

Recommended Project Delivery Approach for 4th and King Yard DTX Preparation

AMP COMMITTEE
NOVEMBER 29, 2023



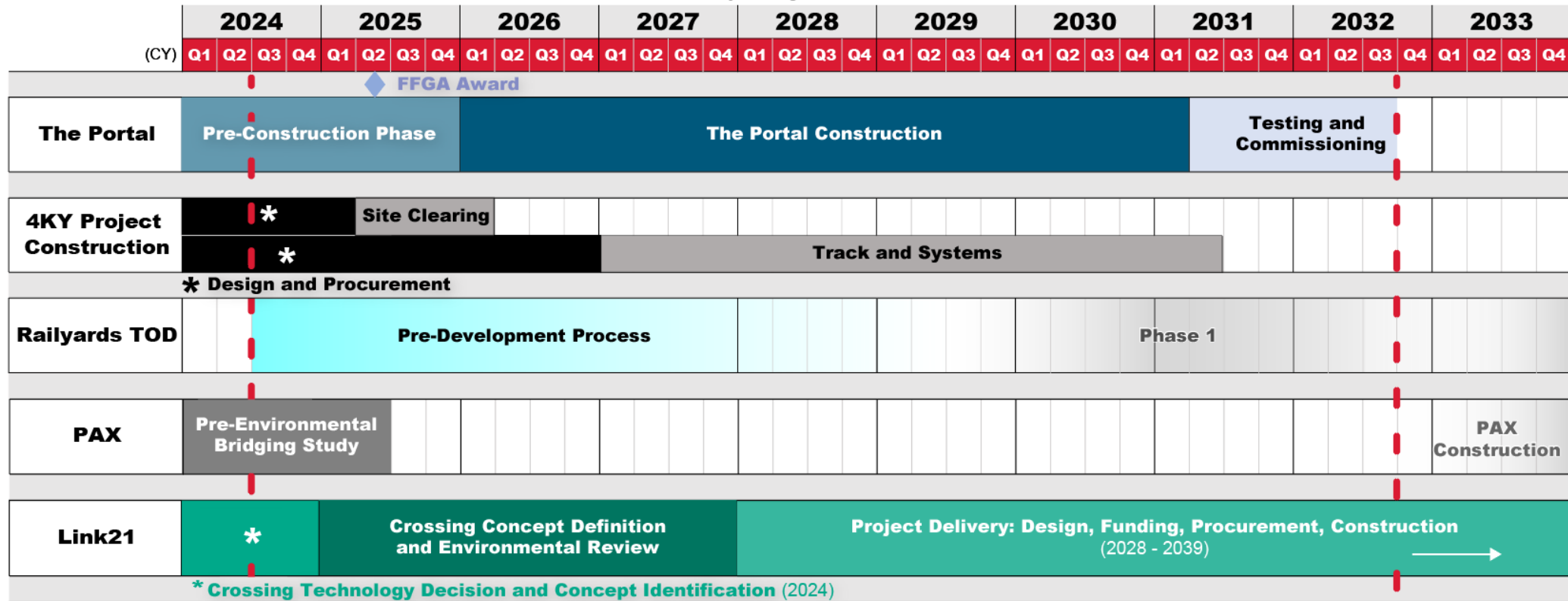
Agenda

- 4th and King Yard DTX Preparation (4KY) Overview
- Background on The Portal/Downtown Extension (DTX) construction delivery
- 4KY Procurement Analysis
- Construction Manager/ General Contractor (CMGC) delivery method for 4KY Package B
 - Benefits of CMGC
 - Caltrain as Delivery Agency
- Recommended Action and Next Steps



SF Rail Projects

Schedule Subject to Agreement with TJPA



Caltrain Electrified Revenue Service



Caltrain Revenue Service Through The Portal



HSR Revenue Service



Potential Link21 Revenue Service (2040 estimate)





