THE SCOPE OF SERVICES ADDED BY THIS AMENDMENT IS FOR A DESIGN-BID-BUILD (DBB) PROJECT ONLY. THE SCOPE OF SERVICES SPECIFIED BELOW INCLUDES ARTICLES 8.1, 8.3, 8.4, 8.5, 8.6, AND 8.7. THE SERVICES SPECIFIED IN ARTICLE 8.1 HEREIN ARE INTENDED TO SUPPLEMENT (OR BE ADDITIVE) AND NOT SUPERCEDE ARTICLE 8.1 IN THE ORIGINAL STANDARD CONTRACT BETWEEN THE PARTIES.

## **ARTICLE 8: BASIC SERVICES**

In addition to those Basic Services included in the original Contract between the Parties, the Owner's Project Manager shall perform the following Basic Services during the Design Development/Construction Documents/Bidding/Construction/Completion Phases:

# 8.1 Project Management

- 8.1.1 A draft of the communication plan shall be submitted to the Owner for approval within 30 days of the Approval to proceed to Design Development/Construction Documents/Bidding Phase and be further updated (a) as needed to include the award of a construction contract and (b) no later than 30 days after Approval to Proceed to the Construction Phase. The Owner's Project Manager shall include the Designer in its distribution of the Project Budget, Schedule, Monthly Progress Report and other reports as appropriate and as outlined in the Communications Plan.
  - 8.1.1.2 The Owner's Project Manager shall assist the Owner in the preparation of all information, material, documentation, and reports that may be required or requested by the Authority, including without limitation, documentation related to incentive reimbursement percentage points that may be awarded to the Owner by the Authority, requests for reimbursement, and audit materials. The Owner's Project Manager shall assist the Owner in the preparation of all material and documents, including bid solicitations and construction contracts, necessary for the Owner to ensure compliance with the federal Davis Bacon and Massachusetts labor standards.
  - 8.1.1.3 The Owner's Project Manager shall prepare agendas for and attend school building committee meetings, attend meetings with other representatives of the Owner, municipal administration and the school department, and attend neighborhood meetings relating to the Project, and participate as a member of the Owner's Prequalification Committee as applicable. The Owner's Project Manager shall take minutes of all of the above-referenced meetings and promptly distribute minutes of these meetings to the Owner.
  - 8.1.1.4 The Owner's Project Manager shall review all applications for payments, requisitions and invoices relating to the Project as submitted by the Designer, General Contractor, equipment vendors and all other prime contractors and suppliers and make recommendations to the Owner relative to amounts due.

## 8.1.2 Project Control

During the Design Development/Construction Documents/Bidding Phase, the Owner's Project Manager shall monitor and report to the Owner and the Authority any changes to the Project Budget and Schedule established in the Owner-Authority Project Scope and Budget Agreement.

## 8.1.2.1 Project Budget

The Owner's Project Manager will use the baseline Project Budget as the Project control against which all Designer estimates, contractor bids and other cost information will be measured. The Owner's Project Manager shall maintain and update the Project Budget throughout the term of this Contract. The Owner's Project Manager shall report any variances to the baseline Project Budget as part of the Monthly Progress Report.

The Owner's Project Manager shall prepare revisions to the Project Budget, as needed, and submit them to the Owner for approval.

# 8.1.2.2 <u>Cost Estimating</u>

The Owner's Project Manager shall prepare detailed independent cost estimates as specified in each Design phase (design development and construction documents). The Owner's Project Manager shall record and track the cost estimates at each Design phase and submit this information with each design submittal due to the Authority using the Authority's Cost Estimate Comparison Spreadsheet. The Owner's Project Manager shall compare its cost estimate to that prepared by the Designer to identify and notify the Owner of any variances.

In the event that the cost as estimated by the Designer exceeds the construction cost in the Project Budget at any of the Design phases, the Owner's Project Manager shall consult with the Designer and recommend to the Owner appropriate revisions to the scope of work.

The Owner's Project Manager shall provide cost estimating services, as may be required, to develop cash flows.

