

**COMPREHENSIVE MONTHLY REPORT**

**July 2014**

**Dulles Corridor Metrorail Project  
Phase 2  
(Wiehle Avenue Station to Route 772 Station)**

Metropolitan Washington Airports Authority  
Washington, DC

August 29, 2014

**PMOC Contract Number:** DTFT60-09-D-00016

**Task Order Number:** 009, **Project Number:** DC-27-5242, **Work Order No.** 01

**OPs Referenced:** 01, 25

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**Length of Time PMOC Assigned to Project:** 0.5 years

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## EXECUTIVE SUMMARY

The Project Management Oversight Contractor (PMOC) met with Metropolitan Washington Airports Authority (MWAA) on *August 7, 2014* to conduct the monthly progress meeting for work performed in *July 2014* on Phase 2 of the Locally Preferred Alternative (LPA) for the Dulles Corridor Metrorail Project. The Phase 2 project extends from the Wiehle Avenue Station in Fairfax County through Dulles International Airport to the Route 772 Station in Loudoun County. The PMOC plans to conduct future PMOC monthly progress meetings during the first week of each month.

### **1. Project Description**

MWAA, in cooperation with the Washington Metropolitan Area Transit Authority (WMATA), proposes to implement a 23.1-mile rapid transit system in the Dulles Corridor of Northern Virginia. The proposed corridor follows the alignment of the Dulles International Airport Access Highway (DIAAH), the Dulles Toll Road within Fairfax County, and the Dulles Greenway, a private toll road in Loudoun County. MWAA is implementing the LPA in two phases as described below.

Phase 1 of the Project (Initial Operating Segment), which went into revenue service on July 26, 2014, provided the construction of the initial 11.7 miles of the rail project from the existing Metrorail Orange Line just east of the West Falls Church (WFC) Station to a station constructed at Wiehle Avenue with a total project cost of \$3.142 billion. Included in the Project were five new stations (McLean, Tysons Corner, Greensboro, Spring Hill and Wiehle-Reston East), improvements to the existing yard at WFC, and tail tracks beyond the Wiehle Avenue station. The procurement of sixty-four new rail cars was also included for Phase 1.

Phase 2 of the Project will provide 11.4 route miles of new track from the interim terminus at Wiehle-Reston East Station through Washington Dulles International Airport ("Dulles Airport") to a terminus in eastern Loudoun County. Phase 2 includes six new stations (Reston Town Center, Herndon, Innovation Center, Dulles Airport, Route 606 and Route 772 Stations). Phase 2 also includes a maintenance and storage yard facility at Dulles Airport, wayside facilities (including traction power substations, tiebreaker stations, and stormwater management ponds along the alignment), five new parking facilities with a total of 8,900 parking spaces, and sixty-four new railcars. The current Phase 2 project budget is \$2,778,235,564 exclusive of parking facilities and finance costs. According to the last approved CRC schedule (March Schedule Update), Phase 2 Revenue Service would begin in early 2019.

### **2. Project Status Summary**

The PMOC met with MWAA on *August 7, 2014* to conduct the Phase 2 monthly progress review meeting. The information provided is as of *July 31, 2014*, unless otherwise noted.

- **National Environmental Policy Act (NEPA)** – MWAA and FTA prepared an EA in April 2012 covering the preliminary engineering design refinements for Phase 2, which they released for public review on May 10, 2012. Subsequently, the FTA Regional Administrator issued a Finding of No Significant Impact (FONSI) on December 17, 2012.

- **Procurement Status** – A Project Management Support Services (PMSS) consultant, Jacobs Engineering, supports the MWAA management team to ensure technical capacity and capability. The contract for the PMSS was signed on July 26, 2013, and the first task order issued was for the PMSS to provide a staffing support. The PMSS previously provided support for Phase 2 for preliminary engineering under a separate contract that expired on July 26, 2013.

Phase 2 is divided into several packages that will be procured separately: Package A includes the final design and construction of 11.4 miles of the rail line, stations and systems elements; Package S (the Advanced Earthwork Contract) is for the removal and relocation of the Phase 1 soils currently stockpiled at the Maintenance Facility site associated with Package B; Package B includes the final design and construction of the WMATA Maintenance Facility at the northwest corner of the Dulles Airport property; and Parking Facilities (formerly Package C) includes the design and construction of the five parking facilities at the stations in Fairfax and Loudoun counties. MWAA awarded the contract for Package A on May 14, 2013 and issued the Notice-to-Proceed (NTP) on July 8, 2013. MWAA awarded the contract for Package S on November 1, 2013 and issued the NTP on November 18, 2013. Lastly, MWAA *announced an intent to* award the contract for Package B on July 2, 2014. *The contract was signed on July 29, 2014 and the NTP was issued on August 18, 2014.*

- **Disadvantaged Business Enterprise (DBE) Goal** – MWAA developed a DBE Project Goal of 25% of federal participation cost for Phase 2 that FTA reviewed and accepted. Package A has a contract goal of 14%, the PMSS Contract has a goal of 25%, the Package S Contract has a goal of 25%; and the Package B goal is 14%. Fairfax and Loudoun Counties plan to procure the work in Parking Facilities (formerly Package C) without the use of Federal assistance; therefore, there would be no DBE requirement.

Through the last assessment on June 30, 2014, the DBE participation for the PMSS is 20.07%; Package A is 4.1%; and Package S is 3.19%.

- **Third Party Agreements** – MWAA reported that it required six Intergovernmental Agreements for Phase 2: WMATA, the Dulles Greenway, Loudoun County, Fairfax County, Virginia Department of Transportation (VDOT), and the Town of Herndon. All six Intergovernmental Agreements were executed as of December 5, 2013. A Local Funding Agreement to transfer to VDOT the project-related scope of work for Route 606, which includes an intersection improvement and addition of a turn lane, was signed by MWAA and executed by VDOT on June 11, 2014.
- **Real Estate Acquisition** – MWAA submitted the Real Estate Acquisition Management Plan (RAMP) for Phase 2 on August 19, 2013. At the PMOC's request, MWAA provided the Property Acquisition Listing on September 27, 2013. The RAMP was reviewed by the PMOC and comments provided to FTA on November 13, 2013. A teleconference to discuss the comments and the changes from the Phase 1 RAMP was held on November 15, 2013, and MWAA resubmitted the RAMP, *Revision 1*, in response to the comments on February 5, 2014. FTA provided comments to the review of the RAMP on February 26, 2014 and MWAA resubmitted the RAMP, *Revision 2*, on April 1, 2014.

Prior to the June 2014 meeting, a conference call was held with Pamela Peckham, FTA Realty Specialist, to discuss FTA comments to the RAMP. FTA approved the increase for threshold limits for the Dulles Phase 2 Project on July 3, 2014. FTA also transmitted its

comments on the RAMP to MWAA on July 9, 2014 for incorporation into the next revision of the RAMP. *MWAA addressed the comments and resubmitted Revision 3 to the RAMP, including Procedure P2M-3.01, on August 6, 2014. The PMOC recommended that FTA accept this revision and the FTA letter accepting the RAMP was forwarded to MWAA on August 18, 2014.*

- **Permits** – MWAA submitted the Permit Management Plan to FTA on August 16, 2013. The PMOC reviewed and provided its comments in a draft spot report to FTA on October 8, 2013, and an advanced copy of the draft Spot Report was transmitted to MWAA for review on December 9, 2013. MWAA resubmitted the Permit Management Plan on April 1, 2014 incorporating all previous FTA and PMOC comments. On April 22, 2014, the PMOC advised FTA that the comments to the earlier submissions of the Permit Management Plan had been incorporated and recommended that FTA accept the Permit Management Plan. Initially, FTA advised that its approval of the Permit Management Plan would be coupled with the RAMP review; however, during the July 9, 2014 meeting FTA stated that it would accept the Permit Management Plan independent of the RAMP. *On August 8, 2014, FTA issued a letter approving the Phase 2 Permit Management Plan, Revision 1.*
- **Design Progress** – MWAA reported that the Preliminary Design submittal for Package A of the Phase 2 Project was submitted to the Authority Having Jurisdiction (AHJ) - the Virginia Department of General Services and the Airports Authority Building Code Department on January 27, 2014. The Preliminary Design submittal establishes the code year for building code compliance and is a required predecessor to the approval of the 60% and 90% design submittals. MWAA transmitted the Preliminary Design submittal to the AHJ with a cover letter that identified what MWAA saw as the deficiencies in the submittal. MWAA reported that of all the deficiencies, the most serious non-compliance is that CRC did not complete the Rational Analysis (Fire, Life, Safety analyses). MWAA informed CRC that the Preliminary Design submittal was sent to the AHJ and that MWAA considers it as accepted-as-noted pending the final disposition by the AHJ. MWAA reported that the outcome of the April 3, 2014 meeting with the AHJs, was that the Preliminary Design submittal on the condition that CRC revises and resubmits the Route 772 Station design to address DGS comments. The 60% submittal is scheduled for *January 2015 and after review by MWAA*, will be submitted to DGS as the required Preliminary Design for the station package.

Package S, the advanced earthwork contract to clear the on-airport site for the Package B rail yard, was awarded in November 2013, and the Package S Design-Build (DB) Contractor, Atlantic Contracting and Material Company (ACMC), submitted the 100% design submittal in late January 2014 for MWAA review. Based on comments provided by MWAA, ACMC provided the interim final design submittal on March 4, 2014 for MWAA review, which was used as part of the application for the MWAA construction permit. MWAA noted that the Soil Stabilization Calculations that were submitted by ACMC on May 15, 2014, did not match what was included in the interim final design submittal. A revision to the final design submittal was received from ACMC on June 26, 2014 *and MWAA approved the design package on July 17, 2014 with one comment.*

Fairfax and Loudoun Counties will manage the final design and construction of the Parking Facilities (formerly Package C). MWAA has set a deadline of December 31, 2014 for the counties to confirm that they can deliver the completed parking facilities as required. Fairfax County plans to design, construct, own, maintain, and operate both parking facilities to be

located in the County. The County's Department of Public Works and Environmental Services is the lead county agency for the design and construction of both parking facilities, and will be responsible for the project management and oversight of both projects. Fairfax County anticipates issuing a Design-Bid-Build solicitation through the Public Works and Environmental Services Department for the construction of both of their parking facilities. Fairfax County anticipates the start of final design in September 2014 with twelve months for design, NTP for construction in late 2015 and thirty months for construction with a project completion date of May 2018.

On January 15, 2014, the Loudoun Board of Supervisors voted in favor of the County taking responsibility for the funding and construction of the Route 606 and 772 North and South parking facilities. Loudoun County has issued a solicitation through the Public-Private Transportation Act of 1995 for proposals from qualified private entities for the design, construction, financing, operation and maintenance of up to three parking facilities in Loudoun County in conjunction with Phase 2 of the Dulles Corridor Metrorail Project. Four proposals for each parking facility were received on October 30, 2013, and the proposals were reviewed by a Loudoun County evaluation team that includes MWAA and WMATA. During the closed session on March 5, 2014, the Loudoun Board of Supervisors approved the Design-Build-Operate-Maintain and Finance (DBOM+F) method for the procurement of the parking facilities. The request for a Best and Final Offer (BAFO) was transmitted to all four of the bidders on April 11, 2014, and BAFOs were received from all bidders on May 14, 2014. Loudoun County reviewed the BAFOs and issued a short list for each parking facility for negotiations for the DBOM+F contract award. Loudoun County is in the process of negotiations for each of the parking facilities. Loudoun County anticipates commissioning the parking garages in April 2018; three months prior to the Phase 2 project baseline scheduled substantial completion date of July 2018.

- **Construction Progress** – MWAA issued a NTP for the Package A Contract on July 8, 2013. The contract is approximately 21% complete, based on time. The scheduled substantial completion date is July 7, 2018. MWAA also issued a NTP for Package S on November 18, 2013, and the scheduled substantial completion date is December 8, 2014. Package S is approximately 66% complete based on time.
- **Budget Status** – The Phase 2 Engineer's Estimate was \$3,153,264,289, which included \$157,750,000 in unallocated contingency. This figure is in year-of-expenditure (YOE) dollars and excluded the finance costs. After the Package A firm-fixed price contract was awarded on May 14, 2013 at a cost below the engineer's estimate, MWAA adjusted the total Project Capital Cost from \$3,153,264,289 to \$2,902,000,000. However, during the finalization of the Risk and Contingency Management Plan, MWAA modified the total Project Capital Cost to \$3,126,450,757 to account for secondary mitigation. With the commitment from both Fairfax and Loudoun Counties to fund and procure the parking facilities independently, MWAA has revised its Phase 2 project budget to \$2,778,235,564. This is a deduction of \$348,215,194, which includes associated primary and secondary contingency mitigation for the parking facilities. As of *June* 2014, project expenditures total \$279,199,827. Based on the budget and expenditures, the total project completion is 13%. This percentage does not include finance charges and contingency.

Primary funding for Phase 2 comes from MWAA (8.39%), Fairfax County (18.54%), Loudoun County (9.83%), Commonwealth of Virginia (11.62%), and the Dulles Toll Road

(51.62%). On August 20, 2014, United States Department of Transportation (USDOT) Transportation Infrastructure Finance and Innovation Act (TIFIA) credit assistance program executed a loan with MWAA, not to exceed \$1.278 billion to assist in financing its share. Fairfax County, and Loudoun County anticipate receiving direct loans under the TIFIA credit assistance program to assist in financing their shares in September 2014.

- **Risk** – MWAA submitted the Phase 2 Risk and Contingency Management Plan (RCMP) Revision 1 dated April 2013 to FTA for approval. On May 28, 2013, MWAA submitted their draft Standard Cost Category (SCC) Budget Workbook to the PMOC. The PMOC evaluated the Phase 2 budget, including the proposed level of contingency, and conducted a cost review workshop with MWAA on July 9, 2013. Following discussions held in July and August 2013 regarding the Phase 2 budget, the proposed level of contingency, and the draft risk register, MWAA issued a draft RCMP Revision 1b for PMOC review on August 30, 2013; this revision adjusted the total project cost to \$3,126,450,757, including base contingency of \$477,143,052 and a secondary cost contingency of \$146,211,294. On November 13, 2013, MWAA resubmitted RCMP, revision 1c based on comments received from FTA. The PMOC reviewed and recommended that FTA accept this revision on November 27, 2013. FTA forwarded a letter accepting the RCMP to MWAA on February 4, 2014.

With the commitment from both Fairfax and Loudoun Counties to fund and procure the parking facilities independently, MWAA has revised its Phase 2 project budget to \$2,778,235,564. On February 25, 2014, MWAA provided a revised project contingency to the PMOC due to the reassignment of the parking facilities from the Project to the Counties. The revised base contingency is \$422,105,181 and a secondary cost contingency of \$129,345,998 for a revised total contingency of \$551,451,179. MWAA revised and resubmitted the RCMP on April 28, 2014 and a meeting was held to discuss the PMOC's comments on May 6, 2014. After receiving the PMOC's concurrence, MWAA incorporated the revisions into RCMP Revision 1d and resubmitted the RCMP to the FTA on June 20, 2014 for review. *The PMOC is in the process of reviewing the RCMP, Revision 1d.*

- **Schedule Status** – CRC formally submitted the draft Baseline Schedule on November 26, 2013, 11 days late, and met with MWAA in December to review the Baseline Schedule. On December 31, 2013, MWAA received CRC's draft Final Baseline Schedule, which addressed MWAA's comments. MWAA reviewed the document, accepted-as-noted the draft Final Baseline Schedule, and CRC made some minor changes to the schedule. The Final Baseline Schedule was resubmitted by CRC and "accepted as noted" by MWAA in February 25, 2014. The critical path in the Final Baseline Schedule is through the Innovation Center Station and shows zero float.

CRC's June 2014 update of the Package A Project Schedule was received on July 16, 2014 showing a delay of 243 calendar days, no change from the May 2014 update. CRC attributed the delay to the redesign required due to revised Stormwater Criteria (SWM Part II-B) and included the Time Impact Analysis (TIA) schedule for design change due to the revised stormwater management regulations. MWAA has not accepted the reason for the delay as the Project Schedule Update does not address CRC's delay in obtaining approval of the Preliminary Design submittal. MWAA has held meetings with CRC to discuss the Package A delays, including the TIA. In response to a request from the PMOC, MWAA provided a draft white paper to FTA explaining the SWM Part II-B revisions and the

potential impact to Package A design and construction. PMOC provided comments to MWAA's draft white paper, *stating that the white-paper received did not address the total cost and schedule impacts to design and construction. On July 29, 2014, MWAA transmitted the Stormwater Study completed in February 2014 along with a revised version of the SWM White Paper; the PMOC provided comments on August 6, 2014. MWAA added that the design has been refined greatly since last month and they are continuing to assess opportunities to reduce the number of stormwater facilities and still meet the DEQ criteria. MWAA to issue a response to the PMOC comments before August 15, 2014. MWAA has issued an offer to CRC to resolve the additional design costs; the offer is under review by CRC. The PMOC also requested both Fairfax and Loudoun Counties to submit their own white papers on the stormwater management issue.*

*The Package B Proposal Schedule from Hensel Phelps Construction Company (HPCC) was received by the MWAA in June 2014. This schedule contains the contractor's detailed plan for the six months following the NTP. MWAA is expected to meet jointly with the HPCC scheduling team in August 2014 to address the schedule issues.*

As of the latest accepted Phase 2 project schedule dated March 2014 and updated during the July 9, 2014 meeting, commencement of revenue service is expected on January 10, 2019.

