



**Request for Proposals (RFP)
RFP # VSW-KTB-2019-20
(Re-Advertising)**

Addendum Five

**Department of Environmental Conservation
Village Safe Water Program**

**City of Thorne Bay, Alaska
General Contractor Services for Construction of Water Plant and
Wastewater Plant Improvements**

Date of Issue: March 12, 2019

The RFP Package is hereby clarified or changed as follows:

1. Submittal deadline is not changed
2. Remove and Replace
3. Questions and Answers
4. Attachments

The remove and replace, questions and answers and attachments begin on page two. This Addendum is hereby made part of the RFP and is a total of five pages (not including attachments).

All other terms and conditions for this RFP remain unchanged.

Issued by: Fred Parrish
Procurement Officer
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2. Remove and Replace

Remove Attachment G, Schedule of Values, and replace with Attachment A, Schedule of Values (revised 3-12-19). Offerors shall submit their proposal on the updated Schedule of Values, revised 3-12-19.

3. Questions and Answers

Question 1: Spec 330910.2.2.A details the door alarms and specifies recessed door contacts on the door, including the existing doors. The specified product series is surface mount. Please clarify this spec to read surface mount which fits the existing conditions and also coordinates with the door, frame, and hardware specs which do not include prep for these door alarms.

Answer 1: The specified surface mount door alarm may be installed on the existing doors without recessions.

Question 2: WTP drawing D23 describes a 3” housekeeping pad for the nano-filtration unit and drawings M02 and M03 seem to indicate a housekeeping pad for the reinstalled generator but no further information is given. Please clarify. Are housekeeping pads required for this equipment? If so, can further details for size and reinforcement be provided? Drawing D23 indicates that Appendix F Equipment Procurement will give additional layout details but there is no Appendix F?

Answer 2: A housekeeping pad is not required for the Nano-filtration equipment. For the reinstalled generator, Contractor can provide a 3” thick pad poured over the top of the new or existing slab-on-grade as the case may be and reinforced with 4x4- W2.9xW2.9 welded wire fabric. The surface of the slab-on-grade is to be mechanically scarified to achieve a roughened surface. Just prior to pouring the housekeeping pad, the roughened is to be thoroughly coated with a non-rewettable bonding agent.

Question 3: WTP P&ID drawings D04 through D07 indicate the new 2” air piping from the new blower B-200 is PVC Schedule 80 piping connecting to existing motorized valves and PVC piping at each pressure filter. Pipe drawings D16 through D23 indicate this air piping is 2” carbon steel (eventually commented on D23 as Schedule 10). Spec 401109 Interior Piping 2.2.B and C specify steel piping as standard thickness and threaded if under 4”. Schedule 10 steel pipe is not able to be threaded. Since the blower pressure output in 466176 is specified as a minimum of 98 SCFM at 6 psi, is it permissible to use PVC Schedule 80 pipe? In the 2” size, the pressure rating is 88 psi at the maximum permissible temperature of 140 degrees F. Drawing G03 indicates that the blower will run for only 2 minutes for each backwash cycle so it is doubtful that the air temperature will elevate enough to threaten the maximum PVC temperature limit. Please advise.

Answer 3: Schedule 80 PVC is acceptable for all air piping. Maximum rated temperature increase is 115°F from ambient.

Question 4: WTP spec section 330910.2.1.E details a 4” flowmeter. Drawings D13, D14, and D25 indicate removing an existing 4” flowmeter (FE-600) and installing a new one on the potable distribution line. Drawing D11 indicates this is an existing flowmeter and D12 does not list it as a new flowmeter. Please clarify. Is a new one to be provided?

Answer 4: Removal of an existing flow meter is required. Installation of a new 4” magnetic flow meter is required. Drawing D25 shows the installation of the new 4” meter. Drawing D13 is a demolition drawing and indicates which pipe segments are to be deleted by red piping. D14 shows the installation of a new 4” meter (detailed on D25).

