ADDENDUM NO. 2

ISSUE DATE: February 16, 2024

PROJECT: Three Rivers Regional Wastewater Authority
Primary Clarifier, Hauled Waste, Aerobic Digester Upgrades

PROJECT NO.: 8947

TIME BIDS DUE: **10:00 A.M., Thursday, March 7, 2024**

TO: All Planholders

This addendum is hereby made part of the Contract Documents to the same extent as though it were originally included herein. The following changes, additions, or alterations to the Contract Documents and/or Drawings are hereby made a part of the requirements and conditions of Addendum No. 2.

Acknowledge receipt of this Addendum in the space provided on the Bid Form.

Item Location & Description of Change

Specifications

1. **Section 02 40 00 Demolition**
   a. Strike Part 1, 1.01, A, 7.

   This is incorporated into Section 02 40 00 by this addendum.

2. **Section 40 05 49 Weir Gates, Slide Gates and Stop Gates**
   a. Replace this section with the attached.

   This is incorporated into Section 40 05 49 by this addendum.

3. **Section 40 63 00 Programmable Logic Controller**
   a. Strike title to Part 2.02A and replace with the following:
      2.02 PROGRAMMABLE LOGIC CONTROLLERS (ROCKWELL/ALLEN-BRADLEY)
   b. Strike Part 2.02 A. and replace with the following.
      A. Manufacturer: Programmable Logic Controller equipment shall be Rockwell/Allen-Bradley, ControlLogix, no equal.

   This is incorporated into Section 40 63 00 by this addendum.

4. **Section 46 33 33 Polymer Blending and Feed Equipment.** 40 63 00
   a. Strike Part 2.04, E. 4. No PLC control system is required.
   b. Strike Part 2.04, E. 5 and replace with the following:

   5. The control panel shall consist of all controllers, digital displays, potentiometers, switches, lights, relays, and other control devices required for a complete operable system. The dilution water flow rate shall be monitored by a rotameter type flow meter.

   This is incorporated into Section 46 33 33 by this addendum.

5. **Section 46 71 33 Rotary Drum Thickening Equipment**
   a. Strike the third sentence from Part 1, 1.01, A and replace with the following:
   b. The Rotary Drum Thickener (RDT) system supplied shall consist of a polymer injector, static mixer, flocculation tank with mixer, rotary drum screen, supporting frame, spray deflecting and odor containing cover, RDT spray wash header, thickened sludge shroud and control panel.

   This is incorporated into Section 46 71 33 by this addendum.

6. **Volume 3 – Section 11- OFCI Control Panels**
   a. Add the following control panel drawings from Andritz as Volume 3 Section 11.
      i. Vol. III, Section 11 – PLC-10
      ii. Vol. III, Section 11 – RIO-10

Both PDF drawing sets may be downloaded from http://www.bxwa.com/

<u>Drawings</u>

7. **Revised Drawings**

Replace the following sheets from the bid package as attached to this addendum:

D-101	M-201
D-201	M-202
D-202	M-203
C-103	M-621
C-105	M-622
C-106	M-624
C-122	I-554
C-201	

<u>Other:</u>

8. **Mandatory Prebid Meeting Sign-in List** – See attached list.

9. **NAVISWORKS MODELS – 3D model output for the Hauled Waste Station and Dryer may be downloaded from** http://www.bxwa.com/

END OF ADDENDUM NO. 2

Acknowledgement of this addendum is required under ADDENDA on the Bid Form Section 00 41 00 - 1 of the Bidding Requirements.

Issued this <u>16th</u> Day of <u>February</u>, 2024.

