



Dulles Corridor Metrorail Project

PHASE 2

MONTHLY COST AND SCHEDULE UPDATE

AS OF MARCH 31, 2018

MAY 2018



DULLES CORRIDOR
METRORAIL PROJECT



Phase 2 Cost Summary

March Expenditures	\$	28.7 Million
Total Expenditures	\$	1.709 Billion
Total Budget	\$	2.778 Billion
Total Forecast	\$	2.778 Billion



Phase 2 Contingency Allocation

<u>Total Contingency</u>	<u>\$ 551.5 Million</u>
Contingency Allocated through February 2018	\$ 196.4 Million
Contingency Allocated in March 2018	\$ 4.6 Million
Total Contingency Allocated through March 2018	\$ 201.0 Million
<u>Remaining Contingency</u>	<u>\$ 350.5 Million</u>



March Contingency Allocation

Total (Package A & Package B) Contingency Allocated in March 2018	\$	4.6 Million
Package A (Capital Rail Constructors (CRC))	\$	1.2 Million
• 34.5kV Ductbank Relocation at the Yard Lead Track (Settled at \$1,400,000)	\$	633,000
• Dielectric Coating on Handrails	\$	430,000
• Multiple Small Changes of less than \$100,000 each	\$	126,950



Guideway & Stations Design-Build Activities

Current

- All Design Packages complete and issued for construction.
- 97 Identified Design and Field Changes in Progress:
 - 42 yet to be submitted by CRC
 - 29 in Review process (MWAA Ball in Court = 7)
 - 26 in Issued for Permit/Issued for Construction production process
 - 31 reviewed/processed by MWAA last month
- Three Design Revisions approved by MWAA Building Codes Department & three by the Department of General Services last month.
- 119 Supplier Submittals reviewed/processed last month.
- 43 Non-Conformance Reports resolved last month.



Guideway & Stations Design-Build Activities

Upcoming

- Electricians have received and set all Traction Power Substation (TPSS) and Tie Breaker Station (TBS) buildings and are continuing to connect these facilities with communication and power cables to the guideway and stations.
- East Stations – Continue roofing, escalator installation, and electrical and plumbing and set rail ties and track through the stations. Reston Station platform paver installation is ongoing and Loudoun Gateway and Ashburn Stations vault structural steel welding and painting continues.
- Track – Ballasted rail and switch installation continues on the east through the at-grade stations and along the guideways; the contact (Third) rail is being installed in advance of the Systems electrical work on the track.



Canopy Ceiling Framing in Reston Station Mezzanine





Set Storm Water Retention Cistern Precast Risers at Reston South Pavilion Area





Relocating Underground Communications Services along Sunrise Valley Drive





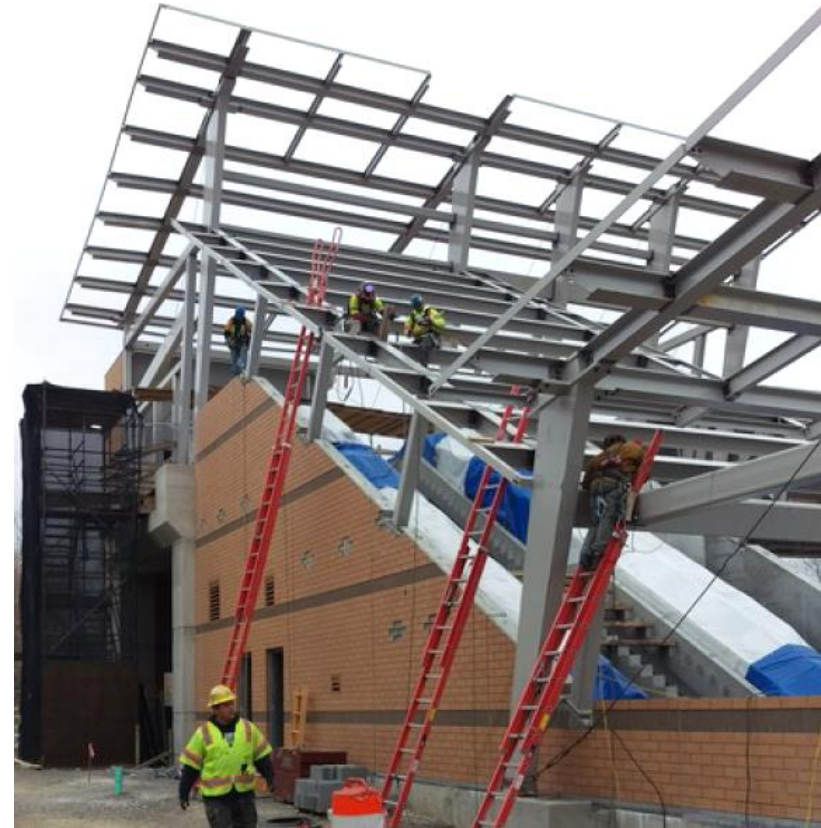
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Herndon Station



