

PMOC COMPREHENSIVE MONTHLY REPORT

East Side Access (MTACC-ESA) Project
Metropolitan Transportation Authority
New York, New York

Report Period December 1 to December 31, 2013



PMOC Contract No. DTFT60-09-D-00007

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Urban Engineers of New York, P.C., 2 Penn Plaza, Suite 1103, New York, New York 10121

PMOC Lead: V. Simuoli, 212-736-9100; vrsimuoli@urbanengineers.com

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

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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 and quality 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

EXECUTIVE SUMMARY

1. PROJECT DESCRIPTION

The East River tunnels in Manhattan are at capacity. The ESA project is anticipated to improve LIRR tunnel capacity constraints and enable the growth of the overall system. The project comprises a 3.5 mile commuter rail extension of the Long Island Rail Road (LIRR) service from Sunnyside, Queens to Grand Central Terminal (GCT), Manhattan, utilizing the existing 63rd St. Tunnel under the East River and new tunnels in Manhattan and Queens, including new power and ventilation facilities. The project includes a new 8 track terminal constructed below the existing GCT and a new surface rail yard in Queens for daytime train storage. Ridership forecast is 162,000 daily riders (27,300 new riders) in 2020. The project will provide increased capacity for the commuter rail lines of the LIRR and direct access between suburban Long Island and Queens and a new passenger terminal in Grand Central Terminal (GCT) in east Midtown Manhattan, in addition to the LIRR's current Manhattan connection at Penn Station.

2. CHANGES DURING 2nd Quarter 2013

a. Engineering/Design Progress

As of the end of November 2013, MTACC reported that the Engineering/Design effort was 97.8% complete (no change from the previous month), however a review of their Cost Report shows only 91.8% of the budgeted section titled “Design” as having been invoiced.

b. New Contract Procurements

A limited NTP for CH057A was issued during 4Q2013.

c. Construction Progress

The PMT reported in its November 2013 Monthly Progress Report that the total construction progress reached 55.1% complete, however excluding Management Reserve, based on the Cost Report, on a cost invoiced basis, it is 55.9%, in accordance with its re-baselined budget of May 2012.

d. Continuing and Unresolved Issues

During December 2013, the PMT submitted its confidential and ‘working’ new projections for the re-plan of the project cost and schedule and a series of meetings were convened by the MTA’s Office of Construction Oversight (OCO with the PMOC, IEC, and the Supplemental Engineering Consultant (SEC), who have each submitted its forecasts. At this point, the project schedule and cost projections are confidential, however it is noted that cost and schedule forecasts put forth by the oversight groups are higher and longer respectively than what the MTACC is forecasting.

In addition to the delays resulting from repackaging the CM012R Contract Package, the PMOC remains seriously concerned about delays to other significant procurements namely: Systems Package 1 (CS179) (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 PMOC notes that since 2Q2013, the ESA Project continues to be non-compliant with ELPEP contingency forecasting and is also not meeting the cost and schedule forecasting and reporting requirements of the Schedule Management Plan (SMP) and Cost Management Plan (CMP) sub-plans to the PMP. The PMOC considers this a serious problem, especially because MTACC has not had a functional Integrated Project Schedule (IPS) since October 2012 and has still not finalized the forecast cost impacts to the project due to the cancellation of the CM012R procurement in November 2012 and the subsequent significant delays caused by the required repackaging and re-bidding of the CM012R scope of work. The PMOC provided the details of ELPEP non-compliance to MTACC on October 30, 2013. See Section “ELPEP COMPLIANCE SUMMARY” later in this report for more details.

e. New Cost and Schedule Issues

As noted above, MTACC has stated that the draft projections for cost and schedule are confidential. The PMOC will formally provide its analysis and opinions once this information is presented publically at the MTA CPOC meeting (currently forecast for January 2014).

3 PROJECT STATUS SUMMARY AND PMOC ASSESSMENT

a. Grantee Technical Capacity and Capability

The ESA Project Office lost two key staff members during June 2013; the Project Controls Program Manager and the Operational Readiness Program Manager. ESA also lost its Harold Program Manager, lead scheduler, and the Rail Systems Program Manager in 3Q2013. Replacements have since been hired to fill the Harold Program Manager and Project Controls Program Manager. The ESA PMT needs to re-staff the remaining open key positions (Rail Systems Program Manager and scheduler) as soon as possible.

b. Real Estate Acquisition

Details of the Real Estate acquisition activities pertaining to the 48th Street Entrance of GCT are provided in Section 2.6 of this report.

c. Engineering/Design

Progress for remaining design work continues to lag design milestone targets. The GEC and PMT continue to consistently miss each of its target dates for completing the remaining design activities on the project. Details are provided in Section 2.1 of this report.

d. Procurement

Several procurement activities are ongoing related to the CM012R replacement packages (CM006; CM007), CM014B and the Systems packages (CS179; CS084, CS284; and VS086), and the procurement of these packages continue to be delayed. Details are provided in Section 2.2 of this report.

e. Railroad Force Account (Support and Construction)

During 4Q2013, Amtrak C&S personnel successfully completed the cutover of “F1” Interlocking. LIRR C&S personnel continued to prepare for the cutover of new Point Interlocking, although the cutover itself will be delayed by approximately 2 months until February 2014 due to a computer software incompatibility between new Point and Penn Station Central Control (PSCC), from where Point will be controlled. It will take the additional time for the parties to rectify the incompatibility. Additionally, LIRR Traction Power personnel continued its construction to cutover the signal power between 43rd and 48th streets in Queens. That cutover is now scheduled for 1Q2014.

f. Third-Party Construction

Manhattan: The CM005 contractor received the NTP in September 2013 and mobilized into the Eastbound and Westbound Caverns and the Tail Tracks to 37th St. In addition to mobilizing and other preparation work, the contractor began to install waterproofing on the sidewalls of the Eastbound Cavern in December 2013.

At CM013, the partial Stop Work Order placed by the MTACC Code Compliance Unit (CCU) on placement of pneumatically applied concrete for the construction of Stair #1 in the ventilation shaft remained in effect. Mockup coring and testing will be complete in January 2014.

On the CM014A contract, the initial components of the power system equipment were delivered and installed. MTACC and the contractor continue to negotiate over their disagreement on the time impact caused by the Systems Control and Data Acquisition (SCADA) system redesign.

Queens: The CQ031 contractor completed its construction in Queens in October 2013 and has since demobilized and left the project. Some commercial issues remain, however, and the PMT and the contractor will continue to negotiate those to completion. The PMOC does not believe that this will occur until mid-to-late 1Q2014.

The CQ032 contractor continued to make significant progress in the Open Cut (Plaza Substation) during 4Q2013 and it completed its work on the B-10 Substation in December 2013.

Additionally, the contractor expanded its construction to the Bellmouth, where it poured the last remaining portion of invert, and into the 63rd St. Tunnel, where it is making tunnel repairs. The contractor also continues to make “punchlist” repairs in the wayside vent facilities at the Roosevelt Island, Vernon Boulevard, and 29th, 23rd, and 12th streets. The PMT and the contractor continue to negotiate the re-baselined schedule, which will help to alleviate the large discrepancy between the “planned vs. actual” construction difference. This effort has been extended due to a re-design issue for the support of the structure above the Early Access Chamber (EAC). The MTACC’s forecast for Substantial Completion (SC) remains virtually the same at August 7, 2015. [Ref: ESA-95-Sept12]

Although the November 2013 ESA Monthly Report indicates that the CQ039 contract achieved Substantial Completion on September 30, 2013, the contractor continued to apply compensation grout behind the Northern Boulevard tunnel liner into December 2013 (it was planned to apply compensation grout between Substantial and Final Completion). The contractor has since completed the grout application, de-mobilized, and left the project. Final Completion will not be achieved, however, until the remaining commercial issues are fully negotiated and the Code Compliance issue about pneumatically applied concrete (PAC) (concrete cover) is resolved. The PMOC believes that the commercial issues will be agreed upon by mid-to-late 1Q2014, but the PAC issue may take longer.

The CH057A contractor, who will begin construction of the Westbound Bypass in Harold Interlocking, received limited Notice to Proceed (NTP) in early December 2013 and the kick-off meeting was held shortly thereafter. The contractor has begun administrative start-up and some very preliminary surveying. The contractor expects that actual construction will begin in early March 2014.

Harold Interlocking: Contract CH053 (Harold Interlocking, Part 1 and G.O.2 Substation):

The CH053 contractor progressed its construction during 4Q2013 with the continued installation of trough for the Tunnel A Approach Structure (although construction is presently suspended due to a conflict with the existing 12kV line), continued construction of the 43-S2 retaining wall, as well as the installation of the ML4 and Westbound Bypass bridge structures over the Loop Tracks near 43rd St, and the bridge girders for the ML4 bridge at 48th St. Additionally, the contractor continued to pull 12kV cables and prepare for micro-tunnel runs at various locations in Harold Interlocking.

The contractor also remains well behind its approved baseline schedule. Based on its historic construction rate, the PMOC maintains its projection of October 2014 as the earliest possible Substantial Completion date for CH053.

Contract CH054A (Harold Structures Part 2A):

The CH054A contractor continued to progress the 12kV ductbank installation during 4Q2013 with the installation of conduits, jacking and receiving pits, and micro-tunnels at various

locations in Harold Interlocking. The MTACC projects Substantial Completion (SC) for July 9, 2014, although the PMOC believes that it will be 2 to 3 months later based on CH054A's current rate of construction.

g. Vehicles

Details of the vehicle procurement (non-federally funded portion) are provided in Section 2.5 of this report.

h. Commissioning and Start-Up

A Quarterly Operational Readiness meeting was held on December 19, 2013. Details are provided in Section 2.4 in this report.

i. Project Schedule

Table 1: 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. Given the current status of the project, this date will not be met.

j. Project Budget/Cost

Table 2- Project Budget/Cost Table (as of November 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		9824	100.0%	\$5,345.00	54.4%
Financing Cost	\$1,036	14		1116		617.6	55.3%
Total Project Cost	\$6,350*	86	\$4,107	8708	88.3%	\$4,727.40	54.3%
Federal Share	\$2,683	36.3	\$1,148	2699	27.5%	\$1,922.70	71.2%
5309 New Starts share	\$2,632	35.6	\$1,098	2437	24.8%	\$1,665.20	68.3%
Non New Starts grants	\$51	0.7	\$50	67	0.7%	\$62.10	92.7%
ARRA	0	0	0	195	2.0%	195.4	100.2%
Local Share	\$3,667	49.6	\$2,959	6009	61.2%	\$2,804.70	46.7%

* CBB represents current MTA Board approved \$8,245 million budget plus \$463 million for Rolling Stock Reserve (regional investment not included).

k. Project Risk

The MTACC Risk Management Plan (RMP), Rev. 2.0 dated July 2012, a sub-plan within the ESA Project Management Plan (PMP), has been updated to conform to the ELPEP principles and requirements, and to incorporate FTA/PMOC comments. The FTA conditionally approved Rev. 2.0 on March 4, 2013.

MTACC routinely performs package level risk reviews for new contracts to be procured, although the PMOC notes that this was not done for the recently bid CM005 Contract. For a more detailed discussion, see Section 6.0 of this report.

MONTHLY UPDATE

The information contained in the body of this report is in accordance with Oversight Procedure 25, to “inform the FTA of the most critical project occurrences, issues, and next steps, as well as professional opinions and recommendations.” Where a section is included with no text, there are no new “critical project occurrences [or] issues” to report this month.

ELPEP COMPLIANCE SUMMARY

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

- **Technical Capacity and Capability (TCC):** PMOC’s review of the MTACC update to the March 2010 Technical Capacity and Capability Plan for ESA and SAS was completed and comments were forwarded to the FTA in August 2013. In September 2013, MTACC unilaterally issued a subsequent revision to the TCC Plan. The PMOC completed its review of the September 2013 update, consolidated all comments and forwarded the final draft comments to the FTA in November 2013. The FTA is currently evaluating how the updated TCC Plan will be incorporated into the revised ELPEP. The PMOC previously noted that a TCC review might be warranted given the recent significant personnel changes to many key upper management level positions.
- **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.

An ELPEP Compliance meeting was held on December 12, 2013. Significant risk elements discussed were:

- The monthly project schedule review meetings have not been held, but the project has shared information with the PMOC regarding the IPS “build-up” process the project is using to develop the new schedule baseline.
- The next risk workshop will be for the CM014B contract (GCT Concourse and Facilities Fit-Out), anticipated in January 2014.
- Risk workshops for CS179 (Systems Package 1 – Facilities Systems) and CM007 (Manhattan Cavern Structures & Facilities Fit-Out) are expected to be held during Q1-2014.
- Recent schedule and cost data provided by ESA includes a qualification regarding funding availability and inquired how the project will consider and evaluate funding risk. MTACC noted that funding risk will be analyzed separately.

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 opinion is that this is a serious deficiency and needs to be resolved immediately. [Ref: ESA-114-Sep13]

Specific areas of non-compliance were provided to MTACC at the September 12, 2013 ELPEP Quarterly Review Meeting. The PMOC transmitted the details of ELPEP non-compliance on the ESA Project to MTACC on October 30, 2013. MTACC provided preliminary draft responses (partial) to the PMOC list of ELPEP non-compliances at the December 12, 2013 ELPEP Quarterly Compliance Meeting. MTACC and the PMOC are currently planning to hold a January 2014 workshop to address the FTA and PMOC's concerns. 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.
- **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 that will include the new cost and schedule contingency values. As of December 31, 2013, MTACC has still not issued the new revised cost and schedule baselines.

MTACC Project Procedures Audit Related to ELPEP: At the December 12, 2013 Quarterly ELPEP Compliance Meeting, MTACC advised that they have completed their audit of 22 project procedures and the CMP, SMP and RMP Sub-Plans for ELPEP compliance. Audit findings have been reviewed by the ESA project and, for those findings that were not cleared, corrective action plans were submitted by the project for the remaining non-conformances.

The next ELPEP Quarterly Review Meeting with MTACC, FTA-RII, SAS and ESA projects and the PMOC is scheduled for March 20, 2014.

1.0 GRANTEE'S CAPABILITIES AND APPROACH

1.1 Technical Capacity and Capability

a) Organization

There are currently no issues to report pertaining to the MTACC organizational structure.

b) Staffing

The ESA Project Office lost two key staff members in 2Q2013; the Project Controls Program Manager and the Operational Readiness Program Manager. . ESA also lost its Harold Program Manager, lead scheduler, and the Rail Systems Program Manager in Q3 2013. Replacements have been hired to fill the Harold Program Manager, Project Controls Program Manager, and Operational Readiness Program Manager. ESA needs to re-staff the remaining open key positions as soon as possible.

1.2 Project Management Plan**a) History of Performance**

MTACC re-baselined the ESA Project in May 2012. These baselines resulted in a risk adjusted budget of \$8.24B (not including rolling stock reserve and finance cost) and a projected RSD in August 2019. During 2013, ESA has undertaken an extensive re-planning effort to revise the Program Budget as a result of the CM012R bid overrun and continuing delays in several other major procurements (CS179; CM014B). This is the second re-planning effort undertaken by ESA since the FFGA.

b) PMP

The Grantee has updated the PMP and issued Rev. 9 on June 28, 2013. The PMOC completed its review of the revised PMP in August 2013 and incorporated the FTA comments in September 2013. The PMOC and FTA comments were then coordinated, consolidated and finalized. The FTA formally issued final PMP review comments and transmitted them to MTACC in December 2013. At the Quarterly ELPEP Compliance Review Meeting held on December 12, 2013, MTACC notified the FTA and the PMOC that they anticipate full revisions to the CMP and SMP, using the Candidate Revision process, within the next few months. On October 2, 2013, MTACC completed the PMP procedures training that started on July 11, 2013.

1.3 Project Controls**a) Schedule**

The ESA IPS has not been properly updated since October 2012, as required in the SMP (Section 5.3 – Update Process). ESA submitted a program overview schedule on December 3, 2013, a partial IPS without RSD, and a very brief variance report. The bar chart schedule indicates that the project critical path goes through contracts CM005 and CM007, and part of Integrated System Testing (IST) and LIRR testing and commissioning for three months.

b) Cost

The project estimate at completion remains \$8.7 billion (the same as the result from the re-baseline in May 2012) not taking into account the cost associated with the delay caused by cancelling the CM012R contract, or the projected higher costs for the packages created out of the CM012R scope.. The CMP states (Section 5.7 – Monthly Update Process) that “each month the project level EAC is forecasted and the baseline budget is updated”. The PMT continues to not meet this requirement.

