



SUNSHINE COAST REGIONAL DISTRICT

AMENDMENT NO.#1

Request for Proposal No. 2437022

Well Improvements at Chaster Well

Date: September 25, 2024

This addendum forms part of the contract documents and shall be read, interpreted, and coordinated with all other parts. The costs of all work contained herein shall be included in the tender submission. The following revisions, clarifications, changes, additions, or deletions supersede the information contained in the original documents to the extent referenced and shall become part thereof:

Number of pages including attachments: #1

Item No.1 Closing Date and Time

The Closing Date and Time has been changed from "October 4, 2024 at 3:00 pm local time" to "October 15, 2024 at 3:00 pm local time."

Item No.2 Item 1.23 Insurance and Worksafe.

Delete:

"(b) Automobile liability insurance in respect of vehicles that are required by law to be insured under a contract by a Motor Vehicle Liability Policy, shall have limits of not less than \$10,000,000 inclusive per occurrence for bodily injury, death and damage to property, covering all vehicles owned or leased by the Contractor."

Add:

"(b) Automobile liability insurance in respect of vehicles that are required by law to be insured under a contract by a Motor Vehicle Liability Policy, shall have limits of not less than \$10,000,000 inclusive per occurrence for bodily injury, death and damage to property, covering all vehicles owned or leased by the Contractor."

Item No.3 Item 4.3 Additional Work

Delete:

"The Regional District may request the Contractor to perform additional services using qualified professional for:

- a) Well redevelopment services, the work will need to be completed by a qualified professional hydrogeologist and certified well contractor or equivalent.
- b) Removal, disassembly, cleaning, painting, reassembly and reinstallation of the existing submersible pump and motor by a certified water well removal and installation contractor."

Add:

"The Regional District may request the Contractor to perform additional services using a Qualified Well Driller (QWD) and Professional Hydrologist to complete the following:

- a) Well redevelopment services, the work will need to be completed by a qualified professional hydrogeologist and QWD.
- b) Completion of a continuous 72 hour well step pumping test and start of the constant rate test undertaken by the QWD in accordance with the Water Sustainability Act and Groundwater Protection Regulation and applicable best practices in the Province of BC.
- c) The Professional Hydrologist will interpret the pumping test data and calculate the long term sustainable well yield, Q_{max}, following industry standards. This includes well interference measured during the pumping test.
- d) The Professional Hydrologist will in conjunction with the QWD complete the following work tasks and provide a Stamped Final Engineering Well Rehabilitation and Development Project Completion Report summarizing at a minimum the following information:
 - 1. Project background.
 - 2. Details of the maintenance and rehabilitation program completing the following items:
 - i. Removal and contractor disposal of existing pump and motor.
 - ii. Contractor installation of a temporary pump and motor and connections, compatible with the anticipated long-term flow and well head capacity and completion of a pre-rehabilitation step test and summary.
 - iii. Pre-rehabilitation video inspection.
 - iv. Well development and cleaning using a surge and bail method and chemically treating the well followed by additional bailing and surging, pumping and chemical treatment.
 - v. Post rehabilitation video inspection.
 - vi. Removal of the temporary pump and motor.
 - 3. Post well development video inspections and written summary.
 - 4. Continuous 72-hour step test and results including a summary of both the pre-rehabilitation and post-rehabilitation step tests pumping rates.

5. Pre and post-rehabilitation specific capacity of the well.
6. A Professional Engineer (P.Eng) stamped pump curve depicting and specifying the recommended permanent replacement pump and motor assembly and specifications to be installed under a future phase of this project.
7. The recommended Variable Frequency Drive (VFD) motor assembly specifications, wiring and routing, complete with stamped P.Eng. engineering drawings to be installed under a future phase of this project.

Item No. 4 Appendix 1 - Specifications

Delete:

"Any and all reference to removal, reinstalling or commissioning of the existing pump and motor assembly"

Add/ Replace with:

"The existing pump and motor assembly is inoperative, and the Contractor is to remove and dispose of the burnt-out pump and motor assembly and install a temporary pump and motor assembly or approved equivalent alternative to complete the 72-hour sustained pump test. At the successful conclusion of the pumping test, and well redevelopment, the temporary pump and motor or approved equivalent alternative assembly must be removed by the Contractor."

