PMOC MONTHLY REPORT

East Side Access (MTACC-ESA) Project

Metropolitan Transportation Authority

New York, New York

Report Period October 1 to October 31, 2013

PMOC Contract No. DTFT60-09-D-00007

Task Order No. 7, Project No. DC-27-5235, Work Order No. 1

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Length of time on project: Five years on project for Urban Engineers

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THIRD PARTY DISCLAIMER

This report and all subsidiary reports are prepared solely for the Federal Transit Administration (FTA). This report should not be relied upon by any party, except FTA or the project sponsor, in accordance with the purposes as described below.

For projects funded through FTA Full Funding Grant Agreements (FFGAs) program, FTA and its Project Management Oversight Contractor (PMOC) use a risk-based assessment process to review and validate a project sponsor's budget and schedule. This risk-based assessment process is a tool for analyzing project development and management. Moreover, the assessment process is iterative in nature; any results of an FTA or PMOC risk-based assessment represent a "snapshot in time" for a particular project under the conditions known at that same point in time. The status of any assessment may be altered at any time by new information, changes in circumstances, or further developments in the project, including any specific measures a sponsor may take to mitigate the risks to project costs, budget, and schedule, or the strategy a sponsor may develop for project execution. Therefore, the information in the monthly reports will change from month to month, based on relevant factors for the month and/or previous months.

REPORT FORMAT AND FOCUS

This report is submitted in compliance with the terms of the Federal Transit Administration (FTA) Contract No. DTFT60-09-D-00007, Task Order No. 007. Its purpose is to provide information and data to assist the FTA as it continually monitors the grantee's technical capability and capacity to execute a project efficiently and effectively, and hence, whether the grantee continues to be ready to receive federal funds for further project development.

This report covers the project management activities on the East Side Access (ESA) Mega-Project managed by MTA Capital Construction (MTACC) with MTA as the grantee and financed by the FTA FFGA.

MONITORING REPORT

1.0 PROJECT STATUS

a. Design

As of September 30, 2013, MTACC reported that the Engineering/Design effort was 97.8% complete in the ESA September '13 Monthly Progress Report; however the Cost Report shows only 94.0% complete on a cost invoiced basis. The percent complete varies monthly depending on the award of tasks to the General Engineering Consultant (GEC).

The Project Management Team (PMT) met with Amtrak on September 5, 2013 to review their comments on the Harold Stage 4 60% Catenary design. Amtrak stated at the meeting that they wanted to see the catenary work (modifying and installing 20 new catenary structures) in the midday storage yard incorporated into the 60% design before they approved it. The GEC incorporated the requested changes into the 60% design and forwarded it to Amtrak on October 4, 2013. The PMT will meet with Amtrak in early November to review the revised design submittal. In the interim, the GEC has completed the 90% design.

The 90% submittal for CH058 (Harold Structures - Part 3b) remains on hold as a result of the PMT rethinking the method of construction for the eastbound re-route structure (in order to utilize a 45-60 day track outage that may be granted for the work in the future). Possible options being examined are to continue with the current jacked shield tunnel approach or construct the tunnel via an alternate method that can make better use of available track outages, but will require a change to the sequencing of other Harold infrastructure work. Long Island Rail Road (LIRR) and Amtrak are discussing the matter and a decision on a construction alternate and the overall Harold rescheduling is anticipated by November 2013 (previously forecast for October 2013).

The GEC repackaging modification for the CM007 contract package was fully executed on September 5, 2013. The PMT requested that the GEC develop the basic concepts for a cast-in-place/pre-cast option. Cast-in-place vs. pre-cast discussion materials was forecast to be ready in early September 2013; however this date was not met. These materials will be used to form the basis of an industry outreach to determine the best approach. The PMT is now forecasting November 2013 for completing the discussion materials for the industry outreach.

Completion of the specifications and drawings for the stand-alone Track and Signal Installation Contract package (CS284) was achieved in October 2013 (previously forecast for September 30, 2013). Technical drawings and specifications for the Traction Power Contract Package (CS084) were completed in September 2013, however work on the Contract documents continue.

b. Procurement

As of the end of September 2013, the total procurement activity on the project was 62.1% complete against the $8.708B budget. There have been $5.404 billion in contracts awarded to date. The PMT's calculations on procurement are done against the $8.245B budget, without the Rolling Stock Reserve.

The CM006 (Northern Structures) was advertised on August 15, 2013 (with Contract documents available on August 26, 2013). Initial proposal due date was October 17, 2013, however this date has been extended twice to November 15, 2013. The anticipated award date is still forecast for March 2014.

The CM007 (Caverns) Contract Package remains under development. The advertise date for this package is forecast for March 2014. ESA has stated that although the award decision should be made by the end of December 2014, due to lack of available funding a Limited NTP for procurement of pre-cast can be issued July 1, 2015 with the Full NTP not issued until April 7, 2016.

Awarding the CS179 (Systems Package 1) Contract continues to slip. The ESA PMT will be issuing an addendum in November 2013 that restructures this package to include a base contract and six options. This will significantly complicate the procurement, and the PMOC does not believe that the PMT will meet its latest commitment to have a notice of award ready to present at the November 2013 MTA Board meeting.

The CS179 (Systems Package 1) Contract is on the critical path of the May 2012 approved baseline schedule. MTACC committed in April 2013 to have a recommendation for award ready to present to the MTA Board in July 2013, and that date was not met. The ESA PMT then re-forecast recommendation to award ready to present at September 2013 MTA Board meeting, with award of the Contract following in late September/early October 2013. The PMOC was informed in August 2013 that MTACC would not have a recommendation for award in time for the September 2013 Board meeting, as the ESA team continues negotiations and has yet to select a contractor. The planned award date and NTP remain TBD.

The PMT has decided to split the Tunnel Systems package (CS284) into two packages: one for track work and one for the traction power work. Procurement dates for this package are now TBD. This split will have an impact on the Systems Package 1 (CS179) Contractor, who is responsible for systems integration for these packages

An industry outreach is scheduled for November 1, 2013 for the CM014B (GCT finishes) Package. Advertising for this package is anticipated for December 2013 (slipped from September 2013) with award anticipated by July 1, 2014.

