

**Addendum No. 2
to the Bidding Documents**

**Ultraviolet Disinfection System Procurement
Town of Spencer, MA**

Issued: June 22nd, 2021

Under the provisions of Article 7 of Section 00200, Instructions to Bidders, Bidders are informed that the Bidding Documents for the above-mentioned Project are modified, corrected, and/or supplemented as follows. Addendum No. 2 becomes part of the Bidding Documents and Contract Documents.

Acknowledge receipt of this addendum by inserting its number on Page 15, Section 6 Price Proposal Form, of the Request for Proposals. Failure to acknowledge receipt of the Addendum may subject the Bidder to disqualification.

Project Manual Changes

Item 2-1 Request for Proposals – Table of Contents

Delete the words, "Section 00615 – Payment Bond" from the Table of Contents, Appendix A.

Item 2-2 Request for Proposals – Appendix A, Specification Table of Contents

Delete the words, "Section 00615 – Payment Bond" from the Table of Contents.

Item 2-3 Section 00200 – Instructions to Bidders

Delete Article 19 in its entirety and **replace** it with the following paragraphs (Note: the changes reflected in the paragraphs below remove the language relating to the requirement to provide a payment bond):

“19.1 Performance bond shall be furnished by the successful Bidder. The amount of and other requirements for the performance bond are stated in Article 5 of the General Conditions. Performance bond submitted shall be posted by a recognized surety company having a place of business in the Commonwealth of Massachusetts. Performance bond signed by an agent must be accompanied by a certified copy of the authority to act. Performance Bond shall be submitted on the form included in Sections 00610 of the Procurement Contract Documents. Additional requirements, including dual obligee requirements, are stated in the General or Supplementary Conditions. Suitable form modifications to cover the dual obligee requirements and cover the bonding of the process performance guarantee may be made.

19.2 Bidders shall submit with bid, a letter from their surety indicating that the Bidder currently qualifies for a performance bond. Surety shall be licensed to transact such business in the Commonwealth of Massachusetts and named on the current list of “Surety Companies Acceptable on Federal Bonds” as published in the “Treasury Department Circular 570”. Notice of Award of the Contract and Execution of an agreement between the Buyer and the Bidder shall be contingent on receipt of this letter.

19.3 Bidders shall submit their performance bond at the time of the execution of an agreement between Buyer and Bidder. Unless indicated otherwise, this will be at the time of the contract award to the Construction Contractor.

19.4 If, at the time of construction contract award to the Construction Contractor, the Bidder is unable to provide their performance bond the Buyer reserves the right to terminate its agreement with the Bidder and award the contract to the next highest ranked bidder based on the bid evaluation from this pre-selection bid process.

19.5 The required contract securities will become part of the Procurement Contract Documents.

19.6 Article 5 of the General Conditions and Article 5 of the Supplementary Conditions set forth Buyer's requirements as to performance bond and insurance. When the Successful Bidder delivers the executed Procurement Agreement to Buyer, it must be accompanied by such bond."

Item 2-4 Section 00520 – Agreement

In Paragraph 5.4.A, **add** the following sentence immediately after the words "...Seller shall pay Buyer an equitable portion of the \$2,500 per day liquidated damages assessed the Buyer (Construction Contractor).":

"The total value of the liquated damages assessed on the Seller shall not exceed the value of the Goods and Special Services furnished, as listed on the Price Proposal Form and adjusted as allowed herein."

Item 2-5 Section 00520 – Agreement

Delete Paragraph 10.1.A.c in its entirety.

Item 2-6 Section 00615 – Payment Bond

Delete Section 00615 – Payment Bond in its entirety.

Item 2-7 Section 00800 – Supplemental Conditions

In Article 6, **delete** Paragraph SC-6.01 in its entirety.