During the design development Phase, the Owner's Project Manager shall prepare a construction cost estimate for the design in Uniformat II Level 3 format, with unit rates and quantities supporting each item. The estimated cost shall be projected, to the mid point of the construction period.

At the 60% stage of completion of the final drawings and specifications, the Owner's Project Manager shall prepare a construction cost estimate using the Uniformat II Classification to Level 3, the CSI MasterFormat 6-digit format to Level 3 and MGL c.149 §44F (filed sub-bid) format including quantities of all materials and unit prices of labor, equipment, and materials as well as a cost estimate for each item of work.

The Owner's Project Manager shall prepare a final construction cost estimate in Uniformat II Elemental Classification to Level 3 (Sections A-G inclusive), the CSI MasterSpec format to Level 3 and M.G.L. c. 149, §44F (filed sub-bid) format, complete with a single line outline specification description for each item with the detailed unit rate or item cost buildup provided as a backup in each case.

#### 8.1.2.3 Project Schedule

The Owner's Project Manager shall submit this detailed baseline Project Schedule from the Project Scope and Budget Agreement to the Owner and the Authority within 30 days of Approval to proceed to the Design Development/Construction Documents/Bidding Phase. The Owner's Project Manager shall maintain and update the Project Schedule

throughout the term of this Contract. The Owner's Project Manager shall assess the actual progress of the Project relative to the baseline Project Schedule and report any variances from the baseline Project Schedule as part of the Monthly Progress Report.

In the event that actual progress of the Project varies from the baseline Project Schedule, the Owner's Project Manager shall consult with the Designer and the Contractor and make appropriate recommendations to the Owner relative to actions that should be taken by the Designer or the Contractor to achieve the baseline Project Schedule and/or recommend revisions to the Project Schedule. The Owner's Project Manager shall not be responsible for delays caused by the Designer, Contractor or Subcontractors, or the employees, agents or subconsultants of the Designer, Contractor or Subcontractors.

The Owner's Project Manager shall prepare revisions to the Project Schedule, as needed, and submit them to the Owner for approval.

## 8.1.2.4 Construction Schedule

The Contractor shall be responsible for preparing and updating its construction schedule on a monthly basis. The Owner's Project Manager shall meet once each month with the Contractor and Designer to review and update its schedule, develop the monthly progress information to support the Contractor's payment estimate, and monitor the Contractor's performance for compliance with its contract.

The Owner's Project Manager shall notify the Owner of and include in its Monthly Progress Report any significant changes or delays to the construction schedule. The Owner's Project Manager shall make appropriate recommendations to the Owner relative to the actions that should be taken by the Contractor and/or advise the Owner when liquidated damages, if included in the construction contract, are anticipated to be incurred.

## 8.1.3 Monthly Progress Report

The Owner's Project Manager shall submit to the Owner and the Authority no later than the twelfth day of each calendar month a written Monthly Progress Report summarizing activity during the preceding calendar month. The Monthly Progress Report shall be submitted in a format acceptable to the Authority and shall describe work performed by all project participants (OPM, Designer, Contractor) during the reporting period and work planned for the next reporting period. The report shall also address matters of schedule adherence (Project Schedule as well as individual completion percentages for design and construction), costs to date (updated Project Budget and actual expenses incurred), change orders and potential change orders, cash flow projections, Contractor's safety performance, Designer's QA/QC, Contractor's environmental compliance, community issues, Designer and Contractor MBE/WBE activities, any issues that could result in additional time and/or additional costs and any anticipated problems/concerns together with recommended solutions.

