

REGIONAL TRANSIT ISSUE PAPER

Agenda Item No.	Board Meeting Date	Open/Closed Session	Information/Action Item	Issue Date
11	12/10/12	Open	Action	11/28/12

Subject: Approving Mitigation Measures and an Amendment to the Blue Line to Cosumnes River College Mitigation Monitoring and Reporting Plan to Include Inadvertently Omitted Mitigation Measures

ISSUE

Whether or not to approve mitigation measures and an amendment to the Blue Line to Cosumnes River College Mitigation Monitoring and Reporting Plan to include inadvertently omitted mitigation measures.

RECOMMENDED ACTION

Adopt Resolution No. 12-12-_____, Approving Mitigation Measures and an Amendment to the Mitigation Monitoring and Reporting Plan for the SSCP2 Extension Project.

FISCAL IMPACT

None as a result of this action.

DISCUSSION

The Blue Line to Cosumnes River College Light Rail Extension Project (Project), also known as the South Sacramento Corridor Phase 2 Light Rail Extension, will extend light rail service 4.3 miles south from the Blue Line terminus at Meadowview Road to Cosumnes River College. In order to comply with the National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA), the Project was evaluated by the Federal Transit Administration (FTA) and RT in a Supplemental Final Environmental Impact Statement/Subsequent Final Environmental Impact Report (SFEIS/SFEIR) in 2008. The SFEIS/SFEIR was approved in December 2008 through the issuance of a Record of Decision by FTA and the filing of a Notice of Determination with the State of California by RT. At that time, a Mitigation Monitoring and Reporting Plan (MMRP) was also approved as required by CEQA committing RT to certain mitigation measures.

Following the approval of the SFEIS/SFEIR and the MMRP in 2008, RT identified several necessary modifications to the Project's design. Because these modifications were not evaluated in the SFEIS/SFEIR, the proposed modifications required further environmental evaluation under NEPA and CEQA. A joint Initial Study/Environmental Assessment (IS/EA) was prepared to analyze the potential impacts associated with the proposed modifications. The IS/EA was approved in October 2011 through the issuance of a Finding of No Significant Impact. At the same time, an Amended MMRP was approved to incorporate additional mitigation requirements.

Earlier this year, the FTA, working closely with RT staff, began developing a Full Funding Grant Agreement (FFGA) Readiness Report. This report is comprised of approximately 50 specific compliance requirements that must be met prior to finalizing the report, including review of the

Approved:

Presented:

Final 12/03/12

General Manager/CEO

Director, Project Management

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MMRP. During this review, it was discovered that four mitigation measures originally identified in the 2008 SFEIS/SFEIR related to cumulative construction phase impacts were inadvertently omitted from the MMRP and subsequently from the Amended MMRP. The four omitted mitigation measures included:

- CCP-5 – Submit a set of detailed plans to utility providers for their review and comment prior to the onset of any relocation work.
- CCP-6 – Schedule any short-term, limited service interruptions well in advance and with provision of appropriate notification to users.
- CCP-7 – Apply mitigation measures for fugitive dust and PM10, listed in Section 5.2.3.3, in overlapping or adjacent construction areas.
- CCP-8 – Apply mitigation measures for construction noise and vibration, listed in Section 5.2.14.2, in overlapping or adjacent construction areas.

Although the four mitigation items were inadvertently omitted from the original MMRP and Amended MMRP, FTA’s Project Management Oversight Consultant performed an audit on all MMRP items (including these four) and concluded on October 5, 2012 that all MMRP requirements have been addressed through contract plans or bid document language. A recommendation from the audit was that the MMRP be updated to include the inadvertently omitted mitigation measures.

Accordingly, to address this technical omission, staff is requesting that the Board approve and adopt these mitigation measures and amend the current MMRP to incorporate mitigation measures CCP-5, CCP-6, CCP-7 and CCP-8. RT, as the lead agency under CEQA, has the authority to amend the MMRP to include the previously disclosed mitigation measures.

RESOLUTION NO. 12-12-_____

Adopted by the Board of Directors of the Sacramento Regional Transit District on this date:

December 10, 2012

**APPROVING MITIGATION MEASURES AND AN AMENDMENT TO THE MITIGATION
MONITORING AND REPORTING PLAN
FOR THE SSCP2 EXTENSION PROJECT**

BE IT HEREBY RESOLVED BY THE BOARD OF DIRECTORS OF THE
SACRAMENTO REGIONAL TRANSIT DISTRICT AS FOLLOWS:

WHEREAS, on October 27, 2008, the RT Board of Directors approved and certified a Subsequent Final Environmental Impact Report (SFEIR) for the Blue Line to Cosumnes River College Light Rail Extension Project (Project) [then referred to as the South Sacramento Corridor Phase 2 Extension Project] in compliance with the California Environmental Quality Act (CEQA) and adopted a Mitigation Monitoring and Reporting Plan for the Project; and

WHEREAS, on September 26, 2011, the RT Board of Directors approved and certified the Initial Study/Mitigated Negative Declaration for the Project in compliance with CEQA and adopted an Amended Mitigation Monitoring and Reporting Plan for the Project; and

WHEREAS, in 2012, RT staff identified four mitigation measures identified in the SFEIR that were inadvertently omitted from both the Mitigation Monitoring and Reporting Plan and the Amended Mitigation Monitoring and Reporting Plan, although these measures have been applied to the ongoing project.

THEREFORE, BE IT FURTHER RESOLVED, that the Board approves and adopts the corrected Mitigation Monitoring and Reporting Plan for the Blue Line to Cosumnes River College Light Rail Extension Project, set out as Exhibit A and incorporated herein by this reference, to include those four mitigation measures (CCP-5, CCP-6, CCP-7, CCP-8) omitted from previous Mitigation Monitoring and Reporting Plans approved as part of the SFEIR and the Initial Study/Mitigated Negative Declaration; and

THAT, the Chair and General Manager are hereby authorized and directed to execute said amendment.

BONNIE PANNELL, Chair

A T T E S T:

MICHAEL R. WILEY, Secretary

By: _____
Cindy Brooks, Assistant Secretary

EXHIBIT A

**AMENDED MITIGATION MONITORING PROGRAM
ENVIRONMENTAL IMPACT REPORT**

SACRAMENTO REGIONAL TRANSIT

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INTRODUCTION

Purpose

This mitigation monitoring program is developed pursuant to Public Resources Code (California Environmental Quality Act) §21081.6. This section requires all lead agencies responsible for certifying an environmental impact report (EIR) with mitigation measures or adopting a mitigated negative declaration to prepare and approve a mitigation reporting or monitoring program. The reporting or monitoring program is to be structured as necessary to ensure that changes to the project that the lead agency has adopted to mitigate or avoid significant effects on the environment are carried out during project implementation.

