Rengstorff Avenue Grade Separation Project

**Project Delivery Strategy** 

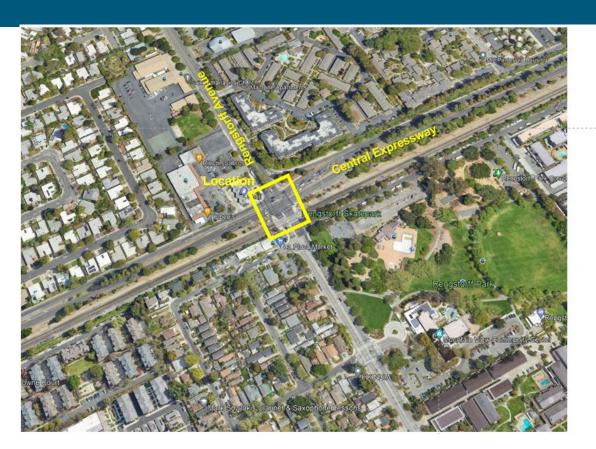
**JPB Board of Directors Meeting** 

May 4, 2023





## **Project Location**







## **Project Goals**

- Improve safety for all modes of travel
- Improve overall traffic flow
- Reduce traffic delays caused by gate down times
- Support the Active Transportation Goals of Measure B Program



## **Project Elements**



- (1) Railway structure above the lowered Rengstorff Avenue;
- (2) Bicycle and pedestrian enhancements along Rengstorff Avenue and crossing Central Expressway;
- (3) Bicycle and pedestrian crossing above the lowered Rengstorff Avenue to provide east-west connection between the neighborhood and market on the west side of Rengstorff Avenue, and the Rengstorff Park on the east side;
- (4) Leland connector roadway and new intersection to maintain vehicular access to the neighborhood and the market on the west side of Rengstorff Avenue;
- 5) A replacement parking lot for the market on the west side of Rengstorff Avenue;
- (6) An American with Disabilities Act (ADA)-compliant pathway between Crisanto Avenue and Rengstorff Park and the lowered Rengstorff Avenue; and
- (7) An ADA-compliant pathway between the shopping center on the north side of Central Expressway and the lowered Central Expressway.

## **Overall Project Schedule**

Dates	Activity
September 2023	Board approval of Final Design and CM/GC Contract
October 2023 to May 2025	Final Design
July 2025	CM/GC Price Proposal
October 2025 – October 2027	Construction
December 2027	Closeout

## Legislative Basis for CMGC CA Public Utility Code section 103393 et. seq.

### Allows District to use CMGC delivery after

 Evaluation of both traditional design-bid-build process and CMGC project delivery method in a public meeting





## Legislative Basis for CMGC CA Public Utility Code section 103393 et. seq.

### Allows District to use CMGC delivery after

- District 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





# Legislative Basis for CMGC CA Public Utility Code section 103393 et. seq.

#### Written Findings must be

- Made prior to the District entering into a CMGC contract
- Included as part of any application for state funds for the transit project





## **Project Delivery Methods Evaluated**

#### **Design-Bid-Build (Traditional)**

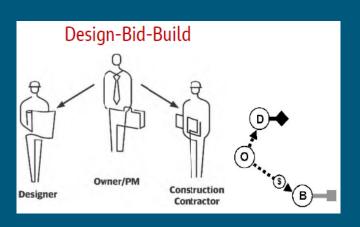
- Standard US project delivery method provides the baseline delivery method
- Contractual obligations are well understood by design and construction industry
- Typically, the longest project delivery duration

### **Construction Manager/General Contractor (CMGC)**

- Caltrain controls Final Design
- Maximizes cost savings opportunities commercial pricing
- Teamwork develops during design reducing conflict risk during construction



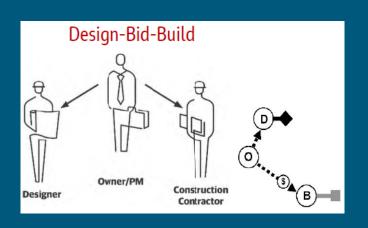
# Design-Bid-Build Advantages



- Competitive bidding = lowest initial price
- Designer and contractor "checks and balances"
- Rights and obligations well understood
- Exemption from competitive bidding not required
  - No public hearing and record of findings