The CMP needs to be revised to reflect changes resulting from the May 2012 project re-baseline effort

The Grantee

needs to follow the CMP as agreed to improve its project budget effectiveness. As noted earlier, ESA has begun to present its unofficial re-plan values for discussion with the PMOC, IEC, and the Supplemental Engineering Consultant, even while officially presenting the old values.

1.4 Federal Requirements

a) FFGA

As a result of MTACC's cost and schedule re-baseline effort in 2011/2012 and the independent risk assessment completed in May 2012, MTACC presented a new budget and RSD to the MTA Capital Program Oversight Committee (CPOC) on May 21, 2012: \$8.24 billion (w/o vehicles and financing). At the December 12, 2012 special briefing to FTA-RII by MTACC on the decision to cancel the CM012R solicitation, the MTACC President said that MTACC's analysis of the cost and schedule impact to the ESA project budget would not be completed until January 2013, prior to presentation at the January 2013 CPOC meeting. At that time, FTA-RII advised MTACC that the FTA has decided to place on hold the FFGA Amendment pending written commitment from the MTA regarding details of an impact analysis and a recovery plan. As of the end of December 2013, MTACC has provided draft re-plans for cost and schedule that have not yet been finalized.

b) Federal Regulations

There are currently no issues to report with regard to the Uniform Property Acquisition and Relocation Act of 1970.

1.5 Safety and Security

a) Safety Certification Process

The MTACC Director of Construction Safety presented a brief status of remaining design packages that have to be reviewed and approved by the Safety Certification Committee at the December 19, 2013 Operational Readiness meeting, and a schedule for certification of preliminary hazards on remaining design packages. Most of the packages will be completed by the end of December 2013/beginning of January 2014. A meeting of the Safety Certification Committee will be convened in the 1Q2014 to review the package.

A chart detailing the flow of information from design to construction was also presented at the Operational readiness meeting. The MTACC Director of Construction Safety stated that technical working groups will be established to acquire feedback on the certifiable elements from the CM teams.

A brief status on the certification of construction was presented at the meeting. It was noted that the packages for CM009/CM019; CQ039; CQ031, CM004; and CM013C have been made available to construction managers. The PMOC stated that a separate meeting will be held to verify that the certifiable elements have been authorized. The PMOC remains concerned about the lag in certifying elements that have been built/installed to date. [Ref: ESA-A47-March13] The MTACC Director of Construction Safety stated that going forward, technical working groups will be convened to integrate the safety certification related activities of the GEC; CM: Safety; and Quality representatives for each contract package.

The PMOC also recommends that the MTACC Director of Construction Safety stress the need to maintain a stable committee to all of the participating stakeholders having representation on the

Committee. [Ref: ESA-96-Sep12] The PMOC will observe the continuity of the committee at the next meeting planned for early 2014.

b) Project Construction Safety Performance

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. There has been continuing improvement in the overall project safety statistics and currently there are two contracts that are trending above the average for the project. For the CM004 Contract, the lost time accidents are trending above the ESA Project average (2.80 vs. 2.23 lost time accidents per 200,000 hours). On the CQ031 Contract, the lost time accident statistics are trending above the ESA Project average (2.59 vs. 2.22 lost time accidents per 200,000 hours), although this contract is currently in the demobilization and punch list phase.

c) Security

The PMT did not report any significant security issues during December 2013.

1.6 Project Quality

a) ESA Project Quality Manual (PQM)

A Draft of Revision 7 has been prepared. MTACC's Chief of Quality, Safety, and Security and the ESA Quality Manager are scheduled to discuss the revision on January 10, 2014 and the PMOC expects to receive a draft copy for review later that month. [Ref: ESA-93-June 12]

b) Submission of As-Builts

The single construction contractor working on CH053, CH054A, and CQ032 continues to be late in submitting As-Built drawings. The contractor started to submit a limited number 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. The ESA Quality Manager, MTACC's Chief of Quality, Safety, and Security, and Deputy Executives from the ESA Project will meet to develop a plan of action in January 2014. [Ref: ESA-100-Dec12]

c) CH053, CH054A Quality Issues

The MTACC Code Compliance Officer stated that the CH053/CH054A contractor is using uncertified inspectors on Special Inspections for the bridges it has installed. He also noted that there is a difference between local special inspection requirements and New York State requirements. He informed the contractor's Quality Manager that New York State requirements take precedence. The contractor's Quality Manager stated that he did not agree with this but the MTACC Code Compliance advised him that the contractor must follow the New York State requirements. A follow-up meeting to resolve this issue is scheduled for January 8, 2014. [Ref: ESA-115-Dec13]

d) CM005 Quality

Submittals from the new Quality Manager for the CM005 Contractor have many errors and omissions. The ESA Quality and CM005 Construction Managers met with the Contractor who committed to improve the submittals. The ESA CM005 Quality Manager then conducted a workshop for Construction Work Plans (CWPs) with the contractor on December 11, 2013.

e) Quarterly Quality Oversight (QO) Reports

During the 4Q2013, the PMOC attended QO Reports for the following contracts: CM004/CM014A, and CH053/ CH054A. The following are the PMOC's observations:

CONTRACT	OBSERVATIONS
CM004/CM014A	<ol style="list-style-type: none"> 1. No contractor Management Representative was present. 2. The ESA auditor collected many examples to review later. 3. The ESA auditor did not conduct an exit interview.
CHO53/054A	<ol style="list-style-type: none"> 1. Some subcontractors did not acknowledge that they would use the contractor's approved Quality Plan. 2. There was no traceability of some Receiving Inspection Records and Purchase Orders. 3. Construction Work Plan and Safe Work Plan submittal logs were not properly formatted. 4. The contractor's approved Nonconformance Reporting process is not correct and must be revised.

The ESA quality auditors use a generic checklist when performing their Quarterly Quality Oversight Reports. The contractor's Quality Plan that was approved by ESA often contains additional requirements. The PMOC recommended to MTACC Quality Management that each QO Report checklist be tailored to include the additional requirements from the contractor's Quality Plan since that would be more meaningful than only auditing to the generic MTACC requirements. MTACC Quality agreed with this suggestion and the revised checklist that will be issued in 2014 will include blocks for additional requirements from the Quality Plan of the contractor being audited.

1.7 Stakeholder Management**a) Railroads**

In coordination with Amtrak and LIRR, more weekend outages took place in Harold Interlocking with a focus on the installation of catenary and signal towers. Eighteen (18) catenary poles in Stage 1 remain to be installed, but all of the poles critical for the westbound bypass slab outage were installed in time for the past summer's outage on Lines 2 and 4.

b) Others

No other coordination efforts to discuss for this quarter.

1.8 Local Funding**a) MTA/New York State (Capital Plan)**

MTACC announced at the May 2012 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. [REDACTED]

b) Other Sources

The total Federal funding commitment as of November 2013 remained at \$2.699 billion, as indicated in Table 2 in the Executive Summary.

1.9 Project Risk Monitoring and Mitigation

a) Risk Management Plan

The MTACC Risk Management Plan (RMP), Rev. 2 dated July 2012, is a sub-plan within the ESA Project Management Plan (PMP). The RMP, Rev 2 was updated and has incorporated the FTA/PMOC review comments to bring it into compliance with the ELPEP principles and requirements. The FTA formally notified MTACC of its conditional acceptance of the RMP by letter dated March 4, 2013. At the December 12, 2103 Quarterly ELPEP Compliance Meeting, MTACC advised that the RMP will be updated during 1Q2014 using the Candidate Revision process.

b) Monitoring

The MTACC committed that PMT would hold monthly risk meetings with the PMOC to review current risk related activities at the end of 2Q2012. The kick-off meeting occurred in January 2013. The last meeting was held on July 31, 2013, although the target has been monthly meetings. The PMOC encourages the PMT to be more proactive and keep to a monthly schedule because valuable insight and information is discussed among the meeting participants.

c) Mitigation

Discussion of current mitigations is discussed in Section 6.3 below.

2.0 PROJECT SCOPE

2.1 Engineering/Design and Construction Phase Services

Status:

As of the end of November 2013, MTACC reported that the Engineering effort was 97.8% complete (on an earned value basis), however a review of their Cost Report shows only 91.8% of the budgeted section titled “Design” as having been invoiced. The percent complete varies monthly and depends on the award of additional tasks to the GEC.

The 90% catenary design submittal for FHA04 was sent to Amtrak for their review on November 15, 2013. Amtrak reviewed the design and gave permission to go to 100% on December 20, 2013. The 100% design was forward to Amtrak for their review on December 27, 2013.

The portion of the scope of work within the right of way of 48th Street – the structural box and the street utility work – is shifting from CM015 into CM014B. [REDACTED]

Advertising of CM014B is anticipated for the end of January, 2014 with an Award anticipated for July 1, 2014.

The CCC approved the creation of a new package (CH057B) to construct the relocated LIRR tracks ML2 and ML4. This work was taken out of the CH057 package and will be performed by an MTA on-call track contractor in early 2014.

The remaining scope of CH057 is being considered for repackaging based on the outcome of the Harold force account schedule review, which has been ongoing over the last several months. As

a result of the schedule review the major elements of the CH057 and CH058 scopes of work be shifted between the two packages, e.g. the Tunnel D pit and approach work will be split, with the east end of the D approach structure being moved to the CH058 package, and the catenary structures for the Loop and T interlockings being moved into the CH057 Package. The proposed changes were approved by the CCC on December 20, 2013. Revisions to the CH057 package will proceed with advertising anticipated in April 2014.

The CCC approved the repackaging and alternate method for constructing the Eastbound Reroute tunnel in Contract Package CH058 to make better use of available extended track outages in the summers of 2015 and 2016 on December 20, 2013. Revisions to the package will proceed with a 90% submission planned for June 2014.

The GEC completed the discussion materials for the cast in place, hybrid concept, and precast design options for CM007 in early November, 2013. A RFEI was advertised on November 18th and 16 Expressions of interest were received by December 17, 2013. Meetings with interested parties will be held in January and February 2014. The 100% repackaging submittal is planned for March, 2014.

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). Contract documents remain under development. Technical drawings and specifications for the Traction Power Contract Package (CS084) were completed in September 2013, however work on the Contract documents continues. The specifications and drawings are being reviewed by MTACC Legal. The target for advertising is currently January 2014.

Observation:

The GEC and PMT continue to consistently miss all of its target dates for remaining design activities on the project.

Concerns and Recommendations:

The PMT design management team needs to focus on achieving intermediate milestones in a timely fashion and work closely with the GEC to help make this happen. The PMOC continues to recommend that the PMT develop a design milestone tracking sheet for the remaining design work on the project; similar to what was done for the catenary design work; in order to more effectively manage the design effort. [Ref: ESA-103-Dec12]

2.2 Procurement

Status:

As of the end of November 2013, the total procurement activity on the project was reported to be 62.3% complete, with \$5.423 billion in contracts awarded out of the \$8.708 billion revised budget.

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 was extended twice to November 15, 2013. Meetings with proposers were held in December and a BAFO date of December 20, 2013 was issued via addendum. 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 issued addendum #35 in November 2013 that restructured the contract package to include a base contract and six options. [REDACTED] As a result, ESA missed its last forecast of having a recommendation to award to present at the November 2013 MTA Board meeting. The latest round of Best and Final Offers (BAFOs) for the revised contract package was due on November 20, 2013 and this date was subsequently extended to December 11, 2013. The ESA PMT stated that a recommendation to award was presented to the selection committee in December, with a goal of presenting this recommendation to the MTA Board in January 2014.

As stated above, the PMT has decided to split the Tunnel Systems package (CS284) into two packages: one for track work and signals (which will remain CS284) and one for the traction power work (CS084). Advertise date (RFP) for CS084 is forecast for January 15, 2014; procurement dates for CS284 remain TBD. This package split will have an impact on the Systems Package 1 (CS179) Contractor, who is responsible for systems integration for these packages.

An Industry Outreach was held November 1, 2013 to familiarize the bidding community with the CM014B package. Advertising of CM014B is anticipated for mid-January 2014, with an award anticipated for July 1, 2014.

A notice of award Notice to Proceed (NTP) for a limited scope of work was issued for CH057A on November 21, 2013 (previously forecast for October 2013). Full NTP is anticipated for January/February 2014, pending resolution of funding issues with Amtrak and the FRA for the High Speed Rail (HSR) portion of the work. On September 17, 2013, the CCC approved creating a new package (CH057B) to construct the relocated LIRR tracks ML2 and ML4. This work will be taken out of the CH057 package and be done by an MTA on-call track contractor in early 2014. NTP for remaining work in the CH057 package is forecast for August 2014.

Observation:

The ESA PMT did not meet any of its 2012 schedule re-baseline dates for the four major packages that were to be procured in 2012 (CM012R; CS179; CM014B; CH057). Procurement dates for major packages continue to slip or remain TBD as of December 2013.

Concerns and Recommendations:

The lack of stability in the contracting strategy and Contract Packaging Plan remains a concern. The PMT continued to shift and split scope among different packages during 4Q2013, making it difficult to fully understand the impact of these changes to the overall ESA Project. 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. [Ref: ESA-113-June 13]



The PMOC also remains seriously concerned about delays to other significant procurements, namely: Systems Package 1 (CS179) (currently in negotiations since 2Q2012); CS184 (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.

2.3 Construction

ESA reported in its November 2013 Monthly Progress Report that the total construction progress reached 55.1% complete on a cost invoiced basis (vs. 57.6% planned), in accordance with its baseline budget of May 2012. The data dates for financial and progress figures are November 30, 2013 for all reported contracts. Details for active construction contracts are provided below.

Manhattan Contracts

CM004 – 44th St. Demolition and Construct Fan Plant Structure and 245 Park Ave.

Entrance

Status: Through November 30, 2013 the EAC was \$54.99M. The forecast Substantial Completion (SC) date remains January 31, 2014 for the Vent Building and for the 245 Park Ave. Entrance. The percent complete was 90.6% vs. 98.5 planned. Data date for the table below is November 30, 2013.

	1	2	3	4	5	6	
	Original Baseline	Current Approved Baseline	Change to Original (2 – 1)	EAC / Forecast	Change to Original (4 – 1)	Change to Current (4 – 2)	
Contract Cost	\$40.77M (Award)	\$55.20M	+14.43M 35.39%	\$55.00M	+\$14.23M 34.9%	+0M 0%	
Scheduled SC Date	09/16/11	12/31/13 10/04/13 (245 Park)		01/31/14 01/31/14 (245 Park)			
Duration (NTP - SC)	24 mos.	51 mos. 49.5 mos. (245 Park)	+27 mos. 112.5% +25.5 mos 106.25% (245 Park)	52 mos. 52 mos. (245 Park)	+28 mos. 116.66% +28 mos 116% (245 Park)	+1 mo. 1.96% +3.5 mos 5.05% (245 Park)	
% Complete		Actual - 12 mos.		Actual - 6 mos.		Avg. Req'd. Progress	
Plan	Actual	Total	Avg./mo	Total	Avg./mo	Contract SC	Forecast SC
98.5%	90.6%	*N/A	*N/A	*N/A	*N/A	*N/A	*N/A

From November 2013 ESA Monthly Report

*MTACC reports that the curve for percentage of completion was redesigned again.

Construction Progress:

44th St. Vent Plant

The contractor completed erection of the limestone building facing and louvers. During December 2013 the gantry crane was re-installed. The temporary access stair from the 2nd Floor to Ground Floor while the Gantry Crane remains has been completed. The stair will be completed in the CM014-B contract. Street utility work in E. 44th St., remaining erection of below grade structural steel and shaft punch list work has resumed. The temporary structural timber deck on the ground floor was removed and the contractor began installation of the permanent Ground Floor deck.

245 Park Ave. Entrance

The area remains under Beneficial Use with only minor punch list items remaining.

Observations/Analysis:

The remaining work is progressing smoothly toward substantial completion January 31, 2014.

CM005 – Manhattan South Structures

Status: MTACC reports that through November 30, 2013 the EAC remained at \$225,287,000. The forecast Substantial Completion date remained February 6, 2016. The actual percent complete is 6.5% versus 5.0% planned. Data date for the chart below is November 30, 2013.

