

ADDENDUM NO. 2
WATER SYSTEM IMPROVEMENTS
CONTRACT 16-03
SNELL BRANCH SEWAGE PUMPING STATION RENOVATION
LEWISBURG, TENNESSEE
WAUFORD PROJECT NO. 1942

Date of Addendum: Monday, October 23, 2017

Bid Opening: Tuesday, October 31, 2017, 2:00 P.M. Local Time

1. Detailed Specifications, Sub-Section 6A, Vertical Non-Clog Wastewater Pumps, Immersible Motors, Variable Frequency Drives, and Accessories, Paragraph 2. Vendors, Page DS 6A-1:

Modify this paragraph as follows:

“2. Vendors

The equipment specified at this Sub-Section shall be provided as an integrated system by:

- Wascon, Inc. of Livingston, Tennessee utilizing vertical non-clog type wastewater pumps manufactured by Chicago **Pumps** and variable frequency drives manufactured by Allen Bradley **or** Yaskawa, Inc.;
- Van Brocklin & Associates of Memphis, Tennessee utilizing pumps manufactured Smith & Loveless and variable frequency drives manufactured by Allen Bradley **or** Yaskawa, Inc.;
- ***Water and Waste Equipment, Inc. of Cleveland, Tennessee utilizing vertical non-clog type wastewater pumps manufactured by Cornell Pump Company and variable frequency drives manufactured by Allen Bradley or Yaskawa, Inc.;***
- ***Guthrie Sales and Service, Inc. utilizing vertical non-clog type wastewater pumps manufactured by Fairbanks Nijhuis and variable frequency drives manufactured by Allen Bradley or Yaskawa, Inc.”***

2. Detailed Specifications, Sub-Section 6A, Vertical Non-Clog Wastewater Pumps, Immersible Motors, Variable Frequency Drives, and Accessories, Paragraph 4. Quality Assurance, Page DS 6A-2:

Delete the last sentence of this paragraph.

3. Detailed Specifications, Sub-Section 6A, Vertical Non-Clog Wastewater Pumps, Immersible Motors, Variable Frequency Drives, and Accessories, Paragraph 7.a. Vertical Non-Clog Type Wastewater Pumps, Page DS 6A-4:

Add the following pump selections for Large Pumps:

- Fairbanks Nijhuis: 5435 – 17.05" Ø Impeller – 1,185 rpm – 60 Hz
- Cornell: 8NNT18 – 12.75" Ø Impeller – 1,780 rpm – 60 Hz

Add the following pump selections for Small Pumps:

- Fairbank Nijhuis: 5433 – 11.83" Ø Impeller – 1,185 rpm – 60 Hz
- Cornell: 6NHTA -12.19" Ø Impeller – 1,165 rpm – 60 Hz

4. Detailed Specifications, Sub-Section 6B, Mechanically Cleaned Bar Screen and Screw Conveyor:

Replaced with attached revised Sub-Section 6B*.

5. BID FORM:

Replace Bid Form Pages BF-4 and BF-5 with attached Pages BF-4* and BF-5*.

6. Plans, Sheets 3 and 4:

Add the following construction note:

- “7. All ductile iron pipe used for gravity drains shall be specially lined inside equal to Protecto 401.”

7. Plans, Sheet 4:

Revised as shown on the attached 8 ½" x 11" sheets.

J. R. WAUFORD & COMPANY,
CONSULTING ENGINEERS, INC.



J. Gregory Davenport, P.E.
Tennessee License No. 104881

SUB-SECTION 6B

MECHANICALLY CLEANED BAR SCREEN AND SCREW CONVEYOR

1. Scope

Furnish and install one (1) fully automatic bar screen for collecting and removing debris from the incoming wastewater flow and one (1) screw conveyor to receive and convey the screenings to the dumpster.

The bar screen and screw conveyor shall be provided complete with all accessories, spare parts, mounting, anchor bolts and other appurtenances as specified and as may be required for a complete and operating installation.

It shall be the Contractor's responsibility to ensure that the bar screen, screw conveyor and appurtenances furnished and installed shall be compatible with and have the necessary operating clearances to the structural elements and associated equipment shown on the Contract Drawings.

Electrical work associated with equipment described at this Sub-section, including all connecting signal and power wiring, is depicted at the accompanying Drawings and should be reviewed and taken into account by the Vendor of equipment described at this Sub-section.

