAZ-6 (LUST Sites and Coordination with DTSC), BMP HAZ-7 (Halt Construction Work if Potentially Hazardous Materials/Abandoned Oil Wells are Encountered), and BMP HAZ-8 (Pre-Demolition Investigation). Implementation of these measures would aim to protect the health and safety of construction employees, the public, and the environment from spills and release incidents. The handling, storage, transport, and disposal of any hazardous waste or materials would be subject to federal and state regulations and local health and safety requirements (those specified by SJRRC, railroad operators, or property owners on a case-by-case basis). Therefore, the Project is consistent with this general plan goal.



# Air Quality

# CAA and NAAQS (42 U.S.C. 7609)

The FCAA, promulgated in 1963 and amended several times thereafter, including the 1990 FCAA amendments, establishes the framework for modern air pollution control in the US. The FCAA is regulated by EPA, which sets standards for the concentration of pollutants in the air. At the federal level, these standards are called NAAQS. NAAQS standards have been established for six transportation-related criteria air pollutants that have been linked to potential health concerns: carbon monoxide (CO), nitrogen dioxide (NO2), ozone (O3), particulate matter, which is broken down for regulatory purposes into particles of 10 micrometers or smaller (PM10) and particles of 2.5 micrometers or smaller (PM2.5), and sulfur dioxide (SO2). In addition, national standards exist for lead (Pb). The NAAQS standards are set at levels that protect public health with a margin of safety and are subject to periodic review and revision. TACs are covered, as well.

Federal air quality standards and regulations provide the basic requirements for Project-level air quality analysis under NEPA. In addition to this environmental analysis, a parallel Conformity requirement applies under FCAA.

The FCAA requires EPA to designate areas as attainment, nonattainment, or unclassified for each criteria air pollutant based on whether the NAAQS have been achieved. The federal standards are summarized in Table K-1 in Appendix K. EPA has designated the SJVAB as a nonattainment area for O3 and PM2.5 and as a maintenance area for PM10.A maintenance area is an area that was formerly in nonattainment and currently under a maintenance plan. **Consistent.** As discussed in Section 3.13, *Air Quality*, the Project is subject to the General Conformity rule which ensures that federal activities do not cause or contribute to new violations of NAAQS; actions do not worsen existing violations of the NAAQS; and attainment of the NAAQS is not delayed.

Based on the air quality analysis detailed under the Environmental Consequences discussion, maximum estimated emissions would be below conformity de minimis levels. Therefore, since emissions do not exceed the SJVAB's *de minimis* thresholds, the action is exempt from conformity determination and the Project is consistent with the CAA and NAAQs.



#### General Conformity Rule (40 CFR 93)

The General Conformity Rule applies to all federal actions in areas that either: (1) do not meet NAAQS that are not exempt from the General Conformity Rule, covered by a Presumed-to-Conform approved list, or (2) do not meet the de minimis emission levels established in the General Conformity Rule (40 CFR 93.153). The General Conformity Rule applies only to direct and indirect emissions generated by a federal action that are subject to New Source Review for which a federal permitting agency has directly caused or initiated, has continued program responsibility for, or can practically control. The rule does not include stationary industrial sources requiring air quality permits from local air pollution control agencies. Because the proposed Project likely will require and/or receive one or more federal approvals, or future federal construction funding, the proposed Project is subject to the implementing regulations of Section 176 of the FCAA.

The evaluation of whether the total direct and indirect emissions exceed the requirements of 40 CFR Section 93.158(c) is performed by comparing the total annual emissions to the applicable de minimis emissions level listed in 40 CFR Section 93.153(b). If the evaluation indicates that emissions exceed General Conformity de minimis thresholds, FRA must perform a conformity determination. The method for determining conformity depends upon the pollutant and the circumstances surrounding the federal action. Most conformity demonstrations either mitigate the emission increases or demonstrate that the emissions have been or will be included in the SIP. If the evaluation indicates that the emissions do not exceed the de minimis thresholds, the action is exempt from a conformity determination and FRA must prepare a RONA.

**Consistent.** As discussed in Section 3.13, *Air Quality*, the Project is a federally funded project. Thus, it is subject to the General Conformity rule established under the CAA (section 176(c)(4)).

Based on the air quality analysis detailed under the Environmental Consequences discussion, maximum estimated emissions would be below conformity de minimis levels. Therefore, since emissions do not exceed the SJVAB's *de minimis* thresholds, the action is exempt from conformity determination.

FRA approved the RONA on [INSERT DATE]. With the approval of the RONA by FRA the proposed Project is consistent with the General Conformity Rule.





# CCAA and CAAQS

The CCAA is administered by CARB at the State level and by the air quality management districts and air pollution control districts at the regional and local levels. The CCAA requires all air districts in the State to endeavor to achieve and maintain the CAAQS. CAAQS are generally more stringent than the corresponding federal standards and incorporate additional standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles.

CARB regulates mobile air pollution sources, such as motor vehicles. CARB oversees the functions of local air pollution control districts and air quality management districts, which, in turn, administer air quality activities at the regional and county levels.

The State standards are summarized in Table K-1 located in Appendix K. The CCAA requires CARB to designate areas within California as either attainment or nonattainment for each criteria air pollutant based on whether the CAAQS have been achieved. Under the CCAA, areas are designated as nonattainment for a pollutant if air quality data shows that a State standard for the pollutant was violated at least once during the previous three calendar years. Exceedances that are affected by highly irregular or infrequent events are not considered violations of a State standard and are not used as a basis for designating areas as nonattainment. Under the CCAA, the SJVAB is designated as a nonattainment area for O3, PM2.5, and PM10.

**Consistent.** As discussed in Section 3.13, *Air Quality*, Project construction activities have the potential to generate emissions from equipment used during construction, as well as to generate dust. Likely air pollutants from construction include the following: PM dust and criteria air pollutants from fuel combustion. As stated earlier, the *de minimis* thresholds are applicable only in areas designated as nonattainment or maintenance for NAAQS.

Since ROG, PM<sub>2.5</sub>, and PM<sub>10</sub> will be subject to *de* minimis thresholds the Project plans to incorporate BMP AQ-1 (Compliance with EPA's Tier 4 Exhaust Emission Standards), identified in Table 3.13-2, which requires that SJRRC, in coordination with CHSRA, to ensure that all offroad diesel-powered construction equipment greater than 50 horsepower shall comply with EPA's Tier 4 Final exhaust emission standards (40 CFR Part 1039), and if not already supplied with a factory equipped diesel particulate filter, all construction equipment will be outfitted with Best Available Control Technology devices certified by CARB. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations.

The Project will also plan on incorporating BMP AQ-2 (Fugitive Dust), identified in Table 3.13-2, which requires SJRRC, in coordination with CHSRA, to prepare a dust control plan that would be in compliance with SJVAPCD Regulation VIII (Fugitive PM<sub>10</sub> Prohibition) prior to issuance of a grading or building permit.

With the incorporation of BMP AQ-1 and BMP AQ-2, the annual construction emissions associated with the construction of the Project would not exceed the SJVAB *de minimis* thresholds, identified in Table 3.13-1 for ROG, PM<sub>2.5</sub> and NO<sub>X</sub>; thus, no direct or indirect short-term adverse effects related to air quality during construction are anticipated under the Project, and the Project is consistent the CCAA and CAAQS.





# California State Implementation Plan

Federal clean air laws require areas with unhealthy levels of ozone, inhalable particulate matter, carbon monoxide, nitrogen dioxide, and sulfur dioxide to develop SIP. SIPs are comprehensive plans that describe how an area will attain the NAAQS. SIPs are not single documents, but rather a compilation of new and previously submitted plans, programs, district rules, State regulations, and federal controls. Many of California's SIPs rely on the same core set of control strategies, including emission standards for cars and heavy trucks, fuel regulations, and limits on emissions from consumer products. State law makes CARB the lead agency for all purposes related to the SIPs. Local air districts and other agencies prepare SIP elements and submit them to CARB for review and approval. CARB then forwards SIP revisions to EPA for approval and publication in the Federal Register.

# AB 617

Stockton CERP identified a wide range of measures designed to reduce air pollution and exposure, including several partnership strategies to be implemented in between agencies and local organizations. To address disproportionate localized air quality impacts and a special consideration of sensitive receptors, community emissions reduction programs will focus on two objectives

- Maximizing progress on reducing exposure to TACs that contribute to cumulative exposure burdens within selected communities.
- Reducing exposure caused by localized PM2.5 sources to achieve healthful levels of PM2.5 within the community.

### SJVAPCD

The Project is located within the jurisdiction of SJVAPCD. SJVAPCD has adopted several air quality attainment plans over the years that identify measures needed in the SJVAB to attain EPA's increasingly stringent NAAQS. All the plans include federal, State, and local measures that would be implemented through rule making or program funding to reduce air pollutant emissions in SJVAB **Consistent.** As discussed in Section 3.13, *Air Quality*, Project's maximum estimated emissions would be below conformity de minimis levels. Therefore, since emissions do not exceed the SJVAB's *de minimis* thresholds, the action is exempt from conformity determination. As a result, the Project is in compliance and consistent with the California SIP.

**Consistent.** As discussed in Section 3.13, *Air Quality*, the Project will incorporate BMP AQ-3 (Compliance with Stockton Community Emissions Reductions Program), which requires SJRRC in coordination with CHSRA, to review the Stockton CERP and incorporate feasible emission reduction strategies such as enhancing community participation in land use processes, the deployment of zero and near-zero emission HHD trucks, HHD truck rerouting analyses, reducing HHD truck idling, and incorporating vegetative barriers and urban greening. With the incorporation of BMP AQ-3, the Project would be consistent with AB 617.

**Consistent.** As discussed in Section 3.13, *Air Quality*, Project's maximum estimated emissions would be below conformity de minimis levels. Therefore, since emissions do not exceed the SJVAB's *de minimis* thresholds, the action is exempt from conformity determination. Therefore, the Project is consistent with the SJVAPCD air quality attainment plan.



# City of Stockton General Plan

Goal SAF-4. Improve local air quality.

**Policy SAF-4.1.** Reduce air impacts from mobile and stationary sources of air pollution.

Action SAF-4.1A. Require the construction and operation of new development to implement best practices that reduce air pollutant emissions, including:

- Use of low-emission and well-maintained construction equipment, with idling time limits.
- Development and implementation of a dust control plan during construction.
- Installation of electrical service connections at loading docks, where appropriate.
- Installation of Energy Star-certified appliances.
- Entering into Voluntary Emissions Reduction Agreements with the SJVAPCD

**Consistent.** The current rail activity through the Stockton Diamond results in substantial delays and inefficiencies in operations. The Project's goal is to improve regional passenger and freight rail efficiency by reducing conflicting train movements. The Project would improve freight and passenger movements leading to reduced passenger and freight rail delays and associated congestion. The Project would improve air quality through reduction of criteria air pollutant emissions caused by existing congestion and delays.

The improved freight mobility would reduce the total daily occupancy of the roadway crossings by approximately 30 percent in 2045. As a result, the Project would improve air quality in the study area. Therefore, the Project is consistent with this general plan goal.

**Consistent.** The Project will replace at-grade crossing with a grade separated crossing at East Hazelton Avenue and East Scotts Avenue. The improved freight mobility would reduce the total daily occupancy of the roadway crossings by approximately 30 percent in 2045. The reduction in crossing occupancy would improve on-road traffic flow and reduce vehicle idling in the Project Study Area. Therefore, the Project would result in long-term reductions in criteria pollutant emissions and the Project is consistent with this general plan policy.

**Consistent.** The Project will incorporate all BMPs identified in Table 3.13-2, in Section 3.13, *Air Quality*, which includes Measures BMP AQ-1 (Compliance with EPA's Tier 4 Exhaust Emission Standards), BMP AQ-2 (Fugitive Dust), BMP AQ-3 (Compliance with Stockton Community Emissions Reduction Program), and BMP AQ-4 (Vegetative Barriers and Urban Greening). Therefore, no direct or indirect short-term or long-term effects to air quality would result from the Project, and the Project is consistent with this general plan action.



Action SAF-4.1C. Require the use of electricpowered construction and landscaping equipment as conditions of project approval when appropriate.

Action SAF-4.1D. Limit heavy-duty off-road equipment idling time to meet the ARB's idling regulations for on-road trucks.

**Policy SAF-4.3.** Coordinate with the SJVAPCD to promote public awareness on air quality issues and consistency in air quality impacts analyses.

Action SAF-4.3B. Coordinate review of development project applications with the SJVAPCD to ensure that air quality impacts are consistently identified and mitigated during CEQA review. **Consistent.** The Project will incorporate BMP AQ-3 (Compliance with Stockton Community Emissions) identified in Table 3.13-2, in Section 3.13, *Air Quality*, which requires feasible emissions reduction strategies from the Stockton CERP into the Project, including the deployment of zero and near-zero emission HHD trucks. Therefore, the Project is consistent with these general plan actions.

**Consistent.** The Project will incorporate BMP AQ-2 (Fugitive Dust) in Table 3.13-2, in Section 3.13, *Air Quality*, which requires a dust control plan to be reviewed and approved by the SJVAPCD. Therefore, the Project is consistent with this general plan policy.

**Consistent.** The Project is anticipated to receive grading or building permits from the SJVAPCD. SJRCC will coordinate review of the Project with the SJVAPCD to ensure air quality effects are minimized. In addition, the Project will incorporate BMP AQ-2 (Fugitive Dust) in Table 3.13-2, in Section 3.13, *Air Quality*, which requires a dust control plan, to be reviewed and approved by SJVAPCD, prior to issuance of grading or building permits. Therefore, the Project is consistent with this general plan action.



#### Noise and Ground-borne Vibration

#### Occupational Noise Exposure Standard (29 CFR § 1910.95)

The Occupational Noise Exposure Standard is noise standards set by OSHA. The standards set noise exposure protection for when the sound levels exceed the measurements set by OSHA. **Consistent.** As discussed in Section 3.14, *Noise and Ground-borne Vibration*, the Project will incorporate BMP NV-1 (Noise Control Plan), identified in Table 3.14-4, which requires that a noise control plan be prepared that will incorporate best practices into the construction scope of work and specifications to reduce the effects of temporary construction-related noise on nearby noise-sensitive receptors.

The Noise Control Plan will be developed in coordination with the City of Stockton in compliance with City standards, which are developed based on OSHA standards. Therefore, with the incorporation of BMP NV-1, identified in Table 3.14-4, no direct or indirect short-term adverse effects related to noise would occur under the Project, and the Project would be consistent with the Occupational Noise Exposure Standard.

#### US EPA Railroad Noise Emission Standards (42 U.S.C. 4916)

Interstate rail carriers (such as freight railroads) must comply with EPA noise emission standards which are expressed as maximum measured noise levels and applicable to locomotives manufactured after 1979. **Consistent.** The Project would not preclude interstate rail carriers, such as UP, to comply with EPA noise emission standards. Therefore, the Project is consistent with the US EPA Railroad Noise Emission Standards.

#### FRA Guidelines and Noise Emission Compliance (49 CFR 210)

FRA has regulations governing compliance with noise emissions from interstate railroads. FRA's Railroad Noise Emission Compliance Regulation (49 CFR 210) prescribes compliance requirements for enforcing railroad noise emission standards adopted by USEPA (40 CFR 201). **Consistent.** The Project would not preclude interstate rail carriers, such as UP, to comply with FRA guidelines for noise emission compliance. Therefore, the Project is consistent with the FRA Guidelines and Noise Emission Compliance.





# FTA Guidelines

Similar to FRA, FTA developed a guidance manual in September 2018 entitled Transit Noise and Vibration Impact Assessment Manual (guidance manual) for assessing noise and ground-borne vibration effects from major rail projects intended to satisfy environmental review requirements and assist Project sponsors in addressing predicted construction and operation noise and ground-borne vibration during the design process. The FTA guidance manual noise and ground-borne vibration impact criteria for rail projects and their associated fixed facilities, such as storage and maintenance yards, passenger stations and terminals, parking facilities, and substations are described in Section 3.14, Noise and Ground-borne Vibration, and are the primary noise criteria used for the proposed Project. FTA guidance is accepted by FRA.

**Consistent.** As discussed in Section 3.14, *Noise and Ground-borne Vibration*, the basis for noise and ground-borne vibration RSA is the FTA Transit Noise and Vibration Impact Assessment Manual dated September 2018, with consideration of intervening structures, topography, and the location and number of sensitive noise receptors in Project vicinity. Therefore, the Project is consistent with these FTA guidelines.

#### California Noise Control Act (Cal H.S.C. 46010 et. seq)

At the state level, the California Noise Control Act, enacted in 1973 (Health and Safety Code 46010 et seq.), requires the Office of Noise Control in the Department of Health Services to provide assistance to local communities developing local noise control programs.

The Office of Noise Control also works with the Office of Planning and Research to provide guidance for preparing required noise elements in city and county general plans, pursuant to Government Code Section 65302(f). In preparing the noise element, a city or county must identify local noise sources and analyze and quantify, to the extent practicable, current and projected noise levels for various sources, such as passenger and freight railroad operations, including commuter rail alignments.

The California Noise Control Act stipulates the mapping of noise-level contours for these sources, using community noise metrics appropriate for environmental impact assessment as defined in Section 3.14.3. Cities and counties use these as guides to making land use decisions to minimize the community residents' exposure to excessive noise **Consistent.** As discussed in Section 3.14, *Noise and Ground-borne Vibration*, the Project will incorporate BMP NV-1 (Noise Control Plan), identified in Table 3.14-4, which requires that a noise control plan be prepared that will incorporate best practices into the construction scope of work and specifications to reduce the effects of temporary construction-related noise on nearby noise-sensitive receptors.

The Noise Control Plan will be developed in coordination with the City of Stockton in compliance with City standards. Therefore, with the incorporation of BMP NV-1, identified in Table 3.14-4, no direct or indirect short-term adverse effects related to noise would occur under the Project, and the Project would be consistent with the California Noise Control Act.



#### City of Stockton General Plan

**Policy SAF-2.5:** Protect the community from health hazards and annoyance associated with excessive noise levels.

**Consistent.** As discussed in Section 3.14 *Noise and Ground Borne Vibration*, the majority of the necessary construction along the railroad and structures to will be completed during daytime hours and no noise-intensive pile driving would occur at night. Further, the Project would protect the community from excessive noise and vibration levels by incorporating Measures BMP NV-1 (Noise Control Plan) and BMP NV-2 (Vibration Control Plan) during construction.

Additionally, the Project will implement Measure MM NV-1 (Reductions for Severe Noise Effects), which would mitigate any long-term effects from noise during operation. Therefore, the Project is consistent with this general plan policy.

#### City of Stockton General Plan EIR

**NOISE-1:** The proposed project would not expose people to or generate noise levels in excess of standards established in the General Plan, the Municipal Code, or the applicable standards of other agencies.

**NOISE-2:** The proposed project would not expose people to or generate excessive ground-borne vibration or ground-borne noise levels.

**Consistent.** Please see response above for Policy SAF-2.5. Therefore, the Project would be consistent with Noise-1 and Noise-2 in the City of Stockton's General Plan EIR.



#### **Biological Resources**

#### ESA (16 USC Section 1531, et seq., 50 CFR Part 402)

The ESA of 1973 provides protective measures for federally listed endangered or threatened species and their habitats, from unlawful take. The ESA defines "take" to mean to "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." In 50 CFR Part 222, harm is further defined as an act that actually kills or injures fish or wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures fish or wildlife by significantly impairing essential behavioral patterns, including feeding, spawning, rearing, migrating, feeding, or sheltering.

ESA Section 7(a)(1) requires federal agencies to use their authority to further the conservation of listed species. ESA Section 7(a)(2) requires consultation with USFWS or NMFS if a federal agency undertakes, funds, permits, or authorizes any action that may affect endangered or threatened species or designated critical habitat (referred to as a federal nexus). **Consistent.** As discussed in Section 3.15, *Biological Resources*, the Project would result in potential direct short-term moderate adverse effects on up to 0.39 acre of Central Valley steelhead critical habitat and Chinook salmon EFH as a result of construction access during construction of the Mormon Slough flyover structure.

However, with implementation of Measure MM BIO-2 (National Oceanic and Atmospheric Administration Consultation), which requires implementation of all commitments and avoidance and minimization measures identified during Section 7 consultation, these direct short-term moderate effects would be mitigated. Therefore, the Project is consistent with the ESA.



# Magnuson-Stevens Fishery Conservation and Management Act of 1976 (16 U.S.C. 1801 et seq)

Magnuson-Stevens Fishery Conservation and Management Act of 1976 (revised in 1996 and reauthorized 2007) is the primary law governing marine fisheries management in US federal waters.

Among other items, the Sustainable Fisheries Act revision in 1996 specifically outlined the responsibility of the US to conserve and facilitate long-term protection of EFH, defined as "those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity" (16 USC 1801). The 1996 revision also designated HAPC, which are subsets of EFH for more focused consideration.

Under the act, federal agencies that fund, permit, or carry out activities that may adversely affect EFH or HAPCs are required to consult with NMFS regarding the potential adverse effects of proposed project activities, as well as to respond in writing to NMFS project-specific recommendations.

# CWA Section 404 (33 U.S.C. 1344)

The basis of the CWA was enacted in 1948 and was called the Federal Water Pollution Control Act, but the Act was significantly reorganized and expanded in 1972. "Clean Water Act" became the Act's common name with amendments in 1972. CWA Section 404 established the program to regulate the discharge of dredged or fill material into waters of the US, including wetlands. Under this regulation, certain activities proposed in waters of the US, such as the placement of fill for the purposes of development, require a permit prior to initiation. The primary objective of this program is to stipulate that the discharge of dredged or fill material is not permitted if a practicable alternative to the proposed activities exists that would result in less effects on waters of the US, or if the proposed activity would result in significant adverse effects on these waters. To comply with these objectives, a permittee must document the measures taken to avoid and minimize effects on waters of the US and provide compensatory mitigation for any unavoidable effects.

**Consistent.** As discussed above, the Project would result in potential direct short-term moderate adverse effects on up to 0.39 acre of Central Valley steelhead critical habitat and Chinook salmon EFH as a result of construction access during construction of the Mormon Slough flyover structure.

However, with implementation of Measure MM BIO-2 (National Oceanic and Atmospheric Administration Consultation), which requires implementation of all commitments and avoidance and minimization measures identified during Section 7 consultation, these direct short-term moderate effects would be mitigated. Therefore, the Project is consistent with the Magnuson-Stevens Fishery Conservation and Management Act.

**Consistent.** As discussed in Section 3.15. Biological Resources, the Project would result in direct long-term moderate adverse effects on potential jurisdictional non-wetland waters of the US. However, with the implementation of Measures MM BIO-3 (Mitigation for Aquatic Resources), which requires mitigation for Project effects on aquatic resources, MM BIO-4 (Compliance with Permitted Mitigation Measures), which requires that SJRRC, in coordination with CHSRA, obtains all required permits and authorization for Project effects on waters of the US, and MM-BIO-5 (Preparation of Formal Jurisdictional Delineation), which requires that a formal field-delineation is conducted during final design, would mitigate these direct or indirect moderate adverse effects.

Therefore, with the implementation of Measures MM BIO-3 through MM BIO-5, no direct or indirect long-term moderate adverse effects on federal jurisdictional waters would result under the Project, and the Project would be consistent with CWA Section 404 requirements.





#### CWA Section 401 (33 U.S.C. 1341)

Under CWA Section 401, federal agencies are not authorized to issue a permit or license for any activity that may result in discharges to waters of the US unless a state or tribe where the discharge originates either grants or waives CWA Section 401 certification. Decisions made by states or tribes are based on the Project's compliance with EPA water quality standards as well as applicable effluent limitations guidelines, new source performance standards, toxic pollutant restrictions, and any other appropriate requirements of state or tribal law. In California, SWRCB is the primary regulatory authority for CWA Section 401 requirements. **Consistent.** As discussed above, the Project would result in direct long-term moderate adverse effects on potential jurisdictional non-wetland waters of the US. However, with the implementation of Measures MM BIO-3 (Mitigation for Aquatic Resources), MM BIO-4 (Compliance with Permitted Mitigation Measures), and MM-BIO-5 (Preparation of Formal Jurisdictional Delineation).

Therefore, with the implementation of Measures MM BIO-3 through MM BIO-5, no direct or indirect long-term moderate adverse effects on federal jurisdictional waters would result under the Project, and the Project would be consistent with CWA Section 401 requirements.



# Migratory Bird Treaty Act (16 U.S.C. 703-712)

Migratory birds are protected under the MBTA of 1918. A list of species protected by the MBTA is currently codified in 50 CFR 10.13. In its current form, section 2(a) of the MBTA provides in relevant part that, unless permitted by regulations, it is unlawful:

> At any time, by any means of in any manner, to pursue, hunt, take, capture, kill, attempt to take, capture, or kill, possess, offer for sale, sell, offer to barter, barter, offer to purchase, purchase, deliver for shipment, ship, export, import, cause to be shipped, exported, or imported, deliver for transportation, transport or cause to be transported, carry or cause to be carried, or receive for shipment, transportation, carriage, or export, any migratory bird, any part, nest, or egg of any such bird, or any product, whether or not manufactured, which consists, or is composed in whole or part, of any such bird or any part, nest, or egg thereof.

**Consistent.** As discussed in Section 3.15, *Biological Resources*, the BSA and immediate surroundings provide potential habitat for nesting, wintering, and/or foraging habitat for migratory birds and raptors. All native breeding birds (except game birds during the hunting season), regardless of their listing status, are protected under the MBTA. The SJMSCP identifies Incidental Take Avoidance Measures for various classifications of nesting birds of which the BSA has potential to support the following classes: *Ground Nesting or Streamside/Lakeside Nesting Birds* and *Birds Nesting in Isolated Trees or Shrubs Outside of Riparian Areas*.

With the incorporation of BMP BIO-1 (Biological Monitoring and Environmental Awareness Training) and BMP BIO-2 (Migratory Bird and Raptor Surveys and Nest Avoidance), identified in Table 3.15-2, and the implementation of Measure MM BIO-1 (Compliance with SJMSCP), which requires SJRRC, in coordination with CHSRA, to ensure compliance with applicable Incidental Take Avoidance Measures identified in the SJMSCP, no direct short-term moderate adverse effects on special-status species, such as migratory birds and raptors would occur under the Project.

Additionally, in the event that active migratory bird or raptor nests are present within the BSA during operation of the Project, BMP BIO-2, identified in Table 3.15-2, will be incorporated to minimize these potential direct long-term effects. Further, the Project would result in habitat loss for migratory nesting birds and raptors. However, these direct and indirect long-term moderated adverse effects would be mitigated with the implementation of Measure MM BIO-1.

Based on the discussion above, with the incorporation of BMP BIO-2, identified in Table 3.15-2, and the implementation of Measure MM BIO-1, no direct or indirect long-term moderate adverse effects on special-status species, including migratory birds, would result under the Project and the Project is consistent with the MBTA.



### Bald and Golden Eagle Protection Act (16 U.S.C. 668-668c)

The Bald and Golden Eagle Protection Act (16 U.S.C. 668-668c), enacted in 1940, and amended several times since, prohibits anyone, without a permit issued by the Secretary of the Interior, from "taking" bald or golden eagles, including their parts\*, nests, or eggs. The Act provides criminal penalties for persons who "take, possess, sell, purchase, barter, offer to sell, purchase or barter, transport, export or import, at any time or any manner, any bald eagle ... [or any golden eagle], alive or dead, or any part\*, nest, or egg thereof." The Act defines "take" as "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb." **Consistent.** As discussed above under the MBTA, with the incorporation of BMP BIO-1 (Biological Monitoring and Environmental Awareness Training) and BMP BIO-2 (Migratory Bird and Raptor Surveys and Nest Avoidance), identified in Table 3.15-2, and the implementation of Measure MM BIO-1 (Compliance with SJMSCP), no direct short-term moderate adverse effects on special-status species, such as migratory birds and raptors, including bald and golden eagles, would occur under the Project

Additionally, in the event that active migratory bird or raptor nests are present within the BSA during operation of the Project, BMP BIO-2, identified in Table 3.15-2, will be incorporated to minimize these potential direct long-term effects. Further, the Project would result in habitat loss for migratory nesting birds and raptors. However, these direct and indirect long-term moderated adverse effects would be mitigated with the implementation of Measure MM BIO-1.

Based on the discussion above, with the incorporation of BMP BIO-2, identified in Table 3.15-2, and the implementation of Measure MM BIO-1, no direct or indirect long-term moderate adverse effects on special-status species, including migratory birds (and more specifically band and/or golden eagles), would result under the Project and the Project is consistent with Bald and Golden Eagle Protection Act.



# Fish and Wildlife Coordination Act (16 U.S.C. 661-666c)

The Fish and Wildlife Coordination Act of 1958 requires that whenever any body of water is proposed or authorized to be impounded, diverted, or otherwise controlled or modified, the lead federal agency must consult with USFWS, the state agency responsible for fish and wildlife management, and NMFS. Section 662(b) of the act requires the lead federal agency to consider the recommendations of USFWS and other agencies.

### EO 13112 – Invasive Species

EO 13112 was signed on Feb 3, 1999, directing all federal agencies to refrain from authorizing, funding, or carrying out actions or projects that may spread invasive species. **Consistent.** As discussed in Section 3.15, *Biological Resources*, NMFS designated Mormon Slough as critical habitat for Central Valley steelhead in 2000 (NMFS 2014), including the portion of the Mormon Slough within the BSA. EFH for Chinook salmon also occurs in the portion of the Mormon Slough within the BSA. In addition, there is critical habitat for green sturgeon and EFH for groundfish downstream of the BSA. While none of these species are present within the BSA at this time, preservation of fish passage and important habitat characteristics would be important to future restoration efforts of Mormon Slough as fish habitat.

NMFS issued a "not likely to adversely affect" determination for the Project on May 17, 2021, with regard to Central Valley steelhead and its critical habitat and the southern distinct population segment of North American green sturgeon and its critical habitat. It also determined that the Project would have "no adverse effect" on EFH for chinook salmon or groundfish. The NMFS Concurrence Letter is provided in Appendix N. Therefore, the Project is consistent with the Fish and Wildlife Coordination Act.

**Consistent.** The Project will incorporate BMP BIO-8 (Prevention of Invasive Species During Construction) in Table 3.15-2, Section 3.15, *Biological Resources* to address potential invasive plant species. BMP BIO-8 will include the inspection of the Project Study Area immediately prior to and during construction to identify the presence of invasive weeds, and recommending measures, as needed, to avoid the inadvertent spread of invasive weeds in association with the Project. BMP BIO-8 will incorporate invasive species control measures, such as inspection and cleaning of construction equipment and use of eradication strategies. Therefore, the Project is consistent with EO 13112.



#### National Invasive Species Act (Public Law 104–332)

The National Invasive Species Act of 1996 reauthorized and amended the Nonindigenous Aquatic Nuisance Prevention and Control Act of 1990 with a number of findings that highlighted a need for additional management measures to prevent further introduction and infestation of destructive species.

#### EO 11990 – Protection of Wetlands

EO 11990 of May 24, 1977, requires federal agencies to provide leadership and take action to minimize destruction, loss, or degradation of wetlands and to preserve and enhance the natural qualities of these lands.

SJMSCP

The SJMSCP was developed in 2000 to offer an approach for balancing the conservation of open space and the need to convert open space as a result of development while simultaneously protecting the region's economy; preserving property rights; providing for the long-term management of plant, fish, and wildlife species, especially special status species; and providing and maintaining multiple-use areas.

Project applicants are given the option of participating in the SJMSCP as a way to streamline compliance with required local, state, and federal laws regarding biological resources, and typically avoid having to approach each agency independently. Participating applicants pay mitigation fees or provide land in-lieu of fees on a per-acre basis according to the measures needed to mitigate adverse effects to the various habitat and biological resources. Development occurring on land that has been classified under the SJMSCP as "no-pay" would not be required to pay a fee but fulfill the biological requirements of the plan to minimize adverse effects to species. **Consistent.** As discussed above, the Project will incorporate BMP BIO-8 (Prevention of Invasive Species During Construction) in Table 3.15-2, Section 3.15, *Biological Resources* to address potential invasive plant species. Therefore, the Project is consistent with the National Invasive Species Act.

**Consistent.** As discussed above, the Project would result in direct long-term moderate adverse effects on potential jurisdictional non-wetland waters of the US. However, with the implementation of Measures MM BIO-3 (Mitigation for Aquatic Resources), MM BIO-4 (Compliance with Permitted Mitigation Measures), and MM-BIO-5 (Preparation of Formal Jurisdictional Delineation).

Therefore, with the implementation of Measures MM BIO-3 through MM BIO-5, no direct or indirect long-term moderate adverse effects on federal jurisdictional waters would result under the Project, and the Project would be consistent with EO 11990.

**Consistent.** The Project will incorporate BMP BIO-1 (Biological Monitor and Environmental Awareness Training), which specifies that all SJMSCP Incidental ITMMs are implemented, BMP BIO-2 (Migratory Bird and Raptor Surveys and Nest Avoidance), which specifies that if active nest sites are identified in the survey area, a nodisturbance buffer will be established based on requirements within the SJMSCP (as described in SJMSCP ITMM 5.2.4.17, 5.2.4.18, and 5.2.4.19), and the implementation of Measure MM BIO-1 (Compliance with SJMSCP), which requires SJRRC, in coordination with CHSRA, comply with all applicable standards and regulations set forth in the SJMSCP, as well as all applicable Incidental Take Avoidance Measures identified within the SJMSCP. Therefore, with these BMPs and mitigation measure incorporated, the Project would be consistent with SJMSCP.



# City of Stockton General Plan

**Goal LU-5:** Protected Resources – Protect, maintain, and restore natural and cultural resources.

Action LU-5.1B: Protect, preserve, and improve riparian corridors and incorporate them in the City's parks, trails, and open space system.

**Policy LU-5.2:** Protect natural resource areas, fish and wildlife habitat, scenic areas, and open space areas, agricultural lands, parks, and other cultural/historic resources from encroachment or destruction by incompatible development.

Action LU-5.2A: Coordinate with the SJCOG and comply with the terms of the SJMSCP.

**Consistent.** Please refer to the consistency discussion under the topic of *Cultural Resources*. Based on that discussion, the Project is consistent with this general plan goal under this topic, *Biological Resources*.

**Consistent.** As discussed in Section 3.15 Biological Resources, no essential habitat connectivity areas, natural landscape blocks, wildlife movement barrier priorities, or missing linkages occur within or adjacent to the BSA. However, the Mormon Slough may provide a corridor for common terrestrial wildlife movement through the BSA. Therefore, the Project will incorporate appropriate BMP measures identified in Table 3.15-2, which include Measure BIO-1 (Biological Monitor and Environmental Awareness Training), BMP BIO-3 (Construction BMPs at Mormon Slough), BMP BIO-4 (Environmentally Sensitive Area Fencing at Mormon Sough), BMP BIO-5 (Restoration of Temporarily Affected Areas), and BMP BIO-6 (Vehicle Access and Speed Limits).

Further, the Project will implement mitigation in the form of Measures MM BIO-1 (Compliance with SJMSCP), MM BIO-2 (National Oceanic and Atmospheric Administration Consultation), MM BIO-3 (Mitigation for Aquatic Resources), MM BIO-4 (Compliance with Permitted Mitigation Measures), and MM BIO-5 (Preparation of Formal Jurisdictional Delineation). Therefore, no direct or indirect short-term or long-term adverse effects would result, and the Project is consistent with this general plan action.

**Consistent.** Please refer to the consistency discussion under the topic of *Parks, Recreation, and Section 4(f) Resources*. Based on that discussion, the Project is consistent with this general plan goal under this topic, *Biological Resources*.

**Consistent.** As discussed in Section 3.15 *Biological Resources*, Measure MM BIO-1 (Compliance with SJMSCP), will require Project compliance with all applicable standards and regulations set forth in the SJMSCP; as well as all applicable Incidental Take Avoidance Measures identified within the SJMSCP. Therefore, the Project is consistent with this general plan action.


Action LU-5.2B: For projects on or within 100 feet of sites that have the potential to contain special-status species or critical or sensitive habitats, including wetlands, require preparation of a baseline assessment by a qualified biologist following appropriate protocols, such as wetland delineation protocol defined by USACE. Impacts shall be minimized through project design or compensation identified in consultation with a qualified biologist.

Action LU-5.2C: Require new development to implement best practices to protect biological resources, including incidental take minimization measures and other federal and State requirements and recommendations that are consistent with the SJMSCP.

#### **Cumulative Effects**

#### CEQ 1978 Regulations (40 CFR part 1508.7)

As defined under CEQ's Regulations under 40 CFR Section 1508.7, "cumulative impact" is the impact on the environment that results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over time. **Consistent.** As discussed in Section 3.15 *Biological Resources*, the Project would result in short-term effects to up to 0.39 acre of potential non-wetland waters of the State and cause longterm effects on approximately 0.04 acre of potential jurisdictional waters of the State.

However, the Project will incorporate BMP BIO-4 (Environmentally Sensitive Area Fencing at Mormon Slough); as well as implement mitigation through Measures MM BIO-3 (Mitigation for Aquatic Resources), MM BIO-4 (Compliance with Permitted Mitigation Measures), and MM BIO-5 (Preparation of Formal Jurisdictional Delineation). Thus, no direct or indirect short-term or long-term adverse effects on aquatic resources or jurisdictional waters would result from the Project. Therefore, the Project is consistent with this general plan action.

**Consistent.** The Project will implement mitigation through the form of Measure MM BIO-1 (Compliance with SJMSCP), which requires Project compliance with all applicable standards and regulations set forth in the SJMSCP; as well as all applicable Incidental Take Avoidance Measures identified within the SJMSCP. Therefore, the Project is consistent with this general plan action.

Consistent. As discussed in Section 3.16, Cumulative Effects, a list of projects presented in Table 3.16-1 represents current and reasonably foreseeable planned or programmed future projects used for this cumulative analysis. The projects considered affect the same general geographic area and consist of major transportation and infrastructure projects. Effects from these projects are considered reasonably foreseeable and have a reasonably close causal relationship with the Project, factors which form the basis of cumulative effects analysis under 40 CFR 1508.7. No formally planned or approved private development projects exist within this area. Therefore, the cumulative analysis was prepared in accordance with NEPA requirements.



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## Appendix C. Demographic and Growth Data

STOCKTON DIAMOND GRADE SEPARATION PROJECT



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This Appendix provides supplemental demographic and growth data for the existing setting in support of Section 3.2, *Community Effects and Growth*.

## C.1 Existing Setting

#### **Property Tax**

Table C.1-1 compares the general property tax levies in San Joaquin County for FY 2018-2019 and FY 2012-2013.

FY	Net	Pr	_				
	Taxable Assessed Value <sup>1</sup> (\$ Million)	Cities	County <sup>3</sup>	Schools <sup>3</sup>	Other Districts⁴	Total⁴	Average Tax Rate
FY 2019-2020	\$80,557	\$78.4	\$170.5	\$546.2	\$124.1	\$919.2	1.14%
FY 2012-2013	\$52,751	\$53.623	\$108.4	\$348.4	\$73.4	\$583.9	1.12%
Percent Change	34.5%	31.6%	36.4%	36.2%	40.8%	36.5%	1.75 %

#### Table C.1-1: County of San Joaquin General Property Tax Levies

Source: CBOE 2021 Note: FY=Fiscal Year

<sup>1</sup> Excluded are tax exemptions, such as for homeowners.

<sup>2</sup> San Joaquin levies at a rate of 1 percent of assessed value have been allocated among the jurisdictions receiving a portion of those levies. Excluded are the state reimbursements to local governments and for the homeowners' exemption described in footnote 1.

<sup>3</sup> San Joaquin levies for school purposes such as junior college tuition and countywide school levies are included with school levies.

<sup>4</sup> Includes debt levies on land and improvements and other levies

#### **Regional and Local Demographic Characteristics**

#### Race and Ethnicity Characteristics

Table C.1-2 presents the race and ethnicity characteristics of San Joaquin County and the City of Stockton.

## Table C.1-2: Race and Ethnicity Characteristics in San Joaquin County and the Community Impacts and Growth RSA

	San Joaqı	in County	City of Stockton		
Race/Ethnicity	Total Estimate	Percentage of Population	Total Estimate	Percentage of Population	
Total Population	732,212	100.0%	306,283	100.0%	
White alone, non-Hispanic	237,887	32.4%	63,847	20.8%	
Black or African American alone, non-Hispanic	49,926	6.8%	35,066	11.4%	
Asian alone, non-Hispanic	110,164	15.0%	64,487	21.1%	
Other <sup>a</sup>	32,979	4.5%	14,087	4.6%	
Hispanic or Latino (all races)	301,256	41.1%	128,796	42.1%	

Source: U.S. Census Table B03002 2018 ACS 5-Year Estimates

<sup>a</sup> "Other" includes non-Hispanic Native Hawaiian and Other Pacific Islander alone, American Indian and Alaska Native alone, Some other race, and Two or more races.



#### Socioeconomic and Housing Characteristics

Table C.1-3 provides an overview of employment, poverty status, and housing data in San Joaquin County and the City of Stockton.