As noted further in this document, this mitigation monitoring and reporting program may be amended to provide for the addition of new or modified mitigation measures that are adopted as part of a subsequent or supplemental EIR/negative declaration associated with the project. As per those requirements, this amended mitigation monitoring and reporting program includes two new mitigation measures for the project as identified in the South Sacramento Corridor Light Rail Project Phase 2 Extension Project Modifications Initial Study/Environmental Assessment. These measures, indentified herein as Mitigation Measures N&V-7 and CN&V-5, are noted with underlined text on pages 14 and 30 of this document. Additionally, four specific mitigation measures identified in the SFEIS/SFEIR were inadvertently omitted from the mitigation monitoring and reporting program and subsequently from the amended mitigation monitoring and reporting program. The four omitted mitigation measures are identified herein as Mitigation Measures CCP-5, CCP-6, CCP-7 and CCP-8. All other mitigation measures that were previously adopted remain unchanged and in effect.

Project and Monitoring Responsibilities

The Sacramento Regional Transit District ("RT") adopted this mitigation monitoring program for the South Sacramento Corridor Phase 2 SFEIS/SFEIR Project. Monitoring assignments are made based on the expertise or authority of the person(s) assigned to monitor the specific activity. For changes that have been required or incorporated into the project at the request of an agency having jurisdiction by law over natural resources affected by the project, that agency shall, if so requested by RT, prepare and submit a proposed reporting or monitoring program.

Mitigation Monitoring Program

The mitigation monitoring program of the attached matrix identifying the mitigation measures, the responsible party, the monitoring activity, schedule for completion, and the date of completion to be initiated by the appropriate RT Division Director. These categories are further explained as follows:

Description of Impacts and Mitigation Measures

This is a summary of the impacts and mitigation measures as described in the Final Environmental Impact Statement/Environmental Impact Report (FEIS/EIR). The section numbers for the mitigation measures correspond with the section number in the mitigation summary table in the certified EIR for this project.

Lead Agency

The lead agency is the agency or individual with responsibility for ensuring the mitigation measure is carried out.

Implementing Agency

The monitoring agency is the public agency with responsibility for monitoring to ensure that the mitigation measure is effective in mitigating the impact.

Timing

Timing specifies the date or project phase by which the mitigation measure is to be initiated and completed.

Monitoring Record

This section provides for recording compliance and monitoring over time and would be initiated by the RT Division Director who supervises the person assigned responsibility for monitoring compliance with the applicable mitigation measures.

Updating Monitoring Program

If a subsequent or supplemental EIR or negative declaration is prepared for this project, this monitoring program shall be amended to take into effect any new or changed mitigation measures that may be required under the subsequent or supplemental EIR/negative declaration.

Completion of Monitoring Program

Upon completion of the monitoring program, the attached summary matrix will be submitted to the RT General Manager for acceptance and approval. If the monitoring program and all mitigation measures are completed as specified in the certified EIR for the South Sacramento Corridor Phase 2 SFEIS/SFEIR Project, the General Manager shall accept, date, and sign the matrix summary. If a mitigation measure or measures were not properly implemented, the General Manager shall take such action as is required to comply with the California Environmental Quality Act ("CEQA"). The attached summary matrix shall be annotated to summarize the actions so taken before the General Manager accepts, dates, and signs the matrix.

Project Records

The originally signed matrix summary shall be maintained with the records for the project.

Coordination with RT's Quality Assurance Program

This mitigation monitoring program is part of RT's overall quality assurance program for the light rail extensions. The measures adopted in this Mitigation Monitoring Program are to be implemented throughout the following project stages:

- 1) Final Design
- 2) Mobilization
- 3) Construction
- 4) Pre-Service Testing
- 5) Operations

The elements that are specified for implementation during final design are meant to be included in the appropriate design drawings and specifications; by inclusion in the final design, these measures will be carried out during construction.

The measures that are specified for implementation during the construction phase are to be included in the construction contract specifications during the final design phase. The remaining measures will be incorporated in an on-going safety and quality assurance program by RT staff.

LONG TERM IMPACTS

This section contains mitigation measures for long-term impacts. These measures generally require monitoring of system operations over time and the modification of those operations to reduce adverse environmental impacts. Compliance with these measures would result in the reduction of adverse environmental impacts.

3.3 Traffic and Transportation

<p>Description of Impact and Mitigation Measure 3.3.9</p>	<p>Impact on Intersections: Under the LPAP2, operations at five intersections in the City of Sacramento and one intersection in the County of Sacramento are projected to exceed thresholds.</p> <p>Parking: The LPAP2 is projected to reduce downtown parking demand by about 1,300 spaces (in 2025).</p>	
	T-1	Center Parkway & CRB: add a second southbound left turn lane & provide overlap for all right turn phases. Mitigation requires widening bridge over Union House Creek which is included in the projects costs.
	T-2	Franklin Boulevard & CRB: provide overlap for all right turn phases.
	T-3	Bruceville Road & CRC: Add a second eastbound left turn lane & add a shared through-right turn lane.
	T-4	Bruceville Road & Old Calvine Road: provide overlap signal phasing on the right turn.CRC new South Access & Old Calvine Road: Signalize the intersection.
	T-5	CRC new South Access & Old Calvine Road: provide overlap signal phasing on the right turn.
	T-6	Auberry Drive & Calvine Road: provide protected phasing for the northbound and southbound approaches.
	T-10	Center Parkway & CRB: add a second southbound left turn lane and provide overlap for all right turn phases and restripe the eastbound approach to one left, one through and through right.
	T-11	Bruceville Road & CRB: provide overlap for all right turn phases.
	T-12	Bruceville Road & Sheldon Road: provide overlap for all right turn phases.
<p>Lead Agency</p>	<p>Sacramento Regional Transit District</p>	
<p>Implementing Agency</p>	<p>Sacramento Regional Transit District</p>	
<p>Monitoring Agency</p>	<p>Sacramento Regional Transit District</p>	
<p>Timing</p>	<p>Start:</p>	<p>Before and during the final design and construction phases of the project</p>
	<p>Complete:</p>	<p>Before initiation of LRT operations</p>

Date	Signature of Monitor	Action/Accomplishments

3.3.7 Delays at Grade Crossings

Description of Impact and Mitigation Measure 3.3.7	Increased queue times and decreased efficiency at grade crossings	
	T-7	RT will implement crossing signal control measures at LRT grade crossings adjacent to stations.
	T-8	RT will implement “near side” crossing signal control measures at the intersections of Center Parkway and CRB, Franklin Boulevard and CRB, and Bruceville Road and Cosumnes River College to provide additional safety.
	T-9	Express trains not stopping at a near side station would have equipment to bypass the timed delay.
Lead Agency	Sacramento Regional Transit District	
Implementing Agency	Sacramento Regional Transit District	
Monitoring Agency	Sacramento Regional Transit District	
Timing	Start:	Before and during the final design and construction phases of the project
	Complete:	Before initiation of LRT operations

