

PMOC MONTHLY REPORT

East Side Access (MTACC-ESA) Project

Metropolitan Transportation Authority

New York, New York

Report Period April 1- April 30, 2015



PMOC Contract No. DTFT60-09-D-00007

Task Order No. 7, Project No. DC-27-5235, Work Order No. 2

[Note: This is the Final Report for the East Side Access Project under this Contract & Task Order]

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

PMOC Lead: E. Williamson, 212-736-9100; ejwilliamson@urbanengineers.com

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

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THIRD PARTY DISCLAIMER

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

REPORT FORMAT AND FOCUS

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

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

MONITORING REPORT

1.0 PROJECT STATUS

a. Design

As of the end of March 2015, MTACC reported that the overall Engineering effort was 99.2% complete, based on Earned Value for Design Deliverables, compared with a Planned status of 100%. Their Cost Report shows 89.2% of the overall EIS & Engineering category as invoiced and 89.3% of the budgeted section titled "Design" (including Design Settlement) as having been invoiced.

Design work on the new, stand-alone package CH061A (completion of Queens Tunnels "A" and "D") has commenced. The 60% review submission is scheduled for May 8, 2015.

At a technical meeting with the owners of 415 Madison Avenue earlier this year, the owners decided that they will only relocate the existing utilities (including water service, sewer, steam, mechanical duct work, electrical lines and the telephone service) within their building. MTACC is currently preparing the design agreement (MOU) with the owner, which will enable the design to begin. Once that MOU is signed, the scope of work to repackage CM015 and CM015A will be completed and the Proposed Change Order, currently being prepared, will be finalized.

Anticipated advertise date for the CH057 package was previously forecast for July 2014 with NTP forecast for September 2014. The forecast advertise date was not met. Completed bid package documents were issued by the GEC on February 27, 2015. The package is now structured to include 15 options. The contract was advertised on March 26, 2015 and the bid opening date is May 19, 2015.

CH058 is being repackaged and the bid advertisement date has not been determined. The East Bound Re-route tunnel construction method is being revised from a top down to a traditional cut and cover method and ESA is considering splitting the package into two separate Contracts: CH058A will contain the East Bound Re-route; CH058B will contain the loop box. A white paper is being developed to present to the Change Control Committee (CCC), which must approve the proposed repackaging plan. The design work for this package is currently on hold.

At the west end of the mid-day storage yard (CQ033), there has been progress determining what work is to be performed by Amtrak (track and signals) to tie into the ERT (East River Tunnels) and what work will be performed by LIRR (track) to tie into the Arch Street shop. ESA PMT and the GEC met with Amtrak in April 2015 and the technical direction has been established. ESA and LIRR need to reach agreement *on* what elements of the Arch Street Yard connection will be LIRR force account work. The GEC has commenced work on procurement package VQ033 to provide the CILs for contract CQ033. The 100% design submission is scheduled for June 2015.

b. Procurement

As of the end of March 2015, the Cost Report showed total procurement activity on the project as 69.1% complete, with \$7.033 billion in contracts awarded out of the \$10.178 billion current reported budget.

The CM007 package was advertised on December 23, 2014 and contract documents were made available for proposers on January 15, 2015. The pre-proposal conference and site tour were held in early March 2015. The proposal due date has been extended from May 1, 2015 to June 2, 2015, and the cost proposals are due 3 weeks later. Approximately 525 questions have been received from proposers and 6 Addenda have been issued.

Contract CH057, Loop Box Approach, EBRR West Approach & Tunnel, was advertised on March 26, 2015, with bids due on May 19, 2015. The PMT is considering revising the bid due date and NTP by one month in response to a bidder's request and because of additional time has been made available due to the delay of the H5, H6 and Loc 30 cutovers.

The PMT is favoring a stand-alone package, CS086, for the signal installation work and needs to finalize the decision. The PMOC recommends that this decision be made soon, since the signal installation work must be coordinated with the track work to be performed in CM007.

c. Construction

The PMT reported in its March 2015 Monthly Progress Report that the total construction progress reached 55.0% complete vs. 55.8% planned; the PMOC calculations based on data in the ESA Cost Report agree with the ESA completed percentage.

CM005- Manhattan South Structures: The Estimate at Completion for CM005 increased slightly to \$239,124,369 during March 2015 due to a re-forecast of contract modification values. The MTACC forecast for Substantial Completion remained at February 6, 2016. Actual

construction progress was 6.0% versus 3.2% planned. Cumulative progress was 64.9% actual versus 66.4% planned.

Construction Progress: During April 2015, the CM005 contractor continued to place exterior wall concrete in the upper levels of the GCT 1&2 East and West Wye Caverns, continued to form and place re-bar and concrete on the lower level of the west side of the 38th St. Vent Facility, began to waterproof the lower levels of the raised bores at 37th St., continued to place pneumatically applied concrete (PAC) on the archways of Access Tunnels #1 and #2, and continued concrete placement on the exterior wall of the east side of the Eastbound Cavern.

CM006 – Manhattan North Structures: The Estimate at Completion for CM006 increased slightly to \$319,995,750 during March 2015 due to inclusion of pending and potential contract modifications. The MTACC forecast for Substantial Completion was extended by one month to December 30, 2016. Actual construction progress was 2.8% versus 5.3% planned. Cumulative progress was 20.2% actual versus 36.5% planned.

Construction Progress: During April 2015, the CM006 contractor continued to waterproof, install re-bar, and began to place concrete liners in Tunnels #402 and #403 between the East- and Westbound Caverns and the GCT 4 Crossover Cavern, continued to waterproof, install re-bar, and place pneumatically applied concrete (PAC) on the GCT 4 Crossover and East Wye Cavern archways, continued to place invert concrete in the Westbound Tunnel between the GCT 4 Crossover and the GCT 5 West Wye Cavern, completed archway PAC placement in the GCT 5 West Wye Cavern, and continued upper level west side concrete placement of exterior and interior walls of the 55th St. Vent Facility.

CM013A – 55th Street Vent Facility: MTACC reports that through March 31, 2015, the EAC increased to \$57.38 million from the previous \$57.11 million, reflecting MTACC changes to the hoist system in the Fan Rooms. Work progress has slowed slightly during construction of the Plenum Roof and final lining of the Shaft, along with delays in ConEd Cable Supports and the new Hoisting System. Accordingly, forecast Substantial Completion has been extended to July 22, 2015. However, MTACC reports that the MTACC CCM forecasts that Substantial Completion will be further extended to October 2015 for the above noted reasons. Cumulative progress was 84.0% actual vs. 93.0% planned.

Construction Progress:

Plenum: New Sewer Manhole #3 is being constructed in the East Plenum. The new Electrical Manhole and utilities has been completed in the East Plenum. Began constructing north and south street ventilators on the East Plenum side. Began installation of Electrical Manholes over the West Plenum. Concrete placement of the East & West Plenum Roof continues at the top of the Shaft Central Plenum. Continued installation of support angles for precast stairs and moving up the work deck in the shaft. Began forming south and interior walls.