- **Rail Car Procurement** – On August 15, 2012, MWAA authorized WMATA to amend their contract with Kawasaki to exercise the option for an additional sixty-four 7000 Series railcars for Phase 2. WMATA's letter of August 30, 2012 to MWAA confirmed the amendment to the Kawasaki Contract for the Phase 2 railcars. The latest schedule from Kawasaki dated May 25, 2014 shows final delivery for the last Phase 2 vehicle no later than August 2, 2017.
- **Personnel** – The March 2014 Project Management Plan (PMP) included a revised staffing plan showing the gradual transfer of the Phase 1 staff to the Phase 2 project. The MWAA Executive Project Director was dedicated 50% to Phase 2, increasing in time through July 2014; Sam Carnaggio, MWAA Project Director, is dedicated 10% to Phase 2 increasing in time through July 2014; Karl Rohrer, MWAA Deputy Project Director is dedicated 100% to Phase 2. With the exception of Mr. Rohrer, the key personnel are the same as those working on Phase 1. This transition plan appears to be reasonable; however, it may continue to be impacted by any protracted delay in the substantial completion of Phase 1. Although the staff transition plan has been delayed by approximately seven months, it does not appear that the implementation of the Phase 2 project has been significantly impacted. Further delay in the transfer of staff from Phase 1 activities to Phase 2, could impact the effective and efficient implementation of the Phase 2 project by MWAA.

On June 4, 2014, MWAA met with FTA to discuss potential reorganization plans for the Phase 2 Project. A subsequent meeting was held on June 13, 2014. MWAA committed to provide an advanced copy of draft revised organizational chart, including roles and responsibilities, at the end of July 2014 for FTA review and acceptance before MWAA can implement the staffing changes. *On July 28, 2014, MWAA submitted its proposed organization chart, draft description of the roles and responsibilities of the key staff, and the resumes for five key staff members in the proposed reorganization of the Phase 2 Project. The PMOC reviewed the submittal and provided comments to MWAA on August 6, 2014. MWAA plans to address the PMOC's comments in the next revision of PMP anticipated for transmittal to the PMOC for review and approval in September 2014.*

During the *August* 2014 meeting, MWAA *announced* that Mr. Kevin Volbrecht has been assigned as the Project Director for the *Package A* Contract and Mr. Stephen Barna has been assigned as the Project Director for the *Packages B and S* Contracts.

### **3. PMOC's Assessment of Project Status**

As a result of the lessons learned and experience gained from the design and construction of the Phase 1 project, MWAA has developed a staffing plan necessary to effectively manage the Phase 2 project. FTA needs to monitor closely the transition of staff from the Phase 1 project to Phase 2 to ensure that there are adequate levels of dedicated and experienced staff on both projects through the completion of Phase 1 and the procurement activities and the start of final engineering of the Phase 2. As stated above, the transition of staff from Phase 1 to Phase 2 has been impacted due to the delay in the substantial completion of Phase 1; however, this delay does not appear to have a major impact on the implementation of the Phase 2 project. *However, MWAA's proposed reorganization of the Phase 2 staff includes several new staff positions that MWAA is in the process of filling.* Additionally, the effective working relationship between MWAA and WMATA during Phase 1 needs to continue for Phase 2. With the proposed staff reorganization for the Phase 2 project, FTA will need to monitor the effectiveness of staff in the revised positions as well to ensure that there are adequate levels of dedicated and experienced staff on each of the packages within the Phase 2 project. The PMOC has concerns with the proposed draft reorganization.

MWAA incorporated into the Phase 2 project the design changes to enhance the new/improved system requested by WMATA during Phase 1. MWAA continues to issue conformed specifications for late resolutions on design changes requested by WMATA on Phase 1 to ensure that the revisions are addressed during the design phase and not during construction. It is expected that this will reduce the number of WMATA-requested design changes under Phase 2. MWAA also included the contractual requirement for MWAA approval at the 60%, 90% and 100% phases of the design in Division 1 of the DB Contract Specifications, in an effort to initiate design issue resolution at an earlier phase in the design. The Phase 1 contract documents required review at only the 60% and 100% design phases.

Likewise, MWAA implemented lessons learned from the Phase 1 project to mitigate some of the potential risks in the Phase 2 project. Most significant of the lessons learned and implemented in Phase 2 was the elimination of Allowance Items, institution of a cost-loaded schedule requirement and requiring the DB Contractor to be responsible for utility relocations. These elements led to significant cost overruns in Phase 1. As the Phase 2 project progresses into construction, MWAA needs to remain proactive in identifying and mitigating potential risks.

MWAA has implemented the SWM Part II-B revisions into the Package A design and construction. FTA and PMOC have expressed concerns that the total cost and schedule impacts for the revised stormwater management criteria is unknown at this time.

# MAIN REPORT

## 1. Grantee's Capabilities and Approach

### a. Technical Capacity and Capability

Based on lessons learned during the Phase 1 project, Metropolitan Washington Airports Authority (MWAA) is implementing an integrated project management organization consisting of MWAA and Project Management Support Services (PMSS) staff. The Board approved the contract for the PMSS and the contract was executed on July 26, 2013. The first task order issued to the PMSS, Jacobs Engineering, was to provide staffing support for Phase 2. Prior to the new contract, the PMSS staff provided support for Phase 2 for preliminary engineering under a separate contract that expired on July 26, 2013.

MWAA submitted a draft Project Management Plan (PMP) for Phase 2, Version 1.1, which includes project organization and a staffing chart. Because most of the Phase 1 staff will be transitioning to Phase 2, labor distribution charts for each position were also provided to determine levels of staffing by month. The PMP, including the current Phase 2 staffing levels, was reviewed and comments returned to MWAA for issuance of the final PMP on November 3, 2013. On April 2, 2014, MWAA transmitted the final Phase 2 PMP, Version 1.1, including the Project Management Procedures, which were being submitted to FTA for initial review. On April 23, 2014, the PMOC recommended approval of the PMP and Project Management Procedures, and on May 19, 2014, FTA issued a letter approving the PMP and Project Management Procedures.

On April 16, 2014, Patrick Nowakowski, the MWAA Executive Project Director, announced his resignation from MWAA as of May 2, 2014. MWAA advertised the position on April 7, 2014 *and on August 8, 2014 MWAA announced that the position will be filled by Charles Stark, formally the Vice President and Project Executive for AECOM. Mr. Stark's official start date is September 3, 2014.* In the interim, Ginger Evans, MWAA Vice President for Engineering, is filling this position.

The MWAA Manager of Quality Assurance/Quality Control (QA/QC) and Safety, William Kerrigan, retired in November 2013. In the interim, Bob Whedon of the PMSS is the acting QA/QC and Safety Manager. As a part of the proposed reorganization, MWAA has split the position into two separate positions; Manager of QA/QC and Manager of Safety. The Manager of QA/QC position closed on June 3, 2014, an offer was made to one of the applicants, *and the applicant is scheduled to start on August 25, 2014. The Manager of QA/QC will report directly to the Executive Project Director. In addition, effective July 11, 2014, Trevor Bell, MWAA QA/QC Supervisor, retired. MWAA stated that it plans to add two additional QA/QC lead positions to increase the level of QA/QC review on the Phase 2 Project and be more proactive in the field. MWAA intends to use the resumes received in response to the Manager of QA/QC position to fill those additional positions. The QA/QC lead positions will be used for Package A and Package B, and will report to the respective package leads.*

The Manager of Safety position closed on June 13, 2014 and MWAA is in the process of interviewing applicants. *MWAA stated that the number of resumes received was limited,*

*and after a review of those received, not many applicants had any FTA safety experience. MWAA added that it may need to re-advertise the position. MWAA stated that it should take approximately eight weeks from the date the position closed before it can be filled, to allow for resume evaluations, interviews and background checks. **Staffing the positions of Manager of QA/QC and Manager of Safety needs to be a priority activity.** MWAA added that it is pleased with the culture and implementation of safety and QA by the Package A contractor, Capital Rail Constructors (CRC).*

On June 4, 2014, MWAA met with FTA to discuss potential reorganization plans for the Phase 2 Project. A subsequent meeting was held on June 13, 2014. The PMOC expressed Technical Capacity and Capability concerns with the proposed draft organization changes, and MWAA committed to address the concerns raised by the PMOC. MWAA followed up by email on June 16, 2014 and committed to providing an advanced copy of draft revised organizational chart, including roles and responsibilities with qualified resumes, by the end of July 2014, for FTA review and acceptance before MWAA can implement the staffing changes. *On July 28, 2014, MWAA submitted its proposed organization chart, draft description of the roles and responsibilities of the key staff, and the resumes for five key staff members in the proposed reorganization of the Phase 2 Project. The PMOC reviewed the submittal and provided comments to MWAA on August 6, 2014. MWAA plans to address the PMOC's comments in the next revision of PMP anticipated for transmittal to the PMOC for review and approval in September 2014.*

At the January 8, 2014 meeting, MWAA reported that because Substantial Completion Date was delayed on Phase 1, MWAA has not been able to transfer the Phase 1 staff to the Phase 2 project as projected. A revised staffing plan was included in the final PMP submitted on April 2, 2014, showing the gradual transfer of the Phase 1 staff to the Phase 2 project through July 2014. *However, MWAA's proposed reorganization of the Phase 2 staff includes several new staff positions that MWAA is in the process of filling. In addition to the QA/QC positions and the manager of Safety, MWAA anticipates advertising for the position of Director of Project Controls and Contracts for Phase 2. MWAA anticipates that it will take about ten weeks to fill the position. Also, MWAA reported that Mr. Kevin Volbrecht has been assigned as the Project Director for the Package A Contract and Mr. Stephen Barna has been assigned as the Project Director for Packages B and S. The PMOC will continue to monitor the transition of staff from the Phase 1 project to Phase 2 to ensure that there are adequate levels of dedicated and experienced staff on Phase 2 to ensure effective and efficient progression of final engineering and project management.*

MWAA reported that the number of full-time equivalents for Phase 2 during July 2014 is 501, an increase of 21 from June 2014. This is composed as follows: MWAA – 11, Virginia Department of Rail and Public Transportation (DRPT) – 1, Virginia Department of Transportation (VDOT) – 6, Washington Metropolitan Area Transit Authority (WMATA) – 25, Project Management Support Services (PMSS) –69, Capital Rail Constructors (CRC), Package A–328, and Atlantic Contracting and Material Company (ACMC), Package S – 61. Of the 328 staff reported by CRC, some are located in the project office; the remainder is located in local design offices in Washington, DC and Virginia.

The Package A Design-Build (DB) Contractor, CRC, and WMATA project staff are co-located with the MWAA project staff. CRC's design team is located in the adjacent building.

Upon completion of the project, WMATA will become the owner/operator of this extension to the existing Metrorail system. WMATA personnel have been active participants in the Phase 1 project, and the agency will have more staff involved on the Phase 2 project.

#### **b. Project Controls**

MWAA continues to develop project management procedures with regard to monitoring and controlling project scope, quality, schedule, cost, contingency management, and safety. MWAA has implemented lessons learned from the Phase 1 project for the Phase 2 contracts. Most significant of the lessons learned and implemented in Phase 2 was the elimination of Allowance Items, requiring the DB Contractor to implement a cost-loaded schedule and to be responsible for utility relocations. These elements led to significant cost overruns in Phase 1. It is the PMOC's observation that MWAA continues to monitor and control the project in accordance with their draft procedures.

MWAA has adopted an electronic document control system, Autodesk Constructware, for Phase 2. All submittals and correspondence are input into the system and made available for any staff member needing access to the documentation. As a part of the electronic document control process, MWAA is using LATISTA (a separate software application) to post and process review comments electronically. Reviewers can put their comments into the LATISTA system, the comments work their way back to CRC, and a record of the communication is retained. MWAA is planning an all-electronic distribution of plans, but is not quite there yet; hard copies are still being sent to some of the reviewers.

#### **c. Compliance**

It is the PMOC's observation that MWAA continues to follow the required statutes, regulations, and agreements.

- **Disadvantaged Business Enterprise (DBE) Goal** – MWAA developed a DBE Project Goal of 25% of the federal participation cost for Phase 2, which the FTA's Region 3 Civil Rights Officer reviewed, and subsequently approved on August 26, 2013. Package A has a contract goal of 14%, the PMSS Contract has a goal of 25%, the Package S Contract has a goal of 25%; the Package B has a goal of 14%.

MWAA continues to perform review and verification of reported DBE payments. Through the last assessment on June 30, 2014, the DBE participation for the PMSS is 20.07%; Package A is 4.1%; and Package S is 3.19%.

- **Davis-Bacon Act Verification** – MWAA is reporting Davis-Bacon Act verification activities in the Monthly Progress Report. As of the *June* 2014 Monthly Progress Report compliance monitoring is ongoing.
- **Title VI**– FTA stated that Fairfax and Loudoun Counties have to secure approved Title VI Plans because they will be recipients of TIFIA loan funds for the project.

Fairfax County: Fairfax County reported that a technical memorandum to implement a Title VI program was received from their consultant on November 1, 2013, and Fairfax County staff briefed the Fairfax County Board of Supervisors in closed session on November 19, 2013. Fairfax County submitted the technical memorandum to Mr. Riess, FTA Region 3, on December 3, 2013 and held a follow-up conference call on December 13, 2013. Fairfax County received correspondence from FTA regarding requirements for the Title VI Plan to be in compliance. Fairfax County submitted the Interim Title VI Plan to FTA on January 6, 2014 for review and comment. On January 28, 2014, the Fairfax County Board of Supervisors approved the Interim Title VI Plan. However, the Plan went back to the Board on January 29, 2014 for policy revisions on how service changes will be made to the Fairfax Connector bus service. FTA requested the submission of a timeline for completing its Service Equity Analysis prior to approving the Interim Title VI Plan. Fairfax County submitted the detailed Service Equity Analysis timeline to FTA on March 27, 2014. During the May 6, 2014 meeting, Fairfax County reported that the Disparate Impact and Disproportionate Burden (DIDB) portion of the Title VI Plan was approved by the Fairfax County Board of Supervisors on April 29, 2014. The County will begin the Service Equity Analysis now that the DIDB is approved.

Fairfax County received FTA concurrence on the Interim Title VI Plan on April 8, 2014; however, FTA noted that Fairfax County's Interim Title VI program *expired* on August 1, 2014. *Fairfax County reported that the Title VI Plan was approved by the Fairfax County Board of Supervisors on July 9, 2014 and subsequently submitted to FTA for review. In addition, the Fairfax County Service Equity Analysis was approved by the Fairfax County Board of Supervisors on July 29, 2014 and subsequently submitted to FTA for review, prior to the August 1, 2014 expiration date of the interim plan. As of the August 2014 meeting, no comments had been received from FTA.* Fairfax County is working on some of the interim steps required by FTA, and anticipates that it will then take an additional 12 to 18 months to implement the plan.

Loudoun County: On January 16, 2014, the Loudoun Board of Supervisors approved adoption of the Title VI Plan. Loudoun County reported that the technical aspects of the Title VI Plan were assembled, reviewed by Loudoun County staff, and submitted to Mr. Michael Riess, FTA Region 3's Civil Rights Officer, for review on January 22, 2014. Loudoun County received FTA concurrence on the Title VI Plan on January 23, 2014 and Loudoun County is in the process of implementing its Plan. On March 10, 2014, the Loudoun Board of Supervisors held a Transit Summit to look at the future configuration of the entire bus system in Loudoun County. Any changes in service will be incorporated into the Title VI Plan. *Loudoun County continues to implement their Title VI Plan.*

During the April 2014 meeting, Loudoun County reported that requests for proposals were issued to contract operators for the Loudoun County commuter and local bus services for which Loudoun County is assuming responsibility from the City of Leesburg. The required Title VI clauses have been included in the documentation issued. During the May 6, 2014 meeting, Loudoun County reported that bids were received in response to the Request for Proposals (RFP) for the local and commuter

feeder bus services. During the July 2014 meeting, Loudoun County reported that the existing operator, *Veolia Transportation*, won the contract. *The recommendation for award was approved, and the contract executed by the Loudoun County Board of Supervisors in July 16, 2014.*

*MWAA: During the August 2014 meeting, FTA reported that the MWAA Title VI Plan is scheduled to expire in Fall 2014 and stated that MWAA will need to update and submit its Title VI Plan before the existing plan expires. FTA requested a MWAA contact name to discuss the status of the Title VI Plan. MWAA responded that Richard Gordon, Manager of Equal Opportunity Programs, is the MWAA contact and committed to providing his contact information after the August 2014 meeting.*

- **Safety and Security**–The contractor’s safety performance reports, including the accident/injury statistics, are included in the MWAA Monthly Progress Reports. However, the PMOC requested that the Accident/Injury Statistics be provided by the fifteenth of each month, ahead of each monthly progress meeting. As of *July 2014*, CRC has recorded *567,261* hours worked with *two* first-aid cases, *six* incidents, two utility hits and zero hours of lost time; *two incidents occurred during the month of July 2014. The two incidents were a first aid event where a worker was exposed to poison ivy and a near-miss event where a drainage pipe was exposed during an excavation.*

ACMC has recorded *22,260* hours worked with *three incidents* and zero hours of lost time; *two incidents occurred during the month of July 2014.* They were both instances where trucks hauling dirt became unstable and dumped their loads prematurely as the trucks are designed to do. There were no injuries or damage.