Date	Signature of Monitor	Action/Accomplishments

4.1 Visual and Aesthetics

Description of Impact and Mitigation Measure 4.1.5	New LRT facilities would introduce visual changes that would be perceived by motorists, residents and business occupants within the project corridor and would add more or less to the visual elements of the urban scene, depending on the design options at each location.	
	V&A-1	RT will invite public participation regarding station and noise wall design during the final design phase of the project.
	V&A-2	RT will incorporate landscaping into the final design to soften views of LPAP2 LRT stations, PNR lots, substations and the optional shuttle lot.
	V&A-3	RT will control light and glare by directing lighting associated with LRT facilities onto the premises of each facility and away from surrounding land uses.
Lead Agency	Sacramento Regional Transit District	
Implementing Agency	Sacramento Regional Transit District	
Monitoring Agency	Sacramento Regional Transit District	
Timing	Start:	During construction phases of the project
	Complete:	Before initiation of LRT operations

Date	Signature of Monitor	Action/Accomplishments

4.4 Biological Resources

<p>Description of Impact and Mitigation Measure 4.4.6</p>	<p>Loss of 0.311 acres of jurisdictional wetlands for the LPAP2. Up to 0.14 acres of seasonal wetlands that provide suitable habitat for vernal pool fairy shrimp, midvalley fairy shrimp, vernal pool tadpole shrimp, and California linderiella; 0.04 acres of suitable habitat for western pond turtle and giant garter snake; and between 0.70 and 63.34 acres of nesting and foraging habitat for 13 special-status bird species would be affected. Possible loss of Valley oaks (<i>Quercus lobata</i>), interior live oak (<i>Quercus wislizenii</i>), and blue oak (<i>Quercus douglasii</i>) from SRCSD Bufferlands. Trees planted in 1995 as part of the Trail of Trees effort.</p>	
	<p>B-1</p>	<p>Compensate for impacts to vernal pool crustacean habitat through purchase of the equivalent of 2.26 acres of preservation credits, and 0.14 acre of creation/restoration credits from a USFWS-approved conservation bank, or combination of banks.</p>
	<p>B-2</p>	<p>Transplant directly affected elderberry shrubs and purchase the appropriate number of beetle habitat credits at a USFWS-approved conservation bank prior to ground breaking.</p>
	<p>B-3</p>	<p>Purchase equivalent of 9.823 acres of giant garter snake habitat credits from a USFWS-approved conservation bank.</p>
	<p>B-4</p>	<p>Consult with SRCSD Bufferlands manager to explore opportunities to compensate for impacts to nesting and foraging habitat for special-status bird species.</p>
	<p>B-5; B-6</p>	<p>Permanent impacts to western burrowing owl burrows and foraging habitat and Swainson's hawk foraging habitat will be mitigated through the purchase of credits at a CDFG-approved mitigation bank.</p>
	<p>B-7</p>	<p>Provide a qualified arborist to survey potentially affected trees. To extent possible, avoid removal of native oaks, mature native riparian trees, and any other protected trees. Develop and implement a mitigation plan, in accordance with the applicable City ordinances, to compensate for removal of protected trees. Compensate for loss of protected trees pursuant to the City of Sacramento Heritage Tree Ordinance.</p>
	<p>B-8</p>	<p>Will obtain all necessary permits pertaining to affected waters of the U.S. The permitting process would also require compensation for project-related impacts.</p>
	<p>B-9</p>	<p>Purchase mitigation credits in an agency-approved wetland mitigation bank or an in lieu fee.</p>

Lead Agency	Sacramento Regional Transit District	
Implementing Agency	Sacramento Regional Transit District in cooperation with the S	
Monitoring Agency	California Department of Fish and Game, U.S. Fish and Wildlife Service and/or U.S. Army Corps of Engineers, as applicable	
Timing	Start:	Before any construction or grading within 125 feet of any of the identified biological resources or their associated habitat
	Complete:	On-going

Date	Signature of Monitor	Action/Accomplishments

4.5 Cultural Resources

Description of Impact and Mitigation Measure 4.5.4	No archaeological resources appear eligible for listing in the NRHP or the CRHR. Because much of the APE has been covered over with pavement or other obstructions, however, the survey could not conclude with certainty that there are no unrecorded cultural remains within the APE. Areas in which such remains may exist have been identified. No historic architectural resources appear eligible for listing in the NRHP or CRHR, or are included in any local list of historic resources.	
	H&C-1	During construction in identified areas, monitoring will be conducted by a qualified professional archaeologist and/or a member of the local Native American community. The monitor(s) will have the ability to temporarily stop any work in an area where archaeological materials or human remains are uncovered long enough to assess the finds and, in the case of human remains, to follow the stipulations set out in the State Health and Safety Code (Section 7050.5). Such provisions will be in the construction contracts.
	H&C-2	If unanticipated archaeological resources are encountered during construction, they would be addressed in consultation with the Office of Historic Preservation (OHP) or in accordance with an archaeological treatment plan to be developed in consultation with OHP. Such provisions will be in the construction contracts.
Lead Agency	Sacramento Regional Transit District	
Implementing Agency	Sacramento Regional Transit District, the cities and County	
Monitoring Agency	Sacramento Regional Transit District in coordination with the State Historic Preservation Officer	
Timing	Start:	Before and during project construction
	Complete:	Upon completion of the construction phase of the project

Date	Signature of Monitor	Action/Accomplishments

4.6 Electromagnetic Fields (EMF) and Electromagnetic Interference (EMI)

Description of Impact and Mitigation Measure 4.6.3	Present evidence suggests that any increased health risks from EMF exposures attributable to light rail improvements would be very small. The LPAP2 would generate EMF, which could interfere with the effective performance of electronics and electrical equipment.	
	EMF-1	The potential for EMI effects can be minimized by ensuring that all electronic equipment is operated with a good electrical ground and that proper shielding is provided for electronic system cords, cables, and peripherals.
	EMF-2	Specialized components, such as filters, capacitors and inductors that can also reduce EMI susceptibility of certain systems will be installed, as appropriate.
Lead Agency	Sacramento Regional Transit District	
Implementing Agency	Sacramento Regional Transit District	
Monitoring Agency	Sacramento Regional Transit District	
Timing	Start:	During construction phases of the project
	Complete:	Before initiation of LRT operations

