# central **T**subway

# Inside Yerba Buena/Moscone

Earth-moving equipment has begun to remove material and excavate the interior of the station box.



# **Progress Report**

September 2015









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<u>Cover photo:</u> With the completion of the Yerba Buena/Moscone Station box roof slab in early September, work to begin excavation of the station box interior began shortly after. A "breakable" wall had been previously constructed with a reinforced header beam overhead. A small hole was made in this wall, and earth-moving equipment was brought in. **More photos of this construction can be found starting on page 33.** 

<u>Above photos</u>: The ends of large steel I-beams can be seen jutting from concrete piles at the Union Square/Market Street Station site, while a worker grinds the edges of recent welds. These beams are tied into other structural elements, and eventually hold up the roof decking currently being installed for the station structure.

See the Appendix E final page for CS websites hyperlinks and public outreach on line resources. The Project main web site is at: <u>http://www.centralsubwaysf.com/</u>



Workers operate drilling and grouting equipment to waterproof the inside of the Chinatown Station headhouse, while excavation is temporarily paused.

# **Executive Summary**

Continue excavation at YBM, UMS and CTS Stations for the future stations.

**Chinatown Station -** Install dewatering wells on Stockton Street. Drill compensation grout hole from inside headhouse and precondition under buildings. Finish drilling inclinometers on Stockton Street. Excavate to El 70, start installing bracing level 2. Continue relocating ductbank on Stockton Street.

**Union Square/Market Street Station** - Deck and rebar installation at Ellis Annex and in the North Concourse. Discontinued grouting on the east and west sides of Stockton Street.

**Yerba Buena/Moscone Station -** Traffic flowing on east side of 4th Street with west side work area closed for construction. Backfill over portion of headhouse beneath Clementina Street is in progress. Utility installation at 4th and Howard (sewer mains, water lines, and electrical ductbank) is in progress. Headhouse and station box temporary bracing strut level 2 installation is in progress. Archaeological monitoring by spot checking is in progress.

**Surface, Track and Systems** Continue Muni ductbank installation. Continue 78" sewer rehabilitation. Continue 36" sewer force main. Continue Auxiliary Water Supply System (AWSS) installation. Continue water line work. Continue AT&T crossing work. Start 4th/King Special Trackwork. Start tunnel prep work.

Tunnel - Contract administrative closeout is ongoing.

Total project costs to date are \$847.11 million, an increase of \$16.27 million over last month. The total cost to date equals 53.67% of the total project budget of \$1.578 billion. The Master Project Schedule forecast the Revenue Service Date of May 2019.

The Stations Contractors' Safety Reports show no recordable accidents took place this month and the rates of work site accident incidents by the man hours worked continue to be below industry standards - see tables on page 29.

# Key Milestones

# Excavation of the Chinatown Station headhouse interior part 2



**1** Workers use earth-moving equipment to collect material in the central access shaft

MILESTONE	DATE EXPECTED
General	
Revenue Service	December 2018
Contract 1252 Tunnels	
Substantial Completion	April 15, 2015 (A)
Contract 1300 Stations, St	urface, Track, Systems
Notice to Proceed (NTP 1)	June 17, 2013 (A)
Notice to Proceed (NTP 2)	January 12, 2014 (A)
Substantial Completion	November 7, 2018



**2** Material is transferred to a large, steel bucket and raised up by a crane



**3** Material is piled to be offloaded onto waiting dump trucks at Washington St.

#### **Costs** (See Appendix A for Details)

The Current Cost Estimate (CCE) for the Central Subway Project is **\$1.578 billion** in year of expenditure dollars (\$YOE). This total project cost is shown at the top of Report 7.1, Program Project Budget. This capital cost projection incorporates allocated and unallocated contingencies to cover the risks associated with the project completion.

Total net incurred costs for the project are \$847.11 million, a \$16.27 million increase over last month. The cost to date figure reflects expenditures through FAMIS 786 Report (\$803.89 million) plus the utilities joint trench Form B Reimbursement payment (\$10.03 million), invoices currently being processed (\$16.00 million) and estimates of outstanding pay requests (\$17.19 million). This incurred amount equals 53.67% of the total project budget of \$1.578 billion.

The current funding level to date is \$1,179.79 million includes FTA \$150 million FY2015 New Starts Grant appropriated in September 2015. This represents 75% of the total project budget.

#### Earned Value Analysis

In September 2015 Report, Central Subway Project Master Schedule has used Contract 1300 Station contractor baseline schedule and August monthly update schedule. Contractor continues address the cost issues in cost loaded schedule. Preliminary September Earned Value Analysis reports the Planned Value, Earned Value, Percent Complete and resulting indexes as follows:

Overall Budgeted Cost:	\$1,578,300,000
Planned Value:	\$1,120,593,029
Earned Value:	\$906,275,419
Actual Cost:	\$847,113,878
Schedule Performance Index (SPI):	0.81
Cost Performance Index (CPI):	1.07
Percent Complete:	57.4%

Earned Value Cost shows 60M higher than Actual Cost for Contract 1300 is due to Tutor Perini Corporation Schedule has remaining cost in the completed activities.

#### **Schedule Highlights - Continued**

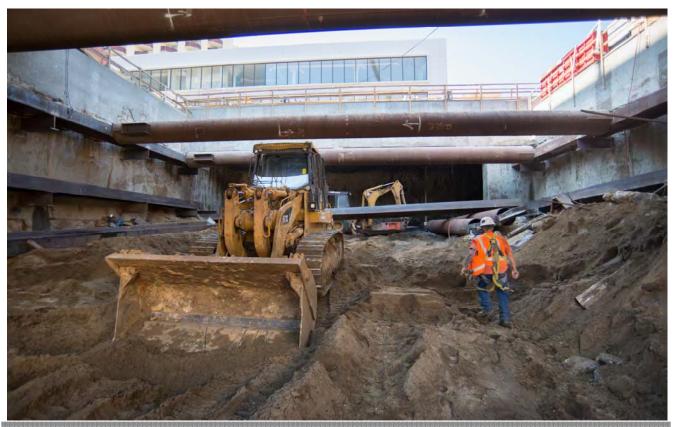
The Master Project Schedule (MPS) below includes progress through September 30, 2015.

The MPS shows the forecast the Revenue Service Date of May 6, 2019 due to 9 Months delay shown in Contractor September Update Schedule.

The controlling critical (longest) path of the MPS runs through CTS Excavation succeeded by STS Startup & Testing, Commissioning and Pre-Revenue Activities to the Baseline Finish and Revenue Service Date. See Appendix B – Longest Path. The latest schedule shows the longest path has changed from Union Square Station (UMS) to the Chinatown Station (CTS). The 1300 Contractor has re-sequence UMS Platform Station Jet Grout Operation and was able to partially recover some time in UMS Station. This adjustment in the Critical Path will continue as the 1300 Contractor incorporate their schedule recovery options and change their construction work plans.

The Schedule Contingency is reduced to zero on the critical path of the MPS, which is below the Minimum Schedule Contingency level of 6 months. A re-evaluation is now required, utilizing the updated Contract 1300 Schedule to justify any revisions to current minimums.

The 1300 Contractor submitted ten (10) Schedule Updates from December 2014 to September 2015. The September 2015 Schedule Update is currently under review shows 9 Months slippage of progress on the Critical Path. Contractor has been directed to develop a Recovery Schedule as required by Contract and correct out-of-sequence and Retained Logic driving many unrealistic forecast dates. The 1300 Contractor continues address key critical activities to recover lost time and improve schedule performance. Review of schedule update as well as identifying recovery options is ongoing.



As excavation of the Yerba Buena/Moscone Station headhouse has progressed, steel supports have been temporarily installed.

#### Contract 1300 Stations, Surface, Track and Systems

The Contractor, Tutor Perini Corporation's (TPC) baseline schedule is incorporated into the master program. The preliminary Tutor Perini Corporation's (TPC) September schedule is used in September Report.

Contract 1300 has several interface points with Contract 1252. The timing of these interface points correlate to when the NTP was issued for Contract 1300. This table represents the current status of these interface points with respect to the Contract 1252 update. The 1300 Contractor is not ready to access the tunnel used by Contract 1252. The tunnel access from Contract 1252 is not expected to impact Contract 1300. The current completion date of the Contract 1252 is shown in the table below.

Interface Points	CN1300 Requirement	CN 1252 Mar 2015 Update	N	Variance
Tunnel Portal Completion	24-Sep-15	15-May-15	132	CD

#### Work Package P-1254R CTS performed the following work this month:

- Install dewatering wells on Stockton St
- Drill compensation grout hole from inside headhouse and precondition under buildings
- Finish drilling inclinometers on Stockton Street
- Excavate to EI 70, start installing bracing level 2
- Continue relocating ductbank on Stockton Street

#### Work Package P-1253 UMS performed the following work this month:

- Deck and rebar installation at Ellis Annex and in the North Concourse
- Discontinued grouting on the east and west sides of Stockton Street

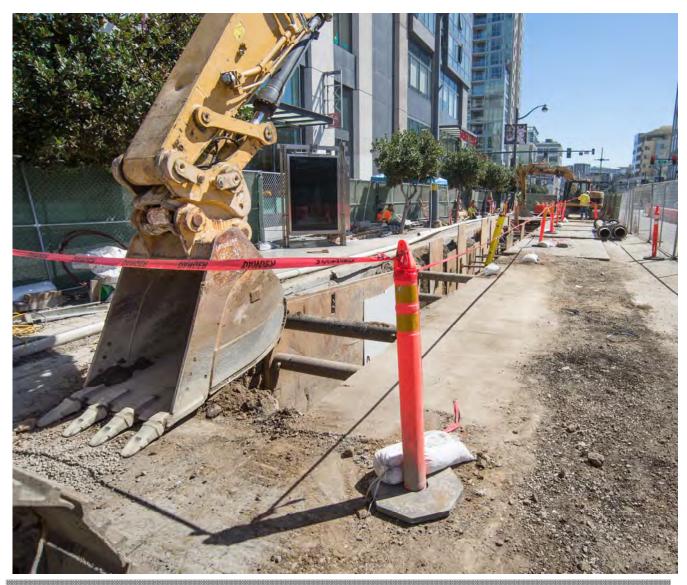
#### Work Package P-1255 YBM performed the following work this month:

- Traffic flowing on east side of 4th Street with west side work area closed for construction
- Backfill over portion of headhouse beneath Clementina Street is in progress
- Utility installation at 4th and Howard (sewer mains, water lines, and electrical duct bank) is in progress
- Headhouse and station box temporary bracing strut level 2 installation is in progress
- Archaeological monitoring by spot checking is in progress

#### Work Package P-1256 STS performed the following work this month:

#### Schedule Highlights - Continued

- Continue Muni ductbank installation
- Continue 78" sewer rehabilitation
- Continue 36" sewer force main
- Continue Auxiliary Water Supply System (AWSS) installation
- Continue water line work
- Continue AT&T crossing work
- Start 4th/King Special Trackwork
- Start tunnel prep work



The bucket of an excavator pauses as work to install a new sewer continues in a trench on 4th Street just north of King.

# **Master Project Schedule**

Activity ID Activity Name	Original 15		-	2016	90			107		-		8107			2019			-	2020
	1000	03 07	5	62	8	5	Q1 02	2 03	3 04	5	8	8	3	ā	8	8	3	5	8
CENTRAL SUBWAY PROJECT	1807				1	╟						<b> </b>				CENTRAL SUB	-	MY PROJEC	5
Program Level Milestones	\$955	+	┞	I	t		+	+	+		1				Prop	Program Level Milectoned	Allectone		
PJD1650 Central Subway Project Start	•		-																
M80004A Tunnel Exosvation Complete - Project Milectone \$4A	0	- Project Mile	of Milectone 44A	-													-		
M80019 Baceline Finich Date: 12-26-2018			-							-					+ Base	<ul> <li>Bageline Finjeh Date: 12-28-2018</li> </ul>	Date: 12-	28-2018	
M30009 C3P Revenue Service Date	•		-	-	1	-	+			-	ļ	ļ	ļ		+ C3P	CSP Revenue Service Date	ervice Dat	2	1
Preliminary Engineering Phase	Ħ						0.00												
Final Design	1011					-													
Light Rail Vehicles		-	ŀ		1	t	-	-					1	Light Ra	ight Rail Vehioles				
Real Estate	SIM	2	Real Ediate																
Construction Phase	i i	-					-								I	Construction Phase	Ion Phase		İ
Construction Support and Costs	2732	╉	₽	1		╏	+	╉	-	╉	-				I	Construction Support and Costs	ion Supp	ort and (	Costs
Construction Utility Contract #1-MOS & Portal CN-1250	909		-											1			_		
Construction Utility Contract #2 - UMS CN-1251	Ŧ		1																
Construction Tunnels CM-1252	1416	8	netruction	Construction Tunnels C& 1262	1262	P				-									
Construction CM1300	1612						+	-			-	1		Ĩ	Construction CN-13	CN-1340	-		†
CN-1300 Millestone	1422	-			T		-		-	ł			1	Ĩ	Ch-1300 Milectone	scione			
Construction UMS Station P-1253	1388	-			THE R. L.				-		-		Ĩ	onctructs	Construction UMS station P-1253	tion P-1263			-
Construction CTS station P-1254R	1368	╉					-	-	-		-		-	opetrueth	Construction CTS Station P-1564R	ion P-15646	œ		
Construction YBM Station P-1255	1612	-					-		-				1	onctructs	Construction YBM Station P-1265	tion P-1265			
Construction STS P-1256	1440				T		-	-				4.			Construction \$13 P-1268	T3 P-1268	-	+	1
Project Start Up	316		-							-					Proje	Project Start Up			
Unallocated Contingency	38		_			_									1 unall	Unallocated Contingency	ntingeno		
CO1.700 Cost Activity Unallocated Contingency (LOE) - 1.7.600.99.090.00 -	#									_					Cont	Coat Activity Unsiloodted Contingenoy (LOE) -	allootted	d Contin	Denoy (I



A mechanic inspects work on a ventilator fan inside the south concourse of the Union Square/Market Street Station, beneath the intersection of Ellis and Stockton.

# **Contracts & Construction**

#### **Construction Contracts In Progress**

#### Contract 1300: Combined Work Packages 1253, 1254, 1255, 1256

- Contractor:
- Tutor Perini Corporation
- Amount: \$838.65 million
- Contract Status: 42.28% complete construction

#### **Contracts Completed**

**Contract 1250: Moscone Station and Portal Utilities Relocation** 

Contract 1251: Union Square/Market Street Station Utility Relocation

Contract 1277: Pagoda Theater Site Demolition (Funded separately from the CS Project budget)

Contract 1252: Central Subway Tunneling

Contract SBE Participation (Updated Quarterly) See Appendix E

#### See Appendix D

# **Stations, Surface, Track and Systems**

Contract 1300 Contractor: Tutor-Perini Corporation

#### **Description of Work**

The Contract 1300 scope is to construct the Central Subway's three subway stations, one surface station, construct the 2,000 feet of surface track, and install track and operating systems throughout the new alignment. The separate station and systems work packages are presented in the following pages.

Work includes station finishes, AC and DC substations, elevators, escalators, lighting, emergency ventilation fans, HVAC fire alarm/ suppression/ protection, Cutter Soil Mixing, secant pile bottom up and Sequential Excavation Method construction, settlement monitoring, building protection, connecting to and modifying the BART Powell Street Station, PA, CCTV, signage, installation of fare collection equipment and station start-up and commissioning.

Contract I	Details	Budget/Expe	nditures⊾
Contract Awarded:	May 21, 2013	Current Budget	\$859,676,400
Notice to Proceed:	June 17, 2013		
Substantial Completion:	November 7, 2018	Expenditures to Date	\$302,388,888
Contract Award Value:	\$839,676,400		
Modifications to Date:	(\$1,016,585)		
Current Contract Value :	\$838,659,815		

#### 1300 Summary Schedule

Activity Name	2013			2014			20	15			2016			20	17			20	18			20	19		20	)20
	2 Q3	Q4	Q1	Q2 Q3	B Q4	Q1	Q2	Q3	Q4	Q1	Q2 Q	3 Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4 (	21 0	Q2 Q3
CENTRAL SUBWAY PROJECT											1	1														T
Construction Phase			1	1						1									Ì						İ	
Construction CN-1300			1							1	1	1						1	1			1	Í		1	1
CN- 1300 Milestone	Ċ	1		-	l.			1		į		1					i		1	C			1		ì	1
Construction UMS Station P-1253	-			T.	1						Ý	÷.				10				1					i	İ
Construction CTS Station P-1254R				<b>N</b>	-													1							1	1
Construction YBM Station P-1255	-											AL U F					ļ			1					1	1
Construction STS P-1256					÷	1							T				į		1		1				ł	

# **Chinatown Station**

#### Contract 1300 - Work Package 1254R



#### **Current Work Status**

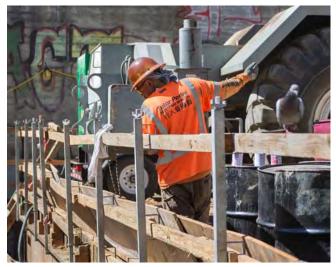
- Install dewatering wells on Stockton Street
- Drill compensation grout hole from inside headhouse and precondition under buildings
- Finish drilling inclinometers on Stockton
   Street
- Excavate to El 70, start installing bracing level 2
- Continue relocating ductbank on Stockton
   Street

#### Work Expected Next Month

- Finish installing dewatering wells on Stockton Street
- Excavate and install temp level 3 bracing beams
- Finish drilling and installing compensation grout tubes and preconditioning
- Finish installing level 2 bracing
- Install horizontal inclinometers and MBX's above crosscut crown
- Install weep hole through slurry walls

#### **Description of Work**

This Work Package is to construct one subway station. Includes station finishes, AC and DC Traction Power substations elevators, escalators, lighting, emergency ventilation fans, HVAC fire alarm/ suppression/ protection, slurry wall top-down construction, settlement monitoring, building protection, PA, CCTV, signage, installation of fare collection equipment and station start-up and commissioning.



#### Three Month Look Ahead

- Form and place CDF in TBM tunnels
- Build composite wall over crosscut cavern opening
- Slip line brick sewer on Stockton Street
- Drill and install barrel vaults pipe
- Finish installing temp level 3 bracing
- Excavate to level 4 bracing

Contract	Details
Contract Awarded:	May 21, 2013
Notice to Proceed:	June 17, 2013
Substantial Completion:	November 7, 2018
Contract Award Value:	\$247,567,810
Modifications to Date:	\$230,956
Current Contract Value:	\$247,798,766

Budget/Exper	nditures ⊾
rrent Budget	\$252 567 81

Current Budget	\$252,567,810
Expenditures to Date	\$72,581,447

#### **CTS Three Month Schedule**

ity ID	Activity Name		20	15			2016	-
		Sép	Oct	Nev	Dec	Jan	Feb	M
CENTRAL SU	3WAY PROJECT		I					
Construction P	hase							
Construction CN-	1300							
Construction CTS	Station P-1254R							
CT5.33.31.290	CTS_Install New Sewer Manholes & Piping @ Washington & Stockton	_	i			1		
CT5.33.31.330	CTS_Utility Demolition							
CTS 33 11 110	CTS_Perform: Utilities: Complete Washington St - AWS Mains	_	1					
C3.745	CTS_SU Drill & Install Dewatering Wells - In Stockton St - 24 ea	_	1					
CTS.31.43.130	CTS_Install Compensation Grout Tubes & Pretreat - North Of Washington St	_	đ.					
CTS 31 43 120	CTS_Install Compensation Grout Tubes & Pretreat - South Of Washington St	_						
CTS.31.20.150	Excavate for Temp Level 2 Struts +/- 6.5kcy	 L						
CTS.33.31.300	CTS_Backfil & Complete Permanent Sewer Work in Washington St.							
CTS.33.51.110	CTS_Perform: Utilities: Gas Line Washington/Stockton		3					
CTS.31.71.920	Install Piles For Excavation Support North Emergency Egress Access Shaft (12)*							
CT5.01.78.100	CTS_Prep/Submit Warranties (Prior to Substantial Completion)	1.1						
CTS.31.50.160	Install Temp Level 2 Struts & Wales & Preload	-						
CTS,31.20.170	Excavate Below Temp Level 3 Struts +/-4koy							
CTS,32,13,270	Re-open Washington Street		٠	CTS 32.13	3.270			
CTS.03.30.180	F/R/P Partial North Composite Wall Between B & D From Strut Level 3							
CTS.03.30.910	F/R/P Partial East Composite Wall Between 1.0 & 4.0 From Strut Level 3							
CTS.31 20.172	Excavate Below Temp Level 3 Struts +/-2 8kcy (Franciscan)						1041108	
CTS.31.50.191	Install Temp Level 3 Struts & Wales & Preload Col 1-3		1					
CTS.31.50.190	Install Temp Level 3 Strute & Wales & Preload Col 4-11			-				
CTS.31.71.350	Install Barrel Vault Piping Above Level 4 Struts (Top Row 15-41 & Bottom 18-38) = 25ea							
CTS.31.20.200	Excavate to 4' Below Temp Level 4 Struts Col 1.0-4.0							
CTS.31.50.274	Form/Place & Cure CDF in TBM Tunnels @ Crosscut Cavern							1

# **Union Square/Market Street Station**

#### Contract 1300 Work Package1253

#### **Description of Work**

This Work Package is to construct one subway station. Includes station finishes, AC and DC Traction Power substations elevators, escalators, lighting, emergency ventilation fans, HVAC fire alarm/ suppression/ protection, slurry wall top-down construction, settlement monitoring, building protection, PA, CCTV, signage, installation of fare collection equipment and station start-up and commissioning.

#### **Current Status This Month**

- Deck and rebar installation at Ellis Annex and in the North Concourse
- Discontinued grouting on the east and west sides of Stockton Street

#### Work Expected Next Month

- Street closures: Stockton Street between Ellis and Post and Ellis halfway, Stockton to Powell. Alternate lane configuration on O'Farrell at Stockton. Narrowing of Geary to 1 lane at Stockton
- Total closure expected for several days, at night hours, for Geary/Stockton Intersection
- Union Square Garage demolition and abatement. Concrete installation
- North Concourse install decking, concrete for roof deck and reroute of ductbanks and waterline
- Production and test jet grouting on the east and west sides of Stockton Street discontinued at month end until after moratorium
- Concrete installation at Ellis Street Annex
- Geary Street portion of North concourse sewer notch and roof installation should be complete



#### Three Month Look Ahead

- Progress roof beam, roof deck and waterproofing installation for roof deck construction for main station box
- Continue construction operations at Ellis Street Annex and on connection to BART structure
- Installation of new roof on Ellis for BART Station entrance to UMS station
- Continue working on Union Square Garage demolition and construction
- Suspended jet-grouting operations on Stockton Street between Geary and O'Farrell Streets
- Install remainder of north concourse roof on Station between Maiden Lane and Geary Street

#### Union Square Market Street Station Construction - Continued

Contract Details						
Contract Awarded:	May 21, 2013					
Notice to Proceed:	June 17, 2013					
Substantial Completion:	November 7, 2018					
Contract Award Value:	\$294,030,590					
Modifications to Date:	\$90,000					
Current Contract Value:	\$294,120,590					

#### Budget/Expenditures 🛦

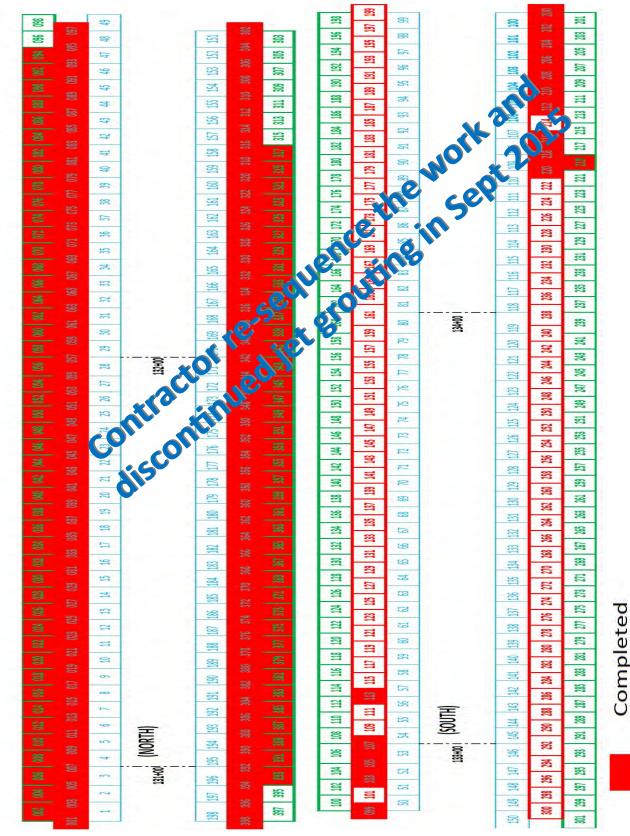
Current Budget	\$299,030,590
Expenditures to Date	\$127,468,542

#### **UMS Three Month Schedule**

(y ID	Activity Name	1		115			2016	
		Sep	Qat.	Nov	Dec	Jan	Feb	٨
ENTRAL SUB	WAY PROJECT					-		
construction Ph	ase							
Construction CN-13	000							
Construction UMS S	Nation P-1253		1					
UMS 31 32 105 4b	UMS_Jet Grout Stockton St East/West Side for Water Seal Rig#1 Pour 4B		-					
UMS 12 10 9010	UMS_Initiate Art work Project Kick Off meeting- Suspended Stainless Scroll Sculpture- Platform Level							-
UMS 31 23 720	UMS_Begin Dewatering to 10 Ft Below Bottom of Excavation		2					
UMS.31.41.0240	UMS_Install Sheet Piles @ Access Shaft #2 (O'Farrel)*		<b>6</b>					
UMS.02.41.0150	UMS_Demo South Entrance For BART Elevator Powell St Station		-					
UMS.03.30 100.2a	UMS_Formwork/Rebar Roof Deck and Pile Cap - Sta 131+26 to Sta 131+62		<b>•</b>					
UMS.03.30.105.1b	UMS_Place Concrete - Roof Deck and Pie Cap - Sta 131+98 to Sta 132+34	-	1					
UMS.31.50.0250	UMS_Excavate. Lag & Support @ Access Shaft #2 (O'Farret)							
UMS.03.30.105.2a	UMS_Place Concrete - Roof Deck and Ple Cap - Sta 131+26 to Sta 131+62		L.					
UMS.03.30.110.1b	UMS_Cure Concrete - Roof Deck and Pile Cap - Sta 131+98 to Sta 132+34							
UMS.31.50.0040	UMS_Install Bracing & Shoring for Walls & Slabs							
UMS.03.30,110.2a	UMS_Cure Concrete - Roof Deck and Pile Cap - Sta 131+26 to Sta 131+62					-		
UMS.31.32.100.4b	UMS_Jet Grout Stockton St East/West Side for Water Seal Rig#1 Pour 4B							
UMS.07.14.100.1b	UMS_Install Waterproofing System/Grout Cover - Roof Deck and Pile Cap - Sta 131+98 to Sta 132+34	-						
UMS.07.14.100.2a	UMS_Install Waterproofing System/Grout Cover - Roof Deck and Pile Cap - Sta 131+25 to Sta 131+62		1					
UMS.05.12.100.2b	UMS_Set Bridging Support Skid - Sta 132+34 to Sta 132+70	-	i -					
UMS 31 20 100 2b	UMS_Excavate For Roof Section & Support Utilities (Where Required) Sta 132+34 to Sta 132+70		1					
UMS 33.31.0100	UMS_Install New 18" Sewer Main - South Side Ellis St							
UMS 31 20 105 1b	UMS_Backfill Roof Section To Subgrade & Move Skid - Sta 131+98 to Sta 132+34	-						
UMS.31.20.101.2b	UMS_As-Build Beam Connections / Fabricate / Deliver Roof Beams - Sta 132+34 To Sta 132+70							
UMS.31.20 105.2a	UMS_Backfil Roof Section To Subgrade & Move Skid - Sta 131+26 to Sta 131+62							
UMS.05.12.100.3a	UMS_Set Bridging Support Skid - Sta 131+62 to Sta 131+98		1					1
UMS.31.32.110.5b	UMS_Jet Grout Stockton St/O'Farrel East Side for Water Seal Rig#2 12ea Piles w/e #1-3	-						
UMS.31.50.0260	UMS_Install Temporary Lid @ Access Shaft #2 (O'Farrell)							
UMS.31.20.100.3a	UMS_Excavate For Roof Section & Support Utilities (Where Required) Sta 131+62 to Sta 131+98							
UMS 31 20:101 3a	UMS_As-Build Beam Connections / Fabricate / Deliver Roof Beams - Sta 131+62 To Sta 131+98	-	-	<b>D</b>				
UMS.05.12.105.2b	UMS_Install Roof Deck Beams - Sta 132+34 to Sta 132+70							-
UMS 33.11.0100	UMS_Install New 8" Water Main - South Side Ellis St							
UMS.05.30.100.2b	UMS_Install Metal Roof Decking - Sta 132+34 to Sta 132+70	-						
UMS.05.12.106.2b	UMS_Erect Excavation Access Shaft Steel - Sta 132+50	1.1	1	1				
UMS.05.12.105.3a	UMS_Install Roof Deck Beams - Sta 131+62 to Sta 131+98							
UMS.03 30 100.2b	UMS_Formwork/Rebar Roof Deck and Pie Cap - Sta 132+34 to Sta 132+70	-	1			-		
UMS.31.50.0560	Uhts_Install Spiling @ Access Shaft #2 & Excavate to Pile Face							
UMS 05 30 100 3a	UMS_Install Metal Roof Decking - Sta 131+62 to Sta 131+98	-		1				
UMS.31 32 0070	UMS_Jet Grout Under South Wall Footings - USG		-					
UMS.03.30.110.2b	UMS Cure Concrete - Roof Deck and Pile Cap - Sta 132+34 to Sta 132+70		1					

#### **UMS North End and South End Jet Grouting**

Jet Grouting - 200 of 398 Completed



# Yerba Buena/Moscone Station

#### Contract 1300 - Work Package 1255



#### **Current Status**

- Traffic flowing on east side of 4<sup>th</sup> Street with west side work area closed for construction
- Backfill over portion of headhouse beneath Clementina Street is in progress
- Utility installation at 4<sup>th</sup> and Howard (sewer mains, water lines, and electrical duct bank) is in progress
- Headhouse and station box temporary bracing strut level 2 installation is in progress
- Archaeological monitoring by spot checking is in progress

#### Work Expected Next Month

- Continue utility installation on 4<sup>th</sup> Street north of the north headwall and on Folsom Street
- Continue excavation and temporary bracing installation in headhouse and station box
- Begin placement of mezzanine level slab within station box (beneath 4<sup>th</sup> Street)

#### **Description of Work**

This Work Package is to construct one subway station. Includes station finishes, AC and DC Traction Power substations elevators, escalators, lighting, emergency ventilation fans, HVAC fire alarm/ suppression/ protection, slurry wall top-down construction, settlement monitoring, building protection, PA, CCTV, signage, installation of fare collection equipment and station start-up and commissioning.



#### Three Month Look Ahead

- Continuation of headhouse and station box excavation, install excavation temporary bracing
- Placement of mezzanine level slab within station box (beneath 4<sup>th</sup> Street)
- Archaeological Monitoring
- Utility installation at intersections of 4<sup>th</sup> Street with Howard and Folsom Streets

#### Yerba Buena Moscone Station Construction - Continued

Contract	t Details
Contract Awarded:	May 21, 2013
Notice to Proceed:	June 17, 2013
Substantial Completion:	November 7, 2018
Contract Award Value:	\$158,089,000
Modifications to Date:	(\$1,642,919)
Current Contract Value:	\$156,446,081

Budget/Expenditures 🔺					
Current Budget \$163,089,0					
Expenditures to Date	\$74.198.865				

#### **YBM Three Month Schedule**

ity ID	Activity Name		2	015		1	2016	
		Se	Oct	Nov	Dec	Jan	Feb	Ма
CENTRAL SU	BWAY PROJECT							
Construction F	hase							
Construction CN	1300		1					
Construction YB	I Station P-1255							
YBM.31.20.320	Excavate Headhouse to Temp Strut Level 1 & Install Struts							
YBM.05.60.540	FRP Stair #5 from Under surface to Surface Level							
YBM.31.20.370	Excavate Station & Headhouse to Temp Strut Level 2							
YBM.31.20.590	Station & Headhouse Instal Level 2 Struts							
YBM.31.11.610	Place 12" Concrete Base/ AC- East Half Roof Slab							
YBM.31.20,400	Excavate Station to Top of Mezzanine Level Slab		<b></b>					
YBM.31.20.600	Excavate Station For Mezzanine Level Slab Construction							••••••
YBM.03.30.980	Prep & Place Mud Slab Mezz Level, Station							
YBM.03.30.401	F/R/P Station Mezz Level Slab, Station Pour 1							
YBM.03.30.402	F/R/P Station Mezz Level Slab, Station Pour 2							
YBM.03.30.403	F/R/P Station Mezz Level Slab, Station Pour 3							
YBM,03.30.404	F/R/P Station Mezz Level Slab, Station Pour 4							
YBM.03.30.405	F/R/P Station Mezz Level Slab, Station Pour 5							
YBM.03.30.408	F/R/P Station Mezz Level Slab, Station Pour 6							
YBM.31.50,105	Remove Station Level 2 Struts							

# Systems, Trackwork, & Surface Station

#### Contract 1300 - Work Package 1256

#### **Description of Work**

This Work Package is to construct one Surface Station. Includes light rail track and systems, track invert, track safety walkways; light rail track and systems constructed on the 2,000 foot surface for the alignment from the tunnel portal, south to the tie-in to the existing Muni T-Line at Fourth and King Streets; and the surface Fourth and Brannan Street (FBS) Station.

#### **Current Status**

- Continue Muni ductbank installation
- Continue 78" sewer rehabilitation
- Continue 36" sewer force main
- Continue Auxiliary Water Supply System (AWSS) installation
- Continue water line work
- Continue AT&T crossing work
- Start 4<sup>th</sup>/King Special Trackwork
- Start tunnel prep work

#### Work Expected Next Month

- Continue 78" sewer rehabilitation
- Continue MRY ductbank and vault installation
- Continue 36" sewer force main
- Continue AWSS installation
- Continue waterline installation
- Continue AT&T crossing work
- Start 4<sup>th</sup>/King sewer structure modification
- Continue tunnel prep work



#### Three Month Look Ahead

- Waterline installation
- AWSS installation
- Muni ductbank installation and vault installation
- 36" sewer force main installation
- 78" Sewer rehabilitation
- 4<sup>th</sup>/King sewer structure modification
- OCS pole foundation installation
- AT&T crossing installation
- 4<sup>th</sup>/King special Trackwork
- Construct tunnel invert slab and walkways

<b>Contract</b>	Details
Contract Awarded:	May 21, 2013
Notice to Proceed:	June 17, 2013
Substantial Completion:	November 7, 2018
Contract Award Value:	\$139,989,000
Modifications to Date:	\$305,378
Current Contract Value:	\$140,294,378

Budget/Expenditures							
Current Budget	\$144,989,000						
Expenditures to Date	\$28,140,034						

#### Systems, Track and Surface Station Three Month Schedule

ity ID	Activity Name		20	15			2016	
		Sep	Oct	Nov	Dec	Jan	Feb	1
ENTRAL SUB	WAY PROJECT							
Construction Pl	hase		1					
Construction CN-1	1300		1					
Construction STS	P-1256							
STS.33.31.220	STS_Install New 10" Sewer Piping & Catch Basins - In West Side Bryant St			0				
STS.33.71.200	STS_Pothole: Utilities:Pothole for MRY Manholes On/Off - 4th Street							
STS 26.05.3730	STS_Pothole Utilities: MRY Ductbanks On/Off 4th Street		Ļ.					
STS.33.71.120	STS_Install: Utilities: MRY MH 1893 - Freelon St			1				
STS 26.05.205	STS_Install: Utilities: MRY Ductbank MH 1891 To MH 1890 - Bryant/4th							
STS.33.71.160	STS_Install: Utilities: MRY Ductbanks MH 1894 To 1897 - Brannan St	-						
STS.33.11.105	STS_Install: Utilities: Water Distribution 8" Main - 4th St Bryant To Welsh St		Ċ		********			
STS.33.11.100	STS_Install: Utilities: Auxiliary Water Supply 12" Main 4th St Through Bryant St Intersection							
STS.33.11.300	STS_Install: Utilities: Water Distribution 8" Main - 4th St Welsh St to Freelon St.							
STS.33.11.120	STS_Install: Utilities: Auxiliary Water Supply 12' Main 4th St (Bryant St To Welch St)							
STS.34.11.215	Construct Temporary Crossover Platform - King Street							
STS.34.23.2610	STS_Install: OCS System - Install OCS Trolley Wire In 4th St/King Street - Intersection		1					
STS 34.11.220	#1 Shut down- Install Trackwork - King Street & 4th Street- SP 5,6,7,8,11,12,13, tie in with existing tracks		1					
STS 34.42.0100	STS_Install: Surface Signaling - Switches 11A & 11B - 4th/King		ł					
STS.34.42.2450	STS_Install: Surface Signaling - Install VTS Conduit & Wiring - 4th/King St	1						
STS.33.11.130	STS_Install: Utilities: Auxiliary Water Supply 12' Main 4th St (Through Welch St Intersection)							
STS 33.11.360	STS_Install: Utilities: Track Drainage- 4th St (Townsend St To King St Tie-in)		E					
STS.33.11.140	STS_Install: Utilities: Auxiliary Water Supply 12" Main 4th St (Welsh St To Freelon St))							
STS 34.42.1080	STS_Install: Security - SB Portal Intrusion Devices		0					
STS.26.05.2720	STS_Install: OCS System - Install OCS Poles In Portal		ė.					
STS 26.05.120	STS_Install: Utilities: 230Kv Electrical Transmission Casing - Assist PG&E - 4th St @ Bryant Intersection		<u></u>			-		
STS.33.11.34D	STS_Install: Utilities: Track Drainage- 4th St (Brannan St To Bluxome St)							
STS.26.05.0430	STS_Install: Tunnel Electrical -Lighting Fixtures - NB Portal To Moscone		× •					
STS.33.51.150	STS_Pothole: Utilities: Pothole for Gas Distribution							
STS.01.78.100	STS_Prep/Submit Warranties (Prior to Substantial Completion)							
STS.01.76.380	STS_Conduct Preconstruction Water Main Condition Inspections		-			-		
STS.33.11.310	STS_Install: Utilities: Water Distribution 8" Main - 4th St Freelon St. Brannan St							
STS.33.11,350	STS_Install: Utilities: Track Drainage- 4th St (Bluxome St To Townsend St)							
STS.26.05.0810	STS_Install: Tunnel Electrical -Lighting Fixtures - NB Moscone to Union Square							
STS.26.05.215	STS_Install: Utilities: MRY Ductbanks MH 1890 to Existing DB @ Sta 169+00 - 4th Street		0					
STS.33.11.270	STS_Install: Utilities: Sewer: Casing for 10" Force Main - 4th St Sta @ Brannan St Intersection							
STS 33.31.420	STS_Install New CB's Manhole, 10" & 15" Sewer Piping @ 4th St/Townsend - West Side							1.11
STS.33.11.320	STS_Install: Utilities: Water Distribution 8" Main - 4th St Brannan St to Bluxome							
STS.33.31.260	STS_Install New 18" Sewer Lateral In Welsh St To Future 48" Manhole		E	1				
STS.33.31.330	STS_Install New Sewer Laterals & Sleeves West Side 4th Street - Brannan to Bluxome		1					
STS 26.05.1190	STS_Install: Tunnel Electrical -Lighting Fixtures - NB Union Square to Chinatown		1					

# **Program Components**

#### **Community Outreach**

#### Outreach public information, events and presentations for September 2015 include:

Successfully completed phase one of 4<sup>th</sup> & King Shutdown work

Outreach to stakeholders, merchants and residents for construction at 4<sup>th</sup> & King

Completed Chinatown dewatering wells

Conducted a tunnel tour to Senator Boxers staff and City Hall Fellows

Conducted walk through of Union Square Station construction with Union Square BID

#### **Outreach in Support of Mitigation and Monitoring**

Team members participated in weekly progress and traffic meetings to address neighborhood concerns

Outreach and communication efforts continue in Chinatown, Union Square, and SOMA

Weekly photo documentation of project work and editing

Weekly construction update emails sent to list of approximately 600 residents and stakeholders Distributed monthly construction update to STS and CTS neighborhood; CTS flier are bi-lingual

#### **Quality Assurance**

Quality Assurance monthly activity of oversight, surveillance, audits, proactive feedback and QA records actively involves the Project construction management staff, the resident engineers, the prime construction contractor and their subcontractors.

#### Stations and Systems Contract CN1300 Quality Assurance Monitoring – On Going

- UMS roof beam to pile WF installation Installation of steel continues
- UMS Water Proofing Subcontractor Waterproofing Experts and substrate and application inspection/acceptance by Kingfield Construction Products (water proofing manufacturer)
- UMS Jet Grout Subcontractor, continuation of Jet Grout
- YBM Slurry Wall Panels to roof slab and interior slabs
- YBM Water Proofing Subcontractor Waterproofing Experts and substrate and application inspection/acceptance by Kingfield Construction Products (water proofing manufacturer)
- TPC QC Daily Inspection Reports (which includes TPC's Specialty Subcontractor's QC checklists and associated documentation and Smith Emery Inspection Reports)
- Smith Emery TPC's laboratory and Inspection Services including Special Inspections that are also provided via email to the City of San Francisco's Department of Building Inspection (DBI) for all permitted Work)
- Preparatory, Initial and Additional Initial Phase Meetings as required by Specification Section 01 45 00, continue. Attendance/participation of these vital meetings (Contractor is not allowed to start work until such time that all perquisite requirements have been met which continues to greatly facilitates all work being done to the strict requirements of the Contract Documents, the "first time"). Of late, additional initial phase meetings are being conducted, at the request of SFMTA for all concrete placements to ensure that all prerequisite requirements have been met.
- Bi-Weekly and ad hoc (mostly at the request of the UMS SFMTA Resident Engineer with Additional Initial Phase Meetings, per 01 45 00 Section 1.09, for pre-concrete placement) Quality Task Force (QTF) Meetings are attended primarily to assist and support the Contractor's QC effort.
- Daily Instrumentation/Monitoring and Construction Management Task Force (CMTF) Meeting
- Progress Meetings for C1300, STS, YBM, UMS and CTS when conducted and as time constraints allow.

#### Document comment and review:

- Contractor's submittals, e.g., review of welding, concrete and other Quality related submittals/ comments as requested to support the RE's and CM, and RFIs related to quality.
- QA Staff continues random/spot checks of the 1300 Contractor's Field Testing lab results; items requiring further action/investigation (missing or inconsistent data, compressive strength results that appear to have a very broad range of values and such) are brought to the attention of the Contractor.
- Review of updated CNCR logs and CNCRs that provide guidance to REs regarding content, accuracy of the disposition and confirmation close-out is correct – TPC QC has been asked to

#### Quality Assurance - Continued

correct the CNCR Log that will result in accurate descriptions and status of each CNCR. TPC QC is fulfilling the 24 hour initial generation of a CNCR once cognizant of a non-conforming condition, through the issuance of the "Initial Issue" of each CNCR. The Initial Issue of each CNCR provides the "what" and "where" but not the "why" or how to prevent repeating CNCRs. The accuracy and completeness of the CNCR Log continues to be a subject of discussion at each C1300 Progress Meeting and is tracked through the associated Meeting Minutes. TPC QC is now posting CNCRs to CM13, using the Noncompliance module of CM13. Currently, existing (completed by "hand") CNCRs are posted as attachments as are the SFMTA RE's responses to Use-As-Is and Repair dispositioned CNCRs. The CNCR Log entries are now more accurate and timely – some improvement is still necessary but the Log is improved.

#### QA Issues:

 TPC's Program Executive has issued CAR #4 Revisions 3, the issue of TPC Management not honoring the QCM's authority to Stop Work remains unresolved. Note that the 01 45 00 *Contractor Quality Control* Specification Section requires that the CQM has the ability to issue SWNs). CAR #4 is included in Quality Assurance Audit (QAA) QAA 025, which was posted to the EDMS and transmitted to the Contractor for responses to six (6) findings. TPC QC has provided a response to the QAA 025 which is under review.

#### QA Concerns:

- TPC QCM not having the authority to exercise Stop Work to prevent non-conforming work from being incorporated into the permanent Work. (CAR #4)
- Necessity of using both Reinforcing Steel Design Drawings and approved Reinforcing Steel Shop Drawings to inspect/accept rebar placement.



#### **Quality Assurance - Continued**

- Incomplete/confusing shop drawing submittals for UMS structural steel resulting in QC and or QA stopping TPC from making welded connections upon discovery that approved details are missing, continues.
- Welding inspection and associated documentation of CWI acceptance of all welded joints, including tack welding, at UMS. Smith Emery continues to update and refine their spreadsheet "tool" that is used by TPC QC to account for the acceptability and associated documentation by CWIs for all welded joints that are to be embedded in concrete.
- Use of CM13 as the document depository related to a user having the ability to delete submittal attachments after a submittal has been approved without any record or trail of the deletion (this was a finding included in QAA 025 Audit Report)
- Contractor's Quality Control Program's acceptance of verbal direction from PM releasing a SFMTA Hold Point (re TPC CAR #6)
- The number of SFMTA CSP Field Notifications at UMS provided to TPC
- De-certification of waterproofing installer, Water Proofing Experts, by Kingfield, waterproofing system manufacturer. Concrete placements at UMS are currently not be places because the waterproofing manufacturer will not inspect/accept installations by a non-certified waterproofing installer.

#### **Other Program QA Practices Implemented**

- Close-out of Corrective Action Requests: Close outs continued from Quality Assurance staff's Audits, Surveillances and PMOC Quarterly Reviews. The status is tracked in the Corrective Action Log that is provided to the project team and the FTA PMOC.
- On-going indoctrination to the CSP Quality Program continues on a one-to-one basis as new personnel are added to the PM/CM Staff.
- he Contractor's response to the 6 audit findings of Quality Assurance Audit QAS 025 of the implementation and effectiveness of some components of the C1300 Contractor's approved Contractor Quality Program (CQP) is being reviewed with the primary effort associated the difficulty of obtaining the objective evidence for verification of each TPC QC audit finding response.
- Revision 12 (Review Cycle 13) of the Contractor's Quality Program (CQP) was approved as noted with no resubmittal required.
- Quality Assurance Surveillance's QAS 069 Waterproofing at UMS was posted to CM13, the subject of the surveillance was the status and compliance with the Cold Fluid-Applied Water-proofing Specification 07 14 16.

## Quality Assurance - Continued Risk Management

Risk Mitigation Management Meeting No. 74 was held on September 3, 2015. The Risk Assessment Committee reviewed and discussed Risks that include Construction Risks with ratings above 6; Remaining Requirement and Design Risks; and, any New Risk Assessment and Mitigations identified to date.

#### Program Safety & Security

The San Francisco Municipal Transportation Agency is committed to the highest practical level of safety and security standards and practices in the public transit industry. The Safety and Security Management Plan (SSMP) components are reported on below as appropriate including, Safety and Security Committee, the Fire Life Safety and Security Committee the Construction Conformance Verification and Documentation and Contractor Safety and Security.

#### Project Management/Construction Management (PMCM) Team

About half of the PMCM team attended and completed First Aid, CPR and AED training. The instructor is a paramedic and she had lots of good information that the attendees could relate to. The other half of the PMCM team will be attending a First Aid, CPR and AED class hopefully in October.

Safety bulletin boards have been a great success. I continually get lots of comments about pictures and articles that are posted.

As an incentive for the PMCM team to continue to work safe and look for and report safety hazards to the Program Safety Manager, the PMCM team is working on creating safety incentives that will be handed out to those that demonstrate good safety awareness and good safety working records.

#### Safety Summary for the 1300 Stations Systems Track Construction Package

Cal-OSHA Mining and Tunneling came out to conduct an investigation into the flagger being hit by a car incident during the month. Neither the contractor nor the PMCM team has heard what the results may be.

During the month of September, safety work on the 1300 contract progressed as follows:

STS had no recordable or first aid incidents. They shutdown at 4<sup>th</sup> and King Streets over the Labor Day holiday weekend went very well from a safety standpoint. STS now is focusing on the next closure that will occur between November 6 and the 16<sup>th</sup>. The closure will be at 4<sup>th</sup> and King Streets again. In addition, TPC has been given full access to the tunnels and has started to remove the ventilation ductwork so they can get other, larger, equipment into the tunnel.

YBM did have one recordable/first-aid incident. Apparently, a worker knelt down onto one knee. That process resulted in a pebble becoming lodged in his knee. He complained and went to the local emergency clinic. This was not reported to his supervisor so no one the contractor's operation was aware until a day or two later. The safety department is doing an investigation and will forward it on to the PMCM upon completion.

#### Program Safety & Security - continued

They have completed the first level of excavation and are starting the next level down.

UMS is ready to pour several roof tops. That should take place in early October. Layne is mobilizing out of the area. This station did not incur any safety injuries or incidents during the month.

CTS continues excavating the head house area. Cal-OSHA Mining and Tunneling was out during the month to investigate the flagger being hit incident. At this time, no one has any indication if there will be citations.

Layne will soon be complete with the compensation grouting and then will demobilize off the site. Obnoxious odors have been eliminated by means of the ventilation system. Air flows and gas detector readings are taken at the beginning of each shift and then midway through the shift. Records are maintained and are reviewed by the Program Safety Manager on a periodic basis to ensure that they are being completed.

Viking has completed the dewatering holes in Stockton Street.

#### Table 1300 Stations Construction Safety Record

Table 1300 below summarizes the Month to Date and Project to Date for the Stations, Systems and Track Construction contractor and subcontractors. Table 1300 shows that no recordable accidents took place in July for the work underway at the station sites and surface line.

#### Next Month Look Ahead

#### 1300 Contract

- 1. AT CTS, Layne is almost done with all of the compensation grouting. They should be gone in early October. A second level of excavation will then commence.
- 2. UMS has prepared several roof tops for pouring. This should be done in early October with waterproofing tests shortly thereafter. Ellis Street has the roof being installed and readied for concrete.
- 3. AT YBM, obnoxious odors haven't been dealt with via ventilation. We will be checking on this to ensure exposures do not reoccur. The next level of excavation is due to start and we will be watching this process closely.
- 4. The critical work at STS is preparing for the closure during the beginning of November. In addition, the STS package also is responsible for system work inside of the tunnel. The contractor has been given access to the tunnels and has started work there. The initial phase is the removal of the ventilation system.

Tutor was given access to the tunnels in September. The majority of the work from the launch box to Chinatown will fall under the STS package. We will be maintaining a close eye on all activities inside the tunnels to ensure worker safety as well as compliance with Cal-OSHA Mining and Tunneling regulations.