# 8.1.4 Change Order and Claims Administration

The Owner's Project Manager shall review and coordinate its review with the Designer and make specific document and processing recommendations to the Owner, consistent

with the General Laws and the construction contract documents, which minimize change order and claims processing costs and time. Services provided by the Owner's Project Manager shall include:

# 8.1.4.1 Change Order Administration

- 8.1.4.1.1 Review all Contractor proposals for change orders and supporting schedules for time extension requests. For change orders in excess of \$100.000, prepare independent cost estimate analysis with associated schedule impact.
- 8.1.4.1.2 Initiate, conduct, and document negotiations through a memorandum of negotiations with the Contractor.
- 8.1.4.1.3 For all change order requests by the Contractor, make recommendations to the Owner for their acceptance or rejection.
- 8.1.4.1.4 Prepare and finalize any documentation required for processing change orders including a summary of the Owner's Project Manager's review of the reasonableness of the costs and documentation to support or reject the change.
- 8.1.4.1.5 Maintain a status report system for logging and tracking change orders, claims, and disputes to resolution. At a minimum, monthly reports shall include contract number, description of change order or claim, reason for change, date initiated, magnitude of estimated cost, actions required (identification of action parties and response dates) and status. This report shall be included in the Monthly Progress Report.

# 8.1.4.2 Claims and Disputes Management

- 8.1.4.2.1 Implement a claims management procedure consistent with the construction contract documents.
- 8.1.4.2.2 Analyze Contractor claims and propose recommendations to the Owner in support of the Owner's obligations under the claims article of the construction contract documents. Prepare responsive positions in coordination with the Owner, and obtain appropriate input from the Designer and/or Contractor.
- 8.1.4.2.3 In the event that a dispute arises between the Contractor, and/or any Subcontractors, and/or the Designer, including, but not necessarily limited to, disputes regarding the performance, quality, acceptability, fitness and rate of progress of the Project or the requirements of the Designer's contract or the Contractors' construction contract(s), the Owner's Project Manager shall report any such claims, disputes or other matters in question relating to the performance by the Contractor, Subcontractor, Designer or vendor to the Owner and the Authority in writing as soon as reasonably possible.
- 8.1.4.2.4 The Owner's Project Manager shall take all reasonable efforts designed to resolve any such claims, disputes, or other matters in question.

## 8.2 INTENTIONALLY LEFT BLANK

# Design Development/Construction Documents/Bidding Phase

# 8.3 <u>Design Development</u>

- 8.3.1 The Owner's Project Manager shall continue to oversee the activities and responsibilities of the Designer in the further development of the scope, schedule and budget including a general review of the Designer's detailed scaled plans, elevations and sections of all aspects of the design. The Owner's Project Manager shall:
  - a. Prepare independent construction cost estimates pursuant to Section 8.1.2.2 of this Contract, for comparison with the Designer's cost estimates. (One Estimate during Task 8.3)
  - b. Work with the Owner and Designer to update the Project Budget and Schedule.
- 8.3.2 The Owner's Project Manager shall monitor and coordinate the schedule, technical accuracy, efficiency, coordination, and constructability of the Project and cost-effectiveness of all designs, drawings, reports, estimates and other work furnished by the Designer, and make recommendations to the Owner when, in the opinion of the Owner's Project Manager, requirements of the Designer's contract with the Owner are not being fulfilled.
- 8.3.3 The Owner's Project Manager shall promptly review all Designer submissions and shall meet with the Designer to discuss those submissions. Upon completion of its review, the Owner's Project Manager shall recommend that the Owner: 1) approve the submission as made; 2) approve that part of the submission that is acceptable and reject the remainder; 3) reject the submission; or 4) require the Designer to submit additional information or details in support of its submission.
- 8.3.4 The Owner's Project Manager shall coordinate the timely review of the design between the Designer and the Commissioning Consultant. The Owner's Project Manager shall be responsible for providing the necessary documents to the Commissioning Consultant for its review, distributing review comments made to the Designer, Owner and the Authority and coordinate the timely resolution and incorporation of the Commissioning Consultant's recommendations. The Owner's Project Manager shall not be responsible for the Commissioning Consultant's performance, but if the Owner's Project Manager becomes aware of any performance or lack of performance issues with the Commissioning Consultant, the Owner's Project Manager shall immediately notify the Owner and the Authority of such issues.