	1	2	3	4	5	6	
	Original Baseline	Current Approved Baseline	Change to Original (2 - 1)	EAC / Forecast	Change to Original (4 - 1)	Change to Current (4 - 2)	
Contract Cost	\$200.6M (Award)	\$200.6M	0.0M 0.0%	\$225.3 M	+\$24.7M +12.3%	+24.7M +12.3%	
Scheduled SC Date	02/06/16	02/06/16		02/06/16			
Duration (NTP - SC)	29 mos.	29 mos.	0 mos. 0.0%	29 mos.	0 mos. 0.0%	0 mos. 0.0%	
% Complete		Actual - 12 mos.*		Actual - 6 mos.*		Avg. Req'd. Progress	
Plan	Actual	Total	Avg./mo	Total	Avg./mo	Contract SC	Forecast SC
5.0%	6.5%	NA	NA	NA	NA	N/A	3.6%/mo.

From November 2013 ESA Monthly Report

* This contract has just started.

Construction Progress: The contractor continued to mobilize and prepare submittals. Site handover and takeover inspections continued. Weep hole drilling of slabs was completed. The contractor began smoothing shotcrete on the walls and waterproofing installation in the East Cavern. Preparation for smoothing shotcrete and waterproofing installation continued in the West Cavern and Tail Tunnel L402. Muck cleanup and removal was completed at GCT East Bound and West Bound Wye Caverns 1 and 2. Material and equipment deliveries continued.

Observations/Analysis: Mobilization has gone well and the work has progressed ahead of schedule.

Concerns and Recommendation: The PMOC recognized the contractor's aggressive approach to start the waterproofing work, but appeared to lag behind in making the necessary submittals for this work. The ESA Construction Manager (CM) must enforce contract requirements. The PMOC recommends that the ESA CM and ESA Quality Manager meet to review and approve/disapprove future contractor submissions together that require joint review.

CM009 Contract – Manhattan Tunnels Excavation/Structures Part 1

Status: The CM009 contract achieved Substantial Completion, including its contract extension work, on September 30, 2013, and the contractor has completed its de-mobilization. As of mid-December 2013, the MTACC estimated the final cost of CM009 to be \$430,550,426, which included \$123,500 for Post-Bid Contingency. Actual elapsed construction time was 83 months versus 48 months planned.

Construction Progress:

No construction progress was made by this contract during 4Q2013. The contract achieved Substantial Completion on September 30, 2013.

Observations:

The Contract achieved substantial completion.

Concerns and Recommendations: T

This will be the last time the PMOC reports on this Contract.

CM013 – 50th Street Vent Facility

Status: Through November 30, 2013 MTA reports that the EAC is \$125,020,000. The forecast Substantial Completion (SC) date remains December 31, 2013. The actual percent complete is 92% vs. 93.7% planned. Data date for the table below is November 30, 2013.

	1	2	3	4	5	6	
	Original Baseline	Current Approved Baseline	Change to Original (2 – 1)	EAC / Forecast	Change to Original (4 – 1)	Change to Current (4 – 2)	
Contract Cost	\$118.35M (Award)*	\$124.15M	+\$5.87M +4.90%	\$125.02M	+\$6.67M 5.64%	7M +.70%	
Scheduled SC Date	06/10/12	12/31/13		12/31/13			
Duration (NTP - SC)	29 mos.	47mos.	+18 mos. +62.06%	47 mos.	+18 mos. +62.06%	+0 mos. n/a	
Percent Complete	Actual - 12 mos.		Actual - 6 mos.		Avg. Req'd. Progress		
Plan	Actual	Total	Avg./mo	Total	Avg./mo	Contract SC	Forecast SC
93.7%**	92%**	NA**	NA**	NA**	NA**	NA**	NA**

From November 2013 ESA Monthly Report

*Total award price of \$118,355,000 includes \$94,355,000 for CM013 and \$24,000,000 for work performed by the owner of the 300 Park Ave. building.

**MTA reports that the planned percent complete is based on revised forecast that is under review.

Construction Progress: Stair #1 erection to the upper floors and roofs is complete and has also extended to its entry point at the ground floor Public Plaza. Painting of concrete block throughout continues. Acoustical lining of the shaft continued. The contractor began installation of hollow metal doors & frames. Exterior cladding to the main building and Utility Chase is ongoing, and installation of fixed ventilation louvers continues. The installation of exterior building stone facing is nearing completion. The restoration of E. 50th St. is complete. Waterproofing and placement of the concrete decking in the Public Plaza is complete.

Observations/Analysis: The PMOC observes that this contract did not meet the forecast substantial completion date of December 31, 2013. No new forecast substantial completion date has been reported by MTACC. The stop work order for scaffolding in the shaft was lifted and application of the acoustical lining resumed. The partial stop work order for pneumatically applied concrete remained in effect. However, the contractor did complete the required mockup and the cores & testing are to be completed the first week of January 2014.

Concerns and Recommendations: The PMOC will continue to monitor the impact that weather conditions have on the completion of the work as the contract moves to substantial completion. As of the date of this report the substantial completion of this contract has no impact on current or future contracts.

CM013A – 55th Street Vent Facility

Status: MTA reports that through November 30, 2013 the EAC is \$59,260,000 from the previous \$59,410,000. Forecast Substantial Completion date is March 25, 2015. The current Approved Baseline Schedule for Substantial Completion remains April 5, 2015. As of November 30, 2013, MTA reports that the actual percent complete is 25.1% vs. 21.6% planned.

	Original Baseline	Current Approved Baseline	Change to Original (2 – 1)	EAC / Forecast	Change to Original (4 – 1)	Change to Current (4 – 2)	
Contract Cost	\$56.04M	\$56.38M	+\$0.34M +.60%	\$59.26M	+\$3.22M 5.74%	+2.88M +5.10%	
Scheduled SC Date	04/05/15	04/05/13		03/25/15			
Duration (NTP - SC)	31 mos.	31 mos.	+0 mos. +0 %	30.33 mos.	-.33mos. -2.16%	-3.33mos. -2.16%	
Percent Complete		Actual - 12 mos.		Actual - 6 mos.		Avg. Req'd. Progress	
Plan	Actual	Total	Avg./mo	Total	Avg./mo	Contract SC	Forecast SC
21.6%	25.1%	N/A	N/A	13.4%	2.23%	74.9%	4.68%

From November 2013 ESA Monthly Report

Construction Progress:

Blasting in the Plenum was completed and during December 2013 cleaning out the area and shotcreting was ongoing. Mud mat placement in the Plenum Area began. Blasting in the shaft began and reached approximate Elevation 308, 10' ft. below the invert of the Plenum. Rock bolting and shotcreting is ongoing at the plenum walls and rock bolting began following the initial blasting in the shaft. The shaft break through to the Cavern Arch is forecast for January 2014.

Observations:

MTACC approved the Shaft Breakthrough Plan and blasting in the shaft has proceeded.

Concerns and Recommendations:

MTACC continues to report that the work is proceeding at or slightly ahead of schedule. There are no concerns or recommendations at this time.

CM014A – GCT Concourse & Facilities Fit-Out

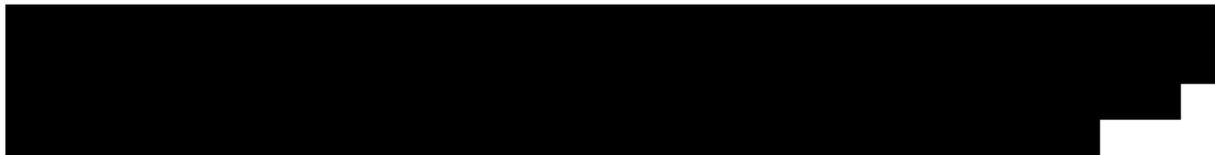
Status: MTACC reports that through November 30, 2013 the EAC has increased to \$57.13M from the previous \$55.58M. Forecast Substantial Completion date continues to be April 1, 2014, The actual substantial completion date cannot be determined at this time until negotiations for time extension are finalized for the Systems Control and Data Acquisition (SCADA) system redesign and the additional scope to this contract to perform early CM014-B work. The actual percent complete is 59.3% versus 83.9% planned. Data date for the chart below is November 30, 2013.

	1	2	3	4	5	6	
	Original Baseline	Current Approved Baseline	Change to Original (2 - 1)	EAC / Forecast	Change to Original (4 - 1)	Change to Current (4 - 2)	
Contract Cost	\$43.50M (Award)	\$48.70M	+\$5.20M +11.95%	\$57.13M	+\$14.08M +11.95%	+8.43M +17.31%	
Scheduled SC Date	04/25/13	02/14/14		04/01/14			
Duration (NTP - SC)	18 mos.	27 mos.	+9 mos. +50%	+28.5 mos	+10.5 mos. +58.3%	+1.5 mos. +5.5%	
% Complete		Actual - 12 mos.		Actual - 6 mos.		Avg. Req'd. Progress	
Plan	Actual	Total	Avg./mo	Total	Avg./mo	Contract SC	Forecast SC
83.9%*	59.3%*	NA*	NA*	73.3%	1.7%	16.1%	4.02%/mo.

From November 2013 MTA Monthly Report

*MTA reports that the percent complete represents a redesigned curve based on the original, current & actual baseline, which will be revised once SCADA modifications are executed.

Construction Progress: Work continued with concrete block wall erection and door frames installation for the various Back of House rooms. Branch feeder conduit and overall electrical connections is ongoing. Air Handling Units have been installed and ductwork and piping continues. Switchgear and SCADA equipment are in various stages of fabrication, testing and delivery. The contractor completed the temporary access ramp at the south end of the site and began demolition of the previous ramp at Track 115.



Concerns and Recommendation:



At the time of this report, schedule delays to this contract do not impact other current or future contracts.

Queens Third-Party Contracts

CQ031 Contract – Queens Bored Tunnels and Structures

Status: The CQ031 contract achieved Substantial Completion on November 18, 2013, and the contractor has completed its de-mobilization from the site. Administrative issues remain, however, and the PMOC estimates that Final Completion will be attained in 1Q2014 after the remaining commercial issues are agreed upon. The table below indicates the latest financial and schedule status of the CQ031 contract as of the November 2013 ESA Monthly Report.

	1	2	3	4	5	6	
	Original Baseline	Current Approved Baseline	Change to Original (2 – 1)	EAC / Forecast	Change to Original (4 – 1)	Change to Current (4 – 2)	
Contract Cost	\$648.90 M (Award)	\$761.2M	\$112.3M +17.3%	\$758.7M	+\$109.8M +16.9%	-\$2.5M -0.3%	
Scheduled SC Date	09/26/12	11/18/13 (A)		11/18/13 (A)			
Duration (NTP - SC)	36 mos.	36 mos.	(no change)	50 mos.	+14 mos. +38.9%	+14 mos. +38.9%	
Percent Complete		Actual - 12 mos.		Actual - 6 mos.		Avg. Req'd. Progress	
Plan	Actual	Total	Avg./mo	Total	Avg./mo	Contract SC	Forecast SC
100.0%	98.2%	8.8%	0.7%	2.1%	0.4%	N/A – Past Due	Project Complete

Construction Progress: All construction work for CQ031 was completed as of November 18, 2013.

Observation: To date, the CQ031 contract performed the closest to its original schedule of all the major ESA contracts and it bored 4 tunnels with the minimum of disruption to railroad operations, which was an initial concern. In order to do so, the ESA PMT gave the CQ031 contractor the highest priority (in terms of Force Account support) of all the contracts working in Harold and Queens.

Concerns and Recommendations: Although the PMOC has no further recommendations for the CQ031 contract, the PMOC does recommend that the ESA PMT develop a more evenly balanced priority list for the Force Account support that it provides for the remaining and future Harold and Queens contracts.

CQ032 Contract – Plaza Substation and Queens Structures

Status: The Estimate at Completion (EAC) was reduced to \$225,403,000 during the 4Q2013 as a result of the MTACC's decision to no longer include potential contract modifications or future claims in the EAC. The contract Substantial Completion date was shortened slightly to August 7, 2015, a reduction of one week. Actual construction progress for November 2013 was 5.0% versus 3.8% planned. As of November 30, 2013, cumulative progress was 42.2% actual versus 69.0% planned.

	1	2	3	4	5	6	
	Original Baseline	Current Approved Baseline	Change to Original (2 – 1)	EAC / Forecast	Change to Original (4 – 1)	Change to Current (4 – 2)	
Contract Cost	\$147.38M (Award)	\$206.1M	+\$58.7% +40.0%	\$225.4M	+\$78.0M +52.9%	+\$19.3M +9.4%	
Scheduled SC Date	08/14/14	08/14/14		8/7/15			
Duration (NTP - SC)	36 mos.	36 mos.	(no change)	48 mos.	+12 mos. +33.3%	+12 mos. +33.3%	
Percent Complete		Actual - 12 mos.		Actual - 6 mos.		Avg. Req'd. Progress	
Plan	Actual	Total	Avg./mo	Total	Avg./mo	Contract SC	Forecast SC
69.0%	42.2%	28.9%	2.4%	16.6%	2.8%	2.8%/mo.	2.9%/mo.

From November 2013 ESA Monthly Report

Construction Progress: The CQ032 contractor completed installation of exterior brick and interior CMU walls in the B-10 Substation during December 2013 and is complete with its contract tasks at that location. The contractor also completed its repairs at the wayside ventilation facilities at Roosevelt Island, Vernon Blvd, and 12th, 23rd, and 29th Sts., which are ready for turnover to the follow-on contractor and placed concrete for the last section of the invert in the Bellmouth. At Plaza Substation in the Open Cut, the contractor continued to install structural steel and re-bars and place concrete and shotcrete for the sump pit, the C06 Substation, and the Yard Lead Tunnel, and the contractor also continued to make concrete repairs in the 63rd St. Tunnel.

Observations/Analysis: The contractor continues to make very good progress on its construction in the Plaza Substation work site and has moved its operations to the EAC, Bellmouth, and 63rd St. Tunnel areas in recent months since its access is no longer restricted. It has also begun to slowly reverse the trend of the accelerating difference between its actual construction versus planned, which had grown to over 30%, but is 26.8% as of November 30, 2013.



CQ039 Contract – Northern Boulevard Crossing

Status: The Estimate at Completion (EAC) was reduced slightly to \$103,719,000 as of the latest financial information available from the PMT, the 3Q2013 ESA Monthly Report. The actual Substantial Completion (SC) date was September 30, 2013, although the CQ039 contractor continued to apply compensation grout behind the Northern Boulevard tunnel liner into December 2013. The MTACC did not report the actual monthly and cumulative construction progress for CQ039 in its November 2013 Monthly Report. Please note that the information shown in the table below was taken from the last CQ039 report available from the MTACC, the 3Q2013 ESA Monthly Report.

	1*	2*	3*	4*	5*	6*	
	Original Baseline	Current Approved Baseline	Change to Original (2 – 1)	EAC / Forecast	Change to Original (4 – 1)	Change to Current (4 – 2)	
Contract Cost	\$84.95M (Award)	\$99.3M	+\$14.3M +16.8%	+\$103.7M	+\$18.8M +22.1%	+\$4.4M +4.4%	
Scheduled SC Date	10/05/11	08/01/12	/	9/30/13 (A)	/	/	
Duration (NTP - SC)	20 mos.	30 mos.	+10 mos. +50.0%	42 mos.	+22 mos. +110.0%	+12 mos. +40.0%	
Percent Complete		Actual – 12 mos.		Actual – 6 mos.		Avg. Req'd. Progress	
Plan	Actual	Total	Avg./mo	Total	Avg./mo	Contract SC	Actual
100.0%	96.8%	19.5%	2.2%	0.9%	0.3%	(N.A. - past date)	Project Complete

*As of latest information available from the MTACC (3Q2013 ESA Monthly Progress Report)

Construction Progress: The contractor completed application of compensation grout behind the tunnel liner in early December 2013 and has since de-mobilized from the project.

Observations/Analysis: In summary, the contractor had difficulty achieving the initial ground thaw before its excavation began and subsequently experienced similar difficulty achieving the ground thaw after the excavation was complete and the tunnel liner was installed. The actual excavation process proceeded without incident and was achieved within the timeframe the contractor anticipated.

Concerns and Recommendations: The PMOC has no concerns about or recommendations for this contract at this time.

Harold Interlocking Contracts**CH053 Contract – Harold Structures Part 1 and G.0.2 Substation**

Status: The Estimate at Completion (EAC) was reduced to \$252,000,000 during the 3Q2013 due to the MTACC's decision to no longer include potential contract modifications or future claims in the EAC. The forecast Substantial Completion (SC) date has been postponed until August 25, 2014, a delay of an additional 2 months. Actual construction progress for November 2013 was 1.9% versus 0.0% planned (the project was supposed to be complete by now). Cumulative progress through November 30, 2013, was 85.9% actual versus 100.0% planned.

