Los Angeles County
Metropolitan Transportation Authority

Westside Purple Line Extension

Section 2 Project

MONTHLY PROJECT STATUS REPORT
OCTOBER 2017

Metro

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WESTSIDE PURPLE LINE EXTENSION SECTION 2 PROJECT

MONTHLY PROJECT STATUS REPORT

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OCTOBER 2017

TABLE OF CONTENTS

Page No.

Project Overview & Status…….. 1
Management Issues.....…… 3
Project Alignment by Sections……..…… 4
Project Alignment Section 2……..…… 5
Base Project Scope...…… 6
Project Status
- Project Schedule
  - Key Milestones Six-Month Look Ahead…….. 8
  - Project Summary Schedule…… 9
  - Schedule Measurements…… 10
  - Overall Construction Progress Curve…… 11
  - Major Equipment Delivery…….. 12
  - Design-Builder's (C1120) Long Lead Item List…….. 13
  - Critical Path Narrative…….. 14
  - Project Schedule Contingency Drawdown.……..…… 15
  - Project Schedule Contingency Drawdown Analysis…… 15
- Project Cost
  - Project Cost Status…….. 16
  - Project Cost Analysis…… 16
  - Project Cost Contingency Drawdown…… 17
  - Project Cost Contingency Drawdown Analysis…… 17
  - Race-Conscious Disadvantaged Business Enterprise (RC-DBE) 18
  - Project Labor Agreements (PLA) Status…… 18
  - Summary of Contract Modifications.…… 19
- Financial/Grant
  - Financial/Grant Status…… 20
  - Status of Funding Anticipated.…….. 20
- Staffing Status
  - Total Project Staffing……..…… 21
  - Metro Staffing……..…….. 22

TABLE OF CONTENTS (Continued)

Page No.

- Construction Management Support Services Consultant…….. 22
- Engineering Management Services Consultant…… 23
- Real Estate Status..…… 24
- Quality Assurance Status..…… 25
- Environmental Status…….. 25
- Construction Relations Status..... 26
- Creative Services Status..…….... 26
- Safety & Security Status…….. 27
- Third Party Agreement Status..……..…… 28
- Advanced Utility Relocation Status……..……... 29
- Peak Hour and Nighttime Construction Variances…… 29
- Chronology of Events…….. 30
- Construction Contracts
  - Contract C1120 Status ……..……... 31
- Construction Photographs…….. 32

Appendices

- Cost and Budget Terminology…… 33
- List of Acronyms and Abbreviations……... 34

PROJECT OVERVIEW & STATUS

Section 2 of the Westside Purple Line Extension Project is the second of three sections to be designed and constructed as part of the Los Angeles County Metropolitan Transportation Authority (LACMTA) Measure R Program. The program was approved by Los Angeles County voters in November 2008 and provides a half-cent sales tax to finance new transportation projects. In April 2012, the three sections of the Project were environmentally cleared and adopted by LACMTA Board of Directors.

Section 2 will extend the future Wilshire/La Cienega Station that is part of the Westside Purple Line Extension Section 1 Project currently under construction to the Century City area. The Project is located entirely underground, primarily following Wilshire Boulevard, and includes the design and construction of approximately 2.59 miles of double-track heavy rail and two new stations as well as the purchase of 20 heavy rail vehicles. The Project also includes train controls, signals, traffic controls, communications, traction power supply and distribution, fare collection systems and equipment, acquisition of right-of-way, and utility relocations.

Design

The Engineering Management Services (EMS) team continues to provide design support for the Advanced Utility Relocation (AUR) work in Century City and Beverly Hills as well as real estate support services. The team is supporting Metro in reviewing final design submittals, responding to RFI's, and assisting in the preparation of change notices.

The C1120 Contractor, Tutor Perini/O&G, a Joint Venture (TPOG), has mobilized the final design team, STV.

The design work has been identified into three distinct design unit packages. They are:

1. Design Package 1 – Utility/Civil Design at Launch Box in Century City
2. Design Package 2 – Remaining Utility Conflicts (Outside of Launch Box)
3. Design Package 3 (Volume 1) - Tunnel Reaches
   Design Package 3 (Volume 2) – Stations
   Design Package 3 (Volume 3) – Track & Systems

Each design unit package will be submitted and evaluated at each of the following phases: 60%, 85%, 100%, Approved for Construction (AFC) and Issued for Construction (IFC). If required, critical design units can be advanced as Advanced Partial Design Units (APDU's) to support ongoing construction activities.

Design progress meetings are occurring weekly related to the design unit packages. TPOG is continuing with the required contractual submittals. *Design related submittals of note that TPOG has submitted this month are: Geotechnical Site Investigation and Design Unit Review and Work Plan.*

Design Package 2 – Remaining Utility Conflict (Outside of Launch Box) 60% Design was returned to TPOG as Approved as Noted.

TPOG's 120-Day schedule is currently being utilized for progress and payment purposes. *The resubmittal of the Baseline CPM Schedule is planned for October 31, 2017. The cost loaded schedule and narrative are under review. Disposition is planned for November 2017.*

Major Contract Procurement
All construction contracts for the Project have been awarded.

Construction

Advanced Utility Relocations
Century City Constellation: Telecom joint trench civil work completed in June 2017. *Cable pulling and splicing work is anticipated to complete in December 2017*. *LADWP Power began in May 2017 and is anticipated to complete in early November 2017*. *SCG utility relocations are anticipated to complete outside of the launch box in early November 2017*. AT&T utility relocations to start in November 2017.

Wilshire/Rodeo: SCE began its relocation of power lines in September 2017, to be followed by SCG and AT&T once SCE construction is complete.

TBM Launch Box: *SCG utility relocations were completed this period.* LADWP Power utility relocations are ongoing. *TPOG's planned access for this area is in January 2018.*

Contract C1120 – Tunnels, Stations, Trackwork and Systems (Design/Build)
Contract award was issued on January 31, 2017 and Notice to Proceed on April 26, 2017. TBM's purchase order has been executed.

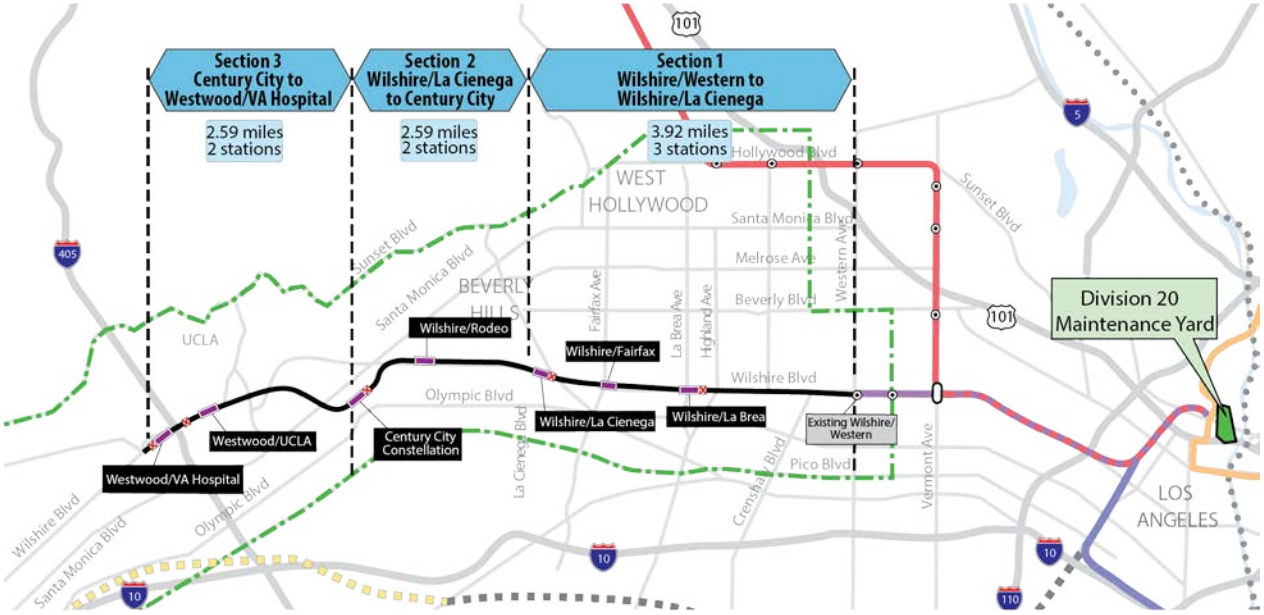
TPOG was granted access to the Wilshire/Rodeo Station entrance site on October 10, 2017.

Beverly Hills City Council approved the permit for geotechnical investigation work to begin.