Question 5: Which bid item is to include the work shown on drawings D13 and 14 (as it relates to the work at the aging tank RT-100), D17, D21 and D25 (as it relates to modifying the filtered and potable water at the exit and entrance to the building), and D24?

Answer 5: Reference Attachment A, rev 3-12-19, the following pay items have been added:

A8.8 - Remove existing purge piping as shown on D13 and D14- Lump Sum Payment

A8.9 - Install treatment plant plumbing not captured in other bid items, such as the modifications to the potable water piping as it enters the building shown on D17, and installation of a flow meter as shown in D25- Lump Sum Payment

A8.10- Install Eye Wash Station as shown on D24- Lump Sum Payment.

All other work shall be considered incidental to the previously established bid items.

Question 6: Addendum 4, the answer to question 3 allowed a water outage longer than 2 hours if the storage tank was full and the FD notified. The work between tie points 8 and 9 (reconfiguring the potable water piping on D25) will isolate the storage tank from the distribution piping which removes any storage tank use during the shutdown. This work will take longer than 2 hours because the 6” gate and check valves must be removed and reused in the new piping. Even if a new gate and check valve were specified, it is possible that the distribution system will empty before the work is completed. Will an outage described above be allowed?

Answer 6: There is no way to avoid an outage for work in this pipe section. The outage must be coordinated with the FD and the pipe spool should be prefabricated as much as possible to minimize the outage duration. The pipe segment will require sterilization prior to returning to service.

Question 7: From question 6 above - A similar outage will occur when the addendum 2 new pay item A1.7 Cross Connection Elimination on G02 is performed (assuming the cross connection exists). Please advise.

Answer 7: This outage is also unavoidable (if required). A similar procedure shall be used and outage time minimized.

Question 8: Bid item A5.2 Install Building Addition Toyo Stove and Fuel Lines Quantity of 2 each but only 1 new Toyo Stove is shown on drawing M01. Please clarify where 2nd new Toyo Stove is located?

Answer 8: Reference Attachment A, rev 3-12-19, there is only 1 new Toyo in the building addition. Quantity is revised to 1.

Question 9: Drawing A04 indicates 2 each fire extinguishers, 1 in the chlorine room and 1 in the nanofiltration room. Spec 102824.2.2.A.4 states 1 shall be provided. Please clarify this discrepancy. Provide per spec or plans?

Answer 9: There should be two fire extinguishers as shown in the plans.

Question 10: From question 10 above - Further, please clarify the size of the extinguisher. The type given indicates a 5 lb size. Is this intended given the absence of a sprinkler system?

Answer 10: 5 lb fire extinguishers are to be used as the basis of bid.

Question 11: WTP Drawing D21 in section view indicates removing the existing cross connection and level gauge indicator and installing a new spool and level transmitter. The section marks this indicator as LIT-600. This designator is missing from both existing and new instrument schedules. It is shown on P&ID D09 with an incorrect sheet note (should be note 2) and the cross connection remaining but is missing from the instrument spec 330910. Please clarify and provide additional information. Reuse or provide new?

Answer 11: A flow transmitter with 4-20mA output is required. Specification 33 09 10, 2.1, D would apply.

Question 12: From question 12 above - Further, as a suggestion, would this installation be much simpler with a tapped blind flange on the tee instead of fabricating a new spool as shown? Or is the intent of design to preserve the means to cross connect and isolate the storage tank as inferred on P&ID D09? If so, please clarify the drawings accordingly.

Answer 12: The intent is to preserve the means to cross connect and isolate. Tapped blind flanges are acceptable since the bypass would take the tank out of service and level indication is not required when the spool is in place.

Question 13: Schedule of Values - There are two bid items listed as B2.1?

Answer 13: Reference Attachment A, rev 3-12-19, re-label B2.1 bid items to B2.1a, and B2.1b.

Question 14: WWTP drawing M02, plan view, arrow note at air compressor calls for a weatherproof enclosure. The UV submittal does not describe an enclosure. No other information is provided. Please clarify this note.