#### Program Safety & Security - continued

# Project Safety Record - Contract 1300

SAFETY GOALS

Through Month End - Sept 2015

OSHA Recordable Accidents, <3.4

 Lost Time Cases, <1.6

JOB TO DATE	Tutor	Subs	Total Project	Rate*
OSHA Recordable Accidents	1	0	1	0.27
Job Transfer or Restricted Duty Cases	0	0	0	0.00
Lost Time Cases	0	0	0	0.00
Total Project Incidents	1	0	1	0.27
Man Hours Worked Through M/E Sept 2015	304,563	426,593	731,156	

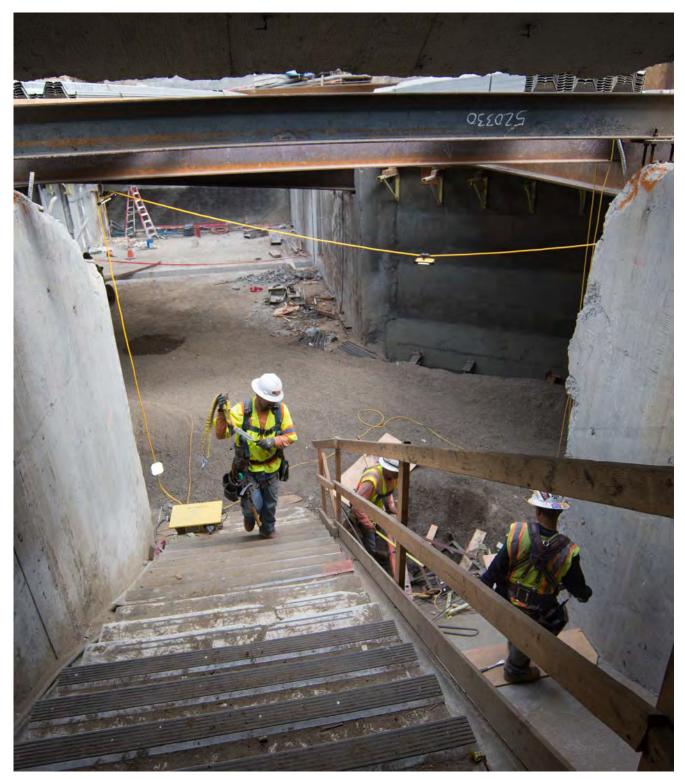
YEAR TO DATE (Month ,Day, Year to Month, Day, Year)	Tutor	Subs	Total Project	Rate*
OSHA Recordable Accidents	1	0	1	0.59
Job Transfer or Restricted Duty Cases	0	0	0	0.00
Lost Time Cases	0	0	0	0.00
Total Project Incidents	1	0	1	0.59
Man Hours Worked Through M/E Sept 2015	168,793	170,376	339,168	1

\* Rate is calculated based on number of incidents divided by total number of man hours worked multiplied by 200,000 man hours.

OSHA Recordable Accidents - 2008 Construction Industry Rate for Highway, Street, and Bridge Construction = 3.9

# **Technical Capacity**

No Project positions are currently open or unfilled.



Daylight begins to disappear under corrugated steel sheets of roofing being installed atop the portion of the south concourse being constructed at Ellis and Stockton.

#### Staffing

The Central Subway Staffing Table shows Planned and Actual full-time equivalent staff (FTEs) working on the Program by organizational function and responsibility.

	Jul-2015		Aug-2015		Sep-2015	
	Planned	Actual	Planned	Actual	Planned	Actual
Project Management						
Program Management	7.10	6.00	7.10	6.00	7.10	6.00
Quality Assurance	1.80	2.30	1.80	2.30	1.80	2.30
Contract Administration	1.40	1.40	1.40	1.40	1.40	1.40
Community Outreach	5.50	5.10	5.50	5.10	5.50	5.10
Finance	2.00	2.00	2.00	2.00	2.00	2.00
Project Controls	5.80	5.80	5.80	5.80	5.80	5.80
Subtotal	23.60	22.60	23.60	22.60	23.60	22.60
Construction Management						
CM - CN 1252	1.00	1.00	1.00	1.00	1.00	1.00
CM - CN 1300	30.00	30.00	30.00	31.00	30.00	31.00
Design Support - CN 1252	0.00	0.10	0.00	0.10	0.00	0.10
Design Support - CN 1300	12.40	12.00	12.40	12.00	12.40	12.20
Subtotal	43.40	43.10	43.40	44.10	43.40	44.30
Start Up						
Start Up / Safety & Security	3.00	2.10	3.00	2.10	3.00	2.10
Subtotal	3.00	2.10	3.00	2.10	3.00	2.10
Total	70.00	67.80	70.00	68.80	70.00	69.00

#### **Third-Party Agreements**

In January 2015, the court issued a decision on the amount payable to the property for the single outstanding access license, for compensation grouting, at 19 Stockton Street, adjacent to the Union Square / Market Street Station. The City Attorney's Office is working with Project Staff to release payment of the Court ordered amount to the property owner.

Installation of instrumentation within the building is complete. Installation of the grout tubes commenced late June and continued into July. Project staff continue to keep the Property Owner informed of the status of the work.

#### **LRV Procurement**

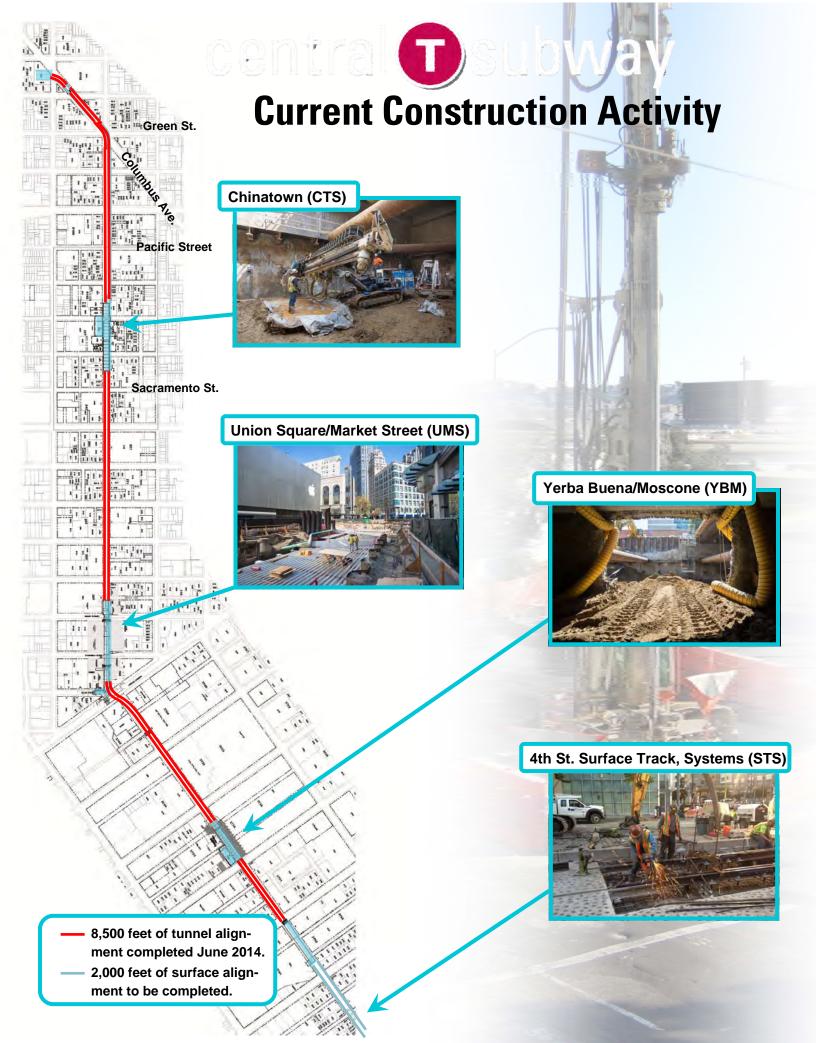
The SFMTA light rail vehicle procurement continues to schedule the 24 LRVs that will be part of the Central Subway start up to be ready for service testing and training by mid 2018 in order to begin use at the start of Central Subway service in December 2018.

The SFMTA Board authorized award of the contract on July 15, 2014 to Siemens for up to 260 cars, which includes a base contract of 175 cars for a total of \$648 million, with an option to acquire up to 85 more, bringing the overall total to 260 cars. On September 19, 2014 Mayor Edwin Lee approved the contract.

LRV task date/month milestones will be further developed and integrated into CS Master Project Schedule, the Rail Activation Plan and the startup schedule in 2015.



Corrugated steel decking covers the south concourse at Ellis and Stockton. Work to construct the roof of this portion of the station is ongoing.



# CTS



Workers use a drill rig to pump a grout-like solution into surrounding soil, to help waterproof the station headhouse and improve surrounding soil.



A loader operator moves excavated material around the staging area where dump trucks line up to be loaded.

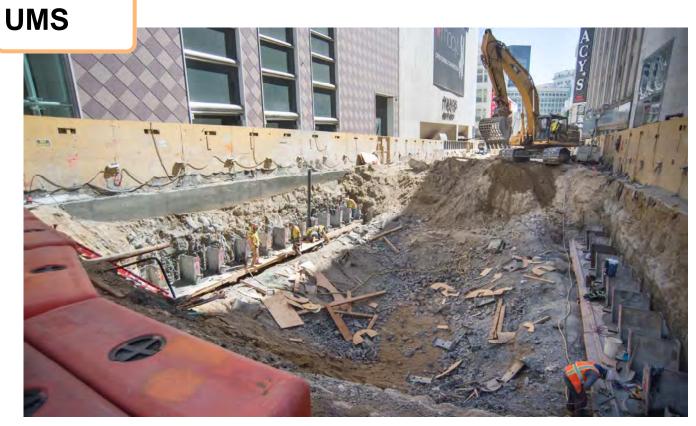
# CTS-continued



A drill rig is set up against one of the station headhouse's exterior walls to engage in soil improvement activity.



A backhoe moves excavated and slurry material around the roof deck area during drilling operations below.

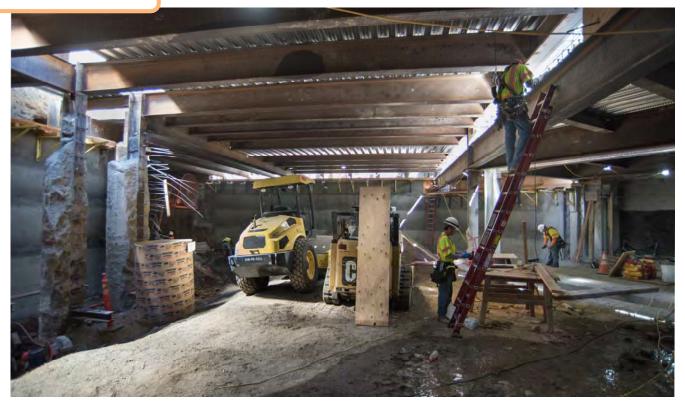


Before installing the roof deck, workers must first expose steel beams inside concrete piles installed last year.

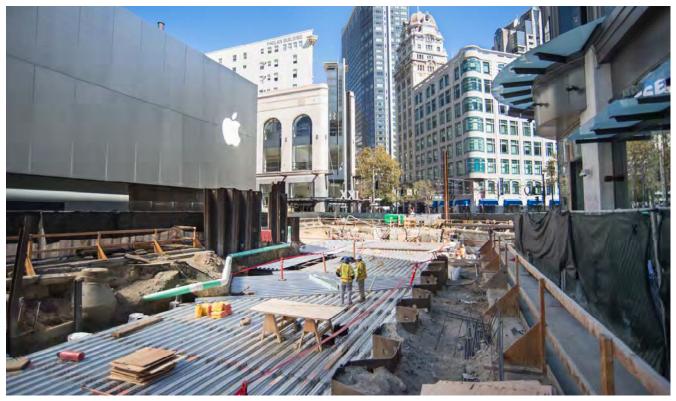


Each section of roof decking is comprised of reinforced concrete poured over corrugated steel panels, resting on large steel I-beams.

# UMS-continued



Before the contractor can backfill the site and restore the roadway, work to install corrugated steel panels, rebar, and finally concrete is completed.



The south concourse will connect directly with the existing mezzanine of Powell Station at the Market Street subway, as well as the existing station entrance at Ellis and Stockton.

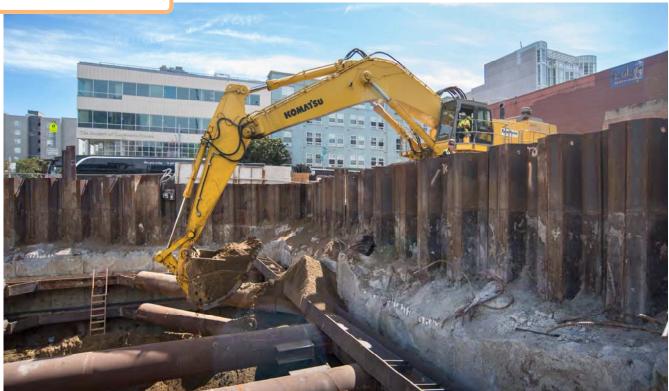


A view out of the access opening created when station box excavation began. This opening will eventually be widened as excavation efforts progress.

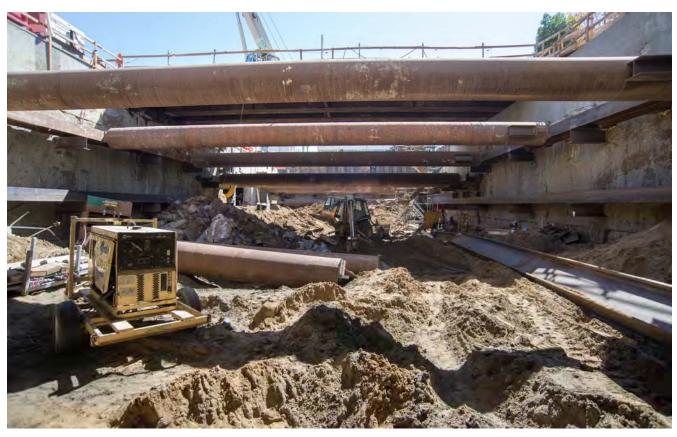


A surveyor marks down measurements inside the north end of the partially-excavated station box.

## YBM - continued



A large excavator removes material gathered from the station box interior.



Steel supports span the width and length of the station headhouse. These supports are temporary and will eventually be replaced by reinforced concrete structural elements.

## STS



A radial saw cuts a section of track to fit the new interchange installed over Labor Day weekend with the old section along 3rd Street.



A new track interchange is "hung" prior to pouring the new, reinforced concrete base.

## STS—Continued



Tracks leading up 4th Street and a temporary surface pad mark where track interchange upgrades were made over Labor Day weekend.



Workers upgrade a century-old water line on 4th Street at Freelon Alley. Work to upgrade utilities along the surface portion of the alignment is ongoing.



## Appendix A

### **DETAIL COST REPORTS**

#### 1. PROJECT COST

The Current Cost Estimate (CCE) for the Central Subway Project is **\$1.578 billion** in year of expenditure dollars (\$YOE). This total project cost is shown at the top of Report 7.1, Program Project Budget. This capital cost projection incorporates allocated and unallocated contingencies to cover the risks associated with the project completion.

Total net incurred costs for the project are \$847.11 million, a \$16.27 million increase over last month. The cost to date figure reflects expenditures through FAMIS 786 Report (\$803.89 million) plus the utilities joint trench Form B Reimbursement payment (\$10.03 million), invoices currently being processed (\$16.00 million) and estimates of outstanding pay requests (\$17.19 million). This incurred amount equals 53.67% of the total project budget of \$1.578 billion.

The current funding level to date is \$1,179.79 million includes FTA \$150 million FY2015 New Starts Grant appropriated in September 2015. This represents 75% of the total project budget.

CONTRACT	PP NO	PP PERIOD TO	3	PROG PYMT AMOUNT	CONTRACT	PP NO	PP PERIOD	PROG PYMT AMOUNT
CS155.1	52	3/31/2014	\$	26,671.53	CS155.2*	66	8/31/2015	\$ 183,581.00
CS155.1	53	4/30/2014	S	19,500,26	CS155.2*	67	9/30/2015	\$ 214,783.00
CS155.1	54	5/31/2014	\$	29,166.76	CS155.3	60	3/31/2015	\$ 71,356.8
CS155.1	55	6/30/2014	S	22,666.39	CS155.3	61	4/30/2015	\$ 63,343.3
CS155.1	56	7/31/2014	\$	36,602.38	CS155.3	62	5/31/2015	\$ 65,121.9
CS155.1	57	8/31/2014	\$	40,273.52	CS155.3*	63	6/30/2015	\$ 53,964.0
CS155.1	58	9/30/2014	\$	37,269.95	CS155.3*	64	7/31/2015	\$ 47,059.0
CS155.1	59	10/31/2014	\$	30,018.32	CS155.3*	65	8/31/2015	\$ 38,422.0
CS155.2	60	11/30/2014	\$	20,183.22	CS155.3*	66	9/30/2015	\$ 81,258.0
CS155.1	61	12/31/2014	\$	18,828.97	Contract 1252	39	4/30/2015	\$ 1,174,889.0
CS155.1	62	1/31/2015	\$	20,970.00	Contract 1252	40	5/31/2015	\$ 236,920.0
CS155.1	63	2/28/2015	\$	19,921.99	Contract 1300	20	8/31/2015	\$ 11,303,286.0
CS155.1	64	3/31/2015	\$	16,373.00	Contract 1300*	21	9/30/2015	\$ 14,475,397.9
CS155.1	65	4/30/2015	\$	16,369.00	CS149	76	5/31/2015	\$ 483,285.8
CS155.1	66	5/31/2015	\$	2,121.00	CS149	77	6/30/2015	\$ 678,039.0
CS155.1*	67	6/30/2015	\$	1,180.00	CS149	78	7/31/2015	\$ 479,587.4
CS155.1*	68	7/31/2015	\$	7,137.00	CS149*	79	8/31/2015	\$ 471,585.7
CS155.1*	69	8/31/2015	\$	1,805.00	CS149*	80	9/30/2015	\$ 500,000.0
CS155.1*	70	9/30/2015	\$	1,583.00	CS156.1	51	4/30/2015	\$ 75,569.0
CS155.2	60	2/28/2015	\$	124,687.44	CS156.1	52	5/31/2015	\$ 62,700.7
CS155.2	61	3/31/2015	\$	160,313.16	CS156.1	53	6/30/2015	\$ 88,018.6
CS155.2	62	4/30/2015	\$	200,555.80	CS156.1*	54	7/31/2015	\$ 53,950.0
CS155.2	63	5/31/2015	\$	189,656.49	CS156.1*	55	8/31/2015	\$ 74,324.2
CS155.2*	64	6/30/2015	\$	186,844.91	CS156.1*	56	9/30/2015	\$ 74,324.2
CS155.2*	65	7/31/2015	\$	268,558.00	other accruals*	-	9/30/2015	\$ 641,666.4

\* Estimated Amount

\$ 33,191,690.48

#### 2. <u>CONTINGENCY ALLOCATIONS AND USAGE</u>

The current Total Project Contingency is **\$84.32 million**, which is a \$24.32 million favorable balance against the current Minimum Contingency level of \$60 million. The Contingency Drawdown Curve is shown in Report 7.3. Follows by Report 7.4 Contingency Management Trend Report with the Remaining Contingency after Approved Changes Deducted contingency items in column "i".

In this reporting period, Contract 1252 Tunnel had not processed any contract modification and Contract 1300 Station had processed two contract modifications for the amount of \$255,237. Refer to Report 7.5 for approved contract modifications and potential changes.

#### 3. BUDGET TRANSFERS

No budget transfers in this reporting period.

#### 4. <u>FORM B</u>

The Utilities Joint Trench Form B Details is listed in the Table A2 below. Total utilities joint trench Form B Reimbursement payment to three construction contracts is \$10.03 million.

TABLE A2: UTILITIES JOINT TRENCH FORM B DETAILS*	[A] Apr 2015 BUDGET	[B] EXPENDED TO DATE	Associated Cost Account
1.3.491.07.040.02 - FORM B - CN1250 UTILITY REIMBURSEMENT	(2,275,419)	2,463,325	1.3.081.07.040.02 - 1UTL:SITEWORK: UTILITIES & RELOC
1.3.491.08.040.02 - FORM B - CN1251 UTILITY REIMBURSEMENT	(7,618,412)	3,608,217	1.3.082.08.040.02 - 2UTL:SITEWORK:UTILITIES&RELOCATE
1.3.491.02.040.02 - FORM B - CN1252 UTILITY REIMBURSEMENT	(254,050)	3,958,658	1.3.083.02.040.02 - TUNN:Sitework:Utilities & Relocate
1.3.491.04.040.02 - FORM B - CTS: CN1300 UTILITY REIMBURSEMENT	(451,703)		
1.3.491.09.040.02 - FORM B - STS: CN1300 UTILITY REIMBURSEMENT	(1,000,000)		
1.3.491.03.040.02 - FORM B - UMS: CN1300 UTILITY REIMBURSEMENT	(528,370)		
1.3.491.05.040.02 - FORM B - YBM: CN1300 UTILITY REIMBURSEMENT	(100,000)		
TOTAL	(12,227,954)	10,030,200	

Note: \*Revised Form B Reimbursements SCC code from 900.01 to 040.02.

#### 5. EARNED VALUE (EV) ANALYSIS

In September 2015 Report, Central Subway Project Master Schedule has used Contract 1300 Station contractor baseline schedule and September monthly update schedule. Contractor continues address the cost issues in cost loaded schedule. Preliminary September Earned Value Analysis reports the Planned Value, Earned Value, Percent Complete and resulting indexes as follows:

#### **Preliminary September Earned Value**

Overall Budgeted Cost:	\$1,578,300,000
Planned Value:	\$1,120,593.029
Earned Value:	\$906,275,419
Actual Cost:	\$847,113,878
Schedule Performance Index (SPI):	0.81
Cost Performance Index (CPI):	1.07
Percent Complete:	57.4%

					naid	REVISION		Checken white A	no vou
Subway Project - September 2015 Update CN 1252	2	5		ומור	31-Jul-12	31-Jul-12 Cash Flow Curve	Ð		
Layout: AA 01 MPR EV CHART	SE	PTEMBEI	₹ 30, 20	SEPTEMBER 30, 2015 Update					
26-Sep-15, 19-Oct-15,10:55									
Astituty ID Astituty Name	Start	FNBI	Pertômiatos % Complète	Bi dgete d Total Cost		Earned Value Cost (EV)	Paned Valke Cost Earred Valke Cost (EV) Achail Total Cost (AC) (PV)	Cell	ld:S
CENTRAL SUBWAY PROJECT	03-Jun-03A	10-May-21	57.37%	1,578,300,001	1,120,593,029	906,275,419	847,113,878	1.07	0.81
Preliminary Engineering Phase	03-Jun-03A	07-Jan-10 A	10%	46,542,061	46,542,061	46,542,061	46,542,061	1.00	1.00
Final Design	08-Jan-10A	17-Jun-13.A	100%	115,075,987	115,075,987	115,075,987	113,929,833	101	1.00
Light Rail Vehicles	15-Apr-13A	04-Dec-18	8.22%	26,385,653	2,177,132	2,177,132	2,146,905	1.01	1.00
Real Estate	01-Aug-08 A	30-Sep-15	80.31%	37,405,895	30,606,114	30,041,759	30,361,102	0.99	0.98
Construction Phase	03-Jan-10A	02-Jul-19	52.98%	1,343,370,948	926,191,736	712,438,480	654,133,978	1.09	0.77
Construction Support and Costs	03-Jan-10A	02-Jul-19	41%	199,862,849	73,768,343	81,961,986	84,366,255	0.97	1.11
Construction Utility Contract #1-MOS & Portal CN-1250	04-Jan-10A	23-May-11 A	100%	11,968,150	11,968,150	11,968,150	11,968,150	1.00	1.00
Construction Utility Contract #2 - UMS CN-1251	12-Jan-11 A	15-0d-12 A	100%	20,794,582	20,794,582	20,794,582	20,794,582	6,	1.00
Construction Turnels CN-1252	08-Jun-11 A	01-0d-15	80.05%	251,068,967	250,994,170	233,608,894	234,616,103	1.00	0.93
Construction CN-1300	08-Jun-13A	13-Feb-19	42.28%	869,676,400	568,666,491	364,114,867	302,388,888	1.20	0.64
Unallocated Contingency	15-Nov-18	06-May-19	%0	9,519,456	0	0	0	0;0	000
Project Management	06-May-19	10-Mav-21	%0	0	-	-	-	000	000

Contract 1300 shows Earned Value Cost \$60M higher than Actual Cost is due to Tutor Perini Corporation Schedule has remaining cost in completed activities.

#### Earned Value Analysis and Definitions

**SPI** is a measure of schedule efficiency on a project. It is the ratio of earned value (EV) to planned value (PV). A SPI equal to or greater than one indicates more work was completed than planned and a value of less than one indicates less work was completed than planned. A value of less than 0.9 is unfavorable.

**CPI** is a measure of cost efficiency on a project. It is the ratio of earned value (EV) to actual cost value (AC). A CPI equal to or greater than one indicates a cost under run and a value of less than one indicates a cost overrun. A value of less than 0.9 is unfavorable.

Cost Element Group	Planned Value (Primavera)	Earned Value (Primavera)	Actual Cost (SFMTA Cost Accounting (SAP)
Prelim. Engineering	Expenditure Plan Level of Effort (LOE)	Equals to Planned Value (LOE)	Time Keeping; Vendor Accruals and Invoices
Final Design	Expenditure Plan Level of Effort (LOE)	Equals to Planned Value (LOE)	Time Keeping; Vendor Accruals and Invoices
Procurement	Planned Delivery Date	Actual Delivery Date	Time Keeping; Vendor Accruals and Invoices
Real Estate	Expenditure Plan Level of Effort (LOE)	Equals to Planned Value (LOE)	Time Keeping; Vendor/ Material Accruals and Invoices
Construction	Schedule of Work	% Complete* x Budget at Completion (BAC)	Vendor Accruals and Invoices
Sub-Total	Performance Measurement Baseline (PMB)	Total Earned Value	Total Actual Cost
Below the Line	+ Contingency		
Total	Approved Budget		

The following earning rules are established for each of the phase:

#### 6. FUNDING SUMMARY

The Funding Available Table below shows the total awarded funds to date vs. the total committed funds from the Project's seven funding sources.

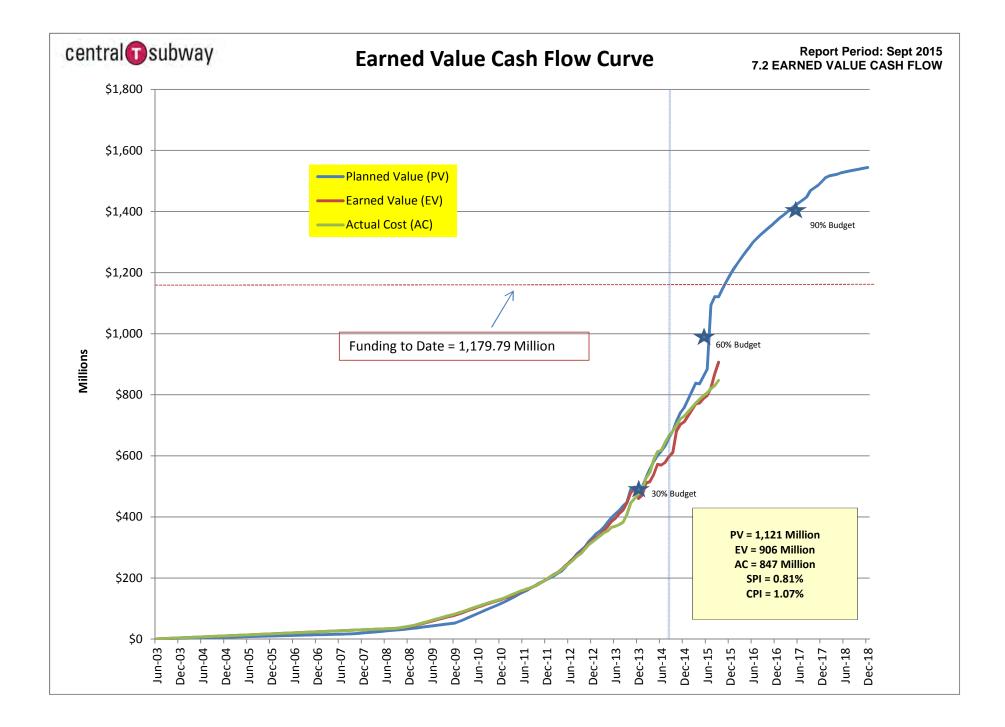
Funding Available Table		
	Fund	ding
	Committed Funding Sources	Total Awarded Funds to Date
Federal		
Sect. 5309-NS	\$942,200	\$619,196
CMAQ	\$41,025	\$41,025
Federal Subtotal	\$983,225	\$660,221
State		
TCRP	\$14,000	\$14,000
State RIP	\$88,000	\$12,498
Prop. 1B (I-Bond) PTIMSE	\$307,792	\$307,792
Prop. 1A (HSR-Bond)	\$61,308	\$61,308
State Subtotal	\$471,100	\$395,598
Local		
Prop. K	\$123,975	\$123,975
Local Subtotal	\$123,975	\$123,975
CPT 544 Total	\$1,578,300	\$1,179,794

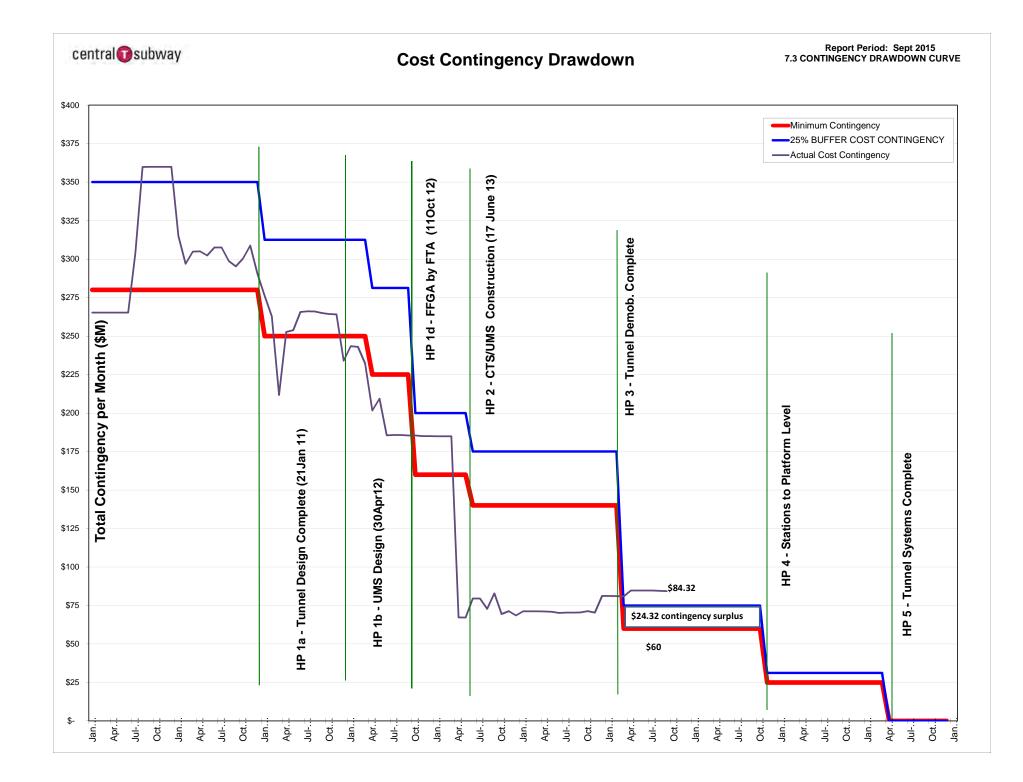
#### 7. LIST OF COST REPORTS

- 7.1 Program Project Budget
- 7.2 Earned Value Cash Flow
- 7.3 Contingency Drawdown Curve
- 7.4 Summary Contingency Management Trend Report
- 7.5 Detail Contingency Usage Report
- 7.6 Budget Revisions: Report sorted by Construction Packages & Soft Costs
- 7.7 Project Budget & Expenditure Report: Sorted by SCC Summary
- 7.8 Budget & Expenditure Report: Sorted by SCC Details
- 7.9 Detail Monthly Expenditure Report: grouped by Project Phase
- 7.10 Cost Report Notes



	Project	Name	Amount	PM	Funding Source	Reporting	Cost Report Notes
1	CPT544	Central Subway Project	\$1,578,300,000	J. Funghi	62% Fed, 30% State, 8% Local	yes	1
		Total:	\$1,578,300,000				
. F	Related S	FMTA Capital Improvement Projects					
	Project	Name	Amount	PM	Funding Source	Reporting	
2	CPT690	TBM Retrieval Shaft Relocation	\$9,700,000	Funghi/Magary	MTA Operating Funds	no	2
3	CPT718	Chinatown Metro Plaza	\$6,980,000	J. Funghi	Transbay Redevelopment	no	3
4	CPT665	Central Subway Project - Goodwill	\$2,367,750	K. Magary	I-Bond Interest	no	4
				0,			
5	CPT705	MOH - Broadway/Sansome	\$8,000,000	K. Magary	MTA Operating Funds	no	5
5		Total:	\$8,000,000 <b>\$27,047,750</b>		MTA Operating Funds	no	5
-		Total: Ibway Project - Project Offset Credit	\$8,000,000 <b>\$27,047,750</b> S	K. Magary			5
. c	Central Su	Total: Ibway Project - Project Offset Credit From	\$8,000,000 \$27,047,750 S Amount	K. Magary Index	Notes	Reporting	
<b>C</b>	<b>Central Su</b> 2009-2016	Total: Ibway Project - Project Offset Credit From Utility Co Form B Reimbursement	\$8,000,000 \$27,047,750 S <u>Amount</u> \$12,227,954	K. Magary Index	Notes Construction contracts	<b>Reporting</b> yes	6
<b>C</b>	2009-2016 2017-2019	Total: Ibway Project - Project Offset Credit From Utility Co Form B Reimbursement PG&E - Power Feed Reimbursement	\$8,000,000 \$27,047,750 \$ <u>Amount</u> \$12,227,954 \$7,624,540	K. Magary Index 	Notes Construction contracts Not yet bill PG&E	<b>Reporting</b> yes yes	6 7
<b>C</b>	<b>Central Su</b> 2009-2016 2017-2019 6/26/2013	Total: Ibway Project - Project Offset Credit From Utility Co Form B Reimbursement PG&E - Power Feed Reimbursement B BART Elevator	\$8,000,000 <b>\$27,047,750</b> <b>S</b> <u>Amount</u> \$12,227,954 \$7,624,540 \$90,000	K. Magary Index  68CPT544135B	Notes Construction contracts Not yet bill PG&E Not yet rec'd BART Funds	<b>Reporting</b> yes yes yes	6 7 8
1 2 3 4	2009-2016 2017-2019 6/26/2013 11/6/2013	Total: Ibway Project - Project Offset Credit From Utility Co Form B Reimbursement PG&E - Power Feed Reimbursement BART Elevator Tutor Perini - CAD Files	\$8,000,000 <b>\$27,047,750</b> <b>S</b> <u>Amount</u> \$12,227,954 \$7,624,540 \$90,000 \$2,500	K. Magary Index  68CPT544135B 68CPT5441236	Notes Construction contracts Not yet bill PG&E Not yet rec'd BART Funds Deposit to Design Index	<b>Reporting</b> yes yes yes yes yes	6 7 8 9
<b>C</b>	2009-2016 2017-2019 6/26/2013 11/6/2013 1/27/2014	Total: Ibway Project - Project Offset Credit From Utility Co Form B Reimbursement PG&E - Power Feed Reimbursement BART Elevator Tutor Perini - CAD Files SFPUC - Sewer Main	\$8,000,000 <b>\$27,047,750</b> <b>S</b> <u>Amount</u> \$12,227,954 \$7,624,540 \$90,000 \$2,500 \$2,925,296	K. Magary Index  68CPT544135B 68CPT5441236 68W251	Notes Construction contracts Not yet bill PG&E Not yet rec'd BART Funds Deposit to Design Index Certified in Contract 1300	<b>Reporting</b> yes yes yes yes yes yes	6 7 8 9 10
<b>1</b> 1 2 3 4 5 6	2009-2016 2017-2019 6/26/2013 11/6/2013 1/27/2014 9/27/2014	Total: Ibway Project - Project Offset Credit From Utility Co Form B Reimbursement PG&E - Power Feed Reimbursement BART Elevator Tutor Perini - CAD Files SFPUC - Sewer Main SFPUC - 24" Water Main	\$8,000,000 <b>\$27,047,750</b> <b>S</b> <u>Amount</u> \$12,227,954 \$7,624,540 \$90,000 \$2,500 \$2,925,296 \$328,857	K. Magary Index  68CPT544135B 68CPT5441236 68W251	Notes Construction contracts Not yet bill PG&E Not yet rec'd BART Funds Deposit to Design Index Certified in Contract 1300 Contract 1252 CMod #41	Reporting yes yes yes yes yes yes yes	6 7 8 9 10 11
1 2 3 4 5	2009-2016 2017-2019 6/26/2013 11/6/2013 1/27/2014 9/27/2014 8/27/2014	Total: Ibway Project - Project Offset Credit From Utility Co Form B Reimbursement PG&E - Power Feed Reimbursement BART Elevator Tutor Perini - CAD Files SFPUC - Sewer Main	\$8,000,000 <b>\$27,047,750</b> <b>S</b> <u>Amount</u> \$12,227,954 \$7,624,540 \$90,000 \$2,500 \$2,925,296	K. Magary Index  68CPT544135B 68CPT5441236 68W251 68CPT544135A	Notes Construction contracts Not yet bill PG&E Not yet rec'd BART Funds Deposit to Design Index Certified in Contract 1300	<b>Reporting</b> yes yes yes yes yes yes	6 7 8 9 10





			C	NTRACT COST				CONTI	NGENCY		BUDGET	VARIANCE	
		ORIGINAL CONTRACT VALUE	APPROVED CHANGES	CURRENT CONTRACT	POTENTIAL CHANGES	ESTIMATE AT COMPLETION	ORIGINAL CONTINGENCY	CONTINGENCY ADJUSTMENT	REVISED AUTHORIZED	REMAINING CONTINGENCY	ORIGINAL CONTRACT	BUDGET -	
	COST ELEMENT	/ September 2013 SUPPLEMENTAL BUDGET		VALUE		(EAC)	/ Sep 2013 SUPPLE- MENTAL CONTINGENCY (Exclude CN	TRANSFERS	CONTINGENCY (Exclude CN1250 &	AFTER APPROVED CHANGES DEDUCTED	VALUE + REVISED AUTHORIZED CONTINGENCY	ESTIMATE AT COMPLETE	Cos Repo Note
				[a + b]		[c + d]	(Exclude CN 1250 & CN1251)		CN1251)	[h - b]	[a + h]	[j - e]	
000 /0 50		a	b	C	d	е	f	g	h	i	j	k	
SCC 10-50	CONSTRUCTION CONTRACT PACKAGE	9,273,939	2,694,211	11,968,150		11,968,150	1,953,377	740,834	2,694,211		11,968,150		14
1200	Contract 1250 Department of Technology	166,756	2,004,211	166,756		166,756	1,000,011	140,004	2,004,211		166,756		14
1251	UTILITY RELOCATION PACKAGE #2	16,832,550	3,962,032	20,794,582		20,794,582	5,367,297	(1,405,265)	3,962,032		20,794,582		15
	Contract 1251 Department of Technology	75,615		75,615		75,615					75,615		
1252	GUIDEWAY TUNNEL	233,584,015	1,421,807	235,005,822	(77,798)	234,928,024	23,658,464	(21,173,511)	2,484,953	1,063,145	236,068,968	1,140,943	16
1300	STATIONS	839,676,400	(1,016,585)	838,659,815	15,682,627	854,342,442	20,000,000		20,000,000	21,016,585	859,676,400	5,333,958	17
	1253 UNION SQUARE/MARKET ST STATION IUMS1	294,030,590	90,000	294,120,590	9,956,615	304,077,205	5,000,000		5,000,000	4,910,000	299,030,590	(5,046,615)	)
	1254 CHINA TOWN STATION [CTS]	247,567,810	230,956	247,798,766	5,628,923	253,427,689	5,000,000		5,000,000	4,769,044	252,567,810	(859,879)	)
	1255 YERBA BUENA/ MOSCONE STATION	158,089,000	(1,642,919)	156,446,081	3,059,523	159,505,604	5,000,000		5,000,000	6,642,919	163,089,000	3,583,396	
	1256 SURFACE TRACKWORK & SYSTEMS ISTSI	139,989,000	305,378	140,294,378	(2,962,434)	137,331,944	5,000,000		5,000,000	4,694,622	144,989,000	7,657,056	
OTHER		31,233,501		31,233,501	0	31,233,501	1,160,000		1,160,000	1,160,000	32,393,501	1,160,000	
	SCC 10 - 50 Construction Sub-total	1,130,842,776	7,061,465	1,137,904,241	15,604,829	1,153,509,070	44,818,464	(21,173,511)	23,644,953	23,239,730	1,161,143,971	7,634,901	
SCC 60 - 80	SOFT COSTS PACKAGES												
60	ROW, LAND, EXISTING IMPROVEMENTS	36,511,799	(4,265,478)	32,246,321		32,246,321	1,000,000	4,265,478	1,000,000	1,000,000	37,511,799	5,265,478	18
70	VEHICLES	24,108,712	(10,799,712)	13,309,000		13,309,000	2,276,941	10,799,712	13,076,653	13,076,653	26,385,653	13,076,653	19
80	PROFESSIONAL SERVICES	310,518,041		310,518,041		310,518,041	18,221,079		18,221,079	18,221,079	328,739,120	18,221,079	
	SCC 60 - 80 Construction Sub-total	371,138,552	(15,065,190)	356,073,362		356,073,362	21,498,020	15,065,190	32,297,732	32,297,732	392,636,572	36,563,210	
SCC 90	UNALLOCATED CONTINGENCY						3,845,945	20,673,511	24,519,456	24,519,456	24,519,456	24,519,456	20
		1,501,981,328	(8,003,725)	1,493,977,603	15,604,829	1,509,582,432	70,162,429	14,565,190	80,462,141	80,056,918	1,578,299,999	68,717,567	

people. Connecting communities. Modification/Trend Log - Contract 1300 Stations	I				
Awarded NTE Amount Substantial Completion	\$839,676,400 2/10/2018				\$838,659,81 2/10/201
	UMS	СТЅ	YBM	STS	COST REPORT NOTES
Potential Changes	\$9,956,615	\$5,628,923	\$3,059,523	(\$2,962,434)	24
Forecasted - Trends	\$4,913,275	\$2,925,601	\$783,235	\$1,016	
Negotiation	¢ 1,0 10, <u>-</u> 10	<i>\_,0_0,00</i>	¢100,200	¢1,010	
Change of date range to receive art	(\$10,001)				
UMS -Remove AWSS Hydrant at OFarrel	\$8,421				
UMS BART Entry Hazmat Abatement	\$33,600				
CTS- AWSS Wk PGE relocation schedul	φ00,000	\$60,309			
STS Traffic Signal and SL Changes		φ00,000		\$298,307	
STS Comm and Elec Cabinets Relocati				\$67,221	
CTS-PCC#17 FH at Jade Galore		\$106,350		<i>\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\</i>	
STS - OCS Pole Changes		<b>\$100,000</b>		\$12,706	
STS Additional AT&T Ductbank at 4th				\$139,238	
CTS-FACO#39- Soil Testing cmply OAB		\$5,000		¢100,200	
UMS FACO #31 NDSC Incomplete PGE DB	\$32,980	<i><b>Q</b></i> <b>0</b> ,000			
UMS-FACO #25 OCS Pole@ Market/Ellis	\$3,349				
UMS-FACO #19 Street Light at Stock.	\$4,000				
STS-FACO #48 Work Related St Lght	¢ .,000			\$5,000	
UMS FACO #34 Becho Obstruct J Piles	\$15,000			<i>+-,</i>	
UMS FACO #45 Blocked Stubs PG&E	\$7,500				
STS Traction Power Cable Downsizing	+ ,			(\$117)	
UMS Transfer Instru BART Facilities	\$30,000			(+/	
CTS-PCC40 Plaza Surface Slab Pntrtn	+,	\$5,525			
YBM PCC 41 Install #7 Box Clementin		<i><b>v</b>vvvvvvvvvvvvv</i>	\$52,667		
UMS Sewer Line Conflict	\$168,718		<i><i>vo_</i>,<i>ooi</i></i>		
UMS DSC Mass of Conc Stocktn 137+15	\$7,500				
UMS - PCC #030 (US Garage Underpin)	\$474,470				
UMS Install Floor Drain	\$6,579				
UMS - N. Entrance Art Glass and Gla	\$681,978				
YBM COR 44 Buried concrete wall	+		\$100,001		
YBM COR 45 Abandoned sewer not			\$6,001		
YBM COR 64 Buried sheet pile P-7			\$15,001		
STS COR #89 Extra Sewer Work			,	\$8,090	
STS COR #112 MRY MH 1890 TS Conduit				\$6,000	
STS COR 98 DSC MRY MH Conf w N CB				\$15,000	
YBM COR 116 Archaeological Discover			\$100,001	,	

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#### Report Period: Sept 2015 7.5 DETAIL CONTINGENCY USAGE REPORT

warded NTE Amount ubstantial Completion	\$839,676,400 2/10/2018				\$838,659,81 2/10/201
					COST REPORT
	UMS	CTS	YBM	STS	NOTES
USG COR 203 Non-Resp.Review Process	\$20,001				
USG COR 223 Wall Footing Clarif.	\$75,001				
USG COR 224 (N) Concrete Wall Conn.	\$50,001				
USG COR 228 Tiebacks at Level X	\$75,001				
USG COR 227 Plaza Lvl. Sequence	\$200,001				
USG COR 225 SOG/Wall Connection	\$50,001				
USG COR 226 SOG/Column Connection	\$20,001				
USG COR 261 8" Wall at Grid 11B	\$15,001				
USG COR 263 12" Shear Walls	\$50,001				
USG COR 262 Maintenance Hatch Walls	\$15,001				
USG COR 264 Str. Steel Shop Dwgs.	\$5,001				
UMS COR 250 Macy's DSC	\$75,001				
USG COR 280 Strut Wall Grid 16 - 17	\$50,001				
USG COR 282 Survey Requirements	\$10,001				
USG COR 283 Slab Cantilver Detail	\$10,001				
USG COR 284 New Beam at Grid Line C	\$50,001				
USG COR 285 Elev.Edge of Slab Dtl.	\$50,001				
USG COR 286 Shear Wall GL 13/B-C	\$25,001				
USG COR 273 E.Slab/Shear Wall Conn.	\$100,001				
USG COR 274 Shear Wall at Grid 10	\$10,001				
USG COR 275 Conn. Plaza Grid B	\$50,001				
USG COR 276 Escalator #1	\$10,001				
STS - Deletion of ARS (Revision 1)				(\$4,689,000)	
YBM COR 63 Buried objects in P-86			\$24,648		
STS COR 100 DSC Zayo PVC Conf w SW				\$80,082	
STS COR 210 WD pit size increase				\$24,417	
CTS COR 085 Addl FACO 10 Costs		\$13,267		. ,	
CTS PCC 001 Delete DB on Stockton		(\$84,018)			
STS COR #92 PG&E Vault Conf 12 AWSS				\$79,173	
STS COR #118 78" Sewer Excess Debri				\$54,455	
YBM COR 054 FACO 028 Conc obst			\$56,654	. ,	
UMS - PCC #29 (Concrete Wale Suppt)	\$9,239				
CTS COR 041 FACO #4 JT Unid. Cond	<i>+-,_</i> <b>-·</b> ··	\$28,026			
CTS COR 040 FACO 002 Connect (E) DB		\$16,936			
YBM PCC 022 Addtl Signage on Clem		<i><b><i></i></b><i></i><b>,</b><i></i><b>,</b><i></i><b>,</b><i></i><b>,</b><i></i><b>,</b><i></i><b>,</b></i>	\$12,000		

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varded NTE Amount bstantial Completion	\$839,676,400 2/10/2018				\$838,659,81 2/10/20
		070		070	COST REPORT
VPM COP 40 Puried timber piles	UMS	CTS	<b>YBM</b>	STS	NOTES
YBM COR 49 Buried timber piles			\$75,001		
YBM COR 71 Remove rigging straps			\$7,501	¢7 000	
STS 78 Sewer Existing Concrete Crow CTS-COR#201 Swr Line & Station Roof		\$55,000		\$7,200	
YBM COR 87 Transite ductbank removal		\$ <b>5</b> 5,000	¢10 c01		
			\$12,631 \$75,001		
YBM COR 50 Potential contam Soil			\$75,001		
YBM COR 115 C1250 unencased JT			\$147,892		
YBM COR 196 Work on Hold			\$4,500	<b>\$0.500</b>	
STS-COR #84 Sewer Cleaning and Dewa			<b>#00.004</b>	\$3,598	
YBM COR 253 DSC Culvert Conflict			\$30,001	<b>*</b> ~~~~~	
STS COR #236 E WD Config at Freelon				\$20,000	
STS COR 272 Pier AWSS Conflict				\$2,000	
STS COR 258 WD/PVC Conflict				\$55,001	
UMS COR 184 Slurry Fill Void	\$8,261			•	
STS COR 211 SW conf AWSS 4th/Freelo				\$4,561	
STS COR #229 Multi E Util Conf w N				\$4,000	
STS COR 101 Cleaning for non-78" SW				\$58,906	
STS COR #187 DB Conf w N 12 Water				\$37,012	
YBM COR 240 Headhouse Contam. Mtl.			\$100,001		
STS COR #241 2-In WD Line w Offset				\$20,001	
STS COR #242 DSC Gas Confl w/ Pole				\$1,501	
YBM COR 243 Culvert Conflict			\$10,001		
YBM COR 248 Transite pipe			\$1,501		
YBM COR 249 Utility Conflicts			\$60,001		
STS COR #252 Thick Pavemnt 4th/Kin				\$1,501	
YBM COR 295 DSC AT&T Vault Conflict			\$10,001		
YBM COR 298 Buried Conc Slab			\$20,001		
STS COR 073 AWSS Incorrectly Shown				\$35,134	
STS COR 067 FACO #41 GW Lead Filter				\$22,695	
STS COR 037 FACO 037 30" FM Removal				\$63,972	
STS COR 090 Subsurface Obstrc				\$20,452	
YBM COR 310 12" WL Conf w/ 36" FM			\$15,001		
CTS COR 353 AWSS confl w HDPE in SW		\$3,203	. ,		
STS COR 048 Add'I Soil Testing Req		. /		\$9,226	
CTS COR 042 FACO 005 Unknown 3" Pip		\$319		. , -	