# Table C.1-3: Socioeconomic and Housing Characteristics in San Joaquin County and the Community Impacts and Growth RSA

Sociooconomic and Housing	San Joaqui	n County	City of Stockton <sup>a</sup>		
Characteristics	Total Estimate	Percentage of Total Estimate	Total Estimate	Percentage of Total estimate	
Households for Which Poverty Status was Evaluated	168,502	100.0%	68,040	100.0%	
Households Below Poverty Level	21,450	12.7%	11,626	17.1%	
Population in Civilian Labor Force	334,498	100.0%	137,250	100.0%	
Unemployed in Civilian Labor Force	28,989	8.7%	14,007	10.2%	
Occupied Housing Units	226,727	100.0%	95,191	100.0%	
Renter-Occupied Housing Units	100,630	44.4%	49,960	52.5%	

Source: U.S. Census Table B17010 2018 ACS 5-Year Estimates Table; Table B23025 2018 ACS 5-Year Estimates Table; U.S. Census Table B25003 2018 ACS 5-Year Estimates Table

Note: RSA=Resource Study Area

#### **Community Demographic Characteristics**

#### Race and Ethnicity Characteristics

Table C.1-4 provides the race and ethnicity characteristics of each census tract block group within the community impacts and growth RSA.



RSA (CT/BG)	Total Population	White Alone	Black/Africa n American Alone	Asian Alone	Other	Hispanic/ Latino (All Races)	Total Minority Population
CT 1/BG 1	1,443	18.6%	35.4%	13.0%	0%	33.0%	81.4%
CT 1/BG 2	944	13.1%	25.5%	13.7%	7.5%	40.1%	86.8%
CT 1/BG 3	896	0%	0.4%	0%	0.6%	99.0%	100.0%
CT 1/BG 4	772	10.4%	20.1%	7.9%	11.1%	50.5%	89.6%
CT 4.02/BG 1	889	31.8%	19.1%	30.4%	0%	18.7%	68.2%
CT 4.02/BG 2	1,045	14.6%	10.0%	1.8%	2.1%	71.5%	85.4%
CT 5/BG 1	1,304	17.2%	2.1%	5.4%	0%	75.3%	82.8%
CT 5/BG 2	1,161	13.9%	2.4%	3.4%	0.4%	79.9%	86.1%
CT 6/BG 1	816	3.9%	5.9%	1.7%	0%	88.5%	96.1%
CT 6/BG 2	992	3.6%	1.7%	15.0%	1.6%	78.0%	96.4%
CT 7/BG 1	811	0%	14.2%	19.7%	1.2%	64.9%	100.0%
CT 7/BG 2	1,099	2.0%	1.6%	20.8%	0.4%	75.2%	98.0%
CT 16/BG 2	1,374	13.2%	5.8%	7.7%	2.0%	71.3%	86.8%
CT 19/BG 2	1,773	7.3%	14.3%	0%	2.3%	76.1%	92.7%
CT 19/BG 3	1,067	7.8%	14.2%	0%	2.1%	75.9%	92.2%
CT 19/BG 4	987	6.5%	23.9%	1.6%	0%	68.0%	93.5%
CT 22.01/BG 1	1,078	2.3%	11.6%	5.1%	0%	81.0%	97.7%
CT 22.01/BG 2	1,737	3.5%	19.7%	1.0%	5.6%	70.1%	96.5%
CT 22.02/BG 1	1,582	3.9%	4.7%	13.8%	0%	77.5%	96.1%
CT 23/BG 1	1,988	0.8%	3.9%	8.7%	2.9%	83.8%	99.3%
CT 23/BG 2	1,543	3.4%	2.3%	9.2%	0%	85.1%	96.6%
CT 23/BG 3	1,101	7.3%	4.3%	14.1%	1.5%	72.9%	92.8%
RSA Total	26,402	8.4%	11.1%	8.8%	1.9%	69.8%	91.6%

#### Table C.1-4: Race and Ethnicity Characteristics by Census Tract Block Group

Source: U.S. Census Table B03002 2018 ACS 5-Year Estimates

Note: CT = Census Tract; BG = Block Group; RSA=Resource Study Area

<sup>a</sup> "Other" includes non-Hispanic Native Hawaiian and Other Pacific Islander alone, non-Hispanic American Indian and Alaska Native alone, non-Hispanic Some other race, and non-Hispanic Two or more races.



#### Socioeconomic Characteristics

Table C.1-5 provides the poverty status and employment characteristics of each census tract block group within the community impacts and growth RSA.

RSA (CT/BG)ª	Total Households for which Poverty was Evaluated	Rate of Households Below Poverty Level	Total Civilian Labor Force	Rate of Unemployment in Civilian Labor Force
CT 1/BG 1	253	56.5%	451	25.7%
CT 1/BG 2	107	44.9%	185	18.4%
CT 1/BG 3	155	30.3%	605	14.2%
CT 1/BG 4	71	80.3%	256	12.5%
CT 4.02/BG 1	153	58.2%	316	11.1%
CT 4.02/BG 2	155	27.7%	334	16.2%
CT 5/BG 1	290	26.9%	553	14.8%
CT 5/BG 2	233	47.6%	477	5.5%
CT 6/BG 1	178	28.1%	403	4.7%
CT 6/BG 2	152	30.9%	348	5.5%
CT 7/BG 1	199	10.1%	413	23.0%
CT 7/BG 2	234	60.7%	401	10.5%
CT 16/BG 2	331	20.2%	611	4.9%
CT 19/BG 2	398	28.9%	622	12.7%
CT 19/BG 3	195	36.9%	492	15.2%
CT 19/BG 4	189	39.7%	362	10.5%
CT 22.01/BG 1	250	20.0%	415	15.2%
CT 22.01/BG 2	367	45.0%	543	9.9%
CT 22.02/BG 1	336	17.3%	655	13.0%
CT 23/BG 1	417	24.7%	773	6.6%
CT 23/BG 2	324	25.3%	645	5.4%
CT 23/BG 3	221	32.1%	422	4.5%
<b>RSA</b> Total	5,208	36.01%	10,282	11.82%

#### Table C.1-5: Socioeconomic Characteristics by Census Tract Block Group

Source: U.S. Census Table B17010 2018 ACS 5-Year Estimate; Table B23025 2018 ACS 5-Year Estimate Note: CT = Census Tract; BG = Block Group; RSA=Resource Study Area



#### **Growth Characteristics**

#### Population

Table C.1-6 presents historical, current, and projected population trends for San Joaquin County and the City of Stockton.

#### Table C.1-6: Historic, Current, and Projected Population (2000–2035)

Location	Historic/Current Trends				Projected Conditions			
	2000	2010	2020	Percent Change 2000- 2020	2035	Percent Change 2000-2035	Percent Change 2020-2035	
City of Stockton	243,771	291,275	318,522	30.7%	401,961	64.9%	20.8%	
San Joaquin County	563,598	684,057	773,632	37.3%	947,835	68.2%	18.4%	
2000 00 00 00 00 00 00 00 00 00 00 00 00								

Sources: DOF 2012; DOF 2020b; SJCOG 2018

#### Housing

Table C.1-7 presents housing trends as well as the percentage of single-family dwellings, vacancy rates, and average household size for San Joaquin County and the City of Stockton.

#### Table C.1-7: Housing Trends and Characteristics (2000-2020)

Location	Housing Unit Trends			Characteristics (2020)			
Location	2000	2010	2020	Single Family (%)	Vacancy (%)	Average Persons per Household	
City of Stockton	82,042	99,637	101,235	72.0%	6.1%	3.26	
San Joaquin County	189,160	233,755	249,058	78.2%	5.7%	3.23	

Sources: DOF 2012; DOF 2020b

Table C.1-8 presents the projected increase in housing units by 2035 for San Joaquin County and the City of Stockton.

#### Table C.1-8: Projected Housing Units (2035)

Location	Projected Housing Units (2035)	Percent Increase from 2020
City of Stockton	131,461	29.9%
San Joaquin County	314,470	26.3%
Sources: DOF 2020b; SJC0	DG 2018	



#### Employment

Table C.1-9 presents employment trends for San Joaquin County and the City of Stockton.

Location	Historic/Current Trends			Projected Conditions		
Location	2000	2010	2020	Percent Change 2000-2020	2035	Percent Change 2000-2035
City of Stockton	89,165	111,001	115,500	22.8%	144,228	38.2%
San Joaquin County	219,000	264,858	294,500	25.6%	299,918	27.0%

#### Table C.1-9: Historic, Current, and Projected Employment (2000–2035)

Sources: U.S. Census Table DP03 2010 ACS 1-Year Estimate; Table DP3 2000 Decennial Census; EDD 2021; SJCOG 2018



## Appendix. D Final Section 4(f) and Section 6(f) Evaluation

STOCKTON DIAMOND GRADE SEPARATION PROJECT



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## D.1 Introduction

This appendix describes the Stockton Diamond Grade Separation Project's (Project) compliance with the provisions of 49 USC Section 303 of the DOT Act of 1966—hereafter referred to as Section 4(f)—and the Land and Water Conservation Fund (LWCF) Act of 1965—hereafter referred to as Section 6(f). This appendix describes the regulatory requirements associated with Section 4(f) and with Section 6(f) and identifies all properties protected by these regulations in the Project Study Area. Determinations to comply with Section 4(f) and Section 6(f) are made following an evaluation of potential uses of these properties per Section 4(f) and land conversion per Section 6(f) with implementation of the Project.

#### D.1.1 SECTION 4(F)

Section 4(f) of the USDOT Act of 1966, codified in federal law at 49 United States Code 303, declares that "...it is the policy of the United States Government that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites."

Section 4(f) specifies that the Secretary of Transportation may approve a transportation program or project:

"... requiring the use of publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, state, or local significance, or land of an historic site of national, state, or local significance (as determined by the federal, state, or local officials having jurisdiction over the park, area, refuge, or site) only if:

- There is no prudent and feasible alternative to using that land; and
- The program or project includes all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuge, or historic site resulting from the use."

In certain instances, Section 4(f) further requires consultation with the United States Department of the Interior and, as appropriate, the United States Departments of Agriculture and Housing and Urban Development in developing transportation projects and programs that use lands protected by Section 4(f). If historic sites are involved, then coordination with the State Historic Preservation Officer is also needed in certain instances.

#### Section 4(f) Definitions

According to the Section 4(f) Policy Paper (FHWA 2012) and 23 CFR 774.17, a use of land from a Section 4(f) property is determined by FHWA to occur: (a) "when land is permanently incorporated into a transportation facility," (b) "when there is a temporary occupancy of land that is adverse in terms of the statute's preservation purposes," or (c) "when there is a constructive use of a Section 4(f) property as determined by the criteria in (23 CFR) section 774.15."



**Permanent Incorporation**: Land will be considered permanently incorporated into a transportation facility when it has been purchased as right-of-way or when the applicant for federal-aid funds has acquired a sufficient property interest for the purpose of Project implementation.

**Temporary Occupancy**: During construction activities, a temporary occupancy is considered a Section 4(f) use if the Section 4(f) property is subjected to adverse temporary or permanent changes and/or if there is a disruption to the facilities or activities of the Section 4(f) property.

However, according to Section 23 CFR 774.13(d), temporary occupancies of land are exempt from Section 4(f) approvals when they are so minimal as to not constitute a use within the meaning of Section 4(f). For the temporary occupancies of land use exemption to apply, the following conditions must be satisfied:

- 1) Duration must be temporary (i.e., less than the time needed for construction of the project), and there should be no change in ownership of the land
- 2) Scope of the work must be minor, (i.e., both the nature and the magnitude of the changes to the Section 4(f) property are minimal)
- 3) There are no anticipated permanent adverse physical impacts, nor will there be interference with the protected activities, features, or attributes of the property, on either a temporary or permanent basis
- 4) The land being used must be fully restored (i.e., the property must be returned to a condition which is at least as good as that which existed prior to the project); and
- 5) There must be documented agreement of the official(s) with jurisdiction over the Section 4(f) resource regarding the above conditions

In situations where the above criteria cannot be met, the temporary occupancy will be a use of Section 4(f) property and the appropriate Section 4(f) analysis, coordination, and documentation will be required. In those cases where a temporary occupancy constitutes a use of Section 4(f) property and the *de minimis* impact criteria are also met, a *de minimis* impact finding may be made. A *de minimis* impact findings should not be made in temporary occupancy situations that do not constitute a use of Section 4(f) property.

**Constructive Use**: Constructive use involves no actual physical use of the Section 4(f) and is only possible in the absence of a permanent incorporation of land or a temporary occupancy of the type that constitutes a Section 4(f) use. Constructive use occurs when the proximity impacts of a project on an adjacent or near-by Section 4(f) property, after incorporation of impact mitigation (e.g., noise, vibration, visual, access, ecological) are so severe that the activities, features, or attributes that qualify the property for protection under Section 4(f) are substantially impaired. Substantial impairment occurs when the protected activities, features, or attributes of the Section 4(f) property are substantially diminished.



**De Minimis Impact:** According to the Section 4(f) Policy Paper (FHWA 2012) and Section 23 CFR 774.17(5), a *de minimis* impact is one that, after taking into account any measures to minimize harm (such as avoidance, minimization, mitigation or enhancement measures), results in either of the following:

 For historic sites, *de minimis* impact means that the Administration (CHSRA) has determined, in accordance with 36 CFR part 800, that no historic property is affected by the project or that the project will have "no adverse effect" on the historic property in question.

Per CFR 774.5 (b)(1), prior to making *de minimis* impact determinations under §774.3(b), the following coordination shall be undertaken for historic properties:

- The consulting parties identified in accordance with 36 CFR part 800 must be consulted
- The Administration (CHSRA) must receive written concurrence from the pertinent SHPO officer or Tribal Historic Preservation Officer (THPO), and from ACHP, if participating in the consultation process, for a finding of "no adverse effect" or "no historic properties affected" in accordance with 36 CFR part 800. The Administration (CHSRA) shall inform these officials of its intent to make a *de minimis* impact determination based on their concurrence in the finding of "no adverse effect" or "no historic properties affected."
- For parks, recreation areas, and wildlife and waterfowl refuges, a *de minimis* impact is one that will not adversely affect the features, attributes, or activities qualifying the property for protection under Section 4(f).

Per CFR 774.5 (b)(2), prior to making *de minimis* impact determinations under §774.3(b), the following coordination shall be undertaken for parks, recreation areas, and wildlife and waterfowl refuges:

- Public notice and an opportunity for public review and comment concerning the effects on the protected activities, features, or attributes of the property must be provided. This requirement can be satisfied in conjunction with other public involvement procedures, such as a comment period provided on a NEPA document.
- The Administration (CHSRA) shall inform the official(s) with jurisdiction of its intent to make a *de minimis* impact finding. Following an opportunity for public review and comment, as described in paragraph (b)(2)(i) of this section, the official(s) with jurisdiction over the Section 4(f) resource must concur in writing that the project will not adversely affect the activities, features, or attributes that make the property eligible for Section 4(f) protection. This concurrence may be combined with other comments on the project provided by the official(s).

While *de minimis* is generally applied where there is a permanent incorporation of land, if a temporary occupancy of a Section 4(f)-protected property during construction does not meet the conditions required for the temporary occupancy exception of use under Section 774.13(d), it may be possible to make a *de minimis* impact determination.



# D.1.2 SECTION 6(F) OF THE LAND AND WATER CONSERVATION FUND ACT REGULATIONS

State and local governments often obtain grants through the LWCF Act to acquire or make improvements to parks and recreation areas. Section 6(f) of the LWCF Act prohibits the conversion of any property acquired or developed with these grants a non-recreational purpose without the approval of NPS. Section 6(f) requires NPS to make certain that replacement lands of comparable value and function or monetary compensation (used to enhance the remaining land), location, and usefulness are provided as conditions to such conversions.

The Project team consulted the California Department of Parks and Recreation's database of funded projects from 1964 through 2019 and identified 15 parks funded in whole or in part by LWCF grants located in the City of Stockton. The nearest park subject to a Section 6(f) analysis is located a little over 0.5-mile south of the Project Study Area.<sup>1</sup> There are no recreational lands or facilities funded through the LWCF in the RSA; therefore, Section 6(f) is not applicable to the Project and will not be discussed further in this Appendix or EA.

#### D.1.3 SECTION 4(F) APPLICABILITY

According to the Section 4(f) Policy Paper (FHWA 2012), a park or recreational area qualifies for protection under Section 4(f) if it is:

- Publicly owned at the time at which the use occurs
- Open to the general public
- Being used for recreation
- Considered significant by the OWJ
- A publicly owned recreation property designated in a formal plan
- A public school with a joint-use agreement for public recreation use of the school grounds or recreation facilities
- Private schools with a joint-use agreement for public recreation use of the school grounds or recreation facilities

It is important to note that some of the conditions listed above would require OWJ to consider such resource significant. This would be applicable to public parks, but not necessarily to public schools with public recreational facilities.

According to the Section 4(f) Policy Paper (FHWA 2012), section 4(f) does not apply in the following circumstances:

• Publicly owned facilities whose major purpose is for commercial reasons, such as professional sport or music venues, rather than for park or recreation purposes

<sup>&</sup>lt;sup>1</sup> <u>California Department of Parks and Recreation. 2021. "Land and Water Conservation Fund." Accessed May</u> 2021. https://www.parks.ca.gov/?page\_id=21360



- Land that is privately owned, even if it is designated in a formal plan
- Where no joint use agreement for use of public or private school recreational facilities exists
- Publicly owned facilities where park, recreational, or refuge activities would be incidental, secondary, occasional, or dispersed
- Publicly owned land or facilities whose major purpose, as described by the agency with jurisdiction, is transportation, even when recreational activities may occur within the facility
- Privately owned golf course
- Planned facilities that are not publicly owned by the entity

A wildlife or waterfowl refuge qualifies for protection under Section 4(f) if: (1) it is publicly owned at the time at which the use occurs; (2) the land has been officially designated as a wildlife and/or waterfowl refuge by a federal, state, or local agency; (3) its primary purpose is the conservation, restoration, or management of wildlife or waterfowl resources; and (4) it is considered significant by the OWJ. As per USFWS, there are no wildlife or waterfowl refuges located in the RSA;<sup>2</sup> therefore, these properties are not discussed in this Appendix or the EA.

For publicly owned multiuse land holdings, Section 4(f) applies only to those portions of a property that are designated by statute or identified in an official management plan of the administering agency as being primarily for public park, recreation, or wildlife and waterfowl refuge purposes, and are determined to be significant for such purposes.

Historic sites listed or eligible for listing in the NRHP are protected under Section 4(f). Although the statutory requirements of Section 106 of the NHPA and Section 4(f) are similar, if a project results in an "adverse effect" under Section 106, there is not automatically a Section 4(f) use. To determine whether a use of an NRHP-protected property would occur, CHSRA completes a separate Section 4(f) analysis and determination, in addition to those completed in compliance with the Section 106 process.

For a property to be eligible for listing in the NRHP, it must meet at least one of the four NRHP criteria (that is, Criterion A to D) described in this section. The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association and meet one or more of the following criteria:

- **Criterion A**: Properties that are associated with events that have made a significant contribution to the broad patterns of our history
- Criterion B: Properties that are associated with the lives of persons significant in our past

<sup>&</sup>lt;sup>2</sup> USFWS. 2021. Find a Wildlife Refuge. Available online: <u>https://www.fws.gov/refuges/find-a-wildlife-refuge/?method=state&query=California</u>. Last updated 2021. Accessed February 8, 2021.



- **Criterion C**: Properties that embody distinctive characteristics of a type, period, or method of construction; that represent the work of a master; that possess high artistic values; or that represent a significant and distinguishable entity whose components may lack individual distinction
- **Criterion D**: Properties that have yielded, or may be likely to yield, information important in prehistory or history

For archaeological sites, in addition to the general requirements for cultural properties, Section 4(f) applies only to those sites that are on or eligible for the NRHP and that warrant preservation in place, including those sites discovered during construction. After consultation with SHPO/Tribal Historic Preservation Officer, federally recognized Indian tribes (as appropriate), and the Advisory Council on Historic Preservation (ACHP) (if participating), Section 4(f) does not apply if CHSRA determines that the archaeological resource is important chiefly because of what can be learned by data recovery and has minimal value for preservation in place (23 CFR 774.13(b)).

## D.2 Overview of Project

#### D.2.1 PURPOSE AND NEED

The Project is a critical freight and passenger mobility project. The current ACE and Amtrak San Joaquin's passenger rail service is constrained by the Stockton Diamond Interlock at-grade crossing, which can cause reliability and on time performance schedule conflicts for both passenger and freight rail operations. The grade separation would help improve SJRRC and SJJPA operational performance in providing service between the Central Valley, Sacramento, and San Francisco Bay Area.

At the present time, the BNSF Stockton Subdivision and the UP Fresno Subdivision consist of two main tracks each, and intersect each other at a level, at-grade crossing known as the Stockton Diamond. This rail intersection, located just south of Downtown Stockton near South Aurora Street and East Scotts Avenue, is the busiest at-grade railway junction in California. The at-grade crossing results in significant congestion and delays to service that moves people and freight throughout the Central Valley as well as freight out to the broader national network. The current, at-grade track configuration results in significant delays to passenger and freight trains in the area, including those serving the Port of Stockton, as well as other trains in the area. Train congestion also causes local delays at roadway-rail grade crossings and potential motor vehicle, rail, bicycle, and pedestrian conflicts.

The Project would construct a grade separation of the BNSF and UP rail lines to reduce rail congestion and allow for an uninterrupted flow of passenger and freight rail traffic through the crossing. The reduction in rail congestion would reduce delays for passenger rail providers, improve freight mobility that may lead to lower costs for freight shipping, and reduce delays for motor vehicle, bicyclist, and pedestrian traffic waiting for trains to pass. The reduction in train congestion and motor vehicle wait times at these roadway-rail grade crossings would reduce locomotive and automobile



idling and air emissions. See Chapter 1.0, *Project Description,* for a detailed discussion of the Project's Purpose and Need.

#### D.2.2 ALTERNATIVES

#### **No Action Alternative**

Under the No Action Alternative, the Project would not be implemented and none of the Project components would be developed. There would be no Project-related construction activities and all roadways and existing rail lines within the Project Study Area would continue to operate as they do now. Any eligible Section 4(f) properties would not be impacted; therefore, the use of Section 4(f) properties is not evaluated further for this alternative.

#### Project

The Project would replace the existing at-grade intersection of the BNSF Stockton Subdivision and UP Fresno Subdivision with a grade-separation structure that elevates the UP main tracks above the BNSF main tracks, enabling through trains proceeding on the UP main tracks. The three existing wye track connections between the two railroads would remain and function much as they did prior to completion of the Project, although their alignments would be modified to accommodate the development of the flyover structure and to reduce operating conflicts between trains on various routes within Stockton. No existing UP main tracks would remain in place at-grade across the BNSF main tracks after the Project is constructed. Traffic conflicts and train staging that currently occur, as trains wait on one railroad's main track for trains using the other railroad's main tracks to pass through the Stockton Diamond footprint, would be reduced once trains traveling on the UP main tracks begin using the grade-separation structure to cross above the BNSF main tracks. The at-grade crossing would be removed permanently, thereby removing the need for frequent maintenance and the resulting train delays created during shutdown of the crossing. See Chapter 1.0, *Project Description*, for a detailed description of the Project.



### Section 4(f) Applicability Analysis

This section identifies and describes the properties that meet the criteria for protection as Section 4(f) properties.

#### D.2.3 PARKS AND RECREATIONAL FACILITIES

The RSA for parks and recreation and Section 4(f) properties is defined consistently with the RSA for parks and recreation in Section 3.4, *Parks and Recreation and Section 4(f) Properties*, as the area within 1,000 feet of the Project Study Area.

Table D-1 identifies four parks and recreational facility properties that meet the eligibility criteria noted in Section D.1.3 and fall within the RSA. Figure D-1 shows the Project location, the RSA, and all eligible parks and recreational Section 4(f) properties located within the RSA.

Section 4(f) Property	OMJ	Proximity to Project Study Area	Type of Work Proposed at Property	Potential Effect on Property
Independence Park	City of Stockton	Adjacent to Project Study Area	None Anticipated	Temporary construction noise and dust impacts
Gleason Park	City of Stockton	807 feet	None Anticipated	None Anticipated
Union Park	City of Stockton	Partially within Project Study Area	TCE at corner of property	Temporary construction noise and dust impacts
Liberty Park	City of Stockton	338 feet	None Anticipated	Temporary construction noise and dust impacts
San Joaquin County Fairgrounds	State of California	850 feet	None Anticipated	None Anticipated

#### Table D-1: Section 4(f) Properties – Parks and Recreational Facilities





#### Figure D-1: Section 4(f) Properties – Parks and Recreational Facilities



#### Independence Park

Independence Park is a 2-acre City of Stockton neighborhood park located at 802 East Market Street within the southwest quadrant of East Market Street and South Aurora Street. The park consists of a grassy open space available for public use. The Project Study Area terminates immediately east of the park and there would be no encroachment within the park boundary with any Project elements or construction activities. There would be construction-related noise and dust impacts.

#### **Gleason Park**

Gleason Park is a 2-acre City of Stockton neighborhood park located at East Sonora Street and California Street. The park consists of a grassy open space, five picnic tables, and a playground available for public use. It is over 800 feet from the Project Study Area.

#### **Union Park**

Union Park is a 2-acre City of Stockton neighborhood park located at East Hazelton Avenue and North Pilgrim Street. The park consists of a grassy open space, three picnic tables, and playground equipment available for public use. There is also a walking path that spans the diagonal of the park property. The Project Study Area terminates at the northwestern border of the park and there would be no permanent encroachment within the park boundary with any Project elements. However, there is an anticipated need for a TCE that would temporarily occupy a small portion of the northeastern corner of the park.

#### **Liberty Park**

Liberty Park is a 2-acre City of Stockton neighborhood park located at 725 East Jefferson Street within the northeast quadrant of Jefferson Street and South Stanislaus Street. The park consists of a grassy open space, four picnic tables, a playground, basketball courts, and a small walking trail for public use. The Project Study Area terminates approximately 338 feet east of the park, and there would be no encroachment within the park. However, there is the potential for construction-related noise and dust impacts.

#### San Joaquin County Fairgrounds

The San Joaquin County Fairgrounds are located at 1658 South Airport Way. It provides a large area for community events including music concerts, carnivals, and food and local exhibits. More specific events include the annual San Joaquin County Fair, Delta Speedway, California Central Valley Archery, Open Air Market, Stockton Dirt Track, Go Cart Track, and Soccer for Kids. The fairgrounds are located approximately 850 feet east of the Project Study Area.

#### D.2.4 HISTORIC PROPERTIES

The RSA for impacts on historic properties includes the APE defined for Section 106 purposes. The APE includes a study area for built historic properties that encompasses all legal parcels intersected



by the Project as well as adjacent parcels in case the built historic properties on those parcels are indirectly affected. For archaeological sites, the APE also includes a study area for archaeological resources that was established based on an undertaking's potential for direct effects from ground-disturbing activities, including ground disturbance beyond the immediate footprint, which includes all preconstruction, construction, and operation activities. The APE for archaeology consists of the current and proposed ROW, temporary staging areas, utility easements, and laydown area. All historic properties located within the RSA/APE that meet the noted criteria qualify for Section 4(f) protection and are listed in Table D-2. Each of these properties is identified in Figure D-2.

Section 4(f) Property	OMJ	Proximity to Project Study Area	Type of Work Proposed at Property	Anticipated Effect on Historic Property
Stockton Downtown Commercial Historic District	SHPO	Within and adjacent to Project Study Area	Utility modifications within public right- of-way	No Adverse Effect
Imperial Hotel	SHPO	Adjacent to Project Study Area	None anticipated	No Adverse Effect
Imperial Garage	SHPO	70 feet	None Anticipated	No Adverse Effect
Hotel New York	SHPO	Adjacent to Project Study Area	None Anticipated	No Adverse Effect
915 East Market Street	SHPO	Adjacent to Project Study Area	None Anticipated	No Adverse Effect
Waldemar Apartments	SHPO	Adjacent to Project Study Area	None Anticipated	No Adverse Effect

#### Table D-2: Section 4(f) Properties – Historic Properties



#### Figure D-2: Section 4(f) Properties – Historic Properties





#### Stockton Downtown Commercial Historic District

The RSA/APE intersects the Stockton Downtown Commercial Historic District. Comprised of 84 contributing buildings within its approximate 21-city-block boundary, only four legal parcels at the district's easternmost boundary are within the RSA/APE. A previous evaluation of the district concluded that it was eligible for listing in the NRHP. The present study updated previous evaluations of four of the district's contributing buildings located along South Aurora and East Market streets in the RSA/APE. The district is significant at the local level under NRHP Criterion A within the context of commercial development of Stockton during a period of significance from 1880-1940. The boundary of the district generally extends east-west along Weber, Main, and Market streets between El Dorado and the Union Pacific Railroad. Although no specific character-defining features were identified in previous evaluations of the historic district, they would include the integrity of its contributing buildings and structures, including the four buildings in the RSA/APE. The historic district and the four contributors to the historic district within the RSA/APE, described below, are historic properties under Section 106 of the NHPA and are thus historic sites under Section 4(f). Figure D-3 depicts the eastern portion of the historic district and its contributing buildings as well as their relationships to the Project Study Area.







#### **Imperial Hotel**

The Imperial Hotel, located at 902 East Main Street, is a one-story, Victorian Eclectic-style building constructed of brick (Figure D-4). The building was found to be eligible for the NRHP at the local level under NRHP Criterion A as a contributor to the Stockton Downtown Commercial Historic District. The character-defining features identified for this structure include, but are not limited to, its arched window and door openings, Corinthian columns, terra cotta window and door surrounds, brick work detailing, and corner quoining. The period of significance for this historic property is 1896, the year it was constructed, through 1940, the end of the historic district's period of significance. The historic property boundary of this building is its current legal parcel.

# 

#### Figure D-4: Imperial Hotel, Map Reference No. 3

Source: JRP Historical Consulting, LLC

#### Imperial Garage and 30 South Aurora Street

The Imperial Garage at 20 South Aurora Street and the similar, adjacent structure at 30 South Aurora Street are one-story early commercial buildings. Both rectangular buildings are of brick construction and have symmetrical facades with stepped parapets (see Figure D-5). The buildings were found to be eligible for the NRHP at the local level under NRHP Criterion A as a contributor to the Stockton Downtown Commercial Historic District. Character-defining features identified for this Project include, but are not limited to, their symmetrical facades, stepped parapets, three bays, and decorative brickwork. The period of significance for these buildings is ca. 1915 and 1918, respectively, the years they were constructed, through 1940, the end of the historic district's period of significance. Located on a single parcel, the historic property boundary for these buildings is their current legal parcel.





#### Figure D-5: Imperial Garage and 30 South Aurora Street, Map Reference No. 4

Source: JRP Historical Consulting, LLC

#### **New York Hotel**

The New York Hotel, located at 34 South Aurora Street, is a four-story brick building with stepped parapets and corbeled cornice (Figure D-6). It has a modified first floor with stucco siding. Fenestration is generally symmetrical, with double-hung, wood-frame windows on the upper portion of each facade. The building was found to be eligible for the NRHP at the local level under NRHP Criterion A as a contributor to the Stockton Downtown Commercial Historic District. Character-defining features identified for this Project include, but are not limited to, its brick construction, symmetrical fenestration on upper floors, parapeted roof with corbeled cornice, belt courses, window lintels and sills, and construction date plaque. The period of significance for this historic property is 1910, the year it was constructed, through 1940, the end of the historic district's period of significance. The historic property boundary is its current legal parcel.



#### Figure D-6: New York Hotel, Map Reference No. 5



Source: JRP Historical Consulting, LLC

#### 915 East Market Street

The building at 915 East Market Street is a two-story brick structure with a hipped roof and parapets with corbeled cornice (Figure D-7). The building was found to be eligible for the NRHP at the local level under NRHP Criterion A as a contributor to the Stockton Downtown Commercial Historic District. Character-defining features identified for this Project include, but are not limited to, Flemish bond brick construction, brick parapet, and brick window surrounds that incorporate soldier and header courses. The period of significance for this historic property is ca. 1926, the year it was constructed, through 1940, the end of the historic district's period of significance. The historic property boundary is its current legal parcel.





#### Figure D-7: 915 East Market Street, Map Reference No. 6

Source: JRP Historical Consulting, LLC

#### **Waldemar Apartments**

Waldemar apartments, located at 920 East Market Street, is a three-story early 20th century brick building with classical details (Figure D-8). The building is eligible for the NRHR at the local level under NRHP Criterion C as a representative example of a multi-storied, masonry apartment building constructed in the early 20th century. Its period of significance is 1918, the year it was constructed, and its character-defining features are its scale and massing; corbeled parapet; diamond-patterned belt course; flat roof; symmetrical fenestration that appears to still contain one-over-one, double-hung wood sash windows with brick lentils and sills; belt course between first and second floors; Flemish-bond, multi-colored brick; and primary and secondary entrances. The boundary of the property is its current legal parcel.



#### Figure D-8: Waldemar Apartments, Map Reference No. 7



Source: JRP Historical Consulting, LLC

## D.3 Section 4(f) Use Assessment

This section presents the Project's use assessment for the park and recreational facilities (Section D.3.1) and historic properties (Section D.3.2) in the RSA identified in Section D.3. As noted earlier, USDOT defines the use of a Section 4(f) property when:

- a land is permanently incorporated into a transportation project
- there is a temporary occupancy of land that is adverse in terms of the statute's preservation purpose
- there is a constructive use (a project's proximity impacts are so severe that the protected activities, features, or attributes of a property are substantially impaired)

These three use definitions are applied to assess the use of Section 4(f) properties by the Project.



#### D.3.1 SECTION 4(F) ASSESSMENT – PARKS AND RECREATIONAL FACILITIES

Independence Park, Gleason Park, Liberty Park, and San Joaquin County Fairgrounds

#### Is there land permanently incorporated into the transportation project?

As seen in Figure D-1, Independence Park, Gleason Park, Liberty Park, and San Joaquin County Fairgrounds are located outside of the Project Study Area. None of the Project elements would permanently encroach into the boundaries of these parks. Therefore, the Project does not require the permanent incorporation of any portion of these Section 4(f) properties.

# *Is there a temporary occupancy of land that is adverse in terms of the statute's preservation purpose?*

All Project construction work would occur outside of the boundary of the Independence Park, Gleason Park, Liberty Park, and San Joaquin County Fairgrounds properties. Therefore, temporary occupancy of these Section 4(f) properties would not occur.

## *Is there a constructive use of the property that is so severe that the protected activities, features, or attributes of a Section 4(f) property are substantially impaired?*

Based on the analysis provided in this EA, no vibration, traffic, or visual impacts are anticipated during construction. Although Independence Park, Gleason Park, Liberty Park, and San Joaquin County Fairgrounds are within the RSA for parks and recreational Section 4(f) properties, there would be no permanent or temporary construction-related traffic, air quality, visual, noise, or vibration effects on these Section 4(f) properties.

Construction activities would be located just outside of the Independence Park's eastern boundary, and park users may experience short-term, temporary noise and air quality (dust) impacts during construction. However, any construction-related effects related to noise and dust would be considered temporary in nature and would not impact the use of the park. In the long-term, the Project would improve air quality through reduction of criteria air pollutant and GHG emissions caused by trains and vehicles that sit idling due to congestion and delays. Reductions in air pollutant emissions can lead to long-term health benefits for park users, addressing health problems associated with air pollution such as lung irritation, inflammation, asthma, heart and lung disease, and worsening of existing chronic health conditions. Gleason Park, Liberty Park, and San Joaquin County Fairgrounds are between 338 and 850 feet away from the project area and are at a distance that proximity impacts from construction and operations that would substantially impair the protected activities, features, or attributes are not expected.

Therefore, none of the impacts from implementation of the Project would be severe or adverse enough to substantially impair the protected activities, features, or attributes of these parks and no constructive use would result.



STOCKTON DIAMOND

*Determination:* There would be no Section 4(f) use of Independence Park, Gleason Park, Liberty Park, and San Joaquin County Fairgrounds by the Project. No further Section 4(f) analysis is required.

#### **Union Park**

Union Park, located to the east of the flyover and south and adjacent to the proposed East Hazelton Avenue underpass, would be impacted temporarily with the Project. With the construction of the East Hazelton Avenue underpass, to provide a grade-separated crossing of the UP Fresno Subdivision, East Hazelton Avenue will need to be re-graded to allow for the appropriate height clearance below the new railroad flyover for arterial roadway use. There would be no permanent encroachment into Union Park to construct these roadway improvements, but there is an anticipated need for a 0.03-acre (1,316-sqare-foot) TCE that would temporarily occupy a small portion of the northeastern corner of the park (see Figure D-9). The park is 2 acres, so the temporary encroachment is within 1.4 percent of the Section 4(f) property.



#### Figure D-9: Project Impacts on Union Park





#### Is there land permanently incorporated into the transportation project?

The northwest corner of Union Park is within the Project Study Area; however, none of the Project elements would permanently encroach into the park boundary. Therefore, the Project does not require the permanent incorporation of any portion of this Section 4(f) property.

# *Is there a temporary occupancy of land that is adverse in terms of the statute's preservation purpose?*

The Project anticipates the need for a TCE in the northwest corner of Union Park during the construction phase of the Project. This TCE would be considered a temporary occupancy of the park property. However, as discussed in Section D.1.1, a temporary occupancy of property does not constitute a use of a Section 4(f) property when the following five conditions are satisfied. An assessment of the Project's impact against the five conditions for an exception of use under Section 4(f) is described below.

- 1) The occupancy must be of temporary duration (for example, shorter than the period of construction) and must not involve a change in ownership of the Section 4(f) property.
  - It is anticipated that the TCE would be required for approximately 2 to 4 weeks, which is substantially less than the duration of Project construction (3 years). In addition, there would be no temporary or permanent change in the ownership of any portion of the Section 4(f) property.
- 2) The scope of use must be minor, with only minimal changes to the Section 4(f)-protected property.
  - The construction activities at the northwestern corner of Union Park include temporary storage of materials and construction access to East Hazelton Avenue. None of Union Park's recreational activities, features, or attributes would be impacted with the temporary occupancy of the Section 4(f) property.

There must be no permanent adverse physical impacts to the protected property or temporary or permanent interference with activities or purpose of the Section 4(f) property.



- As shown in Figure D-9, a small portion of the northwest corner of Union Park at East Hazelton Avenue and South Union Street would be temporarily closed off during construction by a TCE. This TCE is required to construct the underpasses at East Hazelton Avenue and East Scotts Avenue and to protect park users from construction activities. Within this northwest corner, there is an existing entrance to a park pathway that crosses the park diagonally in a northwest to southeast direction to the Pilgrim Street and Scotts Avenue intersection. During the temporary construction activities at this location, this park access would be closed. However, the other southeastern end of the diagonal pathway would remain open for public access. Further, the park is an open facility with no fencing around its perimeter; therefore, continuous and unobstructed access allows for entry at almost any point, and no impacts to the recreational activities, features, or attributes of the Section 4(f) property would occur. At the conclusion of construction, this northwestern pathway entry point would be re-opened for public use.
- 3) The Section 4(f) property being used must be fully restored to a condition that is at least as good as that which existed prior to project construction.
  - At the conclusion of construction activities at the northwestern corner of Union Park, the park entrance at this location would be re-opened and the area closed off during construction would be returned to pre-construction conditions.
- 4) There must be documented agreement of the appropriate OWJ over the Section 4(f) property regarding the foregoing requirements.
  - On April 9, 2021, SJRRC and CHSRA sent the City of Stockton a letter requesting concurrence with the preliminary determination that all five conditions for a temporary occupancy exception of use have been met. On September 9. 2021, the City of Stockton as the OWJ over Union Park concurred with the determination. A copy of the request for concurrence letter from SJRRC and CHSRA with signed agreement from the City of Stockton is provided in Attachment A of this Section 4(f) and Section 6(f) Evaluation. All coordination will be documented in Section D.5.

All five conditions described above have been met for a temporary occupancy exception of use determination of Union Park under Section 4(f).

Is there a constructive use of the property that is so severe that the protected activities, features, or attributes of a Section 4(f) property are substantially impaired?

The Project will incorporate BMP TRA-2 (Construction Management Plan), BMP TR-4 (Maintenance of Pedestrian Access), BMP TRA-5 (Maintenance of Bicycle Access), and BMP TRA-7 (Transportation Management Plan) in Table 3.7-6 in Section 3.7, *Traffic and Transportation*, and Measures BMP AQ-1 (Compliance with EPA's Tier 4 Exhaust Emission Standards) and BMP AQ-2 (Fugitive Dust) in Table 3.13-3, in Section 3.13, *Air Quality*. Therefore, although Union Park is surrounded by and partially within the Project Study Area, no indirect temporary effects related to traffic, noise, or air quality (dust) impacts would occur and no users of Union Park would be affected during construction. Accordingly, traffic, noise, or air quality (dust) impacts would occur and no users would not be of a severity that the protected activities, features, or attributes that qualify Union Park for protection under Section 4(f) would be substantially impaired, and no constructive use would result.



*Determination:* Union Park is subject to a temporary occupancy exception of use. The OWJ concurred with this determination on September 9, 2021. Therefore, there would be no Section 4(f) use of Union Park.

#### D.3.2 SECTION 4(F) ASSESSMENT – HISTORIC PROPERTIES

#### **Stockton Downtown Commercial Historic District**

Utility relocation, protection in place, and/or removal would occur within the boundaries of the historic district. Utilities consist of storm drains, underground water, sewer, gas lines, overhead electrical lines, and fiber optic cable. All modifications to utilities would be conducted within the public ROW. As seen in Figure D-3, there would be no permanent encroachment into the district to construct these utility modifications, but temporary construction areas are proposed within the eastern edge of the district, intersecting some of the district's contributing buildings. However, no construction activity would be conducted within any historic property boundary of district contributors.