- **QA/QC**–The Quality Management Plan, Revision 1, submitted by CRC was approved in January 2014. MWAA added that it has requested that the QC plans be submitted from the CRC subcontractors and vendors. CRC has started submitting inspection test plans for MWAA review.

QA audit surveillance schedules for design were developed for the first, second and third quarters of 2014 for Package A; MWAA transmitted the QA Audit and Surveillance Schedule for the third quarter 2014 on July 3, 2014. MWAA has performed eight QA audits/surveillances to date; no areas of non-conformance were noted. MWAA initially stated that because the start date for construction is still a moving target, MWAA did not want to issue a six-month QA audit surveillance schedule, only to have to revise the schedule once construction starts. However, now that construction has started on Package A, the PMOC requests a six-month QA audit surveillance schedule from MWAA. *MWAA committed to providing a response once the position of Manager of QA/QC is filled.* MWAA has no plans to conduct QA audits on Package S.

- **Labor Agreement**–Only MWAA will have to sign a 13(c) agreement with the Department of Labor for the TIFIA loan. FTA will initiate the process.
- **Community Outreach** – MWAA provided its Phase 2 Communications and Community Outreach calendar for *July 2014*. The Phase 2 outreach efforts continue to increase. MWAA continues to focus activities around the Dulles Airport with

Airport tenants and communities beyond its parameters. The concentration is on outreach at the Airport, meeting with senior airport, facilities and business personnel. MWAA is issuing multi-level alerts at the Airport to target the specific recipients depending on the nature of the alert. MWAA reported that business outreach has been strong this summer, with several requests to attend events in Loudoun County.

*During July 2014, MWAA reported that the primary question being asked by the community is the opening date for the Phase 2 Project. MWAA wants to ensure that all stakeholders are using the same date. To date, no groundbreaking events are scheduled for the Phase 2 Project, however now that Phase 1 is open, MWAA will discuss scheduling an event in the near future.*

Based on lessons learned from Phase 1, the community outreach team is meeting with the property owners as well as their tenants, since the property owners do not always communicate with their tenants. The tenants are those usually most impacted by construction disruptions. MWAA is also notifying the public of project completion expectations.

CRC submitted a revised version of their Communications Management Plan, which was reviewed by MWAA and returned to CRC with minor comments. CRC resubmitted the revised Communications Management Plan on March 5, 2014. CRC has also expanded their community outreach team and is providing updates on upcoming work

The Construction hotline is up and running. Traffic alerts are going out on a regular basis especially for the Dulles Toll Road. The plan for issuing construction alerts at the Airport has been recently revised, and MWAA will now issue the alerts in lieu of the Airport Information Technology (IT) Department.

## **2. Project Scope**

Phase 2 of the Project will provide 11.4 route miles of new track from the interim terminus at Wiehle Avenue Station through Dulles Airport to a terminus in eastern Loudoun County. Phase 2 includes six new stations (Reston Town Center, Herndon, Innovation Center, Dulles Airport, Route 606 and Route 772). Phase 2 also includes a Maintenance Facility (maintenance and storage yard facility) at Dulles Airport, wayside facilities, including traction power substations, tiebreaker stations, and stormwater management ponds, along the alignment, five new Metrorail parking facilities at four stations to provide 8,900 parking spaces, and sixty-four new rail cars.

### **a. National Environmental Policy Act (NEPA)**

MWAA prepared an Environmental Assessment covering the preliminary engineering design refinements for Phase 2, and issued it for public review on May 10, 2012. The FTA Regional Administrator issued a Finding of No Significant Impact (FONSI) on December 17, 2012, that stated there were “no significant environmental or socioeconomic impacts associated with the design refinements for Phase 2 of the Dulles Corridor Metrorail Project.” FTA cautioned that should there be any changes in the location of the parking facilities by the counties, or if they need any additional property for the construction of the parking facilities, MWAA must notify FTA immediately to determine if the environmental documents would need revisions.

MWAA questioned whether a NEPA review/re-evaluation is still required if the parking facilities are being procured with local funds, and questioned whether only local requirements should be required. FTA stated that the requirement for a NEPA review/re-evaluation would depend on the location of the parking facilities.

**b. Third Party Agreements**

MWAA reported that there are six Intergovernmental Agreements required for Phase 2: WMATA, Virginia Department of Transportation (VDOT), Fairfax County, Loudoun County, the Town of Herndon, the Dulles Greenway. As of November 4, 2013, MWAA had executed all six Intergovernmental Agreements.

MWAA reported that VDOT is widening Route 606 along the yard site under an on-going improvement project. After discussing the coordination of intersection improvements and an added turn lane required in Package B, MWAA and VDOT agreed to incorporate this work into the Route 606 widening project and MWAA will fund that portion of the work. This work has been included in the VDOT procurement package. MWAA and VDOT agreed on costs and MWAA drafted a funding agreement in early December 2013. During the week of February 28, 2014, VDOT requested that MWAA use a Local Funding Agreement, which is what VDOT uses with local jurisdictions for site improvements. This agreement allows VDOT to recover any additional costs for the work, above the initial funding amount. MWAA and VDOT agreed on the form of the Local Funding Agreement; MWAA signed the Agreement and sent it to VDOT for signature. In June 2014, the Local Funding Agreement was signed by MWAA and executed by VDOT on June 11, 2014. MWAA received approval from FTA for the advanced payment to VDOT; MWAA will issue a check for the agreed cost. MWAA added that the work has been added to the design plans and a Notice of Intent to Award has been issued for the Route 606 widening project.

MWAA provided a summary of the status of finalizing agreements below.

<b>AGREEMENT</b>	<b>STATUS</b>	<b>NOTES</b>
WMATA – New Agreement	Executed on August 7, 2013	Effective date August 7, 2013
VDOT – Amendment of Phase 1 Agreement	Executed on November 4, 2013	Effective date November 4, 2013
Fairfax County – Amendment of Phase 1 Agreement	Executed on May 28, 2013	Effective date May 28, 2013
Loudoun County	Executed on August 7, 2013	Effective date August 7, 2013
Town of Herndon	Executed on July 9, 2013	Effective date July 9, 2013
TRIP II (Dulles Greenway)	Executed on September 30, 2013	Effective date August 1, 2013
Local Funding Agreement with VDOT for Route 606 improvements	Executed on June 11, 2014	Work was added to the design plans prior to execution of the agreement.

**c. Design Status**

Preliminary Engineering is complete for Phase 2. Final design and construction will be performed under the DB contracts for Package A as well as for Package B. Fairfax and Loudoun Counties will manage the final design of the parking facilities included in Parking

Facilities (formerly Package C). The Counties were asked to confirm delivery of those elements as a condition precedent to a TIFIA loan.

**d. Bidding and Construction Status**

- **New Mass Transit Line (Package A)**

Procurement: In August 2012, MWAA issued a Request for Qualifications solicitation for the DB contract for Package A of the Phase 2 Dulles Corridor Metrorail Project. Five DB teams were shortlisted and a final RFP issued on February 6, 2013. At the opening of proposals on April 19, 2013, CRC, a joint venture consisting of Clark Construction Group, LLC and Kiewit Infrastructure South Company, had the lowest responsible and responsive bid of \$1,177,777,000. On May 14, 2013, MWAA formally awarded the Package A Contract to CRC. NTP was issued on July 8, 2013 with a contractual duration for Package A of 1,825 calendar days from NTP. Thus, the Scheduled Substantial Completion Date for Package A is July 7, 2018.

Design: CRC is in the *thirteenth* month of their contract and is continuing design activities. MWAA received the Preliminary Design submittal to establish the code year for building code compliance on July 23, 2013. It is MWAA's position there are still some major deficiencies in the preliminary design document, but since this was the third submittal (second resubmittal) of the preliminary design document, MWAA decided to allow CRC to get a direct reading from the Authorities Having Jurisdiction (AHJ) in order for CRC to take MWAA's comments more seriously. On January 27, 2014, CRC made the Preliminary Design submittal for the entire alignment to the respective AHJs - the Virginia Department of General Services (DGS) and the Airports Authority Building Code Department - to establish the base building code year to be used for the project; CRC also gave the AHJs an overview of how the DB packages will be submitted for permit. The Preliminary Design submittal was transmitted to the AHJs with a cover letter from MWAA that identified what MWAA saw as the deficiencies in the submittal. In addition, MWAA sent a letter back to CRC stating that the Preliminary Design submittal was sent to the AHJs and that it is accepted-as-noted pending the final disposition by the AHJs.

MWAA reported that of the deficiencies, the most serious non-compliance is that CRC did not complete the Rational Analysis (Fire, Life, Safety analyses) which is the fire modeling demonstration of the safe egress path and confirmation of the distances and the egress time. Without the completion of the Rational Analysis, there are major building elements that are subject to change that could potentially change the actual building size itself. The Commonwealth of Virginia Construction and Professional Services Manual (CPSM) requires that the final Rational Analysis be included with the Preliminary Design submittal to achieve the payment milestone.

During the April 2014 meeting, MWAA reported that CRC did submit Fire, Life, Safety analyses in time for the April 3, 2014 meeting with the AHJs. During the meeting with the AHJs, CRC presented the Fire, Life, Safety analyses models to demonstrate to the AHJs that they had used proper methodology. MWAA reported that the outcome of the meeting was that the Preliminary Design submittal was conditionally accepted for the purposes of code basis and advancement of design; however, DGS has reserved accepting the Preliminary Design until such time as CRC revises and resubmits the Route 772

Station design to address DGS comments. *During the August 2014 meeting, MWAA reported that CRC is in possession of a revised Fire-Life Safety Plan and the Exiting Model Study but does not plan to issue the revision as a whole, but as a revision to each station design package submittal.* MWAA reported that the 60% submittal for the Route 772 Station is expected on *January 19, 2015*, at which time MWAA will review the design submittal before it is submitted to DGS for review. DGS is the AHJ for the Route 772 Station. MWAA needs the final disposition from the AHJ because the CRC payment milestone is tied to the approval by the AHJs. MWAA reported that based on the requirements of CPSM, the approval of the Phase 2 Preliminary Design submittal is a required predecessor to the approval of the 60% and 90% design submittals. The design of the Project is expected to take eighteen months, through September 2015.

CRC has submitted 84% of the 60 percent design submittals, 62% of the 90 percent submittals and 34% of the 100 percent submittals. The 60% utility, civil, *wayside facilities*, and trackwork design submittals are complete. MWAA has accepted 60% design submittals for the *structures*, systems and station facilities. All 60% design submittal packages are scheduled to be submitted by *January 2015*. *The 90% utility and trackwork design submittals are complete. MWAA has accepted 90% design submittals for the civil, systems, station facilities, wayside facilities, and structures. All 90% design submittal packages are scheduled to be submitted by April 2015. During the month of July 2014, nine design submittals are submitted by CRC and 12 were reviewed and returned by MWAA; one 40% design package, one 60% design package, five 90% design packages and 5 100% design packages.*

CRC has submitted 100% design submittals for *utilities, trackwork, civil, systems, station facilities, wayside facilities, and structures*; however, MWAA reported that there are a number of issues with the 100% submittals. As a result, MWAA and CRC continue to hold design/comment resolution meetings and plan to have CRC resubmit either a 100% design submittal or a plan check-set for permitting. Weekly design management and review meetings, which started on July 31, 2013, are held to advance the design. MWAA and CRC continue *to* meet on Wednesdays and Thursdays to review the designs, review comments provided, and discuss upcoming submittals. CRC has implemented a design management plan and has defined what will be included in every package and the interfaces between the packages. CRC has also assigned two more senior design reviewers to review the design submittals before they are submitted to MWAA.

As part of the design process for Phase 2, there are a series of meetings leading up to the approval of a design package. First, a kick-off meeting is held between MWAA and CRC to discuss what CRC has proposed for the scope of the design package, whether MWAA thinks the scope proposed is appropriate, and whether additional scope needs to be added to the design submittal. About two weeks prior to the submittal of the design package, a Pre-Submittal meeting is held where CRC reviews what will be in the design package submittal. Once the design package is submitted and reviewed by MWAA, a comment resolution meeting is held. At the end of the process, there is a record of design review. Integration between the design disciplines occurs at these meetings. MWAA added that they are trying to enforce issue resolution to be completed prior to the 90% submittals to reduce delay in submitting the 100% designs for permitting.

MWAA is of the opinion that the CRC design schedule is aggressive, resulting in omissions and incomplete design submittals. MWAA stated that lessons learned from Phase 1 included the contractual requirement for approval at the 60%, 90% and 100% phases of the design in Division 1 of the DB Contract Specifications, in an effort to initiate issue resolution at an earlier phase in the design. The Phase 1 contract document only required MWAA approval at the 60% and 100% design phases. MWAA also continues to issue conformed specifications for late resolutions on design changes on Phase 1 to ensure that the revisions are addressed during the design phase and not during construction.

*Commonwealth of Virginia's Stormwater Management Regulations:* MWAA has also requested that CRC comply with the latest stormwater management regulations. MWAA explained that the changes to revised stormwater regulations require that instead of constructing water retention ponds, CRC will be required to construct a variety of water treatment facilities that focus on water quantity and treating water quality, which could affect stormwater facility right-of-way. CRC plans to integrate the stormwater redesign into design and construction schedules. During the June 2014 meeting, MWAA explained that CRC is required to comply with the Commonwealth of Virginia's SWM Part II-B criteria. MWAA added that although the Virginia Stormwater Management Program (VSMP) Construction Permit allows CRC to be "grand-fathered" into the prior regulations, Virginia Department of Environmental Quality (DEQ) encouraged CRC to comply with the revised criteria to be current with the regulations. In addition, MWAA made a policy decision to implement the revisions to be compliant with the latest regulations. CRC is being requested to comply with the SWM Part II-C criteria at a minimum.

In response to the PMOC request, MWAA provided a draft white paper explaining the revision to the regulations, when the revision went into effect, why the revisions are being implemented and the potential impact to the design and construction costs and schedule of the project on July 8, 2014. The PMOC responded that the white-paper received does not address the total cost and schedule impacts to design and construction. A separate discussion regarding the white-paper was held after the *July 2014* meeting.

MWAA explained that preliminary engineering was performed during the transition in the regulations leaving MWAA with two options; change the criteria to SWM Part II-B and be in conformance with the latest regulations, or move forward with the prior regulations and race to complete the design to ensure that the project is "grand-fathered" into the prior regulations. MWAA made the determination to proceed with the new criteria. MWAA explained that the primary difference in construction is that instead of stormwater from the guideway being collected in a pond and allowed to settle, the new regulations will send the water through a series of constructed wetlands designed to treat and eliminate pollutants prior to the stormwater entering the Chesapeake Bay.

Site-specific maintenance of the constructed wetlands will be the responsibility of the facility owner. Maintenance at the Dulles Airport will be the responsibility of MWAA, along the Greenway will be the responsibility of TRIP II (Dulles Greenway) and the Maintenance Facility will be the responsibility of WMATA. MWAA added that WMATA is aware of the maintenance requirements once this extension to the existing Metrorail system is turned over to WMATA.

Revisions related to SWM Part II-B are being identified as design development proceeds. CRC has stated that the SWM Part II-B design is a change that would require increased design scope. Further design development will identify the extent of scope change, repackaging of design, and property impacts. MWAA added that the initial design submittals based on SWM Part II-B have been submitted for review. The 100% Dulles Airport Stormwater Management design submittal was received in June 2014 and the 60% Stormwater Management - East design submittal was submitted on June 30, 2014; both are under review by MWAA. The 60% Stormwater Management - West design submittal is due in mid-August 2014.

*During the August 2014 meeting, MWAA reported that the Stormwater Study completed in February 2014 had been transmitted to the PMOC on July 29, 2014 along with a revised version of the SWM White Paper; the PMOC provided comments on August 6, 2014. MWAA added that the design has been refined greatly since last month and they are continuing to assess opportunities to reduce the number of stormwater facilities and still meet the DEQ criteria. MWAA to issue a response to the PMOC comments before August 15, 2014. MWAA has issued an offer to CRC to resolve the additional design costs; the offer is under review by CRC. MWAA also stated that it is in the process of evaluating the additional construction impacts; however, the lack of information at this time makes the evaluation difficult. CRC is preparing a presentation to MWAA on the construction impacts. A separate discussion regarding the offer made to CRC was held after the August 2014 meeting.*

The PMOC also requested that the Counties provide white-papers on the impact of SWM Part II-B relative to the design and construction of the parking facilities. Loudoun County stated that the new Stormwater Management requirements are included in the contracts for the parking facilities.

Permits: MWAA attained the Wetlands permit from the Army Corps of Engineers during preliminary engineering. CRC considered doing a re-delineation because they found some areas that were wet on Airport property that were not included in the initial delineation. After discussions with the Airport and DEQ, an accommodation was made that the permit will not be re-delineated, but a permit modification submitted to the Army Corps of Engineers and DEQ showing changed areas based on refinements for technical accuracy. The permit modification was submitted to the Army Corps of Engineers and DEQ on April 7, 2014.