Item No. 5 Specification's Section 0111000 Summary of the Work

Delete:

"1.2.1.8 Removal, disassembly, cleaning, reassembly and reinstallation of the existing submersible well pump and motor, including redevelopment of the existing well should the Regional District elect to undertake the optional work.

Additional Work: certified well redevelopment services by a qualified well driller (QWD) and a professional hydrogeologist, and materials required to complete a vertical submersible well pump and motor removal using a certified water well removal, well redevelopment and installation Contractor along with the completion of Certified factory cleaning, testing, and redevelopment of the Chaster Well. All work will be completed in accordance with these Contract Documents and Drawings."

Add:

"1.2.1.8 Cleaning, disinfection and re-development of the existing well and completion of a 72-hour well step pumping test should the Regional District elect to undertake the optional work. Work to be completed by a Professional Hydrologist and Qualified Well Driller (QWD).

Item No. 6 Specification's Section 332113 Well Rehabilitation

Delete:

"5.0 TEMPORARY TEST PUMP REMOVAL AND PERMANENT PUMP INSTALLATION

5.1 The QPI will mount their truck on the grass to the southeast of the well.

5.2 The temporary test pump will be removed from the Well. A permanent vertical turbine pump assembly (pump assembly) will be collected from the Regional District's maintenance building to replace the existing pump assembly.

5.3 The static groundwater level will be measured and recorded. The permanent pump supplied by Regional District will be installed into the groundwater supply well with the pump intake installed as per the IFC drawings. The installation depth will be confirmed by the Contractor's Hydrogeologist and the actual pump intake depth recorded.

5.4 Along with the permanent pump, two (2) schedule 40 PVC, 38 mm nominal ID sounding tubes will be installed. The sounding tubes will extend from the top of casing to the top of the pump intake. The bottom meter of the sounding tubes will be slotted with maximum five (5) mm perforations and an end cap will be secured to the bottom end of the tubes. The sounding tubes will be installed at the same time as the pump by the Contractor."

Replace with:

"5.0 TEMPORARY TEST PUMP INSTALLATION AND REMOVAL

5.1 The QWD will mount their well truck over the top of the well head.

5.2 The temporary test pump or approved equivalent will be installed for the well redevelopment, the sustained 72-hour pump test, and determination of the sustained long term well yield and at the conclusion of the sustained well test and determination of the well pump curve, the contractor must remove the temporary well pump and motor assembly from the Well.

5.3 The static groundwater level will be measured and recorded.

5.4 Along with the temporary pump installation or approved equivalent, two (2) schedule 40 PVC, 38 mm nominal ID sounding tubes will be installed. The sounding tubes will extend from the top of casing to the top of the pump intake. The bottom meter of the sounding tubes will be slotted with maximum five (5) mm perforations and an end cap will be secured to the bottom end of the tubes. The sounding tubes will be installed at the same time as the temporary pump by the Contractor."

Item No.7 CCDC 41 'CCDC Insurance Requirements'

Delete in its entirety:

"2. Automobile liability insurance in respect of vehicles that are required by law to be insured under a contract by a Motor Vehicle Liability Policy, shall have limits of not less than \$10,000,000 inclusive per occurrence for bodily injury, death and damage to property, covering all vehicles owned or leased by the *Contractor*. Where the policy has been issued pursuant to a government-operated automobile insurance system, the *Contractor* shall provide the *Owner* with confirmation of automobile insurance coverage for all automobiles registered in the name of the *Contractor*.

Add:

"2. Automobile liability insurance in respect of vehicles that are required by law to be insured under a contract by a Motor Vehicle Liability Policy, shall have limits of not less than \$5,000,000 inclusive per occurrence for bodily injury, death and damage to property, covering all vehicles owned or leased by the *Contractor*. Where the policy has been issued pursuant to a government-operated automobile insurance system, the *Contractor* shall provide the *Owner* with confirmation of automobile insurance coverage for all automobiles registered in the name of the *Contractor*.

Item No.8 Schedule A Schedule of Prices

Delete in its entirety.

Replace with updated schedule.

Amendment No.1 is issued prior to receipt of submission and shall form part of the contract documents. The revisions shall clarify the information contained in the original Proposal documents issued on August 28, 2024.

