



Finance, Administration and Oversight Committee

Action Item III-A

July 9, 2009

**Approve Red Line Segment Rehabilitation
Contract**

Washington Metropolitan Area Transit Authority

Board Action/Information Summary

<input checked="" type="radio"/> Action <input type="radio"/> Information	MEAD Number: 100384	Resolution: <input type="radio"/> Yes <input checked="" type="radio"/> No
---	------------------------	--

TITLE:

Award Red Line - 1 Rehabilitation Contract

PURPOSE:

To obtain Board approval to award the first Red Line Rehabilitation contract, Dupont Circle to Silver Spring for a not to exceed amount of \$177,000,000.

DESCRIPTION:

This is the first contract in the System Infrastructure Rehabilitation Program to be awarded.

The new System Infrastructure Rehabilitation Program concept will enhance the Metro's ability to keep the system in a state of good repair, with minimal disruption, increased productivity and reduced cost. The new program will eventually include all Metrorail stations, line facilities, rail yard facilities and bus facilities. The basic concept is to accomplish all rehabilitation work in a specific length of the system using one contract starting with the oldest segment first.

The first contract from Dupont Circle Station to Silver Spring Station will include standard Design - Bid - Build construction contract work; where designs currently exist, Design - Build construction; where designs need to be prepared and a Job Order Contract approach; where a standardized unit price schedule can be applied to the work required.

This type of contract will result in a more efficient use of the contractor and Metro forces, resulting in increased productivity. Week night single tracking in accordance with Metro's Track Rights Guidelines will be implemented to accomplish the majority of the work. By providing the contractor greater access in a defined area, the productivity is increased greatly. This decreases the overall time required to complete the work at a reduced overall cost. This equates to a reduced labor cost over our prior methods to do the same work with less disruptions.

Typical work to be performed includes, but is not limited to, traction power,

automatic train control and communications upgrades, track fastener replacement, tunnel lighting replacement, tunnel ventilation and fire stand pipe rehabilitation. Station rehabilitation includes platform slab and tile replacement, canopy roof replacements, station vault repairs, air conditioning and ventilation equipment rehabilitation and replacement, lighting, public address, and closed circuit television system upgrades, and elevator and escalator rehabilitation.

As a result of the competitive procurement process, reassessment of critical traction power needs, the urgent need for remote monitoring of traction power equipment and overall cost escalation, the value of the base work has increased from \$96 million to \$115 million. Additional work is also proposed to be added to the original scope approved by the Board which includes installation of new escalators at Dupont Circle and Foggy Bottom stations; platform slab and tile replacement at Shady Grove and Rockville stations; and emergency replacement of electrical equipment on other line's of the rail system which increases the value of the base contract by \$43.9 million.

The contract contains a series of options for each of the four phases. The option work for Phase 1 was originally estimated at \$12 million with competitive process resulting in \$17.9 million which will be funded utilizing stimulus funding. Funding for options 2 - 4 will be determined in conjunction with the prioritization process for the next capital program.

FUNDING IMPACT:

Action for Multi-Year Funded Contract			
	Capital Improvement Program - Metro Matters		
	Red Line Rehabilitation - 1 (Dupont to Silver Spring) -- System Infrastructure Rehabilitation PE_MDAB		
Budget:	FY09 - 10 Metro Matters	FY11 - 13 Metro Matters	Total
	\$33,056,000	\$135,802,000	\$168,858,000
This Action:	\$28,013,550	\$115,086,450	\$143,100,000
Prior Approval:	\$0	\$0	\$0
Remaining Budget:	\$5,042,450	\$20,715,550	\$25,758,000
Remarks:	The budget and funding beyond FY10 are subject to approval by the Board. Contract options for work in Phases 2-4 of \$38,800,000 will be included in the contract and awarded subject to the availability of funding.		

Operating Budget Impact:	Positions: None Annual Expense: None
--------------------------	---

Action for Multi-Year Funded Contract			
	Capital Improvement Program - Metro Matters		
	Red Line Rehabilitation - 1 (Dupont to Silver Spring) -- American Recovery and Reinvestment Act ST08, 09		
Budget:	FY09 - 10 Stimulus	FY11 - 13 Stimulus	Total
	\$33,900,000	\$0	\$33,900,000
This Action:	\$33,900,000	\$0	\$33,900,000
Prior Approval:	\$0	\$0	\$0
Remaining Budget:	\$0	\$0	\$0
Remarks:	\$17.9M Phase 1 Options \$16.0M Added to Base for Platform Rehabilitation		
Operating Budget Impact:	Positions: None Annual Expense: None		

RECOMMENDATION:

Award the first Red Line Rehabilitation contract, Dupont Circle to Silver Spring for a not to exceed amount of \$177,000,000.