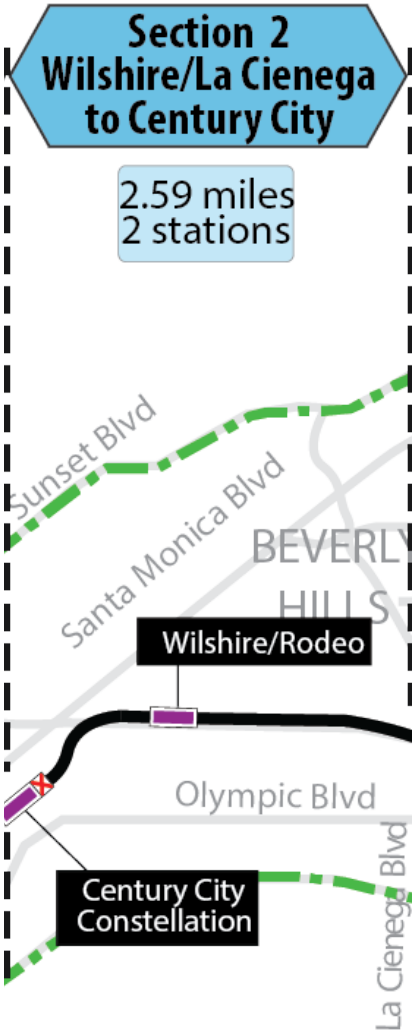
MANAGEMENT ISSUES

No management issues this period.

PROJECT ALIGNMENT BY SECTIONS



PROJECT ALIGNMENT SECTION 2



BASE PROJECT SCOPE

Section 2 of the Westside Purple Line Extension Project is the second of three sections to be designed and constructed as part of the Los Angeles County Metropolitan Transportation Authority (LACMTA) Measure R Program. The program was approved by Los Angeles County voters in November 2008 and provides a half-cent sales tax to finance new transportation projects. In April 2012, the three sections of the Project were environmentally cleared and adopted by LACMTA Board of Directors.

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The Wilshire/Rodeo Station box will be under the center of Wilshire Boulevard beginning just east of South Canon Drive and extending to El Camino Drive. The entrance will be on the southwest corner of Wilshire Boulevard and Reeves Drive.

The Century City Constellation Station box will be under the center of Constellation Boulevard between Century Park East and Solar Way. A double crossover will be located east of this station. The entrance will be on the northeast corner of Constellation Boulevard and Avenue of the Stars. In lieu of tail tracks, safe breaking distance will be provided at the interim terminus station.

Contract C1120 – Tunnels, Stations, Trackwork, Systems and Systems Integration Testing

The procurement of this contract utilized a two-step approach with the submittal of qualification statements through a Request for Qualification (RFQ) process, prequalification of qualified proposers followed by the release of a Request for Proposals (RFP) soliciting technical and price proposals with an option at Metro's discretion for Best and Final Offers (BAFO).

The Design/Build contract provides for final design and construction of the infrastructure along the 2.59 mile alignment. Contract scope includes demolition and removal of structures and clearing sites to facilitate construction operations. The structures to be constructed include twin bored tunnels, complete with cross-passages and walkways including all mechanical, electrical and finished work. A tunnel boring launch (TBM) shaft will be constructed at the Century City Constellation Station. Two underground stations are to be constructed with one double crossover location set east of the Century City Constellation (terminus) Station. Each station has a single entrance plaza with stairs, escalators and elevators which meet ADA requirements. The scope of work also includes all architectural finishes, mechanical and electrical systems and equipment including train control, traction power, communications, trackwork, system tie-in to the Wilshire/La Cienega Station (currently under construction), testing and commissioning.

BASE PROJECT SCOPE (Continued)

Metro Furnished Equipment

Metro has procured a separate contract to provide the 20 Heavy Rail Vehicles (HRV) and will procure a separate contract for the Universal Fare System (UFS) necessary to operate the Purple Line. The scope of the HRV contract includes design, manufacturing, testing and delivery of the vehicles. The scope of the UFS contract will include design, fabrication and installation of equipment at the two stations and system testing.

Start Up

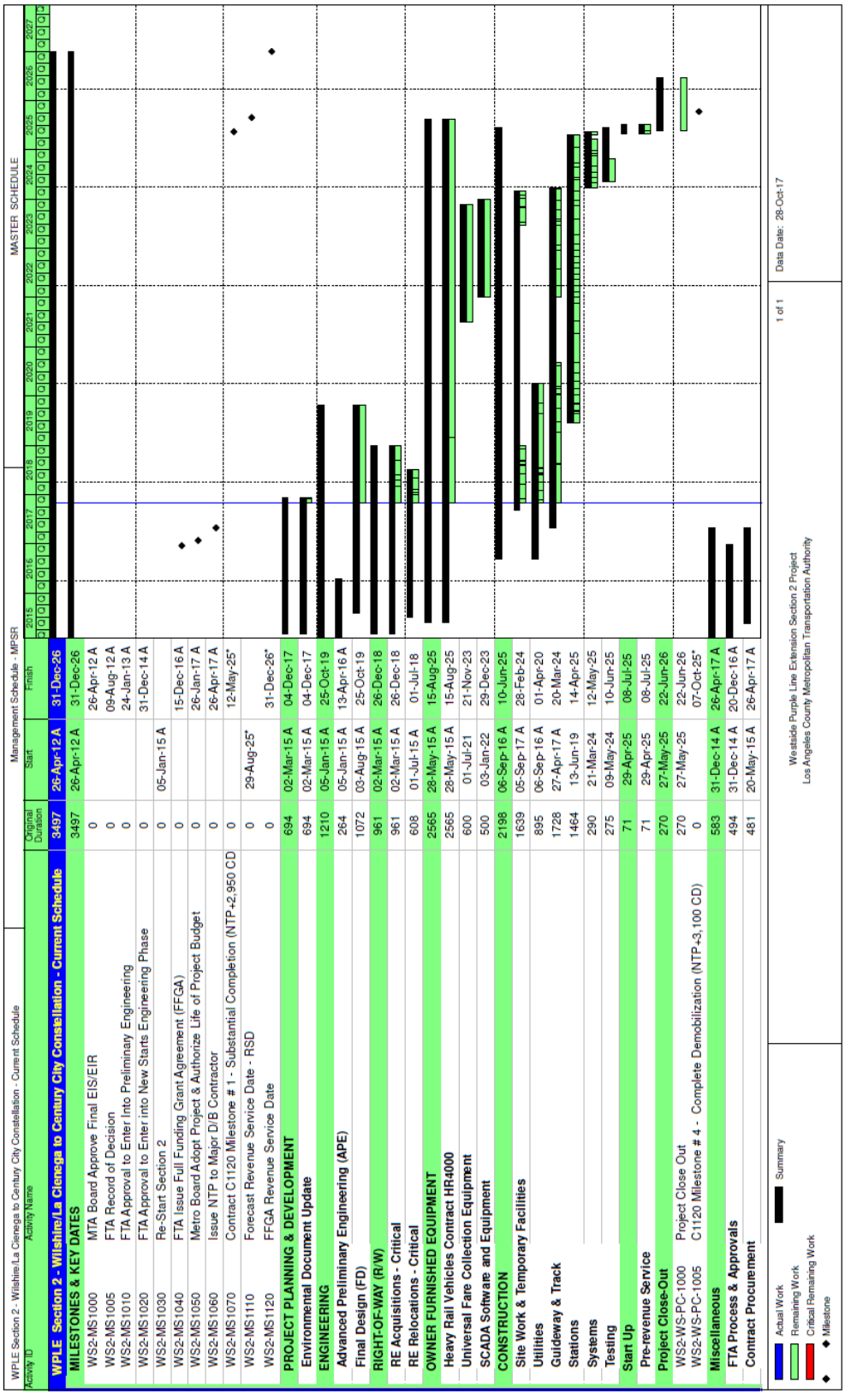
The commencement of pre-revenue operations will be determined by Metro. Generally, all systems integration testing will have been completed and passed. All testing will be required to include and pass a “stress test” of maximum operational service levels to be acceptable. Pre-Revenue Operations include train runs, especially those involving multiple trains on the integrated and fully operational extension; rehearsal of expected revenue operations scenarios; abnormal and emergency scenarios in which random combinations of system interactions are tested and equipment “burned-in”; and training of emergency services as well as Metro personnel who will operate and maintain the extension. Activities occurring during Pre-Revenue Operations are carried out by a designated Metro Project Rail Activation Group.

