

PMOC COMPREHENSIVE MONTHLY REPORT

Second Avenue Subway Phase 1(MTACC-SAS) Project
Metropolitan Transportation Authority
New York, New York

September 1 to September 30, 2011
Revision 2



PMOC Contract No. DTFT60-09-D-00007
Task Order No. 2, Project No. DC-27-5115, Work Order No. 02
OPs Referenced: OP20-OP26, OP33, OP34, OP37, OP40, OP41, OP53, OP54

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Length of time on project: 1 year

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THIRD PARTY DISCLAIMER

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

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

Therefore, the information in the monthly reports may change from month to month, based on relevant factors for the month and/or previous months.

REPORT FORMAT AND FOCUS

This monthly report is submitted in compliance with the terms of the Federal Transit Administration (FTA) Contract No. D1FT60-09-D-00007, Task Order No. 003. 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 MTACC (Capital Construction) Second Avenue Subway (SAS) Mega-Project managed by MTACC and MTA as the grantee and financed by the FTA FFGA.

MONITORING REPORT

EXECUTIVE SUMMARY

1. PROJECT DESCRIPTION

The Second Avenue Subway project will include a two-track line along Second Avenue from 125th Street to the Financial District in lower Manhattan. It will also include a connection from Second Avenue through the 63rd Street tunnel to existing tracks for service to West Midtown and Brooklyn. Sixteen new ADA accessible stations will be constructed. The Second Avenue Subway will reduce overcrowding and delays on the Lexington Avenue line, improving travel for both city and suburban commuters, and provide better access to mass transit for residents of the far East Side of Manhattan. Stations will have a combination of escalators, stairs, and, in compliance with the Americans with Disabilities Act, elevator connections from street-level to station mezzanine and from mezzanine to platforms.

Phase One of the project will include tunnels from 105th Street and Second Avenue to 63rd Street and Third Avenue, with new stations along Second Avenue at 96th, 86th and 72nd Streets and new entrances to the existing Lexington Ave./63rd Street Station at 63rd Street and Third Avenue.

2. CHANGES DURING 3rd Quarter 2011

a. Engineering/Design Progress

None

b. New Contract Procurements

Construction Contract C5B was awarded on August 4, 2011.

Proposals were received for Construction Contract C6 on July 28, 2011

c. Construction Progress

TBM mining was completed on September 22, 2011

Muck handling sheds at 69th and 72nd Street Station are operational and cavern excavation is proceeding. To date, production has exceeded forecasts.

d. Continuing and Unresolved Issues

Resolution of change order associated with the deletion of tunnel lining between 72nd and 86th Streets.

Local funding of the 2010 – 2014 MTA Capital Plan.

e. New Cost and Schedule Issues

Resolution of the cost and schedule impacts of blasting restrictions (no later than 7:00 PM) and excessive vibration at 72nd Street Station.

Development of the C5B baseline schedule and its incorporation into the IPS.

3 PROJECT STATUS SUMMARY AND PMOC ASSESSMENT

a. Grantee Technical Capacity and Capability

The SAS Project Management Team continues to be an integrated project organization utilizing personnel from MTACC, NYCT, PB Americas (Consultant Construction Management (CCM)) and DHA (Design Consultant). There are five primary functional groups: Design Services Management; Construction; Construction Support; Budget, Administration and Accounts; and Program Control. The project has set up a Management Control System such that it can continuously manage, monitor, and report the scope, budget, schedule and contingency levels of the project in order to ensure that the project progresses in accordance with the Enterprise Level Project Execution Plan (ELPEP).

b. Real Estate Acquisition

Real estate acquisition and tenant relocation was performed in accordance with the approved SAS Real Estate Acquisition Management Plan and Relocation Plan. These plans address Title 49 CFR Part 24, which implements the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended and FTA real estate requirements 5010.1C. Court date of October 25, 2011 is now confirmed for remaining easements acquisition (233 East 69th Street). Upon completion of this, all real estate needed for the Phase I SAS Project will be obtained.

c. Engineering/Design

The final design phase of the project was completed in late November 2010. Engineering support is now being directed toward the update of the station finish packages (C2B, C4C, and C5C) with as-built information from predecessor packages and updates or modifications involving utilities, MPT, etc.

d. Procurement

The procurement has been completed on 6 (C1, C2A, C3, C4B, C5A, and C5B), of the 10 construction packages for the SAS Project. Bids for construction package C6 (Systems) have been received. The ranking, negotiations and award of this contract is scheduled for December 8, 2011.

e. Railroad Force Account (Support and Construction)

While MTACC is heavily involved in construction activities, it does not have its own employees to support these activities. It relies on NYCT in-house labor for this purpose. The SAS Construction Support Services Force Account Plan details the services that will be provided by NYCT, including general orders, flagging, work trains, access and protection, inspections, and crowd control. As of September 30, 2011, force account expenditure has been \$ 806,763. With the award of the contract to modify the 63rd Street Station (C3) the force account expenditure is expected to increase in the near future.

f. Vehicles

No change in status this period. Additional vehicles required to support SAS Phase 1 will be provided as required by other means not directly associated with this program.

g. Systems Testing and Start-Up

The scope of work associated with systems testing and start-up is allocated to the Systems – Track, Power, Signals and Communications Contract C-26009 (C6). Comprehensive testing of the SAS will be based on a Facilities Systems Test Program (FSTP) which is documented in a four volume submittal; Volume 1 – Management Plan, Volume 2 – Interface Control Plan, Volume 3 – Test Procedures – Factory Acceptance Test (FAT), Field Installation Acceptance Test (FIAT), Simulated Integrated Systems Test (SIST), Volume 4 – Test Procedures – Final Systems Integrated Testing (FSIT). FSTP testing and startup functions shall be performed at various stages of Contract 6. For example, there will be standalone tests performed by the Stations and (C6) Systems Contractors, independent of each other, at the equipment level. There will be installation work to be performed by the Systems Contractor in both the stations and tunnels that is concurrent with work being performed by the Stations Contractor at both the equipment and the station level. There will be integrated tests in stations that will need to be coordinated between the Stations and Systems Contractors as part of the Station Construction Substantial Completion milestones at the Station Level. There will be integrated systems testing in stations that will be conducted post Station Construction Substantial Completion at the NYCT System wide level, both prior to and with Test Train Operations, during which time the stations may have on-going Contractor maintenance activities which may impede test scheduling or contract testing progress. All these Pre-Revenue Operations periods of testing require formal, advance scheduling and diligent, close coordination among the Contractor, the C-26009 Systems

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Contractor, and the Authority. The Contractor's Systems Integrator will serve as the liaison for coordination of interface testing with other third party testing managers and activities.

h. Project Schedule

Table 1: Summary of Critical Dates

	FFGA	Forecast Completion	
		Grantee	PMOC
Begin Construction	January 1, 2007	03/20/2007A	03/20/2007A
Construction Complete	December 31, 2013	October 25, 2016	
Revenue Service	June 30, 2014	December 30, 2016	February 2018

Comment [hp2]: Redact FOIA Exemption 5 U.S.C. § 552(b)(4)

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i. Project Budget/Cost

Table 2: Project Budget/Cost Table

	FFGA			FFGA Amend	MTA Current Working Budget (CWB)		Expenditures as of September 30, 2011	
	(\$ Millions)	% of Total	Obligated (\$ Million)		TBD	\$ Millions	% of Total	\$ Millions
Grand Total Cost:	4,866.614	100	4,137.911		5,489.614	100	1,393.775	25.39
Financing Cost	816.614	16.78			816.614	14.88		
Total Project Cost:	4,050.000	83.22	4,137.911		4,673.000	85.12	1,393.775	25.39
Total Federal:	1,350.693	27.75	*866.760		1,350.693	24.60	393.489	7.17
Total FTA share:	1,300.000	96.25	838.667		1,300.000	23.68	382.377	6.97
5309 New Starts share	1,300.000	100	838.667		1,300.000	23.68	382.377	6.97
Total FHWA share:	50.693	3.75	28.093		50.693	0.92	11.112	.20
CMAQ	48.233	95.15	25.633		48.233	0.88	8.652	.16
Special Highway Appropriation	2.460	4.85	2.460		2.460	0.04	2.460	.04
Total Local share:	2,699.307	55.47	**3,509.000		**3,509.000	63.92	1,000.286	18.22
State share	450.000	16.67	100.000		450.000	8.20		
Agency share	2,249.307	83.33	1,145.782		3,059.000	55.72		
City share	0	0			0	0		

* Obligated amounts obtained from the Transportation Electronic Award Management (TEAM) system and MTACC's Grant Management Department

** Current MTA Board approved budget

j. Project Risk

Completion of the TBM mining eliminates a significant element of geotech risk for the future.

Delays resulting from coordination of work between multiple prime contracts will be a major risk for the foreseeable future.

MONTHLY UPDATE

The information contained in the body of this report is limited, 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 SUMMARY

Status:

Throughout September 2011, MTACC has continued to work with the FTA to produce Management Plans and to demonstrate compliance with the Enterprise Level Project Execution Plan (ELPEP). As reported previously, the original schedule for accomplishment of portions of the ELPEP implementation has been delayed. However the many meetings and discussions that have been held have served as a catalyst for the incremental incorporation of many ELPEP concepts and processes by the respective ESA and SAS project teams. As the remaining elements of the ELPEP are finalized, this process is expected to continue.

The current status of each of the five (5) main ELPEP components is summarized as follows:

- *Technical Capacity and Capability (TCC) – The SAS PMP review by the PMOC is being supplemented and reformatted into the Candidate Revision -> PMP Revision -> Implementation and Resolution framework suggested by the FTA.*
- *Schedule & Schedule Contingency Management Plan – The PMOC has verified SAS substantial compliance with the SMP since August 2010. The process of transferring the verification process to the respective project teams has been generally discussed in several recent ELPEP meetings. Refer to "Conformance Demonstration" for additional information.*
- *Cost & Cost Contingency Management Plan (CMP) – Conditional approval of this plan was transmitted to the MTACC from the FTA on September 1, 2011. The MTACC is working to address the five (5) Candidate Revisions upon which final approval is conditioned.*
- *Risk Mitigation Capacity Plan (RMCP) – Final PMOC comments to this plan will be reviewed with MTACC at the October ELPEP Meeting.*
- *Conformance Demonstration-MTACC is responsible for demonstrating full compliance to ELPEP requirements. Preliminary discussions regarding the manner by which conformance will be documented have been held. MTACC has developed a "white paper" explaining its proposed means of conformance demonstration.*

Observation:

Although overall implementation of the ELPEP is somewhat behind schedule, the MTACC has begun implementation of schedule, cost and risk management plans. Both projects have updated their PMPs to support these management documents and processes. The PMOC has noted numerous instances where benefits conferred by these enhanced management tools have been realized.

Concerns and Recommendations:

Development of formal implementation verification and reporting process for each of these ELPEP elements should be given priority. The verification process will ensure that all benefits associated with the ELPEP are realized to the greatest extent possible. [REDACTED]

Comment [hp3]: Redact FOIA Exemption 5 U.S.C. § 552(b)(4)

1.0 GRANTEE'S CAPABILITIES AND APPROACH

1.1 Technical Capacity and Capability

1.1.1 Organization, Personnel Qualifications and Experience

Status:

During the 3rd quarter 2011, personnel changes were made to improve the effectiveness of the management team on the 72nd Street Station Cavern Mining contract C-26007 (CAB). MTACC's Construction Manager on the tunnel boring contract C-26002 (C1) was reassigned to contract C-26007 (CAB) and the Project Engineer on contract C-26002 (C1) was elevated to the position of Construction Manager. The SAS Quality Manager's position which had been vacant was filled and commitments were made to have four Quality Managers supporting the QA/QC efforts on the construction contracts.

Observation:

MTACC is effectively utilizing consultant staff to fill key positions on the project team. The project team acts as an integrated organization with virtually no distinction between the employee's actual employers. Better coordination of the efforts on the CAB contract is being provided by the reassigned Construction Manager.

Concerns and Recommendations:

The PMOC has no major concerns. The PMOC recommends that the SAS Project team continue to be proactive in making personnel changes when needed.

1.1.2 Grantee's Work Approach, Understanding, and Performance Ability

a) Adequacy of Project Management Plan and Project Controls

Status:

PMOC review of the updated SAS Project Management Plan (Revision 8) has been completed. The PMOC has continued to evaluate the specific issue that resulted in a Candidate Revision, whether the proposed PMP revision has been implemented and whether the original issue was ultimately satisfied.

Observation:

The PMOC will review its findings with the FTA and subsequently present findings and recommendations to the MTA.

Concerns and Recommendations:

Any concerns will be documented as comments and tracked for resolution prior to the PMOC's recommendation for the FTA's approval of the revised PMP.

b) Grantee's Approach to FFGA and other FTA/Federal Requirements

Status:

MTACC continues to utilize the ELPEP and its various sub-plans in management of the FFGA.

Observation:

Efforts are *still* underway to amend the FFGA because the baseline cost and schedule have been exceeded. No update this period.

Concerns and Recommendations:

See section 1.1.2 a

c) Grantee's Approach to Force Account Plan

Status:

The Force Account requirements are documented in the SAS Force Account Plan. The plan gives a description and a cost estimate of the NYCT services required for the design of the track and signal elements of the system and to support construction activities for each individual contract.

Observation:

The Force Account budget is being validated as part of the review of Revision 8 of the SAS Cost Estimate.

Concerns and Recommendations:

None

d) Grantee's Approach to Safety and Security Plan

Status:

MTACC's approach to Safety and Security is defined in Section 4 – Safety, Security and Health Programs of the SAS PMP.

Observation:

Section 4 of the PMP includes the required project Health and Safety Plan (HASP) that describes the responsibility and protocols to maintain a safe environment throughout the construction of the SAS Project. The requirements for the contractor's security program are delineated. The section also outlines the Project Safety and Security Management Plan (SSMP) as required by 49 CFR Part 659 which includes the Safety and Security Certification Plan (SSPC) and the Systems Safety and Reliability Assurance Program Plan (SSRA)

Concerns and Recommendations:

None

e) Grantee's Approach to Asset Management

Status:

Asset Management – Identification and control of project assets will be coordinated between the Systems --Track, Power, Signals and Communications Contractor (Contract 26009) and NYCT's Department of Subways. Development of the plan will start after the award of the contract currently forecasted for late November / early December 2011 based on Nov. 14, 2011 MTA Board approval.

Observation:

SAS Asset Management Plan must be integrated with NYCT's Property Management System.

Concerns and Recommendations:

None

D) Grantee's Approach to Community Relations

Status:

On September 24, 2011, 14th District Congresswoman Carolyn B. Maloney released her annual report card for the Second Avenue Subway. Two items on this report card are directly applicable to community relations, and provide some insight as to how this effort is perceived by its target audience.

<i>Item</i>	<i>2011</i>	<i>2010</i>
<i>Communications with the Public</i>	<i>B+</i>	<i>B+</i>
<i>Mitigation of Construction Impact</i>	<i>C-</i>	<i>C-</i>

Observation:

Specific observations relevant to the MTACC's approach to community relations contained in this report include:

Communication with the Public

- *In general, the MTA has been extremely accessible to local residents and elected officials, and willing to make data available. However, there have been many complaints this year about the MTA's failure to warn residents about blasting, failure to warn residents about utilities disruptions and failure to provide information about air-quality monitoring.*
- *The MTA continues to meet with local community groups and to provide periodic updates through Community Board 8's Second Avenue Subway Task Force (CB8 Task Force), the newly-created Second Avenue Subway Construction Advisory Committee (SAS CAC), its website and weekly e-mail updates.*
- *The MTA maintains an office in the community, staffed with individuals who are tasked with addressing local concerns immediately.*
- *The MTA has an excellent website that makes many pertinent documents publicly available.*
- *The MTA has tried to be responsive to community concerns, but it could improve its efforts at outreach.*

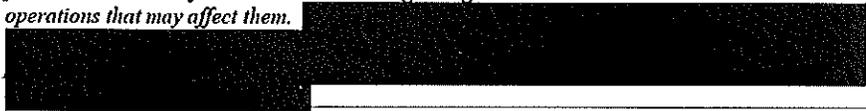
Mitigation of Construction Impact

- *Residents have complained about lack of warning about blasting, and about blasting and warning whistles that occur late at night. The MTA has promised to abide by a 7 pm blasting cut-off time.*
- *The MTA has been diligent in meeting with local businesses and they have hired people who genuinely appear to want to work with the community to address individual concerns. These employees have earned plaudits for their responsiveness.*

- Further, the MTA did a good job of minimizing the number of buildings that have been condemned for the subway and as a result residents of only 61 apartments had to move.
- Businesses have been significantly affected by the construction, losing sidewalk cafes, pedestrian traffic, and signage, experiencing narrowed sidewalks, constant construction noise, barricades and poor visibility.
- The MTA created a Shop Second Avenue campaign to try to drive customers to affected businesses, and has extended it to all areas where construction is impacting businesses.
- In addition, in 2011 the MTA began implementing its Model Block concept to try to make blocks within the construction zones more attractive and inviting for potential customers. Among the efforts is the installation of Urban Canvas artwork.
- Unfortunately, dozens of businesses have closed along the subway's construction zone despite these efforts.
- While the MTA's efforts to meet with and address the concerns of businesses and residents are welcome, the bottom line is that construction impacts remain a heavy burden for people who live, work or own businesses in the community.