CM014A – Concourse and Facilities Fit-Out: MTACC reports that through March 31, 2015, the EAC decreased to \$58.68M from the previous \$59.70M. MTACC Forecast Substantial Completion date has been further extended to September 15, 2015 from the previous July 2, 2015. This extension reflects the MTACC forecast for completion of the Battery Exhaust in the substations, the Con Ed Summer Moratorium and work to energize the system and the follow-on commissioning. To help facilitate achieving Substantial Completion as soon as possible, MTACC reports that \$1.7M of remaining base contract work has been transferred to the new

CM014B contract. As of March 31, 2015, MTACC reported that the actual percent complete was 91.7% vs. 100% planned.

Construction Progress: Installation of fire stopping continues with daily quality inspections. Painting of doors & CMU walls is ongoing throughout. Ductwork and piping installation is ongoing in Zones #1 & #2. Sprinkler/Standpipe installation nears completion in Zones #4 & #5. 600V cable installation continues. CMU wall erection is nearing completion with the work in Shaft #2. Branch feeder and conduit installation is ongoing throughout. Installation of the Roll-Up Doors and controls is nearing completion. 16341 Switchgear installation resumed and nears completion. System grounding continues throughout. SCADA installation has resumed and is ongoing. Installation of the Trapped Key Interlocking Hardware (Kirk Key) is ongoing throughout. Installation of the Battery Exhaust has begun.

CM014B – Concourse and Facilities Fit-Out: MTACC reports that through March 31, 2015 the EAC remained \$404.62M, the base contract award amount. The substantial completion date remains August 18, 2018.

Construction Progress: There is no construction progress for this period. Contractor mobilization at the Madison Yard site is scheduled for May 1, 2015.

CS179 – Systems Package 1: As of March 31, 2015, the Estimate at Completion for CS179 was \$552,789,740, which included \$2,401,740 for pending and potential contract modifications. The MTACC forecast for Substantial Completion remained at November 25, 2019. The MTACC has not generated a progress curve for CS179 yet, so no Actual versus Planned construction data is available.

Construction Progress: During April 2015, the CS179 contractor began to install utility conduit in the Roosevelt Island and Vernon Boulevard Vent Facilities and the B-10 Substation in Queens.

CS084 – Traction Power Substations: As of March 31, 2015, the Estimate at Completion for CS084 was \$78,373,772. The MTACC forecast for Substantial Completion was extended by 1 month to January 2, 2020. The MTACC has not generated a progress curve for CS084 yet, so no Actual versus Planned construction data is available.

Construction Progress: The CS084 contractor has not begun any significant construction yet.

Queens Contracts:

CQ032 – Plaza Substation and Queens Structures: The Estimate at Completion for CQ032 increased slightly to \$247,235,065 during March 2015 due to the inclusion of pending and potential contract modifications. The MTACC forecast for Substantial Completion was reduced by 1 week to March 10, 2016. Actual construction progress was 1.5% versus 2.7% planned. Cumulative progress was 75.3% actual versus 81.6% planned.

Construction Progress: During April 2015, the CQ032 contractor completed erection of structural steel for the Plaza Vent Structure, completed foundation and lower level concrete placement and began to erect *structural* steel for the Yard Services Building, continued benchwall construction in Tunnels A, B/C, D, and the 63rd St. Tunnel, began to form the C07 slab in the Early Access Chamber, began to backfill the Open Cut/Plaza Substation area, and continued to place mechanically stabilized earth (*MSE*) in the Bellmouth.

Harold Interlocking:

CH053 Contract – Harold Structures Part 1 and G.0.2 Substation: The Estimate at Completion for CH053 remained at \$294,151,990 during March 2015. The MTACC forecast for Substantial Completion was extended by 2 weeks to July 10, 2015. Actual construction progress was 0.4% versus 0.0% planned (contract was supposed to be complete by now). Cumulative progress was 94.8% actual versus 100.0% planned.

Construction Progress: During April 2015, the CH053 contractor continued work to place the S1 and S2 12kV cables between Sub 44 and the Sunnyside Yard Frequency Converter in service, continued to install conduit and splice cables in Runs 1-4 at the new GO2 Substation, continued to grade the Westbound Bypass roadbed between 48th and 43rd Sts., and completed waterproofing and ballast placement on the Westbound Bypass Bridge over 43rd St.

CH054A – Harold Structures Part 2A: The Estimate at Completion for CH054A increased slightly to \$57,035,770 during March 2015 due to inclusion of pending and potential contract modifications. The MTACC forecast for Substantial Completion was extended 3 weeks to June 30, 2015. Actual construction progress was 0.9% versus 0.0% planned (contract was supposed to be complete by now). Cumulative progress was 93.5% actual versus 100.0% planned.

Construction Progress: During April 2015, the CH054A contractor installed a communications duct bank and began to restore the slope along the embankment between Queens Boulevard and Honeywell Street overhead bridges and began to construct the Loop 1A roadbed in the same location.

CH057A – Part 3 Westbound Bypass: The Estimate at Completion for CH057A increased slightly to \$115,050,588 during March 2015 due to inclusion of pending and potential contract modifications. The MTACC forecast for Substantial Completion remained at October 7, 2016. Actual construction was 1.3% versus 6.8% planned. Cumulative progress was 17.1% actual versus 49.2% planned.

Construction Progress: During April 2015, the CH057A contractor installed 24 soldier piles under the Queens Boulevard overhead bridge and 26 secant piles in the East Approach Structure of the Westbound Bypass Tunnel. The contractor also continued to install de-watering wells throughout the tunnel area and excavated 5 foundation holes for the future installation of communications poles between Harold and Woodside Interlockings.

Railroad Force Account:

PMOC Note about Amtrak Force Account Packages FHA01, FHA02, and FQA65: The “ESA First” baseline re-schedule process which the ESA PMT is presently progressing will postpone the Regional Investment High Speed Rail work for the Eastbound Re-Route Track, Loop and “T” Interlockings, and the new Car Washer until the very end of the ESA project. While this will theoretically advance the completion date for the LIRR ESA service, at the same time it will cause the Substantial Completion dates for all Amtrak direct and support work to be delayed. The ESA PMT has estimated that the delays for each of the Amtrak Force Account packages will be approximately 24 months.

FHA01 – Harold Stage 1 Amtrak: The Estimate at Completion for FHA01 increased slightly to \$18,834,861 during March 2015. The MTACC forecast for Substantial Completion was extended by 22 months to February 25, 2018, as a result of the “ESA First” Schedule re-baseline.

Actual construction progress was 0.0% versus 0.0% planned. Cumulative progress was 97.8% versus 99.0% planned.

Construction Progress: Amtrak did not perform any significant Stage 1 construction during April 2015.