#### 8.4 Construction Documents

- 8.4.1 The Owner's Project Manager shall review the construction documents for quality, cost, and schedule improvements, conciseness and clarity. The Owner's Project Manager shall:
  - a. Prepare independent construction cost estimates pursuant to Section 8.1.2.2 of this Contract, for comparison with the Designer's cost estimates. (Two estimates during Task 8.4)
  - b. Provide advice, consultation and guidance to the Owner relative to value engineering recommendations.

- c. Work with the Owner and Designer to update the construction budget and schedule.
- 8.4.2 The Owner's Project Manager shall provide advice, consultation and guidance to the Owner and the Designer relative to general contractor and subcontractor prequalification requirements pursuant to M.G.L. c. 149 § 44D½ and § 44D¾ as applicable, including participation as a member of the Owner's Prequalification Committee.
- 8.4.3 The Owner's Project Manager shall review the construction documents in line with the Project Scope and Budget Agreement. The review shall include constructability, operability and bid-ability as well as document clarity and coordination between drawings and to identify conflicts between drawings and specification. The constructability review will identify potential conflicts, make recommendations specific to any phasing issues, recommend appropriate milestones, constraints and liquidated damages and a review of the project specific requirements in the General Requirements.
- 8.4.4 The Owner's Project Manager's review of the construction documents shall also include, but not be limited to, any concerns of the Owner's Project Manager and/or the Owner relative to access, usable area, parking, utilities, anticipated noise sources during construction and identification of field offices, facilities, supplies and equipment.
- 8.4.5 The Owner's Project Manager shall coordinate the timely review of the construction documents by the Commissioning Consultant to determine that plans and specifications include the recommendations made during design development in regard to materials selection, installation and testing criteria in regard to commissioning and start-up and provide adequate information and allow sufficient time for functional and system testing.
- 8.4.6 The Owner's Project Manager shall monitor the schedule of the Designer, provide review and comment of Designer's work product and make recommendations to the Owner when, in the opinion of the Owner's Project Manager, requirements of the Designer's contract with the Owner are not being fulfilled.

#### 8.5 Bidding Phase

- 8.5.1 The Owner's Project Manager shall monitor the activities and responsibilities of the Designer in the advertisement, distribution of bidding documents and solicitation of public bids in accordance with M.G.L. c. 149 §§ 44A through 44J and other public construction-related statutes. The Owner's Project Manager shall:
  - a. Administer general contractor and subcontractor prequalification requirements pursuant to M.G.L. c. 149 § 44D½ and § 44D¾ as applicable, including participation as a member of the Owner's Prequalification Committee.
  - b. Attend, and assist the Owner with, all pre-bid conferences and meetings and, assist, if directed by the Owner.
  - c. Attend, and assist the Owner with, all sub-bid and general bid openings and, assist, if directed by the Owner.
  - d. Review all sub-bids and general bids in conjunction with Designer's determination of responsiveness, bidder eligibility, completeness, accuracy and price. Provide technical guidance to the Owner relative to its acceptance of bids and determination of bidder responsibility.
  - e. Review alternates and make written recommendations as to their acceptance.

- f. If the bid of the lowest eligible and responsible general bidder exceeds the construction budget, the Owner's Project Manager shall consult with the Designer and make recommendations to the Owner in regard to maintaining the Project Budget which may include, consistent with Massachusetts public construction laws, reviewing and recommending acceptance of alternates, re-bidding or seeking additional funding from the City/Town/Regional District.
- 8.5.2 The Owner's Project Manager shall make recommendations to the Owner relative to the award of a construction contract.
- 8.5.3 The Owner's Project Manager shall assist the Owner in the preparation and execution of the Owner-Contractor Agreement and shall obtain from the Contractor performance and payment bonds, insurance certificates, and all other documents and certificates required for contract execution.
- 8.5.4 The Owner's Project Manager shall assist the Owner and the Designer in preparing and sending the Notice to Proceed to the Contractor.
- 8.5.5 The Owner's Project Manager shall provide the Contractor, Designer, Owner and the Authority with required copies of executed construction contract documents.

#### **Construction Phase**

## 8.6 Construction

The Owner's Project Manager shall provide supervisory staff for each of the following activities, from Notice to Proceed of the construction contract to contract close-out.