Red Line Rehabilitation Contract

Presented to the Board of Directors:

Finance, Administration and Oversight Committee

July 9, 2009



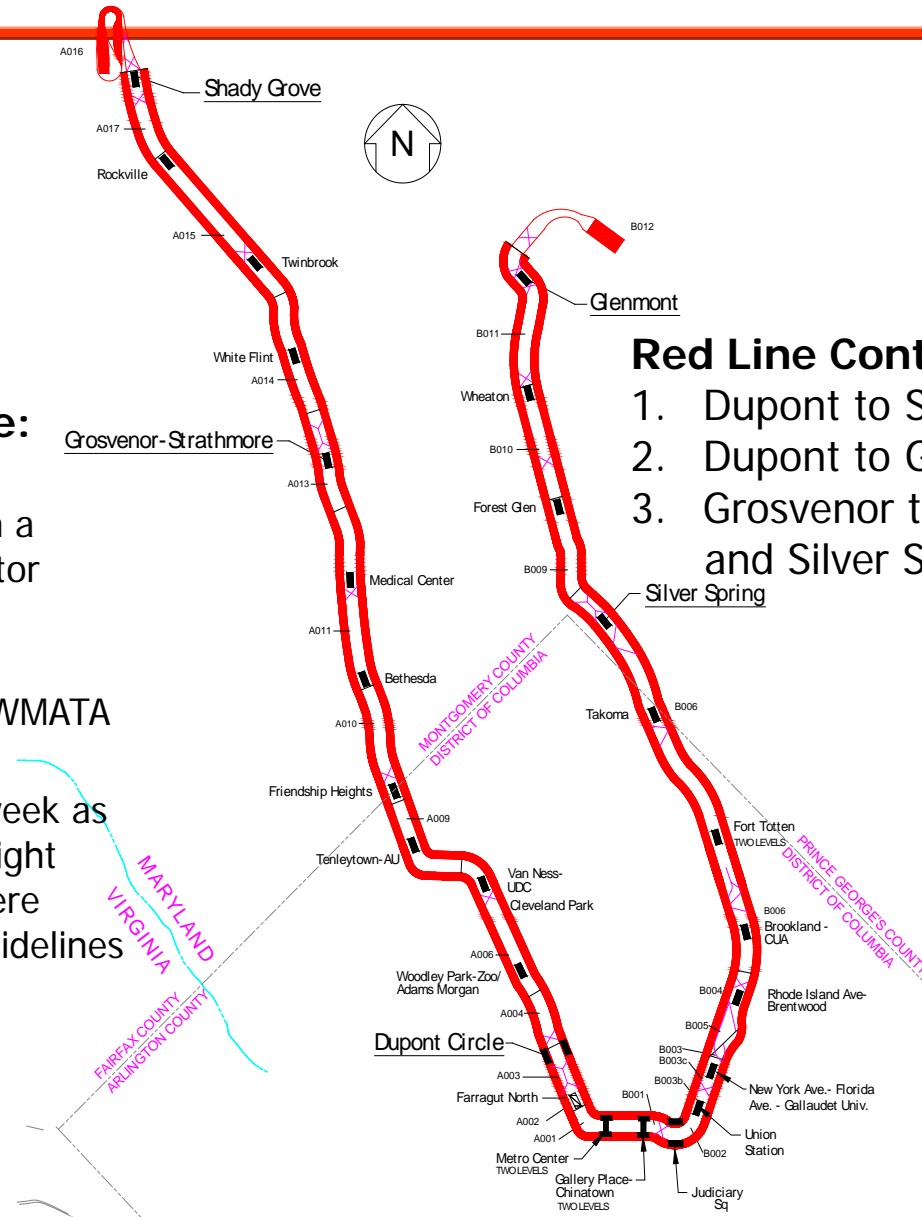
Purpose

- To obtain Committee concurrence and Board of Directors approval to award the first Red Line Rehabilitation contract, Dupont Circle to Silver Spring

Background

New Practice and Sequence:

- One contract to address all Infrastructure rehab work in a specific length; one contractor responsible
- Work in same areas on maintenance projects with WMATA internal staff
- Single tracking during the week as early as 8:00 pm, Sunday night through Thursday night where allowed per Track Rights Guidelines