Awarded NTE Amount Substantial Completion	\$839,676,400 2/10/2018				\$838,659,815 2/10/2018
	UMS	стѕ	YBM	STS	COST REPORT NOTES
YBM COR 072 FACO 51 1252 N Headwall	UNIS	015	\$90,027	313	NOTES
YBM COR 86 Side sewer conflict AT&T			\$90,027 \$75,001		
STS COR 091 PG&E Vault Conf 16" Wtr			φ <i>1</i> 5,001	\$20,001	
STS COR 093 12" Water Conf 12" Tee				\$20,001 \$5,001	
STS COR 093 12 Water Collin 12 Tree STS COR 094 Unknown DB Conf 12" Wtr				\$3,001 \$20,001	
USG COR 238 Grid 17 & Vent Conn.	\$50,001			φ20,001	
USG COR 238 Glid 17 & Vent Conn. USG COR 237 Elevator Sump Pits	\$20,001				
STS COR 074 AWSS Offset/Sewer Demo	\$20,001			\$49,817	
USG COR 315 Beam Conflict at C Line	\$50,001			φ <del>4</del> 9,017	
USG COR 317 Subgrade Transition	\$5,001				
USG COR 281 8in Slab Conn.at B Line	\$25,001				
USG COR 345 8 inch Slab Support	\$25,001				
USG COR 343 Edge of Slab Detail	\$5,001				
USG COR 360 Column on Grid Line B	\$5,001				
USG COR 363 Grid Line B Footing	\$10,001				
USG COR 358 Elev. Machine Rooms	\$5,001				
USG COR 359 Escalator #1 Truss Span	\$2,001				
USG COR 361 Mud Slab Clarification	\$50,001				
USG COR 364 Barricades and Guardrai	\$70,001				
USG COR 374 Add Built Up Columns	\$25,001				
YBM COR 117 Additional Signage	φ20,001		\$12,001		
YBM COR 046 FACO#18 Add analy tests			\$146,249		
Proposed Contract Change (PCC)			φ110,210		
UMS - Geoprobe Credit	(\$30,320)				
UMS - Relocation of TS Cabinet	\$23,275				
STS - Tunnel Lowering	<i>\\\</i>			\$100,000	
CTS - Stairs 5, 6, 7 Mods		\$25,000		<i>\</i>	
UMS - Escalator Barricade	(\$122,511)	<i>\</i> 20,000			
UMS - USG HVAC Trench Modifications	\$75,001				
CTS - CMU Wall Bracing	¢. 0,001	\$25,000			
UMS MRY Duct Bank-East Conflict	\$25,000	+,			
YBM PCC 32 Delete Post-Grout of TB-2	+=0,000		(\$10,001)		
YBM CTS PCC 33 Platform Gate Revisio			\$100,001		
CTS - Removal of Bus Bulb		\$30,000	+		
CTS Delete PGE Work at Vault 732		(\$50,000)			

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warded NTE Amount ubstantial Completion	\$839,676,400 2/10/2018				\$838,659,81 2/10/201
	UMS	CTS	YBM	STS	COST REPORT NOTES
UMS Remove Fire Hose Valve	\$20,000	013		313	NOTES
UMS MRY Duct Bank-West	\$25,000				
YBM PCC 21 Dele Instrum & Monitoring	φ20,000		(\$1)		
STS PCC #51 Inventory Temp Crossover			(Ψ1)	\$20,001	
Deletion of ARS (Part II)				(\$600,000)	
YBM PCC 56 OCS Pole Foundations			\$30,001	(\$000,000)	
UMS - DCW and Hose Bibbs	\$30,000		400,001		
YBM PCC 059 Pavers Basis of Design	<i>\\</i>		\$20,001		
STS Track Switch Mach Change (Rev 1)			<i>\\</i> 20,001	\$50,000	
YBM PCC 062 Delete SW MH FOL 10+35			(\$29,867)	<i>\\</i> 00,000	
STS PCC 063 Del ATT/TSIC/PGE on 4th			(\$20,001)	(\$100,000)	
CTS PCC 061 (Rev1) Rev Escalator Pit		\$50,001		(\$100,000)	
UMS Roof Deck - Schedule Recovery	\$0	<i>\\</i> 00,001			
STS PCC 066 Add CS ATCS Emer Stop B	÷**			\$50,001	
CTS PCC 067 Wall Shift North Access		\$25,001		+,	
Change Order Request (COR)		+ - /			
STS - Additn manholes for 78" sewer				\$27,204	
STS COR 17 Changes to Sewer Structu				\$20,000	
STS-FACO #47 Sewer Related Work Pt2				\$33,898	
STS- AT&T Conduit Changes				\$22,290	
UMS COR 102 Cap on 12 inch Water	\$44,544				
STS COR #114 Conc Obs 4th-Bryant SE				\$1,262	
STS - COR 181 DSC Poly Line Conf MR				\$10,000	
UMS COR 202 DSC CG Grout Forever 21	\$20,000			-	
UMS COR 212 Comp. Grout PSI Drop	\$155,001				
YBM COR 230 Load Rating Siwalk Hatch			\$31,474		
UMS COR 232 S.Walk Hatches RFI 240	\$10,141				
STS COR #233 18" VCP in 3'x5' Sewer				\$1,764	
UMS COR 235 DSC Transite Pipe	\$10,000				
STS COR #88 Modify CBs and Culverts				\$4,395	
STS COR 113 DSC PVC Conduit/WL Conf				\$10,001	
STS COR 145 DSC PVC Conduits Conf				\$5,001	
STS COR 146 DSC 8" WL in Conf w SW				\$5,001	
STS COR 164 DSC 8" AWSS Lat Conf 78				\$10,000	
STS COR #170 Cores in 78" RC Crown				\$1,666	

Awarded NTE Amount Substantial Completion	\$839,676,400 2/10/2018				\$838,659,815 2/10/2013
	UMS	стѕ	YBM	STS	COST REPORT NOTES
CTS COR 231 Sidewalk Hatches		\$19,249			
STS COR 254 DSC 4" Confl w 36" FM				\$50,001	
CTS COR 255 Additional Instruments		\$429,777			
YBM COR 257 Failed Water Line Cap			\$75,841		
STS COR 270 SW AWSS Conflict				\$10,000	
STS COR 271 DB AWSS Conflict				\$20,001	
UMS COR 277 8" Steel line Asbestos	\$5,000				
STS COR 290 E CB PVC Confl WD AWSS				\$10,000	
STS COR #296 Mult E Util Confl AWSS				\$130,000	
STS COR 297 TC for Track Work at 4t				\$150,000	
UMS COR 301 Concr. Overpour and PVC	\$10,001			. ,	
UMS COR 110 DSC Obst. at JG Columns	\$965,550				
CTS COR 039 Time Adjust PGE Pole	. ,	\$0			
STS COR 198 NDSC Out of Spec Cover				\$8,123	
USG COR 246 Tieback Access RFI 1050	\$160,933				
UMS COR 300 14 HDPE at Geary	\$30,001				
CTS COR 305 Abandon OBW-CTS-03		\$1,790			
CTS COR 318 Delay Mobe of Monitor W		\$5,800			
STS COR 322 Existing Tunnel Cond.		. ,		\$345,001	
YBM COR 362 Temp Pavement Section			\$107,503	+ )	
STS COR 367 DSC Conf w/ CP and FM			Ŧ - )	\$2,892	
STS COR 371 Conflicts w/ 12" AWSS				\$30,001	
CTS COR 372 DSC Potholing @ N Acces		\$20,001		Ŧ )	
YBM COR 373 DSC NoD Contaminated Ma		÷ -)	\$30,783		
YBM COR 366 NDSC Mez. Soil Failure			\$45,001		
UMS COR 380 14 HDPE at O'Farrell	\$30,001		<b>+</b> · · · <b>, ·</b> · · ·		
UMS COR 381 UMS Roof Deck CJ Plan	\$10,001				
CTS COR 378 Comp Grout Rock Elev	¢,	\$100,001			
Change Order - Pending		<i><b>•</b>·••,•••</i> .			
CTS Sewer Line Demo at Washing		\$57,707			
CTS Utility Conflict at WD Tie-In		\$14,527			
CTS-Plaza Surface Level Struct Mods		(\$10,337)			
CTS-FACO #44 (E) Utl Cnflct w/ AWSS		\$25,211			
UMS-FACO #32 8" Waterline Conf NDSC	\$48,615	Ψ <b>-</b> 0,2 · ·			
CTS-FACO #27 AWSS vs PGE Vault #728	<i><i><i>v</i></i> 10,010</i>	\$14,439			

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Awarded NTE Amount Substantial Completion	\$839,676,400 2/10/2018				\$838,659,815 2/10/2018
	UMS	стѕ	YBM	STS	COST REPORT NOTES
YBM COR 78 Change POC by SFWD			\$50,493		
UMS DSC Tanks in Stockton N of Gear	\$97,817		. ,		
STS COR 052 Fire Hyd NE 4th&Bryant				\$5,346	
YBM COR 36 Culvert NW corn Folsom			\$8,033		
CTS COR 007 (E) Soil Characteristics		\$1,714,205			
YBM PCC 055 Add 24" water east side			\$241,607		
YBM Underground storage tank Folsom			\$156,733		
UMS Modification to Roof Composite	\$12,997				
YBM PCC 047 Add PGE conduits east			\$144,533		
YBM COR 182 Cap (E) 16" AWSS Tee			\$14,868		
STS AL-3 Allowance Replenishment				\$32,302	
Approved	\$90,000	\$230,956	(\$1,642,919)	\$305,378	
Contract Modification					
CMod #1 BART Elevator Option 1 @ Pow	\$90,000				
CMod #3 CTS Work Safely Ard Power Po		\$25,956			
CMod #5 YBM Deletion of Comp Groutin		<b>^</b>	(\$1,833,869)		
CMod #6 CTS Plaza Constr Supt Servi		\$75,000			
CMod #4 CTS-Force Account Change Or		\$130,000		<b>*</b> • • • <b>•</b> •	
CMod #7 STS FACOs 016, 017 &COR 009				\$80,170	
CMod #8 STS PCC 006 AT&T MH, PB, and Trench			<b>\$</b> 400.000	\$225,208	
CMod #9 YBM COR 010, 015, 016, 018, 020, 025			\$126,663		
Cmod #10 YBM PCC 042	40.046.645	E 0E0 070	\$64,287	(\$2,657,056)	
Grand Total	10,046,615	5,859,879	1,416,604	(\$2,657,056)	

#### 7.6 BUDGET REVISIONS: REPORT SORTED BY CONSTRUCTION PACKAGES & SOFT COSTS

								Report Perio	od: Sept 2015
			Aug 2015			Sept 2015			
Group by Contract & SCC	CATEGORY ITEM	Aug 2015 Base	Aug 2015 Allocated Contingency	Aug 2015 Base + Allocated Contingency (YOE)	Sept 2015 Base	Sept 2015 Allocated Contingency	Sept 2015 Base + Allocated Contingency (YOE)	BUDGET TRANSFERS [Sept 2015] vs. [Aug 2015]	Cost Report Notes
10-50	CONSTRUCTION CONTRACT PACKAGES	1,137,713,291	23,430,680	1,161,143,971	1,137,904,241	23,239,730	1,161,143,971	1	
1250	UTILITY RELOCATION PACKAGE #1 Contract 1250 Form B Credit	12,134,906 (2,275,419)		12,134,906 (2,275,419)	12,134,906 (2,275,419)		12,134,906 (2,275,419)	0	
1251	UTILITY RELOCATION PACKAGE #2 Contract 1251 Form B Credit	20,870,197 (7,618,412)		20,870,197 (7,618,412)	20,870,197 (7,618,412)		20,870,197 (7,618,412)	0	
1252	GUIDEWAY TUNNEL Contract 1252 Form B Credit	235,005,822 (254,050)	1,063,145	236,068,968 (254,050)	235,005,822 (254,050)	1,063,145	236,068,968 (254,050)	0	25
1300	CN1300 STATIONS TOTAL	838,468,865	21,207,535	859,676,400	838,659,815	21,016,585	859,676,400	0	
1253: UMS	UNION SQUARE/MARKET STREET STATION [UMS] UMS 1253 Form B Credit	294,120,590	4,910,000	299,030,590	294,120,590	4,910,000	299,030,590	0	
1254: CTS	CHINA TOWN STATION [CTS] CTS 1254 Form B Credit	(528,370) 247,798,766 (451,703)		(528,370) 252,567,810 (451,703)	(528,370) 247,798,766 (451,703)	4,769,044	(528,370) 252,567,810 (451,703)	0 1 0	
1255: ҮВМ	YERBA BUENA/ MOSCONE STATION [YBM]	156,255,131	6,833,869	163,089,000	156,446,081	6,642,920	163,089,001	1	
1256:	YBM 1255 Form B Credit SURFACE TRACKWORK & SYSTEMS [STS]	(100,000) 140,294,378	4,694,622	(100,000) 144,989,000	(100,000) 140,294,378	4,694,621	(100,000) 144,988,999	0 (1)	
STS	STS 1256 SFPUC SEWER MAIN CREDIT STS 1256 Form B Credit	(2,925,296) (1,000,000)		(2,925,296) (1,000,000)	(2,925,296) (1,000,000)		(2,925,296) (1,000,000)	0	
OTHER	OTHER CONSTRUCTION TOTAL	46,386,751	1,160,000	47,546,751	46,386,751	1,160,000	47,546,751	0	
40.06	PUBLIC ART PROGRAM	8,175,555	1,160,000	9,335,555	8,175,555	1,160,000	9,335,555	0	
40.02	MISC. CONSTR CONTRCT WK (TRACTION POWER FOR 1251)	258,202		258,202	258,202		258,202	0	
40.01	CONTRACT 1300 SOIL PROCESS	500,000		500,000	500,000		500,000	0	26
50.01	TEMPORARY LICENSE AGREEMENT (ATCS CENTRAL CONTROL)	487,972		487,972	487,972		487,972	0	
50.06	MTA FARE COLLECTION EQUIPMENT	5,400,000		5,400,000	5,400,000		5,400,000	0	
50.06	BART FARE COLLECTION EQUIPMENT	700,000		700,000	700,000		700,000	0	
40.02	JOB ORDER CONTRACTS (JOCS) - CONSTRUCTION	117,255		117,255	117,255		117,255	0	
40.08	AON RISK INSURANCE	18,088,750		18,088,750	18,088,750		18,088,750	0	

#### 7.6 BUDGET REVISIONS: REPORT SORTED BY CONSTRUCTION PACKAGES & SOFT COSTS

								Report Peric	od: Sept 2015
			Aug 2015			Sept 2015			
Group by Contract & SCC	CATEGORY ITEM	Aug 2015 Base	Aug 2015 Allocated Contingency	Aug 2015 Base + Allocated Contingency (YOE)	Sept 2015 Base	Sept 2015 Allocated Contingency	Sept 2015 Base + Allocated Contingency (YOE)	BUDGET TRANSFERS [Sept 2015] vs. [Aug 2015]	Cost Report Notes
40.02	PUBLIC AGENCIES UTILITY								
40.08		3,713,215		3,713,215	3,713,215		3,713,215	0	
40.02	DEPARTMENT OF PARKING AND TRAFFIC (DPT)	1,200,000		1,200,000	1,200,000		1,200,000	0	
50.03	UNION SQUARE/ MARKET STREET STATION POWER FEED	2,959,826		2,959,826	2,959,826		2,959,826	0	
50.03	UNION SQUARE/ MARKET STREET STATIONS PERMANENT POWER	(2,350,000)		(2,350,000)	(2,350,000)		(2,350,000)	0	
50.03	CHINATOWN STATION POWER FEED	2,959,826		2,959,826	2,959,826		2,959,826	0	
50.03	CHINATOWN STATION PERMANENT POWER	(2,350,000)		(2,350,000)	(2,350,000)		(2,350,000)	0	
50.03	YERBA BUENA/ MOSCONE STATION [YBM] POWER FEED	3,125,222		3,125,222	3,125,222		3,125,222	0	
50.03	YERBA BUENA/ MOSCONE STATION [YBM] PERMANENT	(2,368,540)		(2,368,540)	(2,368,540)		(2,368,540)	0	
50.03	SURFACE STATION POWER FEED	11,839		11,839	11,839		11,839	0	
50.04	COMMUNICATION CONNECTION COSTS	5,757,629		5,757,629	5,757,629		5,757,629	0	
60	ROW, LAND, EXISTING IMPROVEMENTS	32,246,321	5,265,478	37,511,799	32,246,321	5,265,478	37,511,799	0	
60.01	PURCHASE OR LEASE OF REAL ESTATE	30,065,810	5,265,478	35,331,288	30,065,810	5,265,478	35,331,288	0	27
60.02	RELOCATION OF EXISTING HOUSEHOLDS	2,180,511		2,180,511	2,180,511		2,180,511	0	
70	VEHICLES	13,309,000	13,076,653	26,385,653	13,309,000	13,076,653	26,385,653	0	
70.01	LIGHT RAIL	13,309,000	13,076,653	26,385,653	13,309,000	13,076,653	26,385,653	0	28
70.07	SPARE PARTS								
80	PROFESSIONAL SERVICES	310,518,041	18,221,079	328,739,120	310,518,041	18,221,079	328,739,120	0	
80.01	PRELIMINARY ENGINEERING	46,202,674		46,202,674	46,202,674		46,202,674	0	
80.02 80.06	FINAL DESIGN	61,322,751		61,322,751	61,322,751		61,322,751	0	
80.03	PROJECT MANAGEMENT FOR DESIGN & CONSTRUCTION	89,021,634	13,905,845	102,927,479	89,021,634	13,905,845	102,927,479	0	
80.04	CONSTRUCTION ADMINISTRATION & MANAGEMENT	91,037,791	2,956,812	93,994,603	91,037,791	2,956,812	93,994,603	0	
80.05	INSURANCES	6,800,000		6,800,000	6,800,000		6,800,000	0	
80.06	LEGAL: PERMITS. REVIEW FEES BY OTHER AGENCIES	8,258,184		8,258,184	8,258,184		8,258,184	0	

#### 7.6 BUDGET REVISIONS: REPORT SORTED BY CONSTRUCTION PACKAGES & SOFT COSTS

							Report Perio	od: Sept 2015
		Aug 2015			Sept 2015			
CATEGORY ITEM	Aug 2015 Base	Aug 2015 Allocated Contingency	Aug 2015 Base + Allocated Contingency (YOE)	Sept 2015 Base	Sept 2015 Allocated Contingency	Sept 2015 Base + Allocated Contingency (YOE)	BUDGET TRANSFERS [Sept 2015] vs. [Aug 2015]	Cost Report Notes
RVEYS, TESTING, ESTIGATION. INSPECTION	883,100		883,100	883,100		883,100	0	
ART-UP	6,991,907	1,358,422	8,350,329	6,991,907	1,358,422	8,350,329	0	
SCC CATEGORIES 10 TO 80	1,493,786,653	59,993,890	1,553,780,544	1,493,977,603	59,802,940	1,553,780,544	0	)
ALLOCATED CONTINGENCIES			24,519,459		-	24,519,459		29
TAL PROJECT COST 10 TO 100			1,578,300,002			1,578,300,002		
TAL CONTINGENCY			84,513,349			84,322,399		
NTINGENCY MINIMUM			60,000,000			60,000,000		
LOW OR ABOVE MINIMUM			24,513,349			24,322,399		

COST STATUS BY CATEGORY	SCC CODES	BUDGET	BUDGET	BUDGET	Sept 2015	Sept 2015
	0000000000	Aug 2015	TRANSFERS	Sept 2015	CTD	EAC
CONSTRUCTION	SCC 010 - 050	1,161,143,972	0	1,161,143,972	595,684,838	1,153,573,357
REAL ESTATE	SCC 060	37,511,799	0	37,511,799	30,467,005	32,246,321
VEHICLES	SCC 070	26,385,653	0	26,385,653	2,146,905	13,309,000
PRELIM ENGINEERING	SCC 080.01	46,202,674	0	46,202,674	46,202,675	46,202,674
FINAL DESIGN	SCC 080.02	61,318,331	0	61,318,331	61,199,308	61,322,751
PM FOR DESIGN & CONSTRUCTION	SCC 080.03 - 080.04	196,922,082	0	196,922,082	100,445,996	180,059,425
OTHER PROF SRVCS	SCC 080.05 - 080.08	24,296,033	0	24,296,033	10,967,356	22,933,191
UNALLOC CONTINGENCY	SCC 090	24,519,456	0	24,519,456		
Grand Total		1,578,300,000	0	1,578,300,000	847,114,082	1,509,646,719



SFMTA

SCC DESCRIPTION	Sept 2015 BUDGET	Sept 2015 CTD
010 - GUIDEWAY & TRACK ELEMENTS	285,468,439	174,076,983
020 - STATIONS, STOPS, TERMINALS, INTERMODAL	577,989,115	238,259,748
040 - SITEWORK & SPECIAL CONDITIONS	202,315,319	169,358,630
050 - SYSTEMS	95,371,099	13,989,476
060 - ROW, LAND, EXISTING IMPROVEMENTS	37,511,799	30,467,005
070 - VEHICLES (number)	26,385,653	2,146,905
080 - PROFESSIONAL SERVICES (applies to Cats. 10-50)	328,739,120	218,815,335
090 - UNALLOCATED CONTINGENCY	24,519,456	
Grand Total	1,578,300,000	847,114,082



SFMTA

	Sept 2015	Sept 2015
SCC DESCRIPTION	BUDGET	CTD
010.02-Guideway: At grade semi-exclusive (allows cross-traffic)	2,860,000	142,000
010.06-Guideway: Underground cut & cover	70,802,812	61,657,316
010.07-Guideway: Underground tunnel	200,594,901	110,248,321
010.09-Track: Direct fixation	6,761,089	1,182,347
010.12-Track: Special (switches, turnouts)	4,449,637	847,000
020.01-At-grade station, stop, shelter, mall, terminal, platform	6,673,138	1,226,534
020.02-Aerial station, stop, shelter, mall, terminal, platform	4,694,621	0
020.03-Underground station, stop, shelter, mall, terminal, platform	544,919,519	234,437,925
020.07-Elevators, escalators	21,701,837	2,595,289
040.01-Demolition, Clearing, Earthwork	11,144,242	7,955,380
040.02-Site Utilities, Utility Relocation	56,673,634	51,412,530
040.03-Haz. mat'l, contam'd soil removal/mitigation, ground water treatments	4,957,405	1,810,916
040.04-Environmental mitigation, e.g. wetlands, historic/archeologic, parks	1,020,165	417,082
040.05-Site structures including retaining walls, sound walls	2,706,431	2,706,431
040.06-Pedestrian / bike access and accommodation, landscaping	9,755,506	1,668,538
040.07-Automobile, bus, van accessways including roads, parking lots	6,967,874	2,102,265
040.08-Temporary Facilities and other indirect costs during construction	109,090,062	101,285,488
050.01-Train control and signals	28,031,423	4,318,932
050.02-Traffic signals and crossing protection	12,584,529	5,198,515
050.03-Traction power supply: substations	21,487,073	3,744,853
050.04-Traction power distribution: catenary and third rail	12,441,113	722,172
050.05-Communications	12,062,374	5,003
050.06-Fare collection system and equipment	6,100,000	0
050.07-Central Control	2,664,586	1
060.01-Purchase or lease of real estate	35,331,288	28,236,576
060.02-Relocation of existing households and businesses	2,180,511	2,230,430
070.01-Light Rail	26,385,653	2,146,905
080.01-Preliminary Engineering	46,202,674	46,202,675
080.02-Final Design	61,318,331	61,199,308
080.03-Project Management for Design and Construction	102,927,479	58,683,281
080.04-Construction Administration & Management	93,994,603	41,762,715
080.05-Professional Liability and other Non-Construction Insurance	6,800,000	6,340,196



SFMTA

SCC DESCRIPTION	Sept 2015 BUDGET	Sept 2015 CTD
080.06-Legal; Permits; Review Fees by other agencies, cities, etc.	8,262,604	4,569,839
080.07-Surveys, Testing, Investigation, Inspection	883,100	13,831
Grand Total	1,578,300,000	847,114,082

	BUDGET		ACTUAI	L COSTS			
[A] Cost Account Description	[B]	[C]	[D]	[E]	[F]	[G]	
	September 2015	PRIOR	PRIOR	CURRENT	CURRENT	VARIANCE	COST
	Budget (YOE)	MONTH Total	MONTH	CURRENT	CURRENT	(B - F)	REPORT NOTES
	(YOE)		Monthly	Monthly	Total	(2 1)	NULES
TOTAL PRELIMINARY ENGINEERING	46,542,061	46,542,061	0	0	46,542,061	0	30
11 - SFMTA PROJECT MANAGEMENT	8,828,359	8,253,957	0	0	8,253,957	574,403	31
12 - SFMTA ENGINEERING SERVICES	11,425,594	11,425,594	0	0	11,425,594	0	32
16 - DEPARTMENT OF PARKING AND TRAFFIC (DPT)	935,451	802,883	0	0	802,883	132,568	
21 - ARTS COMMISSION	1,500,570	1,500,570	0	0	1,500,570	1	33
22 - FIRE DEPARTMENT	33,825	33,825	0	0	33,825	0	
23 - CITY ATTORNEY'S OFFICE	1,234,754	1,234,754	0	0	1,234,754	0	
24 - RISK MANAGEMENT	0	0	0	0	0	0	
26 - PLANNING	99,604	99,604	0	0	99,604	0	
27 - DEPARTMENT OF PUBLIC HEALTH (DPH)	4,420	4,420	0	0	4,420	0	
29 - CITY AUDITOR	308,540	315,616	0	0	315,616	(7,076)	
32 - DPW - IDC ENGINEERING (HYDRAULIC)	3,322,887	3,336,432	0	0	3,336,432	(13,545)	
34 - DPW - IDC CONSTRUCTION (CAPTITAL)	17,462	17,462	0	0	17,462	0	
36 - DPW - BSM INFRASTRUCTURE (MAPPING)	76,549	76,549	0	0	76,549	0	
39 - DPW - PCS SITE ASSESSMENT & REMEDIATION (SAR)	13,993	13,993	0	0	13,993	0	
51 - 821 HOWARD STREET	1,005,653	1,005,653	0	0	1,005,653	0	
55 - 651 BRANNAN	2,294,910	2,294,910	0	0	2,294,910	0	34
63 - CENTRAL SUBWAY PARTNERSHIP - AECOM-EPC JV CONTRACT 149	26,793,234	26,793,234	0	0	26,793,234	0	35
66 - ANIL VERMA	395,204	395,204	0	0	395,204	0	36
67 - HILL INTERNATIONAL CONTRACT 156	6,716,294	6,716,294	0	0	6,716,294	0	
68 - ARTHUR GALLAGER & CO. CS 164	6,800,000	6,340,196	0	0	6,340,196	459,804	
71 - TUNNEL/UTILITIES - CONTRACT # CONTRACT 155-1	5,469,336	5,469,336	0	0	5,469,336	0	37
72 - STATIONS - CONTRACT # CONTRACT 155-2	26,220,609	26,220,609	0	0	26,220,609	0	38
73 - SYSTEMS/INTEGRATION - CONTRACT 155-3	11,432,312	11,432,312	0	0	11,432,312	(0)	39
331 - BAY AREA RAPID TRANSIT (BART)	146,427	146,427	0	0	146,427	0	
332 - SAN FRANCISCO COUNTY TRANSPORTATION AUTHORITY (SFCTA)	0	0	0	0	0	0	
TOTAL FINAL DESIGN	115,075,987	113,929,833	0	0	113,929,833	1,146,155	
11 - SFMTA PROJECT MANAGEMENT	15,589,933	5,019,287	102,609	213,953	5,233,240	0	
1.3.011.01.080.03 - CM:SFMTA LABOR-PROJECT MANAGEMENT	15,589,933	5,019,287	102,609	213,953	5,233,240		
12 - SFMTA ENGINEERING SERVICES	905,264	1,717,255	38,260	55,789	1,773,044	150,539	
1.3.012.02.080.04 - CM: SFMTA LABOR-ENGINEERING CONTRACT 1252	123,582	57,648	(0)	0	57,648	65,934	
1.3.012.06.080.04 - CM: SFMTA LABOR-ENGINEERING CONTRACT 1300	1,800,000	1,659,607	38,260	55,789	1,715,396	84,604	
13 - SFMTA CONSTRUCTION MANAGEMENT	44,075,375	8,052,448	123,125	265,500	8,317,948	34,739,109	
1.3.013.01.080.04 - CM:SFMTA LABOR-CONSTR. MANAGEM	43,057,057	8,052,448	123,125	265,500	8,317,948	34,739,109	
16 - DEPARTMENT OF PARKING AND TRAFFIC (DPT)	3,588,074	1,359,098	13,986	34,803	1,393,901	2,203,931	
1.3.016.01.080.04 - DPT CONTRACT 1300 SUPPORT UMS	299,600	64,508	2,964	1,771	66,279	233,321	

	BUDGET		ACTUA	L COSTS			
[A] Cost Account Description	[B]	[C]	[D]	[E]	[F]	[G]	
	September 2015		_				COST
	Budget	PRIOR MONTH Total	PRIOR MONTH	CURRENT	CURRENT	VARIANCE (B - F)	REPORT
	(YOE)	MONTH Total	Monthly	Monthly	Total	( <b>B</b> - <b>F</b> )	NOTES
1.3.016.01.080.04 - DPT CONTRACT 1300 SUPPORT CTS	274,900	43,433	3,388	5,865	49,298	225,602	
1.3.016.01.080.04 - DPT CONTRACT 1300 SUPPORT YBM	238,400	79,234	1,338	7,737	86,971	151,429	
1.3.016.01.080.04 - DPT CONTRACT 1300 SUPPORT STS	876,876	66,217	190	9,744	75,961	800,915	
1.3.016.02.040.08 - DPT: FIELD OPS TUNNEL [B84]	0	1,464	0	0	1,464	(1,464)	
1.3.016.02.040.08 - DPT: FIELD OPS TUNNEL [B86]	0	204,261	0	0	204,261	(204,261)	
1.3.016.06.040.02 - DPT:DPT TRAFFIC SHOP CONTRACT 1300	1,200,000	0	0	0	0	1,200,000	
1.3.016.07.080.04 - DPT:SSD DS/CN: 1UTL	38,450	0	0	0	0	38,450	
1.3.016.08.040.08 - DPT:PCOS:2UTL [68A]	400,728	400,728	0	0	400,728	0	
1.3.016.08.040.08 - DPT:SSD CN:2UTL	0	108,020	0	0	108,020	(108,020)	
1.3.016.08.080.04 - DPT:SSD [1326]	259,120	265,201	6,105	9,685	274,886	(15,766)	
1.3.016.08.080.04 - DPT:SSD [13BN]	0	23,302	0	0	23,302	(23,302)	
1.3.016.08.080.04 - DPT:SSD [13CN]	0	963	0	0	963	(963)	
1.3.016.08.080.04 - DPT:SSD [B85]	0	92,008	0	0	92,008	(92,008)	
1.3.016.09.040.08 - PCOS:1300/STS [68CPT544132Z.CPT544132Z]		9,759	0	0	9,759	(9,759)	
17 - MOTIVE POWER	2,195	0	0	0	0	2,195	
1.3.017.07.040.02 - PWR:SFMTA-MOTIVE POWER-UTL.REL	2,195	0	0	0	0	2,195	
18 - SFMTA OPERATIONS	400,000	39,371	1,518	215	39,586	286,883	
1.3.018.04.040.02 - OPS:SUPPORT TO CONTRACT 1300/CTS	100,000	26,469	0	0	26,469	73,531	
1.3.018.06.080.07 - OPS:SUPPORT TO CONTRACT 1300/UMS	300,000	12,902	1,518	215	13,117	286,883	
19 - OTHER SFMTA	700,000	159,749	(0)	10,605	170,354	529,646	
1.3.019.01.080.07 - OTH.MTA SURVEY AND TESTING	500,000	0	0	0	0	500,000	
1.3.019.07.080.07 - OTH.MTA SFMTA-SURVEY; TSTG [6840]	0	714	0	0	714	(714)	
1.3.019.08.040.08 - OTH.MTA 1251 MATERIALS	150,000	126,149	0	0	126,149	23,851	
1.3.019.08.080.08 - OTH.MTA OPERATION SUPPORT DURI	50,000	32,887	(0)	10,605	43,491	6,509	
21 - ARTS COMMISSION	12,010,885	1,829,612	85,230	75,645	1,905,256	8,360,169	
1.3.021.01.040.06 - ARTS:CTYCO-ARTS COMMISSION CONSTRUCTION COSTS	4,772,555	0	0	0	0	4,772,555	
1.3.021.01.080.03 - ARTS:CTYCO-ARTS COMMISSION [1227]	2,030,147	388,167	0	0	388,167	1,641,980	40
1.3.021.01.080.04 - ARTS:CTYCO-ARTS COMMISSION [PWE335MPFUNA.CPT5441227]	21,000	10,003	(0)	1,383	11,386	9,614	
1.3.021.06.080.03 - ARTS:CTYCO-ARTS COMMISSION PM [285MC.132J]	158,970	201,405	31,830	16,314	217,719	(58,749)	
1.3.021.01.080.03 - ARTS:CTYCO-ARTS COMMISSION [PWE335MPFUNA.CPT5441327]	0	804	(0)	461	1,265	(1,265)	
1.3.021.06.040.06 - ARTS:CTYCO-ARTS COMMISSION [68CPT5441327.CPT5441327]	1,500,000	1,075,780	53,400	53,400	1,129,180	370,820	
1.3.021.06.040.06 - ARTS:CTYCO-ARTS COMMISSION [285MCPFUNA.CPT5441327]	1,903,000	153,453	(0)	4,087	157,540		
1.3.021.01.080.03 - ARTS:CTYCO-ARTS COMMISSION [132J]	465,213	0	0	0	0	465,213	
1.3.021.97.040.06 - ARTS:ARTS COMMISSION ALLOC CO	1,160,000	0			0	1,160,000	
23 - CITY ATTORNEY'S OFFICE	2,171,781	1,555,745	148,001	0	1,555,745	616,036	
1.3.023.01.080.06 - ATTY:CN LEGAL-CITY ATTORNEY OF	2,171,781	1,555,745	148,001	0	1,555,745	616,036	
25 - PUBLIC UTILITIES COMMISSION SEWER	(2,925,296)	0	0	0	0	(2,925,296)	
1.3.025.09.040.02 - STS.1256: SITE UTILITIES SFPUC SEWER MAIN	(2,925,296)					(2,925,296)	
26 - PLANNING	137,062	19,493	1,265	0	19,493	117,569	
1.3.026.01.080.06 - CM:CTYCO-PLANNING DEPARTMENT	137,062	19,493	1,265	0	19,493	117,569	

	BUDGET ACTUAL COSTS						
[A] Cost Account Description	[B]	[C]	[D]	[E]	<b>[F]</b>	[G]	
	September 2015	PRIOR	PRIOR	CURRENT	CURRENT	VARIANCE	COST
	Budget (YOE)	MONTH Total	MONTH	CORRENT	CORRENT	(B - F)	REPORT NOTES
	(102)		Monthly	Monthly	Total		
28 - PUBLIC UTILITIES COMMISSION WATER	4,242,012	2,166,541	67,648	23,936	2,190,477	2,051,535	
1.3.028.02.040.02 - CM:CTYCO-PUBLIC UTIL COMM. (PUC)	0	4,745	0	0	4,745	(4,745)	
1.3.028.02.040.08 - PUC: FIELD OPERATIONS TUNNEL	398,400	537,814	0	0	537,814	(139,414)	
1.3.028.02.080.04 - PUC:MTA CSP CN1252 [470465]	105,000	91,587	0	0	91,587	13,413	
1.3.028.03.040.02 - PUC:CDD CONTRACT 1300/UMS SUPPORT	606,354	37,093		1,204	38,297	568,057	
1.3.028.03.080.04 - PUC:CMB CONTRACT 1300/UMS INSPECTION	230,000	30,363	0	0	30,363	199,637	
1.3.028.04.040.02 - PUC:CDD CONTRACT 1300/CTS SUPPORT	271,755	152,442	46,964	245	152,687	119,068	
1.3.028.04.080.04 - PUC:CMB CONTRACT 1300/CTS INSPECTION	115,000	6,956	0	0	6,956	108,044	
1.3.028.05.040.02 - PUC:CDD CONTRACT 1300/YBM SUPPORT	450,282	123,377	11,531	7,021	130,398	319,884	
1.3.028.05.080.04 - PUC:CMB CONTRACT 1300/YBM INSPECTION	184,000	4,008	0	0	4,008	179,992	
1.3.028.07.040.02 - PUC:PUC CDD WATER CONNECTION CONTRACT 1250	248,035	291,501	0	0	291,501	(43,466)	
1.3.028.07.080.04 - PUC:PUC CMB INSPECTION CONTRACT 1250	74,468	113,844	0	0	113,844	(39,376)	
1.3.028.08.040.02 - PUC:PUC CDD WATER CONNECTION CONTRACT 1251 [445]	565,389	318,130	0	0	318,130	247,259	
1.3.028.08.080.04 - PUC:PUC CMB INSPECTION CONTRACT 1251	266,252	289,424	0	0	289,424	(23,172)	
1.3.028.09.040.02 - PUC:CMB CONTRACT 1300/STS SUPPORT	520,077	100,521	8,569	15,466	115,987	404,090	
1.3.028.09.080.04 - PUC:CMB CONTRACT 1300/STS INSPECTION	207,000	64,737	0	0	64,737	142,263	
32 - DPW - IDC ENGINEERING (HYDRAULIC)	1,150,459	126,317	2,459	4,228	130,545	856,948	
1.3.032.01.080.04 - CM:DPW:1424J-BUREAU OF ENGINEERING (BOE) [AB12]	60,000	94,362	959	1,036	95,398	(35,398)	
1.3.032.03.080.04 - DPW IDC HYDRAULIC CN1300 UMS SUPPORT	297,938	1,011	0	0	1,011	296,927	
1.3.032.04.080.04 - DPW IDC HYDRAULIC CN1300 CTS SUPPORT	295,639	5,188	0	1,569	6,758	288,882	
1.3.032.05.080.04 - DPW IDC HYDRAULIC CN1300 YBM SUPPORT	301,882	9,742	1,499	602	10,344	291,538	
1.3.032.06.080.04 - DPW: BOE: 1300 DSDC	6,000	0	0	0	0	6,000	
1.3.032.08.080.04 - DPW.HYRDDPW-BOE IDC ENG SVC DC	9,000	0	0	0	0	9,000	
1.3.032.09.080.04 - DPW IDC HYDRAULIC CN1300 STS SUPPOR	180,000	16,013	0	1,021	17,034	162,966	
34 - DPW - IDC CONSTRUCTION (CAPITAL)	6,695,348	4,137,583	39,134	67,664	4,205,246	2,490,102	
1.3.034.02.080.04 - DPW:CONSTR:1252 CM [CD12]	730,000	1,084,558	15,897	27,486	1,112,045	(382,045)	
1.3.034.02.080.04 - DPW:CONSTR:1252 CM [13AC12]	206,000	138,397	0	0	138,397	67,603	
1.3.034.01.080.04 - DPW:BCM LABOR [2113]	2,140,142	2,140,142	0	0	2,140,142	0	
1.3.034.06.080.04 - DPW:CONSTR:1300 CM [13CP12]	3,619,206	774,485	23,236	40,178	814,662	2,804,544	
36 - DPW - BSM INFRASTRUCTURE (MAPPING)	465,562	110,294	0	0	110,294	436,268	
1.3.036.01.080.04 - DPW:MPPG:DPW-BUREAU OF ST USE	417,129	32,680	0	0	32,680	384,449	
1.3.036.02.080.04 - DPW:MPPG:1300-DPW-BUREAU OF ST USE	0	33,084	0	0	33,084	(33,084)	
1.3.036.02.080.06 - DPW:MPPG:DPW-BUREAU OF ST USE	90,000	44,530	0	0	44,530	45,470	
1.3.036.06.080.06 - DPW:MPPG:BSM PERMIT REVIEW	39,433	0	0	0	0	39,433	
37 - DPW - PCS MATERIAL TESTING LABORATORY	83,100	0	0	0	0	83,100	
1.3.037.01.080.07 - DPW.MTL.LABDPW-MATERIAL TESTIN	83,100	0	0	0	0	83,100	
39 - DPW - PCS SITE ASSESSMENT & REMEDIATION (SAR)	622,474	935,904	0	0	935,904	(313,430)	
1.3.039.01.080.04 - DPW:SITE ASSESSMENT & REMEDIATION (SAR) [132112]	8,621	506,858	0	0	506,858	(498,237)	
1.3.039.01.080.04 - DPW:SITE ASSESSMENT & REMEDIATION (SAR) [2213]	92,459	92,459	0	0	92,459	0	
1.3.039.01.080.04 - DPW:SITE ASSESSMENT & REMEDIATION (SAR) [2250]	78,400	78,400		0	78,400	0	

	BUDGET	UDGET ACTUAL COSTS						
[A] Cost Account Description	[B]	[C]	[D]	[E]	[F]	[G]		
	September 2015						COST	
	Budget	PRIOR MONTH Total	PRIOR MONTH	CURRENT	CURRENT	VARIANCE (B - F)	REPORT	
	(YOE)	WONTH Total	Monthly	Monthly	Total	( <b>B</b> - F)	NOTES	
1.3.039.01.080.04 -DPW:SITE ASSESSMENT & REMEDIATION (SAR) [2257]	151,515	151,515	0	0	151,515	0		
1.3.039.01.080.04 - DPW:SITE ASSESSMENT & REMEDIATION (SAR) [2313]	24,343	24,343	0	0	24,343	0		
1.3.039.01.080.04 - DPW:SITE ASSESSMENT & REMEDIATION	58,757	10,043	0	0	10,043	48,713		
1.3.039.01.080.04 - DPW:SITE ASSESSMENT & REMEDIATION (SAR) [CE13]	31,367	31,367		0	31,367	0		
1.3.039.01.080.04 - DPW:SITE ASSESSMENT & REMEDIATION (SAR) [CH13]	100,000	8,621	0	0	8,621	91,379		
1.3.039.01.080.04 - DPW:SITE ASSESSMENT & REMEDIATION (SAR)	17,000	0	0	0	0	17,000		
1.3.039.02.080.04 - DPW: SITE ASSESSMENT & REMEDIATION (SAR) – CN1252 [13CE11]	18,632	16,880	0	0	16,880	1,753		
1.3.039.02.080.04 - DPW: SITE ASSESSMENT & REMEDIATION (SAR) – CN1300 [13CH11]	41,379	15,417	0	0	15,417	25,962		
46 - MACY'S WEST - SFPUC SEWER WORK	258,202	258,202	0	0	258,202	0		
1.3.046.08.040.02 - MCY.SWRC. CONTRACT: MACY'S-SEW	258,202	258,202	0	0	258,202	0		
51 - 821 HOWARD STREET	4,690,481	447,296	28,204	13,650	460,946	4,229,535		
1.3.051.01.080.03 - ODC.HWRD:ODCs - 821 HOWARD STR	4,625,481	436,659	27,300	13,650	450,309	4,175,172		
1.3.051.02.080.04 - ODC.HWRD:ODCs - TUNNEL CONTRACT 1252	10,000	1,056	0	0	1,056	8,944		
1.3.051.06.080.04 - ODC.HWRD:ODCs - STATION CONTRACT 1300	55,000	9,581	904	0	9,581	45,419		
55 - 651 BRANNAN	0	10,348	0	0	10,348	(10,348)		
1.3.055.01.080.03 - CM:ODCs - 651 BRANNAN STREET	0	10,348	0	0	10,348	(10,348)	41	
63 - CENTRAL SUBWAY PARTNERSHIP - AECOM-EPC JV CONTRACT 149	42,373,401	23,891,367	(148,725)	321,585	24,212,952	18,160,449		
1.3.063.01.080.03 - CM:PM:AECOM.CS149 OM-EPC JV CS149-PM	9,507,939	5,934,169	(59,490)	128,634	6,062,803	3,445,136	42	
1.3.063.01.080.04 - CM:AECOM.CS149OM-EPC JV CS-149 [3B]	5,218,630	3,343,761	(89,235)	192,951	3,536,712	1,681,918		
1.3.063.01.080.04 - CM:AECOM.CS149OM-EPC JV CS-149 [3E]	7,000,000	7,982,813	0	0	7,982,813	(982,813)		
1.3.063.01.080.04 - CM:AECOM.CS149OM-EPC JV CS-149 [9B]	11,042	11,042	0	0	11,042	0		
1.3.063.01.080.04 - CM:AECOM.CS149OM-EPC JV CS-149 [9D]	550,000	515,694	0	0	515,694	34,306		
1.3.063.01.080.04 - CM:AECOM.CS149OM-EPC JV CS-149 [9E]	600,000	523,943	0	0	523,943	76,057		
1.3.063.01.080.04 - FD:CM:EPC JV CS49-PM [123A]	5,579,945	5,579,945	0	0	5,579,945	0		
1.3.063.97.080.03 - AECOM.CS149 ALLOCAT CONTING	13,905,845					13,905,845		
67 - HILL INTERNATIONAL CONTRACT 156	11,000,000	1,260,370	78,336	74,324	1,334,694	9,665,306		
1.3.067.01.080.03 - HILL.CS156:HILL INTL. CS-156 [1336]	600,000	0	0	245,399	245,399	354,601		
1.3.067.01.080.03 - HILL.CS156:HILL INTL. CS-156 [1337]	9,400,000	1,133,109	78,336	(171,075)	962,035	8,437,965		
1.3.067.01.080.03 - HILL.CS156:HILL INTL. [1330]	1,000,000	127,261	0	0	127,261	872,739		
69 - BAYLAND SOIL PROCESS CONTRACT 175	500,000	95,001	0	0	95,001	404,999	43	
1.3.069.06.040.01 - BAYLAND.CS175:BAYLAND SOIL PROCESS [133K]	500,000	95,001	0	0	95,001	404,999		
71 - TUNNEL/UTILITIES - CONTRACT # CONTRACT 155-1	1,358,950	1,878,707	(23,122)	7,539	1,886,246	(527,296)		
1.3.071.01.080.04 - CM: CS155.1 DESIGN SUPPORT DURING CM [1232]	0	(87,201)	0	0	(87,201)	87,201	44	
1.3.071.02.080.04 - CM: CS155.1 DESIGN SUPPORT DURING CM [1332]	1,358,950	1,965,908	(23,122)	7,539	1,973,447	(614,497)		
72 - STATIONS - CONTRACT # CONTRACT 155-2	8,752,240	3,264,199	152,657	587,825	3,852,023	4,900,217		
1.3.072.01.080.04 - CM: CS155.2 DESIGN SUPPORT DURING CM [1233]	50,000	51,351	0	0	51,351	(1,351)	45	
1.3.072.01.080.04 - CM: CS155.2 DESIGN SUPPORT DURING CM [1333]	8,702,240	3,212,848		587,825	3,800,673	4,901,567		
73 - SYSTEMS/INTEGRATION - CONTRACT 155-3	4,828,269	1,021,227	37,809	81,258	1,102,485	3,725,784		
1.3.073.01.080.04 - CM: CS155.3 DESIGN SUPPORT DURING CM [1236]	90,000	89,791	0	0	89,791	209		
1.3.073.01.080.04 - CM: CS155.3 DESIGN SUPPORT DURING CM [1334]	4,738,269	931,436	37,809	81,258	1,012,694	3,725,575		

	BUDGET	ACTUAL COSTS					
[A] Cost Account Description	[B]	[C]	[D]	[E]	<b>[F]</b>	[G]	
	September 2015						COST
	Budget	PRIOR MONTH Total	PRIOR MONTH	CURRENT	CURRENT	VARIANCE (B - F)	REPORT
	(YOE)	WOWIN Iotai	Monthly	Monthly	Total	( <b>D</b> - <b>F</b> )	NOTES
81 - UTILITIES RELOCATION #1 (PORTAL & MOS) - CONTRACT 1250	11,968,150	11,968,150	0	0	11,968,150	0	
1.3.081.07.040.01 - UR1.CONTRACT 1250:SITEWORK: DEMOLIT	167,458	167,458	0	0	167,458	0	
1.3.081.07.040.02 - UR1.CONTRACT 1250:SITEWORK: UTILITI	10,099,341	10,099,341	0	0	10,099,341	0	
1.3.081.07.040.03 - UR1.CONTRACT 1250:SITEWORK:HAZMAT	453,321	453,321	0	0	453,321	0	
1.3.081.07.040.08 - UR1.CONTRACT 1250:SITEWORK:TEMPORAR	1,248,030	1,248,030	0	0	1,248,030	0	
82 - UTILITIES RELOCATION #2 (UMS) - CONTRACT 1251	20,794,582	20,794,582	0	0	20,794,582	0	46
1.3.082.08.040.01 - UR2.CONTRACT 1251:SITEWORK: DEMOLIT	752,240	752,240	0	0	752,240	0	
1.3.082.08.040.02 - UR2.CONTRACT 1251:SITEWORK:UTILITI	10,328,044	10,328,044	0	0	10,328,044	0	
1.3.082.08.040.03 - UR2.CONTRACT 1251:SITEWORK:HAZMAT	172,712	172,712	0	0	172,712	0	
1.3.082.08.040.05 - UR2.CONTRACT 1251:SITEWORK: STRUCTU	2,706,431	2,706,431	0	0	2,706,431	0	
1.3.082.08.040.06 - UR2.CONTRACT 1251:SITEWORK:PEDESTRA	319,317	319,317	0	0	319,317	0	
1.3.082.08.040.07 - UR2.CONTRACT 1251:SITEWORK:AUTO/BUS	190,362	190,362	0	0	190,362	0	
1.3.082.08.040.08 - UR2.CONTRACT 1251:SITEWORK:TEMP FAC	6,325,476	6,325,476	0	0	6,325,476	0	
GUIDEWAY TUNNELS TOTAL	236,068,968	234,616,308	204	0	234,616,308	1,452,660	
83 - GUIDEWAY TUNNELS - CONTRACT # 1252 BASE	233,584,015	232,689,302	204	0	232,689,302	894,713	
1.3.083.02.010.06 - CONTRACT 1252:GUIDEWAY:UNDERGRN'D CUT	60,446,425	61,377,878	0	0	61,377,878	(931,453)	
1.3.083.02.010.07 - CONTRACT 1252:GUIDEWAY:UNDERGROUND	105,423,090	105,097,157	0	0	105,097,157	325,933	
1.3.083.02.020.03 - CONTRACT 1252: STATIONS: UNDERGROUND	21,685,000	21,685,000	0	0	21,685,000	0	
1.3.083.02.040.01 - CONTRACT 1252:SITEWORK:DEMO CLEARING	2,440,000	2,440,000	0	0	2,440,000	0	
1.3.083.02.040.02 - CONTRACT 1252:SITEWORK:UTILITIES & RE	10,895,000	10,087,676	0	0	10,087,676	807,324	
1.3.083.02.040.03 - CONTRACT 1252:SITEWORK:HAZMAT&MITIGAT	200,000	0	0	0	0	200,000	
1.3.083.02.040.04 - CONTRACT 1252:SITEWORK:ENVIRON. MITIG	300,000	54,292	0	0	54,292	245,708	
1.3.083.02.040.06 - CONTRACT 1252:SITEWORK:PED/BIKE ACCES	50,000	50,000	0	0	50,000	0	
1.3.083.02.040.07 - CONTRACT 1252:SITEWORK:AUTO/BUS ACCES	1,345,000	1,345,000	0	0	1,345,000	0	
1.3.083.02.040.08 - CONTRACT 1252:SITEWORK:TEMP FACILITIE	30,799,500	30,552,299	204	0	30,552,299	247,201	
83 - GUIDEWAY TUNNELS - CONTRACT # 1252 CMODs	1,421,807	1,927,006	0	0	1,927,006	(505,199)	
1.3.083.83.010.06 - CONTRACT 1252: CONTRACT MOD	81,937	81,937	0	0	81,937	0	
1.3.083.83.010.07 - CONTRACT 1252: CONTRACT MOD	1,180,322	1,280,322	0	0	1,280,322	(100,000)	
1.3.083.83.020.03 - CONTRACT 1252: CONTRACT MOD	965,121	1,077,223	0	0	1,077,223	(112,102)	
1.3.083.83.040.02 - CONTRACT 1252: CONTRACT MOD	1,665,207	1,665,208	0	0	1,665,208	(1)	
1.3.083.83.040.03 - CONTRACT 1252: CONTRACT MOD	401,933	401,933	0	0	401,933	0	
1.3.083.83.040.08 - CONTRACT 1252: CONTRACT MOD	(2,872,713)	(2,579,617)	0	0	(2,579,617)	(293,096)	
1.3.083.93.010.07 - CONTRACT 1252: TUNNEL ALLOC CONTING	1,063,146	0	0	0	0	1,063,146	47
CONTRACT 1300 - STATIONS, TRACKWORK AND SYSTEMS TOTAL	859,676,400	, ,	11,335,514	14,071,294	302,388,888	557,287,512	47a
84 - UNION SQUARE/MARKET STREET STATION (UMS) - WORK PACKAGE 1253	294,030,590	123,400,744	2,691,628	3,977,798	127,378,542	166,652,048	17
1.3.084.03.020.03 - UMS.1253: UNDERGROUD STATION	253,822,452	107,044,509	1,544,001	3,037,800	110,082,309	143,740,143	
1.3.084.03.020.07 - UMS.1253: ELEVATORS ESCALATOR	9,465,694	854,058	195,858	90,001	944,059	8,521,635	
1.3.084.03.040.01 - UMS.1253: DEMOLITION CLEARING	6,071,588	2,637,838		702,500	3,340,338	2,731,250	
1.3.084.03.040.02 - UMS.1253: SITE UTILITIES UTIL	3,971,620	1,232,601	80,136	15,000	1,247,601	2,724,019	
1.3.084.03.040.03 - UMS.1253: HAZARDOUS MATERIALS	550,000	0	0	22,490	22,490	527,510	I I