FHA02 – Harold Stage 2 Amtrak: The Estimate at Completion for FHA02 was reduced to \$45,369,618 during March 2015. The MTACC forecast for Substantial Completion was extended by 24 months to February 1, 2020, as a result of the “ESA First” Schedule re-baseline. Actual construction progress for March 2015 was 1.2% versus 1.5% planned. Cumulative progress through March 31, 2015, was 94.0% actual versus 95.9% planned.

Construction Progress: During April 2015, Amtrak Electric Traction personnel installed catenary wires over the #821 and #823 crossovers and made miscellaneous catenary modifications at catenary poles B911E, B912, B931W, and B923W in Harold Interlocking. Amtrak C&S personnel relocated signal trough near “Q” Tower so that the CH057A contractor can begin construction of a pump house for the Westbound Bypass Tunnel.

FQA65 – Loop Interlocking Amtrak: The Estimate at Completion for FQA65 increased slightly to \$29,682,534 during March 2015. The MTACC forecast for Substantial Completion was extended by approximately 33 months to September 11, 2022, as a result of the “ESA First” Schedule re-baseline. Actual construction progress was 0.6% versus 3.7% planned. Cumulative progress was 9.1% actual versus 32.4% planned.

Construction Progress: During April 2015, Amtrak C&S personnel continued to install trough and signal cable between “R” Interlocking and “R7” Location and resumed retaining wall construction between “R” and the future “T” Interlockings.

FHL01 – Harold Stage 1 LIRR: The Estimate at Completion for FHL01 was reduced to \$20,804,621 during March 2015. The MTACC forecast for Substantial Completion was extended by 3 weeks to March 22, 2016. Actual construction progress was 0.0% versus 0.8% planned. Cumulative progress was 100.0% actual (based on contract value invoices) versus 99.2% planned.

Construction Progress: The LIRR did not perform any significant Stage 1 construction during April 2015.

FHL02 – Harold Stage 2 LIRR: The Estimate at Completion for FHL02 was reduced to \$76,619,172 during March 2015. The MTACC forecast for Substantial Completion was extended by 14 weeks to April 11, 2018. Actual construction progress was 1.6% versus 2.3% planned. Cumulative progress was 68.3% actual versus 78.6% planned.

Construction Progress: During April 2015, LIRR Signal personnel continued to pull and terminate signal cables at the new “H3” CIL and make signal revisions at the existing Harold CIL, Communications personnel continued to install a new wooden pole line and aerial fiber optic cables between Location 30 and 48th St., High Tension personnel continued to install 3rd rail conduit and apparatus at turnouts installed in 2014, and B&B personnel continued to make interior renovations in the existing Harold Tower building.

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

GEC Quality: The GEC Quality Manager will be leaving the project. The ESA Quality Manager plans to perform an audit of ESA GEC Quality in May 2015 and will invite the PMOC to observe it.

CM013A: On January 15, 2015, a 16 inch long crack was discovered at the top of the West Plenum North Branch column. A nonconformance report (NCR) was generated. The contractor has completed the repair work. The GEC must approve the NCR before it can be closed. This column is not exposed to the public and will not receive an architectural finish.

As-Built Process Audits: The ESA Quality Manager reviewed the As-Built Drawing Process on contracts CH057A and CM006 earlier in 2015. Other contracts were originally audited in 2014. Follow up audits have been performed and the ESA Quality Manager plans to issue a report on all contracts in May 2015.

CS179 (Systems Package 1 – Base Contract): This contract was awarded twelve months ago and many submittals are late and/or unacceptable. The Contractor's original Quality Manager left. The replacement left in February 2015. Since the personal involvement of the contractor's Corporate Quality Manager, the PMOC has seen an improvement of the contractor's implementation of its quality system. The contractor has hired a new permanent Quality Manager who is scheduled to start on May 4, 2014. A meeting with the contractor's upper management, ESA Quality, and the CM team is scheduled for May 15, 2015 to address the various issues.

Procedure Compliance Audits: During 3Q2014, MTACC Quality conducted Procedure Compliance Audits on Contracts CM005, CM013, CM013A, CH057A, and CQ032. The ESA Heavy Civil Project Executive prepared a response to the auditors. MTACC Quality agreed with most of the response and is still working with the ESA staff to resolve the remaining issues. Since these issues have been open for many months, the PMOC recommended that MTACC's Chief of Quality and System Certification help to close them.

Quality Training: A Quality Kickoff meeting and Quality Training that was scheduled in February 2015 for the CS179 contractor was postponed when their Quality Manager resigned. With the hire of a new permanent Quality Manager both of these events will be conducted by mid-May 2015. A Quality Kickoff meeting for the new CS084 contractor will also be held by mid-May 2015.

2.0 SCHEDULE DATA



As noted in the PMOC's January 2015 report, ESA's critical path has changed since its current re-baseline in July 2014. The critical path passes through the procurement of Contract CM007 and then to building the Structure within the GCT. The path then shifts to CS179 work within the Train Operations Center (TOC) and finally through Integrated Systems Testing, Starting, Commissioning and RSD.

ESA reported in its variance report that contract CM006 is experiencing significant delay but the IPS and variance report do not state the amount of delay. The PMOC understands that there is 6 months of delay for Milestone #2 which is access for contract CM007 based on CM006's contract schedule.

ESA also reported that the delay on the construction of the 23rd St underground Communication Room and Vent Shafts on contract CQ032 is impacting Milestone#4B-1 (which is access milestone for contract CS179). This access milestone (AR02) in contract CS179 baseline schedule has a start date of March 31, 2015; however, contract CQ032's schedule shows an access date of February 2, 2016 which is 308 days of delay.

CS179 Contractor baseline schedule submission was approved as noted. The CS084 baseline schedule submission was returned to the Contractor March 20, 2015 as revise and resubmit. A resubmission had been expected by the end of April 2015.

ESA has stated that Harold "ESA First" re-sequenced schedule has been incorporated into the IPS. This schedule plan modifies the existing contract work in Harold and reconfigures the remaining Harold contracts to be awarded creating multiple major float paths that must be monitored closely to identify and help mitigate any potential issues.

Harold Substantial Completion is September 2019 in the current IPS (data date April 1, 2015) and was November 2018 in the baseline IPS, which means that Harold has absorbed 10 months of delay in a year. This is not a favorable trend. MTACC will need to carefully monitor and effectively manage the work that is on the critical and near-critical paths.