Background

- **Red Line Rehabilitation – 1**
 - The Board of Directors authorized staff to initiate a contract – 7/24/08
 - Two Step Contract Procurement process began – 8/5/08
 - Step-1: Prequalification of the Proposers was completed – 11/7/08
 - Step-2: Technical and Cost Proposals for Contract Award
 - Received Initial Proposals late-March
 - Conducted Oral Presentations mid-April
 - Began Preliminary Discussions & Negotiations early-May
 - Revised Proposals received – 6/23/09
 - WMATA Evaluation Team has completed proposal review and made a recommendation for award

Base Contract Variation

Base Contract - Estimated Value as of July'08 \$96.2M

Electrical Equipment Additions

1. Reassessment of electrical equipment identified additional older transformers, rectifiers, DC and AC switchgear requiring replacement costing an additional \$16M
2. Failures on the Orange – Blue Lines in 2007 revealed an urgent need for the replacement of obsolete remote monitoring equipment and installation of fiber optic cable for key electrical equipment costing an additional \$5M
3. Electrical equipment cost escalation since the last rehabilitation contracts were awarded in 2006 increased cost \$9M

Total Additions \$30.0M

Deletion of work originally planned

1. Track fastener installation removed cost reduction of (\$4.0M)
2. Station lighting has been removed to include in a cost neutral energy savings program reducing cost by (\$7.0M)

Total Deletions (\$11.0M)

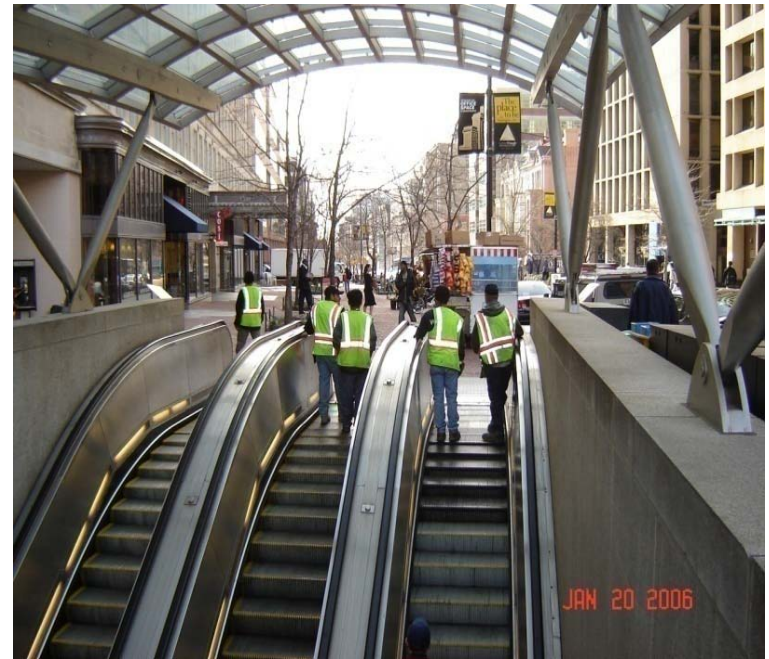
Adjusted Base Contract Cost \$115.2M

Proposed Additional Contract Scope

- Since formulation of the original Red Line contract scope in early 2008 several items of critical work have been determined to be more expeditiously completed under this contract.

I. Escalator replacement at Dupont Circle South entrance:

1. The south entrance escalators are some of the least reliable in the system
2. Width of these escalators requires special parts and steps that are not available without special order
3. To fit regular width escalators a modification to escalator well ways is needed
4. The cost of replacement is \$11M above the \$1.4M budgeted amount for rehabilitation



Proposed Additional Contract Scope

II. Escalator replacement and canopy installation at Foggy Bottom Station

1. The existing three escalators are overdue for rehabilitation
2. The escalators at this single entrance station present consistent reliability problems and should be replaced in lieu of rehabilitation
3. Replacement of the current escalators will allow closer placement and make room to add a stair
4. A canopy over this entrance is required to increase safety and reduce maintenance for the new escalators and added stair
5. Cost of replacement of escalators, additional stair and installation of canopy is \$8M



