



Construction Update

November 14, 2013

Transbay Transit Center

TJPA





Transbay Transit Center

Period Summary

- There were no recordable or lost time injuries this period. There was one minor incident to report. A fire started in a scrap metal only dumpster that was located in the southwest corner of the project, outside the excavation. Non-metal, flammable material had been placed in the dumpster. This material ignited as the scrap metal was being cut by a worker. The fire was put out immediately.
- There have been over 885,000 craft hours completed, excluding demolition, through October 31, 2013. Over 20,000 completed since the last presentation.
- RUP 4.2, the AWSS Work continued. The First Street intersection was completed and paved this period. In order to coordinate with SFMTA – MUNI work began at night on Main and Mission Streets and will continue through February.



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Period Summary

- Overall the excavation work is over 90% complete. Bracing installation is complete in Zones 1, 2 and 3. In Zone 4 internal bracing is complete at bracing levels A and B and over 50% complete at level C. Zone 4, level 4 excavation is in progress.
- The hangers and conduits beneath Beale Street were completed this period by PG&E.
- Grounding, Geothermal, Mud Slab, Waterproofing and Protection Slab installation has been completed in all available areas of Zones 1, 2 and 3.
- Foundation Mat Slab pours have been completed up to building gridline 16 (through Zone 1 and into Zone 2). This represents a total of 6 pours to date (about 28,000 CYDS).
- Level D bracing removal has begun in Zone 2 working west.



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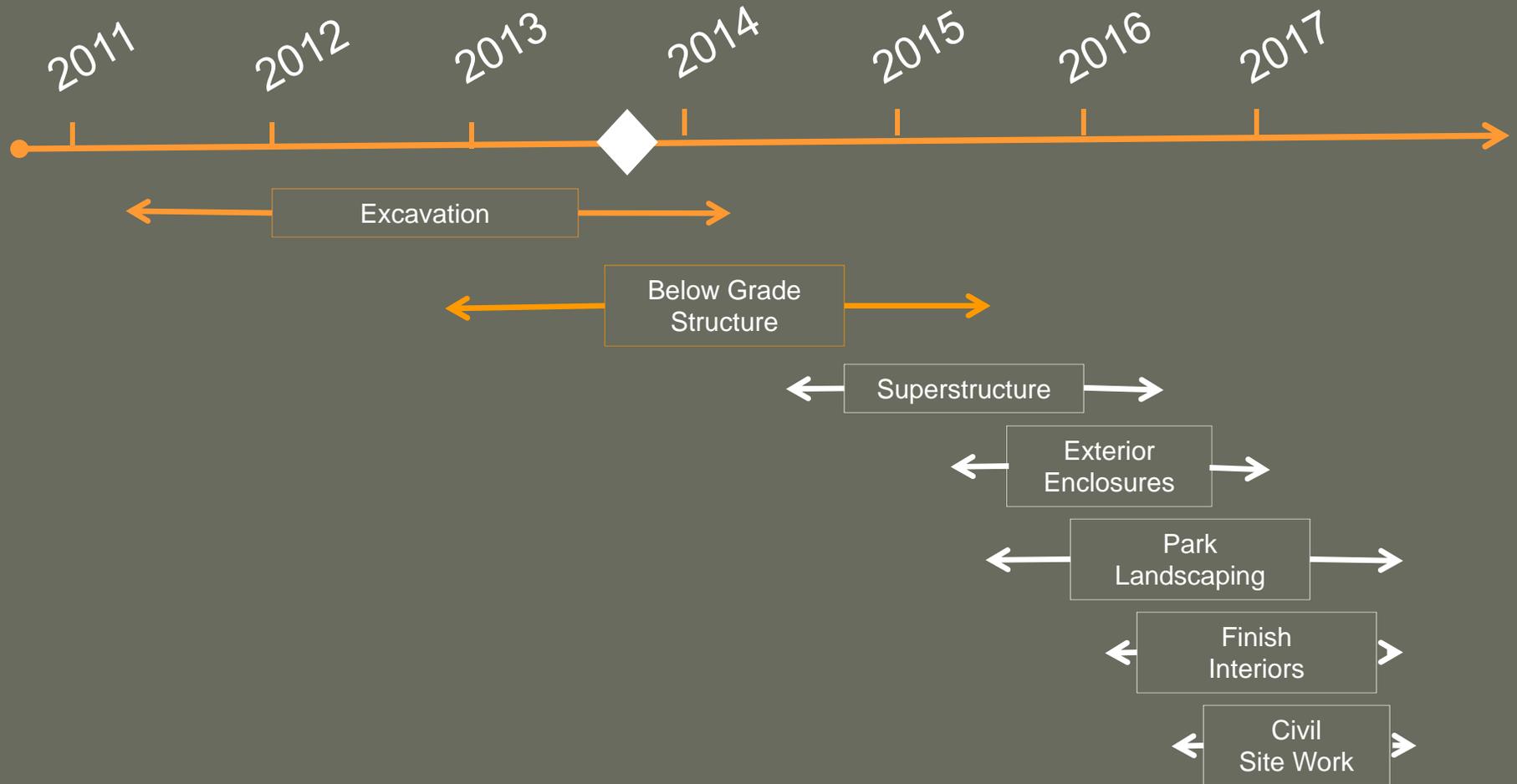
Construction The Next 90 Days

