

ATTACHMENT E

BALTIMORE-WASHINGTON PARKWAY MINIMIZATION MEASURES

Beginning in January, 2012, the Maryland Transit Administration (MTA), the Federal Transit Administration (FTA), and the National Park Service (NPS) National Capital Region (NCR) staff met monthly with representatives of the NPS National Capital Parks – East (NACE) to discuss the proposed Purple Line and the potential impacts it would have on the Baltimore-Washington Parkway. In addition to discussing anticipated impacts, staff from these respective agencies discussed avoidance measures and ways to minimize and mitigate impacts to the Parkway. Many of the minimization measures discussed at these monthly meetings were intended to reduce the impact to the forest area in the median of the Parkway, maintain traffic flow on the Parkway, minimize effects from construction, and decrease potential visual impacts to the maximum extent possible. The minimization measures agreed upon at these agency coordination meetings are provided below.

Maintenance of Traffic (MOT)

After evaluating several options to maintain traffic flow, MOT Option 3 was developed and selected in consultation with the NPS-NCR and NACE at the June 22, 2012 agency coordination meeting. MOT Option 3 will be implemented during construction and would avoid impacts to trees in the median. This MOT option also includes construction of temporary bridges on the outside of the existing bridges, between the existing roadway and the ramps. These temporary bridges would maintain two lanes of traffic in each direction during construction and would avoid the forest area and archeological site in the median of the Parkway.

Permanent Replacement Bridge Structures

Permanent replacement bridge structures would have a similar arch design as the existing bridge structures. The new structures would be constructed on the same horizontal alignment as the existing Parkway roadways and would be the same width (across the roadway) as the existing bridges. The bridges would include horizontal arched concrete shields above the transitway overhead wires. The design of these shields was developed in consultation with the NPS. The design of the shields would match the shape of the existing arch of the bridge structure, blending in visually as vehicles approach the bridges on Riverdale Road. In addition, the shields would not extend above the bridge railings so as to maintain views from the Parkway to the adjacent landscape.

MTA will re-use the stone façade on bridge abutments to maintain the appearance of the abutments as practicable. The existing stone would be removed from the existing abutments, stored during construction to maintain the integrity, and be re-used to the extent practicable. If additional stone is required, it would come from the same source, if possible. MTA will identify new stone, if needed, in consultation with the NPS to match the existing stone.

MTA will attach catenary wires to the bridges as agreed upon during consultation with NPS at the June 22, 2012 meeting. Attaching the catenary wires to the bridge will reduce the number of catenary poles within the Park. Final specifications for bridge design will be subject to review by the NPS.

Landscaping and Invasive Species

MTA will develop landscape plans including tree and vegetation replacement (at agreed upon ratios in consultation with the NPS) using native and approved species to mitigate the temporary and permanent removal of vegetation and trees. Landscape plans for areas within the Park will be included in the project plans and specifications and will be made available for review and approval by the NPS at milestones in the project development process (i.e., 60% design and 90% design).

MTA will conduct a survey prior to construction in all areas where vegetation will be disturbed to identify the presence of invasive species. A two year invasive species avoidance and removal program within the project limits will be developed, submitted to the NPS for approval, and implemented by MTA.

The maintenance of traffic plan calls for temporary bridges and approach roadways to be constructed between the existing mainline roadway and bridges and the ramps between the Parkway and MD 410. Upon completion of construction all temporary roadway, structures, and construction materials will be removed and the ground returned to pre-construction grade using stockpiled materials from the site, or similar, to support vegetation. Any residual structures or pavements will be removed. The area will be stabilized and planted with appropriate species. The final landscape plan for the slope between the mainline roadway and ramps will be determined in consultation with the NPS.

Protected and Sensitive Resources

Sensitive natural and built resources including trees and archeological resources will be identified and a buffer area established and marked in the design plans and in the field to protect the resources. MTA will also identify the sensitive resources on the project design plans, including the buffer area required for protection. The NPS will be consulted and MTA will locate the resources and buffer in the field prior to construction activities. The NPS-NCR tree guidelines will be incorporated into project specifications, contract documents, and the NPS Special Use Permit.

Design Elements

MTA will take the following actions regarding the design elements:

- MTA will design sidewalk improvements along Riverdale Road to meet ADA requirements.
- MTA will not construct stormwater management facilities within the boundaries of the Parkway.
- During design reviews MTA will provide the NPS with plans for the material, colors and finishes for permanent traffic signals and roadway lighting poles and fixtures within the Parkway. The NPS will approve the plans prior to final design.

Land Exchange Agreement and Measures for Temporary Impacts

A land exchange agreement will be executed between MTA and the NPS to mitigate for the permanent use of approximately 0.6 acres of park land along Riverdale Road. The financial valuation and exchange of the permanent land will be determined through an approved appraisal process between the NPS and MTA following all applicable Federal and State laws and practices. The general steps of the land exchange include the following:

1. The property being exchanged is identified by the NPS.
2. The NPS-NCR Lands Office contacts the U.S. Department of the Interior (DOI) Office of Valuation Services (OVS) and provides details of exchange.
3. OVS prepares Statement of Work (SOW) to be used by contract appraiser.
4. OVS provides SOW and a list of qualified and DOI approved appraisers to MTA.
5. MTA hires appraiser from list.

6. Appraiser prepares appraisal based on DOI SOW.
7. OVS reviews appraisal for conformance with SOW and applicable regulations.
8. Once appraisal is approved OVS informs the NPS-NCR Lands Office of appraisal acceptance.
9. Proceed with transaction.

To mitigate for temporary impacts MTA will replace sections of metal guardrail that were previously installed along the Baltimore-Washington Parkway. The guardrail was installed to address immediate safety concerns and does not meet the design aesthetic or guidelines of the NPS. Guardrail will be replaced with an approved FHWA crash-tested longitudinal barrier system such as the Stone Masonry Guardwall (TL-3) system, which is an approved design for FHWA Eastern Federal Lands roadways including the NPS Baltimore-Washington Parkway. This can be found in the Design Elements Guidelines at <http://www.efl.fhwa.dot.gov/technology/abs.aspx>.

The exact location and limits of this work will be determined in consultation with the NPS and the Maryland State Historic Preservation Officer and will be selected in areas that do not result in adverse effects to the Park.

To establish equitable compensation the scope of the mitigation including the cost of design, overhead, fees, mitigation, construction, and other attributable items will be commensurate with the value of temporary use of NPS property by the Purple Line in accordance with all applicable Federal and State laws. To support this work the NPS will waive fees associated with construction permits and temporary lease agreements, design reviews, and other administrative or other fees that may be required for the mitigation. In addition, the NPS will facilitate design review and approval including construction access and maintenance of traffic plans.