Duane Leaf

Duane Leaf, General Manager

Three Rivers Regional Wastewater Authority
467 Fibre Way
Longview, WA 98632
(360) 577-2040

SECTION 40 05 59

WEIR GATES, SLIDE GATES AND STOP GATES

PART 1 - GENERAL

1.01 SECTION INCLUDES

A. Furnish and install complete, tested and operating, the equipment as shown on the Drawings and as specified herein.

B. Work Included in this Section:
   1. Weir Gates with operators.
   2. Slide Gates with operators.

1.02 SUBMITTALS

A. Shop Drawings: Submit shop drawings in the Product Review category for the sluice gates, slide gates, flap gates and associated operators. Submit construction details, dimensions, and construction materials. Include sufficient data to show that equipment conforms to Specification requirements. Submit shop drawings as a complete initial package.

B. Manuals: Furnish manufacturer's installation, lubrication, and maintenance manuals, bulletins, and spare parts lists.

C. Affidavits: Furnish affidavits from the manufacturer stating that the gates and operators have been properly installed and tested and are ready for full-time operation.

1.03 QUALITY ASSURANCE

A. All equipment furnished under this Section shall be of a manufacturer who has been regularly engaged in the design and manufacture of the equipment for at least 5 years. Demonstrate to the satisfaction of the Engineer that the quality is equal to equipment made by those manufacturers specifically named herein.

1.04 SEISMIC CERTIFICATION

A. Seismic anchorage certifications and descriptions are required.

PART 2 - PRODUCTS

2.01 WEIR GATES

A. General: Provide non-rising stem, self-contained, downward operating, weir gates complete with slide guides, stems, mechanical operators and all appurtenances to provide complete operational slide gate as shown in the Gate Schedule on the Mechanical Drawings and as specified herein.
   1. The complete system comprising the gate, slide, guides and appurtenances shall be furnished by the gate manufacturer, who shall be responsible for the compatibility of components and functional integrity. The size of each weir gate shall be suitable for the clear opening shown on the Drawings.
   2. The weir gate as a whole and all their components shall be suitable for service in raw sewage. The gate shall be designed for manual operation with

heads under three feet. Gates will be installed under non-seating head conditions, and components shall be adequate to ensure a maximum leakage of 0.3 gallons per minute per foot of seating perimeter under these conditions.

3. Weir gates shall conform to AWWA C513 except as modified herein.

B. Weir Gate Type: The weir gate shall be of the downward-operating, flange back, self-contained, non-rising stem type. The gates shall be by Waterman Industries; Rodney Hunt; Hydrogate Corporation; Golden Harvest, Inc.; Fontaine; or approved equal.

C. Weir Gate Construction:

1. Frame and guides: The gate frame shall be a rigid unit made of plate and structural shapes. The frame shall be constructed type 316 stainless steel. The guides shall be designed to mount to the downstream face of the concrete (under non-seating head conditions). Fasteners will be of the wedge-anchor type. Guides will incorporate an ultrahigh molecular weight polyethylene (UHMW-PE) material. The invert of the frame will be a type 316 stainless steel extrusion welded to the lower ends of the guides and anchored in-channel to form a seating surface for the resilient seal.
2. Weir (Disk): The Weir shall be type 316 stainless steeel plate, reinforced with structural steel shapes or extrusions welded to the plate. The slide shall not deflect more than 1/360th of the maximum dimension under conditions shown on the Drawings.
3. Seals shall be UHMW-PE and will be mounted on the seating surfaces of the disk. The shape of the seal will produce a seating surface having a minimum width of ¾-inches.

4. Motorized weir gate operators where called for in the Gate Schedule shall be electric motor driven.
   a. All gearing shall be enclosed. Operator shall be equipped with auxiliary hand operator (push-pull), stem cover, and shall be frame-mounted. Each operator shall be designed with ample strength and power to operate the weir gate under maximum heads as shown in the Gate Schedule, at a minimum speed of 1 foot per minute, without overloading the motor, and shall be for indoor service.
   b. Provide integral electric controls for open-close service including reversing starter, limit switches, torque switch, indicating lights and local-off-remote switch. Comply with AWWA C540. The motor shall be reversible, squirrel cage induction rated for 460 volts, 3-phase, 60 Hz with Class "F" insulating system. The motor shall be totally enclosed and non-ventilated with all leads terminating within the limit switch compartment. The motor shall be of sufficient size to open or close the valve at 200% of maximum required breakaway torque. The motor shall operate at ±10% of rated voltage and shall be sufficient for one complete cycle without exceeding its temperature rating.
   c. Provide auxiliary contacts for remote monitoring of "open," "close," and "ready" indication. Ready indication shall be indicated when the valve selector is in the "remote" position.
   d. Manufacturer: Auma; Limitorque; Rotork; EIM; or equal.
5. Fasteners and anchor bolts shall be stainless steel.