Formal award of CH057A is now expected in November 2013 (previously forecast for October 2013) with NTP anticipated for December 2013. [redacted]

c. Construction

The PMT reported in its September 2013 Quarterly Progress Report that the actual construction progress was 54.0% vs. 57.0% planned. Over the last several months, progress has only been proceeding at about half the rate as projected.

Manhattan: CM009 – Manhattan Tunnels Excavation/Structures Part 1: The Estimate at Completion (EAC) for contract CM009 decreased to $430,550,000 as of September 30, 2013. Substantial Completion was achieved on September 30, 2013, after the additional waterproofing and shotcrete work in 3 caverns was completed, which completed CM009's last Milestone, 9A. All field construction is complete. Remaining work is administrative close-out of the contract, which is expected to take until December 31, 2013, at which time Final Completion will be declared. Actual progress for September 2013 was 2.0% versus 0.0% planned. Cumulative progress through September 30, 2013, was 99.4% actual versus 99.4% planned (remaining work is administrative).

Construction Progress: All field construction on CM009 was completed on September 30, 2013. No additional construction work was done during October 2013.

CM013 – 50th Street Vent Facility: MTACC reports that through September 30, 2013, the EAC has been reduced to $124.97 million from the previous $126.41 million. Forecast

Substantial Completion date remains December 31, 2013. As of September 30, 2013, the actual percent complete was 88.2% vs. 100% planned.

Construction Progress: Stair #1 erection to the upper floors and roofs is nearly complete. Roofing has begun. Concrete block wall erection is substantially complete around the building perimeter and in the interior areas of the building. Painting of concrete block in the 1st & 2nd Basements is underway. Final building cladding has begun on the rear Loading Dock Roof/2nd Floor. Stair #1 erection is complete in the shaft. Utility work and backfilling continues on E. 50th Street. The Cooling Tower supply/return piping in the Utility Chase is complete and cladding of the chase is beginning.

CM013A – 55th Street Vent Facility: MTACC reports that through September 30, 2013 the EAC has increased to $60.24 million from the previous $58.85 million. Forecast Substantial Completion date remains March 11, 2015. As of September 30, 2013, MTACC reports that the actual percent complete is slightly ahead of schedule at 20.4% vs.19.6% planned.

Construction Progress: The street decking and MPT has been completed along E. 55th St. between Madison Ave. and Park Ave. Steam line, temporary sewer line and other utilities are supported under the street decking. Mechanical rock breaking, production blasting & excavation are the primary activities at the site, and the Contractor has reached an invert elevation approximately 30' below the street surface. Mucking is performed daily during swing shift. Preparations are underway to begin excavation of the shaft into the cavern.

CM004 – 44th Street Building Demolition and Fan Plant Structure; 245 Park Avenue Entrance: MTACC reports that through September 30, 2013 the EAC is 55.35 million. The Forecast Substantial Completion date remains January 31, 2014 for the Vent Plant. Beneficial Use for the 245 Park Entrance remains forecast at January 31, 2014 in the MTA report, but is actually now the date for Substantial Completion (see Section # 7.0 below). The actual percent complete is 86.8% versus 96.6% planned.

Construction Progress: The contractor continued with perimeter and interior concrete block erection and completed intumescent paint application and cementitious column/beam encasement. Roof installation began. Prepared Work Plans for the stone façade, roofing, windows & louvers and continued the runway installation for the re-installation of the Gantry Crane. Concrete encasements of steel framing continued in the Basement stair corridor and started the remaining utility connection work in 44th Street.

CM005- Manhattan South Structures: The contractor was given Notice to Proceed on September 9, 2013. MTACC reports that the Estimate at Completion (EAC) is $225.75 million. Forecast Substantial Completion date is set for February 6, 2016. As this contract has just started, the cumulative actual progress vs. planned percent complete remains essentially 0.0%.

Construction Progress: The contractor continued to mobilize and prepare submittals. Initial shotcrete smoothness criteria inspection in the Main Caverns continued. Screed rail installation to support construction of the invert slabs started. Weep hole drilling of slabs also started. The contractor continued to re-install the mine tracks. The Bellmouth support crane passed NYC DOB inspection.

CM014A– Concourse and Facilities Fit-Out: MTACC reports that through September 30, 2013 the EAC has increased to $53.32 million from the previous $52.00 million. Forecast Substantial Completion date has been extended to April 1, 2014 from the previous February 15, 2014. The actual substantial completion date cannot be determined at this time until negotiations are finalized for the proposed additional scope to this contract to perform early CM014-B work.

The actual percent complete reported is 49.8% versus 97.4% planned. This large gap between percent complete versus planned can be largely attributed to the Supervisory Control and Data Acquisition (SCADA) system redesign (based on LIRR requirements), which resulted in a hold being placed on fabrication and delivery of all power system equipment until the redesign was complete.

Construction Progress: The contractor completed the delivery of the 6 Transformers and 2 Unit Substations during the weekends of Friday October 18, 2013 and Friday, October 25, 2013. Construction of the protective enclosures for this equipment began Oct. 23, 2013.

Queens: **CQ031 – Queens Bored Tunnels and Structures**: The Estimate at Completion (EAC) decreased to $769,361,000 as of September 30, 2013, primarily due to scope transfers to other (future) contracts. The MTACC has now forecast CQ031 Substantial Completion for November 10, 2013, with Final Completion to follow on December 10, 2013. Actual progress for September 2013 was 1.1% versus 0.0% planned (contract was planned to be finished earlier). Cumulative progress through September 2013 was 98.7% actual versus 100.0% planned. This contract is not on the overall ESA critical path.

Construction Progress: During October 2013, the CQ031 contractor completed installation of the remaining 22 secant piles for the Tunnel A Approach Structure west of 39th St. In total, the contractor installed 246 secant piles and 30 soldier piles.

CQ032 – Plaza Substation and Queens Structures: The Estimate at Completion (EAC) decreased to $231,423,000 as of September 30, 2013. The MTACC forecast Substantial Completion date remained at August 11, 2015. Actual construction progress for September 2013 was 2.8% versus 5.2% planned. Cumulative progress through September 30, 2013, was 39.2% actual versus 70.4% planned. ESA and the CQ032 contractor continue to develop a re-baselined contract schedule which will include the additional work for the 63rd St. tunnel rehabilitation and will more accurately reflect the status of actual versus planned work. It is not anticipated that this schedule will be developed before the end of December 2013, however.