Legend

- SF Railyards at 4th & King Caltrain Station
- DTX / Downtown Extension Tunnel (pre-construction)
- PAX / Pennsylvania Ave. Extension Tunnel (under study)
- Existing Caltrain Line
- Existing Railroad Crossings

0 0.25 0.5 Miles

North arrow icon

Potential Link21 Alignment

Salesforce Transit Center

DOWNTOWN EXTENSION (DTX) TUNNEL

DTX 4th & Townsend Station

San Francisco Railyards

STREET X-ING

PENNSYLVANIA AVENUE EXTENSION (PAX) TUNNEL

CALTRAIN TUNNEL

Existing Caltrain 22nd Street Station

Central Waterfront

Project Delivery Alternatives Study (PDAS)

Adopted by TJPA July 2022

- Working with the DTX partners, TJPA led the Project Delivery Alternatives Study (PDAS)
 - TJPA identified as the delivery agency for all construction packages
 - Recommended contract packaging delivery methods for the DTX project including:
 - Design Bid Build (DBB)
 - Construction Management General Contractor (CMGC)
 - Progressive Design Build (PDB)

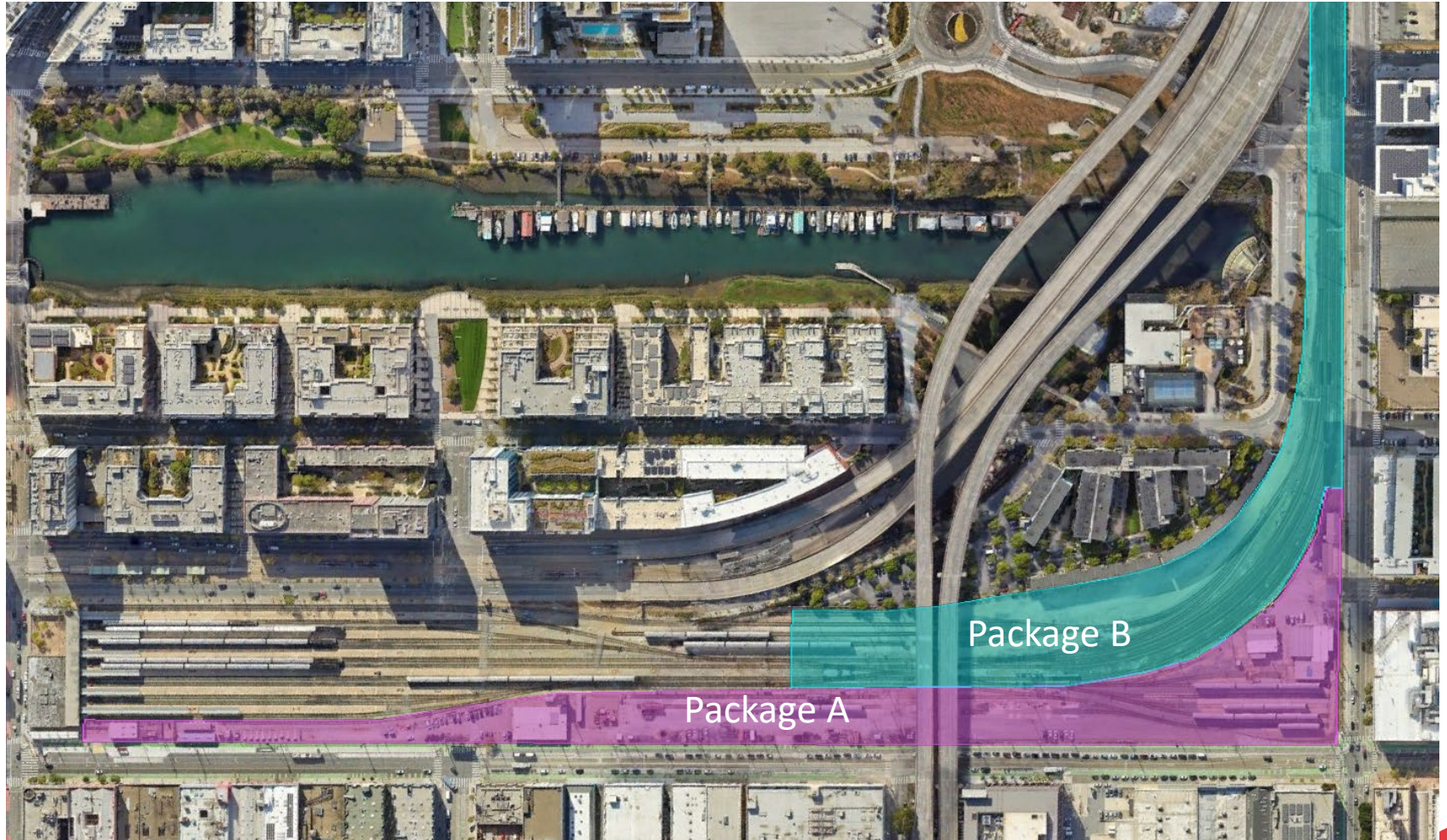
4th and King Yard Prep (4KY) Project Packages

