PMOC COMPREHENSIVE MONTHLY REPORT

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

Report Period September 1 to September 30, 2012

PMOC Contract No.DTFT60-09-D-00007
Task Order No. 2, Project No. DC-27-5115, Work Order No. 03

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

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THIRD PARTY DISCLAIMER

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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. 002. 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 current connection to Penn Station in Manhattan.

2. CHANGES DURING 3rd Quarter 2012

a. Engineering/Design Progress

As of August 31, 2012, MTACC reported that the Engineering/Design effort was 89.1% complete (on a cost invoiced basis). Details are provided in the Engineering/Design Section below.

b. New Contract Procurements

Construction progress reached 45.7 % complete on a cost invoiced basis, as of the end of August, 2012. Details for each of the contracts are provided below.

c. Construction Progress

Construction progress reached 45.7 % complete on a cost invoiced basis, as of the end of August, 2012. Details for each of the contracts are provided below.

d. Continuing and Unresolved Issues

Both the CS179 and CM012 packages have experienced significant delays since the new baseline schedule was developed. Although the risk informed baseline was adjusted (CM012 bid due date to mid-August, and NTP for CS179 to October 1st); both of these procurements continue to slip; with the bid date for CM012 currently set for October 11, 2012 (award by December 1, 2012); and NTP for CS179 now forecast for December 1, 2012. Additionally, the advertise date for the CH057 package has slipped from September 15, 2012 to October 29, 2012. The CS179 and CM012 packages are on the critical path; and the CH057 Contract is currently near critical (<30CDs). At present, project contingency will have to be utilized if either the CS179 or CM012 contracts are not awarded by the end of 2012. CH057 bid date is currently forecast for December 22, 2012 (note: there are currently 365 days of project contingency; while the RSD will not be immediately impacted; the use of contingency in the procurement phase is not good practice). Although the risk adjusted schedule was adjusted to take into account some procurement delay; the ongoing delays in the CS179 and CM012 procurements have placed the project contingency at risk.

e. New Cost and Schedule Issues

Revised schedules are being developed for the F1, F2, and Point cutovers and other follow-on cut-overs. The latest IPS update does not capture the impact of these revised schedules on overall project completion; however, at this point, these activities are not on the project critical path.

3 PROJECT STATUS SUMMARY AND PMOC ASSESSMENT

a. Grantee Technical Capacity and Capability

Although there are no Technical Capacity and Capability issues related to the ESA Organization and staffing to report on at this time; other issues related to Technical Capacity and Capability are discussed later in the report.

b. Real Estate Acquisition

There was a considerable amount of activity related to the 48th Street Entrance that occurred during Q3 2012. Details are provided in Section 2.6 of this report.

c. Engineering/Design

Design work continues for Harold/force account projects, Queens projects, and Manhattan projects. The PMOC is concerned that delays in finalizing the E/T Stage 3 Catenary design could impact the CH058 procurement if it is not finalized by November 1, 2012 (as per latest IPS update). The PMOC is also concerned that although the PMT has stated that Amtrak approval of the means of constructing the slab in CH057 will not hold up the advertise date for the Contract package; the last forecast date of September 15, 2012 for advertising, has not been met.

d. Procurement

Several procurements are ongoing related to the CM012R and CS179 Contract packages and there are issues associated with these packages. Details are provided in Section 2.2 of this report.

e. Railroad Force Account (Support and Construction)

At times in the past, both LIRR and Amtrak have had difficulty supplying sufficient personnel to support the contractor's construction, but, during the last quarter, this has not been the case. During that time, 42 new catenary poles have been installed, bringing the total percent complete up to 64.4%. Catenary pole installation is forecast for completion by late December 2012/early January 2013.

ESA continues to work with Amtrak to finalize the F1 and F2 cutover dates in FHA02 contract. Once the F1/F2 cutover dates are finalized, the Point cutover in FHL02 can be finalized.

f. Third-Party Construction

Manhattan: The MTACC's latest IPS update for CM019 indicated that the Contractor's latest forecast for achieving SC in June 2013 may be delayed by as much as 9 days as a result of slower than anticipated progress in the GCT 1&2 East and West Wyes and the Tail Tunnels. The Current ESA forecast for Substantial Completion by August 31, 2013 is not impacted.

CM013 contractor has experienced slow production rates on concrete placement over the last three months, resulting in a potential delay in completing Milestone #5 (Shaft Access) in December 2012 as planned.

The PMOC continues to be concerned with the schedule for switchgear fabrication and delivery on the CM014A Contract. The MTACC Project office has advised the PMOC that there continues to be issues with LIRR and the GEC over the current performance requirements by LIRR of the switchgear. This issue is impacting completion of shop drawing submittal/approval, manufacture and delivery of all equipment by the required December 2012 for May 2013 "power up" (note: this package was created to bring early power into both the caverns and the concourse area for both temporary construction power and final permanent power. There is an underlying concern that if power is not up on schedule, CM012, CM014B and CS179 contracts could be impacted).

The PMOC remains concerned that the ability of the CM004 Contractor to meet the revised substantial completion date may be jeopardized by several factors including: having to redo the shop drawings; and the fabrication and delivery of the building structural steel.

Queens: On the **CQ031 Contract (Queens Bored Tunnels and Structures)**, The contractor has been able to recover significant schedule time primarily based on advancing the WBBY

work ahead of schedule. Based on the Contractor's performance to date, the PMOC believes that this contract will be completed in Q1-2013. Some delays may be encountered, however, due to continued late completion of the CH053 work that is still creating some access and work zone conflicts with the CQ031 contractor. The CQ032 contractor is awaiting access to the TBM launch area where the CQ031 contractor is working to complete the remaining contract work in that area (note: delay is about 4-5 months. Milestones will be revised accordingly).

On the **CQO39 (Northern Boulevard Crossing) Contract,** sequential excavation is still behind plan. The PMOC is concerned about the continued delays to completion of this Contract, the additional costs incurred, and the impact of delayed access to the follow-on CQ032 contract.

On the **CQO32 (Queens Structures and Plaza Substation) Contract,** the contractor has made good progress during the first 12 months and is only slightly behind the planned completion goal. Future planned progress is at a higher rate but will be constrained by late access to three work areas: east end of the Queens Open-Cut Excavation (turnover from CQ031); west end of the Queens Open-Cut Excavation (turnover from CQ039); B10 Substation (partial access exists; full access requires removal of the CM009/019 muck conveyor system).

Harold Interlocking: Contract CH053 (Harold Interlocking, Part 1 and G.O.2 Substation): The PMOC notes that the reported construction progress has improved over the last several months and that this rate needs to continue to improve to meet the forecast SC date of February 5, 2014. At the September 2012 job progress meeting, however, the contractor stated that his forecasted SC date is October 31, 2014, 9 months later than the MTACC-ESA forecast date. The PMOC also notes that the continued late completion of the CH053 work is still creating some access and work zone conflicts with the CQ031 contractor.

Contract CH054A (Harold Structures Part 2A: The PMOC notes that the reported construction progress has shown improvement the last several months, although it is still trending behind schedule. The Contract is currently not on the project critical path.

g. Vehicles

The first phase of the vehicle procurement is underway. Details are provided in Section 2.5 of this report.

h. Commissioning and Start-Up

Quarterly Operational Readiness meeting was held on September 20, 2012. 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 – ELPEP baseline needs to be adjusted based on 2012 risk assessment results.

j. Project Budget/Cost

Table 2: Project Budget/Cost Table

	FFGA (as of December 18, 2006)			MTA's Current Baseline Budget (CBB)* (August 31, 2012)		Expenditures as of August 31, 2012	
	($ Millions)	(% of Grand Total Cost)	Obligated (Millions)	($ Millions)	(% of Grand Total Cost)	($ Millions)	(% of CBB)
Grand Total Cost	**$7,386**	**100**		**$9,824**	**100**	$3,975.7	40.5
Financing Cost	$1,036	14.0		$1,116	11.4		
Total Project Cost	$6,350	86.0	$4,107	$8,708*	88.6	$3,975.7	45.7
Federal Share	$2,683	36.3	$1,148	$2,699	27.5	$1,740.0	20.0
5309 New Starts share	$2,632	35.6	$1,098	$2,436.6	27.6	$1,494.2	17.2
Non New Starts grants	$51	0.7	$50	$67	0.8	$50.4	0.6
ARRA	0	0	0	$195.4	2.2	195.4	2.2
Local Share	$3,667	49.6	$2,959	$6,009	61.2	$2,235.7	25.7

* Current Baseline Budget represents current MTA Board approved $8,245 budget that includes $463 million for Rolling Stock Reserve

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 bring it into conformance with the

ELPEP principles and requirements and to incorporate FTA/PMOC comments. It is currently under review by the PMOC.

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 main ELPEP components is summarized as follows:

- **Technical Capacity and Capability (TCC):** The PMOC has completed its review of the Candidate Revisions for the ESA-PMP and discussed them with the FTA Region II Office. MTACC issued ESA PMP Revision 8.1 on September 27, 2012 and is planning to issue Revision 9.0 by June 30, 2013. There is an outstanding issue requiring MTACC to demonstrate that it has implemented the PMP training process.
- **Schedule Management Plan (SMP):** The SMP was fully approved by the FTA on November 3, 2011.
- **Cost Management Plan (CMP):** FTA conditional approval of the Cost Management Plan, including five (5) Candidate Revisions was received on September 1, 2011. MTACC submitted its final revisions to the CMP on November 11, 2011, which incorporate its responses to those Candidate Revisions.
- **Risk Mitigation Capacity Plan (RMCP):** FTA-RII provided its conditional acceptance of the RMCP in its May 24, 2012 letter to MTACC. Final acceptance is based on incorporation of the RMCP into the RMP, currently under review by the PMOC.
- **Conformance and Compliance:** MTA's final conformance and compliance document, the ELPEP Whitepaper, was completed and submitted to FTA-RII. In its May 30, 2012 letter to MTACC, the FTA acknowledged that ESA was in compliance with the ELPEP requirements. Continued ELPEP compliance will be tracked separately once the checklist discussed below has been agreed upon among MTACC; FTA-RII Office, and the PMOC.
- **Risk Management Plan (RMP):** MTACC submitted Rev. 2 of the RMP, which addressed previous FTA/PMOC comments in August 2012. The Plan is currently under review by the PMOC

The ELPEP Quarterly Review Meeting with MTACC, FTA-RII and the PMOC was held on September 12, 2012. The current ELPEP compliance checklist completed by MTACC, was reviewed, and some possible modifications were discussed. MTACC will update the checklist and issue for FTA and PMOC review and comment. MTACC will provide a status update of the outstanding MTACC procedures. The next ELPEP Quarterly Review Meeting is scheduled for December 2012.

1.0 GRANTEE'S CAPABILITIES AND APPROACH

1.1 Technical Capacity and Capability

a) Organization

There is no Quality function shown in the Organization Chart in the ESA April-May-June 2012 Quarterly Report. The PMOC recommends that this omission be corrected in the ESA September 2012 Quarterly Report [Ref: ESA-92-July12]

b) Staffing

The ESA Quality Manager was given the authority to hire two additional quality engineers. One of the positions was filled in December 2011, and the other in September 2012; consequently this action will be closed out. [Ref: ESA-84-Mar 12]

1.2 Project Management Plan

a) History of Performance

ESA presented its latest baseline cost and schedule baseline to the MTA CPOC in May 2012. These baselines have been risk adjusted, resulting in a risk adjusted budget of $8.24B (not including rolling stock reserve and finance cost) and a projected RSD in August 2019. This is the second re-baselining effort undertaken by ESA since the FFGA.

b) PMP

Since the MTACC has finalized all of the necessary procedures needed to finalize the PMP, this item be closed [Ref: ESA-49-Jan10]. As stated earlier, Revision 8.1 of the PMP was received by the PMOC on September 27, 2012 and is currently under review.

1.3 Project Controls

a) Schedule

The ESA-PMT issued the IPS#39 with data date of September 1, 2012. This schedule has an RSD of August 31, 2019, with 365 days of contingency from September 1, 2018 to August 31, 2019.

b) Cost

The Cost Management Plan (CMP) needs to be revised to reflect changes resulting from the May 2012 project re-baseline effort (Section 6.1 of the CMP states that the ESA project has no Reserve Contingency; currently there is $150 million of management reserve).

1.4 Federal Requirements

a) FFGA

As a result of MTACC's cost and schedule re-baselining 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 on May 21, 2012: $8.24 billion (w/o vehicles and financing). Through September 2012, MTACC continued to work with FTA Region II to finalize documentation for the FFGA Amendment that will reflect the changes to the Baseline Cost Estimate and Baseline Schedule.

b) Federal Regulations

There are currently no issues to report with regard to the Uniform Property Acquisition and Relocation Act of 1970 or Buy America/Ship America requirements. For Buy America, ESA has created a Buy America checklist for new contracts and a template for contractors to track BA shipments.

1.5 Safety and Security

a) SSMP

ESA continued activities related to the Safety Certification process as per SSMP requirements. The LIRR has replaced committee members and has named a new chairperson to lead the System Safety Certification Committee. The MTACC Director of Safety met with the Chairperson to review outstanding certification packages requiring signatures from the LIRR discipline leads. The committee was convened and signatures were acquired for the following packages: FQL35, CH057, CS081, CM013a. 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 Committee in coordinating activities related to the Safety Certification Process. The PMOC has expressed its concerns to the MTACC Safety Director. 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 stakeholder's having representation on the Committee. [Ref: ESA-96-Sep12]

b) Project Performance

Project safety statistics for lost time accidents continue to trend above the Bureau of Labor Statistics (BLS) national average at 2.59 vs. 2.20 lost time accidents per 200,000 hours. Although there has been some improvement in the safety statistics for the CM009 Contract, the lost time accidents hours continue to trend above the ESA Program average (2.93 vs. 2.59 lost time accidents per 200,000 hours). On the CQ039 Contract, the lost time accident statistics continue to trend well above the ESA Program average (6.28 vs. 2.59 lost time accidents per 200,000 hours). MTACC made a presentation to FTA during Q2 2012, discussing its Safety Program Plan and measures being taken (root cause analyses, lessons learned, etc.) to improve safety performance

No significant security issues were reported by ESA during September 2012.

1.6 Project Quality

a) ESA Project Quality Manual (PQM)

The current version of the ESA Project Quality Manual (PQM) is Revision 6, issued in February 2009. The PMOC notes that although there is no requirement for periodic revisions to this document and the last revision was accepted; that it is good practice to periodically update this document to reflect changes that have been implemented in the ESA Quality System since then. During a discussion with the ESA Quality Manager and the PMOC in September 2012, the ESA

Quality Manager agreed to revise the PQM by the end of 2012. This issue will remain open until the PQM is revised and submitted to FTA/PMOC. [Ref: ESA-93-Sep 12]

b) Project Performance

During the QQO audits that were conducted in the second quarter of 2012, the PMOC observed that the audits are not being conducted consistently. During audits of the CH053, CHO54A, and CQ032 Contracts, the status of action items from previous oversights were not on the agenda and were not discussed, and no exit meetings were conducted, although an exit meeting is required as stated in Section 14 of Revision 6 of the ESA PQM. [Ref: ESA-94-Sep 12]

1.7 Stakeholder Management

a) Railroads

In coordination with Amtrak and LIRR, more weekend outages took place in the Harold Interlocking with a focus on the installation of catenary and signal towers. If the current outage schedule can be maintained, the CH053 and CH054A contracts should be able to complete the catenary installation in early 2013.

b) Others

No other coordination efforts to discuss for this quarter.