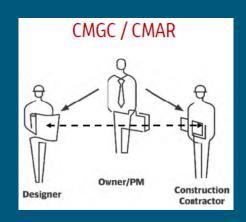
# Design-Bid-Build Disadvantages



- Optimistic pricing = increased likelihood of claims
- Eliminates communication between Caltrain-Contractor on constructability, work plans, mean and methods, and phasing during final design
- Risk of inadequate budget for jurisdictional stakeholder expectations, QC, schedule control, etc.
- Higher Caltrain construction administration
- Potential to develop adversarial positions



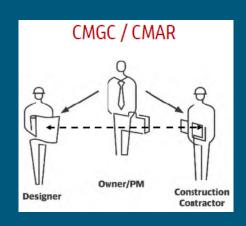
# **CMGC Advantages**



- Use of weighted criteria for selection to match project demands
- Caltrain controls final design
- Maximizes potential cost saving opportunities commercial pricing
- Caltrain influences conduct of construction
  - Analyze options to meet stakeholder and jurisdiction expectations
  - Commercial pricing of options
  - Contractor buy-in



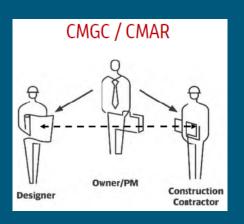
# **CMGC Advantages**



- Competitive pricing
  - Open-book evaluation of all costs
  - Appropriate risk apportionment
  - Sub-contracts are low-bid
  - Targeted best value to support diversity contracting
- Claim risk reduced due to early contractor involvement
- Schedule flexibility allows issue resolution
- Teamwork develops during pre-construction design phase, reducing conflict risk during construction



# **CMGC Disadvantages**



- CMGC exemption requires public hearing
- Reduces competitive leverage on General Conditions
- Claims may occur at subcontractor level



## **Project Delivery Workshop**

#### **Objective**

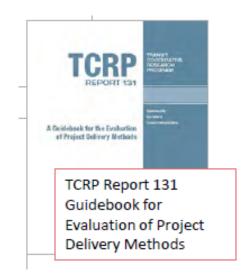
- Evaluate DBB vs CMGC
- Determine most appropriate delivery method

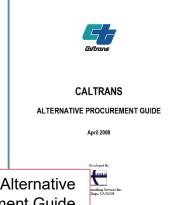
#### **Participants**

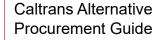
Caltrain, City of Mountain View, and VTA staff

#### **Evaluation Tools**

- TCRP Report 131 Analytical Project Delivery Assessment
- Caltrans Modified Quantitative Project Delivery Method Selection











### Project Delivery Workshop - Results

Based on this project's unique features and complexities

Construction Manager/General Contractor delivery method most appropriate choice

Ranking or Scoring Method	Design-Bid-Build	Construction Manager General Contractor
TCRC Report 131 Analytical Method	51	65
Modified Caltrans Qualitative Method	48	118







## **CMGC Findings**Reduce Project Costs

#### **Optimize Costs**

- Provides total contract price (TCP)
- Provides less competitive leverage on general condition pricing

#### Secure competitive construction bids

 Owner has an off-ramp to competitively bid the construction phase if TCP agreement not reached with contractor



# **CMGC Findings Expedite Project's Completion**

#### **Optimize overall schedule**

Achieves reduced delivery time by overlapping traditional DBB procurement tasks

### Targeted construction schedule reductions

- Allows for early enabling construction work such as utility relocations and other site preparation work
- Allows for early procurement of long-lead items



## CMGC Findings Provide features not achievable under design bid build method

- Provide early contractor input to design to incorporate preferred construction means and methods and phasing
- Allows for collaboration between the owner, designer, and contractor to deliver project requirements
- Early bid packages:
  - Utility relocation
  - Procurement and/or fabrication of long-lead items
  - Advance bid package for discreet critical path items like bridge foundations



## Staff Recommendations

- 1. Make findings that use of the Construction Manager/General Contract (CMGC) project delivery method for the Rengstorff Avenue Grade Separation Project (Project) will accomplish one or more of the following objectives: reduce project costs, expedite the project's completion, or provide features not achievable through the more traditional Design-Bid-Build (DBB) method, as required to utilize this project delivery method pursuant to Public Utilities Code section 103395.
- 2. Authorize the use of the CMGC project delivery method for the Project based on these findings; and
- 3. 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.

## Questions





#### FOR MORE INFORMATION

WWW.CALTRAIN.COM