Date	Signature of Monitor	Action/Accomplishments

4.8 Hazardous Wastes and Materials

<p>Description of Impact and Mitigation Measure 4.8.3</p>	<ul style="list-style-type: none"> • Construction activities may be affected by releases of hazardous materials from known or previously unidentified sites. Clearing/grubbing/excavation may expose or encounter hazardous materials. • Contaminated groundwater may be encountered. • Dewatering during trenching or excavating may change or amplify local hydraulic gradients and draw groundwater contamination into the trench or excavation. <p>New tracks and passenger LRT service would be introduced into a segment of the existing UPRR corridor with existing freight rail service. Safety issues associated with any hazardous materials transport on freight trains would not increase or decrease and would remain the responsibility of the UPRR.</p>	
	HW-1	Exposed soil in the median or on the shoulder of highways and primary traffic corridor that are more than 20 years old will be tested for lead prior to beginning of construction.
	HW-2	The three buildings subject to demolition will be inspected (and tested as necessary) for asbestos containing materials and lead based paints.
	HW-3	Contractors will incorporate procedures into a construction management plan describing how they will monitor for subsurface contamination.
	HW-4	Prepare and implement a contingency plan for handling/disposing of contaminated soil and groundwater
	HW-5	Additional site-specific information will be collected regarding hazardous materials use and hazardous waste generation for those properties that would be acquired for right-of-way or support facilities.
	HW-6	Perform Phase 2 site investigations where indicated.
	HW-7	All contaminated materials encountered will be evaluated in the content of applicable local state, and federal regulations and/or guidelines governing hazardous wastes. Remediation and/or disposal of all materials deemed to be hazardous.
	HW-8	All materials deemed to be hazardous will be remediated and/or disposed of following applicable regulatory agency regulations and/or guidelines.
Lead Agency	Sacramento Regional Transit District	
Implementing Agency	Sacramento Regional Transit District and the UPRR	
Monitoring Agency	Sacramento Regional Transit District	
Timing	Start:	Before and during project construction
	Complete:	Upon completion of the construction phase of the project

Date	Signature of Monitor	Action/Accomplishments

4.9 Hydrology, Floodplain and Water Quality

<p>Description of Impact and Mitigation Measure 4.9.3.1 & 4.9.3.2</p>	<p>From Morrison Creek to Union House Creek, and from Franklin Boulevard to Center Parkway, a flood control project (by others), currently under construction, will eliminate 100-year flood hazards.</p> <p>From Union House Creek to Franklin Blvd., the LPAP2 line would be constructed on a fill embankment above the 100-year flood elevation. Culverts through the embankment would convey runoff/flood flows.</p> <p>The Franklin PNR lot would be constructed above the 100-year flood elevation. The south berm of a large detention basin at Franklin Station would be modified. Flood storage reduction would be avoided.</p> <p>Runoff from the LPAP2 would be negligible.</p>	
	WQ-1	Develop final floodplain mitigation plan in consultation with ACOE and SAFCA.
	WQ-2	In the unlikely event the SSCS project is delayed and floodplain protection is not in place, mitigation measures will be incorporation into the LPAP2 design to minimize impacts due to potential flooding.
	WQ-3	For fill in 100-year floodplain either (1) excavate compensating floodplain storage equal to the amount removed, or (2) pay a mitigation fee to SAFCA.
	WQ-4	Parking lot pavements, catch basins, and storm drains will be cleaned regularly. Solid waste will be collected from facilities on a regular basis.
<p>Lead Agency</p>	Sacramento Regional Transit District	
<p>Implementing Agency</p>	Sacramento Regional Transit District in cooperation with ACOE and SAFCA.	
<p>Monitoring Agency</p>	Sacramento Regional Transit District	
<p>Timing</p>	<p>Start:</p>	Before and during project construction
	<p>Complete:</p>	Upon completion of the construction phase of the project. Ongoing maintenance.

Date	Signature of Monitor	Action/Accomplishments

4.12 Noise and Vibration

<p>Description of Impact and Mitigation Measure 4.12.7 & 4.12.8</p>	<p><u>Noise</u> FTA noise impacts along the LPAP2 alignment would vary depending on the design options selected. Noise impacts along the full LPAP2 alignment would vary from 348 (57 “Moderate” and 291 “Severe”) to 378 (53 “Moderate” and 325 “Severe”).</p> <p><u>Design Requirements/RT Practices:</u> Maintain track and vehicles regularly to reduce noise levels from vehicles.</p> <p><u>Vibration:</u> Vibration impacts along the full LPAP2 alignment would be the same for all design options selected, with the number of homes affected being 29.</p>	
	<p>N&V-1</p>	<p>Noise barriers will be constructed to mitigate noise impacts in compliance with FTA and RT criteria.</p>
	<p>N&V-2</p>	<p>Sound insulation could be considered for residences near the Meadowview Road At-Grade Option and N. Laguna Drive, south of CRB.</p>
	<p>N&V-3</p>	<p>RT will coordinate mitigation with SAFCA, ACOE, and City of Sacramento to address barrier needs of South Sacramento Corridor Phase 2, flood control, and CRB Widening and Extension projects.</p>
	<p>N&V-4</p>	<p>Other potential mitigation measures include minimizing the wheel impacts at crossovers and various approaches, implementing an ongoing rail grinding program along with the recommended wheel profile to reduce the incidence of wheel squeal.</p>
	<p>N&V-5</p>	<p>Bell sound levels at rail/roadway crossings will be set to minimum sound levels allowed by the CPUC. RT will specify that bells with easily adjustable volumes and adjustable ring rates be installed.</p>
	<p>N&V-6</p>	<p>Ballast mats would be used to reduce vibration levels in sensitive areas.</p>
	<p>N&V-7</p>	<p><u>Where appropriate, in lieu of the recommended sound walls, Sacramento Regional Transit shall install rail dampers and implement a maintenance program of rail grinding to lessen noise emissions from the LRT wheel/rail interface. Components of the program shall include, but not necessarily be limited to, the following:</u></p> <ol style="list-style-type: none"> 1. <u>Wheel truing: Regular inspection of wheels and truing of wheels that are out of specifications to ensure that rough wheels do not lead to increased noise levels;</u> 2. <u>Rail grinding contract: A multi-year contract for rail grinding that includes annual grinding on an as-needed basis;</u> 3. <u>Grinding specification: All rail grinding shall</u>

		<p><u>comply with a specification that includes limits on surface roughness;</u></p> <p>4. <u>Verification measurements: Post-grinding measurements that verify that the rails meet the grinding specification. This step along with Step 3 shall be performed to provide RT with assurance that the grinding is performed correctly and to allow for competitive bidding;</u></p> <p>5. <u>Permanent monitoring and prioritization program: The permanent monitoring program shall be designed to determine when noise levels start to increase on a section of track and to prioritize the annual grinding. Once a baseline is established for each segment of track, track sections in need of grinding shall be prioritized in the grinding program;</u></p> <p>6. <u>Rail dampers: In addition to rail grinding, rail dampers may be utilized to achieve program objectives in noise-sensitive areas.</u></p> <p><u>These in-lieu measures shall be designed to achieve the FTA Moderate Impact criteria. If attenuation below these levels cannot be confirmed, then Sacramento Regional Transit shall implement the sound wall mitigation as specified in the Phase 2 SFEIS/SFEIR as designed to achieve the FTA Moderate Impact criteria. Confirmation that this alternative mitigation program is effective will be based on a preliminary monitoring effort. For a period of not less than two years, noise measurements shall be taken on a biannual basis at appropriate locations along the alignment. If the FTA Moderate Impact criteria are exceeded during two successive monitoring cycles, or if the program is otherwise demonstrated to be less than effective in meeting these criteria, then the sound wall mitigation specified in the Phase 2 SFEIS/SFEIR shall be implemented.</u></p>
Lead Agency	Sacramento Regional Transit District	
Implementing Agency		
Monitoring Agency	Sacramento Regional Transit District	
Timing	Start:	Before and during the final design and construction phases of the project
	Complete:	Before initiation of LRT operations (measures N&V-1 through N&V-6); during LRT operations, not to exceed two years following initiation (measure N&V-7)