1.8 Local Funding

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.

a) MTA/New York State (Capital Plan)

The 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.

b) Other Sources

The total Federal funding commitment as of August 31, 2012 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. 2.0 dated July 2012, is a sub-plan within the ESA Project Management Plan (PMP). The RMP was updated to bring it into compliance with the ELPEP principles and requirements. MTACC has incorporated FTA/PMOC review comments into the RMP, Rev. 2, which is currently under review by the PMOC. The ESA-PMT has advised that the project is following the processes included in the RMP and the associated procedures. The PMOC will confirm that the project is using the RMP processes through review of the risk related project documentation. The PMOC notes that the risk informed management decision-making process detailed in the ELPEP has become a standard routine that is included in all management activities throughout all the project phases.

b) Monitoring

The PMT monitors the risk management process through the use of the project Risk Register, a key management tool that tracks the status of discreet risks and specific attributes regarding contracts impacted, probability, potential cost and schedule impacts, and identified mitigation strategies. The Risk Register is regularly updated with individual risks refreshed based on criticality and level of severity with high impact risks being reviewed by the ESA PMT monthly. The PMOC notes that the ESA Project Risk Manager actively and routinely maintains the Risk Register updated in accordance with the RMP. The MTACC committed that ESA would hold monthly risk meetings with the PMOC to review current risk related activities at the end of Q2 2012; but as of this report they have not set up these meetings. The PMOC recommends that these meetings be established as soon as possible [Ref: ESA-97-Sep12].

c) Mitigation

MTACC actively seeks to identify and mitigate risks that may adversely impact the project cost and schedule performance. Mitigation measures are developed in conjunction with construction managers, design engineers and other PMT personnel as well as outside project stakeholders as required. Proposed mitigations are reviewed through defined processes to confirm the effectiveness of the mitigation especially with respect to the cost and schedule benefits. Approval of proposed scope changes to mitigate risk is obtained through the Change Control Committee (CCC) process and a defined sign-off procedure. The PMOC notes that the CCC actions routinely include review and approval of risk mitigation measures such a work scope transfers between contracts. The ESA Project Risk Manager meets with the ESA Construction Managers (CMs) of select Contracts on a monthly basis to review current Contract risks.

2.0 PROJECT SCOPE

2.1 Engineering/Design and Construction Phase Services

Status:

As of September 30, 2012, MTACC reported that the Engineering/Design effort was 96.6% complete (on a cost invoiced basis).

The PMT has addressed the comments from the ESA consultant responsible for the quality assurance review of the E/T designs made on the Stage 3 90% catenary design package (FHA03) and is forecasting forwarding the package to Amtrak for approval by mid-October 2012. Continuing delay in finalizing and obtaining Amtrak approval of the Stage 3 90% catenary design could impact the CH058 procurement (target for completion of 90% design was July 2012).

The 30% review set for the 48th Street entrance to GCT (CM015) was completed by the GEC and forwarded to LIRR and MNR for comment on September 4, 2012. Coordination with the property owners for review of design progress is forthcoming. The PMT is still forecasting completion of the 60% design review set for mid-November, 2012; however this target date may slip.

Amtrak has not approved the construction procedure in the CH057 Contract Package for the west-bound bypass slab as of the end of September 2012 (ESA would like to install the slab utilizing a double track outage; Amtrak will only allow a single track outage at present). The PMT had forecast that the package would be advertised in mid-September 2012 and stated that

an addendum would be issued if the construction procedure was not approved by Amtrak by then. ESA is currently forecasting sending the CH057 Package for Procurement review in early October 2012.

The 90% submittal for CH058 had been previously forecast by ESA for the end of July 2012; this date is now forecast for mid-November 2012, and the PMT has stated that this date might slip by several weeks. The design of the Eastbound Re-route structure is being revised to permit construction with minimum impact to railroad operations.

Responses to the comments on over 100 items received from MNR on July 20, 2012 have been finalized and incorporated into the design for CM014B. ESA anticipates advertising the package by November 1, 2012. The 45th Street Cross Passageway is under design and will be issued as an addendum during the bid period.

Observation:

Approval times for the remaining E/T design packages has started to lag again, after showing improvement earlier in the year. Amtrak approval of the means of constructing the slab in the CH057 Package is also lagging.

Concerns and Recommendations:

The PMOC is concerned that delays in finalizing the E/T Stage 3 Catenary design could impact the CH058 procurement if it is not finalized by November 1, 2012 (as per latest IPS update). The PMOC is also concerned that although the PMT has stated that Amtrak approval of the means of constructing the slab in CH057 will not hold up the advertise date for the Contract package; the last forecast date of September 15, 2012 for advertising, has not been met. As of this report, the project schedule is not impacted by this delay.

2.2 Procurement

As of the end of August 2012, the total procurement activity on the project was reported to be 54.8% complete, with $4.781 billion in contracts awarded out of the $8.708 billion revised budget.

The latest bid date for CM012 is currently forecast for October 11, 2012, with NTP still forecast for December 1, 2012. The bid date has slipped substantially since the June 2012 reporting period (first period utilizing new IPS baseline) from May 2012 to its current forecast of October 11, 2012. Another addendum for this package is being developed, which could cause the October 11, 2012 date to slip. The PMOC notes that CM012 contract package is on the IPS critical path, and that delays on this Contract could possibly impact the CM014B and CS179 Contracts.

The proposal evaluation process continues for the CS179 Systems Contract 1Package during the month of September 2012. Proposers were asked to provide updated schedules containing a more detailed break-out of critical milestones, and meetings with the proposers continued during September. The PMT is anticipating receiving Best-and-Final-Offers (BAFO) by October 1, 2012; with a goal of issuing NTP by December 1, 2012 (one month slip from last month's forecast of November 1, 2012). Given the current status and complexity of this procurement, as well as the large dollar value of the Contract, the PMOC believes that it will be difficult to issue NTP by December 1, 2012. The PMOC notes that CS179 is on the IPS critical path.

The VS086 Systems Package III was advertised on August 21, 2012 and a pre-proposal conference was held on September 19, 2012. Currently, the proposal due date is November 14, 2012. There have been no addenda issued for this package as of the time of this report.

Observation:

Procurement of two major contracts (CS179 and CM012) continues to slip.

Concerns and Recommendations:

The PMOC is concerned about the continuing slippage of CM012 and CS179 Contract Packages. There is approximately one month of float for NTP on CM012 (until January 1, 2013). If NTP goes out further than this the project contingency will be impacted on a day-for-day basis since this Contract is on the critical path. CS179 is also on the project critical path and project contingency will be impacted if NTP occurs in the beginning of 2013.

2.3 Construction

Manhattan Contracts

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

	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)	$42.20M	+1.43M 3.5%	$55.70M	+$14.93M 36%	+13.50M 33%
Scheduled SC Date	09/16/11	01/10/13 08/03/12		01/10/13 09/17/12		
Duration (NTP - SC)	24 mos.	40 mos.	+16 mos. 66%	40 mos.	+16 mos. 66%	+16 mos. 66%

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%	86%	42%	3.5%	12%	2%	3.2%/mo.	3.2%/mo

From August 2012 ESA Monthly Report

Construction Progress: July-September 2012:

- Completed blasting of the remaining section of Shaft #1 down to approximate Elevation 233 at the intersection of horizontal Shaft #1.
- Continued shaping remaining shaft and collecting and stacking muck in the horizontal shaft. Continued the shop drawings approval and steel fabrication process.

Observations/Analysis:
The PMOC notes that the blasting operations for the remaining portion of shaft were carried out in a safe manner with no reported incidents.

Concerns and Recommendations: The PMOC remains concerned that the ability of the contractor to meet the revised substantial completion date may be jeopardized by several factors including: having to redo the shop drawings; and the fabrication and delivery of the building structural steel. This is due to the original steel fabricator going out of business and the inability of the contractor to receive delivery of fabricated steel from this fabricator in a timely manner due to legal procedures. To mitigate this situation the contractor is having all remaining project steel re-fabricated at a different plant. This Contract is currently not on the project critical path.

CM009/CM019 Contracts – Manhattan Tunnels Excavation/Structures Part 1

The Estimate at Completion for the CM009 contract was re-baselined in January 2012 at $413,415,000, and has remained unchanged since then. The Substantial Completion date has been August 31, 2013, since the re-baseline, but the MTACC has revised its forecast to June 1, 2013, since the re-baseline effort concluded. Data date for table below is August 31, 2012.

CM009	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	$428.00M (Award)	$411.80M	-$16.2 0M -3.8%	$413.40M	-$14.60M -3.4%	+1.60M +0.4%
Scheduled SC Date	07/08/10	08/31/13		06/01/13		
Duration (NTP - SC)	48 mos.	85 mos.	+37 mos. 77.5%	83 mos.	+35 mos. 72.5%	-2 mos. -2.8%

Percent Complete		**Actual - 12 mos.**		**Actual - 6 mos.**		**Avg. Req'd. Progress**	
Plan	**Actual**	**Total**	**Avg./mo**	**Total**	**Avg./mo**	**Contract SC**	**Forecast SC**
94.7%	91.9%	3.4%	0.3%	1.6%	0.3%	0.7%/mo.	0.9%/mo.

From August 2012 ESA Monthly Report

The Estimate at Completion for the CM019 contract was re-baselined in January 2012 at $793,879,000, and has remained unchanged since then. The Substantial Completion date has been August 31, 2013, since the re-baseline, but the MTACC has revised its forecast to June 1, 2013, since the re-baseline effort concluded. Data date for the table below is August 31, 2012.

CM019	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	$734.00M (Award)	$772.30M	+$38.30M +5.2%	$793.90M	+$59.90M +8.2	+$21.60M +2.8%
Scheduled SC Date	03/31/12	08/31/13		06/01/13		
Duration (NTP - SC)	48 mos.	65 mos.	+17 mos. +35.5%	62 mos.	+14 mos. +29.2%	-3 mos. -4.6%

Percent Complete		**Actual - 12 mos.**		**Actual - 6 mos.**		**Avg. Req'd. Progress**	
Plan	**Actual**	**Total**	**Avg./mo**	**Total**	**Avg./mo**	**Contract SC**	**Forecast SC**
85.2%	89.2%	39.3%	3.3%	25.1%	2.1%	0.9%/mo.	1.2%/mo.

*CM009 and CM019 have been re-baselined twice since the original contract was executed. The data presented in this table is the PMOC's estimate using percentage of work completed supplied by the MTACC, with a slight adjustment for the most recent Contract re-baseline.

Construction Progress: June – September 2012:

- Completed removal of Westbound Cavern Tunnel 404 benches II and III, archway shotcrete placement in Escalator-Way #1, archway and invert shotcrete placement in Escalator-Way #s 2, 3, and 4, archway concrete placement in Eastbound tunnel #2, and invert concrete placement in the Eastbound assembly chamber.
- Continued punch list and closeout items in the upper level tail tunnels, excavation of the Westbound Cavern pit, excavation of the Eastbound Cavern Tunnel 401 benches II and III, concrete placement in the Bellmouth in Queens, bench excavation in GCT 1 & 2, and shotcrete placement in Tail Track #1.
- Commenced concrete placement in GCT 5 East Wye invert.

Summary Observations:

During its monthly site visits, the PMOC has observed a dramatic increase in production from the CM009/CM019 contractor for the last 12 months. This is borne out by the data presented in the two tables above. It must further be noted that the MTACC has stated in its recent monthly reports that it has removed some of the scope from the contracts in order to hold the re-baselined Substantial Completion date of August 31, 2013. The MTACC has also indicated that the early forecast for SC may be delayed by as much as 9 days as a result of slower than anticipated CM019 progress in the GCT 1&2 East and West Wyes and the Tail Tunnels. Based on its observations and the data presented in the tables above, however, the PMOC believes that the CM009/CM019 contractor will be able complete the scope of work in its contracts by the Substantial Completion date of August 31, 2013. The PMOC also believes, however, that the Contractor's forecast of an earlier SC date of June 1, 2013, is overly optimistic and that a more realistic date would be July 31, 2013.

Summary Concerns and Recommendations:

The PMOC's analysis shows that the CM009/19 will meet the current substantial completion date of August 31, 2013.

CM013 – 50th Street Vent Facility

Status:

	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)*	$123.11M	+$4.76M +4.0%	$127.80M	+$9.45M +8.0%	+4.69M +3.8%
Scheduled SC Date	06/10/12	012/11/12		07/31/13		
Duration (NTP - SC)	29 mos.	35 mos.	+6 mos. +21.9%	43 mos.	+14 mos. +48.2%	+8 mos. +21.6%

Percent Complete		**Actual - 12 mos.**		**Actual - 6 mos.**		**Avg. Req'd. Progress**	
Plan	**Actual**	**Total**	**Avg./mo**	**Total**	**Avg./mo**	**Contract SC**	**Forecast SC**
65.3%	64.9%*	23.7%	1.98%	13%	2.16%	10.5%/mo.	3.2%/mo.

From August 2012 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.

Construction Progress: July-September 2012:

- Completed concrete placement in the deep shaft to the Concourse level deck.
- Continued construction of the 2nd Basement roof in the Service Tunnel, the top of which will be backfilled up to the underside of 50th St. Continued rebar erection and concrete placement of the basement perimeter walls. One lift remains at the west, north and south walls. Continued construction of the 1st Basement below the new 49th St. Entrance Drive.
- Began erection of rebar from the 2nd Basement roof to the underside of 50th St. for the new concrete wall that will contain the new engineered fill.

Observations/Analysis:

The PMOC notes that the upcoming completion of basement wall concrete will allow commencement of structural steel erection. The PMOC expects that the contractor will be able to achieve better progress rates when this portion of the project begins.

Concerns and Recommendations:

The PMOC remains concerned that the slow production of concrete placement in the basement areas could jeopardize the contractor's ability to achieve Milestone #5 in December 2012. Milestone #5(which provides for early access to the deep shaft by upcoming contracts) does not currently impact any other contracts.

CM013A – 55th Street Vent Facility

Status:

The contract was awarded to Shiavone/Picone JV for the price of $56,044,000. The Notice of Award was August 29, 2012. The Notice to Proceed was September 4, 2012. The first Progress Meeting is scheduled for October 23, 2012.

Observations:

None at this time.

Concerns and Recommendations:

None at this time.

CM014A – GCT Concourse & Facilities Fit-Out

Status:

	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)	$43.65M	+$0.15M +.0.3%	$46.53M	+$3.03M +7%	+2.88M +6.6%
Scheduled SC Date	04/25/13	07/08/13		07/24/13		
Duration (NTP - SC)	18 mos.	20 mos.	+2 mos. +13.5%	21mos.	+3 mos. +16.4%	+1 mos. +2.6%

Percent Complete		**Actual - 12 mos.**		**Actual - 6 mos.**		**Avg. Req'd. Progress**	
Plan	**Actual**	**Total**	**Avg./mo**	**Total**	**Avg./mo**	**Contract SC**	**Forecast SC**
18.8%	13.5%	N/A	N/A	8.9%	1.48%	8.5%/mo	8.0%/mo.