As of the July 9, 2014 meeting, six permits have been issued to CRC; one for tree relocation on the Dulles Airport property; one for the installation of test shafts; one for a laydown area at Materials Road and Auto Pilot Drive on Airport property; one for the first aerial guideway package, to include caissons, columns and pier caps; one for the relocation of utilities at the Airport; and the demolition permit for the United Airlines ground service equipment (GSE) Building Demolition along with the site work around the GSE Building.

*As of the August 2014 meeting, three permit applications are under review by MWAA. A permit application for the Dulles Airport water and sewer should be approved and issued by MWAA by August 11, 2014. A permit application for the 34.5 KV ductbank on Route 28 is under review by MWAA and land use applications for both Fairfax and Loudoun*

Counties are under review by VDOT. CRC continues to meet with the various permitting agencies as necessary.

Construction: Tree relocation started on May 2, 2014 along Auto Pilot Drive, and the test shafts at the three locations within the Airport property are installed and testing completed. MWAA reported that the construction of the aerial guideway from the Cargo 5 Building north to Auto Pilot Drive is ongoing. *As of the August 2014 meeting, MWAA reported that 20 drilled shafts and 7 columns have been placed. The first pier cap is scheduled for concrete placement during the week of August 18, 2014. CRC has also started survey work and clearing trees from the yard lead area in preparation for the placement of foundations.* Utility relocation for dry utilities along the aerial guideway and in the Dulles Airport Station areas are ongoing as well as demolition of the GSE Building. The gate at the United Airlines GSE Building was removed and a new security fence installed around the building removing the building from the Air Operations Area.

Geotechnical borings and survey activities continue throughout the entire Phase 2 corridor, including the Dulles International Airport Access Highway (DIAAH). The survey and geotechnical plans have been reviewed and approved, and the work ongoing. MWAA received the final geotechnical design report from CRC and on January 7, 2014, MWAA accepted the report with the exception that CRC not use rammed aggregate piers for the deep foundations as proposed as part of CRC's early design. Initial survey activities are completed and the initial layout for structures is complete.

Geotechnical borings are *currently* complete; *although additional borings may be required as the result of future design.* Additional borings are added as the boring results are analyzed. Location verification of existing utilities is complete for the initial set of borings, and CRC is continuing the survey investigation for proposed jack-and-bore utilities and new utilities crossings. The focus is currently on the wayside facility areas; however, work has been performed in the median of the DIAAH, at the Dulles Airport and out into the Dulles Greenway. Work in the area of the yard lead is scheduled to start shortly.

Schedule: MWAA accepted CRC's cost-loaded Proposal Schedule for the first six months with a maximum payment of \$50 million, in addition to the cost of bonds, and insurance as a condition of the contract award. In August 2013, CRC resubmitted a revised cost-loaded Proposal Schedule. The revised Proposal Schedule was "Accepted as Noted" by MWAA Letter No. MWAA-P2-01014 dated September 4, 2013.

The Baseline Schedule was to be submitted by CRC on November 5, 2013, 120 days from NTP, per contract. CRC did not meet this contract milestone on time and MWAA requested the immediate submission of the first draft of the Baseline Schedule via Letter No. MWAA-P2-01115 dated November 8, 2013. CRC formally submitted the draft Baseline Schedule on November 26, 2013 and meetings were held in December with CRC to review the draft Baseline Schedule and provide comments. On December 31, 2013, MWAA received CRC's draft Final Baseline Schedule, which addressed MWAA's previous comments. MWAA has accepted-as-noted the draft Final Baseline Schedule, and CRC made some minor changes to the schedule. CRC resubmitted the Final Baseline Schedule on February 14, 2014 and MWAA "Accepted-as-Noted the schedule on February 25, 2014. As of February 28, 2014, CRC was working and billing to the

Final Baseline Schedule. As requested, the Final Baseline Schedule was transmitted to the PMOC on March 6, 2014 for review. The Final Baseline Schedule is both cost-and resource-loaded and includes about 12,500 activities. Currently the critical path is through the construction of the Innovation Center Station and shows zero float.

CRC's *June* 2014 update of the Package A Project Schedule was received on *July 16*, 2014 showing a delay of 243 calendar days, no change from the *May* 2014 update. The *June* 2014 update included the Time Impact Analysis (TIA) schedule submitted to MWAA on April 18, 2014 for design change due to the revised SWM Part II-B Criteria. CRC attributed the delay to the redesign required due to revised SWM Part II-B Criteria. However, MWAA has not accepted the reason for the delay as the Project Schedule Update does not address CRC's delay in obtaining approval of the Preliminary Design submittal. MWAA *continues* to meet with CRC to discuss the Package A delays, including the TIA; and requesting mitigation measures to both the design and construction schedules due to the SWM Part II-B revisions. *As stated above, MWAA has issued an offer to CRC to resolve the additional design costs due to the SWM Part II-B criteria change; the offer is under review by CRC.*

*MWAA added that the June 2014 update of the Package A Project Schedule was missing a lot of required information. After a review of the June 2014 update, MWAA returned over 60 comments to be addressed by CRC. A meeting was scheduled on August 7, 2014 to review the comments, however MWAA does not anticipate approving the June 2014 update. MWAA reported that the critical path is altered from the Final Baseline Schedule due to the design impact of SWM Part II-B criteria change. The primary critical path is the design and construction of stormwater management ponds in the east of Dulles Airport, followed by at-grade guideway construction in the east of Dulles Airport.*

*During the July 2014 meeting, the PMOC questioned what is being done by MWAA to ensure that a workable schedule is received from CRC for the Phase 2 Project. MWAA responded that 5% is withheld from CRC's monthly payment application for the rejection of the monthly schedule update; therefore there is an incentive for CRC to submit a workable schedule for MWAA review and approval. MWAA added that 5% was withheld from the April 2014 payment application due to the rejection of the April 2014 schedule update.*

*In a follow up the PMOC request that going forward, the Revenue Service Date be updated during the monthly progress meeting, MWAA stated that there is a concern in providing a Revenue Service Date before the resolution of the SWM Part II-B criteria change. During the meeting, the PMOC added that a Phase 2 Project schedule also be provided.*

- **Dulles Maintenance Facility (Package B)**

Package B will include the final design and construction of the WMATA Maintenance Facility and Storage Yard at the northwest corner of the Dulles Airport property. The yard storage tracks will have an initial storage capacity of 168 railcars, with the ability to expand to 228. The scope of Package B also includes the design and construction of at-grade rail tracks; facilities for railcar service and inspection; facilities for train dispatch, operation, and supervisory personnel facilities; facilities for police and security personnel; facilities for maintenance of way and materials warehouse; a yard control

tower; communications, traction power substations, and train control facilities and equipment; roadway construction and improvements.

MWAA received comments from WMATA on the Package B contract documents and incorporated those comments in the procurement documents and the statement of work, finalizing the contract drawings for Package B based on the reduced scope using some of the original plan details and layouts. MWAA stated that there were no major changes resulting from the WMATA review. The contract drawings went through two cycles of reviews by MWAA and WMATA, which included the specifications and the statement of work.

A two-step solicitation method similar to the procurement of Package A is being followed wherein MWAA issued a Request for Qualifications Information (RFQI) followed by a request technical proposals and price proposals. The change from Package A is that instead of issuing a shortlist in response to the RFQI, MWAA just prequalified potential bidders on a pass/fail basis. The RFQI provided the minimum requirements for qualification. MWAA then issued a RFP package to all qualified potential bidders, and held collaboration meetings with each team to clarify the understanding of the requirements. The technical proposals were evaluated again on a pass/fail basis, and the price proposal will be low bid. This process was presented to the MWAA Board of Directors in October 2013 for concurrence and the MWAA Board of Directors did concur with this approach.

MWAA sent a letter to WMATA confirming a budget for Package B of \$280 million, stating what scope will and will not be included in the base contract package. MWAA added that the procurement included options for the other scope items requested by WMATA but not in the base contract package.

MWAA issued the RFQI solicitation for the Package B Contract on November 12, 2013, and four qualification statements were received on December 20, 2013. A meeting of the evaluation panel was held to determine which offerors are qualified. The RFQI process is complete and all four offerors were determined to be qualified. Two teams were also bidders on Package A. MWAA issued the RFP to the each of the four teams on February 11, 2014 and began the collaboration meeting process during the week of February 17, 2014. Collaboration meetings continued through the week of April 4, 2014 and MWAA issued amendments and clarifications to the RFP based on feedback and questions received during the collaboration meetings.

Technical Proposals were received from all four offerors on April 18, 2014. However, MWAA required clarifications to the technical proposals from all of the offerors, resulting in a delay to the procurement of about two weeks. Supplements to the technical proposals were received on May 22, 2014 and the evaluation completed by MWAA on June 3, 2014. All four offerors were determined to meet the technical requirements and invited to submit a price proposal. Price proposals were received on June 27, 2014. MWAA Procurement performed a responsibility determination and the lowest qualified bidder was selected. Final contractor selection and Notice of Recommended Award was announced on July 2, 2014, to Hensel Phelps Construction Company (HPCC). *HPCC signed the contract on July 29, 2014 and MWAA issued NTP on August 18, 2014. The Preconstruction meeting was also held on August 18, 2014.*

The lowest qualified bid was \$252,989,000, which is under the Package B budget of \$280 million. The \$252,989,000 bid includes two options for the other scope items requested by WMATA but not in the base contract package. MWAA added that the SWM Part II-B regulations are included in the Package B Contract.

Substantial completion is scheduled for *August 17, 2018*. MWAA advised that because this is a construction contract approval, an award by the MWAA Board of Directors is not required; the Contracting Officer will award the contract.

- **Advanced Earthwork for Maintenance Facility (Package S)**

The Phase 1 contractor used the site of the proposed Dulles Maintenance Facility to stockpile excavated material. To construct the new facility, it will be necessary to move most of the stockpiled material and re-grade the site. MWAA has awarded an Advanced Earthwork contract to move the stockpile to another site on Dulles Airport property. MWAA reported that the Package S contract documents were revised prior to advertisement to ensure that the work for Package S is no longer within the Dulles Airport Air Operations Area. The same coordination procedures used during Phase 1 are already in place with the Dulles Airport staff and notices have been re-issued.

Procurement: MWAA issued the Advanced Earthwork contract (Package S) solicitation on June 27, 2013 and held the pre-proposal conference on July 12, 2013. Ten bids were received on August 12, 2013 and a Notice of Recommended Award was sent to the lowest responsible bidder the week of August 26, 2013. The lowest bidder was found nonresponsive because it failed to demonstrate the required experience for its lead designer. The lowest bidder exhausted the protest process and did not forward the appeal to FTA. FTA was notified of the protest denials by MWAA.

MWAA then contacted the second lowest bidder; however, on October 7, 2013, that bidder was disqualified due to noncompliance with the DBE substitution requirements. The second lowest bidder sent a letter to MWAA on October 10, 2013 asking for reconsideration, and filed a protest on October 14, 2013, which they have since dropped.

MWAA issued a Notice of Recommended Award to the third lowest bidder, ACMC, on November 1, 2013. Their bid was \$5.950 million, well under the engineer's estimate of \$18.52 million. NTP was issued on November 18, 2013, with a contractual duration of 385 calendar days from NTP, which results in a December 8, 2014 completion date.

Design and Permits: ACMC completed the initial field survey work, the wetland delineation assessment, the 100% design submittal, and has submitted their Section 404 permit modification for wetland impacts. ACMC submitted the 100% design submittal in late January 2014 for MWAA review. ACMC incorporated MWAA's comments and provided the interim final design submittal on March 4, 2014 for MWAA review. The interim final design submittal received on March 4, 2014 was the basis of MWAA permit application to begin the early erosion and sediment controls activities; however, the soil stability calculations were missing from the design package. The MWAA Construction Permit was issued on April 23, 2014; however, the approval for the installation of the erosion and sediment controls was issued prior to the issuance of the construction permit. Installation of the erosion and sediment controls began on April 21, 2014.

The revised final design package, including the slope stability calculations, was submitted May 15, 2014 for MWAA review and comment. MWAA noted that the Soil Stabilization Calculations submitted by ACMC on May 15, 2014, did not match the interim final design submittal. A revision to the final design submittal was received from ACMC on June 26, 2014. Inspections were performed by the MWAA Environmental Code Department once the erosion and sediment control installation and the haul roads are completed so that the MWAA Environmental Code Department can confirm that all requirements have been met and the final design package accepted in order to get a permit amendment for ACMC to start hauling materials. MWAA anticipated completion of the erosion and sediment control installation and the haul roads by July 11, 2014 *and MWAA approved the design package on July 17, 2014 with one comment.*

MWAA also received the request for minor modification to the Section 404 permit, which MWAA submitted to the Army Corps of Engineers and DEQ on February 7, 2014. The DEQ Water Protection Permit modification was approved on March 6, 2014. Approval from the United States Army Corps of Engineers was also received on March 6, 2014. The VSMP permit application was submitted to DEQ on March 12, 2014 and approved on April 7, 2014.

During the March 6, 2014 meeting, MWAA reported that it was in the process of transferring the site from Dulles Transit Partners, LLC (DTP) to the Package S Contractor, ACMC. DTP has completed hauling dirt to the Dulles Maintenance Facility site and hydro seeding the site for final turnover. On February 4, 2014, the MWAA Environmental Officer, DEQ, DTP and ACMC conducted a joint walk-down to review DEQ's requirements for the transfer of responsibility for the site from one contractor to the other. Site turnover of Laydown Area 11 was pending the resolution of soil stabilization issues by DTP that need to be completed before DTP has completed their obligation. During the July 9, 2014, meeting MWAA reported that DTP has completed the soil stabilization work, closed-out the DEQ and MWAA permits and fulfilled its environmental permit obligations to be issued the VSMP permit for the Laydown Area 11 site. As of June 25, 2014, control and custody of the Laydown Area 11 site was turned-over to ACMC.

Construction: Installation of erosion and sediment control measures began on April 21, 2014 and *were* completed by July 11, 2014. Construction of the haul road and the clearing work began in May 2014 and *were* also completed by July 11, 2014. Removal of the soil *began* in July 2014 *and is approximately 37% complete.* MWAA added that *ACMC is using as many as twenty, 23 cubic-yard trucks and eight 50 cubic-yard trucks to haul the stockpiled material, and should the weather remain clear, ACMC should be able to meet the October 4, 2014 milestone.*

Schedule: MWAA held a start-up meeting with ACMC on December 6, 2013 to review their management plans and to review their detailed baseline schedule. During the month of December 2013, ACMC submitted their management plans all of which were accepted by December 31, 2013. The Baseline Schedule for Package S was submitted by ACMC in December 2013 and returned Accepted as Noted on January 10, 2014.

During the May 2014 meeting, MWAA reported that there might be a delay to the Package S project schedule due to lack of access to Laydown Area 11; however, as of the

March 2014 schedule update, the project schedule showed an overall delay of two calendar days. APMC's June 2014 update of the Package S Project Schedule was received on July 9, 2014 showing a delay of 69 calendar days due to DTP's failure to turnover Laydown Area 11; *an additional 1 calendar day from the May 2014 update*. After a review of the Project Schedule update, MWAA is of the opinion that the schedule is not reflective of actual events and that there are areas for schedule mitigation. MWAA is in the process of negotiating the delay claim with APMC and anticipates approving additional time to the interim milestone, Complete Soil Hauling and Disposal, but not the Contract Substantial Completion Date. MWAA is of the opinion that APMC has the capacity to beat its production rates included in the baseline schedule. MWAA also believes that schedule mitigation may include the use of additional shifts and equipment. The PMOC questioned whether APMC could submit a claim for acceleration. MWAA responded that APMC cannot claim acceleration for their own delays in receiving approval of the final design submittal.

During the August 2014 meeting, MWAA provided the following schedule milestones for Package S:

MILESTONE	DATE
Options Evaluation for Removal of Soil from Maintenance Facility Site Complete	September 2012 (Actual)
Management Decision on Location for Soil Disposal	December 2012 (Actual)
Issue Final Invitation for Bid (IFB)	June 2013 (Actual)
Final Contractor Selection	October 2013 (Actual)
Contract Award	November 2013 (Actual)
Issue NTP	November 2013 (Actual)
Start Soil Hauling and Disposal	July 2014 (Actual)
Complete Soil Hauling and Disposal	October 4, 2014
Contract Substantial Completion Date	December 8, 2014

MWAA stated that it has advised the Package B offerors that they will not have guaranteed access to the Package S site until January 1, 2015. The PMOC questioned whether MWAA should revise the date due to the delay to the Package S Project schedule. MWAA stated that a time extension has not been issued for the Package S Project and believes that the completion date can be mitigated.

- **Parking Facilities(formerly Package C)**

At present, Fairfax County and Loudoun County plan to design and construct the five required parking facilities. Both Fairfax County and Loudoun County are in the procurement process; however, the final location of the parking facilities is not determined at this time. The Counties anticipate final location of the parking facilities by summer 2014. Any NEPA issues will be resolved once counties identify the final locations of the parking facilities.