KEY MILESTONES SIX-MONTH LOOK AHEAD

	Milestone Date	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18
Submit 85% Design Package 1 - Utilities at TBM Launch Box	11/02/17	▭					
Third party utility construction completes at Century City Constellation - SCG (outside Launch Box)	11/06/17	△					
Submit 85% Design Package 2 - Remaining Utillity Conflicts (Outside of Launch Box)	11/10/17	▭					
Third party utility cable pulling & splicing completes at Century City Constellation -AT&T	11/11/17	△					
Submit 100% Design Package - SOE for TBM Launch Box	11/16/17	▭					
Complete SEIS	12/01/17		◆				
Century City Constellation East of Station BR 707+50 Available (Launch Box)	01/11/18			◆			
Third party utility cable pulling & splicing complete at Wilshire/Rodeo -SCG	01/21/18			△			
Submit 100% Design Package 2 - Remaining Utillity Conflicts (Outside of Launch Box)	02/02/18				▭		
Third party utility construction begins at Wilshire/Rodeo - SCG	02/13/18				△		
Third party utility construction begins at Wilshire/Rodeo - AT&T	02/13/18				△		
Issue IFC drawings for Design Package 1 Utilities for Launch Box	02/14/18				▭		
Submit 60% Design Package 3 - Volumes 1, 2, 3	02/23/18				▭		
Start Soldier Pile Installation for TBM Launch Box	03/28/18					▭	
Submit Issued for Construction (IFC) Design Package 2 - Remaining Utillity Conflicts (Outside of Launch Box)	04/26/18						▭

◆ MTA Staff Ⓜ MTA Board Action **FTA** (Federal Transit Administration) △ Other Agencies ▭ Contractor

PROJECT SUMMARY SCHEDULE



SCHEDULE MEASUREMENTS

	Status	Last Period	Change from Last Period	Comment
Forecast Revenue Service	8/29/2025	8/29/2025	None	
FFGA Revenue Service	12/31/2026	12/31/2026	None	
Final Design Progress:				
Contract C1120			39.90%	Final design is scheduled to complete in Nov./Dec. 2018
Construction Contracts Progress*:				
Contract C1120			0.00%	To be provided once construction starts.

*Note: Physical completion assessment reflects work completed and work in progress.

OVERALL CONSTRUCTION PROGRESS CURVE

To be provided when the baseline schedule for Contract C1120 has been approved.

MAJOR EQUIPMENT DELIVERY

To be provided when the baseline schedule for Contract C1120 has been approved.

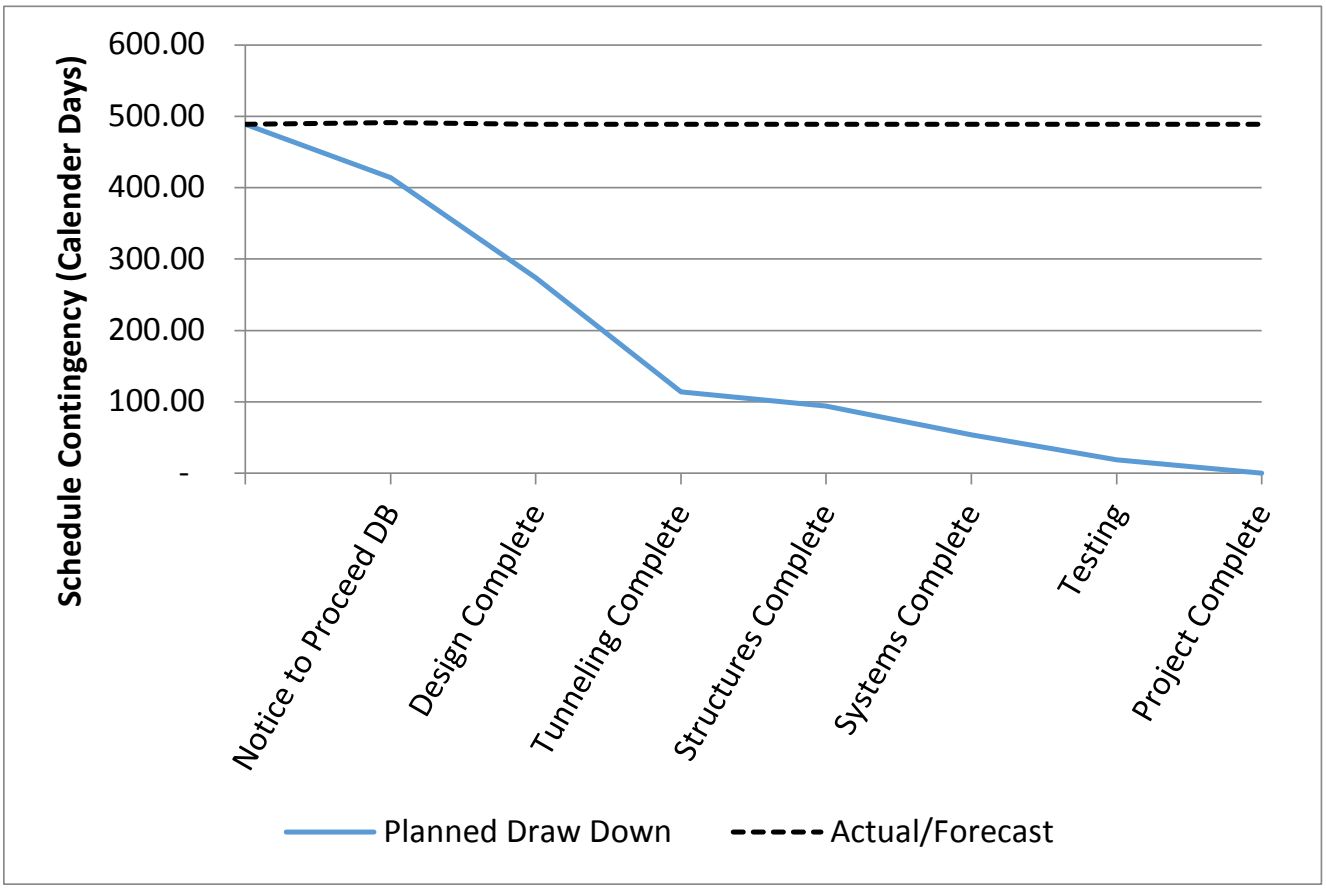
DESIGN BUILDER'S (C1120) LONG LEAD ITEM LIST

To be provided when the baseline schedule for Contract C1120 has been approved.

CRITICAL PATH NARRATIVE

The Critical Path begins with the procurement process for the C1120 Design/Build (D/B) contract, mobilization of the design team for the contractor, and the start of final design for station boxes and tunnels. The Design/Build contractor begins installation of soldier piles, first on the north side of the Century City Constellation Station box, and then on the south side. Temporary street decking is then installed, the station structural box is excavated, and invert concrete is placed. Concurrently with this is the procurement and assembly of the tunnel boring machines (TBM). The path continues with tunneling and then street decking, station box excavation and concrete invert at the Wilshire/Rodeo Station. The path then follows into systems integration and testing and pre-revenue operations.

PROJECT SCHEDULE CONTINGENCY DRAWDOWN



PROJECT SCHEDULE CONTINGENCY DRAWDOWN ANALYSIS

The project schedule contingency drawdown curve is based on an August 29, 2025 Forecast Revenue Service Date (RSD).

PROJECT COST STATUS

DOLLARS IN THOUSANDS

SCC CODE	DESCRIPTION	ORIGINAL BUDGET	CURRENT BUDGET		COMMITMENTS		EXPENDITURES		CURRENT FORECAST		FORECAST/ BUDGET VARIANCE
			PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	
10	GUIDEWAY & TRACK ELEMENTS	346,440	-	346,440	-	329,943	5,175	23,000	-	346,440	-
20	STATIONS, STOPS, TERMINALS, INTERMODAL	434,990	-	434,990	-	410,368	-	41	-	434,990	-
30	SUPPORT FACILITIES: YARDS, SHOPS, ADMIN. BLDGS	-	-	-	-	-	-	-	-	-	-
40	SITEWORK & SPECIAL CONDITIONS	553,282	-	553,282	686	525,661	11,460	145,611	-	553,282	-
50	SYSTEMS	81,457	-	81,457	-	68,537	771	771	-	81,457	-
	CONSTRUCTION SUBTOTAL (10-50)	1,416,169	-	1,416,169	686	1,334,509	17,406	169,423	-	1,416,169	-
60	ROW, LAND, EXISTING IMPROVEMENTS	426,396	-	426,396	-	230,081	195	128,992	-	426,396	-
70	VEHICLES	42,000	-	42,000	-	-	-	-	-	42,000	-
80	PROFESSIONAL SERVICES	374,878	-	374,878	114	173,760	5,664	89,416	-	374,878	-
	SUBTOTAL (10-80)	2,259,444	-	2,259,444	801	1,738,351	23,264	387,831	-	2,259,444	-
90	UNALLOCATED CONTINGENCY	177,176	-	177,176	-	-	-	-	-	177,176	-
100	FINANCE CHARGES	88,695	-	88,695	-	-	-	-	-	88,695	-
	OTAL PROJECT 865522 (FFGA & NON-FFGA CONCURRENT ACTIVITIES)	2,525,314	-	2,525,314	801	1,738,351	23,264	387,831	-	2,525,314	-
	ENVIRONMENTAL/PLANNING - 465518 & 465522	4,349	-	4,349	-	3,329	201	2,472	-	4,349	-
	TOTAL PROJECT 465518 & 465522 (ENV / PLAN'G)	4,349	-	4,349	-	3,329	201	2,472	-	4,349	-
	TOTAL PROJECTS 465518, 465522 & 865522	2,529,664	-	2,529,664	801	1,741,680	23,466	390,304	-	2,529,664	-