	1	2	3	4	5	6	
	Original Baseline	Current Approved Baseline	Change to Original (2 – 1)	EAC / Forecast	Change to Original (4 – 1)	Change to Current (4 – 2)	
Contract Cost	\$137.30M (Award)	\$227.7M	+\$90.4M +65.8%	\$252.0M	+\$114.7M +83.5%	+\$24.3M +10.7%	
Scheduled SC Date	05/05/10	01/16/12		8/25/14			
Duration (NTP - SC)	28 mos.	48 mos.	+20 mos. +71.4%	80 mos.	+52 mos. +185.7%	+32 mos. +66.7%	
Percent Complete		Actual - 12 mos.		Actual - 6 mos.		Avg. Req'd. Progress	
Plan	Actual	Total	Avg./mo	Total	Avg./mo	Contract SC	Forecast SC
100%	85.9%	14.1%	1.2%	7.6%	1.3%	N/A – Past Due	1.8%/mo.

From November 2013 ESA Monthly Report

Construction Progress: The contractor installed the ML4 and the Westbound Bypass bridge structures over the Loop Tracks near 43rd St. and the girders for the ML4 bridge over 48th St. in early December 2013. The contractor also continued construction of the 43-S2 and 48-S1 retaining walls and the Tunnel A Approach structure east of 39th St. (although construction was halted later in December due to a conflict with the 12kV duct bank), and continued to pull 12kV cables between 39th St. and Sub 44.

Concerns and Recommendations: The PMOC recommends that the ESA PMT and the contractor continue to work together to achieve Substantial Completion of this contract as expeditiously as possible.

CH054A Contract – Harold Structures Part 2A

Status: The Estimate at Completion (EAC) was reduced to \$56,832,000 during 3Q2013 as a result of the MTACC’s decision to no longer include potential contract modifications or future claims in the EAC. The MTACC’s forecast for Substantial Completion (SC) was again extended to July 9, 2014, a delay of 1-1/2 months. Actual construction progress for November 2013 was 4.1% versus 0.0% planned (contract was supposed to be complete). As of November 20, 2013, cumulative progress was 63.4% actual versus 100.0% planned.

	1	2	3	4	5	6	
	Original Baseline	Current Approved Baseline	Change to Original (2 – 1)	EAC / Forecast	Change to Original (4 – 1)	Change to Current (4 – 2)	
Contract Cost	\$21.80M (Award)	\$44.6M	+\$22.8M +104.6%	+\$56.8M	+\$35.0M +160.6%	+\$12.2M +27.4%	
Scheduled SC Date	12/21/10	12/21/10		7/9/14			
Duration (NTP - SC)	16 mos.	16 mos.	(no change)	56 mos.	+40 mos. +250.0%	+24 mos. +150.0%	
Percent Complete		Actual - 12 mos.		Actual - 6 mos.		Avg. Req'd. Progress *	
Plan	Actual	Total	Avg./mo	Total	Avg./mo	Contr act SC	Forecast SC
100.0%	63.4%	17.6%	1.5%	12.7%	1.1%	(N.A. - past date).	5.3%

*PMOC projection based on percentages contained in MTACC November 2013 Monthly ESA Report.

Construction Progress: The contractor continues to construct jacking and receiving pits for future utility micro-tunnel runs, as well as install conduits and manholes for the 12 kV duct bank between Thomson Avenue and Sub 44.



Concerns and Recommendations: The PMOC recommends that the ESA PMT and the contractor continue to work together to achieve Substantial Completion of this contract as expeditiously as possible.

Systems Contracts

VH051A (Part 1) – Harold and Point Central Instrument Locations (CILs)

Status: The Estimate at Completion is \$30.76M through November 2013. Forecast Substantial Completion remained the same. Actual Progress through November 2013 was 60% versus 59% planned.

	1	2	3	4	5	6	
	Original Baseline	Current Approved Baseline	Change to Original (2 – 1)	EAC / Forecast	Change to Original (4 – 1)	Change to Current (4 – 2)	
Contract Cost	\$30.89M (Award)	\$30.72M	-0.17M -0.6%	\$30.76M	-.13M -.4%	.04M .13%	
Scheduled SC Date	06/25/12	06/25/12		07/31/15			
Duration (NTP - SC)	37 mos.	37 mos.	+ 0mos. (+0%)	74 mos.	37 mos. 100.5%	37 mos. 100.5%	
Percent Complete		Actual - 12 mos.		Actual - 6 mos.		Avg. Req'd. Progress	
Plan	Actual	Total	Avg./mo	Total	Avg./mo	Contract SC	Forecast SC
72%	70%	-	-	-	-	(N/A)	

From August 2013 ESA Monthly Report

Construction Progress:

Submittals for the H2 and H1 locations remain under review. FRA acceptance/approval of the LIRR’s Railroad Safety Program Plan and Product Safety Plan for the communications and synchronization boards remains open. Conditional approval has been received from the FRA, but formal notification has yet to be provided.

Observations/Analysis:

The H1 and H2 submittals have been under review since the last quarter.

Concerns and Recommendations:

The CM should expedite the completion of the H1 and H2 submittal reviews. The CM should continue to monitor FRA progress on formal acceptance of the plans noted above and should request that LIRR contact the FRA on a regular basis with regards to status.

VH051B (Part 2) – Harold Tower Supervisory Control System (HTSCS)

Status: The Estimate at Completion was \$7.976M through November 2013. Forecast Substantial Completion remained the same. Actual Progress through November 2013 was 88% versus 100% planned.

	1	2	3	4	5	6	
	Original Baseline	Current Approved Baseline	Change to Original (2 – 1)	EAC / Forecast	Change to Original (4 – 1)	Change to Current (4 – 2)	
Contract Cost	\$7.10M (Award)	\$8.10M	+\$1.00M +14.1%	\$7.98M	+\$0.88M +12%	\$-.12M -1.4%	
Scheduled SC Date	08/24/10	08/24/10		TBD			
Duration (NTP - SC)	18 mos.	18 mos.	+0 mos. 0%	58 mos.	TBD	TBD	
Percent Complete		Actual - 12 mos.		Actual - 6 mos.		Avg. Req'd. Progress	
Plan	Actual	Total	Avg./mo	Total	Avg./mo	Contract SC	Forecast SC
100%	88%					(N/A)	

From August 2013 ESA Monthly Report

Construction Progress:

PSCC software is being updated (due to changes requested by Amtrak) to support the cutover of Point interlocking. Field testing and testing at the PSCC is continuing.

Observations/Analysis:

Amtrak is providing the resources to make the required software changes.

Concerns and Recommendations:

The software changes are targeted for completion by mid-January 2014. Every effort should be made to meet this deadline in order to avoid further delay to Point interlocking cutover.

Railroad Force Account Construction Packages

Harold Stage I Amtrak FA (FHA01)

Status: The Estimate at Completion (EAC) remained at \$16,824,000. The MTACC forecast Substantial Completion date was also extended to August 7, 2014, an increase of 1-1/2 months. Actual construction progress for November 2013 was 0.5% versus 0.7% planned. As of November 30, 2013, the cumulative progress was 93.9% versus 95.7% planned.

<u>FHA01</u>	1	2	3	4	5	6	
	Original Baseline	Current Approved Baseline*	Change to Original (2 – 1)	EAC / Forecast	Change to Original (4 – 1)	Change to Current (4 – 2)	
Contract Cost	\$9.50M	\$16.80M	+\$7.30M +76.8%	\$16.8M	+\$7.3M +76.8%	0 0	
Scheduled SC Date	09/30/10	01/03/12		8/7/14			
Duration (NTP - SC)	39 mos.	54 mos.	+15 mos. +38.5%	85 mos.	+46 mos. +117.9%	+31 mos. +57.4%	
Percent Complete		Actual - 12 mos.		Actual - 6 mos.		Avg. Req'd. Progress	
Plan	Actual	Total	Avg./mo	Total	Avg./mo	Contract SC	Forecast SC
95.7%	93.9%	10.1%	0.8%	5.3%	0.9%	N/A – Past Due	0.8%

From November 2013 ESA Monthly Report

*The term “re-baseline” is a misnomer with Force Account work. In Amtrak’s case, the “original baseline” has increased to account for the scope changes as detailed in the Project Initiations (PIs) that have been executed for Stage 1. It is presented in the above table to be consistent with the contract tables contained elsewhere in this report.

Construction Progress: Amtrak Electric Traction (ET) personnel continued to re-locate catenary wires and make other catenary structure modifications at various locations in Harold Interlocking. Overall Stage 1 catenary and signal structure re-location is now approximately 85% complete. ET personnel also continue to support CH053 ESA project construction.

Observations/Analysis: ESA PMT, CH053 management, and Amtrak management personnel continue to find ways to take advantage of opportunities presented to them to progress project ET construction, although there are many other major construction projects in the metropolitan area that require Force Account support and the contractor must remain flexible in order to react to the continually-changing railroad environment.

Concerns and Recommendations: The PMOC recommends that the ESA PMT, the CH053 contractor, and Amtrak management continue to work closely together to progress Stage 1 construction to its completion and to continue to develop the opportunities that may make it possible to finish the work earlier.

Harold Early Stage 2 Amtrak FA (FHA02)

Status: The Estimate at Completion (EAC) for FHA02 remained at \$41,683,000 during December 2013. The MTACC’s forecast for Substantial Completion (SC) slipped an additional 3 weeks to March 28, 2015. Actual construction progress for November 2013 was 2.2% versus 4.4% planned. Cumulative progress through November 30, 2013, was 75.8% actual versus 77.1% planned.

<u>FHA02</u>	1	2	3	4	5	6	
	Original Baseline	Current Approved Baseline*	Change to Original (2 – 1)	EAC / Forecast	Change to Original (4 – 1)	Change to Current (4 – 2)	
Contract Cost	\$9.70M	\$38.6M	+\$28.9M +297.9%	\$41.7M	+\$32.0M +329.9%	+\$3.1M +8.0%	
Scheduled SC Date	9/30/13	08/30/14		3/28/15			
Duration (NTP - SC)	58 mos.	69 mos.	+11 mos. +19.0%	76 mos.	+18 mos. +31.0%	+7 mos. +10.1%	
Percent Complete		Actual - 12 mos.		Actual - 6 mos.		Avg. Req'd. Progress	
Plan	Actual	Total	Avg./mo	Total	Avg./mo	Contract SC	Forecast SC
77.1%	75.8%	27.8%	2.3%	16.2%	2.7%	1.7%	1.6%

From November 2013 ESA Monthly Report

*The term “re-baseline” is a misnomer with Force Account work. In Amtrak’s case, the “original baseline” has increased to account for the scope changes as detailed in the Project Initiations (PIs) that have been executed for Stage 2. It is presented in the above table to be consistent with the contract tables contained elsewhere in this report.

Construction Progress: Since the cutover of the new “F1” Interlocking in November 2013, Amtrak C&S personnel have continued to de-commission and remove old “F1” Interlocking signal equipment and prepare for the installation and eventual cutovers of “Loop” and “T” Interlockings, which will occur later in the program.

Summary Observation: The cutover of new “F1” went as planned and the abandonment of the old “F1” signal equipment is also progressing well.

Summary Concerns and Recommendations: The PMOC recommends that ESA PMT and Amtrak C&S management continue to work closely together to progress project construction for “Loop” and “T” in ensuing years.

Harold Early Stage 3 Amtrak (FHA03)

Status: The Estimate at Completion (EAC) for FHA03 remained at \$2,208,000 during November 2013. All construction for the initial Project Initiation (PI) for FHA03 was accomplished as of August 20, 2013. Construction was followed by three months of periodic material clean-up. Actual construction progress for November 2013 was 1.0% versus 0.0% planned. Cumulative progress for this PI was 100.0% actual versus 100.0% planned.

Observations/Analysis: All work for this phase of FHA03 is complete. FHA03 will be activated again when additional work is authorized through future PIs.

Concerns and Recommendations: The PMOC has no concerns or recommendations at this time.

Harold Stage 1 LIRR FA (FHL01)

Status: The Estimate at Completion (EAC) for FHL01 remained at \$21,972,000 during November 2013. The forecast Substantial Completion date was extended to December 11, 2014, an increase of 1-1/2 months. Actual construction progress for November 2013 was 0.9% versus 1.5% planned. Cumulative progress through November 30, 2013, was 77.3% actual versus 78.8% planned.

<u>FHL01</u>	1	2	3	4	5	6	
	Original Baseline	Current Approved Baseline*	Change to Original (2 – 1)	EAC / Forecast	Change to Original (4 – 1)	Change to Current (4 – 2)	
Contract Cost	\$28.80M	\$20.80M	-\$8.00M -27.8%	\$22.0M	-\$6.8M -23.6%	+\$1.2M +5.8%	
Scheduled SC Date	09/30/10	10/10/11		12/11/14			
Duration (NTP - SC)	39 mos.	52 mos.	+13 mos. +33.3%	90 mos.	+51 mos. +130.8%	+38 mos. +73.1%	
Percent Complete		Actual - 12 mos.		Actual - 6 mos.		Avg. Req'd. Progress	
Plan	Actual	Total	Avg./mo	Total	Avg./mo	Contract SC	Forecast SC
77.8%	77.3%	3.3%	0.3%	2.1%	0.4%	N/A – Past Due	1.9%/mo.

From November 2013 ESA Monthly Report

*The term “re-baseline” is a misnomer with Force Account work. In LIRR’s case, the “original baseline” has increased to account for the scope changes as detailed in the Memoranda of Understandings (MOUs) that have been executed for Stage 1. It is presented in the above table to be consistent with the contract tables contained elsewhere in this report.

Construction Progress: LIRR Traction Power personnel continued to re-locate signal wires and other signal apparatus in preparation to separate the LIRR signal power from the Amtrak signal power, which is scheduled to occur during 1Q2014. The LIRR has concentrated most of its Force Account construction on FHL02 and FHL03 tasks this year. The signal power separation project is the only significant FHL01 task that it undertook in 2013.

Observations/Analysis: The completion of the signal power separation will be a major accomplishment which will have great overall benefit to the LIRR. There have been many obstacles and setbacks for it over the years and it has itself delayed other program tasks. This is the first time in the ESA program that it has no dependency on a predecessor task nor is another task dependent on it.

Concerns and Recommendations: Although it has taken too long to arrive at this point, the PMOC realizes the importance of separating the power sources (so that LIRR is no longer dependent upon Amtrak power supply). As such, the PMOC recommends that LIRR complete the construction and make the cutover as quickly as possible.

Harold Early Stage 2 LIRR FA (FHL02)

Status: The Estimate at Completion (EAC) for FHL02 increased to \$69,296,000 during November 2013. The MTACC's forecast for Substantial Completion was reduced to February 15, 2016, a reduction of 7 months. Actual construction progress for November 2013 was 0.5% versus 3.3% planned. Cumulative progress through November 30, 2013, was 30.5% actual versus 37.9% planned.

<u>FHL02</u>	1	2	3	4	5	6	
	Original Baseline	Current Approved Baseline*	Change to Original (2 - 1)	EAC / Forecast	Change to Original (4 - 1)	Change to Current (4 - 2)	
Contract Cost	\$7.40M	\$28.0M	+\$20.6M +278.4%	\$69.3M	+\$61.9M +836.5%	+\$41.3M +147.5%	
Scheduled SC Date	11/30/15	11/30/15		2/15/16			
Duration (NTP - SC)	75 mos.	75 mos.	+0 mos. 0.0%	78 mos.	+3 mos. +4.0%	+3 mos. +4.0%	
Percent Complete		Actual - 12 mos.		Actual - 6 mos.		Avg. Req'd. Progress	
Plan	Actual	Total	Avg./mo	Total	Avg./mo	Contract SC	Forecast SC
37.9%	30.5%	10.2%	0.9%	5.6%	0.9%	1.3%	2.7%

From November 2013 ESA Monthly Report

*The term "re-baseline" is a misnomer with Force Account work. In LIRR's case, the "original baseline" has increased to account for the scope changes as detailed in the Memoranda of Understandings (MOUs) that have been executed for Stage 2. It is presented in the above table to be consistent with the contractor tables contained elsewhere in this report.

Construction Progress: The majority of FHL02 construction during December 2013 included continued C&S preparations, including pre-testing and circuit revisions, for the Point Interlocking cutover (scheduled for February 2014) and cable pulls and terminations for the H4 signal location in Harold Interlocking.