#### Is there land permanently incorporated into the transportation project?

The Project does not require permanent encroachment within any portion of the Stockton Downtown Commercial Historic District. Therefore, permanent incorporation of the Section 4(f) property would not occur.

#### Does the utility construction area have a de minimis impact?

In accordance with the Section 106 process and after consultation with interested Native American tribes, CHSRA made a finding of no adverse effect for the Downtown Commercial Historic District. On December 9, 2021, SHPO agreed with FOE as detailed in Section 3.9 of this Final EA. For the purposes of Section 4(f), CHSRA has used SHPO's written concurrence in the FOE to determine that the temporary construction areas proposed in the eastern edge of the district necessary for utility relocation, protection in place, and/or removal in the Stockton Downtown Historic District would have *de minimis* impacts. On April 11, 2022, CHSRA informed the SHPO per CFR 774.5(b)(1) of its intent to make a preliminary *de minimis* impact determination based on SHPO's December 9, 2021 concurrence on the Section 106 finding of "no adverse effect." A copy of the letter sent by CHSRA to the SHPO on April 11, 2022 is provided in Attachment A of this Section 4(f) and Section 6(f) Evaluation.

## *Is there a constructive use of the property that is so severe that the protected activities, features, or attributes of a property are substantially impaired?*

The Project would not result in adverse impacts to the Stockton Downtown Commercial Historic District from the introduction of new visual elements. The new at-grade tracks and rail crossings at East Main and East Market streets would each be located east of and more than 130 feet away from the historic district boundary. The crossings would include the upgrading of railroad equipment, flashing light signals, gate arms, signing and pavement markings, as well as potential pedestrian upgrades such as ADA-compliant tactile walking surface indicators and streetlights. These types of railroads, roadways, pedestrian features, and tracks would be located within, or immediately east of,


the railroad ROW. While the new tracks and crossings would be visible from the eastern end of the district boundary, none of these Project components, including the removal of extant tracks, would adversely alter the view or setting of the historic district or any of its contributors because they are consistent with historic-period and existing railroad infrastructure and would blend in with the setting. Therefore, the Project would not diminish the integrity of significant historic features of the Stockton Downtown Commercial Historic District or any of its contributing historic features. Accordingly, visual impacts would not be of a severity that the protected activities, features, or attributes that qualify the Stockton Downtown Commercial Historic District for protection under Section 4(f) would be substantially impaired, and no constructive use would result.

*Determination:* Based on the evaluation of potential permanent incorporation, temporary occupancy, or constructive use of the Stockton Downtown Historic District presented above, the determination is that the Project would have *de minimis* impacts to the Stockton Downtown Historic District. On April 11, 2022, CHSRA informed SHPO, per CFR 774.5(b)(1), of its intent to make a preliminary *de minimis* impact determination based on SHPO's December 9, 2021, concurrence on the Section 106 finding of "no adverse effect." A copy of the letter sent by CHSRA to the SHPO on April 11, 2022, is provided in Attachment A of this Section 4(f) and Section 6(f) Evaluation.

#### Imperial Hotel

#### Is there land permanently incorporated into the transportation project?

The Imperial Hotel is located adjacent to the Project Study Area; however, none of the Project elements would permanently encroach into the boundary of the historic property. Therefore, the Project does not require the permanent incorporation of any portion of Section 4(f) property.

# *Is there a temporary occupancy of land that is adverse in terms of the statute's preservation purpose?*

No temporary encroachment within the Imperial Hotel's historic property boundary by construction activities would occur since all Project construction work would occur outside of the boundary of this historic property. Therefore, no temporary occupancy of the Section 4(f) property would occur.

Is there a constructive use of the property that is so severe that the protected activities, features, or attributes of a property are substantially impaired?

Any construction-related effects related to potential visual or noise impacts would not substantially impair the protected activities, features, or attributes of this historic Section 4(f) property. Refer to Section 3.9, *Cultural Resources*, for additional information.

*Determination:* Based on the evaluation of potential permanent incorporation, temporary occupancy, or constructive use of Imperial Hotel presented above, there would be no Section 4(f) use of the Imperial Hotel by the Project.



#### Imperial Garage and 30 South Aurora Street

#### Is there land permanently incorporated into the transportation project?

The Imperial Garage or 30 South Aurora Street properties are 70 feet from the Project Study Area. None of the Project elements would permanently encroach into the boundary of the historic property. Therefore, the Project does not require the permanent incorporation of any portion of Section 4(f) property.

# *Is there is a temporary occupancy of land that is adverse in terms of the statute's preservation purpose?*

No temporary encroachment within the Imperial Garage or 30 South Aurora Street's historic boundaries by construction activities would occur since all Project construction work would occur outside of the boundary of these historic properties. Therefore, no temporary occupancy of the Section 4(f) property would occur.

# Is there a constructive use of the property that is so severe that the protected activities, features, or attributes of a property are substantially impaired?

Any construction-related effects related to potential visual and noise impacts would not substantially impair the protected activities, features, or attributes of this historic Section 4(f) property. Please refer to Section 3.9, *Cultural Resources*, for additional information.

*Determination:* Based on the evaluation of potential permanent incorporation, temporary occupancy, or constructive use of Imperial Garage and 30 South Aurora Street presented above, there would be no Section 4(f) use of the historic Section 4(f) properties by the Project. New York Hotel

#### Is there land permanently incorporated into the transportation project?

The New York Hotel is located adjacent to the Project Study Area; however, none of the Project elements would permanently encroach into the boundary of the historic property. Therefore, the Project does not require the permanent incorporation of any portion of Section 4(f) property.

# Is there a temporary occupancy of land that is adverse in terms of the statute's preservation purpose?

No temporary encroachment within the New York Hotel's historic property boundary by construction activities would occur since all Project construction work would occur outside of the boundary of this historic property. Therefore, no temporary occupancy of the Section 4(f) property would occur.

# Is there a constructive use of the property that is so severe that the protected activities, features, or attributes of a property are substantially impaired?

Any construction-related effects related to potential visual and noise impacts would not substantially impair the protected activities, features, or attributes of this historic Section 4(f) property. Refer to Section 3.9, *Cultural Resources*, for additional information.



*Determination:* Based on the evaluation of potential permanent incorporation, temporary occupancy, or constructive use of New York Hotel presented above, there would be no Section 4(f) use of the historic Section 4(f) properties by the Project.

#### 915 East Market Street

#### Is there land permanently incorporated into the transportation project?

915 East Market Street is located adjacent to the Project Study Area; however, none of the Project elements would permanently encroach into the boundary of the historic property. Therefore, the Project does not require the permanent incorporation of any portion of Section 4(f) property.

# Is there a temporary occupancy of land that is adverse in terms of the statute's preservation purpose?

No temporary encroachment within the 915 East Market Street's historic property boundary by construction activities would occur since all Project construction work would occur outside of the boundary of this historic property. Therefore, no temporary occupancy of the Section 4(f) property would occur.

# Is there a constructive use of the property that is so severe that the protected activities, features, or attributes of a property are substantially impaired?

Any construction-related effects related to potential visual and noise impacts would not substantially impair the protected activities, features, or attributes of this historic Section 4(f) property. Refer to Section 3.9, *Cultural Resources*, for additional information.

*Determination:* Based on the evaluation of potential permanent incorporation, temporary occupancy, or constructive use of 915 East Market Street presented above, there would be no Section 4(f) use of the historic Section 4(f) property by the Project.

#### Waldemar Apartments

#### Is there land permanently incorporated into the transportation project?

The Waldemar Apartments are located adjacent to the Project Study Area; however, none of the Project elements would permanently encroach into the boundary of the historic property. Therefore, the Project does not require the permanent incorporation of any portion of Section 4(f) property.

# Is there a temporary occupancy of land that is adverse in terms of the statute's preservation purpose?

No temporary encroachment within the Waldemar Apartments' historic property boundary by construction activities would occur since all Project construction work would occur outside of the boundary of this historic property. Therefore, no temporary occupancy of the Section 4(f) property would occur.



*Is there a constructive use of the property that is so severe that the protected activities, features, or attributes of a property are substantially impaired?* 

Any construction-related effects related to potential visual and noise impacts would not substantially impair the protected activities, features, or attributes of this Section 4(f) property. Refer to Section 3.9, *Cultural Resources*, for additional information.

*Determination:* Based on the evaluation of potential permanent incorporation, temporary occupancy, or constructive use of Waldemar Apartments presented above, there would be no Section 4(f) use of the historic Section 4(f) property by the Project.

### D.4 Coordination with Officials with Jurisdiction

#### **Union Park Coordination**

On April 8, 2021, SJRRC and CHSRA requested concurrence from the City of Stockton, the OWJ over Union Park, for the temporary occupancy exception of use determination. The impacts to Union Park have been discussed with the City of Stockton during monthly Project Development Team meetings, during which the SJRRC is partnering with the City of Stockton and other key stakeholders to discuss Project elements, anticipated impacts, and feasible options to avoid or minimize impacts on the park. During these meetings, the Project team has discussed the construction-phase activities that require a TCE and temporary use of Union Park. On September 9, 2021, the City of Stockton provided concurrence with the determination. A copy of the request for concurrence letter from SJRRC and CHSRA with signed agreement from the City of Stockton is provided in Attachment A of this Section 4(f) and Section 6(f) Evaluation.

#### Stockton Downtown Commercial Historic District Coordination

CHSRA, as NEPA Lead Agency, has determined that the Project would have no adverse effect on historic properties within the APE. The project FOE Report was submitted to SHPO on August 4, 2021, and an Addendum to the FOE Report was submitted in November 2021. SHPO agreed with the project finding of "no adverse effect" on December 9, 2021, given the Project BMPs identified in Table 3.9-3, in Section 3.9, *Cultural Resources*, will be incorporated as part of the Project. The FOE and SHPO concurrence information has been provided in Appendix H of this Final EA. For the purposes of Section 4(f), CHSRA has used the consultation with SHPO and its written concurrence in the FOE to determine that the temporary construction areas proposed in the eastern edge of the Stockton Downtown Commercial Historic District necessary for utility relocation, protection in place, and/or removal would have *de minimis* impacts. On April 11, 2022, CHSRA informed SHPO, per CFR 774.5(b)(1), of its intent to make a preliminary *de minimis* impact determination based on SHPO's December 9, 2021, concurrence on the Section 106 finding of "no adverse effect." A copy of the letter sent by CHSRA to the SHPO on April 11, 2022, is provided in Attachment A of this Section 4(f) and Section 6(f) Evaluation.



# Attachment A: Correspondence and Concurrence

STOCKTON DIAMOND GRADE SEPARATION PROJECT



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Chair, **Christina Fugazi**, City of Stockton Vice Chair, **Leo Zuber**, City of Ripon Commissioner, **Jose Nuño**, City of Manteca Commissioner, **Mikey Hothi**, City of Lodi

Executive Director, Stacey Mortensen

Commissioner, Nancy Young, City of Tracy Commissioner, Kathy Miller, San Joaquin County Commissioner, Melissa Hernandez, Alameda County Commissioner, Lily Mei, City of Fremont

April 8, 2021

Amanda Thomas Real Property Manager City of Stockton – Economic Development Department 400 E. Main Street, 4th Floor Stockton, CA 95202

Dear Ms. Thomas:

The San Joaquin Regional Rail Commission (SJRRC), Lead Agency under the California Environmental Quality Act (CEQA), and California High Speed Rail Authority (CHSRA), under assignment by the Federal Railroad Administration<sup>1</sup>, the National Environmental Policy Act (NEPA) Lead Agency, are providing this letter to formally inform the City of Stockton of the expected need for a temporary construction easement (TCE) for construction activities related to the SJRRC's proposed Stockton Diamond Grade Separation Project (proposed Project). The easement area is located at Union Park, and the City of Stockton has been identified as the official with jurisdiction (OWJ) over this property.

The proposed Project would replace the existing at-grade intersection of the BNSF Stockton Subdivision and UP Fresno Subdivision with a grade-separation structure that elevates the UP main tracks above the BNSF main tracks, enabling through trains proceeding on the UP main tracks to advance through the intersection without conflict with through trains on the BNSF main tracks. No existing UP main tracks would remain in place at-grade across the BNSF main tracks after the proposed Project is constructed.

As part of the proposed Project, Union Park, located to the east of the proposed flyover and south and adjacent to the proposed East Hazelton Avenue underpass, would be temporarily impacted during construction. Union Park is recognized as a protected Section 4(f) resource (pursuant to 49 USC 303 of U.S Department of Transpiration Act of 1966 [USDOT Act]). With the construction of the East Hazelton Avenue underpass, included as part of the proposed Project to provide a grade-separated crossing of the UP Fresno Subdivision, East Hazelton Avenue will need to be re-graded to allow for the appropriate vertical clearance below the new railroad flyover for arterial roadway use. There would be no permanent encroachment into Union Park to construct these roadway improvements, but there is an anticipated need for a 0.03-acre (1,316-square-foot) TCE that would temporarily occupy a small portion of the northeastern corner of the park (**Figure 1**). The park is 2.11 acres, so the temporary encroachment is within 1.4 percent of the park property.

As detailed in the regulation, five conditions need to be satisfied in order to meet the temporary occupancy exception. Those conditions, and the basis for SJRRC's determination as to how each is satisfied for Union Park, are summarized as follows:

<sup>&</sup>lt;sup>1</sup> CHSRA is the lead NEPA agency, pursuant to 23 USC Section 327 and the terms of the NEPA Assignment Memorandum of Understanding (FRA and State of California 2019).



Ms. Amanda Thomas April 8, 2021 Page 2 of 4



Figure 1: Proposed Project Impacts on Union Park

- The occupancy must be of temporary duration (for example, shorter than the period of construction) and must not involve a change in ownership of the property.
  - The proposed Project anticipates the need for a TCE for a time period of 2 to 4 weeks, substantially less than the duration of Project construction (3 years). In addition, there would be no temporary or permanent change in the ownership of any portion of the property.
- The scope of use must be minor, with only minimal changes to the protected resource.
  - The construction activities at the northwestern corner of Union Park include temporary storage of materials and access to East Hazelton Avenue. None of Union Park's recreational features would be impacted with the temporary use of the property.
- There must be no permanent adverse physical impacts to the protected resource or temporary or permanent interference with activities or purpose of the resource.



- During construction, a small portion of the corner of Union Park would be closed off to protect park users from construction activities. At this location, there is an entrance to a park pathway that crosses the park, and during the duration of the TCE at this location, this park access would be closed. The other end of the diagonal pathway would remain open for access. However, the park is an open facility with continuous access around its perimeter that allows for entry at almost any point. At the conclusion of construction, this park access area would be re-opened for public use.
- The property being used must be fully restored to a condition that is at least as good as existed before project construction.
  - At the conclusion of construction activities at the northwestern corner of Union Park, the park entrance at this location would be re-opened and the area closed off during construction would be returned to a condition at least as good as prior to construction. Through coordination to date, the City has requested the privately-owned segment of Union Street adjacent to the Park to be converted to a public street. If this occurs with the proposed Project, sidewalk improvements would be constructed along the edge of Union Park between East Hazelton and East Scotts Avenues.
- There must be documented agreement of the appropriate officials having jurisdiction over the resource regarding the foregoing requirements.
  - The Project Team has coordinated with the City of Stockton through project development and is seeking concurrence from the City as the OWJ on the project effects on Union Park and requirements discussed above.

With this letter SJRRC and CHSRA, as assigned by FRA, are respectfully requesting your agreement with our determination, that the TCE needed in conjunction with construction of the proposed Project adjacent to Union Park would be a Temporary Occupancy as set forth in 23 CFR 774.13(d). A signature block is provided at the end of this letter for your convenience to provide your agreement with the temporary occupancy determination.

Sincerely,

-6

Kevin Sheridan, PMP Director of Capital Projects San Joaquin Regional Rail Commission/San Joaquin Joint Powers Authority

cc: Wes Johnson, City of Stockton Eric Alvarez, City of Stockton



Ms. Amanda Thomas April 8, 2021 Page 4 of 4

Concurrence by:

amanda Thomas

9-9-21

Amanda Thomas City of Stockton Economic Development Department Date





Gavin Newsom GOVERNOR Brian P. Kelly

CHIEF EXECUTIVE OFFICER

State of the State of California

April 11, 2022

Julianne Polanco State Historic Preservation Officer **Attention: Cindy Woodward** Office of Historic Preservation 1725 23rd Street, Suite 100 Sacramento, CA 95816

Subject: Stockton Diamond Grade Separation Project notification of intent to make a preliminary *de minimis* impact determination under Section 4(f) for the Stockton Downtown Commercial Historic District

#### Dear Ms. Polanco:

The San Joaquin Regional Rail Commission (SJRRC), on behalf of the California High-Speed Rail Authority (Authority), as assigned by the Federal Railroad Administration (FRA), is continuing consultation on the Stockton Diamond Grade Separation Project (proposed Project) in the city of Stockton, San Joaquin County, California. The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by the State of California pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated July 23, 2019, and executed by the FRA and the State of California.

#### **Background**

In a transmittal letter to the SHPO dated August 4, 2021, the Authority requested review and concurrence on the findings for the built historic properties analyzed in the *Section 106 Finding of Effect Report: Stockton Diamond Grade Separation Project, Stockton, San Joaquin County, California* prepared by JRP Historical Consulting, LLC (June 2021). The transmittal letter, however, did not indicate that the effect findings made as part of the Section 106 process will be used as the basis for a preliminary impact determination that the Authority intends to make under Section 4(f) of the Department of Transportation Act of 1996. This current letter summarizes those findings, focusing particularly on one resource—the Stockton Downtown Commercial Historic District—which the Authority has determined will not be adversely affected by the project under Section 106 and has, therefore, made a preliminary determination under Section 4(f) that the impact on the historic property will be *de minimis*.

The FOE report analyzed project effects on one historic district (the Stockton Downtown Commercial Historic District), which is transected by the area of potential effects (APE), and four of its contributing historic properties within the APE—the Imperial Hotel, Imperial Garage, Hotel New York, and a commercial building at 915 E. Market St.—as well as one historic property (the Waldemar Apartments), which was determined to be individually eligible for listing in the National Register of Historic Places (NRHP) and the California Register of Historical Resources (CRHR).<sup>1</sup> The FOE report determined that the proposed project would have no adverse effect on any of these resources, as summarized in the table below, because none of their character-defining features or their use would be altered in a manner that would diminish their overall integrity of location, design, setting, materials, workmanship, feeling, or association as described in 36 C.F.R. § 800.5(a)(2).

<sup>&</sup>lt;sup>1</sup> SHPO concurred on the NRHP eligibility of these properties in a formal comment letter addressed to the Authority on July 29, 2021.

MAP Reference Number	APN	RESOURCE NAME	Address	YEAR BUILT	EFFECT FINDINGS
n/a	n/a	Stockton Downtown Commercial Historic District	n/a	n/a	No Adverse Effect
3	151-190-001	Imperial Hotel	902 East Main Street	1896	No Adverse Effect
4	151-190-080	Imperial Garage n/a	20 South Aurora Street 30 South Aurora Street	ca. 1915 1918	No Adverse Effect
5	151-190-007	Hotel New York	34 South Aurora Street	1910	No Adverse Effect
6	151-190-060	n/a	915 East Market Street	ca. 1926	No Adverse Effect
7	151-220-020	Waldemar Apartments	920 East Market Street	1918	No Adverse Effect

#### Table 1. Effect findings presented in the 2021 Finding of Effect report for the Stockton Diamond Grade Separation Project.

In a formal consultation letter to the Authority dated December 9, 2021, the SHPO concurred on the findings of no adverse effect for the historic properties within the APE as summarized in Table 1 above.

#### Stockton Downtown Commercial Historic District

As analyzed in the FOE report, the proposed project will require the relocation of various utilities within the boundaries of the historic district, including storm drains, underground water lines, sewer lines, gas lines, fiber optic cables, and overhead electrical lines. All modifications to these utilities would be conducted within the public right-of-way (ROW), and there would be no permanent encroachment into the historic district to relocate these utilities. Temporary construction areas are proposed within the eastern edge of the historic district, intersecting some of the district's contributing buildings, however, no construction activities would be conducted within any historic property boundary of the district contributors.

#### Section 4(f) preliminary de minimis determination

Section 4(f) of the Department of Transportation Act of 1966 requires consultation with the SHPO, the official with jurisdiction over historic properties, as stipulated in 23 CFR § 774.17. The Authority is consequently submitting this current letter to notify the SHPO of its intent to make a preliminary *de minimis* impact determination for the Stockton Downtown Commercial Historic District, in accordance with 23 CFR § 774.5.

For historic properties, a *de minimis* impact determination under Section 4(f) is based on findings made in the Section 106 consultation process, and can be made if the project will have no adverse effect on the historic property. The Authority has determined that the Stockton Downtown Commercial Historic District will not be adversely affected and, therefore, will incur a *de minimis* use under Section 4(f). By concurring with the Authority's finding of no adverse effect under Section 106, the SHPO also concurs with this 4(f) determination.

Should you have any questions, please feel free to contact me.

Sincerely,

Brett Rushing Cultural Resources Program Manager California High-Speed Rail Authority (916) 403-0061 brett.rushing@hsr.ca.gov

Julianne Polanco April 11, 2022 Page 3

Cc: Dan Leavitt, San Joaquin Regional Rail Commission Serge Stanich, California High-Speed Rail Authority Dan McKell, California High-Speed Rail Authority



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## **Appendix E. Utilities Exhibits**



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# Appendix F: Traffic Report



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The San Joaquin Regional Rail Commission (SJRRC) proposes to construct a grade separation of two principal railroad lines at the Stockton Diamond in Stockton, California.

The Stockton Diamond Grade Separation Project (Project) is a critical passenger and freight mobility project. The current Altamont Corridor Express (ACE) and Amtrak San Joaquins passenger rail services are constrained by the Stockton Diamond Interlock at-grade crossing, which can reduce reliability and on-time performance for both passenger and freight rail. The grade separation would help improve operational performance for SJRRC and the San Joaquin Joint Powers Authority (SJJPA) as they provide service between the Central Valley, Sacramento, and the San Francisco Bay Area.

Currently, the BNSF Railway (BNSF) Stockton Subdivision and the Union Pacific Railroad (UP) Fresno Subdivision consist of two main tracks each, and they intersect each other at a level, at-grade crossing known as the Stockton Diamond. This rail intersection, located just south of Downtown Stockton near South Aurora Street and East Scotts Avenue, is the busiest at-grade railway junction in California. The at-grade crossing experiences substantial congestion and delays service for people and freight throughout the Central Valley—and for freight on the broader national network. The current, at-grade configuration results in critical delays to passenger and freight trains in the area, including those serving the Port of Stockton. Train congestion also causes vehicle delays at roadway-rail crossings and creates potential motor vehicle, rail, bicycle, and pedestrian conflicts.

The proposed Project would construct a grade separation of the BNSF and UP rail lines to reduce rail congestion and allow passenger and freight rail traffic to flow uninterrupted through the crossing. The reduction in rail congestion would reduce delays for passenger and freight rail providers and improve freight mobility, which may lead to lower costs for freight shipping and reduce travel times for motor vehicle, bicyclist, and pedestrian traffic. The reduction in train congestion and motor vehicle wait times at these roadway-rail grade crossings would reduce locomotive and automobile idling and air emissions.

The proposed Project's public benefits would extend to motorists, pedestrians, rail passengers, freight shippers, and residents throughout the region. Additional benefits would include reduced fuel consumption, lower freight rail transportation costs, and improved travel times and reliability. Passenger and commuter rail reliability is essential for those residing and working in the region, especially those in rural communities who need improved access to essential services and economic centers. The proposed Project is aligned with San Joaquin County's goals to enhance existing rail infrastructure and to improve the rail network's efficiency and capacity—including safe, reliable transportation choices—while also improving the local economy through economic growth, job retention, and job creation.



This traffic report presents the Existing, No Project Alternative (2045), and Proposed Project (2045) traffic conditions analysis for the Project. The report includes the following sections:

- 1. Traffic Study Area
- 2. Available and new data
- 3. Analysis approach
- 4. Existing traffic conditions analysis
- 5. No Project Alternative (2045) traffic conditions analysis
- 6. Proposed Project (2045) traffic conditions analysis.

# 1.0 Traffic Study Area

The Traffic Study Area shown in Figure 1-1 includes the intersections, roadways, and multimodal transportation systems being analyzed for existing conditions. It will also be the basis for analyzing and presenting future conditions to be evaluated later in this project. The Traffic Study Area was defined to address the full range of potential grade separation alignment concepts recently developed for the Project. The intersections and roadways identified in the Study Area provide the foundation for the comprehensive transportation impact analysis for existing (2019), No Project (2045), and future (2045) proposed Project conditions.



### Figure 1-1: Traffic Analysis Study Area and Location of Intersections



The Study Area intersections shown in Table 1-1 include a total of 28 intersections, 13 of which are signalized in addition to 15 unsignalized intersections. Available and new data (refer to Section 2) was obtained to represent existing 2019 conditions, primarily due to COVID-19, which has limited the ability of agencies to collect observed 2020 data. Roadways analyzed for existing conditions are represented in the intersections shown in the Traffic Study Area for both north-south and east-west oriented roadways in the Study Area.

There are 7 at-grade roadway crossings of UP tracks in the Traffic Study Area. These at-grade railroad crossings are at East Weber Avenue, East Main Street, East Market Street, East Lafayette Street, East Church Street, East Hazelton Avenue and East Scotts Avenue.

Intersection #	Intersection Name	Signalized or Unsignalized		
1	S Stanislaus Street/E Weber Avenue	Signalized		
2	S Airport Way/E Weber Avenue	Signalized		
3	S Stanislaus Street/E Main Street	Signalized		
4	S Airport Way/E Main Street	Signalized		
5	S Stanislaus Street/E Market Street	Signalized		
6	S Airport Way/Market Street	Signalized		
7	E Lafayette Street and California Street	Signalized		
8	E Lafayette Street and S Stanislaus Street	Signalized		
9	E Lafayette Street and Aurora Street	Unsignalized		
10	E Lafayette Street and S Airport Way	Unsignalized		
11	S Wilson Way and E Church Street	Unsignalized		
12	E Hazelton Avenue and S San Joaquin Street	Unsignalized		
13	E Hazelton Avenue and S Sutter Street	Unsignalized		

### Table 1-1: Intersections Located in the Traffic Study Area



Intersection #	Intersection Name	Signalized or Unsignalized	
14	E Hazelton Avenue and California Street	Unsignalized	
15	E Hazelton Avenue and S Stanislaus Street	Unsignalized	
16	E Hazelton Avenue and Aurora Street	Unsignalized	
17	E Hazelton Avenue and S Airport Way	Signalized	
18	E Hazelton Avenue and S Wilson Way	Signalized	
19	E Anderson Street and S San Joaquin Street	Unsignalized	
20	E Anderson Street and S Sutter Street	Unsignalized	
21	E Anderson Street and California Street	Unsignalized	
22	E Anderson Street and S Stanislaus Street	Unsignalized	
23	E Anderson Street and Aurora Street	Unsignalized	
24	E Charter Way and California Street	Signalized	
25	E Charter Way and S Stanislaus Street	Unsignalized	
26	E Charter Way and Aurora Street	Unsignalized	
27	E Charter Way and S Airport Way	Signalized	
28	E Charter Way and S Wilson Way	Signalized	

Figure 1-2 shows the roadways in the Study Area, which include freeway, arterial, collector, and local road functional classes.





### Figure 1-2: Roadways by Functional Classification in the Traffic Study Area

State Route 4 (SR-4), the freeway traveling through the northern portion of the Study Area, travels east-west through the Study Area between I-5 to the west and State Route 99 (SR-99). The other roadways by functional class in the Study Area include:

- Arterials with north to south movements include California Street, S Airport Way, and South Wilson Way, and arterials with east to west movements include East Main Street, East Market Street, East Hazelton Avenue (between South Stanislaus Street and South Wilson Way) and East Charter Way
- Collectors, with north to south movements include South San Joaquin Street and South Stanislaus Street (between East Main Street and East Hazelton Avenue) with east to west collectors include East Weber Avenue, East Lafayette Street (between South Stanislaus Street and South Airport Way) and East Hazelton Avenue (between South San Joaquin Street and South Stanislaus Street) identified in the Study Area
- Local Roads comprise the remainder of the Study Area roadways, with north to south movements on South Sutter Street, South American Street, South Stanislaus Street (between East Hazelton Avenue and East Charter Way), South Grant Street, Aurora Street, South Union Street, and S Pilgrim Street, and with east to west movements on East Lafayette Street (between South San Joaquin Street and South Stanislaus Street), East Church Street, East Scotts Avenue, East Worth Street, East Anderson Street, East Jefferson Street, East Jackson Street, and East Clay Street.



# 2.0 Available and New Data

Transportation data was collected from both available and new sources to develop the existing traffic conditions for turning movements and volumes that encompass the intersections and roadways in the Traffic Study Area. These available and new sources of data were collected, combined, and formatted to represent the existing 2019 average weekday traffic conditions, which is being used as the foundation of the traffic analysis for existing conditions and the later future conditions analysis. Existing traffic conditions were defined to represent average weekday traffic conditions for 2019 based on the following factors:

- Traditionally, data collection of observed roadway volumes and intersection turning movements are scheduled for the Fall and Spring annually to avoid heavy vacation (Summer) and holiday (Winter) periods, with the Fall and Spring representative of normal commute and school travel (Note – 2020 observed data were not collected in the Study Area before COVID-19 impacts of early March 2020.)
- Available traffic data obtained and used in this analysis were collected prior to 2020, primarily due to data not being collected in 2020 due to COVID-19 (Note – 2019 volumes more accurately reflect average weekday traffic conditions. Limited, if any data has been collected in 2020 due to COVID-19.)
- The use of data prior to March 2020 has become standard practice for Traffic Impact Analysis during the Covid Pandemic. While traffic conditions have increased consistently over the last year, there are still differences in travel patterns and changes in peak conditions that cannot be projected accurately. When performing traffic projections for a long-range (2045) forecast, it is safe to assume that there will be temporary cyclical variations during the peak traffic periods. Pre-COVID conditions present a more conservative approach than relying on post-COVID counts since we have no idea when the transition to a new normal will be completed or if they will last a longer period of time.
- New 2019 data was obtained to represent average weekday travel conditions for 2019.

Available roadway volumes and intersection turning movements, multimodal (pedestrian, bicycle, bus, truck) movements, roadway and intersection geometry, intersection signal timings and controls, and multimodal infrastructure (bus routes, bicycle paths), and accident data were collected from the following sources:

- City of Stockton traffic volume maps available online from the City's website
- City of Stockton intersection turning movement, geometric, and signal timing plans
- U.S. Department of Transportation (US DOT) Road-Rail Crossing Inventory roadway volumes
- Envision Stockton, 2040 General Plan Update and Utility Master Plan Supplements Draft EIR, June 2018, Transportation Section traffic volumes, forecasts, planned infrastructure, and multimodal (roadway, pedestrian, bicycle, transit, freight) characteristics
- City of Stockton Truck Route map including STAA Truck Route map available online from the City's website



- San Joaquin Council of Governments Three-County Model (TCM) developed as part of the San Joaquin Valley Model Improvement Plan, Phase 2 (VMIP2)
- Caltrans Traffic Volume summaries (on-line) by multiple years (up to 2019) representing on- and off-ramp Average Annual Daily Traffic (AADT) and Peak Hour Volumes for state owned roadways impacting the Study Area
- San Joaquin Regional Transit District transit routes and schedules
- City of Stockton Bike Master Plan, 2017
- UC Berkeley Transportation Injury Mapping System, 2017-2019 crash data.

Upon the review and assessment of the available traffic data compiled above, while there was good coverage of average annual daily traffic (AADT) of Study Area roadways, the coverage of intersection turning movements was limited, with 4 of the 28 intersections providing representative morning and afternoon peak hour volumes.

In order to develop a more complete profile of existing turning movements for the Study Area intersections, STREETLIGHT DATA was purchased to provide turning movements for each of the 28 intersections. This supplementary (new) data included morning and afternoon peak hour turning movements for each intersection representing average weekday traffic conditions for 2019. Streetlight data was represented average weekday traffic conditions collected in the following periods:

- Collected from March 2019 to April 2019 and September 2019 to October 2019
- Tuesdays through Thursdays
- 12 AM to 12 PM.

Figure 2-1 shows the 2019 intersection turning movements developed and formatted from both the available and new data sources identified above. Figure 2-2 shows the morning (AM) and afternoon (PM) peak hour turning movement volumes for each of the 28 intersections. In addition, morning (AM) and afternoon (PM) peak hour roadway volumes, prepared from the intersection turning movement volumes, are presented in Figure 2-5 and Figure 2-6.



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Figure 2-1: 2019 Turning Movement Diagrams for Study Area Intersections





Figure 2-2: 2019 Turning Movement Diagrams for Study Area Intersections (continued)







#### Figure 2-3: 2019 AM and PM Peak Hour Turning Movement Volumes for Study Area Intersections





Figure 2-4: 2019 AM and PM Peak Hour Turning Movement Volumes for Study Area Intersections (continued)





#### Figure 2-5: 2019 AM Peak Hour Roadway Volumes in the Study Area





#### Figure 2-6: 2019 PM Peak Hour Roadway Volumes in the Study Area







# 3.0 Analysis Approach

This section presents the analysis methods applied to identify the 2019 existing conditions analysis for the Study Area for intersections, roadways, pedestrians, bicyclists, transit, freight, and safety.

# 3.1. INTERSECTION LEVEL OF SERVICE

Accepted, state-of-the practice traffic analysis methods were used to assess the morning and afternoon peak hour intersection operations and levels of service. The 2019 existing traffic profile developed and presented above in Section 2, in addition to the detailed intersection geometry and traffic signal timing and phasing, and unsignalized intersection geometry and controls, were used as primary inputs in this analysis. The intersection operational analysis procedure outlined in the 2010 *Highway Capacity Manual* was implemented using the Synchro 10 traffic analysis software.

This commonly accepted methodology and software is applied to "grade" the intersection operations with levels of service (LOS) from LOS A through LOS F, characterized by the average stopped delay per vehicle. LOS is a measure of driver and/or passenger discomfort, frustration, fuel consumption, and lost travel time. This technique uses 1,900 vehicles per hour per lane as a maximum saturation volume of an intersection, which is adjusted accordingly given varying lane widths, on-street parking availability, pedestrian movements, traffic composition, and shared lane movements at any given intersection. Table 3-1 presents the LOS definitions and criteria used for this analysis. The City of Stockton's current General Plan designates the standard as LOS E for intersections in the Downtown area (bounded by Harding Way, the Union Pacific railroad tracks, Dr. Martin Luther King Jr. Boulevard, I-5, and Pershing Avenue). All other intersections within the City limits require intersection LOS D or better to be acceptable. Most of the study intersections are within the Downtown area and therefore the acceptable LOS is E. The study intersections along South Airport Way and along South Wilson Way are considered outside of the Downtown area which require a LOS D to be acceptable.

Average Stopped Delay Per Vehicle (seconds)	LOS Characteristics		
<10.0	LOS A is typically assigned when the volume-to-capacity ratio is low and either progression is exceptionally favorable, or the cycle length is very short. If it is due to favorable progression, most vehicles arrive during the green indication and travel through the intersection without stopping.		
10.1–20.0	LOS B is typically assigned when the volume-to-capacity ratio is low and either progression is highly favorable, or the cycle length is short. More vehicles stop than with LOS A.		

# Table 3-1: Definitions for Signalized Intersection LOS



Average Stopped Delay Per Vehicle (seconds)	LOS Characteristics			
20.1–35.0	LOS C is typically assigned when progression is favorable, or the cycle length is moderate. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is substantial, although many vehicles still pass through the intersection without stopping.			
35.1–55.0	LOS D is typically assigned when the volume-to-capacity ratio is high and either progression is ineffective, or the cycle length is long. Many vehicles stop and individual cycle failures are noticeable			
55.1–80.0	LOS E is typically assigned when the volume-to-capacity ratio is high, progression is unfavorable, and the cycle length is long. Individual cycle failures are frequent.			
>80.0	LOS F is typically assigned when the volume-to-capacity ratio is very high, progression is very poor, and the cycle length is long. Most cycles fail to clear the queue.			
Source: Highway Capacity Manual (2010)				

### 3.2. ROADWAY PERFORMANCE

Roadway segments were evaluated using a volume-to-capacity (v/c) ratio to measure performance. A v/c analysis is a traditional measure used to assess roadway operations where if the v/c is greater than 1.0, the roadway is over capacity and likely experiences delays. Since speed is difficult to predict for future conditions for freeway and highway segments, the v/c was used to analyze all roadway segments for both the AM and PM peak hours.

Within the traffic project area, State Route 4 (SR-4) and S Airport Way are considered Regional Congestion Management Program (RCMP) facilities by the San Joaquin County. The LOS standard established for RCMP facilities is LOS D, with the exception of the LOS F standard for SR-4 segments located in the Traffic Study Area. These standards are being used to support the roadway performance analysis presented later in Section 4.

### 3.3. PEDESTRIANS AND BICYCLE INVENTORY

Pedestrian movements were identified from limited available data to provide a general inventory of pedestrian movements in the Study Area. Availability of pedestrian crossings for the at-grade roadway crossings with both of the railroads (Union Pacific and Burlington Northern Santa Fe) were identified in the Study Area. The Study Area does not currently include any of the City of Stockton's Class 1, Off-Road Bike Trail; Class 2, On-Road Bike Lane; Class 3, Bike Route – Mixed Traffic; and/or Class 4, Separated Bikeway, designations documented in the Envision Stockton 2040 General Plan Update, Utility Master Plan Supplements Draft EIR (June 2018), and City of Stockton Bike Master Plan (2017).



# 3.4. TRANSIT ROUTE COVERAGE INVENTORY

An inventory of the SJ RTD's transit routes and schedules that currently provide access to the Study Area was prepared, including designated Express Routes, Hopper Routes, and Local Routes.

# 3.5. FREIGHT INVENTORY

An inventory of the existing truck routes and intermodal (truck and rail) facilities were documented for City Truck Routes, in the Envision Stockton, 2040 General Plan Update and Utility Master Plan Supplemental Draft EIR, June 2018.

### 3.6. SAFETY/CRASH INVENTORY

Crash data from 2017 to 2019 was compiled from UC Berkeley's Transportation Injury Mapping System. This data encompassed detailed crash (all modes) history by intersection and roadway locations in the traffic study by fatality, severe injury, other vehicle injury, and complaint of pan injury.

# 4.0 Existing Traffic Conditions Analysis

This section presents the 2019 existing traffic conditions in the Study Area. Traffic, pedestrian, bicycle, transit and truck conditions were evaluated to provide a multimodal assessment of the transportation system consistent with the approach used by the city of Stockton.

# 4.1. INTERSECTION OPERATIONS

As presented in Section 3, the data (turning movements, geometry, signal timing, and unsignalized controls) compiled above from available and new sources were input into the Synchro 10 traffic analysis software to calculate both morning (AM) and afternoon peak (PM) hour level of service analysis for each of the 28 intersections being evaluated. Table 4-1 summarizes existing AM and PM peak hour LOS and average delay (in seconds) at each intersection.

The results of the AM peak hour indicate that the majority of the intersections operate at excellent to good levels of service with most intersections currently operating at LOS C or better during the 2019 AM peak hour except for intersection #8, E Lafayette Street/S Stanislaus Street operating at LOS F.

Similarly, in the 2019 PM peak hour, most of the intersections also operate with excellent to good levels of service C or better except for the following four intersections: intersection #8, E Lafayette Street/S Stanislaus Street, intersection #10, E Lafayette Street/S Airport Way, intersection #15, E Hazelton Avenue/S Stanislaus Street, and intersection #25, E Charter Way and S Stanislaus Street. All three intersections except intersection #15, East Hazelton Avenue/South Stanislaus Street operate at the City of Stockton's acceptable LOS E.

Intersection #8, E Lafayette Street/S Stanislaus Street has LOS F and does not meet the City of Stockton's acceptable level of service Standard (LOS E) during AM peak hour due to follow reasons:



- Higher SR4 off ramp volume
  - o 54 percent of total intersection volume come from SR4 off ramp
- SR4 off ramp v/c ratio is greater than 1
  - Vehicles turning left from SR4 off ramp has v/c ratio of 1.89
  - Vehicles going thru/right from SR4 off ramp has v/c ratio of 1.25

The following intersections have LOS F and does not meet the City of Stockton's acceptable level of Standard during PM Peak hour.