Item 2-8 Section 00800 – Supplemental Conditions

In Article 13, Item SC-13.03, **delete** Paragraph 13.03 B in its entirety, and **replace** it with the following paragraph:

"13.03B Seller shall request payment from Buyer according to the following project milestones:

0% upon completion of preliminary submittals/shop drawings

10% upon receipt of Purchase Order from Buyer (Contractor/Assignee) for equipment (10% cumulative total)

15% upon completion of shop drawings (25% cumulative total)

55% upon delivery of equipment to the project site (80% cumulative total)

10% upon successful startup of equipment (90% cumulative total)

10% upon successful completion of the performance demonstration test as specified (100% cumulative total)

Where percentages indicated above represent the percentage of the Seller's contract price exclusive of the cost of the Seller's Two-Year Service Agreement."

Item 2-9 Section 11262 – Ultraviolet Disinfection System

Delete Paragraph 1.5.B.2, in its entirety and **replace** it with the following paragraph:

"1.5.B.2. If, after two attempts at implementing corrective measures, it cannot be demonstrated that the System can consistently meet the Performance Requirements in Paragraph 1.4.B., the Seller shall remove the System and replace it with one that shall meet the performance requirements. The Seller shall cover the costs, including equipment and labor costs required to replace the System up to 1.5 times the value of the Goods and Special Services furnished, as listed on the Price Proposal Form and adjusted as allowed in Section 00520."

Item 2-10 Section 11262 – Ultraviolet Disinfection System

Delete Paragraph 1.7.D, in its entirety and **replace** it with the following paragraph:

"1.7.D. Guarantee shall also make all consumable parts (lamps, ballasts, sleeves, wiper seals/sleeve wipers, wiper chemicals) associated with the UV system available for shipment within 24 to 48 hours from a USA location, or the said parts are free of charge from the manufacturer, except when delays in shipment are due to Force Majeure. This guarantee must be for a minimum of 3 years from substantial completion."

Item 2-11 Section 11262 – Ultraviolet Disinfection System

Delete Paragraph 2.9, in its entirety and **replace** it with the following paragraph:

2.9 "CHANNEL UV SHIELD

- A. If required as part of Manufacturer's standard offering to provide access to the UV modules for maintenance purposes or to maintain a set module spacing for modules that are completely removable from the channel, provide channel UV shields that meet the following requirements:
 - 1. The channel UV shield shall be designed so that no ultraviolet light shall radiate above the channel when the UV lamp modules are energized and fully immersed in the effluent.
 - 2. At a minimum, provide channel UV shields to cover the exposed spaces between UV modules.
 - 3. Design channel UV shield to support a minimum uniform live load of 60 lbs per square foot.
- B. For UV disinfections systems that do not require channel UV Shields, in accordance with Paragraph A above, UV modules shall be designed to operate under entire range of design conditions when the section of channel directly above the UV modules are

covered with removable grating and diamond plating (provided by Others) that is designed so that no ultraviolet light shall radiate beyond the channel.”

Item 2-12 Section 11262 – Ultraviolet Disinfection System

Add the following sentence to Paragraph 2.11.D:

“If the Seller’s standard design is for a 480 Volt 4 wire (plus GND) system the Owner/Contractor will provide a 4 wire (plus GND) where and if required by the Seller.”

Item 2-13 Section 11262 – Ultraviolet Disinfection System

Delete Paragraph 2.11.G, in its entirety and **replace** it with the following paragraph:

“2.11.G. 480 Volt power shall not be allowed in the System Control Center. If System Control Center is intended to be powered from a 480 Volt feed, design and furnish a step down transformer located outside the System Control Center.”

Item 2-14 Section 11262 – Ultraviolet Disinfection System

Add the following sentence to the end of Section 11262, Paragraph 2.11.J.2.c:

“If separation of low and high voltage wiring is not achievable within Seller provided panels, Seller shall separate high and low voltage wiring in other ways, such as the use of shielded wires, duct partitions, or other similar methods.”

Item 2-15 Section 11262 – Ultraviolet Disinfection System

Delete Paragraph 2.11.J.2.d in its entirety (sub-paragraphs 1 through 6 shall remain as-is) and **replace** it with the following paragraph:

“2.11.J.2.d All wiring shall terminate in a master terminal board, or separate terminal boards within each panel, if interlocking wirings within Seller supplied panels exists. Termination of all external interlocking devices shall be clearly documented in submittal drawings. The master terminal board in the System Control Center shall have a minimum of 25 percent spares, and the maximum amount of spares as allowable by space in other Seller furnished panels. Terminal blocks shall be the compression type.”

