

SECTION 9.0 PROJECT SCHEDULE REQUIREMENTS

9.1 PROJECT SCHEDULE SUBMITTALS

9.1.1 General – Prosecution of Work(Milestones) (Supplementing Subsection 8.03 of the MassHighway Standard Specifications, revised April 2010)

The DB Entity shall complete the Work in accordance with the following milestones:

- Milestone #1: September 2, 2011
- Milestone #2: October 15, 2011
- Milestone #3: November 15, 2011
- Milestone #4: June 30, 2012
- Milestone #5: June 30, 2012

Milestone #1 – Completion of the Superstructures of the Fourteen (14) Bridges.

- Allowable Roadway closure/detour of I-93 to achieve Completion of the Superstructures of the fourteen (14) Bridges shall be limited to the following:
- Detour and closure of all four (4) lanes of traffic on a maximum of two (2) bridges (either northbound or southbound) each weekend, beginning no sooner than 8:00 p.m. Friday and ending no later than 5:00 a.m. the following Monday, beginning Friday, June 3, 2011, and ending Monday, August 29, 2011, excepting the 4th of July weekend, Friday, July 1, 2011, through Monday, July 4, 2011.
- Closure of a maximum of two (2) lanes of traffic each weeknight, excepting Friday, beginning no sooner than 9:00 p.m. and ending the following morning no later than 5:00 a.m., beginning Monday, June 6, 2011, and ending Friday, August 26, 2011.
- If the DB Entity fails to open all four (4) travel lanes of I-93 southbound and I-93 northbound (total 8 lanes) to traffic by 5:00 a.m. on a weekday, the DB Entity will be prohibited from closing travel lanes until it has submitted, and MassDOT has approved, an appropriate corrective action plan..
- In addition, if the DB Entity is assessed the grand total of the total maximum cumulative Disincentive Deduction and the total maximum cumulative Incentive Payment Reduction before achieving Milestone #1 or Milestone #2, the DB Entity will be required to submit a corrective action plan to MassDOT, and MassDOT may modify or augment the DB Entity's work hour restrictions, in accordance with Section 9.1.3.1 Incentive/Disincentive Provisions.
- Milestone #1 shall be completed no later than September 2, 2011.

Milestone #2 – Substantial Completion of the 14 Bridges.

- Substantial completion of the fourteen (14) Bridges shall be limited and defined as:
Having performed the following work on all fourteen (14) Bridges: substructure rehabilitation; installation of the permanent median barrier; parapet walls and bridge railing; complete removal of the moveable barrier (zipper lane); removal of crossovers and restoration of

crossover areas; installation and placement of the membrane; final paving; pavement markings; opening to full capacity of I-93 southbound and I-93 northbound to traffic, including the shoulders; installation of new lighting; restoration of utilities; restoration of secondary roads, as needed.

Allowable Roadway closure and detour of I-93 to achieve Substantial Completion shall be limited to the following:

- Closure of a maximum of two (2) lanes of traffic within work zones from Sunday through Thursday, beginning no sooner than 9:00 p.m. Sunday and ending the following morning no later than 5:00 a.m., beginning Sunday, February 6, 2011, and ending Friday, June 3, 2011, excepting Sunday, May 29, 2011, and Monday, May 30, 2011.
- Closure of a maximum of two (2) lanes of traffic within work zones on a maximum of two (2) bridges from Sunday through Thursday, beginning no sooner than 9:00 p.m. Sunday and ending the following morning no later than 5:00 a.m., beginning Sunday, September 4, 2011, and ending Friday, October 14, 2011.
- Closure of a maximum of two (2) lanes of traffic within work zones from Monday through Thursday, beginning no sooner than 9:00 p.m. Sunday and ending the following morning no later than 5:00 a.m., beginning Monday, June 6, 2011, and ending at 5AM on Friday, September 2, 2011.
- If the DB Entity fails to open all travel lanes of I-93 southbound and I-93 northbound to traffic by 5:00 a.m. on a weekday, the DB Entity will be prohibited from closing travel lanes until it has submitted, and MassDOT has approved, an appropriate corrective action plan.
- In addition, if the DB Entity is assessed the grand total of the total maximum cumulative Disincentive Deduction and the total maximum cumulative Incentive Payment Reduction before achieving Milestone #1 or Milestone #2, the DB Entity will be required to submit a corrective action plan to MassDOT, and MassDOT may modify or augment the DB Entity's work hour restrictions, in accordance with Section 9.1.3.1.
- Milestone #2 shall be completed no later than October 15, 2011.

