ADDENDUM NO. 1 TO THE BIDDING DOCUMENTS FOR PRIMARY FILTRATION PROJECT (PHASE I) CAPITAL PROJECT NO. 2022 FOR THE FOUR RIVERS SANITATION AUTHORITY ROCKFORD, ILLINOIS

DATE: December 17, 2021

BIDS CLOSE: January 11, 2022 at 9:00 A.M., Local Time

This Addendum No. 1, dated December 17, 2021, to the Invitation to Bid: Primary Filtration Project Phase I, Capital Project No. 2022, bid opening January 11, 2022 at 9:00 A.M., supersedes all contrary and conflicting information in the above-mentioned instructions, specifications, and contract documents which are hereby supplemented or revised in certain particulars as follows:

I. <u>General Information</u>

The Four Rivers Sanitation Authority (FRSA) submits Addendum No. 1 to provide new information and to change existing information for potential bidders.

Minutes and sign-in sheet of the mandatory pre-bid meeting held on December 15, 2021 are attached to this addendum.

II. <u>The following are revisions to the Specifications:</u>

- 1. The following revisions shall be made to SECTION 03 08 10 TESTING TANKS AND RESERVOIRS:
 - A. Page 03 08 10-1, add the following to the end of subparagraph 3.01.A.1:

"Groundwater from the plant water system (red hydrants) can be used for tank testing water, but only one 2-inch hose can be attached to the system and used at any time to avoid starving the plant's process needs. Contractor shall provide all required hoses and adapters. If Contractor desires higher water flow than is available from one hose on the plant water system, then Contractor shall make other arrangements to supply the water at Contractor's expense. Final effluent water is not available in this area of the plant and would need to be pumped from the Chlorine Contact Tanks with Contractor supplied pumps and piping."

B. Page 03 08 10-1, add the following to the end of subparagraph 3.01.A.2:

"Contractor shall provide pumps and hoses to remove water from the tanks and discharge to disposal location as directed by Owner. If testing is completed at similar time as tanks are ready to be placed into service, the water can remain in the tanks when influent flow begins."

- 2. The following revisions shall be made to SECTION 03 30 00 CAST-IN-PLACE CONCRETE:
 - A. Page 03 30 00-1, add the following as paragraph 1.03.B.8:

"8. Waterproofing admixture and surface coating: Proposed rate of coverage and manufacturer's literature."

- B. Page 03 30 00-6, add the following as paragraph 2.01.S:
 - "S. Cementitious Waterproofing
 - 1. Manufacturers:
 - a. Xypex
 - b. Aquafin IC.
 - c. Permaquick, Inc."
- C. Page 03 30 00-6, add the following subparagraph 2.02.A.9.c:
 - "c. 6-Primary Tank Outlet Structure and Former Primary Tank Bypass Structure"
- 3. The following revisions shall be made to SECTION 05 50 00 METAL FABRICATIONS:
 - A. Page 05 50 00-9, revised subparagraph 2.13.A.1.a to read the following:

"a. Bilco Type E, Thermally Broken"

- 4. The following revisions shall be made to SECTION 08 71 00 DOOR HARDWARE:
 - A. Page 08 71 00-3, subparagraph 2.02.P:

Delete subparagraph 2.02.P in its entirety

B. Page 08 71 00-3, paragraph 2.03:

Renumber paragraph "2.03 FINISHES" to "2.02 FINISHES"

C. Page 08 71 00-4, subparagraph 3.03.B:

Delete the following in Set No. 2: "1 Electrified Strike"

D. Page 08 71 00-4, subparagraph 3.03.D:

Delete the following in Set No. 4: "1 Electrified Strike"

- 5. The following revisions shall be made to SECTION 23 31 16 THERMOSET FIBERGLASS REINFORCED PLASTIC DUCTS:
 - A. Page 23 31 16-2, subparagraph 2.01.C.6:

Delete "Provide duct tinted light grey" and replace with "Provide duct in color selected by Owner, from standard and custom color samples provided by manufacturer."