Fairfax County: Fairfax County is currently responsible for two parking facilities: one at the Innovation Center Station and one at the Herndon Station. At the December 5, 2013

monthly PMOC meeting, Fairfax County reported that it has hired the architectural, parking, engineering and traffic consultants for both the Innovation Center and Herndon parking facilities. Both the Innovation Center and Herndon parking facilities are in the schematic design phase, and Fairfax County is reviewing location options submitted by the design consultant.

The final locations for the parking facilities *are in the process of being* determined. On July 30, 2013, Fairfax County approved a Real Estate Exchange Agreement for the site of the Innovation Center Station *parking facility*. The Agreement provides for the exchange of property and property acquisition necessary to implement a joint development plan. On May 15, 2014, Fairfax County obtained unanimous approval of the land use case from the Fairfax County Department of Planning and Zoning. Final acceptance to proceed with the relocation of the parking facility *was approved* by the Fairfax County Board of Supervisors on July 29, 2014. *The parking facility will be moved to the south of the location shown in the preliminary engineering plan. Fairfax County stated that the scope and size of the Innovation Center Station parking facility will not change from what was provided in the NEPA documents.*

At the Herndon Station, Fairfax County *evaluated* a concept to shift the location of the parking facility from what is shown in the preliminary engineering plan from the west side to the east side of the station location. The County owns the site shown in the preliminary engineering plans on the west side and is in *negotiations* with the adjacent landowner on the east side to initiate a land swap in order to relocate the parking facility. Fairfax County is also in negotiations with an adjacent land owner to purchase some additional real estate for the parking facility. This will allow the County to reconfigure the site. Fairfax County anticipates resolving all issues with the adjacent landowner and the final location of the parking facility *within the next 30-days*. *Fairfax County added that the scope and size of the Innovation Center Station parking facility will not change from what was provided in the NEPA documents.*

*Fairfax County reported that it will formally advise MWAA of the final locations of the parking facilities once the negotiations for the land acquisition at the Herndon Station parking facility is completed.* A determination of NEPA requirements will be resolved after approval of *both* land use cases is received from the Fairfax County Board of Supervisors.

*Fairfax County reported that the design schedule for the parking facilities has slipped by 30 to 60 days. Fairfax County anticipates schematic design to continue through September 2014 with the start of final design in Fall 2014. Anticipating twelve months for design, NTP for construction in late 2015, and thirty months for construction, Fairfax County anticipates a project completion date of May 2018.*

The County's Department of Public Works and Environmental Services is the lead county agency for the design and construction of both parking facilities, and will be responsible for the project management and oversight of both projects. Fairfax County anticipates issuing a Design-Bid-Build solicitation through the Public Works and Environmental Services Department for the construction of both of their parking facilities. The County plans to design, construct, own, maintain, and operate both parking facilities. The selection of a firm to complete the final design for the parking

facilities was expected in late August 2013. However, this was delayed because the conceptual designs are not yet completed. The question with regard to whether or not a NEPA review is required needs to be resolved.

Fairfax County has authorized approximately \$2.5 million to start design work on both parking facilities, and completion of construction is expected in April 2018.

Loudoun County: Loudoun County is currently responsible for three parking facilities: one at the Route 606 Station and two at the Route 772 Station. On November 16, 2012, Loudoun County issued a Solicitation for Conceptual Proposals through the Public-Private Transportation Act of 1995 for the Loudoun County Parking Facilities. The solicitation requested the submittal of conceptual proposals from qualified private entities for the finance, design, development, construction, and operation of the parking facilities for Route 606 and 772 Stations. Following a detailed review of the proposals by Loudoun County staff, an action item was presented to the Loudoun County Board of Supervisors requesting their approval to proceed with a Best and Final Offer for the three parking facilities. At its meeting on July 17, 2013, the Board voted to reject the three initial proposals received through a Request for Information process. The Board voted instead to solicit new proposals through a RFP process.

Loudoun County has affirmed its strong desire to procure the parking facilities outside of the MWAA program, and intends to privatize the three parking facilities. However, should the privatization process fall short of the County's expectation for acceptance, Loudoun County would move forward with the second option for acceptance of responsibility for the parking facilities, which would be to build the parking facilities through the County using a DB approach.

Procurement of the parking facilities in Loudoun County is proceeding on schedule. On September 3, 2013, Loudoun County issued a RFP for the design, construction, financing, operation and maintenance of the three Phase 2 parking facilities. Bidders could propose on one, two or all three sites, and the bidder for the Route 772 North parking facility will have to provide proof of ownership of the site. During the November 6, 2013 meeting, Loudoun County reported that they received four proposals for the privatization of each of the three parking facilities on October 30, 2013. Loudoun County has reviewed the proposals and one was deemed nonresponsive at the Route 772 North parking facility because the offeror did not provide proof of legal ownership of the property or the ability to own the property, which was a requirement of the RFP. Loudoun County has assembled a procurement team that is reviewing and scoring the proposals received. Jones Lang LaSalle is leading the procurement review team due to the financial component of the proposal, and both MWAA and WMATA members were added to the procurement review team as technical members. The procurement review team has met twice to summarize the financials and to perform a cursory review of the financials and feasibility of the proposals received.

Oral interviews were held in December 2013 with each of the teams. The RFP required that offerors adhere to the preliminary engineering location of each of the facilities; all did with the exception of one team that is proposing that the Route 772 North site be moved to a site that they own within walking distance of the station area. Loudoun is

looking at what kinds of impacts, (time delay, penalties, etc.) will be incurred due to a change in the site location.

On January 16, 2014, the Loudoun Board of Supervisors voted in favor of the County taking responsibility for the funding and construction of the Route 606 and 772 North and South parking facilities. In addition, in the same motion the Board directed staff to pursue further evaluation of all four of the Public-Private Partnership (PPP) offers for each of the parking facilities, citing that all are in the range of general acceptance. Linked to the garage procurement, the Chairman indicated that staff was in the process of obtaining DB estimates for the parking facilities as well. This will establish a parallel path should the PPP approach fall short. The estimates will also provide an independent design and construction estimate for each garage.

At the January 8, 2014 meeting, FTA requested a timeframe for Loudoun County to make a recommendation to the Loudoun Board of Supervisors for a selected offeror(s) to procure the parking facilities. Loudoun County reported that at the January 15, 2014, Loudoun Board of Supervisors meeting, the Board voted to finance and construct the Loudoun County garages separate from the Dulles Corridor Metrorail Project, subject to receiving TIFIA funds for their share of the Project. Subsequently, in accordance with the Commonwealth of Virginia Public-Private Transportation Act of 1995, on February 12, 2014 there was a public hearing on the four proposals that were posted on the Loudoun County website ([www.loudouncounty.gov/procurement](http://www.loudouncounty.gov/procurement)).

Loudoun County distributed a second round of questions to each team. The questions are specific to each team's submittal and focus on clarification of financial areas in their respective proposals. Questions were derived from an early series of one-on-one discussions with the offerors. All questions received from the offerors during the week of February 28, 2014 were financial in nature.

On March 5, 2014, the Loudoun Board of Supervisors met in closed session for staff to provide the Board with the following information:

- 1) In-depth financial details for each of the four offerors. This information is currently being assembled with the assistance of Jones Lang LaSalle.
- 2) Two independent DB cost estimates based on similar specified parking facilities in order to establish a baseline for negotiation. Loudoun County contacted MBP Engineering and requested that they contact DB contractors that build parking facilities for a detailed breakdown and capital cost estimate in order to compare to the types of costs received from the four offerors. Loudoun County asked that the DB contractors not be identified so as not to preclude them should opportunities become available.
- 3) Details on the approach and content to be used during the negotiations and to identify benchmarks for each negotiation.
- 4) Once negotiations are completed, provided the process of assessing whether the benchmarks were achieved during negotiations, and what the follow-up activities would be. The Board will also be provided with a decision matrix for the final approval for privatization that will identify and determine the factors for selection.

During the closed session on March 5, 2014, the Loudoun Board of Supervisors approved the Design-Build-Operate-Maintain and Finance (DBOM+F) method for the procurement of the parking facilities. They discussed and decided on the parameters for the Best and Final Offer (BAFO). The request for a BAFO was transmitted to all four of the bidders on April 11, 2014 and the BAFOs were received from all bidders on May 14, 2014. Loudoun County reviewed the BAFOs and issued a short list for each parking facility for negotiations. A recommendation to start negotiations for the DBOM+F contract award for each of the parking facilities was approved by the Board of Supervisors at the June 10, 2014 meeting. Jones Lang LaSalle will lead formal negotiations for the County.

During the *August* 2014 meeting, Loudoun County provided an update on each of the parking facilities:

- Route 772 North – The recommended DBOM+F contractor, Comstock Construction, has proposed that the parking facility be constructed on property owned by Comstock which is different from the site identified in preliminary engineering *plan*. Loudoun County advised the MWAA has not been officially notified of the change in location of the parking facility pending a successful negotiation with Comstock. MWAA stated that it is its understanding that in accordance with the Record of Decision for the Phase 2 Project, there would need to be an administrative reevaluation to determine if there are any changes in the impacts due to the change in location of the parking facility. Loudoun County provided a copy of the area showing the change in property and explained that the site eliminates the need to cross a heavily traveled vehicle intersection and that the number of parking garages have not changed.

*As of the August 7, 2014 meeting, Loudoun County reported that negotiations are ongoing, and formal notification to MWAA regarding the change in location of the Route 772 North Station parking facility is pending completion of negotiations. Should negotiations fail and Loudoun County choose to self-perform using the DB Contractor, the location of the parking facility would still move to the south of the site identified in preliminary engineering plan; but not the same site as proposed by Comstock Construction.*

- Route 772 South and Route 606 – The recommended DBOM+F contractor, Nexus Properties, Inc., has proposed that both of the facilities be constructed on the sites identified in preliminary engineering. *As of the August 7, 2014 meeting, Loudoun County reported that negotiations are ongoing.*

The Board also approved the County's request for \$3 million to hire a DB Contractor to commence a parallel process for design, construction, and operation of the parking facilities. At a to-be-defined stage in the negotiation process, Loudoun County staff must assess the status of negotiations; assign a confidence level and level of risk associated with each private offeror. As a backstop to ensure that the garages are constructed and ready for operation by the start of revenue service, Loudoun County is taking a proactive approach to maintain its commitment to the Project that the garages will remain the responsibility of the County. Should the objective to privatize the financing, construction, and operation of the garages be determined not to be in the County's best interest, this parallel process will enable Loudoun County within a predefined timeframe, to continue the parking facilities with the DB Contract without a significant delay and engage a

garage operations and maintenance firm. Either of these approaches is phased to ensure garage completion and testing prior to the start of revenue service. The RFQ for the DB is currently being developed; *the first draft was issued for review on August 11, 2014 and Loudoun County anticipates completion and issuance of the DB RFQ in September 2014. Loudoun County has also requested that MWAA review the RFQ and provide comments. At the August 2014 meeting, Loudoun County reported that a date of January 2015 has been set as the “go/no-go” date with the PPP, based on a completion date of April 2018.*

During the April 2014 meeting, Loudoun County reported that it anticipates commissioning the parking garages in April 2018; three months prior to the Phase 2 project substantial completion date of July 2018.

**e. Other Phase 2 Contracts**

- Structural Inspections and Special Inspections

An RFP was issued December 27, 2013, for a contract to perform structural inspections and special inspections on rail stations, guideways, bridges and substations which are part of the Project. Proposals were received on January 30, 2014. The contract was approved by the MWAA Board of Directors on April 16, 2014, and was awarded to Professional Services Industries (PSI) on April 18, 2014. CTI Consultants, Inc. filed a protest on April 28, 2014. The protest was denied on May 1, 2014, by the Manager of Procurement and Contracts. On May 13, 2014, CTI requested a review, by the MWAA CEO, of the rejection of the protest. On June 9, 2014, the CEO confirmed the protest denial decision and denied CTI’s review request.

- Building Code Plan Review and Inspection Services

An RFQI was issued on December 23, 2013, for a consulting firm to conduct building code plan review and inspection services for the Project. The firm will also conduct review of stormwater management plans, provide associated erosion and sediment control inspections, plan review and enforcement services, and provide general environmental services as assigned during construction of the Project. Qualifications were submitted on January 23, 2014, and the contract was approved by the Airports Authority Board of Directors on April 16, 2014. The contract was awarded to IBTS Government Solutions on May 29, 2014. Task Order 1 was issued with NTP on June 5, 2014.

- Environmental Professional Services

The contract for environmental professional services needed to support the completion of Environmental Due Diligence Reports (Environmental Screening Assessments, Phase I Environmental Site Assessments, and Phase II Environmental Site Assessments) for real estate acquisition on the Project was awarded to Environmental Alliance, Inc. on March 25, 2014.

**f. Real Estate and Project Development**

MWAA submitted their Real Estate Acquisition Management Plan (RAMP), Revision 0, for Phase 2 on August 19, 2013. The PMOC requested the appendix listing the Phase 2 properties, which was received by the PMOC via the Property Acquisition List letter

dated September 27, 2013. Details of the required properties will be developed during the design phase of the Package A Contract. The PMOC reviewed the RAMP and provided comments to FTA on November 13, 2013. A teleconference to discuss the comments and the changes from the Phase 1 RAMP was held on November 15, 2013, and MWAA resubmitted the RAMP, *Revision 1*, in response to the comments on February 5, 2014. FTA provided comments on the RAMP, *Revision 1*, on February 26, 2014 and MWAA resubmitted the RAMP, *Revision 2*, on April 1, 2014 incorporating all previous FTA and PMOC comments, including those provided on February 26, 2014. Prior to the June 2014 meeting, a conference call was held with Pamela Peckham, FTA Realty Specialist, to discuss FTA comments to the RAMP. FTA also transmitted its comments on the RAMP to MWAA on July 9, 2014 for incorporation into the next revision of the RAMP. *MWAA addressed the comments and resubmitted Revision 3 to the RAMP, including Procedure P2M-3.01, on August 6, 2014. The PMOC recommended that FTA accept this revision and the FTA letter accepting the RAMP was forwarded to MWAA on August 18, 2014.*

MWAA reported that the letter submitted to FTA in 2007 requesting to raise the threshold values to \$100,000 and \$1,000,000 respectively was for the entire 23-mile corridor and not only Phase 1. In addition, FTA's approval letter October 5, 2007 did not preclude Phase 2 nor did it specify Phase 1. As a result, MWAA determined that the threshold increase applied to the entire corridor, and in response to FTA, MWAA submitted a letter requesting to reauthorize the threshold limits used for Phase 1 for Phase 2 by January 8, 2014. MWAA submitted a supplement to the letter, in accordance with the FTA Circular 5010.1D, to FTA on February 6, 2014. FTA stated that approval of the threshold letter is pending FTA review of the revised RAMP. During the May 6, 2014 meeting, MWAA expressed the need for the approval to increase the threshold limits as there are several acquisitions that will be above the current threshold. On July 3, 2014, FTA approved the increase for threshold limits for the Dulles Phase 2 Project.

Responsibility for Phase 2 right-of-way will be directly under MWAA and not the DB Contractor as in Phase 1. The exception to this is that CRC is responsible for utility relocation and property acquisitions outside of the parcels that MWAA has identified as part of the preliminary engineering plans. In conjunction with CRC, MWAA has identified the project parcels and broken them into priorities (1, 2A, and 2B) under the contract.

Priority 1 parcels were identified by MWAA during preliminary design as the primary parcels that would be needed by the Package A Contractor. MWAA has developed Property Identification Plans (PIP) for the Priority 1 parcels based on CRC's current design and CRC is responsible for verifying the PIPs are adequate to support construction. The Project team will be the negotiator and relocation manager for the Priority 1 parcels and MWAA has retained consultants for the appraisal and appraisal review work associated with the acquisition of the Priority 1 parcels. MWAA has one year to deliver the property once the PIP is verified by CRC. CRC has verified the Priority 1 PIPs for parcels 207, 214, 220 and 237. MWAA reported that no new properties will be moved into Priority 1; however, Priority 1 properties can be deleted. In addition, any additional properties identified as high priority (not identified as Priority 1) will become Priority 2A.

Priority 1 parcels are primarily for the stormwater ponds and the ancillary facility locations. MWAA is beginning to develop the property appraisals and the right-of-way plans for the Priority 1 acquisitions where access is due to CRC by March 15, 2014. The first parcel submitted to FTA for concurrence and review is Parcel 207 (north side of Reston Town Center). Concurrence was received from FTA, and MWAA made an offer to the property owner the week of February 14, 2014. The property owner indicated to MWAA that it was performing an engineering verification of the property limits and submitted additional questions. During the May 6, 2014 meeting, MWAA reported that it is responding the questions from the property owner and anticipated receiving a counter-offer from the landowner to continue negotiations. However, during the June 2014 meeting, MWAA reported that Parcel 207 will have to be condemned due to non-responsiveness from the property owner; the impasse letter was transmitted in early June 2014. *During the August 2014 meeting, MWAA reported that Parcel 207 had been acquired through condemnation of the property; the property owner expected the condemnation.*

Parcels 220 (Sprint Building) and 237 (Dulles West Office Building) are the next Priority 1 acquisitions in the process based on CRC's needs; neither are appraised for over \$1 million, so they may not need FTA review. *During the August 2014 meeting, MWAA reported that the offer package had been presented to the Parcel 220 property owner in July 2014.* For Parcel 237, CRC has revised the layout in the PIP significantly reducing the number of parking spaces' impact to the property. The revised appraisal is also complete and MWAA *held a pre-presentation* meeting to the master leaseholder for the property on July 16, 2014. *MWAA plans to issue an offer for Parcel 237 shortly however the offer is being refined as MWAA anticipates a contentious negotiation.* MWAA/USA is the property owner of Parcel 237.

