

# ADDENDUM NO. 7 <u>HWEA CONTRACT # 133-2019-01</u> <u>HAMMOND-WOOD WASTEWATER TREATMENT PLANT EXPANSION</u> <u>HOPKINSVILLE WATER ENVIRONMENT AUTHORITY</u> <u>HOPKINSVILLE, KENTUCKY</u> <u>WAUFORD PROJECT NO. 1983</u>

Date of Addendum: Tuesday, February 4, 2020 Bid Opening: Thursday, February 6, 2020, 2:00 p.m. Central Time

- 1. Attached is revised Page 6 of the Questions and Clarifications document dated February 4, 2020.
- 2. <u>BID FORM:</u>

Replace the entire BID FORM with the attached revised BID FORM.

3. <u>Detailed Specifications, Section 10, Miscellaneous Equipment, Paragraph</u> <u>10. Free Standing Hoisting Equipment (Three Required), Page DS 10-4:</u>

Modify this paragraph as follows:

- "10. Free Standing Hoisting Equipment (Three Required)
  - a. <u>General</u>

The Contractor shall supply aluminum, stainless steel **or galvanized steel** prefabricated base plate-mounted freestanding cranes as shown on the Plans. The free-standing cranes shall have a rated capacity and height as shown on the Plans. Structural steel and aluminum shapes and hardware shall meet the requirements of Section 9, <u>Miscellaneous Metals</u> of these Details Specifications. The free-standing crane shall be SPANCO Corporation, **EMH, Inc., Capital Hoist & Crane, Inc., Tri State Tool and Hoist, Inc.** or approved equal.

b. Design

The standard capacity rating of the free-standing crane shall be the net rated load at the hook of the hoist of the same rated capacity as the crane. The design factor for the stresses in the crane shall be based upon the capacity plus 25% of the rated load for impact and 15% of the rated load for the weight of the



# Page 2 of 4

hoist and trolley. The design shall provide a margin to allow for variations in material properties, operating conditions, and design assumptions. The design shall be sealed by a registered Kentucky Professional Engineer. The track, headers and columns shall be fabricated out of structural aluminum, stainless steel or galvanized steel. Galvanized coatings shall be in accordance with the latest revision of ASTM A123.

c. <u>Hoists</u>

One (1) hoist shall be provided for each free standing crane as shown on the Plans. The trolley hoist shall be a hand-operated, electric lift, push-type and shall have a lift of 30 feet, the hoist shall have a minimum operating speed of 28/4.5 feet per minute and shall run on the free standing crane as shown on the Plans. The hoist shall be equal to a 0.5 ton electric Harrington Hoist rated for outdoor use. The hoist shall be driven by a 4.7 HP - TENV motor which operates on 480 volt, 3 phase power.

The trolley shall be appropriately sized to operate with the free standing crane and shall be equipped with all festooning and appurtenances to make a fully functional assembly.

4. <u>Detailed Specifications, Sub-Section 11A, Mechanically Cleaned Bar Screen,</u> Paragraph 2. Vendors / Manufacturers, Page DS 11A-1:

Modify this paragraph as follows:

"2. <u>Vendors / Manufacturers</u>

The mechanically cleaned bar screen and appurtenances shall be provided as a system:

- Vulcan Industries, Inc. of Missouri Valley, Iowa
- Duperon of Saginaw, Michigan
- Hydro-Dyne Engineering, Inc. of Clearwater, Florida
- Headworks, Inc. of Houston, Texas
- Approved Equal as Determined by the Engineer"



Page 3 of 4

5. <u>Detailed Specifications, Sub-Section 11G, Effluent Reuse Vertical Turbine</u> <u>Pumps, Associated Variable Frequency Drives, Automatic Pump Control</u> <u>System and Accessories, Paragraph 4.a. Effluent Reuse Vertical Turbine</u> <u>Pumps, Page DS 11G-2:</u>

Modify the list of the acceptable pumps as follows:

"The following pumps appear to meet the stipulated conditions:

- Fairbank Nijhuis, 8M-SS-9 stage, 1,800 rpm with 5.44" Ø impeller
- National Pump Company, L10LC-S-6 stage, 1,800 rpm with 7.44" Ø impeller"
- 6. <u>Detailed Specifications, Sub-Section 11P, Part II Control and Monitoring</u> <u>System Equipment, Paragraph 4.a. General, Page DS 11P-33:</u>

Replace item (4) on Page DS 11P-33 with the following:

- "(4) All analog inputs and outputs including designated spare points, shall be protected from surges using three-level surge/transient suppression. Analog surge protectors shall be manufactured by Edco, CITEL or approved equal. Field termination points shall be installed in the control panel to allow each of the analog inputs to be preconfigured for two-wire loop powered or field sourced 4-20mA devices as determined by field device source type needs. 24VDC power supplies shall be included for use on two-wire loop powered devices."
- 7. <u>Detailed Specifications, Sub-Section 11P, Part II Control and Monitoring</u> System Equipment, Paragraph 4.a. General, Page DS 11P-33:

Delete item (5) on Page DS 11P-33 in its entirety.