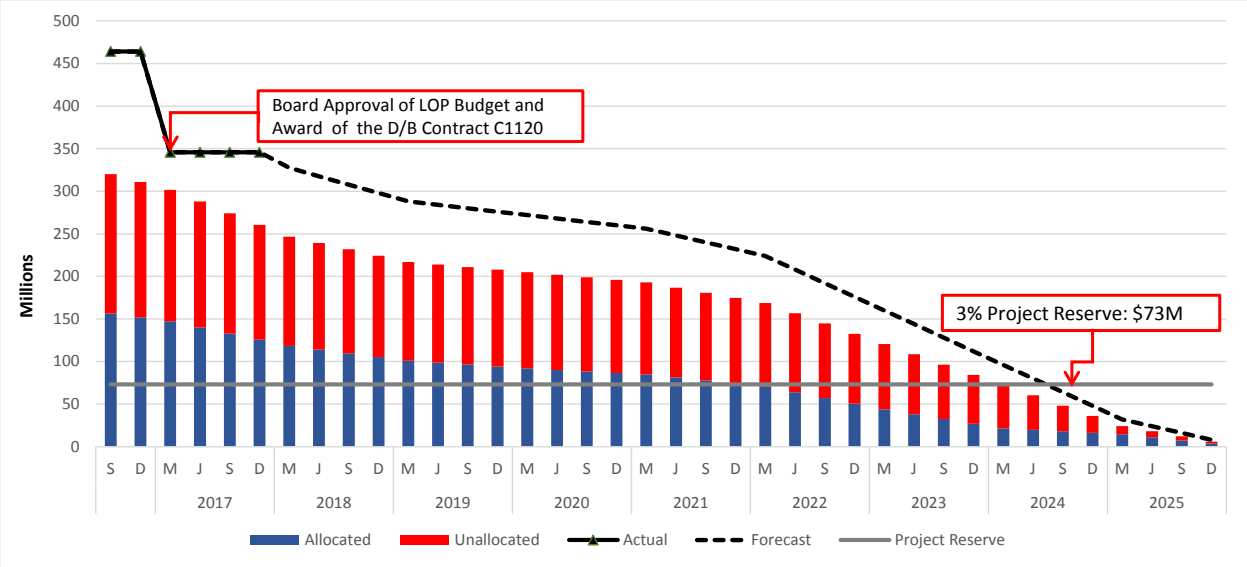
PROJECT COST ANALYSIS

Original Budget, Current Budget and Current Forecast
The Original Budget, Current Budget and Current Forecast of $2.5 billion reflect the Life of Project (LOP) budget approved by the Board on January 26, 2017, plus Finance Charges of $88.7 million.

Commitments
The Commitments increased this period by $0.8 million primarily due to approved Work Orders for Private Utilities, Environmental Services, Program Management Support Services, and a Change Order for the Design/Build (TPOG) Contract C1120. The $1.7 billion in Commitments to date represents 68.9% of the Current Budget.

Expenditures
The Expenditures increased this period by $23.5 million primarily for costs associated with the Design/Build Contract C1120, Real Estate Acquisitions, Private Utilities, Memorandum of Agreement with the City of Beverly Hills, Legal Services, Metro Project Administration, Construction Management Support Services and Engineering Management Services. The $390.3 million in Expenditures to date represents 15.4% of the Current Budget.

PROJECT COST CONTINGENCY DRAWDOWN



Actuals are through October 2017.

PROJECT COST CONTINGENCY DRAWDOWN ANALYSIS

The Current Budget of $2.5 billion includes finance charges of $88.7 million. It also includes a project cost contingency of $345.7 million or 13.7% of the total project, which is based upon the Life of Project (LOP) Budget approved by the Board in January 2017. An allocated contingency amount of $168.5 million is included in the total cost contingency. The allocated contingency is an amount to cover anticipated but unknown contract modifications issued by Metro where applicable to specific contracts within each Standard Cost Category (SCC).

A 3% project reserve threshold is included in the project cost contingency drawdown. Metro's Board is to be notified when it becomes necessary to drawdown contingency below the project reserve threshold to cover project costs. This process was adopted by the Metro Board of Directors in September 2012.

The project cost contingency drawdown curve is based on an August 29, 2025 Forecast Revenue Service Date (RSD).

The project contingency remained unchanged this period.

PROJECT COST CONTINGENCY
DOLLARS IN THOUSANDS

	Original Contingency (Budget)	Previous Period	Current Period	To-Date	Remaining Contingency (Forecast)
Unallocated Contingency	177,176	0	0	0	177,176
Allocated Contingency	168,534	0	0	0	168,534
Total Contingency	**345,710**	**0**	**0**	**0**	**345,710**

RACE-CONSCIOUS DISADVANTAGED BUSINESS ENTERPRISE (RC-DBE) STATUS

Contract C1120

• **RC-DBE Goal – Design** A numerically expressed percentage of funds apportioned to Design Contracts and is calculated based upon the relative availability of RC-DBE firms as compared to all firms in the relevant geographic market area.	25.00%
• **Current RC-DBE Commitment – Design** Total RC-DBE Committed Dollars divided by Total Contract Value for Design or Construction.	$14,477,320 (25.31%)
• ***Current RC-DBE Participation*** *Total amount paid to date to RC-DBEs divided by the amount paid to date to Prime.*	*$3,221,406 (7.39%)*
Fifteen (15) Design RC-DBE subcontractors have been identified.	
• **RC-DBE Goal – Construction** A numerically expressed percentage of funds apportioned to Construction Contracts and is calculated based upon the relative availability of RC-DBE firms as compared to all firms in the relevant geographic market area.	17.00%
• ***Current RC-DBE Commitment – Construction*** *Actual commitments as Construction work is awarded.*	*$108,343,139 (8.21%)*
• ***Current RC-DBE Participation*** *Total amount paid to date to REC-DBEs divided by the amount paid to date to Prime.*	*$277,235 (0.18%)*
Six (6) Construction RC-DBE subcontractors have been identified to-date.	

PROJECT LABOR AGREEMENTS (PLA) STATUS

TPOG has committed to comply with Project Labor Agreements/Construction Careers Policy (PLA/CCP) requirements for the Project. Project Staff will monitor and report TPOG's progress toward meeting the goals of the PLA/CCP once construction begins.

SUMMARY OF CONTRACT MODIFICATIONS

One Contract Modification (MOD) with a zero dollar value has been executed since the award of Contract C1120–Tunnels, Stations, Trackwork, and Systems to TPOG.

FINANCIAL/GRANT STATUS

SOURCE	(A) ORIGINAL BUDGET	(B) TOTAL FUNDS ANTICIPATED	(C) TOTAL FUNDS AVAILABLE	(D) COMMITMENTS $	(D/B) COMMITMENTS %	(E) EXPENDITURES $	(E/B) EXPENDITURES %	(F) BILLED TO FUNDING SOURCE $	(F/B) BILLED TO FUNDING SOURCE %
FEDERAL - SECTION 5309 NEW STARTS	$1,187.000	$1,187.000	$200.000	$1,055.545	89%	$96.748	8%	$89.384	8%
FEDERAL CMAQ	$169.000	$169.000	$43.000	$43.000	25%	$26.826	16%	$26.826	16%
MEASURE R - TIFIA LOAN	$307.000	$307.000	$146.000	$307.000	100%	$111.131	36%	$111.131	36%
MEASURE R 35%	$811.902	$811.902	$145.783	$281.373	35%	$100.837	12%	$56.265	7%
STATE CAPITAL PROJECT LOANS	$54.762	$54.762	$54.762	$54.762	100%	$54.762	100%	$54.762	100%
TOTAL	$2,529.664	$2,529.664	$589.545	$1,741.680	68.9%	$390.304	15.4%	$338.368	13.4%

STATUS OF FUNDS ANTICIPATED

FEDERAL SECTION 5309 NEW STARTS: FTA grant CA-2016-047 for $100.0 million was awarded by the FTA on December 15, 2016. FTA grant CA-2016-047 Amendment No. 1 for $100.0 million was awarded by the FTA on September 22, 2017. Funds are available for drawdown.