The last of the original Priority 1 properties is Parcel 214 (section of land on Sunset Hills next to the Target and a gas station). This parcel was also affected by the stormwater redesign issues; however, the appraisal is complete and the offer was made to the landowner in June 2014.

CRC is also re-prioritizing the Priority 2A and 2B acquisitions; however, they are not needed by the March 15, 2014 deadline. CRC has acknowledged that the PIPs are being submitted late, and it will probably be late Spring/Summer before the Priority 2 acquisitions can go into the negotiation phase with the parcel owners. During the May 2014 meeting, MWAA reported that it is working with CRC on refining the PIPs for several of the Priority 2A acquisitions, most of which are within the Airport property. Parcels 231 and 238, are the first two Priority 2A acquisitions for which CRC has submitted PIPs. MWAA has received Rights-of-Entry with the users at the Dulles Airport to accelerate the acquisition process. MWAA is working with the Real Estate Manager at the Dulles Airport to review leases and is using the lease provisions for the Rights of Entry. MWAA is also relocating tenants within the Dulles Airport to accommodate CRC's construction activities. Also, to accommodate CRC's construction activities, MWAA has expedited some of the Dulles Airport properties. MWAA reported that parcels 238 and 240 will be available to CRC in summer 2014 for guideway construction and laydown area. *MWAA reported that the PIPs have been received from CRC for Parcels 238 and 240 for acquisition processing and MWAA anticipates*

*receiving the PIP for Parcel 231 for processing shortly. MWAA is waiting for the design to progress for CRC to produce more PIPs to support further property acquisition.*

Third-Party Appraisal Review Services Contract: An RFP for Phase 2 appraisal review services was issued on June 7, 2013 and an award issued to Appraisal Review Specialists, LLC, on October 10, 2013. The majority of the Priority 1 appraisals have been completed by the appraisal consultant, Parli Appraisal, Inc., and are with the review appraiser. MWAA added that the PMSS team would be the negotiator and relocation manager for the Priority 1 parcels. Because some of the properties are at the airport, MWAA is dealing with leaseholds as opposed to the property owners for the acquisition of airport parcels.

Third-Party Property Acquisition Consultant Contract: MWAA has also retained a property acquisition consultant for the remainder for the parcels (Priority 2 and 3) using VDOT's specifications. The RFP was issued on May 23, 2013, and the contract was awarded on August 26, 2013 to Stantec Consulting Services, Inc. A kickoff meeting was held on November 8, 2013.

Archeological Investigation: During the January 8, 2014 meeting, MWAA reported that although they had hoped to have the archeological investigation completed by the end of 2013, the archeological investigation was suspended with concurrence from the State Historic Preservation Office (SHPO), as the water table had risen. MWAA estimated that there are six test pits remaining; however, completion of the remaining test pits was not holding up the remaining geotechnical work that CRC needed to complete.

During the June 5, 2014 meeting MWAA reported that the archeological investigation in the area of the Yard Lead west of the guideway line will resume the week of June 9, 2014 and the remaining work should take approximately two weeks. The archeological investigation was reported as being completed during the July 9, 2014 meeting. Nothing of significance was found. MWAA understands that it has concurrence from SHPO not to perform the last step of the investigation, which was to be mechanical exploration, since they have found nothing of significance thus far. SHPO has issued their concurrence that the activity in that western area of the Yard Lead is subject to no further evaluation because it is wetland and due to the realignment of the guideway, no structures or track will be built in that area.

Commonwealth of Virginia's Stormwater Management Regulations: MWAA reported no additional right-of-way should be needed because of revisions in regulations and, therefore, no new agreements are being contemplated at this time. MWAA added that at most, temporary construction easements may be needed. No new private ponds or shared use private ponds are anticipated at this time.

**g. Utility Coordination**

MWAA submitted their Permit Management Plan, Revision 0, for Phase 2 on August 19, 2013. The PMOC has completed its review of the Permit Management Plan and provided a draft spot report with recommendations to FTA for review on October 8, 2013. The draft Spot Report was transmitted to MWAA for review on December 9, 2013. MWAA resubmitted the Permit Management Plan, *Revision 1*, on April 1, 2014 incorporating all previous FTA and PMOC comments. On April 22, 2014, the PMOC

advised FTA that the comments to the earlier submissions of the Permit Management Plan had been incorporated and recommended that FTA accept the Permit Management Plan with the understanding that it may need to be updated as the design of Phase 2 proceeds and additional requirements are identified. Initially, FTA advised that its approval of the Permit Management Plan will be coupled with the RAMP review; however, during the July 9, 2014 meeting FTA stated that it would accept the Permit Management Plan independent of the RAMP. *On August 8, 2014, FTA issued a letter approving the Phase 2 Permit Management Plan, Revision 1.*

MWAA advised that if the counties build the parking facilities, the counties themselves would be the code officials and not the Department of General Services. In addition, the counties will be responsible for compliance with local requirements for stormwater design and other design requirements. The contract with CRC states that all utility relocations associated with Package A are the contractor's responsibility.

#### **h. Vehicle Procurement**

On August 15, 2012, MWAA authorized WMATA to amend their contract with Kawasaki to exercise the option for an additional sixty-four 7000 Series railcars for Phase 2. WMATA's letter of August 30, 2012 confirmed the executed amendment to the Kawasaki Contract. The MWAA budget including contingency, in year of expenditure dollars, for the Phase 2 railcars is \$213.383 million. The latest schedule from Kawasaki dated May 25, 2014 shows final delivery for the last Phase 2 vehicles no later than August 2, 2017.

### **3. Project Management Plan and Sub-plans**

MWAA has submitted the PMP and required sub-plans. Below is the status of each plan received by FTA through August 7, 2014.

- MWAA submitted that latest version of the draft Phase 2 **Project Management Plan** (PMP), Version 1.1 to FTA on May 16, 2013 for FTA review and approval. Version 1.1 included modifications based on the comments received from FTA to Version 1.0, dated November 2012 submitted to FTA on December 7, 2012. The résumé summaries of key personnel were received on June 21, 2013. On August 2, 2013, the PMOC recommended that FTA accept the PMP Version 1.1, with comments, and on November 3, 2013, FTA directed MWAA to address the comments provided and formally issue the final PMP for this stage of the Phase 2 project for approval.

On April 2, 2014, MWAA transmitted the final Phase 2 PMP, Version 1.1, including the Project Management Procedures, which were being submitted to FTA for initial review. The PMOC advised FTA that the previous comments to the draft PMP have been satisfactorily addressed and recommended FTA acceptance on April 23, 2014. The FTA letter approving the PMP was sent to MWAA on May 19, 2014 and the final PMP, version 1.2 (without track-changes) was issued. On June 4, 2014, MWAA met with FTA to discuss potential reorganization plans for the Phase 2 Project. A subsequent meeting was held on June 13, 2014. *On July 28, 2014, MWAA submitted its proposed organization chart, draft description of the roles and responsibilities of the key staff, and the resumes for five key staff members in the proposed reorganization of the Phase 2 Project. The PMOC reviewed the submittal and provided comments to MWAA on August*

6, 2014. MWAA plans to address the PMOC's comments in the next revision of PMP anticipated for transmittal to the PMOC for review and approval in September 2014.

- MWAA submitted the latest revision of the Phase 2 **Quality Program Plan (QPP)**, Revision 1, to the FTA on March 26, 2013 for FTA review and approval. The QPP incorporates the changes to address the PMOC comments to QPP Revision 0, dated October 24, 2012 submitted to FTA on December 12, 2012. The comments were discussed after the March 7, 2013 FTA/PMOC monthly meeting. The PMOC recommended acceptance, with comments, of the QPP to FTA on May 17, 2013, and on September 23, 2013, FTA approved the Phase 2 QPP, Revision 1, and requested that MWAA update it as needed as Phase 2 continues to move forward through final design and construction. In addition, FTA requested that MWAA submit the Phase 2 Project Management Procedures to FTA and the PMOC for review. MWAA submitted the Phase 2 Project Management Procedures with the April 2, 2014 resubmittal of the PMP and PMOC recommended FTA acceptance on April 23, 2014. The FTA letter approving the Project Management Procedures was sent to MWAA on May 19, 2014.
- MWAA submitted the Phase 2 **Safety and Security Management Plan (SSMP)**, Revision Draft dated February 28, 2013, to the FTA on March 27, 2013 for review and approval. On May 17, 2013, the PMOC recommended that the FTA accept the SSMP contingent upon the signature by WMATA's Chief Safety Officer. MWAA addressed the three recommendations included in the PMOC review and the SSMP, Revision 0 dated July 2013 was signed by WMATA's Chief Safety Officer on August 6, 2013. The PMOC recommended acceptance of the SSMP, Revision 0 to FTA on September 3, 2013. The FTA letter accepting the SSMP was sent to MWAA on November 15, 2013.

The Tri-State Oversight Committee (TOC) stated that they are revising the Safety and Security Oversight Management Plan for Phase 2 to clearly outline the lines of authority between the TOC, MWAA and WMATA.

- MWAA submitted Revision 1 of the Phase 2 **Risk and Contingency Management Plan (RCMP)**, to the FTA on April 24, 2013 for review and approval. Revision 1 included modifications based on the comments received from FTA to Revision 0, Draft 2, dated December 2012. MWAA submitted their draft SCC Budget Workbook to the PMOC on May 28, 2013. MWAA, FTA, and the PMOC met on July 9, 2013 to review MWAA's development of project costs. Based on the discussions during the review meetings, MWAA issued a revised RCMP Revision 1 a for PMOC review on July 31, 2013.

The July 2013 RCMP included a lower secondary mitigation target than that recommended by the PMOC in the July 9, 2013 meeting based on MWAA's assessment that some of the beta factors assumed by the PMOC could be lowered by this stage of the project. On August 8, 2013, a subsequent meeting was held with MWAA to discuss the development of secondary contingency provided. On August 14, 2013, the PMOC completed a sensitivity analysis of the Modeled Contingency Requirement and concluded that there is still the indication that additional contingency is needed over that currently included in the project budget of \$2,902 million. The PMOC recommended that the project budget should include ample contingency for all project risks and recommended a project budget of \$3,126 million.

Upon further review of the PMOC comments and further consideration of the overall status of the Phase 2 program, MWAA issued a revised draft RCMP, Revision 1b, for PMOC review on August 30, 2013, adjusting the total project cost to \$3,126,450,757, including base contingency of \$477,143,052 and a secondary cost contingency of \$146,211,294. The PMOC has completed its review of the RCMP and on September 3, 2013 recommended acceptance, with comments, to FTA. On November 12, 2013, MWAA resubmitted RCMP, Revision 1c based on comments received from FTA. The PMOC recommended that FTA accept this revision and the FTA letter accepting the RCMP was forwarded to MWAA on February 4, 2014.

With the commitment from both Fairfax and Loudoun Counties to fund and procure the parking facilities independently, MWAA has revised its Phase 2 project budget to \$2,778,235,564. On February 25, 2014, MWAA provided a revised project contingency to the PMOC due to the reassignment of the parking facilities from the Project to the Counties. The revised base contingency is \$422,105,181 and a secondary cost contingency of \$129,345,998 for a revised total contingency of \$551,451,179. On April 8, 2014, a meeting was held with MWAA to discuss the PMOC's recommended revisions to the contingency presented by MWAA and suggested a revised distribution of the project phase contingencies. MWAA resubmitted the RCMP on April 28, 2014 and a meeting was held to discuss the PMOC's comments directly after the Monthly Progress Meeting on May 6, 2014. MWAA needs to revise the Contingency Drawdown table based on the meeting subsequent to the Project meeting. After receiving the PMOC's concurrence, MWAA incorporated the revisions into RCMP Revision 1d and resubmitted the RCMP to the FTA on June 20, 2014 for review. *The PMOC is in the process of reviewing the RCMP, Revision 1d.*

MWAA reported that there is a concern with the contingency procedure because MWAA does not have a non-federal budget from which to fund work to be reimbursed by MWAA's funding partners. With the TIFIA loan, the entire Phase 2 project budget is considered federal. During the June 2014 meeting, several suggestions were discussed and MWAA committed to a resolution of the issue. RCMP, Revision 1d, submitted on June 20, 2014 included the updated procedure P2M 5.07, Revision 1, Management of Project Contingency Procedure, with language confirming MWAA's commitment to secure funding for any "Betterment" and "Concurrent Non-Project Activity (CNPA)" related changes.

- Since WMATA, rather than MWAA, will be the operator of the completed project, the WMATA **Rail Fleet Management Plan (RFMP)** is the applicable document. WMATA submitted RFMP, Revision J, on August 1, 2013 and FTA accepted it on August 8, 2013.
- MWAA submitted their first **Monthly Project Report** for January 2014 on March 12, 2014. *The Monthly Project Report for June was received on August 11, 2014.*

#### 4. Project Schedule

Phase 2 is currently in the procurement/design phase. Construction began on Package A in June 2014 with the start of utility relocation. The commencement of revenue service is to begin on January 10, 2019, according to the last accepted overall Program Schedule.

The table below shows the Phase 2 milestones, as provided by MWAA in the latest schedule dated February 1, 2014 and updated during the *August 7, 2014* meeting.

<b>DULLES CORRIDOR PHASE 2 MILESTONES</b>	
<b>DESCRIPTION</b>	<b>DATE</b>
Package A – Design-Build Contract Award	05/14/2013(A)
Package S – Advanced Earthwork Contract IFB	06/27/2013 (A)
Package A – Contract NTP	07/08/2013(A)
Package S – Advanced Earthwork Contract Award	11/01/2013 (A)
Package S – Advanced Earthwork Contract NTP	11/18/2013 (A)
Package B – Contract RFQI	11/12/2013 (A)
Package B – Contract RFP	02/11/2014 (A)
Loudoun County Garages – Board Action on BAFOs	06/10/2014 (A)
Package B – Contract Award	07/29/2014 (A)
Package A – Start of Construction	June 2014 (A)
Fairfax County – Approval of Land Use Cases for Parking Facilities	07/29/2014 (A)
Package B – Contract NTP	08/18/2014 (A)
Package S – Advanced Earthwork Contract Substantial Completion	12/08/2014
Deadline for Fairfax and Loudoun Counties' decision to construct the Parking Facilities	12/31/2014
Fairfax County – Design of Parking Facility Complete	June 2015
Package A – Complete Design	September 2015
Package A – Complete Elevated Guideway Construction	November 2016
Package A – Complete At-Grade Guideway Construction	March 2018
Package A – Station Build-out	November 2017
Package A – Systems Installation	March 2018
Fairfax County – Construction of Parking Facilities Complete	May 2018
Loudoun County - Construction of Parking Facilities Complete	June 2018
Package B – Contract Substantial Completion	08/17/2018
Package A – Contract Substantial Completion	07/07/2018
Begin Operations Readiness Testing	07/07/2018
Complete Operations Readiness Testing	09/04/2018
Project Final Acceptance	09/4/2018
Begin WMATA Revenue Operations Readiness (ORD) Acceptance Testing	09/4/2018
Complete WMATA Revenue Operations Acceptance Testing	01/10/2019
Revenue Service Date	01/10/2019

**a. Important Activities – 90-Day Look Ahead**

- MWAA and the AHJs approve the Preliminary Design submitted by CRC.
- MWAA to resubmit the PMP, including the proposed reorganization for Phase 2.
- FTA approval of the RCMP.
- ACMC to complete the soil hauling and disposal under the Package S Contract.
- Fairfax County approves the land use cases for the Herndon Station parking facilities.
- Start of final design by Fairfax County for the Innovation Center Station and Herndon Station parking facilities.
- Loudoun County to complete negotiations and issue contract award and NTP for the design, construction, financing, operation and maintenance of the three Phase 2 parking facilities.

## 5. Project Cost

MWAA's Phase 2 project budget was \$3,126,450,757, including the cost of the parking facilities to be funded by Fairfax and Loudoun Counties. This figure is in year-of-expenditure dollars and excludes the finance costs. With the commitment from both Fairfax and Loudoun Counties to fund and procure the parking facilities independently, MWAA has revised its Phase 2 project budget to \$2,778,235,564. This is a deduction of \$348,215,194, which includes associated primary and secondary mitigation for the parking facilities. The SCC budget and expenditure summary for the period ending *June* 2014 is shown below. As of *June* 2014, project expenditures total \$279,199,827. Based on the budget and expenditures, the total project completion is 13%. This percentage does not include finance charges and contingency.