Concerns and Recommendations

The PMOC is concerned about several of the comments in this report, which are not in complete alignment with the corresponding grade. In this report, MTACC is criticized about a failure to provide advance notifications to residents regarding construction and construction-related operations that may affect them.



Comment [hp 1]: Redact FOIA Exemption 5 U.S.C. § 552(b)(4)

The "C-" grade for mitigating construction impacts does not appear to be consistent with the generally positive comments within that section regarding MTACC's community outreach effort. A component of frustration over construction impacts, many of which may be unavoidable, is possibly reflected in this grade. The PMOC recognizes the many efforts that have been made to mitigate the impacts of construction on the surrounding community. The PMOC recommends that construction mitigation activities be reviewed by SAS senior project management on a regular basis for effectiveness.

1.1.3 Grantee's Understanding of Federal Requirements and Local Funding Process

a) Federal Requirements

Status:

MTACC continues to utilize the ELPEP and its various sub-plans in management of the FFGA.

Observation:

Efforts are still underway to amend the FFGA because the baseline cost and schedule have been exceeded. No update this period.

Concerns and Recommendations:

See section 1.1.2 a

b) Uniform Property Acquisition and Relocation Act of 1970

Real estate acquisition and tenant relocation is being performed in accordance with the approved SAS Real Estate Acquisition Management Plan and Relocation Plan. These plans address Title 49 CFR Part 24, which implements the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, and FTA real estate requirements 5010.1C.

c) Local Funding Agreements

MTA's approved 2000-2004 and 2005-2009 Capital Programs provided \$2,964 million for SAS Phase 1 (\$1,050 million and \$1,914 million respectively). The proposed 2010-2014 Capital Program budgets \$1,487 million to complete the SAS Phase 1 project. Of the \$1,487 million, \$545 million was approved for the 2010-2011 timeframe, MTA needs to approve \$942 million for the 2012-2014 timeframe.

1.2 Project Controls

1.2.1 Scope Definition and Control

Status:

The scope of the SAS Project is defined by the FEIS, ROD and the FFGA. The project scope will be delivered via ten (10) construction packages, with support from NYCT for rail systems installation and overall operating systems inspection and testing.

Observation:

The process of utilizing the Configuration Control Board (CCB), the change control process, the Technical Advisory Committee (TAC) and issuing Technical Memorandums has proven to be an effective means of controlling scope and managing the transfer of scope between construction packages. This process continues to be used to manage scope refinements and to adjust package scope to react to unanticipated field conditions.

Concerns and Recommendations:

Technical processes involving the modification or transfer of scope between construction packages are well-established and have been proven effective. Management processes involving the cost and schedule impacts of scope changes and transfers are less developed. *No additional concerns or recommendations were realized during the 3rd Quarter 2011.*

1.2.2 Quality

Status:

The Second Avenue Subway Quality Management team held monthly Quality Meetings and Quarterly Quality Oversight of the Contractor with CCM, MTACC and PMOC participation. They participated in the job progress meetings, monitored quality matters in the field for each construction contract, reviewed and provided comments for Quality Work Plans, and participated in Preparatory Phase Sessions for numerous construction processes.

Observations:

The QA/QC processes are well defined and are being implemented per the various quality plans. With the awarding of additional construction contracts, the quality staff will need to increase to assure adequate oversight.

Concerns and Recommendations:

PMOC recommends that MTACC/CCM expedite the hiring of additional Quality staff.

1.2.3 Project Schedule

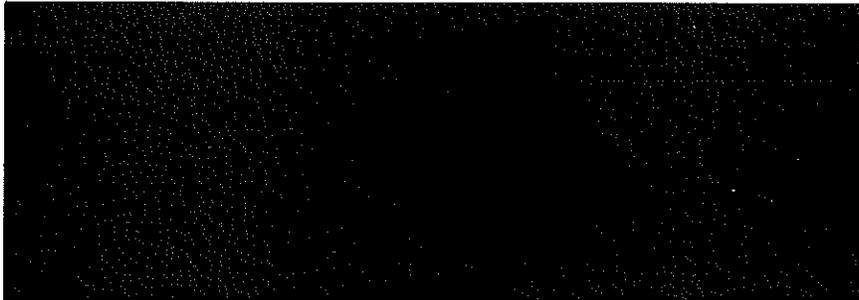
Status:

A summary of project schedule information is as follows:

	FFGA	Forecast Completion	
		Grantee	PMOC
Begin Construction	January 1, 2007	03/20/2007A	03/20/2007A
Construction Complete	December 31, 2013	October 25, 2016	[REDACTED]
Revenue Service	June 30, 2014	December 30, 2016	February 2018

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Observations:



Comment [hp6]: Redact FOIA Exemption 5 U.S.C. § 552(b)(4)

The SAS Integrated Project Schedule now incorporates the actual construction schedule for Contract C3 (63rd Street Station) and will shortly include the C5B (86th Street Station Cavern) construction schedule. The cutover from hypothetical design-phase schedules to the actual construction schedules substantially improves the reliability of schedule forecasts produced by the IPS.

Concerns and Recommendations:

The SAS Project Team continues to demonstrate its capability and intent to actively manage the project schedule and achieve the established schedule goals. No concerns this period.

1.2.4 Project Budget and Cost

Status:

Total project cost in the approved FFGA is \$4,866,614,000 and is allocated into the Standard Cost Categories (SCC) as shown below in Table 1-1.

Table 1-1: Standard Cost Categories

Standard Cost Category (SCC) #	Description	Year of Expenditure \$000
10	Guideway& Track Elements	612,404
20	Stations, Stops, Terminals, Intermodal	1,092,836
30	Support Facilities: Yards, Shops, Admin Bldgs.	0
40	Site Work & Special Conditions	276,229
50	Systems	322,707
60	ROW, Land, Existing Improvements	240,960
70	Vehicles	152,999
80	Professional Services	796,311
90	Unallocated Contingency	555,554
Subtotal		4,050,000
Financing Cost		816,614
Total Project		4,866,614

Table 1-2 lists the associated grants in the Transportation Electronic Award Management (TEAM) System with respective appropriated and obligated amounts as of September 30, 2011.

Table 1-2: Appropriated and Obligated Funds

Grant Number	Amount (\$)	Obligated (\$)	Disbursement (\$) thru September 30, 2011
NY-03-0397	\$4,980,026	\$4,980,026	\$4,980,026
NY-03-0408	\$1,967,165	\$1,967,165	\$1,967,165
NY-03-0408-01	\$1,968,358	\$1,968,358	\$1,968,358
NY-03-0408-02	\$24,502,500	\$24,502,500	\$24,502,500
NY-03-0408-03	0	0	0
NY-03-0408-04	0	0	0
NY-03-0408-05	\$167,810,300	\$167,810,300	\$167,810,300
NY-03-0408-06	\$274,920,030	\$274,920,030	\$102,138,322
NY-03-0408-07	\$237,849,000	\$237,849,000	0
NY-17-X001-00	\$2,459,821	\$2,459,821	\$2,459,821
NY-36-001-00*	\$78,870,000	\$78,870,000	\$78,870,000
NY-95-X009-00	\$25,633,000	\$25,633,000	\$8,652,432
NY-95-X015-00	\$45,800,000	\$45,800,000	0
Total	\$866,760,200.00	\$866,760,200.00	\$393,348,924.00

 Denotes American Recovery and Reinvestment Act (ARRA) funds

A total of \$1,393,775,010 has been expended on the project through September 30, 2011, of which \$417,571,163 has been spent on design and \$569,790,085 on construction (MTACC's September 2011 Cost and Schedule Summary Input).

Observation:

Local funds totaling \$1,000,426,086 (\$1,393,775,010 – \$393,348,924) have been spent as of September 30, 2011. MTA's approved 2000-2004 and 2005-2009 Capital Programs provided \$2,964 million for SAS Phase 1 (\$1,050 million and \$1,914 million respectively). The proposed 2010-2014 Capital Program budgets \$1,487 million to complete the SAS Phase 1 project. Of the \$1,487 million, \$545 million was approved for the 2010-2011 timeframe. MTA needs to approve \$942 million for the 2012-2014 timeframe.

Concerns and Recommendations:

Availability of local funding has been identified as a major concern. Current funding supports the award of construction contract C6, but local funding of the current Capital Program is required to ensure award of subsequent contracts.

1.2.5 Project Risk Monitoring and Mitigation

Status:

Risk monitoring and mitigation is ongoing and being performed per the SAS Risk Management Program, which is documented in Section 6.0 of the PMP. *During the 3rd Quarter 2011, Risk Mitigation Meetings numbers 9 and 10 were held on August 2, 2011 and September 15, 2011 respectively. The risks addressed at the meeting were based on the set of risks identified in the risk analysis as those with the most impact to cost and schedule. The following risks were discussed:*

- *Risk CNS 4 (C6): Problems related to managing contractor during construction.*
- *Risk 89 (C5B): Different site conditions during cavern mining lead to lost productivity and contractor delay resulting in claims.*
- *PB50 (C5C): Delay in approving necessary AWO's may result in schedule delay and contractor claim for associated delay.*
- *Risk TRP 4 (C6): Systems Integration Testing Problems (Traction Power SCADA).*
- *Risk CNS 8 (C6): Delayed safety certification.*
- *Risk 90 (C4B): Settlement of Lot Line window lawsuit (233 E 69th Street) results in cost and schedule delay.*
- *Risk 147 (C4B): Vibration from mining operation.*

From the discussions action items have been assigned and the responsible individual identified to complete the action.

Observation:

SAS Project Management is being proactive in its efforts to monitor and mitigate risk. From the initial Risk Mitigation and through all subsequent meetings held to date, the Project has been

focusing on those risks that DHA indicated in its December 2009 Risk Analysis Report as the risks that contribute the most to the contingency requirements.

Concerns and Recommendations:

None

1.2.6 Project Safety and Security

Status:

Safety --The Lost Time Accident Rate and OSHA Recordable Accident Rate from the start of construction until August 31, 2011 are 2.07 and 4.70, respectively. The Lost Time Accident rate is below the national average of 2.2 and the OSHA Recordable Accident rate is above the national average of 4.2. The cumulative construction time worked since the project inception is 2,511,412 hours. Cumulative lost time injuries since project inception is 26 and the cumulative recordable injuries are 33.

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Security -- During the 3rd Quarter 2011 several contractors reported the theft of various materials. Details of theft are being tabulated and will be used to request additional police presence in the neighborhood.

Observation:

The Tunnel Boring Contractor (C1) Contract 26002 has the highest number of lost time injuries (13) and recordable injuries (25) on the project. The contractor also has the highest amount of construction hours (1,659,344) worked on the project. The tunnel boring operation lends its self to greater risk of injury. With the completion of the tunnel boring operation a deduction in the injuries is anticipated. The MTACC has expanded its safety program to include a monthly walk-thru of the various work zones by the SAS Project Management team. Safety concerns identified by CCM safety personnel and the OCIP representative are quickly addressed by the contractors. When an incident occurs, root cause analysis is performed to assure that the actual cause has been identified and positive corrective actions implemented to prevent recurrence.

Concerns and Recommendations:

None

1.3 FTA Compliance Documents

Status:

No change this period.

1.3.1 Readiness to Enter PE

Status:

Preliminary Engineering (PE) began in December 2001.

1.3.2 Readiness to Enter Final Design

Status:

Final Design began in April 2006.

1.3.3 Record of Decision

Status:

The Record of Decision (ROD) was dated July 8, 2004.

1.3.4 Readiness to Execute FFGA

Status:

The Full Funding Grant Agreement (FFGA) was dated November 19, 2007.

1.3.5 Readiness to Bid Construction Work

Status:

Readiness to Bid Reviews have been "on hold" in accordance with direction received from FTA Region II. It is anticipated these reviews will restart during Q4 2011.

Observations:

None this period.

Concerns and Recommendations:

None this period.

1.3.6 Readiness for Revenue Operations

Status:

No change this period.

Observation:

None

Concerns:

None

2.0 PROJECT SCOPE

2.1 Status & Quality: Design/Procurement/Construction

2.1.1 Engineering and Design

Status:

The design phase of SAS Phase 1 was completed in late November 2010.

Observation:

The primary role of the design team currently includes:

- *Construction Administration, generally including shop drawing review, responding to RFIs, providing design clarifications where needed and technical support during construction package bidding.*
- *Geotechnical mapping and support. Due to the nature of the work, geotechnical engineers from the design team are on site to provide an evaluation of actual subsurface conditions encountered and any consequential design modifications.*

- Updating of station finish packages (C2B, C4C, C5C) with "as-built" information from predecessor packages and updates or modifications involving utilities, MPT, etc.
- Detailing and documentation of design changes as may be required.

Concerns and Recommendations:

Engineering support of the project has remained adequate to support the ongoing construction effort and execute isolated design enhancements or modifications.

2.1.2 Procurement

Status:

Updated procurement status includes:

- C-26009 (C6): Transit & Rail Systems – Proposals were received on 07/28/11. Award of contract has been delayed to 12/08/11.
- C-26010 (C2B): 96th Street Station Concrete, MEP & Finishes: This package is scheduled to be advertised for bidding on 11/04/11.

No other construction packages will be advertised for bid until mid-2012.

Table 2-1: Construction Procurement

Activity #	Description	Date*	Comment
Contract C-26009 (C6): Systems			
SYPR 25t	Issue RFP (Step 2)	03/07/11A	RFP Documents were made available to teams whose qualifications were deemed acceptable in Step 1.
SYPR30d	Submit Proposals	07/28/11A	Proposals were received.
SYPR40	Award Contract	12/08/11	Award of contract delayed.
Contract C-26010 (C2B): 96th Street Station Concrete, MEP & Finishes			
25a	Advertise for Bids	11/04/11	
25d	Bid Opening	01/26/12	
PR40	Award Contract	04/23/12	

* Note: All dates reference IPS Update #62 (Data Date as of 09/01/11) U.N.O.

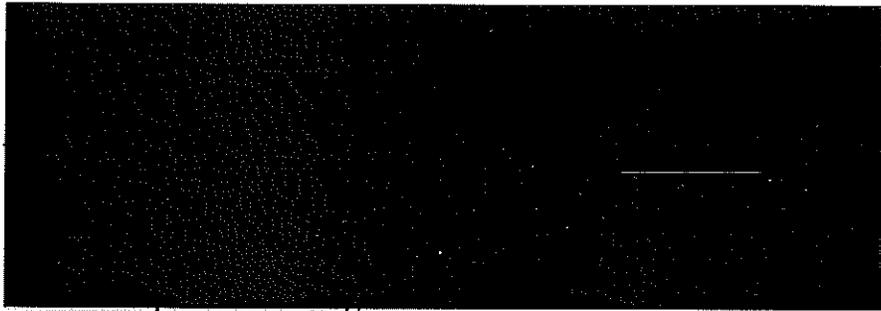
Observations and Analysis:





- *Contract C-26010 (C2B): MTACC has committed to bidding this project in accordance with the current IPS. The project will be awarded subject to available funding.*

Comment [hp7]: Redact FOIA Exemption 5 U S C § 552(b)(3)



Comment [hp8]: Redact FOIA Exemption 5 U S C § 552(b)(4)

2.1.3 Construction

Status:

There are six (6) active construction contracts on the SAS project. Construction progress on these contracts through September 2011 includes:

Contract C-26002(C1) –TBM tunnels from 92nd Street to 63rd Street

- Mining of the East tunnel (7,789 feet) was completed on September 22, 2011 with breakthrough at the 63rd Street Station.
- Disassembly and removal of the TBM from the East tunnel is in progress.
- DBS repair work ongoing
- Surface preparation, waterproofing, and concrete invert placement was completed in the West tunnel.