- Next 30 Days (November)
 - Complete Zone 4 Level C Bracing.
 - Complete Level 5 Excavation in Zone 3.
 - Start foundation walls.
 - Continue to install reinforcing steel, prep and place Structural Mat Slab sections.
 - Continue Cast Node first article fabrication.
 - Continue AWSS work at Main and Mission Streets.
 - Re-mobilize and re-start Micropile operation, Zone 3.
- In 60 Days (December)
 - Complete Zone 4 bracing through level D and buttress top demo through excavation level 5.
 - Continue to install reinforcing steel, prep and place Structural Mat Slab sections in Zone 3.
 - Continue foundation walls and re-bracing in West & Central zones.
- In 90 Days (January)
 - Complete Excavation.
 - Receive bids for bid packages 7.2, 8.1 and 8.2.



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Construction Timeline Summary





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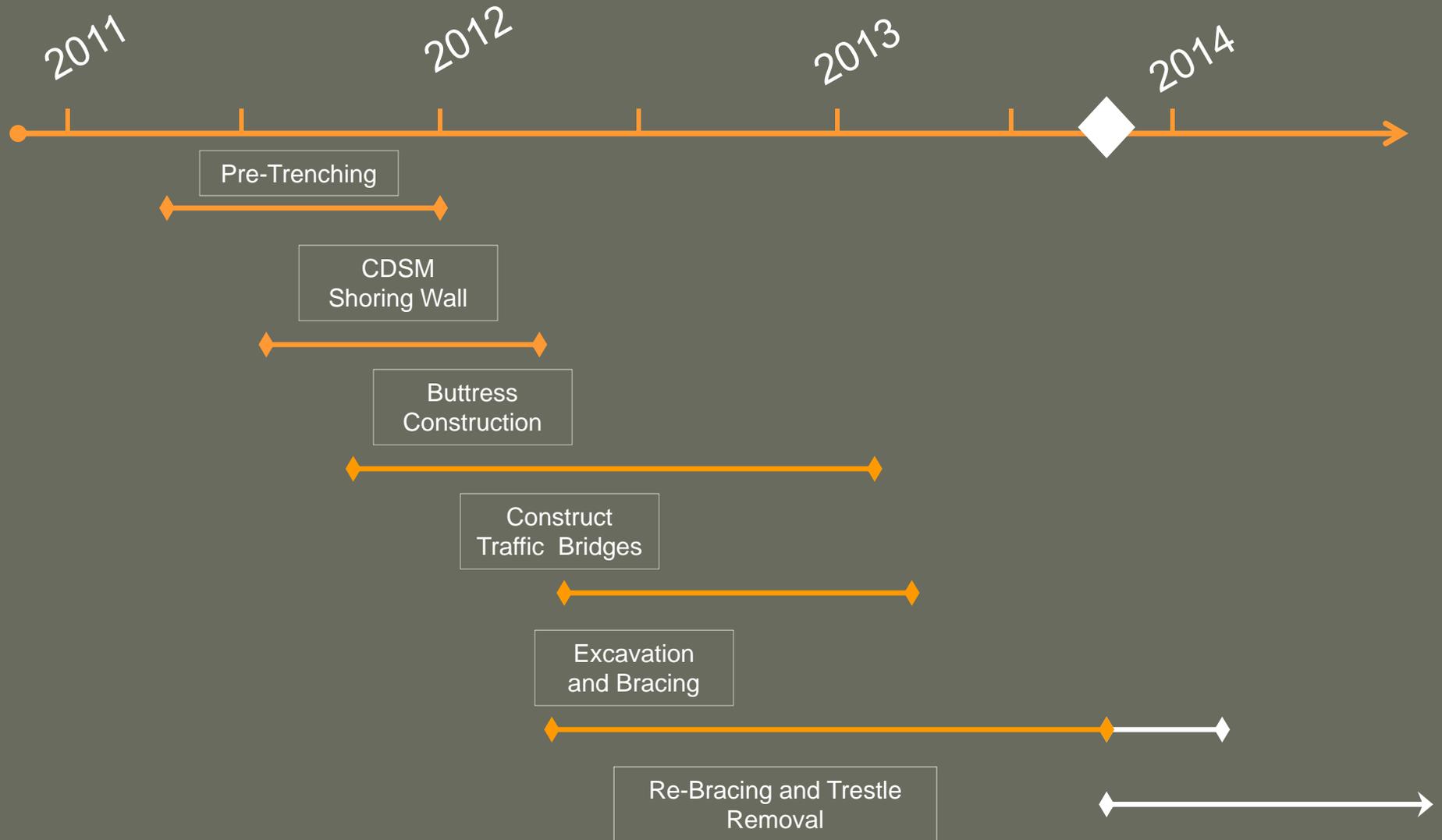
Construction Milestones

