JPB Technology, Operations, Planning, and Safety (TOPS) Committee
Meeting of March 25, 2026

Supplemental Reading File

#	Subject
1.	Receive Update on Guadalupe River Bridge Project
2.	Receive Update on Stadler Vehicle Issues, Corrective Maintenance, and Future Mitigation Strategies

Guadalupe River Bridge Replacement Project (GRBRP)

Executive Monthly Progress Report

February 28, 2026

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1.0 EXECUTIVE SUMMARY

1.1 Introduction

Caltrain will extend and replace two bridges over the Guadalupe River in The City of San José (Santa Clara County) just north of Caltrain Tamien Station. The Project is technically and logistically complex due to the age of the existing structures, their geographical location over a river, and the need to obtain and comply with multiple permits issued by various federal, state, and regional agencies.

The Project involves the full replacement of a northbound bridge (Main Track Bridge 1 or "MT-1"), a partial replacement, including seismic improvements, of the southbound bridge (Main Track Bridge 2 or "MT-2") and modifications to the existing Guadalupe River channel. The improvements address the structural deficiencies of the MT-1 bridge and the geomorphic instability of the Guadalupe River channel in the vicinity of the MT-1 and MT-2 bridges to provide for long-term public safety and service reliability. The Project will enhance surrounding aquatic and upland habitats on the Project site, will purchase habitat credits from the Santa Clara Valley Habitat Agency and will partner with the Midpeninsula Regional Open Space District on a restoration project at Hick's Creek to satisfy mitigation requirements resulting from the environmental impact arising from the Project.

1.2 Background and Recent Accomplishments

In 2023, Caltrain completed demolition and extension of the MT2 bridge, relocation of all signaling cables from the MT1 bridge to the new MT2 bridge, relocation of all privately-owned utilities from the MT1 bridge to the new MT2 bridge and placement of the new MT2 bridge into passenger service. Due to constructability issues with the existing environmental permits, the construction work was paused in 2024 while Caltrain worked to amend the environmental permits to align with the revised approach for completing the project.

While the Construction work was paused, Caltrain issued three limited notices to proceed (LNTPs) to Walsh in February 2025.The LNTPs enabled Walsh to begin fabricating materials (e.g., rebar and casings), procure pipes for river diversion, and mobilize workers, subcontractors, and equipment to commence work on June 15, 2025. Caltrain completed a thorough assessment of all aspects of the program including cost, schedule, risks, and organization and completed a global settlement with the Construction Contractor. Caltrain received JPB board approval for the re-baselined project budget and schedule in June of 2025. Upon receipt of the amended permits, Caltrain provided notice to proceed (NTP) to Walsh to resume construction in June 2025.

Walsh successfully completed the 2025 first dry-season work, achieving the MT1 bridge critical work milestone as scheduled. The planned MT2 seismic retrofit foundation work also progressed; however, completion was delayed due to nesting bluebirds within the project limits in June 2025. The remaining MT2 seismic work is planned for completion in the second dry season.

Walsh Construction, in coordination with the Caltrain project team, has evaluated recovery options to address the schedule impacts and enable completion of the remaining work during the 2026 dry season, maintaining the overall project completion target of March 2027.

In the month of February 2026, Walsh proceeded with wet season work without delay to any critical milestones. Activities included continuation of MT1 bridge construction, and surrounding retaining walls. Other work, such as site grading activities and installation of bird deterrent measures on the MT1 bridge structure, were also ongoing throughout February. With the increased bird nesting activities beginning in February, Biologists supporting the project have increased their oversight to assure prevention of bird nesting that could impact construction progress. Walsh also focused efforts on maintaining erosion control and other winterization measures of the inactive areas of the site.

In channel construction work for completion of MT1 and MT2 bridges require de-energization of the OCS and reduced service for up to five discreet weekends during the 2026 dry season.

The remaining work for reconstruction of the MT1 bridge, installation of seismic retrofit piles for the MT2 bridge, widening the Guadalupe River channel, and implementing environmental mitigation in the form of habitat restoration and enhancements as part of HMMP on-site work will continue through the completion date of March 2027.

1.3 Resource Agency Permitting Status

The team worked with the resource agencies and secured revised permits for the Project in time to commence construction on June 15, 2025, the beginning of the 4-month “dry” construction season, followed by limited construction activities in the “wet season” (October 15, 2025 – June 15, 2026) and the 2026 “dry season”. The following permits were received including conditions and mitigation requirements:

- San Francisco Bay Regional Water Quality Control Board (RWQCB) revised 401 Water Quality Certification
- U.S. Army Corps of Engineers (USACE) Section 404 reverification and the existing 408 permit is sufficient for Caltrain to resume bridge construction
- The California Department of Fish and Wildlife (CDFW) 1600 Streambed Alteration Agreement.
- Santa Clara Valley Water District (SCVWD) bridge construction encroachment permits extension and amendment.

