



Construction Update

March 2016

Transbay Transit Center

TJPA





Transbay Transit Center

Western Zone
Gridlines 1 to 10

Central Zone
Gridlines 10 to 20

Eastern Zone
Gridlines 20 to 35



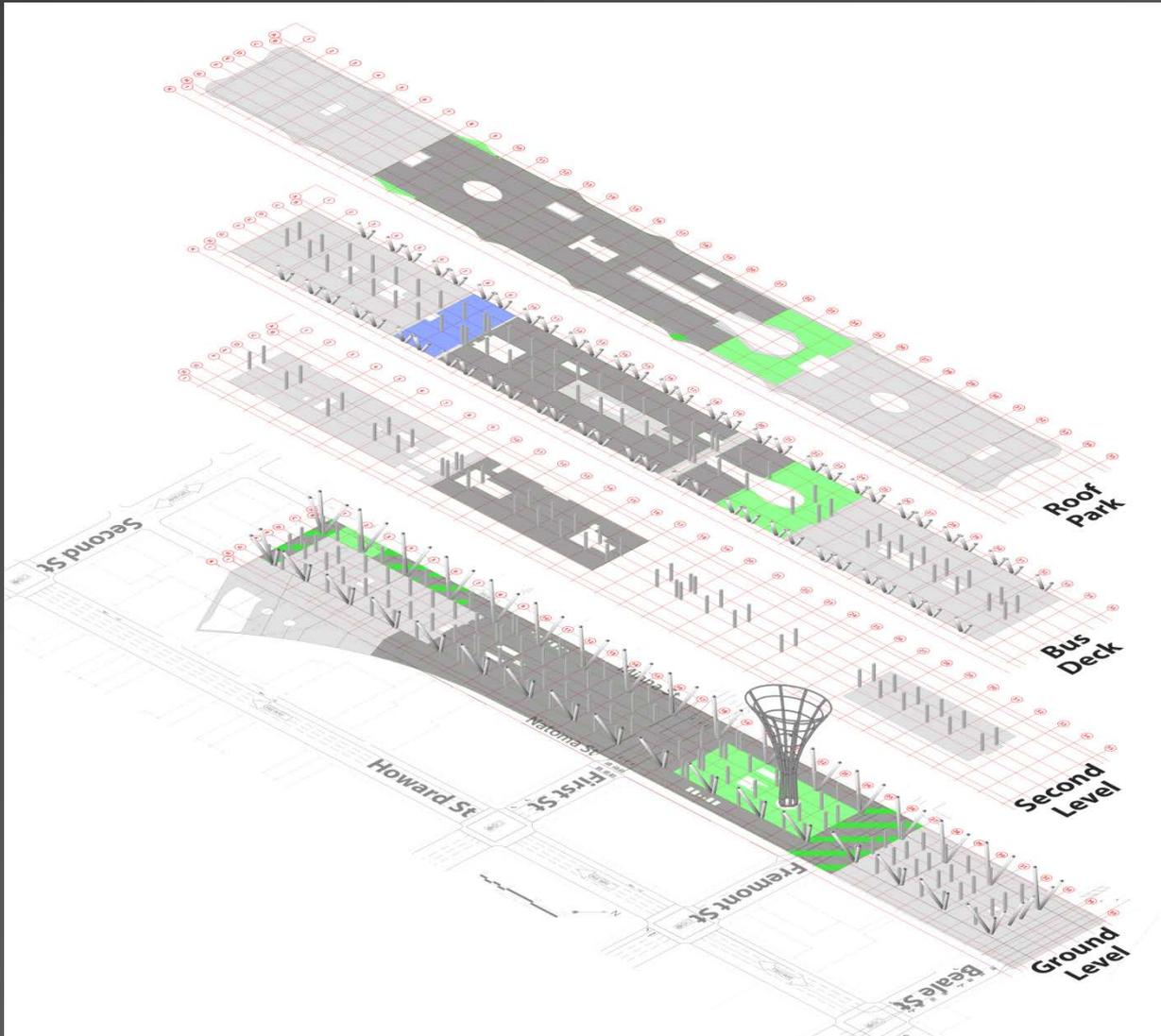
Turner Construction - Transbay Transit Center
Exterior Overview - January 28, 2018 - Photo 1