2.02 SLIDE GATES

A. General: Provide stainless steel slide gates complete with slide guides, seals, stems, operators and all appurtenances to provide complete operational slide gates as shown in the Slide Gate Schedule and as specified herein.
   1. The complete system comprising the gate, slide, guides, and appurtenances shall be furnished by the gate manufacturer, who shall be responsible for the compatibility of components and functional integrity. The size of each slide gate shall be suitable for the clear opening shown on the Drawings.
   2. The slide gate as a whole and all their components shall be suitable for service in raw sewage. The gate shall be designed for manual operation or motor actuation with heads as shown on the Slide Gate Schedule.
   3. Slide gates shall conform to AWWA C561 except as modified herein.

B. Slide Gate Type: The slide gate shall be of the spigot-back, surface mounted, self-contained type. The gate shall be by Rodney Hunt; Hydrogate Corporation; or equal.

C. Slide Gate Construction:
   1. Frame and guides: The gate frame shall be a rigid unit made of plates and structural shapes. The yoke supporting the operator shall not deflect more than 1/360th of the yoke span under the design thrust. The frame shall be constructed of Type 316 stainless steel.
   2. Slide (Disk): The slide shall be plate reinforced with structural shapes welded to the plate. The slide shall not deflect more than 1/360th of the maximum dimension of the gate under the heads indicated in the Slide Gate Schedule. The slide shall be constructed of Type 316 stainless steel.
   3. Fasteners and anchor bolts: ASTM F593/594, Type 316 CW stainless steel.
   4. Stem: The stem shall be ASTM A276, Type 316 stainless steel with a diameter capable of withstanding in compression twice the rated output of the operator at 40-pound pull. The stem shall be floor mounted and supported so that the unsupported L/R ratio does not exceed 200.
   5. Seals: Provide UHMW and neoprene seating faces and seals along the invert, top and sides of the gate. Mount side seals to the frame guides. Bottom seal may be mounted on the slide or the frame.
   6. Slide gates shall be unpainted.

2.03 STOP GATES

A. General: Provide aluminum stop gates complete with hand holds, UHMW polyethylene guide seat, seals and appurtenances to provide complete operational stop gates as shown in the Stop Gate Schedule and as specified herein.
   1. The complete system comprising the gate guides, and appurtenances shall be furnished by the gate manufacturer, who shall be responsible for the compatibility of components and functional integrity. The size of each slide gate shall be suitable for the clear opening shown on the Drawings.
   2. The slide gate as a whole and all their components shall be suitable for service in raw sewage. The gate shall be designed for manual operation with heads as shown on the Stop Gate Schedule.
   3. Stop gates shall conform to AWWA C561 except as modified herein.

B. Stop Gate Type: The stop gate shall be surface mounted and self contained. The gate shall be by Golden Harvest, Inc.; or equal.

C. Stop Gate Construction:
   1. Frame and guides: The gate frame shall be constructed of 36 gauge aluminum.
   2. Gate The slide shall be plate reinforced with structural shapes welded to the plate. The slide shall not deflect more than 1/360th of the maximum dimension of the gate under the heads indicated in the Stop Gate Schedule. The slide shall be constructed of gauge 36 aluminum.
   3. Fasteners and anchor bolts: ASTM F593/594, Type 316 CW stainless steel.
   4. Seals: Provide UHMW and neoprene seating faces and seals along the invert and sides of the gate. Mount side and invert seals to the frame guides.
   5. Stop gates shall be unpainted.