Intersection #8, E Lafayette Street and South Stanislaus Street

- Higher eastbound volumes on East Lafayette Street.
  - Eastbound thru volume on E Lafayette Street (entering SR4 on ramp) totals 26 percent of total intersection volumes
- SR4 off ramp and E Lafayette Street eastbound v/c ratio is greater than 1.
  - Vehicles going thru/right from SR4 off ramp has v/c ratio of 1.31
  - Vehicles entering SR4 on ramp via E Lafayette Street has v/c ratio of 1.01

Intersection #10, E Lafayette Street/S Airport Way

- Inadequate gaps in traffic
  - Eastbound left volume is the cause for LOS F at this intersection. Although only 6 percent of total intersection vehicles are turning left from E Lafayette Street, these stop-controlled vehicles do not have sufficient gaps in traffic to make left turns because of heavy northbound/southbound movements
  - V/c ratio for eastbound direction is 3.29

Intersection #25, E Charter Way and S Stanislaus Street

- Inadequate gaps in traffic
  - Northbound thru/left volume and southbound thru/left volume are the causes for LOS F at this intersection. Only 1 percent of the total intersection volumes are for northbound thru/left vehicles and only 5 percent of the total intersection volumes are for southbound thru/left vehicles. These stop-controlled vehicles do not have sufficient gaps in traffic to pass the intersection because of the heavy eastbound/westbound movements
  - V/c ratios for northbound and southbound direction are 2.71 and 3.85 respectively



Intersection		АМ		PM	
		Delay (seconds)	LOS	Delay (seconds)	LOS
1	S Stanislaus Street and E Weber Avenue	15.8	В	16.9	В
2	S Airport Way and E Weber Avenue	11.8	В	14.5	В
3	S Stanislaus Street and E Main Street	9.2	А	8.8	А
4	S Airport Way and E Main Street	9.6	А	7.8	А
5	S Stanislaus Street and E Market Street	11.8	В	8.3	А
6	S Airport Way and Market Street	9.2	А	11.2	В
7	E Lafayette Street and California Street	16.1	В	18.3	В
8	E Lafayette Street and S Stanislaus Street	192.2	F	87.8	F
9	E Lafayette Street and Aurora Street	11.8	В	15.6	В
10	E Lafayette Street and S Airport Way	6.6	А	117.6	F
11	S Wilson Way and E Church Street	1.6	А	2	А
12	E Hazelton Avenue and S San Joaquin Street	8.3	А	8.9	A
13	E Hazelton Avenue and S Sutter Street	4.2	А	4.5	А
14	E Hazelton Avenue and California Street	8.5	А	9.3	А
15	E Hazelton Avenue and S Stanislaus Street	9.8	А	62.6	Е
16	E Hazelton Avenue and Aurora Street	8.7	А	9.7	А
17	E Hazelton Avenue and S Airport Way	8	А	9.8	А
18	E Hazelton Avenue and S Wilson Way	14.3	В	16	В
19	E Anderson Street and S San Joaquin Street	7.6	А	7.9	А
20	E Anderson Street and S Sutter Street	7.5	А	7.6	А
21	E Anderson Street and California Street	3.8	А	3.3	А
22	E Anderson Street and S Stanislaus Street	0.9	А	1.9	А
23	E Anderson Street and Aurora Street	0.4	А	1.5	А
24	E Charter Way and California Street	12.7	В	18.4	В
25	E Charter Way and S Stanislaus Street	6.5	А	95.5	F
26	E Charter Way and Aurora Street	1	А	0.7	А
27	E Charter Way and S Airport Way	21.4	С	23.3	С
28	E Charter Way and S Wilson Way	21.9	С	24.2	С

### Table 4-1: 2019 AM and PM Peak Hour Intersection Level of Service and Delay



# 4.2. ROADWAY CONDITIONS

As summarized above in Section 3, roadway segments for both AM and PM peak hours in the Study Area were evaluated using v/c ratios to measure performance. Figure 4-1 and Figure 4-2 show the v/c results by roadway segment in the Study Area, for the AM peak hour and PM peak hour respectively. The following parameters and methods were used from the Highway Capacity Manual (HCM) 2010 to analyze roadway v/c ratios for local roads, arterials, collectors, and freeways:

- 1200 Vehicles/hour/lane capacity on Local Roadways
- 1780 Vehicles/hour/lane capacity on Arterials and Collectors

2400 Vehicles/hour/lane capacity on Freeways (SR-4 Crosstown Freeway).

The resulting volume to capacity (v/c) ratios for roadways in morning peak hour for 2019 include:

- Local roads
  - East Lafayette Street between South San Joaquin Street and South Stanislaus Street operates at LOS B with v/c ratio of 0.37
  - $_{\odot}$  All other local roads operate at LOS A with v/c ratio less than 0.30
- Collectors
  - South Stanislaus Street north of East Lafayette Street operates at LOS B with v/c ratio of 0.38
  - All other collector roads within Study Area operate at LOS A with v/c ratios less than 0.30
- Arterials
  - E Main Street, W Market Street and California Street operate at LOS A with v/c ratio less than 0.30
  - E Charter Way, S Airport Way and S Wilson Way operate at LOS B with v/c ratios between 0.31 to 0.50
- Freeways
  - SR-4 operates at LOS F with v/c ratio of 1.11

The resulting volume to capacity (v/c) ratios for roadways in afternoon peak hour include:

- Local roads
  - E Lafayette Street between S San Joaquin Street and South Stanislaus Street operates at LOS B with v/c ratio of 0.48
  - $_{\odot}$   $\,$  All other local roads operate at LOS A with v/c ratio less than 0.30  $\,$
- Collector
  - All collector roads within Study Area operate at LOS A with v/c ratios less than 0.30


- South Stanislaus Street north of East Anderson Street also operates at LOS B with v/c ratio of 0.34
- $\circ$  All collector roads within Study Area operate at LOS A with v/c ratios less than 0.30
- Arterials
  - E Main Street, E Market Street and California Street operate at LOS A with v/c ratio less than 0.30
  - E Charter Way between S San Joaquin Street and Aurora Street operates at LOS C with v/c ratio of 0.62
  - E Charter Way between Aurora Street and S Wilson Way operates at LOS B with v/c ratio of 0.49
  - S Airport Way between E Charter Way and E Lafayette Street operates at LOS B with v/c ratio of 0.49
  - S Airport Way between E Lafayette Street and E Weber Avenue operates at LOS C with v/c ratio of 0.63
  - S Wilson Way between E Charter Way and E Church Street operates at LOS B with v/c ratio of 0.41
  - S Wilson Way between E Church Street and E Weber Avenue operates at LOS C with v/c ratio of 0.62
- Freeways
  - SR-4 operates at LOS F with v/c ratio of 1.08





Figure 4-1: 2019 AM Peak Hour Roadway Volume to Capacity Ratios in the Study Area

Figure 4-2: 2019 PM Peak Hour Roadway Volume to Capacity Ratios in the Study Area





# 4.3. EXISTING PEDESTRIAN CONDITIONS

There is limited data available to identify pedestrian activity in the Study Area. Currently, there are seven at-grade roadway crossings of UP tracks and seven at-grade roadway crossings of BNSF tracks in the Traffic Study Area. The pedestrian inventory identified only four of the 14 intersections meeting ADA compliance. Table 4-2 below provides an inventory of pedestrian accessibility at these crossings with ADA compliance indicated. The crossings of BNSF tracks are not affected by the proposed project and therefore no improvements are planned at these crossings.

Table 4-2: Pedestrian Facilities with at-Grade Roadway/Rail Crossings in the Traffic Stud	у
Area	

Intersection	Sidewalk	ADA Compliant Sidewalk	Reason for ADA Non Compliance
E Weber Avenue/UPRR	Yes	No	No Sidewalk east of track
E Main Street/UPRR	Yes	Yes	N/A
E Market Street/UPRR	Yes	No	Missing detectable warning panel on RR crossing. Missing Audible active warning devices and automated pedestrian gates. No Sidewalk east of track
E Lafayette Street/UPRR	No	No	Missing Sidewalk
E Church Street/UPRR	No	No	Railroad Light Post/Crossbuck on sidewalk Missing detectable warning panel on RR crossing. Missing Audible active warning devices and automated pedestrian gates. Missing Sidewalk
E Hazelton Avenue/UPRR	Yes	Yes	N/A
E Scotts Avenue/UPRR	No	No	Missing Sidewalk
S San Joaquin Street/BNSF	Yes	Yes	N/A



Intersection	Sidewalk	ADA Compliant Sidewalk	Reason for ADA Non Compliance
S Sutter Street/BNSF	Yes	No	Railroad Light Post/Crossbuck and utility post on pedestrian travel path. Missing detectable warning panel on RR crossing. Missing Audible active warning devices and automated pedestrian gates. No southeast Sidewalk.
California Street/BNSF	No	No	Railroad Light Post/Crossbuck and utility post on pedestrian travel path. Missing detectable warning panel on RR crossing. Missing Audible active warning devices and automated pedestrian gates Missing Sidewalk.
S Stanislaus Street/BNSF	No	No	Missing Sidewalk
Aurora Street/BNSF	Yes	No	Sidewalk exists only on the western side of the road. Missing Audible active warning devices. Missing automated pedestrian gates south of BNSF track. Flangeway gaps on RR track.
S Pilgrim Street/BNSF	No	No	Missing Sidewalk
S Airport Way/BNSF	Yes	No	Railroad Light Post/Crossbuck on pedestrian travel path. Missing detectable warning panel on RR crossing. Missing Audible active warning devices and automated pedestrian gates.



# 4.4. BICYCLE CONDITIONS

Bikeway facilities in the Study Area include the following classes defined in the Envision Stockton, 2040 General Plan Update and Utility Master Plan Supplemental Draft EIR (also following Caltrans bike designation criteria):

- Class 1 Off-Road Bike Trail, facilities with exclusive right of way for bicyclists and pedestrians, away from the roadway and with cross flows by motor traffic minimized
- Class 2 On-Road Bike Lane, facilities established along streets and defined by pavement striping and signage to delineate a portion of a roadway for bicycle travel
- Class 3 Bike Route Mixed Traffic, facilities designated as a preferred route for bicyclists on streets shared with motorized traffic not served by dedicated bikeways often marked by route signs
- Class 4 Separated Bikeway, facilities established along streets and defined by not only pavement striping and signage, but also a complete separation with barriers such as on-street parking, grade separation, delineator poles to delineate a portion of roadway for bicycle travel.

Bicycle movements, based on information obtained from the City of Stockton, mirror the low level of activity shown with pedestrian movements in the Study Area. For both the AM and PM peak hours, bicycle movements are less than 1 percent of traffic volumes for a sample of Study Area intersections. There are no current designated bicycle network routes and facilities (Classes 1-4) and limited bicycle access available in the Study Area. The following takeaways from the "City of Stockton Bicycle Master Plan" mirror the bicycle facilities and movements in the Study Area:

- Lack of north/south and east/west connectors for commuters and recreational riders
- Bicycle parking is not available at most locations and bikes are often stolen
- Existing facilities are not always family friendly and many need maintenance and many traffic lights and intersections do not detect or accommodate bikes.

Figure 4-3 shows that there is no existing bicycle network (by Class 1, 2, and 3) available to users in the Study Area.





#### Figure 4-3: 2019 Bicycle Route Network in the Traffic Study Area

#### 4.5. TRANSIT CONDITIONS

Public transit service in the Study Area is primarily provided by the San Joaquin Regional Transit. There are 12 transit routes within our Study Area. Metro Hopper route 4 and 7 operate on E Weber Avenue. Transit routes 315, 510, and 560 operate northbound/southbound on San Joaquin Street, transit route 555 operates northbound/southbound on S Stanislaus Street, express route 44 operates northbound/southbound on S Airport Way and transit routes 378 and 580 operate northbound/southbound on S Wilson Way. Express route 49 operates eastbound/westbound on E



Charter Way, and express routes 44 and 47 operate eastbound/westbound on E Weber Avenue. Figure 4-4 shows the routes in the Traffic Study Area. Note, currently due to COVID19, San Joaquin RTD has limited services while operating typical weekend schedule during weekdays.



### Figure 4-4: San Joaquin Regional Transit Routes in the Traffic Study Area

Source: San Joaquin RDT Weekday System Map

# 4.6. FREIGHT CONDITIONS

Truck routes in Stockton consist primarily of the State Highway system and major arterials within the City. Figure 4-5 shows the truck routes operating in the Traffic Study Area and city of Stockton. Figure 4-6 shows the STAA truck routes operating in the Traffic Study Area and city of Stockton.





Figure 4-5: Truck Route Designations in the Traffic Study Area

Source: City of Stockton. Truck Routes Map dated October 2009.







Source: City of Stockton. STAA Truck Routes Map dated November 2017.



SR 99 and I-5 are considered major truck routes connecting Central Valley cities to other metropolitan areas throughout the state, with the crosstown freeway, SR-4, and Arch-Airport Road supporting citywide truck circulation, as well as providing connections to the airport and BNSF intermodal facility. Truck route designations include City Truck Routes, County Truck Routes, Flammable Liquid-Other Routes, and Truck Routes operating from 7am to 10pm. Currently, with the exception of County Truck Routes, the Study Area includes roadways with each of the other three designations (in some cases roadways include multiple designations):

- City Truck Routes on South Airport Way, East Hazelton Avenue, East Lafayette Street, East Market Street, East Weber Avenue, Aurora Street and South Union Street
- Flammable Liquid-Other Routes on East Charter Way, South Wilson Way, and South Airport Way
- Truck Route 7 am to 10 pm on South Stanislaus Street

East Charter Way is the only roadway in the Study Area which is designated as an STAA truck route.

### 4.7. SAFETY ANALYSIS

Crash data for all transportation modes from 2017 to 2019 was compiled from the University of California Berkeley Transportation Injury Mapping System (TIMS). During this 3-year period, 562 incidents were reported within the Traffic Study Area (Figure 4-7). These included 12 fatalities and 790 injuries. Of the 12 fatalities, 4 were pedestrians, 4 were bicyclists, and remaining 4 were motorists.

In addition to the TIMS data, crashes that occurred at the railroad crossings published by Federal Railroad Administration (FRA) were also compiled to understand road-rail crash locations in the Traffic Study Area. This crash data from 2015 to 2019 were obtained, reviewed, and summarized in Table 4-3. This data also shows crashes at these locations by pedestrians, bicycles, and total vehicles. In this 4-year period, a total of 10 accidents occurred at these at-grade road/rail locations, with six involving pedestrians and bicycles (with freight trains) and four involving vehicles with trains).





# Figure 4-7: 2017-2019 Multimodal Crash Locations in the Traffic Study Area

Source: SWITRS GIS MAP-UC Berkeley Transportation Injury Mapping System (TIMS)



	In	jury	Fa	atal	Non	Injury	
Intersection	Bike/ Ped	Vehicle	Bike/ Ped	Vehicle	Bike/ Ped	Vehicle	Total By Location
E Weber Avenue/UPRR						1	1
E Market Street/UPRR	1						1
E Scotts Avenue/UPRR						1	1
S San Joaquin Street/BNSF	1		1				2
S Sutter Street/BNSF	1						1
California Street/BNSF	1						1
S Stanislaus Street/BNSF	1						1
S Pilgrim Street/BNSF						1	1
S Airport Way/BNSF						1	1
Total by Type	5	0	1	0	0	4	10

# Table 4-3: Accidents on at-grade Crossings between 2015 to 2019

Source: Department of Transportation Federal Railroad Administration (FRA) Incident Report



# 5.0 No Project Alternative (2045) Traffic Condition Analysis

This section presents the expected future transportation condition in the Study Area assuming other anticipated transportation improvements (planned as part of other plans and studies) would move forward. The No Project Alternative traffic conditions does not include the proposed grade separation project being evaluated. The anticipated transportation infrastructure improvement projects, future growth rate and 2045 No Project Alternative Traffic conditions are presented in this section.

## 5.1. ANTICIPATED TRANSPORTATION INFRASTRUCTURE IMPROVEMENT PROJECTS

Table 5-1 shows the anticipated transportation infrastructure (intersections and roadway) improvement projects identified in the Traffic Study Area by the City of Stockton while Table 5-2 shows the specific intersection and roadway improvements from the listing above that were built into the No Project Alternative traffic conditions analysis.

Location	Project
E. Hazelton Avenue and S Airport Way	Signal re-modeling and sidewalk gap closure installation at railroad crossing Existing City Project PW 1902)
	Install left-turn phasing on Airport Way Existing City Project PW 1902)
E Hazelton Avenue and E Stanislaus Street	Conversion of side street stop-controlled intersection to all way stop controlled intersection
E. Charter Way and California Street	Traffic signal remodeling (City Project PW 1713)
E. Charter Way and Aurora Street	Sidewalk, Median, and fencing improvement (City project PW 1903)
California Street	California Street Road Diet project (City Project PW1805)
South Airport Way	South Airport Way separated Bike-way (City project PW1808)

### Table 5-1: Anticipated Future Changes to Transportation Infrastructure



# Table 5-2: Traffic Improvements Built into the No Project Alternative traffic Conditions Analysis

Location	Project
E. Hazelton Avenue and S Airport Way	Install left-turn phasing on Airport Way
E Hazelton Avenue and E Stanislaus Street	Conversion of side street stop-controlled intersection to all way stop controlled intersection

Figure 5-1 shows the 2045 intersection turning movements developed from traffic improvement project identified earlier in Table 5-2 above.

# 5.2. FUTURE GROWTH RATE

Traffic growth rates were required to estimate future expected 2045 traffic volumes. Several sources of available information were used to support the development of annualized traffic growth rates, including traffic volume flow maps, volumes, and reports from the City of Stockton traffic flow maps, travel model forecasts, and most recent General Plan, Caltrans counts, and discussions with City of Stockton Traffic Engineering staff, to determine an annual traffic growth rate for application in this analysis.

Based on this analysis, the City's traffic flow maps from 2015 to 2019 including a combination of major and minor roads within the Traffic Study Area including close by segments of I-5, SR-99 and SR-4 provided an annual growth rate of 0.063 percent per year. The travel demand model for the City of Stockton, which is based on population and employment estimates to determine future travel demand, considered a growth rate of between 1.0 percent to 1.5 percent annually.

Based on the City's traffic consultant recommendation, annual traffic growth by major and minor roads within the Project Traffic Study Area was identified at 1.0 percent. Therefore, the average annual growth rate was computed at an average of 1.0 percent, compounded annually to 2045. This growth rate was well within the range identified by the City's consultant for this area near Downtown Stockton. The 1.5 percent annual growth rate was estimated for areas outside of/peripheral to Downtown Stockton area.

Although 1.0 percent growth rate is much higher than the computed rate of 0.063 percent (based on historical traffic counts), a conservative approach was applied using 1.0 percent annual growth rate to apply to the existing traffic volumes to estimate 2045 No Project Alternative traffic volumes. With the exception on SR4, the traffic growth rate of 0.063 percent per year was applied for this facility, which based on historical traffic volume analysis, considers zero annual growth since 2015.

### 5.3. FUTURE LAND USE DEVELOPMENTS IMPACTING THE STUDY AREA

HDR reached out to the City of Stockton to inquire about any future land use developments impacting the Study Area. Currently there are no planned future land use developments within or adjacent to the project's Study Area.



# 5.4. INTERSECTION OPERATIONS

The 2045 No Project Alternative traffic volumes were generated by applying the annualized growth rates to the 2019 existing traffic volumes. Figure 5-2 illustrates the 2045 No Project Alternative turning movements for each of the 28 intersections being analyzed. Figure 5-3 shows the morning (AM) and afternoon (PM) peak hour turning movement volumes for those intersections. In addition, the 2045 No Project Alternative morning (AM) and afternoon (PM) peak hour roadway volumes, prepared for the intersection turning movement volumes, are presented in Figure 5-4 and Figure 5-5.



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Figure 5-1: 2045 No Project Alternative Turning Movement Diagrams for Study Area Intersections



# TRAFFIC REPORT







# TRAFFIC REPORT



Figure 5-2: 2045 No Project Alternative AM and PM Peak Hour Turning Movement Volumes for Study Area Intersections



# TRAFFIC REPORT





Figure 5-2: 2045 No Project Alternative AM and PM Peak Hour Turning Movement Volumes for Study Area Intersections (continued)













Figure 5-4: 2045 No Project Alternative PM Peak Hour Roadway Volumes in the Study Area









The 2045 No Project Alternative intersection operations were analyzed for the study intersections. Identical to the assessment of the 2019 Existing Condition, intersection operations in 2045 No Project Alternative condition were evaluated for the AM and PM peak hours. LOS analysis was conducted according to procedures outlined in the 2010 Highway Capacity Manual using Synchro 10 traffic analysis software per City and County standards. As discussed in the existing condition section, LOS E or better represents the acceptable LOS in City of Stockton.

Table 5-3 below summarizes and compares the intersection LOS results in the 2045 No Project Alternative with the Existing Conditions (2019) during the AM peak hour. All intersections operate at an acceptable LOS under the 2045 No project Alternative AM condition, except for East Lafayette Street and South Stanislaus Street (#8). This intersection is anticipated to operate at LOS F during the AM Peak hour. The increase in delay at this intersection is due to the anticipated volume increase from 2019 to 2045.

		EXISTING (AM)		2045 NO	DIFFER- ENCE		
		Delay		Delay		Delay	LOS
	Intersection	(sec)	LOS	(sec)	LOS	Diff. (sec)	Change
1	S Stanislaus Street and E Weber Avenue	15.8	В	24.2	С	8.4	B to C
2	S Airport Way and E Weber Avenue	11.8	В	14.2	В	2.4	N/A
3	S Stanislaus Street and E Main Street	9.2	А	17.3	В	8.1	A to B
4	S Airport Way and E Main Street	9.6	А	11	В	1.4	A to B
5	S Stanislaus St and E Market Street	11.8	В	13.9	В	2.1	N/A
6	S Airport Way and Market Street	9.2	А	10.2	В	1	A to B
7	E Lafayette Street and California Street	16.1	В	17.8	В	1.7	N/A
8	E Lafayette Street and S Stanislaus Street	192.2	F	319	F	126.8	N/A
9	E Lafayette Street and Aurora Street	11.8	В	16.8	В	5	N/A
10	E Lafayette Street and S Airport Way	6.6	А	32.1	С	25.5	A to C
11	S Wilson Way and E Church Street	1.6	А	5.7	А	4.1	N/A

#### Table 5-3: Existing and 2045 No Project Alternative AM Intersection LOS Comparison



		EXISTING (AM)		2045 NO	DIFFER- ENCE		
		Delay		Delay		Delay	LOS
	Intersection	(sec)	LOS	(sec)	LOS	Diff. (sec)	Change
12	E Hazelton Avenue and S San Joaquin Street	8.3	А	8.7	А	0.4	N/A
13	E Hazelton Avenue and S Sutter Street	4.2	А	4.5	А	0.3	N/A
14	E Hazelton Avenue and California Street	8.5	А	9.1	А	0.6	N/A
15	E Hazelton Avenue and S Stanislaus Street	9.8	В	13	В	3.2	N/A
16	E Hazelton Avenue and Aurora Street	8.7	А	9.5	А	0.8	N/A
17	E Hazelton Avenue and S Airport Way	8	А	17.1	В	9.1	A to B
18	E Hazelton Avenue and S Wilson Way	14.3	В	16.3	В	2	N/A
19	E Anderson Street and S San Joaquin Street	7.6	А	7.9	А	0.3	N/A
20	E Anderson Street and S Sutter Street	7.5	А	7.7	А	0.2	N/A
21	E Anderson Street and California Street	3.8	А	3.9	А	0.1	N/A
22	E Anderson Street and S Stanislaus Street	0.9	А	1	А	0.1	N/A
23	E Anderson Street and Aurora Street	0.4	А	0.4	А	0	N/A
24	E Charter Way and California Street	12.7	В	14.6	В	1.9	N/A
25	E Charter Way and S Stanislaus Street	6.5	А	29.7	С	23.2	A to C
26	E Charter Way and Aurora Street	1	А	1.1	А	0.1	N/A
27	E Charter Way and S Airport Way	21.4	С	25.2	С	3.8	N/A
28	E Charter Way and S Wilson Way	21.9	С	25	С	3.1	N/A



Table 5-4 below summarizes and compares the intersection LOS results in the 2045 No Project Alternative with the Existing Conditions (2019) for the PM peak hour. All intersections operate at an acceptable LOS under the 2045 No Project Alternative PM conditions, except for the following intersections:

- East Lafayette Street and South Stanislaus Street (#8) This intersection is anticipated to operate at LOS F during PM peak hour
- East Lafayette Street and South Airport Way (#10) This intersection is anticipated to operate at LOS F during the PM peak hour
- East Charter Way and South Stanislaus Street (#25) This intersection is anticipated to operate at LOS F during the PM peak hour

The increase in delay at intersections #8, #10, and #25 during PM peak hour is due to the anticipated volume increase from 2019 to 2045.

As shown in Table 5-4, the LOS and delay for East Hazelton Avenue and Aurora Street intersection (#15) improved during the 2045 No Project condition. This is due to the City's planned improvement project to convert the existing side street stop-controlled intersection to an all way stop controlled intersection (Table 5-1).

		EXIST (PM		EXISTING (PM)		2045 NO PROJECT (PM)		DIFFE	RENCE
	Intersection	Delay	LOS	Delay	LOS	Delay	LOS		
		(sec)		(sec)		Diff. (sec)	Change		
1	S Stanislaus Street and E Weber Avenue	16.9	В	23.5	С	6.6	B to C		
2	S Airport Way and E Weber Avenue	14.5	В	27.8	С	13.3	B to C		
3	S Stanislaus Street and E Main Street	8.8	А	9.2	А	0.4	N/A		
4	S Airport Way and E Main Street	7.8	А	10.1	В	2.3	A to B		
5	S Stanislaus Street and E Market Street	8.3	A	8.7	A	0.4	N/A		
6	S Airport Way and Market Street	11.2	В	35.5	D	24.3	B to D		
7	E Lafayette Street and California Street	18.3	В	20.7	С	2.4	B to C		
8	E Lafayette Street and S Stanislaus Street	87.8	F	174.5	F	86.7	N/A		
9	E Lafayette Street and Aurora Street	15.6	В	36.9	D	21.3	B to D		
10	E Lafayette Street and S Airport Way	>180	F	>180	F	>180	N/A		

### Table 5-4: Existing and 2045 No Project Alternative PM Intersection LOS Comparison



		EXIST (PN	'ING (I)	2045 PROJEC	NO CT (PM)	DIFFE	RENCE
	Intersection	Delay	LOS	Delay	LOS	Delay	LOS
		(sec)		(sec)		Diff. (sec)	Change
11	S Wilson Way and E Church Street	2	А	15.9	В	13.9	A to B
12	E Hazelton Avenue and S San Joaquin Street	8.9	A	9.6	A	0.7	N/A
13	E Hazelton Avenue and S Sutter Street	4.5	А	5.1	A	0.6	N/A
14	E Hazelton Avenue and California Street	9.3	А	10.3	В	1	A to B
15	E Hazelton Avenue and S Stanislaus Street	62.6	Е	22.8	С	-39.8	E to C
16	E Hazelton Avenue and Aurora Street	9.7	А	11.3	В	1.6	A to B
17	E Hazelton Avenue and S Airport Way	9.8	А	20.1	С	10.3	A to C
18	E Hazelton Avenue and S Wilson Way	16	В	20.6	С	4.6	B to C
19	E Anderson Street and S San Joaquin Street	7.9	А	8.2	А	0.3	N/A
20	E Anderson Street and S Sutter Street	7.6	А	7.9	А	0.3	N/A
21	E Anderson Street and California Street	3.3	А	3.6	А	0.3	N/A
22	E Anderson Street and S Stanislaus Street	1.9	А	2.5	А	0.6	N/A
23	E Anderson Street and Aurora Street	1.5	А	1.6	А	0.1	N/A
24	E Charter Way and California Street	18.4	В	23.1	С	4.7	B to C
25	E Charter Way and S Stanislaus Street	95.5	F	>180	F	110.3	N/A
26	E Charter Way and Aurora Street	0.7	А	1.4	А	0.7	N/A
27	E Charter Way and S Airport Way	23.3	С	28.8	С	5.5	N/A
28	E Charter Way and S Wilson Way	24.2	С	27.4	С	3.2	N/A

<sup>1</sup>In Synchro, calculations of >180 seconds conditions cannot be fully represented in the simulation model and are not accurately predictable leading to unacceptable LOS.



# 5.5. ROADWAY CONDITIONS

Roadway segment operations were analyzed for 2045 in the No Project Alternative Conditions. As with the assessment of the 2019 Existing Condition, roadway segments were evaluated using v/c ratios to measure the roadway performance, where a v/c ratio of 1.0 or above represents failure or LOS F.

With the exception of SR 4 (Crosstown Freeway), all of the roadway levels of service in the Traffic Study Area are expected to perform at LOS E or better in the No Project Alternative condition. The resulting volume to capacity (v/c) ratios for roadways in the AM peak hour for the 2045 No Project Alternative condition are summarized in Table 5-5 and shown in Figure 5-5.

Road	Location	Roadway Classification	V/C Ratio	LOS
East Weber Avenue	Between South San Joaquin Street and South Stanislaus Street	Collector	0.32	В
East Main Street	Between South San Joaquin Street and South Stanislaus Street	Arterial	0.34	В
SR 4	Between South San Joaquin Street and South Wilson Way	Freeway	1.14	F
East Lafayette Street	Between South San Joaquin Street and South Aurora Street	Local	0.47	В
East Charter Way	Between South San Joaquin Street and South Stanislaus Street	Arterial	0.59	С
East Charter Way	Between South Stanislaus Street and South Wilson Way	Arterial	0.50	В
South Stanislaus Street	North of East Lafayette Street	Collector	0.62	С
South Airport Way	Between East Weber Avenue and East Lafayette Street	Arterial	0.50	В
South Airport Way	Between East Lafayette Street and East Hazelton Avenue	Arterial	0.45	В
South Airport Way	Between East Hazelton Avenue and East Charter Way	Arterial	0.43	В
South Wilson Way	Between East Weber Avenue and East Church Street	Arterial	0.58	С
South Wilson Way	Between East Church Street and East Church Street	Arterial	0.56	С
All other Roadway Segments	-	-	<0.30	А

#### Table 5-5: 2045 No Project Alternative Condition AM Peak Roadway v/c ratio and LOS





Figure 5-5: 2045 No Project Alternative v/c Ratio and LOS, AM Peak Hour

The resulting volume to capacity (v/c) ratios for roadways in the 2045 No Project Alternative condition PM peak hour are summarized in Table 5-6 and shown in Figure 5-6.

Road	Location	Roadway Classification	V/C Ratio	LOS
SR 4	Between South San Joaquin Street and South Wilson Way	Freeway	1.10	F
East Lafayette Street	Between South San Joaquin Street and South Stanislaus Street	Local	0.63	С
East Charter Way	Between South San Joaquin Street and South Aurora Street	Arterial	0.69	С
East Charter Way	Between Aurora Street and South Airport Way	Arterial	0.80	D
East Charter Way	Between South Airport Way and South Wilson Way	Arterial	0.63	С
South Stanislaus Street	North of East Hazelton Avenue	Collector	0.39	В

Tabla 5-6: 2015 Na Dra	iact Altarnativa Canditia	DM Dook Doodwo	v vla ratio and LOS
1 abie J-0. 204J NO FIO	jeti Allemalive tomulloi	I FINI FEAN NUAUWA	y v/c ralio anu LOS



Road	Location	Roadway Classification	V/C Ratio	LOS
South Stanislaus Street	Between East Hazelton Avenue and East Anderson Street	Local	0.44	В
South Airport Way	Between East Weber Avenue and East Lafayette Street	Arterial	0.81	D
South Airport Way	Between East Lafayette Street and East Hazelton Avenue	Arterial	0.72	D
South Airport Way	Between East Hazelton Avenue and East Charter Way	Arterial	0.46	В
South Wilson Way	Between East Weber Avenue and East Hazelton Avenue	Arterial	0.81	D
South Wilson Way	Between East Hazelton Avenue and East Charter Way	Arterial	0.62	С
All other Roadways	-	-	<0.30	А

Figure 5-6: 2045 No Project Alternative v/c Ratio and LOS, PM Peak Hour





# 5.6. PEDESTRIAN CONDITIONS

The No Project Alternative is not anticipated to change the existing intersection geometry, land uses, and sidewalks or crosswalks in the vicinity and would have no impacts on pedestrian activity. With the exception of pedestrian improvements planned by other, independent projects, existing approaches to the at grade crossings and ADA accessibility is anticipated to remain unchanged.

# 5.7. BICYCLE CONDITIONS

The 2045 No Project Alternative condition are expected to include implementation of the City's proposed bicycle facilities in the Study Area, as shown in Figure 5-7. These future facilities are planned for East Weber Avenue, East Main Street, East Market Street, East Hazelton Avenue, California Street, South Aurora Street and South Airport Way. These planned facilities are considered part of the No Project Alternative and would add to the existing bicycle infrastructure in and around the Study Area.





### Figure 5-7: Proposed No Project Alternative (2045) Bicycle Facilities in Traffic Study Area



# 5.8. TRANSIT CONDITIONS

Public transit services expected to operate in the Study Area by 2045 in the No Project Alternative will be similar to the services provided by the San Joaquin Regional Transit in 2019 (Section 4, Existing Transit Conditions). While the expectation is that over time (2019 to 2045) the San Joaquin Regional Transit will refine transit services (add routes, refine routes) in the Study Area, they have yet to be determined. At a minimum, the expectation is that at least the 12 transit routes currently providing service in the Study Area will be maintained into the future.

# 5.9. FREIGHT CONDITIONS

The 2045 No Project Alternative freight conditions are expected to consider similar levels of trucking services and activity that were identified in existing conditions (Section 4.0, Existing Freight Conditions) in the Study Area. As presented in existing conditions, the primary truck routes in the City of Stockton will remain focused primarily on the state highway system and major arterials, primarily on SR 99 and I-5 outside of the Traffic Study Area, with SR 4 crossing through the Traffic Study Area.

Truck route designations in the Traffic Study Area including STAA truck route will carry forward from existing conditions to the 2045 No Project Alternative. These will continue as designated city truck routes, county truck routes, flammable liquid-other routes, truck routes from 7 am to 10 pm and STAA truck routes. It is expected that the designated truck routes will be the same into the future, including City Truck Routes on South Airport Way, East Hazelton Avenue, East Lafayette Street, East Market Street, East Weber Avenue, Aurora Street and South Union Street; Flammable Liquid-Other Routes on East Charter Way, South Wilson Way, and South Airport Way; Truck Route–7 am to 10 pm on South Stanislaus Street; and STAA Truck Routes on East Charter Way.

# 6.0 Proposed Project 2045 Traffic Conditions Analysis

The following section presents the expected (2045) proposed Project traffic conditions analysis. This alternative considers the implementation and associated transportation impacts associated with all of the proposed components of the Stockton Diamond Grade Separation Project.

# 6.1. ANTICIPATED ROADWAY CLOSURES AND TRAFFIC REDISTRIBUTION

As a part of the proposed Project, permanent road closures are proposed for East Lafayette Street and East Church Street at the railroad crossings. These roadway closures were integrated with the proposed Project analysis. East Lafayette Street is being proposed for closure because of the multiple rail crossings with the at-grade main tracks and wye connection tracks (i.e., four proposed crossings within two blocks).

East Church Street requires closure because the proposed flyover structure would not reach its full elevation and, therefore, would not meet the required minimum vertical clearance for a vehicle crossing. The crossing would not provide the minimum 16.5 feet of vertical clearance required by



UPRR/BNSF joint guidelines for an undercrossing while still adhering to the American Association of State and Highway Transportation Officials' design criteria for change in grade for a local roadway.

East Church Street is classified as a local road with 2045 future AM peak hour volume of 38 for eastbound, and 117 for westbound. The 2045 future PM peak hour volume on East Church Street is 84 for eastbound and 62 for westbound.

Traffic on East Lafayette Street and East Church Street will use alternative routes as a result of road closures. The following assumptions were made to analyze East Lafayette traffic redistribution:

- 30 percent of traffic on East Lafayette Street (EB) will re-route to East Market Street with the remaining 70 percent re-routing to East Hazelton Avenue during both morning and afternoon peak hour
- 11 percent of the traffic on East Lafayette Street (WB) will re-route to East Main Street with the remaining 89 percent re-routing to East Hazelton Avenue during morning peak hour
- 16 percent of the traffic on East Lafayette Street (WB) will re-route to East Main Street with the remaining 84 percent re-routing to East Hazelton Avenue during afternoon peak hour

Figure 6-1 and Figure 6-2 show the morning peak hour traffic redistribution due to East Lafayette Street closure for eastbound and westbound direction respectively in the proposed Project analysis.



### Figure 6-1: Proposed Project (2045) Eastbound Traffic Distribution in AM peak hour





Figure 6-2: Proposed Project (2045) Westbound Traffic Distribution in AM peak hour

Figure 6-3 and Figure 6-4 show the afternoon peak hour traffic redistribution due to Lafayette Street closure for eastbound and westbound direction respectively in the proposed Project analysis.





Figure 6-3: Proposed Project (2045) Eastbound Traffic Distribution in PM peak hour

Figure 6-4: Proposed Project (2045) Westbound Traffic Distribution in PM peak hour





The following assumptions were made to analyze East Church Street traffic redistribution in the proposed Project analysis:

• 100 percent of the traffic on the East Church Street (eastbound and westbound) will re-route to East Hazelton Avenue during the proposed Project condition when East Church Street will be closed

Figure 6-5 shows the morning and afternoon peak hour traffic redistribution due to East Church Street closure for both eastbound and westbound direction in the proposed Project analysis.

# Figure 6-5: Proposed Project (2045) Traffic Distribution AM and PM peak hour due to Church Street Closure



# 6.2. INTERSECTION OPERATIONS

The 2045 proposed Project volumes were generated by redistributing the 2045 No Project Alternative traffic for East Lafayette Street and East Church Street. Figure 6-6 illustrate the 2045 proposed Project morning (AM) and the 2045 afternoon (PM) peak hour turning movement volumes for each of the 28 intersections. In addition, the 2045 proposed Project morning (AM) and afternoon (PM) peak hour roadway volumes, prepared from the intersection turning movement volumes, are presented in Figure 6-7 and Figure 6-8.


Figure 6-6: 2045 Proposed Project AM and PM Peak Hour Turning Movement Volumes for Study Area Intersections



### TRAFFIC REPORT



Figure 6-6. 2045 Proposed Project AM and PM Peak Hour Turning Movement Volumes for Study Area Intersections (continued)









Figure 6-7: 2045 Proposed Project AM Peak Hour Roadway Volumes in the Study Area





Figure 6-8: 2045 Proposed Project PM Peak Hour Roadway Volumes in the Study Area

#### TRAFFIC REPORT



2045 proposed Project intersection operations were analyzed for the Study Area intersections. Identical to the assessment of the 2019 Existing Conditions and 2045 No Project Alternative Conditions, intersection operations in for the proposed Project were evaluated for the AM and PM peak hours. LOS analysis was conducted according to procedures outlined in the 2010 Highway Capacity Manual using Synchro 10 traffic analysis software per City and County standards. As discussed in existing condition section (Section 4.0), LOS E or better represents the acceptable LOS in City of Stockton Downtown area and LOS D or better outside of the Downtown area (intersections along South Airport Way and South Wilson Way).

Table 6-1 and Table 6-2 summarizes and compares the intersection LOS results in the 2045 No Project Alternative with the 2045 proposed Project for the AM and PM peak hours respectively. All intersections operate at an acceptable LOS in the 2045 proposed Project Conditions in the AM peak hours except for East Lafayette Street and South Stanislaus Street (#8). This intersection operates at LOS F (note, this intersection was LOS in both the Existing 2019 and 2045 No Project Alternative analysis).

All intersections operate at an acceptable LOS in the 2045 proposed Project Conditions in the PM peak hours except for East Lafayette Street and South Stanislaus Street (#8) and East Lafayette Street and South Airport Way (#10). East Lafayette Street and South Stanislaus Street (#8) intersection operates at LOS F (note, this intersection was LOS F in both the Existing 2019 and 2045 No Project Alternative analysis). East Lafayette Street and South Airport Way (#10) operates at LOS F (note, this intersection 2019 and 2045 No Project Alternative analysis). East Lafayette Street and South Airport Way (#10) operates at LOS F (note, this intersection 2019 and 2045 No Project Alternative analysis).

The intersections of East Lafayette Street and South Airport Way (#10) and East Lafayette Street and South Aurora Street (#9) are expected to improve LOS as a result of the closure of the East Lafayette Street at-grade crossing of the UP tracks.

