

PMOC MINI MONTHLY REPORT

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

February 1 to February 28, 2010

PMOC Contract No. DTFT60-09-D-00007

Task Order No. 2, Project No. DC-27-5115, Work Order No. 01

OPs Referenced: OP2, OP3, OP20, OP25, OP26, OP37, OP34, OP53

Urban Engineers of New York, P.C., 350 Fifth Avenue, Suite 6024, New York, New York 10118

PMOC lead person's name, affiliation, Richard F. Hill, P.E., Urban Engineers

Length of time on project: 5 years

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ELPEP SUMMARY

Status:

As of the end of February 2010, MTACC is working cooperatively with the FTA to produce Management Plans as called for in the Enterprise Level Project Execution Plan (ELPEP). The FTA and MTACC have agreed to the intermediate deliverables for the Technical Capacity and Capability (TCC) Plan, and the document is in final review. The PMOC will provide comments to MTACC during the first weekly meeting in March 2010, in an effort to bring this plan to ELPEP compliance by mid-March 2010. MTACC is rewriting the Schedule Management Plan which will include the Contingency Management Plan for ESA and SAS. MTACC is writing the Cost Management Plan. Currently, the FTA/PMOC is working with MTACC to clarify the requirement for a schedule to perform the demonstration of compliance with the ELPEP requirements for all material contracts.

Observation:

The ELPEP will allow the MTACC to more effectively manage the SAS project. It will also give the FTA/PMOC a greater level of assurance that the SAS project can proceed through the final design and construction phases and be delivered to the start-up phase consistent with the revised budget and schedule. The weekly workshops are beneficial in helping all to understand the processes and to assure a timely update of the PMP. This month, the SAS Project Team has been proactive in the support of the ELPEP implementation effort.

Concerns and Recommendations:

The PMOC recommends that the level of support continue to ramp up in order to handle the increase in the number of deliverables that are due in the next 30 days.

ELPEP Updates

Status:

During February 2010, the PMOC and the FTA worked with MTACC and SAS staff to make final editorial changes and issue a clean version of the ELPEP including the language describing how the MTA will meet the cost contingency capacity required to match the FTA budget. The FTA schedule contingency float is shown as the difference between the Revenue Service Dates forecasted in FTA and MTACC schedules, and will be tracked through the Schedule Contingency Plan, along with the contingency built into the MTA schedule. The ELPEP provides a detailed basis for the phased implementation of the specific ELPEP requirements. The PMOC, FTA, MTA and SAS staff continued to hold weekly workshops in February 2010. It was agreed that the requirement to hold monthly ELPEP progress updates will, for the time being, be covered as an agenda item in the Executive Meeting with MTA. Based on the ELPEP effective date of January 15, 2010, the following items are scheduled to be completed in the next 30 days:

- *MTA demonstrates that its PMP revision process for SAS is in place and is being applied to the development of the next PMP revision for the respective project.*
- *MTA develops and finalizes Cost and Schedule Management Plans for SAS in conformance with ELPEP requirements.*

- *MTA develops and finalizes Cost and Schedule Contingency Management Plans for SAS in conformance with ELPEP requirements.*
- *MTA demonstrates a functioning process for achieving the traceability of contract package scope from the design basis documentation through pre-construction planning into the contract package cost estimate and schedule through a contract package level WBS or functional equivalent for one active SAS contract package (4B). MTA provides FTA with a plan to demonstrate similar ELPEP conformance on all other un-awarded contract packages for both projects except for construction risk mitigation capacity.*
- *MTA provides FTA with a plan for achieving TCC process conformance, consistent with Section III.1 to III.3. of the ELPEP. [Ref: SAS-A16-0808]*

Observation:

MTA has successfully applied the production of intermediate deliverables in implementing the TCC plan. The development of other plans outlined in the ELPEP will require similar processes, for which the baseline has been established. The FTA/PMOC have provided feedback regarding the PMP Update Plan, the TCC Plan, and the Schedule Management Plan.

Concerns and Recommendations:

MTACC has made good progress in developing the PMP and its sub-plans. Based on the progress to date, the PMOC is projecting that some of the final plan versions that are due within the next month may slip past the due date contained in the ELPEP. The PMOC has observed that the weekly workshops continue to facilitate the development and issuance of these plans.