Project Overview

1. Recent Activity
2. Upcoming Activity
3. Schedule
4. Contingency Cost
5. Safety
6. Labor Statistics
7. Challenges

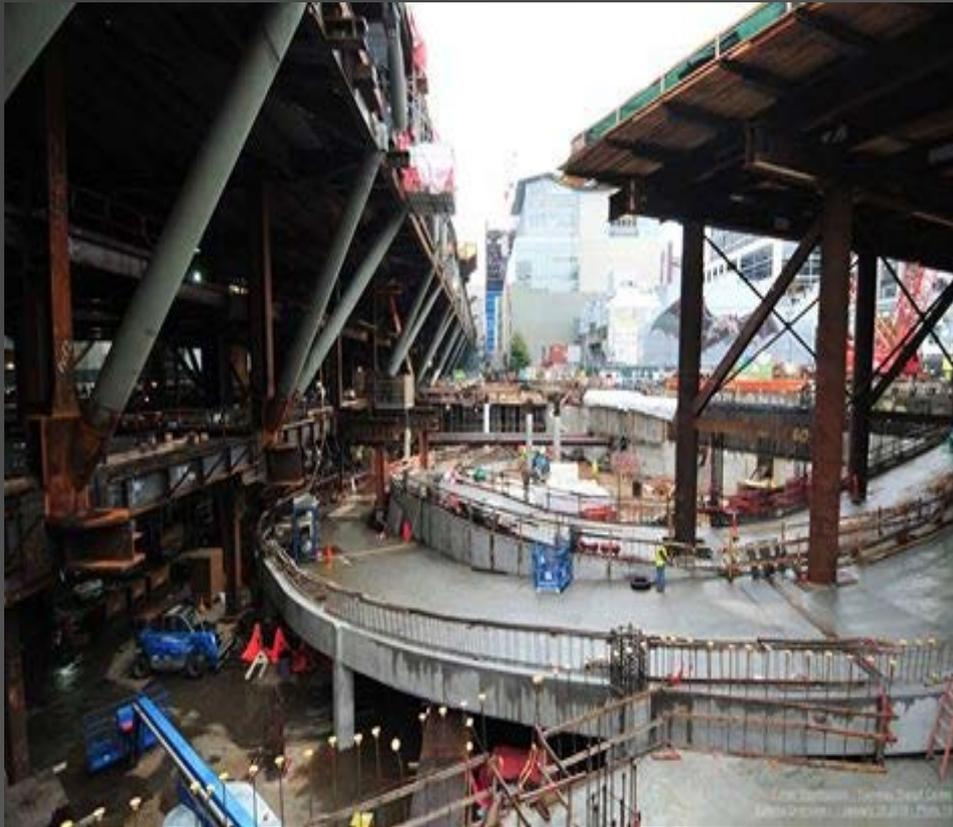


Transit Center



Transbay Transit Center Construction Progress Jan 29, 2016 - Feb 27, 2016

-  **Work Completed**
Between 1/29/16-2/27/16
-  **Concrete Slab**
-  **10" Structural Slab**
(Bus Deck Only)
-  **In Progress**



Western Zone (GL 1-10)

- Structural steel assembly, welding and metal decking are complete. This zone is turned over to the follow on trades.
- Structural Concrete pours for the north trainbox lid (Eyebrow) are continuing.
- The concrete columns and walls for the Vehicle and Bicycle Ramps are in progress.



Central Zone (GL 10-20)

- Fireproofing continues on the Lower Concourse, L2 Mezzanine and Bus Deck levels.
- Mechanical, Electrical, Plumbing and Fire Sprinkler (MEPF) trades continue with piping and HVAC duct work at all levels.
- Waterproofing of the ground level slab has commenced.
- Stair installation continues (Six of twenty-four stairs complete.)