Table 2-1: Critical Milestones 90 Day Look Ahead

Activity ID	Activity Name	Start	Finish	Total Float	Contract	Location
FHL02-CSR140	Ready to start testing / Revision (H3)		15-May-15	105	FHL02	Harold
FHL01-1140	Complete Trough H1 to H2 (WBY)		26-May-15	97	FHL01	Harold
CH057-2030	CH057 - Bid Due Date		1-Jun-15	94	CH057	Harold
VQ033-1030	VQ033 IFB Advertise Date	7-Jul-15		0	CQ033.VQ033	Queens
FHL02-3190	Ready to Demo Rack at Woodside		22-Jul-15	81	FHL02	Harold
FHL02-3290	Ready to Install Loc. 30 CIL		5-Aug-15	80	FHL02	Harold
CQ033-1001000	CQ033 IFB Advertise Date	6-Aug-15		77	CQ033	Queens
FHL01-1150	Complete Trough H2 to H3 (Track A)		6-Aug-15	97	FHL01	Harold
VQ033-1050	VQ033 Bid Due Date		7-Aug-15	9	CQ033.VQ033	Queens

Additionally, the table below shows the number of finish and start milestones in next 90 days.

Location	Count of Start	Count of Finish
Harold	3	32
Manhattan	7	3
Queens	3	5
Systems	2	--
Grand Total	15	40

Project Critical Path:

The table below shows ESA critical path and its contingency for three different RSDs.

Activity Name	Original Duration	Start	Finish
CM007 Contract	1054	06-Mar-15 A	19-Apr-19
IST INTEGRATED SYSTEM TESTING (PART OF CS179)	153	19-Apr-19	26-Nov-19
F START-UP/TESTING/COMMISSIONING/REVENUE SERVICE	1113	27-Nov-19	13-Dec-22
ESA IST Contingency 1 (IST Completion Contingency to LIRR)	170	27-Nov-19	14-May-20
Stakeholder agreed additional IST Contingency 2 [REDACTED]	154	15-May-20	15-Oct-20
COMPLETION OF INTEGRATED SYSTEM TESTING (WITH CONTINGENCY)	0		15-Oct-20
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Stakeholder agreed additional Program Contingency [REDACTED]	304	16-Oct-21	15-Aug-22
ESA Project Substantial Completion for LIRR Final 3 Months	0		15-Aug-22
ESA Planning Contingency Ready for LIRR Final 3 Months Period	30	16-Aug-22	14-Sep-22
LIRR Final 3 Months Period	90	15-Sep-22	13-Dec-22
LATE - Begin LIRR Revenue Service To GCT	0		13-Dec-22

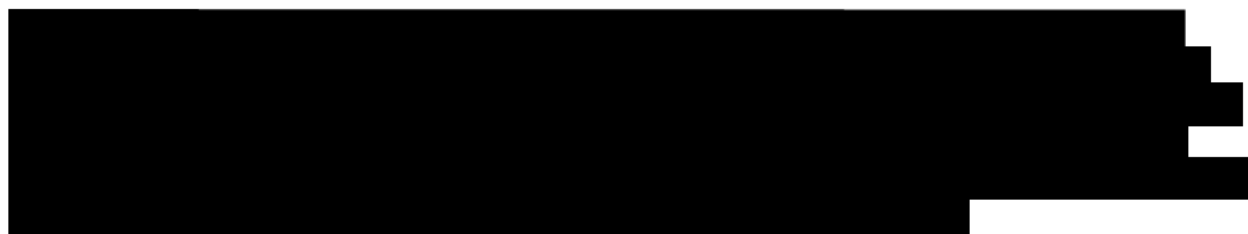
Schedule Contingency: IPS#68 is based on an RSD of December 2022 and has multiple levels of contingency.

3.0 COST DATA

Funding: The MTA funding request for the 2015-2019 Capital Program was submitted to the NYS Capital Program Review Board (CPRB) in September 2014. ESA will need to obtain funding from this Program to award all the options in the CS179, CM007, CQ033, and CH058 Contracts. The new \$10.178B [REDACTED] budget presented to CPOC in June 2014 will make the need for additional funding even greater. Until new funding is provided, the project has a funding shortfall of approximately \$2.6B, and is part of the un-Funded MTA Budget.

Budget/Cost: The ESA March 2015 Progress Report shows the total project progress was 55.7% versus 56.1% planned, against the Current Baseline Budget (CBB) of \$10.178B, and the construction progress as 55.0% vs. 55.8% planned, based on invoiced amount (details of project budget and expenditures are shown in Tables 2 and 3 in the appendix). The PMOC's review of the Cost Report shows a slightly lower percentage for Total Project, at 55.5%. A PMOC review of the ESA Planned Cash Flow Chart shows that it is based on a 2022 completion rather than the ESA announced Target of 2020, so the "Planned Value" at any point will be lower than is required to sustain the ESA current Target completion date. This has been included as one of the PMOC Cost Questions for the May 2015 meeting with ESA.

The current \$10.178B budget follows the procedure of assigning a series of separate small contingencies which are not easily distinguishable. This already entails an excess number of budget adjustments to date and in the future, which appears to be operationally complex and often makes it difficult for the PMOC to determine the expected and current status of the Project and packages. In order to find adequate budget to shift to CM014B for the Award, ESA took significant funds from several of these subcategories of un-allocated contingency, thereby causing some to go into a negative contingency status. This is not an approved budgeting procedure.



As part of the re-plan, ESA has begun use of an 'Allowed for MODs category', which represents funds moved out of Contingency equal to the value of the Pending and Potential MODs. Funds for potential MODs that are not realized are then moved back into Contingency. The PMOC believes that this method of tracking will make it difficult for the ESA Project Control Group to accurately track remaining contingency at any given point in time.

Since the values ESA carries for pending and potential MODs are often very far off of the actual executed values, the cost projections continue to be inaccurate. In many other projects where the value of Anticipated MODs/Change Orders is seen solely as an exposure, by continually making these budget moves in and out, the effect of variance from the projected is much greater and more disruptive to the budget process. ESA needs to have the Construction Managers address the inaccurate forecasting of costs for MODs and change orders.

[REDACTED]

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

[REDACTED]

Change Orders/Budget Adjustments: The PMT reported that over the last month, two (2) - Construction change orders over \$100K were executed for a total of approximately \$712K.

4.0 RISK MANAGEMENT

ESA held its monthly risk meeting in January 2015, but started combining the risk topics with the monthly cost and schedule review starting in March 2015. The PMOC notes that this approach resulted in not having sufficient time to discuss project risk at the April 15, 2015 combined meeting. The PMOC will suggest that the monthly stand-alone risk meetings be resumed.

During April 2015, MTACC progressed elements of the package level risk assessment for Contract CM007, GCT Caverns and Facilities Fit-Out. Preparatory meetings were held on February 25, 2015 for schedule basis, on March 18, 2015 for cost basis and on April 2, 2015 for addressing any remaining issues. The risk workshop was conducted over at two-day period on April 8 & 9, 2015. The preliminary risk report was forecast to be issued by about April 28, 2015 but, as of April 30, 2015, this has not occurred.