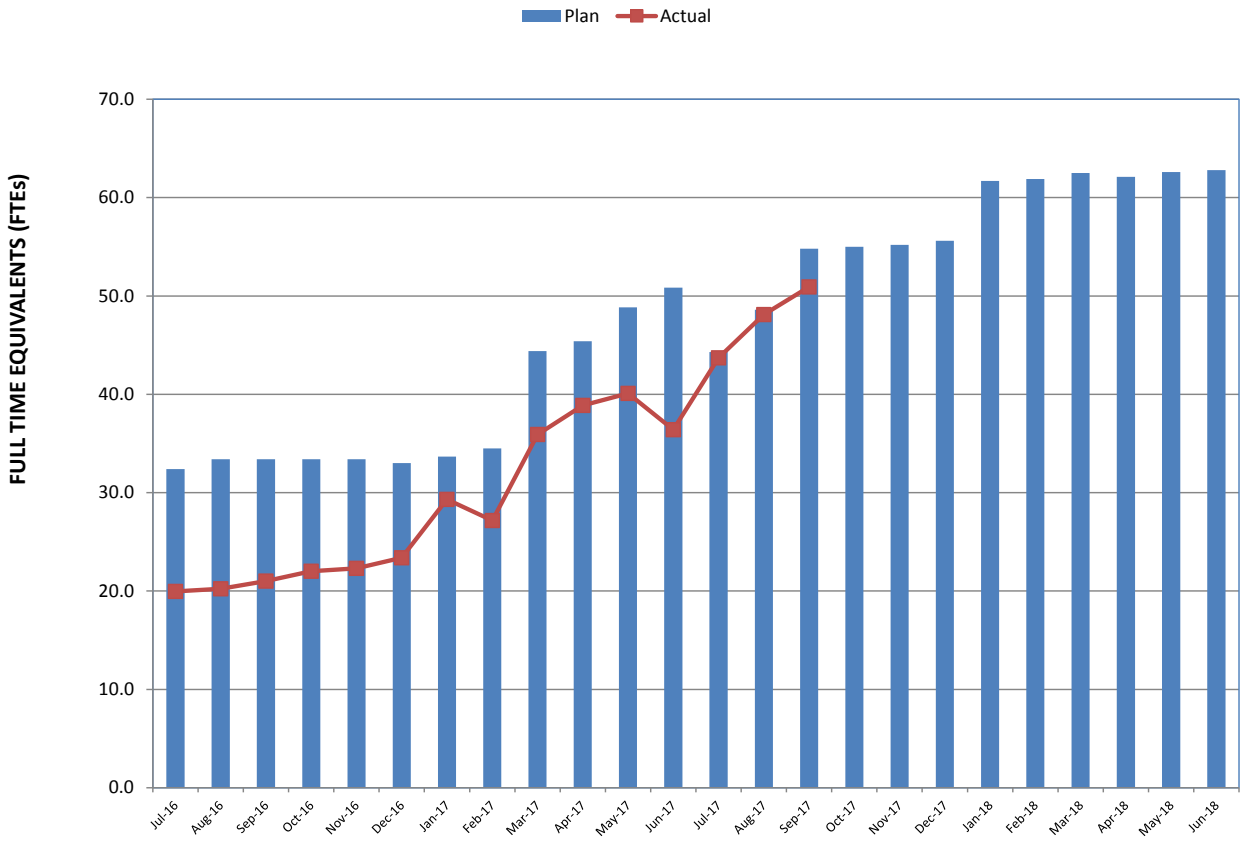
CMAQ (Congestion Mitigation & Air Quality): FTA grant CA-2016-2045 for $43.0 million was awarded by the FTA on December 15, 2016. Funds are available for drawdown.

MEASURE R – TIFIA LOAN (Transportation Infrastructure Finance & Innovation Act): TIFIA Loan was executed on December 20, 2016 for $307.0 million. $146 million funds are available for drawdown. *First Requisition for $103.5 million and second Requisition for $42.5 million were submitted in September and October 2017, respectively.*

MEASURE R: $145.8 million have been allocated to the Project through FY18. Funds are available for drawdown.

STAFFING STATUS

Total Project Staffing – FTEs



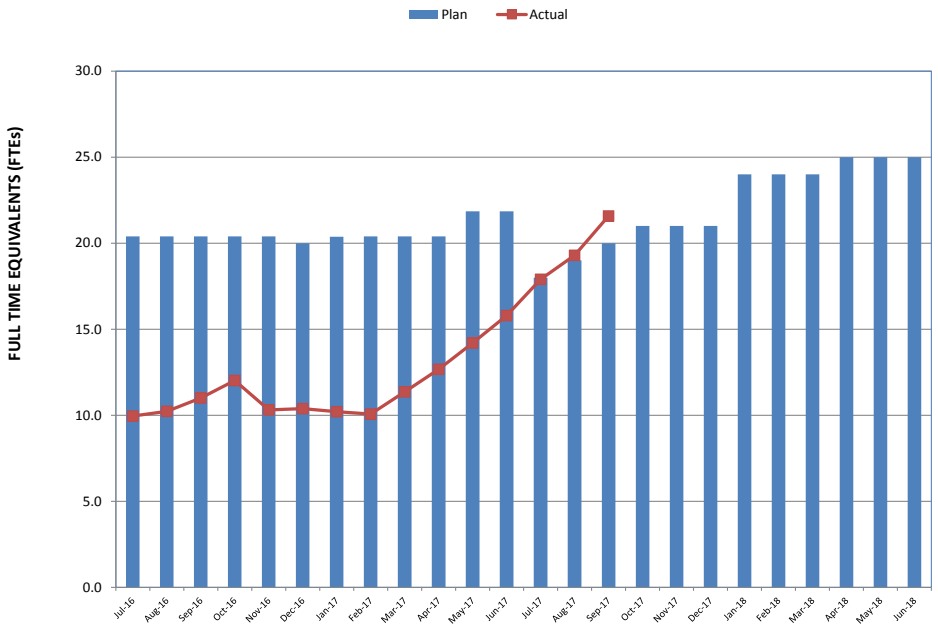
TOTAL PROJECT STAFFING

The overall FY18 Total Project Staffing Plan averages 57.3 FTEs per month.

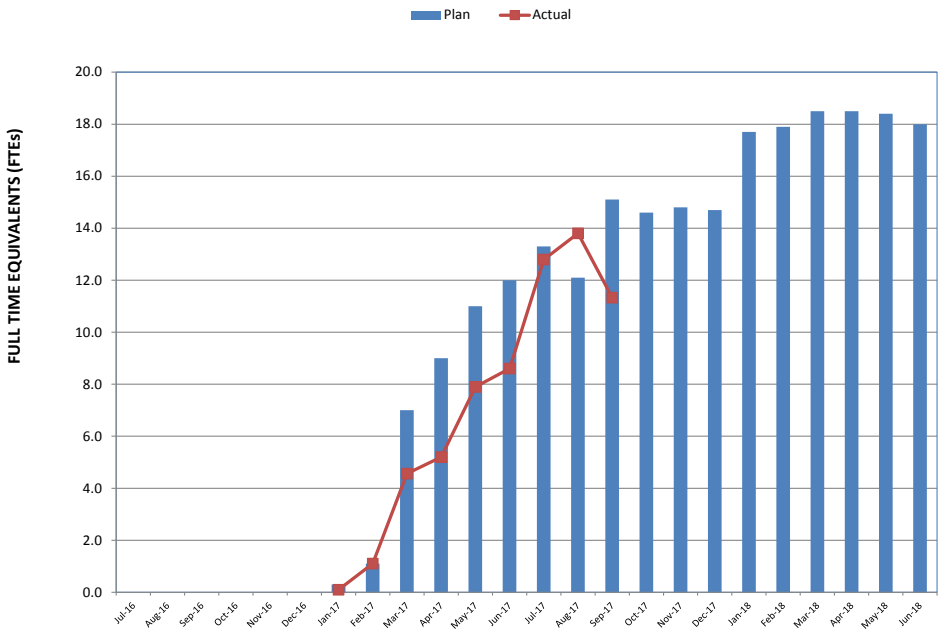
For September 2017, there were a total of 21.6 FTEs for MTA's Project Administration Staff and 29.3 FTEs for Consulting Staff. The total project staffing for September 2017 was 50.9 FTEs.