Contract C-26005 (C2A) 96th Street Station Heavy Civil, Structural and Utility Relocation

- Slurry wall panel rebar cage fabrication and inspection is on-going. Work zone is on the southwest corner of 99th Street and 2nd Avenue.
- Ongoing Slurry Wall Construction (Westside) Status as of 9/28/11
 - Panels completed: 24
 - Panels in progress: 8
 Installation of all 51 panels is anticipated to be completed on 11/14/11 ahead of the 11/30/11 schedule completion.
- Façade repairs at 1873 2nd Avenue are ongoing.
- Installation of the 60" sewer bypass through slurry panel W4 in progress.

- Entrance 1 (ongoing work includes: breakout of ECS ductbank; relocation of 42" sewer and gas main; watermain relocation; re-rout of steam and fire sprinkler lines; structural demolition for jet grout and mini pile work)
- Entrance 2 (ongoing work includes: cellar door relocation at 1814 2nd Ave.; pre-excavate for utility removal and gas relocation; excavation and relocation of 18inch sewer across 94th St.)
- Ancillary 1 (ongoing work includes: Phase II stabilization of building 1802; begin structural slab/grade beam construction; helical pile removal; transformer installation by Con Ed; gas main relocation)

Contract C-26006 – (C3) 63rd Street Station Upgrade

- *The focus continued to be in the plaza at 63rd St. and 3rd Ave. The MPT is continually adjusted to reflect the ongoing work.*
- *Completed excavation in the plaza for the new elevator shaft.*
- *Completed demolition of the West Fan Plant Room and began demolition of the East Fan Chiller Room.*
- *Demolition of the existing Area 5 roof was completed and the contractor began preparations for the Gantry Crane.*
- *Temporary utility work in the Plaza was completed.*
- *Demolition continued at the upper and lower platforms.*
- *Crack repair continued at the upper platform/ 1st Mezzanine.*
- *The TBM Breakthrough Ceremony took place September 22, 2011 at the lower G4 track.*
- *On September 27, 2011 the contractor gave a comprehensive structural steel presentation to the MTACC Program Executive, Program Manager, Construction Manager, NYCT the architects and engineers, staff and the PMOC. The purpose of the presentation was to review in detail the contractor's planned means and methods for steel erection in Area 5 and Ancillary #1.*

Contract C-26007 (C4B) 72nd Street Station Mining and Lining

- Current Rock Excavation Locations:
 - Main Station Cavern between 69th and 72nd St. –center drift excavation completed. West slash in progress.
 - G3/SI Cavern II and I –Excavation between 65th and 66th St. on West side of 2nd Avenue is in progress.
 - Ancillary II Service/Egress/Vent Tunnels –Excavation between 72nd and 73rd St. is in progress.
 - Total rock excavated approximately 49,333 CY of the total 170,507 CY (29%)
- Mapping, shotcrete, rock bolts ongoing
- Ancillary 1 and 2 demolition –lead abatement in progress. Removal of oil tank and fire escapes in progress

- Building remediation –ongoing (257 E 71st St., 242 E 71st St., 1343 2nd Ave, 259 E 71st St., 1390 ½ 2nd Ave, 220 E 65th St.)
- Muck Enclosure (72nd St. Shaft) –Fully operational
- Muck Enclosure (69th St. Shaft) –Fully operational

Contract C-26013 (C5A) 86th Street Station Excavation, Utility Relocation and Road Decking

- Con Edison activities
 - Completed the removal of the three live secondary cables on the west side of the North shaft.
- South Area-JDSI continued
 - Completed rock trimming
 - Excavation for catch basin on 83rd St. west of 2nd Ave is ongoing
 - Installed utility hangers for 12 inch gas main across the South shaft.
 - Continued installation and testing of rock dowels.
 - Completed deck framing with the exception of Deck Beam #8 and its cross braces.
- North Area
 - Completed blasting in the North shaft.
 - Started rock trimming
 - Completed the sewer service tie-in for 205 E. 87th Street and removed temporary MPT setup.

Contract C-26008 (C5B): 86th Street Station Cavern & Heavy Civil

- *The 5B contractor continued to mobilize during September 2011 and coordinate their initial work efforts with the 5A contractor.*
- *C5B work inside C5A hard barrier work zones. 5B began the surveying and layout for the 3' x 4' test pits both inside and outside the work zones. These will be along the 84th St. /85th St. blocks and the 85th St. /86th St. blocks.*
- *Coordination of DOT Permits. The 5A contractor is scheduled to complete stepping down from the project on October 15, 2011. The 5B contractor began piggybacking behind 5A during the lane closures along the southbound lane of 2nd Ave. as 5A completed gas line work.*
- *5B will need a separate DOT permit to remove the 5A barriers and install their chain link fence at the 2 block areas between 84th and 86th Streets.*
- *The CCM had a meeting with DOT on September 14, 2011. DOT will put stipulations on the existing permits allowing 5A/5B co-work and turnover of the existing permits.*
- *Site Turnover. MPT– The 5B contractor is inheriting some of the 5A contractor's MPT Plan. The CCM conducted a walkthrough of the work zones to determine what stays or goes and will give 5B the final in-place configuration.*
- *The 5A contractor will have to be completely finished with a block before they turn over that section permit to 5B.*

Observations:

Key elements of work or issues requiring resolution in the near future to avoid delays to the work are described below.

For Contract C1:

- *Remediation plan to rectify defect on invert concrete in the area south of the pump room.*
- *Raveling rocks around 69th and 72nd Street shaft blasting area.*
- *Waterproofing membrane placement progress.*
- *Backfill grouting plan in the overbreak in the arch cast in place liner.*
- *Remediation/surface preparation plan for ground freeze interliner.*
- *S3TC submission of Composite TIA that includes AWO #103 (Ground Freezing), AWO #92 (TBM Extension), AWO #114 (Mining through freeze zone), and AWO #112 (CIP Lining Deletion).*
- *S3 submission of Recovery Schedule.*

For Contract C2A:

- *Additional building remediation work at 1802 2nd Avenue (Milestone 2 impact).*

For Contract C3:

- *The contractor's presentation of its proposed means and methods for steel erection was detailed and comprehensive. The contractor is submitting steel shop drawings incrementally starting with the lower floors up. Maintaining the steel fabrication schedule for timely steel erection is critical to maintaining the overall project schedule.*

For Contract C4B:

- *Execution of Option 1.*
- *The restriction of no blasting after 7:00 pm (cost impact).*

For Contract C5A:

- *Sewer service tie-in to existing sewer main at 250 East 87th Street on 86th Street. Work on hold pending DEP approval of the tie-in.*
- *Availability of Con Edison crews to complete electrical services (North and South areas).*
- *Excavation for catch basin on 83rd Street west of 2nd Avenue.*
- *Resolution of AWOs 27, 59, and 77 (impact cost)*

For Contract C5B:

- *This contract continued in mobilization phase through September 2011. The initial project meetings are transition coordination meetings between the 5A & 5B contractors. The PMOC has observed that these meetings are proving to be an effective vehicle for smooth transition of site permits and overlapping activities of the 5A contractor's step down operations and the 5B contractor's ramping up operations.*

Concerns and Recommendations:

The SAS Project Team continues to address construction problems and prioritize those issues which have the potential to delay the project. No concerns this period.

2.1.4 Force Account (FA) Contracts

Status:

During the 3rd Quarter 2011 the total force account expenditures increased to \$806,763. The increase of \$462,609 is primarily associated with work at the 63rd Street Station (Contract C3) which requires general orders and work train support.

Observation:

Force account expenditure is expecting to increase as additional general orders, work trains, and flagging support is required.

Concerns and Recommendation:

None

2.1.5 Operational Readiness

Status:

NYCT has developed a Concept of Operations Plan for the SAS Project. Operational Readiness will be validated during NYCT's Pre-Revenue Service testing scheduled from March 21, 2016 to June 15, 2016. No update this period.

Observation:

The specific tests with its associated durations that NYCT will perform during Pre-Revenue Service testing are not identified on the IPS.

Concerns and Recommendation:

None

2.2 Third-Party Agreement

Status:

No change this period.

Observation:

None

Concerns and Recommendation:

None

2.3 Contract Packages and Delivery Methods

Status:

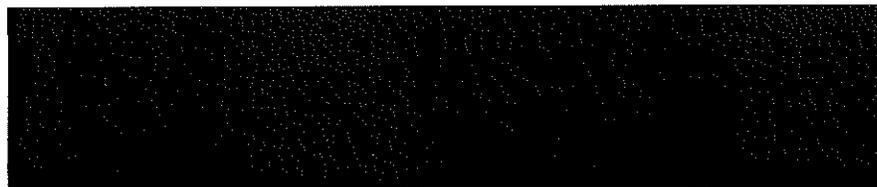
Phase 1 of the Second Avenue Subway is being delivered via ten separate construction packages. Each construction contract package utilizes the design-bid-build process based upon a fixed

price construction contract. Competitive procurements are based on NYCT standard procedures.

Procurement of general construction packages has been primarily based on the IFB (lump-sum bid) process. Due to the technical complexity of the Systems Package (C6), the RFP process was judged to be the best procurement alternative. There was no change to the procurement or delivery method for any of the construction packages during the third Quarter of 2011. Specific procurement procedures for each open construction contract package and its current status are shown in the following table.

Table 2-1 Construction Procurement Method and Status

Pkg.	Contract	Description	Procurement	
			Type	Status
C2B	C-26010	96th Street Station: construction of the entrances and ancillary facilities, architectural finishes and MEP equipment.	IFB	Design Completed
C4C	C-26011	72nd Street Station: construction of ancillary finishes, station finishes and MEP equipment.	IFB	Design Completed
C5B	C-26008	86th Street Station: construction of the station cavern, entrances and access shafts.	IFB	Awarded
C5C	C-26012	86th Street Station: construction of the ancillary facilities, station finishes and MEP equipment.	IFB	Design Completed
C6	C-26009	Power, Signals and Communications; includes the installation of track, 3 rd Rail traction power, way-side signals, and all communication components, integration of the communication network with the NEP SCADA system and commissioning the system for revenue service.	RFP	Proposal evaluation in progress



Comment [hp9]: Redact FOIA Exemption 5 U.S.C. § 552(b)(4)

Concerns and Recommendations:

PMOC recommends the SAS Project Team consider creating additional schedule contingency for the station finish packages (C2B, C4C and C5C). While this allocation of float is contrary to the current IPS management philosophy, it would assist in preventing future procurement impacts to the project schedule. This can be implemented in several ways:

- Establish the award date as an interim milestone date and increase the duration of the procurement period through embedding a dummy activity or lag within the procurement chain of activities.
- Force the start of the procurement process prior to the date currently shown in the IPS.

Either approach should have the effect of starting the procurement process earlier and provide a schedule contingency against the seemingly inevitable delays.

2.4 Vehicles

Status:

No change in status this period. Additional vehicles required to support SAS Phase I will be provided as required by other means not directly associated with this program.

Observations:

None.

Concerns and Recommendations:

None

Comment [hp10]: Redact FOIA Exemption 5
USC § 552(b)(4)

2.5 Property Acquisition and Real Estate

Status:

Real estate acquisition and tenant relocation was performed in accordance with the approved SAS Real Estate Acquisition Management Plan and Relocation Plan. These plans address Title 49 CFR Part 24, which implements the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended and FTA real estate requirements 5010.1C. Court date of October 25, 2011 is now confirmed for remaining easements acquisition (233 East 69th Street). Upon completion of this, all real estate needed for the Phase I SAS Project will be obtained.

SAS Real Estate Acquisition Summary

September 2011

# of Parcels Identified	# Parcels Closed	# Parcels Under Contract	# Parcels In Negotiation	# Parcels In Appraisal	# Parcels In Condemnation	# Parcels Right of Occupancy
95	94	0	1	0	94	88

Observation:

1. The Temporary Residential Relocation associated with 1802 2nd Avenue will be extended until end of November 2011 due to unforeseen construction issues. Currently, the C2A contractor is installing the micropile foundations in the basement. Construction of the grade beam, new basement columns, and basement floor will start shortly thereafter and is scheduled to be completed by the end of October. Once this work is finished, the basement will be available to owners' contractor for installation of the oil burner and water heater beginning in the first or second week of November. The C2A contractor will still be working in the building at this time, removing temporary supports and finishing the façade work, but this will be primarily in the upper floors and rear façade.

2. *The Temporary Commercial Shutdown associated with 301 East 69th Street is awaiting a finalized access agreement and "OK" from MacArthur Properties before 3 retail tenants are contacted. The shutdown is also contingent on approval of utility relocation (cost to cure) from MacArthur and 301 E 69th St residential condo units. Progress has been minimal due to 301 E 69th Street's lack of cooperation. MTACC has a new general counsel who will attempt to get this issue moving.*

3. *Remaining property acquisition:*

233 E 69th St -- court date set for October 25, 2011.

Remaining tenant relocation:

Pookie and Sebastian -- 200 East 63rd Street -- stipulation signed to vacate on January 10, 2012 (vacate date has been coordinated with and approved by project).

4.



Comment [b(1)]: Redact FOIA Exemption 5
U.S.C. § 552(b)(5)

Concerns and Recommendations:

Real estate and right of occupancy acquisition has not affected construction to date and is currently not forecast to do so. PMOC will monitor cost and schedule impacts and interfaces. Review and evaluate cost to complete of all real estate activities during the 3rd Quarter 2011. File audit and OP23 review recommended by end of 2011.

2.6 Community Relations

Status:

During the 3rd Quarter of 2011, MTACC continued community information and outreach efforts which included:

- *Periodic meetings and information sharing sessions with Community Board 8 and the Second Avenue Subway Construction Advisory Committee.*
- *Staffing and maintaining a community office that responds to community concerns.*
- *The "Shop Second Avenue" campaign.*
- *Development of the "Model Block" concept.*

Observation:

Construction complaints have increased in both number and significance over the past several months. It should be noted that construction activity is increasing, particularly the types of activity that are objectionable to the surrounding community.



Comment [b(1)]: Redact FOIA Exemption 5
U.S.C. § 552(b)(4)

Concerns and Recommendations:

The PMOC recommends that MTACC provide additional emphasis on communication construction plans for the short and intermediate terms to the local community. Identification and communication of future events will reduce concerns over the "unknown" and facilitate timely identification of necessary mitigation actions.

3.0 PROJECT MANAGEMENT PLAN AND SUB-PLANS

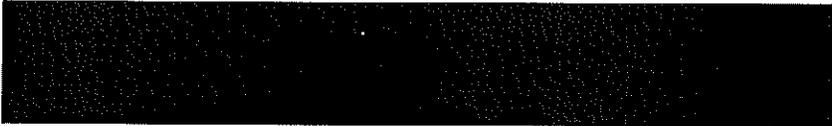
3.1 Project Management Plan

Status:

The PMOC has completed its review of the Revision 8 submission of the draft SAS PMP (dated January 2011). The PMOC will present the results of its review to the FTA. Upon FTA's concurrence with the PMOC's findings and recommendations, the results will be transmitted to the MTACC SAS Project Team.

Observations:

In general Revision 8 of the SAS PMP was updated in accordance with the "PMP Update" process defined in the ELPEP. Candidate Revisions were issued and approved by the Technical Advisory Committee for all "Material Decisions", i.e., project decisions that affect scope, cost, schedule or funding.



Comment [hp13]: Redact FOIA Exemption 5
U.S.C. § 552(b)(4)

3.2 PMP Sub Plan

Status:

As part of the PMP review, the referenced Sub-Plans have been reviewed to confirm their conformance and consistency with the PMP.

Observations:

SAS Sub-Plan documents consist of: Project Quality Manual, Quality Assurance Plan, Risk Management Plan, Design Criteria Manual, Cost Management Plan, Schedule Management Plan, Project Design Quality Manual, Real Estate Acquisition Plan, Real Estate Acquisition Management Plan, Contingency Management Plan, and Quality Implementation Procedure.

Concerns and Recommendations:

None



Comment [hp14]: Redact FOIA Exemption 5
U.S.C. § 552(b)(4)

3.3 Project Procedures

Status:

The MTACC released one additional procedure during September 2011. The total number of revised procedures is now 73 of a potential 75. In March 2011, the MTACC informed the PMOC that the development of the remaining procedures might take longer than originally anticipated because they would require additional internal MTACC review.

Observations:

The MTACC is behind schedule in developing the revised project procedures. To date, it has adopted a total of 73 revised procedures of 75, but it had originally committed to have all the revised procedures adopted by April 12, 2010, which it failed to do. These procedures, in many cases, replace the procedures that are currently referenced in the PMP.

