

**CITY OF STANWOOD
IRVINE SLOUGH STORMWATER SEPARATION – PHASE 1
PROJECT # 594 38 63 01**

**Bid Date: July 28, 2020
Bid Time: 2:00 PM**

**ADDENDUM NO. 2
Issued July 23, 2020**

PAGE 1 OF 9

Bidder shall acknowledge receipt of this addendum by completing the appropriate blanks on the Addenda Received form, found on page I-13 of the Contract Documents.

This Addendum No. 2 consists of nine (9) pages and is hereby made a part of and incorporated into the BID PROPOSAL, CONTRACT DOCUMENTS, AND SPECIFICATIONS for the IRVINE SLOUGH STORMWATER SEPARATION – PHASE 1

CONTRACT PLANS

All references to the “50 hp” pump on all plan sheets shall be replaced with “60 hp” pump.

The Last sentence of Inspections Note 2 on sheet S1.1 shall be changed to “The contractor shall secure and pay for the services of the inspection and testing agency to perform all special inspections and tests.

BID PROPOSAL, CONTRACT DOCUMENTS, AND SPECIFICATIONS

SCHEDULE OF PRICES: (Part 1 Bidding Requirements, page I-9)

Replace the Schedule of Prices with the attached revised Schedule of Prices.

PUBLIC WORKS CONTRACT: (Part II Contract Forms, page II-2)

Replace Paragraph 2A with the following:

2. Time for Performance and Liquidated Damages / Termination of Contract

A. Time is of the essence in the performance of this Contract and in adhering to the time frames specified herein. The Contractor shall commence work within ten (10) calendar days after notice to proceed from the City, All work to prepare for the installation of the new pump, pump controls, slide gates and flap gates shall be physically completed within 40 working days after Notice to Proceed has been issued. Upon receipt and acceptance of the new pump, pump controls, slide gates and flap gate shop drawings, expected to be approximately 18 weeks after being ordered, work to install the pump will commence. All work to complete the installation of the pump shall be physically completed within 20 working days following the date the pump is to be delivered to the job site.

PART IV – SPECIAL PROVISIONS

1-08.5 Time for Completion (Division 1, page IV-43)

(*****)

New

Revise the first paragraph to read:

All work to prepare for the installation of the new pump, pump controls, slide gates and flap gates shall be physically completed within 40 working days after Notice to Proceed has been issued. Upon receipt and acceptance of the new pump, pump controls, slide gates and flap gate shop drawings, expected to be approximately 18 weeks after being ordered, work to install the pump will commence. All work to complete the installation of the pump shall be physically completed within 20 working days following the date the pump is to be delivered to the job site.

8-26 STORMWATER PUMP

Replace section 8-26 in its entirety with the following section 8-26.

8-26 STORMWATER PUMP

(*****)

New

8-26.1 Description

This Work consists of furnishing and installing a vertical axial flow stormwater pump in accordance with the Plans, these Specifications, the Standard Plans, and as ordered by the Engineer in accordance with Section 1-04.4.

8-26.2 Materials

8-26.2(1) General

Installation shall include pump and motor complete with discharge head, hoisting eye, mounting base hardware, and other appurtenances furnished as an integral pumping unit by the manufacturer.

All pump components shall be specifically designed, manufactured, and equipped by the manufacturer to be completely suitable for operation under the conditions specified herein and per the configuration shown on the Plans. The manufacturer shall be solely and completely responsible for supplying a pump specifically designed, manufactured, and equipped for the required piping configuration and operating conditions.

Pumps shall be designed and suitable for pumping municipal stormwater and brackish water, capable of passing 1.0-inch diameter solids and any trash or stringy material passing the lift station trash rack.

Each pump assembly and all pump assembly components shall be capable of operation with and by VFD.

Each pump assembly and all pump assembly components shall be designed for and capable of continuous constant speed operation at any and all points on the pump curve per the conditions specified herein.

Working parts shall be readily accessible for inspection and repairs, easily duplicated and replaced.

The pumps, motors and associated appurtenances shall be suitable for operation in a marine environment under an unsubmerged condition.

Each pump assembly and all pump assembly components shall be designed for and capable of variable speed operation at any and all points on the pump curve, as defined by Conditions A through D specified below.