	BUDGET ACTUAL COSTS		ACTUAL COSTS				ET ACTUAL COSTS							
[A] Cost Account Description	[B]	[C]	[D]	[E]	<b>[F]</b>	[G]								
	September 2015						COST							
	Budget	PRIOR MONTH Total	PRIOR MONTH	CURRENT	CURRENT	VARIANCE (B - F)	REPORT							
	(YOE)	MONTH Total	Monthly	Monthly	Total	( <b>B</b> - <b>F</b> )	NOTES							
1.3.084.03.040.04 - UMS.1253: ENVIRONMENTAL MITIGA	244,500	97,250	6,250	0	97,250	147,250								
1.3.084.03.040.06 - UMS.1253: ELVYIKONNENTAE INTIGA	18,969	12,500	6,900	1	12,501	6,468								
1.3.084.03.040.07 - UMS.1253: AUTOMOBILE BUS ACCE	1,547,185	22,000	3,000	1	22,001	1,525,184								
1.3.084.03.040.08 - UMS.1253: TEMPORARY FACILITIES	10,398,701	9,432,450	216,466	3	9.432.453	966,248								
1.3.084.03.050.02 - UMS.1253: TRAFFIC SIGNALS AND	4,773,076	1,990,000	226,746	110,000	2,100,000	2,673,076								
1.3.084.03.050.03 - UMS.1253: TRACTION POWER SUPPL	1,815,534	9,000	5,000	110,000	2,100,000	1,806,533								
1.3.084.03.050.04 - UMS.1253: TRACTION POWER DISTR	216,957	66,037	16,037	1	66,038	1,800,555								
1.3.084.03.050.05 - UMS.1253: COMMUNICATIONS	1,134,314	2,500	1.000	1	2,501	1,131,813								
84 - UNION SQUARE/MARKET STREET STATION (UMS) CMODs	90,000	90.000	0	0	90.000	0								
1.3.084.84.020.07 - CMOD:UMS.1253: ELEVATORS, ESCALATORS	90,000	90,000	0	0	90,000	0								
1.3.084.94.020.03 - UMS.1253: AC: ALLOC CONTING	4,910,000	0	0	0	0	4,910,000	48							
85 - CHINATOWN STATION (CTS) - WORK PACKAGE 1254	247,567,810	67,611,820	5,229,456	4,766,927	72,378,747	175,189,063								
1.3.085.04.010.07 - CTS.1254: GUIDEWAY: UNDERGROUND TUNNEL	76,417,579	3,001,158	511,798	75,001	3,076,159	73,341,420								
1.3.085.04.020.03 - CTS.1254: UNDERGROUND STATION	133,001,053	48,139,131	2,588,281	523,728	48,662,859	84,338,194								
1.3.085.04.020.07 - CTS.1254: ELEVATORS ESCALATOR	6,812,856	887,500	130,570	67,563	955,063	5,857,793								
1.3.085.04.040.01 - CTS.1254: DEMOLITION CLEARING	400,000	300,000	50,000	55,131	355,131	44,869								
1.3.085.04.040.02 - CTS.1254: SITE UTILITIES UTIL	6,001,718	3,955,450	156,930	140,001	4,095,451	1,906,267								
1.3.085.04.040.03 - CTS.1254: HAZARDOUS MATERIALS	350,000	0	0	0	0	350,000								
1.3.085.04.040.04 - CTS.1254: ENVIRONMENTAL MITIGA	325,665	206,064	56,064	0	206,064	119,601								
1.3.085.04.040.06 - CTS.1254: PEDESTRIAN/BIKE	15,000	0	0	0	0	15,000								
1.3.085.04.040.07 - CTS.1254: AUTOMOBILE BUS ACCE	225,677	14,500	14,500	0	14,500	211,177								
1.3.085.04.040.08 - CTS.1254: TEMPORARY FACILITIES	16,571,322	10,176,082	1,534,609	3,872,503	14,048,585	2,522,737								
1.3.085.04.050.02 - CTS.1254: TRAFFIC SIGNALS AND	1,599,593	701,933	106,703	33,001	734,934	864,659								
1.3.085.04.050.03 - CTS.1254: TRACTION POWER SUPPL	4,063,927	227,500	77,500	0	227,500	3,836,427								
1.3.085.04.050.04 - CTS.1254: TRACTION POWER DISTRIBUTION	124,481	2,500	2,500	0	2,500	121,981								
1.3.085.04.050.05 - CTS.1254: COMMUNICATIONS	1,658,938	0	0	0	0	1,658,938								
85 - CHINATOWN STATION (CTS) CMODs	230,956	173,192	0	29,508	202,700	28,256								
1.3.085.85.020.03 - CMOD:CTS.1254: UNDERGROUND STATION	75,000	24,980	0	29,508	54,488	20,512								
1.3.085.85.040.01 - CMOD:CTS.1254: POWER POLE	155,956	148,212	0	0	148,212	7,744								
1.3.085.95.020.03 - CTS.1254: AC: ALLOC CONTING	4,769,044	0	0	0	0	4,769,044	49							
86 - YERBA BUENA MOSCONE STATION (YBM) - WORK PACKAGE 1255	158,089,000	72,071,251	1,809,281	1,936,664	74,007,915	84,081,085								
1.3.086.05.020.03 - YBM.1255: UNDERGROUND STATION	119,048,929	52,462,160	746,010	413,885	52,876,045	66,172,883								
1.3.086.05.020.07 - YBM.1255: ELEVATORS ESCALATOR	5,333,287	473,870	93,870	132,297	606,167	4,727,120								
1.3.086.05.040.01 - YBM.1255: DEMOLITION CLEARING	657,000	575,000	50,000	82,000	657,000	0								
1.3.086.05.040.02 - YBM.1255: SITE UTILITIES UTIL	6,520,189	4,773,380	423,380	891,839	5,665,219	854,971								
1.3.086.05.040.03 - YBM.1255: HAZARDOUS MATERIALS	2,629,439	620,460	70,460	140,000	760,460	1,868,979								
1.3.086.05.040.04 - YBM.1255: ENVIRONMENTAL MITIGA	100,000	59,476	14,476	0	59,476	40,524								
1.3.086.05.040.06 - YBM.1255: PEDESTRIAN/BIKE	16,665	0	0	1	1	16,664								
1.3.086.05.040.07 - YBM.1255: AUTOMOBILE BUS ACCE	1,542,725	248,200	43,200	243,201	491,401	1,051,324								
1.3.086.05.040.08 - YBM.1255: TEMPORARY FACILITIES	15,564,753	12,102,872	198,552	439	12,103,311	3,461,442								

	BUDGET	BUDGET ACTUAL COSTS					
[A] Cost Account Description	[B]	[C]	[D]	[E]	[F]	[G]	
	September 2015						COST
	Budget	PRIOR MONTH Total	PRIOR MONTH	CURRENT	CURRENT	VARIANCE (B - F)	REPORT
	(YOE)	MONTH Total	Monthly	Monthly	Total	( <b>D</b> - <b>F</b> )	NOTES
1.3.086.05.050.02 - YBM.1255: TRAFFIC SIGNALS AND	1,726,492	697,533	135,533	33,001	730,534	995,958	
1.3.086.05.050.03 - YBM.1255: TRACTION POWER SUPPL	3,708,425	55,800	32,800	0	55,800	3,652,625	
1.3.086.05.050.05 - YBM.1255: COMMUNICATIONS	1,241,096	2,500	1,000	1	2,501	1,238,595	
86 - YERBA BUENA MOSCONE STATION (YBM) CMODs	(1,642,919)	0	0	190,950	190,950	(1,833,869)	
1.3.086.86.040.02 - CMOD:YBM.1255: SITE UTILITIES UTIL	190,950	0	0	190,950	190,950	0	
1.3.086.86.040.08 - CMOD:YBM.1255: TEMPORARY FACILITIES	(1,833,869)	0	0	0	0	(1,833,869)	
1.3.086.96.020.03 - YBM.1255: AC: ALLOC CONTING	6,642,920	0	0	0	0	6,642,920	50
87 - SURFACE TRACKWORK AND SYSTEMS -WORK PACKAGE 1256	139,989,000	24,683,150	1,317,711	3,151,506	27,834,656	112,154,344	
1.3.087.09.010.02 - STS.1256: GUIDEWAY: AT-GRADE SEMI-EXCLUSIVE (ALLOWS CROSS TRAFFIC)	2,860,000	124,500	65,500	17,500	142,000	2,718,000	
1.3.087.09.010.06 - STS.1256: GUIDEWAY: UNDERGROUND CUT & CVR	10,274,450	0	0	197,501	197,501	10,076,949	
1.3.087.09.010.07 - STS.1256: GUIDEWAY: UNDERGROUN	16,510,764	948,983	16,333	(154,300)	794,683	15,716,081	
1.3.087.09.010.09 - STS.1256: TRACK DIRECT FIXATION	6,761,089	1,078,347	162,243	104,000	1,182,347	5,578,743	
1.3.087.09.010.10 - STS.1256: TRACK: EMBEDDED	0	0	0	0	0	0	
1.3.087.09.010.12 - STS.1256: TRACK: SPECIAL	4,449,637	80,000	10,000	767,000	847,000	3,602,637	
1.3.087.09.020.01 - STS.1256: AT-GRADE STATION	6,673,138	1,120,810	40,001	105,724	1,226,534	5,446,604	
1.3.087.09.040.02 - STS.1256: SITE UTILITIES, UTILITY RELOCA	17,509,893	6,022,558	140,001	368,689	6,391,247	11,118,646	
1.3.087.09.040.03 - STS.1256: HAZARDOUS MATERIALS	200,000	0	0	0	0	200,000	
1.3.087.09.040.04 - STS.1256: ENVIRONMENTAL MITIGA	50,000	0	0	0	0	50,000	
1.3.087.09.040.07 - STS.1256: AUTOMOBILE BUS ACCE	2,116,925	39,000	10,000	1	39,001	2,077,924	
1.3.087.09.040.08 - STS.1256: TEMPORARY FACILITIES	13,850,984	9,947,773	650,000	45,850	9,993,623	3,857,361	
1.3.087.09.050.01 - STS.1256: TRAIN CONTROL AND SIGNALS	27,543,451	3,418,268	87,021	850,664	4,268,932	23,274,519	
1.3.087.09.050.02 - STS.1256: TRAFFIC SIGNALS AND	4,485,368	1,177,972	100,022	455,075	1,633,047	2,852,321	
1.3.087.09.050.03 - STS.1256: TRACTION POWER SUPPL	9,911,014	559,640	24,042	143,000	702,640	9,208,374	
1.3.087.09.050.04 - STS.1256: TRACTION POWER DISTRIBUTION	6,099,675	165,300	12,549	250,800	416,100	5,683,575	
1.3.087.09.050.05 - STS.1256: COMMUNICATIONS	8,028,025	0	(0)	0	0	8,028,025	
1.3.087.09.050.07 - STS.1256: CENTRAL CONTROL	2,664,586	0	0	1	1	2,664,585	
87 - SURFACE TRACKWORK AND SYSTEMS (STS) CMODs	305,378	287,437	287,437	17,941	305,378	0	
1.3.087.89.040.02 - CMOD:STS.1256: SITE UTILITIES, UTILITY RELOCA	305,378	287,437	287,437	17,941	305,378	0	
1.3.087.99.020.01 - STS.1256: AC: ALLOC CONTING	4,694,621	0	0	0	0	4,694,621	51
141 - CONSTRUCTION ADMINISTATION	2,956,812	0	0	0	0	2,956,812	
1.3.141.97.080.04 - CONSTR.ADMIN:ALLOC CONTING	2,956,812					2,956,812	
142 - LEGAL/PERMITS	2,014,204	0	0	0	0	2,014,204	
1.3.142.01.080.06 - LGL.PRMTSF:LEGAL; PERMITS	2,014,204	0	0	0	0	2,014,204	
144 - STARTUP	8,300,329	0	0	0	0	8,300,329	
1.3.144.01.080.08 - STRT: STARTUP	6,941,907	0	0	0	0	6,941,907	
1.3.144.97.080.08 - STRTA: AC STARTUP ALLOC CONTIN	1,358,422					1,358,422	
151 - TEMPORARY LICENSE AGREEMENT	17,000	0	0	0	0	17,000	
1.3.151.01.080.06 - TEMP.LICPORARY LICENSE AGREEME	17,000	0	0	0	0	17,000	
170 - COMMUNICATIONS CONNECTIONS	5,757,629	0	0	0	0	5,757,629	
1.3.170.01.050.04 - COMM.CONNN:COMMUNICATION CONN	5,757,629	0	0	0	0	5,757,629	

SFMTA Municipal Transportation Agency

		BUDGET ACTUAL COSTS						
[A] Cost Account Description	[B]	[C]	[D]	[E]	<b>[F]</b>	[G]		
	September 2015		DDIOD	CUDDENT	CUDDENT	VADIANCE	COST	
	Budget	PRIOR MONTH Total	PRIOR MONTH	CURRENT	CURRENT	VARIANCE (B - F)	REPORT NOTES	
	(YOE)		Monthly	Monthly	Total	(2 1)	NUTES	
181 - AON RISK INSURANCE CS 163	18,113,750	18,798,132	0	0	18,798,132	(684,382)	,	
1.3.181.01.040.08 - AON.CS163 AON RISK INS.	18,088,750	18,773,132	0	0	18,773,132	(684,382)	)	
1.3.181.01.080.03 - AON.CS171 AON RISK INS. STUDY	25,000	25,000	0	0	25,000	0		
191 - FARE COLLECTION CONTRACTOR	5,400,000	0	0	0	0	5,400,000		
1.3.191.01.050.06 - FARE.CONSUL:FARE COLLECTION	5,400,000	0	0	0	0	5,400,000		
192 - THALES T&S CENTRAL CONTROL	487,972	50,000	0	0	50,000	437,972		
1.3.192.01.050.01 - THALES T&S ATCS	487,972	50,000	0	0	50,000	437,972		
202 - JOC2-022.0	63,938	0	0	0	0	63,938		
1.3.202.01.040.02 - JOC2-022:15&22 POTHOLING UTIL1 LGHT FNDS	63,938	0	0	0	0	63,938		
203 - JOC2-029.0	53,317	0	0	0	0	53,317		
1.3.203.07.040.02 - JOC0292-029: RELOCATE VAULTS-S	53,317	0	0	0	0	53,317		
302 - PG&E	1,988,173	2,749,912	0	0	2,749,912	(761,739)	l I	
1.3.302.03.050.03 - PGE PERMANENT POWER UMS	(2,350,000)	0	0	0	0	(2,350,000)	1	
1.3.302.03.050.03 - PGE POWER FEED UMS	2,959,826	115,690	0	0	115,690	2,844,136		
1.3.302.04.050.03 - PGE PERMANENT POWER CTS	(2,350,000)	0	0	0	0	(2,350,000)	1	
1.3.302.04.050.03 - PGE POWER FEED CTS	2,959,826	0	0	0	0	2,959,826		
1.3.302.05.050.03 - PGE PERMANENT POWER YBM	(2,368,540)	0	0	0	0	(2,368,540)	1	
1.3.302.05.050.03 - PGE POWER FEED YBM	3,125,222	2,634,222	0	0	2,634,222	491,000		
1.3.302.09.050.03 - PGE POWER FEED STS	11,839	0	0	0	0	11,839		
331 - BAY AREA RAPID TRANSIT (BART)	951,356	60,455	0	0	60,455	890,901		
1.3.331.01.080.04 - CM:SFMTA LABOR-ENG SVCS-IRP/BART/SF	0	33,152	0	0	33,152	(33,152)	)	
1.3.331.01.080.06 - CM: BAY AREA RAPID TRANSIT (BART) [122A]	951,356	27,304	0	0	27,304	924,052		
333 - AMERICAN PUBLIC TRANSP. ASSOCIATION (APTA) CS-APTA	146,500	54,612	0	0	54,612	91,888		
1.3.333.01.080.03 - APTA:APTA - IRP [2G]	46,500	27,304	0	0	27,304	19,196		
1.3.333.01.080.03 - APTA:APTA - IRP [2C]	100,000	27,308	0	0	27,308	72,692		
334 - BART FARE COLLECTION SYSTEM	700,000	0	0	0	0	700,000		
1.3.334.01.050.06 - BART:BART FARE COLLECTION EQP	700,000	0	0	0	0	700,000		
401 - ECONOMIC AND WORKFORCE DEVELOPMENT (EWD)	17,600	17,600	0	0	17,600	0		
1.3.401.01.080.04 - EWD: MAYORS OFFICE ECON DEV	17,600	17,600	0	0	17,600	0		
402 - DEPARTMENT OF TECHNOLOGY	242,371	237,534	0	0	237,534	4,837		
1.3.402.07.050.04 - DT:1UTL:COMM. CONNECTIONS	166,756	166,179	0	0	166,179	577		
1.3.402.08.050.04 - DT:2UTL:COMM.CONNECTIONS	75,615	71,354	0	0	71,354	4,261		
404 - DEPARTMENT OF BUILDING INSPECTION (DBI)	1,204,081	1,204,081	0	0	1,204,081	0		
1.3.404.01.080.06 - DPT OF BUILDING INSPECTION	1,204,081	1,204,081	0	0	1,204,081	0		
491 - FORM B - REIMBURSEMENT	(12,227,954)	0	0	0	0	(12,227,954)	l l	
1.3.491.02.040.02 - FORMB - CONTRACT 1252 UTILITY REIMBUR	(254,050)	0			0	(254,050)	52	
1.3.491.03.040.02 - FORMB - UMS:CONTRACT 1300 UTILITY REIMBURSEMENT	(528,370)	0			0	(528,370)	53	
1.3.491.04.040.02 - FORMB - CTS:CONTRACT 1300 UTILITY REIMBURSEMENT	(451,703)	0			0	(451,703)	54	
1.3.491.05.040.02 - FORMB - YBM:CONTRACT 1300 UTILITY REIMBURSEMENT	(100,000)	0			0	(100,000)	55	
1.3.491.07.040.02 - FORMB - CONTRACT 1250 UTILITY REIMBUR	(2,275,419)	0			0	(2,275,419)	57	

central cubway

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SFMTA Municipal Transportation Agency

	BUDGET		ACTUAI	L COSTS			
[A] Cost Account Description	[B] September 2015 Budget (YOE)	[C] PRIOR MONTH Total	[D] PRIOR MONTH Monthly	[E] CURRENT Monthly	[F] CURRENT Total	[G] VARIANCE (B - F)	COST REPORT NOTES
1.3.491.08.040.02 - FORMB - CONTRACT 1251 UTILITY REIMBUR	(7,618,412)	0			0	(7,618,412)	58
1.3.491.09.040.02 - FORMB - STS:CONTRACT 1300 UTILITY REIMBURSEMENT	(1,000,000)	0			0	(1,000,000)	59
TOTAL CONSTRUCTION PHASE	1,328,370,949	638,224,371	12,084,111	15,909,812	654,134,182	661,988,874	
1.4.091.01.070.01 - LRVS: LIGHT RAIL VEHICLES RFP [34B]	1,325,000	1,319,773	0	0	1,319,773	5,227	
1.4.091.01.070.01 - LRVS: LIGHT RAIL VEHICLES PROJECT MGT [68E]	827,132	827,132	0	0	827,132	0	
1.4.091.01.070.01 - LRVS: LRV PROCUREMENT ODC	25,000	0	0	0	0	25,000	
1.4.091.01.070.01 - LRVS: LRV PROCUREMENT	11,131,868	0	0	0	0	11,131,868	
1.4.091.97.070.01 - LRVA:AC: VEHICLES ALLOC CONTI	13,076,653					13,076,653	19
TOTAL VEHICLES	26,385,653	2,146,905	0	0	2,146,905	24,238,749	
1.5.015.01.060.01 - RE: EASEMENT ACQUISIT	400,000	322,939	0	0	322,939	77,061	1
1.5.015.01.060.01 - RE: REAL EST SITE ACQ	16,523,400	14,307,667	0	0	14,307,667	2,215,733	
1.5.015.01.060.01 - RE: REAL ESTATE	750,000	766,272	0	0	766,272	(16,272)	
1.5.015.01.060.01 - RE: REC & PARK MOU	6,987,624	6,987,624	0	0	6,987,624	0	
1.5.015.01.060.01 - RE:-DEPT OF TRANSPOR	2,686,000	2,686,000	0	0	2,686,000	0	
1.5.015.01.060.01 - RE:-LICENSES FEES	400,000	381,311	0	0	381,311	18,689	
1.5.015.97.060.01 - RE:A:AC: RE: REAL ESTATE ALLO	5,265,478	0			0	5,265,478	
1.5.023.01.060.01 - ATTY:REAL ES	2,212,882	2,678,858	52,870	0	2,678,858	(465,976)	
1.5.101.01.060.02 - RES.RELO: RELOCATION COST	1,275,200	1,289,701	0	0	1,289,701	(14,501)	
1.5.102.01.060.02 - COMM.RELO-RELOC COMMERCIAL	905,311	584,194	0	356,534	940,729	(35,418)	<u> </u>
TOTAL ROW, LAND, EXISTING IMPROVEMENTS	37,405,895	30,004,567	52,870	356,534	30,361,101	7,044,794	
90 - CONTINGENCY	84,322,397					84,322,397	
1.7.500.91.090.00 - UNALLOCATED CONTINGENCY	24,519,456					24,519,456	60
TOTAL ALLOCATED CONTINGENCY	59,802,941					59,802,941	00
						-	
TOTAL PROJECT COST	1,578,300,001	830,847,736	12,074,751	16,266,346	847,114,082	718,938,028	





7.1 P	Program Project Budget
1	The Central Subway Project (CSP) (SFMTA Capital Program CPT 544) is defined in the FTA-SFMTA October 2012 Full Funding
	Grant Agreement with a budget of \$1.578 billion.
2	The TBM Retrieval Shaft Relocation (SFMTA Capital Program CPT 690) is one of four capital projects that is related to CSP. These
	projects are reported for background information as needed outside of the main body of the Project Monthly Progress Report.
3	The Chinatown Plaza (CPT 718) is for Chinatown Station enhancement capital project. The project has funding outside of the Central
3	Subway Project. The construction is carried out in Contract 1300 Contract Modifications.
4	CPT 665 is a Real Estate project to relocation in compliance with California regulations for business relocations but outside of the
4	Central Subway Project as defined by the FTA FFGA.
5	CPT 705 is an SFMTA capital improvement between the Agency and community stakeholders outside of the Central Subway
5	Project.
6	Utility company reimbursements (Form B) result in funds received for work carried out on behalf of utilities concurrent to CSP work to
0	achieve efficiencies.
7	PG&E Power Feed reimbursement funds are the refunds from PG&E when completion of Stations construction and switch to
'	permanent power.
8	BART Elevator funds are reimbursements for work carried out on behalf of BART to install BART Powell Street Station elevator.
9	The Tutor Perini - CAD Files funds are the result of payments by the contractor for project documentation not included in the
9	contract.
10	SFPUC Sewer Main funds are reimbursements for work carried out on behalf of San Francisco PUC (includes 10% construction
10	contingency).
11	SFPUC 24" Water Main funds are reimbursements for work carried out in Contract 1252 Contract Modification #41 on behalf of San
11	Francisco PUC (includes construction management cost).
12	Traffic Effectiveness Project funded Contract Modification #40 for Culvert, Street & Sidewalk Restoration in North Beach are
12	reimbursements for work carried out in Contract 1252 on behalf of SFMTA SSD.
13	SFPUC North Beach 24" Water Main Additional Work funds are reimbursements for work carried out in Contract 1252 Contract
13	Modification #48 on behalf of San Francisco PUC (includes construction management cost).

	7.4 C	Contingency Management Trend Report
		In Oct 2014 Report, updated Contract 1250 contract cost to segregate contract amount and contract modification amount. Note that September 2013 Supplemental Authorized Contingency "column f" did not include completed contract.
ſ		In Oct 2014 Report, updated Contract 1251 contract cost to segregate contract amount and contract modification amount. Note that September 2013 Supplemental Authorized Contingency "column f" did not include completed contract.



16	Contract 1252 Original Contract Value "column a" and Original Congency "column f" did not match September 2013 Supplemental due to Supplemental were used the revised value to reflet Contract Modifications #3-#18. Reduced Contract 1252 contingency to reflect CMod #20 for retrieval shaft relocation cost \$5.15M funded by CPT690, CMod #40 for Culvert, Street & Sidewalk Restoration cost \$694,651 funded by Traffic Effectiveness Project, and CMod #41 for install 24" Water Main in North Beach cost \$328,860 funded by SFPUC. In August 2015 report, release \$15M CN1252 Tunnel assigned contingency to program unallocated contigency.
17	BART Elevator scope and SFPUC Sewer Main scope is in Contract 1300; effort will be funded by BART. In January 2015 Report, corrected Station Contract value to match awarded amount.
18	In April 2015 report, real estate budget stated in RAMP Rev5 is \$36.7M, including \$1M contingency. The cost workbook ROW & contingency budget reflects this with \$36,511,799 and \$1,000,000 respectively. Revised costbook ROW budget & contingency to be \$37,511,799. The \$4,265,478 Caltrans lease savings is allocated to ROW allocated contingency.
19	In Dec 2014 Report, redistributed LRV budget to reflect recent firm bid cost per vehicle (\$3,327,250/unit) from vehicle procurement contract award. (SFMTA Board meeting 15JUL14, calendar item #11). Vehicle line item total budget remains unchanged, redistributed fund by reducing base amount to \$13,309,000, column "c" and increased allocated contingency column "h", by same amount.
20	In Oct 2014 Report, made two corrections: i) revised Professional Services, Original Contract Value "column a" from \$310,518,041 to \$310,618,041, ii) revised Original Congency. "column f" unallocated contingency from \$3,883,481 to \$3,845,945. In April 2015 report, used \$500K program contingency for CS-175 Bayland Soil Process contract. In August 2015 report, added \$15M from Contract 1252.
21	The total Central Subway Project budget of \$1.578 billion, based on the October 2012 FFGA with the FTA, is the primary MPR report reference.
22	Estimate at Completion is shown at Column "e".
23	Estimate at Completion vs. Budget variance is shown at Column "k".

#### 7.5 Contract Modification/Trend Log - Contract 1300 Stations

24 Reported all trend cost for Contractor Change Order Requests and Proposed Contract Change and applied probability to forecasted trends.

7.6 Budget Revisions: Report Sorted by Co	onstruction Packages
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In Dec 2014 Report, reduced CN1252 allocated contingency by \$28K to excute Contract Modification #46, see Report 7.5 Detail Contingency Usage Report. In August 2015 report, release \$15M CN1252 Tunnel assigned contingency to program unallocated contigency.

26 Program contingency increased by \$500,000. Refer to Report Notes #20.

Program contingency increased by \$5,265,478. Refer to Report Notes #18.



	In Dec 2014 Report, redistributed LRV budget to reflect recent firm bid cost per vehicle (\$3,327,250/unit) from vehicle procurement
28	contract award. (SFMTA Board meeting 15JUL14, calendar item #11). Vehicle line item total budget remains unchanged,
	redistributed fund by reducing base amount to \$13,309,000 and increased allocated contingency by same amount.
20	In April 2015 report, program contingency decreased by \$500,000. Refer to Reports #20. In August 2015 report, release \$15M
	CN1252 Tunnel assigned contingency to program unallocated contigency.

7.9 Detail Monthly Expenditure Report

Phase 1 Preliminary Engineering				
30	Famis cost for Preliminary Engineering (PE) is \$48,210,903.71. Cost Report for Preliminary Engineering (PE) is \$46,542,060. Some			
30	Design cost reported in Famis were moved to Design Phase, refer to Notes #19 and #20.			

Phas	Phase 2 Design Phase				
31	Famis cost adjustment to transfer Project Management cost from July 2013 to Phase 3 Construction Phase.				
32	Famis Phase 1 PE Index Code: 357906.CPT5441112 cost is \$10,222,939				
32	\$8,949,300 is reported in Cost Report Phase 1 PE and the balance of \$1,273,639 is reported in Phase 2 Design.				
	1.2.021.01.080.03 - FD:CTYCO-ARTS COMMISSION [357909ART001.CPT5441227]:				
	FAMIS: \$1,425,167				
33	Cost Report: \$1,425,167 cost is reported in Phase 2 Design, 1.2.021.01.080.03				
	Cost Transfer: Remaining cost is reported in Phase 3 Construction, 1.3.021.01.080.03 - ARTS:CTYCO-ARTS COMMISSION				
	[357909ART001.CPT5441227]				
	1.2.055.01.080.02 - FD:ODCs - 651 BRANNAN STREET [35CPT5441241.CPT5441241]:				
	FAMIS: \$2,294,910				
34	Cost Report: \$2,294,910 1.2.055.01.080.02				
	Cost Transfer: Future costs to be allocated to 1.3.055.01.080.02 - FD:ODCs - 651 BRANNAN STREET				
	[35CPT5441241.CPT5441241]				
	1.2.063.01.080.03 - AECOM.CS149 OM-EPC JV CS149-PM [68CPT544133D.CPT544133D]:				
35	FAMIS: \$4,698,167				
55	Cost Report: \$4,698,167 on 1.2.063.01.080.03				
	Cost Transfer: Future costs to 1.3.063.01.080.03 - AECOM.CS149 OM-EPC JV CS149-PM [68CPT544133D.CPT544133D]				
36	AVA Cost \$395,204 is reported in Phase 2 Final Design 1.2.066.01.080.03				
	1.2.071.01.080.02 - FD:FINAL DESIGN-DP1 [35CPT5441232.CPT5441232]:				
37	FAMIS: \$5,608,147				
57	Cost Report: \$5,469,336				
	Cost Transfer: \$138,811 to 1.3.071.01.080.04 - FD:FINAL DESIGN-DP1 [35CPT5441232.CPT5441232]				



	1.2.072.01.080.02 - FD:FINAL DESIGN-DP2 [35CPT5441233.CPT5441233]:
	FAMIS: \$26,268,511
38	COST REPORT: \$26,220,609
	COST TRANSFER: \$47,902 to 1.3.072.01.080.04 - FD:FINAL DESIGN-DP2 [35CPT5441233.CPT5441233]
	1.2.073.01.080.02 - FD:FINAL DESIGN-DP3 [35CPT5441236.CPT5441236]:
39	FAMIS: \$11,502,372
	COST REPORT: \$11,432,312
	COST TRANSFER: \$70,060 to 1.3.073.01.080.04 - CM: DP3 [35CPT5441236.CPT5441236]
Phas	e 3 CONSTRUCTION PHASE
	1.3.021.01.080.03 - ARTS:CTYCO-ARTS COMMISSION [357909ART001.CPT5441227]:
40	FAMIS: \$1,525,982
40	Cost Report: \$1,425,167 1.2.021.01.080.03
	Cost Transfer: any future costs to 1.3.021.01.080.03
	1.3.055.01.080.02 - FD:ODCs - 651 BRANNAN STREET [35CPT5441241.CPT5441241]:
41	FAMIS: \$2,294,910
	Cost Report: \$2,294,910 1.2.055.01.080.02 - FD:ODCs - 651 BRANNAN STREET [35CPT5441241.CPT5441241]
	Cost Transfer: Future costs to be allocated to 1.3.055.01.080.02
	1.3.063.01.080.03 - AECOM.CS149 OM-EPC JV CS149-PM [68CPT544133D.CPT544133D]:
42	FAMIS: \$4,698,167
.2	Cost Report: \$4,698,167 on 1.2.063.01.080.03
	Cost Transfer: Future costs to 1.3.063.01.080.03 - AECOM.CS149 OM-EPC JV CS149-PM [68CPT544133D.CPT544133D]
43	Used \$500K program contingency for CS-175 Bayland Soil Process contract. Refer to Report Notes #20.
	1.3.071.01.080.04 - FD:FINAL DESIGN-DP1 [35CPT5441232.CPT5441232]:
44	FAMIS: \$5,608,147
	Cost Report: \$5,469,336
<b> </b>	Cost Transfer: \$138,811 to 1.3.071.01.080.04 - FD:FINAL DESIGN-DP1 [35CPT5441232.CPT5441232]
	1.3.072.01.080.04 - FD:FINAL DESIGN-DP2 [35CPT5441233.CPT5441233]:
45	FAMIS: \$26,268,511
- 10	COST TRANSFER: \$47,902 to 1.3.072.01.080.04 - FD:FINAL DESIGN-DP2 [35CPT5441233.CPT5441233]
	Contract 1251 Final cost is \$20,794,582.
	In July 2015 Report, used Contract 1300 Contractor schedule to report budget and actual cost. The Standard Cost Categories
47a	(SCC) allocation changed from previous reports. In August 2015 Report, adjusted some of Contract 1300 Contractor SCC
47	assignment to match most of previous SCC assignment.
47	Revised Contract 1252 allocated contingency SCC code from 040.08 to 010.07.



48	Revised Contract 1300/UMS allocated contingency SCC code from 040.08 to 020.03.
49	Revised Contract 1300/CTS allocated contingency SCC code from 040.08 to 020.03.
50	Revised Contract 1300/YBM allocated contingency SCC code from 040.08 to 020.03.
51	Revised Contract 1300/STS allocated contingency SCC code from 040.08 to 020.01.
52	Revised Form B Reimbursements SCC code from 900.01 to 040.02
53	Revised Form B Reimbursements SCC code from 900.01 to 040.02
54	Revised Form B Reimbursements SCC code from 900.01 to 040.02
55	Revised Form B Reimbursements SCC code from 900.01 to 040.02
56	Revised Form B Reimbursements SCC code from 900.01 to 040.02
57	Revised Form B Reimbursements SCC code from 900.01 to 040.02
58	Revised Form B Reimbursements SCC code from 900.01 to 040.02
59	Revised Form B Reimbursements SCC code from 900.01 to 040.02
	Increase Program contingency \$1,023,508. Refer to Report Notes #11 and #12. In April 2015 report, program contingency
60	decreased by \$500,000. Refer to Report Notes #20. In August 2015 report, release \$15M CN1252 Tunnel assigned contingency to
	program unallocated contigency.



# Appendix B

### **DETAIL SCHEDULE REPORTS**

#### SCHEDULE HIGHLIGHTS

The Master Project Schedule (MPS) below includes progress through September, 2015.

The MPS shows the forecast the Revenue Service Date of May 6, 2019 due to 9 Months delay shown in Contractor September Update Schedule.

The controlling critical (longest) path of the MPS runs through CTS Excavation succeeded by STS Startup & Testing, Commissioning and Pre-Revenue Activities to the Baseline Finish and Revenue Service Date. See Appendix B – Longest Path. The latest schedule shows the longest path has changed from Union Square Station (UMS) to the Chinatown Station (CTS). The 1300 Contractor has re-sequence UMS Platform Station Jet Grout Operation and was able to partially recover some time in UMS Station. This adjustment in the Critical Path will continue as the 1300 Contractor incorporate their schedule recovery options and change their construction work plans.

The Schedule Contingency is reduced to zero on the critical path of the MPS, which is below the Minimum Schedule Contingency level of 6 months. A re-evaluation is now required, utilizing the updated Contract 1300 Schedule to justify any revisions to current minimums.

The 1300 Contractor submitted ten (10) Schedule Updates from December 2014 to September 2015. The September 2015 Schedule Update is currently under review shows 9 Months slippage of progress on the Critical Path. Contractor has been directed to develop a Recovery Schedule as required by Contract and correct out-of-sequence and Retained Logic driving many unrealistic forecast dates. The 1300 Contractor continues address key critical activities to recover lost time and improve schedule performance. Review of schedule update as well as identifying recovery options is ongoing.

#### Contract 1300 - WP1253 UMS / WP1254R CTS / WP1255 YBM / WP1256 STS:

The Contractor, Tutor Perini Corporation's (TPC) baseline schedule is incorporated into the master program. The preliminary Tutor Perini Corporation's (TPC) August schedule is used in August Report. Anticipated to use Contractor, Tutor Perini Corporation's (TPC) approved schedule for September Report that incorporates all SFMTA schedule comments.

Contract 1300 has several interface points with Contract 1252. The timing of these interface points correlate to when the NTP was issued for Contract 1300. This table represents the current status of these interface points with respect to the Contract 1252 update. The 1300 Contractor is not ready to access the tunnel used by Contract 1252. The tunnel access from Contract 1252 is not expected to impact Contract 1300. The current completion date of the Contract 1252 is shown in the table below.

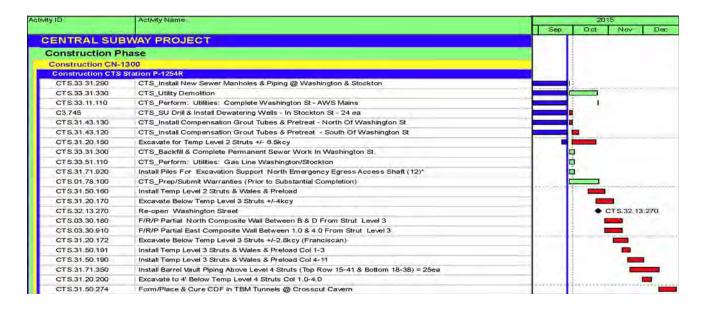
Interface Points	CN1300 Requirement	CN 1252 APR15 Update	Variance		
Tunnel Portal Completion 1252 Tunnel Final Completion	24-Sep-15	15-May-15	132	CD	

#### Work Package P-1254R (CTS) has performed the following work this month:

- Install dewatering wells on Stockton St
- Drill compensation grout hole from inside headhouse and precondition under buildings
- Finish drilling inclinometers on Stockton Street
- Excavate to El 70, start installing bracing level 2
- Continue relocating ductbank on Stockton Street

#### Work Package P-1254R (CTS) will perform the following work next month

- Finish installing dewatering wells on Stockton Street
- Excavate and install temp level 3 bracing beams
- Finish drilling and installing compensation grout tubes and preconditioning
- Finish installing level 2 bracing
- Install horizontal inclinometers and MBX's above crosscut crown
- Install weep hole through slurry walls



#### Work Package P-1253 (UMS) has performed the following work this month:

- Deck and rebar installation at Ellis Annex and in the North Concourse
- Discontinued grouting on the east and west sides of Stockton Street

#### Work Package P-1253 (UMS) will perform the following work next month:

- Street closures: Stockton Street between Ellis and Post and Ellis halfway, Stockton to Powell. Alternate lane configuration on O'Farrell at Stockton. Narrowing of Geary to 1 lane at Stockton.
- Total closure expected for several days, at night hours, for Geary/Stockton Intersection.
- Union Square Garage demolition and abatement. Concrete installation.

- North Concourse install decking, concrete for roof deck and reroute of ductbanks and waterline
- Production and test jet grouting on the east and west sides of Stockton Street discontinued at month end until after moratorium
- Concrete installation at Ellis Street Annex
- Geary Street portion of North concourse sewer notch and roof installation should be complete

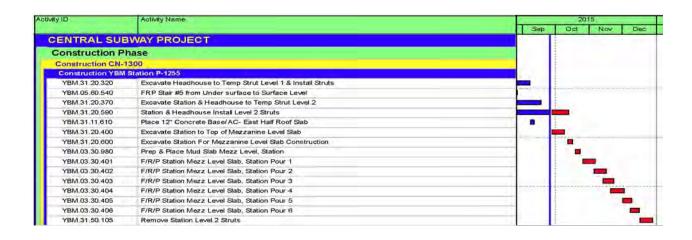
y ID	Activity Name		2016	
ENTRAL SUR	WAY PROJECT	Sep	Oct Nov	
			-	
Construction Ph	ase		+	
Construction CN-13			4	
Construction UMS S		- 1		
UMS.31.32.105.4b	UMS_Jet Grout Stockton St East/West Side for Water Seal Rig#1 Pour 4B	-		
UMS.12.10.9010	UMS_Initiate Art work Project Kick Off meeting- Suspended Stainless Scroll Sculpture- Platform Level		1	
UMS.31.23.720	UMS_Begin Dewatering to 10 Ft Below Bottom of Excavation			
UMS.31.41.0240	UMS_Install Sheet Piles @ Access Shaft #2 (O'Farrell)*			
UMS.02.41.0150	UMS_Demo South Entrance For BART Elevator Powell St Station			
UMS.03.30.100.2a	UMS_Formwork/Rebar Roof Deck and Pile Cap - Sta 131+26 to Sta 131+62	10000		
UMS.03.30.105.1b	UMS_Place Concrete - Roof Deck and Pile Cap - Sta 131+98 to Sta 132+34		1	
UMS.31.50.0250	UMS_Excavate_Lag & Support @ Access Shaft #2 (O'Farrel)			
UMS.03.30.105.2a	UMS_Place Concrete - Roof Deck and Pile Cap - Sta 131+26 to Sta 131+62		1	
UMS.03.30 110.1b	UMS_Cure Concrete - Roof Deck and Pile Cap - Sta 131+98 to Sta 132+34			
UMS.31.50.0040	UMS_Install Bracing & Shoring for Walls & Slabs			
UMS.03.30.110.2a	UMS_Cure Concrete - Roof Deck and Pile Cap - Sta 131+26 to Sta 131+62			
UMS.31.32.100.4b	UMS_Jet Grout Stockton St East/West Side for Water Seal Rig#1 Pour 4B			
UMS.07.14.100.1b	UMS_Install Waterproofing System/Grout Cover - Roof Deck and Pile Cap - Sta 131+98 to Sta 132+34		11	
UMS:07.14.100.2a	UMS_Install Waterproofing System/Grout Cover - Roof Deck and Pile Cap - Sta 131+26 to Sta 131+62		1 I.	
UMS.05.12.100.2b	UMS_Set Bridging Support Skid - Sta 132+34 to Sta 132+70	-	1.0	
UMS.31.20.100.2b	UMS_Excavate For Roof Section & Support Utilities (Where Required) Sta 132+34 to Sta 132+70		1 B	
UMS 33 31 0100	UMS_ Install New 18" Sewer Main - South Side Ellis St		-	
UMS.31 20.105.1b	UMS_Backfill Roof Section To Subgrade & Move Skid - Sta 131+98 to Sta 132+34			
UMS.31.20.101.2b	UMS_As-Build Beam Connections / Fabricate / Deliver Roof Beams - Sta 132+34 To Sta 132+70		1 I I I I I I I I I I I I I I I I I I I	
UMS.31.20.105.2a	UMS_Backfill Roof Section To Subgrade & Move Skid - Sta 131+26 to Sta 131+62		a Barrer	
UMS.05.12.100.3a	UMS_Set Bridging Support Skid - Sta 131+62 to Sta 131+98			
UMS.31.32.110.5b	UMS_Jet Grout Stockton SI/O'Farrel East Side for Water Seal Rig#2 12ea Piles w/e #1-3			
UMS.31.50.0260	UMS_Install Temporary Lid @ Access Shaft #2 (O'Farrell)			
UMS.31.20.100.3a	UMS_Excavate For Roof Section & Support Utilities (Where Required) Sta 131+62 to Sta 131+98			
UMS.31.20.101.3a	UMS_As-Build Beam Connections / Fabricate / Deliver Roof Beams - Sta 131+62 To Sta 131+98		i 💼	
UMS.05.12.105.2b	UMS_Install Roof Deck Beams - Sta 132+34 to Sta 132+70			
UMS.33.11.0100	UMS_ Install New 8" Water Main - South Side Ellis St		-	
UMS.05.30.100.2b	UMS_Install Metal Roof Decking - Sta 132+34 to Sta 132+70		1 1	
UMS.05.12.106.2b	UMS_Erect Excavation Access Shaft Steel - Sta 132+50			
UMS.05.12.105.3a	UMS_Install Roof Deck Beams - Sta 131+62 to Sta 131+98			
UMS.03.30.100.2b	UMS_Formwork/Rebar Roof Deck and Pile Cap - Sta 132+34 to Sta 132+70			
UMS.31.50.0560	UMS_Install Spiling @ Access Shaft #2 & Excavate to Pile Face			
UMS.05.30.100.3a	UMS_Install Metal Roof Decking - Sta 131+62 to Sta 131+98		1	
UMS.31.32.0070	UMS_Jet Grout Under South Wall Footings - USG		-	
UMS.03.30.110.2b	UMS_Cure Concrete - Roof Deck and Pile Cap - Sta 132+34 to Sta 132+70		1	

#### Work Package P-1255 (YBM) has performed the following work this month:

- Traffic flowing on east side of 4th Street with west side work area closed for construction
- Backfill over portion of headhouse beneath Clementina Street is in progress
- Utility installation at 4th and Howard (sewer mains, water lines, and electrical duct bank) is in progress
- Headhouse and station box temporary bracing strut level 2 installation is in progress
- Archaeological monitoring by spot checking is in progress

#### Work Package P-1255 (YBM) will perform the following work next month:

- Continue utility installation on 4th Street north of the north headwall and on Folsom Street
- Continue excavation and temporary bracing installation in headhouse and station box
- Begin placement of mezzanine level slab within station box (beneath 4th Street)



#### Work Package P-1256 (STS) has performed the following work this month:

- Continue Muni ductbank installation
- Continue 78" sewer rehabilitation
- Continue 36" sewer force main
- Continue Auxiliary Water Supply System (AWSS) installation
- Continue water line work
- Continue AT&T crossing work
- Start 4th/King Special Trackwork
- Start tunnel prep work

#### Work Package P-1256 (STS) will perform the following work next month:

- Continue 78" sewer rehabilitation
- Continue MRY ductbank and vault installation
- Continue 36" sewer force main
- Continue AWSS installation
- Continue waterline installation
- Continue AT&T crossing work
- Start 4th/King sewer structure modification
- Continue tunnel prep work

CSP-CMPS-0915 Data Date: September 30, 2015

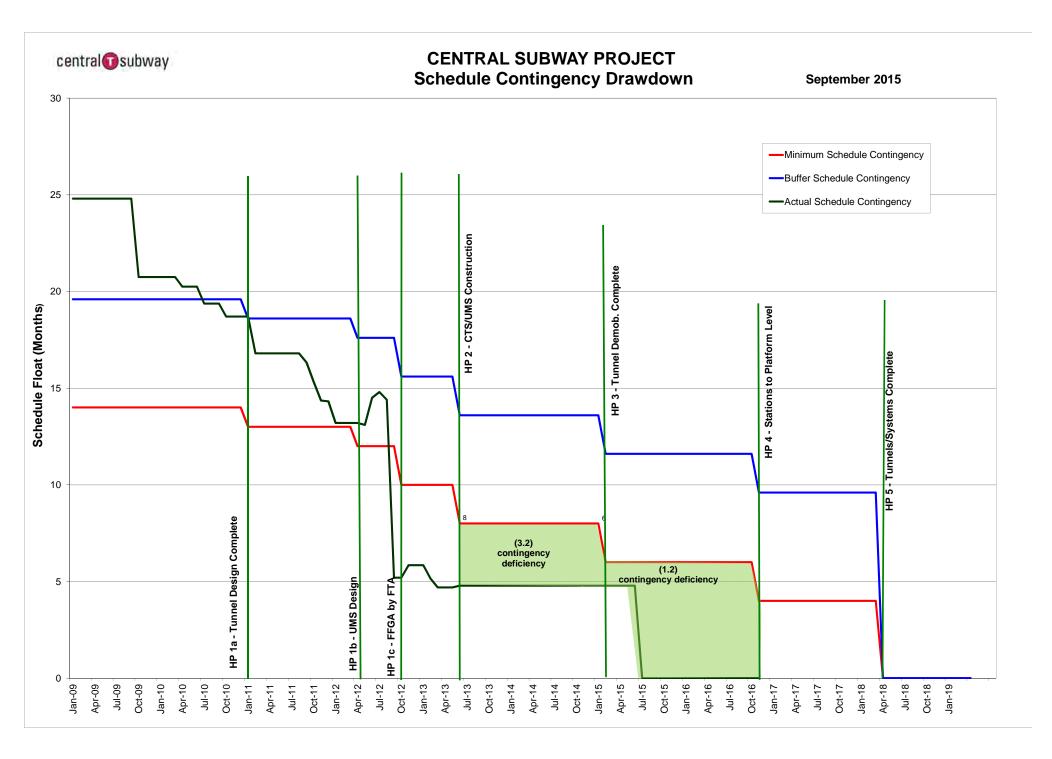
ity ID	Activity Name	-		115	_
		Sep	Oct	Nov	De
	WAY PROJECT				
Construction Pl	hase				
<b>Construction CN-1</b>	300				
Construction STS I	P-1256		1		
ST S.33.31 220	STS_Install New 10" Sewer Piping & Catch Basins - In West Side Bryant St		1	0	
STS.33.71.200	STS_Pothole: Utilities:Pothole for MRY Manholes On/Off - 4th Street				
STS.26.05.3730	STS_Pothole Utilities: MRY Ductbanks On/Off 4th Street	_			
ST S.33.71,120	STS_Install: Utilities: MRY MH 1893 - Freelon St	-		1	
STS.26.05.205	STS_Install: Utilities: MRY Ductbank MH 1891 To MH 1890 - Bryant/4th		1		
STS.33.71.160	STS_Install: Utilities: MRY Ductbanks MH 1894To 1897 - Brannan St				
ST S.33.11.105	STS_Instalt Utilities: Water Distribution 8" Main - 4th St Bryant To Welsh St				
STS.33.11.100	STS_Install: Utilities: Auxiliary Water Supply 12" Main 4th St. Through Bryant St. Intersection				
STS.33.11.300	STS_Install: Utilities: Water Distribution 8" Main - 4th St Weish St to Freelon St.	-			
STS.33.11.120	STS_Install: Utilities: Auxiliary Water Supply 12" Main 4th St (Bryant St To Welch St)		i 💻 /		
STS.34.11.215	Construct Temporary Crossover Platform - King Street		1		
STS,34.23,2610	STS_Instal: OCS System - Install OCS Trolley Wire In 4th St/King Street - Intersection				
STS.34.11.220	#1 Shut down- Install Trackwork - King Street & 4th Street- SP 5,6,7,8,11,12,13, tie in with existing tracks		1		
STS.34.42.0100	STS_Install: Surface Signaling - Switches 11A & 11B - 4th/King				
ST 5.34.42,2450	STS_Install: Surface Signaling - Install VTS Conduit & Wiring - 4th/King St		1		
STS.33.11.130	STS_Install: Utilities: Auxiliary Water Supply 12" Main 4th St (Through Welch St Intersection)				
ST 5.33.11.360	STS_Install: Utilities: Track Drainage 4th St (Townsend St To King St Tie-In)		E	-	
STS,33.11,140	STS_Install: Utilities: Auxiliary Water Supply 12" Main 4th St (Welsh St To Freelon St))				
STS.34.42.1080	STS_Install: Security - SB Portal Intrusion Devices		8		
STS.26.05.2720	STS_Install: OCS System - Install OCS Poles In Portal				
STS.26.05.120	STS_Instalt Utilities: 230Kv Electrical Transmission Casing - Assist PG&E - 4th St @ Bryant Intersection				
STS.33.11.340	STS_Install: Utilities: Track Drainage 4th St (Brannan St To Bluxome St)	1			
ST S.26.05.0430	STS_Install: Tunnel Electrical - Lighting Fixtures - NB Portal To Moscone				
STS.33.51.150	STS_Pothole: Utilities: Pothole for Gas Distribution				
STS.01.78.100	STS_Prep/Submit Warranties (Prior to Substantial Completion)		-		
STS.01.76.380	STS_Conduct Preconstruction Water Main Condition Inspections				
STS.33.11.310	STS_Instalt_Utilities: Water Distribution 8" Main - 4th St Freelon St. Brannan St.				
ST 5.33.11.350	STS_Install: Utilities: Track Drainage- 4th St (Bluxome St To Townsend St)				
STS.26.05.0810	STS_Install: Tunnel Electrical -Lighting Fixtures - NB Moscone to Union Square				
STS.26.05.215	STS_Install: Utilities: MRY Ductbanks MH 1890 to Existing DB @ Sta 169+00 - 4th Street				
ST S.33.11.270	STS_Install: Utilities: Sewer: Casing for 10" Force Main - 4th St Sta @ Brannan St Intersection				
STS.33.31.420	STS_Install New CB's Manhole, 10" & 15" Sewer Piping @ 4th St/Townsend - West Side				
STS.33.11.320	STS_Install: Utilities: Water Distribution 8" Main - 4th St Brannan St to Bluxome				
ST S.33.31.260	STS_Install New 18" Sewer Lateral In Welsh St To Future 48" Manhole		T	1	
STS.33.31.330	STS_Install New Sewer Laterals & Sleeves West Side 4th Street - Brannan to Bluxome				
STS.26.05.1190	STS_Install: Tunnel Electrical - Lighting Fixtures - NB Union Square to Chinatown			-	

#### SCHEDULE REVISIONS

The 1300 Contract September 2015 Schedule Update was added to the Central Subway Project Master Schedule.