Date	Signature of Monitor	Action/Accomplishments

4.16 Safety and Security

<p>Description of Impact and Mitigation Measure 4.16.4</p>	<p>New rail stations would create activity centers and PNR lot traffic, with potential for safety and/or security incidents. Large parking areas would increase the risk of vandalism to vehicles. Circulation of autos and pedestrians in PNR lots would create potential for auto-pedestrian conflicts. The reduction of corridor auto traffic is expected to have a beneficial impact on motor vehicle accident rates and resulting injuries. The LPAP2 tracks and stations would be adjacent to an active freight railroad and would traverse high volume roadways that require crossings by pedestrians and vehicular traffic, increasing the potential for accidents. The alternative would not expose children to disproportionate environmental health or safety risk. At-grade rail crossings would be signalized and gated and would comply with Public Utilities Commission regulations.</p>	
	S-1	Work with emergency service providers to develop alternative sources and adjust service areas and destinations as necessary to maintain emergency service coverage and response times following implementation of the new LPAP2 service.
	S-2	Provide safety and security services by increasing contract security services and assigned law enforcement personnel.
	S-3	Expand fire safety and emergency response training to include five districts that will be responsible for providing these services.
	S-4	Invite public participation regarding station design details during the final design phase of the project to identify and address safety and security concerns.
<p>Lead Agency</p>	Sacramento Regional Transit District	
<p>Implementing Agency</p>	Sacramento Regional Transit District in cooperation with the Sacramento City Police Department and the Sacramento County Sheriff's Office	
<p>Monitoring Agency</p>	Sacramento Regional Transit District	
<p>Timing</p>	<p>Start:</p>	Before and during the final design and construction phases of the project
	<p>Complete:</p>	Before initiation of LRT operations

Date	Signature of Monitor	Action/Accomplishments

PROJECT CONSTRUCTION IMPACTS

This section contains mitigation measures to be implemented before, during and immediately following project construction. These measures generally require the construction manager to implement special procedures during construction. Compliance with these measures would result in minimizing, rectifying or reducing adverse environmental impacts.

5.2.1 Construction-Phase Impact on Aesthetics

Description of Impact and Mitigation Measure 5.2.1.2	Construction equipment would introduce a temporary visual change to the area, including stockpiling of soils and materials, use/staging of heavy equipment, and possible night-time lighting.	
	CA-1	RT will require the contractor to maintain the site in an orderly manner, removing trash, waste, and securing equipment and vehicles at the close of each day's operation.
	CA-2	To reduce glare from nighttime lighting, RT will require contractor to direct lighting onto the immediate construction area and away from residences and traffic lanes.
	CA-3	To reduce dust, the contractor would be required to use water trucks during grading to keep the ground moist.
Lead Agency	Sacramento Regional Transit District	
Implementing Agency	Sacramento Regional Transit District	
Monitoring Agency	Sacramento Regional Transit District	
Timing	Start:	During construction phases of the project
	Complete:	Before initiation of LRT operations

Date	Signature of Monitor	Action/Accomplishments

5.2.3 Construction-Phase Impact on Air Quality

<p>Description of Impact and Mitigation Measure 5.2.3.3</p>	<p>Construction would generate short-term emissions of dust, fumes, equipment exhaust, pollutants and other air contaminants. PM10 would be the air pollutant of greatest concern. Construction impacts were evaluated based on a “worst-case” construction scenario in which track construction, station construction, grade separation, and bridge structure construction would occur concurrently, which is highly unlikely. Under this assumption, construction emissions are not anticipated to exceed the SMAQMD and federal thresholds. However, mitigation measures are recommended to reduce construction emissions.</p>	
	CAQ-1	Construction area and vicinity will be swept and watered at least twice daily.
	CAQ-2	Unpaved roads, parking and staging areas will be watered at least once every two hours of active operations.
	CAQ-3	Site access points will be swept/washed within 30 minutes of visible dirt deposition.
	CAQ-4	On-site stockpiles of debris or dirt will be enclosed, covered or watered at least twice daily.
	CAQ-5	All haul trucks hauling materials will be covered and will maintain at least two feet of freeboard.
	CAQ-6	Haul trucks will have the capacity of no less than 12.75 cubic yards.
	CAQ-7	At least 80 percent of inactive disturbed surface areas will be watered on a daily basis when there is evidence of wind-driven fugitive dust.
	CAQ-8	Operations on any unpaved surfaces will be suspended when winds exceed 25 mph.
	CAQ-9	Traffic speeds on unpaved roads will be limited to 15 miles per hour.
	CAQ-10	Operations on any unpaved surfaces will be suspended during first and second stage smog alerts.
	CAQ-11	Truck loading zones will be maintained in the construction area.
	CAQ-12	Temporary traffic control will be provided during all phases of construction activities to improve traffic flow.
	CAQ-13	Best efforts will be used to limit truck idling to no more than two minutes.
	CAQ-14	Non-toxic soil stabilizers (according to manufacturers’ specifications) will be applied to all inactive construction areas.
	CAQ-15	Submit to SMAQMD for approval a plan to achieve a project-wide fleet-average reduction of roughly 20% for NO _x and approximately 45% for PM ₁₀ (compared to the most recent CARB fleet average at time of construction).

	CAQ-16	Submit to SMAQMD an inventory of all off-road construction equipment, equal to or greater than 50 horsepower, that would be used 40 or more hours during any part of construction phase.
	CAQ-17	Off-road diesel-powered equipment emissions will not exceed 40% opacity for more than three minutes in any one hour.
Lead Agency	Sacramento Regional Transit District	
Implementing Agency	Sacramento Regional Transit District	
Monitoring Agency	Sacramento Regional Transit District and SMAQMD	
Timing	Start:	Before and during project construction
	Complete:	Upon completion of the construction phase of the project