To ensure successful completion of the work during the 2026 dry season, the team has conducted multiple constructability, sequencing, and risk-reduction workshops with the contractor and environmental team to carefully evaluate lessons learned from the 2025 dry season and identify opportunities to further minimize environmental impacts while improving schedule certainty.

Through this process, staff identified several refinements to the approved construction approach that are intended to reduce in-water work duration and avoid unnecessary disturbance. Several of these measures will require amendments to the Resource Agency Permits, if approved, as well as CEQA Addendum approval. Upon receiving additional feedback from the Resource Agencies, the following permit modifications have been formally requested:

- Additional access road from Willow St across JPB ROW to:
    - improve site access and flow of materials needed to complete construction.
    - provide permanent access for future maintenance.

- Pruning the floodplain starting in April to mitigate potential bird nesting in the footprint of the river diversion piping to be installed for the dry season.
- Early start of vegetation clearing and staging river diversion pipe in the floodplain on June 1.
- Extended dry season work hours, limited to a few hours after sunset for refueling, material staging and housekeeping activities to help maximize daylight hours to focus on construction productivity.

The Onsite Habitat Mitigation Management Plan (HMMP) was initially provided to agencies for review in July of 2025. The HMMP was then revised substantially due to comments from SCVWD and the regulatory agencies. The HMMP covers details of the proposed on-site mitigation and off-site mitigation required to address impacts of project construction. The following are highlights of recent habitat mitigation efforts:

- On site HMMP package was revised to address all previous comments and re-submitted for agency review on February 20, 2026. JPB requested that the agencies complete their review of the revised document by March 25, 2026.
- Both CDFW and RWQCB have responded positively, indicating they will prioritize their review of the February 2026 HMMP.
- The project team remains optimistic that approval of the HMMP will be acquired in time to begin construction in 2026 dry season.
- JPB will continue to work with SCVWD to acquire approval of the HMMP and Encroachment Permit #2 to perform on-site habitat mitigation within the district's land prior to the 2026 Dry Season Construction start**.**

Offsite compensatory mitigation was selected through the Santa Clara Valley Habitat Agency (Habitat Agency) and the Mid-Peninsula Open Space District (Midpen).

- JPB will prepare a Project Mitigation Summary Memo detailing the mitigation offered to offset habitat impact due to the project construction. This memo will be distributed to all agency partners.
- JPB is developing a Participating in Special Entity (PSE) agreement through the Habitat Agency to achieve a portion of the required mitigation credits. This agreement will be finalized after the agencies have approved the revised HMMP
- Midpen Board approved the Hick's Creek Mitigation project on July 9th.
    - A Cooperative Mitigation Agreement is currently being drafted between Midpen and JPB.
    - In August, JPB executed a contract with ICF to perform design and permitting services for the Hick's Creek Mitigation project. In early December 2025, ICF completed the 60% design and submitted for permitting agency review.
    - Final Design is anticipated to be completed by April 2026
    - A third CEQA Addendum is needed specifically to capture the Offsite Mitigation offered by the project.
    - JPB and FTA will complete a NEPA re-evaluation for Offsite Mitigation.
    - Advertisements for construction contract procurement will begin fall 2026 after acquiring all regulatory permits.

1.4 Project Cost and Budget

On June 5, 2025, the JPB board approved to amend the Guadalupe River Bridge Replacement Project Budget from $63,698,593 to $171,389,598. As of February 2026,

the project is within budget:

- The current project total cost at completion (EAC) is the same as the Board approved budget of $171.38 million.
- As of February 2026, the project cost is on track to be completed within the approved budget.
- To date, there have been $1,111,734 in drawdowns to the Contractors Risk Allowance.
- Several requests for Risk Allowance usage totaling approximately $1.05 million have been submitted by Walsh Construction and are currently under review for final cost approval.
- No drawdowns to the project contingency of $7.6 million.

1.5 Project Progress and Schedule

After June 2025 NTP was issued, a nesting blue bird within the project delayed the start of water diversion work. However, the project team has been working with the Contractor on resequencing to minimize the critical path impact.