From August 2012 ESA Monthly Report

Construction Progress: July-September 2012:

- Completed, in the Garage, conduit and manhole installation, backfilling and grading on the west side.
- Continued, in the Garage, new paver installation over graded area on the west side. Continued with excavation and conduit installation both horizontally and on vertical angles down to the Concourse level. In the Concourse, continued with conduit and duct bank construction and air tunnel construction. Continued backfilling and grading in preparation for new, permanent concrete slabs. Continued installation of new HVAC duct.
- Began preparations for work in Shaft #2.

Observations/Analysis:

The PMOC was made aware, by the MTACC Project Office of design issues with the Supervisory Control and Data Acquisition (SCADA) equipment. During the process of reviewing the volume of re-issued bid documents for the project (approx. 240 drawings) the Project Office and contractor found that some of the specified equipment was either out of date or was not compatible the LIRR system or with other specified equipment. MTACC is working with the GEC and SCADA manufacturer to resolve this issue.

Previously the PMOC reported on the "Buy America" issue concerning the fabrication of the switchgear and a component of the switchgear being made in China. The fabricator, Siemens was directed to provide a letter certifying that the equipment they are supplying meets all Buy America requirements. The PMOC has read (in the MTACC Project Office) the Siemens letter, dated August 22, 2012, responding to the MTACC Project Office concerns, which does make the above noted certification but also includes reference to a component, or subcomponent, to the switchgear that is made overseas. This letter has been forwarded to MTA Legal for a determination. A hard copy of this letter was not made available to the PMOC.

The PMOC notes that although the volume of work on the project has increased the rate of production will have to increase to meet the current substantial completion date.

Concerns and Recommendations:

The PMOC has requested notification when MTA Legal issues its decision on the potential Buy-America issue.

The PMOC continues to be concerned with the schedule for switchgear fabrication and delivery and progress on the SCADA system. The MTACC Project office has advised the PMOC that there continues to be issues with LIRR and the GEC over the current performance requirements by LIRR of the switchgear. This issue is impacting completion of shop drawing submittal/approval, manufacture and delivery of all equipment by the required December 2012 for May 2013 "power up".

Queens Third-Party Contracts

CQ031 Contract – Queens Bored Tunnels and Structures

Status:

EAC remained unchanged at $766.0 million. Forecast Substantial Completion (SC) date recovered 3 months from 04/09/13 to 01/14/13. Data date for tables below is August 31, 2012.

	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	$648.90M (Award)	$759.00M	+$110.10M +17.0%	$766.00M	+$117.10M +18.0%	+7.00M +0.9%
Scheduled SC Date	09/26/12	09/26/12		01/14/13		
Duration (NTP - SC)	36 mos.	36 mos.	(no change)	40 mos.	+4 mos. +10.0%	+4 mos. +10.0%

Percent Complete		**Actual - 12 mos.**		**Actual - 6 mos.**		**Avg. Req'd. Progress**	
Plan	**Actual**	**Total**	**Avg./mo**	**Total**	**Avg./mo**	**Contract SC**	**Forecast SC**
96.6%	87.1%	40%	3.33%	25.6%	4.27%	15.1%/mo.	2.9%/mo.

Construction Progress: July-September 2012:

- Completed: TBM mining and permanent lining of the four Queens tunnels; removal of TBM trailing gear; excavation for the WBBY structure; Yard Lead Approach Structure.
- Continued: Construction of Yard Lead Tunnel cross-passage at the Yard Lead Emergency Exit (YLEE); steel erection for YLEE and B13 Substation; construction of WBBY foundation.

Observations/Analysis:

The PMOC notes that the contractor has been able to recover significant schedule time primarily based on advancing the WBBY work ahead of schedule. Based on the contractor's performance to date, the PMOC believes that this contract will be completed in 1Q2013. Some delays may be encountered, however, due to continued late completion of the CH053 work that is still creating some access and work zone conflicts with the CQ031 contractor. The CQ032 contractor is awaiting access to the TBM launch area where the CQ031 contractor is working to complete the remaining contract work in that area.

Concerns and Recommendations:

Substantial Completion is forecast for January 2013. The PMOC does not have a concern that this will impact the overall project schedule..

CQ032 Contract – Plaza Substation and Queens Structures

EAC remained unchanged at $165.1 million. Forecast Substantial Completion (SC) date slipped two months from 11/10/14 to 01/05/15. Data date for tables below is August 31, 2012.

	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	$147.40M (Award)	$148.60M	+$1.20M +0.8%	$165.10M	+$17.70M +12.0%	+16.50M +11.1%
Scheduled SC Date	08/14/14	08/14/14		01/05/15		
Duration (NTP - SC)	36 mos.	36 mos.	(no change)	41 mos.	+5 mos. +13.2%	+5mos. +13.2%

Percent Complete		**Actual - 12 mos.**		**Actual - 6 mos.**		**Avg. Req'd. Progress**	
Plan	**Actual**	**Total**	**Avg./mo**	**Total**	**Avg./mo**	**Contract SC**	**Forecast SC**
13.1%	11.2%	11.2%	0.93%	7.8%	1.30%	3.8%/mo.	3.2%/mo.

Construction Progress: July-September 2012:

- Roosevelt Island facility: Continued structural modification work, including vent shaft.
- Vernon Boulevard facility: Continued structural modifications and construction of new communications room and electrical duct bank.
- 12th Street facility: Continued wall construction; started demolition of sidewalk grating.
- 23th Street facility: Continued wall construction; completed beam repairs.
- 29th Street facility: Continued wall construction; completed beam repairs in shaft.
- B10 Substation: Completed foundation and slab-on-grade; started structural steel erection.

Observations/Analysis:

The contractor has made good progress during the first 12 months and is only slightly behind the planned completion goal. Future planned progress is at a higher rate but will be constrained by late access to three work areas: east end of the Queens Open-Cut Excavation (turnover from CQ031); west end of the Queens Open-Cut Excavation (turnover from CQ039); B10 Substation (partial access exists; full access requires removal of the CM009/019 muck conveyor system).

Concerns and Recommendations:

The PMOC is concerned about the potential cost and schedule impacts to the Contract resulting from the access delays detailed above. The completion of Milestone 2 for the yard lead envelope is critical to the overall ESA project. The PMOC recommends that the MTACC PMT, working with the CQ031, CQ032 and CQ039 contractors and the respective ESA construction managers, develop a plan to expedite turnover of the required areas and closely monitor the execution of the plan. [Ref: ESA-95-Sep12]

CQ039 Contract – Northern Boulevard Crossing

Status:

EAC remained unchanged at $102.1 million. Forecast Substantial Completion (SC) date remained the same at 05/06/13. Data date for tables below is August 31, 2012.

	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	$85.00M (Award)	$98.40M	+$13.40M +15.8%	$102.10M	+$17.10M +20.1%	+3.70M +3.8%
Scheduled SC Date	10/05/11	08/01/12		05/06/13		
Duration (NTP - SC)	20 mos.	30 mos.	+10 mos. +49.5%	39 mos.	+19 mos. +95.2%	+9 mos. +30.6%

Percent Complete		**Actual - 12 mos.**		**Actual - 6 mos.**		**Avg. Req'd. Progress**	
Plan	**Actual**	**Total**	**Avg./mo**	**Total**	**Avg./mo**	**Contract SC**	**Forecast SC**
97.9%	66.6%	19.7%	1.64%	15.4%	2.57%	-33.9%/mo.	4.1%/mo.

Construction Progress: July-September 2012:

- Completed turnover of the staging area west of the Early Access Chamber to the CQ032 contractor for construction of the B10 Substation; sequential excavation method (SEM) mining of Drifts 1, 2 and 3 beneath Northern Boulevard.
- Continued: SEM mining of Drifts 1, 2 and 3 beneath Northern Boulevard; fabrication of structural steel for permanent tunnel lining system; maintaining soil freeze operation.

Observations/Analysis: The SEM mining started late due to problems establishing and maintaining acceptable ground freeze of the soil arch. The current progress of the SEM mining is slower than planned due to actual soil conditions, higher than anticipated rock elevation and challenging site working conditions. The PMOC does note, however, that recent progress in July and August 2012 has improved considerably. The PMOC believes that the follow-on work to construct the permanent tunnel liner will be equally difficult and the contractor will be challenged to meet the forecast substantial completion date of May 6, 2013. Late completion of this contract has delayed turnover of the Milestone 1A area, scheduled for July 30, 2012, and the start of Contract CQ032 work in the Early Access Chamber area (CQ032 Access Restraint #1, August 24, 2012) at the west end of the Queens Open-Cut Excavation Area.

Concerns and Recommendations: The PMOC is concerned about the continued delays to completion of this contract, the additional costs incurred and the impact of delayed access to the follow-on CQ032 contract. The PMOC recommends that ESA-PMT work closely with the CM, the contractor and the GEC to expedite completion of the SEM mining beneath Northern Boulevard.

Harold Interlocking Contracts

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

Status: EAC remained unchanged at $267.8 million. Forecast Substantial Completion (SC) date slipped one month from 12/30/13 to 02/05/14. Data date for tables below is August 31, 2012.

	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)	$196.00M	+$58.70M +42.8%	$267.80M	+$130.50M +95%	+71.80M +36.6%
Scheduled SC Date	05/05/10	01/16/12		02/05/14		
Duration (NTP - SC)	28 mos.	48 mos.	+20 mos. +72.9%	73 mos.	+45 mos. +161.1%	+25 mos. +51%

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%	71.8%*	12.9%	1.08%	7.3%	1.22%	-3.8%/mo.	1.6%/mo.

* This is the July 31, 2012 reported figure that is higher than the unexpected Aug. 31, 2012 figure of 66.9%.

Construction Progress: July-September 2012:

- Completed erection of all LIRR signal towers; pile installation for WBBY west abutment; and erection of structural steel for ML4 Bridge over 43rd Street.
- Continued fabrication of steel catenary structures; erection of catenary poles; construction of 12kV duct bank and manholes; construction of foundations for catenary poles at various locations in Harold Interlocking; construction of jacking and receiving pits for micro-tunneling; and internal wiring and equipment testing for G.O.2 Substation.
- Commenced installation of T-Wall sections of Retaining Wall 48-S1.

Observations/Analysis: The PMOC notes that the reported construction progress has improved over the last several months and that this rate needs to continue to improve to meet the forecast SC date of February 5, 2014. At the September 2012 job progress meeting, however, the contractor stated that his forecasted SC date is October 31, 2014, 9 months later than the MTACC-ESA forecast date. The PMOC also notes that the continued late completion of the CH053 work is still creating some access and work zone conflicts with the CQ031 contractor.

Concerns and Recommendations: The PMOC's concerns: the contractor's ability to increase and sustain a higher rate of progress due to the challenging work environment; continued interferences with the CQ031 contractor; potential impacts to the follow-on Contracts CH057 and CH058 due to late completion of CH053 contract work. PMOC recommends that MTACC-ESA focus efforts on adequate and timely support to the project to increase and maintain construction progress at an adequate level.

CH054A Contract – Harold Structures Part 2A

Status: EAC remained unchanged at $46.2 million. Forecast Substantial Completion (SC) date slipped three weeks from 06/04/13 to 06/24/13. Data date for tables below is August 31, 2012.

	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)	$25.90M	+$4.10M +18.8%	$46.20M	+$24.40M +111.9%	+20.30M +78.4%
Scheduled SC Date	12/21/10	12/21/10		06/24/13		
Duration (NTP - SC)	16 mos.	16 mos.	(no change)	46 mos.	+30 mos. +188.2%	+30 mos. +188.2%

Percent Complete		**Actual - 12 mos.**		**Actual - 6 mos.**		**Avg. Req'd. Progress**	
Plan	**Actual**	**Total**	**Avg./mo**	**Total**	**Avg./mo**	**Contract SC**	**Forecast SC**
85.5%*	65.5%	15.4%	1.28%	12.4%	2.07%	-1.7%/mo.	3.5%/mo.

* Based on a forecast progress curve not yet reflected in an approved revised baseline schedule.

Construction Progress: July-September 2012:

- Completed: Retaining Wall F2K; crib wall for CIL-H4.
- Continued: Construction of 12kV duct bank and manholes; construction E-34 North Signal Bridge foundation.
- Commenced: Construction of foundation for Signal Bridge #11; excavation and installation of support-of-excavation for storm sewer.

Observations/Analysis:

The PMOC notes that the reported construction progress has shown improvement the last several months, although it is still trending behind schedule. The Contract is currently not on the project critical path.

Concerns and Recommendations:

The PMOC's concerns: the contractor's ability to increase and sustain a higher rate of progress due to the challenging work environment; potential impacts to the follow-on Contract CH057 due to late completion of CH054A contract work. PMOC recommends that MTACC-ESA focus efforts on adequate and timely support to the project to increase and maintain construction progress at an adequate level by working on possible solutions with the contractor, developing the most cost-effective approach to minimize the delay impacts, and reaching an agreement with the contractor on a revised re-baseline schedule that is realistic. [Ref: ESA-56-Feb10] The PMOC will close this item and continue to monitor progress on this Contract. The PMOC's monitoring effort will focus on MTACC-ESA efforts towards maintaining progress at an

adequate level by working on possible solutions with the contractor, developing the most cost-effective approach to minimize the delay impacts, and reaching agreement with the contractor on a realistic re-baselined schedule.

Systems Contracts

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

	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%	$30.75M	-0.14M -0.5%	+0.03M +0.1%
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**
37.5%	39%					-27.7%/mos.	1.7%/mo.

Status:

The installation of Point CIL was accomplished in the 4Q2011; however, the subsequent CIL deliveries (H3 and H4) slipped due to changes required for the 843 switch; the updating of code charts; and the length of time anticipated for factor acceptance testing of H4. The H4 CIL has been set on-site and fabrication of the H3 CIL continues at the contractor's facility.

As a result of the delays in CIL deliveries for H3 and H4, substantial completion has been reforecast to July 2015.

Observation:

The addition of Positive Train Control (PTC) modifications to the vendor design and the possible re-sequencing of the POINT and F1 cutovers will most likely affect the delivery of the H3 CIL.

Concerns and Recommendations:

LIRR and GEC's timely review of remaining contract submittals is critical to keeping remaining work on schedule. The PMOC will continue to monitor the schedule progress on this Contract.

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

	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%	$8.10M	+$1.00M +14.1%	+$0.00M 0.0%
Scheduled SC Date	05/05/10	01/16/12		02/05/14		
Duration (NTP - SC)	28 mos.	48 mos.	+20 mos. +72.9%	73 mos.	+45 mos. +161.1%	+25 mos. +51.0%

Percent Complete		**Actual - 12 mos.**		**Actual - 6 mos.**		**Avg. Req'd. Progress**	
Plan	**Actual**	**Total**	**Avg./mo**	**Total**	**Avg./mo**	**Contract SC**	**Forecast SC**
100%	71.8%	12.9%	1.08%	7.3%	1.22%	-3.8%/mo.	1.6%/mo.