Milestone #3 – Final Acceptance of the 14 Bridges.

- Final Acceptance of the fourteen (14) Bridges shall be limited and defined as:
Completion of Milestones #1 and #2, as required above, all Punch List Work associated with the fourteen (14) bridges, and one hundred (100%) percent Completion of the bridge work.
- One hundred (100%) percent completion of the bridge work shall be defined as:
MassDOT has accepted all of the bridge work and has no outstanding issues/requirements that require any effort by the DB Entity, including but not limited to: construction work of any kind, reports, financial information, materials and certifications, testing results, financial requirements, outstanding change orders and contract requirements.

Allowable Roadway closure and detour of I-93 to achieve Final Acceptance of the 14 Bridges shall be limited to the following:

- Closure of a maximum of two (2) lanes of traffic within work zones from Sunday through Thursday, beginning no sooner than 9:00 p.m. Sunday and ending the following morning no later than 5:00 a.m., beginning Sunday, October 16, 2011 and ending Tuesday, November 15, 2011.

- If the DB Entity fails to open all four (4) travel lanes of I-93 southbound and I-93 northbound to traffic by 5:00 a.m. on a weekday, the DB Entity will be prohibited from closing travel lanes until it has submitted, and MassDOT has approved, an appropriate corrective action plan.
- Milestone #3 shall be completed no later than November 15, 2011.

Milestone #4 – Completion of the Design and Installation of a Noise Barrier

- The DB Entity shall complete the design and install a Noise Barrier along the southbound side of I-93 between Interchange 32 (Salem Street Rotary) and Interchange 33 (Roosevelt Circle) in Medford, Massachusetts, in accordance with the limits, plans, and specifications included as Appendix C, and pursuant to RFP section 6.6.5.5.

Allowable Roadway closure and detour of I-93 to achieve Completion of the Design and Installation of a Noise Barrier shall be limited to the following:

- Closure of a maximum of two lanes of traffic within work zones from Sunday through Thursday, beginning no sooner than 9:00 p.m. Sunday and ending the following morning no later than 5:00 a.m., beginning Tuesday, February 1, 2011 and ending Saturday June 30, 2012, and the Allowable Roadway closures and detours of I-93 set forth in Milestones #1, #2 and #3 above.
- Milestone #4 shall be completed no later than June 30, 2012.

Milestone #5 – Final Acceptance of the Project

- Final Acceptance of the Project shall be limited and defined as:
Completion of Milestones #1, #2, #3 and #4 as required above, all Punch List Work associated with the Project, requirements set forth in RFP Section 6.3.3.2, and one hundred (100%) percent Completion of the Project work.
- One hundred (100%) percent completion of the work shall be defined as:
MassDOT has accepted all of the work and has no outstanding issues/requirements that require any effort by the DB Entities, including but not limited to: construction work of any kind, reports, financial information, materials certifications, testing results, financial requirements, outstanding change orders, contract requirements, and all requirements of RFP Section 6.3.3.2
- Milestone #5 shall be completed no later than June 30, 2012.

MassDOT is seeking innovations in design and construction to reduce these durations. Every effort should be made to develop a schedule which reduces the time to complete the Project.

9.1.2 Initial Project Schedule/Payment Schedule Submittal

Prior to the issuance of the Notice to Proceed, the DB Entity shall submit an Initial Project Schedule based on the Technical Proposal detailed in Section 3.3 Technical Proposal of the RFP. The Initial Project Schedule Submittal shall divide the DB Work into activities with appropriate logic ties to show the DB Entity's overall approach to the planning, scheduling and execution of the DB Work. The document submitted to MassDOT as the Initial Project Schedule Submittal shall not be considered the Project Schedule unless and until it is approved by MassDOT.