Proposed Additional Contract Scope

III. Platform Slab replacement and rehabilitation of tile at Shady Grove and Rockville stations

1. Platform slabs at Shady Grove and Rockville stations especially the cantilevered portion of slabs have deteriorated beyond normal concrete repairs
2. A concept to replace the deteriorated sections of platform slab with a precast slab has been developed which will minimize disruption of rail operation at these stations
3. These stations have been added to Red Line Rehabilitation-1 due to the urgency of the situation, originally part of Red Line Rehabilitation-3 the replacement cannot be delayed for six to seven years when Red Line Rehabilitation-3 will start
4. The replacement of platform slabs and platform tiles is to be funded using \$16M of Stimulus funding



Proposed Additional Contract Scope

IV. Electrical Equipment beyond current Red-Line segment for emergency replacement.

1. Furnish new traction power transformers for six substation located throughout the Metrorail System
2. Work will include performing necessary site visits and designing the new equipment to ensure compatibility with the existing transformer
3. The following is a listing of the locations and equipment to be furnished:
Alexandria Yard TPSS Unit #2
Cameron Run TPSS Unit #2
First Street TPSS Unit #2
Greenleaf TPSS Unit #1
Grosvenor TPSS Unit #2
Twinbrook TPSS Unit #2
4. Cost of replacement is \$4M



Proposed Additional Contract Scope

V. Trackwork – Medical Center to Grosvenor:

1. The trackway section along the Red Line from Grosvenor Station to Medical Center Station is deteriorated more than normal due to ground water leaks and exposure to ground water chemicals.
2. These trackway sections are added to Red Line Rehabilitation-1 despite being in Red Line Rehabilitation -2 since the existing conditions of trackway components are causing impact on rail operations and replacement cannot be delayed for four to five years
3. Installation of new trackway components Includes the new direct fixation track fasteners, 115 lb running rail, wood crosstie supports (including ballast stone), and new contact rail insulators.
4. These replacement trackway components are \$4.9M



Base Contract Variations

SUMMARY:

	Budget	Revised	Increase	Fund Source
Phase-1 thru 4 Base Contract	\$96.2M	\$115.2M	\$19M	Metro Matters
Add to Base:		\$43.9M	\$43.9	
1) Replace escalators at Dupont Circle			\$11M	Metro Matters
2) Replace escalators at Foggy Bottom			\$8M	Metro Matters
3) Platform & Tiles rehab at A-line Platforms			\$16M	Stimulus
4) Electrical Equipment beyond Red Line			\$4M	Metro Matters
5) Track work Medical Center to Grosvenor			\$4.9M	Metro Matters
Total Base		<hr/> \$159.1M		

Contract Option Variations

Phase-1 Options:

Options for ATC System upgrade, ETS upgrade, PA & CCTV system upgrade are funded with stimulus funds

Budget

Revised

\$12M

\$17.9M

Adjustment to scope of options:

1. New York Ave Station – Upgrade existing CCTV and PA System, \$1.7M to meet current above ground station design criteria add new cameras, recorders, speaker zones, wireless microphone system
2. CCTV Upgrade for underground stations, \$1M to meet current design standards add new cameras at Street level, Fiber cable infrastructure
3. Job Order Work, \$3.2M
Rehab Station Rest rooms, Replace Service Room Floor tiles, Replace Service Room Doors, and Repair leaks in Tunnel

Adjusted Phase-1 Option Costs, \$17.9M

Increase of \$5.9M to be funded by Stimulus funding.

Phase-2 thru 4 Options:

Options for ATC System upgrade, ETS upgrade, PA & CCTV system upgrade

\$37.4M

\$38.8

Adjustment to scope of options:

CCTV upgrade for stations to meet current design standards, \$1.4M

AWARD SUMMARY

AWARD SUMMARY

	<u>Budget</u>	<u>Revised</u>
Base (Phase 1 - 4)	96.2	115.2
Add to Base	0.0	43.9
Base Subtotal	96.2	159.1
Option (Phase 1 only)	12.0	17.9
TOTAL	\$108.2	\$177.0

OPTIONS FOR PHASE 2 THRU 4:

Phase 2 Option	21.5	13.2
Phase 3 Option	9.4	14.0
Phase 4 Option	6.5	11.6
Total Option (Phase 2 - 4)	\$37.4	\$38.8

AWARD

Metro Matters	\$28.0
Metro Matters Obligation Authority	\$115.1
Stimulus	\$33.9

TOTAL	\$177.0
--------------	----------------

Recommendation

- Committee concurrence and Board of Directors approval to award the first Red Line Rehabilitation contract, Dupont Circle to Silver Spring