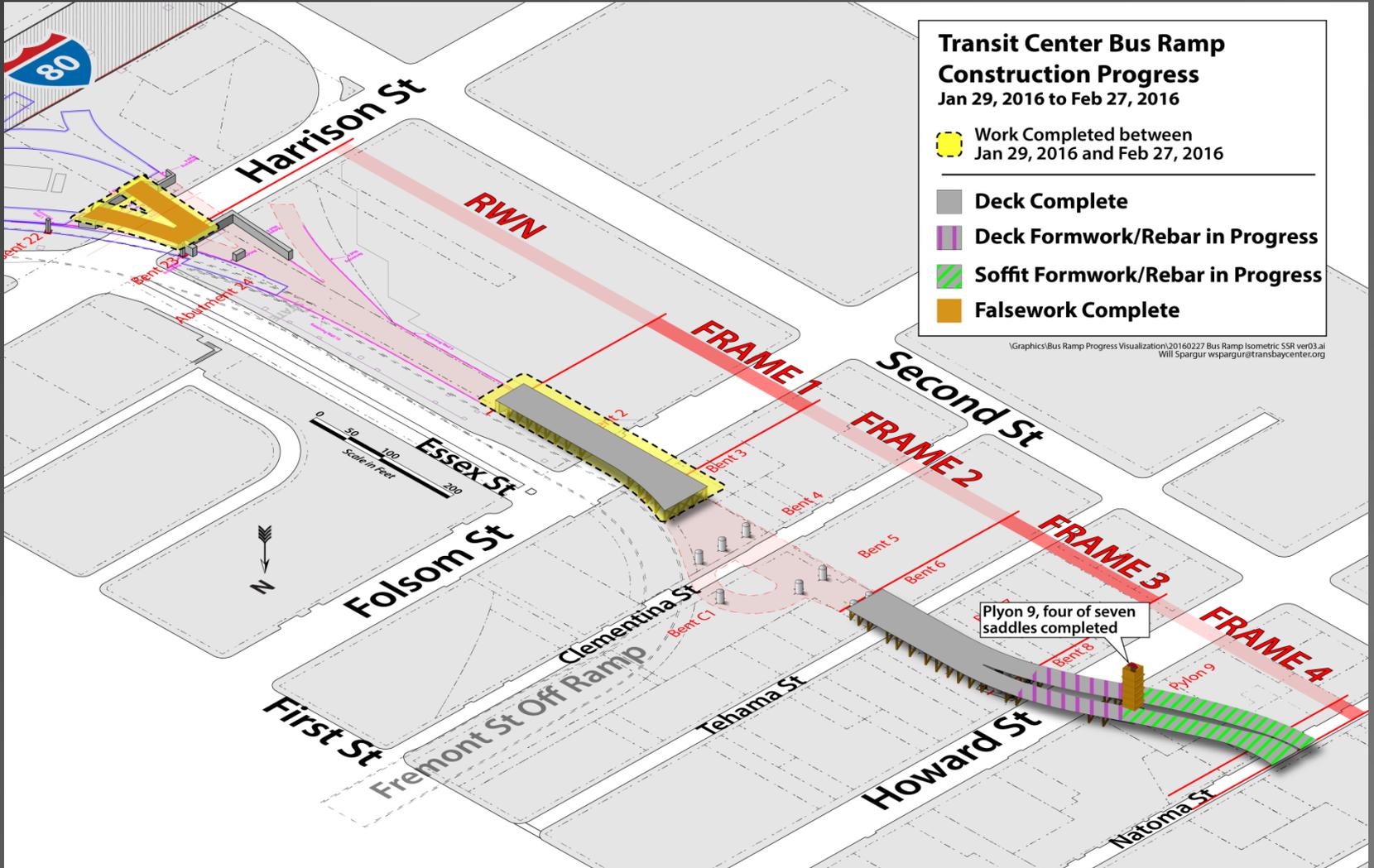


Eastern Zone (GL 20-35)

- Installation of structural steel was completed on January 8th.
- Structural steel welding and bolting continues.
- Concrete pours for the decks on all levels along with the perimeter and scallop walls are continuing.
- Ground Level concrete slab (beneath Fremont Street) pour scheduled mid-March.