The Initial Project Schedule Submittal shall clearly define the progression of the DB Entity's Work from the Notice to Proceed to completion of the DB Work by using separate activities for: (i) all significant DB Work components; (ii) the procurement of approvals; (iii) submittal preparation and

submission; (iv) submittal review and return; (v) material and equipment procurement and delivery to the site or storage locations; (vi) interfaces with adjacent work and work to be completed by others (such as utility companies and public agencies); (vii) DB Entity milestones; (viii) Earned Value; and (ix) Substantial Completion and Final Acceptance.

The DB Entity is required to show all design submittals, MassDOT review timeframes, re-submittals and acceptance activities; all permit and Right-of-Way requirements with appropriate durations, and Public Hearing dates in the schedule. The schedule of values shall contain all activities for which payment will be requested for each lump sum (LS) item.

The DB Entity shall reflect the DB Payment schedule (attached hereto as Exhibit C) among the activities scheduled on the Initial Project Schedule Submittal. The price for each activity shall be all-inclusive, i.e., it shall include all direct and indirect costs, overhead, risks and profit. Activity durations shall be no longer than thirty (30) Days and no less than one (1) day in the Contract Progress Schedule, unless otherwise accepted by MassDOT. The maximum duration, for activities reported in the Short-Term Construction Schedule, shall be no longer than one (1) day, and shall be no less than one (1) hour, unless otherwise required.

The DB Entity shall use standard activity identification numbers, descriptions and codes in all schedule submittals, in a manner acceptable to MassDOT.

The DB Entity shall comply with its Demonstration of Schedule Competency and Critical Path Method (CPM) Schedule submission as provided in its Proposal Appendices for these items as approved by MassDOT.

Schedules shall be resubmitted within ten (10) Work Days after receipt of MassDOT's comments. MassDOT's comments may address whether items of the Work have been omitted, if activity durations are reasonable, or that the means, methods, timing, and/or sequencing of the Work are practicable. The planning, scheduling, and execution of the Work and the accuracy of their representation in the Contract Progress Schedule shall remain the sole responsibility of the DB Entity. The DB Entity shall not be relieved from its responsibility for satisfactorily completing the Work within the specified Contract Time due to its failure to submit an acceptable Contract Progress Schedule.

9.1.3 Project Schedule Requirements

**Schedule of Operations (Contract Progress Schedule)
(Supplementing Subsection 8.02, Division I of the MassHighway Standard Specifications,
Revised April 2010)**

A. General Requirements

Within ten (10) Work Days after Notice to Proceed, the DB Entity shall submit, for MassDOT's acceptance, a Schedule of Operations, hereinafter called the Contract Progress Schedule. The Contract Progress Schedule shall consist of a timeline showing how the DB Entity plans to complete the various items of the Work within the time specified in the Contract.

B. Specific Requirements

1. All Schedule Types

All schedule types described below, baseline, stasured, proposal, recovery, and all Time Entitlement Analyses (TEAs) shall clearly define the progression of the Work from Notice to Proceed to Final Acceptance by using separate activities for each of the following items:

1. Notice to Proceed
2. All components of the Work
3. Procurement of permits by the DB Entity or MassDOT
4. Submittal preparation and submission
5. Submittal review and return, generally fifteen (15) Calendar Days from receipt of complete submittal.
6. Re-submittal, no later than ten (10) Calendar Days from receipt of submittal review and return
7. Material and equipment procurement and delivery to the site or storage location
8. Interfaces with adjacent work, utility companies, public agencies, and/or any other third party work affecting this Contract
9. Interim milestones listed in Section 9.1.1
10. The critical path, clearly defined and labeled
11. Float, as defined below, clearly identified
12. Traffic Set-up, zone removal, night work and phasing
13. Substantial Completion
14. Punch list completion period
15. Final Acceptance

“Float” shall be defined as the amount of time between when an activity can start (Early Start Date) and when an activity must start (Late Start Date). Float belongs to the Project and is a shared commodity between MassDOT and the DB Entity and is not for the exclusive use or benefit of either party. Either party has full use of the float until it is depleted. The float may be claimed by whichever party first demonstrates a need for it, i.e., that Contract Milestones and/or the Contract Completion Date, has been delayed. The DB Entity shall demonstrate this need as required herein.

The DB Entity shall uniquely identify each schedule submittal. Resubmissions shall use the same revision number, followed by the letters A, B, C, and so on, and shall fully address MassDOT's comments.