PROJECT COST TABLE

	FFGA			FFGA Amendments	MTA's Current Working Budget (CWB)		Expenditures as of February 28, 2010	
	(\$ Millions)	(%) Grand Total Cost	Obligated (\$ Million)	TBD	(\$ Millions)	(%) Grand Total Cost	(\$ Millions)	% of Grand Total Cost
Grand Total Cost:	4,866.614	100			5,489.614	100	934.096	17.01
Financing Cost	816.614	16.78			816.614	14.88		
Total Project Cost:	4,050.000	83.22	1,475.083		4,673.000	85.12	934.096	17.01
Total Federal share:	1,350.693	27.75	229.321		1,350.692	24.60	190.566	3.47
Total FTA share:	1,300.000	96.25	167.810		1,300.000	96.25	183.126	3.33
5309 New Starts share	1,300.000	100	167.810		1,300.000	96.25	183.126	3.33
Total FHWA share:	50.693	3.75	50.693		50.692	3.75	7.440	0.14
CMAQ	48.233	95.15	59.051		48.233	95.15	4.980	0.09
Special Highway Appropriation	2.460	4.85	2.460		2.459	4.85	2.460	0.05
Total Local share:	2,699.307	55.47	1,245.782		3,322.308	60.52	743.530	13.54
State share:	450.000	16.67	100.000		450.000	13.54		
Agency share:	2,249.307	83.33	1,145.782		2,872.308	86.46		
City share:	0	0			0	0		

This table has been updated to reflect financial elements in the ELPEP.

1.0 GRANTEE'S CAPABILITIES AND APPROACH

1.1 Technical Capacity and Capability

1.1.1 Organization, Personnel Qualifications and Experience

History of Performance, Adequacy of Management Systems

No change from January 2010 report (See Section 1.1.3 Local Funding and reference issue number SAS-05-0110*)

*All issue numbers are in Section 7 - List of open issues

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

Grantee's Approach to Safety and Security

No critical issue.

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

Federal Requirements

Local Funding Agreements

No change from January 2010 report [Ref: SAS-06-0110]

1.1.4 Scope Definition and Control

No critical issue.

1.1.5 Quality

No critical issue.

1.1.6 Project Schedule

See Section 4.0 Project Schedule Status

1.1.7 Project Budget and Cost

See Section 1.1.1 History of Performance and Section 1.1.3 Local Funding

1.1.8 Project Risk Monitoring and Mitigation

See ELPEP section at the beginning of this report.

1.1.9 Project Safety

No critical issue.

1.2 FTA Compliance Documents

No change from January 2010 report. [Ref: SAS-A17-0808]

2.0 PROJECT SCOPE

2.1 Status & Quality: Design/Procurement/Construction

No critical issue.

2.1.1 Engineering and Design

No critical issue.

2.1.2 Procurement

No change from January 2010 report. [Ref. SAS-07-0110]

2.1.3 Construction

See Section 4.1 Critical Path Activities and Section 4.2 Schedule Performance Analysis

2.1.4 Operational Readiness

See Section 2.4 Vehicles

2.2 Third-Party Agreements

Status:

MTACC's President and the SAS Program Executive met with the new NYC DEP Commissioner and his assistant on February 19, 2010 to conclude the issue of replacing the 48-inch water main with a 60-inch water main. The changes that preclude the need to relocate the main at the north end of the work zone were discussed and accepted by the Commissioner, and permission was received for an outage this summer in lieu of the former November 2010 date, which had the potential for up to one year's delay awaiting the line shutdown. This is a positive outcome to the issue. The solution at the north end eliminates the need to relocate approximately a thousand feet of main and in conjunction with the summer shutdown, this issue appears to be resolved. The SAS design team is still evaluating several design options which will resolve the issue at the south end.

Observation:

MTACC does not have any third-party agreements but works with the third parties and receives approval letters for the design of utilities and city agencies.

The major New York City agencies that interface with the project include: NYC Department of City Planning, NYC Fire Department, NYC Department of Transportation, NYC Medical Examiner, NYC Department of Environmental Protection and NYC Department of Buildings. Each agency has its own agenda regarding input into the SAS design. There are no agreements to preclude any of the aforementioned from requiring changes to design even after previously approving said design.

Concerns and Recommendations:

The PMOC is concerned that, in several cases, agreed-upon design and scope of work have been revised when later reviewed by other personnel within the agencies. The PMOC recommends that MTA consider utilizing utility agreements on future projects to preclude problems of this nature. [Ref. SAS-08-0110]

2.3 Contract Packages and Delivery Methods

No critical issue.