Schedule A Schedule of Prices

The Price for the Work is comprised of the following components and overhead and profit are included in each component: Items 1 through 21 and 22 through 37. More information on the requirements can be found on the IFT drawings issued with this document

Payment Item	Description	Approx. Quantity	Unit	Amount
GENERAL				
1	Mobilization, Site Cleanup and Demobilization. Supervision, Meetings, Site Safety/Security(fencing/storage), Schedule and other Submittals.	1	LS	
2	Provide site construction erosion control measures as shown on the plans and provide site sediment erosion control from the discharge point of the pumped water testing and ensure that the discharge water does not undermine and carry any roadway fines so as to undermine roadside ditches. Ensure that treated water leaving site is dechlorinated prior to discharge to the environment.	1	LS	
WELL, WELL PUMP AND WELL MOTOR WORKS Optional Items 3 & 4				
3	Cleaning, disinfection and redevelopment of the well in the presence of a qualified well hydrogeologist utilizing the approved specifications. Qualified Hydrologist to be provided by the Contractor.	1	LS	
4	Complete a continuous 72 hour well pumping test, Well Summary Report, Pump Curve, and Variable Frequency Drive and Electrical Specifications for the future pump and motor in accordance with the Water Sustainability Act and Groundwater Protection Regulation and applicable best practices in the Province of BC, providing well insight and analysis.	1	LS	

CONSTRUCTION WORKS				
5	Remove and dispose of the existing valve vaults, back fill of well head with appropriate bentonite, and structure fill materials to seal well head and support new slab. To include all bedding and structural fill for installed pipe and any driveway crossings needed for drain installation.	1	LS	
6	Furnish and install the required precast valve vault and specified lid as shown on the drawings.	1	LS	
7	Complete site civil modifications including concreting, connections and improvements necessary to provide for a complete and functioning above grade pitless adaptor unit, well seal complete with a well head steel top enclosure.	1	LS	
8	Supply place and finish reinforced concrete slab sloped away from pitless adapter, over appropriately compacted fill.	1	LS	
9	Installation of protective well head bollards compliant with details as shown in the plans. All roadside bollards to be removeable.	4	Ea.	
ELECTRICAL, MECHANICAL AND CONTROLS				
10	Electrical and mechanical connections for future pump and motor and variable frequency drive assembly, and temporary valve vault submersible pump assembly, including flow control valve.	1	LS	
11	Complete all related mechanical, electrical and SCADA for the new pitless adapter unit and the flow control unit.	1	LS	
12	Perform and complete the necessary electrical and mechanical modifications to the existing electrical mechanical operating system to ensure the system improvements are integrated and provide for the uninterrupted function of the Chaster well station for a complete operable system utilizing the temporary pump and motor or approved equivalent.	1	LS	
13	Install a well level data logger with a sounding tube for well level monitoring, Contractor to propose the design and means and methods of installation. Provided in the plans is a schematic for reference.	1	LS	
14	Furnish, install, and calibrate the electronic interface combination flow control valve and metering valve installation.	1	LS	

UTILITY WORKS				
15	Furnish, assemble and install a new pitless adaptor unit.	1	LS	
16	Supply and installation of new 200 mm ductile mains, and all adapters, fittings and valves as necessary to connect new pitless adapter from wellhead to the existing mains as shown on drawings.	1	LS	
17	Furnish, install and start up testing of new discharge hydraulic pilot flow control and metering valve, the electronic valve controller and all other pump discharge piping modifications for a complete and operational piping system. Include cleaning, sanding and preparation of all piping, and application of new industrial epoxy painting system.	1	LS	
18	Installation and removal of a temporary submersible pump and motor and a 25mm drain line inside the valve vault to discharge to atmosphere. Contractor to provide 115 Volt alternating current power and watertight receptacle to power the pump and motor.	1	LS	
19	Installation of a new valve vault with steel lids complete with a locking lid assembly.	1	LS	
COMMISSIONING				
20	Testing and commissioning of system with SCRD staff present.	1	LS	
21	Contractor to provide Operation & Maintenance Manuals for the upgrades.	1	LS	
		Subtotal		
		GST 5%		
		Total		

Additional Work				
22	Well redevelopment services and 72 hour well pumping test performed by a professional Hydrologist as specified.	1	LS	
		Subtotal		
		GST 5%		
		Total		

Hourly Rates		
23		
24		
25		
26		
27		
28		
29		
30		
31		
32		
33		
34		
35		
36		
Material Markup		
37	Cost plus % markup	