Status:

Amtrak continues to monitor the GATE Interlocking in shadow mode (this means that Amtrak will continue to operate GATE Interlocking on the existing system, as they do presently, but with the new equipment indicating train movement at the same time so Amtrak can monitor it and ensure performance is as intended) using the "F" Harold Alternate Control System (FHACS). Once Amtrak is satisfied that the equipment is working as intended, they will put the new system on-line and retire the old. LIRR's HTSCS will then follow. The plan was to place GATE in-service by the end of September 2012 however this goal was not achieved. An issue was uncovered getting the time source (which synchs the four servers) from Harold to PSCC. The Contractor and PMT are working to resolve the problem within the next couple of weeks. In addition, Amtrak is still working on installing a cable to allow complete redundancy for the timing source. The PMOC is forecasting completion of all of this work within the next few weeks.

Observation:

Substantial Completion forecast (December 2012) remains unchanged from last month.

Concerns and Recommendations:

LIRR, Amtrak, and ESA need to carefully plan the balance of work anticipated for the remainder of 2012 in order to achieve the planned substantial completion by the end of this year. The PMOC will continue to monitor the schedule progress on this Contract.

Railroad Force Account Construction Packages

Harold Stage 1 Amtrak FA (FHA01)

Status:

The remaining FHA01 construction is largely Electric Traction (ET) relocation of existing catenary wires on new catenary poles that the CH053/CH054A contractor has installed. This has gone extremely well over the last 3 months, with Amtrak ET personnel helping to install 42 new catenary poles (of 160) and transferring wires as appropriate. This has brought the overall percentage of new catenary poles installed to 64.4% of the total.

FHA01	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%	$16.80M	+$7.30M +76.8%	+0 M 0.0%
Scheduled SC Date	09/30/10	01/03/12		02/05/14		
Duration (NTP - SC)	39 mos.	54 mos.	+15 mos. +38.8%	79 mos.	+40 mos. +103.2%	+25 mos. +46.4%

Percent Complete		**Actual - 12 mos.**		**Actual - 6 mos.**		**Avg. Req'd. Progress**	
Plan	**Actual**	**Total**	**Avg./mo**	**Total**	**Avg./mo**	**Contract SC**	**Forecast SC**
79.2%	80.6%	**	**	12.1%	2.0%	-2.4%/mo.	1.1%/mo.

*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 this manner in these tables to be consistent with the contract tables contained in this report.

** MTACC began re-calculating percentage of actual work versus planned work in March 2012. As a result, percentages for the twelve month period do not correspond with percentages from the last six months. To avoid confusion, they are not presented in these tables.

Construction Progress: July – September 2012:

- Continued Amtrak ET support for the CH053/CH054A contractor to install catenary poles and catenary wire installation at various locations throughout Harold Interlocking.

Harold Early Stage 2 Amtrak FA (FHA02)

Status:

The scope of FHA02 construction consists of Amtrak installation of two main line crossovers (4 turnouts) by the Track Department and the installation and cutover of the Central Instrument Houses (CIHs) of "F" Interlocking in support of the ESA project. Amtrak completed installation of the crossovers in June 2012 and the Communications and Signals (C&S) Department continues to make preparations to install and cutover the "F" Interlocking CIHs. The cutover has been postponed from November 2012 until 2Q2013 due to predecessor CH053/CH054A and other Amtrak Force construction which was not completed on time to support the November 2012 cutover. The Project Initiation (PI) that authorized this Stage 2 C&S construction was executed in September 2012.

FHA02	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	$21.90M	+$12.20M +125.8%	$40.50M	+$30.80M +317.5%	+18.60M +84.9%
Scheduled SC Date	09/13/13	08/30/14		08/15/14		
Duration (NTP - SC)	58 mos.	69 mos.	+10 mos. +18.9%	68 mos.	+10 mos. +18.1%	0 mos. -0.7%

Percent Complete		**Actual - 12 mos.**		**Actual - 6 mos.**		**Avg. Req'd. Progress**	
Plan	**Actual**	**Total**	**Avg./mo**	**Total**	**Avg./mo**	**Contract SC**	**Forecast SC**
45.0%	44.7%	**	**	14.2%	2.4%	2.3%/mo.	2.4%/mo.

*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 this manner in these tables to be consistent with the contract tables contained in this report.

** MTACC began re-calculating percentage of actual work versus planned work in March 2012. As a result, percentages for the twelve month period do not correspond with percentages from the last six months. To avoid confusion, they are not presented in these tables.

Construction Progress: July – September 2012:

- Completed pulling C&S express cables between location "F2AW" and the "F2" CIH in "F" Interlocking and color light conversion of signal 740E in Harold Interlocking.
- Continued pulling C&S signal cables between "F2" CIH and the "F2J" signal hut, signal, installation of impedance bonds and track circuits in the "F2" CIH, and circuit revisions, point checks, and testing at existing "F" CIH.

Summary Observation:

As can be seen by the recent construction trends in the above tables, actual construction has exceeded the monthly percentage required to complete both FHA01 and FHA02 on schedule.

The PMOC's monthly field observations verify that Amtrak Force Account construction has improved significantly since the beginning of 2012 and the PMOC believes that this will continue to the end of Stages 1 and 2.

Summary Concerns and Recommendations:

The PMOC will continue to monitor the cooperation and coordination among the various involved parties in executing the work.

Harold Stage 1 LIRR FA (FHL01)

Status:

The major elements of the remaining LIRR FHL01 construction include installation of power cables and subsequent energizing and commissioning of G.O.2 Substation by the Traction Power Department, construction and re-alignments of ML2 and ML4 Tracks, and installation and relocation of signal and communications cables by the C&S Department. The G.O.2 Substation work has not been turned over from the CH053 contractor yet, so LIRR work will be "on hold" until it is. There are existing signal power pole lines that must be removed by the CH053 contractor before the LIRR Track Department can begin the ML2 and ML4 work, so that work is also "on hold". The LIRR continues signal and communications construction on a daily basis with dedicated Force Account personnel. In general, that work is going well. Specifically, LIRR C&S personnel continue to prepare the "H4" Central Instrument Location (CIL) in Harold Interlocking for cutover (as well as other miscellaneous work) and Traction Power personnel are pulling signal power cable in order to transfer the signal power in late 2012. This will allow the CH053 contractor to remove the existing signal power pole lines that are holding up the ML2 and ML4 work.

FHL01	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%	$22.00M	-$6.80M -23.6%	+$1.20M +4.2%
Scheduled SC Date	09/30/10	10/10/11		11/14/13		
Duration (NTP - SC)	39 mos.	51 mos.	+12 mos. +31.6%	77 mos.	+38 mos. +96.2%	+25 mos. +49.1%

Percent Complete		**Actual - 12 mos.**		**Actual - 6 mos.**		**Avg. Req'd. Progress**	
Plan	**Actual**	**Total**	**Avg./mo**	**Total**	**Avg./mo**	**Contract SC**	**Forecast SC**
76.5%	73.4%	**	**	4.7%	0.8%	-2.5%/mo.	1.8%/mo.

*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 this manner in these tables to be consistent with the contract tables contained in this report.

** MTACC began re-calculating percentage of actual work versus planned work in March 2012. As a result, percentages for the twelve month period do not correspond with percentages from the last six months. To avoid confusion, they are not presented in these tables.

Construction Progress: July – September 2012:

- Completed: Signal power line transfer between new Towers 47 and 49, 34 and 36, and 37 and 40.

- Continued: Preparation for signal power line transfer on remaining signal towers for cutover in late October/early November 2012 and continued to support Amtrak with its catenary wire transfers between 39th and 43rd streets in Harold Interlocking.

Harold Early Stage 2 LIRR FA (FHL02)

Status:

The FHL02 construction continues the work begun during LIRR Stage 1 and includes the installation of 15 track turnouts, additional main line track, and continued signal, communications, and traction power construction.

FHL02	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	$23.10M	+$15.70M +212.2%	$62.70M	+$55.30M +747.3%	+39.60M +171.4%
Scheduled SC Date	11/30/15	11/30/15		11/20/15		
Duration (NTP - SC)	75 mos.	75 mos.	+0 mos. 0.0%	75 mos.	+0 mos. -0.4%	+0 mos. -0.4%

Percent Complete		**Actual - 12 mos.**		**Actual - 6 mos.**		**Avg. Req'd. Progress**	
Plan	**Actual**	**Total**	**Avg./mo**	**Total**	**Avg./mo**	**Contract SC**	**Forecast SC**
20.0%	19.8%	**	**	5.7%	1.0%	2.1%/mo	2.1%/mo.

*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 this manner in these tables to be consistent with the contract tables contained in this report.
** MTACC began re-calculating percentage of actual work versus planned work in March 2012. As a result, percentages for the twelve month period do not correspond with percentages from the last six months. To avoid confusion, they are not presented in these tables.

Construction Progress: July – September 2012:

- Completed: Placement of "H4" CIL in Harold Interlocking.
- Continued: Signal conduit and trough installation in various locations in Harold Interlocking and communications work between Point CIL and Harold Interlocking.
- Commenced: Track panel construction for the Westward LIRR Passenger Track reconstruction, scheduled for November and December 2012.

Observation:

As the PMOC has noted in past monthly reports, the PMT and the LIRR have difficulty establishing project priorities and, once established, ensuring that work is accomplished on the original schedule. Specifically, as a first step, the two parties must find a way to overcome their differences in order to produce Site Specific Work Plans (SSWPs) for each of the individual turnout installations during the upcoming years. To date, the PMOC has observed that it takes

both parties several months to agree and prepare a single SSWP. In the future, this will not adequately support the number of turnouts the parties have to install.

Concerns and Recommendations:

The PMOC recommends that the ESA-PMT and the LIRR re-assess the manner in which they choose to execute the ESA project for the purpose of establishing a better working relationship and a more stream-lined approach to all of their co-operative planning efforts. The PMOC further recommends that a first step in this matter would be to establish the 2013 turnout installation schedule, then the schedule for SSWP development to support the installation, and then both parties commit to making the installations occur on time. [Ref: ESA-91-June12].

2.4 Operational Readiness

The ESA Operational Readiness group has focused their effort in several areas discussed below during the 3Q2012 and the ESA Operational Readiness Quarterly meeting was held on September 20, 2012.

Asset Management

- The Operational Readiness Group continued its efforts in completing the Asset Inventory with input from LIRR. It is currently working with LIRR Engineering, IT, and ESA/Special Projects personnel to finalize the asset inventory template that will be utilized to identify and record data for assets with supporting attributes in the ESA inventory.

Operations & Maintenance Plan

- Volume 2 – Infrastructure of the Operations and Maintenance Plan (rev. 6) was completed and forwarded to the FTA/PMOC on September 21, 2012. The Operational Readiness Group is working on Revision 7 of the O&M Plan that will include a re-written Volume 1 – Train Operations, since the original version of Volume 1 is dated.

Rail Activation Planning

- Revisions to Volume 1 of the Rail Activation Plan are being finalized to incorporate activities pertaining to Metro North Railroad (MNR). MNR is now fully participating in the regular meetings pertaining to rail activation. The Readiness Group anticipates completing the revisions during 4Q2012.

Transition Strategy

- The Technical Scope of Work for the upgrade of the cab simulator was completed and approved by LIRR. The next steps in the process will be to finalize the cost estimate; develop a procurement schedule; and work with LIRR Procurement and Logistics on moving forward with the procurement for the upgrade.

Observation:

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

Concerns and Recommendations:

There are no significant concerns or recommendations at this time.

2.5 Vehicles

Status:

The M-9 RFP process consists of two phases: Phase 1 is a pre-qualification step that was advertised on June 5th, 2012. Phase II consists of the Technical and Pricing proposals from qualified proposers which are due in January 2013. The anticipated contract award date is currently July 2013.

Observation:

As of this report, the procurement is proceeding as planned.

Concerns and Recommendations:

The PMOC does not have any concerns related to the procurement at this time.

2.6 Property Acquisition and Real Estate

Status:

A meeting with the Rudin's and MTA Real Estate took place on September 14, 2012 to discuss the valuation approach and timing of the work at 415 Madison Ave. Since the development of the easements is in parallel with the negotiation of the consideration for: payment for the easements, damages, temporary construction easements; and condemnation is anticipated to be necessary to terminate the HSBC lease, MTA Real Estate is waiting for an updated construction schedule from the PMT before choosing a suitable timeframe for the public hearing.

MTA Real Estate is also taking the lead in negotiating with the owners of 280 Park Ave. and technical discussion is underway. A meeting with the owners of 280 Park Ave. is in the process of being scheduled for the week of October 15, 2012. MTA Real Estate has engaged the appraiser for additional work for both properties, and received draft appraisals for both properties.

The PMT has gained access to 335 Madison Avenue to further designs for the easements associated with the construction and operation of: 1) an employee elevator that will connect the ESA/LIRR Station Master's Office on the ESA concourse level to the GCT Terminal Management Center on the GCT concourse level and 2) the public ADA elevator in the Biltmore room. The designs are projected for completion in early winter of this year, and progress design schemes are too preliminary for meaningful appraisal purposes. Funding for the ADA elevator has been allocated, but the funding for the employee elevator is still in progress. The window for the public hearing related to easement requirements at this property has been tentative projected for late 2012 to early 2013. Conceptual discussions of potential reconfiguration of the Grand Central Terminal are being initiated with the ESA Project. The PMT will need to assess the impact of redevelopment discussions on the location of the elevators.

Observation:

There is a considerable amount of activity related to the 48th Street Entrance that occurred during 3Q2012 as discussed in the first paragraph above.

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; however, this activity is currently not on the project critical path.

2.7 Community Relations

Status:

During the period of July 2012 through September 2012, the ESA project team continued to provide community outreach and coordination.

Observation:

The PMOC believes that the ESA Community Relations staff is reaching out appropriately and effectively to inform 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 PMOC completed its review of MTACC's incorporation of the candidate revisions. Based on the FTA's review of the PMOC's comments, the PMOC updated and re-submitted them in May 2012. The revised comments were sent to MTACC in June 2012 and working meetings with MTACC to resolve the comments and develop an implementation approach were held on July 17, 2012 and August 1, 2012. MTACC submitted, on August 7, 2012, their plan to incorporate comments into PMP Revision 8.1 in 2012 and PMP Revision 9.0 in 2013. On September 27, 2012, MTACC submitted PMP Revision 8.1 which is currently under review by the PMOC.

Observation:

MTACC is utilizing a task force to address the FTA/PMOC comments on incorporation of the PMP candidate revisions. MTACC continues to actively make progress in advancing comment incorporation into the PMP document.

Concerns and Recommendations:

There are no specific PMOC concerns or recommendations at this time.

3.2 PMP Sub-Plans

Status:

The status of the key PMP sub-plans is discussed in the ELPEP section of this report.