2.4 Vehicles

Status:

No change from January 2010 report [Ref. SAS-A17-0808 Section 8 Grantee Actions from Quarterly and Monthly Meetings].

2.5 Property Acquisition and Real Estate

No critical issue.

2.6 Community Relations

No critical issue.

3.0 PROJECT MANAGEMENT PLAN AND SUB-PLANS

3.1 Project Management Plan

No critical issue. Ongoing concerns referenced in Section 7. [Ref. SAS-09-0110]

3.2 PMP Sub Plan

See ELPEP Section in the beginning of the report. [Ref. SAS-10-0110]

3.3 Project Procedures

No change from January 2010 report. [Ref. SAS-11-0110]

4.0 PROJECT SCHEDULE STATUS

4.1 Critical Path Activities

Status:

The current status as reported by MTACC is based on IPS Update 43 for the period ending January 31, 2010. The Critical Path remains through Contract C1 TBM Mining Operations, 86th Street Station, and Systems. Secondary critical path runs through Contract C1 TBM1 Mining to C4B G3/G4 Caverns. There is a third “near term” critical path through Contract C5A “Open Cuts & Utility Relocation,” to 86th Street Station, and Systems.

Observation:

The latest MTA approved and issued Integrated Project Schedule (IPS) is Rev 3.0 (Update 29) dated January 13, 2009. The IPS needs to be revised and subsequently re-issued to reflect the various schedule updates of the construction contractors, design, real estate and procurement activities. PMOC’s ability to validate the status of the project has been hampered by the lack of a revised IPS.

Concerns and Recommendations:

PMOC is concerned that the time lost due to the inability to proceed with blasting in Contract 1 has impact the critical path. The PMOC recommends that the MTACC investigate the detailed relationships between construction contracts to determine a precise amount of hand-off time. The

strategy for the late performance of construction is to consume hand-off duration downstream. Significant amounts of hand-off could be consumed because of the late performance of Contract 1. The hand-off time is contingency time and should only be consumed in prescribed fashion. [Ref. SAS-12-0110]

4.2 Schedule Performance Analysis

Status:

As reported by MTACC, Contract 1 status through Update 32 shows the contractor is behind the adjusted schedule by 267 calendar days. Over the last month, the contractor lost 10 days but recovered 5 days through a schedule adjustment. The updated schedule includes a negotiated 178-calendar day time extension that extends Milestone #1 to April 5, 2010 and substantial completion to January 24, 2011. However, there are pending contract modifications in analysis and negotiation which could further delay completion of Milestone #1 to December 6, 2010 and substantial completion to October 18, 2011.

Contract 2A has an approved baseline schedule that is being monitored. The latest Update 8 (data date January 31, 2010), as reported by MTACC, shows the project 36 calendar days late. The Milestone #1 date of January 27, 2012 is currently projected to occur on March 30, 2012, thirty-six calendar days late. Milestone #2 is still holding a completion date of August 7, 2012. However, substantial completion has slipped from February 25, 2013 to the forecasted date of April 29, 2013, sixty-three calendar days late.

Contract 5A has an approved baseline schedule and is being monitored. The latest update number 7 (data date January 31, 2010) as reported by MTACC shows the project 90 calendar days late. The Milestone #1 date of May 7, 2010 is currently projected to occur on August 10, 2010 and Milestone #2 date of December 8, 2010 is projected to occur on March 18, 2011. Substantial completion has slipped from February 7, 2011 to May 9, 2011, ninety calendar days late.

Observation:

Neither Contract 1 nor the IPS contains a binding milestone for the turnover of work from Contract 1 to the 86th Street mining contract 5B which is on the critical path of the program. This oversight has the potential to allow the critical path turnover to slip in time without any repercussions to Contract 1. As it stands now, Contract 1 has until substantial completion to turn over work to Contract 5B. To prevent similar issues in the future, a more integrated approach to schedule control should be addressed before other contracts are awarded.

Concerns and Recommendations:

The PMOC is concerned that the project lacks a binding milestone or some other agreement for the turnover of work from Contract 1 to Contract 5B. The PMOC recommends that the MTACC endeavor to establish a firm and committed agreement with Contract 1 to meet the IPS dates. This can be accomplished through the delay negotiations that are held with the contractor. Lacking any firm agreements, the MTACC can only rely on good faith efforts by the contractor.