Item 2-16 Section 11262 – Ultraviolet Disinfection System

Add the following sentence to the end of Section 11262, Paragraph 2.11.J.2.d.6:

“If single tiered terminal blocks are not feasible due to space constraints, two-level terminal blocks are acceptable, as long as the permanent labels indicating the terminal block numbers are provided on both levels.”

Item 2-17 Section 11262 – Ultraviolet Disinfection System

In Section 11262, Paragraph 2.11.J.9.b, **delete** the words “piano type”.

Item 2-18 Section 11262 – Ultraviolet Disinfection System

Add the following sentence at the end of Section 11262, Paragraph 2.11.J.9.e.

“If full height isolation barriers cannot be provided, Seller shall furnish panels with appropriate labeling that indicates warning for electrical hazards.”

Item 2-19 Section 11262 – Ultraviolet Disinfection System

Delete the following text from Section 11262, Paragraph 2.12.B:

“Each circuit breaker shall provide visual trip indication and be capable of regular testing.”

Item 2-20 Section 11262 – Ultraviolet Disinfection System

Add the following text to the end of Section 11262, Paragraph 2.13.D.9.c:

“(if applicable to manufacturer’s standard design)”.

Item 2-21 Section 11262 – Ultraviolet Disinfection System

Add the following sentence at the end of Section 11262, Paragraph 2.14.A.

- A. “If power monitor is too large to be furnished within the Power Distribution Center, the power monitor can be supplied external to the Power Distribution Center. If power monitor is to be mounted by the Contractor external to the Power Distribution Center the power monitor shall be NEMA 4X rated. Seller shall design and furnish Power Distribution Center and System Control Centers that are compatible for use with power monitor being supplied by Seller and shall be capable of monitoring the power. Seller shall also furnish all required mounting hardware for the power monitor and communication cables required to connect power monitor to Power Distribution Center and/or System Control Centers and other necessary panels.”

Bidding Period Questions & Responses

The following responses/clarifications are based on questions raised during the bidding period.

1. The Request for Proposal documents state in several locations that the project is subject to the American Iron and Steel (AIS) requirement. Please clarify whether this applies for UV disinfection systems.

The proposed equipment being provided for this project must comply with AIS requirements. If equipment is exempt from the AIS requirement, per EPA guidance, then the equipment is considered in compliance. Provide certification that states the exemption as part of the Bidder's Submittals at the time of construction per Section 11262, Paragraph 1.6.C.

2. Paragraph 5.1.B of the Request for Proposal, states that bids will be evaluated based on Guaranteed Operational and Maintenance values and costs. Is labor included in this evaluation and if so, how will guarantees be applied?

Labor costs for typical routine operating and maintenance tasks will be included in the evaluation. Please refer to Section 00200, Paragraph 13.3.C for additional details regarding the evaluation process. For labor associated items, the evaluation will consider labor when estimating operation and maintenance costs, which will consider the frequency of the operation and maintenance tasks included in the evaluation.

3. Are electronic bid submissions allowable?

No, bids shall be submitted to the Town as specified in Section 00200, Article 14.

4. Provide the Federal Tax ID number for the address where proposals are to be submitted (3 Old Meadow Road, Spencer, MA 01562). Also, provide a contact name at the Town to include for the courier.

The Federal Tax ID Number is 04-6001308. Contact names for courier are Debra Graves and James LaPlante (office number: 508-885-7542; cell phone: 774-261-2689).

5. What engineering drawings require stamps by a Professional Engineer to be submitted at the time of Construction?

Section 01330, Paragraph 1.4.K states that stamped submittals are only required for submittals specifically called out in the individual Specification Sections. Section 11262 requires stamped submittals only for Structural Calculations, in accordance with Paragraph 1.6.N.

6. Does internal panel wiring need to meet the wire identification standard as specified in Section 11262, Paragraph 1.6.J.5.b?