All schedules shall be prepared as time-scaled bar charts using computerized scheduling software, such as Microsoft Project, Primavera Contractor, or an equal approved by MassDOT, and shall be submitted to MassDOT in two formats; printed on 11” x 17” sized paper and copied on a portable electronic data storage medium.

2. Baseline Contract Progress Schedule

The Contract Progress Schedule shall be submitted within ten (10) Work Days after Notice to Proceed. This schedule shall only reflect the Work contained in the Contract and shall not include any delayed or change order work.

Once the Contract Progress Schedule has been accepted by MassDOT, it will represent the as-planned schedule of the Work and shall be known as the Baseline Contract Progress Schedule. Until such time as this schedule is statused under Contract Subsection 9.1.3.B.3 and Subsection 8.02 of the MassHighway Standard Specifications, as revised, the Baseline Contract Progress Schedule shall also be the Contract Progress Schedule of Record.

3. Stated Contract Progress Schedules

Stated (updated) Contract Progress Schedules shall be submitted by the DB Entity to coincide with each Contract Quantity Estimate ("CQE" or "Pay Estimate"). Except as provided elsewhere in this subsection, Stated Contract Progress Schedules shall update and replace the Contract Progress Schedule of Record.

A Stated Contract Progress Schedule shall consist of the following:

Schedule Narrative

The schedule narrative shall:

- a) itemize and describe the flow of work for all activities on the critical path;
- b) compare Early and Late Dates for activities on the critical path;
- c) give progress highlights and quantify Work Days gained or lost versus the Contract Progress Schedule of Record;
- d) describe delays, and the DB Entity's plan to recover schedule, if appropriate;
- e) describe the DB Entity's plan, approach, methodologies, and resources to be employed for completing the various operations and elements of the Work;
- f) itemize shifts, holidays;
- g) uniquely identify each calendar used.

Summary Progress Schedule

The Contract Progress Schedule shall be coded such that MassDOT may produce a summary-level schedule from each electronic file submitted that identifies major physical classes, structures, facilities, and/or other elements of the Work. Such summary activities shall be shown in relationship to the Contract Duration. The activity descriptions of the summary-level activities shall be subject to the acceptance of MassDOT.

All documentation required by the Contract to support the CQE

Each Stated Contract Progress Schedule shall reflect updated progress to the status date, shall forecast the finish dates for in progress activities and remaining activities, but shall not change any activity descriptions, durations, or sequences without the acceptance of MassDOT. Updated progress shall be limited to as built sequencing and as-built dates for completed and in progress activities. As-built data shall include actual start dates, remaining Work Days, and actual finish dates for each activity.

Stated Contract Progress Schedules shall be prepared in the approved electronic format described above and shall be submitted in two formats; printed on 11" X 17" sized paper and copied on a portable electronic data storage medium.

No Contract Quantity Estimate (CQE) shall be approved by MassDOT until the Contract Progress Schedule has been submitted.

4. Short Term Construction Schedule

The Contractor shall provide a Short-Term Construction Schedule that details the daily work activities, including any multiple shift work that the Contractor intends to conduct, in a bar chart format. The daily activities shall correspond to the Contract Progress Schedule activities (coding, activity ID, float), but shall be at a greater level of detail to identify work planned to the hour (as needed). The Short-Term Construction Schedule shall be submitted at each Weekly Contract Progress Meeting. It shall display all work for a thirty-five (35) Calendar Day period: completed work for the two (2) week period prior and all planned work for the three (3) week period following the Contract Progress Meeting or the end of the previous two (2) week period. The Contractor shall be prepared to discuss the Short-Term Construction Schedule, in detail, with the Engineer in order to coordinate field inspection staff requirements, schedule of work affecting abutters, and corresponding work with affected utilities. Failure to submit Short-Term Construction Schedules at each Contract Progress Meeting or by the end of each two (2) week period could result in withholding of full or partial payments by the Engineer.”

5. Proposal Schedules & Time Entitlement Analyses

A Proposal Schedule or Time Entitlement Analysis (“TEA”) shall be submitted to MassDOT as part of all Extra Work Order (“EWO”) proposals, all requests for extensions of Contract Time, all claims, or any other proposed change to the Contract that may cause a deviation from the Contract Progress Schedule of Record as further discussed in Section 17 of the Contract. If a Proposal Schedule or TEA is requested by MassDOT, the DB Entity shall submit one within ten (10) Work Days.

