



Massachusetts Bay Transportation
Authority

Design & Construction Department

Lessons Learned Management Response: Procurement

Compiled By Project Controls

Lessons Learned Management Response - Procurement

I.D. #	Item No.	Classification	Brief Description	Recommendation	Management Brief Action Plan
P.PL12.1	1	Parking Lot	design build procurement	mandatory ATC should be identified	closely follow MassDot Design Build Process as adapted for Longfellow Bridge
	2			clarify what items should not be ATC	Agreed; should be in each RFP
	3			ATC submittal should require sufficient detail	Agreed; should be in each RFP
	4			procure design builder earlier in design process (30%)	Agree
	5			better coordination between depts.	Agree
	6			better documentation of scope and design changes during the V.E. process	Agree; revisit/develop VE process
	7			best value selection	Agree
	8			produce a good risk allocation matrix	Agree; will revisit procurement guidelines
	9			determine stakeholder requirements	Agree; will revisit procurement guidelines
	10			allocate process management to the contractor for utility relocation	Agree; this is currently in place
	11			provide incentive to contractor for management of all risks	will consider further
P.PL12.2	1	Parking Lot	general design build procurement	selection criteria should be 1 criteria	review Selection Criteria; review design build procurement contract
	2			training for Design Build contractor teams	Agree; implement on next Design Build Contract; review design build procurement contract

Lessons Learned Management Response - Procurement

I.D. #	Item No.	Classification	Brief Description	Recommendation	Management Brief Action Plan
	3			training for selection committee members	Agree; implement on next Design Build Contract; review design build procurement contract
	4			well defined legal agreements between parties	Agree; implement on next Design Build Contract; have well-defined contractual agreements; review design build procurement contract
	5			code egress review completed prior to design build procurement	Agree; implement on next Design Build Contract; review design build procurement contract
	6			clear expectations that all T standards & guidelines are required to be met to have a compliant submittal (technical proposal & cost proposal)	Agree; implement on next Design Build Contract; review design build procurement contract
P.SR12.1	1	Station Renovation	technical requirements and cost defined by track dept. prior to construction	do not issue NTP if Scope of Work is not defined	Agree; PBCRS have been changed to reflect this
	2			when consultant's identify conflicts with existing conditions, all affected depts. should be invited to a meeting to discuss condition	Agree; determine who will make decisions on what to do in order to resolve conflict
	3			determine who will make decision on what to do to correct conflict	Agree; determine who will make decisions on what to do in order to resolve conflict

Lessons Learned Management Response - Procurement

I.D. #	Item No.	Classification	Brief Description	Recommendation	Management Brief Action Plan
	4			determine who is responsible for cost	Agree; determine who will make decisions on what to do in order to resolve conflict
	5			confirm who is responsible for schedule	Agree; determine who will make decisions on what to do in order to resolve conflict
	6			require designers to obtain their own equipment in order to perform inspections	Agree; determine who will make decisions on what to do in order to resolve conflict

PROCUREMENT

PARKING LOT

Lessons Learned Form

QTR. 20____

1. Jan. - Mar.

3. Jul. - Sept.

2. Apr. - June

4. Oct. - Dec.

1. Project Title: Wonderland Parking Garage

2. Contract #: D38CN01

3. Lessons Learned #: _____

4. Date: 1/9/12

5. Project Delivery Method

Design - Bid - Build

Design Build

CM @ Risk

6. Phase:

Conceptual Design of 15%

Preliminary Design 15% - 60%

Final Design 60% - 100%

Procurement

Construction

7. Project Classification:

- | | |
|--|---|
| <input type="checkbox"/> System Improvement | <input type="checkbox"/> Maintenance Facility Improvement |
| <input type="checkbox"/> Parking Lot | <input type="checkbox"/> New Elevator |
| <input type="checkbox"/> Roadway | <input type="checkbox"/> Replacement Elevator |
| <input type="checkbox"/> Commuter Rail | <input checked="" type="checkbox"/> Parking Garage |
| <input type="checkbox"/> Bridge | <input type="checkbox"/> Light Rail Right-of-Way |
| <input type="checkbox"/> Station Renovation | <input type="checkbox"/> New Vertical Construction |
| <input type="checkbox"/> New Capital Expansion | <input type="checkbox"/> Environmental |
| <input type="checkbox"/> Noise Wall | <input type="checkbox"/> Heavy Civil |
| <input type="checkbox"/> Building Demo | <input type="checkbox"/> Signal/Comm./Power |