Summary Observation: After Amtrak cutover "F1" Interlocking in early November 2013, LIRR discovered that the computer software for its cutover of Point Interlocking was not compatible with the software in Penn Station Central Control (PSCC), from where Point will be controlled. After some discussions, Amtrak has decided to change its software in PSCC to be compatible with Point (although this will only be done for Point). [REDACTED]

Summary Concerns and Recommendations: The PMOC is concerned that a severe winter, which is the way this year has started, could delay the Point cutover beyond February. The PMOC therefore recommends that LIRR continue to progress C&S construction on a daily basis and do everything possible to accomplish the cutover in February 2014. The PMOC will also remain concerned about LIRR's preparation of Site Specific Work Plans (SSWPs) until the PMOC observes that it has a process in place for producing these plans that will keep up with the

accelerated pace of 2014 construction. To date, LIRR has not demonstrated that it has such capability [Ref: ESA-101-Dec12]

Harold Early Stage 3 LIRR F/A (FHL03)

Status: The Estimate at Completion (EAC) for FHL03 remained at \$2,706,000 during November 2013. All construction for the initial Memorandum of Understanding (MOU) for FHL03 was accomplished as of September 14, 2013. Construction was followed by three months of periodic material clean-up. Actual construction progress for November 2013 was 1.0% versus 0.0% planned. Cumulative progress for this PI was 100.0% actual versus 100.0% planned.

Construction Progress: All work for this phase of FHL03 is complete. FHL03 will be activated again when subsequent work is authorized through future MOUs.

Concerns and Recommendations: The PMOC has no concerns or recommendations at this time.

2.4 Operational Readiness

A Quarterly Operational Readiness meeting was held on December 19, 2013. There were several topics discussed at the meeting including: status of operational readiness documents; asset management plan; and a report on safety certification activities during the 4Q2013. The new ESA Operational Readiness Program Manager was introduced at the meeting.

Current Status-ESA Operational Readiness Documents

The draft of Volume 2 (tasks and activities) of the Rail Activation Plan is being reviewed by the railroads and is expected to be released by the end of 2013/early 2014. The draft outline of Volume 3 of the Rail Activation Plan (Monitoring and Verification) is complete and kick-off discussions with MNR and LIRR will be scheduled for January 2014.

Asset Management Plan

The Operational Readiness Group in conjunction with the LIRR IT Department has completed development of the asset inventory templates and is now focusing on training contractors to fill in the Inventory Templates. Secure access to the LIRR Maximo process is completed and the LIRR IT Department is working on a data upload test with CQ031 assets entered into a template.

Quarterly Report on Safety Certification Activities

This item is discussed in Section 1.5 above.

Observation:

The Operational Readiness group continues to progress activities comprising system start-up and commissioning.

Concerns and Recommendations:

Given that the re-planned ESA schedule differs significantly from 2012 baseline schedule, the PMOC recommends that the Operational Readiness Group re-evaluate the operational readiness schedule in light of changes to the ESA Program Schedule.

2.5 Vehicles

Status:

Board Approval was received and Notice of Award executed September 18, 2013 for the LIRR M-9 vehicle procurement. These cars will initially be part of the M-3 replacement program and will be used for ESA when it comes on line (this procurement does not use federal funding).

Observation:

Since Contract award on September 18, 2013, several meetings have taken place to progress the design of the M-9 Cars. The vehicle supplier has also achieved the first two milestone payments associated with Contract award and the submittal of various Contract documents.

Concerns and Recommendations:

There are no significant concerns at this time.

2.6 Property Acquisition and Real Estate

415 Madison Ave:

MTA Real Estate, MTACC, Legal, Construction and Project Management met with the property owners on December 6, 2013 to discuss the coordination of construction. Two documents will be required for the agreement to continue:

- 1- Easement document
- 2- Design and construction document

Currently, the easement document is ready and the design and construction document is being drafted, going through an internal review, and then will be forwarded to the owner's counsel upon completion of review. The next meeting is planned for late January 2014.

280 Park:

An easement agreement which allows MTACC to construct a portion of elevator structure is executed.

335 Madison Ave:

A meeting with the property owner's counsel was held on December 19, 2013. Property acquisitions were discussed. A follow up meeting will be coordinated soon amongst all parties.

Extensions of two easements in Queens are being negotiated. No Change

- 48-39 Barnett Ave East (Block 119 Lot 150)
- 39-10 43rd Street (Block 183 Lot 332)

# of Parcels Identified	# Parcels Closed	# Parcels Under Contract	# Parcels In Negotiation	# Parcels In Appraisal	# Parcels In Condemnation	# Parcels Right of Occupancy
127	117	0	5	3	0	2

Concerns and Recommendations:

The PMOC remains concerned about the length of time it is taking to finalize all of the Real Estate aspects of the 48th Street Entrance to GCT.

2.7 Community Relations

Status:

During November 2013, the ESA Community Relations staff continued to notify community members and elected officials about ongoing weekend and overnight work in Sunnyside, Queens Harold Structure Part 1 and GO2 Substation CH053 contract, and continued to update the 37th Street Community regarding the installation of a personnel facility at Madison Avenue, as well as street utility work along 37th Street for the Manhattan South Structures contract CM005. Also, the Community Relations staff oversaw the procurement of planters and landscaping for the 37th Street personnel facility.

The Community Relations staff attended several meetings and site visits with representatives from Outward Bound and the construction management team to provide an update and address concerns about the upcoming work for the Yard Services Building being constructed by the Plaza Substation and Queens Structures CQ032 contractor. Additionally, the Community Relations staff performed a full site walk of the Manhattan alignment to document any site conditions that may have an impact on the community.

Observation:

The PMOC observed that the ESA Community Relations staff, working with the ESA Construction Managers and MTACC management, is reaching out appropriately and effectively to inform the Manhattan and Queens communities of upcoming construction work and planned changes, and has properly handled concerns and complaints from the community.

Concerns and Recommendations:

There are no significant concerns at this time.

3.0 PROJECT MANAGEMENT PLAN AND SUB PLANS

3.1 Project Management Plan

Status:

The Grantee updated the Project Management Plan (PMP) and issued Rev. 9 on June 28, 2013. The PMOC completed its review of the revised PMP in August 2013 and incorporated the FTA comments in September 2013. The PMOC and FTA comments were then coordinated, consolidated and finalized. The FTA formally issued final PMP review comments and transmitted them to MTACC in December 2013.

Observation:

MTACC utilized a task force approach to updating the PMP and Candidate Revisions to the PMP were presented to the CCC for review and approval. However, they were presented to the CCC after the PMOC had already reviewed them and the PMOC notes that this is not in the correct order.

Concerns and Recommendations:

Candidate changes to the PMP should not be in the revision given to the FTA and PMOC for review until after they have been approved by the CCC.

3.2 PMP Sub-Plans

Status: The status of the key sub-plans is discussed in the ELPEP section of this report. At the Quarterly ELPEP Compliance Review Meeting held on December 12, 2013, MTACC notified the FTA and the PMOC that they anticipate full revisions to the CMP and SMP, using the Candidate Revision process, within the next few months.

3.3 Project Procedures

Status: In November 2012, the MTACC indicated to the PMOC that it had completed development of all procedures that it intended to revise. As of December 31, 2013, the total count of revised ESA procedures remains at 77.

Observations: In the PMOC's opinion, the MTACC has developed all the revised procedures necessary to support its revised Project Management Plan (PMP). The PMOC had recommended that the MTACC then develop a schedule that shows for which procedures training will be conducted and who will receive this training. As a result of this recommendation, MTACC developed a schedule of training for 43 applicable procedures and conducted training on seven dates in 2013 as shown in the following table:

Date of Training	Number of Procedures Covered	Number of Participants Trained
07/11/13	8	58*
07/24/13	6	54*
08/07/13	7	45
08/21/13	1	50
09/04/13	7	46
09/19/13	9	37
10/02/13	5	45

* The PMOC attended these two sessions

Concerns and Recommendations:

MTACC began full-scale procedures training for its project management personnel on July 11, 2013. The PMOC attended the workshops for this training (which it found entirely satisfactory). With the session that was conducted on October 2, 2013, MTACC has completed training the ESA Staff.

4.0 PROJECT SCHEDULE

4.1 Integrated Project Schedule

Status:

The ESA submitted a program overview schedule on December 3, 2013, a partial IPS without RSD, and a very brief variance report. The bar chart schedule indicates that the project critical path goes through contracts CM005 and CM007, and part of Integrated System Testing (IST) and LIRR testing and commissioning for three months. The ESA PMT also stated that there are 7 months of contingency in this schedule and there are some schedule savings opportunities in future works of Queens Track work, and also contracts CM005 and CM006. [Ref. ESA-102-Dec12]. As a result of this submittal, the previous action will be closed. This summary schedule is presented in Appendix G.

Observation:

The PMOC has some fundamental disagreement with the ESA PMT regarding the summary schedule submitted by ESA:

- A spot check of the CM005 and CM006 Contract Package documents indicates that the two months' turnover contingencies shown in the Schedule Overview after each Contract is completed are actually included in the schedule durations in the Contracts and are not independent Program contingencies as shown. As such, the statement on the Schedule Overview that there is six months of contingency on the Program critical path is not accurate in the PMOC's opinion.
- Contract CS179 has over 30 milestone interface points with CM005/006 and 007 and CM014B; yet the latest IPS provided to the PMOC does not detail the milestone relationships.
- In previous ESA baseline schedules the CS179 package had 242 days of work in CS179 on the critical path and 445 days of IST on the critical path (this logic was vetted and agreed upon by multiple stakeholders as well as oversight staff) however, the IST Schedule Overview presented to the PMOC has the CS179 Contract off the critical path and only four months of IST on critical path. This is a significant change to the logic structure of the schedule, and the PMOC has requested a basis of schedule to justify this change, and has also requested to see the GEC's approval of such a change. Graph below shows the RSD for ESA with a year of contingency (maintaining the 2012 baseline schedule logic).
- The PMOC believes that a resource histogram demonstrating the viability of the multiple activities across several packages taking place concurrently should be conducted to validate the proposed schedule.
- The ESA Program schedule overview shows a highly unusual four month overlap between IST-Track work and Signals and Track work Installation.
- The PMOC assumes that the IST box labeled "other than below" on the Program Schedule overview (see appendix H) includes the integrated testing for the Harold Systems that also have to be integrated and tested, therefore a link to the appropriate Harold activities needs to be made in the schedule.

Table 1: ESA’s 2012 Baseline Shift

Contract	Start	Duration	Finish
CM012	1-Sep-13	2133	5-Jul-19
Last part of CS179	5-Jul-19	242	3-Mar-20
IST	3-Mar-20	445	22-May-21
LIRR IST	22-May-21	90	20-Aug-21
Cont.	20-Aug-21	365	20-Aug-22

Additionally the PMOC’s assumptions for its schedule are the following:

- Since April 2012, ESA changed its combination of CM005,006, 007 duration by 30% (54 months has become 69 months) which has also affected award of CS179;
- ESA’s historical procurements and construction delay, comparing baseline vs. actuals
 - Historical RFP delays 40% (potential risks; bid protest, e.g. CM019, CQ031, CQ039, CM013A, and lack of findings)
 - Historical IFB delays 16%
 - Historical construction max. delays 70% (excluding repackaging, and CH053, 54A)

Based on the above assumptions and consideration that there would be 24 different delay combinations with Contracts CM005, 006,007, and CS179, the PMOC created three possible scenarios of 30%, 50%, and 70% baseline duration increases for these packages and possible RSDs which would range between 2022 to 2024. It should also be noted that ESA’s schedule does not have the Harold schedule included; therefore the PMOC was not able to develop a probable schedule for Harold. The PMOC strongly recommends that the Harold schedule should be monitored very closely so that it does not become part of the project critical

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

5.0 PROJECT COST

Note: All references to expenditures in this report are with respect to the current cost baseline that was agreed upon at the MTA CPOC meeting in May 2012.

5.1 Budget/Cost

Table 5.1: Comparison of Standard Cost Categories: FFGA vs. CBB

Standard Cost Category (SCC) No.	FFGA SCC baseline (YOE \$) M	July 2, 2012 Re-baseline (YOE \$)	September 2013 SSC (YOE \$) M	November 2013 SSC (YOE \$) M	Nov 2013 % of Rebaseline	Sept'13 to Nov '13 Change \$M	CBB Variance from FFGA %
10	1,989	2,943	3,099	3,073	99.97%	-26	54.50%
20	1,169	1,514	1410	1,405	98.02%	-5	20.19%
30	356	388	332	325	100.26%	-7	-8.71%
40	205	488	513	513	106.56%	0	150.24%
50	619	698	677	715	100.00%	38	15.51%
60	165	204	204	204	100.00%	0	23.64%
70	957	674	674	674	100.00%	0	-29.57%
80	1,184	1,649	1,649	1,649	100.00%	0	39.27%
90	169	150	150	150	100.00%	0	-11.24%
Subtotal	6,813	8,708	8,708	8,708	100.00%	0	27.84%
100	1,036	1,116	1,116	1,116	100.00%	0	7.72%
Total Project Cost (10 – 100)	7,849	9,824*	9,824	9,824	100.00%	0	25.19%

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

Notes to changes in the Code:

SCC Code 10:

FMM14 Transfer to FMM19

B10 Fire Standpipe transfer to CS179

Construction Contingency funds transferred to MNR Design Support

AT1 and AT2 Concrete Lining Transfer to CM012

SCC Code 20:

Construction Contingency funds transferred to MNR Design Support

AT1 and AT2 Concrete Lining Transfer to CM012

Observations:

Although ESA continues to show in its cost reports that the Current Baseline Budget is being held, the SCCs at this baseline level seems to be inadequate, as evidenced in the deletion of CM007 and CQ033 from the Project Working Budget (PWB), and in ESA stating TBD for the Forecast Values on its Budget Status. The ESA PMT has acknowledged at recent cost review meetings that the overall project budget needs to be re-evaluated, but have only provided a preliminary draft of the re-planned cost projections. The PMOC advised the PMT that the Cost Management Plan (CMP) calls for budget forecasting. At the June 2013 Cost Review meeting, the ESA Project Executive informed FTA/PMOC that he was aware that this failure to officially adjust the PWE and budget and contingency forecasts resulting from the CM012R bid overrun and delayed procurements was not in keeping with the ELPEP agreement. The CMP states that the SCC is tied to the CSI numbering system, and both of these categories have specific definitions; therefore, after linking them, it would be impossible to change the definitions of scope included within any SCC.

Concerns and Recommendations:

The coding of work elements in the SCC should be realigned to properly reflect the costs for the type of work specified by the SCC. [Ref: ESA-106-Dec12]

In November 2013, ESA started providing the PMOC with more in-depth presentations on the probable impacts of the higher estimates and longer schedules for future packages; at the same time, none of that was reflected in the PWB or RSD dates provided in the Monthly Reports. At the beginning of December 2013 ESA, the IEC, the Supplemental Engineering Consultant, and the PMOC began meetings on an unofficial basis to provide each group's current projections and rationales for a new Budget and RSD. This was done in preparation for ESA's plan to present the preliminary results of its re-planning exercise at the January 2014 CPOC meeting. The PMOC recommends that ESA continue its efforts to finalize the re-planned cost and schedule baselines for the Project.

5.2 Project Cost Management and Control

Status:

The PMT has reported that as of November 30, 2013, the actual total project progress was 58.9% vs. 63.0% planned progress resulting from the July 2012 re-baseline, however the actual construction progress was 55.3% vs. 60.7% planned based on invoiced amount. This also represents an increase over the last quarter of 0.6% vs. the 1.8% construction progress planned, as shown in Table 5.2.