Roofing

South Pavilion Steel Installation





Placing Concrete for Barrier Walls at Herndon Station Kiss & Ride





Installation of Aerial Guideway Track Third Rail Cover Boards





Electricians Terminating Switch Power and Control Cables on Aerial Guideway





Pulling Wire for Electrical Systems Under Dulles Station Platform





Hanging Elevator Cladding



Painting Station Curtain Wall Beams



Dulles Station



Testing AC Switch Gear at Loudoun Gateway Station





March Contingency Allocation

Package B (Hensel Phelps (HP))	\$	3.4 Million
• Settlement of Four Certified Claims: Different Site Conditions - Low CBR Values, Add Canopies, Deep Pit Lifts, Wheel and Axle Press Equipment	\$	2,850,000
• Fire Pump and Fire Protection Systems changes	\$	400,000
• Rail Clamps (Settled at \$178,000)	\$	149,000



WMATA Rail Yard & Maintenance Facility Design-Build Activities

Current Construction

- Paving, final grading, seeding/stabilization and utility installation continues.
- Interior buildouts continue in the Service and Inspection Building (SIB), Maintenance of Way Building (MWB), Transportation Building and Warehouse Building.
- Running rail installation to be complete soon, third rail installation underway.
- Permanent power provided April 30.



WMATA Rail Yard & Maintenance Facility Design-Build Activities

Other Ongoing – Non-Construction Activities

- Gas crossing under Route 606 to begin soon.
- HP obtaining VDOT permit for the sanitary sewer crossings under Route 606.
- Developing final testing and acceptance plans and procedures.
- Construction permit inspection and testing ongoing.
- Interface coordination with Package A continues.