Issues with the level of Amtrak force account support, historically at about 30-35% of what is required to maintain the 2014 Harold Schedule, would be significant and had the potential to delay completion of the Harold Interlocking work another three years until 2022 under the worst-case trending scenario under the earlier Harold Schedule developed in early 2014. Electric Traction (ET) resources have been insufficient despite Amtrak’s earlier written acknowledgement that the MTACC schedule requires an ET staff of 24. Based on these issues and concerns, ESA completed a Harold schedule re-sequencing in December 2014, also known as “ESA First,” that advances work elements required for the new LIRR service to GCT and

pushes back the FRA funded High Speed Rail Work beyond 2017. MTACC will require FRA approval for a time extension for the funding. As of April 30, 2015, MTACC has not yet received final approval from FRA. In early April 2015, MTACC presented the Harold Re-Sequencing Plan to the Amtrak engineering department. Additional presentations are planned to the Amtrak transportation department.

5.0 ELPEP COMPLIANCE SUMMARY

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

- **Technical Capacity and Capability (TCC):** The FTA requested MTACC to update its TCC Plan in response to the FTA/PMOC comments that were generated in November 2013 as a result of significant changes in key ESA upper management level positions. MTACC submitted its revised Technical Capacity and Capability Plan (ESA and SAS) on April 13, 2015. The Plan is currently being reviewed by the PMOC.
- **Continuing ELPEP Compliance:** The following ELPEP components continue to need improvement or are deficient: Management Decision; Design Development; Change Control Committee (CCC) Process and Results; Stakeholder Management; Issues Management; Procurement; Timely Decision Making; and Risk-Informed Decision Making.
- **Project Management Plan:** The PMOC completed its review and evaluation of MTACC's revisions and responses and submitted its findings to FTA-RII in 4Q2014. MTACC subsequently submitted a revised Rev. 10 on March 13, 2015 that included updated information on the Change Control Committee and revisions based on the PMOC review and evaluation provided in 4Q2014. The revised Rev. 10 of the PMP is currently being reviewed by the PMOC.

The PMOC notes that since June 2013, the ESA project has continued to be non-compliant with ELPEP, and is not meeting some of the more important requirements of the Schedule Management Plan (SMP) and Cost Management Plan (CMP) sub-plans to the PMP. The PMOC's opinion is that this continues to be a serious deficiency and needs to be resolved immediately. [Ref: ESA-114-Sep13] The PMOC's major areas of concern include:

- **Cost/Schedule Contingency:** In November 2014 ESA submitted its initial cost and schedule contingency utilization curves for the new baseline budget and schedule presented to CPOC in June 2014 in order to comply with ELPEP; however, they then stated they would correct them to make the curves usable by ESA Project Controls staff and acceptable to the FTA/PMOC. The PMOC does note, however, that draft proposed cost and schedule contingency drawdown curves were presented by MTACC at the December 11, 2014, ELPEP Quarterly Review Meeting. A meeting was held on March 24, 2015, to review and discuss the MTACC drawdown curves and the FTA/PMOC proposed cost and schedule contingency minimums. The review continued at the April 6, 2015 ELPEP Quarterly Compliance Review Meeting and an additional meeting is planned for May 14, 2015.
- **Schedule Management Plan (SMP):** The ESA project remains non-compliant with requirements for Integrated Project Schedule (IPS) Updating, Forecasting, and Schedule Contingency Management against a current baseline schedule. Given that the new

budget and schedule have been put in place, the PMOC expected that MTACC would start to meet the requirements set forth in its SMP in the above-referenced areas. This has not occurred as MTACC completed, in December 2014, the latest Harold Re-Plan for re-sequencing the remaining work and has since been incorporating the Re-Plan results into the Integrated Project Schedule. MTACC has committed to fully incorporate the Harold Re-Plan details into the March 2015 IPS update that has a data date of April 1, 2015. As of April 30, 2015, the March 2015 IPS update had not been submitted.

- **Cost Management Plan (CMP):** The ESA project remains non-compliant with requirements for Project Level EAC Forecasting, Project Level EAC Forecast Validation, and MTACC Cost Contingency Management and Secondary Mitigation. Given that the new budget and schedule were presented to the MTA CPOC in June 2014, these requirements should have been met by now but MTACC has made very little progress in this area. MTACC submitted its revised Cost Management Plan (ESA and SAS) on April 13, 2015. The Plan is currently being reviewed by the PMOC.

Revisions to the ELPEP Document: Although the 2014 Re-Plan budget amount and Revenue Service Date were presented to CPOC on June 23, 2014, MTACC has not yet fully incorporated the schedule details into its regular monthly reporting. MTACC has advised that the Harold Re-Plan details will be presented in the March 2015 IPS update having data date of April 1, 2015. As of April 30, 2015, however, this has not yet been submitted. Revisions to the ELPEP Document cannot be completed until the IPS is finalized. As part of the process of updating the ELPEP document, the PMOC has started an independent evaluation of the minimum required cost and schedule contingencies going forward. The PMOC's recommendations were presented at the meeting with MTACC on March 24, 2015 with discussion continuing at the April 6, 2015 ELPEP Quarterly Compliance Review Meeting. An additional meeting is planned for May 14, 2015.

The ELPEP Quarterly Review Meeting was held on April 6, 2015. Summarizing the significant discussion:

- Revised TCC Plan would be issued within two weeks. (see discussion above)
- MTACC has resolved all FTA/PMOC comments and issued the final revised SAS PMP.
- MTACC has completed changes to the CCC processes and re-issued a revised ESA PMP.
- MTACC is nearing completion of the revisions to the ESA/SAS Cost Management Plan and expects to issue the draft for FTA/PMOC review by mid-April 2015. [PMOC notes this was submitted on April 13, 2015].
- Revised cost and schedule contingency drawdown curves were distributed and presented by MTACC. The PMOC distributed and presented its revised cost and schedule contingency curves. The MTACC-ESA and FTA/PMOC documents were discussed at length.
- The FTA explained the use and purpose of the minimum cost and schedule contingency requirement in the context of the ELPEP and the FFGA. The FTA/PMOC will review the contingency issues with its management and continue the discussion with MTACC-ESA.

The next ELPEP Quarterly Review Meeting with MTACC, FTA-RII, SAS and ESA projects and the PMOC has been scheduled for June 12, 2015.

6.0 SAFETY AND SECURITY

Project safety statistics for lost time accidents on active construction contracts continue to trend above the Bureau of Labor Statistics (BLS) national average at 2.14 vs. 1.70 lost time accidents (LTA) per 200,000 hours. This is slightly lower than last reporting period (2.20). The CM005 Contract has an average of 2.79 LTA, trending higher than the project average but decreasing (from 3.06 LTA) since the last reporting period. In response to the continuing problems with the CM005 contractor regarding site safety, MTACC had directed the CM005 contractor to retain a third-party safety oversight consultant to evaluate the safety program, prepare recommendations and implement changes. The safety consultant started in April 2015. The PMT did not report any significant security issues in its 1Q2015 Progress Report.