Construction Progress: The contractor continued construction with the installation of waterproofing and placement of concrete and Pneumatically Applied Concrete (PAC) for the sidewalls of the Open Cut, installation of structural steel and concrete floor for the C06 Substation, waterproofing and shotcrete for the sump pit near Tunnel D, and installation of conduit for the C06 substation. The contractor also continued to install brick facing and began to install the louver system at the B-10 Substation. Rehabilitation work at the Roosevelt Island, Vernon Blvd, 12th Street, 23rd Street, and 29th Street ventilation structures continued, although it was very limited.

CQ039 – Northern Boulevard Crossing: As of September 30, 2013, the Estimate at Completion (EAC) decreased slightly to $103,719,000. The MTACC forecast Substantial Completion date was further extended to September 30, 2013, although the PMOC notes that this date was not met. Actual construction progress for September 2013 was 0.2% versus 0.0%

planned (the contract was planned to be complete). Cumulative progress through September 30, 2013, was 96.8% actual versus 100.0% planned.

Construction Progress: Ground thaw was achieved in the Northern Boulevard Crossing during October 2013, and the CQ039 contractor began compensation grouting behind the tunnel liner. All other construction work had been completed during 2Q2013.

Harold Interlocking: CH053 Contract – Harold Structures Part 1 and G.0.2 Substation: As of September 30, 2013, the Estimate at Completion (EAC) increased to $300,671,000. The MTACC forecast Substantial Completion date was extended to July 17, 2014, an additional 3 weeks. Actual construction progress through September 2013 was 1.9% versus 0.0% planned (the contract was supposed to be complete). Cumulative progress through September 30, 2013, was 82.4% actual versus 100.0% planned.

Construction Progress: The CH053 contractor completed construction of the 12kV ductbank between Substation 44 and the Sunnyside Yard Frequency Converter during October 2013 and continued to install 12kV cables. The contractor continued construction of the west abutments for the new ML4 bridges at 43rd and 48th Streets, as well as the 43-S2 retaining wall between the two streets. The contractor also continued construction of the Tunnel A Approach Structure east of 39th Street and installation of various remaining catenary structures in Harold Interlocking.

CH054A – Harold Structures Part 2A: As of September 30, 2013, the Estimate at Completion (EAC) decreased slightly to $73,275,000, while the MTACC forecast Substantial Completion was extended to June 17, 2014, 3 additional weeks. Actual construction progress for September 2013 was 1.5% versus 0.0% planned (contract was supposed to be complete). Cumulative progress as of September 30, 2013, was 55.4% versus 100.0% planned (cumulative decreased due to increase in contract value).

Construction Progress: The CH054A contractor continued construction of the 43-S1 retaining wall, installation of 12kV ductbank and manholes between Manhole 23A and Manhole 26, and construction of jacking and receiving pits for utility micro-tunnel run #s 13, 14, and 15.

Railroad Force Account:

FHA01 – Harold Stage 1 Amtrak: As of September 30, 2013, the Estimate at Completion (EAC) remained at $16,824,000. The MTACC's forecast for Substantial Completion of FHA01 was extended 3 weeks until July 17, 2014. Actual construction progress for September 2013 was 1.2% versus 0.6% planned. Cumulative progress through September 30, 2013, was 92.7% actual versus 94.4% planned. The bulk of the remaining FHA01 construction consists of Electric Traction (ET) relocation of catenary wires on structures erected by the CH053/CH054A contractor, as well as ET protection for the contractor.

Construction Progress: Amtrak ET personnel continued FHA01 catenary construction during October 2013 with the installation of 4 steady spans at new catenary poles, running wire transfers between catenary structures, the installation of hangers and clips from a new catenary structure, and the abandonment of all ET appurtenances at an old catenary pole. This abandonment eliminated the last impediment to the construction of the 12kV system for the CH053 contractor.

FHA02 – Harold Stage 2 Amtrak: As of September 30, 2013, the Estimate at Completion (EAC) remained at $41,684,000. The MTACC's forecast for Substantial Completion of FHA02 was reduced by 6 weeks to January 21, 2015. Actual construction progress for September 2013

was 4.1% versus 3.1% planned. Cumulative progress through September 30, 2013 was 69.5% actual versus 69.3% planned. The majority of the FHA02 work presently planned is the Communications and Signals (C&S) installation and cutover of "F1" Interlocking, which is on schedule to be cutover during the weekend of November 1-3, 2013.

Construction Progress: Amtrak C&S personnel continued to pull and terminate signal cables and continued to test signal circuits in preparation for the cutover of "F1" Interlocking.

FHA03 – Harold Stage 3 Amtrak: The ESA PMT established FHA03, the initial phase of Amtrak Stage 3 construction, for all Amtrak disciplines to support CQ031's installation of concrete slabs under Lines 2 and 4 in Harold Interlocking for the future CQ057A tunnel. All work for this phase was begun in July 2013 and completed in August 2013, although limited project clean-up continues. As of September 30, 2013, the Estimate at Completion (EAC), remained at $1,947,000, and the actual completion date for this phase was August 20, 2013. The EAC for Stage 3 will increase as additional Project Initiatives (PIs) for increased scope are authorized. Actual construction progress for September 2013 was 1.0% versus 0.0% planned. As of September 30, 2013, cumulative progress was 99.0% actual versus 100.0% planned.

Construction Progress: Project clean-up from the summer track outage continued.

FHL01 – Harold Stage 1 LIRR: As of September 30, 2013, the Estimate at Completion (EAC) remained at $21,972,000. The MTACC's forecast for Substantial Completion was extended by 3 weeks to November 21, 2014. LIRR resumed construction on FHL01 during September and October 2013 with Traction Power preparations to cutover its signal power system and separate it from Amtrak's. Actual construction progress for September 2013 was 0.2% versus 0.7% planned. As of September 30, 2013, cumulative progress was 75.2% actual versus 78.8% planned. Remaining FHL01 work includes installation of track turnouts, C&S installation and cutover of Point and Harold Interlockings, Traction Power relocations and cutover of the signal power line, and cable installation for the re-located G02 Substation.

Construction Progress: LIRR Traction Power personnel completed conduit and concrete pad installation at new signal Tower #34 and #40, installed signal cables between Towers #46 and #34, and made other necessary tower modifications in preparation for the signal power cutover.