Installing Truck Turntables in SIB High Bay Area





Installing Power Distribution Panels





Bumping Post at the Train Crew Platforms





Preparing to Test SIB Main Switchgear



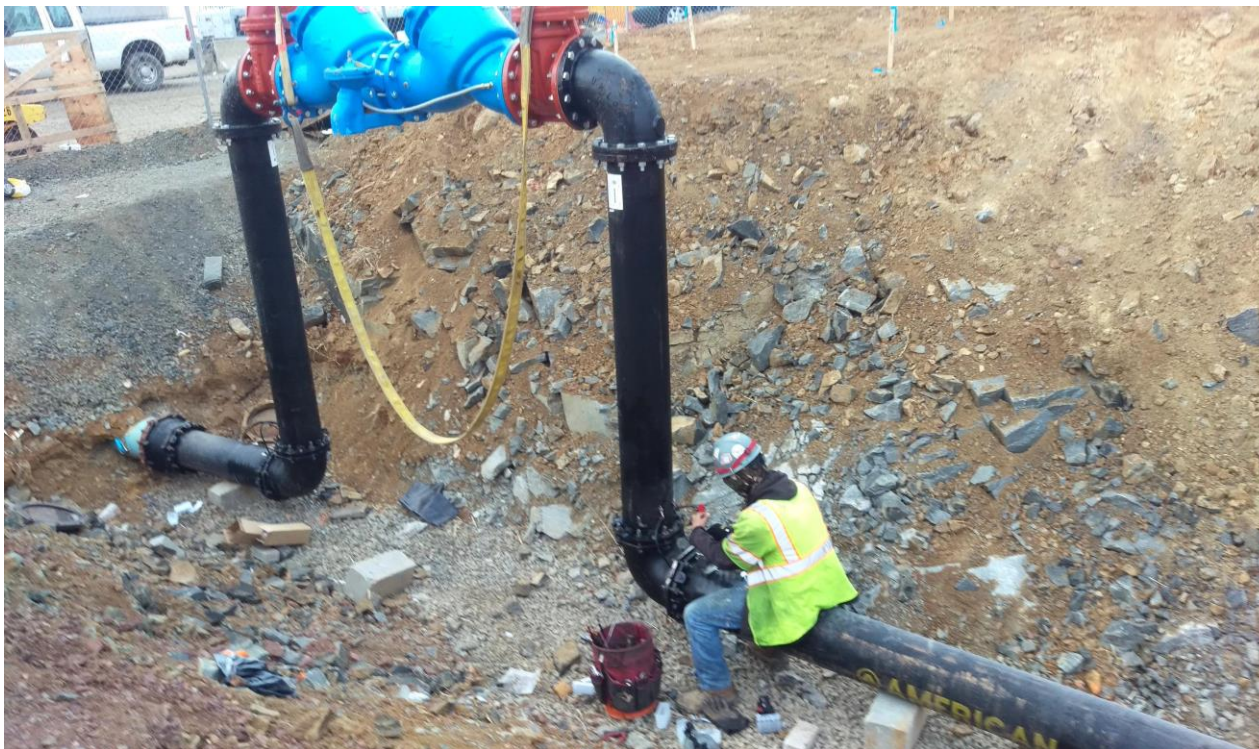


HVAC Installation in MWB Upper Mezzanine





Installing the Water Supply Line





Tie Extender and Third Rail Installation





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DULLES CORRIDOR METRORAIL PROJECT - PHASE 2
MONTHLY COST SUMMARY
 As of March 31, 2018

Description	Budget Amount	Total Forecast	Expenditures to Date		Contract NTP	Contract Substantial
			Amount	Total Percent		
		b	c	c/b		
DULLES CORRIDOR METRORAIL PROJECT - PHASE 2						
DESIGN-BUILD Package A	1,193,777,000	1,374,826,576	1,008,211,917	73%	8-Jul-13	7-Aug-19
DESIGN-BUILD Package B + S	273,280,530	286,810,166	204,390,648	71%	18-Nov-13	23-Dec-18
ROW	58,600,000	58,003,200	22,337,242	39%	8-Jul-13	30-Sep-17
WMATA	305,324,718	305,324,718	159,852,013	52%	N/A	3-Feb-20
PRELIMINARY ENGINEERING	75,000,000	75,000,000	73,266,056	98%	15-Jul-09	30-Dec-13
PROJECT MANAGEMENT	320,802,137	327,782,160	240,765,934	73%	N/A	2-Jan-19
CONTINGENCY	551,451,179	350,488,744				
TOTAL FOR DCMP	2,778,235,564	2,778,235,564	1,708,823,810			



**DULLES CORRIDOR METRORAIL PROJECT - PHASE 2
CONTINGENCY ALLOCATION
As of March 31, 2018**

Description	Amount in million (\$)
DULLES CORRIDOR METRORAIL PROJECT - PHASE 2	
Total Contingency	\$ 551.5
Contingency Allocated through February 2018	\$ 196.4
Expended Contingency in March 2018*	\$ 4.6
Total Contingency Allocated through March 2018	\$ 201.0
Remaining Contingency	\$ 350.5