THE VENDOR OF EQUIPMENT DESCRIBED AT THIS SUB-SECTION IS DIRECTED TO READ ALL OF SECTION 6 – MECHANICAL AND CONTROL EQUIPMENT – GENERAL BEFORE PROCEEDING WITH READING THIS SUB-SECTION.

2. Vendors

The mechanically cleaned bar screen, screw conveyer and appurtenance shall be provided as a system:

- ***VMR Screen by*** Vulcan Industries, Inc. of Missouri Valley, Iowa
- ***TigerShark by*** Hydro-Dyne Engineering, Inc. of Clearwater, Florida
- ***Multirake by*** Duperon Corporation of Saginaw, Michigan

3. Performance

The new mechanically cleaned bar screen shall be installed at the pumping station as shown on the Plans. The screen will remove all solids from the waste

stream larger than 1.5 inches. The new screw shall meet the following minimum parameters:

Number of Units	One (1)
Peak Flow	3,500 gpm
Bar Rack Spacing	1.5 inch

4. Utilities Provided

Electric power provided for the bar screen and screw conveyor shall be alternating current, 480 volt, three phase, 60 Hertz.

5. Special Provisions

a. References

- (1) American Gear Manufacturers Association (AGMA)
- (2) National Electrical Manufacturers Association (NEMA)
- (3) American Federation of Bearing Manufacturers Association (AFBMA)
- (4) American Society for Testing and Materials (ASTM)
- (5) American Welding Society (AWS)
- (6) Steel Structures Painting Council, American National Standards Institute (SSPC)
- (7) Underwriters Laboratory (UL)

b. Operation and Maintenance Manuals

Submit operations and maintenance manuals in three ring binders for the equipment in compliance with the Contract documents, 30 days prior to shipment. Manuals shall include but not limited to:

- Contact name, address, and telephone number of the equipment manufacturer's Service Department and Parts Department.
- Descriptive literature, including illustrations, covering the operational features of the equipment, specific for the particular installation, with all inapplicable information omitted or marked out.

- Operating, maintenance and troubleshooting information.
- Complete maintenance parts list.
- Complete connection, interconnecting and assembly diagrams.
- Approved shop drawings including complete electrical information.

c. Quality Assurance

The materials covered by these specifications are intended to be standard equipment of proven reliability and as manufactured by a reputable manufacturer having experience in the production of screening equipment. The equipment furnished shall be designed and constructed in accordance with the best practices and methods and shall operate satisfactorily when installed as shown on the Contract Drawings and operated per the manufacturer's recommendations.

d. Storage and Handling of Equipment

The Contractor shall store and temporarily support equipment prior to installation in strict accordance with the Manufacturer's recommendations and instructions. Protect all Exposed surfaces. Keep records of the storage parameters and the dates that storage procedures were performed. The Contractor shall be responsible for work, equipment, and materials until inspected, tested and finally accepted.

Protect the equipment from being contaminated by dust, dirt, vibration and moisture.

Temporarily connect equipment with built in space heaters to a power source and keep heaters in operation. Rotate all shafts that have bearings on at least a monthly basis.

The unit shall be erected and lubricated in strict accordance with the instructions of the Manufacturer's field engineer.

e. Bar Screen Design

(1) General

The bar screen shall be manufactured of stainless steel with the exception of certain wear parts; no carbon steel allowed.

The equipment furnished shall positively clean and remove debris from the incoming wastewater by means of a bar rack, installed in

a concrete channel designed to retain debris. The automatic screen will receive flow from a sanitary sewer system and shall be designed to handle debris including leaves and rags. A traveling chain and raking mechanism shall remove and elevate the debris to a discharge scraper mechanism. The bar rack shall be cleaned by multiple rakes engaging the upstream side bar rack from the bottom of the channel and removing the debris. The debris shall be lifted above the top of the wetwell and discharged through the downstream side to a dumpster.

The mechanically cleaned multiple rake bar screen system shall be fully automatic and shall consist of bar rack, dead plate, discharge chute, wiper assembly, electrical controls and local control panel, frame, supports and guides, drive machinery, anchor bolts and rake and chain assembly.