Key Schedule Dates	Baseline	23-Sep-13	Float
Complete Utility Relocations	8-Jul-13	13-Mar-14	896
Complete First Mat Pour	8-Jul-13	9-Sep-13	0
Complete Zone 2 Mat Pour	27-Aug-13	24-Nov-13	6
Complete Excavation	6-Jan-14	3-Mar-14	39
Complete Zone 1 Concourse Level Deck	7-Mar-14	1-Aug-14	13
Begin Steel Erection	6-Jun-14	21-Jul-14	0
Complete Steel Superstructure	19-Nov-15	24-Nov-15	0
Connect Bus Ramps to Transit Center	1-May-16	30-Aug-16	142
Complete Rough Interiors	17-Aug-16	6-Jan-17	37
Complete Exterior Curtain Wall	5-Jan-17	23-Nov-16	35
Complete Finish Interiors	25-Jul-17	28-Aug-17	37
Begin Bus Operations	23-Oct-17	23-Oct-17	0
Final Completion	28-Mar-18	21-Jan-18	0



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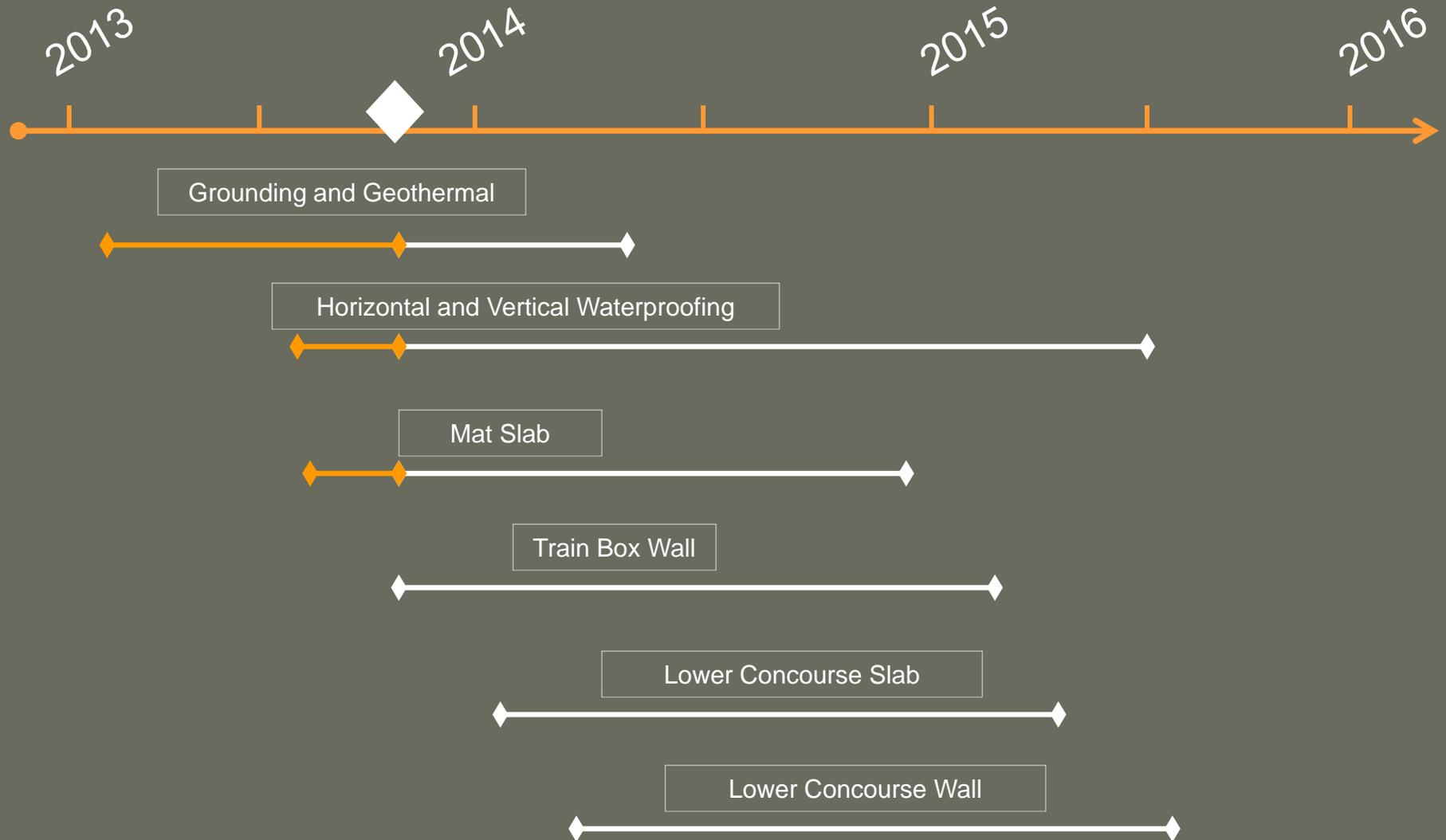
BSE Timeline Summary





