Tender # PCSP-PW-2020-9A

AMENDMENT NO. 1

Owner: Town of Portugal Cove-St. Philips
Project Name: Non-Contract Ultraviolet Disinfection Equipment Supply for UV Upgrade St. Philips Waste Water Treatment Plant
Date Issued: May 4, 2021

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1. This Amendment shall form an integral part of the specification to be read in conjunction therewith. This Amendment shall take precedence over all forms of the aforementioned specification with which it may prove to be at variance or may otherwise be qualified in writing by authorized personnel.

2. The General Conditions and all documents issued with this specification shall apply to govern all phases of the work covered by this Amendment.

3. The purpose of this Amendment is to inform bidders of clarifications to the contract documents.

To advise Contractors of the following changes:

1. Appendix B RFQ Particulars – D – Mandatory Requirements and Specifications for Non-Contact Ultraviolet Disinfection Equipment.

Refer to Pages 2 and 3 of Amendment for Responses to Queries relating to this section.

2. General Arrangement Sketch

Refer to Page 4 of Amendment for General Arrangement Sketch SK-1 for general layout and intended location of non-contact UV unit.

3. **Photographs of Existing Conditions**

Refer to Pages 5 and 6 of Amendment for photos of existing conditions.

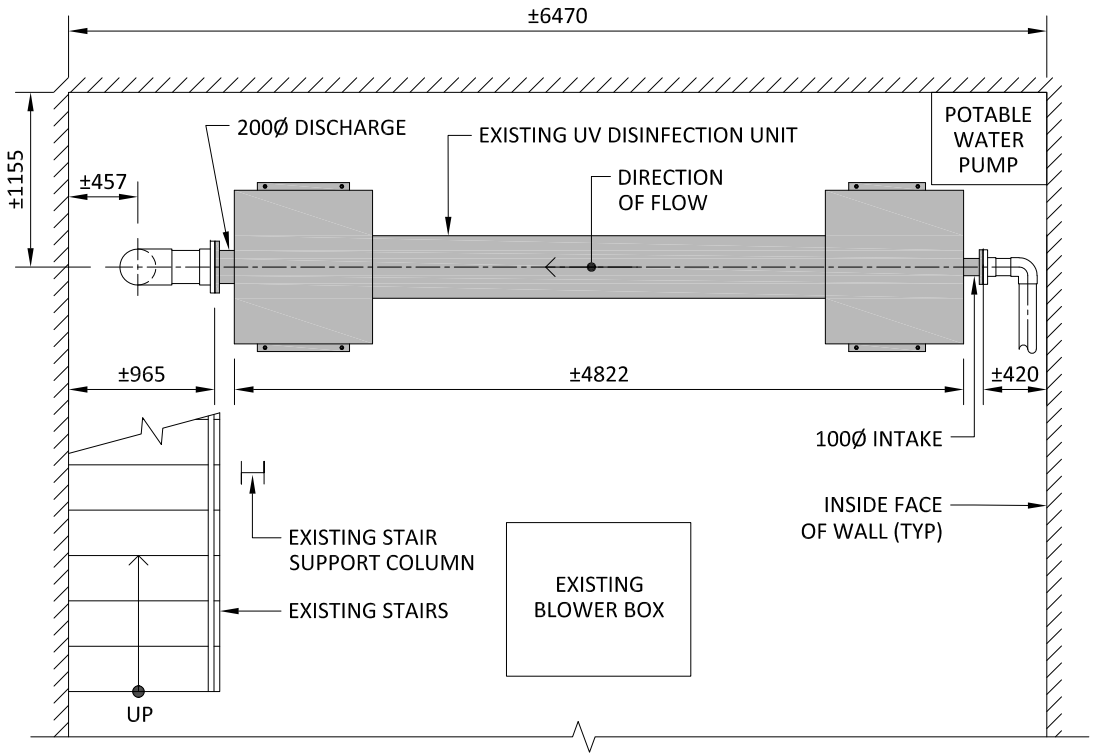
Contractors are advised to acknowledge receipt of this Amendment on the Tender Form when submitting a bid.