8. Lessons Learned Affected Category:

- | | |
|---|--|
| <input checked="" type="checkbox"/> Scope | <input checked="" type="checkbox"/> Time |
| <input checked="" type="checkbox"/> Cost | <input checked="" type="checkbox"/> Management |

9. Is this a safety related lesson? Yes No

10. Title of Lessons Learned: Lessons Learned through Design and Procurement

11. Background:

This project was advanced to 90%. When the ARRA funds became available it was decided to complete the design as a Design Build to mitigate risk, control costs and expedite the schedule

12. Lessons Learned Challenges (what needs improvement or what went well?):

13. Lessons Learned Recommendations (how would you improve or avoid or why do you think it went so well?):

As many Mandatory ATC's should be identified as possible - especially when budget concerns exist. These MATC's should be defined early in the design process such that the design team can keep track and provide detailed descriptions of system and scope included in the MATC. It should be made clear what items should not be considered ATC's. It seems that the process would be more fruitful if it were clear that ATC's should not change project scope or quality (avoiding the "LOW-hanging fruit" approach) and find ways to incentivize creative thinking (such as SCCI's hybrid foundation system). From an evaluation point of view, more detail from the DB teams should be required in order to have ATC's considered. More definition in the ATC would allow for earlier evaluation, hopefully avoiding lengthy negotiation during contract from ATCs. Need to better manage internally signing authority for parties and departments.

14. Applicability:

Submitted by: Tom Rovero/Erik van Aarem

Telephone #: 781-927-5766 Email: erikvanaarem@pmc-ma.com

Lessons Learned Form

QTR. 20__

- 1. Jan. - Mar.
- 2. Apr. - June
- 3. Jul. - Sept.
- 4. Oct. - Dec.

1. Project Title: WONDERLAND TOD'S

2. Contract #'s: D38CN/01 & D39CN/01

3. Lessons Learned #: 3 (GENERAL DB PROCUREMENT)

4. Date: 1/12/12

5. Project Delivery Method

- Design - Bid - Build
- Design Build
- CM @ Risk

6. Phase:

- Conceptual Design of 15%
- Preliminary Design 15% - 60%
- Final Design 60% - 100%
- Procurement
- Construction

7. Project Classification:

- | | |
|--|--|
| <input type="checkbox"/> System Improvement | <input type="checkbox"/> Maintenance Facility Improvement |
| <input type="checkbox"/> Parking Lot | <input type="checkbox"/> New Elevator |
| <input type="checkbox"/> Roadway | <input type="checkbox"/> Replacement Elevator |
| <input type="checkbox"/> Commuter Rail | <input checked="" type="checkbox"/> Parking Garage <i>D39CND/1</i> |
| <input checked="" type="checkbox"/> Bridge <i>D39CND/1</i> | <input type="checkbox"/> Light Rail Right-of-Way |
| <input type="checkbox"/> Station Renovation | <input type="checkbox"/> New Vertical Construction |
| <input type="checkbox"/> New Capital Expansion | <input type="checkbox"/> Environmental |
| <input type="checkbox"/> Noise Wall | <input type="checkbox"/> Heavy Civil |
| <input type="checkbox"/> Building Demo | <input type="checkbox"/> Signal/Comm./Power |

8. Lessons Learned Affected Category:

- | | |
|---|--|
| <input checked="" type="checkbox"/> Scope | <input type="checkbox"/> Time |
| <input checked="" type="checkbox"/> Cost | <input checked="" type="checkbox"/> Management |