*See table below for details

Package A (CRC)	\$1.2 Million
34.5kV Ductbank Relocation at the Yard Lead Track (Settled at \$1,400,000)	\$ 633,000
Dielectric Coating on Handrails	\$ 430,000
Miscellaneous Changes (changes less than \$100,000)	\$ 126,950
Station Battery Rooms Emergency Eyewash and Body Spray System Drainage Requirements	\$ 71,000
Extending the Emergency Trip Station (ETS) System on Yard Leads to Trip Feeder Breakers (Settled at \$90,000)	\$ 44,000
Saarinen Circle Pavement Repairs	\$ 9,950
Topsoil Stockpile Move for Loudoun County Garage Project (Settled at \$14,000)	\$ 2,000
Package B (HP)	\$3.4 Million
Settlement of Four Certified Claims:	\$ 2,850,000
DSC - Low CBR Values, Add Canopies, Deep Pit Lifts, Wheel and Axle Press Equipment	
Fire Pump and Fire Protection Systems changes	\$ 400,000
Rail Clamps (Settled at \$178,000)	\$ 149,000



Airport	Project No	Description	Budget Amount
DULLES CORRIDOR METRORAIL PROJECT - PHASE 2			
DESIGN-BUILD Package A			
DCMP	5401	Package A - Mainline (CRC)	1,177,777,000
DCMP	5406	Commodity Escalation	16,000,000
DCMP	5408	Contingency amount	
DCMP	5408	Secondary mitigation amount	
SUBTOTAL - DESIGN-BUILD Package A			1,193,777,000
DESIGN-BUILD Package B+S			
DCMP	5402	Package B - Yard	269,280,530
DCMP	5402	Package S - Yard Site Preparation	incl above
DCMP	5406	Commodity Escalation	4,000,000
DCMP	5408	Contingency amount	
DCMP	5408	Secondary mitigation amount	
SUBTOTAL - DESIGN-BUILD Package B+S			273,280,530
ROW			
DCMP	5404	Land & Relocation	47,225,000
DCMP	5404	Support Services	11,375,000
DCMP	5408	Contingency	
SUBTOTAL - ROW			58,600,000
WMATA			
DCMP	5405	WMATA Vehicles	205,868,200
DCMP	5405	WMATA other costs	90,205,767
DCMP	5405	WMATA Non Revenue Vehicles	9,250,751
DCMP	5408	Contingency	
SUBTOTAL - WMATA			305,324,718
PRELIMINARY ENGINEERING			
DCMP	5406	PRELIMINARY ENGINEERING	75,000,000
SUBTOTAL - PRELIMINARY ENGINEERING			75,000,000
PROJECT MANAGEMENT			
DCMP	5406	MWAA Staff	34,000,000
DCMP	5406	MWAA Allocated Cost	13,560,000
DCMP	5406	Rent	9,200,000
DCMP	5406	Relocation, IT, Furniture	2,700,000



Airport	Project No	Description	Budget Amount
DCMP	5406	MWAA ODCs	17,060,000
DCMP	5406	Insurance (OCIP)	49,082,137
DCMP	5406	PMSS	140,000,000
DCMP	5406	VDOT	10,000,000
DCMP	5406	DRC Prof Svcs	2,500,000
DCMP	5406	CTI (Special Inspections)	14,000,000
DCMP	5406	DGS	2,000,000
DCMP	5406	TRIP II	2,000,000
DCMP	5406	Dept of Conservation & Recreation (DCR)	2,000,000
DCMP	5406	MWAA Permits/Inspection	4,000,000
DCMP	5406	Power for System Testing	16,000,000
DCMP	5406	Historical/Archaeologic	2,700,000
DCMP	5408	Contingency	
SUBTOTAL - PROJECT MANAGEMENT			320,802,137
CONTINGENCY			
DCMP	5408	Contingency - Package A	289,067,231
DCMP	5408	Secondary mitigation amount - Package A	0
DCMP	5408	Contingency - Package B	109,006,387
DCMP	5408	Secondary mitigation amount - Package B	0
DCMP	5408	Contingency - ROW	5,860,000
DCMP	5408	Contingency - WMATA	30,532,472
DCMP	5408	Contingency Project Management	116,985,089
SUBTOTAL - CONTINGENCY			551,451,179
TOTAL FOR DCMP - PHASE 2			2,778,235,564