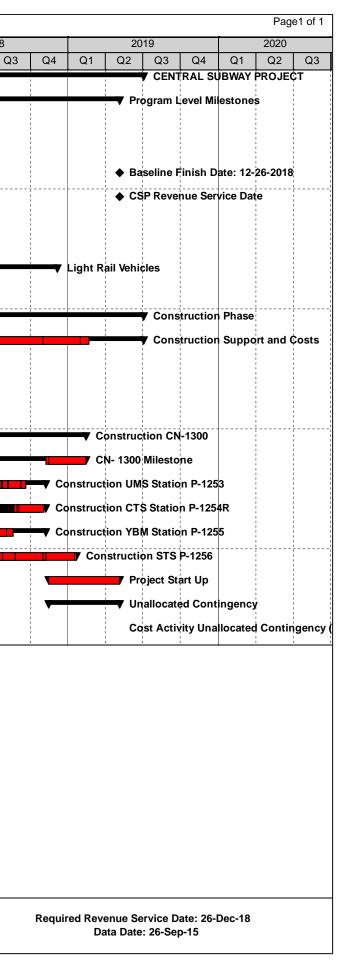
#### LIST OF SCHEDULE REPORTS

- 1.1. Schedule Contingency Drawdown
- 1.2. Master Summary Schedule
- 1.3. Program Critical Path Schedule
- 1.4. Construction Contract Summary Schedule
- 1.5. Detail Schedule for Remaining Work



ivity ID A	Activity Name	Original Duration	Start	Finish	15				016			20					018
					Q3	Q	4 Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	G
CENTRALS	SUBWAY PROJECT	4081	03-Jun-03 A	02-Jul-19		1			1	1		1	1			1	
Program Le	vel Milestones	4143	03-Jun-03 A	06-May-19		1		1	1	1			1	1		1	-
PJD1000 C	Central Subway Project Start	0	03-Jun-03 A						1	1		-					
MS0004A T	unnel Excavation Complete - Project Milestone #4A	0		05-Sep-14 A	nplete	Pro	ject Milest	one #4A					   	1			
MS0019 E	Baseline Finish Date: 12-26-2018	0		06-May-19*				- - - -	     	1			     				
MS0009 C	CSP Revenue Service Date	0		06-May-19*													$\frac{1}{1}$
Preliminary	Engineering Phase	2661	03-Jun-03 A	07-Jan-10 A				- - - -	1 1 1 1				1 1 1 1	1 1 1 1			
Final Desigr	1	1811	08-Jan-10 A	17-Jun-13 A				- - - -	1 1 1				1 1 1 1	1			
Light Rail V	ehicles	2060	15-Apr-13 A	04-Dec-18		:		-	1 1 1	1		1	1 1 1			1	-
Real Estate		3130	01-Aug-08 A	30-Sep-15		Re	al Estate										
Constructio	n Phase	2391	04-Jan-10 A	02-Jul-19		- <mark>+</mark>						+ 	     				1 1 1
Construction	Support and Costs	2732	04-Jan-10 A	02-Jul-19		1											-
Construction	utility Contract #1- MOS & Portal CN-1250	505	04-Jan-10 A	23-May-11 A					1 1 1								
Construction	utility Contract #2 - UMS CN-1251	643	12-Jan-11 A	15-Oct-12 A					     								
Construction	n Tunnels CN-1252	1415	08-Jun-11 A	01-Oct-15	-	¢ co	onstructio	n Tunne	ls CN-1	252			1 1 1 1	1			
Construction	n CN-1300	1512	03-Jun-13 A	13-Feb-19		- - !											<u>.</u>
CN- 1300 Mil	estone	1422	17-Jun-13 A	13-Feb-19				1	1	1		1	,   			1	-
Construction	UMS Station P-1253	1388	17-Jun-13 A	08-Nov-18	<b>—</b>												
Construction	CTS Station P-1254R	1359	17-Jun-13 A	08-Nov-18	<b>—</b>												
Construction	YBM Station P-1255	1512	10-Jun-13 A	08-Nov-18	<u> </u>												
Construction	) STS P-1256	1440	03-Jun-13 A	21-Jan-19													¦
Project Start		115	15-Nov-18	06-May-19					1	1							
	Contingency	115	15-Nov-18	06-May-19					1	1						1	-
									1								
	Cost Activity Unallocated Contingency (LOE) - 1.7.500.99.090.00 - Contingency	115	15-Nov-18	06-May-19					1 1				 				

SFMTA Central Subway Project	
Master Project Schedule	
Summary Schedule - September 2015	
	1



ivity ID	Activity Name	Origina	Start	Finish	Total	Page 1 of 3           15         2016         2017         2018         2019         2020
		Duration			Float	Q3     Q4     Q1     Q2     Q3     Q4     Q1     Q2     Q3     Q4     Q1     Q2     Q3     Q4     Q1     Q2     Q3     Q4     Q1     Q2     Q3     Q4     Q1     Q2     Q3     Q4     Q1     Q2     Q3     Q4     Q1     Q2     Q3     Q4     Q1     Q2     Q3     Q4     Q1     Q2     Q3     Q4     Q1     Q2     Q3     Q4     Q1     Q2     Q3     Q4     Q1     Q2     Q3     Q4     Q1     Q2     Q3     Q4     Q1     Q2     Q3     Q4     Q1     Q2     Q3     Q4     Q1
CENTRAL SU	BWAY PROJECT	1400	12-Dec-13 A	06-May-19	-90	
Program Level	I Milestones	115	15-Nov-18	06-May-19	-90	
HIdPt5	Systems Complete	0		15-Nov-18	-90	♦ Systems Complete
MS0019	Baseline Finish Date: 12-26-2018	0		06-May-19*	-90	
MS0009	CSP Revenue Service Date	0		06-May-19*	-90	CSP Revenue Service Date
<b>Construction</b>	Phase	1400	12-Dec-13 A	06-May-19	-90	
<b>Construction CN</b>		1337	12-Dec-13 A	05-Feb-19	-142	
CN- 1300 Milestor	ne	58	07-Nov-18	05-Feb-19	-142	
MS-10	Substantial Completion - 1,700 Calendar Days (SP-4.B)	C		07-Nov-18*	-270	◆ Substantial Completion - 1,700 Calendar Day
C.Punch	Closeout Punchlist/Remaining Work	90	07-Nov-18	05-Feb-19	-270	Closeout Punchlist/Remaining Work
BUF1017	STS Buffer Float- (0)	C	15-Nov-18	15-Nov-18	-90	I STS Buffer Float- (0)
STS1500	CN 1300 Substantial Completion	C	•	15-Nov-18	-127	CN 1300 Substantial Completion
MS-20	Final Completion - 1,790 Calendar Days (SP-4C)	0	•	05-Feb-19*	-270	◆ Final Completion - 1,790 Calendar Days
Construction CT	S Station P-1254R	1237	12-Dec-13 A	06-Jul-18	-197	
CTS.33.31.290	CTS_Install New Sewer Manholes & Piping @ Washington & Stockton	10	12-Dec-13 A	28-Sep-15	-184	CTS_Install New Sewer Manholes & Piping @ Washington & Stockton
CTS.31.43.130	CTS_Install Compensation Grout Tubes & Pretreat - North Of Washington St	10	10-Aug-15 A	30-Sep-15	-193	CTS_Install Compensation Grout Tubes & Pretreat - North Of Washington St
CTS.31.43.120	CTS_Install Compensation Grout Tubes & Pretreat - South Of Washington St	15	10-Aug-15 A	06-Oct-15	-193	CTS_Install Compensation Grout Tubes & Pretreat - South Of Washington St
CTS.31.20.150	Excavate for Temp Level 2 Struts +/- 6.5kcy			21-Oct-15	-193	Excavate for Temp Level 2 Struts +/- 6.5kcy
CTS.31.50.160	D Install Temp Level 2 Struts & Wales & Preload		14-Oct-15	28-Oct-15	-193	Install Temp Level 2 Struts & Wales & Preload
	D Excavate Below Temp Level 3 Struts +/-4kcy	11	21-Oct-15	05-Nov-15	-193	
	F/R/P Partial North Composite Wall Between B & D From Strut Level 3		28-Oct-15	12-Nov-15	-193	
	F/R/P Partial East Composite Wall Between 1.0 & 4.0 From Strut Level 3		28-Oct-15	12-Nov-15	-193	
	I Install Temp Level 3 Struts & Wales & Preload Col 1-3		12-Nov-15	19-Nov-15	-193	
	D Install Barrel Vault Piping Above Level 4 Struts (Top Row 15-41 & Bottom 18-38		19-Nov-15	14-Dec-15	-193	
	D Install Barrel Vault Piping Above Level 4 Struts (Top Row 8-13, 43-47 & Bottom		14-Dec-15	05-Jan-16	-193	
	Excavate Below Temp Level 5.0 Struts +/-8kcy Col. 1.0-4.0		05-Jan-16	12-Jan-16	-193	
	Excavate Below Temp Level 4.0 Struts +/-8kcy Col. 4.0-11.0		12-Jan-16	28-Jan-16	-193	
	CTS_CN Install Temp Level 4.0 Struts & Wales & Preload Col. 4.0-11.0		22-Jan-16	03-Feb-16	-193	
	ExcavateTo Temp Level 5.0 Struts +/-8kcy Col. 4.0-11.0		03-Feb-16	18-Feb-16	-193	
	D Break-In & Construct Top Sidewall & Headwall Left - Crosscut Cavern		03-Feb-16	02-Mar-16	-193	
	Break-In & Construct Top Sidewall & Headwall Right - Crosscut Cavern		05-Feb-16	02-Mar-16	-193	
	Break-In & Construct Top Center Drift & Headwall - Crosscut Cavern		03-Peb-10 04-Mar-16	17-Mar-16	-193	
	Excavate & Construct Sidewall Bench & Headwall Step 3 Left Heading - Crossc		17-Mar-16	31-Mar-16	-193	
	Excavate & Construct Sidewall Bench & Headwall Step 3 Right Heading - Cross		21-Mar-16	04-Apr-16	-193	
				•		
	Excavate & Construct Step 4 Left Heading Invert & Headwall - Crosscut Cavern		04-Apr-16	18-Apr-16	-193 -193	
	Excavate & Construct Step 4 Right Heading Invert & Headwall - Crosscut Cavern		06-Apr-16	20-Apr-16		
	Excavate Step 5 Bench 1 & Construct Headwall - Crosscut Cavern		20-Apr-16	27-Apr-16	-193	
	Excavate Step 6 Bench 2 & Construct Headwall - Crosscut Cavern		27-Apr-16	04-May-16	-193	
	Excavate & Support Step 7 Invert - Crosscut Cavern		04-May-16	18-May-16	-193	
	Breakout Remaining Cross-Cut Cavern Opening		18-May-16	25-May-16	-193	
	Temporary Backfill Cross Cut Invert for Platform Cavern Excavation		25-May-16	02-Jun-16	-193	
	Barrel Vaults at South Platform Cavern Excavation		02-Jun-16	16-Jun-16	-193	
	Breakin Top Benches for South Platform Cavern Excavation		16-Jun-16	06-Jul-16	-193	
	Excavate & Support Top Right Heading South Platform Cavern 176Lf		06-Jul-16	03-Aug-16	-193	
	Excavate & Support Top Left Heading South Platform Cavern 176Lf		08-Jul-16	05-Aug-16	-193	
	Excavate & Support Top Right Bench South Platform Cavern 176Lf		05-Aug-16	19-Aug-16	-193	
	Excavate & Support Top Left Bench South Platform Cavern 176Lf		09-Aug-16	23-Aug-16	-193	
CTS.31.71.570	Excavate & Support Top Right Step 3 Invert South Platform Cavern 176Lf	14	23-Aug-16	13-Sep-16	-193	Excavate & Support Top Right Step 3 Invert South Platform Cavern 176Lf
			Ма	A Central Sub aster Project S Path - Septemb	chedule	Data Date 26-Sep-15

Activity Name		Original Start Duration	Finish	Total 15 Float	2016     2017     2018     2019     2020     2020       3     Q4     Q1     Q2     Q3     Q4     Q1
TS.31.71.580 Excavate & Suppo	rt Top Left Step 3 Invert South Platform Cavern 176Lf	14 25-Aug-16	15-Sep-16	-193	Excavate & Support Top Left Step 3 Invert South Platform Cavern 176Lf
	prary Bracing - Sidewalls (Platform Cavern)	6 15-Sep-16	23-Sep-16	-193	CTS- Install Temporary Bracing - Sidewalls (Platform Cavern)
	rt Top Center Drift Step 4 South Platform Cavern 176Lf	18 23-Sep-16	19-Oct-16	-193	Excavate & Support Top Center Drift Step 4 South Platform Cavern 176Lf
	rt Center Bench Step 5 South Platform Cavern 176Lf	11 19-Oct-16	03-Nov-16	-193	Excavate & Support Center Bench Step 5 South Platform Cavern 176Lf
	uct Invert Step 6 South Platform Cavern 176Lf	10 03-Nov-16	18-Nov-16	-193	Excavate & Construct Invert Step 6 South Platform Cavern 176Lf
	Repair Headwall South Platform Cavern 176Lf	10 18-Nov-16	06-Dec-16	-193	Demo Sidewalls & Repair Headwall South Platform Cavern 176Lf
	& Construct Ramp For Crossover Breakin	5 06-Dec-16	13-Dec-16	-193	Stage Equipment & Construct Ramp For Crossover Breakin
TS.31.71.650 Break-in Crossove	•	1 13-Dec-16	14-Dec-16	-193	Break-in Crossover Cavern
	uct Left Sidewall & Headwall 268 Lf	55 14-Dec-16	03-Mar-17	-193	Excavate & Construct Left Sidewall & Headwall 268 Lf
	uct Right Sidewall & Headwall 268 Lf	55 16-Dec-16	07-Mar-17	-193	Excavate & Construct Right Sidewall & Headwall 268 Lf
TS.31.71.680 Install Temporary	-	10 07-Mar-17	21-Mar-17	-193	Install Temporary Support Struts
		2 21-Mar-17	23-Mar-17	-193	I Install Ramp For Center Drift
TS.31.71.690 Install Ramp For C					Excavate & Support Center Drift
CTS.31.71.700 Excavate & Suppo		35 23-Mar-17	11-May-17	-193	Remove Crossover Excavation Ramp
TS.31.71.710 Remove Crossove	•	2 11-May-17	15-May-17	-193	Excavate & Support Center Bench - Crossover
TS.31.71.720 Excavate & Suppo		10 15-May-17	30-May-17	-193	Excavate & Support Center Bench - Crossover
TS.31.71.730 Excavate & Constr		7 30-May-17	08-Jun-17	-193	CTS_CN Install Temp Level 5 Struts & Wales & Preload Col 4.0-11.0
	np Level 5 Struts & Wales & Preload Col 4.0-11.0	8 08-Jun-17	20-Jun-17	-193	
	w Level 6 Struts EL 7.5' Col 4.0-11.0	9 15-Jun-17	28-Jun-17	-193	Excavate to 4' Below Level 6 Struts EL 7.5' Col 4.0-11.0
TS.31.50.330 Install Temp Level		10 20-Jun-17	05-Jul-17	-193	Install Temp Level 6 Struts & Wales & Preload
	ow Level 7 Struts EL -7.5 Col 4.0-11.0	15 27-Jun-17	19-Jul-17	-193	Excavate to 3' Below Level 7 Struts EL -7.5 Col 4.0-11.0
TS.31.50.370 Install Temp Level		10 07-Jul-17	21-Jul-17	-193	Install Temp Level 7 Struts & Wales & Preload
TS.31.20.380 Excavate Headhou	se to Invert Slab EL -18.67	8 21-Jul-17	02-Aug-17	-193	Excavate Headhouse to Invert Slab EL -18.67
TS.31.20.010 Prep Invert Slab, I	nstall Ground Mat, Gravel, Mud Slab	5 02-Aug-17	09-Aug-17	-193	Prep Invert Slab, Install Ground Mat, Gravel, Mud Slab
TS.07.13.320 Install Waterproofi	ng - Invert Slab	5 09-Aug-17	16-Aug-17	-193	Install Waterproofing - Invert Slab
CTS.03.53.028 CTS_UP - FRP Top	ping Concrete @ Base Slab - Head House	1 16-Aug-17	17-Aug-17	-193	I CTS_UP - FRP Topping Concrete @ Base Slab - Head House
TS.03.30.030 Form/Rebar/Pour	Invert Slab (Head House)	15 17-Aug-17	08-Sep-17	-193	Form/Rebar/Pour - Invert Slab (Head House)
TS.03.30.035 Form/Rebar/Pour/	Strip - Columns & Walls Invert Slab to Platform Level	10 08-Sep-17	22-Sep-17	-193	Form/Rebar/Pour/Strip - Columns & Walls Invert Slab to Platform Let
TS.03.11.040 Install Falsework -	For Platform Level Slab	10 15-Sep-17	29-Sep-17	-193	Install Falsework - For Platform Level Slab
TS.03.30.050 Form/Rebar/Pour	Platform Level Slab - Headhouse	15 22-Sep-17	13-Oct-17	-193	Form/Rebar/Pour - Platform Level Slab - Headhouse
CTS.03.30.060 Concrete Cure/Stri	p - Platform Level Slab	5 13-Oct-17	20-Oct-17	-193	Concrete Cure/Strip - Platform Level Slab
TS.31.50.110 CTS_CN Remove L	evel 5 Struts & Wales	5 20-Oct-17	27-Oct-17	-193	I CTS_CN Remove Level 5 Struts & Wales
TS.03.30.065 Form/Rebar/Pour/	Strip - Columns Platform Slab to Concourse Level (3 ea)	5 27-Oct-17	03-Nov-17	-193	Form/Rebar/Pour/Strip - Columns Platform Slab to Concourse Lev
CTS.03.11.080 CTS_CN Install Fa	sework - For Headhouse Concourse Level Slab	10 03-Nov-17	20-Nov-17	-193	CTS_CN Install Falsework - For Headhouse Concourse Level Slat
TS.03.30.095 CTS_CN Form/Reb	ar/Pour - Headhouse Concourse Level Slab	15 15-Nov-17	08-Dec-17	-193	CTS_CN Form/Rebar/Pour - Headhouse Concourse Level Slab
TS.03.30.075 CTS_CN Form/Reb	ar/Pour/Strip - Columns Concourse Slab to Intermediate Lev	5 08-Dec-17	15-Dec-17	-193	I CTS_CN Form/Rebar/Pour/Strip - Columns Concourse Slab to In
TS.03.11.120 Install Falsework -	For Intermediate Level Slab	10 15-Dec-17	01-Jan-18	-193	Install Falsework - For Intermediate Level Slab
TS.03.30.130 Form/Rebar/Pour	Intermediate Level Slab	10 20-Dec-17	04-Jan-18	-193	Form/Rebar/Pour - Intermediate Level Slab
TS.03.30.085 Form/Rebar/Pour/	Strip - Columns Intermediate Slab to Lower Mezz Level	5 04-Jan-18	11-Jan-18	-193	Form/Rebar/Pour/Strip - Columns Intermediate Slab to Lower
	Isework - For Lower Mezz Level Slab	10 11-Jan-18	25-Jan-18	-193	CTS_LM Install Falsework - For Lower Mezz Level Slab
	par/Pour - Lower Mezz Level Slab	15 16-Jan-18	06-Feb-18	-193	CTS_LM Form/Rebar/Pour - Lower Mezz Level Slab
CTS.03.30.185 CTS_LM Concrete		5 06-Feb-18	13-Feb-18	-193	GTS_LM Concrete Cure - Lower Mezz Level Slab
	CMU Partition Walls - Head House Concourse Level	15 13-Feb-18	06-Mar-18	-193	CTS_CN - Build - CMU Partition Walls - Head House Concou
	Elect Rm: Install - HVAC: Ductwork	10 06-Mar-18	20-Mar-18	-193	CTS_PL 18 - Main Elect Rm: Install - HVAC: Ductwork
	Elect Rm: Install - Elect Substation & Switchboard DS2	10 20-Mar-18		-193	CTS_PL 18 - Main Elect Rm: Install - Elect Substation & S
			03-Apr-18		CTS_PL 18 - Main Elect Rm: Install - Elect Substation & S
	Elect Rm: Install - Elect Substation & Switchboard DS1	10 03-Apr-18	17-Apr-18	-193	CTS_PL 18 - Main Elect Rm: Install - Elect Substation &
	Elect Rm: Install - Elect Substation & SWGR SG2	10 17-Apr-18	01-May-18	-193	CTS_PL 18 - Main Elect Rm: Install - Elect Substation &
15.26.11.145 CIS_PL 18 - Main	Elect Rm: Install - Elect Substation & SWGR SG1 Elect Rm: Install Conduit From Pull Boxes PB1 & PB2 to Su	10 01-May-18 7 15-May-18	15-May-18 24-May-18	-193 -193	CTS_PL 18 - Main Elect Rm: Install - Elect Substation &

SFMTA Central Subway Project	Required
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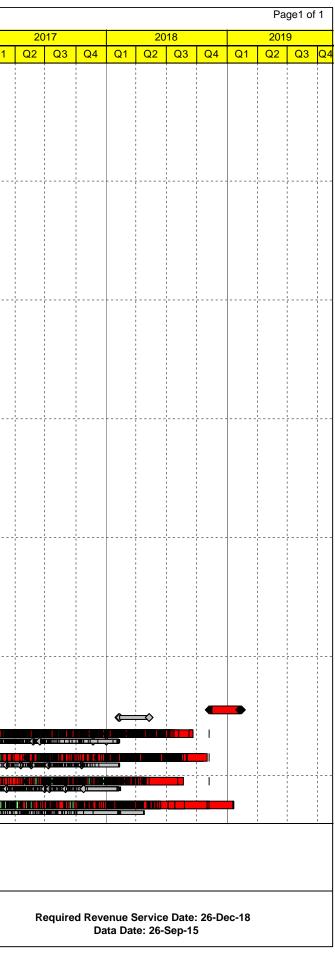
ed Revenue Serive Date 26-Dec-18 Data Date 26-Sep-15

vity ID	Activity Name	Original Start	Finish	Total	15		2	016			2017	7		20	)18		201	9		2020	2021
		Duration		Float	Q3	Q4 Q1	Q2	Q3	Q4	Q1 C	22	Q3 Q4	I Q1	Q2	Q3 (	Q4	Q1 Q2	Q3 Q4	Q1 Q	2 Q3 C	Q1 Q
CTS.26.11.195	CTS_PL 18 - Main Elect Rm:Install Conduit Substations SG1 & SG2 To Substat	6 24-May-18	01-Jun-18	-193										1	CTS_P	L 18	- Main Ele	ct Rm:In	stall Con	duit Subs	tations \$0
CTS.26.11.205	CTS_PL 18 - Main Elect Rm:Install Conduit Substations SG1 & SG2 To A/C TPS	5 01-Jun-18	08-Jun-18	-193										I	CTS_P	PL 18	- Main Ele	ct Rm:In	stall Cor	nduit Subs	tations S
CTS.26.11.235	CTS_PL 18 - Main Elect Rm:Pull & Terminate Power Cable Substations SG1 Tc	5 08-Jun-18	15-Jun-18	-193											CTS_F	PL 18	- Main Ele	ect Rm:P	ull & Ter	minate Po	wer Cable
CTS.26.11.900	CTS_PL 18 - Main Elect Rm: Energize Main Substation SG1 & SG2	5 15-Jun-18	22-Jun-18	-193										1	CTS_I	PL 18	3 - Main El	ect Rm:	Energize	Main Sub	station S
CTS.26.11.905	CTS_PL 18 - Main Elect Rm: Energize Substation DS1 & DS2	5 22-Jun-18	29-Jun-18	-193										1	CTS_	PL 18	8 - Main El	lect Rm:	Energize	e Substatio	on DS1 &
CTS.34.21.915	CTS_PL 18 - Main Elect Rm: Energize A/C TPSS Equipment	5 22-Jun-18	29-Jun-18	-193											стѕ_	PL 18	8 - Main El	lect Rm:	Energize	A/C TPS	6 Equipm
CTS.26.24.990	CTS_UP_02 - Equip Corridor- Energize - 5kV Switchgear "SG-TV"	1 29-Jun-18	02-Jul-18	-193											CTS_	UP_C	02 - Equip	Corridor	r- Energiz	ze - 5kV Sv	vitchgea
CTS.34.21.935	CTS_PL 18 - Main Elect Rm: Energize DC TPSS Equipment	5 29-Jun-18	06-Jul-18	-193											CTS_	_PL 1	8 - Main E	lect Rm:	Energiz	e DC TPSS	6 Equipm
CTS.26.24.10	CTS_UP_02 - Equip Corridor Energize MCC - Emergency Ventilation	1 02-Jul-18	03-Jul-18	-193											CTS_	UP_C	02 - Equip	Corridor	r Enerģiz	e MCC - E	mergenċy
CTS.23.88.10	CTS_UP 04 - Emerg Fan Rm: Start-Up & Test Tunnel Ventilation Fans	3 03-Jul-18	06-Jul-18	-193										• +	I CTS_	UP 0	4 - Emerg	Fan Rm	: Start-U	p & Test T	unnel Ver
Construction STS	P-1256	88 06-Jul-18	07-Nov-18	-193																	
STS.34.42.425	Startup & Testing - Tunnel & ATSC Systems	84 06-Jul-18	01-Nov-18	-193												Sta	rtup & Tes	sting - Tu	innel & A	TSC Syste	ms
STS.34.42.26	STS- Weather Allowance for 2018- 4 days	4 01-Nov-18	07-Nov-18	-193												I ST	S- Weathe	r Allowa	nce for 2	018- 4 day	s
Project Start Up		115 15-Nov-18	06-May-19	-90																	
STU1010	S&S Certification / Pre-Revenue Activities	115 15-Nov-18	06-May-19	-90							· <del> </del> - ·						<b>S</b> 8	S Certifi	cation / I	Pre-Reven	ue Activit
BUF0018	Muni Float	0 06-May-19	06-May-19	-90										-			Mu	uni Float			

SFMTA Central Subway Project	Required
Master Project Schedule	
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ivity Name	Original	Start	Finish		20	012			2	013			20	)14			2	015			2	2016		
	Duration			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	2 Q3	Q4	I Q1
CENTRAL SUBWAY PROJECT	2022	08-Jun-11 A	13-Feb-19																					
Construction Phase	2022	08-Jun-11 A	13-Feb-19																					
Construction Tunnels CN-1252	1799	08-Jun-11 A	15-May-15 A											     							-			
1252 Tunnel Contract BIH	1799	08-Jun-11 A	15-May-15 A	-										     				-						
Contract Milestones	1437	08-Jun-11 A	15-May-15 A	*			*						8	•			***				-		- - - -	
General Conditions	1752	01-Aug-11 A	15-May-15 A				•										<b> </b>				· <del> </del>			
4th & Bryant St TBM Launch Box Construction	686	30-Mar-12 A	02-Jun-14 A								þ			     										
Moscone Station Headwalls	430	14-May-12 A	20-Sep-13 A	_										     							-			
UMS Station Headwalls	425	24-Jul-12 A	22-Nov-13 A	_										     									     	
UMS - Remove Geary to Ellis OCS	5	24-Jul-12 A	26-Jul-12 A	_										1 1 1										
UMS - Setup Traffic Control for Headwall Construction	1	30-Jul-12 A	30-Jul-12 A																•		· <del>!</del>			
North Headwall	237	27-Feb-13 A	22-Nov-13 A											1 1 1								-		
South Headwall	404	31-Jul-12 A	22-Nov-13 A											1									1	
4th St and Market Compensation Grouting	707	28-Jan-13 A	30-Apr-15 A								! =													
Southbound Tunneling	451	27-Apr-13 A	13-Oct-14 A																					
Ellis St Compensation Grouting	561	31-Jul-12 A	09-May-14 A									 	8								· <del> </del>			
Green St Compensation Grouting	320	05-Aug-13 A	30-Jun-14 A	-									1											
Retrieval Shaft	1070	31-Oct-11 A	20-Mar-15 A					<u> </u>																
Cross Passage 1-5	339	22-Mar-14 A	16-Apr-15 A	-								Ī												
Cross Passage 1	79	14-Jun-14 A	13-Sep-14 A																					
Cross Passage 2	105	10-May-14 A	09-Sep-14 A																		· <del> </del>			
Cross Passage 3	127	31-Mar-14 A	28-Aug-14 A										1								-		- - - -	
Cross Passage 4	114	22-Mar-14 A	31-Jul-14 A																					
Cross Passage 5	277	31-May-14 A	16-Apr-15 A														-				-	- - - -		
Portal Structure	196	02-Sep-14 A	15-Apr-15 A														ř.							
Contract Close Out	307	03-Mar-14 A	15-May-15 A																		· <del>¦</del>			
Construction CN-1300	1512	03-Jun-13 A	13-Feb-19																					
CN- 1300 Milestone	1422	17-Jun-13 A	13-Feb-19						•										<b>i</b> 🗖	•		]		
Construction UMS Station P-1253	1388	17-Jun-13 A	08-Nov-18	_																				
Construction CTS Station P-1254R	1359	17-Jun-13 A	08-Nov-18	-																				
Construction YBM Station P-1255	1512	10-Jun-13 A	08-Nov-18						j															
Construction STS P-1256	1440	03-Jun-13 A	21-Jan-19	-																				

SFMTA Central Subway Project	
Master Project Schedule	
Contracts Summary Schedule- September 2015 Update	1
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tivity ID	Activity Name	Original	Start	Finish	Total				20	16			2	017			20	)18	
		Duration			Float	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
<b>CENTRAL SU</b>	IBWAY PROJECT	3953	01-Dec-08 A	10-May-21	0														
Program Leve	l Milestones	1713	31-Aug-16	10-May-21	0														
No 13-Disp		1713	31-Aug-16	10-May-21	0														
MS0005	50% through Construction Project - Milestone #5	0	-	31-Aug-16*	847					•	50%	throug	h Con	structio	n Pro	iect - I	Milesto	one #5	
HldPt4	Stations to Platform Level	0		18-Nov-16*	412					~	· ·								
MS0006	75% through Construction - Project Milestone #6	0		01-Jan-18*	359						·····						6 throu	ugh Co	nstruc
MS0007	90% through Construction - Project Milestone #7	0		01-Jun-18*	208											Ý		-	
STU1030	Accept CSP Funded LRVs	0		15-Nov-18	25	-											· ·		• <sub>4</sub>
HIdPt5	Systems Complete	0		15-Nov-18	-90														<b>ب</b> ا
MS0008	Construction Complete	0		13-Feb-19	-49						1			-		$\sim$			
MS0019	Baseline Finish Date: 12-26-2018	0		06-May-19*	-90		+				+						· <b>X</b>		 ۵
MS0009	CSP Revenue Service Date	0		06-May-19*	-90														ž
MS0010	Grant Closeout - CSP Complete	0		10-May-21	0														
Light Rail Vehi		1254	30-Jun-15 A	04-Dec-18	22		1				1		_						~
		3130	01-Dec-08 A	30-Sep-15	1016				•		-		-						<b>v</b>
Real Estate				· ·															
Construction I	Phase		04-Jan-10 A		465														
Construction Su	pport and Costs	5314	04-Jan-10 A	02-Jul-19	678														
No 13-Disp		5314	04-Jan-10 A	13-Feb-19	817														
SF Arts Commiss	sion (SFAC)			20-Feb-19	-37														
Fare Collection		1709	28-Sep-14 A	02-Jul-19	678														
Construction Tur	nnels CN-1252		1 · · · · · · · · · · · · · · · · · · ·	01-Oct-15	2048				1										
1252 Contingenc	cy, Interfaces, & Buffer Float			01-Oct-15	2048														
Construction CN	I-1300	1512	17-Jun-13 A	13-Feb-19	562												1		
CN- 1300 Milesto	ne			13-Feb-19	562						1		1	1		¢	⇒	1 1	_
Construction UM	IS Station P-1253	1136	17-Jun-13 A	08-Nov-18	625							_							
Administrative /			17-Jun-13 A	· ·	-36	$\diamond$					<u>x</u>	'n							
Preconstruction				05-Feb-18	4				<ul> <li>\$ 50% through Construction Project - Milestone #5</li> <li>\$ Stations to Platform Level</li> <li>75% through Cons</li> <li>90% through</li> <l< td=""><td></td></l<></ul>										
Engineering & P			14-Oct-13 A		261	_					1		-				-		
Site Work / Utilit Drilled Shafts/Je			16-Mar-15 A 05-Jun-15 A		-70 -78	<u> </u>					-								
Compensation (			05-Jun-15 A		-78														
Demolition	orodang		20-May-15 A																
	vation,Construction,Restoration		16-Feb-15 A		0				L 🗖										
Excavation & Su	upport	366	23-Mar-15 A	20-Feb-17	24			, LTA				Ĭ.				Ϋ́			
UMS.31.51.0100	0 UMS_ Install South Wall Tiebacks & Test	15	23-Mar-15 A	11-Mar-16	-178	-		I	UMS	Insta	all Sou	uth Wa	alİTieba	acks &	Test				
UMS.31.23.730	UMS_Dewatering Maintainance	348	28-Sep-15	13-Feb-17	29								UMS_	Dewate	ring N	Maintai	nance		
UMS.31.23.720	UMS_Begin Dewatering to 10 Ft Below Bottom of Excavation	0	28-Sep-15		-19	•	UMS	_Begi	n Dew	aterir	ng to 1	IO Ft E	Bęlow E	Bottom	of Exc	avatio	'n		
UMS.31.41.0240	0 UMS_Install Sheet Piles @ Access Shaft #2 (O'Farrell)*	5	28-Sep-15	02-Oct-15	-92		UMS	S_Insta	all She	et Pil	ės @	Acces	sś Sha	ft #2 (O	Farre	ell)*			
UMS.31.20.1365	5 UMS_Shore Tunnel and ready for break in- Sta 132+50 To North Headwall	15	28-Sep-15	16-Oct-15	66		UN 🖡	S_Sho	ore Tu	nnel a	and re	ady fo	rbreak	(in- St	a 132	+50 To	North	Head	wall
UMS.31.50.0250	0 UMS_Excavate. Lag & Support @ Access Shaft #2 (O'Farrell)	10	05-Oct-15	16-Oct-15	-92		UN 🖡	S_Exc	avate	. Lag	& Sup	oport @	Acce	s Sha	ft #2 (	(O'Far	rell)		
UMS.31.50.0260	0 UMS_Install Temporary Lid @ Access Shaft #2 (O'Farrell)	10	19-Oct-15	30-Oct-15	-92		U 📙	/IS_Ins	stall Te	mpor	ary Li	id @ A	ccess	Shaft #	2 (O'F	arrell	)		
UMS.31.50.0560	0 UMS_Install Spiling @ Access Shaft #2 & Excavate to Pile Face	5	02-Nov-15	06-Nov-15	-92		Ιυ	MS_In	stall S	piling	@ Ac	cess \$	Shaft #	2 & Ex	avate	to Pile	- Face		
UMS.31.20.0710	0 UMS_Break Through Battered Piles & Frame Construction Access #2	10	10-Nov-15	23-Nov-15	-92														2
UMS.31.20.0660	0 UMS_Complete Excavate South Concourse to Invert	5	23-Feb-16	01-Mar-16	-56	-		- '			1-								
UMS.31.20.0680	0 UMS_Excavate Platform Box Bench For Wales & Struts - Concourse Level Sta 132+50	to North I 7	19-Apr-16	27-Apr-16	-167	1			- 1		1						1	truts - 0	Conco
UMS.05.12.0690	0 UMS_ Install Permanent Wales - Concourse Level Sta 132+50 to North Headwall	10	26-Apr-16	09-May-16	-167	Ē													
UMS.31.20.1090	0 UMS_Excavate North Concourse To Concourse Level		28-Apr-16	04-May-16	-59	1.			_ '		1		1	1 1	1		1	1 1	
UMS.31.20.0685	5 UMS_Excavate Platform Box Bench For Wales & Struts - Concourse Level Sta 132+50	to South   7	28-Apr-16	06-May-16	-166	1											:	1 1	Conc
UMS.05.12.0705		eadwall - 1 10	03-May-16	16-May-16	-167				'		1		1		1		1	1 1	
UMS.05.12.0695	5 UMS_ Install Permanent Wales - Concourse Level Sta 132+50 to South Headwall	10	05-May-16	18-May-16	-165						1		- i -	1 1			1	1 1	
		<u> </u>	-	MTA Central S Master Projec	ubway	Proje	ct	1			1.2.101		1.15.11		201		1. 201		

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			)19			20				2021	
Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
nstruc	tion -	Projec	t Miles	tone #	<sup>1</sup> 6						
rough	Cons	structio	on - Pr	oject N	/ilesto	ne #7					
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Conco	urse l	Level	Sta 132	2+50 to	North	n Head	Iwall				
32+50	to No	rth He	adwall				4				
Conco	burse	Level	Sta 13	2+50 t	o Sout	h Hea	dwall				
		1	to No		adwal	- 13e	a				
32+50	to Sc	outh H	eadwa	II							
quired			erive I e: 26-S		5-Dec-2	18					