Package A - Site Clearing

Early site clearing of Caltrain assets to allow DTX to begin underground construction of the 4th and Townsend St. Station as early as 2026.

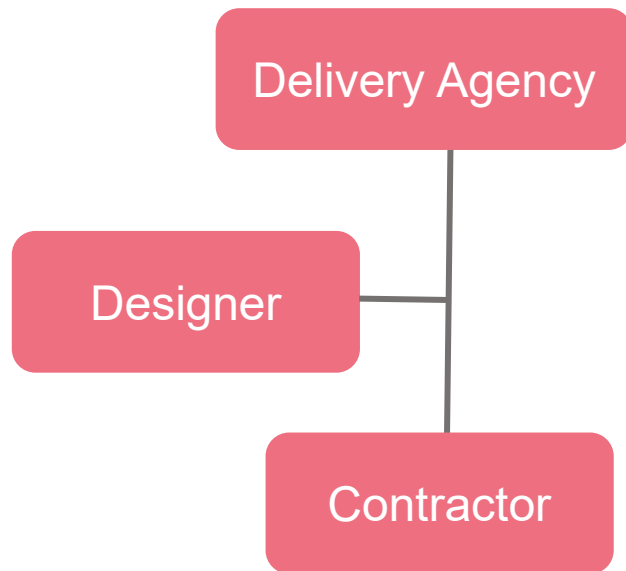
Package B – Track and Systems

Track and systems work to provide for the two-track mainline connection to the DTX U-Wall in 2029.

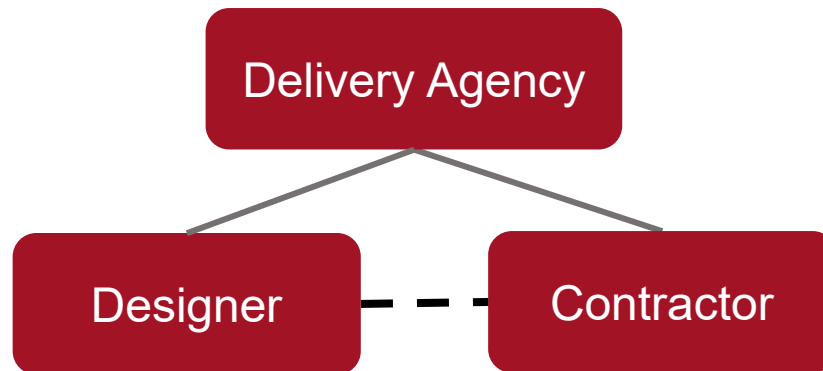


Overview of Delivery Methods

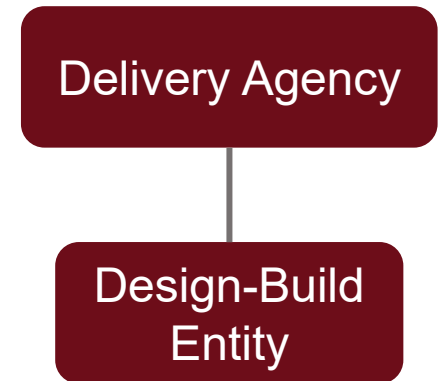
Design-Bid-Build (DBB)