8. <u>Detailed Specifications, Section 12, Electrical Work:</u>

ABB/GE shall be an approved vendor for automatic transfer switch, main switchboard, panelboards, dry type transformers, motor starters, safety switches, lighting contactors and time switches.

9. <u>Plans, Sheet 1, General Notes, Note 17:</u>

Replace Note 17 with the following:



Page 4 of 4

- "17. The Contractor shall wash the existing oxidation ditches and clarifiers, including washing solids into the plant drain system. Solids which cannot be washed into the drain system shall be removed by the Contractor as described in Note 18."
- 10. Plans, Sheet 1, General Notes:

Add Note 18 as follows:

- "18. The removal and dewatering of up to 200 C.Y. of solids from existing structures shall be completed by the Contractor and included in Bid Form A, Item No. 2. The Contractor shall remove and dewater solids as necessary for landfilling. The Owner will be responsible for hauling and landfill disposal costs through their normal contracts for these services."
- 11. Plans, Sheet 40:

Modify this sheet as shown on the attached 8  $\frac{1}{2}$ " X 11" sheet.

12. Plans, Sheet E23:

Modify this sheet as shown on the attached 8  $\frac{1}{2}$ " X 11" sheet.

13. Plans, Sheet E35:

Modify this sheet as shown on the attached two 8  $\frac{1}{2}$ " X 11" sheets.

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

Stephen C. Lee, P.E. Kentucky License No. 27833

44. **Question** – Will the Operations Building require rigid galvanized steel conduit and EMT conduit will NOT be allowed, even concealed in masonry walls?

Answer – Correct.

45. **Comment** – *Please confirm that Rigid Galvanized Steel conduit shall extend 10 feet from the outside of structure or buildings lines within concrete encased duct bank.* 

Response-Correct.

46. Question – Is Schedule 80 PVC conduit required in duct banks, even when encased?

Answer – Yes.

47. Question – Will electrical duct bank concrete require testing?

Answer – No.

48. Question – Will site lighting pole base concrete require testing?

Answer – Yes.

49. Question – Will Aluminum ladder type cable tray be acceptable in Solar Drying Beds?

Answer – Yes.

50. **Clarification** – The scope and requirements for the site fence are covered under Paragraph 12. <u>Fencing (Owner Standard)</u> in Section 4 of the Detailed Specifications, two notes on the left side of Sheet 3 of the Plans, and details on Sheet 25 of the Plans. The two notes on Sheet 3 of the Plans read as follows:

"REPLACE EXISTING FENCE AROUND ENTIRE SITE AS SPECIFIED. THIS INCLUDES 3,650 L.F. OF NEW CHAIN LINK FENCE, ONE 4' MAN GATE AND TWO 6' MAN GATES

40' SLIDING GATE W/ ELEC. OPERATOR & ACCESSORIES AS SPECIF'D (TYP. FOR 2)"

# **BID FORM**

# HWEA CONTRACT # 133-2019-01

# HAMMOND-WOOD WASTEWATER TREATMENT PLANT EXPANSION WAUFORD PROJECT NO. 1983

**FEBRUARY 2019** 

# **TABLE OF CONTENTS**

Article 1 – Bid Recipient	3
Article 2 – Bidder's Acknowledgements	3
Article 3 – Bidder's Representations	3
Article 4 – Bidder's Certification	4
Article 5 – Basis of Bid	5
Article 6 – Time of Completion	17
Article 7 – Attachments to this Bid	17
Article 8 – Defined Terms	17
Article 9 – Bid Submittal	17

#### **ARTICLE 1 – BID RECIPIENT**

1.01 This Bid is submitted to:

# **Hopkinsville Water Environment Authority**

# 401 East Ninth Street, Hopkinsville, Kentucky 42240

1.02 The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with Owner in the form included in the Bidding Documents to perform all Work as specified or indicated in the Bidding Documents for the prices and within the times indicated in this Bid and in accordance with the other terms and conditions of the Bidding Documents.

