



Presentation to TJPA Board Caltrain Downtown Extension Project Update

July 31, 2009

Transbay Transit Center

TJPA





Caltrain Downtown Extension Project

Agenda:

- Project Configuration
- Design Contract Task Progress
- TC / DTX Coordination and Interfaces
- DTX Design Criteria
- Contractor Outreach
- Next Steps





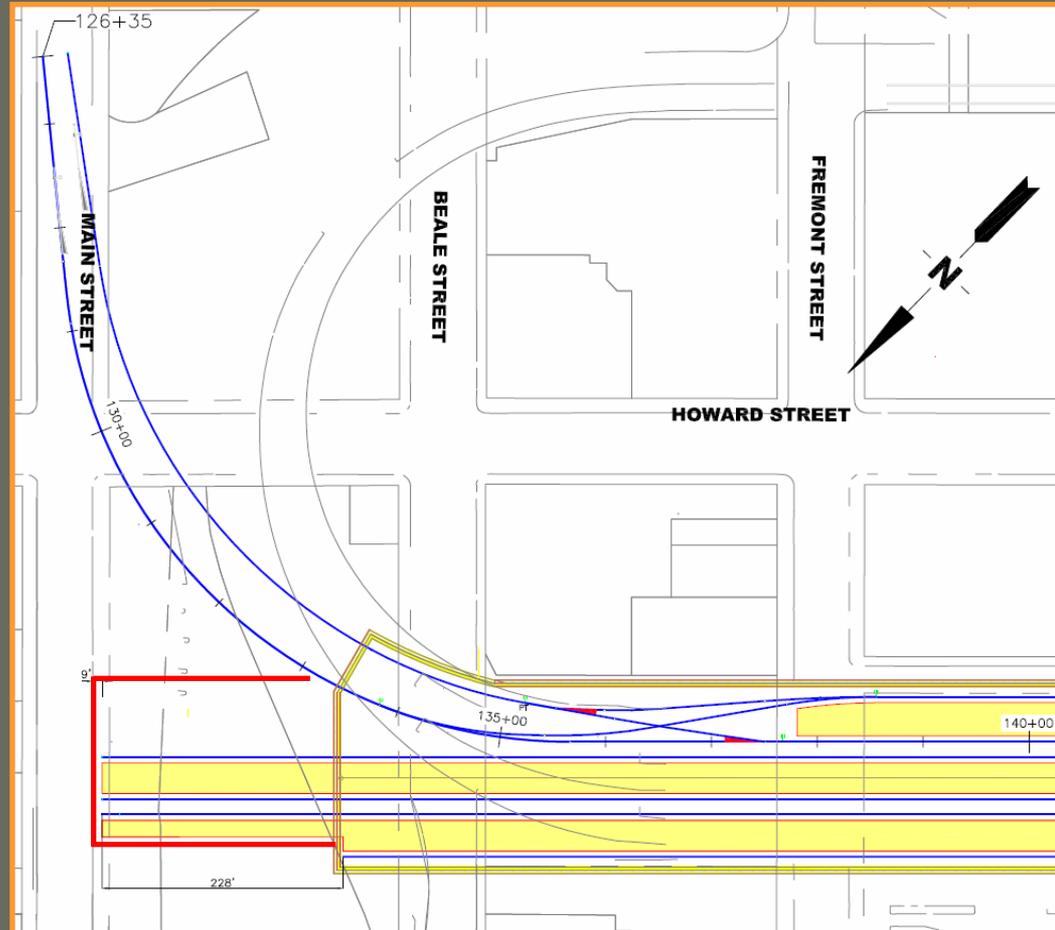
Project Configuration

- Coordination with Caltrain and CAHSR to ensure TC is compatible with their operating requirements
- In particular:
 - Provide 1,345 tangent platform length for CAHSR
 - Provide operational flexibility, and operational redundancy for Caltrain
- Accommodating these requirements has necessitated changes in TC configuration



DTX Configuration

- Train box extended to Main Street to provide CAHSR tangent platform length
- Inclusion of tail track to provide Caltrain operational flexibility/redundancy
- Additional crossover introduced at east end of TC





Design Contract Task Progress

- Task 5 – Draft Sixth Street Sewer Relocation
- Task 5 – Draft Traction Power Load Flow
- Task 5 – Draft Water and Air
- Task 6 – Draft Geotechnical Investigation
- Task 7 – Ground Characterization
- Task 7 – Numerical Analysis: Tunnel Initial Support
- Task 7 – Final Lining Analysis
- Task 9 – Updated Traffic Management Plan