Concerns and Recommendations:

The PMOC remains concerned about the length of time it has taken to produce the revised procedures, now more than two years behind schedule. The PMOC is also concerned that two of the remaining procedures, AD.13 – Financial Reporting and AD.15 – Program Change Control, are, in the PMOC’s opinion, critical to the management of the program. Therefore, the PMOC continues to recommend that the MTACC focus on completing and issuing the remaining procedures [REDACTED]

Comment [hp15]: Redact FOIA Exemption 5 U S C § 552(b)(4)

4.0 PROJECT SCHEDULE STATUS

4.1 Integrated Project Schedule

Status:

The IPS is a management level schedule that integrates all ten construction packages along with design, procurement, startup and other support activities. *IPS Update #62 was received on October 5, 2011 and is based on a Data Date of September 01, 2011.* Update #62 contained a narrative report, a schedule variance report, a schedule revision log and “PDF” versions of several schedule reports. [REDACTED]

Comment [hp16]: Redact FOIA Exemption 5 U S C § 552(b)(4)

Table 4-1: Summary of Schedule Dates

	FFGA	Forecast Completion	
		Grantee	PMOC
Begin Construction	January 1, 2007	03/20/2007A	03/20/2007A
Construction Complete	December 31, 2013	October 25, 2016	[REDACTED]
Revenue Service	June 30, 2014	December 30, 2016	February 2018

Comment [hp17]: Redact FOIA Exemption 5 U S C § 552(b)(4)
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During the month of September 2011, progress continued on five (5) active construction packages:

- C-26002 (C1) TBM Tunneling and 96th Street Box,
- C-26005 (C2A) 96th Site Work and Heavy Civil,
- C-20006 (C3) 63rd Street Station Rehabilitation
- C-26013 (C5A) Open Cuts and Utility Relocation, and
- C-26007 (C4B) 72nd Street Station Cavern Mining & Lining.

Contract C-26008 (C5B) 86th Street Station Cavern Mining & Lining was awarded on August 4, 2011 and the contractor is actively mobilizing and preparing to commence work. No major additions, deletions or significant changes were made to the schedule during the latest update

period. Changes were limited to routine updating to reflect the current status of the ongoing activities. The schedule status of individual construction contracts is illustrated in the table below.

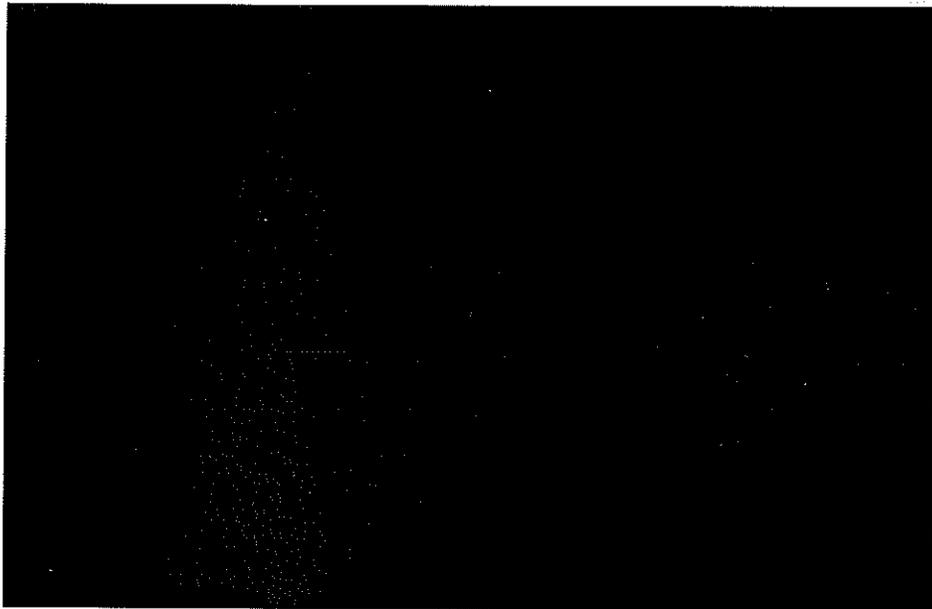


Comment [hp18]: Redact FOIA Exemption 5
U.S.C. § 552(b)(4)

Observations and Analysis:

At the request of the FTA, the PMOC has initiated quarterly tracking of major schedule activities and/or "milestones" that are in progress during that quarter as a means of reviewing and evaluating the project's ability to achieve short-term schedule goals. Due to the one-month lag in reporting schedule update progress, the 3rd Qtr. 2011 baseline and intermediate results are published in this report and shown in the following table.

Comment [hp19]: Redact FOIA Exemption 5
U.S.C. § 552(b)(5)



Concerns and Recommendations:

Based upon QTR #3, 2011, schedule progress to date:

- *Reported delays to Contract CAB continue, however excavation production has exceeded forecast rates. The CAB Critical path to S/C is through mining of the G3/G4 cavern areas where limited progress has occurred. Demolition at Ancillary #2 is controlling this path. Delayed start of demo due to subcontracting problems has been a contractor issue. Although this delay is a contractor responsibility, it must be overcome before recovery of the time becomes unachievable.*
- *Development of the CSB baseline schedule and reconciliation of the milestones restraining the start of cavern excavation must be given a high priority in order to provide an accurate IPS forecast.*

4.2 90-Day Look-Ahead

Status:

Based on the Integrated Project Schedule (IPS) Update#62 (DD=09/01/11), major activities that can be anticipated to either start or complete over the upcoming 90 days include the following:

Table 4-4: 90-Day Look-Ahead Schedule

Activity ID	Start	Finish
C1- TBM Construction -- Tunnel 96th Box (91st to 95th)		
<i>TBM 2nd Run - Backout TBM/Trailing Gear</i>		10/18/11
<i>West Tunnel Concrete Liner</i>	06/27/11A	12/22/11
C2A - 96th Street Station Sitework & Heavy Civil		
<i>Stage 4 Slurry Walls 95th -> 97th Streets; West</i>	07/21/11A	11/30/11
<i>Stage 4 Slurry Panels @ Ent. #3</i>	07/19/11A	11/08/11
C2B - 96th Street Station Concrete, Finishes & Utilities		
[REDACTED]		
C3 - 63rd Street Station Rehab		
<i>Instrumentation & Baseline Readings</i>		09/15/11
<i>Begin Procure/Fab Elevators</i>	11/15/11	
<i>MEP Rough-In; Upper Platform & Track T1</i>	11/12/11	
C4B - 72nd Street Station Mining & Lining		
<i>NOA+12MO; Option to Construct Ancillary #1</i>		10/14/11
<i>Excavate Top Heading; Area 3</i>	05/04/11A	10/21/11
<i>G3/S1 Cavern Excavate.</i>	09/08/11	10/04/11
C5A-86th St. Station Sitework		
<i>SUBSTANTIAL COMPLETION</i>		10/10/11
C5B - 86th St. Station Mining & Lining (IFB)		
<i>Mobilization for Cavern Mining</i>	08/04/11	10/19/11
<i>Entrance #1; Underpinning 4 Columns</i>	10/19/11	09/10/12
<i>Entrance #2; Excavation Support & Deck</i>	11/21/11	01/31/12
C6 - Systems (RFP)		
[REDACTED]		

Comment [hp20]: Redact FOIA Exemption 5
U.S.C. § 552(b)(4)

Comment [hp21]: Redact FOIA Exemption 5
U.S.C. § 552(b)(4)

Observations and Analysis:

90-Day Look-Ahead Notes:

1. Actual start of construction for Contract C5B is constrained by restrictive milestones that have been superseded as a result of construction progress.
2. Contract C5A will achieve Substantial Completion in October. Work remaining in Contract C1 is generally limited to concrete tunnel liner installation.
3. MTACC reports the bidding of Contract C2A will proceed in accordance with the current schedule update.

[REDACTED]



The following discussion on the schedule critical and near-critical paths will substantiate and support these conclusions and recommendations.

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U S C § 552 (b)(4)

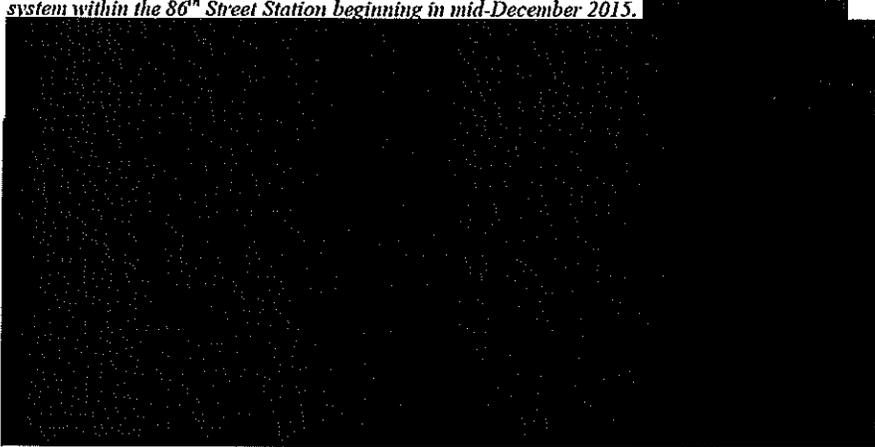
4.3 Critical Path Activities

Status:

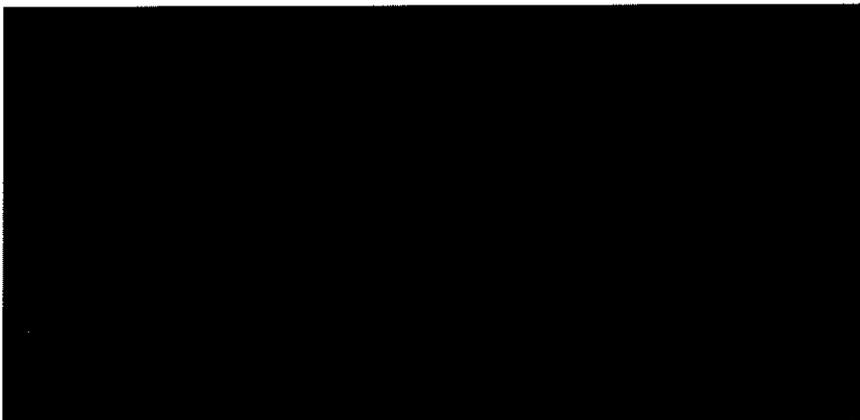
As depicted in Update #62 of the Integrated Project Schedule, the critical path begins with Contract C-26008 "86th Street Station Mining & Lining," activity C5BC1 ARD, "C5B No Blast Constraint NOA+10 MOs," with a completion date of 05-Jun-12. This ten-month lag represents the "No Blast Restriction" contained in the C5B bid documents and results from the NYFD restriction on blasting while the C1 TBM is south of the potential blast area, thereby creating a potential entrapment situation. This history and impact of this restraint was first discussed in the April 2011 PMOC Monthly Report.

The critical path then travels directly into cavern excavation from the South Shaft, continuing through completion of C5B South Cavern mining and concrete operations (C5B MS# 1). Upon achieving MS #1 in early March 2014, the critical path shifts to start and completion of Contract C5C mezzanine and platform concrete work in the southern half of the station, including the start of Ancillary No. 1 concrete work in early September 2014, then shifting to 1st and 2nd fix work in 86th St Station south Ancillary (No. 1) where it is handed over to C6 in April 2015 (note - additional CP/LP 1st 2nd, and 3rd Fix work continues through November 2015).

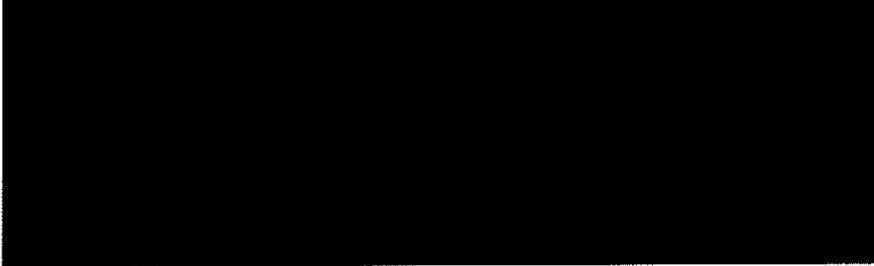
The critical path continues into C6 Systems Signal and Traction Power work for the next several months within the 86th Street Station, followed by Integrated Testing of the Traction Power system within the 86th Street Station beginning in mid-December 2015.



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U S C § 552(b)(4)



Comment [hp24]: Redact FOIA Exemption 5
U.S.C. § 552(b)(4)



Comment [hp25]: Redact FOIA Exemption 5
U.S.C. § 552(b)(4)

4.4 Compliance with Schedule Management Plan

Status:

In August 2010, the PMOC has established a structured review of the MTACC's compliance with its Schedule Management Plan, developed as part of the overall ELPEP process. The PMOC will continue this compliance review until the MTACC undertakes the role of ELPEP compliance reporting and verification.

Observations and Analysis:

Schedule Management Plan compliance is based upon achieving four (4) "Beneficial Outcomes" identified in the ELPEP and related documents.

1. Establish the IPS' usefulness as a management tool for the planning and organizing the work, and as a decision support tool for evaluation of alternatives and risk-based scenarios.
2. MTACC is actively managing and controlling individual packages and the overall project with input from and consideration of the project schedule.
3. Provide reliable forecasts of the SAS revenue service date (RSD) and other major accomplishments.

4. Facilitate communication of project time-related information, priorities, issues, and changes, as may be required.

Specific Processes, Products and Metrics cited in the ELPEP and companion documents, supporting each "Beneficial Outcome" have been summarized and grouped in a worksheet. A summary of the review conducted this period:

- MTACC "Conforms" to 22 of 24 performance measures.
- MTACC "Does Not Conform" to 2 of 24 performance measures.

Concerns and Recommendations:

In general, the PMOC notes that MTACC is realizing the beneficial outcomes established by the ELPEP. Based upon this analysis, the MTACC's IPS currently "Conforms" to the Schedule Management requirements established by the ELPEP.

As has been noted for the past several months, the current IPS does not provide a reliable forecast of the RSD due to the manner by which the C5B procurement delay and associated restraining milestones have been evaluated. This issue has not affected the MTA's target RSD, only the schedule contingency measured against this target. The PMOC anticipates this issue will be resolved in the 4th Quarter 2011, as the C5B baseline schedule is developed and approved.

5.0 PROJECT COST STATUS

5.1 Budget/Cost

Status:

The FFGA baseline budget and current working budget are broken down into Standard Cost Categories in year of expenditure dollars as follows:

Table 5-1: Allocation of Current Working Budget to Standard Cost Categories

Std. Cost Category (SCC)	Description	FFGA	MTA's Current Working Budget
10	Guideway & Track Elements	\$612,404,000	\$728,617,000
20	Stations, Stops, Terminals, Intermodal	\$1,092,836,000	\$1,276,632,000
30	Support Facilities	0	\$562,000
40	Site Work & Special Conditions	\$276,229,000	\$537,621,000
50	Systems	\$322,708,000	\$247,627,000
60	ROW, Land, Existing Improvements	\$240,960,000	\$292,000,000*
70	Vehicles	\$152,999,000	0**

Std. Cost Category (SCC)	Description	FFGA	MTA's Current Working Budget
80	Professional Services	\$796,311,000	\$885,941,000
90	Unallocated Contingency	\$555,554,000	\$482,000,000
Subtotal		\$4,050,000,000	\$4,451,000,000
Financing Cost		\$816,614,000	\$816,614,000
Total Project		\$4,866,614,000	\$5,267,614,000

* Includes \$47M Cost-to-Cure ** FTA has not approved the removal of the vehicles from the scope of work

The PMOC notes that this MTACC's CWB omits the cost for new Rolling Stock or corresponding reduction in funding and that this CWB does not represent an approved budget modification in any form.