The design shall allow all manufacturer recommended preventive maintenance to be accomplished at the operating floor level. The equipment shall be designed and built for 24-hour intermittent service and for moderate shock without overheating, excessive vibration or strain.

(2) Frame Assembly

The side frames shall be formed from plate with engineered bends and provided with bracing to form a rigid assembly capable of withstanding all operating forces. The frame shall be manufactured of 304 stainless steel plate, having a minimum thickness of ¼-inch. Chain guides shall be manufactured of 304 stainless steel.

(3) Rake and Chain Assembly

The rake and chain assembly shall consist of multiple rakes attached to the links of chain. Lower components of the chain guide system **shall not utilize rotating sprockets or wheels and shall be protected by cover plates. The lower components** shall be self-lubricating and capable of being replaced while the screen is in the channel. Rake drive chains shall be rated for the maximum operating force. Link plates shall be 304 stainless steel. **Rake drive trains shall be pitch roller type chain constructed of 304 stainless steel side link plates and 17-4 PH stainless steel rollers, bushings and pins.** The rake teeth shall engage the clear space openings in the bar rack. The rake teeth shall engage the bar rack a minimum of **50** percent of the bar depth. The rake teeth shall be made in removable/replaceable sections and attached to

the rake. The rake, teeth and attachment hardware shall be 304 stainless steel.

(4) Drive Assembly

The bar screen shall be provided with an integrated drive assembly consisting of a Class 1, Division 1, Group C & D explosion-proof electric motor. The drive motor and gear reducer shall be mounted on the drive shaft and the frame. The drive shaft shall operate in a greaseable bearing mounted on the external side of the frame. The entire drive assembly shall be supported by adjustable jacking plates mounted on the exterior of the frames to provide rake alignment and proper chain tension.

The electric motor shall be close-coupled to the reducer. The motor shall be a maximum 5 horsepower with a service factor of 1.0. Electrical characteristics shall be 460 volt, 3-phase, 60 Hertz, Class F/B rise insulation, 40 degree C Ambient, inverter duty.

Gear reducers shall have ball or roller bearings throughout with all moving parts immersed in oil. Helical gears shall be of alloy steel with threads precision ground and polished after casehardening. The worm gear shall be of all high strength alloy bronze. Gear shafts shall be of high strength alloy steel grounded to required tolerances. Gear reducer units shall meet the standards of the AGMA for such equipment under moderate shock, 24-hour service with a minimum service factor of 1.25. The output capacity of the gear reducer shall be equal to the motor horsepower less reducer losses at the rated service factor.

Torque limiting devices and overcurrent protection shall be provided for all electric motors and driven devices.

(5) Bar Rack

The bar screen shall be provided with a removable bar rack. The bar rack shall consist of equally spaced, parallel bars having 1 ½-inch clear spacing between each bar. The bars shall be straight and inclined at 80 degrees above the horizontal plane. The bottom of the bars shall be attached to a flush bottom, base plate. Bar racks shall not require a recess in the bottom of the flow channel. The bars shall be manufactured of 304 stainless steel and have a minimum thickness of ¼-inches.

(6) Dead Plate

The dead plate shall be securely fastened to the side frames and shall be manufactured of 304 stainless steel having a minimum thickness of ¼-inch.

(7) Discharge Chute

- a. ***A dead plate and discharge chute heater shall be supplied as an integral part of the bar screen mechanism to prevent ice and screenings buildup.***
- b. ***The dead plate and chute shall be insulated on the downstream side with 1-inch thick semi-rigid fiber insulation board capable of withstanding temperatures from -60°F to 450°F. The insulating material shall have a density of not less than 3.0 lbs./cubic feet and shall have a foil vapor barrier attached to one side.***
- c. ***The heating element shall consist of a self-limiting cable rated 10.0 watts per foot at 120-volt AC and shall be capable of maintaining a constant temperature of 150°F. The buss wires shall be 16 AWG copper inside a semi-conductive polymer matrix. The cable shall be jacketed with a flame retardant and water-resistant insulating thermoplastic rubber material.***
- d. ***The heating element and insulation system shall be covered with minimum 14-gauge type 304 stainless steel metal sheeting, gaskets and sealed against moisture.***
- e. ***The entire system shall contain U.L. listed components.***

(8) Wiper Assembly

A wiper mechanism shall be positioned at the point of discharge and shall have a replaceable ultra high molecular weight polyethylene wiper blade. During each cycle, the wiper blade shall scrape the debris off the end of the rake and through the discharge chute. The wiper mechanism, excluding the wiper blade, shall be manufactured of 304 stainless steel. The rake shall be capable of operating reverse without the need to manually lift the wiper assembly. The grease fillings shall be in an area where they can be easily accessed.