8-26.2(2) Pump Materials

The pump shall be a Flowserve 20AFV-H unit with a 60HP motor or Engineer approved equal meeting the following specifications:

1. Axial flow, single stage vertical unit
2. 60 HP, 900 RPM, 460V motor.
3. Cast iron stator case & suction bell, TEFC for VFD use
4. Bronze propeller with key
5. Bronze bowl bearings
6. Pump shaft shall be type 416 stainless steel
7. Steel suction splitter vortex suppression/basket strainer, 10 inches long
8. Flanged carbon steel column pipe, 24-inch diameter, 0.375-inch wall
9. Carbon steel line shaft, 1.69-inch diameter, 2.50-inch steel enclosing tube
10. Bronze enclosed line shaft bearings
11. Stainless steel type UF (underground) discharge head, 24-inch plain end discharge
12. Tension tube assembly for oil lubrication
13. All assembly hardware shall be 316 stainless steel
14. Bowl assembly coating shall be standard factory gray enamel
15. Column pipe coating shall be standard factory gray enamel
16. Discharge head coating shall be standard factory gray enamel
17. Motor housing shall be rated for exterior marine installation
18. Pump shall have a Non-Reverse Ratchet mechanism

8-26.2(3) Spare Parts

Provide one (1) spare impeller and two (2) sets of all gaskets, seals, and wear rings with repair diagrams, and one gallon of touch up paint.

8-26.2(4) Performance Requirements

The pump shall operate over the range of flows and heads specified in the following tabulation.

Condition	A	B	C	D
Flow, gpm	0	10,000	12,000	14,000
Total Head, Feet	45	18	14	11.5
Efficiency, %		35	80	75

Maximum Motor Horsepower 60
Speed 900 rpm

8-26.2(5) Submittal

In accordance with the requirements of Standard Specification Section 1-06, submit the following for Engineer review and approval.

1. Descriptive literature, bulletins, and catalog cut sheets of the equipment.
2. Complete certified performance curves showing capacity versus head, NPSH required, pump efficiency, and brake horsepower.
3. Materials of construction.
4. Detailed drawings of complete pump assembly showing all pertinent dimensions.
5. Certification that the proposed pumps will be manufactured and equipped to be completely suitable for operation under all specified conditions and in the installations shown on the Contract Drawings.
6. Complete installation instructions, with points of electrical and plumbing connection requirements clearly shown.
7. Performance test results according to Section 8-26.2(6)3.

Pump unit shall not be delivered to the project site until Engineer approval is issued.

8-26.2(6) Quality Assurance

1. The manufacturer of the pumps shall be ISO 9001:2000 revision certified, with scope of registration including design control and service after sales activities.
2. All electrical equipment and materials specified herein shall be approved by UL (Underwriters Laboratories) for the specified purpose and shall bear the UL label. Labels from other electrical testing laboratories will be acceptable if approved by the local electrical inspection authority.
3. A Hydraulic Institute performance test shall be performed on each pump assembly supplied. The tests shall be performed at full pump speed to define pump discharge head, efficiency, and input horsepower at Conditions A, B, C, and D. Testing shall be performed to simulate actual field conditions within reasonable testing constraints. All test data recorded shall be provided in the format defined by the Hydraulic Institute Standards. All non-direct measured values used in calculation of pump characteristics shall be documented and justified. Performance curves,

indicating measured and calculated pump characteristics for Conditions A, B, C, and D shall be developed and certified by the manufacturer.

8-26.2(7) Operation and Maintenance Data

In accordance with the requirements of Standard Specification Section 1-06 submit the following Operation and Maintenance Data:

1. Manufacturer's catalog data for each specified pump and motor.
2. Manufacturer's Parts List for each specified component.
3. Manufacturer's installation, adjustment and startup procedures for each pump and motor.
4. Manufacturer's periodic maintenance schedule and specific procedures.

8-26.3 Construction Requirements

8-26.3(1) Installation

Install pumping equipment, complete, in accordance with the Plans, manufacturer's recommendations, and approved submittals.

Make final adjustment after piping is completed and before startup by the manufacturer's representative.

Pumps shall be set plumb with no stresses on the pump discharge. All equipment shall be supported and securely anchored, ensuring all connections are tight.

All construction debris shall be removed from the system and wet well prior to operation of the pumping equipment.

8-26.3(2) Startup and Field Testing

Startup and field testing shall be conducted in accordance with Division 1650, Testing, Startup and Operation.