As of February 28, 2026, the overall bridge construction completion is 67% and the current project schedule is still on track with the contractors' substantial completion date of March 2027 for the Guadalupe River Bridge Replacement and Habitat Mitigation work on the Guadalupe Bridge Site. Additional work will be ongoing through 2027 for completion of an offsite habitat mitigation project at the Hick's Ranch site owned by Mid-peninsula Regional Open Space District.

1.6 This Month's Accomplishments

The project team has completed the following notable activities for the month of February 2026:

- Construction of retaining walls continued.
- Continued temporary and final site grading activities.
- Continued to refine design for additional access point along the site perimeter to improve access and mitigate potential site congestion during the 2026 Dry season Construction as well as provide future Caltrain access.
- HMMP design was finalized and submitted for final permit applications.
- Completed installation of temporary bird deterrent measures on MT1 bridge.
- Advanced design work with ICF for the offsite Hick's Creek project design.
- Hosted quarterly update meeting with the Environmental Permitting Agencies, including FTA.

1.7 Upcoming Work

For the next month, the Project team will be focusing on the work below:

- Continue MT1 bridge construction activities that are outside of the channel.
- Continue to work with permitting agencies to obtain permits for HMMP onsite work.
- Work with resource agencies to gain approval of modifications to permits to mitigate construction risks in 2026.
- Continue to work toward Hick's Creek offsite mitigation 100% design.
- Ongoing work to finalize agreement with Mid-Peninsula Regional Open Space District for use of Hick's Ranch for the offsite mitigation project.

- Host monthly status meetings with the Environmental Permitting Agencies.
- Hold quarterly status meeting with Funding Partners.
- Finalize design for additional access to improve efficiency during the 2026 Dry Season Construction.
- Work with Walsh Construction to reconcile risk allowance drawdowns resulting from 2025 work

1.8 Risk Management

As of February 2026, the top critical items and related actions are listed below.

Table 1-1. Key Risks and Actions

Risk Descriptions	Mitigation Actions
Bird nesting impact to construction work	• Bird deterrents are installed on new bridge structures to prevent nesting over the 2025-2026 wet season. • Walsh advanced all contract required tree removals in 2025 dry season to eliminate locations for nesting birds. • Biological monitors increasing site monitoring during bird nesting season to prevent development of new nests. • Working in coordination with Walsh Construction, Construction Management Staff and Caltrain Environmental staff to evaluate modifications to the planned work that will mitigate 2025 nesting bird impacts and reduce schedule risk in 2026 dry season. • Requested permit amendments from Regulatory Agencies to gain approval for advancing pruning activities in potential bird nesting locations that could affect the 2026 dry season work area.
Work needed to execute construction deviates from what is permitted, specifically the river diversion methods for 2026	• Ongoing collaboration with Walsh Construction, Construction Management Staff and Caltrain Environmental staff to hold regular bi-weekly workshops to review site conditions and develop work plans for the 2026 dry season river diversion that incorporate lessons learned from 2025 river diversion implementation. • Work with Walsh Construction to evaluate 2026 river diversion implementation risks and potential mitigations to ensure work can be completed in 2026 dry season work window. • Work with the JPB environmental team to evaluate potential risk mitigations and propose modifications to the regulatory agencies.
Unforeseen subsurface or structural conditions	• Advanced potholing, when possible, to uncover potential utility conflicts and differing structural conditions (MT2)
Unpredictable Water or weather conditions	• River Diversion and Temp Sheet pile for wet season work designs incorporate appropriate capacities to handle expected water levels. • Monitoring forecast to allow time to sufficiently prepare for weather events • Response plan was developed with Construction Contractor to mitigate “over-topping” of river diversion in case of weather event that will affect water levels in river. • Adjusting schedule to pause construction activities to avoid forecasted weather that could result in high flows and impacts to environment. • Develop work plans and implement measures to manage groundwater and other water accumulating behind sheet pile walls to prevent discharges to the river.

Delays to approval of onsite HMMP	• Worked with permitting agencies to review draft HMMP and capture edits needed in advance of permit needs. • Regularly communicating status and timeline on monthly meetings to allow regulatory agencies to plan in advance for workload. • Engage executive staff level support to contact Permitting agencies who have been unresponsive. • Provided draft HMMP plans to Walsh to confirm baseline schedule assumptions and to prepare for advertisements to subcontractors. To maintain schedule, draft HMMP (90% complete) is being used to advance bidding process. Any changes resulting from agency reviews will be addressed via addendum to the subcontractor.
Reductions to onsite HMMP require additional mitigation that cannot be achieved with the current Hick's Creek Offsite mitigation project	• Working with Santa Clara Valley Water District to find mutually agreeable solutions to include as much mitigation scope on their property as possible. • Evaluating Hick's Creek Offsite mitigation project for additional opportunities to satisfy requirements. • Identified other options for offsite mitigation opportunities, should they be needed.