(9) Frame Enclosures

The bar screen shall be provided with removable enclosure panels on the upstream portions of the frame from the top of the channel to the top of the frame. The removable enclosure panels shall be manufactured of 20-gauge 304 stainless steel held in place by latches. Each panel shall be provided with two (2) handles for panel removal/replacement. All handles and latches shall be 304 stainless steel.

(10) Fasteners and Anchor Bolts

All fasteners and anchor bolts shall be 304 stainless steel unless otherwise indicated in this specification. All threaded fasteners shall be coated with a nickel based anti-seize thread lubricant prior to assembly.

f. Shaftless Screw Conveyor

The screw conveyor shall be provided to convey screenings material received from one mechanical bar screen. Screenings material shall enter the inlet hoppers and be transported by the rotating screw to the point of discharge. The screw conveyor shall be designed to convey screenings from the drive end of the unit to the discharge end. Designs that pull the screenings towards the drive end shall not be acceptable. The manufacturer shall heat trace the screw conveyor and discharge pipe and power the heat trace from the control panel.

(1) Inlet Hopper

The inlet hopper shall be designed to direct wet screenings material into the screw housing from the mechanical bar screen. The inlet zone will be completely shrouded to contain the screenings. The inlet hopper shall be 12-gauge thick minimum and be constructed of 304 stainless steel. All attachment hardware shall be of 304 stainless steel.

(2) Screw Housing

The screw housing shall be a U-shaped trough constructed of 10-gauge thick 304 stainless steel. The interior of the housing shall incorporate a nominal 1/4-inch thick UHMW replaceable liner to prevent metal-to-metal contact between the screw housing and the screw. The entire housing shall be supported by 304 stainless steel legs.

The transport area of the screw housing shall be furnished with removable cover panels. The cover panels shall have a minimum thickness of 20-gauge and be constructed of 304 stainless steel.

(3) Shaftless Screw

The conveyor screw shall be of the shaftless spiral design and shall be connected to the drive unit and a sealing system shall be provided to prevent water from entering the drive unit.

The screw shall be constructed of high strength carbon steel and have a minimum Brinell hardness of 200.

A stainless steel reinforced nylon brush shall be attached to the screw flighting with setscrews in the drainage area to help prevent debris from blinding the perforated drain.

(4) Drive Assembly

The shaftless screw conveyor shall be complete with an integrated drive assembly consisting of a TEFC electric motor close-coupled to a parallel shaft helical bevel double reduction gear reducer.

The motor shall be a minimum 1 horsepower, 230/460 volt, 3 phase, 60 Hertz with a service factor of 1.15. The motors shall be rated at 40°C ambient with Class F insulation and shall have a Class B temperature rise at full load. The nominal motor speed shall be 1800 rpm.

The gear reducer shall have ball or roller bearings throughout with all moving parts immersed in oil. Worm shall be of alloy steel with threads precision ground and polished after casehardening. The worm gear shall either be of all high strength alloy bronze or alloy bronze-rimmed semi-steel. Shafts shall be of high strength alloy steel ground to required tolerances. All ball or roller bearings shall be rated and manufactured by a member of the Antifriction Bearing Manufacturer's Association. At least one bearing on each shaft shall be of the combined radial and thrust type.

(5) Perforated Drain

A perforated drain section shall be incorporated into to the bottom of the screw housing near the drive end of the screw conveyor. The perforated section of the drain will have minimum 2 mm diameter

drain holes. The lower drain pan shall be sloped back towards the channel and shall have a minimum 3-inch diameter drainpipe.

g. Controls and Instrumentation

(1) General

The automatic bar screen and screw conveyor shall be provided with a complete control package including a weather resistant NEMA 4X stainless steel enclosure complete with all required components including a run-time meter, H/O/A switch, forward/reverse switch for the screen, a run-time meter, H/O/A switch, forward/reverse switch for the screw conveyor, and upstream high water float switch. **Torque limiting devices and overcurrent protection shall be provided for all electric motors and driven devices. Where possible, resettable breakers shall be used in lieu of fuses.**

(2) Operational Requirements

When “Automatic” is selected on the H/O/A switch, the screen shall operate at an adjustable time interval for an adjustable period of time. Initially, the screen shall be set to operate on a 30 minutes interval for a time period of 5 minutes. Additionally, the screen shall operate when it receives a discrete signal from the upstream high water float switch for an adjustable period of time.