Date	Signature of Monitor	Action/Accomplishments

5.2.4 Construction-Phase Impacts on Biological Resources

<p>Description of Impact and Mitigation Measure 5.2.4.2</p>	<p>Approximately 0.15 acre of wetlands/waters would be temporarily disturbed at Morrison Creek and 0.05 acre of wetlands/waters at Morrison Creek/Union House Creek.</p> <p>Construction activities and related impacts may disturb vernal pool, riparian and non-native grassland natural communities that provide suitable habitat for up to 19 special-status species including four invertebrates, two reptiles and 13 bird species.</p> <p>There is no confirmed evidence that any or all of these species are present in the project area or would be present at the time of construction. All sensitive habitat and wetland areas would be identified for avoidance during project design.</p>	
	<p>CB-1</p>	<p>Include a copy of the Biological Opinion within solicitations for design and construction, making the primary contractor responsible for implementation.</p>
	<p>CB-2</p>	<p>Implement measures consistent with Best Management Practices (BMPs), including Storm Water Pollution Prevention Plan (SWPPP) and Water Pollution Control Program (WPCP) to minimize effects to giant garter snake and prevent pollution of streams, waterways, and other bodies of water during construction, to prevent sedimentation from entering Environmentally Sensitive Areas (ESAs), and to reduce erosion, dust, noise, and other deleterious aspects of construction related activities. BMPs may include, but are not limited to, silt fencing, temporary berms, restrictions on cleaning equipment in or near ESAs, installation of vegetative strips, and temporary sediment disposal. Runoff from dust control and hazardous materials will be retained on the construction site and prevented from flowing into the ESAs.</p>
	<p>CB-3</p>	<p>Clearing and grubbing procedures that specify that only trees and plants designated for removal shall be removed.</p>
	<p>CB-4</p>	<p>Excavation techniques would ensure stability of subsurface materials as well as the retention of excavated materials within the construction areas.</p>
	<p>CB-5</p>	<p>Construction within wetlands would be avoided during the rainy season.</p>
	<p>CB-6</p>	<p>Materials and fluids generated by construction activities would be placed at least 100 feet from wetland areas or drainages until they could be disposed of at a permitted site.</p>
	<p>CB-7</p>	<p>Post-construction, remove all temporary fill/ debris. Restore disturbed areas to pre-project conditions, using native grass seed mixes.</p>

CB-8; CB-9	Install high visibility fencing around habitats of federally listed species to identify and protect designated ESAs.
CB-10	A qualified, USFWS-approved biological monitor shall be present during construction within suitable habitat. If a snake is encountered, all construction activities in the immediate area shall be halted until appropriate corrective measures are implemented.
CB-11	Implement a Worker Environmental Awareness Training Program for construction personnel to be conducted by the USFWS-approved biologist.
CB-12	The number and size of access roads and staging areas, and the total area of project activities will be restricted to the minimum necessary for the duration of construction activities.
CB-13	All food-related trash items must be disposed of in closed containers and removed at the end of each work day.
CB-14	A post-construction walkthrough will be conducted to assess whether any damage occurred to vegetation within buffer areas. Damage may include accidental cutting of vegetation or visible physical damage to roots, stems, and leaves. If damage is observed, vegetation within the buffer areas will be restored with appropriate native plant species.
CB-15	RT will maintain and monitor the project site for one (1) year following the completion of construction and restoration activities.
CB-16	Measures will be taken by the contractor to avoid the introduction of new noxious weeds and the spread of weeds previously documented at the project area.
CB-17	Where possible, protect by a 50-foot buffer zone (ESA) with exclusionary fencing habitat for vernal pool fairy shrimp, Midvalley fairy shrimp, vernal pool tadpole shrimp, and California linderiella.
CB-18	Prior to construction, RT shall conduct a survey to assess the status of existing elderberry shrubs within the project site.
CB-19	Construction shall be prohibited within 100 ft. of elderberry plants during beetle emergence and mating period.
CB-20	No application of herbicides, insecticides, and/or other chemical agents shall occur within 100 feet of elderberry plants or where they might drift or wash into the area of elderberry plants.
CB-21	Protective fencing shall be established around all shrubs that are not removed prior to initiating and construction activities on the site.
CB-22	Post-construction walkthrough will be conducted to assess whether any damage occurred to vegetation within the buffer areas.

CB-23	Pre-construction survey of all project affected aquatic no more than 24 hours prior to instream construction or disturbance of riparian vegetation. If western pond turtles are found, on-site monitoring and possible relocation shall be implemented.
CB-24	Construction in GGS habitat is preferably from May 1 to October 1. If between October 2 and April 30 USFWS may require additional measures.
CB-25	Where possible, giant garter snake habitat will be protected by a 200-foot buffer zone.
CB-26	Best management practices for water quality will be implemented during construction.
CB-27	Any dewatered GGS habitat shall remain dry for at least 15 consecutive days after April 15 and prior to excavating or filling.
CB-28	Survey for GGS 24 hours prior to construction.
CB-29	Appropriate netting will be used for erosion control and other purposes to ensure that the giant garter snake does not get trapped or become entangled.
CB-30	A USFWS-approved biological monitor shall be present during construction within suitable habitat.
CB-31	Clearing will be confined to the minimal area necessary to facilitate construction activities.
CB-32	Following completion of construction, all temporary fill and construction debris will be removed from the project and disturbed areas will be restored to pre-project conditions.
CB-33	RT will compensate for project-related temporary impacts to giant garter snake habitat by purchasing the equivalent of 8.44 acres of giant garter snake habitat credits. All temporary effects will be compensated at a 1:1 ratio.
CB-34	If construction or tree removal will occur between February and August, preconstruction surveys for migratory bird, raptor, or special-status birds nests will be conducted within 0.25 mile of the project area.
CB-35	Surveys shall be conducted no more than 30 days prior to the initiation of construction activities.
CB-36	If active nests are found, consult with USFWS and CDFG to develop avoidance/ minimization measures.
CB-37	Raptor or migratory bird nest trees shall be removed outside of the nesting season (February through August), or after nest is empty and adult and young birds leave the tree.
CB-38	All natural communities and wetland areas outside the construction zone that could be affected will be temporarily fenced off using high visibility fencing and designated as ESAs.

	CB-39	Annual survey for Swainson's hawk nests from March-August 15. If nests are discovered, consult with CDFG.
	CB-40	In accordance with the Staff Report on Burrowing Owl Mitigation the following should be considered impacts; disturbance within 160 ft of an occupied burrow, destruction of occupied natural and artificial burrows, and destruction and/or degradation of foraging habitat adjacent (within 330 ft) of to an occupied burrow(s).
	CB-41	Pre-construction survey for western burrowing owls and burrows within 330 feet no more than two weeks before construction.
	CB-42	If active burrows are located, a no-disturbance buffer will be established around each active burrow. The size of the buffer will be determined through CDFG.
	CB-43	If adverse effects to occupied burrows are unavoidable, the owls shall be passively relocated using techniques approved by CDFG.
Lead Agency	Sacramento Regional Transit District	
Implementing Agency	Sacramento Regional Transit District	
Monitoring Agency	California Department of Fish and Game, U.S. Fish and Wildlife Service and/or U.S. Army Corps of Engineers, as applicable	
Timing	Start:	Before and during project construction
	Complete:	Upon completion of the construction phase of the project and for appropriate monitoring periods to determine the effectiveness and success of planting and habitat restoration.