Proposal Schedules and TEAs shall be used for the negotiation of EWOs and/or other changes to the Contract as discussed in the subsections referenced in the paragraph above. Proposal Schedules and TEAs shall incorporate all proposed activities required to implement the change and detail all impacts on pre-existing activities. Accepted changes shall be included in the next Stated Contract Progress Schedule.

Proposal Schedules and TEAs shall be prepared and submitted as required in Contract Subsection 9.1.3.B.3 and Subsection 8.02 of the MassHighway Standard Specifications.

6. Recovery Schedules

The DB Entity shall promptly report to MassDOT all schedule delays during the prosecution of the Work.

The DB Entity shall promptly develop a Recovery Schedule whenever one of the following occurs:

1. The Contract Progress Schedule of Record’s critical path exceeds the greater of: a) A delay of thirty (30) Work Days, or, b) A delay equal to five (5%) percent of the Work Days remaining until the Contract Completion Date;
2. The DB Entity cannot comply with the Contract Progress Schedule of Record;
3. MassDOT requests a Recovery Schedule. If requested by MassDOT, the DB Entity shall submit a separate Recovery Schedule, prepared in accordance with this Section 9.1.3.B. within ten (10) Work Days and submit it no later than the submittal of the next Stated Contract Progress Schedule.

Recovery Schedules shall be used by the DB Entity to notify MassDOT of revisions to logic ties and activities of the Contract Progress Schedule of Record. Recovery Schedules shall include a

separate time-scaled logic diagram of the activities impacted and a narrative describing the causes of any delay and the actions planned to recover schedule to meet the Contract Completion Date.

Recovery Schedules shall be prepared in the approved electronic format described above and shall be submitted in two formats; printed on 11" x 17" sized paper and copied on a portable electronic data storage medium.

Failure to submit a Recovery Schedule could result in withholding of full or partial Contract Quantity Estimate payments by MassDOT.

C. Schedule Reviews

MassDOT will respond to each schedule submittal within fifteen (15) Calendar Days of receipt providing comments and disposition; either accepting the schedule or requiring revision and re-submittal. A schedule shall be accepted, or revised and resubmitted, only upon written notification of such by MassDOT

Schedules shall be resubmitted within ten (10) Work Days after receipt of MassDOT's comments.

MassDOT's comments may address whether items of the Work have been omitted, if activity durations are reasonable, or that the means, methods, timing, and/or sequencing of the Work are practicable. The planning, scheduling, and execution of the Work and the accuracy of their representation in the Contract Progress Schedule shall remain the sole responsibility of the DB Entity.

The DB Entity shall not be relieved from its responsibility for satisfactorily completing the Work within the specified Contract Time due to its failure to submit an acceptable Contract Progress Schedule.

D. Disputes

As stated in Contract Section 9.1.3.C and MassHighway Standard Specifications Section 8.02, all schedules shall be submitted, reviewed, dispositioned, and accepted in the timely manner specified so as to provide the greatest possible benefit to the execution of this Contract.

Any dispute concerning the acceptance of a schedule or any other question of fact arising under this subsection shall be determined by MassDOT.

Pending resolution of any dispute, the last schedule accepted by MassDOT will remain as the Contract Schedule of Record as described in Contract Subsection 9.1.B, paragraphs 2 and 3 and MassHighway Standard Specifications Section 8.02.

E. Basis of Payment

The DB Entity is required to comply with all schedule submittal requirements of RFP Section 6.3.3. A fixed price of two hundred fifty thousand (\$250,000.00) dollars will be provided to the DB Entity for these project schedule submittal requirements.

Payment will be made under Item No. 100.021 Project Schedule (Fixed Price \$250,000), with the following breakdown:

- Fifteen (15%) percent of the fixed price will be made when the Baseline Contract Progress Schedule is accepted as "Re-submittal Not Required" (As- Planned Schedule).

- The remaining eighty-five (85%) percent will be pro-rated in equal amounts on each subsequent application for payment upon MassDOT's receipt and acceptance of the monthly schedule update submittals. The number of months to be used for the pro-rating will be the number of remaining months estimated to complete the work.