When “Hand” is selected on the H/O/A switch, the screen or screw conveyor shall operate continuously until another position is selected.

A mushroom head emergency STOP push button shall be provided which stops all automatic or manual operation of the equipment when depressed.

(3) Main Controls

Furnish one (1) main control panel for the bar screen and screw conveyor. The main control panel shall be totally enclosed, front access type with top/side/bottom entry. The panel shall be manufactured by a U.L. listed control panel facility and shall bear a U.L. 698A label. Construction of the control panel enclosure shall be NEMA 4X, 304 stainless steel with indicating devices and switches mounted on the front door.

Main control panel wiring shall be color-coded, labeled, neatly cabled and supported in nonflammable wiring raceways. Wiring shall be minimum 16-gauge MTW stranded wire.

All switches, pushbuttons and lights shall be NEMA rated components. The control panel wiring shall contain all power and control devices shown on the Contract Drawings (wiring diagrams), which shall include, but not be limited to, the following:

- One (1) control power ON-OFF selector switch
- Two (2) red pilot light for “Screen Run” and “Conveyer Run” indication
- Two (2) amber pilot light for “Over Current” indication for screen and conveyer
- One (1) white pilot light for control power
- Two (2) momentary “reset” push-button for over current reset for screen and conveyer
- Spare contact for remote indication of “Over current” status
- Control relays, wiring and circuitry required to implement the screen control logic
- Two (2) full voltage NEMA rated starter. The magnetic starter shall be of the heater less design and provide phase loss protection, short circuit self-protection and thermal memory. The solid-state overload shall be self-powered. One for the screen and one for the conveyer.
- Two (2) hand-off selector switch for screen and conveyer
- One (1) forward-off reverse selector switch for conveyer
- One (1) circuit breaker
- One (1) 120 VAC step down control transformer
- One (1) adjustable interval timer mounted on DIN rail to automatically initiate operation of the screen
- One (1) float switch

h. Lubrication

The manufacturer shall state in the operating manual the amount of and specification for any lubricant required.

i. Protective Coatings

Stainless steel and plastic components shall not be painted. The stainless steel structural components shall be passivated after fabrication to remove embedded iron, surface rust and weld burn. All other surfaces shall be solvent cleaned to remove dirt, oil and foreign materials.

Cleaned surfaces shall be shop primed with one (1) coat of TNEMEC Series N69-1212 primer, or equal, to attain a minimum dry film thickness of 2.5 mils. The motor and gear reducer shall be finish coated with two (2) coats TNEMEC Series 74 Endura-Shield, or equal, to attain a total minimum dry mil thickness of 5 mils. The motor and gear reducer shall be painted the same color. Non-stainless steel controls panels shall have manufacturer's standard paint finish.

j. Spare Parts

The manufacturer shall furnish the following spare parts as the total amount of spare parts for this specification section:

1. (1) Replacement Scraper (Wiper Blade)

All spare parts shall be properly packaged, labeled and stored where directed by the Owner or Engineer.

6. Testing

The screen shall be factory assembled and factory run tested. The main control shall also be factory tested. If the screen is manufactured outside of the United States, the screen shall be factory tested at the point of manufacture and factory tested a second time as a complete assembly (including the motor) in the United States prior to shipment to the jobsite. The main control panel shall also be factory tested prior to shipment.

The screen shall also be field tested after erection in the presence of the Owner and Engineer to confirm and verify the structural and mechanical compliance to the specification. The field acceptance test shall include demonstrating that the rake teeth properly engage the bar rack along the length of the bar rack and that the screen can be run continuously without overheating.