8-26.3(3) Operational Training

The Contractor shall provide the following Operational Training:

A minimum of one four-hour session of field training demonstrating the operation of the pumping system.

8-26.4 Measurement

Pump Unit – Vertical Axial Flow – 60HP

Measurement for Pump Unit – Vertical Axial Flow – 60HP shall be Lump Sum.

8-26.5 Payment

The lump sum price for Pump Unit – Vertical Axial Flow – 60HP shall include all labor, material and equipment necessary to install the pump and appurtenances as shown on the Plans and described in the specifications.

July 23, 2020
City of Stanwood
Irvine Slough Stormwater Separation – Phase 1
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ISSUED BY:

PACE Engineers, Inc.



Andrew C. Reaves
Senior Principal



**CITY OF STANWOOD
IS4 – PHASE 1
BASE BID
SCHEDULE OF PRICES**

Item No.	Spec Ref.	Unit	Qty	Description of Item	Amount	
					Unit Price	Total
1	1-05	LS	1	Record Drawings		
2	1-05.4	LS	1	Surveying		
3	1-07.15	LS	1	Spill Prevention, Control and Countermeasures (SPCC) Plan		
4	1-09	LS	1	Mobilization		
5	1-10	LS	1	Project Temporary Traffic Control		
6	2-02	LS	1	Removal of Structures and Obstructions		
7	2-02	EA	2	Potholing		
8	2-09	LS	1	Trench Safety Systems		
9	2-09	CY	1,140	Structure Excavation Class B Incl. Haul		
10	4-04	TN	78	Crushed Surfacing Base Course		
11	4-04	TN	19	Crushed Surfacing Top Course		
12	5-04	TN	31	HMA for Pavement Repair Cl. 1/2 PG 64-22		
13	6-01	LS	1	Concrete Vault Wall		
14	6-01	LS	1	Interior Concrete Wall		
15	7-04	LF	320	Corrugated Polyethylene Storm Sewer Pipe 48-In. Diam.		
16	7-05	EA	2	Catch Basin Type 2 72-In. Diam.		
17	7-05	EA	1	Connection to Drainage Structure		
18	7-05	EA	1	Access Ladder (Exterior)		

Item No.	Spec Ref.	Unit	Qty	Description of Item	Amount	
					Unit Price	Total
19	7-05	EA	1	Access Ladder (Interior)		
20	7-06	EA	1	Slide Gate (Exterior)		
21	7-06	EA	1	Slide Gate (Interior)		
22	7-08	EA	11	Pipe Anchors		
23	7-08	CY	250	Gravel Backfill for Pipe Zone Bedding		
24	7-08	LS	1	Dewatering		
25	7-09	CY	285	Bank Run Gravel for Trench Backfill		
26	7-09	SF	3,800	Shoring or Extra Excavation Class B		
27	7-17	CY	142	Removal & Replacement of Unsuitable Material		
28	8-01	LS	1	Erosion and Water Pollution Control		
29	8-02	AC	0.1	Seeding, Fertilizing, and Mulching		
30	8-15	TN	70	Quarry Spalls		
31	8-26	LS	1	Pump Unit - Vertical Axial flow – 60 hp		
32	8-27	FA	1	Bypass Pumping	\$20,000	\$20,000.00
33	8-27	LS	1	Cofferdam – Irvine Slough		
34	8-27	LS	1	Cofferdam – Discharge		
35	8-27	LS	1	Vault Grating		
36	8-27	LS	1	Trash Rack		
37	8-27	LS	1	Railing		
38	8-27	EA	1	Tide Gate and Extension		

Item No.	Spec Ref.	Unit	Qty	Description of Item	Amount	
					Unit Price	Total
39	8-27	EA	1	Remove and Replace Flapper Assembly		
40	8-27	LS	1	General Demolition		
41	8-28 SP	LS	1	Fiberglass Flap Gates		
42		LS	1	Electrical		
SUBTOTAL \$						
WASHINGTON STATE SALES TAX @ 9.2% \$						
TOTAL AMOUNT BID \$						

Contract award will be based on the Total Amount Bid with Tax to determine the low-responsive bidder.

The work is subject to State **Sales Tax** – Rule 170. The Contractor shall not include the retail sales tax in the unit bid item prices, or in any other contract amount subject to Rule 170.