Answer 14: There is no weatherproof enclosure to be installed. Air compressor shall be installed in the location specified on the plans.

4. Attachments

The following attachments are now added to the RFP:

- A. Schedule of Values, (revised 3-12-19) (eight pages)

Offerors must acknowledge receipt of this addendum prior to the submittal deadline.

The proposal documents require acknowledgment individually of all addenda to the drawings and/or specifications. This is a **mandatory requirement** and any proposal received without acknowledgment of receipt of addenda may be classified as not being a responsive proposal.

End of Addendum

Schedule of Values, (revised 3-12-19)

Item	Description	units	quantity	Unit Price	Total
Schedule A	Water Plant Building and Power Supply Upgrades		Schedule A1 through A8 Subtotal =		
A1.0	General Conditions			A1 Subtotal =	
A1.1	Superintendent	ea	1		
A1.2	Housing and travel	ls	1		
A1.3	Material Procurement*	ls	Included in the itemized costs		
A1.4	Equipment mobilization*	ls	1		
A1.5	Engineering and Quality Control*	ea	1		
A1.6	Safety planning and equipment*	ea	1		
A1.7	Cross Connection Elimination As Shown on G02	ls	1		

*present an itemized list.

A2.0	Building Demolition			A2 Subtotal =	
A2.1	remove building siding and trim, and associated equipment	sf	1396		
A2.2	remove roofing and roof structure	sf	1938		
A2.3	remove columns and footing bases along outside northwest wall	ea	7		
A2.4	remove and temporarily house the generator.	ls	1		
A2.5	demolish the generator walls and mechanical equipment	lf	29		
A2.6	remove sections of existing northwest wall for wall columns and doors.	ea	4		
A2.7	dispose of demolition waste.	tons	13		

Schedule of Values, (revised 3-12-19)

Item	Description	units	quantity	Unit Price	Total
A2.8	demolish and remove existing side walk on the south east side of the water treatment plant building	tons	2		
A3.0	Building Addition Foundation			A3 Subtotal =	
A3.1	overexcavate building addition footprint area	cy	27		
A3.2	Install drain piping around northwest and northeast ends of building, and under slab area. Bed pipe with NFS material per the specifications.	lf	106		
A3.3	Install raw water pump feeder, area light, and the KRBD Radio Repeater (notes 6, 8, and 10 on sheet E02.)	lf	140		
A3.4	Lay and compact subgrade, 3/4-inch minus material, 1-foot depth	sf	740		
A3.5	form and place reinforcement steel in slab and thickened slab foundation. (12 in x 12 in, 36 in x 36 in, 24 in x 24 in)	sf	576		
A3.6	Pour and finish slab and foundation	cy	28.4		
A3.7	Inspection by Engineer (by others)				
A3.8	Construct new sidewalk per sheet C01 including 6-inches of compacted subgrade and 4 inches of concrete.	sy	67		
A4.0	Building Addition Walls and Roof			A4 Subtotal =	
A4.1	Erect roof columns in the existing northwest wall	ea	2		
A4.2	exterior wall: frame, insulate, and apply vapor and air retarder (quantity is frame sf)	sf	700		
A4.3	interior wall: frame, insulate, and apply vapor and air retarder (quantity is the frame quantity for partition and center wall).	sf	610		
A4.4	Erect portal frame (anchor and frame W6x16)	lbs	614		
A4.5	frame the new roof (include glulam beam)	sf	2058		
A4.6	finish the interior walls	sf	2620		

Schedule of Values, (revised 3-12-19)

