ATTACHMENT F

EXAMPLE

SIMPLE CONCEPTUAL CTD

(CONTRACT TIME DETERMINATION)

FOR 25% DESIGN STAGE

DEVELOPED FOR ***CONSTRUCTION PLANNING***

DURING THE ***DESIGN PHASE***

REV3 05MAR2024

CONTENT

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ATTACHMENT F – SIMPLE/CONCEPTUAL CTD AT THE 25% DESIGN PHASE (ONLY)

1.1 CONCEPTUAL CONTRACT TIME DETERMINATION (CTD) SUMMARY

The Designer has conducted a conceptual CTD and found these durations based on an advertising date of 03Sep11 and a Notice to Proceed (NTP) date of 24Mar12.

- **NTP to Full Beneficial Use / Substantial Completion (Activity MS02) 913 cd 22 Sep 2014**
- **NTP to Contractor Field Completion (Activity MS01) 942 cd 21 Oct 2014**

This report describes the basis for the conceptual CTD and gives an overview of the project scope, the assumptions used, the limitations of operations and any initial time related concerns.
A simplified/conceptual CTD schedule is also attached.

1.2 PURPOSE

A conceptual CTD is required at the 25% DBB submission. As required, this conceptual CTD has been generated for initial budgeting and planning purposes only. The CTD will be developed and refined as part of the 75% Submission.

1.3 PROJECT DESCRIPTION – CTD BASIS

The proposed project consists of the rehabilitation of the existing three-span concrete arch bridge that carries North Harvard Street over the Charles River. Included in the rehabilitation will be the replacing of the existing bridge lighting, side spandrel and parapet walls and roadway surface. The proposed rehabilitation of the bridge will occur within the footprint of the existing bridge. The existing bridge will be modified to accommodate bicycle lanes in each direction. The final width of the bridge will match the original dimension. The intersections of North Harvard Street with both Memorial Drive and Soldiers Field Road may be reconstructed to include new traffic signals, new and relocated granite curbing. The project also includes utility upgrades on the bridge superstructure and landscape improvements adjacent to the bridge.
The proposed project will be staged to minimize impacts and maintain pedestrian and vehicular traffic. The construction will be phased so that continuous vehicular, pedestrian is maintained to the maximum extent possible. The project is intended to be built in four phases. The existing four-lane section will be reduced to two lanes, one lane in each direction. Whenever possible, sidewalks will be maintained on both sides of the bridge during construction.

1.4 CONCEPTUAL CTD - REFERENCES

The conceptual CTD was developed using information contained in the following documents:

A. MassDOT Accelerated Bridge Project Description – Project 605517
B. 25% Drawings Set
C. Previous Data/Experience

1.5 METHODOLOGY

After a cursory review of the preliminary staging concepts, sketch plans, Preliminary Office Estimate, the scope of work was identified. The project scope was broken down into discrete high level phases. The duration of each phase of demo and construction was calculated based on the (similar project) and engineering judgment from our project team.

1.6 ASSUMPTIONS

Initial Maintenance-Of-Traffic and Sequencing considerations

The schedule has been developed as per the initial traffic sequencing of the project:

Note- these are initial stages only and will be refined.

- ✓ ***Stage 1:***

  Arch Repairs and temporary support of excavation installation in the middle lane. The middle lane will be closed and at least one lane of traffic will be maintained on North Harvard Street in each direction

- ✓ ***Stage 2:***

  East or West lane reconstruction (Bridge and Roadway). One lane will be closed and at least one lane of traffic will be maintained on North Harvard Street in each direction

- ✓ ***Stage 3:***

  West or East lane reconstruction (Bridge and Roadway). One lane will be closed, at least one lane of traffic will be maintained on North Harvard Street in each direction

- ✓ ***Stage 4:***

  Middle Roadway construction. Middle lane will be closed, at least one lane of traffic will be maintained on North Harvard Street in each direction

1.7 INITIAL TIME RELATED CONCERNS

- Currently the bridge carries utilities (water mains, duct banks, and lighting conduit). If it is determined that the condition of the utilities requires replacement, advance notice and coordination may be required with utility companies
- The entire area is considered historical both nationally and locally at the state level. Very intimate attention should be given to ensure that the rehabilitation of the bridge will adhere and preserve all of the historical details and all required permits are granted
- Environmental permits will be granted to allow for water access
- No PUC Form has been provided to the Designer at this time. Utilities will be critical to that early stages of this project and the Designer will be seeking an update on the PUC form after the schedule Utility Site meeting (on _____, 2014), and as the design evolves into the 75% stage.

1.8 INCENTIVE/DISINCENTIVE

It is the Designer's understanding that this project will not be offering contractor Incentive/Disincentive at this time. The Designer will coordinate and confirm with the Project Manager whether an Incentive/Disincentive (I/D) provision is appropriate for this project.

1.9 ATTACHMENTS – SIMPLE BAR CHART - CTD

9.1 SIMPLIFIED/CONCEPTUAL CTD SCHEDULE – (ATTACHED)