FHL02 – Harold Stage 2 LIRR: The Estimate at Completion (EAC) increased to $69,296,000 during September 2013. The MTACC's forecast for Substantial Completion remained at September 11, 2016. Actual construction progress for September 2013 was 1.4% versus 2.7% planned. As of September 30, 2013, cumulative progress was 29.4% actual versus 31.4% planned. Remaining FHL02 construction includes installation of 15 track turnouts, installation of 6 Central Instrument Locations (CILs) in Harold Interlocking, installation of new third rail for additional tracks that will be constructed, and the installation of a new motor-generator (MG) set for the signal power separation.

Construction Progress: LIRR C&S personnel continued to install conduit, install and terminate signal cables, and test signal circuits in preparation for the cutover of Point Interlocking, scheduled for the weekend of December 6-8, 2013.

FHL03 – Harold Stage 3 LIRR: The ESA PMT established FHL03, the initial phase of LIRR Stage 3 construction, for all LIRR disciplines to participate in the installation of two turnouts and rehabilitation of a total of 1,800 LF of track while the CQ031 contractor was installing the

concrete slabs for the CH057A tunnel under Lines 2 and 4 in Harold Interlocking. This work was started in July 2013 and completed in August 2013, although some clean-up remains. As of September 30, 2013, the Estimate at Completion (EAC) remained at $49,394,000 (total amount authorized for FHL03 by ESA. To date, LIRR has invoiced $2.547M against FHL03). The LIRR installed three additional turnouts after the summer track outage for the concrete slabs was complete on September 14, 2013. Actual construction progress for September 2013 was 13.0% versus 15.0% planned. As of September 30, 2013, cumulative progress was 98.0% actual versus 100.0% planned.

Construction Progress: Project clean-up from the summer track outage continued.

d. Quality Assurance and Quality Control (QA/QC)

ESA Project Quality Manual (PQM) The ESA Quality Manager had committed to update Revision 6 of the ESA Project Quality Manual (PQM) that was issued in February 2009 by the end of February 2013. Each month this date continues to slip. A Draft of Revision 7 has been prepared and is being reviewed by MTACC's Chief of Quality, Safety, and Security who was scheduled to meet with the ESA Quality Manager in mid-July 2013 to finalize it. The latest date provided to the PMOC for rescheduling this meeting, early October 2013, was not met and the meeting is now re-scheduled for November 15, 2013. If there are no major changes required, the ESA Quality Manager stated that he will provide a copy of Rev. 7 to the PMOC by the end of November 2013.

Submission of As-Builts The single construction contractor working on the CH053, CH054A, and CQ032 contracts continues to be late in submitting As-Built drawings. The contractor started to submit a limited number of As-Builts but they are not in the correct format. As a result, the GEC had to convert the files, a task that is not in their scope. Additionally, the As-Builts submitted are not up to date. At the monthly ESA Quality Staff Meeting held on October 31, 2013, the ESA Quality Manager, MTACC's Chief of Quality, Safety, and Security, and Deputy Executives from the ESA Project agreed to meet and develop a plan of action.

PMP-Related Procedures Training As of October 2013, MTACC has issued 78 procedures. Training for the ESA staff commenced in July 2013 and continued through October 2013. On October 2, 2013, a training session was conducted for 45 employees on five procedures. The initial training has now been completed**.**

2.0 SCHEDULE DATA

The executive summary of ESA's September 2013variance report states that the program-level review of the Integrated Project Schedule (IPS) is ongoing, with the following adjustments made during this period:

- The top down CM007 Schedule that was presented to stakeholders at the end of August 2013 has been incorporated into the IPS (note: bottom-up detailed schedule is still under development).
- The CS179 Installation Schedule (IST is still being detailed) was used as the basis for the access restraint workshop on October 2, 2013 and was incorporated into the IPS. The results of the workshop will be used to further refine the CS179 schedule, and detailed Integrated Systems Testing activities will be incorporated into the IPS in the next few weeks.

- Additionally, the PMT stated in its schedule variance report that Harold repackaging, and CM014B and the Integrated Systems Testing remain to be detailed before the re-planning exercise can be considered complete.

The Harold schedule is being re-planned and revised in conjunction with Railroad personnel taking into account the following items:

- Utilize a Long-term Outage (Year 2015 and Year 2016) to reduce the need for weekend outages, mitigate schedule risk and maximize efficiency of construction.
- Limited railroad force account resources.
- Use the weekend outage plan that was jointly developed with Amtrak and LIRR.
- Schedule priority will be given to FRA High Speed Rail scope.
- CIL cutovers are fixed but some screen shot revisions are required to support long-term outages.

The PMT had committed to holding a workshop with the FTA/PMOC in October 2013 to review the changes, but has not met this commitment.

Project Critical Path: ESA's 2012 baseline schedule critical path went through Contracts CM012R (42 months), then a portion of Contract CS179 (only 8 months of total Contract duration), then IST (15 months), and finally through LIRR IST (3 months). The PMOC believes that the new critical path will have the same structure, with CM005, CM006, CM007 replacing CM012R; however, the current project critical path cannot be determined until ESA provides a fully updated and linked Integrated Project Schedule. The PMT had committed to provide a draft of the revised schedule by mid-September 2013, but has not met this commitment.

Schedule Contingency: Schedule contingency must be developed as part of the program re-baselining effort. Schedule contingency cannot be developed until a new RSD is established.

3.0 COST DATA

Funding: MTACC announced at the May 2012 Capital Program Oversight Committee (CPOC) meeting that an additional $720 million will need to be identified in the MTA 2015 – 2019 Capital Plan to cover the new project baseline budget. The funding request for the 2015 – 2019 Capital Program will be submitted to the NYS Capital Program Review Board (CPRB) in September 2014. The MTA stated in April 2013 that it would review any project budget changes resulting from the new packaging plan for CM012R and compare it to funding availability in the current MTA Capital Plan. Results of this comparison were to be discussed internally with the MTA Board in July 2013; however, as of this report, there has been no indication that this discussion occurred or that there was any tentative date scheduled for presentation of a new Budget Re-Plan.

Budget/Cost: The ESA September 2013 Progress Report shows total project progress was 58.0% vs. 60.3% planned, against the Current Baseline Budget (CBB) and the construction progress as 55.3% vs. 58.9% planned, based on invoiced amount.

As of September 30, 2013, the CBB remains at the baseline value of $8.708 billion, with no changes in the Standard Cost Categories (SCCs) this month.