# **ARTICLE 2 – BIDDER'S ACKNOWLEDGEMENTS**

2.01 Bidder accepts all of the terms and conditions of the Instructions to Bidders, including without limitation those dealing with the disposition of Bid security. This Bid will remain subject to acceptance for **90** days after the Bid opening, or for such longer period of time that Bidder may agree to in writing upon request of Owner.

# **ARTICLE 3 – BIDDER'S REPRESENTATIONS**

- 3.01 In submitting this Bid, Bidder represents that:
  - A. Bidder has examined and carefully studied the Bidding Documents, and any data and reference items identified in the Bidding Documents, and hereby acknowledges receipt of the following Addenda:

Addendum No.	Addendum Date

- B. Bidder has visited the Site, conducted a thorough, alert visual examination of the Site and adjacent areas, and become familiar with and satisfied itself as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
- C. Bidder is familiar with and has satisfied itself as to all Laws and Regulations that may affect cost, progress, and performance of the Work.
- D. Bidder has carefully studied all: (1) reports of explorations and tests of subsurface conditions at or adjacent to the Site and all drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings, and (2) reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings.
- E. Bidder has considered the information known to Bidder itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and any Site-related reports and

This document is a MODIFIED version of EJCDC<sup>®</sup> C-410, Copyright © 2013 by the National Society of Professional Engineers, American Society of Civil Engineers, and American Council of Engineering Companies, or is based in part on excerpts from EJCDC documents. Those portions of the text that originated in published EJCDC documents remain subject to the copyright.

drawings identified in the Bidding Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder; and (3) Bidder's safety precautions and programs.

- F. Bidder agrees, based on the information and observations referred to in the preceding paragraph, that no further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of this Bid for performance of the Work at the price bid and within the times required, and in accordance with the other terms and conditions of the Bidding Documents.
- G. Bidder is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents.
- H. Bidder has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents, and confirms that the written resolution thereof by Engineer is acceptable to Bidder.
- I. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance and furnishing of the Work.
- J. The submission of this Bid constitutes an incontrovertible representation by Bidder that Bidder has complied with every requirement of this Article, and that without exception the Bid and all prices in the Bid are premised upon performing and furnishing the Work required by the Bidding Documents.

# **ARTICLE 4 – BIDDER'S CERTIFICATION**

- 4.01 Bidder certifies that:
  - A. This Bid is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any collusive agreement or rules of any group, association, organization, or corporation;
  - B. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid;
  - C. Bidder has not solicited or induced any individual or entity to refrain from bidding; and
  - D. Bidder has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract. For the purposes of this Paragraph 4.01.D:
    - 1. "corrupt practice" means the offering, giving, receiving, or soliciting of anything of value likely to influence the action of a public official in the bidding process;
    - 2. "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the bidding process to the detriment of Owner, (b) to establish bid prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;
    - 3. "collusive practice" means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish bid prices at artificial, non-competitive levels; and

This document is a MODIFIED version of EJCDC<sup>®</sup> C-410, Copyright © 2013 by the National Society of Professional Engineers, American Society of Civil Engineers, and American Council of Engineering Companies, or is based in part on excerpts from EJCDC documents. Those portions of the text that originated in published EJCDC documents remain subject to the copyright.

4. "coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

# ARTICLE 5 – BASIS OF BID

5.01 Bidder will complete the Work in accordance with the Contract Documents for the following price(s):

#### **BID FORM A - CONSTRUCTION**

Bids shall include sales tax and all other applicable taxes and fees.

# 1. <u>Lump Sum Price</u>

For performing all labor and furnishing all materials, equipment, and equipment installation necessary for constructing Contract 133-2019-01 – Hammond-Wood Wastewater Treatment Plant Expansion including all incidentals and all other work and appurtenances except Finish Grading, Topsoiling, Seeding and Final Clean-up necessary for completion of work under this Contract as shown on the Plans and/or specified for the lump sum amount of:

TOTAL BID FORM A, Item No. 1 - (\$	)
	Dollars
Cents	

# 2. Lump Sum Price – Finish Grading, Topsoiling, Seeding and Final Clean Up

For performing all labor and furnishing all materials required for Finish Grading, Topsoiling, Seeding and Final Clean-up necessary for completion of work under this Contract as shown on the Plans and/or specified for the lump sum amount of:

TOTAL BID FORM A, Item No. 2 - (\$	_)
	_Dollars
Cents	
* NOTE: Bid Item No. 2 shall not be less than 2% of Bid Iter	m No. 1.
TOTAL BID FORM A, Item No. 1 + Item No. 2 - (\$	

\_\_\_\_\_

\_)

Dollars

Cents

# Equipment to be Furnished

The prices for equipment listed hereinafter for work to be constructed under Sub-Sections 11A through 11P are included in the lump sum price shown previously as <u>Lump Sum Price</u>. 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 on the next page shall include the cost of furnishing the various equipment items.