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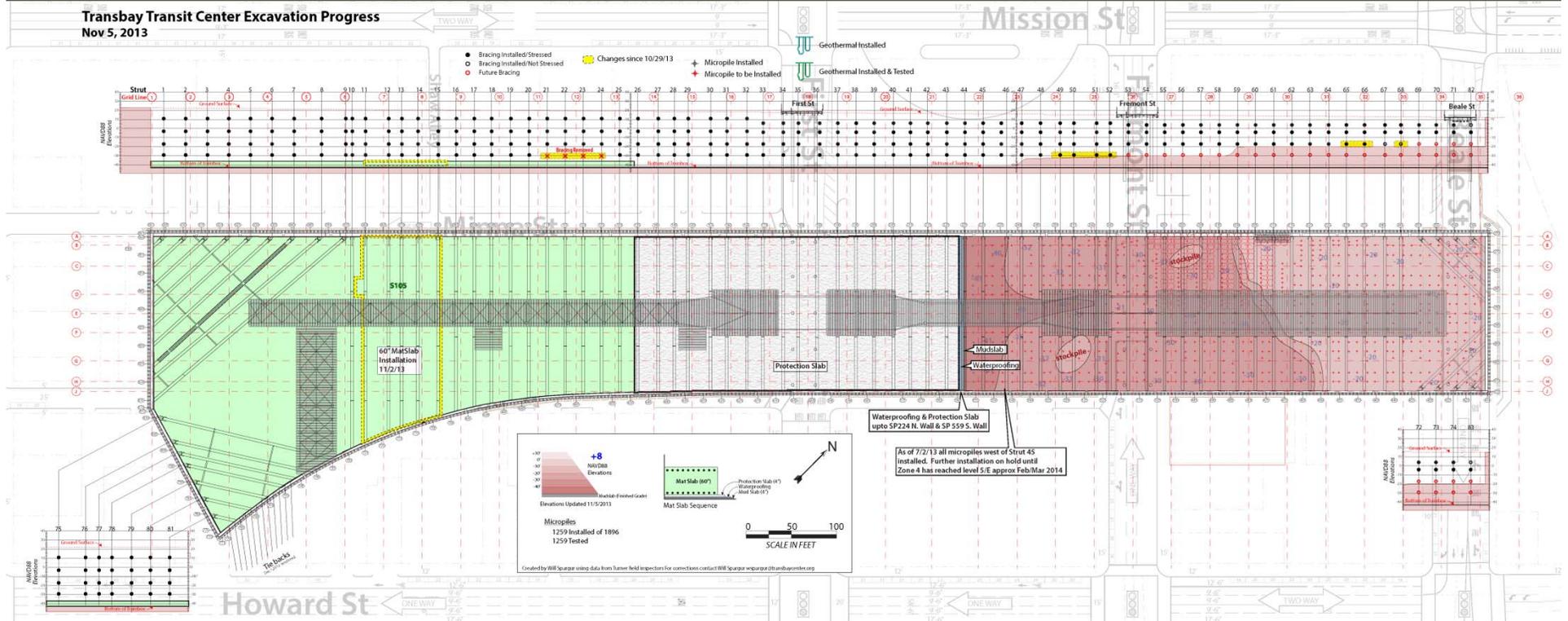
Below Grade Concrete Timeline Summary