In October 2012, the low bid for CM012R was rejected as too high. Since that time, CM012R has been re-packaged; however, the PMT has not adjusted the original budget for this work. [redacted] ESA PMT continues to maintain the $8.708B project budget, but does not show a probable cost increase. The PMT has stated that it cannot make any adjustments to the Budget without approval by MTACC Senior Management. The PMT has indicated it is re-planning the Project Cost and Schedule, but has missed its mid-September forecast date for the Schedule, and cost results are not expected before the end of 2013.

[redacted]

The current Budget and Cost data is shown in Table 1 in Appendix B of this report. Table 3 in Appendix B of this report shows a comparison of the FFGA Baseline Budget in Standard Cost Categories (SCC) vs. the MTA's CBB.

Contingency: [redacted] As noted above, this is simply budgeted contingency and in no way reflects the actual increase in costs or higher than budgeted contract estimates or bids.

Change Orders/Budget Adjustments: The PMT reported that during September 2013, there were nine (9) change orders executed over $100K, with a net value of $11.9M.

4.0 RISK MANAGEMENT

Status: ESA initially committed to holding Monthly Risk Review Meetings but has not achieved this schedule. The last meeting was held on July 31, 2013.

The PMT experienced the loss of some key senior management staff within the last few months which places extra demands on current staff to meet the project needs. The PMOC believes that the loss of key individuals creates a risk to the Technical Capacity and Capability of the PMT and the ESA project. Replacements have been found for two key positions; however, the PMT still has two key spots to fill (senior scheduler and Rail Systems Program Manager)

ESA held a Systems Access Restraint (AR) meeting on October 2, 2013 and announced that the CS179 Package will be revised to include eleven options due to funding constraints. The PMT subsequently announced that package revision will include six options (based on ARs in the CM005; CM006; CM014B Contract Packages). These options represent approximately 40% of the total Contract Budget. This change essentially restructures the CS 179 Package, and in the

PMOC's opinion, will have a significant impact on the entire ESA Program (in terms of both cost and schedule).

ESA continues to work on schedule and cost estimates for both the CM007 and CM014B contracts. As of the end of October, 2013, the PMT has not provided a cost estimate for CM007 and has not provided the cost or schedule estimates for CM014B. The CM014B risk workshop is expected to be held after the schedule and cost estimate are completed (this was originally forecast for October 2013, but at this point the PMOC does not believe this will happen until at least December 2013). The CM007 risk workshop is forecast for some time in the 1Q2014 and is anticipated to be done between issuance of the Request for Expressions of Interest and the Request for Proposals. The PMT stated that it will not have a "bottom up" schedule developed for this package until sometime in the 4Q2013. The Contract Packaging Plan (CPP) will be updated after the project re-planning effort is completed and, as such, there is currently no forecast date for issuing an updated CPP. The PMT is currently not planning to perform a programmatic risk assessment until sometime in early 2014, if at all. The PMOC notes that cost and schedule contingency levels are often determined on the basis of the risk assessment results; this is a standard approach to determine the contingency levels assigned to the project.

Minimal progress has been made on producing an Integrated Master Schedule which overlays the ESA Harold work schedule on an Amtrak Program of Projects that may compete for limited resources. Amtrak provided a schedule for the Moynihan project for remaining work in 2013; however, the ESA PMT has yet to develop the framework for the Integrated Master Schedule. Given that PMT is now re-planning the remaining Harold work. The PMOC believes that now it is even more critical to have the Amtrak Program of Projects in place in order to provide a more realistic evaluation of the schedule for remaining ESA Harold work.

5.0 ELPEP COMPLIANCE SUMMARY

The current status of each of the main ELPEP components is summarized as follows:

- **Technical Capacity and Capability (TCC):** The PMOC has completed its review of the draft PMP Revision 9.0 and incorporated the FTA comments in September 2013. Regarding PMP training, the PMOC has been advised that MTACC has completed its audits to establish where training efforts need to be focused. The audit report was provided to the FTA and the PMOC in September 2013. MTACC began full-scale procedures training for its project management personnel during 3Q2013 (discussed in the QA/QC section above). MTACC unilaterally issued a subsequent revision to the TCC Plan in September 2013. The PMOC will review this latest update, consolidate all comments and forward the final draft comment to the FTA in November 2013. The PMOC previously noted that a TCC review might be warranted given the recent significant personnel changes to many key upper management level positions.
- **Risk Mitigation Capacity Plan (RMCP):** FTA-RII provided its conditional acceptance of the RMCP in its May 24, 2012 letter to MTACC. The PMOC has verified RMCP final acceptance based on its incorporation into the RMP.
- **Risk Management Plan (RMP):** FTA formally notified MTACC of its conditional acceptance of the RMP (Rev. 2) by letter dated March 4, 2013, based on MTACC correcting an error and expanding discussion of certain risk and mitigation topics.

- **Continuing ELPEP Compliance:** The following ELPEP components continue to need improvement or are deficient: Management Decision; Design Development; CCC Process and Results; Stakeholder Management; Issues Management; Procurement; Timely Decision Making; Risk-Informed Decision Making.

The next ELPEP Quarterly Review Meeting with MTACC, FTA-RII, SAS and ESA projects and the PMOC is scheduled for December 12, 2013.

With MTACC's submission of its East Side Access FTA Quarterly Report (July, August, September 2013) and its latest October 2013 quarterly Progress Report, the PMOC notes that the ESA project continues to be non-compliant with ELPEP, and is not meeting some of the more important requirements of the SMP and CMP sub-plans to the PMP. The PMOC's major areas of concern include:

- **ELPEP**: MTACC is not forecasting and trending either cost or schedule contingency accurately because it does not include the significant cost, schedule and contingency impacts of the CM012R bids over budget event and subsequent cancellation of the procurement in 4Q2012. ESA has not accurately calculated the schedule contingency utilization resulting from the repackaging of CM012R and the major procurement delays. ESA has also not addressed the need for utilizing project cost contingency to cover the budget shortfall.
- **Schedule Management Plan**: The ESA project is non-compliant with requirements for IPS Updating, Forecasting, and Schedule Contingency Management. Additionally, ESA is no longer providing any schedule information about future planned contract packages and has ceased providing the monthly IPS updates.
- **Cost Management Plan**: The ESA project is non-compliant with requirements for Cost Estimating, Contract Level EAC Forecasting, Project Level EAC Forecasting, Project Level EAC Forecast Validation, Monthly Update Process and MTACC Cost Contingency Management and Secondary Mitigation.