9. Is this a safety related lesson? Yes No

10. Title of Lessons Learned: GENERAL DB PROCUREMENT RELATED

11. Background:

12. Lessons Learned Challenges (what needs improvement or what went well?):

- SELECTION CRITERIA SHOULD BE 1 CRITERIA/SENTENCE
- TRAINING FOR DB CONTRACTOR TEAMS.
- TRAINING FOR SELECTION COMMITTEE MEMBERS.
- WELL DEFINED AGREEMENTS BETWEEN PARTIES
(LEGAL)

13. Lessons Learned Recommendations (how would you improve or avoid or why do you think it went so well?):

- CLEAR EXPECTATIONS THAT ALL MBTA STANDARDS & GUIDELINES ARE REQUIRED TO BE MET TO HAVE A COMPLAINT SUBMITTAL (TECHNICAL PROPOSAL & COST PROPOSAL)
- CODE/EBOOKS REVIEW COMPLETED ^{PRIOR TO} DB PROCUREMENT

Submitted by: _____

Telephone #: 502 590 8760 Email: TRIVERO@MBTA.COM

**STATION
RENOVATION
(RAPID TRANSIT)**

7. Project Classification:

- | | |
|--|---|
| <input type="checkbox"/> System Improvement | <input type="checkbox"/> Maintenance Facility Improvement |
| <input type="checkbox"/> Parking Lot | <input type="checkbox"/> New Elevator |
| <input type="checkbox"/> Roadway | <input type="checkbox"/> Replacement Elevator |
| <input type="checkbox"/> Commuter Rail | <input type="checkbox"/> Parking Garage |
| <input type="checkbox"/> Bridge | <input type="checkbox"/> Light Rail Right-of-Way |
| <input checked="" type="checkbox"/> Station Renovation | <input type="checkbox"/> New Vertical Construction |
| <input type="checkbox"/> New Capital Expansion | <input type="checkbox"/> Environmental |
| <input type="checkbox"/> Noise Wall | <input type="checkbox"/> Heavy Civil |
| <input type="checkbox"/> Building Demo | <input type="checkbox"/> Signal/Comm./Power |

8. Lessons Learned Affected Category:

- | | |
|---|-------------------------------------|
| <input checked="" type="checkbox"/> Scope | <input type="checkbox"/> Time |
| <input checked="" type="checkbox"/> Cost | <input type="checkbox"/> Management |

9. Is this a safety related lesson? Yes No

10. Title of Lessons Learned: Ongoing technical discussions with the Track Department

11. Background:

The construction NTP for the Orient Heights Station Project was issued on 12/7/11. Unfortunately, as of 11/13/12 the extent of track work in the station and adjoining areas has not been defined and the design of the future track profile is a work in progress. Also, the Project Office and Track Department, which is committed to performing the track work, must agree on a schedule for performing the track improvements in concert with the construction contract.

12. Lessons Learned Challenges (what needs improvement or what went well?):

During preliminary design, the Consultant performed a survey of the top of rail elevations throughout the station area in order to determine the platform elevations. Upon completion of the survey, the Consultant submitted a memo requesting concurrence on the platform elevation (so that it was constant throughout the station) based on proposed top of rail elevations and the MBTA design standard. This memo identified areas of the track that would need to be raised 3-4" to accommodate the proposed platform elevation. The focus should have been on completely understanding the limits of track work that would need to be modified to accommodate the proposed design, or in fact, modifying the design to accommodate a proposed track profile.

13. Lessons Learned Recommendations (how would you improve or avoid or why do you think it went so well?):

When the Consultant identifies conflicts with existing conditions, all affected MBT A Departments should be invited to meetings to discuss the existing conditions; develop a game plan to collect additional information if needed; determine who will make the decision on what to do to correct the conflict; and then determine how it will be paid and when it will be completed.

14. Applicability:

Any station renovation project that involves platform or near-track work is driven by MBTA Track Design and Accessibility Standards.

Submitted by: _____ John Favorito _____

Telephone #: _____ 617-222-4330 _____ Email: _____ jfavorito@mbta.com _____