7.0 ISSUES AND RECOMMENDATIONS

Design: The PMT design management team needs to focus on achieving intermediate milestones in a timely fashion and work closely with the GEC to help make this happen. The continuing shifting of scope has made finalizing design documents and drawings extremely difficult.

Procurement: The lack of stability in the contracting strategy and Contract Packaging Plan remains a concern. The PMT continued to shift and split scope among different packages during the period January to April 2015 (latest information available to PMOC), making it difficult to fully understand the impact of these changes to the overall ESA Project. An updated draft Contract Packaging Plan (revision 10.0) was submitted on March 28, 2014 and the next revision still has not been issued as of April 30, 2015. ESA should make an effort to adhere to the current version of the CPP and minimize shifting scope for the remainder of the project.



Contract CS179: The ESA PMT approved the contractor's baseline schedule in April 2015. In general, the CS179 contractor's administrative and construction performance slowly improved during March and April 2015, although neither is totally acceptable at present. The contractor needs to continue to concentrate efforts to improve its submittal process while at the same time start to ramp up its field construction activities. For future schedule updates, the contractor needs to maintain focus on details of the multiple contract interfaces with CM006, CM007, CM014B and CQ033.

Contracts CH053/54A: The PMOC remains concerned that the CH053/CH054A Contracts continue to have delays, with a potential for additional construction delays and increased cost due to their high degree of dependence upon the railroads' Force Account support, which has been historically inconsistent. Although the contractor continues to progress its construction as rapidly as possible, important tasks have been postponed due to lack of Force Account

protection, especially during this past winter's inclement weather. The PMOC does note that ESA has reported that this situation, with regard to Amtrak has improved in April 2015 due, in part, to force account scheduling changes and priority setting. To minimize further schedule slippage, the PMOC recommends that the ESA PMT continue to work closely with the railroads' project teams to minimize down time and take maximum advantage of every track outage opportunity presented to them.

Contract CH057A: The PMOC remains concerned that the CH057A contractor is dependent upon the same railroad Force Account support resources as the CH053/CH054A contractor. This has been a major contributor to CH057A's early poor schedule performance. Insufficient Force Account resources cause daily priority conflicts among all three contracts which the ESA PMT must do a better job of managing if it intends to mitigate delays to all three. The PMOC recommends that, since CH053 and CH054A are nearing Substantial Completion, the ESA PMT temporarily place greater priority on their resource needs in order for them to achieve SC sooner. In that way, CH057A will be the sole ESA contract working in Harold until CH057 and CH061A begin construction. This will enable the CH057A contractor to recover a significant percentage of its lost schedule through prudent use of additional work shifts and/or track outages.

Project Funding: As stated in the Risk Management Section, the PMOC believes that the timing and availability of funding presents a significant schedule risk to the project. The timing of funding has impacted the CS179 package (restructured with options due to funding availability) and the CM007 procurement (moved out to the 4th Quarter of 2015 for full Award). The PMOC does note that MTACC is fully aware of this situation and the critical role that funding serves in the successful completion of the project. MTACC continues to work closely with the MTA finance group and keeps the FTA up to date on developments and issues. The PMOC has recommended to the ESA Project Controls Group that a funding needs projection be developed along with the cash flow projection to assess the risks to the project should funding not be available in the necessary time frame.

Project Budget: ESA did not adequately budget the CM014B package and has used significant cost contingency to cover the contract award amount. The PMOC remains concerned about the adequacy of remaining cost contingency to address major risks detailed in the Risk Management discussion below.

Project Schedule: The PMOC remains concerned about the CS179 contractor's ability to effectively manage his work since it required almost a year to develop a viable baseline schedule even with considerable support by the ESA project scheduling group. The CM006 Contract has experienced significant delays and although ESA has approved a recovery schedule from the Contractor, his performance to date has not met the revised production targets. Finalization of the baseline IPS continues to be delayed due to extend time incorporating the Harold schedule re-plan/re-sequencing effort that was completed in December 2014.

Risk Management: In the PMOC's opinion, funding availability continues to be a significant risk on the ESA project. Funding uncertainty has already resulted in: the PMT's delay of CM007 Contract award until 2015 due to budget constraints; and the restructuring of the CS179 Contract by splitting it into a base contract with seven options, based predominately on access restraints imposed by the CM006; CM007; and CM014B packages, which will significantly increase the interface risks. This segmentation of construction packages has resulted in multiple inter-contract interfaces and milestones. The probability of successfully achieving all of them is

low, in the PMOC's opinion, and leads to the possibility of a ripple effect of delays and coordination difficulties between contracts. There is very limited opportunity for the contractors to make up time lost to interface delays. Managing inter-contract handoffs and interfaces will be challenging and represent significant owner retained risks. Schedule risks will be exacerbated if funding is not in place to award the options in the CS179 Contract Package as planned. Access Restraints in the CS179 Contract are correlated to the options in the Contract; and the CS179 Contract will also have multiple interfaces to the CM007 Contract which has not yet been awarded. Given that this work is on the project critical path, delays in awarding the options will result in the use of Program schedule contingency.

The PMOC remains concerned about the coordination risk retained by MTACC on the completion of the work in Manhattan, especially with regard to the construction and testing interface management for the systems work. When combined with the extensive scoping re-configuration changes associated with the Harold Interlocking work, the PMOC believes that this may create significant changes to the overall project risk profile.

The PMOC considers the major risks to be: funding; contractor interface coordination in Manhattan; integrated systems testing duration; continued availability of adequate Amtrak and LIRR force account resources; and continued availability of required track outages in the Harold Interlocking. The PMOC notes that MTACC has actively engaged Amtrak to develop some specific mitigations and continues to work on strategies for mitigating many of the identified risks. But many external stakeholder issues with Amtrak and LIRR will remain beyond MTACC's direct control and will complicate problem resolution essential to completion of the project.

APPENDIX A -- ACRONYMS

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

IEC	Independent Engineering Consultant (to MTA)
IFB	Invitation for Bid
IPS	Integrated Project Schedule
IST	Integrated System Testing
LIRR	Long Island Rail Road
MNR	Metro-North Railroad
MTA	Metropolitan Transportation Authority
MTACC	Metropolitan Transportation Authority Capital Construction
N/A	Not Applicable
NTP	Notice-to-Proceed
NYAR	New York and Atlantic Railroad
NYCDEP	New York City Department of Environmental Protection
NYCDOB	New York City Department of Buildings
NYCT	New York City Transit
NYSPTSB	New York State Public Transportation Safety Board
OCO	Office of Construction Oversight (MTA)
PAC	Pneumatically Applied Concrete
PCO	Preliminary Change Order
PEP	Project Execution Plan
PMOC	Project Management Oversight Contractor (Urban Engineers)
PMP	Project Management Plan
PMT	ESA Project Management Team
PQM	Project Quality Manual
PWE	Project Working Estimate
QA	Quality Assurance
RAMP	Real Estate Acquisition Management Plan
RFP	Request for Proposal
RMCP	Risk Mitigation Capacity Plan
RMP	Risk Management Plan
ROD	Revenue Operations Date
ROW	Right of Way
RSD	Revenue Service Date

SC	Substantial Completion
SCC	Standard Cost Category
SIR	Supplemental Independent Reviewer
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
VoIP	Voice over Internet Protocol
WBS	Work Breakdown Structure
WBY	Westbound Bypass Tunnel
YSB	Yard Service Building

APPENDIX B – TABLES

Table 1: Summary of Critical Dates

	FFGA	Forecast (F) Completion, Actual (A) Start	
		Grantee*	PMOC**
Begin Construction	September 2001	September 2001(A)	September 2001(A)
Construction Complete	December 2013	December 2022 (F)	September 2023(F)**
Revenue Service	December 2013	December 2022 (F)	September 2023 (F)

* Source – Grantee forecast Revenue Operations Date per information presented to the MTA CPOC in June 2014.