7. Initial Start-Up and Training

The Contractor shall provide the services of a factory-employed service technician who shall adequately inspect the installation, test the equipment furnished under this Contract and instruct the Owner's operating personnel in its maintenance and operation. Factory personnel are required. Manufacturer's representatives are not deemed acceptable to provide the start-up service. The services of the technician shall be provided for two separate trips as follows:

- (1) One (1) trip of one (1) day of service to supervise the installation of the bar screen and screw conveyor.

Detailed Specifications

1942 – July 2016

Revised August 2017

- (2) One (1) trip of two (2) days of service to inspect and certify the installation prior to startup and provide Owner's personnel in proper operation and maintenance of the equipment.

8. Warranty

The equipment supplier shall warrant that its equipment shall be free from defects in material and workmanship; and that it will replace or repair, F.O.B. its factory, any part or parts returned to it which examination shall show to have failed under normal use and service by the user within eighteen (18) months following initial shipment or twelve (12) months following operation start-up, whichever occurs first.

CONTRACT 16-03 – SNELL BRANCH SEWAGE PUMPING STATION
 RENOVATION (cont'd)

9.b. Equipment to be Furnished

The prices for equipment listed below for work to be constructed under Sub-Sections 6A through 6B are included in the lump sum price shown previously as Item 9.a. Lump Sum Price. The BIDDER shall use the lowest priced item listed as an acceptable Base Bid item as the basis for arriving at his overall price. The BIDDER is required to fill in the items below in order to indicate the relative prices of the equipment of various manufacturers which may be considered by the Owner for various reasons. The prices shown below shall include the cost of furnishing the various equipment items. ***The Owner reserves the right to evaluate and select equipment regardless of pricing even if the reused pricing determines a new low bidder for Contract 16-03.***

The prices listed hereinafter are not to be in addition to the Lump Sum Price in Paragraph 9.a., but are to be included in it.

Sub-Section	Description	Price	Equipment Used in Base Bid (Show only one per Sub-Section)
6A	<u>Vertical Non-Clog Wastewater Pumps, Immersible Motors, Variable Frequency Drives and Accessories</u>		
	Chicago Pumps with Variable Frequency Drives by: (check one)	\$ _____	\$ _____
	Allen Bradley <input type="checkbox"/>		
	Yaskawa <input type="checkbox"/>		
	Smith & Loveless Pumps with Variable Frequency Drives by: (check one)	\$ _____	\$ _____
	Allen Bradley <input type="checkbox"/>		
	Yaskawa <input type="checkbox"/>		
	Cornell Pumps with Variable Frequency Drives by: (check one)	\$ _____	\$ _____
	Allen Bradley <input type="checkbox"/>		
	Yaskawa <input type="checkbox"/>		
	Fairbanks Nijhuis Pumps with Variable Frequency Drives by: (check one)	\$ _____	\$ _____
	Allen Bradley <input type="checkbox"/>		
	Yaskawa <input type="checkbox"/>		