The current status of Contract 1, which is on the critical path and performing late, and the concern of TBM production can have a significant effect on the start of subsequent contracts. Without the ability to recover lost time, the Revenue Service Date could be impacted. The

PMOC also recommends that MTACC review its approach to schedule control to insure that this same issue does not impact other contracts as they are awarded. [Ref. SAS-13-0110]

5.0 PROJECT COST STATUS

5.1 Budget/Cost Status

No critical issue.

5.2 Cost Variance Analysis

No critical issue.

5.3 Project Funding Status

See Section 1.1.3 Local Funding Agreement

6.0 PROJECT RISK

6.1 Initial Risk Assessment

Status:

MTACC has developed a Risk Management Program through various workshops and mutual cooperation. The PMOC has documented the efforts of the Risk Assessment Team in various draft Spot Reports. The MTACC and FTA have identified and documented the risk mitigation initiatives in a scoping document for incorporation into the PMP.

Observation:

The SAS Project Team and the FTA's Risk Assessment Team have worked to address issues which could impact the success of the project. The FTA/PMOC has been meeting with MTACC regularly to effectuate a revised schedule and cost estimate that will be acceptable to all parties.

Concerns and Recommendations:

The PMOC's recommendation that a Financial Management Oversight Contractor (FMOC) review the MTA's financial capacity to fund the SAS project has been implemented and is in process. [Ref. SAS-06-0110]

6.2 Risk Updates

No critical issue.

6.3 Risk Management Status

Status:

At the January 13, 2010 Quarterly Meeting with the FTA, the SAS Project Team described their efforts to incorporate the consideration of risk in their respective decision-making processes. These efforts include the periodic review and update of risk registers; the consideration of risk, cost and schedule as part of a defined process for decision-making; and periodic internal risk reviews to validate assumptions for individual contract schedule and cost estimates.

Observation:

The implementation of these processes will facilitate better management of risk from the agency perspective as well as greater effectiveness in assignment of risk in dealing with third party

contractors. This will help the agencies to better control cost and schedule assumption accuracy for both projects.

The PMOC considers these efforts to be an important step in moving toward the implementation of processes included in the ELPEP.

During February 2010, the PMOC continued to work on the following Risk Assessment update activities:

- *Review of grantee's compliance with 2006, 2007, 2008 and 2009 risk mitigation commitments.*
- *The PMOC supported the FTA-Region 2 with finalizing and implementing of the ELPEP.*

During February 2010, discussions of ELPEP requirements took place between the MTA and the FTA. Implementation meetings were held and will continue to be held weekly.

Concerns and Recommendations:

The PMOC is concerned that the SAS project contingency did not start at the FTA recommended level and that SAS projections originally brought it below the Cost Contingency Curve. The PMOC recommends that SAS closely monitor their cost contingency to ensure that there is sufficient mitigation capacity and/or contingency funding available to cover the impact of projected drawdown and the possible realization of identified risks.

6.4 Risk Mitigation Actions

No critical issue.

6.5 Cost and Schedule Contingency

No critical issue.

7.0 LIST OF OPEN ITEMS

Priority in Criticality column

1 – Critical

2 – Near Critical

Number with Date Initiated	Section	Issue	Criticality
SAS-05-0110	1.1.1 History of Performance	The PMOC is concerned about MTA's ability to provide both its ETPC funds and the \$307 million in secondary cost mitigation funds (the difference between the MTA's ETPC and the PMOC's ETPC), if necessary.	2
SAS-06-0110	1.1.3 Local Funding Agreement 6.1 Initial Risk Assessment 6.3 Risk Management	The PMOC's recommendation that a Financial Management Oversight Contractor (FMOC) review the MTA's financial capacity to fund the SAS project has been implemented and is in process.	2
SAS-07-0110	2.1.2 Procurement	The PMOC is concerned about the utilization of the IFB process for Contract 4B because of its estimated value. The scope of the contract might limit the number of responsive and responsible bidders, which would extend the procurement process. This contract is on the near critical path and any slippage could have a major impact on the project. The PMOC recommends that the MTACC develop a contingency plan if an insufficient number of responsive and responsible bids are received.	2