STAFFING STATUS (Continued)

METRO STAFFING – FTEs

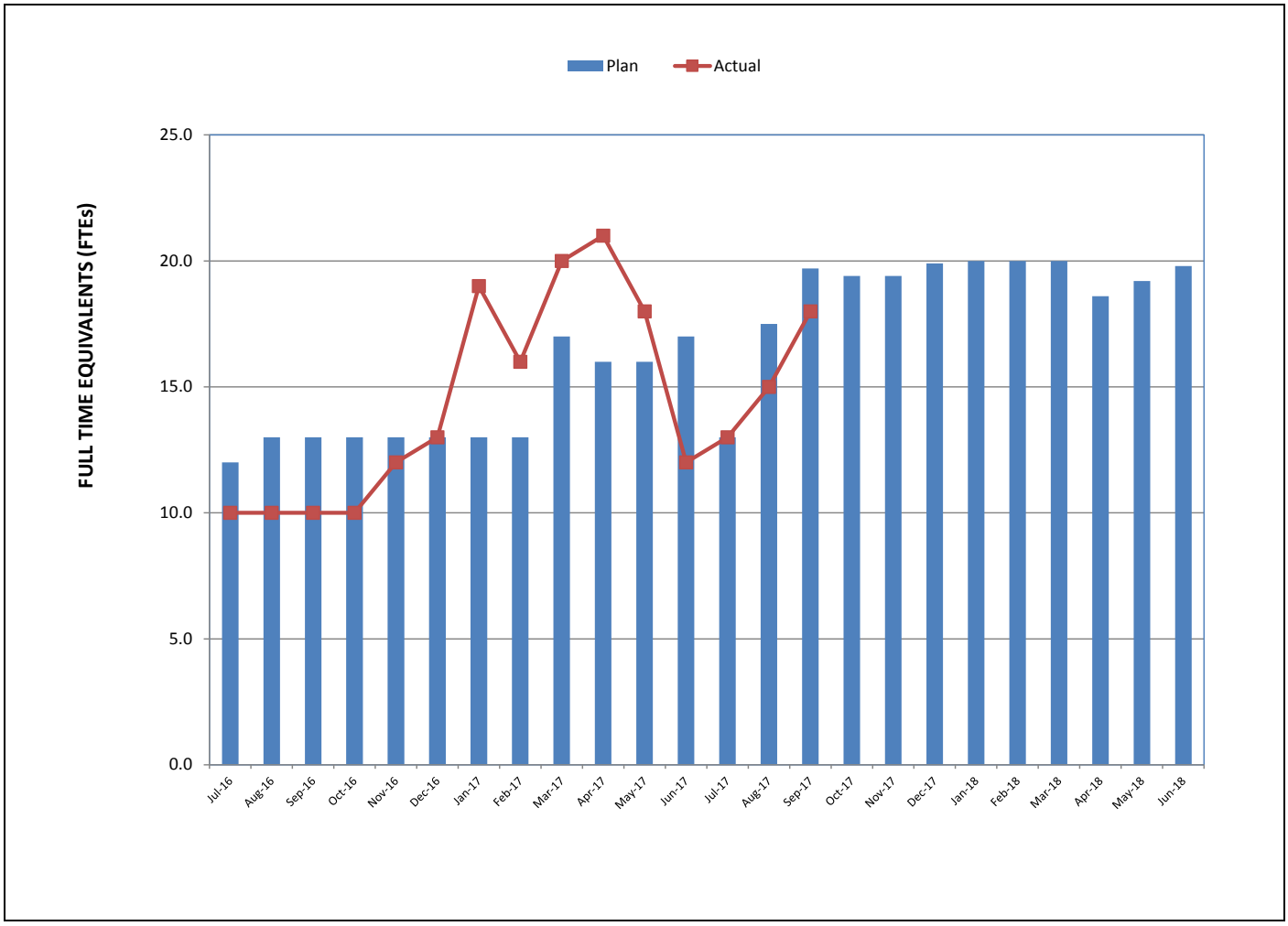


CONSTRUCTION MANAGEMENT SUPPORT SERVICES CONSULTANT – FTEs



STAFFING STATUS (Continued)

ENGINEERING MANAGEMENT SERVICES CONSULTANT – FTEs



REAL ESTATE STATUS

Real Estate Status Summary

Description	Number of Parcels	Certified	Appraisals Completed	Offers Made	Agreements Signed	Condemnation Filed	Relocations		Parcels Available
							Required	Completed	
Full Takes	3	3	3	3	1	2	21	19	1
Part Takes	3	1	1	1	0	0	0	0	0
TCE	3	3	1	1	0	1	1	0	0
SSE	23	1	1	1	0	1	3	3	0
Permanent Easements	1	0	0	0	0	0	0	0	0
Total Parcels	**33**	**8**	**6**	**6**	**1**	**4**	**25**	**22**	**1**

QUALITY ASSURANCE STATUS

- Attended weekly project staff meetings and progress meetings with TPOG.
- *Reviewed and provided comments on the Demolition Plan by Silverado Contractors, Inc. for 9430 Wilshire Blvd. The disposition was Rejected, Revise and Resubmit.*
- *NCR # F854-865522-NCR-2017-001 to Southern California Gas Company regarding backfilled sand slurry type is opened for 20 days. Will be closed in November 2017.*
- *Received and approved Qualifications and Certifications of Independent Testing Laboratory TWINING, Inc.*
- *Reviewed and provided comments on Geotechnical Instrumentation and Monitoring Construction Works Plan by Analysis & Solutions Consultants (ASC): Deep Benchmarks. The disposition was Rejected, Revise and Resubmit.*
- *Reviewed and provided comments on Geotechnical Instrumentation Construction Work Plan by ASC: Strain Gages and Load Cells. The disposition was Rejected, Revise and Resubmit.*
- *Reviewed and provided comments for the submittal: revised Construction Project Quality Program Manual. The disposition was Accepted as Noted.*

ENVIRONMENTAL STATUS

- Performed daily noise monitoring activities at Century City Constellation Station and at Wilshire/Rodeo Station for advanced utility relocation work and submitted daily field reports.
- Participated in various project pre-construction and advanced utility relocation meetings and reported on environmental compliance with local, state and federal regulations, specifications and EIR.
- Provided environmental awareness training to advanced utility relocation construction crews as required.
- Conducted field environmental monitoring and spot check inspections for construction noise, stormwater and dust BMPs, cultural resources and Metro's Green Construction Policy.
- Participated in various TPOG coordination meetings and evaluated progress and schedules for environmental compliance and sustainability efforts.
- Provided responses to various TPOG submittals and requests for information related to environmental matters.
- *Submitted 10th Quarter Mitigation Measures Status Report to the Federal Transit Administration.*

- *Finalized August and September 2017 Noise Monitoring Reports for the City of Los Angeles.*
- *Finalized Phase I Environmental Site Assessment reports for parcels W-3701 and W-3901.*
- *Attended and provided guidance at various TPOG and advanced utility relocation construction meetings.*

CONSTRUCTION RELATIONS STATUS

- Attended the following meetings: Construction Management, Advanced Utility Relocations, Construction Relations, Environmental Mitigations, Third Party Workshop, Marketing, Social Media and Bus Relocations and Stops.
- Addressed traffic control complaints related to utility work on Constellation Boulevard.
- Updated Facebook, Twitter and website as needed.
- Produced and distributed two pre-construction work notices for advanced utility relocations.
- Conducted online and door-to-door outreach for community meetings regarding potholing/geotechnical investigation work and proposed Memorandum of Agreement for AUR.
- *Attended meeting for the Sixty Hotel in the City of Beverly Hills regarding generator usage and location during Southern California Edison (SCE) outages.*
- *Made Project presentations at the following: Beverly Hills Monthly Community Meeting, Century Towers Building Management, Elected Officials briefing.*

CREATIVE SERVICES STATUS

- Conducted community outreach and coordinated cultural partnerships.
- Refined artwork opportunities with Metro Planning staff.