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Excavation and Bracing Status All Zones November 5, 2013





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Central and West Sections Progress



October 2013

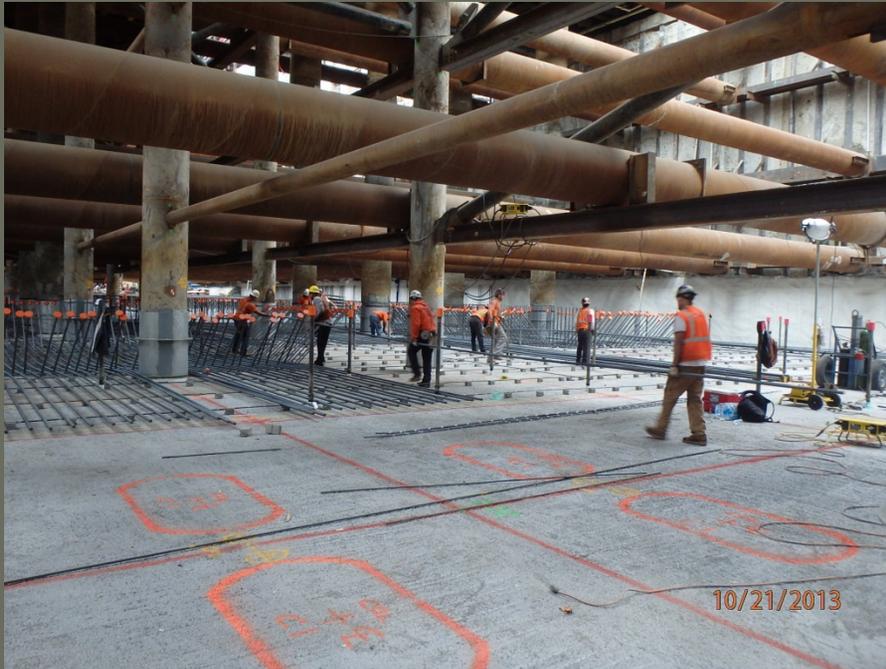


November 2013



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Mat Foundation Slab Reinforcing Placement



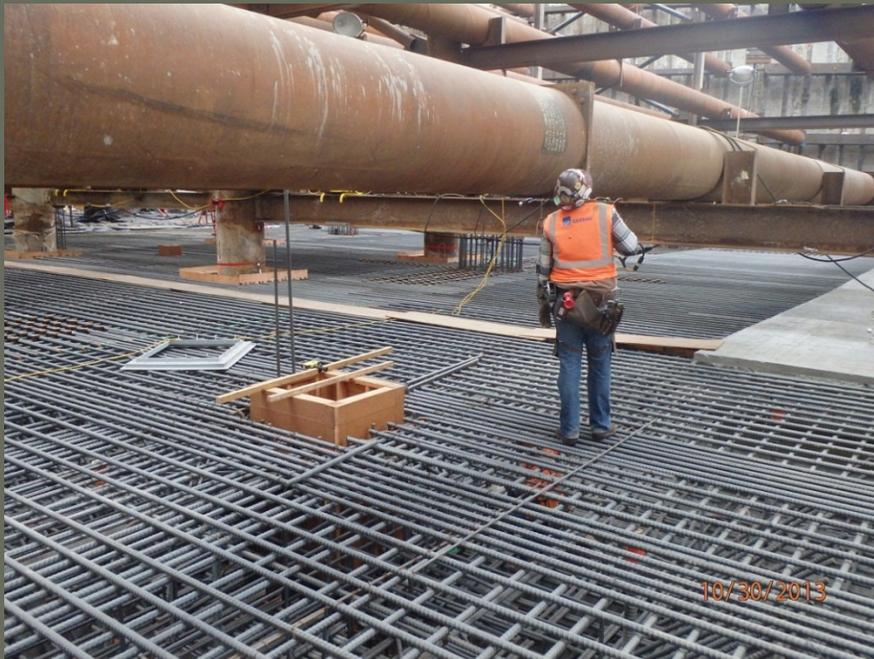
Typical Lower Mat Reinforcing
Steel for Mat Foundation





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Mat Foundation Slab Reinforcing Placement