Intersection		2045 Project	2045 NO 2045 P Project (AM) Proje		oposed t (AM)	DIFFE	DIFFERENCE	
		Delay (sec)	LOS	Delay (sec)	LOS	Delay Diff. (sec)	LOS Change	
1	S Stanislaus Street and E Weber Avenue	24.2	С	24.2	С	0	N/A	
2	S Airport Way and E Weber Avenue	14.2	В	14.2	В	0	N/A	
3	S Stanislaus Street and E Main Street	17.3	В	17.35	В	0.2	N/A	
4	S Airport Way and E Main Street	11	В	11	В	0	N/A	

# Table 6-1: 2045 No Project Alternative and 2045 Proposed Project Intersection LOS Results Comparison, AM Peak Hour





	Intersection	2045 Project	NO t (AM)	2045 Pr Projec	oposed t (AM)	DIFFE	RENCE
		Delay (sec)	LOS	Delay (sec)	LOS	Delay Diff. (sec)	LOS Change
5	S Stanislaus Street and E Market Street	13.9	В	14.3	В	0.4	N/A
6	S Airport Way and Market Street	10.2	В	11.1	В	0.9	N/A
7	E Lafayette Street and California Street	17.8	В	17.8	В	0	N/A
8	E Lafayette Street and S Stanislaus Street	319	E	319.8	E	0.8	N/A
9	E Lafayette Street and Aurora Street	16.8	В	10.6	В	-6.2	N/A
10	E Lafayette Street and S Airport Way	32.1	С	1.5	A	-30.6	C to A
11	S Wilson Way and E Church Street	5.7	А	5.7	A	0	N/A
12	E Hazelton Avenue and S San Joaquin Street	8.7	А	8.7	A	0	N/A
13	E Hazelton Avenue and S Sutter Street	4.5	А	4.5	А	0	N/A
14	E Hazelton Avenue and California Street	9.1	А	9.1	А	0	N/A
15	E Hazelton Avenue and S Stanislaus Street	13	В	16.8	В	3.8	N/A
16	E Hazelton Avenue and Aurora Street	9.5	А	231.1	С	121.6	A to C
17	E Hazelton Avenue and S Airport Way	17.1	В	18.6	В	1.5	N/A
18	E Hazelton Avenue and S Wilson Way	16.3	В	16.3	В	0	N/A
19	E Anderson Street and S San Joaquin Street	7.9	А	7.9	А	0	N/A
20	E Anderson Street and S Sutter Street	7.7	А	7.7	A	0	N/A
21	E Anderson Street and California Street	3.9	А	3.9	А	0	N/A
22	E Anderson Street and S Stanislaus Street	1	А	1	А	0	N/A
23	E Anderson Street and Aurora Street	0.4	А	0.4	А	0	N/A



Intersection		2045 Projec	2045 NO 2045 Propo Project (AM) Project (A		oposed t (AM)	sed DIFFERENCE M)	
		Delay (sec)	LOS	Delay (sec)	LOS	Delay Diff. (sec)	LOS Change
24	E Charter Way and California Street	14.6	В	14.6	В	0	N/A
25	E Charter Way and S Stanislaus Street	29.7	С	29.7	С	0	N/A
26	E Charter Way and Aurora Street	1.1	А	1.1	А	0	N/A
27	E Charter Way and S Airport Way	25.2	С	25.2	С	0	N/A
28	E Charter Way and S Wilson Way	25	С	25	С	0	N/A

# Table 6-2: 2045 No Project Alternative and 2045 Proposed Project Intersection LOS Results Comparison, PM Peak Hour

	Intersection 2045 NO Project 2045 Proposed (PM) Project (PM)		Dif	Difference			
		Delay	LOS	Delay	LOS	Delay	LOS
		(sec)		(sec)		Diff. (sec)	Change
1	S Stanislaus Street and Weber Street	23.5	С	23.5	С	0	N/A
2	Airport Way and Weber Street	27.8	С	27.8	С	0	N/A
3	S Stanislaus Street and E Main Street	9.2	А	9.3	А	0.1	N/A
4	Airport Way and Main Street	10.1	В	10.1	В	0	N/A
5	S Stanislaus Street and E Market Street	8.7	А	8.7	А	0	N/A
6	Airport Way and Market Street	35.5	D	40.5	D	5	N/A
7	Lafayette Street and N California Street	20.7	С	20.7	С	0	N/A
8	Lafayette Street and S Stanislaus Street	174.5	F	178.3	F	3.8	N/A
9	Lafayette Street and Aurora Street	36.9	D	10.9	В	-26.0	D to B



1

	Intersection	2045 NC (P	) Project M)	2045 P Proje	roposed ct (PM)	Dif	ference
		Delay	LOS	Delay	LOS	Delay	LOS
		(sec)		(sec)		Diff. (sec)	Change
10	Lafayette Street and S Airport Way	560.7	Ē	55.4	E	-505.3	F to E
11	S Wilson Way and Church Street	15.9	В	15.9	В	0	N/A
12	Hazelton Avenue and S San Joaquin Street	9.6	А	9.6	А	0	N/A
13	Hazelton Avenue and S Sutter Street	5.1	А	5.1	А	0	N/A
14	Hazelton Avenue and N California Street	10.3	В	10.3	В	0	N/A
15	Hazelton Avenue and S Stanislaus Street	22.8	С	60	E	37.2	C to E
16	Hazelton Avenue and Aurora Street	11.3	В	41.8	D	30.5	B to D
17	Hazelton Avenue and S Airport Way	20.1	С	27.8	С	7.7	N/A
18	Hazelton Avenue and S Wilson Way	20.6	С	20.6	С	0	N/A
19	E Anderson Street and S San Joaquin Street	8.2	А	8.2	А	0	N/A
20	E Anderson Street and S Sutter Street	7.9	А	7.9	А	0	N/A
21	E Anderson Street and N California Street	3.6	А	3.6	А	0	N/A
22	E Anderson Street and S Stanislaus Street	2.5	А	2.5	А	0	N/A
23	E Anderson Street and Aurora Street	1.6	А	1.6	А	0	N/A
24	E Charter Way and N California Street	23.1	С	23.1	С	0	N/A
25	E Charter Way and S Stanislaus Street	0.9	А	0.9	А	0	N/A
26	E Charter Way and Aurora Street	1.4	А	1.4	А	0	N/A
27	E Charter Way and S Airport Way	28.8	С	28.8	С	0	N/A
28	E Charter Way and S Wilson Way	27.4	С	27.4	С	0	N/A



#### 6.3. ROADWAY CONDITIONS

With the exception of SR 4 (Crosstown Freeway), all roadway levels of service in the Traffic Study Area are expected to perform at LOS E or better. Table 6-3 summarizes and compares the roadway v/c ratio and LOS results in the 2045 No Project Alternative with the 2045 proposed Project. The resulting v/c ratios for roadways in AM peak hour for the 2045 Proposed Project is shown in Figure 6-9.

Road	Location	Roadwav Classification	2045 No Project (AM)		2045 Proposed Proiect (AM)		Difference	
			V/C Ratio	LOS	V/C Ratio	LOS	V/C Ratio	LOS
East Webber Avenue	Between South San Joaquin Street and South Stanislaus Street	Collector	0.32	В	0.32	В	N/A	N/A
East Main Street	Between South San Joaquin Street and South Stanislaus Street	Arterial	0.34	В	0.34	В	N/A	N/A
SR 4	Between South San Joaquin Street and South Wilson Way	Freeway	1.14	F	1.14	F	N/A	N/A
East Lafayette Street	Between South San Joaquin Street and South Stanislaus Street	Local	0.47	В	0.47	В	N/A	N/A
East Hazelton Avenue	Between South Stanislaus Street and South Airport Way	Arterial	0.17	A	0.36	В	0.19	A to B
East Charter Way	Between South San Joaquin Street and South Stanislaus Street	Arterial	0.59	С	0.59	С	N/A	N/A
East Charter Way	Between South Stanislaus Street and South Wilson Way	Arterial	0.50	В	0.50	В	N/A	N/A
South Stanislau s Street	North of East Lafayette Street	Collector	0.62	С	0.63	С	0.01	N/A
South Airport Way	Between East Weber Avenue and East Lafayette Street	Arterial	0.50	В	0.40	В	-0.10	N/A
South Airport Way	Between East Lafayette Street and East Hazelton Avenue	Arterial	0.45	В	0.44	В	-0.01	N/A

## Table 6-3: 2045 No Project Alternative and 2045 Proposed Project Roadway V/C and LOSResults Comparison, AM Peak Hour



Road	Location	Roadway Classification	2045 No Project (AM)		2045 Proposed Project (AM)		Difference	
			V/C Ratio	LOS	V/C Ratio	LOS	V/C Ratio	LOS
South Airport Way	Between East Hazelton Avenue and East Charter Way	Arterial	0.43	В	0.41	В	-0.02	N/A
South Wilson Way	Between East Weber Avenue and East Church Street	Arterial	0.58	С	0.58	С	N/A	N/A
South Wilson Way	Between East Church Street and East Church Street	Arterial	0.56	С	0.56	С	N/A	N/A
All other Roadway s	-	-	<0.30	A	<0.30	A	N/A	N/A

Figure 6-9: 2045 Proposed Project v/c Ratio and LOS, AM Peak Hour



Table 6-4 summarizes and compares the roadway v/c ratio and LOS results in the 2045 No Project Alternative with the 2045 proposed Project. The resulting v/c ratios for roadways in PM peak hour for the 2045 Proposed Project is shown in Figure 6-10.



Cable 6-4: 2045 No Project Alternative and 2045 Proposed Project Roadway V/C and LOS
Results Comparison, PM Peak Hour

Road	Location	Roadway Classification	2045 Project	No (PM)	2045 Prop Project (	oosed PM)	Diffe	rence
			V/C Ratio	LOS	V/C Ratio	LOS	V/C Ratio	LOS
SR 4	Between South San Joaquin Street and South Wilson Way	Freeway	1.10	F	1.10	F	N/A	N/A
East Lafayette Street	Between South San Joaquin Street and South Stanislaus Street	Local	0.63	С	0.63	С	N/A	N/A
East Hazelton Avenue	Between South Stanislaus Street and South Airport Way	Arterial	0.24	A	0.51	В	0.27	A to B
East Charter Way	Between South San Joaquin Street and South Aurora Street	Arterial	0.69	С	0.69	С	N/A	N/A
East Charter Way	Between Aurora Street and South Airport Way	Arterial	0.80	D	0.80	D	N/A	N/A
East Charter Way	Between South Airport Way and South Wilson Way	Arterial	0.63	С	0.63	С	N/A	N/A
South Stanislaus Street	North of East Hazelton Avenue	Collector	0.39	В	0.39	В	N/A	N/A





Road	Location	Roadway Classification	2045 Project	No (PM)	2045 Propose Project (PM)		Difference	
			V/C Ratio	LOS	V/C Ratio	LOS	V/C Ratio	LOS
South Stanislaus Street	Between East Hazelton Avenue and East Anderson Street	Local	0.44	В	0.44	В	N/A	N/A
South Airport Way	Between East Weber Avenue and East Lafayette Street	Arterial	0.81	D	0.81	D	N/A	N/A
South Airport Way	Between East Lafayette Street and East Hazelton Avenue	Arterial	0.72	D	0.67	С	-0.05	D to C
South Airport Way	Between East Hazelton Avenue and East Charter Way	Arterial	0.46	В	0.46	В	N/A	N/A
South Wilson Way	Between East Weber Avenue and East Hazelton Avenue	Arterial	0.81	D	0.81	D	N/A	N/A
South Wilson Way	Between East Hazelton Avenue and East Charter Way	Arterial	0.62	С	0.62	С	N/A	N/A
All other Roadways	-	-	<0.30	А	<0.30	А	N/A	N/A





#### Figure 6-10: 2045 Proposed Project v/c Ratio and LOS, PM Peak Hour

#### 6.4. PEDESTRIAN CONDITIONS

The proposed projects will make crossing and sidewalk improvements at Weber Avenue, Main Street, Market Street, Hazelton Avenue, Scotts Avenue, and Charter Way. The proposed Project would also upgrade roadway-rail at-grade crossing infrastructure, to include sidewalks and ADA ramps.

#### 6.5. BICYCLE CONDITIONS

The 2045 proposed Project conditions are expected to include implementation of the City's proposed bicycle facilities in the Study Area (also shown above in Section 5.0, Figure 5-7). These future facilities are planned for East Weber Avenue, East Main Street, East Market Street, East Hazelton Avenue, and South Aurora Street funded through Measure K. According to adopted plans, these proposed bicycle facilities are anticipated to be implemented before the proposed Project and therefore, short temporary detours may be needed during construction of the proposed Project on Main Street, Market Street, Lafayette Street, and Hazelton Avenue.

#### 6.6. TRANSIT CONDITIONS

Public transit services expected to operate in the Study Area by 2045 in the proposed Project will be similar to the services provided by the San Joaquin Regional Transit in 2019 (Section 4.0, Existing Transit Conditions). Near the 2045 proposed Project Alternative, transit routes are on San Joaquin Street (315, 510), Airport Way (44), and Charter Way (49). The 2045 proposed Project Alternative would have no impacts on existing transit routes except on Charter Way (Route 49). In the long



term, Route 49 will remain on Charter Way. During construction, however, the proposed Project will include construction of two new bridges across Charter Way, with a portion of an existing bridge expected to be demolished. Temporary closures, detours, or narrowing to two lanes on Charter Way may be necessary (temporarily) during construction. Mitigation measures include preparing a traffic management plan and coordination with SJRTD and transit riders to notify them of construction implications.

#### 6.7. FREIGHT CONDITIONS

The 2045 proposed Project freight conditions are expected to consider similar levels of trucking services and activity that were identified in existing conditions (Section 4.0, Existing Freight Conditions) in the Study Area. As presented in existing conditions, the primary truck routes in the City of Stockton will remain focused primarily on the state highway system and major arterials, primarily on SR 99 and I-5 outside of the Traffic Study Area, with SR 4 crossing through the Traffic Study Area.

Truck route designations in the Traffic Study Area will carry forward from existing conditions in the proposed Project. These will continue as designated city truck routes, county truck routes, flammable liquid-other routes, and truck routes from 7 am to 10 pm. It is expected that the designated truck routes will be the same into the future, including City Truck Routes on South Airport Way, East Hazelton Avenue, East Lafayette Street, East Market Street, East Weber Avenue, Aurora Street and South Union Street; Flammable Liquid-Other Routes on East Charter Way, South Wilson Way, and South Airport Way; and Truck Route–7 am to 10 pm on South Stanislaus Street.

#### 6.8. TRAFFIC DELAY DUE TO TRAINS

Train occupancies represent the total amount of time within each peak hour when the road is unavailable to automobile traffic at highway-rail grade crossings while trains pass. This includes the minimum activation time of warning devices at the crossing (i.e., bells, flashing light signals, and gates), prior warning time, and the time it takes for the grade crossing warning devices to recover after the passing of a train. Based on the train occupancy times and assumptions regarding number of trains per peak hour, average individual vehicle delays were calculated using Synchro 10 software.

The 2019 Existing Conditions included 2 freight trains and 3 passenger trains for both AM and PM peak hours, including:

- 1 Diamond Route (rail traffic going through the diamond north south) freight train for each morning and afternoon peak hours
- 1 NE connector route freight train for each morning and afternoon peak hours
- 1 ACE passenger train (Diamond Route) for each morning and afternoon peak hours
- 2 Amtrak passenger train (NE connector Route) for each morning and afternoon peak hours

1)



The 2045 No Project Alternative and 2045 proposed Project conditions were estimated to include 3 passenger and 3 freight trains at these locations for both peak hours, including:

- 2 diamond route freight train for each morning and afternoon peak hours
- 1 NE connector route freight train for each morning and afternoon peak hours
- 1 ACE passenger train (Diamond Route) for each morning and afternoon peak hours
- 2 Amtrak passenger train (NE connector Route) for each morning and afternoon peak hours

Table 6-5 and Table 6-6 summarize AM and PM peak hour delay per auto (in seconds) caused by trains at each of the railroad crossings for the 2019 Existing, 2045 No Project Alternative, and 2045 proposed Project conditions. The delay per auto in the 2045 No Project Alternative are expected to be higher than 2019 existing conditions due to the increase in train occupancy times (including potential number of trains and length of trains anticipated in the future) and the growth in rail traffic demand. For example, as shown below (Table 6-5), over the course of an hour, each auto traveling eastbound on East Weber Avenue will have approximately 18 seconds of delay in 2019 existing AM peak hour. Also shown is a comparison of the average auto delay for 2045 No Project Alternative to proposed Project analysis, including nominal increases in average auto delays at the East Main Street, and East Market locations, reduced delay at East Hazelton Avenue and East Scotts, and eliminated delay at the two locations with road closures.



Road Name/RR Crossing	Direction	2019 Existing AM Delay (sec)	2045 No Project AM Delay (sec)	2045 Proposed Project AM Delay (sec)
East Weber Avenue/UP	EB WB	18.2 26.5	33.4 37.8	33.4 37.8
East Main/UPStreet/UP	WB	18.1	29.6	29.8
East Market/UPStreet/UP	EB	16.3	28.4	29.4
East Lafayette Street/UP	EB WB	20.0 16.8	34.9 29.3	-
East Church Street/UP	EB WB	24.8 25.8	40.4 42.1	-
East Hazelton Avenue/UP	EB WB	25.7 27.8	41.8 43.3	34.6 34.7
East Scotts Avenue/UP	EB WB	24.9 26.3	40.7 43.0	30.5 32.2

#### Table 6-5: Morning Peak Hour Average Individual Vehicle Delay, all Conditions

Similar, 2045 No Project Alternative to proposed Project analysis are shown for the PM peak hour (Table 6-6), including nominal increases in average auto delays at the East Main Street, and East Market Street locations, reduced delay at East Hazelton Avenue and East Scotts Avenue, and eliminated delay at the two locations with road closures.



Road Name/RR Crossing	Direction	2019 Existing PM	2045 No Project PM	2045 Proposed Project PM
		Delay (sec)	Delay (sec)	Delay (sec)
East Weber	EB	20.8	36.3	36.3
Avenue/UP	WB	24.5	35.3	35.3
East Main Street/UP	WB	16.5	28.9	29.0
East Market Street/UP	EB	16.9	29.5	31.0
East Lafayette	EB	21.9	38.3	-
Street/UP	WB	16.3	28.5	-
East Church	EB	25.4	41.4	-
Street/UP	WB	25.1	40.9	-
East Hazelton	EB	27.4	44.6	38.9
Avenue/UP	WB	29.7	44.7	38.1
East Scotts	EB	25.8	42.0	31.5
Avenue/OP	WB	25.4	41.4	31.0

#### Table 6-6: Afternoon Peak Hour Average Individual Vehicle Delay, all Conditions

For both AM and PM peak hour conditions, the nominal increase in auto delays (averaging 1-2 seconds) at the East Main Street and East Market locations is because of traffic re-routing due to road closures at the East Lafayette Street and East Church Street locations. No auto delays are expected on East Lafayette Street and East Church Street crossing locations due to road closures. The reduced auto delays on East Hazelton Avenue and East Scotts Avenue are due to reduction in train volumes (with the Build, combined grade separation and at-grade configuration).



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# Appendix G Stockton Background Documents Affecting Visual Quality



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# Appendix G: Stockton Background Documents Effecting Visual Quality

### **City of Stockton General Plan**

### Land Use

- Action LU-1.3B Work with transportation agency partners and private property owners to improve maintenance, code enforcement, screening, and landscaping of viewsheds along major transportation routes into Stockton, including rail corridors, Highway 99, Highway 4, and Interstate 5.
- Action LU-5.1C Require landscape plans to incorporate native and drought-tolerant plants in order to preserve the visual integrity of the landscape, conserve water, provide habitat conditions suitable for native vegetation, and ensure that a maximum number and variety of well-adapted plants are maintained.
- Action LU-5.3A. At the interface between development and rural landscapes, use landscaping and other attractive edging instead of soundwalls and similar utilitarian edges of developments to maintain the visual integrity of open space.
- Action LU-6.3D. Design public facilities and infrastructure to maintain and improve the visual quality of the urban environment, including through the following approaches:
  - Designing buildings and infrastructure to fit into and complement their ultimate surroundings.
  - Buffering buildings and infrastructure from their surroundings as appropriate to shield unsightly areas from public view.
  - Providing appropriate landscaping.

### **City of Stockton Municipal Code**

#### **Title 15 Buildings and Construction**

CHAPTER 15.32 MAINTENANCE, SECURITY AND REHABILITATION OF ABANDONED AND VACANT PROPERTY

#### 15.32.010 Findings—Declaration of purpose.

- A. The Council finds that neglected, vacant, and abandoned properties are a major source of blight in residential and nonresidential neighborhoods, especially when owners or responsible persons fail to maintain and manage those properties in a manner that ensures they do not become a liability to the surrounding community. Vacant buildings often attract transients and criminals, including drug users and prostitutes. Use of vacant, unsecured buildings by transients and criminals, who may employ primitive cooking or heating methods, creates a risk of fire for the building and adjacent properties and presents a dangerous attractive nuisance to children. Vacant properties are often used as dumping grounds for drug paraphernalia, furniture, tires, garbage, junk and debris, and are frequently overgrown with weeds and vegetation. In addition, the presence of vacant buildings that are simply boarded up for long periods of time to prevent entry by transients or vandals very often discourages economic development and encourages graffiti, disrupting neighborhood stability, retarding appreciation of property values, and promoting blight conditions. As a result, neighboring property owners and occupants are denied full use and enjoyment of their property.
- B. The City currently expends vast resources monitoring and responding to the numerous health, welfare, safety, and economic problems caused by neglected, vacant properties. Because there is already a significant cost to the City for monitoring these properties, as well as a substantial toll on the citizens who are affected by the nuisance conditions created, the City Council finds there is an urgent need to implement a process by which these buildings are monitored and the costs borne by the owners of these properties, rather than the community. (Ord. 009-08 C.S. § 2; prior code § 14-520)



### **Appendix H. Section 106 Consultation Efforts**



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# **H.1 Section 106 Consultation Correspondence**



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### **Communication Log**

Project	Stockton Diamon Grade Separation Project
Subject	Communications with interested parties re: historic resources
Notes Prepared By	Toni Webb, JRP Historical Consulting, LLC

#### Notes:

Interested Party	Communication	Notes
	Date	
San Joaquin County Historical Society & Museum	October 29, 2020	Letter sent via US Mail. No
P. O. Box 30, Lodi, California 95241-0030		response received.
Phone: (209) 331-2055	January 14, 2021	Follow-up message sent via
Email: info@sanjoaquinhistory.org		email. No response received.
Haggin Museum	October 29, 2020	Letter sent via US Mail. No
1201 N. Pershing Ave.		response received.
Stockton, CA 95203-1699	January 14, 2021	Follow up mossage contivia
Phone: (209) 940-6300	January 14, 2021	Pollow-up message sent via
Email: info@hagginmuseum.org		
San Joaquin Genealogical Society	October 29, 2020	Letter sent via US Mail. No
P.O. Box 690243		response received.
Stockton, California 95269-0243	January 14, 2021	Follow-up message sent via
Email: AskUs@sjgensoc.org	, ,	email. No response received.
City of Stockton Cultural Heritage Board	October 29, 2020	Letter sent via US Mail. No
c/o Community Development Department		response received.
345 North El Dorado Street	January 14, 2021	No follow-up message sent
Stockton, CA 95202-1997	Junuary 17, 2021	hecause interested party has no
Phone: (209) 937-8444		listed email.



Chair, Christina Fugazi, City of Stockton Vice-Chair, Leo Zuber, City of Ripon Commissioner, Debby Moorhead, City of Manteca Commissioner, Doug Kuehne, City of Lodi

Executive Director, Stacey Mortensen

October 29, 2020

RE: Stockton Diamond Project

To Whom It May Concern:

The San Joaquin Regional Rail Commission (SJRRC) and California High Speed Rail Authority (CHSRA) propose to replace an at-grade crossing of the Union Pacific Railroad (UPRR) and Burlington Northern & Santa Fe Railway Company (BNSF) rail lines with a railroad grade separation. Rail-over-rail grade separation is a method of aligning a junction of two or more at-grade rail lines at different heights (grades) so that they will not disrupt the traffic flow on each other's transit routes when they converge at the junction point. Grade separations generally allow rail to move freely, with fewer interruptions, and at higher overall speeds. In addition, reducing the complexity of traffic movements at a junction between at-grade rail lines—coupled with vehicular, bicycle, and pedestrian traffic—reduces the potential for rail, vehicle, and bicycle/pedestrian conflicts. The "Stockton Diamond," where the UPRR and BNSF tracks converge and cross one another at grade, is located in the City of Stockton. The general project limit extends southward from Weber Street to the UPRR Stockton Yard, and from Stanislaus Street eastward to Pilgrim Street. See the enclosed map.

JRP Historical Consulting, LLC (JRP) has been retained to conduct a study to survey and evaluate historic-era buildings and structures that may be affected by the proposed project for their eligibility to be listed in the National Register of Historic Places and/or the California Register of Historical Resources. JRP's study will be prepared to support the project's environmental compliance under the National Environmental Policy Act (NEPA), along with its compliance under Section 106 of the National Historic Preservation Act and its implementing regulations in Title 36 Code of Federal Regulations Part 800 (36 CFR 800). JRP's study will also be prepared for project compliance under the and California Environmental Quality Act (CEQA), as per CEQA Guidelines Section 15064.5. CHSRA is lead NEPA agency, and SJRRC is the lead CEQA agency.

If you or your organization has any information or concerns regarding historic resources in the area that could be affected by this project, please respond via email to JRP Architectural Historian, Toni Webb, at <u>twebb@jrphistorical.com</u>, or in writing to her at JRP Historical Consulting, LLC, 2850 Spafford Street, Davis, CA 95618, within the next thirty (30) days. Please note, this is not a request for research, just for information. Thank you for any assistance you can provide. Sincerely,

Kevin Sheridan Director of Capital Projects



### Enclosures: Project Area Map





#### **List of Recipients**

San Joaquin County Historical Society and Museum P. O. Box 30, Lodi, California 95241-0030 Phone: (209) 331-2055 Email: info@sanjoaquinhistory.org

City of Stockton Cultural Heritage Board c/o Community Development Department 345 North El Dorado Street Stockton, CA 95202-1997 Telephone: (209) 937-8444

Haggin Museum 1201 N. Pershing Ave. Stockton, CA 95203-1699 Phone: (209) 940-6300 Email: info@hagginmuseum.org

San Joaquin Genealogical Society P.O. Box 690243 Stockton, California 95269-0243 Email: <u>AskUs@sjgensoc.org</u>



### Toni Webb

From:	Toni Webb
Sent:	Thursday, January 14, 2021 8:21 AM
То:	info@hagginmuseum.org
Subject:	Stockton Diamond Grade Separation Project
Attachments:	Signed Letter to Interested Parties.pdf

This email serves as a follow-up to a letter (see attachment) sent via US Postal Service by the San Joaquin Regional Rail Commission to your organization on October 29, 2020 regarding historic resources that may be located within the vicinity of the Stockton Diamon Grade Separation Project. This communication is to confirm that your organization received that letter and to inquire if you have any information or concerns about historic resources in the project area. If you do have any questions or concerns, please reply to this email or contact me via phone or in writing (see contact information below) as soon as possible.

Thank you,

Toni Webb | Architectural Historian 530.757.2521 ext. 115



Our office is working remotely until further notice. The best way to reach me is by email or voicemail at the number and extension listed. I will get back to you as soon as I can.

### Toni Webb

From:	Toni Webb
Sent:	Thursday, January 14, 2021 8:22 AM
То:	AskUs@sjgensoc.org
Subject:	Stockton Diamond Grade Separation Project
Attachments:	Signed Letter to Interested Parties.pdf

This email serves as a follow-up to a letter (see attachment) sent via US Postal Service by the San Joaquin Regional Rail Commission to your organization on October 29, 2020 regarding historic resources that may be located within the vicinity of the Stockton Diamon Grade Separation Project. This communication is to confirm that your organization received that letter and to inquire if you have any information or concerns about historic resources in the project area. If you do have any questions or concerns, please reply to this email or contact me via phone or in writing (see contact information below) as soon as possible.

Thank you,

Toni Webb | Architectural Historian 530.757.2521 ext. 115



Our office is working remotely until further notice. The best way to reach me is by email or voicemail at the number and extension listed. I will get back to you as soon as I can.

### Toni Webb

From:	Toni Webb
Sent:	Thursday, January 14, 2021 8:19 AM
То:	info@sanjoaquinhistory.org
Subject:	Stockton Diamond Grade Separation Project
Attachments:	Signed Letter to Interested Parties.pdf

This email serves as a follow-up to a letter (see attachment) sent via US Postal Service by the San Joaquin Regional Rail Commission to your organization on October 29, 2020 regarding historic resources that may be located within the vicinity of the Stockton Diamon Grade Separation Project. This communication is to confirm that your organization received that letter and to inquire if you have any information or concerns about historic resources in the project area. If you do have any questions or concerns, please reply to this email or contact me via phone or in writing (see contact information below) as soon as possible.

Thank you,

Toni Webb | Architectural Historian 530.757.2521 ext. 115



Our office is working remotely until further notice. The best way to reach me is by email or voicemail at the number and extension listed. I will get back to you as soon as I can.



CHAIRPERSON Laura Miranda Luiseño

VICE CHAIRPERSON Reginald Pagaling Chumash

SECRETARY Merri Lopez-Keifer Luiseño

Parliamentarian Russell Attebery Karuk

Commissioner Marshall McKay Wintun

COMMISSIONER William Mungary Paiute/White Mountain Apache

Commissioner Julie Tumamait-Stenslie Chumash

Commissioner

[Vacant]

COMMISSIONER [Vacant]

Executive Secretary Christina Snider Pomo

NAHC HEADQUARTERS 1550 Harbor Boulevard Suite 100 West Sacramento, California 95691 (916) 373-3710 nahc@nahc.ca.gov NAHC.ca.gov STATE OF CALIFORNIA

#### NATIVE AMERICAN HERITAGE COMMISSION

Gavin Newsom, Governor

May 12, 2020 Liz Denniston Paleo Solutions, Inc.

Via Email to: liz@paleosolutions.com Cc: canutes@verizon.net

#### Re: Stockton Diamond Grade Separation, San Joaquin County

Dear Ms. Denniston :

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were <u>positive</u>. Please contact the North Valley Yokuts Tribe on the attached list for more information. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance, we can assure that our lists contain current information.

If you have any questions or need additional information, please contact me at my email address: <u>Nancy.Gonzalez-Lopez@nahc.ca.gov</u>.

Sincerely,

/ hnuy Cormaley Jopen

Nancy Gonzalez-Lopez Cultural Resources Analyst Attachment

Page 1 of 1

### Native American Heritage Commission Native American Contact List San Joaquin County 5/12/2020

#### North Valley Yokuts Tribe

Katherine Perez, Chairperson P.O. Box 717 Linden, CA, 95236 Phone: (209) 887 - 3415 canutes@verizon.net

Costanoan Northern Valley Yokut

The Confederated Villages of Lisjan Corrina Gould, Chairperson 10926 Edes Avenue Oakland, CA, 94603 Phone: (510) 575 - 8408 cvltribe@gmail.com

Bay Miwok Ohlone Delta Yokut

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed Stockton Diamond Grade Separation, San Joaquin County.

PROJ-2020-002689

05/12/2020 09:12 AM

1 of 1



#### December 21, 2020

Thomas Richards CHAIR Nancy Miller VICE CHAIR

BOARD MEMBERS

Ms. Katherine Perez Chairperson North Valley Yokuts Tribe P.O. Box 717 Linden, CA 95236

Re: Invitation to Consult under Section 106 for the Stockton Diamond Grade Separation Project, San Joaquin County, California

Dear Ms. Perez,

The San Joaquin Regional Rail Commission (SJRRC), on behalf of the California High-Speed Rail Authority (Authority) under assignment by the Federal Railroad Administration (FRA), is proposing the Stockton Diamond Grade Separation Project (proposed Project) to improve operational efficiency at the at-grade crossing of the Union Pacific Railroad (UPRR) and BNSF Railway (BNSF) freight lines (Stockton Diamond or Diamond) in the city of Stockton, San Joaquin County, California.

Please consider this letter and preliminary Project information as Project notification and initiation of Section 106 consultation for the Project pursuant to the National Historic Preservation Act. Please respond within 30 days if you would like to consult on this Project and provide a designated lead contact person.

SJRRC is the lead agency for consultation under AB 52 and you should have received letters initiating AB 52 consultation on November 9, 2020. The Authority, under assignment by the FRA, is the lead agency for consultation under Section 106.

#### Project Location and Setting

The proposed Project is located in the city of Stockton in San Joaquin County, California (see Attachment A: Project Overview Maps). The northern Project limit connects to the existing UPRR tracks between Main and Weber Streets. The southern Project limit is the UPRR Stockton Yard. Two BNSF main line tracks run east to west through the proposed Project area. The study limit generally reaches to Stanislaus Street in the west and to Pilgrim Street in the east.

#### **Project Description**

Substantial freight movements between the Port of Stockton and points east, north, and south must pass through the Stockton Diamond. The at-grade nature of the Diamond is an operational constraint that results in delays to the regional rail network where these two heavily traveled rail lines intersect. The proposed Project would construct a flyover structure to provide the vertical clearance required by both railroads to grade separate the existing crossing of the UPRR and BNSF tracks at the Diamond. It is anticipated that

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Nancy Miller VICE CHAIR Andre Boutros Ernest M. Camacho Martha M. Escutia James C. Ghielmetti Henry R. Perea, Sr. Lynn Schenk Anthony Williams

Honorable Dr. Joaquin Arambula Honorable Jim Beall

Brian P. Kelly


Page 2 December 21, 2020

UPRR long-haul freight service and current Altamont Commuter Express (ACE) rail services would use the new flyover tracks during operations.

Each at-grade road crossing—Main, Market, Lafayette, Hazelton, and Scotts Streets—would have new tracks running perpendicular through the street, east of the existing track crossing. The new tracks would require a modification to the roadway profile to accommodate the flat grades across the new tracks to tie back into the existing roadway. Those tie-ins would likely occur within 200 feet of the existing and new tracks. The new and existing tracks would also require upgrading the railroad crossing equipment to the most current UPRR/BNSF crossing guideline standards.

### Summary of Sacred Lands File and Record Search Results

To initiate the identification of cultural resources that could be affected by the proposed Project, SJRRC requested a search of the Sacred Lands File (SLF) from the Native American Heritage Commission (NAHC) May 8, 2020. The NAHC responded on May 12, 2020 and reported the search of the SLF revealed positive results for the relevant USGS quadrangles. No additional information on the location or nature of the positive finding was provided; however, the NAHC recommended that we contact the North Valley Yokuts Tribe for more information.

A records search was conducted by the Central Coast Information Center at California University, Stanislaus. A total of 184 previously-documented resources were identified within 0.25 mile (402 m) of the proposed Project area. Of these, five (5) are historic-age sites, 178 are historic-age built environment resources, and one (1) is a locally-eligible historic district. The historic-age resources consist of three (3) refuse deposits, one (1) temporary detention camp for Japanese Americans, and the burial place of John Brown (Juan Flaco). Of the five (5) historic-age resources, one refuse deposit is within the proposed Project area and the burial place of John Brown (Juan Flaco) is located immediately adjacent to it. No prehistoric resources have been recorded within 0.25 mile of the Project area.

The Authority would appreciate any information you can provide regarding sensitive Native American cultural resources within or near the Project area. Identification of sensitive resources or other concerns early in the project planning process will ensure their consideration and protection to the maximum extent feasible.

If you know of any cultural resources that could be impacted by the proposed Project, or if you would like to consult on the Project, please do not hesitate to contact Liz Denniston at liz@paleosolutions.com or by phone at (626) 205-5444. If you wish, you may also contact me by email at Brett.Rushing@hsr.ca.gov.com or by phone at (916) 403-0061.

Sincerely,

Brett Rushing Cultural Resources Program Manager

Attachments: Attachment A: Project Figures Page 3 December 21, 2020

# ATTACHMENT A PROJECT FIGURES



Figure 1. Project Vicinity Map



Figure 2. Project Location Map



San Joaquin Regional Rail Commission Chair, Christina Fugazi, City of Stockton Vice-Chair, Leo Zuber, City of Ripon Commissioner, Debby Moorhead, City of Manteca Commissioner, Doug Kuehne, City of Lodi Commissioner, Nancy Young, City of Tracy Commissioner, Bob Elliott, San Joaquin County Commissioner, Scott Haggerty, Alameda County Commissioner, John Marchand, City of Livermore

Executive Director, Stacey Mortensen

November 9, 2020

Ms. Katherine Perez Chairperson North Valley Yokuts Tribe P.O. Box 717 Linden, CA 95236

Re: Invitation to Consult under Assembly Bill (AB) 52 for the Stockton Diamond Grade Separation Project, San Joaquin County, California

Dear Ms. Perez,

The San Joaquin Regional Rail Commission (SJRRC), on behalf of the California High Speed Rail Authority (CHSRA) under assignment by the Federal Railroad Administration (FRA), is proposing the Stockton Diamond Grade Separation Project (proposed Project) to improve operational efficiency at the at-grade crossing of the Union Pacific Railroad (UPRR) and BNSF Railway (BNSF) freight lines (Stockton Diamond or Diamond) in the city of Stockton, San Joaquin County, California.

Please consider this letter and preliminary project information as formal notification of the proposed Project as required under the California Environmental Quality Act, specifically Public Resources Code (PRC) 21080.3.1 and Chapter 532 Statutes of 2014 (i.e., AB 52). Please respond within 30 days, pursuant to PRC 21080.3.1(d) if you would like to consult on this project and provide a designated lead contact person. Project Location and Setting

The proposed Project is located in the city of Stockton in San Joaquin County, California (see Attachment A: Project Overview Maps). The northern Project limit connects to the existing UPRR tracks between Main and Weber Streets. The southern Project limit is the UPRR Stockton Yard. Two BNSF main line tracks run east to west through the proposed Project area. The study limit generally reaches to Stanislaus Street in the west and to Pilgrim Street in the east. Project Description

Substantial freight movements between the Port of Stockton and points east, north, and south must pass through the Stockton Diamond. The at-grade nature of the Diamond is an operational constraint that results in delays to the regional rail network where these two heavily traveled rail lines intersect. The proposed Project would construct a flyover structure to provide the vertical clearance required by both railroads to grade separate the existing crossing of the UPRR and BNSF tracks at the Diamond. It is anticipated that UPRR long-haul freight service and current Amtrak and Altamont Commuter Express (ACE) rail services would use the new flyover tracks during operations.





Project, San Joaquin County, California

city of Stockton, San Joaquin County, California.

and provide a designated lead contact person.

Project Location and Setting

Pilgrim Street in the east. **Project Description** 

#### December 21, 2020

Ms. Corrina Gould Chairperson The Confederated Villages of Lisjan 10926 Edes Avenue Oakland, CA 94603

Dear Ms. Gould,

Nancy Miller

СНАІВ

BOARD MEMBERS

Thomas Richards

Andre Boutros

Ernest M. Camacho

Martha M. Escutia

James C. Ghielmetti

Henry R. Perea, Sr.

Lynn Schenk

Anthony Williams

EX OFFICIO BOARD MEMBERS

Honorable Dr. Joaquin Arambula

Honorable Jim Beall

Brian P. Kelly CHIEF EXECUTIVE OFFICER

> GAVIN NEWSOM GOVERNOR



Substantial freight movements between the Port of Stockton and points east, north, and south must pass through the Stockton Diamond. The at-grade nature of the Diamond is an operational constraint that results in delays to the regional rail network where these two heavily traveled rail lines intersect. The proposed Project would construct a flyover structure to provide the vertical clearance required by both railroads to grade separate the existing crossing of the UPRR and BNSF tracks at the Diamond. It is anticipated that

Re: Invitation to Consult under Section 106 for the Stockton Diamond Grade Separation

The San Joaquin Regional Rail Commission (SJRRC), on behalf of the California High-

Speed Rail Authority (Authority) under assignment by the Federal Railroad Administration (FRA), is proposing the Stockton Diamond Grade Separation Project (proposed Project)

to improve operational efficiency at the at-grade crossing of the Union Pacific Railroad (UPRR) and BNSF Railway (BNSF) freight lines (Stockton Diamond or Diamond) in the

Please consider this letter and preliminary Project information as Project notification and

initiation of Section 106 consultation for the Project pursuant to the National Historic Preservation Act. Please respond within 30 days if you would like to consult on this Project

SJRRC is the lead agency for consultation under AB 52 and you should have received

letters initiating AB 52 consultation on November 9, 2020. The Authority, under

The proposed Project is located in the city of Stockton in San Joaquin County, California (see Attachment A: Project Overview Maps). The northern Project limit connects to the existing UPRR tracks between Main and Weber Streets. The southern Project limit is the

UPRR Stockton Yard. Two BNSF main line tracks run east to west through the proposed

Project area. The study limit generally reaches to Stanislaus Street in the west and to

assignment by the FRA, is the lead agency for consultation under Section 106.

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Page 2 December 21, 2020

UPRR long-haul freight service and current Altamont Commuter Express (ACE) rail services would use the new flyover tracks during operations.

Each at-grade road crossing—Main, Market, Lafayette, Hazelton, and Scotts Streets—would have new tracks running perpendicular through the street, east of the existing track crossing. The new tracks would require a modification to the roadway profile to accommodate the flat grades across the new tracks to tie back into the existing roadway. Those tie-ins would likely occur within 200 feet of the existing and new tracks. The new and existing tracks would also require upgrading the railroad crossing equipment to the most current UPRR/BNSF crossing guideline standards.

### Summary of Sacred Lands File and Record Search Results

To initiate the identification of cultural resources that could be affected by the proposed Project, SJRRC requested a search of the Sacred Lands File (SLF) from the Native American Heritage Commission (NAHC) May 8, 2020. The NAHC responded on May 12, 2020 and reported the search of the SLF revealed positive results for the relevant USGS quadrangles. No additional information on the location or nature of the positive finding was provided; however, the NAHC recommended that we contact the North Valley Yokuts Tribe for more information.

A records search was conducted by the Central Coast Information Center at California University, Stanislaus. A total of 184 previously-documented resources were identified within 0.25 mile (402 m) of the proposed Project area. Of these, five (5) are historic-age sites, 178 are historic-age built environment resources, and one (1) is a locally-eligible historic district. The historic-age resources consist of three (3) refuse deposits, one (1) temporary detention camp for Japanese Americans, and the burial place of John Brown (Juan Flaco). Of the five (5) historic-age resources, one refuse deposit is within the proposed Project area and the burial place of John Brown (Juan Flaco) is located immediately adjacent to it. No prehistoric resources have been recorded within 0.25 mile of the Project area.