Date	Signature of Monitor	Action/Accomplishments

5.2.5 Construction-Phase Cultural Resource Effects

Description of Impact and Mitigation Measure 5.2.5.1	Although not anticipated, construction activities could result in loss or degradation of previously undiscovered cultural resources.	
	CC-1	If cultural materials are unearthed during construction, work in the vicinity would be halted until a qualified archaeologist can assess their significance.
	CC-2	If unanticipated archaeological resources are encountered during construction, they would be addressed in consultation with OHP, in accordance with an archaeological treatment plan to be developed in consultation with OHP.
Lead Agency	Sacramento Regional Transit District	
Implementing Agency	Sacramento Regional Transit District, the cities and County	
Monitoring Agency	Sacramento Regional Transit District in coordination with the State Historic Preservation Officer	
Timing	Start:	Before and during project construction
	Complete:	Upon completion of the construction phase of the project

Date	Signature of Monitor	Action/Accomplishments

5.2.7 Construction-Phase Geological and Soils and Seismicity Impacts

Description of Impact and Mitigation Measure 5.2.7.2	Weak and/or compressible soils or expansive soil can adversely affect the structures, pavements and slabs on grade. Shallow groundwater could affect earthwork and construction and the service of floor slabs and roadbed/hardscape subjected to traffic load. Soil erosion can damage existing structures and can discharge sediment to waterways. Additional loads on existing slopes could result in slope instability.	
	CG&S-1	Geotechnical studies in final design will incorporate requirements into the final design and construction requirements. Design requirements likely to be implemented include excavation and replacement (or treatment) of soil, use of synthetic material to reinforce weak soils and deep foundations, modification or re-grading of slopes, increased set-backs and clearance from slopes, vegetation of slopes, and lining of channels.
Lead Agency	Sacramento Regional Transit District	
Implementing Agency	Sacramento Regional Transit District	
Monitoring Agency	Sacramento Regional Transit District	
Timing	Start:	Before and during project construction
	Complete:	Upon completion of the construction phase of the project

Date	Signature of Monitor	Action/Accomplishments

5.2.8 Construction-Phase Effects due to Hazardous Wastes

Description of Impact and Mitigation Measure 5.2.8.2		Previously unidentified contamination may be encountered.	
		CHW-1	Walk-through site reconnaissance will be conducted for each of the site areas to identify any additional evidence of contamination.
		CHW-2	A review will be conducted of the remediation status of the sites listed in Table 4.8-1. If remediation activities will be complete before construction of the project, then no further mitigation will be necessary. If remediation would not be completed prior to project construction, then an alternate mitigation plan will be prepared and implemented.
		CHW-3	A site specific evaluation will be made of any known and suspected contaminated sites that would be distributed by construction operations before any soil is removed from affected areas for construction, using the following procedure: 1) implementation of a Worker Health and Safety Plan; 2) preparation of a site specific work plan specifying the proposed location for surface samples or soil borings or trenches; 3) soil boring or trenching and sample collection; 4) laboratory analysis of samples; and 5) preparation of a findings and recommendations report. If the site-specific evaluations determine that contaminants are present, RT will determine the type and extent of contamination and will prepare and implement a remediation plan to avoid risks to public health and safety.
		CHW-4	If the site-specific evaluations determine that contaminants are present, RT will determine the type and extent of contamination and will prepare and implement a remediation plan to avoid risks to public health and safety.
		CHW-5	RT will notify the State Department of Toxic Substances Control, Sacramento County Environmental Health Department and the local fire department of any contaminants encountered during construction.
Lead Agency		Sacramento Regional Transit District	
Implementing Agency		Sacramento Regional Transit District	
Monitoring Agency		Sacramento Regional Transit District in cooperation with State Department of Toxic Substances Control, Sacramento County Environmental Health Department	
Timing		Start:	Before and during project construction
		Complete:	Upon completion of the construction phase of the project
Date	Signature of Monitor		Action/Accomplishments

5.2.9 Construction-Phase Impact on Hydrology, Floodplain and Water Quality

Description of Impact and Mitigation Measure 5.2.9.2	Construction activities would increase the sediment load in stormwater and disturb one or more acres of land. Modification of the berm of Franklin Station detention basin could result in the temporary loss of flood storage.	
	CHF&Q-1	The contractor will prepare a SWPPP identifying Best Management Practices to reduce water quality impacts.
	CHF&Q-2	RT will coordinate with SRCSD and the City of Sacramento regarding impacts to the detention basin and to maintain flood storage during construction.
	CHF&Q-3	If groundwater is encountered, dewatering will be conducted and contaminated effluent disposed of per applicable regulations.
Lead Agency	Sacramento Regional Transit District	
Implementing Agency	Sacramento Regional Transit District, the cities and County	
Monitoring Agency	Sacramento Regional Transit District	
Timing	Start:	Before and during project construction
	Complete:	Upon completion of the construction phase of the project

Date	Signature of Monitor	Action/Accomplishments

5.2.12 Construction-Phase Impact on Neighborhoods and Businesses

Description of Impact and Mitigation Measure 5.2.12.3	Construction traffic would temporarily affect study area neighborhoods due to street closures, rerouting of transit and vehicular traffic, and movements of construction equipment, materials and vehicles. There would be construction noise and vibration, air emissions, and visual changes. Impacts would localized, temporary and intermittent; none would substantially affect neighborhoods or local businesses.	
	CN&B-1	RT practices for noise and vibration, air quality, transportation, and aesthetics are in the respective sections of Chapter 5. No further mitigation is indicated.
Lead Agency	Sacramento Regional Transit District	
Implementing Agency	Sacramento Regional Transit District, the cities and County	
Monitoring Agency	Sacramento Regional Transit District	
Timing	Start:	Before and during project construction
	Complete:	Upon completion of the construction phase of the project

Date	Signature of Monitor	Action/Accomplishments

5.2.13 Noise and Vibration during Construction

Description of Impact and Mitigation Measure 5.2.13.1	Temporary noise during construction of new tracks, stations, and traction power substations may adversely affect nearby residents. Most severe conditions would occur if construction were concurrent with that of the CRB Widening, CRB Extension and levee system improvement projects (by others).	
	CN&V-1	RT will include specific residential property line noise limits in the construction specifications for this project, and perform noise monitoring during construction to verify compliance with the limits.
	CN&V-2	Perform noise monitoring during construction to verify compliance with the limits.
	CN&V-3	Assure that a compliant resolution procedure is in place to rapidly address any problems that may develop.
	CN&V-4	Vibration impacts will be mitigated by including numeric limits in the construction specifications, monitoring vibration, and requiring the contractor to follow the specified limits.
	CN&V-5	<u>Prior to use of vibratory hammers, initial trenching shall be conducted to minimize vibration during the preliminary installation of sheet piling. Before initiating the pile driving, the contractor shall submit a vibration monitoring plan to the Resident Engineer and have the plan approved by the Resident Engineer. Monitoring shall occur on a continual basis during the use of vibratory hammer equipment whenever activities are occurring within 50 feet of the PG&E pipeline. If the monitoring determines that thresholds are likely to be exceeded, all vibration-producing operations must stop until it can be ensured that construction may commence without exceeding applicable safety standards. Monitoring results shall be recorded hourly in a log and be available at the work site for inspection by the Resident Engineer, project managers, construction supervisors, PG&E representatives, and other appropriate personnel.</u>
Lead Agency	Sacramento Regional Transit District	
Implementing Agency	Sacramento Regional Transit District	
Monitoring Agency	Sacramento Regional Transit District	
Timing	Start:	Before and during the final design and construction phases of the project
	Complete:	Before initiation of LRT operations