Observation and Analysis:

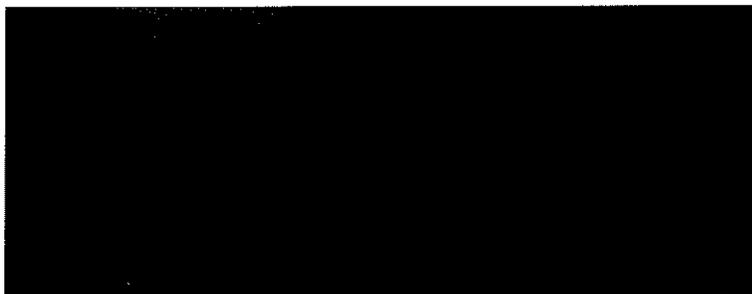
A summary of the completion status of the active construction contracts as of September 30, 2011, based upon cost incurred through that date, is as follows:

- C26002 (Tunnel Boring) – 89.20%
- C26005 (96th Street Station) – 43.3%
- C26013 (86th Street Station) – 85.83%
- C26008 (86th Street Station) – 0.82%
- C26006 (63rd Street Station) – 4.8%
- C26007 (72nd Street Station) – 22.2%

Aggregate Construction % Completion:

- 59.4% of all construction work is under contract
- 37.1% of active construction contracts are complete
- 22.50% of all construction is complete

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U S C § 552(b)(4)

Conclusions and Recommendations:

A review of costs incurred by the project to date suggests the following:

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1. *Soft cost expenditures are generally consistent with or lower than the current construction rate of progress. At the current rate of expenditure, the remaining soft cost budget can support the forecast construction duration, which supports EAC calculations.*
2. *Using financial performance as a surrogate for schedule-based analysis provides an approximate means of comparison. There are numerous variances that can impact the outcome of this analysis. However the PMOC is concerned that the general trend of this analysis is not better aligned with the IPS schedule forecast.*
3. *The PMOC considers a significant increase in the rate of construction progress to be likely, reducing the variance between these forecasts.*

The PMOC recommends continuing review and analysis of all project metrics in an effort to provide the best available forecast.

5.1.1 Project Cost Management and Control

Status:

SAS estimates the percent of work complete based on cumulative payments divided by contract (or budget) value as may be appropriate.

As of September 30, 2011, MTACC reports total project expenditures of \$1,393,775,010. When compared against the CWB of \$4,451,000,000, this results in an estimated total project completion of 31.3%.

Observation:

When compared against values reported as of August 31, 2011, expenditures for the month of September 2011 equal \$26,268,261. Based on these values, approximately .65% of SAS Phase 1 was completed during this period.

This evaluation does not take into account "payment lag" or other time offsets.

Concerns and Recommendations:

The SAS Project Team has demonstrated effective and comprehensive cost tracking and reporting capability. These capabilities should be augmented to conform to the requirements of the Cost Management Plan.

5.1.2 Project Expenditures and Commitments:

Status:

As of September 30, 2011, a summary comparison of the SAS Current Working Budget and expenditures is as follows:

Description	CWB	Expended	%
Total Construction	\$2,935,000,000	\$569,790,084	19%
Total Soft Cost	1,516,000,000	\$823,984,926	54%
Subtotal	\$4,451,000,000	\$1,393,775,010	31.3%

Observations:

The PMOC notes that expenditures are generally representative of the level of completion of the project element.

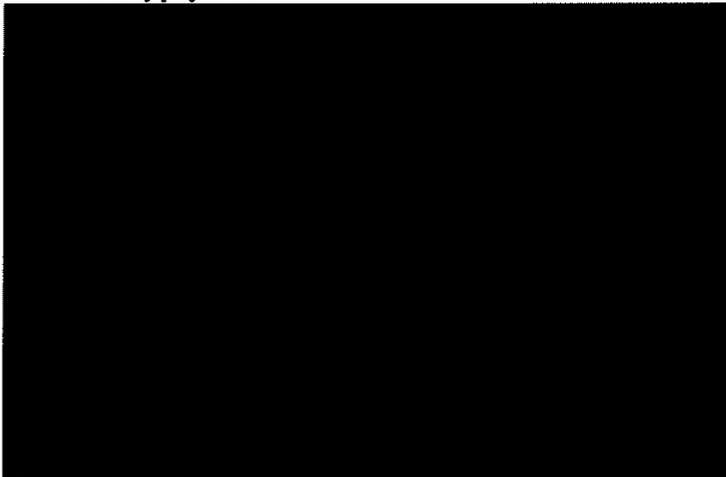
Concerns and Recommendations:

None at this time.

5.1.3 Change Orders

Status:

As of September 30, 2011, the status of Additional Work Orders (AWOs) on Phase 1 of the Second Avenue Subway project is summarized as follows:



Comment [hp27]: Redact FOIA Exemption 5
U.S.C. § 552(b)(4)

[REDACTED]

[REDACTED]

[REDACTED]

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

In recent months, the MTACC has implemented certain staffing changes and process improvements directed at reducing the time required to estimate, negotiate and administratively process Additional Work Orders (AWOs). The PMOC is monitoring and evaluating the quantifiable indicators associated with AWO processing in an effort to evaluate the effectiveness of the MTA's improvement efforts.

[REDACTED]



Comment [hp28]: Redact FOIA Exemption 5
U.S.C. § 552(b)(4)

Concerns and Recommendations:

The PMOC is concerned that the rate at which AWOs are executed has remained relatively constant throughout 2011. This suggests that staffing or process improvements implemented by the MTACC have not yet had a significant impact on AWO processing. The PMOC will continue to review and evaluate AWO processing to monitor the effectiveness of MTACC management and execution of this process. [Redacted]

Comment [hp29]: Redact FOIA Exemption 5
U.S.C. § 552(b)(4)

5.2 Project Funding

Status:

Total Federal participation is currently \$1,350,692,821. Appropriated, obligated and disbursements are shown below:

Table 5-3: Appropriated and Obligated Funds (Federal)

Grant Number	Amount (\$)	Obligated (\$)	Disbursement (\$) thru September 30, 2011
NY-03-0397	\$4,980,026	\$4,980,026	\$4,980,026
NY-03-0408	\$1,967,165	\$1,967,165	\$1,967,165
NY-03-0408-01	\$1,968,358	\$1,968,358	\$1,968,358
NY-03-0408-02	\$24,502,500	\$24,502,500	\$24,502,500
NY-03-0408-03	0	0	0
NY-03-0408-04	0	0	0
NY-03-0408-05	\$167,810,300	\$167,810,300	\$167,810,300
NY-03-0408-06	\$274,920,030	\$274,920,030	\$102,138,322

Grant Number	Amount (\$)	Obligated (\$)	Disbursement (\$) thru September 30, 2011
NY-03-0408-07	\$237,849,000	\$237,849,000	0
NY-17-X001-00	\$2,459,821	\$2,459,821	\$2,459,821
NY-36-001-00*	\$78,870,000	\$78,870,000	\$78,870,000
NY-95-X009-00	\$25,633,000	\$25,633,000	\$8,652,432
NY-95-X015-00	\$45,800,000	\$45,800,000	0
Total	\$866,760,200.00	\$866,760,200.00	\$393,348,924.00

* Denotes American Recovery and Reinvestment Act (ARRA) funds

Local funds totaling \$1,000,426,086 (\$1,393,775,010 – 393,348,924) have been spent as of September 30, 2011. MTA's approved 2000-2004 and 2005-2009 Capital Programs provided \$2,964 million for SAS Phase 1 (\$1,050 million and \$1,914 million respectively). The proposed 2010-2014 Capital Program budgets \$1,487 million to complete the SAS Phase 1 project. Of the \$1,487 million, \$545 million was approved for the 2010-2011 timeframe. MTA needs to approve \$942 million for the 2012-2014 timeframe.



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U.S.C. § 552(b)(5)

Concerns and Recommendations:

The availability of funds and the impact on the manner in which the project progresses is a key concern for all parties. As part of the proposed amendment of the SAS FFGA, local funding sources should be identified and committed to by the MTA. PMOC will continue to monitor the situation and assist all parties in evaluating the funding situation.

5.2.1 Overall Project Funding

Refer to Section 5.2 of this Report.

5.2.2 Local Funding

Refer to Section 5.2 of this Report.

5.3 Cost Variance Analysis

Status:

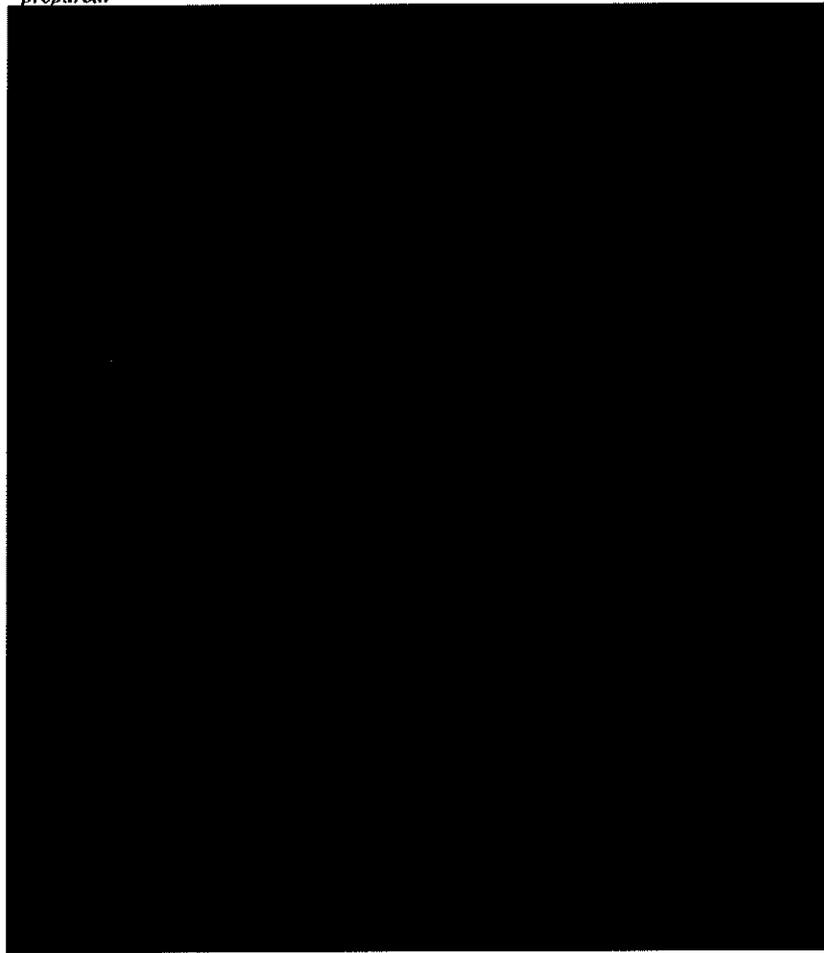
Using the MTACC financial reporting format contained in its Capital Construction Reports, the PMOC will maintain an independent Estimate-At-Completion (EAC) report for Phase 1 of the Second Avenue Subway Project until such time as the MTACC assumes this reporting function in accordance with its recently submitted Cost Management Plan.

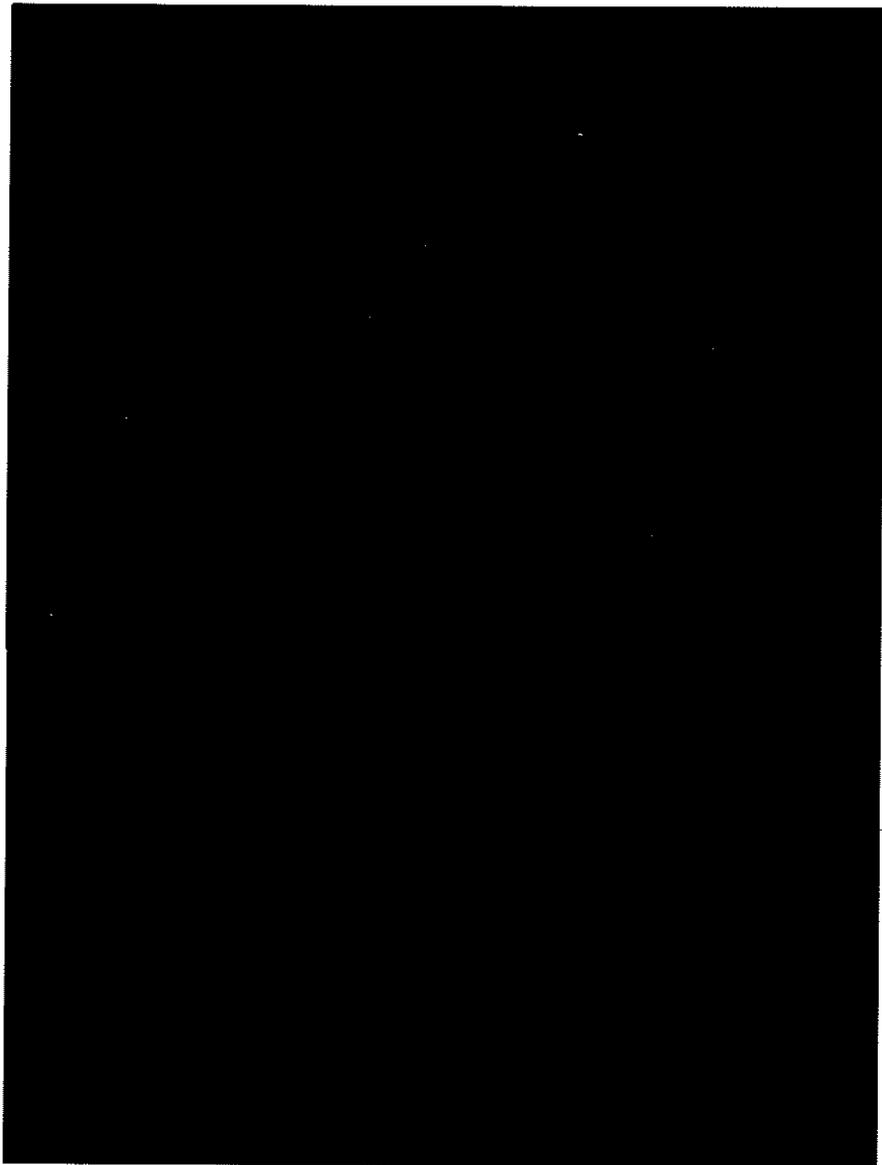
This EAC is based on the following:

- *The results of MTACC's cost estimate (Revision 9) for SAS Phase 1.*
- *Cost information provided by the SAS project team through established periodic reporting.*

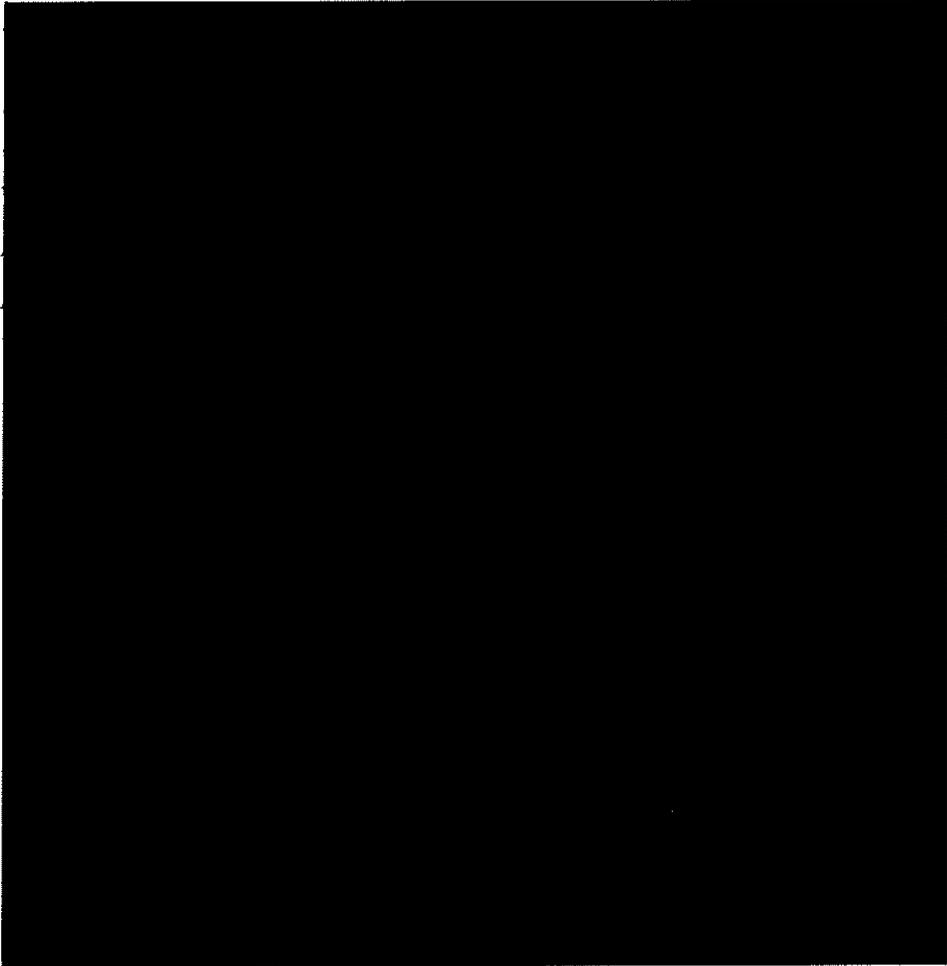
Observation and Analysis:

As of September 2011, the EAC generally corresponds with values contained within the recently completed and approved Cost Estimate Revision 9. As variances are observed and evaluated, they will be incorporated in the EAC and reconciled when the next project cost estimate is prepared.