2.0 SAFETY

Walsh Construction provides a full-time safety manager on the project who oversees and implements the Health and Safety program for the project. Walsh's safety manager continues to provide relevant training, host safety meetings, safety related inspections, reporting and managing responses to safety issues. This role will continue for the duration of the project.

Walsh reports the following safety activities for the month of February 2026:

Period	Man Hours	Safety Meetings	Inspections	Observations	Close Calls	Incidents
February 2026	2,766	28	83	12	0	2
Cumulative (from June 2025)	61,102	191	365	362	9	21

Safety Event Synopsis:

- 02.17.26: Motor Vehicle Incident (MVI): Walsh Subcontractor involved in an off-site MVI, resulting in property damage only, with no injuries reported (local street).
- 02. 26.26: Motor Vehicle Incident (MVI): Walsh Subcontractor involved in an off-site MVI, no injuries reported (Hwy 87, California Highway Patrol (CHP) report pending)

There are no OSHA reportable incidents and no Caltrain ROW incidents.

Definitions:

Incident: Any event occurring on or in the vicinity of the Work Site involving personnel, property or equipment associated with the Work which results in personal injury to any person or damage to any property.

Close Call: Any event resulting in no injury or no damage, but which had potential to result in injury or damage to persons or property.

Observation: The act of watching and recording specific workplace activities, conditions, and behaviors as they occur. The intent is to identify safe and unsafe actions, conditions, and positive safety behaviors, with the goal of preventing incidents before they occur. The process is driven by behaviors, actions and workspace conditions observed by the person(s) conducting the observation.

Inspection: The act of conducting a specific or multiple element job site evaluation of a workplace, equipment, or operational process aimed at identifying potential hazards, ensuring compliance with safety regulations, and promoting a safe working environment. Typically, a checklist based upon regulatory standards is used during the process.

3.0 PROJECT SCHEDULE

3.1 Introduction

The JPB has approved project re-baseline schedule as part of project reset with a Substantial Completion date of March 03, 2027, and Final Acceptance of March 31, 2027. The off-site habitat mitigation work will carry through 2027 for completion at Hick's Ranch site owned by Mid-peninsula Regional Open Space District.

As of February 28, 2026, the overall delay to the critical path is 0 days. The contractor re-sequenced dry season work to minimize schedule impact caused by bird nesting. Bridge Construction will be completed in two dry seasons.

Milestone 1 (MT-1 Installation of Steel Girder Span 2) was completed on time on September 25, 2025.

3.2 Re-Baseline Schedule

Guadalupe River Bridge Replacement (GRBR) project re-baseline schedule was established. The following are the status of major Milestones as of February 28, 2026.

Major Milestones	Re-Baseline Date	Forecast Date	Notes
2025 Dry Season Mobilization	06/15/2025	06/15/2025A	Completed
Interim Milestone 1 (Completion of MT1 Steel Girder)	09/27/2025	09/25/2025A	Completed
2025-2026 Wet Season (outside of river channel) • MT1 Foundation and Super Structure • MT2 Pier 4 Work	06/1/2026 01/23/2026	06/01/2026 01/23/2026	Re-baseline date contained significant float for wet season work, allowing for work to be completed by June 1, 2026, prior to the next dry season. MT1 foundation and superstructure work (Concrete Girders) were completed in January. MT 2 Pier 4 work will be deferred to later in the season when weather is more favorable.
2026 Dry Season—Milestone 2 (All in-channel work) • MT1 Deck & Finishes • MT2 Finishes	10/15/2026	10/15/2026	
2026-2027 Wet Season-Complete Final Planting – On-Site Mitigation	02/09/2027	02/09/2027	
Substantial Completion	03/03/2027	03/03/2027	
Completion of Off-Site Mitigation	12/27/2027	12/27/2027	

Table 3-1. Re-baseline Schedule

3.3 Critical Path Analysis

The critical path goes through MT1 Abutments 1 and 5 works before linking to MT2 Piers 2, 3 and 4 retrofit. The critical path continues through the 2026 dry season and includes completing the remaining MT1 and MT2 bridge work, and final HMMP work.

4.0 COST AND BUDGET

4.1 Introduction

The JPB approved a revised Project budget of $171.38 million. Table 4-1 depicts a summary level of project budget, costs, and estimate at completion based on the latest project cost update as of February 28, 2026.