- 8.6.1 The Owner's Project Manager shall monitor the Designer's administration of the Owner-Contractor Agreement including the processing of submittals, issuance of timely decisions and directives and consultant's or subconsultants' visits to the Project as necessary during the time that construction is occurring on the portions of the work to which the consultant's services relate.
- 8.6.2 The Owner's Project Manager shall provide a full-time (40 hours per week minimum) on-site Project Representative, who shall be dedicated exclusively to the Project, either as an employee of the Owner's Project Manager or as a subconsultant to the Owner's Project Manager.
  - 8.6.2.1 The Project Representative shall be subject to the approval of the Owner and the Owner reserves the right to require the Owner's Project Manager to replace the Project Representative at any time during the course of the Project.
  - 8.6.2.2 The Project Representative shall have at least five years experience in on-site supervision of projects similar in size and complexity to the Project.
  - 8.6.2.3 Unless otherwise directed, the Project Representative shall be present at all times when the Contractor is conducting operations at the site starting from issuance by the Owner of a Notice to Proceed to the Contractor and continuing until issuance to the Contractor of a Certificate of Substantial Completion by the Owner and

thereafter on an, as needed basis, until issuance to the Contractor of a Certificate of Final Completion by the Owner.

- 8.6.3 The Owner's Project Manager shall review the Contractor's schedule of values to determine if it represents a reasonably balanced payment schedule for work to be performed with no items front-end loaded or artificially inflated. The schedule of values shall include line items for all deliverables, testing requirements and specified operations and maintenance materials. The Owner's Project Manager shall submit recommendations for the Contractor's schedule of values to the Owner within forty-five days of the Owner's Notice to Proceed to the Contractor.
- 8.6.4 The Owner's Project Manager shall review the Contractor's submitted baseline schedule. The Owner's Project Manager shall be responsible for monitoring the timeliness of these submittals and enforcing compliance with schedule submittal requirements of the construction documents. The Owner's Project Manager shall evaluate the Contractor's planning for the execution of the work, evaluate the reasonableness of the proposed schedule and determine if the submitted schedule meets the requirements of the construction documents.
- 8.6.5 The Owner's Project Manager shall provide daily observation and monitoring of construction activities such that all shifts and work activities are observed and documented. Responsibilities shall include:
  - 8.6.5.1 The Owner's Project Manager shall keep a daily log containing a record of weather, the Contractor's work on site, number of workers, visitors to the site, safety status of the Project, equipment and equipment utilization, material and equipment deliveries, non-compliance with safety procedures and issuance of any safety violation notifications, accidents, general description of work performed and quality of work, visits of code enforcement officials and any resulting reports or orders, verbal instruction to interpretations given to the Contractor, pay items, and any observed delays, deficiencies and field problems.
  - 8.6.5.2 The Owner's Project Manager shall prepare weekly progress reports for submittal to the Designer and the Owner that summarize the progress achieved, provide a concise description of problems and include a copy of the daily log.
  - 8.6.5.3 The Owner's Project Manager shall assist the Designer in determining if construction and construction related activities are performed in accordance with plans and specifications and the approved shop drawings and are consistent with Massachusetts public construction laws.
  - 8.6.5.4 The Owner's Project Manager shall monitor on a daily basis Time and Materials work on change orders for less than \$50,000, including work installed, volume measurements, time sheets, crew sizes and mixes, and equipment utilized.
  - 8.6.5.5 The Owner's Project Manager shall evaluate actual quantities and classification of Unit Price work performed by Contractors.
  - 8.6.5.6 The Owner's Project Manager shall evaluate field problems, using the proper channels for solution and communication of the information to the Designer and the Owner.