Item	Description	units	quantity	Unit Price	Total
A4.7	finish the new roof	sf	2058		
A4.8	finish exterior walls (less window and door openings)	sf	1510		
A4.9	Install the overhead door to the new building addition and finish	ea	1		
A4.10	Install interior doors and hardware	ea	3		
A4.11	Install exterior doors and hardware	ea	1		
A4.12	Inspection by Engineer (by others)				
A5.0	Mechanical, Building			A5 Subtotal =	
A5.1	Install chemical room ventilation, fans and venting	ea	2		
A5.2	Install building addition Toyo Stove and fuel lines	ea	1		
A5.3	Install generator, and generator battery charger	ea	1		
A5.4	Install gravity louver, air control dampers (and associated actuators).	ls	1		
A5.5	Install fuel supply and storage. (reuse existing tank)	ls	1		
A5.6	Inspect and test the generator, fan, and heater installation and function (by others)				
A6.0	Electrical Service Replacement			A6 Subtotal =	
A6.1	Demolish existing electrical service	ls	1		
A6.2	Develop plan to maintain service during electrical change over and execute it.	ls	1		
A6.3	Install service drop, disconnect and meter base	ls	1		
A6.4	Relocate MDP, and install Panel A and the transformer (item 5 on the sheet E08 equipment schedule).	ls	1		

Schedule of Values, (revised 3-12-19)

Item	Description	units	quantity	Unit Price	Total
A6.5	Mount the WTCP (equipment provided by others). Wire to Panel A. Wire to ethernet. (E13)	ls	1		
A6.6	Wire equipment including starter/disconnect to MDP and WTCP (sheet E10): Air Pump (B-200), Backwash Pump (P-410)	ls	1		
A6.7	Connect new lake service line to the relocated MDP.	ls	1		
A6.8	Wire equipment (and any associated starter/disconnects) to Panel A and WTCP: Re-circ pump (P-410), domestic water pump (DWP-1), Exhaust fans (EF-1, EF-2, and EF-3), and unit heaters.	ls	1		
A6.9	Wire chemical feed pumps and chemical feed outlets to Panel A and WTCP (Sheet E11): Polymer pump (CF-100), Chlorine feed pump (CF-500), Soda Ash Pump (CF-501)	ls	1		
A6.10	Wire lights and fixtures per sheet E05. Wire receptacles per sheet E04.	ls	1		
A6.11	Wire existing instruments to Panel A and WTCP: turbidimeters, flow meters.	ls	1		
A6.12	Inspect and test equipment and instrument operational function by engineer (by others)				
A6.13	Provide 120 Volt power to operate the turbidimeters on the wall opposite from the filters. Mount turbidity signal transmitters and wire transmitters to the WTCP.	ls	1		
A7.0	Automate the filters			A7 Subtotal =	
A7.1	Confirm the existing Bray valve viability				
A7.2	Install air blower and plumb the air piping for air scour	ls	1		
A7.3	Mount and wire the air and water valve motors and test the motor function -- closing, closed, opening, and opened.	ls	1		

Schedule of Values, (revised 3-12-19)

Item	Description	units	quantity	Unit Price	Total
A7.3i	Relocate turbidimeters and transmitters on wall opposite the direct filters. Install new Hach TU5300 filter turbidimeters to monitor individual and combined filter effluent turbidity.	ls	1		
A7.4	Inspection and testing of wiring.	ls	1		
A7.5	Start up by others (WTCP integrator). Contractor, including electrical and mechanical, to be on site for inspection and assist with start up.				
A7.6	Training (by others)				
A8.0	Nanofiltration Equipment			A8 Subtotal =	
A8.1	Plumb the NF unit, supply, return, and waste piping.	ls	1		
A8.2	Install and plumb the nanofiltration unit and equipment (owner provided, manufactured by Pure Aqua).	ls	1		
A8.3	Wire the nanofiltration control panel. Provide all field wiring connections (power and control) to the nanofiltration control panel and equipment.	ls	1		
A8.4	Inspect and test plumbing and electrical associated with nanofiltration equipment and instruments.	ls	1		
A8.5	Start up the nanofiltration unit. Requires Pure Aqua start up representative, Engineer, and the System Integrator (owner furnished)	ls	1		
A8.6	Inspect and test equipment and instrument operational function by engineer and Pure Aqua (by others)				
A8.7	Training (by others)				
A8.8	Remove existing purge piping as shown on D13 and D14- Lump Sum Payment	ls	1		