UMS.31.20.0800         UMS_Exc           UMS.31.50.795         UMS_Ins           UMS.31.23.0740         UMS_Dex           UMS.05.12.0715         UMS_Ins           UMS.03.37.0700         UMS_Ins           UMS.03.37.0665         UMS_Ins           UMS.03.37.0665         UMS_Ins           UMS.03.37.0665         UMS_Ins           UMS.05.12.0820         UMS_Ins           UMS.05.12.0820         UMS_Ins           UMS.05.12.0820         UMS_Ins           UMS.05.12.0820         UMS_Ins           UMS.05.12.0820         UMS_Ins           UMS.05.12.0830         UMS_Exc           UMS.05.12.0830         UMS_Ins           UMS.03.0.1525         UMS_Ins           UMS.03.120.0830         UMS_Exc           UMS.05.12.0825         UMS_Ins           UMS.05.12.0835         UMS_Ins           UMS.03.120.0835         UMS_Ins           UMS.03.120.0835         UMS_Ins           UMS.03.37.0986         UMS_Ins           UMS.03.37.0987         UMS_Ins           UMS.03.120.0860         UMS_Ins           UMS.03.120.0860         UMS_Ins           UMS.03.120.0865         UMS_Ins           UMS.03.120.1355         UMS_Ins <th></th> <th>15 21 21 10 10 10 10 10 10 10 10 10 1</th> <th></th> <th>Finish           18-May-16           25-May-16           20-May-16           08-Jun-16           25-May-16           25-May-16           27-May-16           31-May-16           02-Jun-16           24-May-16           03-Jun-16           13-Jun-16           13-Jun-16           13-Jun-16           14-Jun-16           17-Jun-16           21-Jun-16</th> <th>Total         15           79         -           -167         -           -70         -           74         -           -165         -           -165         -           -163         -           -163         -           -163         -           -163         -           -163         -           -163         -           -163         -           -163         -           -163         -           -163         -           -163         -           -167         -           -168         -           155         -           -178         -           155         -           -167         -</th> <th></th> <th></th> <th>Q3Q4Q1Q2Q3Q4Q1Q2Q3Q4Q1Q2Q3Q4Q1Q2Q3Q4Q1Q2Q3Q4Q1Q2Q3Q4Q1Q2Q3Q4Q1Q2Q3Q4Q1Q2Q3Q4Q1Q2Q3Q4Q1Q2Q3Q4Q1Q2Q3Q4Q1Q2Q3Q4Q1Q2Q3Q4Q1Q2Q3Q4Q1Q2Q3Q4Q1Q2Q3Q4Q1Q2JMS_InstallPermanent Struts&amp; 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UMS.05.12.0900         UMS_Inst UMS.31.20.0800           UMS.31.50.795         UMS_Inst UMS.05.12.0715           UMS.05.12.0715         UMS_Inst UMS.03.37.0700           UMS.03.37.0700         UMS_Inst UMS.03.37.0665           UMS.03.37.0665         UMS_Inst UMS.03.37.0665           UMS.05.12.0820         UMS_Inst UMS.05.12.0820           UMS.05.12.0820         UMS_Inst UMS.05.12.0820           UMS.31.20.1140         UMS_Exc UMS.05.12.0830           UMS.05.12.0825         UMS_Inst UMS.03.0.1525           UMS.31.20.1150         UMS_Inst UMS.03.120.0830           UMS.31.20.0830         UMS_Exc UMS.03.120.0830           UMS.05.12.0825         UMS_Inst UMS.03.120.0835           UMS.05.12.0835         UMS_Inst UMS.03.120.0835           UMS.03.37.0986         UMS_Inst UMS.03.37.0986           UMS.03.37.0985         UMS_Inst UMS.03.37.0987           UMS.03.37.0987         UMS_Inst UMS.31.20.1355           UMS.31.20.1355         UMS_Inst UMS.31.20.1355           UMS.31.20.1355         UMS_Inst UMS.31.20.1355           UMS.31.20.1355         UMS_Inst UMS.31.20.0865           UMS.31.20.0865         UMS_Inst UMS.05.12.0890           UMS.31.20.0865         UMS_Inst UMS.05.12.0885	Install Permanent Struts & Wales - Concourse Level Excavate Bench to Intermediate Strut Level & Expose Wide Flange Sta 132+50 to North He Install Bracing in Existing Tunnels Dewater to 10 Ft Below Bottom of Excavation & Maintain Install & Pre-Load Permanent Struts - Concourse Level Sta 132+50 to South Headwall - Install Drain Pipe & Grout Fill Void Between Piles - Roof To Concourse Level Sta 132+50 t Install Studs, Mesh, Drain Pipe & Shotcrete Pile Walls Concourse to Intermediate Level Si Install Drain Pipe & Grout Fill Void Between Piles - Roof To Concourse Level Sta 132+50 t Install Permanent Wales - Intermediate Strut Level Sta 132+50 To North Headwall Excavation For South Concourse Escalator Excavate Bench to Intermediate Strut Level & Expose Wide Flange Sta 132+50 to South He Install Per-Load Permanent Struts - Intermediate Strut Level Sta 132+50 To North Headvall Install Pere-Load Permanent Struts - Intermediate Strut Level Sta 132+50 To North Headvall Install Pere-Load Permanent Struts - Intermediate Strut Level Sta 132+50 To North Headvall Install Sheet Piling at Garage Base Slab Form/Rebar/Pour Invert Slab For South Concourse Escalator Upper Landing Excavate Bench to Temporary Strut Level 1 & Expose Wide Flange Sta 132+50 To North He Install Permanent Wales - Intermediate Strut Level Sta 132+50 To South Headvall Install Permanent Wales - Intermediate Strut Level Sta 132+50 To South Headvall Install Pere-Load Permanent Struts - Intermediate Strut Level Sta 132+50 To South Headvall Install & Pre-Load Permanent Struts - Intermediate Strut Level Sta 132+50 To South Headvall Install & Pre-Load Permanent Struts - Intermediate Strut Level Sta 132+50 To South Headvall Install & Pre-Load Permanent Struts - Intermediate Strut Level Sta 132+50 To South Headvall Remove Temporary Struts & Wales For South Concourse Escalator Excavate Bench to Temporary Strut Level 1 & Expose Wide Flange Sta 132+50 To South Headvall Install Studs, Mesh, Drain Pipe & Shotcrete Pile Walls Interm Level To Temp Strut Lv1 1 Sta Form/Rebar		0         05-May-16           0         05-May-16           0         05-May-16           1         10-May-16           1         10-May-16           1         12-May-16           1         12-May-16           1         12-May-16           1         17-May-16           1         17-May-16           1         19-May-16           2         23-May-16           2         23-May-16           2         23-May-16           3         25-May-16           3         31-May-16           3         31-May-16           0         6-Jun-16           0         06-Jun-16           0         08-Jun-16	25-May-16 20-May-16 08-Jun-16 25-May-16 25-May-16 31-May-16 31-May-16 02-Jun-16 03-Jun-16 03-Jun-16 27-May-16 13-Jun-16 13-Jun-16 14-Jun-16	79         •           -60         •           -167         •           -165         •           -165         •           -163         •           -163         •           -163         •           -163         •           -163         •           -163         •           -163         •           -163         •           -163         •           -163         •           -163         •           -163         •           -163         •           -163         •           -163         •           -163         •           -163         •           -163         •           -160         155           -178         155           -167         •			JMS_ Compensation Grouting       JMS_Install Permanent Struts & Wales - Concourse Level         JMS_Install Permanent Struts & Wales - Concourse Level       JMS_Excavate Bench to Intermediate Strut Level & Expose Wide Flange Sta 132+50 to North Headwall         JMS_Install Bracing in Existing Tunnels       JMS_Dewater to 10 Ft Below Bottom of Excavation & Maintain         JMS_Install & Pre-Load Permanent Struts       - Concourse Level Sta 132+50 to South Headwall - 13ea         JMS_Install Drain Pipe & Grout Fill Void Between Piles - Roof       To Concourse Level Sta 132+50 to South Headwall         UMS_Install Drain Pipe & Grout Fill Void Between Piles - Roof       To Concourse to Intermediate Level Sta 132+50 to North Headwall         UMS_Install Drain Pipe & Grout Fill Void Between Piles - Roof       To Concourse Level Sta 132+50 to North Headwall         UMS_Install Permanent Wales - Intermediate Strut Level Sta 132+50 To North Headwall       JMS_Excavation For South Concourse Escalator         UMS_Install & Pre-Load Permanent Struts - Intermediate Strut Level & Expose Wide Flange Sta 132+50 to South Headwall       JMS_Excavate Bench to Intermediate Strut Level & Expose Wide Flange Sta 132+50 to South Headwall         UMS_Install & Pre-Load Permanent Struts - Intermediate Strut Level & Expose Wide Flange Sta 132+50 to South Headwall       JMS_Excavate Bench to Intermediate Strut Level & Expose Wide Flange Sta 132+50 to South Headwall         UMS_Install & Pre-Load Permanent Struts - Intermediate Strut Level Sta 132+50 To North Headwall       JMS_Excavate Bench to Intermediate Strut Level & Expose Wide Flange Sta 132+50 To No
UMS.05.12.0900         UMS_Inst UMS_31.20.0800           UMS.31.50.795         UMS_Inst UMS_31.23.0740         UMS_Dev UMS_05.12.0715           UMS.05.12.0715         UMS_Inst UMS_03.37.0700         UMS_Inst UMS_03.37.0665           UMS.03.37.0665         UMS_Inst UMS_05.12.0820         UMS_Inst UMS_05.12.0820           UMS.31.20.1140         UMS_Exct UMS_05.12.0830         UMS_Inst UMS_05.12.0830           UMS.05.12.0830         UMS_Inst UMS_05.12.0830         UMS_Inst UMS_05.12.0830           UMS_31.20.1150         UMS_Inst UMS_03.30.1525         UMS_Inst UMS_03.30.1525           UMS_01.20.0830         UMS_Exct UMS_01.20.0830         UMS_Exct UMS_01.20.0830           UMS.05.12.0825         UMS_Inst UMS_03.30.1525         UMS_Inst UMS_03.37.0986           UMS.03.37.0986         UMS_Inst UMS_03.37.0986         UMS_Inst UMS_03.37.0987           UMS.03.37.0987         UMS_Inst UMS_03.37.0987         UMS_Inst UMS_31.20.1355           UMS_31.20.1355         UMS_Inst UMS_31.20.1355         UMS_Inst UMS_31.20.1355           UMS_31.20.1355         UMS_Inst UMS_31.20.0865         UMS_Inst UMS_31.20.0865           UMS_31.20.0865         UMS_Inst UMS_31.20.0865         UMS_Inst UMS_31.20.0865           UMS_31.20.0865         UMS_Inst UMS_31.20.0865         UMS_Inst UMS_31.20.0865	Install Permanent Struts & Wales - Concourse Level Excavate Bench to Intermediate Strut Level & Expose Wide Flange Sta 132+50 to North He Install Bracing in Existing Tunnels Dewater to 10 Ft Below Bottom of Excavation & Maintain Install & Pre-Load Permanent Struts - Concourse Level Sta 132+50 to South Headwall - Install Drain Pipe & Grout Fill Void Between Piles - Roof To Concourse Level Sta 132+50 t Install Studs, Mesh, Drain Pipe & Shotcrete Pile Walls Concourse to Intermediate Level Si Install Drain Pipe & Grout Fill Void Between Piles - Roof To Concourse Level Sta 132+50 t Install Permanent Wales - Intermediate Strut Level Sta 132+50 To North Headwall Excavation For South Concourse Escalator Excavate Bench to Intermediate Strut Level & Expose Wide Flange Sta 132+50 to South He Install Per-Load Permanent Struts - Intermediate Strut Level Sta 132+50 To North Headvall Install Pere-Load Permanent Struts - Intermediate Strut Level Sta 132+50 To North Headvall Install Pere-Load Permanent Struts - Intermediate Strut Level Sta 132+50 To North Headvall Install Sheet Piling at Garage Base Slab Form/Rebar/Pour Invert Slab For South Concourse Escalator Upper Landing Excavate Bench to Temporary Strut Level 1 & Expose Wide Flange Sta 132+50 To North He Install Permanent Wales - Intermediate Strut Level Sta 132+50 To South Headvall Install Permanent Wales - Intermediate Strut Level Sta 132+50 To South Headvall Install Pere-Load Permanent Struts - Intermediate Strut Level Sta 132+50 To South Headvall Install & Pre-Load Permanent Struts - Intermediate Strut Level Sta 132+50 To South Headvall Install & Pre-Load Permanent Struts - Intermediate Strut Level Sta 132+50 To South Headvall Install & Pre-Load Permanent Struts - Intermediate Strut Level Sta 132+50 To South Headvall Remove Temporary Struts & Wales For South Concourse Escalator Excavate Bench to Temporary Strut Level 1 & Expose Wide Flange Sta 132+50 To South Headvall Install Studs, Mesh, Drain Pipe & Shotcrete Pile Walls Interm Level To Temp Strut Lv1 1 Sta Form/Rebar	15 21 21 10 10 10 10 10 10 10 10 10 1	5         05-May-16           9         10-May-16           9         10-May-16           9         12-May-16           9         12-May-16           9         12-May-16           9         12-May-16           9         17-May-16           9         17-May-16           9         17-May-16           9         19-May-16           9         23-May-16           9         23-May-16           9         23-May-16           9         31-May-16           9         31-May-16           9         31-May-16           9         31-May-16           9         06-Jun-16           9         08-Jun-16	25-May-16 20-May-16 08-Jun-16 25-May-16 25-May-16 31-May-16 31-May-16 02-Jun-16 03-Jun-16 03-Jun-16 27-May-16 13-Jun-16 13-Jun-16 14-Jun-16	-60 -167 -70 74 -165 -165 -163 -156 -163 -157 -163 -114 -167 -160 155 -178 155 -167			JMS_Install Permanent Struts & Wales - Concourse Level JMS_Excavate Bench to Intermediate Strut Level & Expose Wide Flange Sta 132+50 to North Headwall UMS_Install Bracing in Existing Tunnels JMS_Dewater to 10 Ft Below Bottom of Excavation & Maintain JMS_Install & Pre-Load Permanent Struts - Concourse Level Sta 132+50 to South Headwall - 13ea UMS_Install Drain Pipe & Grout Fill Void Between Piles - Roof To Concourse Level Sta 132+50 to South Headwall UMS_Install Studs, Mesh, Drain Pipe & Shotcrete Pile Walls Concourse to Intermediate Level Sta 132+50 to North Headwall UMS_Install Drain Pipe & Grout Fill Void Between Piles - Roof To Concourse Level Sta 132+50 to North Headwall UMS_Install Drain Pipe & Grout Fill Void Between Piles - Roof To Concourse Level Sta 132+50 to North Headwall UMS_Install Permanent Wales - Intermediate Strut Level Sta 132+50 To North Headwall UMS_Install Permanent Wales - Intermediate Strut Level Sta 132+50 to North Headwall UMS_Excavation For South Concourse Escalator UMS_Excavate Bench to Intermediate Strut Level & Expose Wide Flange Sta 132+50 to South Headwall UMS_Install & Pre-Load Permanent Struts - Intermediate Strut Level Sta 132+50 To North Headwall UMS_Install & Pre-Load Permanent Struts - Intermediate Strut Level Sta 132+50 To North Headwall UMS_Install Temporary Struts & Wales For South Concourse Escalator
UMS.31.20.0800         UMS_Exc           UMS.31.50.795         UMS_Ins           UMS.31.23.0740         UMS_Dex           UMS.05.12.0715         UMS_Ins           UMS.03.37.0700         UMS_Ins           UMS.03.37.0700         UMS_Ins           UMS.03.37.0665         UMS_Ins           UMS.03.37.0665         UMS_Ins           UMS.05.12.0820         UMS_Ins           UMS.05.12.0820         UMS_Ins           UMS.05.12.0820         UMS_Ins           UMS.05.12.0820         UMS_Ins           UMS.05.12.0820         UMS_Ins           UMS.05.12.0820         UMS_Ins           UMS.05.12.0830         UMS_Ins           UMS.03.1.20.1150         UMS_Ins           UMS.03.120.0830         UMS_Ins           UMS.05.12.0825         UMS_Ins           UMS.05.12.0835         UMS_Ins           UMS.05.12.0835         UMS_Ins           UMS.03.37.0986         UMS_Ins           UMS.03.37.0986         UMS_Ins           UMS.03.37.0987         UMS_Ins           UMS.03.37.0987         UMS_Ins           UMS.03.37.0987         UMS_Ins           UMS.03.37.0987         UMS_Ins           UMS.31.20.1355         UMS_Ins	Excavate Bench to Intermediate Strut Level & Expose Wide Flange Sta 132+50 to North He Install Bracing in Existing Tunnels Dewater to 10 Ft Below Bottom of Excavation & Maintain Install & Pre-Load Permanent Struts - Concourse Level Sta 132+50 to South Headwall - Install Drain Pipe & Grout Fill Void Between Piles - Roof To Concourse Level Sta 132+50 t Install Studs, Mesh, Drain Pipe & Shotcrete Pile Walls Concourse to Intermediate Level Si Install Drain Pipe & Grout Fill Void Between Piles - Roof To Concourse Level Sta 132+50 t Install Drain Pipe & Grout Fill Void Between Piles - Roof To Concourse Level Sta 132+50 t Install Permanent Wales - Intermediate Strut Level Sta 132+50 To North Headwall Excavation For South Concourse Escalator Excavate Bench to Intermediate Strut Level & Expose Wide Flange Sta 132+50 to South He Install & Pre-Load Permanent Struts - Intermediate Strut Level Sta 132+50 To North Headv Install Sheet Piling at Garage Base Slab Form/Rebar/Pour Invert Slab For South Concourse Escalator Upper Landing Excavate Bench to Temporary Strut Level 1 & Expose Wide Flange Sta 132+50 To North He Install Pre-Load Permanent Struts - Intermediate Strut Level Sta 132+50 To South He Install Permanent Wales - Intermediate Strut Level Sta 132+50 To South He Install Permanent Wales - Intermediate Strut Level Sta 132+50 To South Headwall Install Permanent Wales - Intermediate Strut Level Sta 132+50 To South Headwall Install & Pre-Load Permanent Struts - Intermediate Strut Level Sta 132+50 To South Headwall Install & Pre-Load Permanent Struts - Intermediate Strut Level Sta 132+50 To South Headwall Remove Temporary Struts & Wales For South Concourse Escalator Excavate Bench to Temporary Strut Level 1 & Expose Wide Flange Sta 132+50 To South Head Remove Temporary Struts & Wales For South Concourse Escalator Excavate Bench to Temporary Strut Level 1 & Expose Wide Flange Sta 132+50 To South H Install Studs, Mesh, Drain Pipe & Shotcrete Pile Walls Interm Level To Temp Strut Lvl 1 Sta Form/Rebar/Pour Walls For South Con	S           21           10           10           10           10           10           10           10           10           10           10           10           10           10           10           2           9           10           10           10           10           10           10           10           10           10           10           10	9         10-May-16           10-May-16         12-May-16           12-May-16         12-May-16           12-May-16         17-May-16           17-May-16         17-May-16           17-May-16         17-May-16           10-May-16         17-May-16           10-May-16         19-May-16           10-May-16         23-May-16           10-May-16         31-May-16           10-May-16         31-May-16	20-May-16 08-Jun-16 25-May-16 25-May-16 31-May-16 31-May-16 02-Jun-16 03-Jun-16 03-Jun-16 27-May-16 13-Jun-16 13-Jun-16 14-Jun-16 17-Jun-16	-167 -70 74 -165 -156 -163 -157 -163 -114 -167 -160 155 -178 155 -167			JMS_Excavate Bench to Intermediate       Strut Level & Expose Wide Flange Sta 132+50 to       North Headwall         UMS_Install Bracing in Existing Tunnels       JMS_Dewater to 10 Ft Below Bottom of Excavation & Maintain       JMS_Install & Pre-Load Permanent Struts       - Concourse Level Sta 132+50 to South Headwall - 13ea         JMS_Install & Pre-Load Permanent Struts       - Concourse Level Sta 132+50 to South Headwall - 13ea         UMS_Install Drain Pipe & Grout Fill Void Between Piles - Roof       To Concourse Level Sta 132+50 to South Headwall         UMS_Install Studs, Mesh, Drain Pipe & Shotcrete Pile Walls Concourse to Intermediate Level Sta 132+50 to North Headwall         UMS_Install Drain Pipe & Grout Fill Void Between Piles - Roof       To Concourse Level Sta 132+50 to North Headwall         UMS_Install Drain Pipe & Grout Fill Void Between Piles - Roof       To Concourse Level Sta 132+50 to North Headwall         UMS_Install Drain Pipe & Grout Fill Void Between Piles - Roof       To Concourse Level Sta 132+50 to North Headwall         UMS_Install Permanent Wales - Intermediate Strut Level Sta 132+50 To North Headwall       JMS_Excavation For South Concourse Escalator         UMS_Install & Pre-Load Permanent Struts - Intermediate Strut Level Sta 132+50 To North Headwall       JMS_Excavate Bench to Intermediate Strut Level & Expose Wide Flange Sta 132+50 to South Headwall         UMS_Install & Pre-Load Permanent Struts - Intermediate Strut Level Sta 132+50 To North Headwall       JMS_Excavate Bench to Struts - Intermediate Strut Level Sta 132+50 To North Headwall <td< td=""></td<>
UMS.31.50.795         UMS_Ins           UMS.31.23.0740         UMS_Dev           UMS.05.12.0715         UMS_Ins           UMS.03.37.0700         UMS_Ins           UMS.03.37.0700         UMS_Ins           UMS.03.37.0665         UMS_Ins           UMS.03.37.0665         UMS_Ins           UMS.03.37.0665         UMS_Ins           UMS.03.37.0665         UMS_Ins           UMS.03.37.0665         UMS_Ins           UMS.05.12.0820         UMS_Ins           UMS.31.20.1140         UMS_Exc           UMS.31.20.0805         UMS_Ins           UMS.31.20.1150         UMS_Ins           UMS.31.20.0805         UMS_Ins           UMS.31.20.0830         UMS_Ins           UMS.05.12.0835         UMS_Ins           UMS.05.12.0835         UMS_Ins           UMS.05.12.0835         UMS_Ins           UMS.31.20.1345         UMS_Exc           UMS.31.20.0835         UMS_Ins           UMS.33.7.0986         UMS_Ins           UMS.31.20.0860         UMS_Ins           UMS.31.20.0860         UMS_Ins           UMS.31.20.0860         UMS_Ins           UMS.31.20.1120         UMS_Exc           UMS.31.20.1355         UMS_Ins	Install Bracing in Existing Tunnels Dewater to 10 Ft Below Bottom of Excavation & Maintain Install & Pre-Load Permanent Struts - Concourse Level Sta 132+50 to South Headwall - Install Drain Pipe & Grout Fill Void Between Piles - Roof To Concourse Level Sta 132+50 t Install Studs, Mesh, Drain Pipe & Shotcrete Pile Walls Concourse to Intermediate Level Si Install Drain Pipe & Grout Fill Void Between Piles - Roof To Concourse Level Sta 132+50 t Install Drain Pipe & Grout Fill Void Between Piles - Roof To Concourse Level Sta 132+50 t Install Permanent Wales - Intermediate Strut Level Sta 132+50 To North Headwall Excavation For South Concourse Escalator Excavate Bench to Intermediate Strut Level & Expose Wide Flange Sta 132+50 to South He Install & Pre-Load Permanent Struts - Intermediate Strut Level Sta 132+50 To North Headwall Install Temporary Struts & Wales For South Concourse Escalator Install Sheet Piling at Garage Base Slab Form/Rebar/Pour Invert Slab For South Concourse Escalator Upper Landing Excavate Bench to Temporary Strut Level 1 & Expose Wide Flange Sta 132+50 To North He Install Permanent Wales - Intermediate Strut Level Sta 132+50 To South He Install Permanent Wales - Intermediate Strut Level Sta 132+50 To South He Install Permanent Wales - Intermediate Strut Level Sta 132+50 To South He Install Permanent Wales - Intermediate Strut Level Sta 132+50 To South Headwall Install & Pre-Load Permanent Struts - Intermediate Strut Level Sta 132+50 To South Headwall Install & Pre-Load Permanent Struts - Intermediate Strut Level Sta 132+50 To South Headwall Remove Temporary Struts & Wales For South Concourse Escalator Excavate Bench to Temporary Strut Level 1 & Expose Wide Flange Sta 132+50 To South Head Remove Temporary Struts & Wales For South Concourse Escalator Excavate Bench to Temporary Strut Level 1 & Expose Wide Flange Sta 132+50 To South H Install Studs, Mesh, Drain Pipe & Shotcrete Pile Walls Interm Level To Temp Strut Lvl 1 Sta Form/Rebar/Pour Walls For South Concourse Escalator Upper Landing	21 10 10 10 10 10 10 10 10 10 1	10-May-16           12-May-16           12-May-16           12-May-16           16-May-16           17-May-16           17-May-16           23-May-16           23-May-16           23-May-16           23-May-16           31-May-16           31-May-16           31-May-16           031-May-16           131-May-16           131-May-16           131-May-16           131-May-16           131-May-16           131-May-16           131-May-16           131-May-16           131-May-16           141-May-16           141-May-16	08-Jun-16         25-May-16         25-May-16         27-May-16         31-May-16         02-Jun-16         03-Jun-16         03-Jun-16         13-Jun-16         13-Jun-16         13-Jun-16         13-Jun-16         13-Jun-16         14-Jun-16         17-Jun-16	-70 74 -165 -156 -157 -163 -157 -163 -114 -167 -160 155 -178 155 -178			UMS_Install Bracing in Existing Tunnels JMS_Dewater to 10 Ft Below Bottom of Excavation & Maintain JMS_Install & Pre-Load Permanent Struts - Concourse Level Sta 132+50 to South Headwall - 13ea UMS_Install Drain Pipe & Grout Fill Void Between Piles - Roof To Concourse Level Sta 132+50 to South Headwall UMS_Install Studs, Mesh, Drain Pipe & Shotcrete Pile Walls Concourse to Intermediate Level Sta 132+50 to North Headwall UMS_Install Drain Pipe & Grout Fill Void Between Piles - Roof To Concourse Level Sta 132+50 to North Headwall UMS_Install Drain Pipe & Grout Fill Void Between Piles - Roof To Concourse Level Sta 132+50 to North Headwall UMS_Install Permanent Wales - Intermediate Strut Level Sta 132+50 To North Headwall UMS_Excavation For South Concourse Escalator UMS_Excavate Bench to Intermediate Strut Level & Expose Wide Flange Sta 132+50 to South Headwall UMS_Install & Pre-Load Permanent Struts - Intermediate Strut Level Sta 132+50 To North Headwall UMS_Install & Pre-Load Permanent Struts - Intermediate Strut Level Sta 132+50 To North Headwall UMS_Install Temporary Struts & Wales For South Concourse Escalator
UMS.31.23.0740         UMS_Dev           UMS.05.12.0715         UMS_Ins           UMS.03.37.0700         UMS_Ins           UMS.03.37.0700         UMS_Ins           UMS.03.37.0700         UMS_Ins           UMS.03.37.0665         UMS_Ins           UMS.05.12.0820         UMS_Ins           UMS.05.12.0820         UMS_Ins           UMS.05.12.0820         UMS_Ins           UMS.31.20.1140         UMS_Exc           UMS.31.20.1150         UMS_Ins           UMS.31.20.1150         UMS_Ins           UMS.31.20.1150         UMS_Ins           UMS.31.20.1150         UMS_Ins           UMS.31.20.1150         UMS_Ins           UMS.05.12.0835         UMS_Ins           UMS.05.12.0835         UMS_Ins           UMS.05.12.0835         UMS_Ins           UMS.03.37.0986         UMS_Ins           UMS.03.37.0985         UMS_Ins           UMS.03.37.0985         UMS_Ins           UMS.03.37.0987         UMS_Ins           UMS.03.37.0987         UMS_Ins           UMS.03.37.0987         UMS_Ins           UMS.03.37.0987         UMS_Ins           UMS.03.37.0987         UMS_Ins           UMS.03.120.1120         UMS_Exc	Dewater to 10 Ft Below Bottom of Excavation & Maintain Install & Pre-Load Permanent Struts - Concourse Level Sta 132+50 to South Headwall - Install Drain Pipe & Grout Fill Void Between Piles - Roof To Concourse Level Sta 132+50 t Install Studs, Mesh, Drain Pipe & Shotcrete Pile Walls Concourse to Intermediate Level Si Install Drain Pipe & Grout Fill Void Between Piles - Roof To Concourse Level Sta 132+50 t Install Drain Pipe & Grout Fill Void Between Piles - Roof To Concourse Level Sta 132+50 t Install Permanent Wales - Intermediate Strut Level Sta 132+50 To North Headwall Excavation For South Concourse Escalator Excavate Bench to Intermediate Strut Level & Expose Wide Flange Sta 132+50 to South He Install & Pre-Load Permanent Struts - Intermediate Strut Level Sta 132+50 To North Headwall Install Sheet Piling at Garage Base Slab Form/Rebar/Pour Invert Slab For South Concourse Escalator Upper Landing Excavate Bench to Temporary Strut Level 1 & Expose Wide Flange Sta 132+50 To North He Install Permanent Wales - Intermediate Strut Level Sta 132+50 To South He Install Permanent Wales - Intermediate Strut Level Sta 132+50 To South He Install Sheet Piling at Garage Base Slab Form/Rebar/Pour Invert Slab For South Concourse Escalator Upper Landing Excavate Bench to Temporary Strut Level 1 & Expose Wide Flange Sta 132+50 To South Headwall Install & Pre-Load Permanent Struts - Intermediate Strut Level Sta 132+50 To South Headwall Install & Pre-Load Permanent Struts - Intermediate Strut Level Sta 132+50 To South Headwall Install & Pre-Load Permanent Struts - Intermediate Strut Level Sta 132+50 To South Headwall Install & Pre-Load Permanent Struts - Intermediate Strut Level Sta 132+50 To South Headwall Install Studs, Mesh, Drain Pipe & Shotcrete Pile Walls Interm Level To Temp Strut Lvl 1 Sta Form/Rebar/Pour Walls For South Concourse Escalator Upper Landing		<ul> <li>12-May-16</li> <li>12-May-16</li> <li>12-May-16</li> <li>16-May-16</li> <li>17-May-16</li> <li>17-May-16</li> <li>19-May-16</li> <li>23-May-16</li> <li>23-May-16</li> <li>23-May-16</li> <li>31-May-16</li> <li>31-May-16</li> <li>06-Jun-16</li> <li>08-Jun-16</li> </ul>	25-May-16 25-May-16 27-May-16 31-May-16 02-Jun-16 24-May-16 03-Jun-16 06-Jun-16 27-May-16 13-Jun-16 13-Jun-16 14-Jun-16	74           -165           -156           -163           -163           -163           -163           -164           -165           -163           -163           -163           -163           -163           -163           -163           -167           -160           155           -178           155           -167		0 yr 0 yr 0 yr 0 yr 0 yr 1 yr 1 yr 1 yr 1 yr 1 yr 1 yr 1 yr 1	JMS_Dewater to 10 Ft Below Bottom of Excavation & Maintain         JMS_Install & Pre-Load Permanent Struts       - Concourse Level Sta 132+50 to South Headwall - 13ea         JMS_Install Drain Pipe & Grout Fill Void Between Piles       Roof       To Concourse Level Sta 132+50 to South Headwall - 13ea         UMS_Install Studs, Mesh, Drain Pipe & Shotcrete Pile Walls       Concourse to Intermediate Level Sta 132+50 to North Headwall         UMS_Install Drain Pipe & Grout Fill Void Between Piles       Roof       To Concourse Level Sta 132+50 to North Headwall         UMS_Install Drain Pipe & Grout Fill Void Between Piles       Roof       To Concourse Level Sta 132+50 to North Headwall         UMS_Install Permanent Wales       - Intermediate Strut Level Sta 132+50 To North Headwall       JMS_Excavate Bench to Intermediate Strut Level & Expose Wide Flange Sta 132+50 to South Headwall         UMS_Install & Pre-Load Permanent Struts       - Intermediate Strut Level Sta 132+50 To North Headwall         UMS_Install & Pre-Load Permanent Struts       - Intermediate Strut Level Sta 132+50 To North Headwall         UMS_Install & Pre-Load Permanent Struts       - Intermediate Strut Level Sta 132+50 To North Headwall         UMS_Install & Pre-Load Permanent Struts       - Intermediate Strut Level Sta 132+50 To North Headwall         UMS_Install Temporary Struts & Wales For South Concourse Escalator       - North Headwall
UMS.05.12.0715         UMS_Ins           UMS.03.37.0700         UMS_Ins           UMS.03.37.0700         UMS_Ins           UMS.03.37.0980         UMS_Ins           UMS.03.37.0980         UMS_Ins           UMS.03.37.0665         UMS_Ins           UMS.05.12.0820         UMS_Ins           UMS.05.12.0820         UMS_Ins           UMS.31.20.1140         UMS_Exc           UMS.31.20.1140         UMS_Exc           UMS.31.20.1150         UMS_Ins           UMS.31.20.1150         UMS_Ins           UMS.31.20.1150         UMS_Ins           UMS.31.20.1150         UMS_Ins           UMS.05.12.0830         UMS_Exc           UMS.03.0.1525         UMS_Ins           UMS.05.12.0835         UMS_Exc           UMS.05.12.0835         UMS_Ins           UMS.03.120.0835         UMS_Ins           UMS.03.37.0986         UMS_Ins           UMS.03.37.0985         UMS_Ins           UMS.03.37.0987         UMS_Ins           UMS.03.37.0987         UMS_Ins           UMS.03.37.0987         UMS_Ins           UMS.03.37.0987         UMS_Ins           UMS.03.120.1355         UMS_Ins           UMS.05.12.0880         UMS_Ins	Install & Pre-Load Permanent Struts - Concourse Level Sta 132+50 to South Headwall - Install Drain Pipe & Grout Fill Void Between Piles - Roof To Concourse Level Sta 132+50 t Install Studs, Mesh, Drain Pipe & Shotcrete Pile Walls Concourse to Intermediate Level Si Install Drain Pipe & Grout Fill Void Between Piles - Roof To Concourse Level Sta 132+50 t Install Permanent Wales - Intermediate Strut Level Sta 132+50 To North Headwall Excavation For South Concourse Escalator Excavate Bench to Intermediate Strut Level & Expose Wide Flange Sta 132+50 to South H¢ Install & Pre-Load Permanent Struts - Intermediate Strut Level Sta 132+50 To North Headvall Install Sheet Piling at Garage Base Slab Form/Rebar/Pour Invert Slab For South Concourse Escalator Upper Landing Excavate Bench to Temporary Strut Level 1 & Expose Wide Flange Sta 132+50 To North H¢ Install Permanent Wales - Intermediate Strut Level Sta 132+50 To North H¢ Install Permanent Vales - Intermediate Strut Level Sta 132+50 To North H¢ Install Sheet Piling at Garage Base Slab Form/Rebar/Pour Invert Slab For South Concourse Escalator Upper Landing Excavate Bench to Temporary Strut Level 1 & Expose Wide Flange Sta 132+50 To North H¢ Install Permanent Wales - Intermediate Strut Level Sta 132+50 To South Headwall Install & Pre-Load Permanent Struts - Intermediate Strut Level Sta 132+50 To South Headwall Remove Temporary Struts & Wales For South Concourse Escalator Excavate Bench to Temporary Strut Level 1 & Expose Wide Flange Sta 132+50 To South Head Remove Temporary Struts & Wales For South Concourse Escalator Excavate Bench to Temporary Strut Level 1 & Expose Wide Flange Sta 132+50 To South H Install Studs, Mesh, Drain Pipe & Shotcrete Pile Walls Interm Level To Temp Strut Lvl 1 Sta Form/Rebar/Pour Walls For South Concourse Escalator Upper Landing	10 10 10 10 10 10 2 2 5 5 10 10 10 10 10 10 10 10 10 10 10 10 10	<ul> <li>12-May-16</li> <li>16-May-16</li> <li>17-May-16</li> <li>17-May-16</li> <li>19-May-16</li> <li>23-May-16</li> <li>23-May-16</li> <li>23-May-16</li> <li>23-May-16</li> <li>31-May-16</li> <li>31-May-16</li> <li>06-Jun-16</li> <li>08-Jun-16</li> </ul>	25-May-16 27-May-16 31-May-16 31-May-16 02-Jun-16 24-May-16 03-Jun-16 06-Jun-16 27-May-16 13-Jun-16 13-Jun-16 14-Jun-16 17-Jun-16	-165 -156 -163 -157 -163 -114 -167 -160 155 -178 155 -167			JMS_Install       & Pre-Load Permanent Struts       - Concourse Level Sta 132+50 to South Headwall - 13ea         JMS_Install       Drain Pipe & Grout Fill Void Between Piles - Roof       To Concourse Level Sta 132+50 to South Headwall         UMS_Install       Studs, Mesh, Drain Pipe & Shotcrete Pile Walls       Concourse to Intermediate Level Sta 132+50 to North Headwall         UMS_Install       Drain Pipe & Grout Fill Void Between Piles - Roof       To Concourse Level Sta 132+50 to North Headwall         UMS_Install       Drain Pipe & Grout Fill Void Between Piles - Roof       To Concourse Level Sta 132+50 to North Headwall         UMS_Install       Permanent Wales - Intermediate Strut Level Sta 132+50 To North Headwall       JMS_Excavation For South Concourse Escalator         UMS_Install & Pre-Load Permanent Struts       - Intermediate Strut Level & Expose Wide Flange Sta 132+50 to North Headwall         UMS_Install       & Pre-Load Permanent Struts       - Intermediate Strut Level Sta 132+50 To North Headwall         UMS_Install       Temporary Struts & Wales For South Concourse Escalator       South Headwall
UMS.03.37.0700         UMS_Ins           UMS.03.37.0980         UMS_Ins           UMS.03.37.0665         UMS_Ins           UMS.05.12.0820         UMS_Ins           UMS.05.12.0820         UMS_Ins           UMS.05.12.0820         UMS_Exc           UMS.31.20.1140         UMS_Exc           UMS.31.20.1140         UMS_Exc           UMS.31.20.1150         UMS_Ins           UMS.31.20.1150         UMS_Ins           UMS.31.20.1150         UMS_Ins           UMS.31.20.1150         UMS_Ins           UMS.31.20.1150         UMS_Ins           UMS.31.20.1350         UMS_Ins           UMS.03.30.1525         UMS_Ins           UMS.05.12.0835         UMS_Ins           UMS.05.12.0835         UMS_Ins           UMS.31.20.1345         UMS_Exc           UMS.31.20.0835         UMS_Ins           UMS.33.7.0986         UMS_Ins           UMS.31.20.0850         UMS_Ins           UMS.31.20.0860         UMS_Exc           UMS.31.20.1120         UMS_Exc           UMS.31.20.1355         UMS_Ins           UMS.31.20.1355         UMS_Ins           UMS.31.20.1355         UMS_Ins           UMS.31.20.0865         UMS_Ins	Install Drain Pipe & Grout Fill Void Between Piles - Roof To Concourse Level Sta 132+50 t Install Studs, Mesh, Drain Pipe & Shotcrete Pile Walls Concourse to Intermediate Level Si Install Drain Pipe & Grout Fill Void Between Piles - Roof To Concourse Level Sta 132+50 t Install Permanent Wales - Intermediate Strut Level Sta 132+50 To North Headwall Excavation For South Concourse Escalator Excavate Bench to Intermediate Strut Level & Expose Wide Flange Sta 132+50 to South He Install & Pre-Load Permanent Struts - Intermediate Strut Level Sta 132+50 To North Headvall Install Sheet Piling at Garage Base Slab Form/Rebar/Pour Invert Slab For South Concourse Escalator Upper Landing Excavate Bench to Temporary Strut Level 1 & Expose Wide Flange Sta 132+50 To North He Install Permanent Wales - Intermediate Strut Level Sta 132+50 To North He Install Permanent Struts - Intermediate Strut Level Sta 132+50 To North He Install Sheet Piling at Garage Base Slab Form/Rebar/Pour Invert Slab For South Concourse Escalator Upper Landing Excavate Bench to Temporary Strut Level 1 & Expose Wide Flange Sta 132+50 To North He Install Permanent Wales - Intermediate Strut Level Sta 132+50 To South Headwall Install & Pre-Load Permanent Struts - Intermediate Strut Level Sta 132+50 To South Headwall Install & Install & Pre-Load Permanent Struts - Intermediate Strut Level Sta 132+50 To South Headwall Remove Temporary Struts & Wales For South Concourse Escalator Excavate Bench to Temporary Strut Level 1 & Expose Wide Flange Sta 132+50 To South Head Install Studs, Mesh, Drain Pipe & Shotcrete Pile Walls Interm Level To Temp Strut Lvl 1 Sta Form/Rebar/Pour Walls For South Concourse Escalator Upper Landing	100 100 100 100 22 55 56 100 100 100 100 100 100 100 100 100 10	<ul> <li>b) 16-May-16</li> <li>c) 17-May-16</li> <li>c) 17-May-16</li> <li>c) 19-May-16</li> <li>c) 23-May-16</li> <li>c) 23-May-16</li> <li>c) 23-May-16</li> <li>c) 23-May-16</li> <li>c) 31-May-16</li> </ul>	27-May-16 31-May-16 31-May-16 02-Jun-16 24-May-16 03-Jun-16 06-Jun-16 27-May-16 13-Jun-16 13-Jun-16 14-Jun-16 17-Jun-16	-156 -163 -157 -163 -114 -167 -160 155 -178 155 -167			UMS_Install Drain Pipe & Grout Fill Void Between Piles - Roof To Concourse Level Sta 132+50 to South Headwall UMS_Install Studs, Mesh, Drain Pipe & Shotcrete Pile Walls Concourse to Intermediate Level Sta 132+50 to North Headw UMS_Install Drain Pipe & Grout Fill Void Between Piles - Roof To Concourse Level Sta 132+50 to North Headwall UMS_Install Permanent Wales - Intermediate Strut Level Sta 132+50 To North Headwall UMS_Excavation For South Concourse Escalator UMS_Excavate Bench to Intermediate Strut Level & Expose Wide Flange Sta 132+50 to South Headwall UMS_Install & Pre-Load Permanent Struts - Intermediate Strut Level Sta 132+50 To North Headwall UMS_Install Temporary Struts & Wales For South Concourse Escalator
UMS.03.37.0980         UMS_Ins           UMS.03.37.0665         UMS_Ins           UMS.05.12.0820         UMS_Ins           UMS.05.12.0820         UMS_Ins           UMS.31.20.1140         UMS_Exc           UMS.31.20.1140         UMS_Exc           UMS.31.20.1140         UMS_Exc           UMS.31.20.0805         UMS_Ins           UMS.31.20.1150         UMS_Ins           UMS.31.20.1150         UMS_Ins           UMS.31.20.1150         UMS_Ins           UMS.31.20.1150         UMS_Ins           UMS.31.20.0830         UMS_Exc           UMS.05.12.0825         UMS_Ins           UMS.05.12.0835         UMS_Ins           UMS.05.12.0835         UMS_Ins           UMS.31.20.1345         UMS_Rer           UMS.31.20.0835         UMS_Ins           UMS.33.7.0986         UMS_Ins           UMS.33.7.0985         UMS_Ins           UMS.31.20.0860         UMS_Exc           UMS.33.7.0987         UMS_Ins           UMS.33.7.0987         UMS_Ins           UMS.33.7.0987         UMS_Ins           UMS.33.7.0987         UMS_Ins           UMS.33.7.0987         UMS_Ins           UMS.31.20.1350         UMS_Exc	Install Studs, Mesh, Drain Pipe & Shotcrete Pile Walls Concourse to Intermediate Level Si Install Drain Pipe & Grout Fill Void Between Piles - Roof To Concourse Level Sta 132+50 t Install Permanent Wales - Intermediate Strut Level Sta 132+50 To North Headwall Excavation For South Concourse Escalator Excavate Bench to Intermediate Strut Level & Expose Wide Flange Sta 132+50 to South He Install & Pre-Load Permanent Struts - Intermediate Strut Level Sta 132+50 To North Headv Install Temporary Struts & Wales For South Concourse Escalator Install Sheet Piling at Garage Base Slab Form/Rebar/Pour Invert Slab For South Concourse Escalator Upper Landing Excavate Bench to Temporary Strut Level 1 & Expose Wide Flange Sta 132+50 To North He Install Permanent Wales - Intermediate Strut Level Sta 132+50 To South He Install Permanent Wales - Intermediate Strut Level Sta 132+50 To South He Install Permanent Wales - Intermediate Strut Level Sta 132+50 To South Headwall Install Pere-Load Permanent Struts - Intermediate Strut Level Sta 132+50 To South Headwall Install & Pre-Load Permanent Struts - Intermediate Strut Level Sta 132+50 To South Headwall Install & Studs, Mesh, Drain Pipe & Shotcrete Pile Walls Interm Level To Temp Strut Lvl 1 Sta Form/Rebar/Pour Walls For South Concourse Escalator Upper Landing		<ul> <li>17-May-16</li> <li>17-May-16</li> <li>19-May-16</li> <li>23-May-16</li> <li>23-May-16</li> <li>23-May-16</li> <li>23-May-16</li> <li>31-May-16</li> <li>31-May-16</li> <li>31-May-16</li> <li>06-Jun-16</li> <li>08-Jun-16</li> </ul>	31-May-16         31-May-16         02-Jun-16         24-May-16         03-Jun-16         27-May-16         13-Jun-16         13-Jun-16         14-Jun-16         17-Jun-16	-163 -157 -163 -114 -167 -160 155 -178 155 -167			UMS_Instal Studs, Mesh, Drain Pipe & Shotcrete Pile Walls Concourse to Intermediate Level Sta 132+50 to North Headw UMS_Instal Drain Pipe & Grout Fill Void Between Piles - Roof To Concourse Level Sta 132+50 to North Headwall UMS_Instal Permanent Wales - Intermediate Strut Level Sta 132+50 To North Headwall JMS_Excavation For South Concourse Escalator UMS_Excavate Bench to Intermediate Strut Level & Expose Wide Flange Sta 132+50 to South Headwall UMS_Instal & Pre-Load Permanent Struts - Intermediate Strut Level Sta 132+50 To North Headwall UMS_Instal Temporary Struts & Wales For South Concourse Escalator
UMS.03.37.0665         UMS_Ins           UMS.05.12.0820         UMS_Ins           UMS.31.20.1140         UMS_Exc           UMS.31.20.1140         UMS_Exc           UMS.05.12.0830         UMS_Exc           UMS.31.20.1150         UMS_Inst           UMS.31.20.1150         UMS_Inst           UMS.31.20.1150         UMS_Inst           UMS.31.20.1150         UMS_Inst           UMS.31.20.1150         UMS_Inst           UMS.31.20.0830         UMS_Exc           UMS.05.12.0825         UMS_Inst           UMS.05.12.0835         UMS_Inst           UMS.05.12.0835         UMS_Rer           UMS.31.20.1345         UMS_Rer           UMS.03.37.0986         UMS_Inst           UMS.03.37.0985         UMS_Inst           UMS.03.37.0985         UMS_Inst           UMS.03.37.0987         UMS_Inst           UMS.03.37.0987         UMS_Inst           UMS.03.37.0987         UMS_Inst           UMS.03.37.0987         UMS_Inst           UMS.03.37.0987         UMS_Inst           UMS.03.120.1120         UMS_Exc           UMS.05.12.0880         UMS_Inst           UMS.05.12.0890         UMS_Inst           UMS.05.12.0890         <	Install Drain Pipe & Grout Fill Void Between Piles - Roof To Concourse Level Sta 132+50 t Install Permanent Wales - Intermediate Strut Level Sta 132+50 To North Headwall Excavation For South Concourse Escalator Excavate Bench to Intermediate Strut Level & Expose Wide Flange Sta 132+50 to South He Install & Pre-Load Permanent Struts - Intermediate Strut Level Sta 132+50 To North Headv Install Temporary Struts & Wales For South Concourse Escalator Install Sheet Piling at Garage Base Slab Form/Rebar/Pour Invert Slab For South Concourse Escalator Upper Landing Excavate Bench to Temporary Strut Level 1 & Expose Wide Flange Sta 132+50 To North He Install Permanent Wales - Intermediate Strut Level Sta 132+50 To South Headwall Install Permanent Wales - Intermediate Strut Level Sta 132+50 To South Headwall Install & Pre-Load Permanent Struts - Intermediate Strut Level Sta 132+50 To South Headwall Remove Temporary Struts & Wales For South Concourse Escalator Excavate Bench to Temporary Strut Level 1 & Expose Wide Flange Sta 132+50 To South Head Remove Temporary Struts & Wales For South Concourse Escalator Excavate Bench to Temporary Strut Level 1 & Expose Wide Flange Sta 132+50 To South Head Remove Temporary Struts & Wales For South Concourse Escalator Excavate Bench to Temporary Strut Level 1 & Expose Wide Flange Sta 132+50 To South H Install Studs, Mesh, Drain Pipe & Shotcrete Pile Walls Interm Level To Temp Strut Lvl 1 Sta Form/Rebar/Pour Walls For South Concourse Escalator Upper Landing		<ul> <li>17-May-16</li> <li>19-May-16</li> <li>23-May-16</li> <li>23-May-16</li> <li>23-May-16</li> <li>23-May-16</li> <li>31-May-16</li> <li>31-May-16</li> <li>06-Jun-16</li> <li>08-Jun-16</li> </ul>	31-May-16 02-Jun-16 24-May-16 03-Jun-16 06-Jun-16 27-May-16 13-Jun-16 13-Jun-16 14-Jun-16 17-Jun-16	-157 -163 -114 -167 -160 155 -178 155 -167	· · · · · · · · · · · · · · · · · · ·		UMS_Instal       Drain Pipe & Grout Fill Void Between Piles - Roof       To Concourse Level Sta 132+50 to North Headwall         UMS_Instal       Permanent Wales - Intermediate Strut Level Sta 132+50 To North Headwall         JMS_Excavation For South Concourse Escalator         UMS_Excavate Bench to Intermediate Strut Level & Expose Wide Flange Sta 132+50 to South Headwall         UMS_Instal       & Pre-Load Permanent Struts - Intermediate Strut Level Sta 132+50 To North Headwall         UMS_Instal       Tepporary Struts & Wales For South Concourse Escalator
UMS.05.12.0820         UMS_Ins           UMS.31.20.1140         UMS_Exc           UMS.31.20.0805         UMS_Exc           UMS.05.12.0830         UMS_Ins           UMS.31.20.1150         UMS_Ins           UMS.31.20.1150         UMS_Ins           UMS.31.20.1150         UMS_Ins           UMS.31.20.1150         UMS_Ins           UMS.31.20.1150         UMS_Ins           UMS.31.20.1150         UMS_Ins           UMS.03.30.1525         UMS_For           UMS.05.12.0835         UMS_Ins           UMS.05.12.0835         UMS_Ins           UMS.05.12.0835         UMS_Rer           UMS.31.20.1345         UMS_Exc           UMS.03.37.0986         UMS_Ins           UMS.03.37.0985         UMS_Ins           UMS.03.37.0985         UMS_Ins           UMS.31.20.0860         UMS_Exc           UMS.31.20.1120         UMS_Exc           UMS.31.20.1120         UMS_Exc           UMS.31.20.1355         UMS_Ins           UMS.31.20.1355         UMS_Ins           UMS.05.12.0880         UMS_Ins           UMS.31.20.1355         UMS_Ins           UMS.05.12.0890         UMS_Ins           UMS.05.12.0890         UMS_Ins	Install Permanent Wales - Intermediate Strut Level Sta 132+50 To North Headwall Excavation For South Concourse Escalator Excavate Bench to Intermediate Strut Level & Expose Wide Flange Sta 132+50 to South He Install & Pre-Load Permanent Struts - Intermediate Strut Level Sta 132+50 To North Headv Install Temporary Struts & Wales For South Concourse Escalator Install Sheet Piling at Garage Base Slab Form/Rebar/Pour Invert Slab For South Concourse Escalator Upper Landing Excavate Bench to Temporary Strut Level 1 & Expose Wide Flange Sta 132+50 To North He Install Permanent Wales - Intermediate Strut Level Sta 132+50 To South He Install & Pre-Load Permanent Struts - Intermediate Strut Level Sta 132+50 To South Headwall Install & Pre-Load Permanent Struts - Intermediate Strut Level Sta 132+50 To South Headwall Remove Temporary Struts & Wales For South Concourse Escalator Excavate Bench to Temporary Strut Level 1 & Expose Wide Flange Sta 132+50 To South Head Remove Temporary Struts & Wales For South Concourse Escalator Excavate Bench to Temporary Strut Level 1 & Expose Wide Flange Sta 132+50 To South Head Remove Temporary Struts & Wales For South Concourse Escalator Excavate Bench to Temporary Strut Level 1 & Expose Wide Flange Sta 132+50 To South H Install Studs, Mesh, Drain Pipe & Shotcrete Pile Walls Interm Level To Temp Strut Lvl 1 Sta Form/Rebar/Pour Walls For South Concourse Escalator Upper Landing	10 22 5 10 3 10 10 7 7 10 10 10 10 3	<ul> <li>19-May-16</li> <li>23-May-16</li> <li>23-May-16</li> <li>23-May-16</li> <li>23-May-16</li> <li>31-May-16</li> <li>31-May-16</li> <li>06-Jun-16</li> <li>08-Jun-16</li> </ul>	02-Jun-16 24-May-16 03-Jun-16 06-Jun-16 27-May-16 13-Jun-16 13-Jun-16 14-Jun-16 17-Jun-16	-163 -114 -167 -160 155 -178 155 -167	· · · · · · · · · · · · · · · · · · ·		UMS_Install Permanent Wales - Intermediate Strut Level Sta 132+50 To North Headwall JMS_Excavation For South Concourse Escalator UMS_Excavate Bench to Intermediate Strut Level & Expose Wide Flange Sta 132+50 to South Headwall UMS_Install & Pre-Load Permanent Struts - Intermediate Strut Level Sta 132+50 To North Headwall UMS_Install Temporary Struts & Wales For South Concourse Escalator
UMS.31.20.1140         UMS_Exc           UMS.31.20.0805         UMS_Exc           UMS.05.12.0830         UMS_Ins           UMS.31.20.1150         UMS_Ins           UMS.31.20.1150         UMS_Ins           UMS.31.20.1150         UMS_Ins           UMS.31.20.1150         UMS_Ins           UMS.31.41.0205         UMS_Ins           UMS.31.20.0830         UMS_Exc           UMS.05.12.0825         UMS_Ins           UMS.05.12.0835         UMS_Exc           UMS.05.12.0835         UMS_Rer           UMS.31.20.1345         UMS_Exc           UMS.03.37.0986         UMS_Inst           UMS.03.37.0985         UMS_Inst           UMS.03.37.0985         UMS_Inst           UMS.31.20.0860         UMS_Exc           UMS.31.20.1320         UMS_Exc           UMS.31.20.0860         UMS_Inst           UMS.31.20.1120         UMS_Exc           UMS.31.20.1355         UMS_Inst           UMS.31.20.1355         UMS_Inst           UMS.31.20.1355         UMS_Inst           UMS.05.12.0880         UMS_Inst           UMS.31.20.0865         UMS_Inst           UMS.05.12.0890         UMS_Inst           UMS.05.12.0890         UMS_I	Excavation For South Concourse Escalator Excavate Bench to Intermediate Strut Level & Expose Wide Flange Sta 132+50 to South He Install & Pre-Load Permanent Struts - Intermediate Strut Level Sta 132+50 To North Heady Install Temporary Struts & Wales For South Concourse Escalator Install Sheet Piling at Garage Base Slab Form/Rebar/Pour Invert Slab For South Concourse Escalator Upper Landing Excavate Bench to Temporary Strut Level 1 & Expose Wide Flange Sta 132+50 To North He Install Permanent Wales - Intermediate Strut Level Sta 132+50 To South Headwall Install & Pre-Load Permanent Struts - Intermediate Strut Level Sta 132+50 To South Headwall Install & Pre-Load Permanent Struts - Intermediate Strut Level Sta 132+50 To South Headwall Remove Temporary Struts & Wales For South Concourse Escalator Excavate Bench to Temporary Strut Level 1 & Expose Wide Flange Sta 132+50 To South Headwall Install Studs, Mesh, Drain Pipe & Shotcrete Pile Walls Interm Level To Temp Strut Lvl 1 Sta Form/Rebar/Pour Walls For South Concourse Escalator Upper Landing	2 9 10 3 10 10 10 7 7 10 10 10 3	2 23-May-16 3 23-May-16 3 23-May-16 3 25-May-16 3 31-May-16 3 31-May-16 3 06-Jun-16 0 08-Jun-16	24-May-16 03-Jun-16 06-Jun-16 27-May-16 13-Jun-16 13-Jun-16 14-Jun-16 17-Jun-16	-114 -167 -160 155 -178 155 -167	9	יי ש ע ש ע ו עו	JMS_Excavation For South Concourse Escalator UMS_Excavate Bench to Intermediate Strut Level & Expose Wide Flange Sta 132+50 to South Headwall UMS_Install & Pre-Load Permanent Struts - Intermediate Strut Level Sta 132+50 To North Headwall UMS_Install Temporary Struts & Wales For South Concourse Escalator
UMS.31.20.0805         UMS_Exc           UMS.05.12.0830         UMS_Ins           UMS.31.20.1150         UMS_Ins           UMS.31.20.1150         UMS_Ins           UMS.31.20.1150         UMS_Ins           UMS.31.20.0830         UMS_Exc           UMS.03.30.1525         UMS_Erc           UMS.05.12.0830         UMS_Exc           UMS.05.12.0835         UMS_Ins           UMS.05.12.0835         UMS_Ins           UMS.31.20.1345         UMS_Rer           UMS.03.37.0986         UMS_Ins           UMS.03.37.0986         UMS_Ins           UMS.03.37.0985         UMS_Ins           UMS.31.20.0860         UMS_Ins           UMS.31.20.0860         UMS_Exc           UMS.31.20.0860         UMS_Exc           UMS.31.20.1120         UMS_Exc           UMS.31.20.1120         UMS_Exc           UMS.31.20.1355         UMS_Inst           UMS.31.20.1355         UMS_Inst           UMS.31.20.1355         UMS_Inst           UMS.31.20.0865         UMS_Inst           UMS.31.20.0865         UMS_Inst           UMS.31.20.0865         UMS_Inst           UMS.31.20.0865         UMS_Inst           UMS.31.20.0865         UMS_Inst	Excavate Bench to Intermediate Strut Level & Expose Wide Flange Sta 132+50 to South He Install & Pre-Load Permanent Struts - Intermediate Strut Level Sta 132+50 To North Heady Install Temporary Struts & Wales For South Concourse Escalator Install Sheet Piling at Garage Base Slab Form/Rebar/Pour Invert Slab For South Concourse Escalator Upper Landing Excavate Bench to Temporary Strut Level 1 & Expose Wide Flange Sta 132+50 To North He Install Permanent Wales - Intermediate Strut Level Sta 132+50 To South Headwall Install & Pre-Load Permanent Struts - Intermediate Strut Level Sta 132+50 To South Headwall Remove Temporary Struts & Wales For South Concourse Escalator Excavate Bench to Temporary Strut Level 1 & Expose Wide Flange Sta 132+50 To South Headwall Remove Temporary Struts & Wales For South Concourse Escalator Excavate Bench to Temporary Strut Level 1 & Expose Wide Flange Sta 132+50 To South H Install Studs, Mesh, Drain Pipe & Shotcrete Pile Walls Interm Level To Temp Strut Lvl 1 Sta Form/Rebar/Pour Walls For South Concourse Escalator Upper Landing	5 10 10 10 10 7 10 10 10 10 10 10 10 10 10 10 10 10 10	<ul> <li>23-May-16</li> <li>23-May-16</li> <li>25-May-16</li> <li>31-May-16</li> <li>31-May-16</li> <li>31-May-16</li> <li>06-Jun-16</li> <li>08-Jun-16</li> </ul>	03-Jun-16 06-Jun-16 27-May-16 13-Jun-16 13-Jun-16 14-Jun-16 17-Jun-16	-167 -160 155 -178 155 -167	<u>.</u>	ט ט ו טו ו נו	UMS_Excavate Bench to Intermediate Strut Level & Expose Wide Flange Sta 132+50 to South Headwall UMS_Install & Pre-Load Permanent Struts - Intermediate Strut Level Sta 132+50 To North Headwall UMS_Install Temporary Struts & Wales For South Concourse Escalator
UMS.05.12.0830         UMS_Inst UMS_31.20.1150           UMS.31.20.1150         UMS_Inst UMS_31.41.0205         UMS_Inst UMS_6.03.30.1525           UMS.03.30.1525         UMS_For UMS_05.12.0830         UMS_Exc UMS_05.12.0835           UMS.05.12.0835         UMS_Inst UMS_01.120.1345         UMS_Rer UMS_31.20.1345           UMS.03.37.0986         UMS_Inst UMS_03.37.0986         UMS_Inst UMS_03.37.0985           UMS.03.37.0985         UMS_Inst UMS_03.37.0987         UMS_Inst UMS_03.37.0987           UMS.31.20.1850         UMS_Inst UMS_31.20.1120         UMS_Exc UMS_05.12.0880           UMS.31.20.1355         UMS_Inst UMS_31.20.0855         UMS_Inst UMS_31.20.1355           UMS.31.20.0855         UMS_Inst UMS_31.20.0865         UMS_Inst UMS_31.20.0865           UMS.31.20.0865         UMS_Inst UMS_31.20.0865         UMS_Inst UMS_31.20.0865           UMS.31.20.3250         UMS_Inst UMS_31.20.3850         UMS_Inst UMS_31.20.3855	Install & Pre-Load Permanent Struts - Intermediate Strut Level Sta 132+50 To North Heads Install Temporary Struts & Wales For South Concourse Escalator Install Sheet Piling at Garage Base Slab Form/Rebar/Pour Invert Slab For South Concourse Escalator Upper Landing Excavate Bench to Temporary Strut Level 1 & Expose Wide Flange Sta 132+50 To North He Install Permanent Wales - Intermediate Strut Level Sta 132+50 To South Headwall Install & Pre-Load Permanent Struts - Intermediate Strut Level Sta 132+50 To South Head Remove Temporary Struts & Wales For South Concourse Escalator Excavate Bench to Temporary Strut Level 1 & Expose Wide Flange Sta 132+50 To South Head Remove Temporary Struts & Wales For South Concourse Escalator Excavate Bench to Temporary Strut Level 1 & Expose Wide Flange Sta 132+50 To South H Install Studs, Mesh, Drain Pipe & Shotcrete Pile Walls Interm Level To Temp Strut Lvl 1 Sta Form/Rebar/Pour Walls For South Concourse Escalator Upper Landing	10 3 10 10 7 7 10 10 10 3	<ul> <li>23-May-16</li> <li>25-May-16</li> <li>31-May-16</li> <li>31-May-16</li> <li>31-May-16</li> <li>06-Jun-16</li> <li>06-Jun-16</li> <li>08-Jun-16</li> </ul>	06-Jun-16 27-May-16 13-Jun-16 13-Jun-16 14-Jun-16 17-Jun-16	-160 155 -178 155 -167		ם ט ו טו ∎ נ	UMS_Install & Pre-Load Permanent Struts - Intermediate Strut Level Sta 132+50 To North Headwall UMS_Install Temporary Struts & Wales For South Concourse Escalator
UMS.31.20.1150         UMS_Inst UMS.31.41.0205           UMS.31.41.0205         UMS_Inst UMS.03.30.1525         UMS_For UMS_For UMS.05.12.0830           UMS.05.12.0835         UMS_Inst UMS.05.12.0835         IMS_Inst UMS_Rer UMS.31.20.1345           UMS.03.37.0985         UMS_Exc UMS_03.37.0986         UMS_Inst UMS_03.37.0985           UMS.03.37.0985         UMS_Inst UMS_03.37.0985         UMS_Inst UMS_03.37.0987           UMS.31.20.0860         UMS_Inst UMS_03.37.0987         UMS_Inst UMS_05.12.0880           UMS.03.37.0987         UMS_Inst UMS_05.12.0880         UMS_Inst UMS_05.12.0885           UMS.05.12.2250         UMS_Inst UMS_05.12.2250         UMS_Inst UMS_05.12.0890           UMS.05.12.0890         UMS_Inst UMS_05.12.0890         UMS_Inst UMS_05.12.0890	Install Temporary Struts & Wales For South Concourse Escalator Install Sheet Piling at Garage Base Slab Form/Rebar/Pour Invert Slab For South Concourse Escalator Upper Landing Excavate Bench to Temporary Strut Level 1 & Expose Wide Flange Sta 132+50 To North He Install Permanent Wales - Intermediate Strut Level Sta 132+50 To South Headwall Install & Pre-Load Permanent Struts - Intermediate Strut Level Sta 132+50 To South Headwall Remove Temporary Struts & Wales For South Concourse Escalator Excavate Bench to Temporary Strut Level 1 & Expose Wide Flange Sta 132+50 To South Head Install Studs, Mesh, Drain Pipe & Shotcrete Pile Walls Interm Level To Temp Strut Lvl 1 Sta Form/Rebar/Pour Walls For South Concourse Escalator Upper Landing	3 10 10 7 10 7 10 10 3	3       25-May-16         0       31-May-16         0       31-May-16         7       06-Jun-16         0       06-Jun-16         0       08-Jun-16	27-May-16 13-Jun-16 13-Jun-16 14-Jun-16 17-Jun-16	155 -178 155 -167		ן <sub>חו</sub>	UMS_Install Temporary Struts & Wales For South Concourse Escalator
UMS.31.41.0205         UMS_Ins           UMS.03.30.1525         UMS_For           UMS.03.1.20.0830         UMS_Exc           UMS.05.12.0825         UMS_Ins           UMS.05.12.0825         UMS_Ins           UMS.05.12.0835         UMS_Rer           UMS.31.20.1345         UMS_Exc           UMS.31.20.0835         UMS_Exc           UMS.31.20.0835         UMS_Exc           UMS.03.37.0986         UMS_Inst           UMS.03.37.0985         UMS_Inst           UMS.31.20.0860         UMS_Inst           UMS.31.20.0860         UMS_Exc           UMS.31.20.1120         UMS_Exc           UMS.31.20.1120         UMS_Exc           UMS.31.20.1120         UMS_Exc           UMS.31.20.1355         UMS_Inst           UMS.31.20.1355         UMS_Inst           UMS.31.20.1355         UMS_Inst           UMS.31.20.1355         UMS_Inst           UMS.05.12.2250         UMS_Inst           UMS.05.12.0890         UMS_Inst           UMS.05.12.0890         UMS_Inst           UMS.05.12.0890         UMS_Inst	Install Sheet Piling at Garage Base Slab Form/Rebar/Pour Invert Slab For South Concourse Escalator Upper Landing Excavate Bench to Temporary Strut Level 1 & Expose Wide Flange Sta 132+50 To North Hi Install Permanent Wales - Intermediate Strut Level Sta 132+50 To South Headwall Install & Pre-Load Permanent Struts - Intermediate Strut Level Sta 132+50 To South Headwall Remove Temporary Struts & Wales For South Concourse Escalator Excavate Bench to Temporary Strut Level 1 & Expose Wide Flange Sta 132+50 To South H Install Studs, Mesh, Drain Pipe & Shotcrete Pile Walls Interm Level To Temp Strut Lvl 1 Sta Form/Rebar/Pour Walls For South Concourse Escalator Upper Landing	10 10 7 10 10 10	<ul> <li>31-May-16</li> <li>31-May-16</li> <li>31-May-16</li> <li>06-Jun-16</li> <li>06-Jun-16</li> <li>08-Jun-16</li> </ul>	13-Jun-16 13-Jun-16 14-Jun-16 17-Jun-16	-178 155 -167		ا	
UMS.03.30.1525         UMS_For           UMS.31.20.0830         UMS_Exc           UMS.05.12.0825         UMS_Ins           UMS.05.12.0835         UMS_Ins           UMS.05.12.0835         UMS_Ins           UMS.31.20.1345         UMS_Rer           UMS.31.20.0835         UMS_Exc           UMS.31.20.0835         UMS_Exc           UMS.31.20.0835         UMS_Inst           UMS.03.37.0986         UMS_Inst           UMS.03.37.0985         UMS_Inst           UMS.31.20.0860         UMS_Exc           UMS.31.20.0860         UMS_Exc           UMS.31.20.1120         UMS_Exc           UMS.31.20.1120         UMS_Exc           UMS.31.20.1120         UMS_Exc           UMS.31.20.1355         UMS_Inst           UMS.31.20.1355         UMS_Inst           UMS.31.20.0865         UMS_Inst           UMS.31.20.0865         UMS_Inst           UMS.05.12.2250         UMS_Inst           UMS.05.12.0890         UMS_Inst           UMS.05.12.0890         UMS_Inst           UMS.05.12.0885         UMS_Inst	Form/Rebar/Pour Invert Slab For South Concourse Escalator Upper Landing Excavate Bench to Temporary Strut Level 1 & Expose Wide Flange Sta 132+50 To North He Install Permanent Wales - Intermediate Strut Level Sta 132+50 To South Headwall Install & Pre-Load Permanent Struts - Intermediate Strut Level Sta 132+50 To South Headwall Remove Temporary Struts & Wales For South Concourse Escalator Excavate Bench to Temporary Strut Level 1 & Expose Wide Flange Sta 132+50 To South H Install Studs, Mesh, Drain Pipe & Shotcrete Pile Walls Interm Level To Temp Strut Lvl 1 Sta Form/Rebar/Pour Walls For South Concourse Escalator Upper Landing	10 7 10 10	<ul> <li>31-May-16</li> <li>06-Jun-16</li> <li>06-Jun-16</li> <li>08-Jun-16</li> </ul>	13-Jun-16 14-Jun-16 17-Jun-16	155 -167		i eri -	
UMS.03.30.1525         UMS_For           UMS.31.20.0830         UMS_Exc           UMS.05.12.0825         UMS_Ins           UMS.05.12.0835         UMS_Ins           UMS.05.12.0835         UMS_Rer           UMS.31.20.1345         UMS_Rer           UMS.03.37.0986         UMS_Inst           UMS.03.37.0986         UMS_Inst           UMS.03.37.0985         UMS_Inst           UMS.03.37.0985         UMS_Inst           UMS.03.37.0986         UMS_Inst           UMS.03.37.0985         UMS_Inst           UMS.31.20.0860         UMS_Exc           UMS.31.20.120         UMS_Exc           UMS.31.20.1355         UMS_Inst           UMS.31.20.1355         UMS_Inst           UMS.31.20.1355         UMS_Inst           UMS.31.20.1355         UMS_Inst           UMS.31.20.0865         UMS_Inst           UMS.31.20.0865         UMS_Inst           UMS.31.20.0865         UMS_Inst           UMS.31.20.0865         UMS_Inst           UMS.05.12.0890         UMS_Inst           UMS.05.12.0890         UMS_Inst           UMS.05.12.0885         UMS_Inst	Form/Rebar/Pour Invert Slab For South Concourse Escalator Upper Landing Excavate Bench to Temporary Strut Level 1 & Expose Wide Flange Sta 132+50 To North He Install Permanent Wales - Intermediate Strut Level Sta 132+50 To South Headwall Install & Pre-Load Permanent Struts - Intermediate Strut Level Sta 132+50 To South Headwall Remove Temporary Struts & Wales For South Concourse Escalator Excavate Bench to Temporary Strut Level 1 & Expose Wide Flange Sta 132+50 To South H Install Studs, Mesh, Drain Pipe & Shotcrete Pile Walls Interm Level To Temp Strut Lvl 1 Sta Form/Rebar/Pour Walls For South Concourse Escalator Upper Landing	10 7 10 10	<ul> <li>31-May-16</li> <li>06-Jun-16</li> <li>06-Jun-16</li> <li>08-Jun-16</li> </ul>	14-Jun-16 17-Jun-16	-167		i eri -	UMS_ Install Sheet Piling at Garage Base Slab
UMS.31.20.0830         UMS_Exc           UMS.05.12.0825         UMS_Ins           UMS.05.12.0835         UMS_Ins           UMS.31.20.1345         UMS_Rer           UMS.31.20.0835         UMS_Exc           UMS.31.20.0835         UMS_Exc           UMS.31.20.0835         UMS_Exc           UMS.31.20.0835         UMS_Exc           UMS.03.37.0986         UMS_Inst           UMS.03.37.0985         UMS_Inst           UMS.31.50.0850         UMS_Inst           UMS.31.20.0860         UMS_Exc           UMS.31.20.1120         UMS_Exc           UMS.31.20.1120         UMS_Exc           UMS.31.20.1120         UMS_Exc           UMS.31.20.1355         UMS_Inst           UMS.31.20.1355         UMS_Inst           UMS.31.20.21355         UMS_Inst           UMS.31.20.0865         UMS_Inst           UMS.05.12.2250         UMS_Inst           UMS.05.12.0890         UMS_Inst           UMS.05.12.0890         UMS_Inst           UMS.05.12.0885         UMS_Inst	Excavate Bench to Temporary Strut Level 1 & Expose Wide Flange Sta 132+50 To North Hi Install Permanent Wales - Intermediate Strut Level Sta 132+50 To South Headwall Install & Pre-Load Permanent Struts - Intermediate Strut Level Sta 132+50 To South Headwall Remove Temporary Struts & Wales For South Concourse Escalator Excavate Bench to Temporary Strut Level 1 & Expose Wide Flange Sta 132+50 To South H Install Studs, Mesh, Drain Pipe & Shotcrete Pile Walls Interm Level To Temp Strut Lvl 1 Sta Form/Rebar/Pour Walls For South Concourse Escalator Upper Landing	7 10 10	7 06-Jun-16 0 06-Jun-16 0 08-Jun-16	14-Jun-16 17-Jun-16	-167			UMS_Form/Rebar/Pour Invert Slab For South Concourse Escalator Upper Landing
UMS.05.12.0825         UMS_Ins           UMS.05.12.0835         UMS_Ins           UMS.31.20.1345         UMS_Rer           UMS.31.20.0835         UMS_Rer           UMS.31.20.0835         UMS_Exc           UMS.03.37.0986         UMS_Inst           UMS.03.37.0986         UMS_Inst           UMS.03.37.0985         UMS_Inst           UMS.03.37.0985         UMS_Inst           UMS.03.37.0985         UMS_Inst           UMS.31.20.0860         UMS_Exc           UMS.03.37.0987         UMS_Inst           UMS.03.37.0987         UMS_Inst           UMS.03.37.0987         UMS_Exc           UMS.03.37.0987         UMS_Inst           UMS.03.120.120         UMS_Exc           UMS.03.12.0.1355         UMS_Inst           UMS.05.12.2250         UMS_Inst           UMS.05.12.0890         UMS_Inst           UMS.05.12.0890         UMS_Inst           UMS.05.12.0890         UMS_Inst           UMS.05.12.0885         UMS_Inst	Install Permanent Wales - Intermediate Strut Level Sta 132+50 To South Headwall Install & Pre-Load Permanent Struts - Intermediate Strut Level Sta 132+50 To South Head Remove Temporary Struts & Wales For South Concourse Escalator Excavate Bench to Temporary Strut Level 1 & Expose Wide Flange Sta 132+50 To South H Install Studs, Mesh, Drain Pipe & Shotcrete Pile Walls Interm Level To Temp Strut Lvl 1 Sta Form/Rebar/Pour Walls For South Concourse Escalator Upper Landing	10 10	06-Jun-16 08-Jun-16	17-Jun-16		_ !		UMS_Excavate Bench to Temporary Strut Level 1 & Expose Wide Flange Sta 132+50 To North Headwall
UMS.05.12.0835         UMS_Ins           UMS.31.20.1345         UMS_Rer           UMS.31.20.0835         UMS_Rer           UMS.31.20.0835         UMS_Exc           UMS.03.37.0986         UMS_Inst           UMS.03.37.0986         UMS_Inst           UMS.03.37.0985         UMS_Inst           UMS.03.37.0985         UMS_Inst           UMS.03.37.0985         UMS_Inst           UMS.03.37.0985         UMS_Inst           UMS.03.37.0987         UMS_Inst           UMS.03.37.0987         UMS_Inst           UMS.03.37.0987         UMS_Inst           UMS.03.37.0987         UMS_Inst           UMS.03.37.0987         UMS_Inst           UMS.05.12.0880         UMS_Inst           UMS.05.12.2250         UMS_Inst           UMS.05.12.0890         UMS_Inst           UMS.05.12.0890         UMS_Inst           UMS.05.12.0890         UMS_Inst	Install & Pre-Load Permanent Struts - Intermediate Strut Level Sta 132+50 To South Head <sup>1</sup> Remove Temporary Struts & Wales For South Concourse Escalator Excavate Bench to Temporary Strut Level 1 & Expose Wide Flange Sta 132+50 To South H Install Studs, Mesh, Drain Pipe & Shotcrete Pile Walls Interm Level To Temp Strut Lvl 1 Sta Form/Rebar/Pour Walls For South Concourse Escalator Upper Landing	10	08-Jun-16		-164			UMS_Install Permanent Wales - Intermediate Strut Level Sta 132+50 To South Headwall
UMS.31.20.1345         UMS_Rer           UMS.31.20.0835         UMS_Exc           UMS.03.37.0986         UMS_Inst           UMS.03.37.0986         UMS_Inst           UMS.03.37.0985         UMS_Inst           UMS.03.37.0985         UMS_Inst           UMS.03.37.0985         UMS_Inst           UMS.03.37.0985         UMS_Inst           UMS.31.20.0860         UMS_Exc           UMS.03.37.0987         UMS_Inst           UMS.03.12.0.1120         UMS_Exc           UMS.05.12.0880         UMS_Inst           UMS.05.12.0880         UMS_Inst           UMS.05.12.2250         UMS_Inst           UMS.05.12.2250         UMS_Inst           UMS.05.12.0890         UMS_Inst           UMS.05.12.0890         UMS_Inst           UMS.05.12.0890         UMS_Inst	Remove Temporary Struts & Wales For South Concourse Escalator Excavate Bench to Temporary Strut Level 1 & Expose Wide Flange Sta 132+50 To South H Install Studs, Mesh, Drain Pipe & Shotcrete Pile Walls Interm Level To Temp Strut Lvl 1 Sta Form/Rebar/Pour Walls For South Concourse Escalator Upper Landing	3			-164			UMS_Install & Pre-Load Permanent Struts - Intermediate Strut Level Sta 132+50 To South Headwall
UMS.31.20.0835         UMS_Exc           UMS.03.37.0986         UMS_Inst           UMS.03.37.0986         UMS_Inst           UMS.03.30.1535         UMS_For           UMS.03.37.0985         UMS_Inst           UMS.31.50.0850         UMS_Inst           UMS.31.20.0860         UMS_Exc           UMS.03.37.0987         UMS_Inst           UMS.03.37.0987         UMS_Inst           UMS.03.37.0987         UMS_Inst           UMS.05.12.0880         UMS_Inst           UMS.31.20.1355         UMS_Exc           UMS.31.20.1355         UMS_Inst           UMS.31.20.1355         UMS_Exc           UMS.31.20.1355         UMS_Exc           UMS.31.20.0855         UMS_Exc           UMS.31.20.0855         UMS_Inst           UMS.05.12.2250         UMS_Inst           UMS.05.12.0890         UMS_Inst           UMS.05.12.0885         UMS_Inst           UMS.05.12.0885         UMS_Inst	Excavate Bench to Temporary Strut Level 1 & Expose Wide Flange Sta 132+50 To South H Install Studs, Mesh, Drain Pipe & Shotcrete Pile Walls Interm Level To Temp Strut Lvl 1 Sta Form/Rebar/Pour Walls For South Concourse Escalator Upper Landing			16-Jun-16	155			
UMS.03.37.0986         UMS_Inst UMS_03.30.1535           UMS_03.37.0985         UMS_For           UMS.03.37.0985         UMS_Inst           UMS.31.50.0850         UMS_Inst           UMS.31.20.0860         UMS_Exc           UMS.31.20.0860         UMS_Exc           UMS.31.20.0860         UMS_Exc           UMS.03.37.0987         UMS_Inst           UMS.03.37.0987         UMS_Inst           UMS.05.12.0880         UMS_Exc           UMS.05.12.0880         UMS_Inst           UMS.31.20.1355         UMS_Inst           UMS.31.20.0855         UMS_Inst           UMS.05.12.2250         UMS_Inst           UMS.05.12.0890         UMS_Inst           UMS.05.12.0890         UMS_Inst           UMS.05.12.0885         UMS_Inst	Install Studs, Mesh, Drain Pipe & Shotcrete Pile Walls Interm Level To Temp Strut Lvl 1 Sta Form/Rebar/Pour Walls For South Concourse Escalator Upper Landing			23-Jun-16				UMS_Remove Temporary Struts & Wales For South Concourse Escalator
UMS.03.30.1535         UMS_For           UMS.03.37.0985         UMS_Ins           UMS.31.50.0850         UMS_Ins           UMS.31.20.0860         UMS_Exc           UMS.03.37.0987         UMS_Ins           UMS.03.37.0987         UMS_Ins           UMS.03.37.0987         UMS_Exc           UMS.05.12.0880         UMS_Exc           UMS.05.12.0880         UMS_Ins           UMS.31.20.1355         UMS_Exc           UMS.05.12.0880         UMS_Inst           UMS.05.12.2250         UMS_Inst           UMS.05.12.0890         UMS_Inst           UMS.05.12.0885         UMS_Inst           UMS.05.12.0885         UMS_Inst	Form/Rebar/Pour Walls For South Concourse Escalator Upper Landing		7 15-Jun-16		-159	•		UMS_Excavate Bench to Temporary Strut Level 1 & Expose Wide Flange Sta 132+50 To South Headwall
UMS.03.37.0985         UMS_Ins           UMS.31.50.0850         UMS_Ins           UMS.31.20.0860         UMS_Exc           UMS.03.37.0987         UMS_Insi           UMS.03.37.0987         UMS_Insi           UMS.03.37.0987         UMS_Insi           UMS.03.120.1120         UMS_Exc           UMS.05.12.0880         UMS_Insi           UMS.31.20.1355         UMS_Exc           UMS.31.20.1355         UMS_Insi           UMS.05.12.2250         UMS_Insi           UMS.05.12.0865         UMS_Exc           UMS.05.12.0890         UMS_Insi           UMS.05.12.0890         UMS_Insi           UMS.05.12.0885         UMS_Insi			) 15-Jun-16	28-Jun-16	-167		_	UM\$_Install Studs, Mesh, Drain Pipe & Shotcrete Pile Walls Intern Level To Temp Strut Lv 1 Sta 132+50 to North Headw
UMS.31.50.0850         UMS_Ins           UMS.31.20.0860         UMS_Exc           UMS.03.37.0987         UMS_Inst           UMS.03.120.1120         UMS_Exc           UMS.05.12.0880         UMS_Inst           UMS.05.12.0880         UMS_Inst           UMS.05.12.0880         UMS_Inst           UMS.05.12.0880         UMS_Inst           UMS.31.20.1355         UMS_Inst           UMS.31.20.0855         UMS_Inst           UMS.05.12.2250         UMS_Inst           UMS.05.12.0890         UMS_Inst           UMS.05.12.0890         UMS_Inst           UMS.05.12.0885         UMS_Inst	Install Stude Mesh Drain Pine & Shatarata Dila Walls Concourse to Intermediate Loval St		) 17-Jun-16	30-Jun-16	155		<u> </u>	UM\$_Form/Rebar/Pour Walls For South Concourse Escalator Upper Landing
UMS.31.20.0860         UMS_Exc           UMS.03.37.0987         UMS_Inst           UMS.03.120.1120         UMS_Exc           UMS.05.12.0880         UMS_Inst           UMS.31.20.1355         UMS_Exc           UMS.31.20.1355         UMS_Exc           UMS.31.20.1355         UMS_Inst           UMS.31.20.1355         UMS_Inst           UMS.31.20.0855         UMS_Inst           UMS.31.20.0865         UMS_Exc           UMS.31.20.0865         UMS_Inst           UMS.05.12.0890         UMS_Inst           UMS.05.12.0885         UMS_Inst			) 22-Jun-16	06-Jul-16	-164	d		UMS_Install Studs, Mesh, Drain Pipe & Shotcrete Pile Walls Concourse to Intermediate Level Sta 132+50 to South Head
UMS.03.37.0987         UMS_Inst UMS_31.20.1120           UMS.05.12.0880         UMS_Exc UMS_31.20.1355           UMS_31.20.1355         UMS_Exc UMS_31.50.0855           UMS_31.20.2250         UMS_Inst UMS_31.20.0865           UMS_31.20.0865         UMS_Exc UMS_31.20.0865           UMS_31.20.0865         UMS_Inst UMS_05.12.0890           UMS_05.12.0885         UMS_Inst UMS_05.12.0885	Install & Pre-Load Temporary Struts - Level 1 Sta 132+50 to North Headwall		29-Jun-16	13-Jul-16	-167	<b>_</b>		UMS_Install & Pre-Load Temporary Struts - Level 1 Sta 132+50 to North Headwall
UMS.31.20.1120         UMS_Exc           UMS.05.12.0880         UMS_Ins           UMS.31.20.1355         UMS_Exc           UMS.31.50.0855         UMS_Inst           UMS.05.12.2250         UMS_Inst           UMS.05.12.0865         UMS_Exc           UMS.05.12.0865         UMS_Inst           UMS.05.12.0890         UMS_Inst           UMS.05.12.0890         UMS_Inst           UMS.05.12.0885         UMS_Inst	Excavate Bench to Mezzanine Level & Expose Wide Flange Sta 132+50 to North Headwall	7	7 07-Jul-16	15-Jul-16	-167			UMS_Excavate Bench to Mezzanine Level & Expose Wide Flange Sta 132+50 to North Headwall
UMS.05.12.0880         UMS_Ins           UMS.31.20.1355         UMS_Exc           UMS.31.50.0855         UMS_Inst           UMS.05.12.2250         UMS_Inst           UMS.31.20.0865         UMS_Exc           UMS.05.12.0890         UMS_Inst           UMS.05.12.0890         UMS_Inst           UMS.05.12.0885         UMS_Inst	Install Studs, Mesh, Drain Pipe & Shotcrete Pile Walls Interm Level To Temp Strut Lvl 1 Sta	10	07-Jul-16	20-Jul-16	-164			UMS_Install Studs, Mesh, Drain Pipe & Shotcrete Pile Walls Interm Level To Temp Strut Lvl 1 Sta 132+50 to South Head
UMS.31.20.1355 UMS_Exc UMS.31.50.0855 UMS_Inst UMS.05.12.2250 UMS_Inst UMS.31.20.0865 UMS_Exc UMS.05.12.0890 UMS_Inst UMS.05.12.0885 UMS_Inst	Excavate to Bottom of North Concourse Slab (Intermediate Strut Level)	5	5 11-Jul-16	18-Jul-16	43		0	UMS_Excavate to Bottom of North Concourse Slab (Intermediate Strut Level)
UMS.31.50.0855 UMS_Inst UMS.05.12.2250 UMS_Inst UMS.31.20.0865 UMS_Exc UMS.05.12.0890 UMS_Inst UMS.05.12.0885 UMS_Inst	Install Permanent Wales - Mezzanine Level Sta 132+50 To North Headwall	10	) 14-Jul-16	27-Jul-16	-167			UMS_ Install Permanent Wales - Mezzanine Level Sta 132+50 To North Headwall
UMS.05.12.2250         UMS_inst           UMS.31.20.0865         UMS_Exc           UMS.05.12.0890         UMS_Inst           UMS.05.12.0895         UMS_Inst	Excavate HVAC Chase Beneath North Concourse Slab (Intermediate Strut Level)	5	5 18-Jul-16	25-Jul-16	43		. 0	UMS Excavate HVAC Chase Beneath North Concourse Slab (Intermediate Strut Level)
UMS.31.20.0865 UMS_Exc UMS.05.12.0890 UMS_Inst UMS.05.12.0885 UMS_Inst	Install & Pre-Load Temporary Struts - Level 1 Sta 132+50 to South Headwall	10	) 21-Jul-16	03-Aug-16	-164			UMS_Install & Pre-Load Temporary Struts - Level 1 Sta 132+50 to South Headwall
UMS.31.20.0865 UMS_Exc UMS.05.12.0890 UMS_Inst UMS.05.12.0885 UMS_Inst	Install W-Section Piles Reinforcement - (Intermediate Strut Level)	10	) 25-Jul-16	08-Aug-16	56			UMS_Install W-Section Piles Reinforcement - (Intermediate Strut Level)
UMS.05.12.0890 UMS_Inst UMS.05.12.0885 UMS_Inst	Excavate Bench to Mezzanine Level & Expose Wide Flange Sta 132+50 to South Headwall		6 28-Jul-16	04-Aug-16	-164		· · · ·	UMS_Excavate Bench to Mezzanine Level & Expose Wide Flange Sta 132+50 to South Headwall
UMS.05.12.0885 UMS_Inst	Install & Pre-load Permanent Struts - Mezzanine Level Sta 132+50 To North Headwall		) 28-Jul-16	10-Aug-16	-167	0		UMS_Install & Pre-load Permanent Struts - Mezzanine Level Sta 132+50 To North Headwall
	Install Permanent Wales - Mezzanine Level Sta 132+50 To South Headwall		0 04-Aug-16	17-Aug-16	-164			UMS_Install Permanent Wales   Mezzanine Level Sta 132+50 To South Headwall
UNIS.31.20.0970 UNIS EXC	Excavate Bench to Temporary Strut Level 2 & Expose Wide Flange Sta 132+50 To North H		6 11-Aug-16	18-Aug-16	-160			┽╾ <sub>╋</sub> ╾╔╴╌╶ <del>┈</del> ╞╶╌╌╌╔╴╌╌╴╔╴╌╌╴╔╴╌╌╴╔╴╴╴╴╗╴╴╴╗╴╴╴╎╴╴╴╴╡╴╴╴╴┇╴╴╴╴┇╴╴╴╴╡╴╴╴╴╴╡╴╴╴╴╴╡╴╴╴╴╴╡
	Install & Pre-Load Permanent Struts - Mezzanine Level Sta 132+50 To South Headwall					•		UMS_Excavate Bench to Temporary Strut Level 2 & Expose Wide Flange Sta 132+50 To North Headwall
			0 11-Aug-16	24-Aug-16	-164	•		UMS_Install & Pre-Load Permanent Struts - Mezzanine Level Sta 132+50 To South Headwall
	Install Studs, Mesh Drain Pipe & Shotcrete Pile Walls Temp Strut Level 1 to Mezzanine Sta		3 11-Aug-16	29-Aug-16	-167			UMS_Install Studs, Mesh Drain Pipe & Shotcrete Pile Walls Temp Strut Level 1 to Mezzanine Sta 132+50 To North H
	Excavate Bench to Temporary Strut Level 2 & Expose Wide Flange Sta 132+50 To South H		3 19-Aug-16	30-Aug-16	-158	0		UMS_Excavate Bench to Temporary Strut Level 2 & Expose Wide Flange Sta 132+50 To South Headwall
UMS.03.37.0877 UMS_Inst	Install Studs, Mesh Drain Pipe & Shotcrete Pile Walls Temp Strut Level 1 to Mezzanine Sta		25-Aug-16	08-Sep-16	-164			UMS Install Studs, Mesh Drain Pipe & Shotcrete Pile Walls Temp Strut Level 1 to Mezzanine Sta 132+50 To South H
UMS.03.37.0875 UMS_ Ins	Install Studs, Mesh Drain Pipe & Shotcrete Pile Walls Mezzanine Level to Temp Strut Leve	10	0 30-Aug-16	13-Sep-16	-167			UMS Install Studs, Mesh Drain Pipe & Shotcrete Pile Walls Mezzanine Level to Temp Strut Level 2 Sta 132+50 To N
UMS.03.37.0880 UMS_Inst	Install Studs, Mesh Drain Pipe & Shotcrete Pile Walls Mezzanine Level to Temp Strut Level	10	09-Sep-16	22-Sep-16	-164			UMS_Install Studs, Mesh Drain Pipe & Shotcrete Pile Walls Mezzanine Level to Temp Strut Level 2 Sta 132+50 To S
UMS.31.50.0990 UMS_ Ins	Install & Preload Temporary Struts - Level 2 Sta 132+50 To North Headwall	10	0 14-Sep-16	27-Sep-16	-167			UM\$_ Install & Preload Temporary Struts - Level 2 Sta 132+50 To North Headwall
UMS.03.37.0995 UMS_Inst	Install Studs, Mesh Drain Pipe & Shotcrete Pile Walls Temp Strut Level 2 To Platfm Strut Le	10	23-Sep-16	06-Oct-16	-112			UMS_Install Studs, Mesh Drain Pipe & Shotcrete Pile Walls Temp Strut Level 2 To Platfm Strut Level Sta 132+50 To
UMS.31.50.0995 UMS_Inst	Install & Preload Temporary Struts - Level 2 Sta 132+50 To South Headwall	10	23-Sep-16	06-Oct-16	-164			UMS_Install & Preload Temporary Struts - Level 2 Sta 132+50 To South Headwall
UMS.31.20.0980 UMS_Exc	Excavate Bench to Platform Strut Level & Expose Wide Flange Sta 132+50 To North Headv	8	3 28-Sep-16	07-Oct-16	-167			UMS_Exclavate Bench to Platform Strut Level & Expose Wide Flange Sta 132+50 To North Headwall
	Install Permanent Wales Platform Strut Level Sta 132+50 To North Headwall		0 05-Oct-16	18-Oct-16	-167			UMS Install Permanent Wales Platform Strut Level Sta 132+50 To North Headwall
	Excavate to Intermediate Level In Garage		5 10-Oct-16	14-Oct-16	-76			UMS Excavate to Intermediate Level In Garage
	Excavate Bench to Platform Strut Level & Expose Wide Flange Sta 132+50 To South Heads		3 10-Oct-16	19-Oct-16	-165		0	<ul> <li>UMS_Excavate Bench to Platform Strut Level &amp; Expose Wide Flange Sta 132+50 To South Headwall</li> </ul>
			0 12-Oct-16	25-Oct-16	-167	•		
	Install & Preload Permanent Struts Platform Strut Level Sta 132+50 To North Headwall	IC		20 000 10	-107			UMS_Install & Preload Permanent Struts Platform Strut Level Sta 132+50 To North Headwall