9.1.3.1 Incentive/Disincentive Provisions

For the purposes of this contract, MassDOT is instituting an Incentive/Disincentive specification. This specification is to encourage the DB Entity to use innovative methodologies and techniques to achieve early project completion and to achieve certain milestones. Conversely, if the DB Entity fails to achieve certain milestones, MassDOT shall assess Disincentive Deductions. If the DB Entity submits, and MassDOT approves, an alternative Project Schedule, MassDOT will amend, as necessary, the allowable roadway closures/detours set forth in RFP Section 6.3.1 and the incentive/disincentive provisions set forth in this section. Any amended incentive/disincentive provisions will be comparable to those set forth in this Section.

For purposes of determining whether the Contractor shall receive an Incentive Payment, the dates and times set forth in Milestone Numbers 1, 2 and 3 will not be adjusted under any circumstance for any reason, cause, or circumstance whatsoever, regardless of fault, save and except in the instance that MassDOT amends the incentive/disincentive provisions in accordance with RFP section 6.3.2, and in the instance of a Force Majeure event as defined in Contract Section 15.0, Force Majeure.

Payment: The Incentive Payments for achieving Milestone Numbers 1, 2 and 3, or the Disincentive Deductions shall be a payout schedule under this Contract. Any partial day will be rounded down to the nearest whole day. For hourly incentive payment, the time will be rounded down to the nearest whole hour. All incentive payments/disincentive deductions shall be paid at the final invoice stage.

Liquidated Damages: Nothing in this section shall alter or otherwise affect the assessment of liquidated damages under Subsection 8.11 of the MassHighway Standard Specifications for Highways and Bridges – Failure to Complete Work on Time.

Milestone #1 – Completion of the Superstructures of the Fourteen (14) Bridges

Incentive Payment #1: If the DB Entity fails to open all four (4) travel lanes of I-93 southbound and I-93 northbound to traffic, MassDOT shall assess Incentive Payment Reductions as follows:

- If the DB Entity achieves Milestone #1, but fails to open all four (4) travel lanes of I-93 southbound and I-93 northbound to traffic by 5:00 a.m. on any one Monday following a weekend closure, MassDOT shall assess the DB Entity an Incentive Payment Reduction of fifty (50%) percent of Incentive #1, Three Million, Two Hundred Twenty-Five Thousand Dollars (\$3,225,000).
- If the DB Entity achieves Milestone #1, but fails to open all four (4) travel lanes of I-93 southbound and I-93 northbound to traffic by 5:00 a.m. on any two (2) Mondays following a weekend closure, MassDOT shall assess the DB Entity an Incentive Payment Reduction of seventy-five (75%) percent of Incentive #1, Four Million, Eight Hundred Thirty-Seven Thousand Dollars (\$4,837,000).
- If the DB Entity achieves Milestone #1, but fails to open all four (4) travel lanes of I-93 southbound and I-93 northbound to traffic by 5:00 a.m. on three (3) or more Mondays following a weekend closure, MassDOT shall assess the DB Entity a Incentive Payment Reduction of one hundred (100%) percent of Incentive #1, Six Million, Four Hundred Fifty Thousand Dollars (\$6,450,000).

Disincentive Deduction #1a: If the DB Entity fails to open all four (4) travel lanes of I-93 southbound and I-93 northbound to traffic by 5:00 a.m. on a Monday morning following a weekend closure, MassDOT shall assess the DB Entity a Disincentive Deduction of Four Hundred Fifty Thousand Dollars (\$450,000).

Disincentive Deduction #1b: If the DB Entity fails to open all four (4) travel lanes of I-93 southbound and I-93 northbound to traffic by the specified times the following additional deductions will be made:

- Failure to open by 5:15 a.m. on any weekday, MassDOT will assess the DB Entity a Disincentive Deduction of One Hundred Thousand Dollars (\$100,000);
- Failure to open by 5:30 a.m. on any weekday, MassDOT will assess the DB Entity another Disincentive Deduction of One Hundred Fifty Thousand Dollars (\$150,000);
- Failure to open by 5:45 a.m. on any weekday, MassDOT will assess the DB Entity another Disincentive Deduction of Two Hundred Thousand Dollars (\$200,000);
- Failure to open by 6:00 a.m. on any weekday, MassDOT will assess the DB Entity another Disincentive Deduction of Two Hundred Fifty Thousand Dollars (\$250,000);

The total maximum daily Disincentive Deduction #1a and #1b shall be One Million, One Hundred Fifty Thousand Dollars (\$1,150,000).