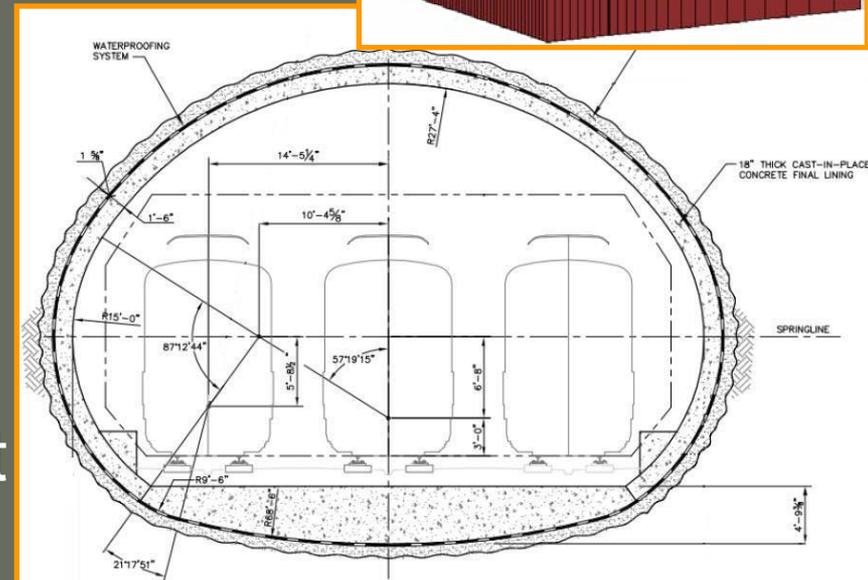
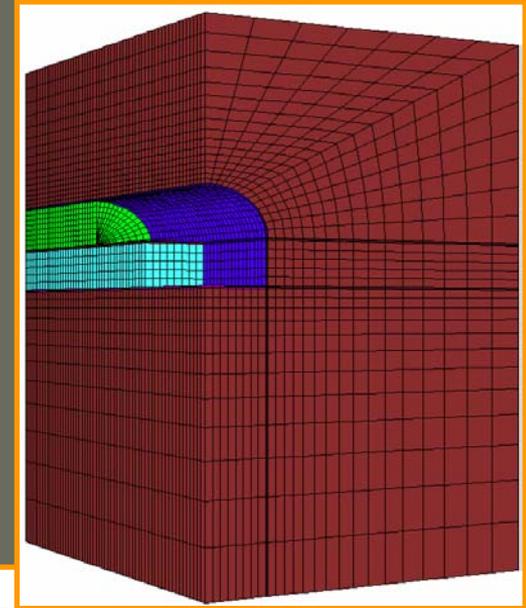
Task 5 Traction Power Load Flow

- Simulates the ability of the proposed Caltrain electrification to accommodate Transbay.
- Study determined Caltrain electrification system can accommodate Transbay.
- The addition of DTX does not substantially alter Caltrain operational performance
- No additional substation is needed to power DTX/TC.



Task 7 Mined Tunnel Numerical Analysis

- Determined required tunnel excavation size
- Modeled excavation sequence and initial support requirements:
 - Pipe canopy
 - Rockbolts
 - Lattice Girders
 - Shotcrete
- Determined final lining thickness and reinforcement





Design Contract Task Progress

- Preliminary Engineering design ~ 60% complete
- Significant work in progress ~ 30 subtasks
- Scope, budget and schedule re-baselined:
 - evaluation of TC options for CHSRA
 - additional scope items
- Existing design budget maintained
- Completion within existing contract period
- 30% Preliminary Engineering Substantial Completion planned for May 2010



TC/DTX Coordination & Interfaces

- Top of rail elevation
- Trainbox extension
- Use of area over Second Street 'throat'
- Seismic compatibility
- Integrated ventilation design
- Communication systems
- Configuration of ventilation ducts and overhead contact system





DTX Design Criteria

- DTX Design Criteria issued May 2009 to design team, Caltrain, CHSRA & stakeholders
- Additional comments to be addressed through errata/addenda/revision process

Transbay Transit Center Program

DTX Design Criteria

May 2009



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URS

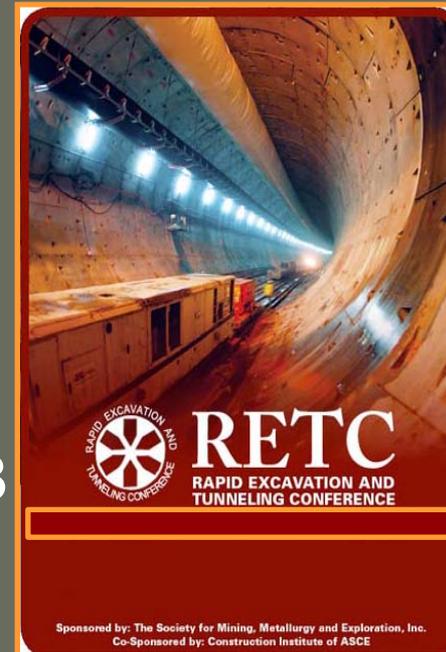
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DTX Contractor Outreach

- Promote industry awareness of project to maximize bidding potential.
- Key presentations given:
 - RETC, Toronto June 2007
 - NAT, San Francisco June 2008
 - APTA, San Francisco, June 2008
 - RETC, Las Vegas, June 2009
- Abstracts Submitted:
 - NAT, Portland, June 2010
 - ITA, Vancouver, June 2010





Next Steps

- Continue Caltrain/CAHSR design interface for Fourth and Townsend UG Station and Fourth and King Station/Yard
- Establish rail operational responsibilities and requirements at the Transit Center facility for station command & control
- Continue task progress
- Finalize scope, budget and schedule



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Questions?