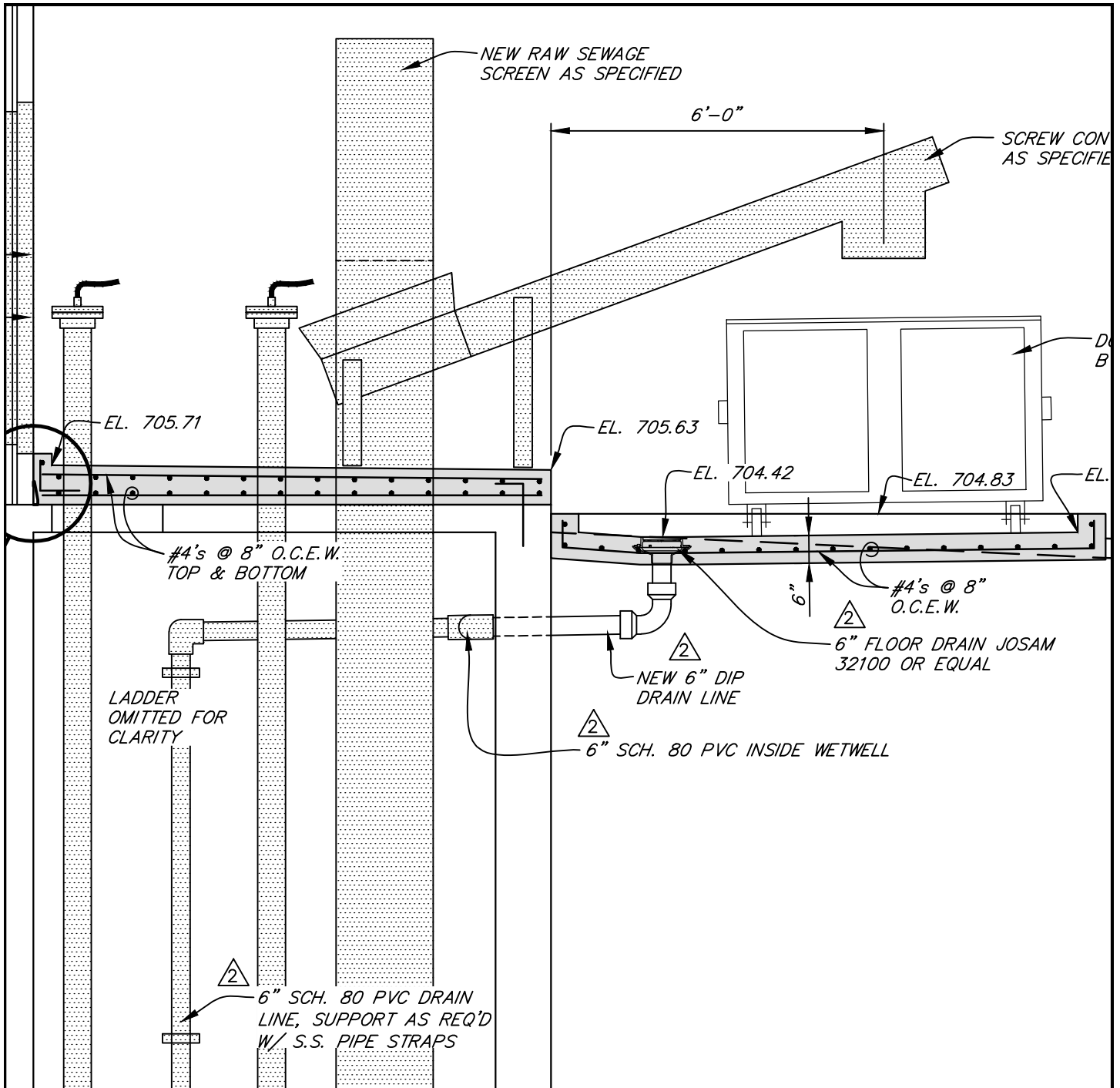
BID FORM
1942 – July 2016
Revised August 2017

CONTRACT 16-03 – SNELL BRANCH SEWAGE PUMPING STATION
RENOVATION (cont'd)