Number with Date Initiated	Section	Issue	Criticality
SAS-08-0110	2.2 Third Party Agreements	The PMOC is concerned that in several cases agreed upon design and scope of work has been revised when later reviewed by other personnel within the agencies. <i>The PMOC recommends that MTA consider utilizing utility agreements on future projects to preclude problems of this nature.</i>	2
SAS-09-0110	3.1 PMP	The PMP and its sub-plans must be updated to reflect the new management processes and strategies of the ELPEP.	2
SAS-10-0110	3.2 PMP Sub-Plans	MTA is required to develop and finalize a Cost and Schedule Management Plan, and a Cost and Schedule Contingency Management Plan for the SAS in conformance with ELPEP requirements within 60 days of January 15, 2010. The PMOC is concerned that the 60 day requirement may not be met. PMOC recommends the continuation of the workshops.	2
SAS-11-0110	3.3 Procedures	The PMOC is concerned whether the new procedures will actually be utilized by the different operating agencies within the MTA, given that NYCT will implement SAS, and the procedures of the SAS PMP reflect the NYCT quality management system. The PMOC recommends that representatives from the different operating agencies be part of the team generating the procedures which would contribute to the acceptance of the procedures. The PMOC also recommends that a training schedule be developed to familiarize MTACC personnel with the new procedures.	2
SAS-12-0110	4.1 Critical Path Activities	The MTACC should investigate the detailed relationships between construction contracts to determine a precise amount of hand-off time. The strategy for the late performance of construction is to consume hand-off duration downstream. Significant amounts of hand-off could be consumed because of the late performance of Contract 1. The hand-off time is contingency time and should only be consumed in prescribed fashion. The MTACC should also develop a new IPS to reflect the status of its construction and procurement efforts and keep update the IPS schedule monthly.	1

Number with Date Initiated	Section	Issue	Criticality
SAS-13-0110	4.2 Schedule Performance Analysis	The MTACC should assure that the IPS contains a binding milestone for the turnover of work from Contract 1 to the 86 th Street mining Contract 5B, which is on the critical path of the program. This oversight has the potential to allow the critical path turnover to slip in time without any repercussions to Contract 1. As it stands now, Contract 1 has until substantial completion to turn over work to Contract 5B.	1

8.0 GRANTEE ACTIONS FROM QUARTERLY AND MONTHLY MEETINGS

Priority in Criticality column

1 – Critical

2 – Near Critical

Number with Date Initiated	Section.	Grantee Actions	Criticality
SAS-A17-0808	2.4 Vehicles	<p>The PMOC requested additional information regarding certain statements in the draft Rail Fleet Management Plan:</p> <ul style="list-style-type: none"> ▪ NYCT should provide a test plan for increasing the period between inspections of the new technology fleet. ▪ NYCT should explain why, in light of the ongoing state of good repair fleet replacement program, the cars financed under the SAS project are no longer needed. ▪ MTA should explain why they are considering removing the vehicles from the project scope without reducing the project funding. 	2
SAS-A18-0808	ELPEP Updates	The change in the Contingency Drawdown Curve, particularly the latent contingency, needs to be clarified.	2
SAS-A19-0210	6.5 Cost and Schedule Contingency	<p><i>MTACC has developed a Risk Management Program through various workshops and mutual cooperation. The PMOC has documented the efforts of the Risk Assessment Team in various draft Spot Reports. The MTACC and FTA have identified and documented the risk mitigation initiatives in a scoping document for incorporation into the PMP.</i></p> <p><i>PMOC had expressed concern that the amount of available contingency may be insufficient to support the required contingency determined under the risk process.</i></p>	2

ATTACHMENT A -- LIST OF ACRONYMS

AFI	Allowance for Indeterminates
ARRA	American Recovery and Reinvestment Act
AWO	Additional Work Order
CCM	Consultant Construction Manager
CPM	Critical Path Method
CPRB	Capital Program Review Board
DHA	DMJM+Harris and ARUP
DOB	New York City Department of Buildings
FD	Final Design
FEIS	Final Environmental Impact Statement
FFGA	Full Funding Grant Agreement
FTA	Federal Transit Administration
HLRP	Housing of Last Resort Plan
MEP	Mechanical, Electrical, Plumbing
MTA	Metropolitan Transportation Authority
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
ROD	Revenue Operations Date
TIA	Time Impact Analyses
S3	Skanska, Schiavone and Shea
SAS	Second Avenue Subway
SCC	Standard Construction Categories
SSMP	Safety and Security Management Plan
SSOA	State Safety Oversight Agency
SSPP	System Safety Program Plan
TBD	To Be Determined