3.3 Project Procedures

Status:

The MTACC finalized procedure AD.15 – Project Change Control during September 2012. This brought the total number of revised executed procedures to 77. Based on earlier reports from the MTACC, there are still 3 procedures which remain to be implemented.

Observations:

Implementation of all of the revised procedures is a predecessor activity to the development of the Project Management Plan (PMP). Although the MTACC was significantly late in implementing all of its revised procedures, nonetheless, the PMOC believes that it has revised all the significant procedures necessary to complete this task (the 3 remaining procedures to be revised are not necessary to do this).

Concerns and Recommendations:

The PMOC no longer has concerns about this issue; as a result, this action will be closed. [Ref: ESA-A34-Jan10]

4.0 PROJECT SCHEDULE STATUS

4.1 Integrated Project Schedule

Status:

The ESA-PMT issued the IPS#39 with data date of September 1, 2012. This schedule has an RSD of August 31, 2019, with 365 days of contingency from September 1, 2018 to August 31, 2019.

Observations/Analysis:

The PMOC divided ESA contracts into two categories of active and future construction/force account packages. In order to simplify its analysis and presentation of this very complex issue, the PMOC further divided these contracts into six categories: Underground, Structures, Systems/Finishes, Force Account, Railroad Structure, and Completed Construction. Since the FFGA was authorized in 2006, the ESA has awarded all of its geotechnical packages. Subsequent to that, Contract CM009 was the first geotechnical package awarded on July 10, 2007, and CQ031 was scheduled to be completed on September 26, 2012 (duration of 2,270 calendar days) according to IPS re-baseline of 2009. Both of these packages experienced delays and, as a result, Contract CM013A has become the last geotechnical package that will be completed (on April 2, 2015). This is a 2.5 year delay. The total duration of the geotechnical packages has increased 40% with a total duration of 3,188 calendar days.

In Queens, Harold Railroad Structure packages started in January 2, 2008 by the award of Contract CH053, followed by CH054A in August 9, 2009. Both of these were scheduled to be finished by the time CH057 and CH058 were to be awarded. Unfortunately, both CH053 and CH54A have experienced significant delays and are now projected to be complete in August 2014. As a result, ESA has projected that CH057 and CH058 will begin construction before CH053 and CH054A are complete. As a result, all four contracts will compete for the same scarce Force Account resources to support construction during the overlap periods.

ESA's GCT Concourse and Facilities Fit-out (CM014A) and 55th Street Vent Plant Facility (CM013A) packages were recently awarded (see Appendix H for the complete table of the schedules for these packages).

The PMOC has analyzed the IPS #39 data date of September 1, 2012, compared the Substantial Completion of 14 active construction packages with the baseline schedule of IPS#37, data date of July 1, 2012, and concluded that, based on the Contractors' projection of SC for Harold active contracts, these packages could have further delays of 226 and 413 calendar days respectively (which would impact Harold critical path) (see Table 4.1 below).

Table 4.1- Substantial Completion Changes since July 2012

Contract	July 1, 2012 Substantial Completion	September 1, 2012 SC	Change since July 2012 re-baseline
CQ026			0
CM009	1-Jun-13	10-Jun-13	9
CM019	1-Jun-13	10-Jun-13	9
CM008A	8-Apr-11	8-Apr-11	0
CM004	20-Dec-12	10-Jan-13	21
CQ031	11-Apr-13	11-Apr-13	0
CM013	31-Jul-13	31-Jul-13	0
CQ039	20-May-13	6-Jun-13	14
CM013A	2-Apr-15	2-Apr-15	0
CM014A	24-Jul-13	24-Jul-13	0
CM02	N/A	8/2/2012A	
CQ032	10-Nov-14	5-Jan-15	56
CH053	30-Dec-13	13-Aug-14	226
CH054A	5-Jun-13	23-Jul-14	413

The aforementioned delays in Contracts CH053 and CH054A will complicate the construction in Harold more because it will create some concurrency among all Harold contracts (with CH057 scheduled to start in on March 31, 2013 and CH058 on November 1, 2013). Having four concurrent construction contracts with limited resources available to support construction in Harold could cause delay in completing the work in Contracts CH057 and CH058.

It should also be noted that, after finishing the Harold construction work, the ESA does have Integrated System Testing and Start Up and Commissioning activities to follow.

It is evident that ESA has experienced significant delay in Harold contracts of CH053 and CH054A.

Table 4.2: ESA Future Third Party Construction Packages

Contract	July 2009 Duration	NTP	July 2009 Substantial Completion	Calendar days Duration	NTP	Substantial Completion	Construction duration difference
underground structure							
CM012	1290	22-Feb-11	4-Sep-14	1280	1-Dec-12	3-Jun-16	(10)
CM015	1474	10-Feb-11	23-Feb-15	942	1-Jan-15	31-Jul-17	(532)
Support facilities							
CQ033	760	7-Jun-12	7-Jul-14	1215	2-Jan-14	1-May-17	455
Harold Rail Road Structure							
CH057	905	4-Jan-11	27-Jun-13	1141	31-Mar-13	13-May-16	236
CH061	N/A	N/A	N/A	517	1-Aug-13	31-Dec-14	
CH058	1054	12-Jun-12	2-May-15	1258	1-Nov-13	12-Apr-17	204
CH059	377	3-Mar-15	14-Mar-16	423	4-Aug-17	1-Oct-18	46
System and Finishes							
CM014 B	1473	11-Feb-11	23-Feb-15	1739	1-Apr-13	4-Jan-18	266
CS179	1645	6-May-11	6-Nov-15	2001	1-Nov-12	25-Apr-18	356
CS184	1487	28-Sep-10	24-Oct-14	1829	1-May-13	4-May-18	342
VS086	935	16-Apr-12	7-Nov-14	1886	5-Mar-13	4-May-18	951

The PMOC notes that there has been significant slippage in the IPS (please also see Appendix H for procurement schedule) during 3Q2012.

Concerns and Recommendations:

The PMOC is concerned that, because of slippage in the procurement schedule shown above, there is little chance of awarding Contracts CM012 and CS179 in accordance with the IPS forecast. These two packages are extremely large (together worth more than $1B) and they are on the IPS critical path. The ESA PMT may have to use project schedule contingency to keep the project on schedule if award of these packages continues to slip.

4.2 90-Day Look-Ahead of Important Activities

Status:

The ESA-PMT issued the IPS#39 with data date of September 1, 2012. This schedule has an RSD of August 31, 2019, with 365 days of contingency from September 1, 2018 to August 31, 2019.

Observations/Analysis:

There is a long list of upcoming milestones for ESA during the next calendar quarter (see also section 4.3), the majority of which are either on or near the critical path of the IPS. The PMOC is concerned about ESA's ability to achieve these milestones on schedule (Appendix H has the complete list of milestones).

Table 4.3: 90 Day Look Ahead (Key Milestones)

Activity ID	Activity Name	Start	Finish
CM009-19	(Revised ML#1B) Escalators 2 (Exc. Conn. To Cavern), 3, 4, Shafts & ATs 2 & 3		27-Sep-12
CM009-19	(Revised ML#7) 55th Street Excavation - Phases 3, 4, 5		31-Oct-12
CM012	CM012 Bid Due date		11-Oct-12
CM014	CM014B Advertisement	1-Nov-12	
CQ031	CQ031 (ML#4) Finish Tunnel & Turnover LL to CQ032	11-Oct-12	
CQ039	Milestone 3 - Turnover South Slurry Wall area for B10 Substation		21-Nov-12
CH053	Retaining Walls HON-N1 turnover to LIRR signal trough Installation		3-Sep-12
CH053	MILESTONE 7 Loop A Outage Complete		4-Sep-12
CH053	Subset D 43rd to 48th Street ROW Grading (Stage 1)	31-Oct-12	
CH054A	Completion of Thompson Ave Retaining Wall		25-Sep-12
CH054A	Milestone #2 - Complete West of Thomson		2-Oct-12
CH057	CH057 Advertise Date	29-Oct-12	
CH58	90% Design Submission - Contract CH058		1-Oct-12
CS284	CS284 - Advertisement	2-Oct-12	
CS079-	VS086 Bid Due		14-Nov-12

Concerns and Recommendations:

The PMOC will report on achievement of these milestones next quarter and the impact if milestone dates are not met.

4.3 Critical Path Activities

Status:

The PMT stated in its schedule variance report that there are few changes in the advertise dates of CM014B, CH057 and CS284. There have been minor adjustments to the active construction forecasts that can be found in section 4.1 of this report.

The critical path continues to go through Manhattan CM009/019 Contract followed by Manhattan Structures 2 & Facilities Fit out (CM012R) and will be continued through the System Contract Package 1 (CS179) to construct the last facility rooms in GCT4 and GCT5. Integrated Systems Testing (IST) will start in January 2017 and will be followed with the last LIRR readiness activities completed by Revenue Service Start in August 2018. The RSD is still August 31, 2019. The PMT has 12-months contingency prior to the RSD of August 2019.

Observations/Analysis:

Appendix H has a complete list of important milestones that need to be completed on time in order to achieve the RSD of 2019. Additionally, the PMOC summarized the number of all IPS milestones which are presented in Appendix H based on the new baseline schedule.

The PMOC strongly believes as stated in the SMP (section 5.3 IPS Update Process) that "Milestones are used as a management tool to gauge how well the original design plans are fulfilled and to indicate significant deviations that could affect the RSD. These milestone dates (and access restraints) are identified in the IPS and are specified in the applicable Contract

Documents. While milestones are not constrained in the IPS, they are monitored by the Project Controls Manager and CM staff." Critical milestones are key metrics that are useful to gauge whether or not the project is on track to meet the RSD.

Concerns and Recommendations

The PMOC is concerned that the PMT has not defined a turn over milestone date from Contract CM012 to Contract CM014B, despite the fact that Contract CM012 has been advertised and is ready to receive bids. The SMP clearly states in section 4.1 that "the Contract Packaging Plan (CPP) defines interfaces for each contract package and is kept up to date." The PMOC recommends that the PMT adhere to this requirement in the SMP and ensure that Contract interfaces are properly incorporated into the Contract Packages. In addition, as was earlier in this report, the PMOC notes the possibility of a significant slippage for NTP of Contracts CM012 and CS179 which are on the IPS critical path.

4.4 Schedule Contingency Analysis

Status:

ESA has developed a new re-baselined IPS with the RSD of August 31, 2019, which includes 365 days of project contingency.

Observations/Analysis:

The PMT has not developed a schedule contingency drawdown plan yet, however since there is a new project baseline this item will be closed [Ref: ESA-76-Feb11]. The PMOC believes that the delay in award of contracts CS179 and CM012 may result in some contingency drawdown for these contracts.

Overall Concerns and Recommendations

The PMOC is concerned about the potential delays in award of contracts CM012 and CS179 which may cause use of contingency.

The PMOC also recommends that ESA define the new "hold point" dates and create a schedule contingency drawdown to monitor the contingency consumption based on its risk assessment report to show ESA's management logic in using its schedule contingency. [Ref: ESA-98-Sep 12] (note: Ref: ESA-79-11 Apr 11 will be closed and is replaced by this new reference number).

5.0 PROJECT COST

5.1 Budget/Cost

Status:

MTACC completed its revised project cost and schedule re-baseline in May 2012 and placed it in Standard Cost Category format in July 2012. The Table 5.1 shows a comparison of the MTA's Current Baseline Cost Estimate broken out in SCC vs. FFGA baseline.

Table 5.1: Comparison of Standard Cost Categories: FFGA vs. Current Baseline

Standard Cost Category (SCC) No.	Description	FFGA baseline (YOE$)	MTA's July 2012 Baseline Cost Estimate (YOE$)	% Change from FFGA
10	Guideway & Track Elements (route miles)	1,988,741,167	2,943,134,639	147.99%
20	Stations, Stops, Terminals, Intermodal (number)	1,168,655,079	1,514,027,405	129.55%
30	Support Facilities: Yards, Shops, Admin. Buildings	356,264,228	388,053,607	108.92%
40	Sitework & Special Conditions	205,104,572	487,858,151	237.86%
50	Systems	619,343,096	698,309,342	112.75%
60	Row, Land, Existing Improvements	165,280,342	203,639,301	123.21%
70	Vehicles (number)	493,982,304	674,371,631	136.52%
80	Professional Services (applies to Cats. 10-50)	1,183,999,942	1,648,605,925	139.24%
90	Unallocated Contingency	168,529,271	150,000,000	89.01%
Subtotal		**6,349,900,000**	**8,708,000,000**	**137.14%**
100	Finance Charges	1,036,103,583	1,116,453,993	107.76%
Total Project Cost (10 – 100)		**7,386,003,583**	**9,824,453,993***	**133.01%**

Observations:

Since the project re-baseline in May 2012, ESA's budget has increased by approximately $2.5B in comparison to the 2006 FFGA, and its RSD has been delayed by 92 months from December 2013 to August 2019.

Concerns and Recommendations:

PMOC will continue to monitor cost performance vs. the new baseline going forward.

5.2 Project Cost Management and Control

Status:

ESA reported that, based on invoiced amounts, 49.4% of the total project (which includes all "Soft Costs") was completed as of August 30, 2012. The total construction progress has been reported at 45.7%.

Observations:

The PMOC does not agree with the PMT's calculation of 49.4% of total project completion because the PMT has calculated this percentage based on the total project budget of $8.2B. This amount does not include the "rolling stock reserve" budget. As presented in section 1.1, above, ESA's total project budget is $8.71 billion. In order to get a true project percent complete, all

calculations should be based on this amount. Table 5.2 below summarizes ESA's budget and percent completion.

Table 5.2: Project Budget and Expenditures as of August 31, 2012

Categories	Current Total Budget ($)	Awarded Value ($)	Invoiced to Date ($)	% Budget Invoiced
Construction	6,118,922,157	3,552,281,002	2,865,043,718	46.82%
Soft Costs Subtotal	2,126,077,843	1,303,894,914	1,257,142,765	59.13%
Engineering	671,029,379	602,844,256	601,203,460	89.59%
OCIP	173,913,620	112,941,841	104,451,900	60.06%
Project Mgmt.	762,816,530	485,775,993	450,930,661	59.11%
Real Estate	166,318,314	102,332,824	100,556,744	60.46%
Rolling Stock	202,000,000	0	0	0.00%
Management Reserve	150,000,000	0	0	0.00%
Project subtotal W/O Financing and RI	8,245,000,000	4,856,175,916	4,122,186,483	50.00%
Rolling Stock reserve	463,000,000	-	0	0.00%
Project Subtotal	8,708,000,000	4,856,175,916	4,122,186,483	47.34%
Regional Investment Subtotal	590,732,003	12,598,478	12,173,152	2.06%
Construction (RI)	475,016,081	12,387,606	12,141,822	2.56%
Design (RI)	24,595,433	210,872	31,330	0.13%
OCIP (RI)	16,939,198	0	0	0.00%
Project Mgmt. (RI)	24,181,291	0	0	0.00%
Rolling Stock (RI)	50,000,000	0	0	0.00%
Project Subtotal W/O Financing	9,298,732,003	4,868,774,394	4,134,359,635	44.46%
Financing Cost	1,116,453,993	-	418,000,000	37.44%
Project Grand Total	10,415,185,996	4,868,774,394	4,552,359,635	43.71%

The PMOC believes that the management reserve, as the CMP requires, is not part of the construction budget. ESA, however, considers the $150M management reserve budget a part of its construction budget and reports construction progress on this basis.