Construction Manager / General Contractor (CMGC)



Progressive Design-Build (PDB)



4KY Procurement Analysis

Completed October 2023

- Complexity of Package B and potential impact on operations might benefit from early contractor involvement to improve constructability
- In August 2023, TJPA and Caltrain agreed to reevaluate delivery methods for 4KY:
 - Define the scope of 4KY Package A and Package B
 - Identify risks, and constraints, and objectives
 - Consider delivery method options and identify optimum method
 - Completed in early October 2023 by TJPA consultant team

Study Recommendations:

1. Separate 4KY contract packages
 - Package A – Site Clearing
 - Package B – Track and Systems
2. Use DBB contract model for 4KY Package A
3. Use CMGC contract model for 4KY Package B

TJPA Approved PDAS Recommendations

TJPA Board October 2023

Recommended Delivery Method	Modified Contract Package
Design-Bid-Build (DBB)	Advance Works – Utility relocation, building demolition, and 4KY Package A (site clearing)
Construction Manager/ General Contractor (CMGC)	Track and Systems - Installation of track and rail systems
	Station Fit-out - Mechanical, electrical, plumbing, and architectural finishes at Salesforce Transit Center
	4KY Package B (track and systems work)
Progressive Design-Build (PDB)	Civil and Tunnel - Construction of tunnel, throat, and civil structures including 4th and Townsend station box; two ventilation structures; 4th and Townsend station fit-out

Legislative Basis for CMGC

- CA Public Utility Code section 103393 et. seq.
- Allows Caltrain to use CMGC delivery after:
 - JPB must make a written finding that the use of CMGC will accomplish one or more of the following objectives:
 - Reduce project costs
 - Expedite the project's completion
 - Or provide features not achievable through the design-bid-build method



Benefits of CMGC for 4KY Package B

Reduces Project Costs

- Early contractor involvement improves constructability, reduces potential for change orders, and better controls project costs.

Expedites Project Completion

- Improves the reliability of the Package B construction schedule and integration with the DTX master schedule
- Allows for early procurement of long-lead items (special trackwork, OCS equipment, etc.)

Provides features not achievable through DBB

- Defines detailed sequencing and construction methods in advance of construction
- Improves constructability and minimizes the impact on Caltrain operations during construction