END

Responses to queries relating to Appendix B - RFQ Particulars - D - Mandatory Technical Requirements and Specifications for Non-Contact Ultraviolet Disinfection Equipment.

Section	ITEM	QUESTION	RESPONSE
D.1.3.G.h	Bypass UV Transmittance Sensor	Please confirm that a By-Pass UVT% Analyzer is desired or required for this application.	The UVT analyzer as described below in Section D.3.1.G shall be included.
D.1.4.A.1	decanting) *Peak Decant Flow Rate (Two (2) SBR treatment trains decanting) [2] [4] — 33.6 / 533 — LPS / USGPM (Future Peak Disinfection flow rate)	Higher than our last design of 27.76/440.0 (LPS/GPM). UV reactor will have to be up sized to disinfect the higher flow.	The UV System shall be designed and sized as per the design criteria in Table 1 (page7) of the tender specification.
D.1.4.A.1	Equipment Redundancy — 100% Redundancy. One reactor with two banks in series, each rated to disinfect 100% of the one (1) SBR train peak decant treated effluent flow. No Redundancy. One reactor with two banks in series, each rated to disinfect 100% of the two (2) SBR train peak decant treated effluent flow.	Probably a TYPO? Paragraph describes a fully redundant UV system at the two (2) SBR train peak decant flow.	The paragragh for “No Redundancy for two (2) SBR train peak decant treated effluent flow” is to be deleted and ignored.
D.2.1.H.2	Transformers	Is 240 VAC 1P/ or 208 VAC 1P available on site? If so then the lamps may be powered by 240 VAC 1P/ 208 VAC 1P. If only 575 VAC 3P is available, the two (2) 575 VAC 3P to 480 VAC 3 P & transformers have to be to be added to scope.	The Transformers as required in the technical specifications shall be included. Plant Power supply is 575/3/60.
D.2.1.H.3	3. Electrical power required shall consist of the following: a. Main power to reactor(s): 575 VAC, 3 phase (Y), 5 Wire (3 Ph + N + G)	Related to question D.2.1.H.1 above. The response to question above will have a bearing on this.	Confirmed. Plant Power supply is 575/3/60.
D.3.1.C	HMI Panel	Please confirm that a HMI Panel is desired, if so we will add this to our scope.	Confirmed. The HMI Panel as described in the tender specifications shall be required.

SECTION	ITEM	QUESTION	RESPONSE
D.3.1.G	G. On Line UV Transmittance (UVT) Organic Analyzer 1. An On Line UVT analyzer shall be supplied with the UV reactors and the analyzer output shall be integrated with the UV control panel and the real time UVT displayed on the HMI. The UVT sensor shall have an UVT measurement range of 10% - 100% for UVC wavelength/Pathlength of 254nm@ 1cm. The UVT Analyzer shall have an accuracy of +/- 1 % and a resolution of .1% and have an operating temperature range of 0 - 50 Deg C (32 – 122 Deg F). 2. The UVT analyzer shall include an automatic chemical cleaning system. 3. Standard of Acceptance: REALTECH REAL UV Model M3000, and REAL Clean System 1.	Related to question D.1.3.G.H, please confirm that a By-Pass UVT% Analyzer is desired or required for this application.	The UVT analyzer shall be included.



NOTE:
SUPPLIER TO CONFIRM ALL DIMENSIONS ON SITE PRIOR TO COMMISSIONING SHOP DRAWING PREPARATION.

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TITLE
NEW UV DISINFECTION EQUIPMENT TENDER SUPPLY
GENERAL ARRANGEMENT

TOWN OF PORTUGAL COVE-ST. PHILIP'S

PROJECT. NO.	SCALE	DATE (dd/mm/yyyy)	DWG. NO.
374-1	1:50	04/05/2021	SK-1

Photo 1: Side view of existing UV unit.

Photo 2: Top view of existing UV unit.

Photo 3: View at inlet to existing UV unit.

Photo 4: View at outlet from existing UV unit.