Comment [lp31]: Redact FOIA Exemption 5
USC § 552(b)(4)



Comment [hp32]: Redact all of Section 5.4. FOIA exemption 5 U.S.C. § 552(b)(4)

Concerns and Recommendations:

To date, this evaluation has been limited to contingency usage required by the active construction packages. The available contingency must also be applied to any soft cost overruns. This contingency evaluation process must be extended to include all project costs.

6.0 PROJECT RISK

6.1 Initial Risk Assessment

No change this period.

6.2 Risk Updates

Status:

No updates for this period.

6.3 Risk Management Status

Status:

Risk Mitigation Meeting #10 was held on September 15, 2011.

Observation and Analysis:

See Section 6.4 below for a summary of issues discussed and actions to be taken as a result of this meeting.

Conclusions and Recommendations:

None.

6.4 Risk Mitigation Actions

Status:

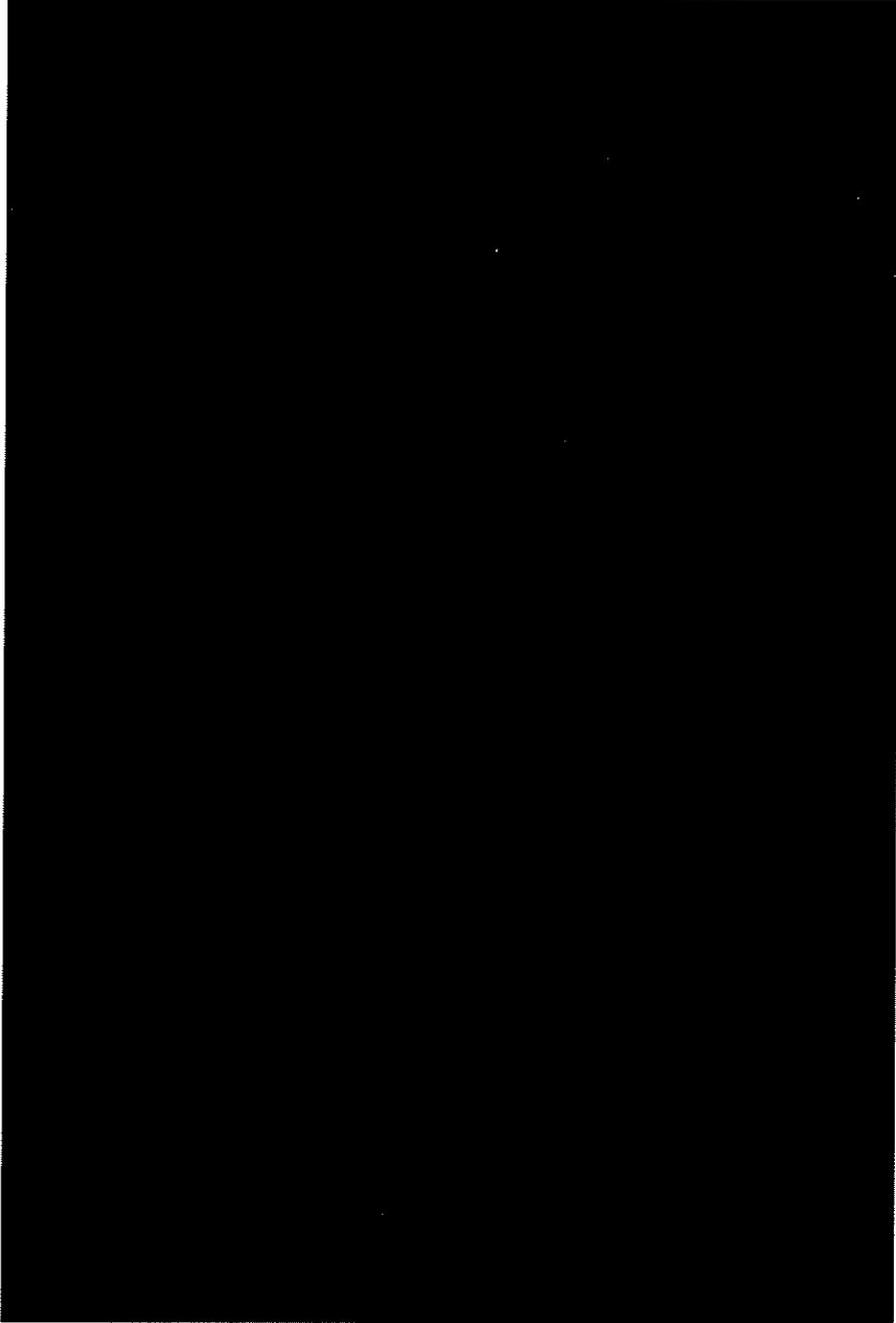
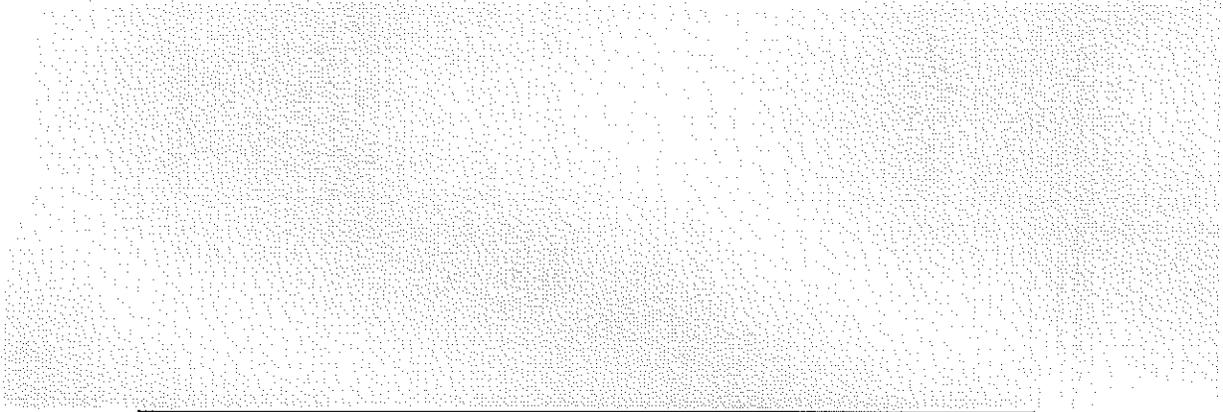
Risk Mitigation Meeting #10 was held on September 15, 2011.

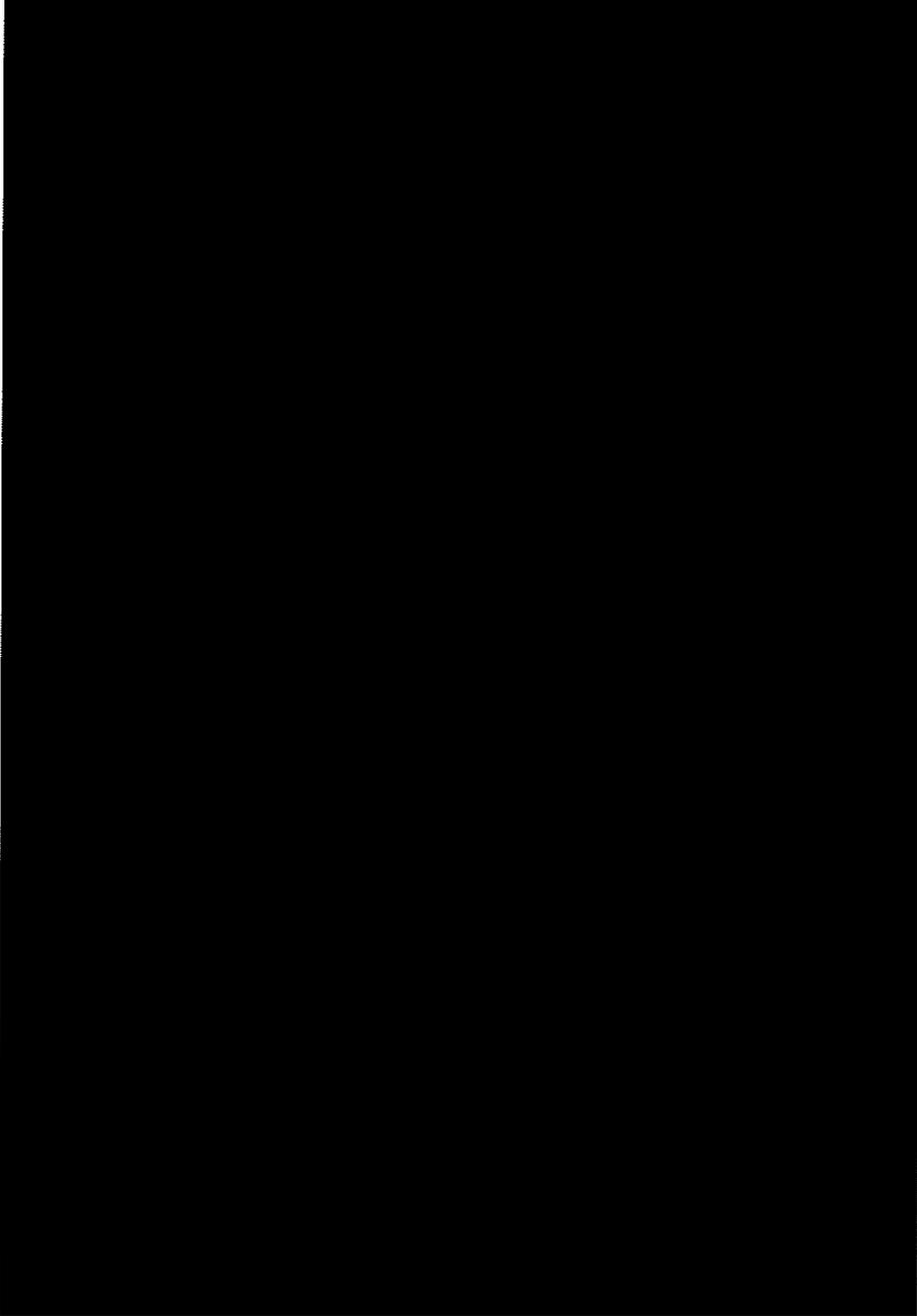
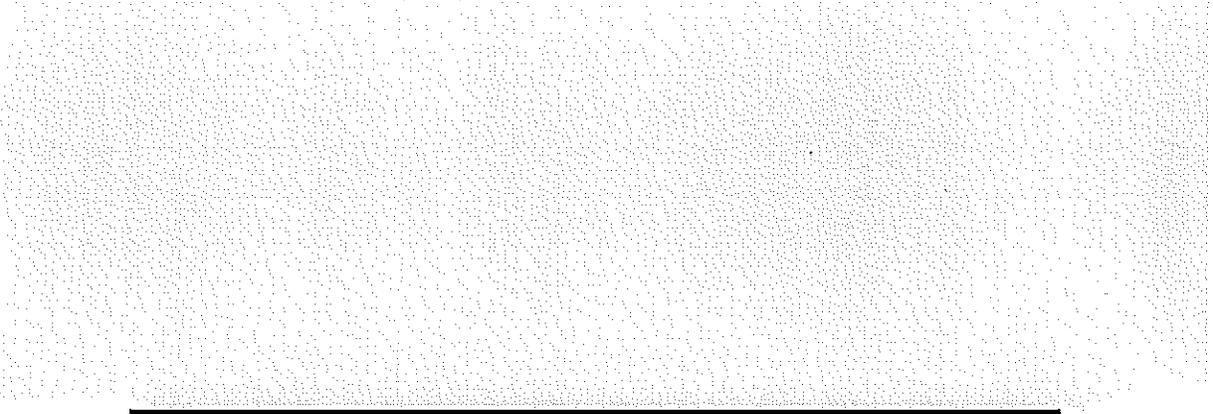
Observation and Analysis:

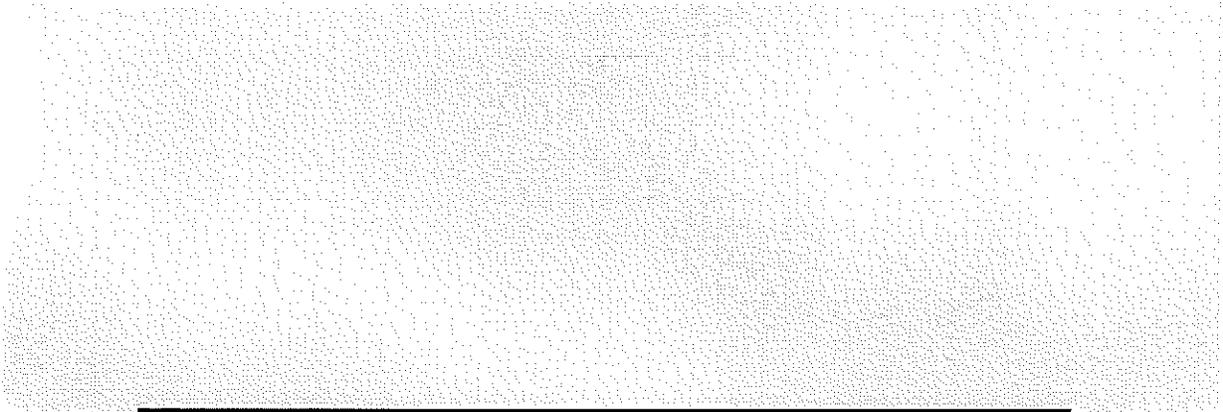
A summary of issues discussed and actions to be taken as a result of this meeting include the following:

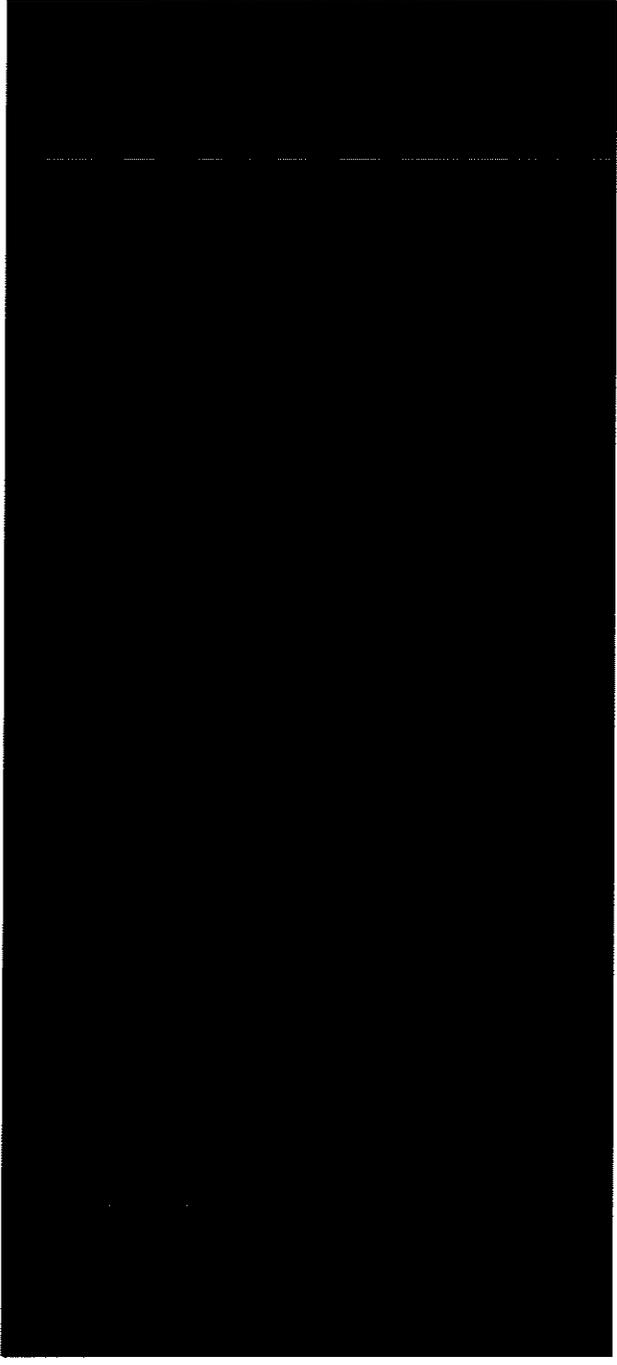
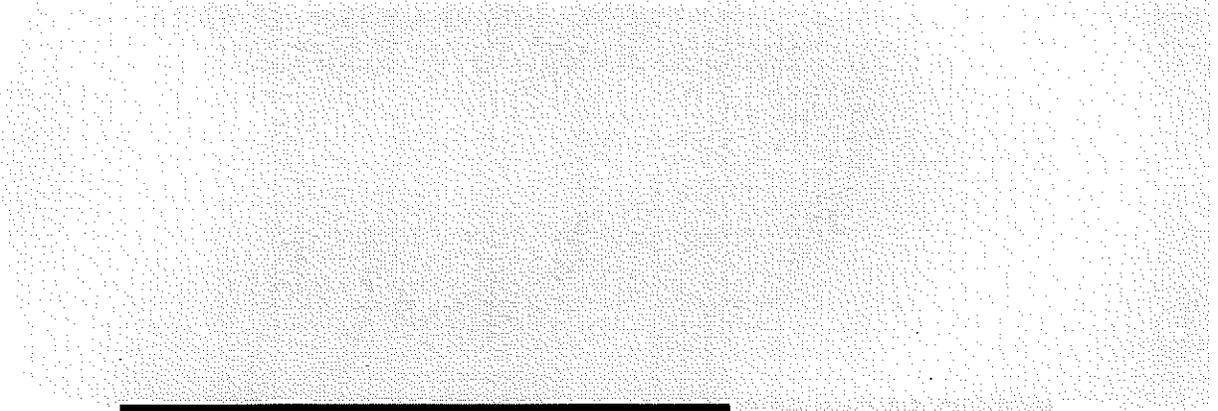
<i>Risk</i>	<i>Discussion</i>	<i>Actions Taken</i>
<i>CNS 4 (C6)</i>	<i>Problems related to managing the contractual interfaces during construction may result in delays and related claims.</i>	<ol style="list-style-type: none"><i>1. Further develop the interface spreadsheet for the next three months and present status at the next risk mitigation meeting which is planned for late October.</i><i>2. Evaluate how the interface matrix is incorporated into the IPS.</i><i>3. Review the format of the 90 day look ahead at the next risk mitigation meeting.</i>
<i>89 (C5B)</i>	<i>Differing site conditions during cavern mining lead to lost productivity and contractor delay resulting in change requests.</i>	<ol style="list-style-type: none"><i>1. CM is to assure that geological inspectors are mapping the excavation face in timely manner and identifying any differences with the contractor's mapping. Any differences are to be reported immediately.</i><i>2. A GAC team will design a mechanism to evaluate rock as it gets exposed, compare it to the GBR and communicate (flag) potential issues early. Once finished, this document will serve to communicate the process to the project field team.</i>