**DRAFT All Packages Project Cost Summary by SCC Code, June 2014**

FTA SCC CODE	DESCRIPTION	ORIGINAL BUDGET <sup>1</sup>	BASELINE BUDGET <sup>2</sup>	EXPENDITURE IN JUNE	EXPENDITURE TO DATE	ESTIMATE AT COMPLETION	CONTINGENCY TO DATE
10	Guideway and Track Elements	\$ 344,946,326	\$ 167,928,670	\$ -	\$ 2,709,166	\$ 167,928,670	
20	Stations	\$ 228,424,057	\$ 227,697,000	\$ -	\$ -	\$ 227,697,000	
30	Yards, Shops, Admin. Bldgs	\$ 229,857,097	\$ 229,467,709	\$ -	\$ -	\$ 229,467,709	
40	Site Work & Utility Relocation	\$ 394,075,868	\$ 550,537,624	\$ 3,282,248	\$ 61,690,256	\$ 550,563,005	\$ 25,381
50	Systems	\$ 193,794,178	\$ 210,763,916	\$ -	\$ 819,396	\$ 210,763,916	
60	Right of Way Acquisition	\$ 58,523,267	\$ 58,600,000	\$ 2,610,649	\$ 2,732,149	\$ 58,600,000	
70	Vehicles	\$ 212,765,000	\$ 212,771,989	\$ -	\$ 39,832,723	\$ 212,771,989	
80	Professional Services	\$ 564,398,592	\$ 569,017,477	\$ 4,664,703	\$ 171,416,137	\$ 571,984,034	\$ 2,966,557
90	Contingency <sup>3</sup>	\$ 551,451,179	\$ 551,451,179	\$ -	\$ -	\$ 548,459,241	\$ (2,991,938)
100	Finance Charges						
<b>TOTAL PROJECT COST</b>		<b>\$ 2,778,235,564</b>	<b>\$ 2,778,235,564</b>	<b>\$ 10,557,600</b>	<b>\$ 279,199,827</b>	<b>\$ 2,778,235,564</b>	<b>\$ -</b>

1. Original Budget is based on Table 2-1 "Program Budget Breakdown" of RCMP Rev 1c submitted to FTA in November 2013

2. Baseline Budget reflects cost loading of package A baseline schedule approved in February 2014 and redistribution of spares parts budget.

3. All of the contingency resides in SCC 90

On May 14, 2013, MWAA awarded the Package A Contract for final design and construction of the line and stations in the amount of \$1,177,777,000. This was \$307.6 million below the engineer's estimate, which did not take into account the Insurance line item that was deleted from the contract award amount; MWAA will now issue an Owner Controlled Insurance Program (OCIP), estimated to cost \$50 million. The net savings realized was approximately \$258 million. MWAA incorporated these changes into the Baseline Budget. In April 2014, MWAA redistributed the SCC budgets to reflect the cost-loaded Final Baseline Schedule for Package A. Once Package B is awarded, MWAA will perform a second redistribution based on the Package B and Package S contracts.

As of June 30, 2014, 13 Contingency Drawdown Requests (CDR) totaling \$2,991,938 have been issued; however, the *June* 2014 Monthly Progress Report lists an additional 22 Requests for Change under evaluation at a requested cost of \$3,941,708.

During the June 5, 2014 meeting, the PMOC questioned why 27% of the professional services cost had been expended, and asked if there will sufficient funds to cover the professional service for the remainder of the project considering the current Revenue Service Date for the Phase 2 Project is January 2019. MWAA responded that the expended costs include the Preliminary Engineering activities for Phase 2.

**b. Monthly Cost Report – June 2014**

**DRAFT Monthly Cost Report, June 2014**

DESCRIPTION	ORIGINAL/ BASELINE BUDGET	EXPENDITURE TO DATE	ESTIMATE AT COMPLETION	PERCENT OF EAC EXPENDED TO DATE
<b>Design-Build</b>				
Design Build Main Line - Package A	\$ 1,177,777,000	\$ 107,566,873	\$ 1,179,421,561	
Commodity Escalation - Package A	\$ 16,000,000	\$ -	\$ 16,000,000	
Yard - Package B + Yard Soil Preparation - Package S	\$ 269,280,530	\$ 391,146	\$ 268,780,530	
Commodity Escalation - Package B	\$ 4,000,000	\$ -	\$ 4,000,000	
Parking Garages - Package C	\$ -	\$ -	\$ -	
<b>Design-Build Contracts Total</b>	<b>\$ 1,467,057,530</b>	<b>\$ 107,958,019</b>	<b>\$ 1,468,202,091</b>	<b>7%</b>
<b>Right of Way</b>				
Parcels & Project Management	\$ 58,600,000	\$ 2,732,149	\$ 58,600,000	
<b>Right Of Way Total</b>	<b>\$ 58,600,000</b>	<b>\$ 2,732,149</b>	<b>\$ 58,600,000</b>	<b>5%</b>
<b>WMATA Agreement</b>				
Vehicles	\$ 205,868,200	\$ 39,832,723	\$ 205,868,200	
WMATA Non Revenue Vehicles	\$ 9,250,751	\$ -	\$ 9,250,751	
WMATA Project Management and Other Costs	\$ 90,205,767	\$ 5,252,505	\$ 90,205,767	
<b>WMATA Agreement Total</b>	<b>\$ 305,324,718</b>	<b>\$ 45,085,228</b>	<b>\$ 305,324,718</b>	<b>15%</b>
<b>Preliminary Engineering</b>				
<b>Preliminary Engineering Total</b>	<b>\$ 75,000,000</b>	<b>\$ 71,141,607</b>	<b>\$ 75,000,000</b>	<b>95%</b>
<b>Airports Authority Services</b>				
Airports Authority Project Management	\$ 64,620,000	\$ 4,718,647	\$ 64,620,000	
Project Management Support	\$ 140,000,000	\$ 24,689,723	\$ 140,000,000	
Other Costs <sup>1</sup>	\$ 116,182,137	\$ 22,874,453	\$ 118,029,514	
<b>Airports Authority Services Total</b>	<b>\$ 320,802,137</b>	<b>\$ 52,282,824</b>	<b>\$ 322,649,514</b>	<b>16%</b>
<b>Contingency</b>				
<b>Contingency Total</b>	<b>\$ 551,451,179</b>		<b>\$ 548,459,241</b>	
<b>Finance Charges</b>				
<b>Finance Charges Total</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	
<b>TOTAL PROJECT COST</b>	<b>\$2,778,235,564</b>	<b>\$ 279,199,827</b>	<b>\$2,778,235,564</b>	<b>13%<sup>2</sup></b>

1. Includes Airports Authority Allocated Costs, Rent, Relocation, OCIP, VDOT, DRC, Testing Consultant, DGS, TRIP II, DEQ, Airports Authority Permits/Inspection, Testing Power and Historic/Archaeological Mitigation

2. This percentage does not include Finance Costs and Contingency.

**c. Funding Sources**

Primary funding for Phase 2 (excluding parking facilities) comes from MWAA (8.39%), Fairfax County (18.54%), Loudoun County (9.83%), Commonwealth of Virginia (11.62%), and the Dulles Toll Road (51.62%). MWAA, Fairfax County, and Loudoun County anticipate receiving a total of \$1.876 billion in direct loans under the United States Department of Transportation (USDOT) Transportation Infrastructure Finance and Innovation Act (TIFIA) credit assistance program to assist in financing their shares.

Funding Source	Phase 2 Funding	Percentage of Total
Commonwealth of Virginia	\$ 323,300	11.62%
Fairfax County	\$ 515,113	18.54%
Loudoun County	\$ 272,829	9.83%
MWAA (Aviation Funds)	\$ 233,041	8.39%
MWAA (Dulles Toll Road)	\$ 1,434,953	51.62%
<b>Total Sources of Funding</b>	<b>\$ 2,778,236</b>	<b>100.00%</b>

#### **d. TIFIA Funding Status**

The TIFIA working group continues to meet on a weekly basis. On June 21, 2013, MWAA, and Fairfax and Loudoun Counties presented the financial plans for the project to the USDOT TIFIA staff and consultants. All parties within the TIFIA working group are fully engaged in ensuring TIFIA has all deliverables, and MWAA, Fairfax and Loudoun Counties submitted an application. Fairfax and Loudoun Counties have agreed to remove the parking facilities from the TIFIA loan and construct the parking facilities using funding outside of the TIFIA eligible budget. In exchange for removing the funds from the TIFIA eligible costs, the Counties will agree to deliver the parking facilities without requesting funding from the Phase 2 project budget. This agreement is pending completion. MWAA, Fairfax, and Loudoun Counties have each remitted \$233,000 to TIFIA to prefund financial advisory and legal work by the TIFIA office. On February 24, 2014, the TIFIA working group extended a formal invitation to apply for a federal low-interest TIFIA loan for the Dulles Corridor Metrorail Project. MWAA completed the preliminary draft application form and developed a coordinated schedule with the Counties. Applications from MWAA, Fairfax County and Loudoun County were submitted on March 27, 2014. The TIFIA working group had 30 days to review the completeness and correctness of the application, followed by the financial review. On April 9, 2014, the entities received notice from USDOT that the TIFIA applications were deemed complete. *Financial review was completed, and the TIFIA working group extended a formal authorization to MWAA, Fairfax County and Loudoun County to submit the final applications.*

*On August 20, 2014, United States Department of Transportation (USDOT) Transportation Infrastructure Finance and Innovation Act (TIFIA) credit assistance program executed a loan with MWAA, not to exceed \$1.278 billion to assist in financing its share. The Counties advised that they will need to go back to their respective Boards of Supervisors for approval before submitting their closing documents for the loan agreement. Neither County anticipates this happening before September 2014. There is some concern that the Counties may not close before the end of the federal fiscal year in September 2014.*

Each loan requestor submitted its requested deliverables for TIFIA's due diligence:

MWAA: On April 11, 2013, MWAA provided the financial feasibility study to the TIFIA Joint Program Office. On May 9, 2013, MWAA submitted its initial plan of finance and financial model, and indicative rating to the TIFIA Joint Program Office. By October 17, 2013, MWAA had submitted all of the items requested by TIFIA for due diligence. A teleconference was held on December 5, 2013 to respond to any follow-up questions from the TIFIA Joint Program Office.

Fairfax County: Fairfax County submitted its initial plan of finance and financial model, indicative rating, and feasibility study to the TIFIA Joint Program Office on June 5, 2013. Fairfax County responded to the conditions of the TIFIA loan repayment using commercial and industrial tax revenue funds on June 21, 2013. As of the October 10, 2013, Fairfax County reported that it has submitted everything that has been required by the TIFIA Joint Program Office for due diligence. Fairfax County will have two separate loan agreements since it has two sources for repayment.

Loudoun County: Loudoun County submitted its initial plan of finance and financial model, indicative rating, and feasibility study to the TIFIA Joint Program Office on June 14, 2013.

Loudoun County reported that they are up to date on all required submittals for due diligence, including financial information, to the TIFIA Joint Program Office. Loudoun County added that it had gone to the bond market for another project and the bond agencies have given Loudoun County a AAA rating.

FTA DC Metro Office staff advised that they are waiting for guidance from FTA Headquarters on how FTA will manage TIFIA-funded projects.

Because of the Office of the Inspector General audit of Phase 1, MWAA has taken steps to better manage the accounting for Phase 2. FTA is currently planning to perform a Financial Management Oversight review within 6 months after MWAA has completed all the required corrective actions required in the Audit report, which would review the implementation of the accounting approach for Phase 2.

## 6. Project Risks

With the commitment from both Fairfax and Loudoun Counties to fund and procure the parking facilities independently, MWAA revised the RCMP and the PMOC provided comments to the proposed contingency drawdown on March 31, 2014. MWAA submitted the latest revision of the Phase 2 Risk and Contingency Management Plan (RCMP), Revision 1d, to the FTA on *June 20, 2014*, including MWAA's proposed Top Ten Risks to FTA for review and approval. The submission *included* updated procedure P2M 5.07, *Revision 1*, Management of Project Contingency Procedure, with language confirming MWAA's commitment to secure funding for any "Betterment" and "Concurrent Non-Project Activity (CNPA)" related changes. MWAA has identified four primary mitigation strategies; however, MWAA and the PMOC agree that the primary and secondary mitigation measures should be developed in more detail following the award of all the DB contracts. RCMP, Revision 1d, included the updated Top Ten Risks List, lowering the severity and hence the removal of risks associated with parking garages as the garages will be funded and managed by the counties and addition of three new risks. Also, included in the revised RCMP were updated contingency drawdown milestones.

- **Budget Risks:** MWAA has allocated \$551 million in contingency for the overall project. Contingency is further broken down by Package as follows: \$289 million for Package A and \$109 million for Package B. With the assumption of the responsibility for the Parking Facilities to the counties, the \$72 million for Parking Facilities (formerly Package C) included in the RCMP revision 1c was deleted in Revision 1d. A contingency management plan has been established for the release of contingency based on contract milestones. The Phase 2 budget of \$3,126,450,757 includes a base cost contingency of \$422,105,181 and a secondary cost contingency of \$129,345,998.
- **Schedule Risks:** The result from MWAA's schedule risk analysis shows that there is less than five percent chance that the Schedule Substantial Completion Date (SSCD) will take place on July 7, 2018. The 80% confidence level date for the SSCD is December 6, 2018, indicating a hypothetical delay of 152 calendar days. The schedule risk analysis performed by the project team was limited to the SSCD. For the Revenue Service Date, the project team has accepted the recommendation by PMOC to include a time contingency of 14 months in the overall program schedule. Overall, the schedule contingency, including the WMATA testing through the Revenue Service Date, is 14 months.

- **Top Ten Risks:** In its June 2014 RCMP, Revision 1d, MWAA provided a summary of the Top Ten Risks for review and approval. MWAA has moved the implementation of the Stormwater Management Regulations to the number one spot on the Top Ten Risks list. The PMOC questioned the methodology behind the scoring for Risk Register and what assumptions were made in determining the scoring for the Top Ten Risks. MWAA suggested that FTA perform Risk Assessment Workshop for the Phase 2 Project as was done for Phase 1. FTA will consider the suggestion and advise.

Below is MWAA's Top Ten Risks list from RCMP, Revision 1d, submitted to FTA on June 20, 2014.

### Summary Status of the Top Ten Project Risks, June 2014 RCMP

RCMP Revision 1d - June 2014			
Risk ID	Event Description	(Proposed Primary) Risk Mitigation	Risk Rating
Proposed NEW Item 40.D.1 and Top Ten Risk	Storm Water 2B	Define the detail scope requirements and mitigate any potential cost and schedule overruns ASAP	45
80.R.1	Project Team and various Agencies add new design requirements not currently included in the PE documents.	Project Team earliest possible exploration and identification of politically based/influenced issues from any and all sources and the timely implementation of a solution that minimizes cost and schedule impact to the Project.	32
Proposed NEW Item 80.D.2 and	CRC's ability to secure approval from AHJ for Preliminary Design (PD)	CRC is to secure PD approval ASAP.	32
40.C.98	Utility Companies involved in the utility relocation delay the DB.	DB to establish agreements with utility companies to start relocations work in advance of construction and complete by earliest need date in DB schedule for timely Project Completion.	27
80.D.39	Fairfax and Loudoun Counties, VDOT, Reston and Town of Herndon require local roadway improvements & traffic signal integration not currently planned or represented in the PE design.	DB to undertake early coordination with the Project Team, Loudoun and Fairfax Counties, Reston and Town of Herndon, VDOT and the owners/developers of congruous and adjacent real property..	24
80.D.43	Initial PE design addressing issues of real property acquisition is incomplete, vague or ambiguous.	Project Team to perform advance supplemental analysis of PE design and real estate requirements; Project Team include pessimistic availability dates in DB Contract Documents.	24
40.R.96	VDOT, Loudoun County, Fairfax County, Reston, and/or Town of Herndon do not provide new roadways or alteration connecting existing roadways to Project station and parking facility access points.	The Project Team is to coordinate and clarify the responsibilities and obligations of Loudoun and Fairfax Counties, the Town of Herndon, Reston, and VDOT, in the IGA and engage the above named counties and local authorities to solidify buy-in from owners and developers of contiguous and adjacent properties for completing access roadways availability to meet the DB schedule for Project Completion.	21
Proposed new to Top Ten Risks List Item 80.C.196	WMATA does not complete testing and start-up and final acceptance in a timely manner.	DB to monitor critical path activity progress during design and construction, coordinate with the Project Team WMATA's participation, and resolve potential delays to testing and start-up and WMATA final acceptance of the Project as they occur. To maximize the amount of testing/witnessing that WMATA does alongside Airports Authority and the DB contractor- this approach is being tried in Phase 1.	21
80.C.19B	DB does not issue complete and coordinated documents for use in design, construction and the permitting process.	The Project Team is to coordinate the clear articulation in the DB RFP documents the expectations for DB early establishment of submissions procedures and compliance therewith during design and construction, to include establishment of interim milestones during the design phase that are enforceable. Furthermore, the Project Team has to ensure that the DB Contract Documents clearly articulate the DB responsibilities and obligations to provide full and complete submissions to include the work scope of all disciplines required to complete construction and that submittals are staggered to prevent overloading of the review systems.	18
60.R.22	Project Team or DB does not make timely acquisition of right-of-way permanent and temporary easements.	The Project Team shall coordinate the early acquisition of right-of-way and easements so as to not impact the DB design and construction process and progress.	18