Typical Top Mat Reinforcing Steel
for Mat Foundation





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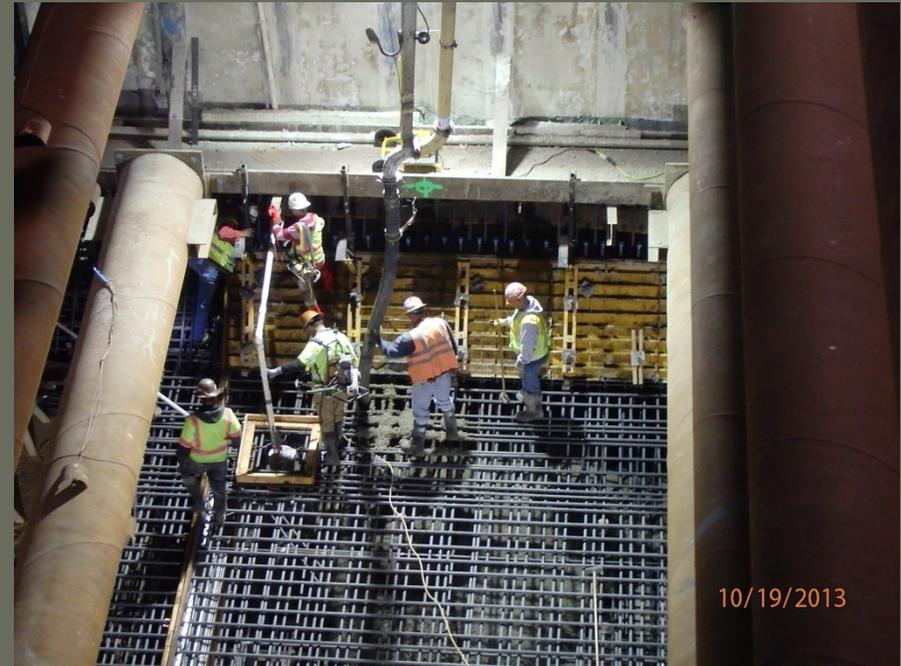
Mat Foundation Slab Concrete Placement





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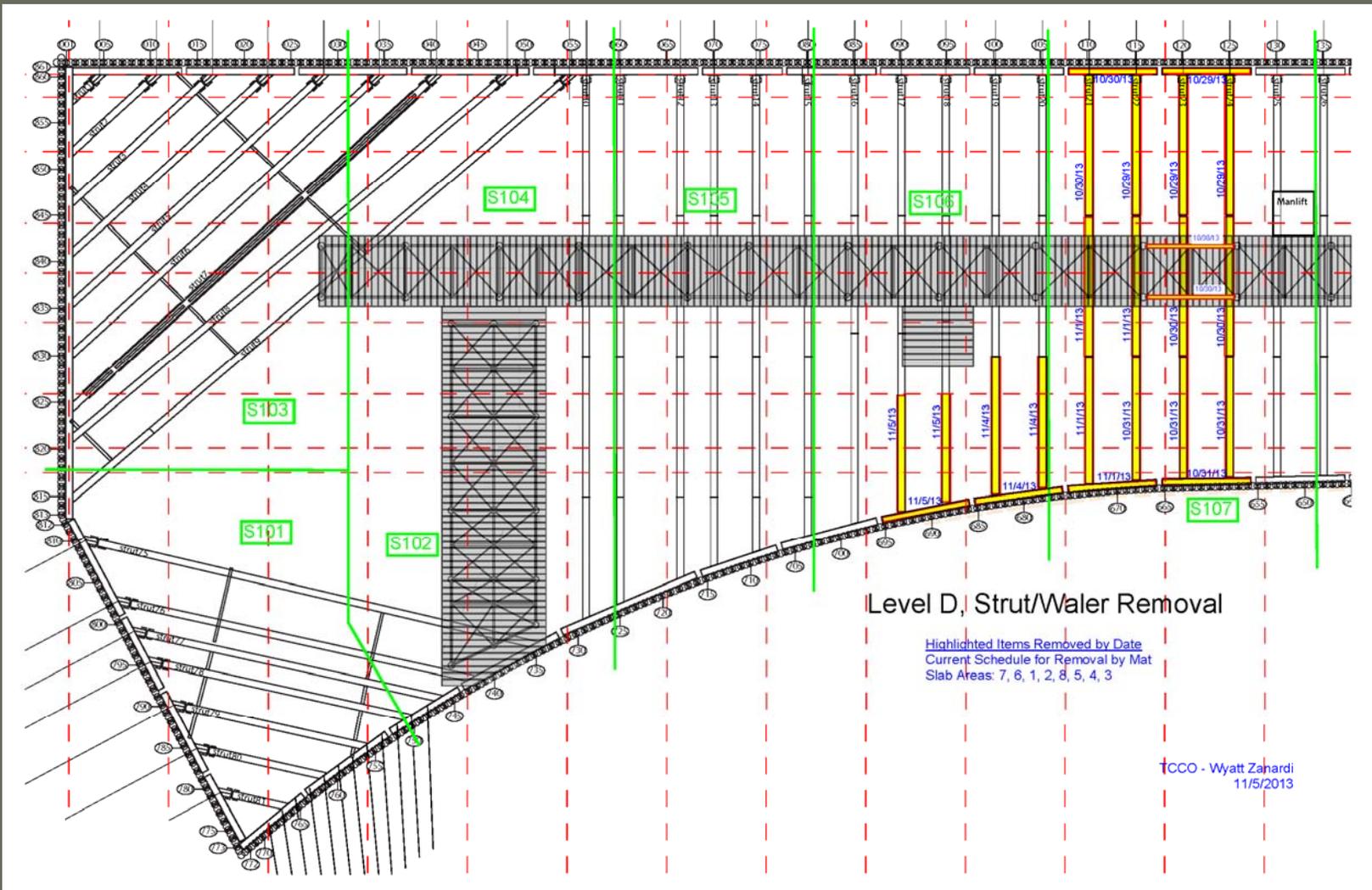
Mat Foundation Slab Concrete Placement