- 6. The following revisions shall be made to SECTION 40 05 53 PROCESS VALVES:
 - A. Page 40 05 53-15, Schedule 1: Air Release Valve Sizing Criteria:

Delete schedule in entirety and replace with schedule below:

Service	Pipe Material	Design Flow Range gpm	Pressure Range psi	Inlet Connection	Remarks
4" PFTS	GLDI	0-350	0-100	2-inch NPT	For thickened primary sludge (up to 5% solids) application. <u>Quantity:</u> (1) Primary Filtration Thickened Sludge Pump 1 Discharge
6" PFTS	GLDI	0-350	0-100	2-inch NPT	For thickened primary sludge (up to 5% solids) application. <u>Quantity:</u> (2) Primary Filtration Thickened Sludge Pump 1 Discharge (1) Primary Filtration Thickened Sludge Pump 2 Discharge
10" PFS	CLDI	0-1,157	0-20	2-inch NPT	For primary filter backwash (0.15% TSS) and waste solids removal (1% TSS) application. <u>Quantity:</u> (1) Primary Filter 1 PFS (1) Primary Filter 2 PFS

SCHEDULE 1: AIR RELEASE VALVE SIZING CRITERIA

- 7. The following revisions shall be made to SECTION 46 61 41 CLOTH MEDIA DISK FILTERS:
 - A. Page 46 61 41-3, subparagraph 1.02.D:

Delete subparagraph 1.02.D in its entirety and replace with following:

"Service Conditions: Each disk filter shall be capable of filtering primary influent wastewater after screening and grit removal. Design shall be for 7.5 MGD Average Daily Flow and 15 MGD Peak Day Flow to each filter. Filter effluent total suspended solids concentration shall not be greater than 50 mg/l with 250 mg/l influent TSS at Average Daily Flow Rate and 120 mg/L influent TSS at Peak Day Flow. Monthly average TSS removal shall exceed 80% with influent loadings of 175 mg/L. Backwash and solids removal system shall be designed for solids filter loading of 10 ppd/sf peak day and 12 ppd/sf peak hour without utilizing overflow that bypasses primary influent."

III. The following are revisions to the Drawings:

- 1. Sheet No. 11, Drawing 1-M-02:
 - A. Delete the entire drawing and replace with the attached Sheet No. 11.

2. Sheet No. 36, Drawing 2-CP-04:

A. Delete the entire drawing and replace with the attached Sheet No. 36.

- 3. Sheet No. 38, Drawing 2-CF-01:
 - A. Delete Plan Note No. 3 and replace with the following:

"3. REPLACE WOODEN FENCE IN-KIND."

- 4. Sheet No. 48, Drawing 4-R-01:
 - A. Delete note "Core drill holes in bottom slab 20' on centers" and replace with the following note:

"Core drill holes in the bottom slab, 20'-0" on center both directions, only in location outside the footprint of the new Primary Filtration Facility (TYP)"

- 5. Sheet No. 61, Drawing 5-S-01:
 - A. Delete Plan Note No. 10 and replace with the following:

"10. Coat top slab, walls, and bottom slab with cementitious waterproof coating approved by Engineer. See Specification 03 33 00."

- 6. Sheet No. 76, Drawing 5-M-04:
 - B. Delete leader callout for "12"x8" WYE" in Section A and replace with "12"x10" WYE".
- 7. Sheet No. 83, Drawing 5-M-11:

A. Delete the entire drawing and replace with the attached Sheet No. 83.

- 8. Sheet No. 94, Drawing 5-E-02A:
 - B. Delete the entire drawing and replace with the attached Sheet No. 94.
- 9. Sheet No. 102, Drawing 6-SM-01:

A. Add General Note No. 3 as follows:

- "3. All concrete shown on this drawing shall achieve a high-early strength. Concrete mix design shall consist of a Type I/II cement with additives to meet this requirement. Concrete mix design shall be submitted to the Engineer for approval before construction."
- 10. Sheet No. 123, Drawing 9-S-03:
 - A. Revise 1st sentence of Plan Note No. 1 to read as follows: "STAINLESS STEEL ROOF HATCH CENTERED OVER LADDER BELOW."
- 11. Sheet No. 156, Drawing 10-S-08:
 - A. Revise Detail S599:
 - a. Revise "EPDM MEMBRANE" to "TPO MEMBRANE"
 - b. Revise "EPDM MEMBRANE FLASHING" to "TPO MEMBRANE FLASHING"

12. Sheet No. 157, Drawing 10-S-09:

A. Revise Detail S621: Revise "1/4" ALUM SPLICE PL" to "1/4" SS SPLICE PL"

This information shall be taken into consideration by bidders when preparing the bid. Bidders shall acknowledge all project addenda on the proposal form. This addendum and attachments will be emailed to all plan holders as well as posted on the FRSA's website at https://fourrivers.illinois.gov/.

Donohue & Associates, Inc. Chicago Illinois



Kam P. Law, PE

END OF ADDENDUM NO. 1

Issued December 17, 2021

Four Rivers Sanitation Authority

Christopher T. Baer, PE Director of Engineering





1	No.	DATE	REVISION	INT.	Project No.	13852	
	1	12/17/2021	ADDENDUM 1	MTR	Designed By	KEM	
					Drawn By	KEM	
					Checked By	NWC	
					Approved By	KPL	ROCKFORD, IL

HYDRAULIC PROFILE	Shee	et No.
	Draw	ving No.



PIPING PROFILES	36 Drawing No.
SITE DEVELOPMENT	Sheet No.





PRIMARY FILTRATION PROJECT – PHASE 1 CAPITAL PROJECT NUMBER 2022 PRE-BID MEETING – DECEMBER 15, 2021

BIDDING INFORMATION:

Sign-in sheet is attached for this mandatory pre-bid meeting.

Sealed bids are due by 9:00 A.M. Tuesday, January 11, 2022 at the Four Rivers Sanitation Authority (FRSA) office, at which time bids will be opened and read aloud. Conditional bids will not be read. Recommendation for contract award is expected at the January 24, 2022 Board meeting. Bid packages are to include proposal on FRSA bid form, bid security on FRSA form (5% of bid amount), completed Fair Employment Practices Affidavit on FRSA form, and Contractor's statement of qualifications. IEPA loan funding is anticipated for this work; Bidders shall make themselves aware of the specific subcontractor bidding requirements associated with IEPA loan funded projects as identified in the specifications. Apparent low bidder to submit Schedule of Values, with subcontracted work identified, before 2:00 pm on Friday January 14, 2022.

This is a lump sum contract; bid shall include all work associated with the project to provide a complete functional system. Per the FRSA (RRWRD) General Provisions and Technical Specifications for Sanitary Sewer Construction, the Contractor shall perform at least 40% of the project with their own forces.

Since this is a lump sum project, there is no electronic proposal form available.

Pay request retention is 10% of each pay application. Certified payroll and waivers of lien are required with each application for payment.

FRSA is responsible for City of Rockford Building Permit application and costs.

Site perimeter security fence shall be maintained at all times and gates to remain closed. Contractor will be issued two gate fobs for duration of the project; need to be returned prior to final payment. Contractor shall coordinate access for their employees and their subcontractors. No contractor deliveries will be received by FRSA.

Warranty is 1 year from acceptance of the installed and tested equipment.

Written questions should be submitted to FRSA no later than January 5, 2022 to allow time to address by addendum.

PROJECT SCHEDULE:

Shop drawings shall be submitted and approved early in the project. Assume two weeks FRSA review time for each submittal and each resubmittal.