Date	Signature of Monitor	Action/Accomplishments

5.2.15 Construction Impacts on Public Services and Facilities

Description of Impact and Mitigation Measure 5.2.15.2	Construction could involve temporary detours or street closures but are expected to have little or no impact on access to local public services and facilities. Emergency vehicles would need to observe any short-term road closures and temporary construction detours.	
	CPS-1	RT will coordinate with local emergency service providers in developing detour plans.
	CPS-2	Emergency service providers would be provided advance notice of road closures and detour routes.
Lead Agency	Sacramento Regional Transit District	
Implementing Agency	Sacramento Regional Transit District	
Monitoring Agency	Sacramento Regional Transit District	
Timing	Start:	Before and during the final design and construction phases of the project
	Complete:	Before initiation of LRT operations

Date	Signature of Monitor	Action/Accomplishments

5.2.16 Safety and Security during Construction

Description of Impact and Mitigation Measure 5.2.16.2	Construction activities could expose construction workers, local residents, and employees to potential safety hazards.	
	CS-1	RT will require the contractor submit a safety plan in advance of construction to ensure procedures for the safety of construction workers, local residents, and employees during construction of the LPAP2 Alternative.
	CS-2	Fencing and lighting of construction and staging areas, and recognized safety practice requirements for the utilization of heavy equipment and the movement of construction materials would be implemented to contain construction activities and avoid accidents.
Lead Agency	Sacramento Regional Transit District	
Implementing Agency	Sacramento Regional Transit District	
Monitoring Agency	Sacramento Regional Transit District	
Timing	Start:	Before and during the final design and construction phases of the project
	Complete:	Before initiation of LRT operations

Date	Signature of Monitor	Action/Accomplishments

5.2.17 Traffic and Transportation during Construction

<p>Description of Impact and Mitigation Measure 5.2.17.2, 5.2.17.5 & 5.2.17.8</p>	<p>- <u>Rail Services</u>: Construction of the connections of existing LRT tracks with new LPAP2 tracks could affect on-going revenue service. To avoid disruption of current LRT operations, construction of these connections will be scheduled during non-revenue hours.</p> <p>- <u>Bus Services</u>: Construction of grade crossings would involve closure of cross streets for 24 to 48 hours at a time, temporarily rerouting some bus routes.</p> <p>- <u>Vehicular Traffic</u>: Traffic could be disrupted by construction equipment and traffic. Construction of LPAP2 improvements would require street closures for 24 to 48 hours at several locations and rerouting of vehicular traffic.</p>	
	CT-1	Coordinate construction with other major work in the vicinity.
	CT-2	Grade-crossing construction that requires street closure will be scheduled so only one crossing in an area is affected at one time
	CT-3; CT-8	Provide the public and transit users advance notice of proposed transit reroutes and any other changes in stops and service.
	CT-4	Construction of at-grade crossings will take place during non-peak periods whenever possible, including at night and at normal work hours in residential areas.
	CT-5	RT will notify local residents and businesses in advance of proposed construction activity.
	CT-6	RT will communicate and coordinate with the CRC and Los Rios Community College District regarding the time of any street closures during construction of the LPAP2, with particular attention to peak student travel periods.
	CT-7	Contractors will be required to prepare and implement traffic handling plans approved by the cities of Sacramento and Elk Grove or Sacramento County.
	CT-9	Construction contracts will include provisions to avoid parking impacts to residential areas or businesses requiring on-street parking.
Lead Agency	Sacramento Regional Transit District	
Implementing Agency	Sacramento Regional Transit District	
Monitoring Agency	Sacramento Regional Transit District	
Timing	Start:	Before and during the final design and construction phases of the project
	Complete:	Before initiation of LRT operations

Date	Signature of Monitor	Action/Accomplishments

5.2.18 Construction-Phase Effects on Utilities

Description of Impact and Mitigation Measure 5.2.18.2	Construction activities may encounter unexpected utilities within the project right-of-way. Relocations of affected utilities will be the responsibility of RT and may require short-term, limited interruptions of service.	
	CU-1	RT will continue close coordination with all utility providers during construction to identify any potential conflicts and formulate strategies to overcome potential problems.
	CU-2	A set of detailed plans will be submitted to utility providers for their review and comment prior to the onset of any relocation work.
	CU-3	Schedule any service interruptions in advance and ensure appropriate notification to users.
Lead Agency	Sacramento Regional Transit District	
Implementing Agency	Sacramento Regional Transit District, in coordination with MCU, US Sprint, Pacific Bell, SMUD, AT&T, PG&E, SCRSD, Sacramento Cable, the cities and UPRR	
Monitoring Agency	Sacramento Regional Transit District	
Timing	Start:	Before and during project construction
	Complete:	Upon completion of the construction phase of the project

Date	Signature of Monitor	Action/Accomplishments

5.2.19.1

Cumulative Construction-Phase Impacts

Description of Impact and Mitigation Measure 5.2.19.2	In the event that construction of any or all of the related projects occurs simultaneously with the construction of the TSM or LPAP2 Alternative of the South Sacramento Corridor Phase 2 project, cumulative construction phase impacts could result	
	CCP-1	Develop traffic handling plans to minimize impacts to the traveling public.
	CCP-2	Develop traffic handling plans and detour routes in coordination with emergency service providers to prevent adverse impacts to emergency service delivery.
	CCP-3	Coordinate with other project proponents, as necessary, in the development of public information messages regarding the timing and location of construction activities, temporary detours, and specific measures to be undertaken to reduce construction impacts.
	CCP-4	Continue to coordinate with all utility providers during the construction stages of the project to identify any potential conflicts and formulate strategies to overcome potential problems.
	CCP-5	Submit a set of detailed plans to utility providers for their review and comment prior to the onset of any relocation work.
	CCP-6	Schedule any short-term, limited service interruptions well in advance and with provision of appropriate notification to users.
	CCP-7	Apply mitigation measures for fugitive dust and PM10, listed in Section 5.2.3.3, in overlapping or adjacent construction areas.
	CCP-8	Apply mitigation measures for construction noise and vibration, listed in Section 5.2.14.2, in overlapping or adjacent construction areas.
Lead Agency	Sacramento Regional Transit District	
Implementing Agency	Sacramento Regional Transit District,	
Monitoring Agency	Sacramento Regional Transit District	
Timing	Start:	Before and during project construction
	Complete:	Upon completion of the construction phase of the project

Date	Signature of Monitor	Action/Accomplishments