The Authority would appreciate any information you can provide regarding sensitive Native American cultural resources within or near the Project area. Identification of sensitive resources or other concerns early in the project planning process will ensure their consideration and protection to the maximum extent feasible.

If you know of any cultural resources that could be impacted by the proposed Project, or if you would like to consult on the Project, please do not hesitate to contact Liz Denniston at liz@paleosolutions.com or by phone at (626) 205-5444. If you wish, you may also contact me by email at Brett.Rushing@hsr.ca.gov.com or by phone at (916) 403-0061.

Sincerely,

Brett Rushing Cultural Resources Program Manager

Attachments: Attachment A: Project Figures Page 3 December 21, 2020

# ATTACHMENT A PROJECT FIGURES



Figure 1. Project Vicinity Map



Figure 2. Project Location Map



Chair, Christina Fugazi, City of Stockton Vice-Chair, Leo Zuber, City of Ripon Commissioner, Debby Moorhead, City of Manteca Commissioner, Doug Kuehne, City of Lodi Commissioner, Nancy Young, City of Tracy Commissioner, Bob Elliott, San Joaquin County Commissioner, Scott Haggerty, Alameda County Commissioner, John Marchand, City of Livermore

Executive Director, Stacey Mortensen

November 9, 2020

Ms. Corrina Gould Chairperson The confederated Villages of Lisjan 10926 Edes Avenue Oakland, CA 94603

Re: Invitation to Consult under Assembly Bill (AB) 52 for the Stockton Diamond Grade Separation Project, San Joaquin County, California

Dear Ms. Gould,

The San Joaquin Regional Rail Commission (SJRRC), on behalf of the California High Speed Rail Authority (CHSRA) under assignment by the Federal Railroad Administration (FRA), is proposing the Stockton Diamond Grade Separation Project (proposed Project) to improve operational efficiency at the at-grade crossing of the Union Pacific Railroad (UPRR) and BNSF Railway (BNSF) freight lines (Stockton Diamond or Diamond) in the city of Stockton, San Joaquin County, California.

Please consider this letter and preliminary project information as formal notification of the proposed Project as required under the California Environmental Quality Act, specifically Public Resources Code (PRC) 21080.3.1 and Chapter 532 Statutes of 2014 (i.e., AB 52). Please respond within 30 days, pursuant to PRC 21080.3.1(d) if you would like to consult on this project and provide a designated lead contact person. Project Location and Setting

The proposed Project is located in the city of Stockton in San Joaquin County, California (see Attachment A: Project Overview Maps). The northern Project limit connects to the existing UPRR tracks between Main and Weber Streets. The southern Project limit is the UPRR Stockton Yard. Two BNSF main line tracks run east to west through the proposed Project area. The study limit generally reaches to Stanislaus Street in the west and to Pilgrim Street in the east. Project Description

Substantial freight movements between the Port of Stockton and points east, north, and south must pass through the Stockton Diamond. The at-grade nature of the Diamond is an operational constraint that results in delays to the regional rail network where these two heavily traveled rail lines intersect. The proposed Project would construct a flyover structure to provide the vertical clearance required by both railroads to grade separate the existing crossing of the UPRR and BNSF tracks at the Diamond. It is anticipated that UPRR long-haul freight service and current Amtrak and Altamont Commuter Express (ACE) rail services would use the new flyover tracks during operations.

4CEP 949 East Channel Street Stockton, CA 95202 (800) 411-RAIL (7245) www.acerail.com



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H-26



# H.2 State Historic Preservation Office (SHPO) Finding of Effect Concurrence



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H-28



#### DEPARTMENT OF PARKS AND RECREATION OFFICE OF HISTORIC PRESERVATION

Julianne Polanco, State Historic Preservation Officer

 1725 23rd Street, Suite 100,
 Sacramento,
 CA 95816-7100

 Telephone:
 (916) 445-7000
 FAX:
 (916) 445-7053

 calshpo.ohp@parks.ca.gov
 www.ohp.parks.ca.gov
 www.ohp.parks.ca.gov

December 9, 2021

**VIA ELECTRONIC MAIL** 

In reply refer to: FRA\_2021\_0226\_001

Mr. Brett Rushing, Cultural Resources Program Manager California High-Speed Rail Authority 707 L Street, Suite 620 Sacramento, CA 05814

Subject: Continuing Section 106 Consultation on the Finding of Effect for the Stockton Diamond Grade Separation Project, San Joaquin County, California.

Dear Mr. Rushing:

The Office of Historic Preservation (OHP) is in receipt a letter dated November 12, 2021 in which the San Joaquin Regional Rail Commission (SJRRC), on behalf of the California High-Speed Rail Authority (Authority) as assigned by the Federal Railroad Administration (FRA), is continuing consultation on the above referenced undertaking. The environmental review, consultation, and other actions required by applicable Federal environmental laws for this undertaking are being, or have been, carried out by the State of California pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated July 23, 2019, and executed by the FRA and the State of California. The November 2021 Section 106 Addendum to the Finding of Effect Report: Stockton Diamond Grade Separation Project; Stockton, San Joaquin County, California (Addendum FOE) is enclosed with the letter.

In previous consultation, a Finding of Effect (FOE) was transmitted to the SHPO for review and comment on August 4, 2021. However, this FOE was limited to the undertaking's effects to the built historic properties identified in the previously submitted *Historic Resources Inventory and Evaluation Report* (May 2021). For the current consultation, the Addendum FOE assesses the undertaking's potential to effect archaeological historic properties within the area of potential effects (APE). Based on the results of the identification efforts presented in the earlier submitted May 2021 *Archaeological Survey Report*, the Addendum FOE concludes that the undertaking will not result in adverse effects to archaeological historic properties. The Addendum FOE also provides conditions to the Authority's finding of no adverse effect, which involve archaeological and Native American monitoring of archaeological sensitive areas, and cultural resources awareness training to construction workers.

The Authority has concluded that the undertaking will have no adverse effect on historic properties. The Authority has requested my review and comment on their finding of effect for the proposed undertaking. After reviewing your letter and supporting documentation, **I agree** 

Armando Quintero, Director

Mr. Rushing December 9, 2021 Page **2** of **2** 

that a finding of *no adverse effect* is appropriate given the conditions outlined in the Addendum FOE. If you require further information, please contact Associate State Archaeologist, Alicia Perez at <u>Alicia.Perez@parks.ca.gov</u>.

Sincerely,

Julianne Polanco State Historic Preservation Officer



# H.3 Finding of Effect Addendum



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H-32



Memorandum

DATE: December 9, 2021

TO: Office of Historic Preservation

FROM: California High-Speed Rail Authority

**SUBJECT:** Stockton Diamond Grade Separation Project, Stockton, San Joaquin County, California Finding of Effect Addendum for Archaeological Resources

This Finding of Effect (FOE) memorandum analyzes potential effects on archaeological resources from the Stockton Diamond Grade Separation Project (Project) in Stockton, San Joaquin County, California. The purpose of the FOE is to assist the San Joaquin Regional Rail Commission (SJRRC), on behalf of the California High-Speed Rail Authority (Authority) as assigned by the Federal Railroad Administration (FRA), in complying with Section 106 of the National Historic Preservation Act and the implementing regulations of the Advisory Council on Historic Preservation—as these pertain to federally funded undertakings and their impacts on historic properties—and with Section 15064.5 of the California Environmental Quality Act (CEQA) Guidelines. "Historic properties" are defined as any prehistoric or historic site, district, building, structure, or object that is listed in the National Register of Historic Places (NRHP) or is eligible for inclusion in the NRHP (36 Code of Federal Regulations [C.F.R.] § 800.16(I)). The environmental review, consultation, and other actions required by applicable Federal environmental laws for this Project are being, or have been, carried out by the State of California pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated July 23, 2019, and executed by the FRA and the State of California. The Authority is the federal environmental lead agency under the National Environmental Policy Act (NEPA) and SJRRC is the state environmental lead agency under the California Environmental Quality Act (CEQA). All work was conducted in compliance with CEQA, NEPA, and applicable local regulations.

The Area of Potential Effect was transmitted to OHP for review and determined to be adequate on April 22, 2021. The findings from the pedestrian survey were documented in the *Stockton Diamond Grade Separation Project Archaeological Survey Report* (May 2021) prepared by Paleo Solutions (ASR). The ASR did not identify any archeological sites, features, or artifacts within the APE. SHPO concurred with the findings in the ASR in a formal comment letter dated July 29, 2021. The Authority determined that no archaeological resources were present in the APE; therefore, archaeological resources were not discussed in the original *Section 106 Finding of Effect Report for the Stockton Diamond Grade Separation Project* (June 2021) prepared by JRP.

### Archival Research and Pedestrian Archaeological Field Survey Results

A records search for the proposed Project was conducted by staff at the Central California Information Center at California State University, Stanislaus in April 2020 (Record Search File No. 11370L). The records search identified one historic-age refuse deposit (P-39- 005114/CASJO-000338H) was previously recorded in the APE, and a plaque marking the historic-age burial place of John Brown (aka Juan Flaco) (P-39-000532, California Historical Landmark #513) is adjacent to the northeast portion of APE. However, no evidence of historic- age refuse deposit P39-005114/CA-SJO-000338H was observed during the field survey. No newly-identified archaeological resources were identified as a result of the survey.

### **Tribal Consultation**

A Sacred Lands File search and AB 52 contact list was requested from the Native American Heritage Commission (NAHC) on May 8, 2020, to identify sensitive or sacred Native American resources that could be affected by the proposed Project. The NAHC responded on May 12, 2020 and reported that the search of the Sacred Lands File revealed <u>positive</u> results for the relevant area. No additional information on the location or nature of the positive finding was provided; however, the NAHC recommended that the North Valley Yokuts Tribe be contacted for more information.

The NAHC also provided a contact list of two Native American tribes who may have direct knowledge of tribal cultural resources in or near the APE:

- North Valley Yokuts Tribe Katherine Perez
- The Confederated Villages of Lisjan Corrina Gould

SJRRC initiated AB 52 consultation with tribal governments on November 9, 2020. Outreach letters were sent to the tribal government representatives on the NAHC contact list providing information about the proposed Project and seeking input from the tribal community. The Authority initiated government-to-government consultation under Section 106 with Native American tribal governments on December 21, 2020. Representatives of the Authority and SJRRC met with a representative of the North Valley Yokuts Tribe and the Confederated Villages of Lisjan in January and February 2021, respectively.

Measures to ensure proper treatment of any inadvertent discoveries of interest to tribal representatives during proposed Project construction activities were discussed. Specifically, Ms. Perez and Ms. Gould both stated concerns regarding the Project and requested that ground disturbing activities be monitored in the event that an inadvertent discovery occur during construction. Activities with a deeper footprint of disturbance, like the installation of footings for bridges or foundations, have greater potential for encountering intact, buried archaeological resources. Therefore, an archaeologist and Native American representative will provide a Worker Environmental Awareness Protection (WEAP) training to outline an overview of cultural (precontact and historic) and tribal cultural resources, the regulatory requirements for the protection of cultural resources, and the proper procedures in the event of an unanticipated cultural resource. The draft ASR was submitted for their review in May 2021 and both Ms. Perez and Ms. Gould re-iterated their concerns regarding subsurface precontact archaeological sensitivity and recommended monitoring.

### **Assessment of Effects**

The Criteria of Adverse Effect (36 CFR 800.5) were applied to the Project actions that have the potential to affect historic properties within the APE. An "adverse effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the NRHP in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association."<sup>1</sup>

Application of the criteria of adverse effect is an assessment of an undertaking's changes to the character or use of a historic property and of how the undertaking will affect those features of a historic property that contribute to its eligibility for listing in the NRHP. Effects can be direct, indirect, and cumulative. Direct effects include such actions as physical destruction or damage, as well as those that may not physically impact the historic property but introduce visual or audible impacts that alter its

<sup>&</sup>lt;sup>1</sup> 36 CFR 800.5, "Assessment of adverse effects," incorporating amendments effective August 5, 2004.

character-defining features [36 CFR 800.5(a)(1)]. Indirect adverse effects include those that are later in time or farther removed in distance but are still reasonably foreseeable. Pursuant to 36 CFR § 800.5(b) the Authority, in consultation with SJRRC, has made a finding that the Project would have no adverse effect on archaeological historic properties within the APE when the following conditions are applied.

### Archaeology and Tribal Monitoring

Prior to issuance of grading permits, SJRRC, in coordination with CHSRA, shall retain an archaeological monitor as well as Native American monitors from the North Valley Yokuts Tribe and The Confederated Villages of Lisjan. The archaeological monitor, working under the direct supervision of a qualified archeologist, shall be present for Project earth-moving activities that occur within undisturbed, original ground in the Project Area. Earth moving activities include, but are not necessarily limited to excavation, trenching, grading, and drilling. One Native American monitor from the North Valley Yokuts Tribe and one Native American monitor from The Confederated Villages of Lisjan shall also be requested to be on-site during Project earth-moving activities that occur within undisturbed, original ground in the Project Area. Attendance is ultimately at the discretion of the tribes.

Areas identified for archaeological and Native American monitoring will be further refined in consultation with interested Native American tribes.

All archaeological monitors shall be familiar with the types of historical and prehistoric resources that could be encountered within the Project Area.

The qualified archaeologist shall have the ability to recommend, with written and photographic justification, the termination of monitoring efforts to SJRRC and CHSRA, and should SJRRC and the Native American monitors concur with this assessment, then monitoring shall cease.

If an inadvertent discovery of archaeological materials is made during project-related construction activities, the qualified archaeologist shall immediately be notified regarding the discovery and shall follow the process laid out under 36 CFR 800.13. If prehistoric or potential tribal cultural resources are identified, the Native American monitors shall also immediately be notified. The archaeological monitor shall have the authority to halt ground disturbing activities within 50 feet of the resource(s) and an Environmentally Sensitive Area physical demarcation shall be established.

The qualified archaeologist, in consultation with SJRRC and Native American monitors, should the find be prehistoric or a potential tribal cultural resource, and in coordination with CHSRA, shall determine whether the resource is potentially significant under Section 106 of the NHPA. Next, CHSRA shall determine actions that SJRCC can take to resolve adverse effects, and notify the SHPO and interested tribes within 48 hours of the discovery. If avoidance is not feasible, the qualified archaeologist, in consultation with SJRRC and CHSRA, shall prepare and implement a detailed treatment plan. Treatment for most archaeological resources would consist of, but would not necessarily be limited to, in-field documentation, archival research, subsurface testing, and excavation.

No work will continue within the 50-foot buffer until the qualified archaeologist, SJRRC and CHSRA, along with the Native American monitors should the find be prehistoric or a tribal cultural resource, agree to appropriate treatment.

### Worker Environmental Awareness Protection Training

Prior to initiating earth-moving construction activity, a qualified archaeologist, meeting the Secretary of the Interior's Standards for professional archaeology, shall ensure that a Worker Environmental Awareness Protection (WEAP) training, presented by a qualified archaeologist and with participation requested by

Native American representative(s), is provided to all construction and managerial personnel involved with the proposed Project. The WEAP training shall provide an overview of cultural (prehistoric and historic) and tribal cultural resources and outline regulatory requirements for the protection of cultural resources. The WEAP will also cover the proper procedures in the event an unanticipated cultural resource is identified during construction. The WEAP training can be in the form of a video or PowerPoint presentation. Printed literature (handouts) can accompany the training and can also be given to new workers and contractors to avoid the necessity of continuous training over thecourse of the proposed Project.



# H.4 Finding of Effect

STOCKTON DIAMOND GRADE SEPARATION PROJECT



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STOCKTON DIAMOND GRADE SEPARATION PROJECT

H-38

## **SECTION 106 FINDING OF EFFECT REPORT**

## Stockton Diamond Grade Separation Project Stockton, San Joaquin County, California





**June 2021** 

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Appendix B: Correspondence

### 1. SUMMARY OF FINDINGS

This Finding of Effect (FOE) report has been prepared for the San Joaquin Regional Rail Commission's (SJRRC) Stockton Diamond Grade Separation Project (proposed Project). The purpose of the FOE is to assist the project's lead federal agency, the California High-Speed Rail Authority (CHSRA), under assignment by the Federal Railroad Administration (FRA), in complying with Section 106 of the National Preservation Act (NHPA) and the implementing regulations of the Advisory Council on Historic Preservation in Title 36 Code of Federal Regulations Part 800 (36 CFR 800), as these pertain to federally funded undertakings and their impacts on historic properties. "Historic properties" are buildings, structures, objects, or districts that are listed in, or formally determined eligible for listing in, the National Register of Historic Places (NRHP).

This FOE presents the effects conclusions for historic properties identified in the *Historic Resources Inventory and Evaluation Report* prepared for the proposed Project in May 2021. The Area of Potential Effects (APE) is based on the project description dated October 1, 2020, as well as designs and mapping dated October 8, 2020. The APE encompasses the full extent of historic built resources, i.e. buildings, engineering structures, districts, or landscapes built or established during the historic era (in or before 1975). The APE map is in Appendix A.

The FOE analyzes potential effects on five built historic properties in the APE, as well as one historic district that intersects the APE. A summary of the five historic properties and historic district is included in Table 1. The proposed Project would not cause an adverse effect to built historic properties within the APE. Construction of the proposed Project would not require the demolition of any built historic properties and would not remove character-defining features from or alter historic setting characteristics of any built historic properties. As such, no mitigation measures for built historic properties will be developed with consulting parties.

Map Reference Number	APN	RESOURCE NAME	Address	Year Built	EFFECT Findings
n/a	n/a	Stockton Downtown Commercial Historic District	n/a	n/a	No Adverse Effect
3	151-190-001	Imperial Hotel	902 East Main Street	1896	No Adverse Effect
4	151-190-080	Imperial Garage n/a	20 South Aurora Street 30 South Aurora Street	ca. 1915 1918	No Adverse Effect
5	151-190-007	Hotel New York	34 South Aurora Street	1910	No Adverse Effect
6	151-190-060	n/a	915 East Market Street	ca. 1926	No Adverse Effect
7	151-220-020	Waldemar Apartments	920 East Market Street	1918	No Adverse Effect

<b>Table 1: Summarv</b>	of Section	<b>106 Effects</b>	<b>Findings</b>	for Built	Historic	Resources
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### 2. DESCRIPTION OF UNDERTAKING

### 2.1 Introduction

The San Joaquin Regional Rail Commission (SJRRC) proposes to construct a grade separation of two principal railroad lines at the Stockton Diamond in Stockton, California. A combined Environmental Impact Report (EIR) and Environmental Assessment (EA) is being prepared in conformance to the California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA), respectively. The SJRRC as the project sponsor is the CEQA Lead Agency, and the California High Speed Rail Authority (CHSRA), under assignment by the Federal Railroad Administration (FRA), is the NEPA Lead Agency. The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being or have been carried out by the State of California pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated July 23, 2019, and executed by the FRA and the State of California.

The Stockton Diamond Grade Separation Project (proposed Project) is a critical freight and passenger mobility project. The current Altamont Corridor Express (ACE) and San Joaquins passenger rail service is constrained by the Stockton Diamond Interlock at-grade crossing which can cause reliability and on time performance schedule conflicts. The grade separation will provide a key element in SJRRC and San Joaquin Joint Powers Authority (SJJPA) operational performance in providing service between the Central Valley, Sacramento, and San Francisco Bay Area. Figure 1 shows the general regional project location.

At the present time, the BNSF Railway (BNSF) Stockton Subdivision and the Union Pacific Railroad (UP) Fresno Subdivision consist of two main tracks each, and intersect each other at a level, at-grade crossing known as the Stockton Diamond. This rail intersection, located just south of Downtown Stockton near South Aurora Street and East Scotts Avenue, is the busiest at-grade railway junction in California. The at-grade crossing results in significant congestion and delays to service that moves people and freight throughout the Central Valley as well as freight out to the broader national network. The current, at-grade configuration of the track results in significant delays to passenger and freight trains in the area, including those serving the Port of Stockton, as well as other trains in the area. These delays limit the capacity of the Port of Stockton for growth and inhibit the Valley Rail Program ACE and San Joaquin "Extension" projects' service reliability and on-time performance of the ACE and San Joaquins services throughout the region. Train congestion also causes local delays at roadway-rail grade crossings and potential motor vehicle, rail, bicycle, and pedestrian conflicts.

The proposed Project would construct a grade separation of the BNSF and UP rail lines to reduce rail congestion and allow for an uninterrupted flow of rail traffic through the crossing, improving freight mobility and leading to lower costs for freight shipping, reduced delays, and a decrease in fuel consumption for idling locomotives. By increasing train speeds and reducing the time that trains occupy public roadway-rail grade crossings in the City of Stockton, there would be a reduction in the time that motor vehicles, bicycles, and pedestrians will spend waiting for trains to pass. In turn, the reduction in train congestion and motor vehicle wait times at these roadway-rail grade crossings will reduce idling and air emissions.



**Figure 1: Regional Location** 

The public benefits of the proposed Project accrue to motorists, pedestrians, rail passengers, and residents throughout the region. The private benefits can be seen in the reduction of fuel consumption, lower costs to freight rail transportation, and decreases in delays. Passenger and commuter rail reliability is essential for those residing and working in the region, especially those in rural communities, who need improved access to essential services and economic centers. The proposed Project is aligned with San Joaquin County goals to enhance existing rail infrastructure in order to improve the rail network efficiency and capacity, including safe, reliable transportation choices, while also improving the local economy through economic growth, job retention, and job creation.

### 2.1.1 Project Background

The railroad main lines comprising the Stockton Diamond are geographically oriented east-west (BNSF Stockton Subdivision) and north-south (UP Fresno Subdivision), as shown in Figure 2, and both railroads are segments of important trade routes between Northern California (including ports in Stockton and the San Francisco Bay Area), the central United States, and the Pacific Northwest. BNSF has operating rights on the UP main line that it exercises for certain trains, and UP has operating rights on the BNSF main line that it exercises for certain trains. Connection tracks between the BNSF and UP main lines at Stockton, in the northeast, southeast, and southwest quadrants of the diamond crossing, enable through trains of one railroad to use the other railroad's tracks. BNSF and UP trains also use these connection tracks to transfer railcars between BNSF and UP yards and terminals in the vicinity of the Stockton Diamond.

Trains operating on the BNSF and UP main lines at the Stockton Diamond consist of freight trains of BNSF and UP, ACE commuter passenger trains between Stockton and San Jose operated by SJRRC, and intercity Amtrak San Joaquins passenger trains between Oakland/Sacramento and Bakersfield operated by SJJPA. Freight trains that operate through Stockton typically consist of various types, such as: intermodal trains that carry containerized freight or highway semi-trailers;

bulk trains that consist of a single commodity such as grain moving single origin between a and destination; manifest trains that carry individual carloads of freight for many shippers and moving between multiple origins and destinations; and local freights and transfers that move freight cars between switching yards, or between yards and the docks or shipping and receiving facilities of railroad customers. Based on the 2018 California State Rail Plan<sup>1</sup>, between approximately 50 and 70 freight trains and between 12 and 20 passenger trains per day on average

### Figure 2: Stockton Diamond



<sup>1</sup> California Department of Transportation, 2018 California State Rail Plan, Accessible at https://dot.ca.gov/programs/rail-and-mass-transportation/california-state-rail-plan.

currently travel through the Stockton Diamond footprint.

The proposed Project replaces the existing at-grade intersection of the BNSF Stockton Subdivision and UP Fresno Subdivision with a grade-separation structure that will elevate the UP main tracks above the BNSF main tracks, enabling through trains proceeding on the UP main tracks to advance through the intersection without conflict with through trains on the BNSF main tracks. The three existing connections between the two railroads will remain and function much as they did prior to completion of the Project, although their alignments will be modified to accommodate the development of the flyover structure and to reduce operating conflicts between trains on various routes within Stockton. No existing UP main tracks will remain in place across the BNSF main tracks after the Project is constructed. Traffic conflicts and train staging that currently occur, as trains wait on one railroad's main track for trains using the other railroad's main track to pass through the Stockton Diamond footprint, will be reduced once trains traveling on the UP main tracks begin using the grade-separation structure to cross above the BNSF main tracks. The atgrade crossing will be removed permanently, thereby removing the need for frequent maintenance and the resulting train delays created during shutdown of the crossing.

## 2.1.2 Project Setting

## 2.1.2.1 Regional Setting

The proposed Project is located in the City of Stockton in San Joaquin County, California. San Joaquin County, located between the counties of Alameda and Contra Costa to the west and Sacramento to the north, encompasses approximately 1,448 square miles. Approximately 773,632 residents occupy San Joaquin County. The region's incorporated cities include Escalon, Lathrop, Lodi, Manteca, Ripon, Stockton, and Tracy, the largest of which is Stockton, with a population of 318,522.<sup>2</sup>

According to the San Joaquin Council of Governments (SJCOG), rail is a critical link to the fullservice transportation network available in San Joaquin County. The network is comprised of approximately 200 miles owned by Class I railroads BNSF and UP. The county also features approximately 50 miles of short-line railroads, including the Stockton Terminal and Eastern Railroad and the Central California Traction Company (CCT).

Transit is also important to the region and includes a system of bus rapid transit; intercity and interregional bus transit services; and ACE commuter rail service. There are currently 10 stops along the 86-mile ACE route between San Jose and Stockton. ACE trains pass through the Stockton Diamond between the current northern terminal station in Stockton (Robert J. Cabral Station) and the Lathrop/Manteca Station approximately 11 miles south. The ACE transit service uses Bombardier Bi-level coaches with MPI F40PH-3C and Siemens Charger locomotives, which operate on lines owned by UP.

San Joaquin County's road network is made up of more than 3,600 maintained miles. Major northsouth highways include State Route 99 (SR 99) and Interstate 5 (I-5). SR 99 is considered the "Main Street" of the San Joaquin Valley and I-5 is a corridor of statewide and national significance. Each of these routes also carries truck traffic that is much higher than the state average for the highway system, and is imperative to goods movement. SR 120, SR 4, and SR 12 are major eastwest highways, connecting SR 99 and I-5. SR 4, referred to as the Crosstown Freeway within Stockton, is located less than 2,000 feet north of the Stockton Diamond and continues westward

<sup>&</sup>lt;sup>2</sup> Department of Finance E-1 Population Estimate: http://www.dof.ca.gov/Forecasting/Demographics/Estimates//E-1/

to the city of Hercules and eastward into the Sierra Nevada Mountains. Other important highways in the region include Interstates 580 (I-580) and 205 (I-205), located in the southwest region of the county. Each of these highways facilitates goods movement throughout the region. I-205 and I-580 serve as the gateway connection between the San Joaquin Valley and the San Francisco Bay Area. Each of these highways has experienced increased travel movement greatly beyond the statewide average.

## 2.1.2.2 Project Study Area and Construction Limits

The northern limit of the proposed Project construction limits includes Weber Avenue, a major east-west arterial in downtown Stockton. Just north of Weber Avenue is the Robert J. Cabral Station. The southern Project construction limit is the UP Stockton Yard, located approximately at East Fourth Street. The eastern and western limits of the Project construction limits are generally South Pilgrim Street and South Grant Street, respectively. Figures 3-6 provide maps of the Project construction limits. The Project study area varies depending on the resource analyzed; however, the general study area extents are included in Figure 3.

The Stockton Diamond is generally located in the middle of the study area. Substantial freight movements between the Port of Stockton and points east, north, and south must pass through the Diamond. The existing at-grade nature of the Diamond provides an operational constraint that results in delays to the regional rail network where these two principal rail lines intersect.

At several locations, the existing north-to-south UP Fresno Subdivision tracks at and near the Diamond are raised above grade by about 3 feet, requiring any vehicular or pedestrian traffic to go up and over the hump to cross the tracks at roadway-rail grade crossings. Additionally, the Mormon Slough is crossed by existing road and railway tracks within the proposed Project study area in several locations.

The Diamond currently features wye connection tracks in three of the four Diamond quadrants, and a new wye for the northwest quadrant, referred to as the Stockton Wye, is planned for construction in 2021. As shown in Figure 2, the wye connection tracks create a triangular joining arrangement of three rail lines, where individual trains can be routed between the BNSF Stockton Subdivision and UP Fresno Subdivision. In the southeast quadrant, the wye track provides connection to and from the UP Stockton Yard located south of the Diamond and allows connectivity to the BNSF Mormon Yard located east of the Diamond.

In the southwest quadrant, a wye track connects the UP Fresno Subdivision and UP Stockton Yard with the BNSF Stockton Subdivision heading westbound. In the northeast quadrant, a wye track provides connection between the BNSF Stockton Subdivision and the UP Fresno Subdivision, which is used by Amtrak for the San Joaquins service between Sacramento, Stockton, and Bakersfield. Completion of the Stockton Wye project would provide a connection track in the northwest quadrant of the diamond, and would improve access between the UP Fresno Subdivision and the Port of Stockton to the west of the Diamond.



Figure 3: Project Study Area Sections



Figure 4: Project Design Features and Study Area (East Weber Avenue to South of East Church Street)



Figure 5: Project Design Features and Study Area (North of East Hazelton Avenue to South of East Jefferson Street)


Figure 6: Project Design Features and Study Area (South of East Jefferson Street to UP Stockton Yard)

#### 2.2 Need for and Purpose of Proposed Project

The need for the improvements proposed with the Stockton Diamond Grade Separation Project and the resulting purpose of the proposed Project are discussed in the sections that follow.

### 2.2.1 <u>Need for the Proposed Project</u>

### 2.2.1.1 Freight and Passenger Rail Activity at the Stockton Diamond

Several passenger and freight rail services converge at the Stockton Diamond, as noted above; consequently, there is a substantial amount of rail activity at this location. Publicly available FRA Highway-Rail Grade Crossing Inventory Reports were consulted to obtain a conceptual estimate of the typical number of freight trains per day operated through each roadway-rail grade crossing in the study area.<sup>3</sup> Available data for the UP Fresno Subdivision is for the year 2016; available data for the BNSF Stockton Subdivision is for the year 2019. Train count data for the UP Fresno Subdivision from the year 2016 was escalated to the year 2019 using a 2% compound annual growth rate, which is a factor acceptable to the FRA to account for freight growth for planning purposes.

According to the data, in 2019, an estimated average of 44 freight trains a day typically operated on the UP Fresno Subdivision north of the Diamond, 36 of which continued south through the Stockton Diamond and eight of which used the northeast connecting tracks to access the BNSF Stockton Subdivision, or vice versa. In addition, an estimated average of 20 freight trains a day operated on the BNSF Stockton Subdivision east of the Diamond, with 12 using the Stockton Diamond and eight using the northeast connecting tracks to access the UP Fresno Subdivision.<sup>4</sup> An additional four trains a day, on average, used the southwest connecting tracks between the BNSF Stockton Subdivision west of the Diamond and the UP Fresno Subdivision south of the Diamond. Figure 7 illustrates the relative freight rail activity in 2019 through and near the Stockton Diamond.

In addition to the freight trains, in 2019 SJRRC operated eight total daily (peak-period service) ACE commuter trains each weekday day between the Stockton Cabral Station and San Jose, through the Stockton Diamond on the UP Fresno Subdivision, all of which pass through the Stockton Diamond. In 2019, the SJJPA had four daily San Joaquins intercity trains (operated by Amtrak) between Bakersfield and Sacramento through the Stockton Diamond along the BNSF Stockton Subdivision and UP Fresno Subdivision (using the northeast connecting tracks), as well as 10 daily San Joaquins trains between Bakersfield and Oakland through Stockton Diamond on the BNSF Stockton Subdivision both east and west of the Diamond. These passenger train volumes are also illustrated in Figure 7.

In the 2045 horizon year, with the conceptual 2019 freight train activity escalated using the same 2% compounded annual growth rate noted above, there could potentially be as many as 52 daily freight trains passing through the Stockton Diamond on the UP Fresno Subdivision and 17 daily freight trains passing through the Diamond on the BNSF Stockton Subdivision. An additional 18 daily trains could potentially utilize the connecting tracks in the Project study area.<sup>5</sup>

<sup>&</sup>lt;sup>3</sup> U.S. Department of Transportation, FRA – Safety Map, accessed at https://fragis.fra.dot.gov/gisfrasafety/.

<sup>&</sup>lt;sup>4</sup> Actual typical number of freight trains is subject to future analysis and railroad coordination.

<sup>&</sup>lt;sup>5</sup> Actual typical number of freight trains for all planning horizons is subject to future analysis and railroad coordination.

Passenger service through the Stockton Diamond would not increase as a result of the proposed Project. The separate SJRRC / SJJPA Valley Rail Sacramento Extension Project proposes seven new round trips of passenger rail service (two new San Joaquins trains and five new ACE trains) that would pass through the Stockton Diamond.<sup>6</sup>



Figure 7: Existing Freight Rail Activity and Crossing Vehicular Traffic near the Stockton Diamond

<sup>6</sup> SJRRC / SJJPA Valley Rail Sacramento Extension Final Environmental Impact Report, accessed online at https://acerail.com/deir-chapters-and-appendices/.

### 2.2.1.2 Railroad and Roadway Delays in the Study Area

Roadway-rail grade crossing occupancy time for a given train (i.e., gate down time for vehicles waiting for a train to pass) is based on train length, train speed, the width of the roadway, as well as railroad industry best practices for minimum activation time, prior warning time, and the time it takes for the grade crossing warning devices to recover after the passing of a train. Each of these factors affecting gate down time and resulting roadway delays is discussed below.

**Average Train Length:** A 2019 report from the United States Government Accountability Office (GAO) titled *Rail Safety: Freight Trains Are Getting Longer, and Additional Information Is Needed to Assess Their Impact* listed average freight train lengths provided by four different U.S. Class I railroads.<sup>7</sup> To support analysis developed for this study, the average of these four values was taken as a baseline for a typical freight train length in the years 2016-2019. A growth in average freight train length from 6,500 feet (with three locomotives) in the years 2016-2019 to an average freight train length of 7,500 feet (with four locomotives) in the year 2045 is assumed, based on observation of rail industry trends.<sup>8</sup> Passenger train length of 700 feet (one locomotive and seven passenger cars) in the 2019 baseline year growing to a length of 1,000 feet (two locomotives and ten passenger cars) in the year 2045 is assumed.

**Average Train Speed:** Based on information in the FRA Highway-Rail Grade Crossing Inventory Reports, trains can operate generally at speeds up to 40 mph on the UP Fresno Subdivision, up to 60 mph on BNSF Stockton Subdivision, and up to 15 mph on the connecting tracks within the vicinity of the Stockton Diamond, although typical speeds are lower.<sup>9</sup> As observed using Google Earth Pro imagery, the Stockton Diamond itself has a posted speed limit of 30 mph for all approaching trains the until the entire train is clear of the Diamond. Based on observation of train operations, train speeds are often reduced substantially as a result of rail congestion within the Stockton Diamond footprint and on the immediate rail network.

**Roadway Width:** The roadway widths are generally determined by the number of travel lanes multiplied by an average width of 12 feet per lane. Most roadways that cross either the UP Fresno Subdivision or the BNSF Stockton Subdivision near the Stockton Diamond are two-lane roads (therefore, 24-foot crossing length); however, East Hazelton Avenue, South San Joaquin Street, South California Street, and South Airport Way each currently have four travel lanes (therefore, 48-foot crossing length). Note that with a separate City of Stockton project, South California Street will be reduced to three lanes with Class IV Separated Bikeways.

**Warning Device Activation Time:** The general assumptions for warning device activation include 20-second prior warning time, 5-second gate down time before train enters crossing, 5-second reaction delay, and 12-second gate rise time. Note that the time for the train to pass through the crossing is based on the other factors and not included in these times.

Considering average train lengths and train speeds, roadway widths, and warning device activation time, the 2019 total occupancy (or gate down time) per freight train crossing typically varies from a minimum of 3 minutes and 11 seconds to a maximum of over 8 minutes. The shorter passenger

<sup>&</sup>lt;sup>7</sup> U.S. Governmental Accountability Office, Report to Congressional Requesters, Rail Safety, GAO 19-443, May 2019, accessed online at https://www.gao.gov/assets/700/699396.pdf

<sup>&</sup>lt;sup>8</sup> Actual average freight train lengths for existing and potential future freight trains are subject to future analysis and railroad coordination.

<sup>&</sup>lt;sup>9</sup> Actual train speeds are subject to future study and railroad coordination.

trains generally have gate down times of between 55 seconds and 1.5 minutes. By 2045, these times *per freight train* are expected to increase between 23 seconds and 1 minute each.

The total daily occupancy of any given roadway-rail grade crossing over the course of a day, based on the 2019 combined train activity ranges from approximately 22 minutes for a small subset of the trains using the BNSF Fresno Subdivision and southwest connecting track to nearly two hours for the majority of the trains (36 a day) using the UP Fresno Subdivision and passing through the Stockton Diamond. By the year 2045, the total daily occupancy of the UP Fresno roadway-rail grade crossings would be as high as three hours a day for the estimated 52 trains that would continue through the Stockton Diamond.

Due to the close proximity to downtown Stockton, the roadways that cross the UP and BNSF tracks also experience a great deal of activity, with traffic volumes ranging from under 1,000 vehicles a day at two-lane crossings such as East Church Street, East Scotts Avenue, and South Pilgrim Street, to nearly 5,000 vehicles a day at East Hazelton Avenue and over 16,000 vehicles a day at South Airport Way, both of which are four-lane roadways. Figure 7 illustrates the vehicular traffic volumes at each roadway-rail grade crossing in the study area. The current and future gate down times result in delays to these vehicles that need to cross the tracks.

#### 2.2.1.3 Passenger Train Reliability

The 2018 California State Rail Plan<sup>10</sup> focuses on a sustainable and connected megaregional rail network, with competitive rail travel times and a high degree of reliability. Therefore, passenger rail services not only need to be integrated and part of a larger network, but the service and transfer opportunities should be reliable.

The large number of freight trains that operate along the UP Fresno and BNSF Stockton Subdivisions impacts the passenger rail operations through the Stockton Diamond and affects passengers' ability to reach destinations on time or to make critical connections to other transit services. Passenger rail users expect a reliable service; they plan for the scheduled arrival and departure of their train and delayed trains can result in being late for work, missed transfer connections, and/or choosing to drive as an alternative.

Train movements through the Diamond are controlled by BNSF, who has priority at the Diamond crossing. As a result, when BNSF allows one of its trains to pass the Diamond, ACE, San Joaquins, and UP trains experience delays when they need to slow down or stop and wait for the BNSF trains to pass. The delays are also caused by maintenance of the Diamond. The at-grade crossing is significantly impacted by continuous heavy freight movements, and must be maintained on a regular basis. Train movements through the Diamond must be shut down during maintenance, creating delays and reducing on-time performance and reliability for both freight and passenger trains.

The delays caused as a result of the at-grade Stockton Diamond adversely affect passenger confidence in rail travel. In addition, delayed passenger and freight trains can affect economic vitality if employees and goods do not arrive at their destinations on time, could affect air quality with increased emissions, and would not meet the goals of the California State Rail Plan.

<sup>&</sup>lt;sup>10</sup> AECOM, *California State Rail Plan*, September 2018, accessed online at https://dot.ca.gov/programs/rail-and-mass-transportation/california-state-rail-plan.

# 2.2.1.4 Safety at Roadway-Rail Grade Crossings

As a result of the number of trains that pass through the study area, crossing local and arterial roadways in residential neighborhoods, safety is a major concern among local residents. Over the past 5 years, there have been 6 trespasser fatalities and an additional 5 injuries within a 1-mile radius of the project<sup>11</sup>. Immediately near the Stockton Diamond, there have been 6 bicycle or pedestrian injuries at at-grade crossings, one of which resulted in a fatality.

### 2.2.1.5 Need for the Proposed Project

Based on the existing and estimated future rail activity through the Stockton Diamond, the amount of time roadway-rail grade crossings are occupied to allow the passing of trains, the resulting vehicular traffic delays, and safety concerns at roadway-rail grade crossings, improvements to enhance railroad operating efficiency are critical for the efficient movement of people and goods and to help the economic conditions in Stockton and the region. The Stockton Diamond Grade Separation is needed because:

- High levels of freight and passenger rail activity cause train congestion. Stockton Diamond is the busiest, most congested at-grade railway junction in California;
- Congestion and freight maintenance activities cause delays and poor reliability. The current, at-grade configuration of the Stockton Diamond results in significant delays and poor reliability for BNSF and UP freight trains and for ACE and Amtrak San Joaquins passenger trains. Local road traffic also experiences delays and poor reliability because of the amount of time the road crossings are occupied by trains.
- Multiple roadway-rail grade crossings and the BNSF-UP main line track at-grade crossing create conflict points, resulting in increased safety risks.

#### 2.2.2 Purpose of the Proposed Project

To address the needs identified herein, the purpose of the Stockton Diamond Grade Separation Project is to:

- Provide operational benefits that enhance existing passenger rail service and new service planned in the Valley Rail program;
- Provide for an uninterrupted flow of rail through the crossing, which will improve freight movement; and
- Reduce delays for pedestrians and motorists at key local roadway-rail grade crossings.

#### 2.2.3 Project Goals and Objectives

The Project Goals and Objectives are to:

- Reduce passenger and freight rail delays and associated congestion;
- Maintain key community connections;
- Improve multimodal access;
- Provide local and regional environmental and economic benefits; and
- Address safety by closure and enhancements at key roadway-rail grade crossings.