4.2 Project Budget and Cost

Table 4-1. Budget Summary by Project

Description of Work	Current Budget (A)[1]	Cost This Month (B)[2]	Cost To Date (C)[3]	Estimate To Complete (D)	Estimate At Completion (E) = (C) + (D)	Variance at Completion (F) = (A) – (E)
Guadalupe River Bridges Replacement	$171,389,598	$2,801,483	$97,400,556	$73,989,042	$171,389,598	$0
GRB TOTAL	**$171,389,598**	**$2,801,483**	**$97,400,556**	**$73,989,042**	**$171,389,598**	**$0**

[1.] Column A "Current Budget" includes re-baseline and executed change orders and awarded contracts.

[2.] Column B "Cost This Month" represents the cost of work performed this month.

[3.] Column C "Cost to Date" includes actual (amount paid) and accruals (amount of work performed) to date.

Table 4-2 depicts project budget, costs, and estimate at completion summarized by major elements of work. This budget table provides additional details for the project and is broken down by major work elements for the project, minor contracts, environmental, designer, project management oversight, HMMP and other indirect support costs.

Table 4-2. Budget Summary by Major Elements

Description of Work	Re-Baseline Budget	Current Budget	Cost This Month	Cost To Date	Estimate To Complete	Estimate At Completion
	(A)	(B)	(C)	(D)	(E)	(F) = (D) + (E)
Walsh Construction Contract	$89,787,026	$89,787,026	$1,752,562	$56,921,584	$32,865,442	$89,787,026
Design Services during Construction	$2,312,930	$2,312,930	$81,188	$1,279,867	$750,133	$2,030,000
Environmental Support (Including Compliance, Monitoring, Legal & Permit Fees)	$14,124,097	$13,753,300	$254,645	$8,761,359	$4,838,396	$13,599,755
Offsite Habitat Mitigation (HMMP) - Incl 100% Design	$12,250,000	$12,620,798	$75,000	$404,725	$12,063,524	$12,468,249
Management Oversight & Support	$23,180,900	$23,180,900	$387,978	$15,168,167	$7,562,323	$22,730,490
Others (TASI & Bus Bridge Support, ICAP)	$16,834,453	$16,834,453	$250,110	$9,588,908	$7,936,376	$17,525,284
PRIOR COSTS - Planning/Engineering & CalMod Improvements	$5,275,945	$5,275,945	$0	$5,275,945	$0	$5,275,945
Contingency	$7,624,247	$7,624,247	$0	$0	$7,972,849	$7,972,849
Grand Total	**$171,389,598**	**$171,389,598**	**$2,801,483**	**$97,400,556**	**$73,989,042**	**$171,389,598**

4.3 Contractor's Risk Allowance Pool

Caltrain and Walsh continued to implement new mechanisms to support a collaborative approach to project delivery. The parties jointly completed a detailed review of project risks and mitigation strategies, acknowledging that certain risks may materialize under specific conditions. To address this, both parties agreed to establish an allowance pool to cover additional costs related to risk mitigation following the start of construction in June 2025.

As part of the global reset, a $4 million Risk Allowance Pool was created to proactively and collaboratively manage risks with the contractor. This pool is intended to compensate the contractor for additional costs incurred if identified risks are realized. Table 4-3 summarizes the current month's drawdown from the Risk Allowance Pool, the cumulative drawdown to date, and the remaining balance by risk category.

Table 4-3. Risk Allowance Pool Status as of February 2026

Risk Allowance Pool Category	Risk Amount	Current Month	Executed to Date	Remaining Balance
Differing Site Conditions	$390,750	$0	$47,248	$343,502
Bird Deterrent Mitigation	$250,000	$0	$0	$250,000
Permit Requirements	$1,000,000	$117,282	$157,574	$842,426
Track Access Impacts	$360,000	$0	$0	$360,000
Water Management	$250,000	$0	$0	$250,000
Warehouse Storage	$297,000	$0	$66,925	$230,075
Isolation Casings	$600,000	$277,174	$277,174	$322,826
Phytophthora Management	$750,000	$0	$562,813	$187,187
Contingency	$102,250	$0	$0	$102,250
Total	**$4,000,000**	**$394,456**	**$1,111,734**	**$2,888,266**

In addition to the established Risk Allowance Pool with Walsh, the re-baseline budget includes a project contingency of $7.6 million to cover potential changes and unknowns not related to Walsh. As of February 2026, the total project contingency is $7.6 million. Table 4-4 summarizes the current remaining and forecasted contingency balance as of the latest monthly update.