Table 5.2: Project Budget and Invoices as of November 30, 2013

Elements	Baseline Total Budget	Current Baseline Budget (November 2013)	Actual Awards (November 30, 2013)	Paid to Date (November 30, 2013)	Actual % Budget Invoiced
Construction	\$6,118,922,157	\$6,118,431,062	\$3,986,542,327	\$3,348,414,059	54.73%
Soft Costs Subtotal	\$2,126,077,843	\$2,126,568,938	\$1,436,374,459	\$1,378,960,637	64.84%
Engineering	\$671,029,379	\$671,520,474	\$619,556,895	\$605,494,568	90.17%
OCIP	\$173,913,620	\$173,913,620	\$140,223,857	\$136,584,990	78.54%
Project Mgmt.	\$762,816,530	\$762,816,530	\$568,392,028	\$532,551,778	69.81%
Real Estate	\$166,318,314	\$166,318,314	\$108,201,679	\$104,329,301	62.73%
Rolling Stock	\$202,000,000	\$202,000,000	\$0	\$0	0.00%
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Regional Investment Subtotal	\$590,732,003	\$590,732,003	\$168,124,991	\$37,519,101	6.35%
Construction (RI)	\$475,016,081	\$475,016,081	\$132,243,147	\$22,207,945	4.68%
Design (RI)	24,595,433	24,595,433	\$15,976,887	\$210,872	0.86%
OCIP (RI)	\$16,939,198	\$16,939,198	\$16,939,198	\$15,100,284	89.14%
Project Mgmt. (RI)	\$24,181,291	\$24,181,291	\$2,965,759	\$0	0.00%
Real Estate (RI)	\$0	\$0	\$0	\$0	0.00%
Rolling Stock(RI)	\$50,000,000	\$50,000,000	\$0	\$0	0.00%
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Finance Charges	\$1,116,453,993	\$1,116,453,993	\$617,607,000	\$617,607,000	55.32%
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

Shown below in Table 5a is the PMOC's cost forecast for the ESA project.

Table 5a; PMOC ESA Cost Forecast

Category	<u>Cost</u>
<u>CONSTRUCTION*</u>	<u>\$ 7,859,922,230</u>
<u>PM/CM; OCIP; RE; and ENGINEERING*</u>	<u>\$ 2,243,759,078</u>
<u>ROLLING STOCK</u>	<u>\$ 202,000,000</u>
[REDACTED]	[REDACTED]
<u>ESA BUDGET FORECAST</u>	<u>\$10,455,681,308</u>
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]

*PMOC Forecast is based on Historical trends; known costs; and schedule slippage. ESA provided data is utilized.

Observations:

The PMOC notes that ESA continues to report its Management Reserve under the Construction budget when computing Construction progress and continues to exclude rolling stock reserve in its calculation of project progress. The PMOC believes that Management Reserve is a Program reserve and should not be included in the Construction progress calculation and also that the rolling stock reserve should be included in the project progress calculation.

The PMT has been providing package estimates for future contract packages; however what is provided often is in formats without the underlying coding structures which hinders analysis, and without Basis of Estimates (BOE). Without a BOE, thorough analysis is difficult and one cannot identify the assumptions of the Estimator. ESA has not provided a detailed Cost Estimate for the CM007 Package, only a summary total estimate value around \$528.8M (Expected Bid of \$491.9M). That value has been identified 'off-line' and not presented in their current PWB. [Ref: ESA-107-Dec12]

Concerns and Recommendations:

The PMT provides monthly cost reporting data in a series of update documents provided by separate PMT staff instead of in a unified report. This lack of singular reporting responsibility and the lack of a single integrated cost document weaken the capacity for analysis and for a joint review of the cost relationships. In June 2013, ESA stated it was working on an Integrated Cost System but no progress has been demonstrated although the new Project Controls Manager discussed several changes to the reporting and measures to assure greater validity of the data. But this data is not backed up with any methodology for integrated cost management and reporting. It is recognized that the major ESA effort has been on developing a Re-Plan budget

but without developing controls mechanisms at the same time ESA runs the risk of accruing cost overruns in the future.

The PMOC is concerned about the lag of invoiced amount for construction and total project to date compared to the forecast amount in the projected cash flow. This continues the trend of ESA not keeping up with its monthly expenditure plans; the cash flow is currently averaging approximately only 50% of the planned value. The PMT should reforecast its monthly cash flow curve, linking it to the current schedule forecast [Ref: ESA-99-Dec12]

5.3 Change Orders

Table 5.3 below shows the executed mods greater than \$100,000 during November 2013.

[REDACTED]

[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

[REDACTED]

[REDACTED]

Status/Observation:

In analyzing the data, the PMOC found that executed MODs were running over 12% of the budget for packages and when the Pending, Possible, and Potential were added, the percentage was close to 20%. ESA has not budgeted enough to cover these changes. The PMOC, without access to the original proposed values or the negotiation processes, cannot assess the causes of or mitigations against this level of Changes.

Concerns and Recommendations:

The PMOC recommends that the PMT perform a more thorough analysis of the change order trends and budget for them, and also prepare an analysis and outline its plan for allocated and unallocated contingency consumption. It also suggests the PMOC be invited to attend major negotiations where MODS exceed \$10M or relate to settlements. [Ref: ESA-108-May12]

5.4 Project Funding

a) Federal Funding

As shown in Table 5.2, as of November 30, 2013, the PMT has awarded a total of \$5.423B, in contract work. The Federal share of awarded contracts is \$2.030B. The total Federal funding commitment as of November 30, 2013 remained at \$2.699 billion (See Appendix G.1 for re-baseline project cash flow and Appendix G.2 for detailed cost distribution)

b) Local Funding

The obligated local share was \$3.393B. There has been a \$617,607,000 incurred finance cost (for local share) to date.

5.5 Cost Variance Analysis

As stated earlier, a meaningful cost variance analysis cannot be performed until a CBB is submitted that takes into account the cost variances resulting from the CM012R bid overrun and subsequent repackaging of the work, as well as delay the procurement delays incurred since 2012.

5.6 Project Cost Contingency

Table 5.4 below is a summary of ESA's contingency for construction, soft cost and total project cost as of August 31, 2013. [REDACTED]

[REDACTED]

[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]					
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]					
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

Status/Observation:

At its last analysis, the PMOC saw that executed MODs were running over 12% of the budget for packages and when the Pending, Possible, and Potential were added, the percentage was close to 20%. ESA has not budgeted enough to cover these changes and its available contingency is less than the sum of its MOD exposure. Among the areas where it has under forecasted its change costs, ESA has treated the CM019 for \$122.6M as only a Potential Change and given it a Current Forecast of \$16M, so there is a potential \$106M of uncovered exposure for this. [Ref: ESA-98- Sep 12]

Concerns and Recommendations:

The PMOC has long stated, and ESA has recently confirmed, that the cost overrun on the cancelled CM012R solicitation has left the ESA Project with a budget shortfall, which will impact the project’s ability to mitigate future cost increases, and will also impact the ability to make timely awards of future contract packages, as is illustrated in ESA schedule for the CM007 award that will be delayed by 6 months in order to receive a limited NTP for Procurement of pre-cast in July 2015, and the Full NTP will be delayed an additional 9 months until April, 2016 when funding is expected to be available.

PMOC continues to recommend that ESA finalize its re-planned project cost estimate as soon as possible. [Ref.: ESA-112-June 13]

6.0 RISK MANAGEMENT

6.1 Risk Process

Status/Observation:

The change of the CS179 Contract Package structure to a base contract with six options (based on access restraints (ARs) in the CM005; CM006; and CM014B Contract Packages) will have a significant impact on the remainder of the ESA Program. These options represent approximately 40% of the total Contract Budget. The PMOC believes that this change in the Contract structure could significantly increase the cost of the CS179 Package. Additionally, interfacing with other Systems packages (VS086, CS084, and CS284) will become more difficult. Funding availability has now become a significant risk factor for this Contract, and the ESA PMT has stated that at present there is only enough funding available to award the base CS179 contract package.

Similarly, the procurement of CM007 has been delayed due to funding constraints; with a partial NTP forecast for July 2015 and full NTP in April, 2016, contingent upon funding availability.

There is a continuing difficulty in adhering to a schedule for a Monthly Risk Review Meeting. The PMT initially committed to holding Monthly Risk Review Meetings but has not achieved this schedule. The last Risk Review meeting was held on July 31, 2013 and none have been scheduled for the future.

Concerns and Recommendations:

As expressed before, 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 may create significant changes to the overall project risk profile and, as a result, the need for a comprehensive programmatic risk assessment.



The PMOC remains 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. Lastly, the PMOC is concerned that the PMT is no longer holding the monthly Risk Review meetings as required by the RMP.

The PMOC is also concerned that the contract risk reviews are conducted in a timely fashion and that all participants are fully informed to provide constructive analysis that can be addressed adequately.

6.2 Risk Register

Status/Observation:

The PMT has maintained a programmatic and contract Risk Register and updated it as specific risk reviews are conducted. The PMT provided a Systems risk register in November 2013. The last full project risk register was issued in August 2013.

Concerns and Recommendations:

Distribution of the Risk Register has been infrequent and ESA should automatically submit Risk Register updates to the FTA and PMOC on a regular basis.

6.3 Risk Mitigations

Status/Observation:

Current Risk Mitigation Efforts: ESA provided confidential draft re-planned cost and schedule baselines to the PMOC and held meetings (December 13, 2013 and December 20, 2013) to discuss these re-planned baselines with the various oversight groups (PMOC, IEC, SEC). The oversight groups had higher cost estimates and longer project schedule durations than what was presented by MTACC/ESA which currently remained unreconciled.

Concerns and Recommendations:

The PMOC is concerned about the disparity of opinions between the oversight groups and MTACC ESA schedule and cost estimates and the fact that MTACC will have to present its preliminary results to the Chairman of the MTA and the CPOC in January 2014, without having fully reconciled its estimates with those of the oversight groups.

7.0 PMOC CONCERNS AND RECOMMENDATIONS

Priority in Criticality column

1 – Critical 2 – Near Critical

Number/ Date Initiated	Section	Issues/Recommendations	Criticality
ESA-93- June12	1.6 Quality	<p><u>Project Quality Manual (PQM):</u> 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.</p> <p><u>Status Update:</u> Each month this date continues to slip. A Draft of Revision 7 has been prepared. MTACC’s Chief of Quality, Safety, and Security and the ESA Quality Manager are scheduled to discuss the revision on January 10, 2014 and the PMOC expects to receive a draft copy for review later that month.</p> <p><u>Recommendation:</u> The PMOC continues to believe that it would be beneficial to issue Revision 7 of the PQM as soon as possible.</p>	2
ESA-95- Sep12	2.3 Construction: Queens	<p><u>Contract CQ032:</u> The PMOC is concerned about the potential cost and schedule impacts to the CQ032 contract resulting from the access delays created by late turnover of work areas by the CM009/019, CQ031 and CQ039 contractors.</p> <p><u>Status Update:</u> The MTACC and the contractor continued to develop a re-baselined schedule (which will incorporate the prior access delays) through December 2013, but the parties were not able to complete and agree on it. The PMOC estimates that this will not occur until at least mid-to-late 1Q2014.</p> <p><u>Recommendation:</u> The PMOC recommends that the parties place greater emphasis on the need for the re-baselined schedule and complete development of it as quickly as possible.</p>	1
ESA-96- Sep12	1.5 Safety and Security	<p><u>Safety Certification Process:</u> The PMOC is concerned about the fact that personnel assigned to the Safety Certification Committee are continually changing; thus hampering the continuity and effectiveness of the Committee. The PMOC is also concerned that the Safety and Security Committee has not met on a regular basis as per the ESA SSMP. This lack of regular meeting will hamper the effectiveness of the</p>	2

Number/ Date Initiated	Section	Issues/Recommendations	Criticality
		<p>Committee in coordinating activities related to the Safety Certification Process.</p> <p><u>Status Update:</u> As of the end of December 2013, the PMOC has not seen a calendar produced for Safety Certification Committee meetings for 2014.</p> <p><u>Recommendation:</u> The PMOC recommends that the Safety Certification Committee produce a calendar for regularly scheduled meetings and adhere to it. The PMOC also recommends that the MTACC Safety Director stress the need to maintain a stable committee to all of the participating stakeholders.</p>	
ESA-98 Sep 12	5.6 Cost Contingency Analysis	<p><u>ELPEP Contingency Drawdowns:</u> The schedule and cost contingency drawdown plans in the ELPEP document have been superseded by the new (2012) schedule and cost baseline.</p> <p><u>Status Update:</u> MTACC provided to the FTA and the PMOC their proposed revisions to the ELPEP on March 19, 2013. This document was an abridged version of the original ELPEP agreement. Until ESA determines a revised schedule and budget for the project; meaningful update of the schedule and cost contingency drawdowns will not be possible. As of the end of September 2013, ESA does not have a revised baseline schedule or budget for the project.</p> <p><u>Recommendation:</u> MTACC needs to update the ELPEP document and create new contingency drawdown plans. ESA will first have address the budget and schedule impacts of the CM012R Bid cancellation before cost and schedule contingency drawdowns can be established.</p>	1
ESA-99- Dec12	5.2 Project Cost Management	<p>The PMOC is concerned about the continuing lag of invoiced amount for construction and total project to date compared to the forecast amount in the re-baseline cash flow. This continues the trend of ESA historically not keeping up with its monthly expenditure plans.</p> <p><u>Status Update:</u> As of the end of November 2013, ESA has only achieved 55.1% of Construction against the Planned 57.6%. The cash flow curves were planned based on the 2012 baseline.</p> <p><u>Recommendation:</u> ESA should reforecast its monthly cash flow curve, linking to the</p>	1

Number/ Date Initiated	Section	Issues/Recommendations	Criticality
		adjusted schedule forecast, and extend the likely date for the end of the payout curve.	
ESA-100- Dec12	1.6 Quality	<p><u>As-Builts:</u> The contractor working on the CH053, CH054A, and CQ032 contracts continues to be late in submitting As-Built drawings.</p> <p><u>Status Update:</u> 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. The ESA Quality Manager, MTACC's Chief of Quality, Safety, and Security, and Deputy Executives from the ESA Project will meet to develop a plan of action in January 2014.</p> <p><u>Recommendation:</u> The PMOC is concerned that this issue is still not resolved and that the contractor is not complying with their contractual requirement. The PMOC continues to recommend that ESA management press to immediately resolve this issue.</p>	2
ESA-101- Dec12	2.3 Construction (FHL02)	<p>The PMOC remains concerned that the LIRR can produce the quantity of SSWPs that will be required for future construction on the fast pace that will dictate their need.</p> <p><u>Status Update:</u> The LIRR developed Site Specific Work Plans (SSWPs) for all of the track work that it scheduled during 2013, including a separate SSWP for each of the 5 turnouts it installed, although none was complete earlier than the day before each task was to begin.</p> <p><u>Recommendation:</u> Since all LIRR track work for 2013 is finished and the 2014 track work program will be at least twice as large, the PMOC recommends that it begin development of the 2014 SSWPs immediately.</p>	2
ESA-102- Dec12	2.2 Procurement	<div data-bbox="569 1149 1671 1344" style="background-color: black; width: 100%; height: 100%; min-height: 120px;"></div> <p><u>Status Update:</u> The ESA submitted a program overview schedule on December 3, 2013, a partial IPS without RSD, and a very brief variance report. The bar chart</p>	1

Number/ Date Initiated	Section	Issues/Recommendations	Criticality
		<p>schedule indicates that the project critical path goes through contract CM005, CM007, and part of Integrated System Testing (IST) and LIRR testing and commissioning for three month. [REDACTED]</p> <p><u>Resolution:</u> As a result of ESA providing a draft of its re-planned baseline schedule, this item will be closed.</p>	
ESA-103-Dec12	2.1 Engineering Design	<p>The GEC and PMT continue to consistently miss all of their target dates for remaining design activities on the project. In several instances (CM014B; CH057), this has resulted in delaying the procurement packages.</p> <p><u>Status Update:</u> As of the end of September 2013, the PMT has not developed a design milestone tracking sheet.</p> <p><u>Recommendation:</u> The PMOC recommends that the PMT develop a design milestone tracking sheet for the remaining design work on the project, similar to what was done for the catenary design work, in order to more effectively manage the design effort.</p>	2
ESA-105-Mar13	2.3 Construction: Queens	<p>Contract CQ032: The PMOC is concerned that actual progress continues to lag planned progress at a rate that has increased from 2.7% to 15.9% in the last 6 months.</p> <p><u>Status Update:</u> The rate of acceleration of the lag in construction progress has continued to slowly reverse itself and is now at 26.8% during the last 3 months (it had been as high as 32%). The ESA PMT and the contractor also continue to develop the re-baselined schedule which will incorporate this lag, along with other schedule issues, that will help to alleviate the “actual vs. planned” construction difference. The PMOC does not anticipate that the parties will be able to agree upon the re-baselined schedule until mid-to-late 1Q2014, however.</p> <p><u>Recommendation:</u> The PMOC recommends that the parties expedite the development of the re-baselined schedule as quickly as possible.</p>	1