SAFETY & SECURITY STATUS

- Third party advanced utility relocation work continues. *No injuries were reported during the month of October 2017.*
- Monitored third party advance utility construction work activities to ensure contractor compliance with regulations and good business practices.
- Attended weekly Project Issues Standing Meetings.
- Conducted Safety Workshop and Coordination meetings with TPOG safety staff and defined over-the-shoulder review schedules.
- Conducted meetings with TPOG safety personnel to ensure pre-submittal compliance for adequate contractual construction safety staffing.
- Conducted project safety orientation for new Metro/Consultants and IPMO project staff.
- Conducted over-the-shoulder reviews on safety/security submittal drafts with TPOG safety staff.
- Conducted right-of-way (ROW) and worksite safety walks.
- Conducted formal TPOG Project Safety Submittals reviews.
- *Conducted LADWP Water & Power, Southern California Edison (SCE) and Southern California Gas (SCG) Injury and Illness Prevention Program (IPP) reviews and conducted site safety walks.*
- *TPOG design work completed 19,573 work-hours for the month of October 2017 with zero recordable incidents. Total Project to Date work-hours are 94,596 with zero recordable incidents.*

THIRD PARTY AGREEMENT STATUS

No.	Third Party	Type of Agreement	Forecast Execution Date	Required Need Date	Status/ Comments
1	City of Los Angeles (LA)	Master Cooperative Agreement	N/A	N/A	Parties will work under 2003 MCA.
2	City of Beverly Hills (COBH)	Memorandum of Agreement	03/17(A)	03/17(A)	Reimbursement Agreement was executed in March 2017.
			06/17(A)	06/17(A)	Beverly Hills City Council approved the construction permit for SCE work in June 2017. Other utility relocation construction permits will be processed as needed.
			03/18	04/18	Metro continues to work with the City to establish an MOA for the C1120 Design/Build contract. Required Need Date reflects turnover date to C1120 contractor for station footprint availability.
3	Los Angeles Department of Water and Power (LADWP)- Water & Power	Master Cooperative Agreement	N/A	N/A	Metro and LADWP will continue to work under the terms of the previous Master Cooperative Agreement.
4	Los Angeles County Public Works Flood Control	Master Cooperative Agreement	N/A	N/A	Executed.
5	Private Utilities	Utility Cooperative Agreement	N/A	N/A	AT&T, Pac Bell, SBC, MCI, Verizon, Southern California Gas Company (SCGC), TCG Los Angeles – Metro is working under existing agreements.
			1/18	1/18	Level 3 – Metro and Level 3 have initiated a new agreement. Currently, awaiting comments from Level 3. Time Warner Pacific West LLC, D/B/A Time Warner Cable – County Counsel to respond to Time Warner's latest comments. SCE – Metro and SCE have initiated a new agreement. A draft is under review. Veolia – A draft agreement has been submitted to Veolia for review and comment. Sprint – A draft of the Agreement submitted has been submitted to Sprint, pending comments.
			11/17	11/17	Zayo, XO Communications, LLC – the agreements has been agendized and scheduled to be in the November Board.

ADVANCED UTILITY RELOCATION STATUS

Century City Constellation

- Completion of telecom joint trench cable pulling and splicing work is anticipated by December 2017.
- LADWP Power utility relocations are ongoing.
- AT&T advanced utility relocations will begin in November 2017.
- *Southern California Gas (SCG) advanced utility relocation inside the TBM launch box were completed this period and outside the launch box will be completed in early November 2017.*

Wilshire/Rodeo

- Advanced third party utility relocations by Southern California Edison (SCE) continues.

PEAK HOUR AND NIGHTTIME CONSTRUCTION VARIANCES

Metro is actively pursuing extended hour variances/exemptions to accommodate the Project's needs. Metro staff is working with the City of Los Angeles Bureau of Engineering and the Los Angeles Police Commission to obtain Peak Hour Exemptions and Nighttime Construction Variances.

- Peak Hour Exemption application is in progress for the TBM launch box excavation on Constellation Boulevard.
- A Peak Hour Exemption application for AT&T relocations on Constellation Boulevard has been approved from August 23, 2017 to November 17, 2017.
- A nighttime noise variance permit for relocation of third party utilities on Constellation Boulevard is approved through February 2018.
- *A Holiday Moratorium application for relocation of third party utilities on Constellation Boulevard was approved by the Los Angeles Bureau of Engineering through January 2018.*

CHRONOLOGY OF EVENTS

August 2012	FTA Record of Decision
January 2013	FTA approval to enter to Preliminary Engineering
December 2014	FTA approval to enter to New Starts Engineering Phase
March 2015	Began Real Estate Acquisition
May 2015	Began Advanced Preliminary Engineering
September 2015	Issued RFQ for C1120 Design/Build contract
October 2015	Received RFQ responses for C1120 Design/Build contract
May 2016	Submitted draft FFGA application
May 2016	Submitted TIFIA loan application
June 2016	Submitted application to FTA requesting an FFGA
June 2016	Received RFP Proposals for Contract C1120
September 2016	Began telecom joint trench construction in Century City
December 2016	FTA executed FFGA
December 2016	Received TIFIA Loan
January 2017	NTP for Construction Management Support Services Contract
January 2017	Metro Board approved staff recommendation to award the Design/Build Contract C1120 to Tutor Perini/O&G, a Joint Venture (TPOG) and approved Life-of-Project Budget
January 2017	Issued C1120 Contract Award TPOG
April 2017	Issued C1120 Contract NTP to TPOG
May 2017	Mobilized C1120 Contract Design and Construction Team
August 2017	Third party relocations started at Century City Constellation Station
September 2017	Third party relocations started at the Wilshire/Rodeo Station

CONTRACT C1120 STATUS

Description: Purple Line Extension Design-Build

Contractor: Tutor Perini/O&G a Joint Venture

Contract No. C1120

Status as of: October 27, 2017

Progress / Work Completed:

- Submitted drawings for Muck Shaft regarding egress and construction passenger elevators to Cal OSHA for review
- Document quality plan submitted and being reviewed
- Tree removal plan submitted and being reviewed
- Comment resolution meeting held for CPM Baseline schedule
- Obtained Beverly Hills City Council permit approval for geotechnical borings

Major Activities (In Progress):

- Final design development
- Baseline CPM schedule preparation and subsequent submittal.
- On-going comment resolution meetings and continue over the shoulder reviews where needed

Areas of Concern:

- None

Major Activities Next Period:

- Executive Partnering session to be held
- Resubmittal of CPM Baseline schedule for approval
- Submittal of October's Monthly Safety Report
- Pay Application #7 progress verification/validation meeting

Schedule Summary:

Date of Award:	01/31/17
Notice to Proceed:	04/26/17
Original Contract Duration:	3,100 CD
Current Contract Duration:	3,100 CD
Elapsed Time from NTP:	185 CD

	Original Contract Dates	Time Extension	Current Contract	Forecast	Variance CDs
Notice to Proceed (Estimated)	04/26/17	0	04/26/17	04/26/17	0
MS 1 (NTP + 2950): Substantial Completion	05/24/25	0	05/24/25	05/24/25	0
MS 2 (NTP + 2600): Stations Available	06/08/24	0	06/08/24	06/08/24	0
MS 3 (NTP + 2700): Ready for Systems Integration Testing	09/16/24	0	09/16/24	09/16/24	0
MS 4 (NTP + 3100): Demobilization	10/21/25	0	10/21/25	10/21/25	0

Physical Percent Complete:

Physical completion: 4.81%

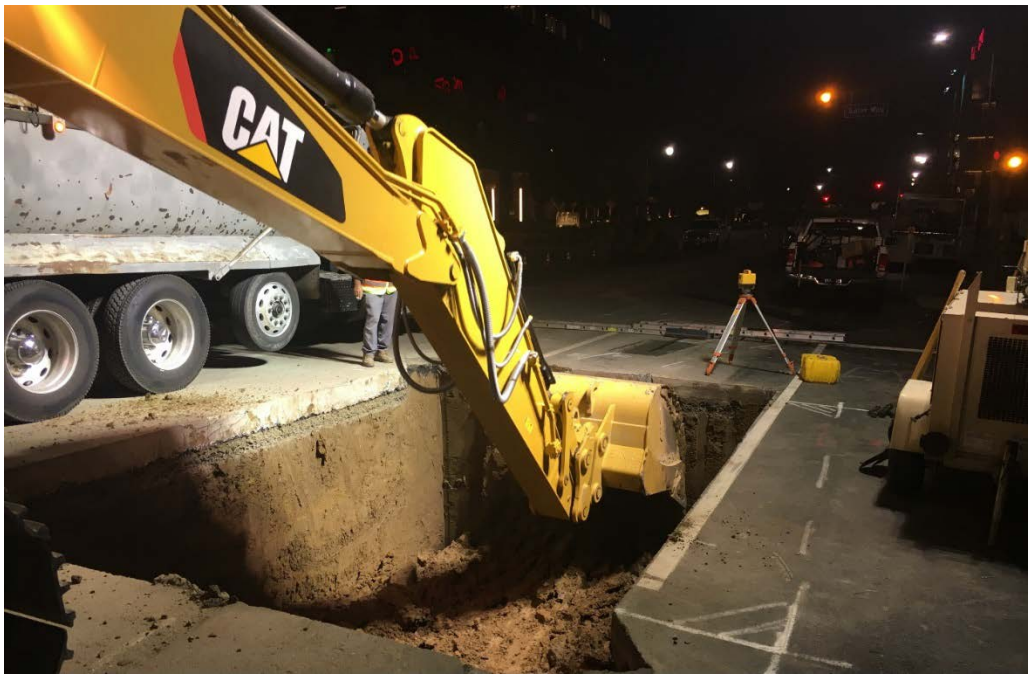
** Note 1: Physical completion assessment reflects work completed and work in progress.*

2: Physical completion includes Final Design.