**Source –Based on PMOC 2014 schedule trending analysis representing a medium degree of mitigation.

Table 2: Project Budget/ Cost Table

	FFGA			MTA's Current Baseline Budget CBB		Expenditures	
	(Millions)	(% of Grand Total Cost)	Obligated	(Millions)	(% of Grand Total Cost)	(Millions)	(% of CBB)
Grand Total Cost	\$7,386	100.00%	\$4,724	11,214.0	100.00%	6,152.2	54.9%
Financing Cost	\$1,036	14.00%	\$617	1,036.0	9.24%	617.6	59.6%
Total Project Cost	\$6,350*	86.00%	\$4,107	10,178.0	90.76%	5,534.6	54.4%
Federal Share	\$2,683	36.30%	\$1,148	2,699.0	24.07%	1,991.1	73.8%
5309 New Starts share	\$2,632	35.60%	\$1,098	2,436.6	21.73%	1,729.0	71.0%
Non New Starts grants	\$51	0.70%	\$50	67.0	0.60%	66.7	99.6%
ARRA	0	0.00%	0	195.4	1.74%	195.4	100.0%
Local Share	\$3,667	49.60%	\$2,959	7,479.0	66.69%	3,543.5	47.4%

Table 3: Project Budget and Invoices as of March 31, 2015

Elements	Baseline Total Budget (June 2014)	Current Baseline Budget (Mar 2015)	Actual Awards (Mar 2015)	Paid to Date (Mar 2015)	Actual % Budget Paid
Construction	\$7,379,296,706	\$7,454,398,776	\$5,399,733,485	\$3,971,459,936	53.28%
Soft Costs Subtotal	\$2,798,474,304	\$2,723,372,232	\$1,633,420,829	\$1,563,157,096	57.40%
Engineering	\$720,615,810	\$720,615,810	\$655,680,648	\$634,515,406	88.05%
OCIP	\$282,613,620	\$282,613,620	\$206,370,653	\$185,325,067	65.58%
Project Mgmt.	\$972,168,644	\$972,168,644	\$655,479,569	\$629,066,540	64.71%
Real Estate	\$182,076,230	\$182,076,230	\$115,889,959	\$114,250,083	62.75%
Rolling Stock	\$202,000,000	\$202,000,000	\$0	\$0	0.00%
Project subtotal w/o Financing & RI	\$10,177,771,010	\$10,177,771,008	\$7,033,154,314	\$5,534,617,032	54.38%
Regional Investment Subtotal	\$758,260,953	\$758,260,953	\$273,879,258	\$87,558,133	11.55%
Construction (RI)	\$611,214,337	\$611,214,337	\$214,464,157	\$51,720,775	8.46%
Design (RI)	24,595,433	24,595,433	\$24,595,433	\$15,976,887	64.96%
OCIP (RI)	\$16,939,198	\$16,939,198	\$16,939,198	\$16,939,198	100.00%
Project Mgmt. (RI)	\$24,181,291	\$24,181,291	\$17,880,470	\$2,921,273	12.08%
Real Estate (RI)	\$0	\$0	\$0	\$0	0.00%
Rolling Stock(RI)	\$50,000,000	\$50,000,000	\$0	\$0	0.00%
Project Subtotal W/O Financing	\$10,936,031,963	\$10,936,031,961	\$7,307,033,572	\$5,622,175,165	51.41%
Finance Charges	\$1,036,100,000	\$1,036,100,000	\$617,607,000	\$617,607,000	59.61%
Grand Total	\$11,972,131,963	\$11,972,131,961	\$7,924,640,572	\$6,239,782,165	52.12%

Table 4: Comparison of Standard Cost Categories: FFGA vs. CBB

Standard Cost Category (SCC) No.	FFGA SCC baseline (YOE \$) M	June, 2014 Re-Plan (YOE \$)	Feb 2015 SSC (YOE \$) M	Mar 2015 SSC (YOE \$) M	Mar 2015 % of Re-Plan	Jan '14 to Mar '15 Change \$M	CBB Variance from FFGA %
10	1,989	3,405	3,411	3,413	100.23%	0	71.59%
20	1,169	2,238	2,341	2,338	104.47%	87	100.00%
30	356	474	474	474	100.00%	0	33.15%
40	205	611	607	607	99.35%	-1	196.10%
50	619	606	574	577	95.21%	4	-6.79%
60	165	220	219	219	99.55%	0	32.73%
70	957	210	210	210	100.00%	0	-78.06%
80	1,184	1,975	1,975	1,975	100.00%	0	66.81%
█	█	█	█	█	█	█	█
Subtotal	6,813	10,178	10,178	10,178	100.00%	0	49.39%
100	1,036	1,036	1,036	1,036	100.00%	0	0.00%
Total Project Cost (10 – 100)	7,849	11,214*	11,214*	11,214*	100.00%	0	42.87%

*This total amount does not include Regional Investment amount of \$758,260,953.

** Sum of rounded values for current month is less than actual summed value

Reasons for Changes to SCC Codes:

SCC Code 10 - \$0.7 million increase to fund Harold Stage 2 procurement. \$1.3 million increase due to issue changes that affect contingency.

SCC Code 20 - \$1.6 million decrease due to the Ladder N scope deletion. \$1.4 million decrease due to issue changes that affect contingency.

SCC Code 50 - \$3.3 million increase to fund Harold Stage 2 procurement. \$0.3 million decrease due to issue changes that affect contingency.