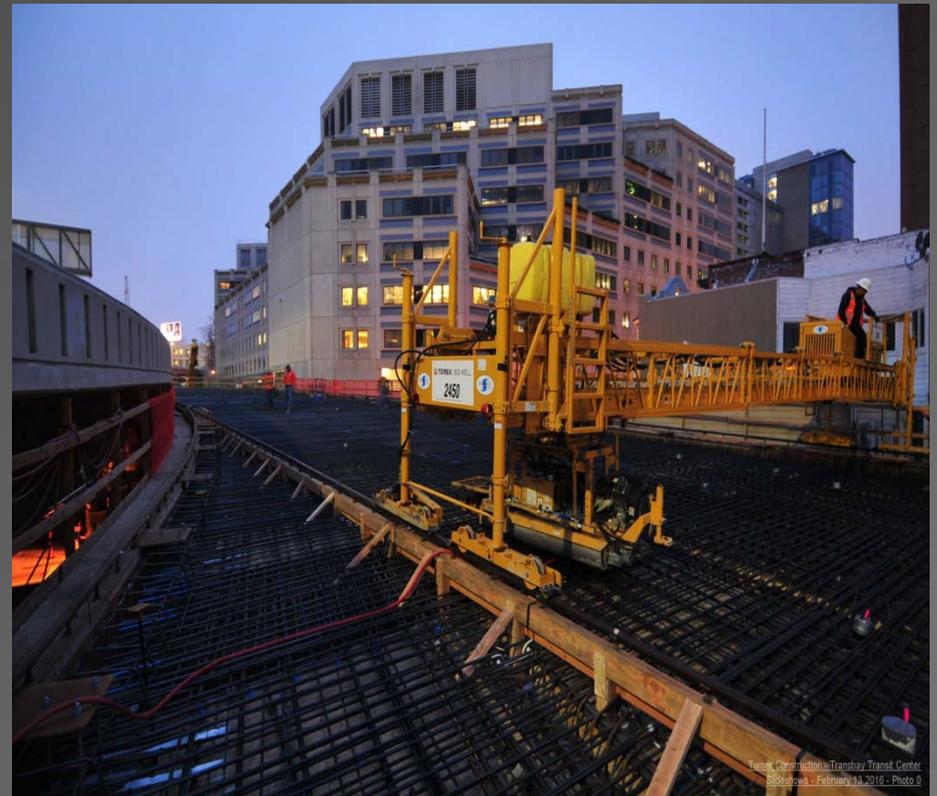


Bus Ramp and Cable Stay Bridge



Bus Ramp Bridge

- Harrison Street viaduct falsework was installed in February while abutment and retaining walls continue to be constructed.
- Concrete placement of the viaduct deck over Folsom Street was completed in February.
- Reinforcing steel and preparation for the Cable Stay Bridge and pylon 9 over Howard Street continues.





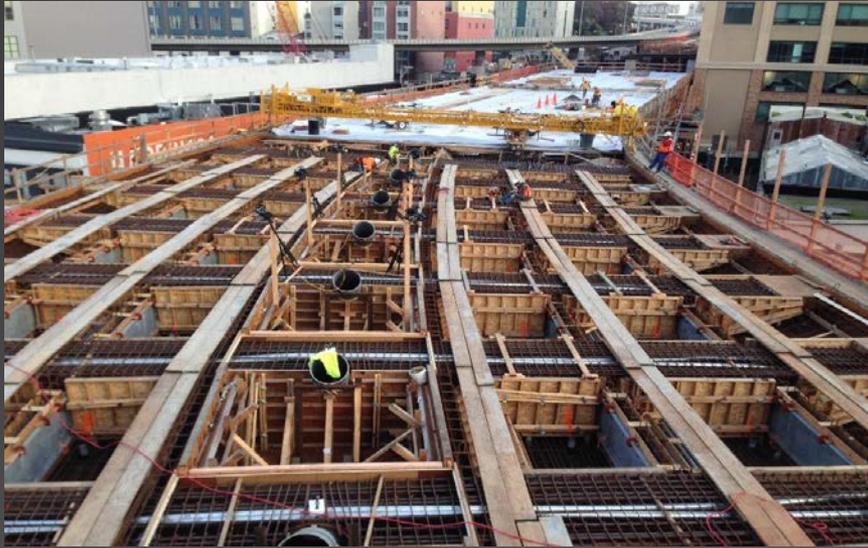
Central Zone

- Start the W-1 Exterior Awning system install.
- Continue with MEPF Piping overhead.
- Bus Deck perimeter concrete crash wall continues.
- Waterproofing of Ground Level slab continues and bus deck slab starts.