The PMOC calculated ESA's expenditure plan, which is presented in Appendix H based on the budget of $8.7B. The PMOC will report on the actual invoiced amount next month for third

quarter of 2012. Table 5.3 shows the actual invoice amounts for the months of July and August 2012.

It should also be noted that ESA does not have Engineering or Project Management budgets beyond 4Q2018 until 3Q2019. The PMT intends to use its Management Reserve budget to cover these costs.

Since the May 2012 re-baseline, the PMOC concludes that ESA is 17.51% behind its planned construction invoices and 30.41% behind its total project budget invoices, as shown in Table 5.3

Table 5.3: Invoiced Amounts (Planned vs. Actual)

Categories	Invoiced in August 2012	Invoiced in July 2012	Actual Invoiced	Planned Invoiced	% complete in months of Jul.& Aug.2012
Construction	2,865,043,718	$2,740,847,093	$124,196,625	$150,553,000	82.49%
Soft Costs Subtotal	1,257,142,765	1,244,049,729	13,093,036	46,743,865	28.01%
Engineering	601,203,460	$598,050,596	$3,152,864	$2,909,000	108.40%
OCIP	104,451,900	$103,537,054	$914,846	$6,491,000	14.09%
Project Mgmt.	450,930,661	$442,166,855	$8,763,806	$12,575,000	69.69%
Real Estate	100,556,744	$100,295,224	$261,520	$24,769,000	1.06%
Rolling Stock	0	$0	$0	$0	0.00%
Management Reserve	0	$0	$0	$0	0.00%
Project subtotal W/O Financing and RI	4,122,186,483	3984896822	137,289,661	197,297,029	69.59%
Rolling Stock reserve	0	$0	0	0	0.00%
Project Subtotal	4,122,186,483	3,984,896,822	137,289,661	197,297,029	69.59%

Concerns and Recommendations:

The PMOC is concerned about the lag of invoiced amount for construction and total project in the months of July and August 2012 compared with ESA's planned amount for that period. Historically, ESA has not kept up with its monthly expenditure plans.

It is evident that ESA will incur its largest expenses between 4Q2014 and 4Q2015. However, looking at the Table H.5 in Appendix H, "Total Number of Milestones in Baseline IPS July 2012," ESA has established additional performance milestones in 2012 and 2013. The PMOC recommends that the PMT consider its cash flow diagram and establish performance milestones in its IPS to enable it to measure project progress in a more meaningful manner further out in the project. To do so, the PMOC recommends that the PMT establish additional milestones in the IPS from 4Q2014 to 4Q2015, as it did in 2012 and 2013. [Ref: ESA-88-June 2012].

5.3 Change Orders

Status:

During August 2012, the PMT executed one change order for contract VM014 in the amount of $205,000. The PMOC conducted a comprehensive change order analysis and concluded that the trend for executed change orders is about 15% of the respective contract award values (excluding force account contracts).

Observation:

Since ESA has budgeted 17.2% for change orders in its EAC, this would leave ESA with a 2.2% surplus. Since the potential claims for all active construction contracts have not been considered yet, the PMOC would expect some major claim settlements involving additional costs in the near future. The PMOC cannot confirm that the 2.2% surplus will be sufficient to cover the remaining ESA contracts.

Concerns and Recommendations:

The PMOC recommends that the PMT prepare an analysis and outline its plan for allocated and unallocated contingency consumption.

5.4 Project Funding

a) Federal Funding

Status:

As shown in table 5.2, as of August 31, 2012, the PMT has awarded a total of $4.856B, in contract work. The Federal share of awarded contracts is $1,810,300,000 ($1,701,400,000 was disbursed) (See Appendix H for detailed cost distribution).

Observation:

None

Concerns and Recommendations:

None

b) Local Funding

The awarded local share was $2,996,000,000 ($2,133,800,000 was disbursed). There has been a $417,900,000 incurred finance cost (for local share) to date.

5.5 Cost Variance Analysis

This is covered in the discussions above.

5.6 Project Cost Contingency Analysis

Status:

Table 5.4 below is a summary of ESA's contingencies. It should be noted that, in the June 2012 proposed budget, the PMT included a management reserve amount of $150,000,000.

Table 5.4: Summary of ESA Project Contingency

Contingency	May 2012 Revised Baseline	July 2012 Contingency	August 2012 Drawdown	August 2012 Contingency
Allocated Contingency				
Pre Award Contingency (AFI)	$184,299,808	$184,299,808	-	$184,299,808
Post Award Contingency (AWO)	215,576,541	206,266,642	$205,000	206,061,642
Sub-Total	$366,876,349	$390,566,540	$11,800,538	$390,361,540
Unallocated Contingency				
Management Reserve	$150,000,000	$150,000,000	-	$150,000,000
Total	$549,876,349	$540,566,540	$11,800,538	$540,361,540

Observation:

Based on ESA's re-baseline budget of $8.7B, in July 2012, ESA's construction budget, including its allocated contingency, was s $3.378B. Deducting the allocated contingency of ($0.367B) from the construction budget, ESA would have a $3.011B base construction budget and a contingency of 13% of its base budget. Adding the management reserve budget ($.150B) to the construction base budget would increase ESA's total contingency to 18% of its base construction budget. However, it was shown in Section 5.3 (change orders) that ESA's post-bid contingency consumption (see Appendix H) is trending at the rate of 15%. This would leave ESA with 2.2% of its construction budget ($66M) to cover future engineer's estimate errors and project management expenses beyond 4Q2018.

Overall Concerns and Recommendations:

The PMOC is concerned that the PMT does not have any project management or engineering budget after August 2018, although its RSD is August 2019 (see Section 5.2). The PMOC is concerned that the PMT will use its management reserve to fund these costs.

The PMOC recommends that ESA develop a cost contingency drawdown based agreed upon milestones. [Ref: ESA-98 Sep 12]

6.0 RISK MANAGEMENT

6.1 Risk Mitigation Commitments

Status:

During 2Q2012, MTACC completed a comprehensive risk assessment of the ESA project based on the comprehensive cost and schedule re-baselining undertaken by the PMT in the September 2011 – March 2012 timeframe. In May 2012, the MTACC's independent risk assessment consultant completed its initial analysis, and issued the draft report on May 15, 2012. [redacted] Based on the cost and schedule re-baselining and the project-wide risk assessment, MTACC presented the new budget and RSD to the MTA Capital Program Oversight Committee on May 21, 2012: $8.24 billion budget (w/o vehicles and financing); August 2019 RSD.

[redacted]

Concerns and Recommendations

There are no significant concerns at this time.

6.2 Risk Management Commitments

Status:

MTACC's risk management commitments are detailed in the Risk Management Plan (RMP), Rev. 2.0 dated July 2012, which is a sub-plan within the ESA Project Management Plan (PMP). The RMP was updated to bring it into compliance with the ELPEP principles and requirements and has been reviewed by the FTA and the PMOC. MTACC has incorporated these comments into the current revision of the RMP and the PMOC nearing completion of its final review.

Observations/Analysis:

The risk management process centers on: routine reviews, at least bi-monthly or quarterly, by the MTACC Risk Manager and the Construction Manager (CM) for each active construction contract; continuous updating of the ESA Project Risk Register; and update and maintenance of the Contract Issues Log for each active construction contract. Significant risks, that is, those above $250,000 in potential cost risk and/or those with potential impact on the project critical path, will be reviewed at least monthly. The ESA-PMT has advised that the project is following the processes included in the RMP and the associated procedures. The PMOC will be reviewing the associated documentation with a focus on those cost and schedule risks that could have a significant adverse impact on the project. Such risks will be discussed at the monthly risk meeting with the FTA/PMOC.

Concerns and Recommendations:

Subsequent to completion of the independent risk assessment consultant's risk analysis in May 2012, MTACC made the commitment to the FTA to institute monthly risk meetings with the FTA and the PMOC patterned on the approach used for the MTACC's Second Avenue Subway Project. As of September 30, 2012, MTACC has not yet scheduled the kick-off meeting. The PMOC has brought up this topic on several occasions and will continue to remind MTACC to set a date for this meeting as soon as possible in the next quarter. [Ref: ESA-97 Sep 12]

6.3 Current Risk Mitigation Actions

Status: During the period of June 2012 – August 2012, the ESA-PMT has continued its efforts to identify and mitigate risks that may adversely affect the program's future cost and schedule performance. Ongoing and recent significant risk mitigation initiatives include the following:

1. In response to continued delays experienced on the Queens contracts to date, ESA-PMT and the associated ESA construction managers continued to manage all Queens area work to the critical CQ031 milestones related to TBM mining of the remaining rail tunnel for Track B/C. All TBM mining was completed in July 2012.
2. ESA-PMT worked with LIRR, Amtrak and the ESA-CMs to evaluate the impacts that the Amtrak planned capital improvements for the East River Tunnels (ERT) will have on the track outages needed for the Harold Interlocking work. This effort continued into early 2012. However, Amtrak has experienced delays in their ERT program due to a broken rail situation and this continues to affect track outage coordination with the ESA project.
3. The ESA Change Control Committee (CCC) approved electrification (catenary) of the Eastward Passenger Track and the new Revised Primary Route (RPR) Track to provide Amtrak operational flexibility when critical track crossovers and track switches are temporarily placed out-of-service during underpinning of the 39th Street Bridge pier. The PMOC's opinion is that the additional operational capability will help mitigate potential delays to the underpinning work.
4. ESA-PMT advanced the transfer of construction of the tunnel bench walk and 63rd Street Tunnel rehabilitation from CS179 to CM012 to improve construction access and to minimize contractor work area conflicts. The PMOC believes that this approach will minimize contractor coordination issues and allow efficient construction of the tunnel bench walk, however issuing the addenda for this scope shift has delayed the procurements on both packages
5. The CCM has been engaged to review construction sequencing and phasing of the CM014B work on the GCT Concourse and propose recommendations for improvements and risk mitigation. Preliminary results of this study are anticipated in September 2012. The PMOC believes that an independent review will provide valuable recommendations to optimize the construction sequencing and phasing.
6. ESA-PMT is proposing transfer of scope from CM014B to CM013 for 4 cooling towers and associated pumps and controls to provide early climate control necessary to support installed systems equipment and to remove a constraint on the ESA work train tracks. The PMOC believes this approach provides benefits, provided that this will not extend the contract time for CM013.
7. ESA-PMT is transferring the CQ031 rock excavation at the north end of the Queens Open-Cut Excavation Area to CQ039 to delete this contract interface. The PMOC agrees with this approach since CQ039 can perform this work, provided that this will not extend the contract time for CQ039 which is already late and is delaying the CQ032 contractor access to the site.
8. ESA-PMT is considering transfer of the sump pit excavation from CQ031 to CQ032 thus permitting CQ031 to complete demobilization of the TBM launch area and timely transfer of the work area to CQ032. The PMOC disagrees with this proposed action because the work involves drill and blast operations in close proximity to Amtrak facilities. The CQ031 has successfully performed drill and blast work without any issues with Amtrak while this type of work would be new to the CQ032 contractor.

Observation/Analysis:

In addition to the risk mitigation actions discussed above, the PMOC notes that ESA-PMT continued, through September 2012, to coordinate contractor activities in shared works area: between CM009/019 (conveyor), CQ039 and CQ032 (Plaza Substation B10) at the location of the Early Access Chamber; and between CH053 and CQ031 regarding the remaining work area and access conflicts.

Concerns and Recommendations:

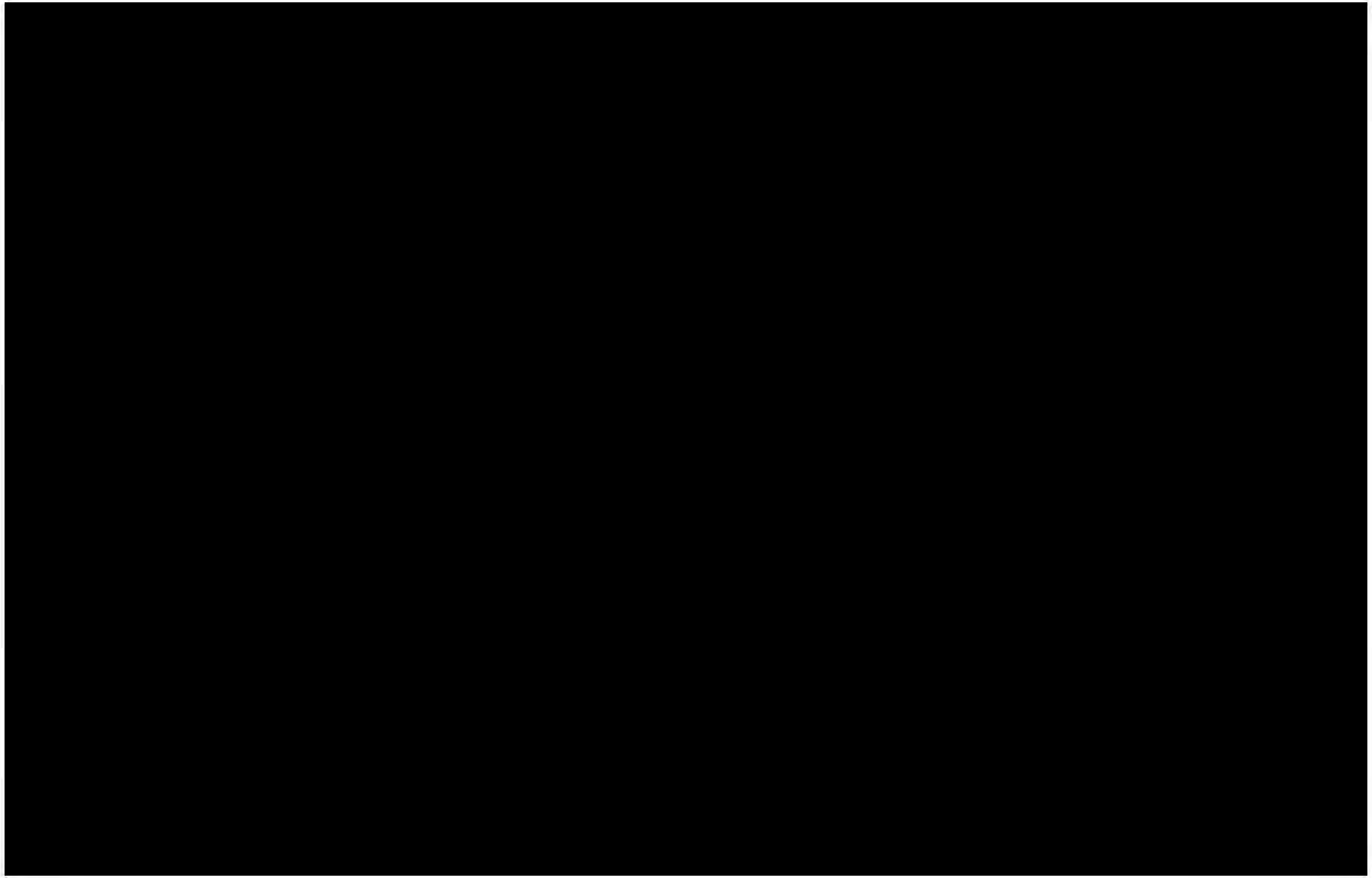
The PMOC believes that to validate that the above listed risk mitigation actions will generally reduce the potential for future schedule delays and will thus minimize cost overruns, ESA-PMT must thoroughly evaluate all possible new risks associated with these changes. The PMOC recommends that the PMT continue to perform a cost-benefit analysis, complete with schedule review, within the framework of the ESA Risk Management Plan, and in accordance with current project configuration change control, to confirm the effectiveness of these mitigation actions.