2.04 MANUAL OPERATORS

A. Manually operated lifts shall be of the handwheel pedestal type or single speed, removable crank type as shown in the Sluice Gate Schedule, conforming to applicable provisions of AWWA Standard C560 or C561 as amended herein. After the gate has been "cracked" from its wedging devices, a maximum hand pull of 25 pounds shall be required to open the gate under the specified operating heads.

B. Provide handwheel lift units with cast iron cap, handwheel and pedestal and a cast bronze lift nut. The lift nut shall be flanged and shall have ball thrust bearings above and below it to take the thrust developed during opening and closing of the gate. Adequate grease fittings shall be provided to lubricate the bearings and other moving parts. The rim of the handwheel shall be cast smooth and be free of sharp edges. An arrow shall be cast in the rim of the handwheel with the word "open" to indicate direction of rotation to open the gate.

C. Hand cranks shall have a maximum 15-inch operating radius and shall be provided with a revolving sleeve. All gears, sprockets, and pinions shall be of steel and have cut teeth. Sufficient grease fittings shall be provided to allow lubrication of all moving parts, such as bearings, gears, etc. Ball thrust bearings shall be provided above and below the flange on the lift nut to take the normal thrust developed during opening and closing of the gate under the maximum specified operating heads. All other bearings shall be provided with bronze sleeves. An arrow shall be cast in the lift housing to indicate the direction of opening. It shall be readily visible to the operator. Lift nuts shall be of cast bronze.

D. All lifts shall be equipped with a transparent rigid butyrate stem cover with permanent marking to indicate full open, full closed, and gate level in 1-inch graduations. Lift nut shall be threaded with left hand threads for standardized valve operation.

PART 3 - EXECUTION

3.01 INSTALLATION

A. Equipment shall be installed in strict conformance with the manufacturer's installation instructions. Installation of sluice gates and operators, flap gates and slide gates shall be in accordance with the requirements of AWWA C560 and C561 and as amended herein. The manufacturer of the sluice gates shall furnish all gates, suitably designed, so that anchorage to thimble can be performed at the designed locations.

3.02 FIELD SERVICE

A. The manufacturer of the gates shall supply a competent field service engineer to thoroughly check and inspect the slide, sluice, and flap gates after installation, place the gates in operation and make necessary adjustments, and instruct plant personnel in proper operating and maintenance procedures.

3.03 FIELD PAINTING

A. Non-submerged ferrous metal shall be painted in accordance with Section 09 96 00. Submerged surfaces need not be field painted but shall be touched up if required.

3.04 FIELD LEAKAGE TESTS

A. All sluice gates, slide gates, and flap gates shall be given a field leakage test under the head conditions listed in the gate schedules on the Drawings or in these specifications. A qualified representative of the manufacturer shall be present to direct any adjustments required to reduce leakage to the specified amounts.

B. Allowable Leakage:

1. The permitted leakage for sluice gates shall not exceed 0.1 gpm per foot of seating perimeter at the specified design seating head called for in the Schedule. The leakage shall not exceed 0.2 gpm per foot of seating perimeter at the specified design unseating head called for in the Schedule for heads of 20 feet or less.
2. The leakage for slide gates shall not exceed 1.0 gpm per foot of seating or unseating perimeter at the design heads shown in the Schedule. If "J" seals are used, this shall be reduced to 0.5 gpm.
3. The leakage for flap gates shall not exceed 1.0 gpm per foot of seating perimeter at the design heads shown in the schedule, or 5 feet, whichever is less.

C. For individual gates, the absence of a leakage test requirement for either seating or unseating head in the Schedule or the fact that the test heads are lower than the expected operating heads shall not relieve the requirement for satisfactory functioning at operating conditions. The tests and test levels are limited by expected limitations on water levels that will be available at the time the tests must be performed.