Table 4-4. Overall Project Contingency

	Project Contingency		
	Allocated (A)	Unallocated (B)	Subtotal C = (A+B)
Project Contingency	$7,624,247	$0	$7,624,247
Drawn Contingency	$0	$0	$0
Remaining Contingency	$7,624,247	$0	$7,624,247
Pending Changes	$0	$0	$0
Forecasted Remaining Contingency	$7,624,247	$0	$7,624,247

4.4 Contract Incentives

The Global Re-set included incentives based on Early Interim Milestone Completion. Table 4-5 provides a status of Contractor incentives Budgeted, Awarded, and remaining Balance. There is $420,000 drawn from contract incentives as of February 2026.

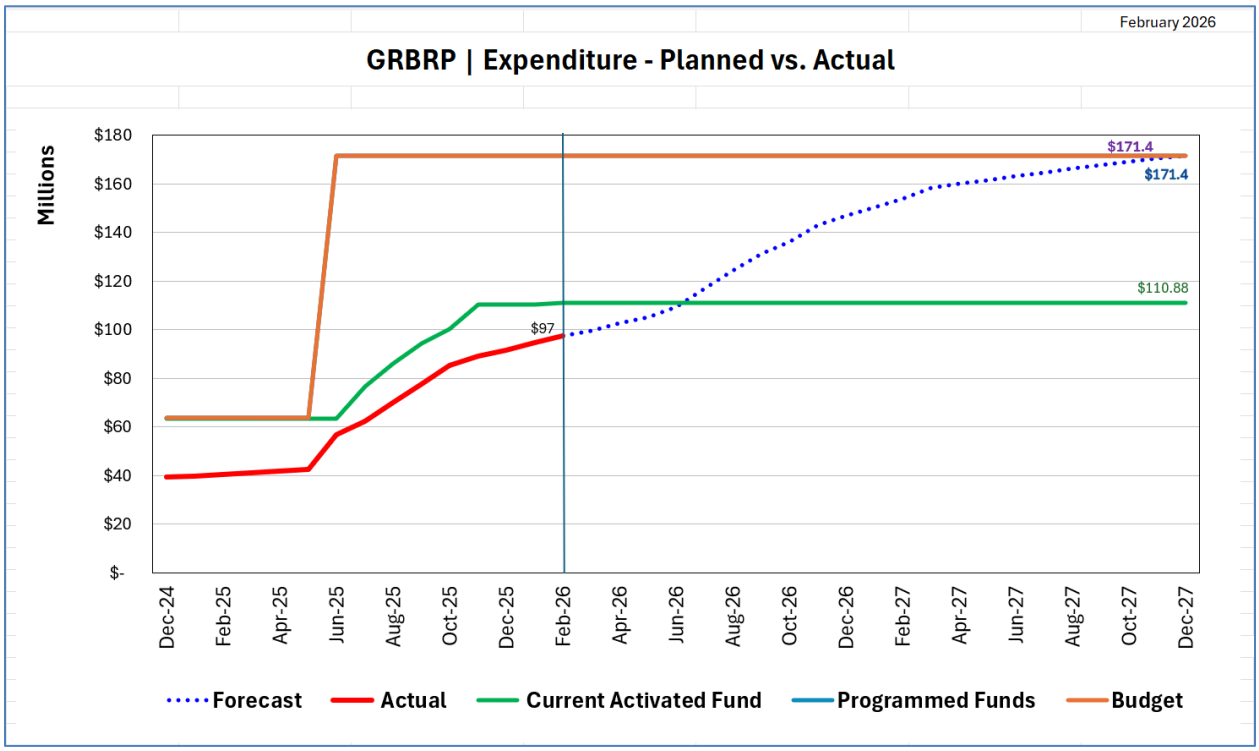
Table 4-5. Construction Contractor Incentives

Incentives	Budgeted (A)	Awarded (B)	Projected Remaining to Award (C)	Projected Balance Remaining (D)=(A)-(B)-(C)
Interim Milestone				
Install Steel Girders on MT1 Span 2	$540,000	$420,000	$0	$120,000
In-Channel Work	$540,000	$0	$540,000	$540,000
Total Contract Incentive	**$1,080,000**	**$420,000**	**$540,000**	**$660,000**

4.5 Project Cash Flow and Funding

The remaining project expenditures are cash flowed in Figure 4-1.