The grand total of the total maximum cumulative Disincentive Deduction for #1a, #1b, #2a and #2b and the total maximum cumulative Incentive Payment Reduction for #1 shall be Six Million, Nine Hundred Thousand Dollars (\$6,900,000).

If the DB Entity is assessed the grand total of the total maximum cumulative Disincentive Deduction for #1a #1b, #2a and #2b and the total maximum cumulative Incentive Payment Reduction for #1 of Six Million, Nine Hundred Thousand Dollars (\$6,900,000) before achieving Milestone #1, the DB Entity will be required to submit a corrective action plan to MassDOT and MassDOT may modify or augment the DB Entity's work hour restrictions. These modifications or augmentations may change based on the ongoing performance of the DB Entity as determined solely by MassDOT.

Milestone #2 – Substantial Completion of the Superstructures of the 14 Bridges

Incentive Payment # 2: If the DB Entity achieves Milestone #2, MassDOT shall make Incentive Payment of Four Hundred Fifty Thousand Dollars (\$450,000).

Disincentive Deduction #2a: If the DB Entity fails to achieve Milestone #2 or fails to open all travel lanes of I-93 southbound and all travel lanes of I-93 northbound to traffic by 5:00 a.m. on any weekday, MassDOT shall assess the DB Entity Disincentive Deduction of Four Hundred Fifty Thousand Dollars (\$450,000).

Disincentive Deduction #2b: If the DB Entity fails to open all four (4) travel lanes of I-93 southbound and all travel lanes of I-93 northbound to traffic by the specified times the following deductions will be made:

- Failure to open by 5:15 a.m. on a weekday, MassDOT will assess the DB Entity Disincentive Deduction of Fifty Thousand Dollars (\$50,000).
- Failure to open by 5:30 a.m. on a weekday, MassDOT will assess the DB Entity other Disincentive Deduction of One Hundred Thousand Dollars (\$100,000).

- Failure to open by 5:45 a.m. on a weekday, MassDOT will assess the DB Entity other Disincentive Deduction of One Hundred Fifty Thousand Dollars (\$150,000).
- Failure to open by 6:00 a.m. on a weekday, MassDOT will assess the DB Entity other Disincentive Deduction of Two Hundred Fifty Thousand Dollars (\$250,000).
- The total maximum Disincentive Deduction #2b shall be One Million One Hundred Fifty Thousand Dollars (\$1,150,000).

The total maximum daily Disincentive Deduction for #2a and #2b shall be One Million, One Hundred Fifty Thousand Dollars (\$1,150,000).

The grand total of the total maximum cumulative Disincentive Deduction for #1a, #1b, #2a and #2b and the total maximum cumulative Incentive Payment Reduction for #1 shall be Six Million, Nine Hundred Thousand Dollars (\$6,900,000).

If the DB Entity is assessed the grand total of the total maximum cumulative Disincentive Deduction for #1a, #1b, #2a and #2b and the total maximum cumulative Incentive Payment Reduction for #1 of Six Million, Nine Hundred Thousand Dollars (\$6,900,000) before achieving Milestone #2, the DB Entity will be required to submit a corrective action plan to MassDOT and MassDOT may modify or augment the DB Entity's work hour restrictions. These modifications or augmentations may change based on the ongoing performance of the DB Entity as determined solely by MassDOT.

Milestones #3 – Final Acceptance of the 14 Bridges

Incentive Payment #3: If the DB Entity achieves Milestone #3, MassDOT shall make an Incentive payment of One Hundred Thousand Dollars (\$100,000).

Incentive Payment Reduction #3: If the DB Entity fails to achieve Milestone #3, MassDOT shall assess the DB Entity Incentive Payment Reduction of One Hundred Thousand Dollars (\$100,000). The maximum cumulative Incentive Payment for Milestone #1, #2 and #3 is Seven Million Dollars (\$7,000,000).