Number/ Date Initiated	Section	Issues/Recommendations	Criticality
ESA-106- Dec12	5.2 Project Cost Management and Control	<p><u>SCC Tracking and Control:</u> The SCC categories were used in Contract setup in a way that does not reflect the actual category of work if scope is transferred to other packages. The PMT provides identification of the SCC's affected strictly through scope transfers that then drive budget transfers; however budget is identified not by the type of work but by a pro-rata percentage of the existing package.</p> <p><u>Status:</u> The PMOC continues to observe that the values of some of the SCCs vary month to month.</p> <p><u>Recommendation:</u> The cost allocation setup for SCC should be modified (best time would be when ESA completes evaluation of its' CBB). Budget Transfer approvals by the Change Control Committee should also note the SCCs affected.</p>	1
ESA-107- May13	5.1 Budget Cost	<p><u>Contract Package Engineer's Estimates:</u> ESA has more frequently been providing the PMOC with the backup for the package Estimates; however, what is provided often is not in formats useful for analysis. The Basis of Estimate, when provided, generally does not provide enough detail for thorough analysis, nor to identify to the PMT the assumptions of the Estimator. No opportunity for reconciliation or explanation as to why those costs are to be used was provided. In addition, ESA still has not provided any Estimate for the CM007 package.</p> <p><u>Status Update:</u> The ESA PMT provided the CM007 Contract Estimate in December 2013.</p> <p><u>Recommendation:</u> The PMOC recommends that the MTACC's Project Control Manager submit estimates and proper documentation for review as well as a full analysis of the elements in the ESA estimate prior to each package bid date, allowing adequate time for review and comment. The PMT should also invite the PMOC to attend reconciliation meetings with the Estimating Firm(S) providing the Estimates. ESA should make sure the Estimating firms provide full and inclusive Basis of Estimate (BOE) documents as an integral part of the Estimate deliverable. The PMOC additionally recommends that the PMT have the estimates for the major packages, to be identified in collaboration with the PMOC, for independent cost review, as well as have</p>	1

Number/ Date Initiated	Section	Issues/Recommendations	Criticality
		<p>the CCM perform a “check estimate” and conduct a constructability review prior to estimate. The PMOC recommends that all costs provided by ESA to MTA as the basis for the Contract Bid be incorporated into the PWE and EAC for the package/project and then be replaced upon actual opening of Bids. A thorough analysis of the Estimate is essential for estimate validation needed for the Risk Assessment that must be held prior to going out to Bid.</p>	
<p>ESA-108-May 13</p>	<p>5.6 Project Cost Contingency</p>	<p><u>Estimate at Completion:</u> ESA had introduced a budget line item named “allocated for mods” in its CBB to adjust active packages budget for specified anticipated change orders.</p> <p>[REDACTED]</p> <p><u>Recommendation:</u> The PMOC recommends that the PMT perform a more thorough analysis of the change order trends and budget for them, and also prepare an analysis and outline its plan for allocated and unallocated contingency consumption. Informally, ESA has notified the PMOC that it intends to eliminate the category Allocated for MODs in the upcoming Re-Plan and present Contingencies on a more finite level.</p>	<p>1</p>
<p>ESA-109-June 13</p>	<p>4.1 Schedule</p>	<p><u>Project Schedule:</u> The IPS update does not adequately represent the current state of the project and events that have transpired since the 2012 baseline schedule was instituted.</p> <p><u>Status:</u> The ESA submitted a program overview schedule on December 3, 2013, a partial IPS without RSD, and a very brief variance report.</p> <p><u>Recommendation:</u> The PMOC highly recommends that ESA complete its re-planned baseline schedule as soon as possible and develop a new basis of schedule</p>	<p>1</p>
<p>ESA-112-June 13</p>	<p>5.6 Project Contingency</p>	<p><u>Project Cost Reporting:</u> The ESA PMT continues its monthly financial reporting without fully acknowledging the CM012R bid cancellation and subsequent repackaging estimates.</p> <p>[REDACTED]</p>	<p>1</p>

Number/ Date Initiated	Section	Issues/Recommendations	Criticality
		<p>[REDACTED]</p> <p><u>Status:</u> The ESA PMT has provided a draft of its re-planned project cost estimate in December 2013, however this has been deemed confidential until preliminary results are presented to the MTA CPOC.</p> <p><u>Recommendation:</u> The PMOC recommends that ESA continue to work to finalize its re-planned project cost estimate.</p>	
ESA-113-June13	2.2 Procurement	<p><u>Contract Packaging Plan:</u> ESA needs to produce a Contract Packaging Plan that reflects the current state of the project and should adhere to it.</p> <p><u>Status:</u> ESA has not updated its Contract Packaging Plan since 2009. The ESA Risk Manager stated at the July 2013 Risk Review meeting that the Contract Packaging Plan remains under development and is not ready to be submitted for review. This status has not changed as of the end of December 2013.</p> <p><u>Recommendation:</u> The PMOC continues to recommend that ESA produce an updated Contract Packaging Plan (CPP) and adhere to it.</p>	1
ESA-114-Sep13	3.0 ELPEP Compliance	<p><u>ELPEP Compliance:</u> With MTACC’s submission of its East Side Access FTA Quarterly Report (Apr, May, June ’13) and then continuing with the ESA FTA Quarterly Report (July, Aug., Sept. 2013) and the October and November 2013 monthly reports, the PMOC notes that the ESA project continues to not be in compliance with ELPEP and is not meeting some of the more important requirements of the SMP and CMP sub-plans to the PMP.</p> <p><u>Status:</u> Specific areas of non-compliance were provided to MTACC at the September 12, 2013 ELPEP Quarterly Review Meeting and additional details provided on October 30, 2013. MTACC provided preliminary draft responses (partial) to the PMOC list of ELPEP non-compliances at the December 12, 2013 ELPEP Quarterly Compliance Meeting. MTACC and the PMOC are currently planning to hold a January 2014 workshop to address the FTA and PMOC’s concerns.</p> <p><u>Recommendation:</u> The PMOC recommends that this deficiency be corrected</p>	1

Number/ Date Initiated	Section	Issues/Recommendations	Criticality
		immediately.	
ESA- 115- Dec13	1.6 Quality	<p><u>Special Inspector Certifications</u>: The MTACC Code Compliance Officer stated that the CH053/CH054A contractor is using uncertified inspectors on Special Inspections for the bridges it has installed.</p> <p><u>Status Update</u>: A follow-up meeting to resolve this issue is scheduled for January 8, 2014.</p> <p><u>Recommendation</u>: The PMOC is concerned that uncertified inspectors are working for the CH053/CH054A contractor and recommends that these inspectors become certified or replaced with inspectors who are certified.</p>	2

8.0 GRANTEE ACTIONS FROM QUARTERLY AND MONTHLY MEETINGS

Priority in Criticality column 1 – Critical 2 – Near Critical

Number with Date Initiated	Section	Grantee Actions	Criticality	Projected Resolution Date
ESA-A45- Dec12	Section 2.2	MTACC committed at the December 12, 2012 CM012R post bid de-brief to provide FTA/PMOC with preliminary schedule impacts of CM012R bid cancellation within approximately two weeks from the meeting. The ESA PMT stated that they will present preliminary results to FTA/PMOC in the beginning of April 2013. Preliminary schedule impacts were presented on April 9, 2013; however MTACC has yet to address the Program Budget impacts as of the end of October 2013 and have stated at the FTA/MTACC Executive Meeting in May 2013 that they will not have the budget impact numbers until later this year (it now appears this will not occur until at let the end of the1Q2014).	1	10/1/13
ESA-A46- Dec12	Section 4.2	The ESA PMT agreed at a meeting held with FTA/PMOC on July 30, 2012 to develop a set of critical metrics jointly with the FTA/PMOC and MTA IEC that would be used as an early indicator of issues that need to be addressed by senior management. The need to do this was re-iterated at the November 8, 2012 ESA/SAS mini-quarterly meeting. The IPS #47 has not been updated fully, and therefore the critical metrics have not been completely developed by the PMT.	2	3/31/14
ESA-A47- Mar13	Section 1.5	ESA Safety Director stated at the Operational Readiness meeting held in March 2013 that one of his goals in the upcoming quarter is to brief the CMs on active Construction Contracts on their role in the safety certification process. The PMOC stated that he would like a status report on this activity at the next Operational Readiness meeting in June 2013. The ESA Safety Director reported on the process, but did not have any tangible results to report in the September 2013 Operational Readiness Meeting.	2	12/30/13

APPENDIX A -- LIST OF ACRONYMS

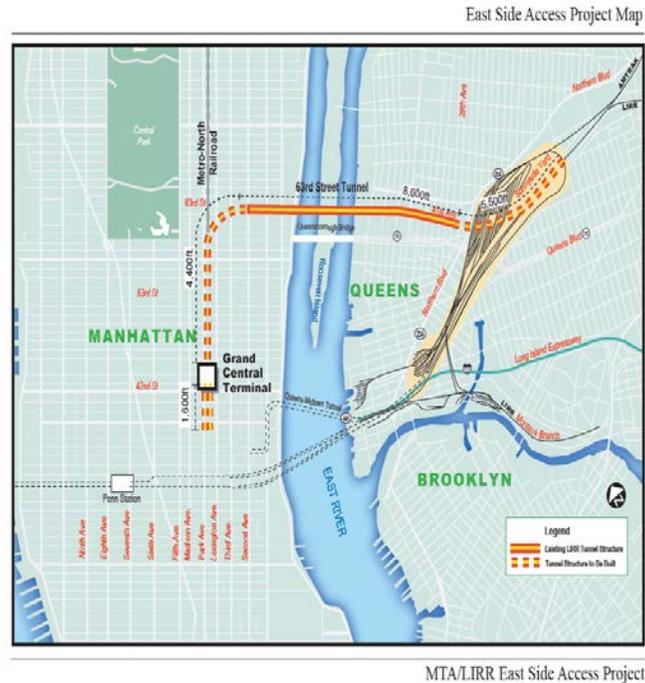
AFI	Allowance for Indeterminates
ARRA	American Recovery and Reinvestment Act
BA	Budget Adjustment
CBB	Current Baseline Budget
C&S	Communication and Signals
CCC	Change Control Committee
CCM	Consultant Construction Manager
CM	ESA Construction Manager assigned to each contract
CMP	Cost Management Plan
CPOC	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
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-- PROJECT OVERVIEW AND MAP

Project Overview and Map – East Side Access



Scope

Description: This project is a new commuter rail extension of the Long Island Rail Road (LIRR) service from Sunnyside, Queens to Grand Central Terminal (GCT), Manhattan, utilizing the existing 63rd Street tunnel under the East River and new tunnels in Manhattan and Sunnyside yard. Ridership forecast is 162,000 daily riders (27,300 new riders).

Guideway: This two-track project is 3.5 route miles long, it is below grade in tunnels and does not include any shared use track. In Harold interlocking, it shares ROW with Amtrak and the freight line.

Stations: This project will add a new 8 track major terminal to be constructed below the existing GCT. The boarding platforms and mezzanines of the new station will be located approximately 90 feet below the existing GCT lower level. A new passenger concourse will be built on the lower level of the terminal.

Support Facilities: New facilities will include: the LIRR lower level at GCT, new passenger entrances to the existing GCT, the East Yard at GCT, the Arch Street Shop and Yard, a daytime storage and running repair/maintenance shop facility in Queens, and ventilation facilities in Manhattan and Queens.

Vehicles: The scope and budget for the ESA project include the procurement of 160 new electric rail cars to support the initial service.

Ridership Forecast: MTA projects that, by 2020, the ESA project will handle approximately 162,000 daily riders to and from GCT. This Ridership projection is based on a 2005 study performed by DMJM/Harris (AECOM).

Schedule

9/98	Approval Entry to PE	12/10	Estimated Rev Ops at Entry to PE
02/02	Approval Entry to FD	06/12	Estimated Rev Ops at Entry to FD
12/06	FFGA Signed	12/13	Estimated Rev Ops at FFGA
08/19	Revenue Service Date at date of this report (MTA schedule)		

Cost (\$)

4,300 million	Total Project Cost (\$YOE) at Approval Entry to PE
4,350 million	Total Project Cost (\$YOE) at Approval Entry to FD
7,386 million	Total Project Cost (\$YOE) at FFGA signed
9,744.1 million	Total Project Cost (\$YOE) at Revenue Operations
10,415.2 million	Total Project Cost (\$YOE) at date of this report including \$ 1,116.5 million in Finance Charges
4,727.4 million	Amount of Expenditures as of November 30, 2013 based on the Total Project Budget of \$8,708 million
54.3	Percent Complete based on the current budget of \$8,708 million and expenditures in the November 30, 2013 report
	
55.1*	Construction Percent Complete
58.9*	Overall Project Percent Complete

*As of November 30, 2013, based on the revised baseline (May 2012) and excluding \$463 million for Rolling Stock Reserve, as provided by ESA in its November 2013 Report.



APPENDIX C – LESSONS LEARNED

#	Date	Phase	Category	Subject	Lessons Learned
1	Dec-12	Construction	Construction	Muck Handling	During cavern excavation, the CM019 contractor became muck-bound, which caused a project delay of several months. The PMOC recommended that the contractor make extraordinary effort to evacuate the muck. After several months, it finally did, but the schedule time could not be recovered by that point. Lesson learned was to develop a well thought out muck handling plan (including establishment of proper haul roads) before work begins and to follow it during excavation.
2	Dec-12	Construction	Management	Stakeholder Management	The CH053 contractor incurred many months of initial construction delay because Amtrak did not approve the Electric Traction design documents on the project’s schedule. A major contributing factor to this was because the MTACC had not established a contractual working relationship with Amtrak prior to letting the CH053 contract. The PMOC recommended that the MTACC and its GEC more closely design the project in accordance with the comments that Amtrak was submitting. To date, the MTACC has exhibited some improvement in this matter, but there are still 2+ Stages to construct, and improvement has not been fast enough or consistent over time. Lesson learned was to develop good working relationships with all project stakeholders before any contracts are let.
3	June-13	Construction	Planning/ Construction	Haul Roads	Haul roads to remove muck need to be passable (preferably paved with a mudslab) with locations pre-determined in areas of confined space such as caverns and tunnels. Deep,

#	Date	Phase	Category	Subject	Lessons Learned
					muck-filled haul roads contributed to the contractor's slow progress in removal of muck during construction. Lesson learned was to plan haul roads in advance and ensure that the muck haulers can travel at a specific rate of speed in order to meet production goals.
4	June-13	Construction	Training	Operator Skill with drill rigs	Lack of proper operator training contributed to inconsistent drilling of 10' deep blast holes which resulted in under/overbreak of excavated material, thus requiring rework to achieve desired results. Lesson learned was to ensure that drill rig operators are properly trained before being allowed to operate a production drill rig.
5	June-13	Procurement	Contract Development	Contract Packaging	Access to work sites, interface with other contracts, and contract staging must be considered when projects employ multiple contractors that may conflict with each other, particularly in confined spaces such as tunnels and caverns. Lesson learned is to carefully consider the access that each contractor may require, perhaps developing a scale model of the expected operation, so that expected operation of each contractor is included in its contractual requirements.
6	June-13	Administration	Quality	Submittals	Identification and resolution of quality issues (e.g. As-Built drawings, NCRs, etc.) must be managed on a daily basis to avoid creation of a backlog. Lesson learned is for the owner to have a well-trained staff with a consistent, coordinated approach (including appropriate pre-approved corrective action) when obtaining contractually required documents from contractors.

#	Date	Phase	Category	Subject	Lessons Learned
7	June-13	Contract Specs/ Construction	Construction	Pneumatically Applied Concrete (PAC)/ Shotcrete	Mismanagement of PAC/Shotcrete application has many different aspects which could adversely affect a project. Lesson learned is that all projects which anticipate use of PAC/shotcrete should carefully examine all aspects of its use and that a careful engineering analysis of the expected use be made so that the approved use can included in the contract documents for the project.
8	June-13	Procurement/ Construction	Procurement	Qualified Personnel	Ensure that project key personnel are properly qualified and experienced for the positions they will fill on the project. Lesson learned is that personnel not properly qualified, experienced, or possessing the requisite credentials can do more harm than good. The owner should ensure that it is getting the contractor's best personnel when excavating a tunnel or cavern.
9	June-13	Scheduling	Construction	TBM Production	Project management should ensure that accurate, up-to-date, production rates for machinery are used when project schedules are developed. PMOC analysis has revealed that ESA schedules for the Manhattan Tunnel Boring Machines were based on a planned excavation rate of 53 linear feet/day. Actual TBM excavation averaged 34 LF/day, a difference of 35%. Lesson learned is that, depending on the length of excavation, inaccurate estimates can have a large negative impact on project schedule.