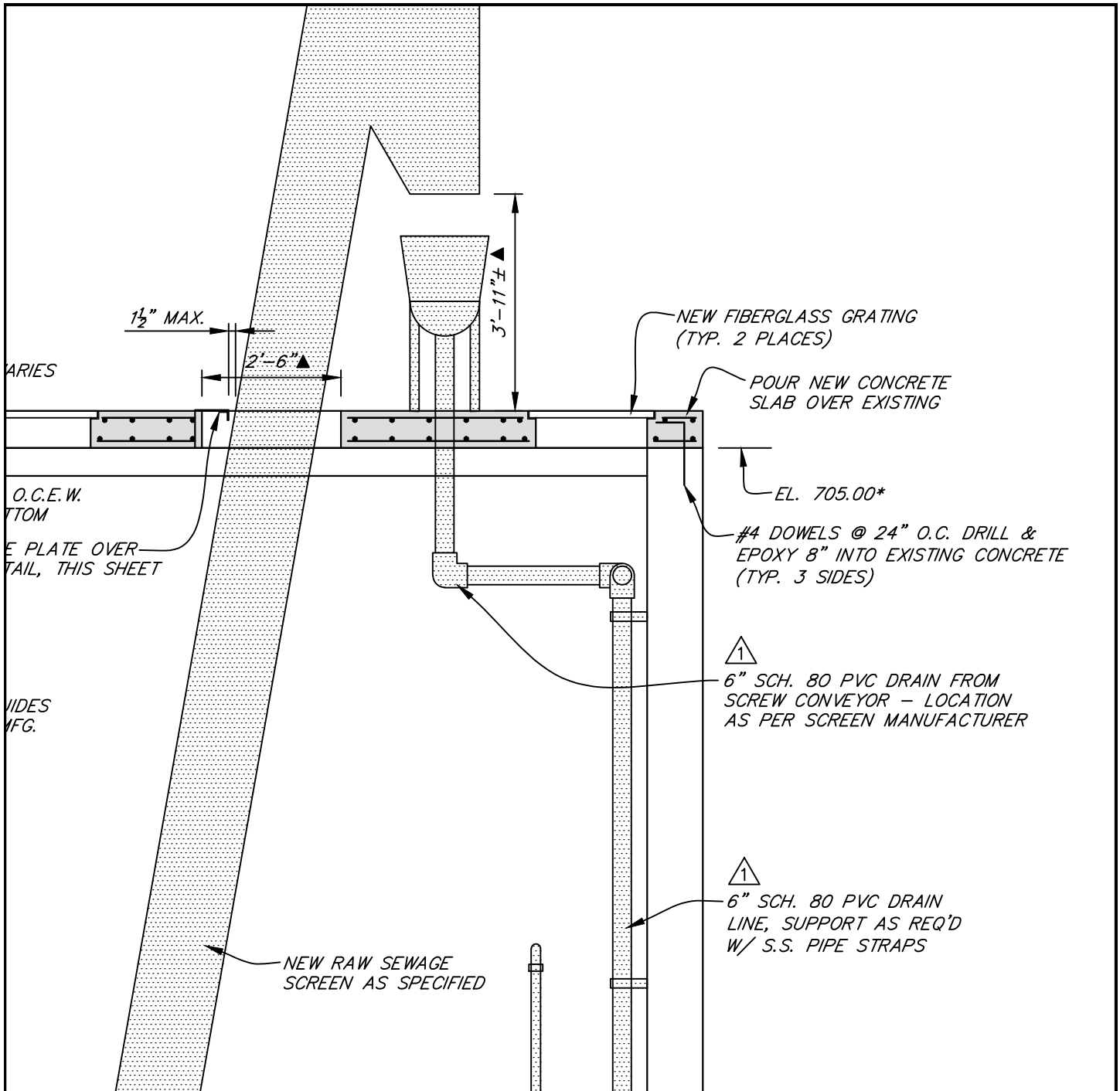
Sub-Section	Description	Price	Equipment Used in Base Bid (Show only one per Sub-Section)
6B	<u>Mechanically Cleaned Bar Screen and Screw Conveyor</u>		
	Vulcan Industries, Inc.	\$ _____	\$ _____
	Hydro-Dyne Engineering, Inc.	\$ _____	\$ _____
	Duperon Corporation	\$ _____	\$ _____

“Or Approved Equal”

It is not the intention of this document to limit equipment to only those manufacturers listed above. Desired substitutions may be submitted to the Engineer for consideration not less than 10 days before the Bid Date. Addenda will be issued notifying all bidders of equipment which is determined to be “approved equal” prior to the Bid Date.



SHEET 4 OF 6		WASTEWATER SYSTEM IMPROVEMENTS	
REVISIONS		CONTRACT 16-03	
① REVISED 9.15.17 ② ADDENDUM NO. 2 10/23/17 AWR		SNELL BRANCH SEWAGE PUMPING STATION RENOVATION	
WETWELL		PROPOSED SECTIONS	
		FOR LEWISBURG, TENNESSEE	
JOB NUMBER 1942		DATE JULY 2016	WAUFORD J. R. Wauford & Company, Consulting Engineers, Inc. Nashville, Tennessee (615)883-3243 www.jrwauford.com
		SCALE AS SHOWN	



SHEET 5 OF 6		WASTEWATER SYSTEM IMPROVEMENTS	
REVISIONS		CONTRACT 16-03	
△ ADDENDUM NO. 2 10/23/17 AWR		SNELL BRANCH SEWAGE PUMPING STATION RENOVATION	
PROPOSED SECTIONS AND DETAILS			
FOR			
LEWISBURG, TENNESSEE			
DATE	JULY 2016	WAUFORD	DESIGNED SCL
JOB NUMBER	1942		DRAWN AWR
SCALE	AS SHOWN	J. R. Wauford & Company, Consulting Engineers, Inc. Nashville, Tennessee (615)883-3243 www.jrwauford.com	CHECKED SCL