The project includes several milestones for completion of specific project tasks as follows:

1. Milestone 1: HVAC system removal and replacement in Main Pump II Building shall be substantially complete by November 1, 2022. Liquidated damages shall be \$2,000 per calendar day after November 1, 2022 until HVAC system is functional and controllable.

- 2. Milestone 2*: This milestone includes a maximum 28 calendar day shutdown of Primary Settling Tanks 1–4, for construction of the Primary Filter Distribution Box and Primary Settling Tanks 1&2 influent channel modifications, to change the way flow is diverted to the tanks. Liquidated damages shall be \$2,000 per calendar day after the 28 calendar day outage limit has elapsed, until flow can resume to and from Primary Settling Tanks 1 & 2.
- 3. Milestone 3**: This milestone includes a maximum 14 calendar day shutdown of Primary Settling Tanks 1–4 to complete work at the Primary Outlet Structure and the 54" Bypass Structure. Liquidated damages shall be \$2,000 per calendar day after the 14 calendar day outage limit has elapsed, until flow can resume to and from Primary Settling Tanks 1-4.
- 4. Milestone 4***: This milestone includes a maximum 7 calendar day shutdown of Primary Settling Tanks 1&2 while the Primary Filtration Facility 1's 42" influent and 60" effluent connections are completed. Liquidated damages shall be \$2,000 per calendar day after the 7 calendar day outage limit has elapsed, until flow can resume to and from Primary Settling Tanks 1&2. Failure to meet the 7 calendar day outage limit also requires the Contractor to provide 20-MGD of bypass pumping to and from Primary Settling Tanks 1&2 until Primary Filtration Facility 1 connection work is completed.
- *Per Section 01 11 00, the work associated with Milestone 2 requires Contractor to provide 20 MGD of bypass pumping with 10 MGD from Primary Settling Tanks 5&6 inlet and 10 MGD from Primary Settling Tanks 7&8 inlet and all 20 MGD discharged to the 2 out of service tanks. This pumping is for stand-by duty, when plant flows exceed 60 MGD or as otherwise necessary during the tank outage.
- **Per Section 01 11 00, the work associated with Milestone 3 requires Contractor to provide 20 MGD of bypass pumping with two 10 MGD pumps. The pumps shall draw flow from Primary Settling Tanks 1&2 effluent channel and discharge to Primary Settling Tanks 5&6 effluent channel. This pumping is for stand-by duty, when plant flows exceed 60 MGD or as otherwise necessary during the tank outage.
- ***Per Section 01 11 00, the work associated with Milestone 4 (if the Contractor's work exceeds the 7 calendar day time limit) the Contractor shall provide 20 MGD of bypass pumping with two 10 MGD pumps. The pumps shall draw flow from Primary Settling Tanks 1&2 effluent box and discharge into Primary Settling Tanks 5&6 effluent channel. This pumping system shall run continuously or as otherwise requested until the work is completed and Primary Settling Tanks 1&2 are back into normal operation.
- The project shall be substantially complete within 548 calendar days of notice to proceed. Liquidated damages shall be \$2,000 per calendar day following the 548 calendar day deadline until substantial completion is achieved (systems demonstrations complete and facilities fully functional for intended purpose, record documents submitted including start-up reports, warranty certificates, record drawing mark-ups, O&M manuals, and required certifications).
- The project shall be fully complete, including completion of punch list items, within 597 calendar days of notice to proceed. Liquidated damages shall be \$1,000 per calendar day for completion following the 597 calendar day completion deadline.
- Sequencing is critical to maintain operation of the treatment systems throughout the construction phase of the project.
- Any existing system outages necessary to complete the work shall be requested at least 7 days in advance of the planned outage. The request shall include a detailed schedule and sequence of activities; the request shall verify that all associated materials are on site. Additional time may

be necessary in order to prepare for taking a process off line, such as for reducing sludge inventories or transfer of electrical feeds.