The grand total of the total maximum cumulative Disincentive Deduction for #1a, #1b, #2a and #2b and the total maximum cumulative Incentive Payment Reduction for #1 and #3 shall be Seven Million Dollars (\$7,000,000).

9.1.4 Substantial Completion/Final Acceptance of the Project

9.1.4.1 Substantial Completion of the Project

The DB Entity shall provide written notice to MassDOT when all of the following have occurred:

- The DB Entity has completed the Project (except for Punch List items, final cleanup and other items included in the requirements for Final Acceptance).
- The DB Entity has ensured that all construction associated with the Project has been performed in accordance with the requirements of the Contract documents.
- The DB Entity has ensured that the Facility may be operated without damage to the Facility or any other property and without injury to any person.
- The DB Entity has ensured that the Facility is ready to be opened to the public.
- All testing requirements have been satisfactorily completed and documented.

As promptly as is practicable after receipt of notice pursuant to this Section, and in no event later than thirty (30) Days thereafter, MassDOT shall advise the DB Entity in writing of any of the following of which MassDOT or FHWA then has knowledge: (a) defects in the DB Work; and/or (b) deficiencies in the Project; and/or (c) deviations of any installed equipment, materials and workmanship from the requirements of the RFP and Contract Documents. The DB Entity shall, at its own cost and expense, promptly correct such defects, deficiencies and deviations.

Substantial Completion of the Project shall be deemed to have occurred when all of the following have occurred:

- The DB Entity has corrected all defects, deficiencies and deviations with respect to the Project and MassDOT has notified the DB Entity in writing of its acceptance (or waiver pending Final Acceptance) of such corrections; provided that final clean-up shall not be required to be performed as a condition to Substantial Completion.
- The DB Entity has received all applicable Governmental Approvals required to be obtained by the DB Entity pursuant to this RFP and Contract Documents.
- The entire Project Site is ready to be fully opened for public travel.
- A Punch List has been developed and mutually agreed to by the DB Entity and MassDOT.

Liquidated Damages

Nothing in this section shall alter or otherwise affect the assessment of liquidated damages under Subsection 8.11 of the MassHighway Standard Specifications for Highways and Bridges – Failure to Complete Work on Time.

9.1.4.2 Final Acceptance of the Project

Promptly after Substantial Completion, the DB Entity shall perform all DB Work, if any, which was waived for purposes of Substantial Completion, and shall satisfy all of its other obligations under the RFP and Contract Documents, including ensuring that the Project has been completed and all components have been properly adjusted and tested. Final Acceptance of the Project shall be deemed to have occurred when all of the following have occurred:

- All requirements for Final Acceptance of the Project shall have been fully satisfied.
- MassDOT shall have received all Design Documents, As-Built Documents, Right-of-Way record maps, surveys, test data and other deliverables required under the RFP and Contract.
- All special tools purchased by the DB Entity as provided in the RFP and Contracts shall have been delivered to MassDOT and all replacement spare parts shall have been purchased and delivered to MassDOT free and clear of Liens.
- All of the DB Entity's and Subcontractors' personnel, supplies, equipment, waste materials, rubbish and temporary facilities shall have been removed from the Right-of-Way.
- The DB Entity shall have delivered to MassDOT a certification representing that there are no outstanding claims of the DB Entity or claims, Liens or stop notices of any Subcontractor or laborer with respect to the DB Work, other than any previously submitted unresolved claims of the DB Entity and any claims, Liens or stop notices of a Subcontractor or laborer being contested by the DB Entity (in which event the certification shall include a list of all such matters with such detail as is requested by MassDOT and, with respect to all Subcontractor and laborer claims, Liens and stop notices, shall include a representation by the DB Entity that it is diligently and in good faith contesting such matters by appropriate legal proceedings which shall operate

to prevent the enforcement or collection of the same). For purposes of such certificate, the term "claim" shall include all matters or facts which may give rise to a claim.

- The Punch List items shall have been completed to the reasonable satisfaction of MassDOT and FHWA, all of the DB Entity's other obligations under the RFP and Contract shall have been satisfied in full, and MassDOT shall have delivered to the DB Entity a Notice of Final Acceptance to the effect of the foregoing.

The occurrence of Final Acceptance shall not relieve the DB Entity from any of its continuing obligations, including any required warranty obligations.