WEIR GATE SCHEDULE

		Size				Operator			Head	
Gate Designation	Location	Width (inches)	Height (inches)	Gate Mounting	Gate Material	Type	Mounting	Motor Operator	Seating (feet)	Unseating (feet)
20WG-011	Headworks	60	42	S	SS	M	SC	M	11.20	0
20WG-012	Headworks	48	42	S	SS	M	SC	M	11.20	0
31WG-001	Splitter Box	48	86	W	SS	M	SC	OC	0	12
31WG-002	Splitter Box	48	86	W	SS	M	SC	OC	0	12

Legend:

Type of operator:	M	-	Electrical motor
	HC	-	Hand crank
	HW	-	Handwheel
Type of operator mounting:	S	-	Slab or Deck
	WB	-	Wall Bracket
	SC	-	Self Contained
Motor Operator	M	-	Modulating
	OC	-	Open Close
Gate mounting:	C	-	Channel
	W	-	Wall
	E	-	Embedded
	S	-	Surface mounted
Gate material:	SS	-	Stainless steel
	AL	-	Aluminum

SLIDE GATE SCHEDULE

		Size				Operator		Head	
Gate Designation	Location	Width (inches)	Height (inches)	Gate Mounting	Gate Material	Type	Mounting	Seating (feet)	Unseating (feet)
20SG-009	Headworks	52	72	C	SS	M	SC	6	0
20SG-010	Headworks	52	72	C	SS	M	SC	6	0
51GT-111	Digester	24	36	W	SS	HC	SC	0	4
51GT-112	Digester	24	36	W	SS	HC	SC	0	4
51GT-121	Digester	24	36	W	SS	HC	SC	0	4
51GT-211	Digester	24	36	W	SS	HC	SC	0	4
51GT-212	Digester	24	36	W	SS	HC	SC	0	4
51GT-221	Digester	24	36	W	SS	HC	SC	0	4
						HC			
						HC			

Legend:

Type of operator:	M	-	Electrical motor
	HC	-	Hand crank
	HW	-	Handwheel
Type of operator mounting:	S	-	Slab or Deck
	WB	-	Wall Bracket
	SC	-	Self Contained
Gate mounting:	C	-	Channel
	W	-	Wall
	E	-	Embedded
	S	-	Surface mounted
Gate material:	SS	-	Stainless steel
	AL	-	Aluminum

STOP GATE SCHEDULE

		Size				Operator		Head	
Gate Designation	Location	Width (inches)	Height (inches)	Gate Mounting	Gate Material	Type	Mounting	Seating (feet)	Unseating (feet)
51GT-312	Digester	48	42	C	AL	HP	SC	3.25	0
51GT-321	Digester	48	42	C	AL	HP	SC	3.25	0

Legend:

Type of operator:	M	-	Electrical motor
	HC	-	Hand crank
	HW	-	Handwheel
	HP	-	Hand Pull
Type of operator mounting:	S	-	Slab or Deck
	WB	-	Wall Bracket
	SC	-	Self Contained
Gate mounting:	C	-	Channel
	W	-	Wall
	E	-	Embedded
	S	-	Surface mounted
Gate material:	SS	-	Stainless steel
	AL	-	Aluminum

END OF SECTION

Three Rivers Regional Wastewater

Kennedy Jenks

Primary Clarifier, Hauled Waste, Aerobic Digester Upgrades
Prebid Meeting Sign-in Sheet