The prices listed hereinafter are not to be in addition to the Lump Sum Price hereinbefore but are to be included in it.

# **BID FORM A – CONSTRUCTION**

Mechanically Cleaned Bar Screen       \$         11A       Vulcan Industries, Inc.       \$         Duperon       \$       \$         Hydrodyne Engineering, Inc.       \$       \$         Headworks, Inc.       \$       \$         Approved equal       \$       \$         WesTech Engineering, Inc.       \$       \$         Parkson       \$       \$         Approved equal       \$       \$         Statary Drum Fine Screens       \$       \$         WesTech Engineering, Inc.       \$       \$         Parkson       \$       \$         Approved equal       \$       \$         fit Removal Equipment       \$       \$         Hydro International Wastewater       \$       \$         Approved equal       \$       \$         Sanitaire Corporation       \$       \$         Stamford Scientific Int'I.       \$       \$         Evoqua Water Technologies, LLC       \$       \$         Approved equal       \$       \$         Sanitaire Corporation       \$       \$         Sanitaire Corporation       \$       \$         Sanitaire Corporation       \$       \$	Sub- Section	Description	Price	Equipment Used in Base Bid (Show only one per Sub-Section)
11A     Vulcan Industries, Inc.     \$     \$     \$       11A     Duperon     \$     \$     \$       Hydrodyne Engineering, Inc.     \$     \$     \$       Approved equal     \$     \$     \$       11B     Rotary Drum Fine Screens     \$     \$       WesTech Engineering, Inc.     \$     \$     \$       11B     WesTech Engineering, Inc.     \$     \$       Parkson     \$     \$     \$       Approved equal     \$     \$     \$       11C     Hydro International Wastewater     \$     \$       Approved equal     \$     \$     \$       11C     Hydro International Wastewater     \$     \$       Approved equal     \$     \$     \$       11D     Stamford Scientific Int'I.     \$     \$       Sanitaire Corporation     \$     \$     \$       11D     Stamford Scientific Int'I.     \$     \$       Sanitaire Corporation     \$     \$     \$       11E     Stamford Scientific Int'I.     \$     \$       Stamford Scientific Int'I.     \$     \$     \$       11E     Stamford Scientific Int'I.     \$     \$       Stamford Scientific Int'I.     \$     \$     \$ </td <td colspan="2">Mechanically Cleaned Bar Screen</td> <td></td> <td></td>	Mechanically Cleaned Bar Screen			
11ADuperon\$\$\$Hydrodyne Engineering, Inc.\$\$\$Headworks, Inc.\$\$\$Approved equal\$\$\$11BRotary Drum Fine Screens\$\$WesTech Engineering, Inc.\$\$\$Parkson\$\$\$Approved equal\$\$\$Parkson\$\$\$Approved equal\$\$\$11CHydro International Wastewater\$\$Approved equal\$\$\$Sanitaire Corporation\$\$\$Stamford Scientific Int'I.\$\$\$Froque Water Technologies, LLC\$\$\$Approved equal\$\$\$11DStamford Scientific Int'I.\$\$Sanitaire Corporation\$\$\$Sanitaire Corporation\$\$\$Sanitaire Corporation\$\$\$Sanitaire Corporation\$\$\$Sanitaire Corporation\$\$\$Sanitaire Corporation\$\$\$Stamford Scientific Int'I.\$\$\$Evoque Water Technologies, LLC\$\$\$Approved equal\$\$\$Mixers and Accessories\$\$HiffFlygt\$\$ABS\$\$\$Sanitaire Corporation\$\$Stamford Scientific Int'I.<		Vulcan Industries, Inc.	<u>\$</u>	<u>\$</u>
11A       Hydrodyne Engineering, Inc.       \$       \$       \$         Approved equal       \$       \$       \$       \$         Approved equal       \$       \$       \$       \$         11B       Rotary Drum Fine Screens       \$       \$       \$         11B       WesTech Engineering, Inc.       \$       \$       \$       \$         11B       Grit Removal Equipment       \$       \$       \$       \$         11C       Hydro International Wastewater       \$       \$       \$       \$         11C       Hydro International Wastewater       \$       \$       \$       \$       \$         11C       Hydro International Wastewater       \$       \$       \$       \$       \$       \$         11D       Stamford Scientific Int'I.       \$       \$       \$       \$       \$       \$       \$       \$       \$       \$       \$       \$       \$ <td< td=""><td></td><td>Duperon</td><td><u>\$</u></td><td><u>\$</u></td></td<>		Duperon	<u>\$</u>	<u>\$</u>