With the successful execution of the Project goals and objectives, it is anticipated that the proposed Project would result in the following benefits:

- 1. *Stimulate Mobility:* Improve regional passenger and freight rail efficiency and travel reliability by reducing conflicting train movements.
- 2. *Enhance Safety:* Improve Stockton residents' access, safety, and mobility across rail lines through enhancements or closures at roadway-rail grade crossings.
- 3. *Economic Vitality:* Reducing delays will result in increased throughput, goods movement, and train velocity. This decreases fuel consumption and leads to cost savings.
- 4. *Inspire Connections:* Support faster, more reliable passenger rail service linking residents to family, jobs, and recreational destinations throughout Northern California.
- 5. *Improve Sustainability:* Improve air quality through reduction of greenhouse gas from trains and vehicles that idle due to congestion and delays.

#### 2.3 Relationship to Other Plans in the Study Area

This section identifies planned and current rail and roadway operations plans at the state and local level that are related to the proposed Project that have provided input into the development and evaluation of potential Project alternatives. It is important to note that all of these plans, studies, and projects are separate efforts apart from the proposed Project and that the improvements proposed as part of these efforts are not elements of the Stockton Diamond Grade Separation Project.

#### 2.3.1 San Joaquin Regional Rail Commission Plans

The SJRRC ACE*forward* is a phased improvement plan proposed by the SJRRC to increase service reliability and frequency (two additional roundtrips in near-term and four additional roundtrips in long-term), enhance passenger facilities, reduce travel times along the existing ACE service corridor from San Jose to Stockton and extend ACE service to Manteca, Modesto, Ceres, Turlock and Merced. While the Draft EIR for ACE*forward* was issued in 2017, the SJRRC rescinded the document to focus on the funded extensions to Sacramento and Ceres / Merced as part of the Valley Rail program.

In addition to the relevance of SJRRC's ACE*forward* to the proposed Project because of its proposed improvements in Stockton and use of the UP Fresno line and Stockton Diamond, Valley Rail implements two new daily round-trips for the Amtrak San Joaquins service to better connect San Joaquin Valley travelers with the Sacramento Area, and an extension of ACE between Sacramento and Ceres/Merced (see Figure 8). In addition, Valley Rail includes plans for vehicle

air quality improvements. SJRRC issued a Final EIR for the ACE Extension Lathrop to Ceres/Merced (ACE Extension) project in July 2018. SJRRC issued a Final EIR for the Valley Rail Sacramento Extension, project in October 2020.

In addition to the Valley Rail program, SJRRC and the Tri-Valley San Joaquin Valley Regional Rail Authority (TVSJVRRA) have established a Universal Infrastructure vision for the Altamont Corridor between Stockton and the San Francisco Bay Area. The "Universal Investment in Infrastructure" throughout the San Joaquin Valley and the San Francisco Bay Area would enable one-seat rides via the Altamont Corridor to San Jose, the Peninsula via a new Dumbarton Bridge, Oakland, and San Francisco via a new Transbay Crossing. Universal infrastructure would be compatible with high-speed rail and would enable a oneseat ride from the California High-Speed Rail initial operating segment at



Merced. The improvements that comprise the Altamont Corridor Vision can be phased as follows:

#### **Near-Term / Phase 1 Priority Improvements**

- Additional ACE round trips between the San Joaquin Valley and San Jose via Altamont Pass and weekend service (six daily round trips weekdays)
- New Valley Link service implementation: Dublin/Pleasanton to North Lathrop (25 daily round trips)
- Altamont Pass Tunnel/Alignment Improvements

#### **Mid-Term Improvements**

- Four additional ACE round trips between the San Joaquin Valley and San Jose via Altamont Pass (10 daily round trips weekdays)
- Newark to Alviso improvements
- Valley Link extended from North Lathrop to Stockton (30 daily round trips)

#### Longer-Term / Vision Improvements

- 15-minute to 30-minute frequency during peak periods
- Dedicated Track "Universal Corridor"

• One seat ride San Joaquin Valley - San Jose/Oakland/San Francisco/Peninsula

The proposed Project is an important component of the SJRRC's ACE*forward* and subsequent Valley Rail programs to address existing travel delays and unreliability and as an initial step in the implementation of the longer-term plans for an integrated and efficient ACE passenger rail network. As a component of this program, the proposed Project is covered under a 2014 Memorandum of Understanding between the SJRRC and CHSRA that created a partnership between the agencies to advance the program, and subsequent NEPA assignment by the FRA as noted herein.

# 2.3.2 California State Rail Plan

The objectives of the proposed Project align with the vision of the 2018 California State Rail Plan. The 2018 Rail Plan is a strategic plan with operating and capital investment strategies identified that would lead to a coordinated, statewide travel system. The 2040 Vision laid out in the 2018 Rail Plan includes several key passenger rail elements, as described below:

- Statewide System Passenger rail service will tie together urban, suburban, and rural areas of the state;
- Integrated Services Multimodal hubs will connect all levels of service with a common fare system, which allows trips to be made on a single ticket;
- Coordinated Schedules Services will be coordinated in a "Pulsed" schedule across the network to reduce wait times and allow direct transfers;
- Frequent Service Service frequency will make rail a timely option for travelers, meeting trip demands throughout the day; and
- Customer Focus Enhanced ticketing, scheduling, and passenger information will be supported by coordinated services.

The proposed Project advances many of these goals by eliminating the Interlock at the Stockton Diamond and allowing for uninterrupted flow of passenger rail trains through the Diamond. The proposed Project would result in improved reliability of travel time and transfers and passenger confidence.

#### 2.3.3 City of Stockton Plans

The City of Stockton's *Bicycle Master Plan* is part of the overall General Plan 2035 update. The City is currently made up of 100 miles of off-street bicycle trails and paths and on-street bicycle facilities. The vision of the Stockton *Bicycle Master Plan* is to:

"Implement a vibrant, safe, and supportive bicycle network that connects residents in every neighborhood with desirable places to ride for any trip purpose. The Bicycle Master Plan should be the catalyst for starting a cultural shift toward cycling in Stockton by effectively marketing cycling as a healthy, active transportation option and through funding supportive educational programs to reach people of all ages and abilities."

To implement the vision, the *Bicycle Master Plan* proposes a network of facilities that creates a citywide "Backbone Network" that only consists of low-stress ratings (LTS 1 or LTS 2). New corridor and intersection tools are incorporated into the Backbone network to create low-stress facilities.

The City of Stockton also received grant funding to develop a *Greater Downtown Active Transportation Plan* in 2017. The Plan was developed in order to address the City's need for transportation options other than driving as downtown continues to grow. The *Greater Downtown Active Transportation Plan* builds on the bicycle network in the 2017 Bicycle Network Master Plan, described above, and will identify and recommend future bicycle and pedestrian facility projects in the City's Greater Downtown. The Plan is intended to enhance safety for pedestrians, cyclists, and transit riders with improved access to transit, schools, work, and regional trails; create connections to and from other areas in the City; and support the revitalization of Stockton's core.

As per City of Stockton's Bicycle Master Plan (2017) and the General Plan 2040 (2018) several bicycle facilities are proposed in the project study area. Class IV separated bikeways are proposed on Charter Way and Weber Avenue within the study area and on Airport Way and California Street near the study area. Class II bicycle lanes are proposed on Hazelton Avenue within the study area and on Main and Market Streets just east of the study area.

The Stockton Diamond Grade Separation Project considers these plans for improved bicycle facilities, in particular along Hazelton Avenue which would be grade-separated from the UP Fresno Subdivision tracks as part of the proposed Project. The proposed Project's Hazelton Avenue underpass would accommodate the bicycle lanes planned by the City of Stockton.

### 2.3.4 Other Local and Regional Plans

# 2.3.4.1 San Joaquin Area Flood Control Agency Strategic Plan

The San Joaquin Area Flood Control Agency (SJAFCA) was formed for the purpose of addressing flood protection, with a mission to manage the region's flood risk. SJAFCA developed a Strategic Plan in 2019 to present its mission statement, goals, objectives, and priority actions.<sup>12</sup> The plan also provides policy guidelines to inform the agency's approach, decisions, investments, and actions as flood risk management programs develop within the region (SJAFCA 2019).

As part of meeting the expectations of the strategic plan, the SJAFCA identified the need to improve the Mormon Channel Bypass. In order to divert 1,200 cubic feet per second (cfs) from the upstream end of the Stockton Diverting Canal to the Mormon Channel, the agency intends to improve the channel and construct a control structure. It is expected that the project would result in a medium reduction of stage at Stockton Diverting Canal and Calaveras River:

- Up to 0.5 foot for a 200-year event, and
- Up to 1.2 feet at the Stockton Diverting Canal for a 200-year event with climate change assumptions.

With project implementation, there are opportunities to provide multi-benefits to recreation/open space. However, no benefits have been identified to ecosystem functions. A feasibility study is expected to be initiated in 2025 and be completed by the end of 2025. The initial scope of the feasibility study includes continuing the conceptual work to a feasibility level to determine the overall system impacts and extend of protection afforded. Construction of the project would not occur in the near-term. It is expected that it would be more than 5 years until the construction is initiated.

<sup>&</sup>lt;sup>12</sup> San Joaquin Area Flood Control Agency (SJAFA), *Draft Strategic Plan*, 2019, accessed online at: https://sjafca.com/pdf/StrategicPlan.pdf, November 2020.

# 2.3.4.2 San Joaquin Council of Governments Congested Corridors Plan

The Congested Corridors Plan was developed by SJCOG, Caltrans and other local agencies and was finalized in March 2020. The Congested Corridors Plan focuses on the highly congested corridors along I-205, I-5, SR 120 and SR 99, and was established to improve local, regional, and interregional circulation in San Joaquin County to serve both existing and projected (Year 2040) travel between California's Central Valley and San Francisco Bay Area. The Plan accounts for all modes of travel, including cars, trucks, transit, rail, pedestrians and bicyclists. The goal of the Congested Corridor Plan is to, "reduce traffic congestion and increase travel choices through a balanced set of transportation, environmental, and community access improvements." The proposed Project is consistent with the Congested Corridors Plan as it would improve circulation, congestion and delay at a highly trafficked location in San Joaquin County (the Stockton Diamond), and improve regional and interregional transportation efficiency.

#### 2.3.4.3 San Joaquin Council of Governments Regional Transportation Plan and Sustainable Communities Strategy

SJCOG and the Metropolitan Planning Organization for San Joaquin County, issued its *Regional Transportation Plan /Sustainable Communities Strategy* (RTP/SCS) in 2018. The RTP/SCS is a transportation investment strategy through 2042, which identifies transportation needs to keep pace with anticipated growth and development. The following are the overarching goals that guide the Plan:

- Enhance the Environment for Existing and Future Generations and Conserve Energy
- Maximize Mobility and Accessibility
- Increase Safety and Security
- Preserve the Efficiency of the Existing Transportation System
- Support Economic Vitality
- Promote Interagency Coordination and Public Participation for Transportation Decision-Making and Planning Efforts
- Maximize Cost-Effectiveness
- Improve the Quality of Life for Residents

#### 2.3.4.4 SJCOG Regional Congestion Management Program

The Regional Congestion Management Program is a mechanism to fulfill the SJCOG's requirements as a metropolitan area exceeding a population size of 200,000 people, under the Federal Congestion Management Process (CMP). Federal regulation defines the CMP as a systematic process that provides for safe and effective integrated management and operation of the multimodal transportation system. The process includes the following elements:

- Development of congestion management objectives;
- Establishment of measures of multimodal transportation system performance;
- Collection of data and system performance monitoring to define the extent and duration of congestion and determine the causes of congestion;
- Identification of congestion management strategies;
- Implementation activities, including identification of an implementation schedule and possible funding sources for each strategy; and
- Evaluation of the effectiveness of implemented strategies.

# 2.3.4.5 SJCOG Regional Transit Systems Plan

The SJCOG *Regional Transit Systems Plan* includes strategies to reduce congestion through a variety of mechanisms including, increased density, multimodal and commercial joint developments, transit expansions, and support for alternative modes of travel throughout San Joaquin County. The following are the goals of the Plan:

- Implement effective ridership programs countywide such as continuing work toward the implementation of San Joaquin County 511; incorporation of San Joaquin County transit routes into Google transit; and the addition of global positioning units on buses to enable real time transit information to be collected.
- Develop a transit system which addresses, to the greatest extent possible, the needs for air quality and congestion management.
- Provide a transit system serving county residents which is efficient and cost-effective.
- Provide an emphasis on the multimodal nature and intermodal opportunities in San Joaquin County.
- Explore the opportunities for extending services into additional travel markets.
- Provide a mechanism whereby service is responsive to local needs to enhance the opportunities for all county riders.

# 2.3.4.6 San Joaquin County Coordinated Transportation Plan

The *San Joaquin County Coordinated Transportation Plan* (SJCCTP) is a locally developed coordinated human service transportation plan, which identifies the transportation needs of individuals with disabilities, older adults, and people with low incomes. The SJCCTP provides strategies for local needs and prioritizes transportation services for funding and implementation. The SJCCTP was prepared by a work group comprised of representatives from various stakeholder groups from social service agencies, public agencies, and local jurisdictions.

# 2.3.4.7 San Joaquin Valley Regional Blueprint

Through executive orders issued by two presidents, the Federal Interagency Task Force was created to help coordinate federal efforts within the San Joaquin Valley region. The San Joaquin Valley Regional Blueprint provides an opportunity for San Joaquin Valley residents, businesses, government agencies, and organizations to collectively plan for the future of transportation and land use in the San Joaquin Valley in the midst of rapid population growth.

#### 2.4 Notice of Preparation

On August 19, 2020, SJRRC, CEQA Lead Agency, in cooperation with the CHSRA, NEPA Lead Agency under assignment by the FRA, officially launched the environmental process for the proposed Stockton Diamond Grade Separation Project with a Notice of Preparation (NOP) of an Environmental Impact Report (EIR) / Environmental Assessment (EA). The NOP was posted at the State Clearinghouse (SCH#2020080321) and circulated to public agencies and other interested parties in compliance with Section 15082(a) of the CEQA Guidelines and §771.111 of the Federal Highway Administration (FHWA) NEPA Guidelines. The NOP notified the public of the EIR/EA being prepared along with public scoping meeting information and how to provide comments on the project during the formal 45-day public comment period from August 19 to October 3, 2020.

#### 3. CONSULTATION AND PUBLIC OUTREACH

A letter regarding the proposed Project was sent to parties potentially interested in historic architectural resources on November 2, 2020. The recipients include such interested parties as local government planning departments, and/or historic preservation programs, historical societies, and museums, in compliance with consultation requirements of NHPA and its implementing regulations in 36 CFR 800. The letters were sent to: San Joaquin County Historical Society and Museum; City of Stockton Cultural Heritage Board; Haggin Museum; and the San Joaquin Genealogical Society. Follow-up communications were conducted on January 14, 2021. No responses were received. A copy of the correspondence is provided in Appendix B.

### 4. DESCRIPTION OF HISTORIC PROPERTIES, APPLICATION OF CRITERIA OF ADVERSE EFFECT, AND CONDITIONS PROPOSED

### 4.1 Methodology

This section assesses the effects of the proposed Project on the built historic properties within the APE. The assessment below identifies the effects as defined in 36 CFR 800.5(a)(2).

### 4.1.1 Criteria of Adverse Effect

The Criteria of Adverse Effect (36 CFR 800.5) were applied to the project actions that have the potential to affect historic properties within the APE. An "adverse effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the NRHP in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association."<sup>13</sup>

Application of the criteria of adverse effect is an assessment of an undertaking's changes to the character or use of a historic property and of how the undertaking will affect those features of a historic property that contribute to its eligibility for listing in the NRHP. Effects can be direct, indirect, and cumulative. Direct effects include such actions as physical destruction or damage, as well as those that may not physically impact the historic property but introduce visual or audible impacts that alter its character-defining features [36 CFR 800.5(a)(1)]. Indirect adverse effects include those that are later in time or farther removed in distance but are still reasonably foreseeable.

Table 2 lists examples of adverse effects, as provided in 36 CFR 800.5(a)(2). Of the seven typical effects, 36 CFR 800.5(a)(2)(vi) and (vii) are not applicable to this Project because this project would not result in the neglect of a historic property (vi); or in the transfer, lease, or sale of property out of federal ownership or control (vii).

ADV TO:	ERSE EFFECTS ON HISTORIC PROPERTIES DESCRIBED IN 36 CFR 800.5 INCLUDE, BUT ARE NOT LIMITED
(i)	Physical destruction of or damage to all or part of the property;
(ii)	Alteration of a property, including restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation, and provision of handicapped access, that is not consistent with the Secretary's standards for the treatment of historic properties (36 CFR part 68) and applicable guidelines;
(iii)	Removal of the property from its historic location;
(iv)	Change of the character of the property's use or of physical features within the property's setting that contributes to its historic significance;
(v)	Introduction of visual, atmospheric, or audible elements that diminish the integrity of the property's significant historic features;
(vi)	Neglect of a property which causes its deterioration, except where such neglect and deterioration are recognized qualities of a property of religious and cultural significance to an Indian tribe or Native Hawaiian organization; and

#### Table 2: Adverse Effects in 36 CFR 800.5(a)(2)

<sup>13</sup> 36 CFR 800.5, "Assessment of adverse effects," incorporating amendments effective August 5, 2004.

Adverse effects on historic properties described in 36 CFR	800.5 INCLUDE, BUT ARE NOT LIMITED
TO:	

(vii) Transfer, lease, or sale of property out of Federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property's historic significance.<sup>a</sup>

<sup>a</sup> 36 CFR 800.5, "Assessment of adverse effects," incorporating amendments effective August 5, 2004.

The assessment of adverse effects to historic properties conducted for the Stockton Diamon Grade Separation Project included review and incorporation of findings from the assessments of visual, noise, and vibration impacts as reported in the noise and vibration study conducted for this proposed Project. The adverse effects analysis for historic properties also took into account the FTA guidance manual regarding assessment of train noise and vibration effects.<sup>14</sup>

Construction and operational noise have the potential to cause adverse effects *only* for historic properties that have an inherent quiet quality that is part of their historic character and significance (e.g., churches, parks, or National Historic Landmarks with significant outdoor use). None of the historic properties addressed in this report is considered to have an inherent quiet quality. All of the historic properties are commercial and/or residential in nature and were constructed in an urban area adjacent to the nineteenth-century former Southern Pacific Railroad (now UP) corridor. Further, construction-period noise is considered temporary and as such is not considered an adverse effect to historic properties. Therefore, the proposed Project would result in no adverse effects on any historic property from any anticipated construction or operational noise (36 CFR 800.5[a][2][iv] and [v]). No further analysis is provided with respect to these types of adverse effects for the historic properties in the following section.

According to the FTA guidance manual, operational ground-borne vibration primarily causes human annoyance or interference with use of equipment sensitive to vibration. Damage to fragile historic buildings from vibration resulting from train operation is "unlikely except when the track is located very close to the structure."<sup>15</sup> All historic buildings analyzed herein are located a considerable distance (more than 165 feet) away from all tracks. Therefore, no further analysis is provided with respect to operational ground-borne vibration effects for the historic properties.

It is also rare for construction vibration to cause physical damage to buildings or structures, except in the case of fragile historic properties in close proximity to construction sources causing high levels of ground-borne vibration. Table 3 and Table 4 provide comparative vibration levels for construction equipment and potential damage to various types of buildings. Table 3 provides generalized information for "various types of construction equipment [that were] measured under a wide variety of construction activities" with an average of source levels reported. The FTA guidance goes on to state that although there is one vibration level shown "for each piece of equipment, there is considerable variation in reported ground vibration levels from construction activities. The data . . . provides a reasonable estimate for a wide range of soil conditions."<sup>16</sup>

<sup>&</sup>lt;sup>14</sup> Cross-Spectrum Acoustics, Inc, *Technical Memorandum, Noise and Vibration*, prepared for Stockton Diamond Grade Separation Project, November 9, 2020; Federal Transit Administration, *Transit Noise and Vibration Impact Assessment Manual*, FTA Report No. 0123 (Washington, DC: US Department of Transportation, FTA, Office of Planning and Environment, September 2018)

<sup>&</sup>lt;sup>15</sup> Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual, 126.

<sup>&</sup>lt;sup>16</sup> Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual, 184.

EQUIPMENT	PPV* AT 25 FEET (IN/SEC)	Approximate Lv† at 25 feet	
Pile driver (impact)	Upper range	1.518	112
	Typical	0.644	104
Pile driver (vibratory)	Upper range	0.734	105
	Typical	0.170	93
Clam shovel drop (slurry wall)	0.202	94	
Hydromill (slurry wall)	In soil	0.008	66
	In rock	0.017	75
Vibratory roller	0.210	94	
Hoe ram	0.089	87	
Large bulldozer	0.089	87	
Caisson drilling	0.089	87	
Loaded trucks	0.076	86	
Jackhammer	0.035	79	
Small bulldozer	0.003	58	

#### **Table 3: Vibration Source Levels for Construction Equipment**

#### Table 4: Construction Vibration Damage Criteria

BUILDING CATEGORY	PPV (IN/SEC)	Approximate Lv†
I. Reinforced-concrete, steel or timber (no plaster)	0.5	102
II. Engineered concrete and masonry (no plaster)	0.3	98
III. Nonengineered timber and masonry buildings	0.2	94
IV. Buildings extremely susceptible to vibration damage	0.12	90

Source: Federal Transit Administration, 2018

\* PPV in/sec = peak signal value of an oscillating vibration velocity waveform, expressed in inches per second.

<sup>t</sup>L<sub>v</sub> = RMS velocity in decibels (VdB) re 1 in/sec.

in/sec = inch(es) per second RMS = root-mean-square

PPV = peak particle velocity VdB = vibration velocity decibels

Comparing the typical source vibration levels shown in Table 3 with the construction vibration damage criteria in Table 4 demonstrates that the only typical construction methods that would exceed the damage criteria threshold for all building categories are impact pile driving and upperrange vibratory pile driving at a distance of 25 feet. All other typical equipment listed in Table 3 would produce, at a distance of 25 feet, vibration at levels below the damage criteria thresholds for all building categories, with a few exceptions—vibratory rollers and material dropped from a clam shovel (slurry wall) could exceed Category III and IV criteria, and the typical range of a vibratory pile driver at 25 feet could exceed Category IV criteria. Otherwise, most construction methods, even at 25 feet, would not exceed the damage criteria for even the most sensitive or fragile historic building.

The noise and vibration analysis prepared for this proposed Project concludes that impacts caused from project construction vibration may exceed the FTA recommended vibration thresholds for historic buildings and structures. This could occur through the use of impact pile driving within 75 feet of a fragile historic structure (Category IV) and/or other heavy construction, such as compactor, bulldozer, and vibratory roller, within 25 feet of a nonengineered timber or masonry historic structure (Category III). The built environment historic properties in the APE are all Category III or higher; there are no Category IV historic buildings or structures in the APE. Thus, while some project activities may exceed the FTA recommended vibration thresholds for historic buildings and structures, which could cause an adverse effect under 36 CFR 800.5(a)(2)(i), (ii) and (iii), impact pile driving for the project would occur 75 feet or more from historic properties, and the use of compactors, bulldozers, and vibratory rollers during construction would be at a distance of more than 25 feet from all historic buildings analyzed herein.<sup>17</sup> Therefore, no further analysis is provided with respect to construction ground-borne vibration effects for the historic properties in the APE.

#### 4.2 Built Historic Properties

The following section summarizes the finding of the evaluation efforts for the proposed Project. The APE includes 32 historic built resources that were evaluated for listing in the NRHP as part of this proposed Project. Five resources and one historic district are eligible for listing in the NRHP and are historic properties under Section 106. All properties were built for, and continued to be used for, commercial purposes. As summarized in Table 5, the Project would have no adverse effect on built historic properties within the APE.

The remainder of this section provides descriptions of each built historic property, including character-defining features, boundary, and summaries of their significance. The description is followed by an analysis of potential adverse effects that may be caused by construction and operation of the proposed Project. Representative photographs of the historic properties are also included for visual reference.

<sup>&</sup>lt;sup>17</sup> Personal communication with Mike Higgins, Senior Project Manager, and Angie Kung, Environmental Sciences Highway Section Manager, both of HDR, June 14, 2021.

Map Reference Number	APN	RESOURCE NAME	Address	Year Built	EFFECT Findings
n/a	n/a	Stockton Downtown Commercial Historic District	n/a	n/a	No Adverse Effect
3	151-190-001	Imperial Hotel	902 East Main Street	1896	No Adverse Effect
4	151-190-080	Imperial Garage n/a	20 South Aurora Street 30 South Aurora Street	ca. 1915 1918	No Adverse Effect
5	151-190-007	Hotel New York	34 South Aurora Street	1910	No Adverse Effect
6	151-190-060	n/a	915 East Market Street	ca. 1926	No Adverse Effect
7	151-220-020	Waldemar Apartments	920 East Market Street	1918	No Adverse Effect

Table 5: Summary of Historic Properties and Effects Finding

#### 4.2.1 Stockton Downtown Commercial Historic District

#### 4.2.1.1 Property Description

The APE intersects the Stockton Downtown Commercial Historic District. Comprised of 84 contributing buildings within its approximate 21 city-block boundary, only four legal parcels at the district's easternmost boundary are within the APE. A previous evaluation of the district concluded that it was eligible for listing in the NRHP. The present study updated previous evaluations of four of the district's contributing buildings located along South Aurora and East Market streets in the APE. According to the previous evaluation, the district is significant at the local level under NRHP Criterion A within the context of commercial development of Stockton during a period of significance 1880-1940. The boundary of the district was previously identified as generally extending east-west along Weber, Main, and Market streets between El Dorado and the Union Pacific Railroad. Although no specific character-defining features were identified in previous evaluation of the historic district, they would include the integrity of its contributing buildings and structures, including the four buildings in the APE, as well as the historic transportation grid. The historic district and the four contributors within the APE, described below, are historic properties under Section 106.

#### 4.2.1.2 Application of Criteria of Adverse Effect:

Project components proposed within or near the Stockton Downtown Commercial Historic District include construction of new tracks; at-grade rail crossings; removal of some existing tracks; the protection-in-place, relocation, and/or removal of various utilities; and temporary construction areas. The new and removed tracks and the crossings would be located outside the historic district boundary, and therefore, would not result in the removal, physical destruction, or damage to the historic district or any of its contributors (36 CFR 800.5[a][2][i], [ii], and [iii]).

Protection-in-place, relocation and/or removal of utilities, such as storm drains, underground water, sewer, and gas lines and overhead electrical lines and fiber optic cable, are proposed within the boundary of the historic district, but would not cause the removal, physical destruction, or damage to any of buildings or the historic transportation grid that contribute to the significance of

this district (36 CFR 800.5[a][2][i], [ii], and [iii]). All modifications to utilities would be conducted within the public right-of-way. Set in a dense urban setting, the streets within and adjacent to this historic district have already been altered by the construction and demolition of buildings, as well as construction of contemporary infrastructure such as light standards, mailboxes, signage, traffic and pedestrian light, parking meters, and sidewalk improvements (including sidewalk extensions, curb replacements, etc.). While portions of the street would be physically impacted by the relocation and/or removal of utilities, the historic street grid would be unchanged. Therefore, this relatively minor construction activity would not diminish the integrity of the district's or any of its contributor's significant historic features nor would they result in any adverse visual effects on any part of this historic district (36 CFR 800.5[a][2][iv] and [v]).

Temporary construction areas are proposed north and south of East Main and East Market streets, intersecting some of the district's contributing building. These areas would be used for staging or encroachment permits and temporary construction easements required to allow construction crews to enter public and private rights-of-way. No construction activity would be conducted within any historic property boundary of district contributors. Thus, these areas would not cause any adverse effect under 36 CFR 800.5[a][2][i], [ii], [iii], [iv] and [v]).

The proposed Project would not result in adverse effects to the historic district from the introduction of new visual elements. The new at-grade tracks and rail crossings at East Main and East Market streets would each be located east of and more than 130 feet away from the historic district boundary. The crossings would include the upgrading of railroad equipment, flashing light signals, gate arms, signing and pavement markings, as well as potential pedestrian upgrades such as ADA-compliant tactile walking surface indicators and streetlights. These types of railroad, roadway, and pedestrian features, and tracks would be located within, or immediately east of, the railroad right-of-way. While the new tracks and crossings would be visible from the eastern end of the district boundary, none of these project components, including the removal of extant tracks, would adversely alter the view or setting of the historic district or any of its contributors because they are consistent with historic-period and existing railroad infrastructure and would blend in with the setting, thus not diminishing the integrity of the district's or any of its contributor's significant historic features (36 CFR 800.5[a][2][iv] and [v]).

The proposed Project would not cause adverse effects from vibration and noise under 36 CFR 800.5(a)(2)(v). Technical analysis of potential vibration impacts indicates that the proposed Project would not generate sufficient construction or operational ground-borne vibration to modify any of the characteristics that qualify this historic property for inclusion in the NRHP. Furthermore, the proposed Project would not result in adverse effects to this historic property from any anticipated construction or operational noise (36 CFR 800.5[a][2][iv] and [v]) because the historic district is not considered noise sensitive.

The construction and operation of the proposed Project results in a finding of *No Adverse Effect* on the Stockton Downtown Commercial Historic District. See the APE map in Appendix A for the location of this historic property.

### 4.2.2 Imperial Hotel (Map Reference No. 3)

### 4.2.2.1 Property Description

The Imperial Hotel at 902 East Main Street is a one-story, Victorian Eclectic-style building constructed of brick. The building was formerly evaluated in 2000 and found to be eligible to the NRHP at the local level under NRHP Criterion A as a contributor to the Stockton Downtown Commercial Historic District. No character-defining features, period of significance, or boundary of this historic property were noted in the previous evaluation. The character-defining features identified for this property include, but are not limited to, its arched window and door openings, Corinthian columns, terra cotta window and door surrounds, brick work detailing, and corner quoining. The period of significance for this historic property is 1896, the year it was constructed, through 1940, the end of the historic district's period of significance. The historic property boundary of this building is its current legal parcel.



(Source: JRP Historical Consulting, LLC)

Figure 9: Imperial Hotel, Map Reference No. 3.

# 4.2.2.2 Application of Criteria of Adverse Effect:

The Project proposes to construct new tracks and an at-grade rail crossing, remove some existing tracks, and protect-in-place, relocate, and/or remove various utilities, near the Imperial Hotel. All of these project components would be located outside of the boundary of this historic property, and therefore, would not result in the removal, physical destruction, or damage to this historic building (36 CFR 800.5[a][2][i], [ii], and [iii]).

The proposed Project would not result in an adverse effect to this historic property from the introduction of new visual elements. The removal of tracks, new at-grade tracks, and rail crossing at East Main Street each would be more than 270 feet east of this building. The crossings would include the upgrading of railroad equipment, flashing light signals, gate arms, signing and pavement markings, as well as potential pedestrian upgrades such as ADA-compliant tactile walking surface indicators and streetlights. These types of railroad, roadway, and pedestrian features, and tracks would be located within, or immediately east of, the railroad right-of-way.

While the new tracks and crossing would be visible when looking west and northwest from this property, they would not adversely alter the view or setting of this historic property. This building was originally constructed adjacent to this nineteenth-century, at-grade railroad, and the introduction of additional at-grade tracks and crossing in the vicinity of this historic building would be consistent with historic-period and existing railroad infrastructure and would blend in with the setting, thus not diminishing the integrity of this historic building (36 CFR 800.5[a][2][iv] and [v]).

Protection-in-place, relocation and/or removal of utilities, such as storm drains, underground water, sewer, and gas lines and overhead electrical lines and fiber optic cable, may be required near this historic property. All modifications to utilities would be conducted within the public right-of-way, more than 90 feet northeast of the Imperial Hotel. This type of project construction activity would be relatively minor and would not adversely alter the view or setting of the historic building, which has already been altered by the construction and demolition of adjacent buildings, as well as construction of contemporary infrastructure. The integrity of the historic property would not be diminished in an adverse manner, thus, there would be no adverse effect from this type of construction activity on the Imperial Hotel (36 CFR 800.5[a][2][iv] and [v]).

The proposed Project would not cause adverse effects from vibration and noise under 36 CFR 800.5(a)(2)(v). Technical analysis of potential vibration impacts indicates that the proposed Project would not generate sufficient construction or operational ground-borne vibration to modify any of the characteristics that qualify this historic property for inclusion in the NRHP. Furthermore, the proposed Project would not result in adverse effects to this historic property from any anticipated construction or operational noise (36 CFR 800.5[a][2][iv] and [v]) because the historic building is not considered noise sensitive.

Lastly, a temporary construction area intersects the southernmost portion of this historic property's boundary. These areas would be used for staging or encroachment permits and temporary construction easements required to allow construction crews to enter public and private rights-of-way. No construction activity would be conducted within this temporary construction area. Thus, this project component would not cause any adverse effect under 36 CFR 800.5[a][2][i], [ii], [iii], [iv] and [v]).

The proposed Project results in a finding of *No Adverse Effect* on the Imperial Hotel. See the APE map in Appendix A for the location of this historic property.

# 4.2.3 Imperial Garage and 30 South Aurora Street (Map Reference No. 4)

# 4.2.3.1 Property Description

The Imperial Garage at 20 South Aurora Street and the similar, adjacent structure at 30 South Aurora Street are one-story Early Commercial buildings. Both rectangular buildings are of brick construction and have symmetrical facades with stepped parapets. The buildings were formerly evaluated in 2001 and found to be eligible to the NRHP at the local level under NRHP Criterion A as a contributor to the Stockton Downtown Commercial Historic District. No character-defining features, period of significance, or boundary of this historic property were noted in the previous evaluation. Character-defining features identified for this report include, but are not limited to, their symmetrical facades, stepped parapets, three bays, and decorative brickwork. The period of significance for these buildings is ca. 1915 and 1918, respectively, the years they were constructed,

through 1940, the end of the historic district's period of significance. Located on a single parcel, the historic property boundary for these buildings is their current legal parcel.



(Source: JRP Historical Consulting, LLC)

Figure 10: Imperial Garage and 30 South Aurora Street, Map Reference No. 4.

# 4.2.3.2 Application of Criteria of Adverse Effect:

The Project proposes to construct new tracks and an at-grade rail crossing, remove some existing tracks, and protect-in-place, relocate, and/or remove various utilities, near the Imperial Garage and the building at 30 South Aurora Street. All of these project components would be located outside of the boundary of this historic property. Therefore, the proposed Project would not result in the removal, physical destruction, or damage to this historic building (36 CFR 800.5[a][2][i], [ii], and [iii]).

The proposed Project would not result in an adverse effect to this historic property from the introduction of new visual elements. The track removal, construction of new at-grade tracks and new rail crossings at East Main and East Market streets would be more than 180 feet east of these buildings. The crossings would include the upgrading of railroad equipment, flashing light signals, gate arms, signing and pavement markings, as well as potential pedestrian upgrades such as ADAcompliant tactile walking surface indicators and streetlights. These types of railroad, roadway, and pedestrian features, and tracks would be located within, or immediately east of, the railroad rightof-way. The new tracks and crossings would only be visible when looking west from these buildings' rear (west) sides, however, they would not adversely alter the view or setting of this historic property. These buildings were originally constructed adjacent to this nineteenth-century, at-grade railroad. The introduction of additional at-grade tracks and crossings in the vicinity of these historic buildings would not adversely alter the view or setting of these historic buildings because they are consistent with historic-period and existing railroad infrastructure and would blend in with the setting. The integrity of the historic property would not be diminished in an adverse manner. Therefore, there would be no adverse effect from these project components on this historic property (36 CFR 800.5[a][2][iv] and [v]).

The protection-in-place, relocation and/or removal of utilities, such as storm drains, underground water, sewer, and gas lines and overhead electrical lines and fiber optic cable, may be required near this historic property. All modifications to utilities would be conducted within the public right-of-way, more than 115 feet north and southeast of these historic buildings. This type of project construction activity would be relatively minor and would not adversely alter the view or setting of the historic buildings, which have already been altered by the construction and demolition of adjacent buildings, as well as construction of contemporary infrastructure. The integrity of the historic property would not be diminished in an adverse manner, thus, there would be no adverse effect from this project component on the Imperial Garage and the building at 30 South Aurora Street (36 CFR 800.5[a][2][iv] and [v]).

The proposed Project would not cause adverse effects from vibration and noise under 36 CFR 800.5(a)(2)(v). Technical analysis of potential vibration impacts indicates that the proposed Project would not generate sufficient construction or operational ground-borne vibration to modify any of the characteristics that qualify this historic property for inclusion in the NRHP. Furthermore, the proposed Project would not result in adverse effects to this historic property from any anticipated construction or operational noise (36 CFR 800.5[a][2][iv] and [v]) because the historic building is not considered noise sensitive.

The proposed Project results in a finding of *No Adverse Effect* on the Imperial Garage and the building located at 30 South Aurora Street. See the APE map in Appendix A for the location of this historic property.

### 4.2.4 Hotel New York (Map Reference No. 5)

#### 4.2.4.1 Property Description

The Hotel New York at 34 South Aurora Street is a four-story brick building with stepped parapets and corbeled cornice. It has a modified first floor with stucco siding. Fenestration is generally symmetrical, with double-hung, wood-frame windows on the upper portion of each facade. The building was formerly evaluated in 2001 and found to be eligible to the NRHP at the local level under NRHP Criterion A as a contributor to the Stockton Downtown Commercial Historic District. No character-defining features, period of significance, or boundary of this historic property were noted in the previous evaluation. Character-defining features identified for this report include, but are not limited to, its brick construction, symmetrical fenestration on upper floors, parapeted roof with corbeled cornice, belt courses, window lintels and sills, and construction date plaque. The period of significance for this historic property is 1910, the year it was constructed, through 1940, the end of the historic district's period of significance. The historic property boundary is its current legal parcel.



Figure 11: New York Hotel, Map Reference No. 5.

(Source: JRP Historical Consulting, LLC)

# 4.2.4.2 Application of Criteria of Adverse Effect:

The Project proposes to construct new tracks and an at-grade rail crossing, remove some existing tracks, and protect-in-place, relocate, and/or remove various utilities, near the Hotel New York. All of these project components would be located outside of the boundary of this property, and thus would not result in the removal, physical destruction, or damage to this historic building (36 CFR 800.5[a][2][i], [ii], and [iii]).

The proposed Project would not result in adverse effects to this historic property from the introduction of new visual elements. The track removal, construction of new at-grade tracks and new rail crossing at East Market Street would be more than 275 feet east of this building. The crossing would include the upgrading of railroad equipment, flashing light signals, gate arms, signing and pavement markings, as well as potential pedestrian upgrades such as ADA-compliant tactile walking surface indicators and streetlights. These types of railroad, roadway, and pedestrian features, and tracks would be located within, or immediately east of, the railroad right-of-way. The new tracks and crossing would only be visible when looking east from the upper floors of this building's secondary (west) side and southeast from its main (south) façade; however, they would not adversely alter the view or setting of this historic property. This building was originally constructed adjacent to this nineteenth-century, at-grade railroad, and the introduction of additional at-grade tracks and crossing in the vicinity of this historic building would not adversely alter the view or setting of this historic building would not adversely alter the view or setting of this historic building would not adversely alter the view or setting of this historic building would not adversely alter the view or setting of the historic property because they are consistent with historic-period and existing railroad infrastructure and would blend in with the setting, thus not diminishing the integrity of the

historic property. Therefore, there would be no adverse effect from these project components on the Hotel New York (36 CFR 800.5[a][2][iv] and [v]).

The protection-in-place, relocation and/or removal of utilities, such as storm drains, underground water, sewer, and gas lines and overhead electrical lines and fiber optic cable, may be required near this historic property. All modifications to utilities would be conducted within the public right-of-way, more than 75 feet southeast of this historic building. This type of project construction activity would be relatively minor and would not adversely alter the view or setting of the historic building, which has already been modified by the construction and demolition of adjacent buildings, as well as construction of contemporary infrastructure. The integrity of the historic property would not be diminished, thus, there would be no adverse effect from this project component on the Hotel New York (36 CFR 800.5[a][2][iv] and [v]).

The proposed Project would not cause adverse effects from vibration and noise under 36 CFR 800.5(a)(2)(v). Technical analysis of potential vibration impacts indicates that the proposed Project would not generate sufficient construction or operational ground-borne vibration to modify any of the characteristics that qualify this historic property for inclusion in the NRHP. Furthermore, the proposed Project would not result in adverse effects to this historic property from any anticipated construction or operational noise (36 CFR 800.5[a][2][iv] and [v]) because the historic building is not considered noise sensitive.

Lastly, a temporary construction area intersects the southernmost portion of this historic property's boundary. These areas would be used for staging or encroachment permits and temporary construction easements required to allow construction crews to enter public and private rights-of-way. No construction activity would be conducted within this temporary construction area. Thus, this project component would not cause any adverse effect under 36 CFR 800.5[a][2][i], [ii], [iii], [iv] and [v]).

The proposed Project results in a finding of *No Adverse Effect* on the Hotel New York. See the APE map in Appendix A for the location of this historic property.

# 4.2.5 <u>915 East Market Street (Map Reference No. 6)</u>

#### 4.2.5.1 Property Description

The building at 915 East Market Street is a two-story brick structure with a hipped roof and parapets with corbeled cornice. The building was formerly evaluated in 2001 and found to be eligible to the NRHP at the local level under NRHP Criterion A as a contributor to the Stockton Downtown Commercial Historic District. No character-defining features, period of significance, or boundary of this historic property were noted in the previous evaluation. Character-defining features identified for this report include, but are not limited to, Flemish bond brick construction, brick parapet, and brick window surrounds that incorporate soldier and header courses. The period of significance for this historic property is ca. 1926, the year it was constructed, through 1940, the end of the historic district's period of significance. The historic property boundary is its current legal parcel.