Revisions to the ELPEP Document: On March 19, 2013, MTACC provided the FTA and the PMOC with its proposed revisions to the ELPEP. The FTA and MTACC have agreed to hold working meetings to progress development of a revised ELPEP. These meetings had been expected to start during 2Q2013 but have been delayed pending agreement on how to proceed without the revised ESA cost and schedule baselines, which are needed to provide a comprehensive revision to the ELPEP document. As of October 31, 2013, MTACC has still not issued the new revised cost and schedule baselines.

6.0 SAFETY AND SECURITY

Project safety statistics for lost time accidents continue to trend slightly above the Bureau of Labor Statistics (BLS) national average at 2.23 vs. 2.00 lost time accidents per 200,000 hours. Although there has been continuing improvement in the overall project safety statistics, several contracts have statistics above the average for the project. For the CM004 Contract, the lost time accidents are trending above the ESA Project average (2.90 vs. 2.23 lost time accidents per 200,000 hours). On the CQ039 Contract, which is nearing completion, the lost time accident statistics continue to trend well above the ESA Project average (5.14 vs. 2.23 lost time accidents

per 200,000 hours). ESA did not report any significant security issues for the September 2013 reporting period.

7.0 ISSUES AND RECOMMENDATIONS

Design: The PMOC remains concerned that the GEC and PMT continue to consistently miss all of their target dates for remaining design activities on the project, not just catenary design. The level of effort for the GEC will increase significantly given the development of the CM007 Contract Package and the potential scopes shifts being considered for the remaining Harold Contract Packages. The PMOC has recommended that the PMT develop a tracking sheet with firm dates for interim milestones as a tool to augment the design management process.

Procurement: The lack of stability in the Contract Packaging Plan remains a concern. The PMT continues to shift and split scope among different packages, making it difficult to fully understand the impact of these changes to the overall ESA Project at this time. The ESA PMT is now looking at repackaging the CH057 and CH058 contracts. The PMOC recommends that the PMT give priority to producing an updated Contract Packaging Plan and adhere to it without shifting scope for the remainder of the project.

The August 1, 2013 planned advertise date for the CM006 (northern structures) package was not met (this is the second time advertise date has slipped, initial forecast for advertising was July 1, 2013) and the advertisement was posted on August 15, 2013, with proposal packages available on August 26, 2013. Advertise date for the CM007 (caverns) package remains TBD. These are critical packages and the continuing slippage of the procurement dates for them is of major concern.

The PMOC also remains seriously concerned about the continuing delays to other significant procurements, namely: Systems Package 1 (CS179) (currently in negotiations since 2Q2012); CS284 (Tunnel Systems which has now been split into two packages); VS086 (Signal Equipment) and CM014B (GCT Concourse and Fit-out). The Systems work is on the project critical path and award dates for the Systems packages remain TBD.

Contract CM004: The PMOC has previously reported on the issues with 245 Park Ave. Entrance, particularly issues with the escalator and acceptance and opening of the entrance by Metro-North Railroad (MNR). As of this report, the Project Office has advised the PMOC that the escalator test has been performed and accepted by MTACC/MNR. On October 21, 2013, MNR officially opened the 245 Park Entrance. Beneficial Use documents are circulating for signature and final punch list items are being completed. Substantial Completion is now January 31, 2014. Accordingly, the PMOC considers this issue closed.

Contract CM013: Through October 31, 2013, the stop work order issued by the MTACC Code Compliance Unit (CCU) for the application of Pneumatically Applied Concrete (PAC) continued to be partially lifted, allowing work in the shaft to be completed. Full release of the order is pending construction & inspection of the PAC mockup. The mockup construction began at the end of October 2013 and inspection will be performed in early November 2013. The PMOC will continue to observe the closure of this issue and any impact it may have on the forecast date for Substantial Completion.

Contract CQ032: The PMOC is concerned that the gap between actual progress and planned progress for CQ032 has grown from 2.7% in September 2012 to 31.2% in September 2013 and

continues to increase. Although the rate of acceleration of this gap has slowed considerably in recent months, the PMOC believes that the only schedule recovery available to the parties will be a schedule re-baseline, which the parties are in the process of developing. The PMOC therefore recommends that the PMT expedite development of this re-baselined schedule and then follow the new schedule explicitly.

Contract CQ039: During most of October 2013, the contractor was waiting for the ground freeze to thaw naturally so that it could finish its remaining work. The thaw was finally achieved late in October and the contractor began to apply compensation grout behind the tunnel liner. After the grout is completely installed, Substantial Completion will be held in abeyance until the Code Compliance issue of PAC cover is resolved. This issue has not been resolved since late spring 2013.

Contracts CH053/54A: The PMOC remains concerned that costs continue to increase in response to delays in construction and, consequently, the Substantial Completion date. Month-by-month, the SC continues to slip and the MTACC now forecasts it for July 17, 2014. Based on recent construction progress, the PMOC forecasts SC for late 3Q2014/early 4Q2014. In order to avoid further schedule slippage, the PMOC recommends that the PMT place a priority on the Force Account support for the CH053/CH054A contractor (Amtrak and LIRR supply fixed amounts of support for all ESA contracts. The ESA PMT is responsible to decide how that support is distributed among all its contracts). The PMOC believes that this will be much easier for ESA to do once the CQ031 contract no longer requires F/A support.

Railroad Force Account: During October 2013, both LIRR and Amtrak continued to prepare for cutovers – LIRR for Point Interlocking in December 2013, and for the signal power separation in November 2013 and Amtrak for "F1" Interlocking in November 2013. To date, the interlocking cutovers are on schedule and the signal power project is slightly behind schedule. All parties, the PMT, the railroads, and contractors (as necessary), continue to work closely together to ensure that project tasks are completed on or close to schedule. The PMOC recommends that the parties continue to work together to identify ways to accelerate the project schedule and take advantage of opportunities that present themselves.