Figure 4.1. Expenditure – Funding Cash Flow



4.6 Issues

Table 4-7. Cost and Funding Issues Identified, and Actions Taken for February 2026

Issues	Actions
None	• N/A

5.0 CHANGE MANAGEMENT

5.1 Introduction

The change management process establishes a formal administrative work process associated with the initiation, documentation, coordination, review, approval, and implementation of changes during the design and construction of GRB. The change management process accounts for the impacts of the changes and ensures prudent use of contingency.

5.2 Construction Change Orders / Risk Allowance Pool

5.2.1 Executed Risk Allowance or CCO Items

- CCO-030 – Global Re-set Change Order
- CCO-031 - Utility Services (Owner's Field Office)
- CCO-032 - Suspension of DBE Requirements

Risk Allowance:

- CCO-033 – Unforeseen Demolition for MT-1 Solid Bent
- CCO-034 - Unanticipated COZEEP Requirements
- CCO-035 - Caltrans Property Fence
- CCO-036 – Phytophthora Management
- CCO-038 – Offsite Refueling
- CCO-039 - Surface Water Sampling

5.2.2 Approved Risk Allowance or Change Order Items:

- CCO-37 - Isolation Casing Changes

5.2.3 Upcoming Risk Allowance Items or Change Orders

- Risk allowance usage requested by Walsh through the month of February is $1,047,415 and is currently pending review and approval of final costs.
- Potential Future Risk allowance items include:
  - CIDH pile modifications
  - Removal of Fallen tree in river obstructing installation of river diversion
  - Additional generator for river diversion pumping and double handling of equipment to accommodate Valley Water fueling restrictions
  - Removal of unforeseen buried concrete
  - Additional pumps needed for river diversion
  - Added ATS system to support dewatering needs
  - Bird Deterrent additional scope
  - Bat mitigation measures
  - Costs related to nesting bluebird delay in June
  - Additional compensation due to impacts related to regulatory permit conditions beyond baseline assumptions in 2025 Dry Season
- Pending Change Orders
  - Willow Access Road Construction

5.3 Issues

Table 5-1. Change Management Issues Identified, and Actions Taken for February 2026

Issues	Actions
River Diversion cofferdams have not sealed completely and are resulting in greater seepage quantities than anticipated. There is no direct impact on critical path work.	• Working with the contractor to develop a plan for improvements and in compliance with permits. • Use of risk allowance anticipated to compensate Walsh for work that is beyond the baseline assumptions including additional dewatering pumps and an additional ATS system. • Will hold a “lessons learned” meeting with the contractor and environmental staff to discuss improvements for future work.
Valley Water added an unexpected permit condition about fueling at the very last minute before construction. No fueling on VW property was not included in previous permits.	• Worked with Walsh to develop fueling plans for approval by JPB for fueling non-mobile equipment within JPB ROW. • Monitoring potential impacts on productivity due to fueling restrictions related to mobile equipment and working with the contractor to mitigate where possible. • Use of risk allowance to compensate Walsh for work that is beyond baseline assumptions.

Peninsula Corridor Joint Powers Board
Staff Report

To:	JPB Technology, Operations, Planning, and Safety (TOPS) Committee
Through:	Michelle Bouchard, Executive Director
From:	Ted Burgwyn, Acting Chief Operating Officer
For:	April 2026 JPB Board of Directors Meeting
Subject:	**Receive Update on Stadler Vehicle Issues, Corrective Maintenance, and Future Mitigation Strategies**

☐ Finance Committee Recommendation ☐ Technology, Operations, Planning, and Safety Committee Recommendation ☐ Advocacy and Major Projects Committee Recommendation

Purpose and Recommended Action

At the December 2025 meeting of the Peninsula Corridor Joint Powers Board (JPB or Caltrain), Chair Heminger and Director Burt requested a report of issues, corrective maintenance, and future mitigation strategies with respect to multiple Stadler vehicle issues that occurred in the last few months of Calendar Year 2025.

There is no action required by the Board to receive this report.

Discussion

During the months of October and November Caltrain experienced a slew of mechanical issues that impacted the availability of the new Electric Multiple Unit (EMU) fleet. This equipment shortage required the cancellation of 35 trains and resulted in seven total days of service disruption. Since these failures impacted a wide range of on-board systems and components, it was difficult to troubleshoot every failure at the same time, which delayed the return of the vehicles to service. Examples of failures (details attached) included power converter faults, Heating, Ventilation, and Air Conditioning (HVAC) failures, compressor issues and problems with the circuit breakers, but the problems that took the longest time to troubleshoot and resolve were with the ethernet system. Because this governs how the braking system normally operates, it was critical to ensure the system was fixed before each train was returned to service. In normal circumstances, Caltrain operates with a healthy "spare" ratio so that individual failures do not impact revenue service; unfortunately, during this period these failures all happened simultaneously, which is what led to train cancellations.