The referenced paragraph only applies to field device wiring; that is, wiring that connects to systems external to the panel. It is acceptable for wiring diagrams internal to Seller's control panels to follow a separate wiring identification standard.

7. Are the standards and conventions established by the Plant Control System Programmer (PCSP), as referenced in Section 11262, Paragraph 1.6.J.6.a, available for review?

The full set of standards and conventions are not available at this time; however, Section 11262 has been written to reflect the anticipated basic standards and conventions that will be required.

8. Section 11262, Paragraph 1.6.L.3.b requires submittal of an electronic copy of the PLC code. We will require the customer to sign a Non-Disclosure Agreement (NDA) to release the code as required. Is this acceptable?

Yes, the Owner would be able to sign a NDA for release of an electronic copy of the PLC code, if requested. Provide NDA for review as part of submittal package during construction.

9. Section 11262, Paragraph 2.4.F states the ballast are to be housed in a separate enclosure located remotely to the channel, located local to the channel in an outdoor location, and shall be equipped with air conditioning equipment, as required, to maintain internal enclosure temperatures below 120 deg F or lower as required by the Seller's equipment. Note that our system is designed to have the Power Distribution Centers alarm at an internal temperature of 122 deg F and to shutdown at an internal temperature of 131 deg F.

These alarm set points determined by the Seller are acceptable if these are the temperature set points that will protect the equipment contained within the cabinet under an upset condition. Note that the Seller shall provide Power Distribution Centers that under normal operating conditions meet the requirements of Section 11262, Paragraph 2.4.F for maintaining an internal enclosure temperature below 120 def F.

10. Is 304 stainless steel an allowable material for the level control device?

No, per Section 11262, Paragraph 2.8.D and E, the level control device, whether a weir or automatic level control gate shall be Type 316 stainless steel.

11. In response to the requirement listed in Section 11262, Paragraph 2.11.H, that a suitable air exchange/cooling system be provided if required by the Seller's equipment, does this requirement also relate to the System Control Center (SCC)?

Yes, the referenced requirement applies to the SCC. Note that this Section only requires an air exchange or cooling system, if in the Seller's determination, such a system is required to maintain the internal enclosure temperature below 120°F for an installation in an external, covered location. Heating and cooling calculations for each panel shall be provided as part of the submittals in accordance with Section 11262, Paragraph 1.6.J.5.a.7.

12. Is a 24V DC uninterruptable power supply (UPS) acceptable?

Providing a 24 VDC UPS with bypass circuit is acceptable as long as it provides power to the PLC, OIT, and all instruments connected to the SCC/PLC as specified in Section 11262, Paragraph 2.13.C.5. If any 120 VAC instruments or control circuits are provided, then a 120 VAC UPS will be required.

13. Is a 120V AC electrical feed available (provided by Others) for the System Control Center (SCC), or must Seller design and furnish a transformer to step-down power for the SCC?

A separate 120V AC feed is available as stated in Section 11262, Paragraph 2.11.E. The requirement to provide a transformer as stated in Para. 2.11.G., is to address systems that do not rely on a separate 120V AC feed for powering the SCC. See clarification in Item 2-13.

14. Is the required hardware for conduit and cable penetrations into required panels (bushings, hubs, gasketed locknuts, etc) as specified in Section 11262, Paragraph 2.11.J.9.d, intended to be provided by Seller or by Others.

All hardware for conduit and cable penetrations performed by the Seller at the factory shall be provided by the Seller. Conduit and cable penetrations required to be made in the field by the installing Contractor will have the appropriate hardware provided by the Contractor.

15. Section 11262, Paragraph 3.1.E. requires Seller to provide a representative to inspect and verify in writing that the installation of the Goods are in accordance with Seller's shop drawings, instructions and recommendations, as well as drawings and specifications for the Construction Contractor's Contract Drawings. Can this inspection be completed when the UV Disinfection System is commissioned?

Yes, it is acceptable for the field inspection following installation to be coordinated at the same time as system commissioning. Note that the schedule shall be coordinated with the Construction Contractor, whom will ultimately dictate the schedule for field visits based on construction progress.

END OF ADDENDUM NO. 2

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