Project Funding/Budget: The PMOC remains concerned about the results of the CM012R bid cancellation and its impact on the project budget. As stated on several occasions, the PMOC remains concerned that MTACC has not provided forecasts to assess the ESA Program budget and schedule impacts of the October 2012 CM012R bid overrun, as required by the CMP, and has not adjusted its CBB (or contingency drawdown) to account for the CM012R bid overrun costs. The PMOC has previously noted that it believed that the cost overrun on the cancelled CM012R solicitation will leave the ESA Project with a budget shortfall, which will impact the project's ability to mitigate future cost increases, and impact the ability to make timely awards of future contract packages. This concern has been borne out by the fact that the PMT indicated that it will have to delay award of CM007 due to funding limitations and, in response to questions from the PMOC, the PMT has acknowledged that its new "options" structure for CS179 has only identified funding to award the base contract at this point.

Project Schedule: ESA stated in its June 2013 Quarterly Report that it is currently performing a program level re-plan, with a goal of issuing a revised baseline for review by mid-September 2013. The PMT is obligated under the ELPEP agreement to provide accurate schedule updates and forecasts. By not doing so, it remains non-compliant with the following requirements set

forth in the SMP: IPS updating: Section 5.2, requirement for updating IPS on a monthly basis; IPS component schedules and monthly update: Section 5.3; IPS update process: Section 8.2 Documentation; Forecasting Requirements: Section 5.4, requires that the PMT identify budget and cash flow issues that may impact the project; Milestones and RSD slippage recovery process: Section 5.5; Schedule Forecasting and Reporting Process; and Schedule Contingency Management: Section 6.

The PMT did not provide a draft baseline schedule in mid-September 2013 as committed to in the July 2013 FTA/MTACC Executive Meeting. As of the end of October 2013, the following schedule items need to be addressed before a viable baseline schedule can be produced:

- CM007 "top down" schedule needs to be fleshed out and finalized.
- Integrated Systems Testing duration must be re-defined based on the change to the CS179 Contract Package Structure, and tied to the Manhattan Contracts schedules.
- Schedule for CM014B has to be produced.
- A new RSD must be determined.

In addition, ESA is currently re-thinking its packaging strategy and schedule going forward for future Harold Contracts that will incorporate lessons learned from previous contracts, regional commitments going forward, and available force account resources and outages. The PMOC has not received any information about the Harold re-planning effort (ESA committed to holding a workshop in October 2013 however this workshop was not held).

Risk Management: The PMOC remains concerned about the "coordination risk" retained by MTACC on the completion of the work in Manhattan, especially with regard to the construction and testing interface management for the systems work. When combined with the extensive scoping re-configuration changes anticipated for the Harold Interlocking work, the PMOC believes that this will create significant changes to the overall project risk profile and, as a result, the need for a comprehensive programmatic risk assessment.

Funding availability has now become a major risk on the ESA project. ESA has announced that it cannot award the CM007 package until at least July 2015 with a limited NTP (full NTP cannot be granted until April 2016) due to budget constraints. The restructuring of the CS179 Package will have a significant impact on the entire ESA Program (in terms of both cost and schedule). Splitting this Contract into a base contract with six options (based predominately on access restraints imposed by the CM005; CM006; CM007; and CM014B packages) will significantly increase the interface risks. Schedule risks will be exacerbated if funding is not in place to award the options as planned. In addition, restructuring of the CS179 Package will continue to delay award of the Contract, since the restructuring of the package will require a significant effort on the part of the proposers to submit new cost and schedules for the revised package.

Lastly, the PMOC is concerned that MTACC has not committed to performing a programmatic risk assessment once the new cost and schedule baselines are completed. The PMOC considers this an essential component in establishing the required cost and schedule contingency going forward.

APPENDIX A -- LIST OF ACRONYMS

AFI	Allowance for Indeterminates
ARRA	American Recovery and Reinvestment Act
BA	Budget Adjustment
CBB	Current Baseline Budget
C&S	Communication and Signals
CCC	Change Control Committee
CCM	Consultant Construction Manager
CM	ESA Construction Manager assigned to each contract
CMP	Cost Management Plan
CPOC	Capital Program Oversight Committee
CR	Candidate Revision
CSSR	Contact Status Summary Report
CIL	Central Instrument Location
CPRB	Capital Program Review Board
CPP	Contract Packaging Plan
DCB	Detailed Cost Breakdown
ELPEP	Enterprise Level Project Execution Plan
EPC	Engineering-Procurement-Construction
ERT	East River Tunnel
ESA	East Side Access
ET	Electric Traction
FA	Force Account
FAMP	Force Account Management Plan
FHACS	"F" Harold Alternate Control System
FFGA	Full Funding Grant Agreement
FTA	Federal Transit Administration
GCT	Grand Central Terminal
GEC	General Engineering Consultant
HTSCS	Harold Tower Supervisory Control System
IEC	Independent Engineering Consultant (to MTA)
IFB	Invitation for Bid

IPS	Integrated Project Schedule
IST	Integrated System Testing
LIRR	Long Island Rail Road
MNR	Metro-North Railroad
MTA	Metropolitan Transportation Authority
MTACC	Metropolitan Transportation Authority Capital Construction
N/A	Not Applicable
NTP	Notice-to-Proceed
NYAR	New York and Atlantic Railroad
NYCDEP	New York City Department of Environmental Protection
NYCDOB	New York City Department of Buildings
NYCT	New York City Transit
NYSPTSB	New York State Public Transportation Safety Board
OCO	Office of Construction Oversight (MTA)
PE	Preliminary Engineering
PEP	Project Execution Plan
PMOC	Project Management Oversight Contractor (Urban Engineers)
PMP	Project Management Plan
PMT	Project Management Team
PQM	Project Quality Manual
PWE	Project Working Estimate
QA	Quality Assurance
RAMP	Real Estate Acquisition Management Plan
RFP	Request for Proposal
RMCP	Risk Mitigation Capacity Plan
RMP	Risk Management Plan
ROD	Revenue Operations Date
ROW	Right of Way
RSD	Revenue Service Date
SC	Substantial Completion
SCADA	Supervisory Control and Data Acquisition
SCC	Standard Cost Category

SMP	Schedule Management Plan
SSMP	Safety and Security Management Plan
SSOA	State Safety Oversight Agency
SSPP	System Safety Program Plan
TBD	To Be Determined
TBM	Tunnel Boring Machine
TCC	Technical Capacity and Capability
VE	Value Engineering
WBS	Work Breakdown Structure
WBY	Westbound Bypass Tunnel