Bids Due: March 7th, 2024 @ 10:00am

	Company/Agency	Contact	Address	Phone	E-mail	Prime Bidder Y/N
	Kennedy/Jenks Consultants	Shawn Spargo	1500 NE Irving St. Ste 200, Portland, OR 97232	503-423-4041	shawnspargo@kennedyjenks.com	N
	Kennedy/Jenks Consultants	Amelia McElhinney	1500 NE Irving St. Ste 200, Portland, OR 97232	503-423-4023	AmeliaMcElhinney@kennedyjenks.com	N
	TRRWA	Duane Leaf	467 Fibre Way Longview, WA 98632	360-577-2040	leaf@trrwa.org	N
	TRRWA	Joe Jordan	467 Fibre Way Longview, WA 98632	360-577-2040	jordan@trrwa.org	N
	TRRWA	Scott Bowman	467 Fibre Way Longview, WA 98632	360-577-2040	bowman@trrwa.org	N
	TRRWA	Debbie Stanley	467 Fibre Way Longview, WA 98632	360-577-2040	stanley@trrwa.org	N
	TSI	Joe KARL	2303 196th Street SW Lynnwood WA 98036	425-218-1285	Jock@tsicontrols.com	n
	AET	Larry Sicles	Longview, WA	360-751-6730	larrys@aet-pneco.com	N
	Stellar J Corp	Chris Gillins	1365 Down River Dr Woodland, WA	360-225-7996	bids@stellarj.com	Y
	PROSPECT CONSTRUCTION	RYAN SONDEROTH	116 23rd St SE PUYALLUP WA 98372	253.446 1600	bids@prospectconst.com	Y
	JW Fowler	Mark Ater	12779 Westview Dr. Dallas Oregon	503-984 8266	estimating@jwfowler.com	Y
	JH Kelly	Chris Ouellette	821 3rd Ave, LV, WA	360 703-1128	couellette@jhkelly.com	Y
	DBM CONTRACTORS	TROY EDWARDS	1220 S. 356th FED. WAY WA	206-423-9896	TROY.EDWARDS@DBMCONTRACTORS.COM	Y
	JW Fowler	Sara Galke	12775 WESTVIEW DR. DALLAS, OR	520-604 0400		Y
	EATON	TYLER STEELE	26850 SW KINSMAN RD. WILSONVILLE, OR	503.504. 8266	TYLERSTEELE@EATON.COM	N

Three Rivers Regional Wastewater

Kennedy Jenks

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Primary Clarifier, Hauled Waste, Aerobic Digester Upgrades

Prebid Meeting Sign-in Sheet

Bids Due: March 7th, 2024 @ 10:00am

	Company/Agency	Contact	Address	Phone	E-mail	Prime Bidder
	Team Electric	Chris Williams	9400 SE Clackamas Rd, Clackamas, OR	503 841-4247	Chris@teamelectricco.com	NO
	Team Electric	Chris Ward	9400 SE Clackamas Rd Clackamas, OR	503 806-9450	Chrisw.teamelectric@gmail.com	no
	PUMPTECH	BOB DOLINYK	321 S. SEQUOIT CANBY, OR	503 915-7867	Dolijnyk@PumptechNW.com	NO
	McCLURE & SONS	PAT RANDLES	15714 COUNTRY CLUB DR MILL CREEK WA 98012	425-3166999	BIDS@MCCLUREANDSONS.COM	Y
	Kiewit	ANDREW MALINAK	33930 Weyerhaeuser Way S Federal Way, WA 98001	253-329-7688	Andrew.MALINAK@Kiewit.com	No
	PRECISION INDUSTRIAL CONTRACTORS	JAKE KELSEY	1555 DOWN RIVER DR. WOODLAND, WA 98674	360-831 3343	Jake.Kelsey@picateam.com	Y
	"	Eric Burton	"	"	Eric.Burton@picAteam.com	Y
	Whitney Equipment	Dave Bobbett	~~7017~~ 2501 SE Columbia Way	~~50~~ 360 558-0784	dbobbett@weci.com	NO
	JH Kelly	Gabe Scanlon	821 3rd AVE	360-423 ~~30~~ 5133	gscanlon@jhkelly.com	NO
	Trrwa	Kevin Olds	467 Fibre wa. Longview WA.	360 751-7109	Olds@trrwa.org	NO
	TRRWA	Jeff Baker	"	360-577-2040	baker@trrwa.org	NO
	"	Adam Hamer	"	360-577-2040	hamer@trrwa.org	NO