## 7. Action Items

### MWAA – DULLES CORRIDOR METRORAIL PROJECT PHASE 2- Items for Grantee Action

PR	ITEM	IDENTIFICATION	NATURE of PROBLEM	D	A	I	COMMENTS	STATUS
1	2A	Fairfax and Loudoun need to submit Title VI Plan for FTA review and approval.	Any project receiving federal funds needs to submit a Title VI Plan for review and approval by FTA.	Y	N	N	Loudoun County submitted its Title VI Plan to FTA and received FTA concurrence on the Title VI Plan on January 23, 2014. <i>Fairfax County submitted its Title VI plan including the detailed Service Equity Analysis timeline to FTA for review on July 30, 2014.</i>	R
1	2A	<i>MWAA needs to submit and updated Title VI Plan for FTA review and approval.</i>	<i>MWAA's Title VI Plan to expire in the Fall 2014.</i>	N	N	N	<i>MWAA to provide FTA with contact information for Richard Gordon, Manager of Equal Opportunity Programs, to discuss the Title VI Plan status.</i>	R
3	2B	FTA to approve MWAA management plans	MWAA submitted the PMP, QPP, SSMP, RCMP, Permit Management Plan and RAMP.	Y	N	N	<i>FTA issued approval of the Permit Management Plan on August 8, 2014. FTA also issued approval of the RAMP on August 18, 2014. The RCMP was resubmitted on June 20, 2014 and is pending FTA approval. MWAA to revise the PMP based on the revised organizational chart for FTA approval.</i>	R
1	2B	FTA to confirm whether further NEPA review will be required for changes to the Loudoun and Fairfax parking facility locations.	Loudoun and Fairfax Counties are procuring the parking facilities with local funds only.	N	N	N	FTA stated that the requirement for a NEPA review/re-evaluation would depend on the location of the parking facilities. NEPA review/re-evaluation may be required for changes to the parking facility locations. Loudoun and Fairfax counties need to submit location plans for the parking facilities if they have changed from the prior NEPA review.	R

PR	ITEM	IDENTIFICATION	NATURE of PROBLEM	D	A	I	COMMENTS	STATUS
1	2B	MWAA to provide a white paper to FTA explaining the Commonwealth of Virginia's Stormwater Management Part II-B (SWM Part II-B) revisions and the potential impact to Package A design and construction.	MWAA requested that CRC comply revisions related to the SWM Part II-B criteria, although the Virginia Stormwater Management Program (VSMP) Construction Permit allows CRC to be "grand-fathered" into the prior regulations,	Y	N	N	MWAA provided a draft white paper explaining the revision to the regulations, when the revision went into effect, why the revisions were being implemented, and the potential impact to the design and construction costs and schedule of the project on July 8, 2014. However, the PMOC responded that the white-paper received does not address the total cost and schedule impacts to design and construction. On July 29, 2014 MWAA submitted the Stormwater Study completed in February 2014 along with a revised version of the SWM White Paper to the PMOC; the PMOC provided comments on August 6, 2014. MWAA to respond by August 15, 2014.	R
2	2A	MWAA to report on the updated Revenue Service Date during the monthly progress meetings.	The Package A schedule shows a significant delay which will affect the overall Phase 2 Project schedule including the Revenue Service Date.	N	N	N	Pending resolution of the SWM Part II-B criteria change.	R
2	2A	MWAA suggested that FTA perform Risk Assessment Workshop for the Phase 2 Project as was done for Phase 1.	The PMOC questioned the methodology behind the scoring for Risk Register and what assumptions were made in determining the scoring for the Top Ten Risks.	N	N	N	FTA to consider the suggestion and advise.	R
3	2A	WMATA to provide confirmation of the Levels of Service in the RFMP.	The TIFIA Working Group has requested the Levels of Service from FTA.	N	N	N		R

**KEY ITEM Note**– Items marked with a 'C' in the 'PMO Contractor Status' column will be dropped from future reports.

Subtask 2A CLIN 0002A – PMP Review  
Subtask 2B CLIN 0002 – On-Site Monitoring

**LEGEND**

PRIORITY (PR)

1- Most Critical  
2- Critical  
3- Least Critical

GRANTEE ACTION

D – Remedial Action Developed  
A – Remedial Action Approved  
I – Action Implemented

PMO CONTRACTOR STATUS

R – Review On-going  
C – Completed – No further review required

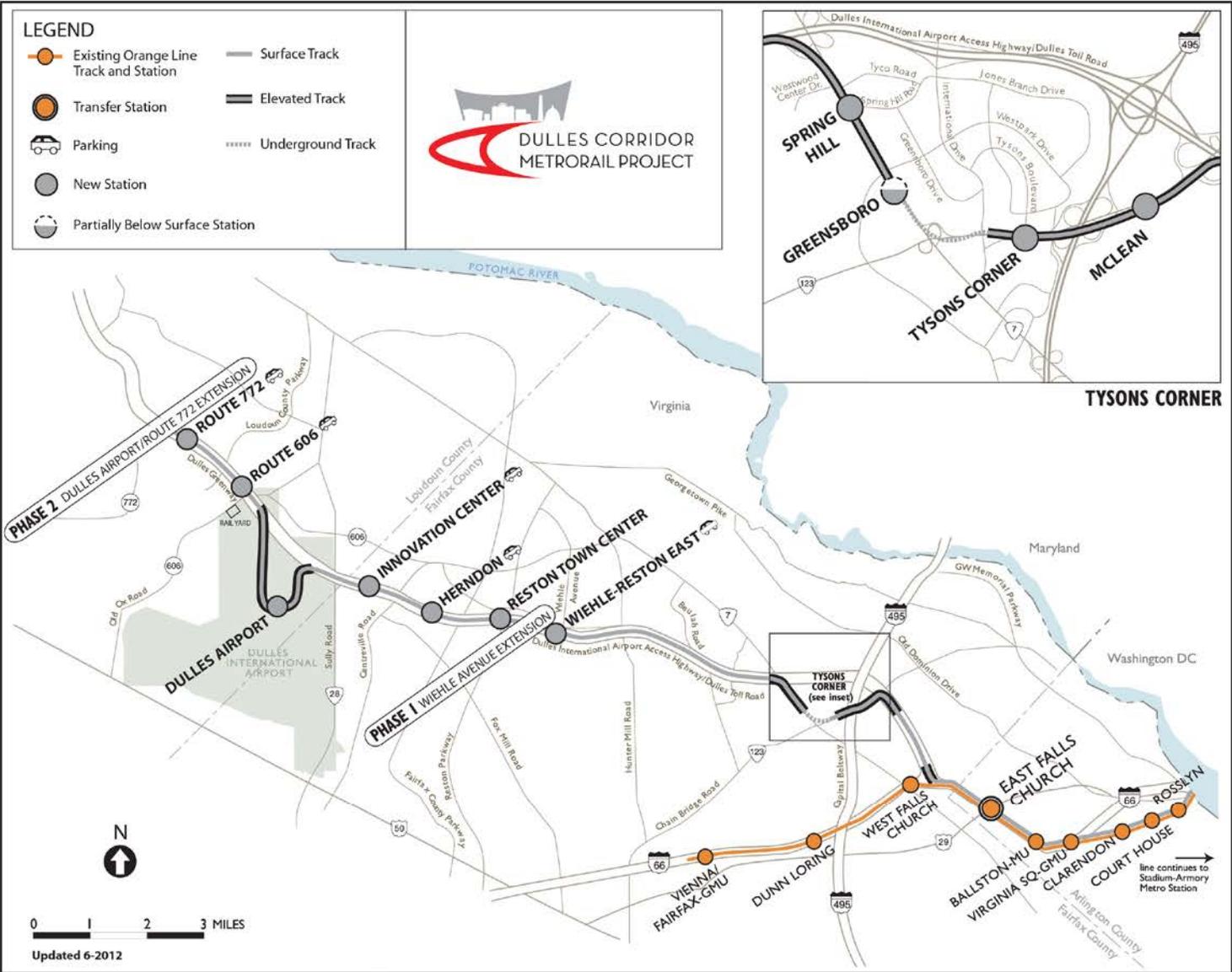
**APPENDICES**

## APPENDIX A – LIST OF ACRONYMS

ACMC	Atlantic Contracting and Material Company
AHJ	Authority Having Jurisdiction
Airport	Dulles Airport
BAFO	Best and Final Offer
Board	MWAA Board of Directors
CDR	Contingency Drawdown Requests
CPSM	Construction and Professional Services Manual (Commonwealth of Virginia)
CRC	Capital Rail Constructors
DB	Design-Build
DBE	Disadvantaged Business Enterprise
DBOM	Design-Build-Operate-Maintain
DBOM+F	Design-Build-Operate-Maintain-Finance
DEQ	Department of Environmental Quality
DHR	Department of Historical Resources
DIAAH	Dulles International Airport Access Highway
DIDB	Disparate Impact and Disproportionate Burden
DTP	Dulles Transit Partners, LLC
EA	Environmental Assessment
FONSI	Finding of No Significant Impact
FTA	Federal Transit Administration
<i>HPCC</i>	<i>Hensel Phelps Construction Company</i>
LPA	Locally Preferred Alternative
MWAA	Metropolitan Washington Airports Authority
NEPA	National Environmental Policy Act
NTP	Notice to Proceed
OCIP	Owner Controlled Insurance Program
PIP	Property Identification Plans
PMOC	Project Management Oversight Contractor
PMSS	Project Management Support Services
PMP	Project Management Plan
PPP	Public-Private Partnership
QA	Quality Assurance
QC	Quality Control
QPP	Quality Program Plan
RAMP	Real Estate Acquisition Management Plan
RCMP	Risk and Contingency Management Plan
RFMP	Rail Fleet Management Plan
RFQI	Request for Qualifications Information
RFP	Request for Proposal
SCC	Standard Cost Category
SHPO	State Historic Preservation Office
SSCD	Schedule Substantial Completion Date
SSMP	Safety and Security Management Plan

TBD	To Be Determined
TOC	Tri-state Oversight Committee
TIA	Time Impact Analysis
TIFIA	Transportation Infrastructure Finance and Innovation Act
USDOT	United States Department of Transportation
VDOT	Virginia Department of Transportation
VSMP	Virginia Stormwater Management Program
WFC	West Falls Church
WMATA	Washington Metropolitan Area Transit Authority

# APPENDIX B – PROJECT MAP



## APPENDIX C – MWA A SAFETY AND SECURITY CHECKLIST

<b>Project Overview</b>	<b>Dulles Corridor Metrorail Project – Phase 2</b>		
Project Mode (Rail, Bus, BRT, multimode)	Rail		
Project Phase (Preliminary Engineering, Design, Construction, or Start-up)	Design and Construction		
Project Delivery Method (Design/Build, Design/Build/Operate/Maintain, CMGG, etc.)	Design/Build		
<b>Project Plans</b>	<b>Version</b>	<b>Review By FTA</b>	<b>Status</b>
Safety and Security Management Plan	July 2013	Approved on November 15, 2013	MWAA submitted SSMP Rev. 0 dated July 2013 for review and approval in August 2013 in response to comments provided in May 2013. FTA approved the SSMP on November 15, 2013.
Safety and Security Certification Plan			To be developed by WMATA. (WMATA's SSCPP March 2012 Revision 9 used in Phase 1 was accepted by the FTA on April 13, 2012.)
System Safety Program Plan	January 2013		WMATA's 2013 SSPP is effective January 2013 and approved by TOC on February 15, 2013.
System Security Plan or Security and Emergency Preparedness Plan (SEPP)	3/2012	N/A	WMATA submitted a revised SEPP to TOC in March 2012, which the TOC approved on April 23, 2012.

Construction Safety and Security Plan (CSSP)		CRC's CSSP was accepted on December 13, 2013 however, the CSSP procedures were expected to be submitted in May 2014. Three out of six procedures have been submitted. The submitted procedures are the Safety and Security Certifiable Items List Development Procedure, Design Criteria Checklist Conformance Procedure and the Hazard/Vulnerability Identification Procedure. APMC's CSSP was Accepted as Noted on December 23, 2014.
<b>Safety and Security Authority</b>	<b>Y/N</b>	<b>Notes/Status</b>
Is the grantee subject to 49 CFR Part 659 State Safety Oversight requirements?	Y	Tri-State Oversight Committee (TOC)
Has the State designated an oversight agency as per Part 659.9?	Y	Tri-State Oversight Committee (TOC)
Has the oversight agency reviewed and approved the grantee's SSPP as per 659.17?	Y	TOC approved an updated WMATA SSPP dated January 2013 on February 15, 2013.
Has the oversight agency reviewed and approved the grantee's Security Plan or SEPP as per Part 659.21?	Y	WMATA SEPP approved on April 23, 2012.
Did the oversight agency participate in the last Quarterly Program Review Meeting?	Y	TOC and/or its contractor (TRA) routinely attend the quarterly meetings, including the most recent on July 9, 2013.
Has the grantee submitted its safety certification plan to the oversight agency?	N	
Has the grantee implemented security directives issued by the Department of Homeland Security, Transportation Security Administration?	N	WMATA will be operator.

<b>SSMP Monitoring</b>	<b>Y/N</b>	<b>Notes/Status</b>
Is the SSMP project-specific, clearly demonstrating the scope of safety and security activities for this project?	Y	MWAA's SSMP, Revision 0, dated July 11, 2013 was approved by FTA on November 15, 2013.
Grantee reviews the SSMP and related project plans to determine if updates are necessary?	Y	
Does the grantee implement a process through which the Designated Function (DF) for Safety and DF for Security are integrated into the overall project management team? Please specify.	N	WMATA will be operator.
Does the grantee maintain a regularly scheduled report on the status of safety and security activities?	N	WMATA will be operator.
Has the grantee established staffing requirements, procedures and authority for safety and security activities throughout all project phases?	N	WMATA will be operator.
Does the grantee update the safety and security responsibility matrix/organizational chart as necessary?	N	WMATA will be operator.
Has the grantee allocated sufficient resources to oversee or carry out safety and security activities?	N	WMATA will be operator.
Has the grantee developed hazard and vulnerability analysis techniques, including specific types of analysis to be performed during different project phases?	N	Contractor (CRC) is responsible for PHA. <i>A draft copy of the PHA was provided by CRC on June 25, 2014.</i> WMATA is responsible for TVA.
Does the grantee implement regularly scheduled meetings to track to resolution any identified hazards and/or vulnerabilities?	N	CRC will resolve all identified hazards and vulnerabilities with final review by the SCWG.
Does the grantee monitor the progress of safety and security activities throughout all project phases? Please describe briefly.	Y	Yes, through SCWG.
Does the grantee ensure the conduct of preliminary hazard and vulnerability analyses? Please specify analyses conducted.	N	MWAA is developing the PHA through its contractor, CRC, and WMATA is responsible for the TVA.
Has the grantee ensured the development of safety design criteria?	Y	
Has the grantee ensured the development of security design criteria?	Y	
Has the grantee ensured conformance with safety and security requirements in design?	Y	

Has the grantee verified conformance with safety and security requirements in equipment and materials procurement?	Y	
Has the grantee verified construction specification conformance?	N	The project is in the early DB stage.
Has the grantee identified safety and security critical tests to be performed prior to passenger operations?	N	
Has the grantee verified conformance with safety and security requirements during testing, inspection and start-up phases?	N	
Does the grantee evaluated change orders, design waivers, or test variances for potential hazards and /or vulnerabilities?	N	
Has the grantee ensured the performance of safety and security analyses for proposed work-arounds?	N	
Has the grantee demonstrated through meetings or other methods, the integration of safety and security in the following: <ul style="list-style-type: none"> <li>• Activation Plan and Procedures</li> <li>• Integrated Test Plan and Procedures</li> <li>• Operations and Maintenance Plan</li> <li>• Emergency Operations Plan</li> </ul>	N	
Has the grantee issued final safety and security certification?	N	
Has the grantee issued the final safety and security verification report?	N	

<b>Construction Safety</b>	<b>Y/N</b>	<b>Notes/Status</b>
Does the grantee have a documented/implemented Contractor Safety Program with which it expects contractors to comply?	Y	
Does the grantee's contractor(s) have a documented company-wide safety and security program plan?	Y	
Does the grantee's contractor(s) have a site-specific safety and security program plan?	Y	MWAA has accepted the contractor's Safety and Security Plan.
Provide the grantee's OSHA statistics compared to the national average for the same type of work. If the comparison is not favorable, what actions are being taken by the grantee to improve its safety record?	Y	System in place, construction activities have not started.

Does the grantee conduct site audits of the contractor's performance versus required safety/security procedures?	Y	MWAA is developing an Audit schedule.
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<b>Federal Railroad Administration</b>	<b>Y/N</b>	<b>Notes/Status</b>
If shared track: has grantee submitted its waiver request application to FRA? (Please identify specific regulations for which waivers are being requested)	N/A	This is a Heavy Rail Transit Project. There is no FRA involvement.
If shared corridor: has grantee specified specific measures to address shared corridor safety concerns?	N/A	
Is the Collision Hazard Analysis underway?	N/A	
Other FRA required Hazard Analysis – Fencing, etc.?	N/A	
Does the project have Quiet Zones?	N/A	
Does FRA attend the Quarterly Review Meetings?	N/A	