Cost Summary:

	$ In millions
1. Award Value:	1,376.5
2. Executed Modifications:	0.0
3. Approved Change Orders:	0.2
4. Current Contract Value (1+2+3):	1,376.7
5. Incurred Cost:	205.5

CONSTRUCTION PHOTOGRAPHS



LADWP Power Vault Installation in Century City

LADWP Power Vault Installation in Century City

APPENDIX

COST AND BUDGET TERMINOLOGY

Project Cost Descriptions

ORIGINAL BUDGET	The Original Project Budget as authorized by the Metropolitan Transportation Authority (Metro) Board.
CURRENT BUDGET	The Original Budget plus all budget amendments approved by formal Metro Board action. Also referred to as Approved Budget.
COMMITMENTS	The total of actual contracts awarded, executed change orders or amendments, and approved work orders of Master Cooperative Agreements, offers accepted for purchase of real estate, and other Metro actions which have been spent or result in the obligation of specific expenditures at a future time.
EXPENDITURES	The total dollar amount of funds expended by Metro for contractor or consultant services, third party services, staff salaries, real estate and other expenses that is reported in Metro's Financial Information System (FIS).
CURRENT FORECAST	The best estimate of the final cost of the Project when all checks have been issued and the Project is closed out. Current Forecast is composed of actual costs incurred to date, the best estimate of work remaining and a current risk assessment for each budgeted cost item.

Cost Report by Element Descriptions

CONSTRUCTION	Includes construction contracts. Cost associated with Guideways, Stations, Southwestern Yard, Sitework/Special Conditions and Systems.
RIGHT-OF-WAY	Includes purchase cost of parcels, easements, right-of-entry permits, escrow fees, contracted real estate appraisals and tenant relocation.
VEHICLES	Includes the purchase of Heavy Rail Vehicles and spare parts for the Project.
PROFESSIONAL SERVICES	Includes design engineering, project management assistance, construction management support services, legal counsel, agency staff costs, and other specialty consultants.
CONTINGENCY	A fund established at the beginning of a project to provide for anticipated but unknown additional costs that may arise during the course of the Project.
PROJECT REVENUE	Includes all revenue received by Metro as a direct result of project activities. This includes cost sharing construction items, insurance premium rebates, and the like.

APPENDIX

LIST OF ACRONYMS AND ABBREVIATIONS

ATC	Automatic Train Control
ATSAC	Automated Traffic Surveillance and Control
BAFO	Best and Final Offer
BIM	Building Information Modeling
BNSF	Burlington Northern Santa Fe Railway Company
BRT	Bus Rapid Transit
CADD	Computer Aided Drafting and Design
CALTRANS	California Department of Transportation
CCTV	Closed Circuit Television
CD	Calendar Day
CEQA	California Environmental Quality Act
CM	Construction Manager
CMAQ	Congestion Mitigation and Air Quality Improvement Program
CMSSC	Construction Management Support Services Consultant
CN	Change Notice
CO	Change Order
COBH	City of Beverly Hills
COLA	City of Los Angeles
CPM	Critical Path Method
CPUC	California Public Utilities Commission
CR	Camera Ready
CRMMP	Cultural Resource Monitoring and Mitigation Plan
CSPP	Construction Safety Phasing Plan
CTC	California Transportation Commission
CUD	Contract Unit Description
D/B	Design/Build
DBB	Design Bid Build
DOT	Department of Transportation
DWP	Department of Water and Power
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
EMS	Engineering Management Services
EPBM	Earth Pressure Balance Machine
FAA	Federal Aviation Administration
FAR	Federal Acquisition Regulation
FD	Final Design
FEIS	Final Environmental Impact Statement
FEIR	Final Environmental Impact Report
FIS	Financial Information System
FLSR	Fire Life Safety Report
FONSI	Finding of No Significant Impact
FRA	Federal Railroad Administration
FSEIR	Final Supplemental Environmental Impact Report
FSEIS	Final Supplemental Environmental Impact Statement

APPENDIX

LIST OF ACRONYMS AND ABBREVIATIONS (Continued)

FTA	Federal Transit Administration
FTE	Full Time Equivalent
GBR	Geotechnical Baseline Report
GDSR	Geotechnical Design Summary Report
HRT	Heavy Rail Transit
HRV	Heavy Rail Vehicle
IFB	Invitation for Bid
IPMO	Integrated Project Management Office
JV	Joint-Venture
LA	Los Angeles
LABOE	Los Angeles Bureau of Engineering
LABOS	Los Angeles Bureau of Sanitation
LABSL	Los Angeles Bureau of Street Lighting
LACFCD	Los Angeles County Flood Control District
LACMTA	Los Angeles County Metropolitan Transportation Authority
LADOT	Los Angeles Department of Transportation
LADPW	Los Angeles Department of Public Works
LADWP	Los Angeles Department of Water and Power
LAUSD	Los Angeles Unified School District
LAWA	Los Angeles World Airports
LAX	Los Angeles International Airport
LNTP	Limited Notice To Proceed
LONP	Letter Of No Prejudice
LOP	Life-of-Project
LPA	Locally Preferred Alternative
LRTP	Long Range Transportation Plan
MCA	Master Cooperative Agreement
MIS	Major Investment Study
MMRP	Mitigation Monitoring and Reporting Plan
MOU	Memorandum of Understanding
MPSR	Monthly Project Status Report
N/A	Not Applicable
NEPA	National Environmental Protection Act
NOD	Notice of Determination
NPDES	National Pollution Discharge Elimination System
NTE	Not to Exceed
NTP	Notice To Proceed
OCC	Operations Control Center
OSHA	Occupational Health and Safety Administration
PA/VMS	Public Address/Visual Messaging Sign
PE	Preliminary Engineering
PEER	Permit Engineering Evaluation Report
PIP	Project Implementation Plan
PLA	Project Labor Agreement

APPENDIX

LIST OF ACRONYMS AND ABBREVIATIONS (Continued)

PM	Project Manager
PMIP	Project Management Implementation Plan
PMOC	Project Management Oversight Consultant
PMP	Project Management Plan
P&P	Policies & Procedures
PR	Project Report
PRMMP	Paleontological Resource Monitoring Mitigation Plan
PSR	Project Study Report
QA	Quality Assurance
QAR	Quality Assurance Report
QC	Quality Control
QPSR	Quarterly Project Status Report
QTIB	Qualified Transit Improvement Bonds
RAMP	Real Estate Acquisition Management Plan
RCHAR	Rail Crossing Hazards Analysis Report
RCMP	Risk Assessment Management Plan
RFC	Request For Change
RFP	Request For Proposals
RFSC	Request for Special Consideration
RHA	Risk Hazard Analysis
ROC	Rail Operations Center
ROD	Record Of Decision
ROM	Rough Order of Magnitude
ROW	Right-Of-Way
RPZ	Runway Protection Zone
RSD	Revenue Service Date
SAV	Stand Alone Validator
SCAQMD	Southern California Air Quality Management District
SCADA	Supervisory Control and Data Acquisition
SCC	Standard Cost Category
SCE	Southern California Edison
SCG	Southern California Gas Company
SCRRA	Southern California Regional Rail Authority
SHA	State Highway Account
SHPO	State Historic Preservation Office
SIT	System Integration Testing
SOQ	Statement of Qualification
SOV	Schedule Of Value
SOW	Statement Of Work
SP	Special Provision
SSMP	Safety and Security Management Plan
STB	Surface Transportation Board
STIP	State Transportation Improvement Program
STP	Surface Transportation Program

APPENDIX

LIST OF ACRONYMS AND ABBREVIATIONS (Continued)

STV	STV Group
SWPPP	Storm Water Pollution Prevention Plan
TBD	To Be Determined
TBM	Tunnel Boring Machine
TCE	Temporary Construction Easement
TCRP	Traffic Congestion Relief Program
TIFIA	Transportation Infrastructure Finance and Innovation Act
TIGER	Transportation Investment Generating Economic Recovery
TPOG	Tutor Perini/O&G a Joint Venture
TPSS	Traction Power Substation
TRACS	Transit Automatic Control System
TVA	Threat Vulnerability Analysis
TVM	Ticket Vending Machine
UFS	Universal Fare System
USDOT	United States Department Of Transportation
VE	Value Engineering
WBS	Work Breakdown Structure
WP	Work Package
YOE	Year of Expenditure