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Table 5: ESA Planned Cash Flow Chart of 11/2014

a/o 3/31/15

aoQuarter/year	Construction S(000)	Engineering S(000)	OCIP S(000)	Project Mgmt. S(000)	Real Estate S(000)	Rolling Stock S(000)
Paid To Date	3,660,194,771	646,377,892	155,604,955	580,041,291	112,634,547	0
Remaining	3,719,144,273	74,237,918	127,008,665	392,127,353	69,441,683	202,000,000
3Q2014	209,340,620	-3,311,163	4,774,951	16,667,454	0	0
4Q2014	168,280,817	-3,290,689	4,774,951	16,667,454	75,948	0
1Q2015	134,568,200	-3,183,384	4,619,246	16,123,950	4,506,241	0
Remaining Planned	3,206,954,636	84,023,154	112,839,518	342,668,494	64,859,494	202,000,000
Remaining Actual	3,283,624,272	77,581,669	97,288,553	336,910,027	67,826,147	202,000,000
2Q2015	147,357,357	-3,290,689	4,774,951	16,667,454	4,658,137	0
3Q2015	169,688,509	-3,290,689	4,774,951	16,667,454	4,658,137	0
4Q2015	201,239,698	-3,290,689	4,774,951	16,667,454	4,658,137	0
1Q2016	193,275,933	-3,219,153	4,671,147	16,305,118	4,556,873	0
2Q2016	180,854,738	-3,290,689	4,774,951	16,667,454	4,658,137	8,666,545
3Q2016	181,988,455	-1,983,850	4,774,951	16,652,320	4,658,137	13,070,855
4Q2016	214,173,807	6,728,414	4,774,951	15,971,281	4,658,137	13,070,855
1Q2017	210,556,624	6,509,009	4,619,246	15,450,479	4,506,241	12,644,631
2Q2017	199,737,103	6,728,414	0	15,971,281	4,658,137	13,070,855
3Q2017	189,382,506	6,728,414	4,774,951	15,971,281	4,658,137	13,070,855
4Q2017	182,084,699	0	4,774,951	15,971,281	4,658,137	13,070,855
1Q2018	174,210,593	6,509,009	4,619,246	15,450,479	4,506,241	12,644,631
2Q2018	170,524,739	6,728,414	4,774,951	15,971,281	4,658,137	13,070,855
3Q2018	168,497,619	6,728,414	4,774,951	15,971,281	4,658,137	14,014,767
4Q2018	155,245,094	6,728,414	4,774,951	15,971,281	50,632	14,014,767
1Q2019	148,441,548	6,509,009	4,619,246	15,450,479	0	13,557,764
2Q2019	110,893,994	6,728,414	4,774,951	15,971,281	0	14,014,767
3Q2019	93,559,944	6,728,414	4,774,951	15,971,281	0	14,014,767
4Q2019	71,649,848	6,728,414	4,774,951	15,971,281	0	14,014,767
1Q2020	20,704,406	6,582,144	4,671,147	15,624,080	0	5,043,553
2Q2020	11,682,057	6,728,414	4,774,951	15,971,281	0	943,912
3Q2020	7,573,078	2,267,183	4,947,825	5,381,627	0	0
4Q2020	2,750,374	0	5,035,679	0	0	0
1Q2021	881,913	0	3,256,771	0	0	0
2Q2021	0	0	0	0	0	0
3Q2023	0	0	0	0	0	0
4Q2023	0	0	0	0	0	0
Subtotal	3,719,144,273	74,237,918	127,008,665	392,127,353	69,441,683	202,000,000

**Table 6- MTA ESA Project Summary by FTA Standardized Cost Categories
2014 Re-plan (\$ in Thousands)**

Standardized Cost Category	FFGA	May 2012 Re-Baseline	June 2014 Re-Plan	Awarded Value (1Q15)	Paid To Date (1Q15)
10- Guideway & Track Elements	\$1,513,998	\$2,943,165	\$3,405,463	\$2,697,250	\$1,925,509
20- Stations, Stops, Terminals, Intermodal	\$1,168,655	\$1,513,998	\$2,238,235	\$1,620,652	\$1,116,025
30- Support Facilities, Yards, Shops, Admin Buildings	\$356,264	\$384,583	\$474,177	\$209,748	\$201,718
40- Site Works and Special Conditions	\$205,105	\$491,341	\$610,570	\$421,929	\$415,976
50- Systems	\$619,343	\$698,296	\$605,592	\$404,496	\$269,361
60-ROW, Land, Existing Improvements	\$165,280	\$203,639	\$219,397	\$153,211	\$151,571
70- Vehicles	\$493,982	\$674,372	\$209,938	\$7,838	\$5,549
80- Professional Services	\$1,184,000	\$1,648,606	\$1,975,398	\$1,517,531	\$1,448,907
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Sub-Total	\$6,349,900	\$8,708,000	\$10,177,771	\$7,033,154	\$5,534,618
Estimated Financing Cost	\$1,036,100	\$1,116,000	\$1,036,000	\$617,607	\$617,607
Total	\$7,386,000	\$9,824,000	\$11,213,771	\$7,650,761	\$6,152,225

Table 7 – ESA Core Accountability Items

Project Status:		Original at FFGA	Current*	ELPEP **
Cost	Cost Estimate	\$7.368B	\$10.178B	\$8.119B
Schedule	RSD	December 31, 2013	December 2022	April 30, 2018
Total Project Percent Complete	Based on Invoiced Amount	55.7		
	Based on Earned Value	NA		
Major Issue	Status	Comments		
Major Procurements Delays	CM014B was advertised in May 2014; ESA did not make its recommendation to award forecast date of November 2014, and did not make its last forecast date of November 2014 for advertising CM007. CM007 was advertised in late December 2014, with proposals now due on June 2, 2015, and the CM014B Award and NTP were issued February 2, 2015. Award of CM007 is contingent upon funding availability.	PMOC remains concerned about the potential project schedule impacts of procurement delays on these two packages, CM014B and CM007, since they are on the critical and near critical paths for the project.		
Project Schedule	MTACC presented a new baseline schedule to the MTA CPOC in June 2014, with an RSD in December 2022. This schedule incorporates 22 months of Program level contingency. It should be noted that there have been significant changes in elements comprising the baseline schedule, including full re-sequencing of the Harold work and restructuring of the CM007 package.	CM006 has experienced significant delays and has yet to meet the approved recovery schedule production targets. The PMOC is also concerned about the ability of the CS179 Contractor to manage this key Contract that is complex and on the critical path based on the difficulties he had preparing the baseline schedule.		
Harold Re-planning	The Harold baseline schedule that formed the basis of the Program schedule presented to the CPOC in June 2014 is no longer valid. Based on current issues with slow progress and inadequate force account support, ESA completed a Harold schedule re-sequencing in December 2014, also known as “ESA First,” that advances work elements required for the new LIRR service to GCT and pushes back the FRA funded High Speed Rail Work beyond 2017.	Work on the Harold Interlocking is subject to influences outside of the control of ESA. The FRA and Amtrak need to accept the most recent Harold re-sequencing plan completed in December 2014. Should issues with the level of Amtrak force account support return, this could further delay the Harold Interlocking work.		

* Current Budget was approved by MTA CPOC in June 2014. ** 2010 Enterprise Level Project Execution Plan (ELPEP) reflecting medium level of risk mitigation, excluding financing cost of \$1,116 million. This is currently being re-evaluated.