(Source: JRP Historical Consulting, LLC)

Figure 12: 915 East Market Street, Map Reference No. 6.

# 4.2.5.2 Application of Criteria of Adverse Effect:

The Project proposes to construct new tracks and an at-grade rail crossing, remove some existing tracks, and protect-in-place, relocate, and/or remove various utilities, near the historic building at 915 East Market Street. All of these project components would be located outside of the boundary of this property, and thus would not result in the removal, physical destruction, or damage to this historic building (36 CFR 800.5[a][2][i], [ii], and [iii]).

The proposed Project would not result in adverse effects to this historic property from the introduction of new visual elements. The track removal, construction of new at-grade tracks and new rail crossing at East Market Street would be more than 200 feet east of this building. The crossing would include the upgrading of railroad equipment, flashing light signals, gate arms, signing and pavement markings, as well as potential pedestrian upgrades such as ADA-compliant tactile walking surface indicators and streetlights. These types of railroad, roadway, and pedestrian features, and tracks would be located within, or immediately east of, the railroad right-of-way. The new tracks and crossing would only be visible when looking east from the building's secondary (west) side and southeast from its main (south) façade; however, they would not adversely alter the view or setting of this historic property. This building was originally constructed adjacent to this nineteenth-century, at-grade railroad, and the introduction of additional at-grade tracks and crossing in the vicinity of this historic building would not adversely alter the view or setting of the historic property because they are consistent with historic-period and existing railroad infrastructure and would blend in with the setting. The integrity of the historic property would not be diminished, therefore, there would be no adverse effect from these project components on this historic property (36 CFR 800.5[a][2][iv] and [v]).

The protection-in-place, relocation and/or removal of utilities, such as storm drains, underground water, sewer, and gas lines and overhead electrical lines and fiber optic cable, may be required near this historic property. All modifications to utilities would be conducted within the public right-of-way, more than 40 feet southeast of this historic building. This type of project construction activity would be relatively minor and would not adversely alter the view or setting of the historic building, which has already been modified by the construction and demolition of adjacent buildings, as well as construction of contemporary infrastructure. The integrity of the historic property would not be diminished, thus, there would be no adverse effect from this project component on this historic property (36 CFR 800.5[a][2][iv] and [v])

The proposed Project would not cause adverse effects from vibration and noise under 36 CFR 800.5(a)(2)(v). Technical analysis of potential vibration impacts indicates that the proposed Project would not generate sufficient construction or operational ground-borne vibration to modify any of the characteristics that qualify this historic property for inclusion in the NRHP. Furthermore, the proposed Project would not result in adverse effects to this historic property from any anticipated construction or operational noise (36 CFR 800.5[a][2][iv] and [v]) because the historic building is not considered noise sensitive.

Lastly, a temporary construction area intersects the southernmost portion of this historic property's boundary. These areas would be used for staging or encroachment permits and temporary construction easements required to allow construction crews to enter public and private rights-of-way. No construction activity would be conducted within this temporary construction area. Thus, this project component would not cause any adverse effect under 36 CFR 800.5[a][2][i], [ii], [iii], [iv] and [v]).

The proposed Project results in a finding of *No Adverse Effect* on the historic building at 915 East Market Street. See the APE map in Appendix A for the location of this historic property.

# 4.2.6 <u>Waldemar Apartments (Map Reference No. 7)</u>

#### 4.2.6.1 Property Description

The Waldemar Apartments at 920 East Main Street is an early twentieth century, three-story, brick building with Classical details. It has a flat roof, symmetrical façade, corbeled parapet, diamond-patterned belt course; and double-hung wood windows. The building is eligible for the NRHR at the local level under NRHP Criterion C as a representative example of a multi-storied, masonry apartment building constructed in the early twentieth century. Its period of significance is 1918, the year it was constructed, and character-defining features consist of its scale and massing; corbeled parapet; diamond-patterned belt course; flat roof; symmetrical fenestration that appears to still contain one-over-one, double-hung wood sash windows with brick lentils and sills; belt course between first and second floors; Flemish-bond, multi-colored brick; and primary and secondary entrances. The boundary of the property is its current legal parcel.<sup>18</sup>

<sup>&</sup>lt;sup>18</sup> Architectural Resources Group, *Revised Draft Downtown Stockton Historic Resources Survey*, prepared for the City of Stockton, September 1, 2000, Appendix One.



Figure 13: Waldemar Apartments, Map Reference No. 7.

(Source: JRP Historical Consulting, LLC)

# 4.2.6.2 Application of Criteria of Adverse Effect:

The Project proposes to construct new tracks and an at-grade rail crossing, remove some existing tracks, and protect-in-place, relocate, and/or remove various utilities, near the Waldemar Apartments at 920 East Market Street. All of these project components would be located outside of the boundary of this property, and thus would not result in the removal, physical destruction, or damage to this historic building (36 CFR 800.5[a][2][i], [ii], and [iii]).

The proposed Project would not result in adverse effects to this historic property from the introduction of new visual elements. The track removal, construction of new at-grade tracks and new rail crossing at East Market Street would be more than 180 feet east of this building. The crossing would include the upgrading of railroad equipment, flashing light signals, gate arms, signing and pavement markings, as well as potential pedestrian upgrades such as ADA-compliant tactile walking surface indicators and streetlights. These types of railroad, roadway, and pedestrian features, and tracks would be located within, or immediately east of, the railroad right-of-way. The new tracks and crossing would only be visible when looking east from the building's secondary (west) side and northeast from its main (north) façade; however, they would not adversely alter the view or setting of this historic property. This building was originally constructed adjacent to this nineteenth-century, at-grade railroad, and the introduction of additional at-grade tracks and crossing in the vicinity of this historic building would not adversely alter the view or setting of the historic property because they are consistent with historic-period and existing railroad infrastructure and would blend in with the setting. The integrity of the historic property would not be diminished, therefore, there would be no adverse effect from these project components on this historic property (36 CFR 800.5[a][2][iv] and [v]).

The protection-in-place, relocation and/or removal of utilities, such as storm drains, underground water, sewer, and gas lines and overhead electrical lines and fiber optic cable, may be required near this historic property. All modifications to utilities would be conducted within the public right-of-way, approximately 20 feet or more northeast of this historic building. This type of project construction activity would be relatively minor and would not adversely alter the view or setting of the historic building, which has already been modified by the construction and demolition of adjacent buildings, as well as construction of contemporary infrastructure. The integrity of the historic property would not be diminished, thus, there would be no adverse effect from this project component on this historic property (36 CFR 800.5[a][2][iv] and [v])

The proposed Project would not cause adverse effects from vibration and noise under 36 CFR 800.5(a)(2)(v). Technical analysis of potential vibration impacts indicates that the proposed Project would not generate sufficient construction or operational ground-borne vibration to modify any of the characteristics that qualify this historic property for inclusion in the NRHP. Furthermore, the proposed Project would not result in adverse effects to this historic property from any anticipated construction or operational noise (36 CFR 800.5[a][2][iv] and [v]) because this historic building is not considered noise sensitive.

Lastly, a temporary construction area intersects the southernmost portion of this historic property's boundary. These areas would be used for staging or encroachment permits and temporary construction easements required to allow construction crews to enter public and private rights-of-way. No construction activity would be conducted within this temporary construction area. Thus, this project component would not cause any adverse effect under 36 CFR 800.5[a][2][i], [ii], [iii], [iv] and [v]).

The proposed Project results in a finding of *No Adverse Effect* on the Waldemar Apartments. See the APE map in Appendix A for the location of this historic property.

### 5. PREPARERS' QUALIFICATIONS

This study was conducted under the general direction of JRP Principal, Christopher McMorris (M.S., Historic Preservation, Columbia University). Mr. McMorris has more than 22 years of experience working as a consulting architectural historian on a wide variety of historical research and cultural resource management projects as a researcher, author, and project manager. Mr. McMorris meets and exceeds the Secretary of the Interior's Professional Qualification Standards under History and Architectural History (as defined in 36 CFR Part 61).

JRP Architectural Historian Toni Webb was the project manager/lead architectural historian for the project. Ms. Webb served as lead architectural historian and primary author of the FOE. Ms. Webb received a B.F.A. in Historic Preservation from the Savannah College of Art & Design and has over 21 years of experience in historic preservation and public history. Based on her level of experience and education, Ms. Webb meets and exceeds the Secretary of the Interior's Professional Qualification Standards under History and Architectural History.

#### 6. REFERENCES

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- Cross-Spectrum Acoustics, Inc. *Technical Memorandum, Noise and Vibration*. Prepared for Stockton Diamond Grade Separation Project. November 9, 2020;
- Department of Finance E-1 Population Estimate. Accessed at http://www.dof.ca.gov/Forecasting/Demographics/Estimates//E-1/.
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- U.S. Department of Transportation, FRA Safety Map. Accessed at https://fragis.fra.dot.gov/gisfrasafety/.
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Appendix A

Area of Potential Effects Map





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H-84



MAP CREATED ON: 2/12/2021



MAP CREATED ON: 2/12/2021


MAP CREATED ON: 2/12/2021

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Appendix **B** 

Correspondence

Project	Stockton Diamon Grade Separation Project
Subject	Communications with interested parties re: historic resources
Notes Prepared By	Toni Webb, JRP Historical Consulting, LLC

#### Notes:

Interested Party	Communication	Notes
	Date	
San Joaquin County Historical Society & Museum	October 29, 2020	Letter sent via US Mail. No
P. O. Box 30, Lodi, California 95241-0030		response received.
Phone: (209) 331-2055	January 14, 2021	Follow-up message sent via
Email: info@sanjoaquinhistory.org		email. No response received.
Haggin Museum	October 29, 2020	Letter sent via US Mail. No
1201 N. Pershing Ave.		response received.
Stockton, CA 95203-1699	January 1/ 2021	Follow-up message sent via
Phone: (209) 940-6300	January 14, 2021	email No response received
Email: info@hagginmuseum.org		
San Joaquin Genealogical Society	October 29, 2020	Letter sent via US Mail. No
P.O. Box 690243		response received.
Stockton, California 95269-0243	January 14, 2021	Follow-up message sent via
Email: AskUs@sjgensoc.org	, ,	email. No response received.
City of Stockton Cultural Heritage Board	October 29, 2020	Letter sent via US Mail. No
c/o Community Development Department		response received.
345 North El Dorado Street	January 1/ 2021	No follow-up message sent
Stockton, CA 95202-1997	January 14, 2021	hecause interested party has no
Phone: (209) 937-8444		listed email.



Chair, **Christina Fugazi**, City of Stockton Vice-Chair, **Leo Zuber**, City of Ripon Commissioner, **Debby Moorhead**, City of Manteca Commissioner, **Doug Kuehne**, City of Lodi

Executive Director, Stacey Mortensen

October 29, 2020

**RE: Stockton Diamond Project** 

To Whom It May Concern:

The San Joaquin Regional Rail Commission (SJRRC) and California High Speed Rail Authority (CHSRA) propose to replace an at-grade crossing of the Union Pacific Railroad (UPRR) and Burlington Northern & Santa Fe Railway Company (BNSF) rail lines with a railroad grade separation. Rail-over-rail grade separation is a method of aligning a junction of two or more at-grade rail lines at different heights (grades) so that they will not disrupt the traffic flow on each other's transit routes when they converge at the junction point. Grade separations generally allow rail to move freely, with fewer interruptions, and at higher overall speeds. In addition, reducing the complexity of traffic movements at a junction between at-grade rail lines—coupled with vehicular, bicycle, and pedestrian traffic—reduces the potential for rail, vehicle, and bicycle/pedestrian conflicts. The "Stockton Diamond," where the UPRR and BNSF tracks converge and cross one another at grade, is located in the City of Stockton. The general project limit extends southward from Weber Street to the UPRR Stockton Yard, and from Stanislaus Street eastward to Pilgrim Street. See the enclosed map.

JRP Historical Consulting, LLC (JRP) has been retained to conduct a study to survey and evaluate historic-era buildings and structures that may be affected by the proposed project for their eligibility to be listed in the National Register of Historic Places and/or the California Register of Historical Resources. JRP's study will be prepared to support the project's environmental compliance under the National Environmental Policy Act (NEPA), along with its compliance under Section 106 of the National Historic Preservation Act and its implementing regulations in Title 36 Code of Federal Regulations Part 800 (36 CFR 800). JRP's study will also be prepared for project compliance under the and California Environmental Quality Act (CEQA), as per CEQA Guidelines Section 15064.5. CHSRA is lead NEPA agency, and SJRRC is the lead CEQA agency.

If you or your organization has any information or concerns regarding historic resources in the area that could be affected by this project, please respond via email to JRP Architectural Historian, Toni Webb, at <u>twebb@jrphistorical.com</u>, or in writing to her at JRP Historical Consulting, LLC, 2850 Spafford Street, Davis, CA 95618, within the next thirty (30) days. Please note, this is not a request for research, just for information. Thank you for any assistance you can provide.

Sincerely,

Kevin Sheridan Director of Capital Projects



#### Enclosures: Project Area Map





#### **List of Recipients**

San Joaquin County Historical Society and Museum P. O. Box 30, Lodi, California 95241-0030 Phone: (209) 331-2055 Email: info@sanjoaquinhistory.org

City of Stockton Cultural Heritage Board c/o Community Development Department 345 North El Dorado Street Stockton, CA 95202-1997 Telephone: (209) 937-8444

Haggin Museum 1201 N. Pershing Ave. Stockton, CA 95203-1699 Phone: (209) 940-6300 Email: info@hagginmuseum.org

San Joaquin Genealogical Society P.O. Box 690243 Stockton, California 95269-0243 Email: <u>AskUs@sjgensoc.org</u>



#### Toni Webb

From:	Toni Webb
Sent:	Thursday, January 14, 2021 8:21 AM
То:	info@hagginmuseum.org
Subject:	Stockton Diamond Grade Separation Project
Attachments:	Signed Letter to Interested Parties.pdf

This email serves as a follow-up to a letter (see attachment) sent via US Postal Service by the San Joaquin Regional Rail Commission to your organization on October 29, 2020 regarding historic resources that may be located within the vicinity of the Stockton Diamon Grade Separation Project. This communication is to confirm that your organization received that letter and to inquire if you have any information or concerns about historic resources in the project area. If you do have any questions or concerns, please reply to this email or contact me via phone or in writing (see contact information below) as soon as possible.

Thank you,

Toni Webb | Architectural Historian 530.757.2521 ext. 115



Our office is working remotely until further notice. The best way to reach me is by email or voicemail at the number and extension listed. I will get back to you as soon as I can.

#### Toni Webb

From:	Toni Webb
Sent:	Thursday, January 14, 2021 8:22 AM
То:	AskUs@sjgensoc.org
Subject:	Stockton Diamond Grade Separation Project
Attachments:	Signed Letter to Interested Parties.pdf

This email serves as a follow-up to a letter (see attachment) sent via US Postal Service by the San Joaquin Regional Rail Commission to your organization on October 29, 2020 regarding historic resources that may be located within the vicinity of the Stockton Diamon Grade Separation Project. This communication is to confirm that your organization received that letter and to inquire if you have any information or concerns about historic resources in the project area. If you do have any questions or concerns, please reply to this email or contact me via phone or in writing (see contact information below) as soon as possible.

Thank you,

Toni Webb | Architectural Historian 530.757.2521 ext. 115



Our office is working remotely until further notice. The best way to reach me is by email or voicemail at the number and extension listed. I will get back to you as soon as I can.

#### Toni Webb

From:	Toni Webb
Sent:	Thursday, January 14, 2021 8:19 AM
То:	info@sanjoaquinhistory.org
Subject:	Stockton Diamond Grade Separation Project
Attachments:	Signed Letter to Interested Parties.pdf

This email serves as a follow-up to a letter (see attachment) sent via US Postal Service by the San Joaquin Regional Rail Commission to your organization on October 29, 2020 regarding historic resources that may be located within the vicinity of the Stockton Diamon Grade Separation Project. This communication is to confirm that your organization received that letter and to inquire if you have any information or concerns about historic resources in the project area. If you do have any questions or concerns, please reply to this email or contact me via phone or in writing (see contact information below) as soon as possible.

Thank you,

Toni Webb | Architectural Historian 530.757.2521 ext. 115



Our office is working remotely until further notice. The best way to reach me is by email or voicemail at the number and extension listed. I will get back to you as soon as I can.



# Appendix I. Paleontological Technical Study



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# PALEONTOLOGICAL TECHNICAL STUDY **Stockton Diamond Grade Separation Project** City of Stockton, San Joaquin County, CA Prepared for: HDR 100 Pringle Ave., Suite 400 Walnut Creek, CA 94596 Prepared by: Paleo Solutions, Inc. 911 S. Primrose Ave., Unit N Monrovia, CA 91016 Courtney Richards, M.S. - Principal Investigator Vincent Zhao, M.S. - Report Author PSI Report: CA20SanJoaquinHDR01R January 21, 2021



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B.A.	Bachelor of Arts
BLM	Bureau of Land Management
BNSF	BNSF Railway
B.S.	Bachelor of Science
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CHSRA	California High Speed Rail Authority
FRA	Federal Railroad Administration
GIS	Geographic Information System
M.S.	Master of Science
NEPA	National Environmental Policy Act
PFYC	Potential Fossil Yield Classification
PRMP	Paleontological Resources Monitoring Plan
Project	Stockton Diamond Grade Separation Project
SJRRC	San Joaquin Regional Rail Commission
UCMP	University of California Museum of Paleontology
UPRR	Union Pacific Railroad
USC	United States Code

#### Abbreviations, Acronyms, and Initialisms



# **Executive Summary**

The San Joaquin Regional Rail Commission (SJRRC), on behalf of the California High Speed Rail Authority (CHSRA) under assignment by the Federal Railroad Administration (FRA), is proposing the Stockton Diamond Grade Separation Project (proposed Project) to improve operational efficiency at the at-grade crossing of the Union Pacific Railroad (UPRR) and BNSF Railway (BNSF) freight lines (Stockton Diamond or Diamond) in the City of Stockton, San Joaquin County, California.

CHSRA is the federal environmental lead agency under the National Environmental Policy Act (NEPA) and SJRRC is the state environmental lead agency under the California Environmental Quality Act (CEQA).

The purpose of this report is to identify and evaluate potential impacts on paleontological resources resulting from the proposed Project. All work was conducted in compliance with applicable state and local regulations. The paleontological study for the proposed Project included review of geologic maps, literature, museum records, and online databases. A pedestrian survey was also conducted on October 1, 2020, to review the proposed Project area site geology and check for the presence of any surficial fossils. The results of the review and site visit were used to complete paleontological sensitivity and impact analyses.

The proposed Project area is mapped entirely as early Holocene- to late Pleistocene-age Modesto Formation but no native, undisturbed exposures were observed during the pedestrian survey. Disturbed silty sand to coarse silty sands was observed. While not mapped, arial photographs indicate recent artificial fill from previous construction is present. Additionally, the preliminary geotechnical memorandum prepared for the proposed Project (Kleinfelder 2020) indicates that artificial fill is present starting at the ground surface and extending to depths of 2 to 15 feet in the vicinity of the proposed Project. The pedestrian survey noted that the railroad was covered by imported gravel while most of the survey area was paved and developed. Activities within the proposed Project area may potentially result in significant impacts on paleontological resources where native sediments of the early Holocene- to late Pleistocene-age Modesto Formation are encountered during excavations.

Due to the potential for impacts on paleontological resources in the proposed Project area, preparation and implementation of a Paleontological Resources Monitoring Plan (PRMP) is recommended. The PRMP should include provisions for periodic spot checks during excavations to check for the presence of Holocene-to late Pleistocene-age Modesto Formation, and full-time monitoring should be implemented if the Modesto Formation is observed. In the event of unanticipated paleontological resource discoveries during proposed Project-related activities, work in the immediate vicinity of the discovery should be halted until it can be evaluated by a qualified paleontologist.



# 1.0 Introduction

The purpose of this study is to identify and evaluate potential impacts on paleontological resources resulting from the Stockton Diamond Grade Separation Project. SJRRC and CHSRA require this document to fulfill their responsibilities as the lead agencies under CEQA and NEPA, respectively. All work was conducted in compliance with applicable state and local regulations.

#### 1.1 Project Purpose and Need

The purpose of the proposed Project is to provide grade separation at the current at-grade crossing of UPRR and BNSF rail lines. Grade separations allow for trains to move freely with fewer interruptions at higher overall speeds. Reducing the complexity of traffic movements at the Stockton Diamond reduces the potential for rail, vehicle, and bicycle/pedestrian conflicts in the vicinity of the crossing.

Substantial freight movements between the Port of Stockton and points east, north, and south must pass through the Stockton Diamond. The at-grade crossing is an operational constraint that results in delays to the regional rail network where these two heavily traveled rail lines intersect. Passenger rail services also pass through the Stockton Diamond using both the UPRR and BNSF tracks. The proposed Project is critical to the expansion of intercity and commuter rail service between the San Joaquin Valley and both Sacramento and the San Francisco Bay Area.

#### 1.2 Project Description and Location

The proposed Project is located in the City of Stockton in San Joaquin County, California (Figure 1 and 2). The grade separation would use a flyover to elevate the UPRR rail lines over the BNSF tracks with the BNSF tracks staying at current grade. The proposed UPRR flyover alignment would be east of the existing tracks to minimize impact on rail operations. The elevated alignment will span from Lafayette Street in the north to Charter Way in the south. New at-grade road crossings would be constructed east of the existing track crossings at Main, Market, Lafayette, Hazelton, and Scotts Streets.





Figure 1. Project location map.





Figure 2. Project overview ma



# 2.0 Definition and Significance of Paleontological Resources

As defined by Murphey and Daitch (2007):

"Paleontology is a multidisciplinary science that combines elements of geology, biology, chemistry, and physics in an effort to understand the history of life on earth. Paleontological resources, or fossils, are the remains, imprints, or traces of once-living organisms preserved in rocks and sediments. These include mineralized, partially mineralized, or unmineralized bones and teeth, soft tissues, shells, wood, leaf impressions, footprints, burrows, and microscopic remains. Paleontological resources include not only fossils themselves, but also the associated rocks or organic matter and the physical characteristics of the fossils' associated sedimentary matrix.

The fossil record is the only evidence that life on earth has existed for more than 3.6 billion years. Fossils are considered non-renewable resources because the organisms they represent no longer exist. Thus, once destroyed, a fossil can never be replaced. Fossils are important scientific and educational resources because they are used to:

- Study the phylogenetic relationships amongst extinct organisms, as well as their relationships to modern groups;
- Elucidate the taphonomic, behavioral, temporal, and diagenetic pathways responsible for fossil preservation, including the biases inherent in the fossil record;
- Reconstruct ancient environments, climate change, and paleoecological relationships;
- Provide a measure of relative geologic dating that forms the basis for biochronology and biostratigraphy, and which is an independent and corroborating line of evidence for isotopic dating;
- Study the geographic distribution of organisms and tectonic movements of land masses and ocean basins through time;
- Study patterns and processes of evolution, extinction, and speciation; and
- Identify past and potential future human-caused effects to global environments and climates."

Fossil resources vary widely in their relative abundance and distribution and not all are regarded as significant. According to Bureau of Land Management (BLM) Instructional Memorandum 2009-2011, a "Significant Paleontological Resource" is defined as:

"Any paleontological resource that is considered to be of scientific interest, including most vertebrate fossil remains and traces, and certain rare or unusual invertebrate and plant fossils. A significant paleontological resource is considered to be of scientific interest if it is a rare or previously unknown species, it is of high quality and well-preserved, it preserves a previously unknown anatomical or other characteristic, provides new information about the history of life on earth, or has an identified educational or recreational value. Paleontological resources that may be considered not to have scientific significance include those that lack provenience or context, lack physical integrity due to decay or natural erosion, or that are overly redundant or are otherwise not useful for research. Vertebrate fossil remains and traces include bone, scales, scutes, skin impressions, burrows, tracks, tail drag marks, vertebrate coprolites (feces), gastroliths (stomach stones), or other physical evidence of past vertebrate life or activities" (BLM 2008).



Vertebrate fossils, whether preserved remains or track ways, are classified as significant by most state and federal agencies and professional groups and are specifically protected under the California Public Resources Code. In some cases, fossils of plants or invertebrate animals are also considered significant and can provide important information about ancient local environments.

The full significance of fossil specimens or fossil assemblages cannot be accurately predicted before they are collected and, in many cases, prepared in a laboratory and compared with previously collected fossils. Pre-construction assessment of significance associated with an area or formation must be made based on previous finds, characteristics of the sediments, and other methods that can be used to determine paleoenvironmental and taphonomic conditions.

# 3.0 Laws, Ordinances, Regulations, and Standards

This section presents the regulatory requirements pertaining to paleontological resources that apply to the proposed Project.

#### 3.1 Federal Regulatory Setting

An evaluation of potential impacts on paleontological resources may be appropriate and/or required if a project is wholly or partially financed using federal funding, sited on federal lands, involves a federal permit, includes a perceived federal impact, and/or federal laws and standards apply. The management and preservation of paleontological resources on public and federal lands are prescribed under various laws, regulations, and guidelines.

#### 3.1.1 National Environmental Policy Act (16 USC Section 431 et seq.)

NEPA, as amended, requires analysis of potential environmental impacts on important historic, cultural, and natural aspects of our national heritage (United States Code [USC], Section 431 et seq.; 40 Code of Federal Regulations [CFR], Section 1502.25). NEPA directs federal agencies to use all practicable means to "Preserve important historic, cultural, and natural aspects of our national heritage" (Section 101(b) (4)). Regulations for implementing the procedural provisions of NEPA are found in 40 CFR 1500 1508.

#### 3.2 State Regulatory Setting

#### 3.2.1 California Environmental Quality Act

The procedures, types of activities, persons, and public agencies required to comply with CEQA are defined in the Guidelines for Implementation of CEQA (State CEQA Guidelines), as amended on March 18, 2010 (Title 14, Section 15000 et seq. of the California Code of Regulations), and further amended January 4, 2013, and December 28, 2018. One of the questions listed in the CEQA Environmental Checklist is: "Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?" (State CEQA Guidelines Appendix G, Section VII, Part F).

#### 3.2.2 State of California Public Resources Code

The State of California Public Resources Code (Chapter 1.7), Sections 5097 and 30244, includes additional state level requirements for the assessment and management of paleontological resources. These statutes require reasonable mitigation of adverse impacts on paleontological resources resulting from development on state lands, and define the excavation, destruction, or removal of paleontological "sites" or "features" from public lands without the express permission of the jurisdictional agency as a misdemeanor. As used in Section 5097, "state lands" refers to lands owned by, or under the jurisdiction of, the state or any state agency.



"Public lands" refers to lands owned by, or under the jurisdiction of, the state, or any city, county, district, authority, or public corporation, or any agency thereof.

#### 3.3 Local Regulatory Setting

#### 3.3.1 San Joaquin County

The San Joaquin County General Plan (2016) does not have any goal or policy regarding paleontological resources.

#### 3.3.2 City of Stockton

The City of Stockton General Plan (2018) does not have an explicit goal or policy regarding paleontological resources but goal LU-5 regards protected resources and it aims to protect, maintain, and restore natural and cultural resources. Policy LU-5.2 protects natural resource areas, fish and wildlife habitat, scenic areas, open space areas, agricultural lands, parks, and other cultural/historic resources from encroachment or destruction by incompatible development. Policy LU-5.2 has two actions that involve paleontology. Action LU5.2D requires that, prior to project approval, a qualified archaeologist or paleontologist (1) conduct a record search at an appropriate historical or archaeological repository, (2) conduct field surveys where appropriate, (3) prepare technical reports, where appropriate, meeting appropriate standards, and (4) prepare a treatment plan in accordance with appropriate standards when development cannot avoid an archaeological or paleontological deposit. Action LU-5.2G requires compliance with appropriate state and federal standards to evaluate and mitigate impacts on cultural resources, including tribal, historic, archaeological, and paleontological resources.

# 4.0 Methods

The paleontological study for the proposed Project included reviews of geologic maps, literature, and online databases. The geology underlying the proposed Project area was reviewed, as well as any geologic units occurring within a half-mile radius. A paleontological pedestrian survey was conducted on October 1, 2020. The results of the reviews and pedestrian survey were used to complete a paleontological sensitivity analysis, which also used the BLM Potential Fossil Yield Classification (PFYC) system, and an impact analysis.

Vincent Zhao, M.S., co-authored this report with Courtney Richards, M.S., and Elisa Barrios, B.S., prepared the GIS maps. Copies of this report will be submitted to HDR, SJRRC, and CHSRA. Paleo Solutions, Inc. will retain an archival copy of all project information.

# 5.0 Analysis of Existing Data

The proposed Project is located within the Great Valley Geomorphic Province. The Great Valley Geomorphic Province is trough bounded by the Sierra Nevada mountains to the east and by the Coast Ranges to the west. This Province has experienced near continuous sediment deposition since the Jurassic and is now characterized by an alluvial plain (Norris and Webb 1990).

#### 5.1 Geologic Context

Based on a review of geologic mapping by Wagner et al. (1991), the proposed Project area is entirely underlain by early Holocene- to late Pleistocene-age Modesto Formation. While not mapped within the proposed Project area, aerial photographs also indicate that recent artificial fill related to previous construction is present. Therefore, artificial fill is also included in this analysis.



#### 5.1.1 Artificial Fill

Artificial fill consists of recent deposits of previously disturbed sediments emplaced by construction operations and is found in areas where recent construction has taken place. The color is highly variable, and sediments are mottled in appearance. These sediments are not mapped within the boundaries of the proposed Project area but are likely to be encountered within previously disturbed portions of the proposed Project area. Additionally, the preliminary geotechnical memorandum prepared for the proposed Project (Kleinfelder 2020) indicates that artificial fill is present starting at the surface and extending to depths of 2 to 15 feet in the vicinity of the proposed Project.

#### 5.1.2 Modesto Formation

The early Holocene- to late Pleistocene-age Modesto Formation has its type section in Stanislaus County, California, within the Ceres 7.5-minute quadrangle. It is exposed along the Tuolumne River in eastern Modesto, as well as east of Modesto and Turlock almost to the San Joaquin River (Davis and Hall 1959). The Modesto Formation was deposited in the San Joaquin Valley during the last major series of depositional events during the Pleistocene. It was deposited by the San Joaquin River as a series of alluvial fans of the San Joaquin River consisting of arkosic sand, silt, and clay (Marchand and Allwardt 1981). The Modesto Formation can be divided into upper and lower members. The upper member ranges in age from 26 to 9 thousand years (ka) and consists of unconsolidated coarse sand and silt. The lower member ranges in age from 73 to 29 ka and consists of consolidated, well-sorted silt and fine-grained sand, silty sand, and sandy silt (Atwater 1982; Marchand and Allwardt 1981).

#### 5.2 Paleontological Resources

Paleontological literature reviews, a University of California Museum of Paleontology (UCMP) online paleontological database search, and a UCMP record search were conducted. While there are no localities within the proposed Project area, the results indicate that there are three localities within the vicinity of the proposed Project area (Holroyd 2020). UCMP localities V2016003, V2016004, and V2016005 are reported from the Modesto Formation in San Joaquin County, which were recorded during construction of the South Stockton Six-Lane Project near the intersection of Highway 99 and Mariposa Road (Holroyd 2020; UCMP 2020). A list of specimens recovered from these localities is not provided in the UCMP database at this time, but Holroyd (2020) indicated that they include a camelid maxilla, the lower jaw of a bison, and other less diagnostic mammal postcranial bones. These finds ranged in depth from 11.5 to 26 feet below the surface and 8 to 16.5 feet above contact with Holocene-age alluvium of the Modesto Formation.

The UCMP database also contains records of additional localities from the Modesto Formation within the Central Valley that produced scientifically significant vertebrate fossils, including ground sloth (*Megalonyx jeffersoni*), mammoth (*Mammuthus columbi*), horse (*Equus sp.*), camel (*Camelops sp.*), bison (*Bison latifrons*), rodents, reptiles, and plants (UCMP 2020). Additionally, recent basin excavations into the Modesto Formation paleosol and overbank deposits at the Le Grand Road overpass in Merced County resulted in the recovery of 1,667 Pleistocene mammal, bird, reptile, and fish fossils (Gust et al. 2012), which have added greatly to the fossil record of this geologic unit.





Figure 3. Project geology map.



# 6.0 Field Survey

Cross qualified archaeologist/paleontologist Brooke Hambley, B.A., conducted a field survey on October 1, 2020. The field visit consisted of a pedestrian survey along the roads and alignment of the proposed Project area from Weber Avenue to 4th Street. Some northern portions of the railroad alignment were not walkable due to the narrow right-of-way (Figure 4). The northern half of the proposed Project area survey was conducted via street access while the southern half was along the track alignment.

No undisturbed native sediment was observed. Most of the alignment has been paved and developed with much of the railway alignment covered with imported gravel (Figures 5 and 6). Disturbed silty sands were observed where foot traffic exposed the underlying sediment, primarily between Worth Street and Charter Way (Figure 7). At Main Street, an electrical box has some disturbed coarse silty sands (Figure 8).

No paleontological resources where observed.



Figure 4. Narrow right-of-way along the tracks near South Pilgrim Street, view southwest.





Figure 5. Typical disturbance along the right-of-way at East Hazelton Avenue, view northwest.



Figure 6. Typical disturbance along the railroad with some exposed disturbed sediment at East Weber Avenue, view southeast.





Figure 7. Exposed disturbed sediment from area cleared of gravel along the tracks, view northwest.



Figure 8. Disturbed coarse silty sand by electrical box with some exposed disturbed sediment along the tracks at East Main Street, view northwest.



# 7.0 Sensitivity and Impact Analysis

Based on the results of the geologic map review, literature review, online database review, museum record search, and field survey, the paleontological sensitivity of the geologic units within the proposed Project area were ranked and an impact analysis was performed.

#### 7.1 Sensitivity Analysis

Paleontological sensitivity rankings were assigned using the BLM PFYC system, which is intended to aid in predicting, assessing, and mitigating paleontological resources.

#### 7.1.1 Criteria for Evaluating Paleontological Potential

The PFYC system was developed by BLM (BLM 2016). Because of its demonstrated usefulness as a resource management tool, PFYC has been used for many years for projects across the country, regardless of land ownership. It is a predictive resource management tool that classifies geologic units on their likelihood to contain paleontological resources on a scale of 1 (very low potential) to 5 (very high potential). The PFYC ranking system is summarized in Table 1.

BLM PFYC Designation	Assignment Criteria Guidelines and Management Summary (PFYC System)
	Geologic units are not likely to contain recognizable paleontological resources.
1 = Very Low	units.
i otentiai	Units are Precambrian in age.
	Management concern is usually negligible, and impact mitigation is unnecessary except in rare or isolated circumstances.
	Geologic units are not likely to contain paleontological resources.
	Field surveys have verified that significant paleontological resources are not present or are very rare.
	Units are generally younger than 10,000 years before present.
2 = Low Potential	Recent eolian deposits.
	Sediments exhibit significant physical and chemical changes (i.e., diagenetic
	alteration) that make fossil preservation unlikely.
	Management concern is generally low, and impact mitigation is usually unnecessary
	except in occasional or isolated circumstances.
	Sedimentary geologic units where fossil content varies in significance, abundance, and predictable occurrence.
	Marine in origin with sporadic known occurrences of paleontological resources.
	Paleontological resources may occur intermittently, but these occurrences are widely scattered.
3 = Moderate Potential	The potential for authorized land use to impact a significant paleontological resource is known to be low-to-moderate.
	Management concerns are moderate. Management options could include record
	searches, pre-disturbance surveys, monitoring, mitigation, or avoidance.
	Opportunities may exist for hobby collecting. Surface-disturbing activities may
	require sufficient assessment to determine whether significant paleontological
	resources occur in the area of a proposed action and whether the action could
	affect the paleontological resources.

Table 1. Potential Fossil Yield Classification (BLM 2016)



BLM PFYC		
Designation	Assignment Criteria Guidelines and Management Summary (PFYC System)	
-		
	Geologic units that are known to contain a high occurrence of paleontological	
	resources.	
	Significant paleontological resources have been documented but may vary in	
	occurrence and predictability.	
	Surface-disturbing activities may adversely affect paleontological resources.	
4 = High Potential	Rare or uncommon fossils, including nonvertebrate (such as soft body	
	preservation) or unusual plant fossils, may be present.	
	Illegal collecting activities may impact some areas.	
	Management concern is moderate to high depending on the proposed action. A	
	field survey by a qualified paleontologist is often needed to assess local conditions.	
	On-site monitoring or spot-checking may be necessary during land disturbing	
	activities. Avoidance of known paleontological resources may be necessary.	
	Highly fossiliferous geologic units that consistently and predictably produce	
	significant paleontological resources.	
	Significant paleontological resources have been documented and occur	
	consistently.	
	Paleontological resources are highly susceptible to adverse impacts from surface	
5 = Very High	disturbing activities.	
Potential	Unit is frequently the focus of illegal collecting activities.	
	Management concern is high to very high. A field survey by a qualified	
	paleontologist is almost always needed and on-site monitoring may be necessary	
	during land use activities. Avoidance or resource preservation through controlled	
	access, designated of areas of avoidance, or special management designations	
	should be considered.	
	Geologic units that cannot receive an informed PEVC assignment	
	Geological units that earlief features or preservational conditions that suggest	
	significant paleontological resources could be present but little information about	
	the actual paleontological resources of the upit or area is upknown	
	Coologia units represented on a man are based on lithologia character on basis of	
	Geologic units represented on a map are based on hunologic character or basis of	
U = Unknown		
Potential	Scientific literature does not exist or does not reveal the nature of paleontological	
Totentia	resources.	
	Reports of paleontological resources are anecdotal or have not been verified.	
	Area or geologic unit is poorly or under-studied.	
	BLM staff has not yet been able to assess the nature of the geologic unit.	
	Until a provisional assignment is made, geologic units with unknown potential	
	have medium to high management concerns. Field surveys are normally necessary,	
	especially prior to authorizing a ground-disturbing activity.	

#### 7.1.2 Sensitivity Analysis Results

Scientifically significant fossils are generally not known from artificial fill since any discovered resource would lack context. Using BLM (2016) guidelines, these deposits have a low paleontological potential (PFYC 2).

The early Holocene- to late Pleistocene-age Modesto Formation, if encountered at unknown depth beneath the surface of artificial fill and disturbed sediment, is considered to have a moderate paleontological potential (PFYC 3) using BLM (2016) guidelines since it has produced scientifically significant vertebrate fossils in the proposed Project vicinity.



#### 7.2 Impact Analysis

Impacts on paleontological resources can generally be classified as either direct, indirect, or cumulative. Direct adverse impacts on surface or subsurface paleontological resources are the result of destruction by breakage and crushing as the result of surface disturbing actions including construction excavations. In areas that contain paleontologically sensitive geologic units, ground disturbance has the potential to adversely impact surface and subsurface paleontological resources of scientific importance. These fossils and the paleontological data they could provide, if properly recovered and documented, could be adversely impacted (damaged or destroyed) by ground disturbance, rendering them permanently unavailable to science and society.

Indirect impacts typically include those effects that result from the continuing implementation of management decisions and resulting activities, including normal ongoing operations of facilities constructed within a given project area. They also occur as the result of the construction of new roads and trails in areas that were previously less accessible. This increases public access and therefore increases the likelihood of the loss of paleontological resources through vandalism and unlawful collecting. Human activities that increase erosion also cause indirect impacts on surface and subsurface fossils as the result of exposure, transport, weathering, and reburial.

Cumulative impacts can result from incrementally minor but collectively significant actions taking place over time. The incremental loss of paleontological resources over time as a result of construction-related surface disturbance or vandalism and unlawful collecting would represent a significant cumulative adverse impact because it would result in the destruction of non-renewable paleontological resources and the associated irretrievable loss of scientific information.

There are no documented paleontological localities within the boundaries of the proposed Project area; however, fossils are recorded in the vicinity from the early Holocene- to late Pleistocene-age Modesto Formation in San Joaquin County and elsewhere in the Central Valley (Holroyd 2020; UCMP 2020).

Based on available excavation information, the proposed Project has the potential to encounter native early Holocene- to late Pleistocene-age Modesto Formation beneath the artificial fill and disturbed sediment during excavations starting at depths as shallow as 2 to 15 feet below the current grade and may result in adverse direct impacts on paleontological resources.

No indirect or cumulative impacts on paleontological resources are anticipated.

# 8.0 Conclusions and Recommendations

Based on the analysis of geologic maps, literature, museum records, and online databases, as well as the current proposed Project description and excavation descriptions, construction activities for the proposed Project may result in significant impacts on paleontological resources if the early Holoceneto late Pleistocene-age Modesto Formation is encountered during excavations.

Due to the potential for impacts on paleontological resources in the subsurface of the proposed Project, preparation and implementation of a PRMP is recommended. The PRMP should include provisions for periodic spot checks during excavations to check for the presence of early Holoceneto late Pleistocene-age Modesto Formation, and implementation of full-time monitoring if early Holocene- to late Pleistocene-age Modesto Formation is observed. In the event of unanticipated paleontological resource discoveries during proposed Project related activities, work in the immediate vicinity of the discovery should be halted until it can be evaluated by a qualified paleontologist.



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