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Bracing Removal Status November 5, 2013





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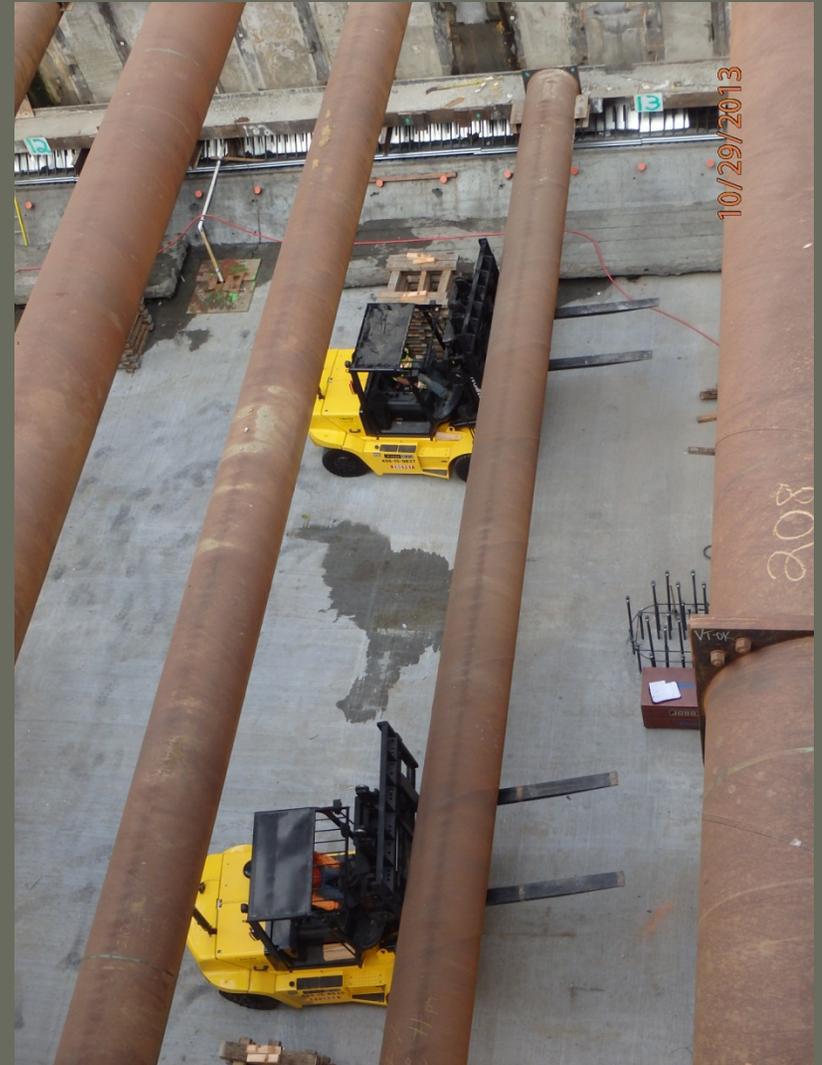
Bracing Removal