SFMTA Central Subway Project	
Master Project Schedule	Required
One Month Back & Remaining Work - September 2014 Update	

Data Date: 26-Sep-15

												Page 3 of 7
ctivity ID	Activity Name	Original Start Duration	Finish	Total 15		2016	2017	2018	2019	2020		2021
				Float Q	3 Q4				4 Q1 Q2 Q3 Q4 Q <sup>4</sup>		3 Q4 C	Q1 Q2 Q
	0 UMS_Install Permanent Wales Platform Strut Level Sta 132+50 To South Headwall	10 17-Oct-16	28-Oct-16	-165		· · · · · · · · · · · · · · · · · · ·		1 1 1	el Sta 132+50 To South Headw			
	0 UMS_Install & Preload Permanent Struts Platform Strut Level Sta 132+50 To South Headwall	10 24-Oct-16	04-Nov-16	-165					n Strut Level Sta 132+50 To Sc			
	0 UMS_Install Studs, Mesh Drain Pipe & Shotcrete Pile Walls Temp Strut Level 2 To Platfm Strut Le	10 26-Oct-16	08-Nov-16	-152		-			Pile Walls Temp Strut Level 2	1 1		
	0 UMS_Excavate/Demo Liner to Temporary Strut Level 3 & Expose Wide Flange Sta 132+50 To No	10 26-Oct-16	08-Nov-16	-167					evel 3 & Expose Wide Flange S	sta 132+50 T	o North He	adwall
	0 UMS_ Install Temporary Struts - Level 3 Sta 132+50 To North Headwall	10 02-Nov-16	16-Nov-16	-157		<b></b>	UMS_Install Temporary					
	UMS_Install Studs, Mesh Drain Pipe & Shotcrete Pile Walls Platfm Strut Level To Temp Strut Leve	10 09-Nov-16	23-Nov-16	-152					e Pile Walls Platfm Strut Level 1	1 1		
	0 UMS_Excavate/Demo Liner to Temporary Strut Level 3 & Expose Wide Flange Sta 132+50 To So	10 09-Nov-16	23-Nov-16	-167			UMS_Excavate/Demo Li	er to Temporary Strut I	Level 3 & Expose Wide Flange	Sta 132+50	To South H	eadwall
UMS.31.20.1060	0 UMS_Excavate to Bottom of Invert Slab & Expose Wide Flange Sta 132+50 To North Headwall	3 03-Jan-17	05-Jan-17	-167			UMS_Excavate to Bot	tom of Invert Slab & Exp	oose Wide Flange Sta 132+50	To North He	adwall	
UMS.03.37.1030	0 UMS_Install Studs, Mesh Drain Pipe & Shotcrete Pile Walls Platfm Strut Level To Temp Strut Leve	10 03-Jan-17	16-Jan-17	-145			UMS_Install Studs, N	lesh Drain Pipe & Shoto	crete Pile Walls Platfm Strut Le	/el To Temp	Strut Level	3 Sta 132+50
UMS.31.50.1220	0 UMS_Install Temporary Struts - Level 3 Sta 132+50 To South Headwall	10 03-Jan-17	16-Jan-17	-162			UMS_Install Tempora	ary Struts - Level 3 Sta 1	132+50 To South Headwall			
UMS.05.12.1360	0 UMS_Attach 60 ea Platform Level Slab Stub Beam Assemblies To East Side Piles - Sta 132+50 To	15 06-Jan-17	26-Jan-17	-167		<b>b</b>	UMS_Attach 60 ea F	latform Level Slab Stub	Beam Assemblies To East Side	Piles - Sta	132+50 To	North Headw
UMS.05.12.2130	0 UMS_Attach 60 ea Platform Level Slab Stub Beam Assemblies To West Side Piles - Sta 132+50	15 06-Jan-17	26-Jan-17	-167			UMS_Attach 60 ea F	latform Level Slab Stub	Beam Assemblies To West Si	de Piles - St	a 132+50 T	To North Head
UMS.03.37.1040	0 UMS_Install Studs, Mesh Drain Pipe & Shotcrete Pile Walls Temp Strut Level 3 To Invert Sta 132-	10 13-Jan-17	26-Jan-17	-160			UMS_Install Studs, I	lesh Drain Pipe & Shot	crete Pile Walls Temp Strut Lev	el 3 To Inve	rt Sta 132+	50 To North H
UMS.31.20.1130	UMS_Excavate to Bottom of Invert Slab & Expose Wide Flange Sta 132+50 To South Headwall	3 17-Jan-17	19-Jan-17	-162					opse Wide Flange Sta 132+50			
UMS.05.12.1365	5 UMS_Attach 40 ea Platform Level Slab Stub Beam Assemblies To East Side Piles - Sta 132+50 To	10 30-Jan-17	13-Feb-17	-167				1 1 1	b Beam Assemblies To East Sid	1 1		o South Head
UMS.05.12.1370	0 UMS Attach 40 ea Platform Level Slab Stub Beam AssembliesTo West Side Piles - Sta 132+50 ]	10 30-Jan-17	13-Feb-17	-167			<u></u>		b Beam Assemblies To West S		÷+	
UMS.03.37.1050	UMS_Install Studs, Mesh Drain Pipe & Shotcrete Pile Walls Temp Strut Level 3 To Invert Sta 132-	10 06-Feb-17	20-Feb-17	-158					otcrete Pile Walls Temp Strut L			
Concrete/Shotc		581 23-Mar-15 A		-27								
Structural Steel		434 18-Apr-16	14-Dec-17	-88								
Masonry		421 25-Aug-16	05-Apr-18	-119								
Mechanical		683 27-Oct-15	05-Jul-18	-114	0							·
Electrical		536 13-Oct-14 A	20-Sep-18	-159								
Electrical - Trans	sportation	343 09-Feb-17	13-Jun-18	-109				ĭ <b>m™⊡</b> =;				
Architectual Fin	lishes	748 26-Sep-15	08-Aug-18	-128								
Conveyances		545 02-Jun-16	04-Jul-18	-103								
Stairs		559 16-May-16	05-Jul-18	-119								
Startup & Testin	ng	66 14-Jun-18	13-Sep-18	-154								
No 13-Disp		1136 16-Oct-13 A		625								
	S Station P-1254R	1359 17-Jun-13 A		625								
Administrative /		927 17-Jun-13 A		2								
Preconstruction		1207 21-Aug-13 A		-180								
Site Work / Utilit	ry Relocation	1265 12-Dec-13 A 5 08-May-18		-178		•						
Excavation & Su	unnort	674 15-Jul-15 A										
Tunnel / Cavern		488 28-Sep-15		-87								
Cavern Lining		267 30-Dec-16		-155								
Concrete/Shotc	rete	711 28-Oct-15	19-Jul-18	-159				ם משפערות				
Structural Steel		105 22-Feb-18	19-Jul-18	-172				8 8 9				
Masonry		106 06-Dec-17	04-May-18	-157								
Mechanical		382 21-Feb-17	09-Aug-18	-174								
Misc Metal		306 06-Jun-17	15-Aug-18	-177				0 00 0 0 000				
Electrical		314 16-Jun-17	29-Aug-18	-178								
Electrical - Trans	•	104 04-Jan-18	,	-165								
Architectual Fin	hishes	556 22-May-15 A		-146		¢aaniaa i						
Conveyances		105 04-Apr-18	29-Aug-18	-188								
Startup & Testin	19	166 15-Mar-18		-190								
No 13-Disp	IM Station P-1255	1359 17-Jun-13 A 1512 17-Jun-13 A		625 <b>625</b>								
Administrative /		927 17-Jun-13 A		-55								
Preconstruction		1566 09-Sep-13 A	· ·	4								
Excavation & Su		650 07-May-15 A		-52								····
Concrete/Shotc		640 19-Oct-15		-70								
Mechanical		5 22-Jun-17		63								
Electrical		440 30-Jun-16		-82	m							
		951	MTA Central S	Subway Pro	ect							
			Master Projec	-				Requir	ed Revenue Serive Date 26-De	c-18		
								1.				

												Page 4
y ID	Activity Name	Original Duration	Start	Finish	Total 15 Float		2016	2017	2018	2019	2020	2021
				07.0.47	Float Q3	Q4 Q1	Q2 Q3 Q4 Q1 C	Q2 Q3 Q4 Q1 Q	2 Q3 Q4 Q1	Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2
Electrical - Trans	sportation		27-Jun-16	07-Dec-17	-18							
Conveyances			24-May-17	01-May-18	-118							
Startup & Testin No 13-Disp	9		11-May-18	03-Aug-18 08-Nov-18	-125							
Construction ST	S P.1256		•	21-Jan-19	579							
Administrative /				29-Sep-17	91							
Preconstruction				05-Feb-18	4							
Engineering & P				01-Apr-16	742							
Site Work / Utilit			08-Sep-14 A	· ·	-8							
Concrete/Shotcr	•	70	08-Aug-16	15-Nov-16	232							
Tunnel Concrete	e	514	05-Apr-16	13-Apr-18	-45							
Structural Steel		15	08-Feb-17	01-Mar-17	62							
Electrical		290	20-Apr-17	08-Jun-18	-129							
Electrical - Trans	sportation		24-Jan-18	14-Feb-18	-118			•				
Trackwork				01-Mar-18	-14	<u> </u>						
STS.34.11.225	King St/ 4th- Maintain Track work		08-Sep-15 A		161		King St/ 4th- Maintain Tra	ick work				
STS.34.11.210	Install Temporary Crossover Trackwork - King Street & 3rd Street	2	19-Jan-16*	20-Jan-16	161	l lr	nstall Temporary Crossover T	Frackwork - King Street 8	3rd Street			
STS.34.11.230	#2 Shut down- Install Trackwork-King Street & 4th Street- SP 9,10,14 tie in with Existing tracks &	3	29-Mar-16	01-Apr-16	161		#2 Shut down- Install Tra	ckwork-King Street & 4th	Street- SP 9,10,14 ti	e in with Existing tra	cks & pre installed trac	
STS.34.11.235	#2 Shut down- Install Trackwork-King Street & 4th Street- Demo/ remove Tempoary double cross	3	29-Mar-16	01-Apr-16	161		#2 Shut down- Install Tra	ckwork-King Street & 4th	Street- Demo/ remo	ve Tempoary double	cross-over	
STS.34.11.240	King St/ 4th- Maintain Track work	38	01-Apr-16	09-May-16	161		King St/ 4th- Maintain	Track work				
STS.32.13.1100	STS_Prepare Phase 1 4th Street Subgrade - King To Townsend St	5	26-Apr-16	02-May-16	-25		STS_Prepare Phase 1		ng To Townsend St			
STS.32.13.1150	STS_Prepare Phase 1 4th Street Subgrade - At Townsend St Intersection	5	03-May-16	09-May-16	-25			I 4th Street Subgrade - At		ection		
STS.32.13.1110	STS_R/F/P Phase 1 4th Street Curbs & Gutters - King To Townsend St	5	03-May-16	09-May-16	-25			th Street Curbs & Gutters				
STS.34.11.245	#3 Shut down- Install Trackwork-King Street & 4th Street- Final Paving and finishes	3	09-May-16	12-May-16	161			Trackwork-King Street & 4	-			
STS.32.13.1200			10-May-16	16-May-16	-25			1 4th Street Subgrade - T				
STS.32.13.1160			10-May-16	16-May-16	-25			th Street Curbs & Gutters	1 1	1 1 1		
STS.32.13.1120	-		10-May-16	16-May-16	-25			1th Street 12" Base Slab			$- \cdots - \frac{1}{1} - \cdots - \frac{1}{1} - \cdots - \frac{1}{1} - \cdots - \frac{1}{1}$	
STS.32.13.1140			10-May-16	16-May-16	287			th Street Sidewalks - Kin		אנ		
STS.32.13.1250			17-May-16	23-May-16	-25							
			17-May-16	23-May-16	-25			1 4th Street Subgrade - E				
STS.32.13.1210			•					4th Street Curbs & Gutter	1 1	1 I I I		
STS.32.13.1170			17-May-16	23-May-16	-25			4th Street 12" Base Slab	jj	· j i i +		
STS.32.13.1190			17-May-16	23-May-16	287			4th Street Sidewalks - At				
STS.34.11.250	Remove Temporary Crossover Trackwork - King Street & 3rd Street		17-May-16	19-May-16	161			Crossover Trackwork – Ki	-			
STS.32.13.1300	STS_Prepare Phase 1 4th Street Subgrade - At Brannan St Intersection	5	24-May-16	31-May-16	-25			1 4th Street Subgrade - /				
STS.32.13.1260	STS_R/F/P Phase 1 4th Street Curbs & Gutters - Bluxome St To Brannan		24-May-16	31-May-16	-25		STS_R/F/P Phase 1	4th Street Curbs & Gutter	s - Bluxome St To E	rannan		
STS.32.13.1220	STS_R/F/P Phase 1 4th Street 12" Base Slab - Townsend St To Bluxome St	5	24-May-16	31-May-16	-25		STS_R/F/P Phase 1	4th Street 12" Base Slab	- Townsend St To B	uxome St		
STS.32.13.1240	STS_R/F/P Phase 1 4th Street Sidewalks - Townsend St To Bluxome St	5	24-May-16	31-May-16	287		STS_R/F/P Phase 1	4th Street Sidewalks - To	wnsend St To Bluxo	me St		
STS.32.13.1350	STS_Prepare Phase 1 4th Street Subgrade - Brannan St Intersection To Freelon St	5	01-Jun-16	07-Jun-16	-25		STS_Prepare Phase	e 1 4th Street Subgrade -	Brannan St Intersec	tion To Freelon St		
STS.32.13.1310	STS_R/F/P Phase 1 4th Street Curbs & Gutters - At Brannan St Intersection	5	01-Jun-16	07-Jun-16	-25		STS_R/F/P Phase 1	4th Street Curbs & Gutte	s - At Brannan St Ir	ntersection		
STS.32.13.1270	STS_R/F/P Phase 1 4th Street 12" Base Slab - Bluxome St To Brannan	5	01-Jun-16	07-Jun-16	-25		STS_R/F/P Phase 1	4th Street 12" Base Slab	- Bluxome St To Bra	innan		
STS.32.13.1290	STS_R/F/P Phase 1 4th Street Sidewalks - Bluxome St To Brannan	5	01-Jun-16	07-Jun-16	287		STS_R/F/P Phase 1	4th Street Sidewalks - B	uxome St To Branna	n		
STS.32.13.1400	STS_Prepare Phase 1 4th Street Subgrade - At Freelon St Intersection	5	08-Jun-16	14-Jun-16	-25		STS Prepare Phase	e 1 4th Street Subgrade -	At Freelon St Inters	ection		1
STS.32.13.1360	STS_R/F/P Phase 1 4th Street Curbs & Gutters - Brannan St Intersection To Freelon St	5	08-Jun-16	14-Jun-16	-25			1 4th Street Curbs & Gutte			St	
STS.32.13.1320	STS_R/F/P Phase 1 4th Street 12" Base Slab - At Brannan St Intersection	5	08-Jun-16	14-Jun-16	-25			1 4th Street 12" Base Slab	1 1	1 I I I		
	STS_R/F/P Phase 1 4th Street Sidewalks - At Brannan St Intersection		08-Jun-16	14-Jun-16	287			1 4th Street Sidewalks - A				
	STS_Prepare Phase 1 4th Street Subgrade - Freelon St To Bryant St		15-Jun-16	21-Jun-16	-25			e 1 4th Street Subgrade	1 1	1 1 1		
	STS_R/F/P Phase 1 4th Street Curbs & Gutters - At Freelon St Intersection		15-Jun-16	21-Jun-16	-25			1 4th Street Curbs & Gutt		· i i i		+
	STS_R/F/P Phase 1 4th Street 12" Base Slab - Brannan St Intersection To Freelon St		15-Jun-16	21-Jun-16	-25							
					287			1 4th Street 12" Base Slat	1 1	1 I I I I I I I I I I I I I I I I I I I	L	
	STS_R/F/P Phase 1 4th Street Sidewalks - Brannan St Intersection To FreeIon St		15-Jun-16	21-Jun-16				1 4th Street Sidewalks - E				
	STS_Prepare Phase 1 4th Street Subgrade - At Bryant St Intersection		22-Jun-16	28-Jun-16	-25			se 1 4th Street Subgrade		1 1 1		
	STS_R/F/P Phase 1 4th Street Curbs & Gutters - Freelon St To Bryant St		22-Jun-16	28-Jun-16	-25			1 4th Street Curbs & Gutt		·		
STS.32.13.1420	STS_R/F/P Phase 1 4th Street 12" Base Slab - At Freelon St Intersection	5	22-Jun-16	28-Jun-16	-25		STS_R/F/P Phase	1 4th Street 12" Base Sla	- At Freelon St Inte	ersection		
			SF	MTA Central S		ect				~		
				Master Project	t Schedule				-	enue Serive Date 26 ta Date: 26-Sep-15	-Dec-18	