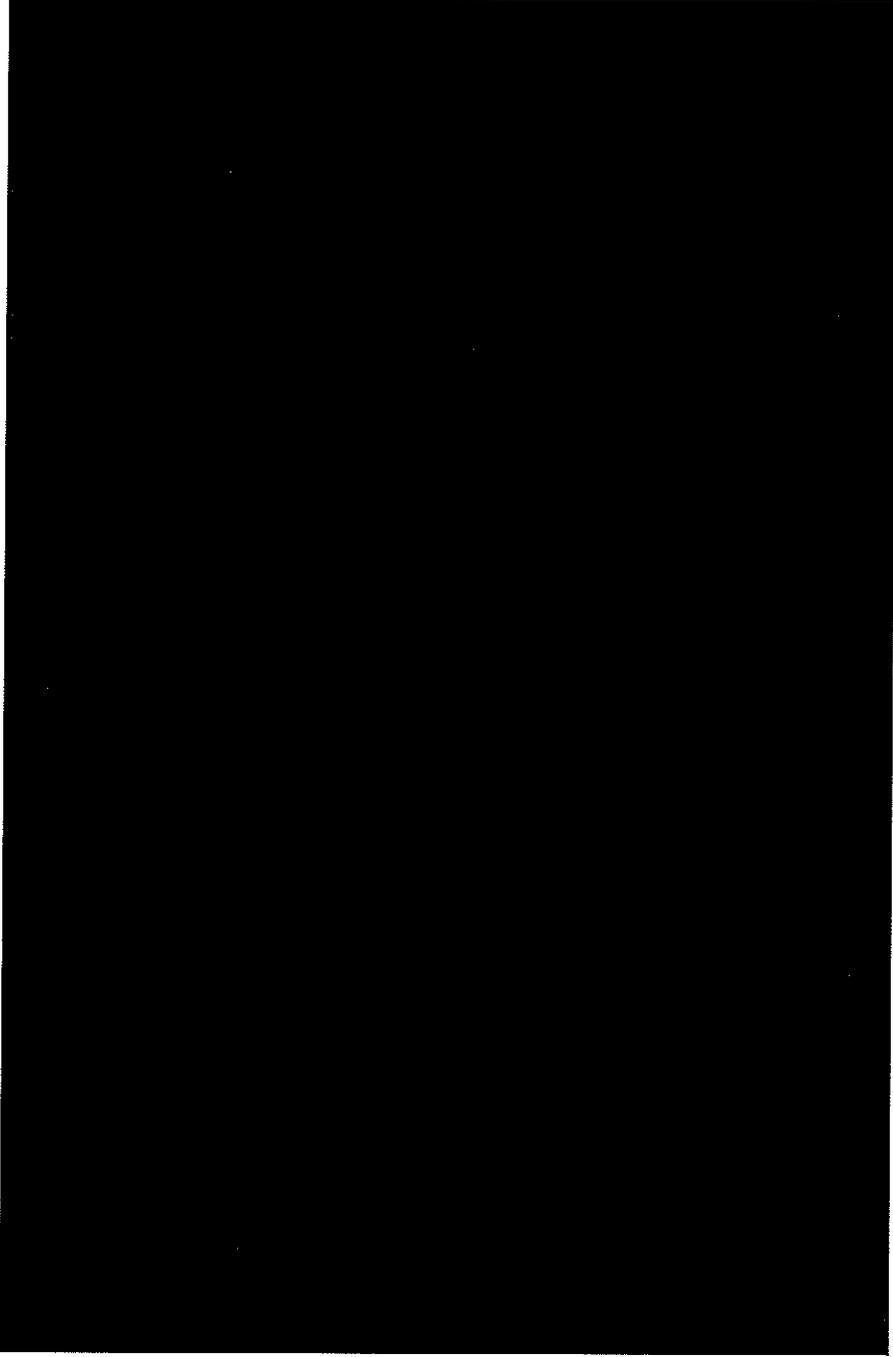
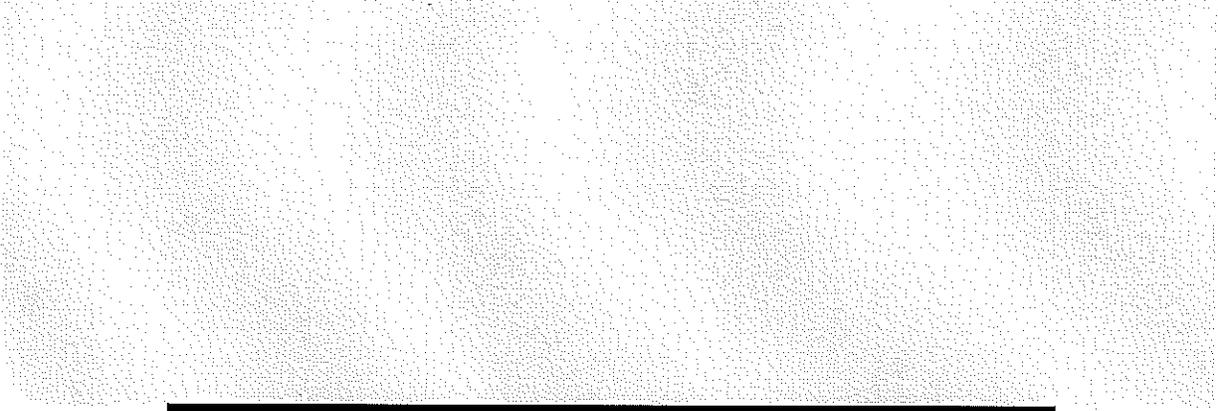
<i>Risk</i>	<i>Discussion</i>	<i>Actions Taken</i>
PB50 (C5C)	<i>Delay in approving necessary AWO's may result in schedule delay and contractor claim for associated delay.</i>	<i>No additional action required at this time</i>
TRP 4 (C6)	<i>Systems Integration Testing Problems (Traction Power SCADA).</i>	<i>It was agreed to strike "Traction Power SCADA" from the risk register. It was also agreed that this risk needs better definition. A better definition of this risk, will be prepared for the next risk mitigation meeting.</i>
CNS 8 (C6)	<i>Delayed Safety Certification</i>	<ol style="list-style-type: none"> <i>1. Identify the activities that have to happen for substantial completion on the 63rd Street contract as a pilot, develop a checklist, and discuss it at the next risk mitigation meeting.</i> <i>2. Review the certification process and obtain any pertinent information, including what to expect from FTA review process.</i>
90 (C4B)	<i>Settlement of Lot Line Windows lawsuit (233 E 69th Street) results in cost and schedule delay.</i>	<i>No additional action required at this time</i>
147	<i>Vibration from mining operation</i>	<i>Review with C5B project team and map any potential issues with blasting vibration limits in relation to C4B at the next risk mitigation meeting.</i>
TBD	<i>Procurement Delay-Risk (C5B)</i>	<i>Work with contractor once NTP is given to reconcile schedule milestones and develop baseline schedule.</i>
91 (C5B)	<i>Yorkshire Towers lawsuit settlement results in cost and delay. This may result in moving the elevator entrance on the corner of the building.</i>	<i>Risk Based Decision Making 0005 was approved on 9/9/11. RBDM 0005 stated that the Project should continue to let the legal process play out as there are no viable options other than this at this time. Recent activities, or lack thereof, on the part of the court and the litigant have not changed the Project's opinion that a satisfactory solution to this lawsuit can be achieved in a time period that will not affect the Project. There is no further action required on this risk at this time.</i>
TBD	<i>Shop Drawings- the review process for shop drawings is too time-consuming. MTACC wants the process streamlined so that it can be done in 20 days.</i>	<i>Present the procedure for the streamlined process at the next risk mitigation meeting.</i>
15B	<i>Third Party Approvals</i>	<i>None. Hold any further reporting on this risk for one month.</i>

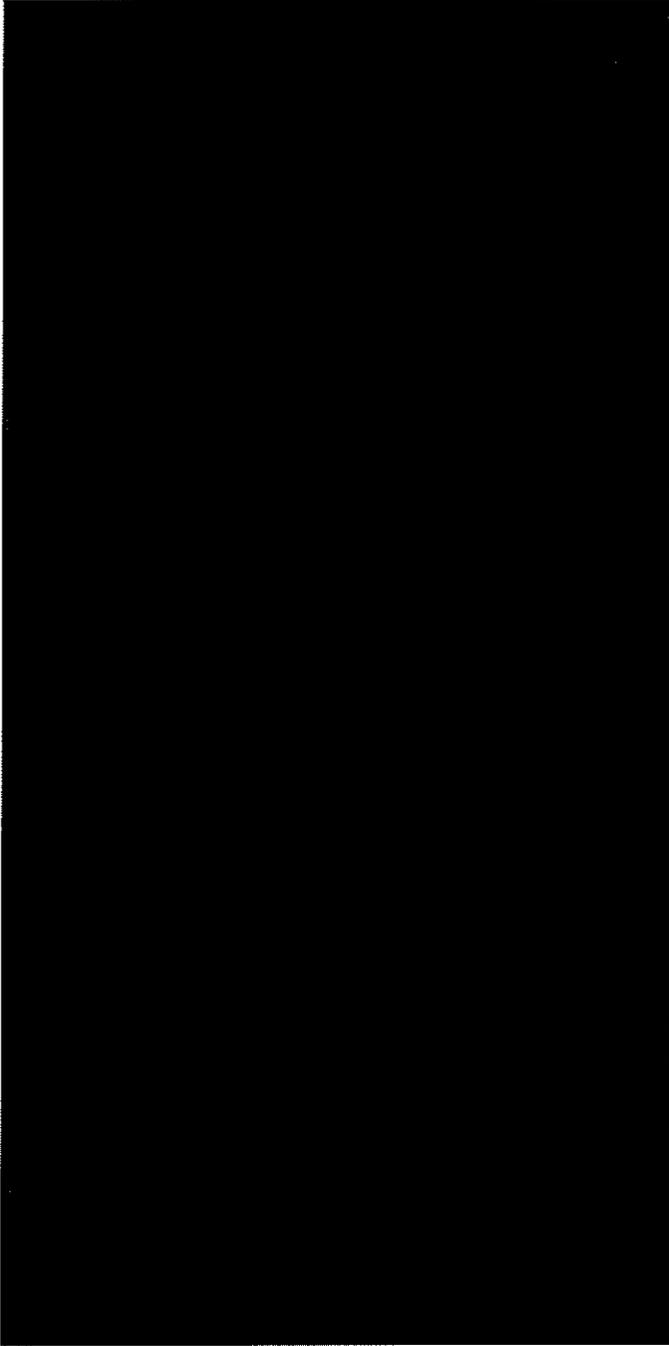
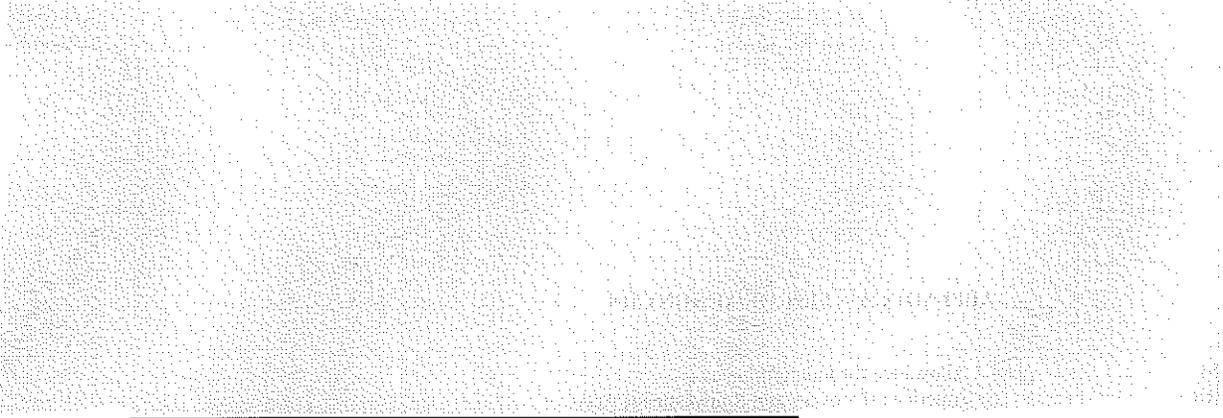