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Bracing Removal



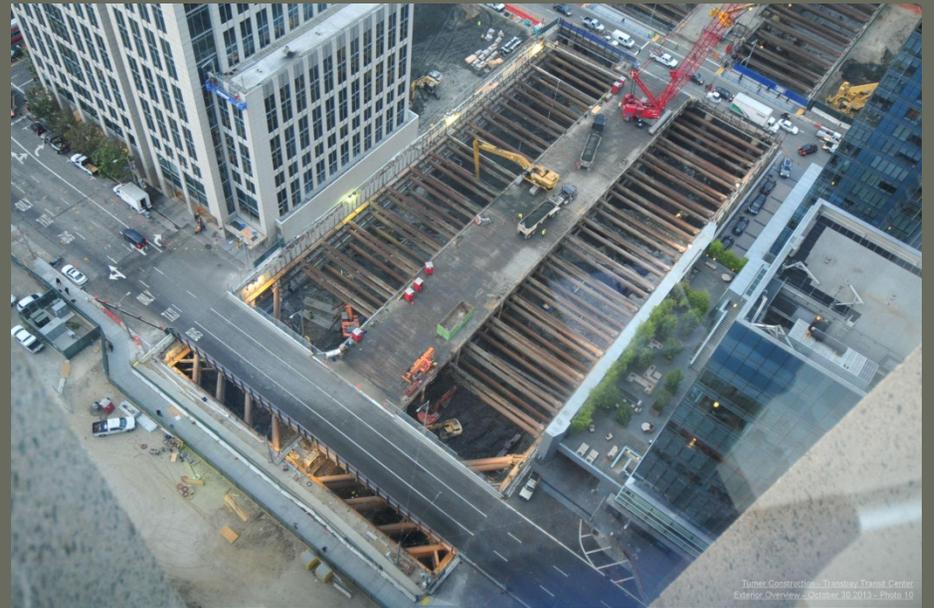


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East Section Progress



October 2013



November 2013



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Excavation and Bracing – Zones 3 and 4





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Excavation and Bracing – Zones 3 and 4





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Cast Node Fabrication as of October 25, 2013

Cast Node Location	Total Castings per Area	Tooling Status - In Process and Complete	Casting Status - In Process and Complete	Machining Status - In Process and Complete	Received by Skanska
Ground Level	35	9	2	0	0
Bus Deck Level	75	6	2	0	0
Roof Level	138	2	4	4	0
Light Columns	56	4	4	0	0
Total Nodes	304	21	12	4	0

as of 10/25/13



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Cast Node Fabrication



Type 21 Cast Node in Bradken's Amite, LA foundry, in "rough casting" form, prior to cleaning and shot blast.



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Cast Node Fabrication



Type 71 and 72 Cast Nodes in Bradken's Kansas Foundry, preliminary cleaning and shot blast complete.



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Utility Relocation - AWSS Installation Update



First Street intersection completed





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Contingency Tracking

(\$millions)

Trend	Design Contingency	Construction Contingency	CM/GC Contingency	Program Reserve	Escalation	Total Contingency & Reserve
Remaining Baseline Budget Amounts (Sep 2013)	\$8.2	\$60.1	\$36.4	\$87.3	\$30.3	\$222.3
Utility Relocation Change Orders		\$.1				\$.1
BSE Change Orders						
Below Grade Change Orders						
Design Budget Changes						
Total Draws (Oct 13)	\$0	\$0.1	\$0		\$0	\$0.1
Remaining Balances	\$8.2	\$60.2	\$36.4	\$87.3	\$30.3	\$222.4



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Bay Area Regional Labor Breakdown

Labor by Area	Through October 2013	
Location	Total Hours Completed	Hours Percent
East Bay (Alameda, Contra Costa, Solano)	285,227	32%
North Bay (Marin, Napa, Sonoma)	27,863	3%
South Bay (San Mateo, Santa Clara)	84,670	10%
San Francisco	160,069	18%
Other*	327,528	37%
Totals	885,357**	100%

*Other includes workers from throughout California including the Central Valley as well as workers from out of state who are onsite for specific tasks.

**Total hours are for the Transit Center construction work and do not include the initial Demolition work represented by a total of approximately 55,000 craft hours.



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Labor Breakdown by Trade through October 2013

Classification	TTC Building and RUP's*
Inspectors – Soils / Material Test	40
Carpenters and Related Trades	57
Cement Mason	49
Electrical – Utility Lineman	26
Electrician	29
Field Surveyor	26
Iron Worker	177
Laborer and Related Trades	536
Operating Engineer	323
Pile Drivers	129
Plumber	12
Roofer and Waterproofer	25
Sheet Metal	5
Teamsters	166
Tile Setters / Finishers	7
Water Well Driller	9
Totals	1,610

* Relocation of Utilities Project



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Questions?