Project status meetings shall be conducted by the Contractor on-site every other week, adjusted throughout project as needed based on work activities. Minutes of the meetings shall be prepared by Contractor and submitted to all attendees.

PROJECT DETAILS:

Project generally consists of:

- 1. Provide, install, and start-up, new Contractor supplied facilities and equipment.
- 2. Take Primary Settling Tanks 1–4 out of service and construct initial modifications required for flow path changes that will allow Primary Settling Tanks 1&2 to remain in service while Primary Settling Tanks 3 &4 are demolished and replaced with primary filtration facilities. This initial work shall be installed and functional within 28 calendar days, sooner is better.
- 3. Demolish portions of Primary Settling Tanks 3 & 4 as shown and required for installation of Primary Filtration Facility 1.
- 4. Primary Filtration Facility 1 generally consists of:
 - a. Four primary filtration submersible influent pumps in a new wet well.
 - b. Two primary cloth media disk filter units in new concrete tankage with a primary filter pump room housing backwash pumps, waste solids pumps, valving, and piping. The system design is based upon Aqua-Aerobic Systems Inc.'s AquaPrime MegaDisk cloth media disk filtration system.
 - c. One concrete primary filter effluent diversion structure.
 - d. One concrete circular gravity thickener tank.
 - e. One gravity thickener pump room with two thickened sludge pumps, valving, and piping.
 - f. One scum pump wet well with one submersible scum pump.
 - g. One control room.
 - h. Most of the reinforced concrete tank and structure walls require textured surfaces using specific form liners indicated on the architectural drawings. Stain colors for the finished surfaces are also indicated. The renderings on Board Room walls provide a visual of the concept. An approved mock-up using the proposed form liner, stain, and finished metal materials is required prior to start of the associated work.
- 5. Modifications to the Primary Tank Outlet Structure.
- 6. Modifications to piping and valves in the Primary Sludge Manhole, GBT Building basement, and Digester Control Building.
- 7. Sitework, new roadway, replacement of concrete roadway where new piping installed, and yard piping improvements.
- 8. Replacement of GBT-2 thickened sludge pump, discharge hopper, and appurtenances.
- 9. Replacement of two sluice gate actuators at the Parshall Flume.
- 10. Modifications of Main Pump II Building, including HVAC system removal and replacement and installation of a new electrical room for the Primary Filtration Facilities.
- 11. Installing new feeders from Substation 3-6 to the Main Pump II Building, in existing conduit to the building then new conduit inside the building.
- 12. All new conduit and wiring for the new facilities and equipment.
- 13. New lighting panels and transformers for the new facilities.

- 14. Existing glass lined ductile iron pipe, fittings, and equipment will be removed and turned over to FRSA for future use.
- 15. All control wiring shall be installed and labeled. Terminations in existing FRSA plant control system PLC cabinets will be performed by FRSA. Wiring to and from, along with all terminations in the new vendor panels, shall be performed by Contractor.
- 16. Painting is required as indicated on the architectural schedule and Section 09 96 00. In addition, all exposed project piping shall be painted ANSI gray and labeled with plastic wrap labels per specifications.

ADDITIONAL CONSIDERATIONS:

Contractor parking and staging areas are shown on the drawings. Contractor toilet and wash facilities shall be located within these designated areas. Electric power (110-volt) will be made available on a limited basis for the Contractor's use, unless abuse occurs at which time Contractor will need to supply their own source.

Per Section 01 35 16 Alteration Project Procedures and the drawings, numerous equipment and piping are to be removed and turned over to FRSA. Equipment and glass lined ductile iron pipe salvage materials shall be moved by Contractor to the Storage Building No. 34 area or the nearby wash pad north of the Chlorine Contract Tanks, as directed by FRSA.

BID FORM OR PROPOSAL:

The total lump sum bid amount shall be entered on the bid schedule in numbers and words. In addition, the subcontractor listing, the Base Bid Type I Material And Equipment Schedule, the Base Bid Type II Material And Equipment Schedule, and the Base Bid Type III Material And Equipment Schedule shall all be submitted with the bid.