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vity ID	Activity Name	Original Start Duration	Finish	Total 15 Float Q3	04	2016	3 04	2017			2019 Q1 Q2 Q3 Q4			4 01	202
STS.32.13.1440	STS_R/F/P Phase 1 4th Street Sidewalks - At Freelon St Intersection	5 22-Jun-16	28-Jun-16	287				Phase 1 4th Street Sic							
STS.32.13.1510	STS_R/F/P Phase 1 4th Street Curbs & Gutters - At Bryant St Intersection	5 29-Jun-16	06-Jul-16	-25		1 <b>4</b>	5	P Phase 1 4th Street C	1	1 1					
STS.32.13.1470	STS_R/F/P Phase 1 4th Street 12" Base Slab - Freelon St To Bryant St	5 29-Jun-16	06-Jul-16	-25		· · ·	1.1	P Phase 1 4th Street 12							
STS.32.13.1490		5 29-Jun-16	06-Jul-16	287				P Phase 1 4th Street Si							1
STS.32.13.1520		5 07-Jul-16	13-Jul-16	-25				P Phase 1 4th Street 12							
STS.32.13.1540		5 07-Jul-16	13-Jul-16	287		i in	. –	P Phase 1 4th Street S							
STS.32.13.1130	-	1 14-Jul-16	14-Jul-16	314		1 14		P Phase 1 4th Street 2	1	1 1 1					
STS.32.13.1180		1 15-Jul-16	15-Jul-16	314		i i,	; =	i i i	i i	<b>Y</b> i	At Townsend St Intersect	ion			
STS.32.13.1230		1 18-Jul-16	18-Jul-16	314			_			4	· Townsend St To Bluxome				
STS.32.13.1280		1 19-Jul-16	19-Jul-16	314	-						Bluxome St To Brannan				
STS.32.13.1330		1 20-Jul-16	20-Jul-16	314		· · · · ·				Ť i	At Brannan St Intersectio	n -			
STS.32.13.1380		1 21-Jul-16	21-Jul-16	314			_		1	Ŷ	- Brannan St Intersection				
STS.32.13.1430	-	1 22-Jul-16	22-Jul-16	314			1	1 I I I I		T I	- At Freelon St Intersection	1	51		
STS.32.13.1480		1 25-Jul-16	25-Jul-16	314					1 1						
STS.32.13.1530		1 28-Jul-16	28-Jul-16	312						1	- Freelon St To Bryant St		· • • • • • • • • • • • • • • • • • • •		
STS.32.13.650	STS_Prepare Phase 2 4th Street Subgrade - King To Townsend St	5 20-Sep-16		-73				- i i i		- T	- At Bryant St Intersection				
STS.32.13.660		· · ·		-73	0		-	Prepare Phase 2 4th S		Ŭ					-
STS.32.13.740	STS_Prepare Phase 2 4th Street Subgrade - At Townsend St Intersection STS R/F/P Phase 2 4th Street Curbs & Gutters - King To Townsend St	5 27-Sep-16		-33	0		<u>.</u>	Prepare Phase 2 4th			1 I I I I				
		5 27-Sep-16			o			_R/F/P Phase 2 4th Str		1 1	°				-
STS.32.13.670	STS_Prepare Phase 2 4th Street Subgrade - Townsend St To Bluxome St	5 04-Oct-16	11-Oct-16	-33				S_Prepare Phase 2 4th							
STS.32.13.750	STS_R/F/P Phase 2 4th Street Curbs & Gutters - At Townsend St Intersection	5 04-Oct-16	11-Oct-16	-33	•			-			At Townsend \$t Intersection	n			1
STS.32.13.1010		5 04-Oct-16	11-Oct-16	230	•		-	S_R/F/P Phase 2 4th St	1						
STS.32.13.830	STS_R/F/P Phase 2 4th Street 12" Base Slab - King To Townsend St	10 04-Oct-16	18-Oct-16	-73	•		i	S_R/F/P Phase 2 4th S	i	i i	9 i i i				
STS.32.13.680	STS_Prepare Phase 2 4th Street Subgrade - Bluxome St To Brannan	5 11-Oct-16	18-Oct-16	-33	0			S_Prepare Phase 2 4th							
STS.32.13.760	STS_R/F/P Phase 2 4th Street Curbs & Gutters - Townsend St To Bluxome St	5 11-Oct-16	18-Oct-16	-33							Townsend St To Bluxome	St			
STS.32.13.1020	STS_R/F/P Phase 2 4th Street Sidewalks - At Townsend St Intersection	5 11-Oct-16	18-Oct-16	230	0			S_R/F/P Phase 2 4th S							
STS.32.13.690	STS_Prepare Phase 2 4th Street Subgrade - At Brannan St Intersection	5 18-Oct-16	25-Oct-16	-33	0			S_Prepare Phase 2 4th		-					
STS.32.13.770	STS_R/F/P Phase 2 4th Street Curbs & Gutters - Bluxome St To Brannan	5 18-Oct-16	25-Oct-16	-33	0		1 n	1 I I	1		Bluxome St To Brannan				Ì
STS.32.13.1030	STS_R/F/P Phase 2 4th Street Sidewalks - Townsend St To Bluxome St	5 18-Oct-16	25-Oct-16	230	0			S_R/F/P Phase 2 4th S		1 1					
STS.32.13.840	STS_R/F/P Phase 2 4th Street 12" Base Slab - At Townsend St Intersection	10 18-Oct-16	01-Nov-16	-73							Townsend St Intersection				
STS.32.13.700	STS_Prepare Phase 2 4th Street Subgrade - Brannan St Intersection To FreeIon St	5 25-Oct-16	01-Nov-16	-33			ST	S_Prepare Phase 2 4tl	Street Sub	grade - Bra	nnan St Intersection To Fr	eelon St			
STS.32.13.780	STS_R/F/P Phase 2 4th Street Curbs & Gutters - At Brannan St Intersection	5 25-Oct-16	01-Nov-16	-33							At Brannan St Intersectio	n			
	STS_R/F/P Phase 2 4th Street Sidewalks - Bluxome St To Brannan	5 25-Oct-16		230			-	S_R/F/P Phase 2 4th S							
STS.32.13.710	STS_Prepare Phase 2 4th Street Subgrade - At Freelon St Intersection	5 01-Nov-16	08-Nov-16	-33			S	TS_Prepare Phase 2 4t	n Streek Sub	ograde - At F	reelon St Intersection				ł
STS.32.13.790	STS_R/F/P Phase 2 4th Street Curbs & Gutters - Brannan St Intersection To Freelon St	5 01-Nov-16	08-Nov-16	-33		•	I s	TS_R/F/P Phase 2 4th	treet Curbs	& Gutters	- Brannan St Intersection	To Freelon S	St		
STS.32.13.1050	STS_R/F/P Phase 2 4th Street Sidewalks - At Brannan St Intersection	5 01-Nov-16	08-Nov-16	230			¦ 🛚 S	TS_R/F/P Phase 2 4th	treet \$idew	alks - Át Bra	annan St Intersection				
STS.32.13.850	STS_R/F/P Phase 2 4th Street 12" Base Slab - Townsend St To Bluxome St	10 01-Nov-16	16-Nov-16	-73			∎ s	TS_R/F/P Phase 2 4th	Street 12" B	ase Slab - 1	Fownsend St To Bluxome S	st			
STS.32.13.720	STS_Prepare Phase 2 4th Street Subgrade - Freelon St To Bryant St	5 08-Nov-16	16-Nov-16	-33		0	I s	TS_Prepare Phase 2 4	h Street Sul	bgrade - Fre	eelon St To Bryant St				
STS.32.13.800	STS_R/F/P Phase 2 4th Street Curbs & Gutters - At FreeIon St Intersection	5 08-Nov-16	16-Nov-16	-33		0	∎ s	TS_R/F/P Phase 2 4th	Street Curbs	s & Gutters	- At Freelon St Intersectio	n			
STS.32.13.1060	STS_R/F/P Phase 2 4th Street Sidewalks - Brannan St Intersection To Freelon St	5 08-Nov-16	16-Nov-16	230		0	0 s	TS_R/F/P Phase 2 4th	Street Sidev	valks - Bran	nan St Intersection To Fre	elon St			
STS.32.13.730	STS_Prepare Phase 2 4th Street Subgrade - At Bryant St Intersection	5 16-Nov-16	23-Nov-16	-33		0	I s	STS_Prepare Phase 2 4	th Street Su	bgrade - At	Bryant St Intersection				
STS.32.13.810	STS_R/F/P Phase 2 4th Street Curbs & Gutters - Freelon St To Bryant St	5 16-Nov-16	23-Nov-16	-33		0	I s	STS_R/F/P Phase 2 4th	Street Curb	s & Gutters	- Freelon St To Bryant St				
STS.32.13.1070	STS_R/F/P Phase 2 4th Street Sidewalks - At Freelon St Intersection	5 16-Nov-16	23-Nov-16	230		0	1 s	STS_R/F/P Phase 2 4th	Street Sidev	walks - At F	reelon St Intersection				i
STS.32.13.860	STS_R/F/P Phase 2 4th Street 12" Base Slab - Bluxome St To Brannan	10 16-Nov-16	09-Jan-17	-73		•		STS_R/F/P Phase 2	th Street 12	2" Base Slat	- Bluxome St To Brannar				-
STS.32.13.820	STS_R/F/P Phase 2 4th Street Curbs & Gutters - At Bryant St Intersection	5 23-Nov-16	09-Jan-17	-33		0		STS_R/F/P Phase 2	th Street C	urbs & Gutte	ers - At Bryant St Intersec	tion			
STS.32.13.1080	STS_R/F/P Phase 2 4th Street Sidewalks - Freelon St To Bryant St	5 23-Nov-16	09-Jan-17	230		o		] ST\$_R/F/P Phase 2	4th Street S	idewalks - F	reelon St To Bryant St				
STS.32.13.1090	STS_R/F/P Phase 2 4th Street Sidewalks - At Bryant St Intersection	5 09-Jan-17	16-Jan-17	230					i	i i	At Bryant St Intersection				
STS.32.13.870	STS_R/F/P Phase 2 4th Street 12" Base Slab - At Brannan St Intersection	10 09-Jan-17	23-Jan-17	-73				_	1	- ! · · · ·	b - At Brannan St Intersed	tion			-
STS.32.13.880	STS_R/F/P Phase 2 4th Street 12" Base Slab - Brannan St Intersection To Freelon St	10 23-Jan-17	07-Feb-17	-73				— 1		- I - I - I - I - I - I - I - I - I - I	ab - Brannan St Intersect		on St		
STS.32.13.890	STS_R/F/P Phase 2 4th Street 12" Base Slab - At Freelon St Intersection	10 07-Feb-17	22-Feb-17	-73							Slab - At Freelon St Interse				
STS.32.13.900	STS_R/F/P Phase 2 4th Street 12" Base Slab - Freelon St To Bryant St	10 22-Feb-17	08-Mar-17	-73	- <mark>:</mark>	<b>=</b> };		· <u>-</u> -			Slab - Freelon St To Bryar		• • • • • • • • • • • • • • • • • • • •		

SFMTA Central Subway Project	
Master Project Schedule Requ	Required I
One Month Back & Remaining Work - September 2014 Update	

ired Revenue Serive Date 26-Dec-18 Data Date: 26-Sep-15

tivity ID	Activity Name	Original Start	Finish	Total 15 Float Q3	2016	2017         2018         2019         2020         202           201         201         201         201         202 </th
STS.32.13.910	STS_R/F/P Phase 2 4th Street 12" Base Slab - At Bryant St Intersection	10 08-Mar-17	22-Mar-17	-73 Q3	Q4 Q1 Q2 Q3 Q4	
	STS_R/F/P Phase 2 4th Street 2" A/C Wearing Surface - King To Townsend St	1 22-Mar-17	22-Mar-17 23-Mar-17	-73	•	STS_R/F/P Phase 2 4th Street 12" Base Slab - At Bryant St Intersection
					•	STS_R/F/P Phase 2 4th Street 2" A/C Wearing Surface - King To Townsend St
	STS_ Prepare Trackway Subgrade - King To Townsend St	5 22-Mar-17	29-Mar-17	-73	0	STS_Prepare Trackway Subgrade - King To Townsend St
STS.32.13.930	STS_R/F/P Phase 2 4th Street 2" A/C Wearing Surface - At Townsend St Intersection	1 23-Mar-17	24-Mar-17	176		STS_R/F/P Phase 2 4th Street 2" A/C Wearing Surface - At Townsend St Intersection
STS.32.13.940	STS_R/F/P Phase 2 4th Street 2" A/C Wearing Surface - Townsend St To Bluxome St	1 24-Mar-17	27-Mar-17	176	1	STS_R/F/P Phase 2 4th Street 2" A/C Wearing Surface - Townsend St To Bluxome St
	STS_R/F/P Phase 2 4th Street 2" A/C Wearing Surface - Bluxome St To Brannan	1 27-Mar-17	28-Mar-17	176	1	STS_R/F/IP Phase 2 4th Street 2" A/C Wearing Surface - Bluxome St To Brannan
	STS_R/F/P Phase 2 4th Street 2" A/C Wearing Surface - At Brannan St Intersection	1 28-Mar-17	29-Mar-17	176	1	STS_R/F/P Phase 2 4th Street 2" A/C Wearing Surface - At Brannan St Intersection
STS.32.13.970	STS_R/F/P Phase 2 4th Street 2" A/C Wearing Surface - Brannan St Intersection To FreeIon St	1 29-Mar-17	30-Mar-17	176		STS_R/F/P Phase 2 4th Street 2" A/C Wearing Surface - Brannan St Intersection To FreeIon St
STS.34.11.0235	STS_ Prepare Trackway Subgrade - Through Townsend St Intersection	5 29-Mar-17	05-Apr-17	-73		STS_ Prepare Trackway Subgrade - Through Townsend St Intersection
STS.32.13.980	STS_R/F/P Phase 2 4th Street 2" A/C Wearing Surface - At FreeIon St Intersection	1 30-Mar-17	31-Mar-17	176		STS_R/F/P Phase 2 4th Street 2" A/C Wearing Surface - At FreeIon St Intersection
STS.32.13.990	STS_R/F/P Phase 2 4th Street 2" A/C Wearing Surface - Freelon St To Bryant St	1 31-Mar-17	03-Apr-17	176		STS_R/F/P Phase 2 4th Street 2" A/C Wearing Surface - Freelon St To Bryant St
STS.32.13.1000	STS_R/F/P Phase 2 4th Street 2" A/C Wearing Surface - At Bryant St Intersection	1 03-Apr-17	04-Apr-17	176		STS_R/F/P Phase 2 4th Street 2" A/C Wearing Surface - At Bryant St Intersection
STS.32.13.9997	STS_4th Street Restoration Punchlist Work	15 04-Apr-17	25-Apr-17	176		STS_4th Street Restoration Punchlist Work
STS.34.11.0245	STS_ Prepare Trackway Subgrade - Townsend St To Bluxome St	5 05-Apr-17	12-Apr-17	-73		STS_ Prepare Trackway Subgrade - Townsend St To Bluxome \$t
STS.34.11.0255	STS Prepare Trackway Subgrade - Bluxome St To Brannan	5 12-Apr-17	19-Apr-17	-73		STS_ Prepare Trackway Subgrade - Bluxome St To Brannan
	STS_ Prepare Trackway Subgrade - Through Brannan St Intersection	5 19-Apr-17	26-Apr-17	-73	0	STS_ Prepare Trackway Subgrade - Through Brannan St Intersection
		0	25-Apr-17	176	0	◆ STS_4th Street Restoration Complete
	STS_ Prepare Trackway Subgrade - Brannan St Intersection To Freelon St	5 26-Apr-17	03-May-17	-73	♦	
		5 03-May-17	10-May-17	-73	0	STS_ Prepare Trackway Subgrade - Brannan St Intersection To Freelon St
	STS_ Prepare Trackway Subgrade - Through FreeIon St Intersection		-			STS_ Prepare Trackway Subgrade - Through Freelon St Intersection
	STS_ Prepare Trackway Subgrade - Freelon St To Bryant St	5 10-May-17	17-May-17	-73	0	STS_ Prepare Trackway Subgrade - Freelon St To Bryant St
	STS_ Prepare Trackway Subgrade - Through Bryant St Intersection	5 17-May-17	24-May-17	-73	0	STS_ Prepare Trackway Subgrade - Through Bryant St Intersection
	STS_ F/R/P Trackway Curb - King To Townsend St	5 24-May-17	01-Jun-17	-53	D	STS_; F/R/P Trackway Curb - King To Townsend St
STS.34.11.0410	STS_ F/R/P Trackway Slab - King To Townsend St	10 24-May-17	08-Jun-17	-73	<b>•</b>	STS_ F/R/P Trackway \$lab - King To Townsend St
STS.34.11.0320	STS_ F/R/P Trackway Curb - Through Townsend St Intersection	5 01-Jun-17	08-Jun-17	-53	p	STS_ F/R/P Trackway Curb - Through Townsend St Intersection
STS.34.11.0420	STS_ F/R/P Trackway Slab - Through Townsend St Intersection	5 08-Jun-17	15-Jun-17	-73		STS_ F/R/P Trackway Slab - Through Townsend St Intersection
STS.34.11.0330	STS_ F/R/P Trackway Curb - Townsend St To Bluxome St	5 08-Jun-17	15-Jun-17	-53	<b>n</b>	STS_ F/R/P Trackway Curb - Townsend St To Bluxome St
STS.34.11.0340	STS_ F/R/P Trackway Curb - Bluxome St To Brannan	5 15-Jun-17	22-Jun-17	-53		STS_ F/R/P Trackway Curb - Bluxome St To Brannan
STS.34.11.0430	STS_ F/R/P Trackway Slab - Townsend St To Bluxome St	10 15-Jun-17	29-Jun-17	-73		STS_ F/R/P Trackway Slab - Townsend St To Bluxome St
	Install NB Tunnel Trackwork - Portal to Moscone (1,312 TF)	20 22-Jun-17	20-Jul-17	-177		■ Install NB Tunnel Trackwork - Portal to Moscone (1,312 TF)
	Install SB Tunnel Trackwork - Portal to Moscone (1,312 TF)	20 22-Jun-17	20-Jul-17	-177		■ Install NB Tunnel Trackwork - Portal to Moscone (1,312 TF)
	STS_ F/R/P Trackway Curb - Through Brannan St Intersection	5 22-Jun-17	29-Jun-17	-53		
	STS F/R/P Trackway Curb - Brannan St Intersection To Freelon St			-53	0	STS_ F/R/P Trackway Curb - Through Brannan St Intersection
		5 29-Jun-17			D	STS_ F/R/P Trackway Curb - Brannan St Intersection To Freelon St
	STS_ F/R/P Trackway Slab - Bluxome St To Brannan	10 29-Jun-17	14-Jul-17	-73		STS_ F/R/P Trackway Slab - Bluxome St To Brannan
	STS_ F/R/P Trackway Curb - Through Freelon St Intersection	5 07-Jul-17	14-Jul-17	-53		STS_ F/R/P Trackway Curb - Through Freelon St Intersection
	STS_ F/R/P Trackway Slab - Through Brannan St Intersection	5 14-Jul-17	21-Jul-17	-73	0	STS_ F/R/P Trackway Slab - Through Brannan St Intersection
STS.34.11.0380	STS_ F/R/P Trackway Curb - Freelon St To Bryant St	5 14-Jul-17	21-Jul-17	-53	0	STS_ F/R/P Trackway Curb - Freelon St To Bryant St
STS.34.11.150	Install NB Trackwork - Thru Moscone Station (188 TF)	2 21-Jul-17	24-Jul-17	-177		Install NB Trackwork - Thru Moscone Station (188 TF)
STS.34.11.135	Install SB Trackwork - Thru Moscone Station (188 TF)	2 21-Jul-17	24-Jul-17	-177		Install SB Trackwork - Thru Moscone Station (188 TF)
STS.34.11.0390	STS_ F/R/P Trackway Curb - Through Bryant St Intersection	5 21-Jul-17	28-Jul-17	-53		STS_ F/R/P Trackway Curb - Through Bryant St Intersection
STS.34.11.0460	STS_ F/R/P Trackway Slab - Brannan St Intersection To Freelon St	10 21-Jul-17	04-Aug-17	-73		STS_ F/R/P Trackway Slab - Brannan St Intersection To Freelon St
STS.34.11.130	Install NB Tunnel Trackwork - Moscone to Union Square (1,950 TF)	25 25-Jul-17	28-Aug-17	-177		Install NR Trianal Tradicularity Magazine to Linian Square (1.050 TEV)
STS.34.11.120	Install SB Tunnel Trackwork - Moscone to Union Square (1,950 TF)	25 25-Jul-17	28-Aug-17	-177		
	STS_ F/R/P Trackway Slab - Through Freelon St Intersection	5 04-Aug-17	11-Aug-17	-73	-	STS_ F/R/P Trackway Slab - Through Freelon St Intersection
	STS_ F/R/P Trackway Slab - Freelon St To Bryant St	10 11-Aug-17	25-Aug-17	-73	0	<ul> <li>STS_ F/R/P Trackway Slab - Freelon St To Bryant St</li> </ul>
STS.34.11.0473	STS_ F/R/P Trackway Slab - Through Bryant St Intersection	5 25-Aug-17	01-Sep-17	-73		· · · · · · · · · · · · · · · · · · ·
					C C	STS_ F/R/P Track way Slab - Through Bryant St Intersection
STS.34.11.125	Install NB Trackwork - Thru Union Square Station (410 TF)	3 29-Aug-17	31-Aug-17	-177		Install NB Trackwork - Thru Union Square Station (410 TF)
STS.34.11.110	Install SB Trackwork - Thru Union Square Station (410 TF)	3 29-Aug-17	31-Aug-17	-177		Install SB Trackwork - Thru Union Square Station (410 TF)
Trackwork wi	Install NB Tunnel Trackwork - Union Square to Chinatown (2,422 TF)	30 01-Sep-17	13-Oct-17	-177		Install NB Tunnel Trackwork - Union Square to Chinatown (2,422 TF)
STS.34.11.105	Install SB Tunnel Trackwork - Union Square to Chinatown (2,422 TF)	30 01-Sep-17	13-Oct-17	-177		Install SB Tunnel Trackwork - Union Square to Chinatown (2,422 TF)
STS.34.11.0490	STS_Install: Trackwork - King To Townsend St	5 01-Sep-17	11-Sep-17	-73		STS_Install: Trackwork - King To Townsend St
		SF	MTA Central S Master Projec		ł	Required Revenue Serive Date 26-Dec-18

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STS.34.11.0500 \$	Activity Name	Original Duration	Start	Finish	Total 15 Float Q3		2016 Q1 Q2 Q3 Q4	2017 Q1 Q2 C	2 01	01 0	2018	Q4		2019		01 0	2020		20
010.04.11.00000	STS_Install: Trackwork - Through Townsend St Intersection	5	11-Sep-17	18-Sep-17	-73	Q4					_			_			12 43		
STS 34 11 0510	STS Install: Trackwork - Townsend St To Bluxome St		18-Sep-17	25-Sep-17	-73		•		• ·		1	rk - Throu rk - Towr	-	1					
	STS Install: Trackwork - Bluxome St To Brannan		25-Sep-17	02-Oct-17	-73		0		- I	- :	i i	ork - Blux	- i -	- i					
	STS_Install: Trackwork - Through Brannan St Intersection		02-Oct-17	02-Oct-17	-73		0		-	- :	1		1			4			
	STS_Install: Trackwork - Friddgri Brainian St Intersection STS Install: Trackwork - Brannan St Intersection To Freelon St		02-Oct-17	16-Oct-17	-73			····		!		ork - Thro		+	+		~		
	STS_Install: Trackwork - Brainian St Intersection To Freeion St STS Install: Trackwork - Through Freelon St Intersection		16-Oct-17	23-Oct-17	-73		0					ork - Bra					n St		
	STS_Install: Trackwork - Freelon St To Bryant St		23-Oct-17	30-Oct-17	-73		0		·		1	vork - Th	Ο,	1	1	ection			
			30-Oct-17									vork - Fr	i		1				
	STS_Install: Trackwork - Through Bryant St Intersection			06-Nov-17	-73		0		·			work - Th	-	•1					
	STS_ F/R/P Trackway Pavement - King To Townsend St		06-Nov-17	14-Nov-17	-68			I				kway Pav			+ +				
	STS_ F/R/P Trackway Pavement - Through Townsend St Intersection		14-Nov-17	21-Nov-17	-68			0	• 9	- i		kway Pav						on	
	STS_ F/R/P Trackway Pavement - Townsend St To Bluxome St		21-Nov-17	08-Jan-18	-68			0		- '		rackway							
	STS_ F/R/P Trackway Pavement - Bluxome St To Brannan		08-Jan-18	15-Jan-18	-68			0			1	Trackway	i		1				
	Install NB Trackwork & Crossover - Thru Chinatown Station (539 TF)		09-Jan-18	06-Feb-18	-149			-				ackwork							
	Install SB Trackwork & Crossover - Thru Chinatown Station (539TF)		09-Jan-18	06-Feb-18	-115					📕 Insta	all SB Tr	ackwork a	& Cross	sover - Th	ru Chi	natown	Station (5	9TF)	
	STS_ F/R/P Trackway Pavement - Through Brannan St Intersection	5	15-Jan-18	22-Jan-18	-68					STS_	F/R/P	Trackway	/ Paven	ienț - Th	rough I	Brannan	St Inters	ction	
STS.34.11.0620	STS_ F/R/P Trackway Pavement - Brannan St Intersection To Freelon St	5	22-Jan-18	29-Jan-18	-68					STS_	_ F/R/P	Trackway	y Paver	nenit - Br	annan	St Inters	ection To	Freelon S	t
STS.34.11.0630	STS_ F/R/P Trackway Pavement - Through Freelon St Intersection	5	29-Jan-18	05-Feb-18	-68			0		STS	_ F/R/F	Trackwa	ıy Pavei	nent - Th	rough	Freelon	St Inters	ction	
STS.34.11.0640	STS_ F/R/P Trackway Pavement - Freelon St To Bryant St	5	05-Feb-18	12-Feb-18	-68			0		I strs	5_ F/R/I	P Trackwa	ay Pave	ment - F	reelon	St To Br	yant St		
STS.34.11.175 I	Install NB Trackwork - Chinatown Station to North Limit (339 TF)	5	06-Feb-18	13-Feb-18	-149			-		Inst	all NB T	rackwork	- China	town Sta	tion to I	North Lir	nit (339 T	F)	
STS.34.11.0650	STS_ F/R/P Trackway Pavement - Through Bryant St Intersection	5	12-Feb-18	19-Feb-18	-68			n!		∎ ¦\$T§	S_ F/R/	PTrackw	ay Pave	ement - T	hrough	n Bryant	St Interse	ction	
STS.34.11.160 I	Install SB Trackwork - Chinatown Station to North Limit (339 TF)	5	22-Feb-18	01-Mar-18	-122							rackwork							
Track System Work	(	941	22-Dec-14 A	21-Jan-19	-181										1				
-	ATSC Systems- Preliminary Design	90	22-Dec-14 A	28-Oct-15	-153	μ A	TSC Systems - Preliminary	Design											
STS.34.42.2560	ATSC Systems- Intermediate Design	90	06-Apr-15 A	12-Feb-16	-153	i 💼	ATSC Systems- Inter	mediate Desid	in l	-			:	1		:			
STS.34.42.2570	ATSC Systems- Final Design	90	12-Feb-16	20-Jun-16	-153			ms- Final Des						·+			· <del> </del>		
STS.34.42.2580	ATSC Systems- Factory Acceptance Test Complete	90	20-Jun-16	26-Oct-16	-153			SC Systems - F	U.S.	centance	e Test (	omplete			-	-			
	ATSC Systems- Hardware Equipment Procurement	120	26-Oct-16	19-Apr-17	-153				Systems	· · ·	i i		ocurem	nt		-			
	Install ATSC Systems - At-Grade Section		02-Mar-17	07-Jul-17	62			<u> </u>	nstall ATS										
	ATSC Systems- Deliver Hardware		19-Apr-17	09-Oct-17	-153						1	ver Hardw							
	ATSC Systems - Installation, Software Testing		09-Oct-17	11-May-18	-153					C Oyştel		Systems		tion Cof	+	Footing	·	÷+	
	Install OCS Contact Wire/RF/ATCS Cable Loop - Northbound Tunnel		07-Feb-18	07-Mar-18	-106							Scontact					orthhous	Tunnal	
	Install OCS Contact Wire/RF/ATCS Cable Loop - Northbound Tunnel		01-Mar-18	29-Mar-18	-122														
	ATSC Systems- Substantial Completion			08-Nov-18	-122						nstall O	C\$ Contac	i i	i i	i l	- i -	i	na i unnei	
										•			17	ems- Sul	1	1.1			
	ATSC Systems- Final Acceptance		08-Nov-18	17-Jan-19	-181	÷						·		Systems	7 +			<u></u>	
	ATSC Systems- Rest of Allowance		17-Jan-19	21-Jan-19	-181					1		•	ATSC	Systems	- Rest	of Allow	ance		
Startup & Testing	Startup & Testing - Tunnel & ATSC Systems		06-Jul-18	07-Nov-18	-193	÷				-	-								
			06-Jul-18	01-Nov-18	-193					-				-	1		Systems		
	STS- Weather Allowance for 2018- 4 days		01-Nov-18	07-Nov-18	-193					0		ST:	S- Wea	the <sup>r</sup> Allow	ance	or 2018-	4 days		
No 13-Disp			17-Oct-13 A		020														
Project Start Up			15-Nov-18	06-May-19	-90														
nallocated Con			15-Nov-18	06-May-19	-90														
	nent	505	06-May-19	10-May-21	0			1 1			1						•		<b>-</b>

SFMTA Central Subway Project	
Master Project Schedule	Require
One Month Back & Remaining Work - September 2014 Update	



# Appendix C

# PROJECT SCOPE AND FUNDING OVERVIEW

### **Project Overview**

The Central Subway Project will construct a modern, efficient light-rail line that will improve public transit in San Francisco. This new 1.7-mile extension of Muni's T Third Line will provide direct connections to major retail, sporting and cultural venues while efficiently transporting people to jobs, educational opportunities and other amenities throughout the city.

The Central Subway Project is Phase 2 of the San Francisco Municipal Transportation Agency's (SFMTA) Third Street Light Rail Transit Project. Phase 1 of the project constructed a 5.1-mile light -rail line along the densely populated 3rd Street corridor. It began revenue service in April 2007, restoring light-rail service to a high transit-ridership area of San Francisco for the first time in 50 years.

The Central Subway Project will extend the T Third Line from the 4th Street Caltrain Station to Chinatown, providing a direct, rapid transit link from the Bayshore and Mission Bay areas to So-Ma, Union Square and downtown.

Four new stations will be built along the 1.7-mile project alignment—an above-ground station at 4<sup>th</sup> and Brannan streets and three underground stations at Moscone Center, Union Square and Chinatown.

The Central Subway will run through the burgeoning technology and digital-media hub in SoMa, where dozens of companies have taken up residence along the 4th Street corridor. Increased



### Project Overview - continued

transit options will attract new employers – the Central Subway makes travel more convenient throughout the corridor and improves connections to downtown, local and regional rail and the Muni bus system.

The Central Subway Project will contribute to San Francisco's economic competitiveness and help secure the city's status of a regional, national and global hub. It will provide a pollution-free transit option that will reduce the environmental impact of transportation in the city, save natural resources, reduce traffic congestion and improve public transit for thousands of San Franciscans.

### **Funding Overview**

The Central Subway Project is funded by the federal government, the State of California, the Metropolitan Transportation Commission, the San Francisco County Transportation Authority (SFCTA) and the City and County of San Francisco.

The majority of funding for the Central Subway Project is expected to be provided by the Federal Transit Administration's (FTA) New Starts program, with a total commitment over the life of the project of \$942.2 million. To date, \$41 million in Department of Transportation Congestion Mitigation and Air Quality Improvement Program funds have been committed and expended.

With the addition in the December 2013 MPR of work to relocate the retrieval site for two tunnel boring machines (TBMs), the SFMTA's baseline budget for the Central Subway Project is \$1.588 billion. In total, about half of the Third Street Light Rail Transit Project's funding is from federal sources, with the remaining half from state and local sources. This is in line with the expectations of the FTA for New Starts-financed programs.

The table below summarizes the local, state and federal fund sources for both phases of the T Third Line including with the addition of the retrieval shaft to the Phase 2 totals.

	T Third (Phase 1)	Central Subway (Phase 2 + Retrieval Shaft Relocation)	Total (Phase 1 + Phase 2 + Retrieval Shaft Relocation)	Percentage of Total
Federal	\$123.380	\$983.225	\$1,106.605	49.5%
State	\$160.700	\$471.100	\$631.800	28.2%
Local	\$364.380	\$133.675	\$498.055	22.3%
Total	\$648.460	\$1,588.000	\$2,236.460	100.0%

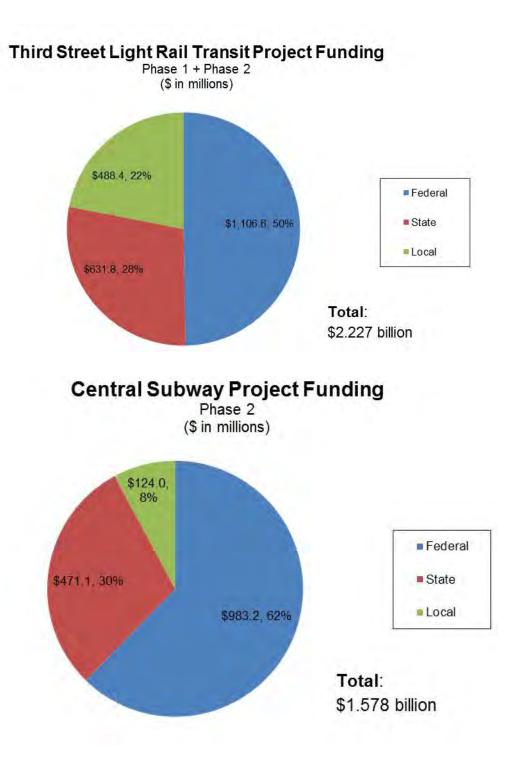
All amounts in millions of dollars

The six charts that follow summarize use of fund sources by phase and with the addition of the retrieval shaft relocation additional budget and funding:

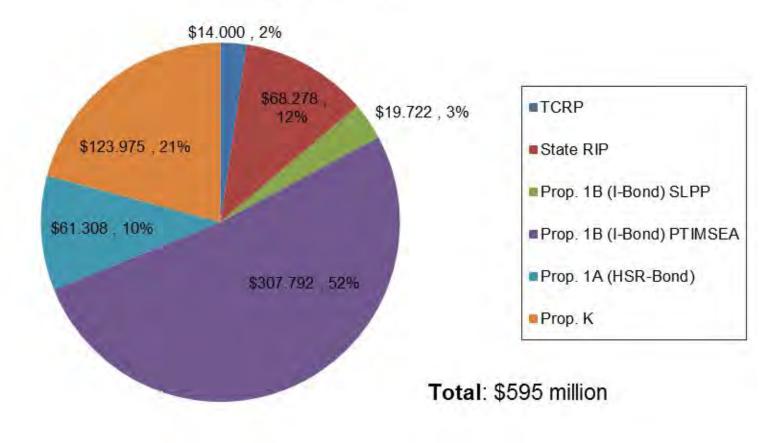
• Phase 1 + Phase 2 of the T Third Line federal, state and local funding percentages previous to the addition of the retrieval shaft relocation budget and funding in December 2013.

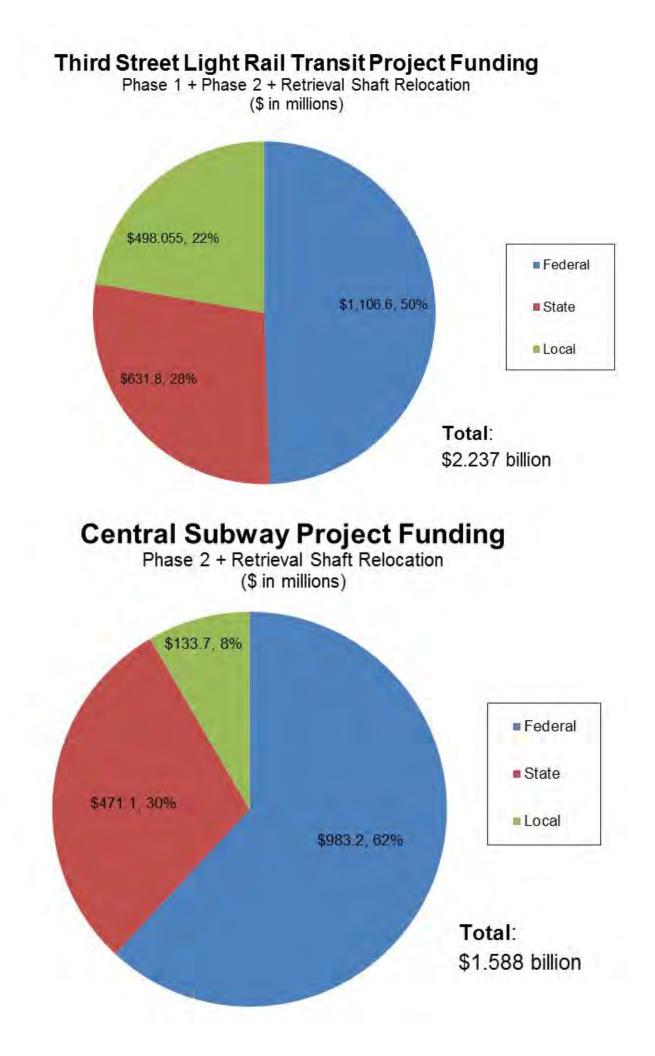
## Funding Overview - continued

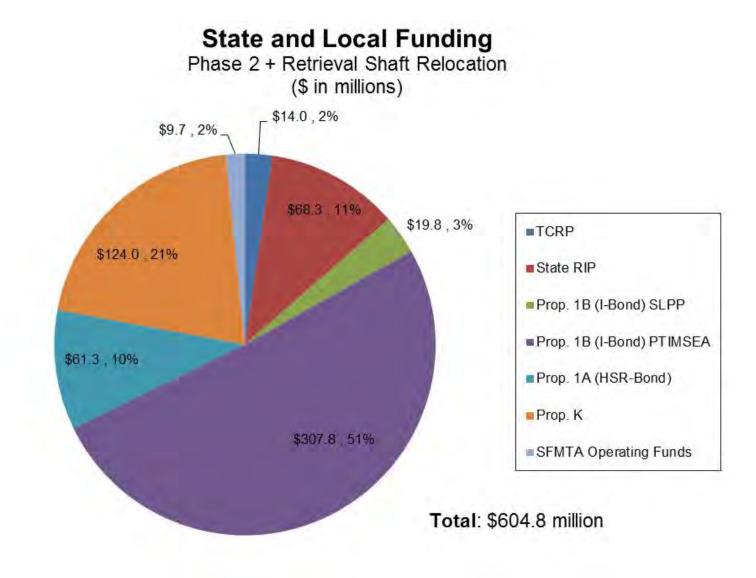
- Phase 2 Central Subway Project only total funding source percentages previous to the addition of the retrieval shaft relocation budget and funding.
- Phase 2 Central Subway Project only detail of the six State and Local funding sources previous to the addition of the retrieval shaft relocation.
- The next three charts that follow are the above three data sets above with the retrieval shaft relocation budget and funding added to the overall presentation.



State and Local Funding Phase 2 (\$ in millions)









# Appendix D

### **COMPLETED CONTRACTS**

# **Moscone Station and Portal Utility Relocation**

Contract 1250

Contractor: Synergy Project Management, Inc.

Budget/Expenditure	S
Category	Amount
Original Budget	\$11,227,316
Expenditures Final	\$11,968,150
Utility Reimbursements	(\$2,275,419)
Final Program Cost	\$9,692,731
Budget Impact (Underrun)	(\$1,534,585)

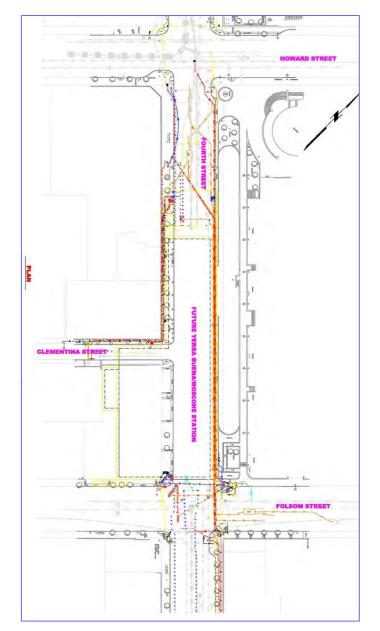
Contract Details		
Contract Awarded: November 17, 2009		
Notice to Proceed: January 4, 2010		
Substantial Completion: June 23, 2011		
Contract Award Value: \$ 9,273,939		
Modifications Final : \$ 2,694,211		
Final Contract Value:	\$11,968,150	

### Status

- Work complete
- Project closeout administration and documentation
- Final Completion Date: June 23, 2011

## Description

This project relocates utilities within the footprint of the proposed Yerba Buena/Moscone Station and the 4th Street Portal where the tunnel boring machines will descend underground. Also included is installation of building protections and monitoring of buildings adjacent to utility trenches.



# **Union Square/Market Street Station Utility Relocation**

### Contract 1251

Contractor: Synergy Project Management, Inc.

Budget/Expenditures		
Category	Amount	
Original Budget	\$22,199,847	
Expenditures Final	\$20,794,581	
Utility Reimbursements	(7,413,510)	
Final Program Costs	\$13,176,169	
Budget Impact (Underrun)	(\$9,023,678)	

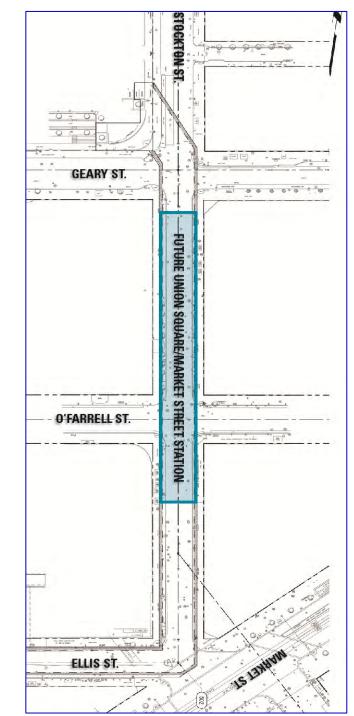
Contract Details	
Contract Awarded:	December 7, 2010
Notice to Proceed:	January 12, 2011
Substantial Completion:	August 16, 2012
Contract Award Value:	\$16,832,550
Modifications Final:	\$3,962,031
Final Contract Value:	\$20,794,581

### Status

- Final completion date October 15, 2012.
- Completed punch list work
- Project Final Acceptance by the SFMTA Board of Directors

### Description

This project relocates utilities for the Union Square/Market Street Station and temporarily reroutes existing trolley coach lines around the construction.



### Contract 1277 Contractor: MH Construction

### Work Description

Demolish and clear the former Pagoda Theater for use the site to recover the tunnel boring machines when tunnels are completed in 2015. Locate and supply contractor facilities and installations. Obtain permits and approvals and coordinate work with City agencies and utility companies. Furnish and install signs and distribute notices to the local community prior to commencing with construction, cleanup and remove of debris from the site.

- Work was substantially completed Sept. 24, 2013.
- Administrative closeout in progress.

Budget/Expenditures			
Category	Amount		
Current Budget	\$722,592		
Expenditures to Date	\$638,278		

Contract Details		
Contract Awarded:	June 12, 2013	
Notice to Proceed:	July 15, 2013	
Substantial Completion: Sept. 24, 2013		
Contract Award Value:	\$498,995	
Modifications to Date:	\$108,228	
Current Contract Value:	\$678,134	



### Contract 1252 Contractor: Barnard Impregilo Healy Joint Venture

### **Description of Work**

1.5-mile twin bore tunnels from Hwy I-80 to North Beach using two tunnel boring machines (TBMs). Contractor procurement and installation of the TBMs; construction of the TBM launch box and retrieval shaft excavation support; Yerba Buena/Moscone Station and Union Square/Market Street Station end walls; tunnel excavation and installation of precast segmental lining, the 4th Street portal transition to the surface and cross passages. Throughout, settlement monitoring and protection of existing utilities, buildings and BART tunnels.

### **Status**

- Final Completion Date: May 15, 2015
- Administrative closeout in progress

Budget/Expenditures		
Category Amount		
Current Budget	\$251,068,968	
Other Project Budget	\$5,150,000	
Other Offset Credits \$1,135,6		
Expenditures to Date \$234,616,1		

Contract Details			
Contract Awarded:	June 28, 2011		
Notice to Proceed 1: January 27,			
Notice to Proceed 2:	March 14, 2012		
Partial NTP 3:	April 12, 2012		
Notice to Proceed 3:	October 15, 2012		
Substantial Completion:	April 15, 2015		
Contract Award Value:	\$233,584,015		
Modifications to Date:	\$7,707,417		
Current Contract Value:	\$241,291,432		





# Appendix E

### **SBE PARTICIPATION**

**Quarterly Report** 

Current Report: July 2015 - September 2015

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#### PROGRAM SUPPORT CONTRACTS – SBE PARTICIPATION

Appendix E presents the Central Subway Program Small Business Enterprise or SBE goals and the actual SBE participation achieved to date – as of September 30, 2015.<sup>1</sup>

#### CS Program SBE Summary Table for Professional Services and Construction Contracts

The summary compares the dollar value of the Base Contracts, the SBE Contract Goals, the percent and dollar value expended to date and the SBE actual participation to date.

				A	В	С	D	E	F	G
	Contract No.	Contractor	Services/Segment	Contract Amount	SFMTA SBE Contract Goal	Contract Expenditure to Date (Est.)	SBE Actual to Date	SBE Contract \$s <u>= A * B</u>	SBE Amount to Date '= C * D	Contractor's SBE Goal (in Bid)
	Project Pr	ofessional Servi	ces Contracts	millions		millions		millions	millions	
1	149	CS Partnership	Project Management	\$85.14	30%	\$51.96	36%	\$25.54	\$18.45	31.4%
2	156	Hill International	Project Controls Task 1	\$17.11	26%	\$8.58	29%	\$4.45	\$2.48	26.0%
3	155-1	PB Telemon	Tunnels Design	\$7.49	30%	\$7.73	30%	\$2.25	\$2.30	31.6%
1	155-2	CS Design Group	Stations Design	\$36.52	30%	\$30.10	43%	\$10.96	\$12.85	36.4%
5	155-3	HNTB, Inc B&C	Systems, Track & Surface Station Design	\$17.23	30%	\$12.55	28%	\$5.17	\$3.55	30.0%
	Subtotal P	rofessional Servi	ces	\$163.50		\$110.93		\$48.36	\$39.64	
3	Project Co	onstruction Contr	racts	millions		millions		millions	millions	
1	1250	Synergy Inc	Utility Relocation 1	\$11.97	20%	\$11.97	97.2%	\$2.39	\$11.63	96.4%
2	1251	Synergy Inc	Utility Relocation 2	\$20.79	20%	\$20.79	87.4%	\$4.16	\$18.18	94.9%
3	1252	BIH	Tunnels and Portal - in Construction	\$241.29	6%	234.62	5.8%	\$14.48	\$13.71	6.1%
4	1277	MH Construction	Pagoda Demolition	\$0.68	100%	\$0.64	100.0%	\$0.68	\$0.64	100.0%
5	1300	Tutor-Perini	Stations/Track/Systems - in Construction	\$838.66	20%	\$302.39	15.1%	\$167.73	\$45.72	25.5%
	Subtotal C	onstruction Cont	tracts	\$1,113.39		\$570.41		\$189.44	\$89.88	1
	Contract	Contractor	Services/Segment	Base Contract	SFMTA Goal	Expenditures	SBE Actual	= A * B	= C * D	Bid Goal
				Δ	B	C	D	F	F	G

#### SBE Summary Table Notes and Sources:

a) Column A is the base contract amount awarded. Column B is the Agency SBE goal percent for each contract awarded.

The SFMTA SBE Contract Goals are also on the Central Subway web site under the listing of on-going contracts – see "**Closed and Awarded Contracts**" at this link: <u>http://centralsubwaysf.com/content/closed-and-awarded-contracts</u>

b) Column C shows each contract's current amount expended to date (estimated) including accruals. Column D is the actual SBE percent level of each contract based on payments to date. Column E is the expected SBE dollar amount when the contract amount is completed and the SFMTA SBE goal achieved using this calculation: Columns A \* B = Column E, the SBE Expected \$ Amount.

Column F is the actual SBE dollar amount out of the total contract expenditure to date:

Columns C \* D = Column F, the SBE Expended \$ Amount.

The source of the SBE Actual percent to date and dollar amounts are Progress Payment Applications and Contractor's monthly submittals that may include the current estimated accruals. The BIH SBE percent is from the contractor's progress payment #38, Form 6.

<sup>&</sup>lt;sup>1</sup> An SBE is a for-profit, small business concern with a three (3) year average gross revenue not exceeding \$14 million or \$12 million, depending on the scope of work to be performed, that is certified under any of the following programs: the State of California's Small Business Program with the Department of General Services ("State Program"), the City and County of San Francisco's LBE Program ("City Program"), or the California Unified Certification Program ("Federal DBE program").

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- c) Column G, the Contractor's SBE Goal in the submitted bid, is background information that is not calculated in the table. The table source of the Contractor's SBE Goals is from the SFMTA Contract Compliance Office. A Contractor's SBE goal in the bid is one source used by SFMTA Contract Compliance to assess and propose the Agency's SBE goal for a contract.
- d) The three constructions contracts shown in **bold type**, **1250**, **1251** and **1277**, with gray background, are completed contracts. Little to no changes will be shown in future reports.
- e) The SBE Hill International Actual to Date SBE participation is 28.9% for the overall SFMTA contract. The Hill International data is for the Central Subway Task 1 portion of the Hill International contract to provide SFMTA Project Controls services and systems.
- f) The SBE SFMTA goal for Contract 1300 Tutor-Perini is 20% SBE with a provision of 50% for trucking.

The 1300 Tutor-Perini SBE percent Actual is based on the SBE data provided in Progress Payment #21 September 2015, SFMTA SBE FORM No. 6.

g) The SBE SFMTA goal for Contract 1277 MH Construction was based on an SBE set-aside.

#### **SBE Participation Details**

The two tables that follow present the Central Subway's professional services and construction contract amounts, expenditures and SBE levels with additional details.

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### Active Professional Services Contracts - SBE Participation Details

A	OS 440 Cantral Subar Data I	nanagement			
100 - 10 - 10 - 10 - 10 - 10 - 10 - 10	CS-149 Central Subway Partnership				
Status:	On-going				
	Base Contract Value	\$85,139,092			
	Approved Change Orders	-0-			
	Current Contract Value	\$85,139,092			
	Expended to Date (est.)	\$51,964,942			
	% Expended	61.0%			
	SBE Participation	35.5%			
Contract:	Project Controls Cost and Schedule Sup	oport			
Contract No.	CS 156 Hill International Task 1				
Status:	On-going				
	Base Contract Value	\$17,112,873			
	Approved Change Orders	-0-			
	Current Contract Value	\$17,112,873			
	Expended to Date (est.)	\$8,575,771			
	% Expended	50.1%			
	SBE Participation	28.9%			
Contract:	ntract: Design Package 1 for CNs 1250, 1251 and 1252 Tunnels				
Contract No.	ontract No. CS-155-1 PB / Telemon				
Status:	Design is completed. Construction support	ongoing			
	Base Contract Value	\$5,795,000			
	Approved Change Orders (6)	\$1,697,245			
	Current Contract Value	\$7,492,245			
	Expended to Date (est.)	\$7,730,484			
	% Expended	103.2%			
	SBE Participation	29.7%			
Contract:	Design Package 2 for 1253 UMS, 1254 CTS, 1255 YBM Stations.				
A REAL PROPERTY.	CS-155-2 Central Subway Design Group				
the second state of the second state of the	Design is completed. Construction support				
	Base Contract Value	\$35,059,252			
	Approved Change Orders (1)	\$1,460,360			
	Current Contract Value	\$36,519,612			
	Expended to Date (est.)	\$30,104,946			
	% Expended	82.4%			
	SBE Participation	42.7%			
Contract	DP 3 Systems, Track work, Surface station	on			
and the second s	CS-155-3 HNTB-B&C	011.			
A CONTRACT OF A	Design is completed. Construction support	ongoing			
	Base Contract Value	\$16,822,238			
	Approved Change Orders (5)	\$312,814			
	Current Contract Value	\$17,232,252			
	Expended to Date (est.)	\$12,553,146			
	% Expended	72.8%			

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### **Active and Completed Construction Contracts - SBE Participation Details**

Contract:	Synergy Inc Utility Relocation 1 YBM & Launch Box		
Contract No.	1250	States and the states	
Status:	Contract is completed and closed out		
	Base Contract Value	\$9,273,939	
	Approved Change Orders	\$2,694,211	
	Final Contract Value	\$11,968,150	
	% Expended	100%	
	SBE SFMTA Goal	20%	
	SBE Participation To Date	97.2%	

Contract:	Synergy Inc Utility Relocation 2 UMS		
Contract No.	. 1251		
	Contract is completed and closed out		
	Base Contract Value	\$16,832,550	
	Approved Change Orders	3,962,031	
	Final Contract Value	\$20,794,581	
	% Expended	100%	
	SBE SFMTA Goal	20.0%	
	SBE Participation To Date	87.4%	

Contract:	Pagoda Palace Demolition / MH Construction 1277 Construction is complete. Contract in Close Out		
Contract No.			
Status:			
12.21	Base Contract Value	\$498,995	
	Approved Change Orders	\$179,139	
	Current Contract Value	\$678,134	
	Expended to Date (est.)	\$638,278	
	% Expended	94.12%	
	SBE SFMTA Goal	100.0%	
	SBE Participation To Date	100.0%	

Contract:	Tunnels Barnard/Impregilo/Haley 1252*		
Contract No.			
Status:	Construction is underway and ongoing		
	Base Contract Value	\$233,584,015	
	Approved Change Orders	\$7,707,417	
	Current Contract Value	\$241,291,432	
	Expended to Date (est.)	\$234,616,104	
	% Expended	97.2%	
	SBE SFMTA Goal	6.0%	
	SBE Participation To Date	5.8%	

Contract:	Stations and Systems / Tutor Perini 1300*		
Contract No.			
Status:	Construction is underway and ongoing		
	Base Contract Value	\$839,676,400	
	Approved Change Orders	(\$1,016,585)	
	Current Contract Value	\$838,659,815	
	Expended to Date (est.)	\$302,388,888	
	% Expended	36.1%	
	SBE SFMTA Goal	20.0%	
	SBE Participation To Date	15.1%	

Notes:

\* Contract 1252 and Contract 1300 March cost is accrual.

Photos on the next page:

The four photos recount the special street reconstruction in December that was carried out for the mandatory Holiday Moratorium on construction in the downtown core area: Food trucks from Off the Grid made regular appearances at the 2014 Winter Walk. Vintage-styled light poles and illuminated benches contributed to an enjoyable atmosphere for shoppers and tourists. A large, moving holiday display was projected onto the Macy's Men's building, setting the scene at Geary and O'Farrell Street. Shoppers, locals and tourists all enjoyed the extra seating and green turf unrolled for the 2014 Winter Walk.

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