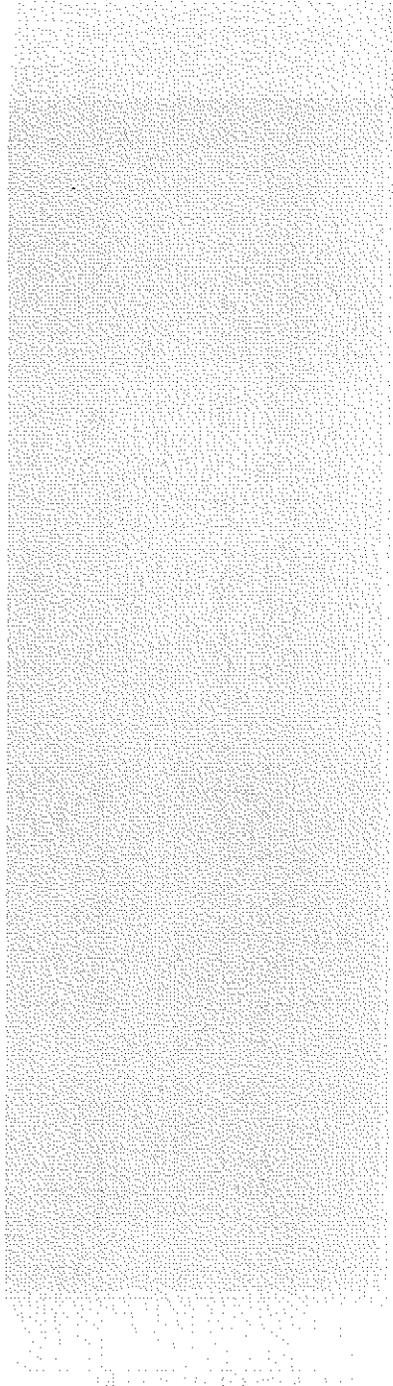


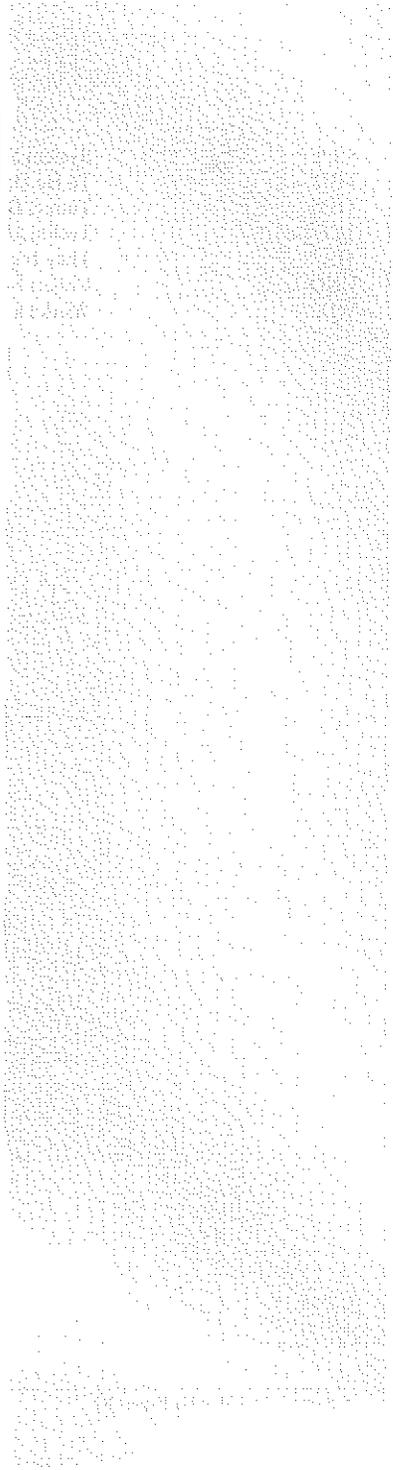
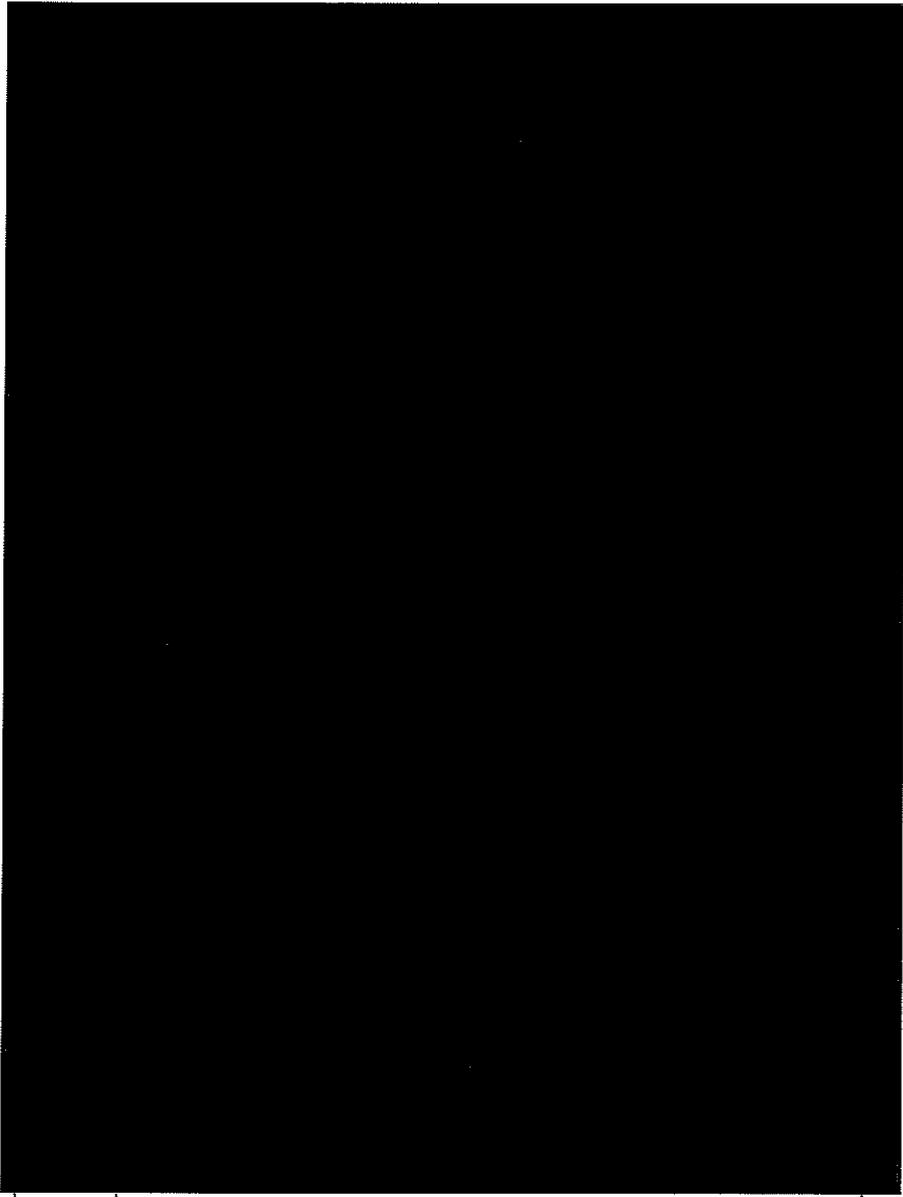


APPENDIX A -- LIST OF ACRONYMS

AFI	Allowance for Indeterminates
ARRA	American Recovery and Reinvestment Act
AWO	Additional Work Order
BCE	Baseline Cost Estimate
BFMP	Bus Fleet Management Plan
CCM	Consultant Construction Manager
CD	Calendar Day
CMAQ	Congestion Mitigation and Air Quality
CPM	Critical Path Method
CPRB	Capital Program Review Board
CR	Candidate Revision
DHA	DMJM+Harris and ARUP
DOB	New York City Department of Buildings
EAC	Estimate at Completion
ELPEP	Enterprise Level Project Execution Plan
FD	Final Design
FEIS	Final Environmental Impact Statement
FFGA	Full Funding Grant Agreement
FTA	Federal Transit Administration
HLRP	Housing of Last Resort Plan
IFP	Invitation for Proposal
IPS	Integrated Project Schedule
LF	Linear Feet
MEP	Mechanical, Electrical, Plumbing
MTACC	Metropolitan Transportation Authority – Capital Construction
N/A	Not Applicable
NTP	Notice to Proceed
NYCDEP	New York City Department of Environmental Protection
NYCT	New York City Transit
PE	Preliminary Engineering
PMOC	Project Management Oversight Contractor (Urban Engineers)
PMP	Project Management Plan
PQM	Project Quality Manual
RAMP	Real Estate Acquisition Management Plan
RFMP	Rail Fleet Management Plan
RFP	Request for Proposal
ROD	Record of Decision
ROD	Revenue Operations Date
RSD	Revenue Service Date
S3	Skanska, Schiavone and Shea, JV
SAS	Second Avenue Subway
SCC	Standard Cost Categories
SSMP	Safety and Security Management Plan
SSOA	State Safety Oversight Agency

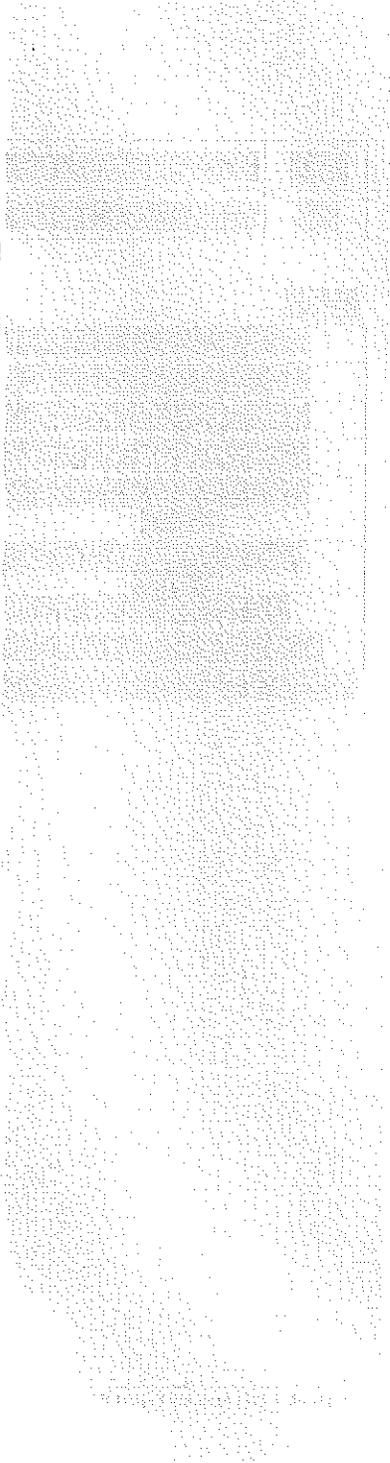
SSPP System Safety Program Plan
TBD To Be Determined
TBM Tunnel Boring Machine
TCC Technical Capacity and Capability Plan
TIA Time Impact Analyses
UNO Unless Noted Otherwise
WD Work Day



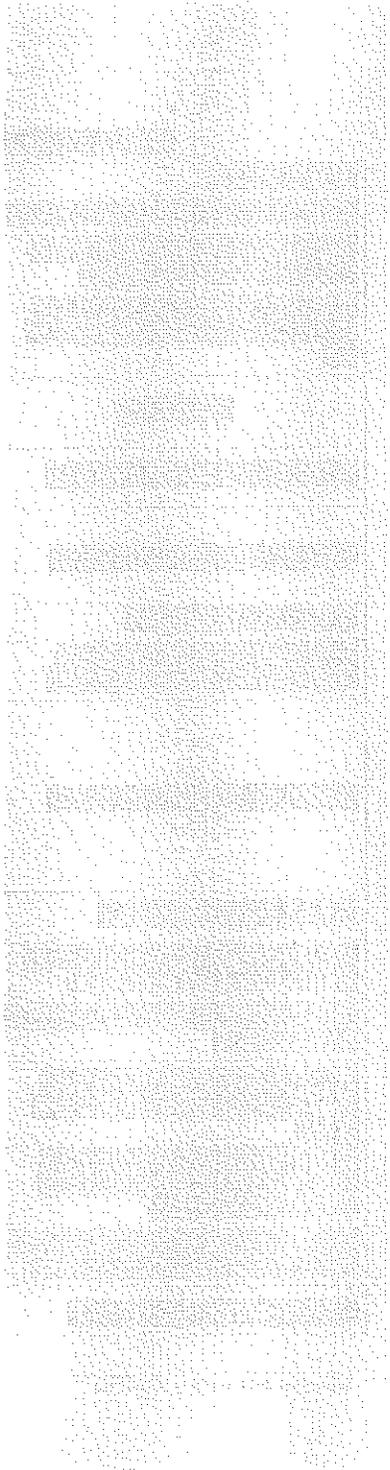


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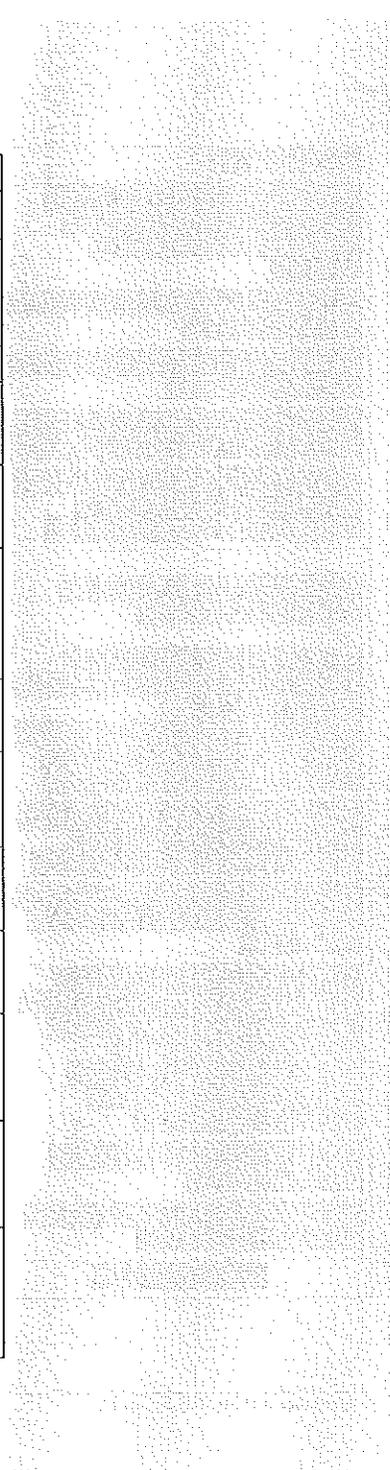
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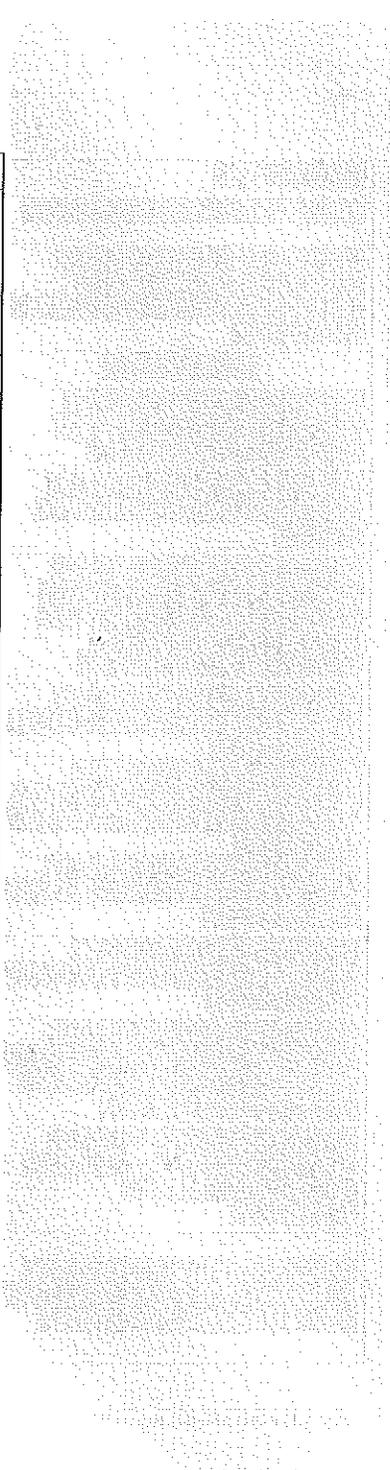
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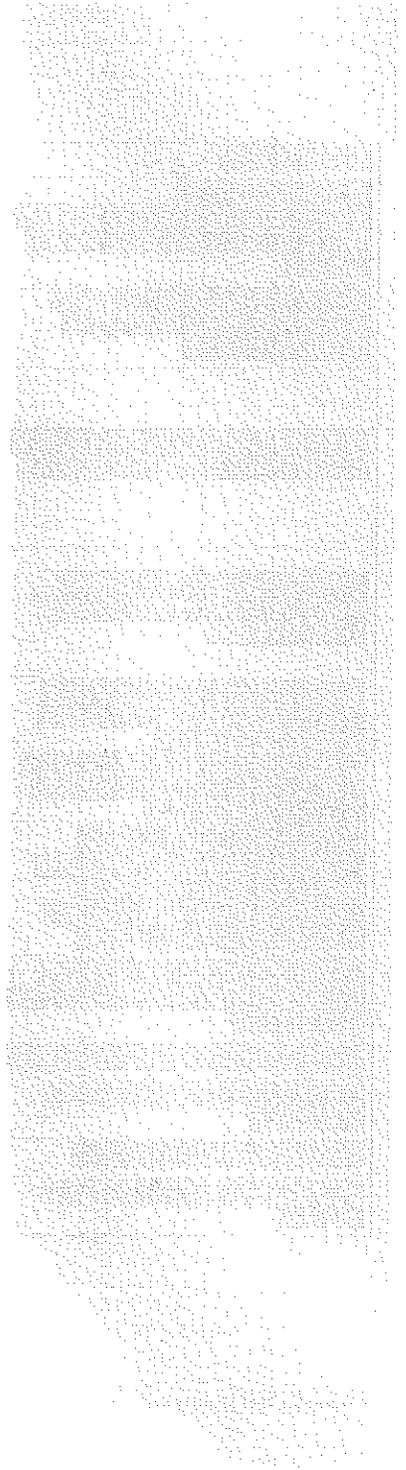
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[REDACTED]		
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[REDACTED]		
[REDACTED]	■	





Comment [hp36]: Redact Appendices B thru G -
FOIA Exemption 5 U.S.C. § 552(b)(4)