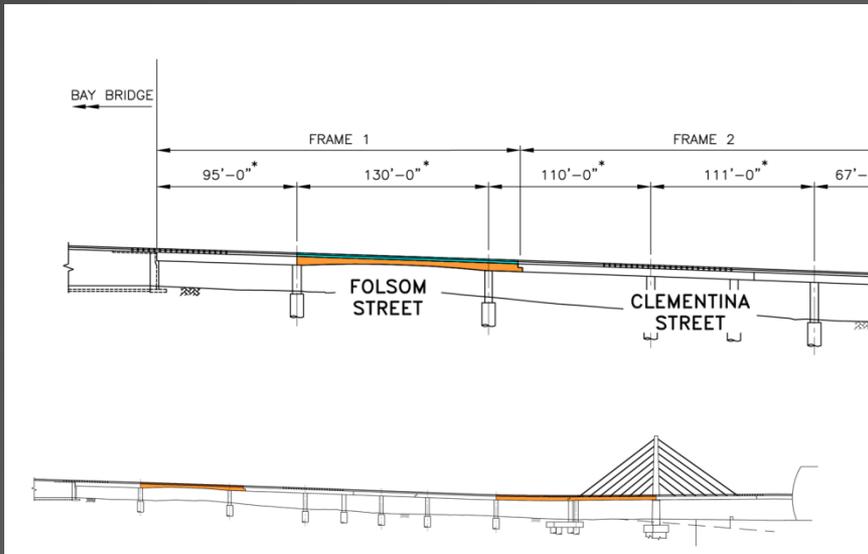
Eastern Zone

- Complete welding of all structural steel and installing metal decking by the end of April.
- Continue rebar placement and concrete deck pours.



Western Zone

- Complete welding and turnover the rooftop restaurant.
- Continue rebar placement and concrete decks, GL1-GL-8.

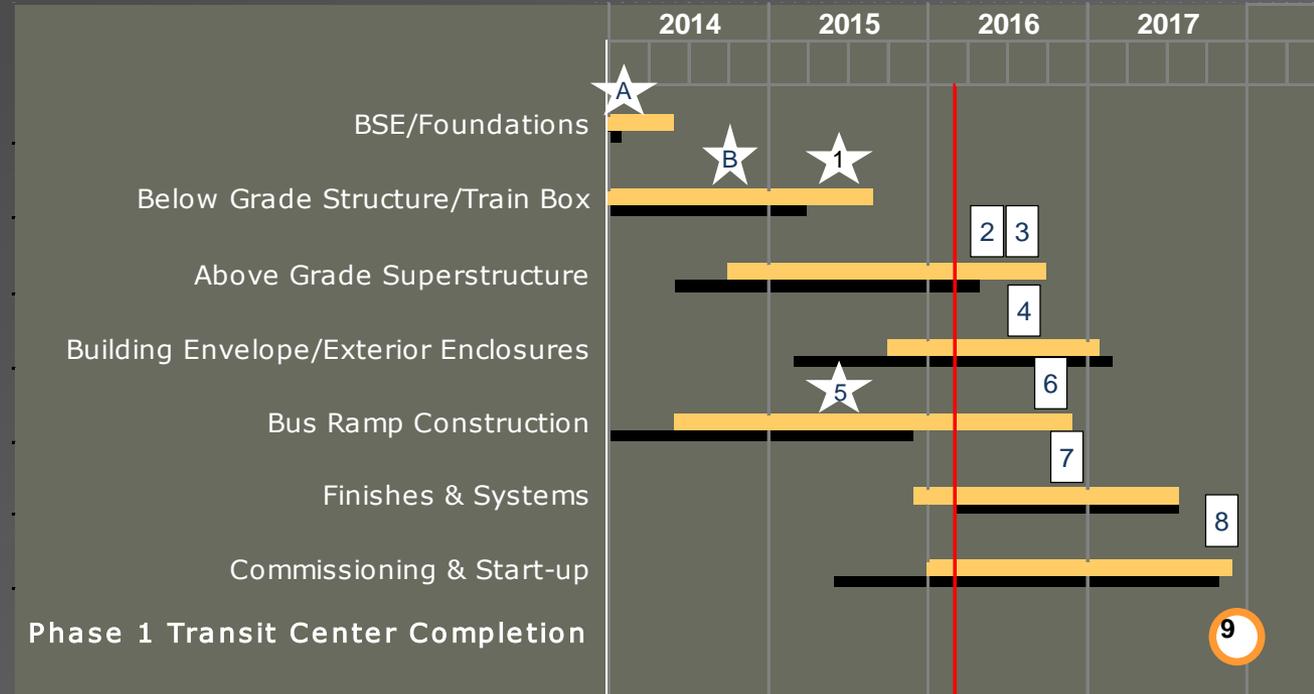


Bus Ramp and Bridge

- Remove Falsework from the Tehama Street overcrossing.
- Install Falsework over the Clementina Street overcrossing.