- The Type I form lists equal suppliers; the bidder shall circle the one they are including in the lump sum price. If bidder is proposing a substitute supplier, they shall enter the substitute name and amount of credit to Owner if the substitute is allowed.
- The Type II form shall include the (A) supplier pricing in the lump sum bid amount. Both the supplier's price and the installed cost shall be provided. If Owner wishes to utilize the Bidder's (B) or (C) supplier, a change order will be issued.
- The Type III form shall include the supplier's price and the installed cost for each (A) item and this shall be included in the lump sum bid amount.
- Substitutes shall be by request and considered only after Contract award. Approved substitutes will be made by change order.

PRE-BID MEETING QUESTIONS AND ANSWERS

- 1) What is the Engineer's estimate for this project?
 - a. \$19,523,000.
- 2) Is the bypass pumping to be diesel or electric powered?
 - a. The Contractor is responsible for powering the bypass pumping equipment. Selection of pump type and means of powering the bypass pumps is a question of means and methods, therefore the Contractor's choice.
- 3) Has the Main Pump II Building been tested for asbestos?
 - a. Asbestos and lead paint testing were conducted in the Main Pump II Building. No asbestos containing materials were detected. Lead paint was remediated. The existing exposed building surfaces were also disinfected.

Primary Filtration Project, Phase I, Capital Project No. 2022 IEPA Project No. L17-5882 Mandatory Pre-Bid Meeting

Date and Time: December 15, 2021 at 9:00 a.m.

Name	Company	Mailing Address	Phone Number
Chris Baer	FRSA	3501 Kishwaukee Street, Rockford, IL 61109	815-387-7660
Scot Strassburg	FRSA	3501 Kishwaukee Street, Rockford, IL 61109	815-387-7657
Mark Hughes	Aqua-Aerobics	6306 N Alpine Road, Loves Park, IL 61111	815-639-4555
Bob Johnson	Helm	2279 US 20 Route East, Freeport, IL 61032	815-297-6062
Edir Nevarez	IHC Construction	385 Airport Road, Suite 100, Elgin, IL	847-742-1516
Tatiana Mazzei	Aqua-Aerobics	6306 N Alpine Road, Loves Park, IL 61111	815-639-4409
Greg Hill	Nelson Carlson Mechanical	1417 22nd Street, Rockford, IL 61108	815-398-1910
Todd Byxbe	Miller Engineering	1616 S Main Street, Rockford, IL 61102	815-963-4878
Mark Rokita	Donohue	230 W Monroe Street, Suite 2925, Chicago, IL	312-583-7241
Steve Gress	Donohue	101 W Ohio Street, Suite 1650, Indianapolis, IN 46204	317-500-4221
Joel Foss	Stenstrom	2420 20th Street, Rockford, IL 61104	815-398-2420
Tom Luepkes	Nelson Carlson Mechanical	1417 22nd Street, Rockford, IL 61108	815-398-1910
Joe Ozzauto	XYPEX	4371 Viewside Drive, New Lenox, IL 60451	847-894-1350
Bill Knapp	Williams Brother	PO Box 1366, Peoria, IL 61654	309-688-0416
Mike Mulcahy	Drydon Equipment	2110 Viewside Drive, New Lenox, IL 60451	630-200-2874
Trevor Hartman	Vissering Construction	175 Benchmark Industrial Drive, Streator, IL 61364	815-673-5511
Rob Sautter	Sjostrom & Sons	1129 Harrison Avenue, Rockford, IL 61104	815-791-0749
Matt Berger	Sterling Commercial Roofing	2711 Locust Street, Sterling, IL 61081	815-626-7744
Darin Baughman	Helm Civil	2283 Route 20 East, Freeport, IL 61032	815-297-8540

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