Schedule of Values, (revised 3-12-19)

Item	Description	units	quantity	Unit Price	Total
A8.9	Install treatment plant plumbing not captured in other bid items, such as the modifications to the potable water piping as it enters the building shown on D17, and installation of a flow meter as shown in D25.	ls	1		
A8.10	Install Eye Wash Station as shown on D24	ls	1		
A9.0	Self Back-washing Screen			A9 Subtotal =	
A9.1	Install Self Back-washing equipment* (BS-1). Requires equipment submittal.	ls	1		
A9.2	Wire the Self Back-washing Screen (BS-1) to Panel A and WTCP.	ls	1		
A9.3	Inspection by Engineer (by others)				

* includes contractor procured equipment.

Note that cost score will be based on the Total value.

Total Schedule A =

Schedule of Values

Item	Description	units	quantity	Unit Price	Total
Schedule B	Wastewater Plant UV Disinfection Project		Schedule B1 and B2 Subtotal =		
B1.0	UV Disinfection Project General Conditions			B1 Subtotal =	
B1.1	Superintendent	ea	1		
B1.2	Housing and travel	ls	1		
B1.3	Material Procurement*	ls	Included in the itemized costs		
B1.4	Equipment mobilization*	ls	1		
B1.5	Engineering and Quality Control*	ea	1		
B1.6	Safety planning and equipment*	ea	1		
B2.0	UV Disinfection			B2 Subtotal =	
B2.1 (a)	Complete demolition of chlorine contact basin elements per the plans -- Remove the broad crested weir, portion of hand rail, telescoping valve.	ls	1		
B2.1 (b)	Construct tee and valving from the extended aeration line that enters the contact basin. Run the pipe to the new UV bank channel through the existing wall and new bulkhead.	ls	1		
B2.2	Complete steel work including W10x22 I beam, framing for the steel grating, etc.	ls	1		
B2.3	Raise the UV Channel floor with clean gravel and a new reinforced concrete floor. Construct new reinforced concrete UV channel walls. Construct new reinforced concrete bulkhead with penetration for the new extended aeration supply piping.	ls	1		
B2.4	Construct the pad for hoist and UV related equipment. Install the hoist.	ls	1		
B2.5	Install remaining steel works -- pipe support, grated platform, stairs, stair rails.	ls	1		

Schedule of Values

Item	Description	units	quantity	Unit Price	Total
B2.6	Install the extended aeration liquid supply piping, support frame work, and associated type I and II wall penetrations.	ls	1		
B2.7	Install the owner furnished Glasco UV Equipment -- Includes 2 each UV units, level control weir, and air compressor.	ls	1		
B2.8	Install new circuits and breakers in the Panel LM. Install Buck-boost transformer. Install Sensaphone.	ls	1		
B2.9	Install buried power and control wire to the UV Control Panel. Wire the Flow Meter, Float Switch, and UV Units.	ls	1		
B2.10	Inspect the installation. Startup the UV system with the Engineer and Glasco representative.				
B2.11					

Additive Alternate

B3.0	Wastewater Plant -- Back Up Power Generator		Additive Alternate B3 Subtotal =		
B3.1	Construct Generator Pad. Place the new generator.	ls	1		
B3.2	Install emergency power and control circuits and normal power circuits to the Automatic transfer switch	ls	1		
B3.3	Install Automomatic Transfer Switch	ls	1		
B3.4	Relocate outside lighting panel to accommodate the ATS.	ls	1		
B3.5	Route Feeder from ATS to HDMP	ls	1		
B3.6	Inspect and test by others including Engineer				

Schedule A1 through A9 Subtotal =	
Schedule B1 and B2 Subtotal =	
Additive Alternate B3 Subtotal =	

Total Schedule A and B and additive alternate(s) =