Regarding Mitigation Action #8 above, the PMOC believes that having the CQ032 contractor perform drill and blast excavation of the rock, a type of work not currently in his contract, in close proximity to Amtrak facilities exposes MTACC to undue risk. The CQ031 contractor has done this work successfully and has established a very good working relationship with Amtrak.

6.4 Schedule and Cost Contingency Status

Status:
The project schedule contingency analysis is included in Section 4.4 of this report. The project cost contingency analysis is included in Section 5.6 of this report.

FOIA Exemption 5 U.S.C. Section 552(b)(4)



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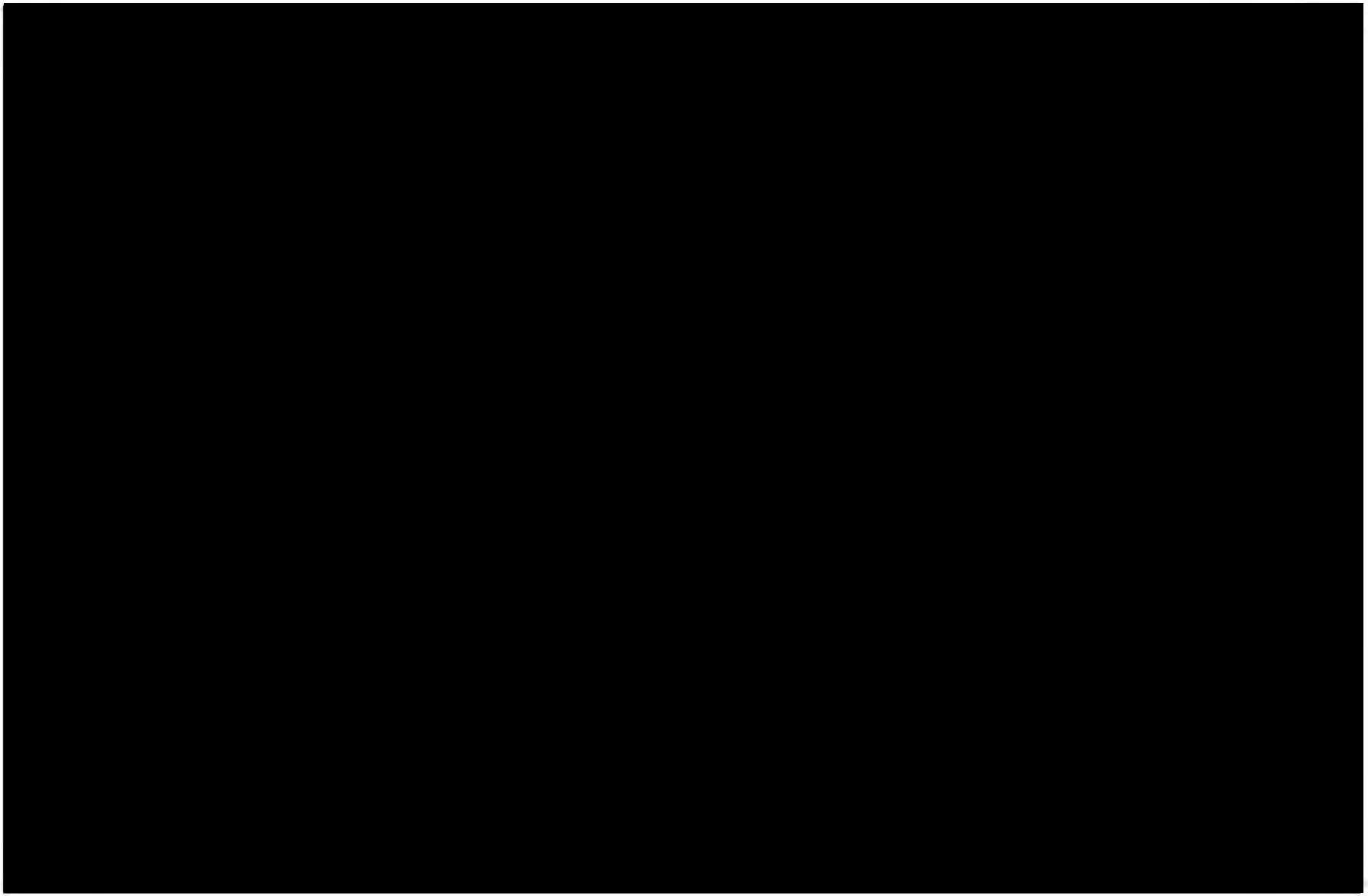


FOIA Exemption 5 U.S.C. Section 552(b)(4)

APPENDIX A -- LIST OF ACRONYMS

AFI	Allowance for Indeterminates
ARRA	American Recovery and Reinvestment Act
BA	Budget Adjustment
CCC	Change Control Committee
CCM	Consultant Construction Manager
CM	ESA Construction Manager assigned to each contract
CMP	Cost Management Plan
CSSR	Contact Status Summary Report
CIL	Central Instrument Location
CPRB	Capital Program Review Board
CPP	Contract Packaging Plan
CWB	Current Working Budget
DCB	Detailed Cost Breakdown
ELPEP	Enterprise Level Project Execution Plan
EPC	Engineering-Procurement-Construction
ERT	East River Tunnel
ESA	East Side Access
FA	Force Account
FAMP	Force Account Management Plan
FFGA	Full Funding Grant Agreement
FTA	Federal Transit Administration
GCT	Grand Central Terminal
GEC	General Engineering Consultant
IEC	Independent Engineering Consultant (to MTA)
IPS	Integrated Project Schedule
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
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
QA	Quality Assurance
RAMP	Real Estate Acquisition Management Plan
ROD	Revenue Operations Date
ROW	Right of Way
RSD	Revenue Service Date
SAS	Second Avenue Subway
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

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)		
45.7*	Construction Percent Complete		
50.0*	Over-all Project Percent Complete		

*****As of August 31, 2012, based on the revised baseline (May 2012).

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
9,744.1 million	Total Project Cost ($YOE) at date of this report including $ 1,036.1 million in Finance Charges
3,975.7 million	Amount of Expenditures as of August 31, 2012 based on the Total Project Budget of $8,708 million
45.6	Percent Complete based on Expenditures as of August 31, 2012 report
540.4 million	Total Project Contingency remaining (including $150 million Management Reserve).

[redacted]

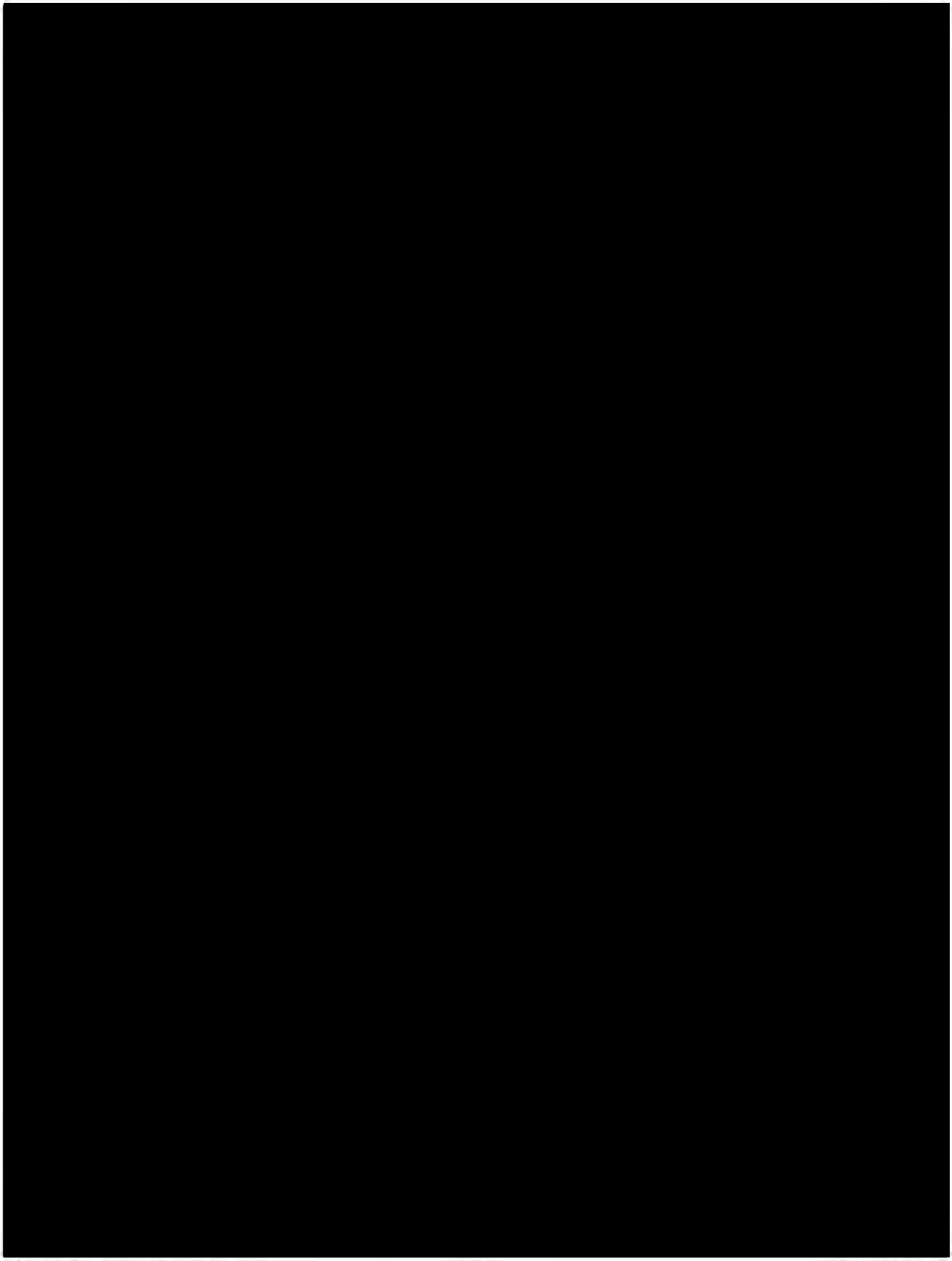
[redacted]

APPENDIX D – PMOC STATUS REPORT

(This will be transmitted as part of the Final in a separate attachment covering the East Side Access project)

FOIA Exemption 5 U.S.C. Section 552(b)(4)

[redacted]



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APPENDIX F – ON-SITE PICTURES

(to be sent in a separate file)

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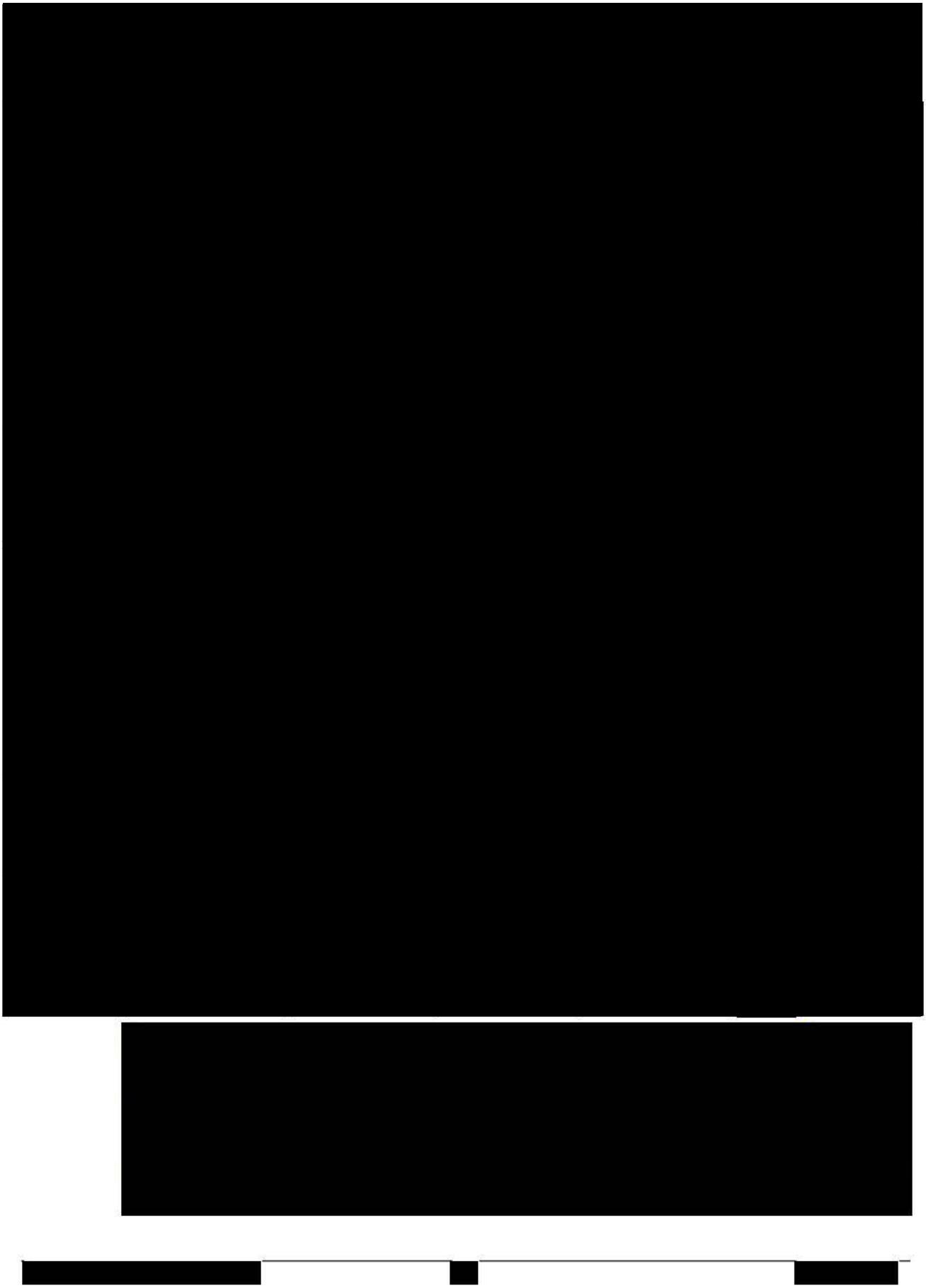