APPENDIX B – TABLES

Table 1- Project Budget/Cost Table (as of September 2013)

	FFGA			MTA's Current Baseline Budget (CBB)		Expenditures	
	(Millions)	(% of Grand Total Cost)	Obligated (Millions)	(Millions)	(% of Grand Total Cost)	(Millions)	(% of CBB)
Grand Total Cost	**$7,386**	**100**		**$9,824**	**100**	***$5,256.10***	***53.50%***
Financing Cost	$1,036	14		$1,116		***617.6***	***55.34%***
Total Project Cost	$6,350*	86	$4,107	$8,708*	88.3	***$4,638.50***	***53.27%***
Federal Share	$2,683	36.3	$1,148	$2,699	30.6	*$1,906.30*	*21.89%*
5309 New Starts share	$2,632	35.6	$1,098	$2,436.60	27.6	*$1,648.80*	*18.93%*
Non New Starts grants	$51	0.7	$50	$67	0.8	$62.10	0.71%
ARRA	0	0	0	$195.40	2.2	195.4	2.24%
Local Share	$3,667	49.6	$2,959	*$6,009*	57.7	*$2,732.20*	*31.38%*

* CBB represents current MTA Board approved $8.245 million budget plus $463 million for Rolling Stock Reserve (regional investment not included).

Table 2 – Summary of Critical Dates

	FFGA	Forecast (F) Completion, Actual (A) Start	
		Grantee*	FTA**
Begin Construction	September 2001	September 2001(A)	September 2001(A)
Construction Complete	December 2013	August 2019	September 2019
Revenue Service	December 2013	August 2019	September 2019

* Source – Grantee forecast Revenue Operations Date per information presented to MTA CPOC on May 21, 2012

**Source –Based on PMOC 2012 risk assessment results.

Table 3: Comparison of Standard Cost Categories: FFGA vs. CBB

Standard Cost Category (SCC) No.	FFGA SCC baseliue (YOE $) M	July 2, 2012 Re-baseline (YOE $)	August 2013 SSC (YOE $) M	Sept 2013 SSC (YOE $) M	Sept 2013 % of Rebaseline	June'13 to Sept '13 Change $M	CBB Variance from FFGA %
10	1,989	2,943	3,099	3,099	105.30%	23	55.81%
20	1,169	1,514	1410	1,410	93.13%	47	26.95%
30	356	388	331	332	85.57%	-61	-6.74%
40	205	488	513	513	105.12%	-9	153.66%
50	619	698	677	677	96.99%	0	9.37%
60	165	204	204	204	100.00%	0	153.66%
70	957	674	674	674	100.00%	0	-29.57%
80	1,184	1,649	1,649	1,649	100.00%	0	153.66%
90	169	150	150	150	100.00%	0	-11.24%
Subtotal	**6,813**	**8,708**	**8,708**	**8,708**	**100.00%**	**0**	**27.81%**
100	1,036	1,116	1,116	1,116	100.00%	0	153.66%
Total Project Cost (10 – 100)	**7,849**	**9,824***	**9,824**	**9,824**	**100.00%**	**0**	**25.16%**

*This total amount does not include Regional Investment amount of $590,732,003.

Notes to changes in the Code: None

Table 4 -- Core Accountability Items – September 2013

Project Status:		Original at FFGA	Current*	ELPEP **
Cost	Cost Estimate	$7.386B	$9.824B	$8.119B
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Schedule	Revenue Service Date	December 31, 2013	September 2019	April 30, 2018
Total Project Percent Complete	Based on Expenditures	58.0 ***		
	Based on Earned Value	NA		

Major Issue	Status	Comments
Impact of CM012R solicitation cancellation, scope repackaging and re-bidding.	Scope from cancelled CM012R (Manhattan Structures 2) solicitation was split among existing and three new contract packages. Work from CM012R replacement packages are on the project critical path. First new contract package (CM005) had an NTP for September 9, 2013. CM006 was advertised on August 15, 2013(initial projection was July 1, 2013) with original proposals due on October 31, 2013 (amended to November 15, 2013).	Results of this procurement have a major impact on project cost and schedule baseline. The PMT continues working on developing the remaining contract package (CM007). Overall impact on project cost and schedule contingency remains TBD since the CM012R bid overrun in October 2012.
Major Procurements Delays	Procurement of CS179 (Systems Package 1) continues to slip. MTACC did not meet its goals of having a recommendation to award presented at the September 2013 MTA Board Meeting. Other System Packages (CS284, CS084, and VS086) procurement dates remain TBD. Advertise date for the CM007 and CM014B packages remains TBD.	The CM007 Package cannot be awarded before July 2015 due to budget constraints. ESA has changed the structure of the CS179 Package to include a base contract and six options. This will further delay negotiations and award of the Contract. The ESA PMT has also stated that it only has funding in place to award the base contract.

Project Schedule	ESA stated in its June 2013 Quarterly Progress report that it was in the middle of re-planning the project baseline and would issue a draft baseline for review by mid-September 2013. It also stated that it would not be providing IPS updates until it has a new schedule baseline.	ESA did not release a draft revised baseline as of the end of October 2013.
Amtrak Integrated Master Schedule	Develop an integrated master schedule that will lay out the upcoming Amtrak projects (Moynihan, ERT Track Rehab., Brookfield, etc.) and overlay the ESA work at Harold. The ESA Risk Manager stated in Q2 2013 that he received a schedule through the end of 2013 for Moynihan project. As of the end of September 2013, the PMOC is not aware of Amtrak providing schedules for additional projects that may impact Harold.	This issue has been outstanding since MTACC committed to producing the Integrated Master schedule in June 2012. An ESA staff member is coordinating this activity on a part-time basis until a dedicated scheduler is hired; however progress in producing this schedule has been limited. Given that ESA is re-planning the remaining Harold work, development of such a schedule will be further delayed.
Next Quarterly Meeting:	TBD	

* Note that $9.824B (finance included) and the September 2019 RSD are the MTA cost and schedule baselines approved in May 2012.

** 2010 Enterprise Level Project Execution Plan (ELPEP) reflecting medium level of risk mitigation, excluding financing cost of $1,116 million. ELPEP is to be updated.

*** Expenditure percentage based on dividing ESA Invoiced" figure by "Current Baseline Budget" figure excluding Rolling Stock Reserve.