- 8.6.5.7 The Owner's Project Manager shall coordinate and track requests for clarification on drawings/specifications, design changes and proposed change orders.
- 8.6.5.8 The Owner's Project Manager shall prepare responses to Contractor correspondence for the Owner.
- 8.6.5.9 The Owner's Project Manager shall monitor and coordinate the scheduling and activities of independent materials testing functions at the site, including distribution of reports and any necessary actions resulting.
- 8.6.5.10 The Owner's Project Manager shall maintain at the Project site, on a current basis, a record copy of Construction Contract Documents, including, but not necessarily limited to, drawings, specifications, addenda, change orders, and directives as well as all approved shop drawings, product data, samples, submittals, operations and maintenance manuals and all other relevant documents relating to the construction of the Project.
- 8.6.5.11 The Owner's Project Manager shall monitor the Contractor's compliance with federal Davis Bacon prevailing wage requirements and Massachusetts prevailing wage requirements pursuant to M.G.L. c. 149 §§ 26 to 27H inclusive including assisting the Owner in cataloging and filing payroll affidavits.
- 8.6.5.12 The Owner's Project Manager shall shoot and maintain Project progress photographs showing construction progress at a frequency sufficient to document major activities or to document safety incidents, differing site conditions and quality issues. The Owner's Project Manager shall maintain a descriptive log and captioning of the photographs on CD.
- 8.6.6 The Owner's Project Manager shall monitor the Contractor's compliance with the construction schedule, identify potential problems, include problem identification on the Monthly Progress Report and make recommendations to the Owner when, in the opinion of the Owner's Project Manager, requirements of the Contractor in the Owner-Contractor Agreement are not being fulfilled.
- 8.6.7 The Owner's Project Manager shall schedule, conduct and prepare minutes of weekly job meetings on progress, coordination and problem resolution and negotiations. The Owner's Project Manager shall prepare and submit minutes to the Owner within three business days of the meeting.
- 8.6.8 The Owner's Project Manager shall schedule the Authority's Commissioning Consultant, as required to support the construction schedule, to provide commissioning services and reports as required.
- 8.6.9 The Owner's Project Manager shall monitor, review and analyze proposed change orders, and claims recommending appropriate action and resolution to the Owner in accordance with Article 8.1.4.
- 8.6.10 The Owner's Project Manager shall review and coordinate its review with the Designer to recommend approval of the General Contractor's monthly payment requisitions. The Owner's Project Manager shall review the Designer's certification that the percentage of

- work included in the requisition is accurate and the work performed conforms to the construction contract.
- 8.6.11 The Owner's Project Manager shall oversee and monitor the procurement of furniture, fixtures, equipment and technology that is not included in the construction contract.
- 8.6.12 The Owner's Project Manager shall verify substantial completion of work; assist the Designer in the Designer's final inspection and receipt of documents, manuals, receipts, certifications, and all other materials required for final closeout as described in the construction contract. The Owner's Project Manager shall coordinate the detailed punchlist with the Designer, including a subsequent walk-through with the Designer and the Authority's Commissioning Consultant. The Owner's Project Manager and the Designer shall then coordinate a walk-through with the Owner to finalize the punchlist. The Owner's Project Manager shall then be responsible for tracking and confirming the completion of the punchlist items.

# 8.7 <u>Completion Phase</u>

- 8.7.1 The Owner's Project Manager shall monitor the activities and responsibilities of the Designer and the Contractor in the close-out and commissioning of the Project.
- 8.7.2 The Owner's Project Manager shall assist in securing and reviewing and recommending approval of all project completion forms and documentation necessary for occupancy and full operation of the facility including, but not necessarily limited to, inspection certificates of local building authorities, Certificate of Substantial Completion, Certificate of Final Completion, Occupancy Permit, shop drawings, as-built drawings, operations and maintenance manuals, warranties, guarantees and any and all documentation as required by the contract documents and the Authority.
- 8.7.3 The Owner's Project Manager shall assist the Owner in completing the written evaluation of the Designer(s) pursuant to M.G. L. c. 7 § 38E and prepare, sign and provide to the Owner for its signature the written evaluation of the Contractor(s) and Trade Subcontractors pursuant to M.G.L. c. 149 § 44D.

END OF ARTICLE 8 OF BASE OPM CONTRACT AMENDMENT FOR DBB