

Planning, Development and Real Estate Committee Board Action Item III-A

March 8, 2007

Approval of Rehabilitation Project for Metro Center Bearings

Washington Metropolitan Area Transportation Authority Board Action/Information Summary

Action Information	 Resolution: ☐ Yes ☐ No

PURPOSE

Initiate and award a competitive contract for structural rehabilitation of the Red Line platforms at Metro Center Station.

DESCRIPTION

Construction of the Red Line platforms of Metro Center Station was completed and the station was opened for revenue operation on March 29, 1976.

A structural evaluation was performed to identify specific deteriorated areas of both the north and south platform box girders to assess the condition of bearing pads; identify structural defects (cracks and spalls) in the concrete box beams; identify defects in the granite edges of the platforms; and determine the quantity of tile replacement needed.

There were no visible signs of distress in the girder concrete. The normal deterioration of these structures over time has caused deterioration and failure of the elastometric bearing pads separating the platform box beams from the station structure (causing damage to the ends of the box beams); deterioration of expansion joints; minor cracking and spalling of structural concrete; misalignment of granite platform edges and failure of paver and truncated dome tiles. Rehabilitation of these items is essential to ensure the overall safety and continued service of the station.

Execution of this work will require disconnecting and re-connecting utilities, removing and reinstalling ceiling tiles; installing temporary jacking frames; jacking the north and south platform box beams (4 lifts) and installing replacement bearing pads. In addition, it will be necessary to reset the granite platform edges; remove existing deteriorated expansion joints and replace them and repair concrete cracks and spalls.

As a consequence of executing these required structural repairs, it will be necessary to replace a portion of the platform tiles.

A 12-month contract duration is planned commencing about July 2007 with jacking of the platform box beams occurring in January/February 2008.

FUNDING IMPACT

Funding is provided in the Capital Improvement Program - Metro Matter FY07-FY11 under the Structural Rehabilitation Project in the amount of \$1,300,000

Budget: Capital Improvement Program - Metro Matter FY07-FY11

Project: Structural Rehabilitation of the Red Line Platforms at Metro Center

Station

Budget Information:

Budget \$75,279,532
This Contract Action: 1,300,000
Prior Obligations for this activity: 11,826,831
Subtotal 13,126,831
Remaining Budget for this activity: \$62,152,701

RECOMMENDATION

Initiate and award a competitive contract for structural rehabilitation of the Red Line platforms at Metro Center Station.

Metro Center Station Platform Bearing Rehabilitation



Presented to the Board of Directors:

Planning, Development and Real Estate Committee

March 8, 2007





Background

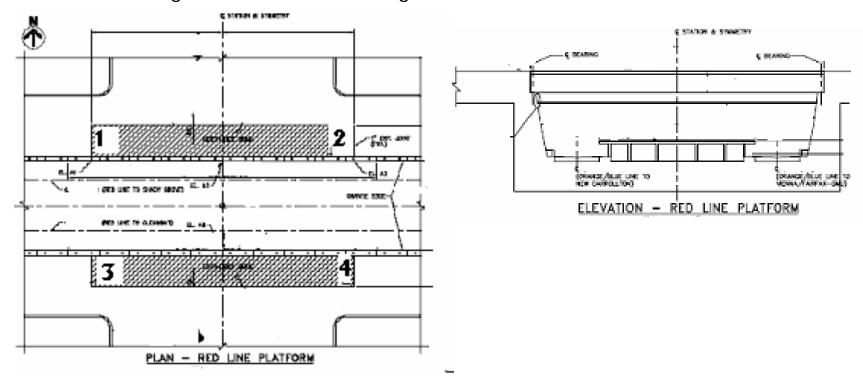
- Metro Center Station opened for revenue operations on March 29, 1976.
- Bearing pads have deteriorated causing damage to end of platform box beams/girders.
- Rehabilitation is essential, but not safety critical.





Rehabilitation Work

- Rehabilitation will require jacking north and south platform box beams and installing replacement bearing pads.
- Granite edge and platform tiles will be reset.
- Work will occur in Jan/Feb 2008 over two three-day weekends with single tracking on both Red and Orange/Blue Lines.





Recommendation

 Approval to advertise and award a competitive contract for rehabilitation of the Metro Center Platform bearings and girders estimated at \$1.3M.