#	Milestone	Current
★1	Complete TG 6.0 Below Grade Concrete	Actual Aug. 2015
2	Complete Structural Steel Erection and Welding	Q2 2016
3	Complete Above Grade Concrete	Q3 2016
4	Building Watertight	Q3 2016
★5	Complete Bus Ramp Below Grade Concrete	Actual Jul. 2015
6	Complete Bus Ramp Viaduct and Cable Stay Bridge	Q4 2016
7	Permanent Power to Building	Q4 2016
8	Building Ready for Bus Driver Training	Q4 2017
9	Substantial Completion	Q4 2017



* The current critical path of the project is as follows; structural steel welding, roof (park) level structural concrete slabs and walls and glass floor.

Current Schedule
 Baseline Schedule

★ = Completed Work; A) TG03 excavation through "rat" slab installation (re-bracing complete 9/18/15).
 B) mat foundation slabs complete 10/11/14.
 1) TG 6.0 Below Grade Concrete complete 8/10/15.
 5) Bus Ramp below grade concrete July 2015.



Contingency Tracking (\$millions)

	Construction Contingency	CM/GC Contingency	Program Reserve	Total Contingency & Reserve
Baseline Budget Amounts (Nov 2015)	\$59.5	\$30.7	\$5.0	\$95.1
Contingency Usage Through Jan 2016	(\$9.8)	(\$0.1)	(\$1.1)	(\$11.0)
Remaining Baseline Budget Amounts (Jan 2016)	\$49.7	\$30.6	\$3.9	\$84.1
Total Draws/Addds Feb 2016	(\$0.0)	0.0		(\$0.0)
Remaining Balances	\$49.7	\$30.6	\$3.9	\$84.1

Uses of Contingency this period

- Miscellaneous Bus Ramp Change Orders

Pending Change Orders: \$ 1,639,151.35



Recordable & Lost Time Incidents:

Recordable Incidents this Feb. 2016 Period:	0	Lost Time Incidents this Feb. 2016 Period:	0
--	----------	---	----------

WOJV Average Recordable Incident Rate	4.35	Nat'l./ State Average Recordable Incident Rate:	3.43
--	-------------	--	-------------

WOJV Average Lost Time Incident Rate :	0.75	Nat'l./ State Average Lost Time Incident Rate:	1.85
---	-------------	---	-------------

Craft Hours:

Total Transit Center Craft Hours through February 2016:	Increase since last update:	Total 2016 Craft Hours:
2,073,110	64,911	143,783



Schedule

Contractor forecast, without mitigation, indicates slippage of 2 to 4 months.

Mitigation Strategy

1. Strategic overtime work related to concrete curbs implemented to support timely glass curtain wall system installation.
2. Initiated team meetings with early focus on commissioning and close out processes in effort towards earliest discovery of problems to maximize resolution on mitigation timeline.
3. CM/GC is engaging subcontractors for schedule forecasting refinement and mitigation opportunities.

Buy America

Compliance efforts.

Mitigation Strategy

1. Extensive effort by TJPA design and construction team to validate subcontractors certification of Buy America procurement.
2. Consorted effort by TJPA design and construction team to identify and address any items specified that need resolution regarding Buy America compliance.



Multi-Trade Influx Onsite

Expected onboarding of many more Trades require sharpened processes.

Mitigation Strategy

1. Restructured Leadership Team meetings to expeditiously address elevated issues to avoid costly delays or scope changes.
2. Streamlined TJPA design and construction teams members ability to address risk and issues at meetings by personally participating in technical problem solving sessions at key levels of the organization

Potential Claims

To date all potential claims submitted to date have been rejected by CM/GC and CMO, lacking merit.

Resolution Strategy

1. Personal participation in technical problem solving sessions brings clarity to issues and timely resolution thus reducing claims.
2. Actively reviewing issues with TJPA and CM/GC legal representatives.
3. Subcontractor has requested DRA process to address merit of potential claims. Project Team scheduling DRA meeting.



Financial Constraints

Potential Adverse Impact on Construction Workflow

Mitigation Strategy

1. Pursuing additional financing with funding partners to ensure construction stays on schedule.
2. Provide close scrutiny of change orders and changes in scope (including materials and staffing levels) to achieve efficiency and reduce construction costs.
3. Continue to seek ways to improve the process to shorten the payment cycle to subcontractors & vendors.