After escalating to Stadler's executive team, who provided additional field technicians and engineering support, the situation with the fleet has stabilized and upon evaluation of the issues encountered, staff identified the following strategies for correcting and minimizing issues moving forward.

Real-Time Monitoring and Response

- **Rail Data Service (RDS) Integration (Will Continue):** Key JPB/TransitAmerica Services, Inc. (TASI) personnel utilize the RDS to monitor live status, 24/7 positioning, and sensor data for every critical EMU component.

- **Immediate Alerting (New Feature):** The system has been configured to send instant alerts to mobile devices and email for any ethernet failures, allowing for immediate intervention and reduced downtime.

Hardware Analysis and Fleet Inspection

- **Failure Analysis (Involving the Manufacturer):** Any component involved in an ethernet failure is returned to the manufacturer for comprehensive analysis. Sending the component back to the manufacturer was an additional step that was taken to troubleshoot the issue.

- **Fleet-Wide Testing (Will Continue):** All train sets undergo inspections and testing for similar parts to confirm that specific failures are not systemic fleet issues. Components involved continue to be monitored on all trains to ensure no re-occurring issue redevelopers.

Training and Documentation (All Updated as Part of Lessons Learned)

- **Specialized Training:** TASI personnel received troubleshooting training focused specifically on ethernet systems.

- **Standardized Guides:** Stadler developed a guide for the Central Control Facility (CCF) regarding brake behavior during ethernet failures and a separate troubleshooting manual to streamline diagnostics while trains are in service.

- **Efficiency Measures:** The Stadler Engineering team is receiving "pre-blue flag" training, allowing them to begin work immediately upon arrival from out of town without administrative delays.

Software and System Diagnostics (All Updated as Part of Lessons Learned)

- **Enhanced Diagnostics:** Troubleshooting laptops have been upgraded with new software and code specifically designed to identify/resolve ethernet issues.

- **Proactive Flagging:** The RDS system identifies and flags any recurring fault codes (ethernet-related or otherwise) to prevent potential future failures. All recurring faults will be monitored/inspected to ensure they are not a potential fleet wide mechanical issue.

Budget Impact

There is no impact on the budget from receiving this report.

Prepared By: Henry Flores Director, Rail Vehicle Maintenance 03/09/2026

EMU Failure Type – Details and Resolution

Failure Type	Issue Description (Oct–Nov)	Approx. Repair Time	Representative Incidents	Corrective Actions / Resolution	Outstanding / Next Steps
Ethernet System Failures	Loss of Ethernet comms between control units; defective switches / modules; wiring defects; brake logic dependency	~1–2 months per incident	Trainset (TS) 04 (service stoppage; **late Oct 2025**, Federal Railroad Administration logs), TS15 (yard Ethernet failure; **early Nov 2025**), TS16 (24 volt loss → parking brake; **mid-Nov 2025**), TS05 (upload-linked Ethernet faults; **late Nov 2025**)	Replaced faulty parts, fixed wiring, tested trains before returning to service	Supplier Root Cause Analyses pending; FRA review of logs
Power Converter Faults	Intermittent converter trips / fault indications reducing traction availability	~2–8 hours per incident	Multiple trainsets; recurring events during **Oct–Nov 2025** shortage	Inspected and replaced parts; updated settings	Supplier analysis and software updates
Compressor Issues	Air supply / compressor faults affecting brakes / doors	~1 day per incident	Isolated Out-of-Service events during **Oct–Nov 2025**	Repaired or replaced compressors; confirm no leaks	Monitor for repeat issues
Main Circuit Breaker (MCB) Problems	Trips / contact wear	~Same day or next day	Short-duration outages during **Oct–Nov 2025**	Reset or replaced breakers; cleaned contacts	Monitor for repeat issues

Failure Type	Issue Description (Oct–Nov)	Approx. Repair Time	Representative Incidents	Corrective Actions / Resolution	Outstanding / Next Steps
HVAC Failures	Blower fan failures leading to comfort / operational constraints	~Same day or next day based on material availability	Component substitutions during **Oct–Nov 2025** to maintain service	Repaired or replaced HVAC units	Field modifications in process (ETC June 2026).
Configuration Control Errors	Incorrect configuration upload caused trainset mis-ID; triggered Ethernet errors during upload	~Same day or next day	TS05 configuration event, manifested on TS18 during upload (**late Nov 2025**)	Corrected software and verified train ID	Stadler implemented tighter configuration control for software updates