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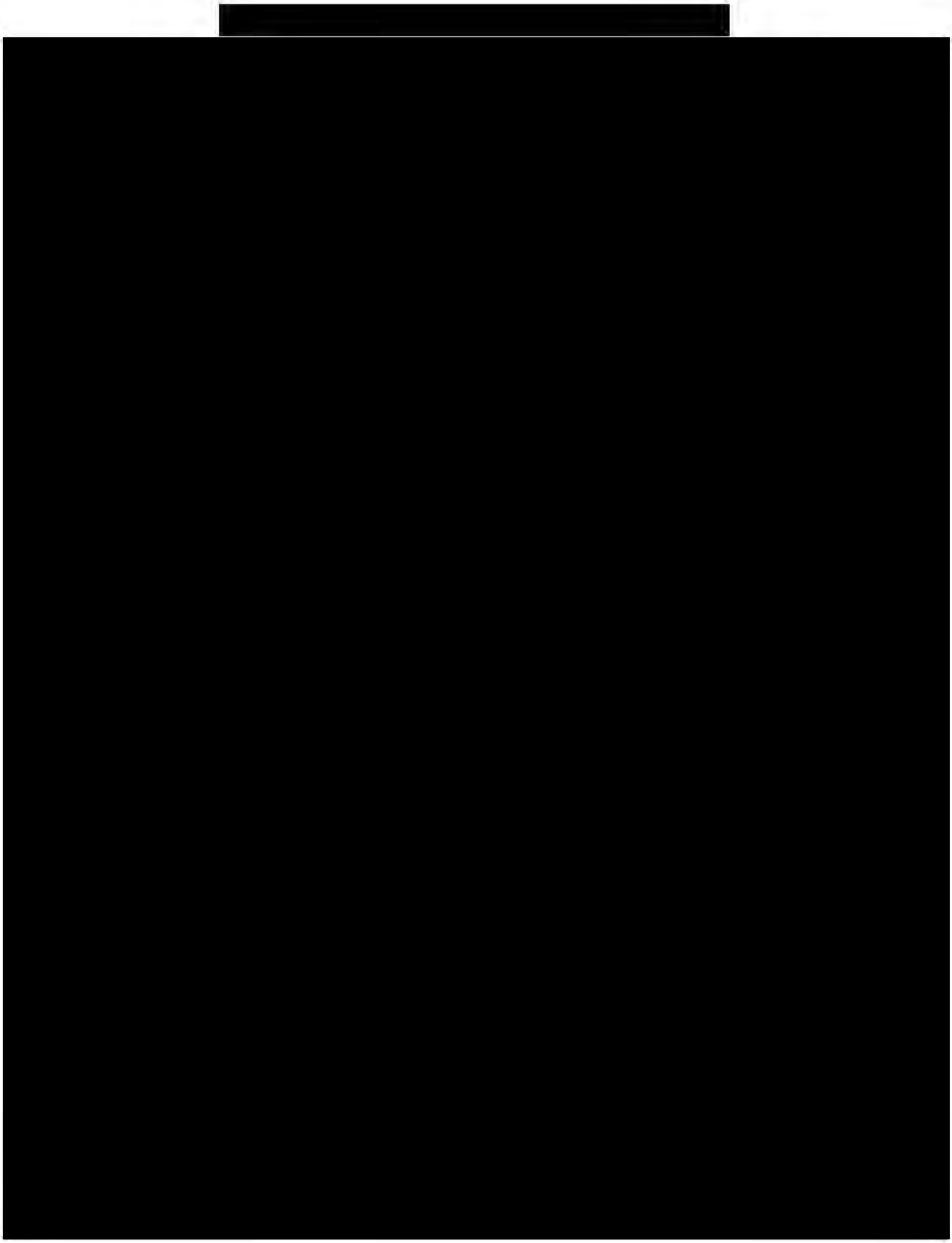

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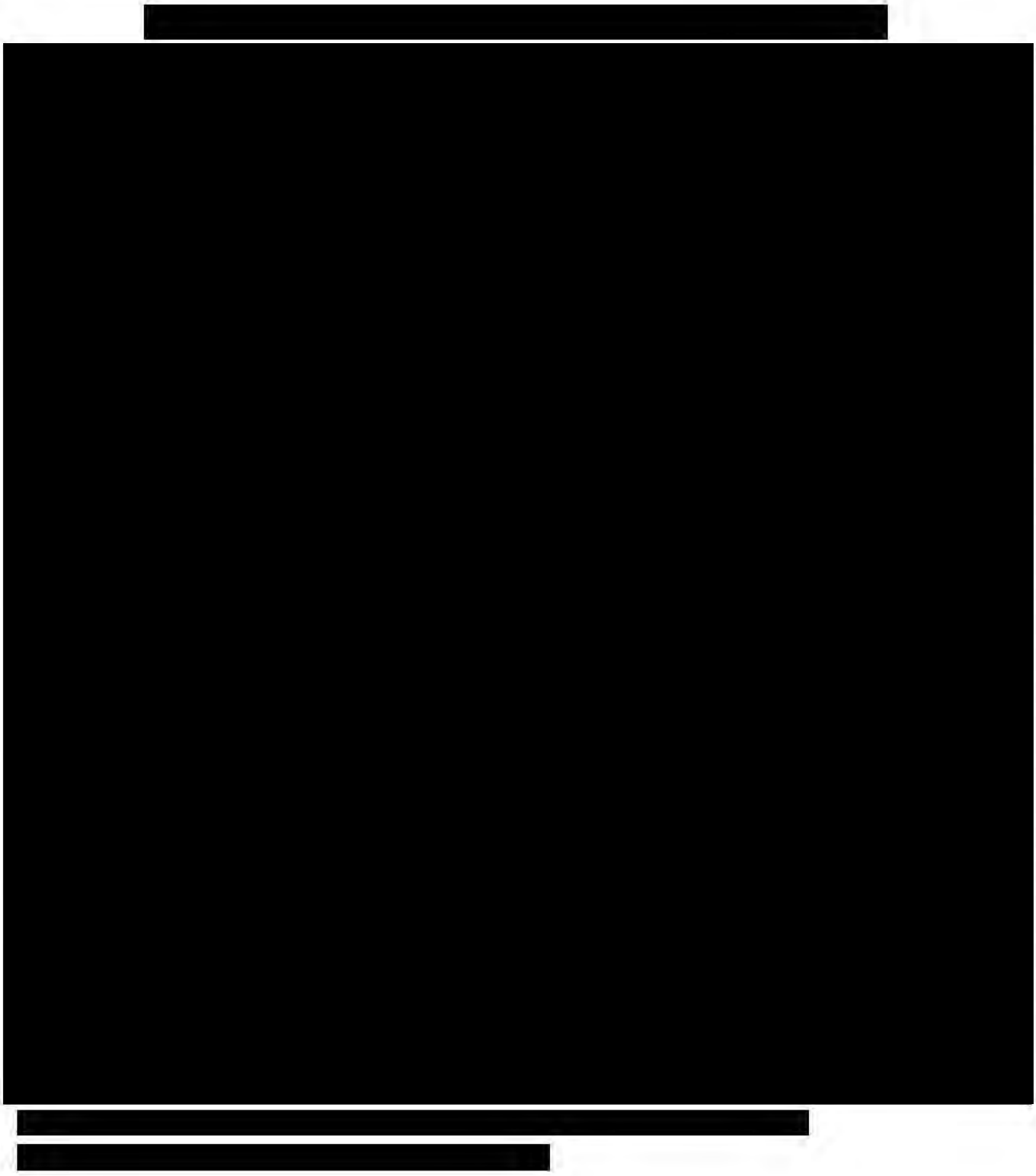

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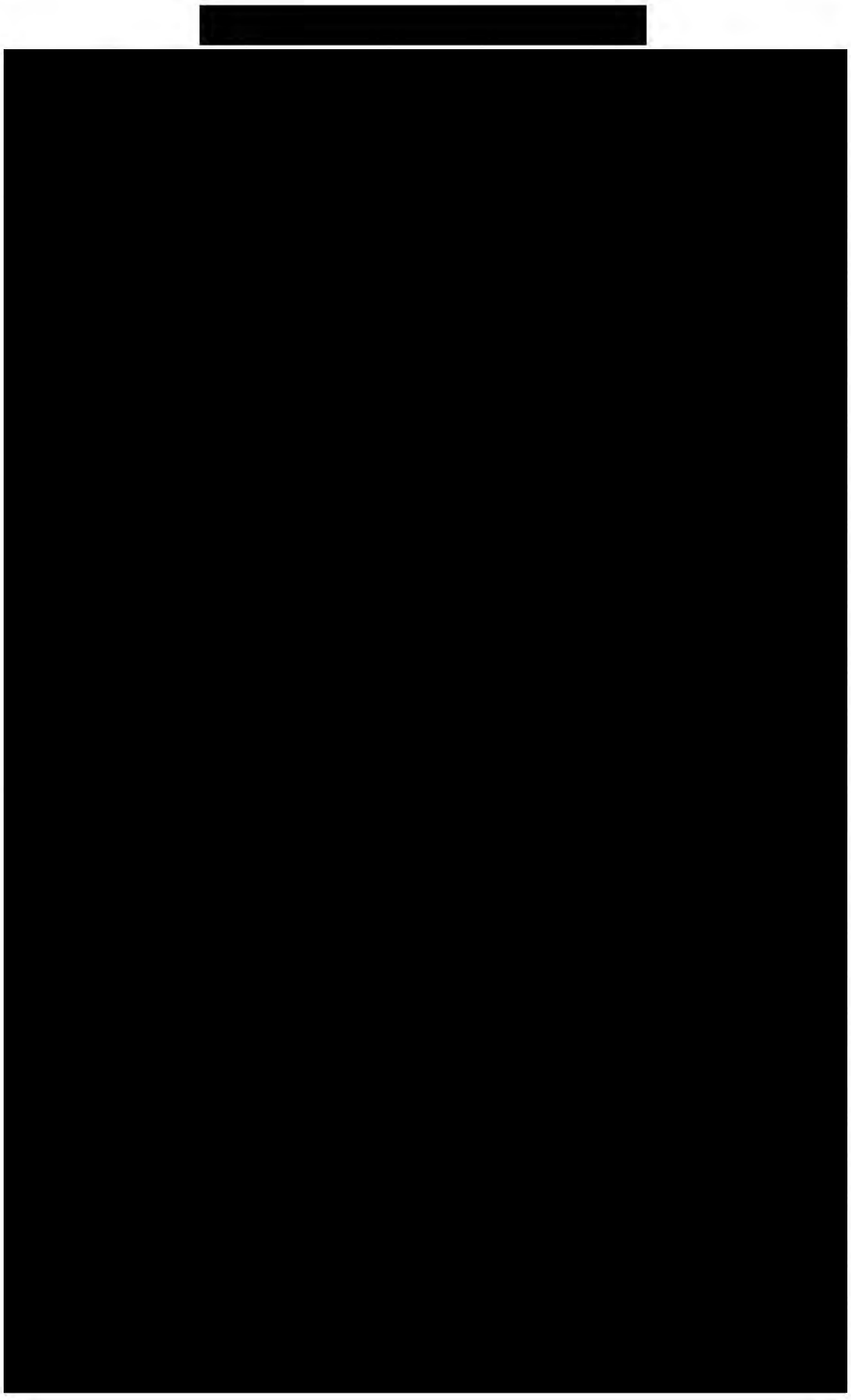

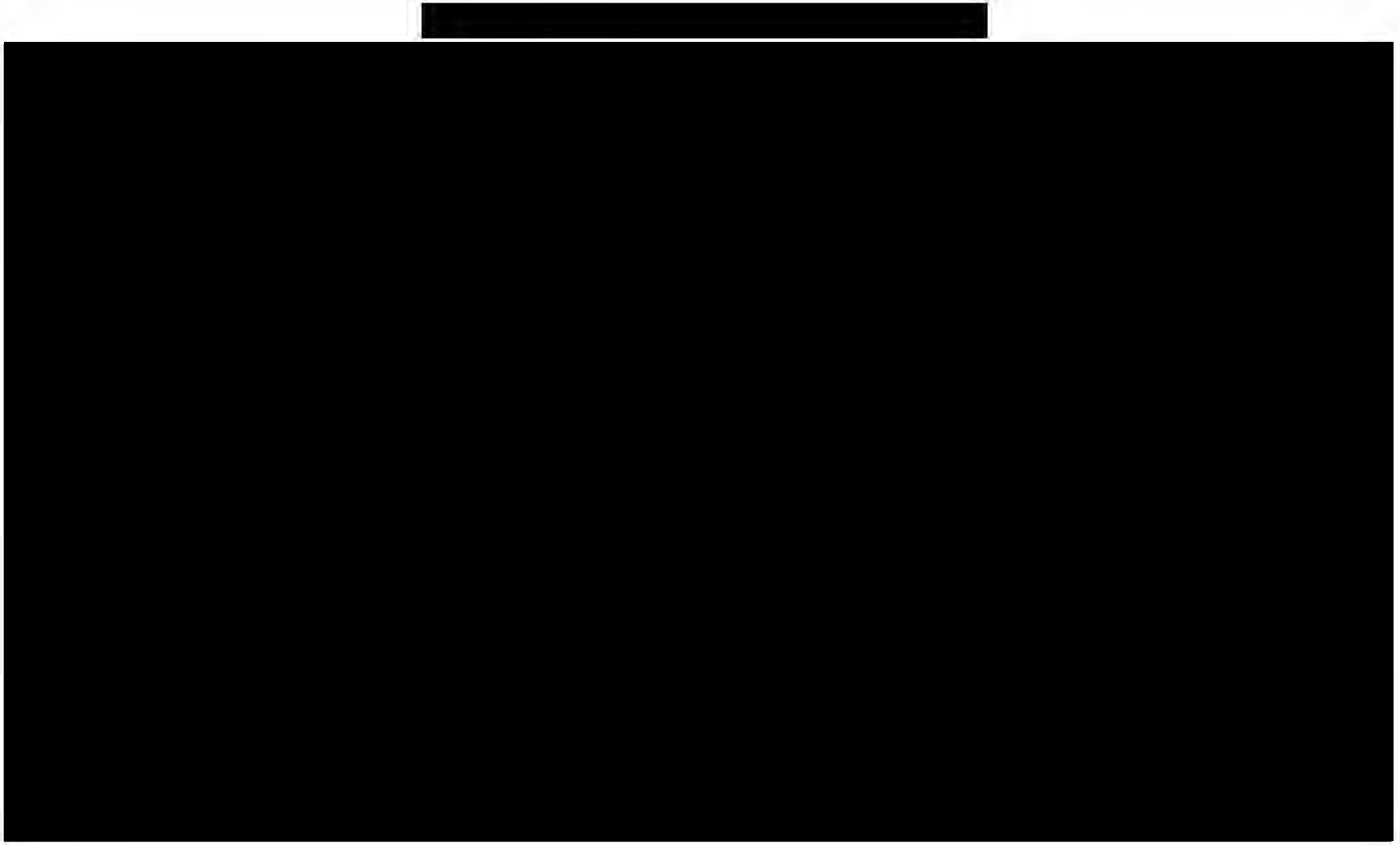

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