Caltrain as Delivery Agency for Package B

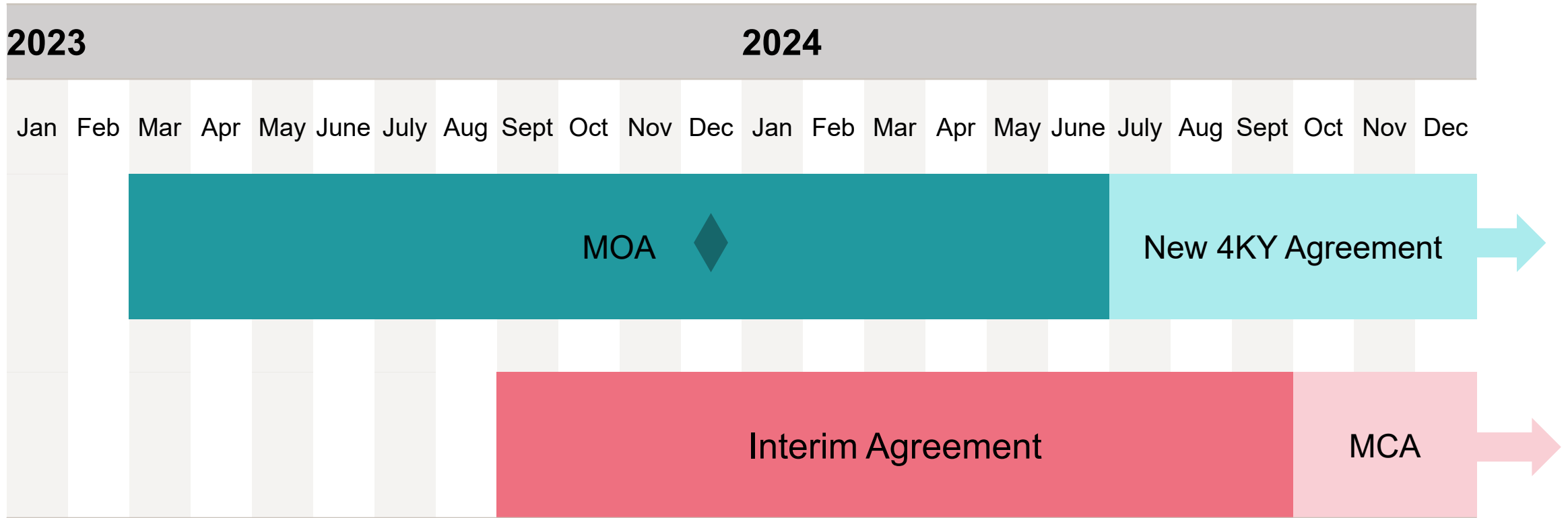
- Package B is in Caltrain's operating right of way and protecting Caltrain operations is the highest priority.
- Provides a direct line of communication and accountability between the operator, contractor, and designer, which is a critical element of the CMGC method.
- Consistent with Caltrain's practice of delivering all work within its operating right of way.
- Caltrain and TJPA conceptually agree that TJPA deliver Package A and Caltrain deliver Package B.
- Caltrain as delivery agency will be formally documented in the 4KY Agreement.

Caltrain as Delivery Agency for Package B

Potential Risks

- Project Delivery Team - Caltrain will need to establish a focused and effective delivery team with sufficient resources, decision-making processes, and authority.
- Tight Schedule - Package B must be completed within a tight schedule to avoid delaying the core DTX construction. As delivery partner, Caltrain owns much of this risk regardless and leading Package B is best approach to mitigate the risk.
- Span of Control - The TJPA GEC will continue as the Package B designer under the technical direction of Caltrain.
- Cost Management - Caltrain will need to manage the project cost to an agreed upon budget and utilize a process to manage and approve contract change orders. TJPA will be responsible for funding all costs for the 4KY work.

Anticipated Timeline of Agreements



◆ = Caltrain Board item: Recommendation for delivery method for 4KY Package B: Track and Systems

4KY Agreement

MCA Principles Adopted at February 2 nd , 2023 Board meeting	Applicability to 4KY Agreement
1. Project must be cost-neutral to Caltrain	<ul style="list-style-type: none">• DTX Project will bear all costs for the 4KY work, including Caltrain costs to support the 4KY Project
2. Project design, operations, and funding must be compatible with and connected to Caltrain's existing and planned rail system and must be consistent with Caltrain's 2040 service vision.	<ul style="list-style-type: none">• Modification, removal, or relocation of Caltrain assets (i.e., trackage, existing offices, etc.) must not adversely impact current or future Caltrain operations
3. Safety and customer experience must be the primary focus of all planning, design, construction, and operations and maintenance decisions.	<ul style="list-style-type: none">• The 4KY construction staging must enable continual train operations with minimal disruptions.

Recommended Action

- **Authorize Caltrain to use the CMGC delivery method for the 4th and King Yard Preparation Track and Systems (Package B)**, based on the findings that the project will accomplish one or more of the following objectives required to utilize this project delivery method pursuant to Public Utilities Code Section 103395, et seq.:
 - Reduce project costs;
 - Expedite the project's completion
 - Provide features not achievable through the traditional Design-Bid-Build (DBB) method
- Authorize the Executive Director, or designee, to file any other required documentation and to take any other actions necessary to give effect to this action.

FOR MORE INFORMATION

WWW.CALTRAIN.COM