APPENDIX D – PMOC STATUS REPORT
(to be transmitted in a separate file)

APPENDIX E – SAFETY AND SECURITY CHECKLIST

Project Overview			
Project mode (Rail, Bus, BRT, Multimode)	Rail		
Project phase (Preliminary Engineering, Design, Construction, or Start-up)	Construction		
Project Delivery Method (Design/Build, Design/Build/Operate/Maintain, CMGC, etc.)	Primarily Design Bid/Build		
Project Plans	Version	Review by FTA	Status
Safety and Security Management Plan	12/2010 Rev. 2	2012	The Grantee has set a target date of Q2 2014 for updating the SSMP. Among other items, newly formulated flow charts associated with the safety certification process will be added.
Safety and Security Certification Plan	11/2008 Rev. 1		Is within the SSPP of LIRR.
System Safety Program Plan	11/2008 Rev. 1		N/A
System Security Plan or Security and Emergency Preparedness Plan (SEPP)	11/2010		Is within the SSPP of LIRR.
Construction Safety and Security Plan	3/2007 Rev. 1		Project Construction Safety and Security Plan, contractors' site specific safety and security plans,
Safety and Security Authority	Y/N		Notes/Status
Is the grantee subject to 49 CFR Part 659 state safety oversight requirements?	Y		
Has the state designated an oversight agency as per Part 659.9?	Y		The New York State Public Transportation Safety Board (NYSPTSB) is the SSOA.
Has the oversight agency reviewed and approved the grantee's SSPP as per Part	In Development		In Q4 of 2013, The SSOA has asked the

Project Overview		
659.17?		FTA for guidance on approving the SSPP.
Has the oversight agency reviewed and approved the grantee's Security Plan or SEPP as per Part 659.21?	In Development	The Grantee is currently in communication with a representative of NYS SSOA.
Did the oversight agency participate in the last Quarterly Program Review Meeting?	N	Grantee to transmit SSMP to SSOA through the Grantee's System Safety Dept. The SSOA's representative has had a meeting with NYCT system safety and the grantee. The PMOC attended a meeting with the grantee and the SSOA. Additionally, in accordance with new MAP- 21 provisions, the FTA recently audited the NYS SSOA. Preliminary FTA findings indicate a need for more funding in order for the SSOA to accomplish its mandate from FTA. Simultaneously, the SSOA was able to transfer an existing NYS employee into the SSOA. It is anticipated that the above events will lead to a greater ability for the SSOA to more effectively and efficiently accomplish its mission moving forward.
Has the grantee submitted its safety certification plan to the oversight agency?	Y	The Grantee has submitted its safety certification plan to the NYS SSOA.

Project Overview		
Has the grantee implemented security directives issues by the Department Homeland Security, Transportation Security Administration?	N	The MTA unified threat vulnerability methodology was applied to the ESA design. A vulnerability log was developed for ESA based on the feedback from the applied methodology. Controls within the design have been implemented to reduce the relative risk of those vulnerabilities identified. Analysis indicated that the controls within design were adequate for the vulnerabilities identified.
SSMP Monitoring	Y/N	Notes/Status
Is the SSMP project-specific, clearly demonstrating the scope of safety and security activities for this project?	Y	
Grantee reviews the SSMP and related project plans to determine if updates are necessary?	In review by MTACC Assistant Chief of Safety and Security.	The Grantee will undertake an update of the SSMP in the second quarter of 2014. A flowchart was created representing the next phase (from design into construction) for incorporation into the SSMP.
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.	Y	The Assistant Chief of Safety and Security for the MTACC meets regularly with the project management team. The CCM and the Grantee's safety and security personnel are integrated into the management team. Integration is also

Project Overview		
		achieved through implementation of ESA HASP, monthly project wide safety meetings, quarterly audits, OCIP inspections, weekly MTACC and contractor joint safety audits, and interface w/ MTA Police and NYPD Infrastructure Protection Unit of the NYPD's Counter-Terrorism Division. As a result of a third party security audit, the grantee has established contract specific security lead persons to assure continuity of security functions.
Does the grantee maintain a regularly scheduled report on the status of safety and security activities?	Y	Safety and Security are reported on during the monthly safety meeting and are incorporated into Grantee's monthly project reports.
Has the grantee established staffing requirements, procedures and authority for safety and security activities throughout all project phases?	Y	Contained within the Grantee's safety procedure documents.
Does the grantee update the safety and security responsibility matrix/organizational chart as necessary?	Y	To be incorporated into the next revision of the SSMP.
Has the grantee allocated sufficient resources to oversee or carry out safety and security activities?	Y	MTA, GEC, CCM, and contractors provide personnel and resources to carry out safety and security activities. Additionally, an MTACC consultant conducted a safety and security review of all MTACC projects. The

Project Overview		
		consultant's report included programmatic and system security recommendations that are currently being reviewed by MTACC and MTA Police.
Has the grantee developed hazard and vulnerability analysis techniques, including specific types of analysis to be performed during different project phases?	Y	The SSMP Committee process is comprehensive and provides for this.
Does the grantee implement regularly scheduled meetings to track to resolution any identified hazards and/or vulnerabilities?	Y	SSMP committee meetings as well as project wide monthly safety meetings take place.
Does the grantee monitor the progress of safety and security activities throughout all project phases? Please describe briefly.	Y	Accomplished through daily audits by contractor and CCM and through the comprehensive SSMP Committee process.
Does the grantee ensure the conduct of preliminary hazard and vulnerability analyses? Please specify analyses conducted.	Y	The SSMP Committee process provides for TVRA, safety, and security analysis as well as input from subject matter experts on the SSMP Committee.
Has the grantee ensured the development of safety design criteria?	Y	The SSMP Committee has established the safety design criteria.
Has the grantee ensured the development of security design criteria?	Y	Accomplished through the SSMP Committee process.
Has the grantee ensured conformance with safety and security requirements in design?	Y	Achieved through the SSMP Committee process.

Project Overview		
Has the grantee verified conformance with safety and security requirements in equipment and materials procurement?	N	The grantee has not verified conformance for materials procured to date. Thus far, the grantee has relied on design specifications and manufacturers' quality controls for verification. The PMOC has advised that this course of action is insufficient and does not align with FTA established guidelines. The grantee is attempting to devise a workable solution.
Has the grantee verified construction specification conformance?	Y	Through ongoing contract review.
Has the grantee identified safety and security critical tests to be performed prior to passenger operations?	N	Although the Grantee has established preliminary hazard analysis (PHA) and a system test plan, the Grantee needs to identify safety and security critical tests in its Test Program Plan. The grantee is working within the PMP to identify critical submittals relevant to system certification. PMOC has expressed concerns, both at meetings and in reports, about the non-linear pattern of completed construction vs. incomplete critical testing.
Has the grantee verified conformance with safety and security requirements during testing, inspection and start-up phases?	In Development	Project is not at these phases yet.

Project Overview		
Does the grantee evaluated change orders, design waivers, or test variances for potential hazards and /or vulnerabilities?	In Development	Systems area design modifications not originally evaluated per the unified methodology are analyzed and controls are incorporated into the design.
Has the grantee ensured the performance of safety and security analyses for proposed workarounds?	In Development	
Has the grantee demonstrated through meetings or other methods, the integration of safety and security in the following: Activation Plan and Procedures Integrated Test Plan and Procedures Operations and Maintenance Plan Emergency Operations Plan	Y	An Emergency Preparedness Plan was promulgated by the Grantee in 11/2010. The EAP operational readiness group has been finalized to include MNR, LIRR, MTAPD, and FDNY. The first meeting took place in March of 2013. A Safety Certification update has been incorporated into this meeting, with the MTACC Assistant Chief of Safety and Security providing regular status report. Task work group meetings have resulted in a white paper being formulated. The paper suggests that management hierarchy of GCT be presented as a single establishment (incorporating MNR and LIRR) in accordance with DHS and SIMS requirements.
Has the grantee issued final safety and security certification?	N	Project is not at this stage.
Has the grantee issued the final safety and security verification report?	N	Project is not at this stage.

APPENDIX F – ON-SITE PICTURES
(to be transmitted in a separate file)

**East Side Access - Contracts Status Summary Report
(Future Contracts)**

D

Contract Number	Contract Name	Design (including estimates and schedules)				Procurement								Construction			
		30% Design	60% Design	90% Design	100% Design	Ready for Proc (S&S - Div 1)	Procurement Method	Advertise	Initial Bid Period	Advertised Bid Date	Addendum Period	Expected Bid Date	Award Period	Notice to Proceed	Project Period	Substantial Completion	
		Forecasted Date	Forecasted Date	Forecasted Date	Forecasted Date	Forecasted Date	RFP or IFB	Forecasted Date	Duration	Forecasted Date	Duration	Forecasted Date	Duration	Forecasted Date	Duration	Forecasted Date	
CM006	Manhattan North Structure	Current Month	Done	Done	Done	8/1/2013 A	8/1/2013 A	RFP (with schedule being a major factor of consideration)	8/15/13 A	11 Weeks	10/17/2013	4 Weeks	12/20/2013	10 Weeks	3/3/2014	32 Months	11/3/2016
		Previous Month										4 Weeks	11/4/2013	16 Weeks	3/3/2014	32 Months	11/3/2016
CM006 NOTE: S&S are scheduled to be received in December, with a target to award by mid-January.																	
CM007	Manhattan Cavern Structure & Facilities Fit-Out	Current Month	Done	Done	Done	3/1/2014	3/1/2014	RFP	10/1/2014	18 Weeks	2/4/2015	11 Weeks	4/22/2015	10 Weeks	7/1/2015	48 Months	7/8/2019
		Previous Month				TBD	TBD		TBD	18 Weeks	TBD	11 Weeks	TBD	10 Weeks	TBD	TBD	TBD
CM007 NOTE: Request for Expression of Interest was advertised on Nov 26th and responses are due on Dec 17th. A meeting with interested parties will be held in January 2014, which will allow for an informed decision as to the contractor's means and methods. Based upon the results of the RFI, the OEC will be directed as to the level of design that is needed. And a more precise schedule can be generated. The target is to issue a limited NTP by 7/1/15, and full NTP by 4/1/16, or allowing a 2 month buffer after CM006 SC.																	
CM012A	Bellmouth Closure	Current Month	Done	30-Aug-13 A	11/8/2013 A	12/20/2013	TBD	IFB	Schedule being developed to be issued in the near future								
		Previous Month			1/8/2013	12/20/2013	TBD		Schedule being developed to be issued in the near future								
CM014B	GCT Concourse & Facilities Fit-Out	Current Month	Done	31-Dec-08 A	01-Sep-10 A	7/1/2012 A	1/15/2014	IFB	2/15/2014	7 Weeks	4/4/2014	5 Weeks	5/12/2014	7 Weeks	7/3/2014	63 Months	9/25/2019
		Previous Month	Done			7/5/2012	1/15/2013		12/1/2013	13 Weeks	3/4/2014	9 Weeks	5/5/2014	8 Weeks	7/3/2014	63 Months	9/25/2019
CM014B NOTE: The construction duration is inclusive of 1 year +/- of "support" to CS-179 during start-up/testing/commissioning. All construction work should be completed by 6/1/16, or within 63 months from NTP.																	
CM015	48th Street Entrance	Current Month	8/20/2012	15-Jan-13 A	3/22/2013A	6/3/2013 A		Schedule being developed to be issued in the near future									
		Previous Month				5/15/2013		Schedule being developed to be issued in the near future									
CM015 NOTE: CS-179 is being incorporated into the CM014B package, and will be removed from future reports.																	
CG033	Mid-Day Storage Yard Facility	Current Month	01-Sep-10 A	31-Oct-11 A	10/22/2013 A	12/20/2013	12/20/2013	IFB	12/1/2014	14 Weeks	3/9/2015	6 Weeks	4/20/2015	11 Weeks	7/5/2015	40 Months	10/25/2018
		Previous Month				12/20/2013	1/20/2013		12/1/2014	14 Weeks	3/9/2015	6 Weeks	4/20/2015	11 Weeks	7/5/2015	40 Months	10/25/2018
CG033 NOTE: CG033 Design has been pushed for 3 reasons: (1) design resources have been working on priority force account packages, and (2) the Montreal Cutoff has been added to the West End Alignment, which is causing a revision to the design. Signal subcontractors will need to be pre-qualified prior to advertising this package.																	
FGA65	Loop Interlocking CIL - Amtrak F/A	Current Month	Done	07-Sep-10 A	24-Jun-11 A	12/31/2013	1/15/2014	Force Account	n/a	n/a	n/a	n/a	n/a	n/a	6/15/2014	52 Months	10/14/2018
		Previous Month	Done			12/31/2013	1/15/2014		n/a	n/a	n/a	n/a	n/a	n/a	n/a	6/15/2014	52 Months
FGA65 Loop Interlocking NOTE: Loop interlocking design was completed in mid 2013; however, a decision on whether to use concrete ties is holding up final drawings.																	
FGA65	Catenary	Current Month	08-Mar-12 A	13-Apr-12 A	10/12/2012 A	26-Jun-13 A	8-Jul-13 A	Force Account	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
		Previous Month							n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
FGA65 Catenary NOTE: FGA65 Catenary will be installed under CH057, and will be removed from future reports.																	
VQ055A	Loop Interlocking CIL	Current Month	09-Mar-10 A	09-Apr-10 A	03-Dec-10 A	13-Jan-12 A	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	9/12/2012	12 Months	3/5/2014
		Previous Month					n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a			9/15/2013
VQ055B	T Interlocking CIL	Current Month	12-May-10 A	03-Dec-10 A	13-May-11 A	12-Jul-11 A	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	9/12/2012	18 Months	3/5/2014
		Previous Month					n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a			3/5/2014
VQ055 NOTE: VQ055 has completed manufacture of material, per the contract completion date, but the contract is being held open so that the vendor can oversee installation under FGA65.																	
CH057B	On-Call Track Construction	Current Month	Done	01-Jul-09 A	02-Feb-11 A	12/30/2013	1/15/2015	On-Call	1/31/2014	4 Weeks	2/28/2014	0 Weeks	2/28/2014	4 Weeks	3/31/2014	28 Months	8/7/2016
		Previous Month				TBD	12/1/2013		TBD	TBD	TBD	TBD	TBD	TBD	TBD	28 Months	TBD
CH057	Loop Box and D Approach, EBRR West Approach & Tunnel, and B & C Approach	Current Month	Done	01-Jul-09 A	02-Feb-11 A	31-May-13 A	3/30/2014	IFB	4/30/2014	4 Weeks	5/30/2014	4 Weeks	6/30/2014	9 Weeks	8/30/2014	TBD	TBD
		Previous Month				03/11/14	12/1/2013		1/15/2014	TBD	TBD	TBD	3/15/2014	7 Weeks	5/1/2014	TBD	TBD
CH058	Harold Structures - Part 3, EB Bypass Structure, D & B/C Approach	Current Month	Done	19-Jul-10 A	3/15/2014	6/15/2014	1/1/2015	IFB	3/1/2015	TBD	TBD	TBD	6/1/2015	9 Weeks	8/1/2015	33 Months	4/27/2018
		Previous Month			3/15/2014	6/15/2014	1/1/2015		3/1/2015	TBD	TBD	TBD	6/1/2015	9 Weeks	8/1/2015	33 Months	4/27/2018

Table H – Core Accountability Items

Project Status:		Original at FFGA	Current*	ELPEP **
Cost	Cost Estimate	\$7.386B	\$8.708B	\$8.119B
	[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	58.9 ***		
	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. BAFOs for CM006 were received on December 20, 2013. RFEIs for CM007 were advertised in November 2013 and 11 expressions of interest were received on December 17, 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 officially TBD since the CM012R bid overrun in October 2012. [REDACTED]	
Major Procurements Delays		Procurement of CS179 (Systems Package 1) continues to slip. MTACC did not meet its goals of having a recommendation to award before the end of 2013. Other System Packages (CS284, CS084, and VS086) award dates remain TBD. Advertise date for the CM007 and CM014B packages remains TBD.	[REDACTED]	

		[REDACTED]
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.	The ESA submitted a program overview schedule on December 3, 2013, a partial IPS without RSD, and a very brief variance report. The bar chart schedule indicates that the project critical path goes through contract CM005, CM007, and part of Integrated System Testing (IST) and LIRR testing and commissioning.
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.