Headworks, Inc.\$\$\$Approved equal\$\$\$11BRotary Drum Fine Screens WesTech Engineering, Inc.\$\$11BWesTech Engineering, Inc.\$\$Parkson\$\$\$Approved equal\$\$\$\$\$11CHydro International Wastewater\$Approved equal\$\$\$\$\$11CHydro International Wastewater\$Approved equal\$\$\$\$\$11DStamford Scientific Int'I.\$Sanitaire Corporation\$\$\$\$\$11DStamford Scientific Int'I.\$\$\$\$11EStamford Scientific Int'I.\$Sanitaire Corporation\$\$\$\$\$11EStamford Scientific Int'I.\$Sanitaire Corporation\$\$\$\$\$11EStamford Scientific Int'I.\$Sanitaire Corporation\$\$\$\$\$11EStamford Scientific Int'I.\$Evoqua Water Technologies, LLC\$Approved equal\$\$\$\$\$11FFlygt\$\$ABS\$\$\$\$\$	11A	Hydrodyne Engineering, Inc.	<u>\$</u>	<u>\$</u>
Approved equal\$\$Rotary Drum Fine Screens\$WesTech Engineering, Inc.\$Parkson\$Approved equal\$\$\$11CGrit Removal EquipmentHydro International Wastewater\$Approved equal\$\$\$Approved equal\$\$\$11CHydro International WastewaterApproved equal\$\$\$Sanitaire Corporation\$\$\$Stamford Scientific Int'I.\$\$\$Approved equal\$\$\$\$\$\$\$Approved equal\$ <t< td=""><td></td><td>Headworks, Inc.</td><td><u>\$</u></td><td><u>\$</u></td></t<>		Headworks, Inc.	<u>\$</u>	<u>\$</u>
Rotary Drum Fine Screens\$11BWesTech Engineering, Inc.\$Parkson\$\$Approved equal\$\$\$\$\$11CGrit Removal Equipment\$Hydro International Wastewater\$\$Approved equal\$\$Sanitaire Corporation\$\$Stamford Scientific Int'I.\$\$Evoqua Water Technologies, LLC\$\$Approved equal\$\$Sanitaire Corporation\$\$Stamford Scientific Int'I.\$\$Evoqua Water Technologies, LLC\$\$Approved equal\$\$Sanitaire Corporation\$\$Sanitaire Corporation\$\$Stamford Scientific Int'I.\$\$Sanitaire Corporation\$\$Sanitaire Corporation\$\$Sanitaire Corporation\$\$Sanitaire Corporation\$\$Sanitaire Corporation\$\$Sanitaire Corporation\$\$Subble Aeration System\$Sanitaire Corporation\$\$Proved equal\$\$Wet Pit Submersible Pumps, Mixers and Accessories Flygt\$ABS\$\$Submersible Pumps, Mixers and Accessories\$Submersible Pumps, 		Approved equal	<u>\$</u>	<u>\$</u>
11BWesTech Engineering, Inc.\$\$Parkson\$\$\$Approved equal\$\$\$\$\$11CGrit Removal Equipment\$Hydro International Wastewater\$\$Approved equal\$\$\$\$\$Approved equal\$\$\$\$\$Approved equal\$<		Rotary Drum Fine Screens		
11B       Parkson       \$       \$       \$         Approved equal       \$       \$       \$       \$         11C       Grit Removal Equipment       \$       \$       \$         11C       Hydro International Wastewater       \$       \$       \$         Approved equal       \$       \$       \$       \$         11C       Hydro International Wastewater       \$       \$       \$         Approved equal       \$       \$       \$       \$         11D       Stamford Scientific Int'I.       \$       \$       \$         11D       Stamford Scientific Int'I.       \$       \$       \$         11D       Stamford Scientific Int'I.       \$       \$       \$         11E       Coarse Bubble Aeration System       \$       \$       \$         Sanitaire Corporation       \$       \$       \$       \$         11E       Stamford Scientific Int'I.       \$       \$       \$       \$         11E       Stamford Scientific Int'I.       \$       \$       \$       \$         11E       Stamford Scientific Int'I.       \$       \$       \$       \$         11F       Wet Pit Submersible Pumps, Mixers and Acc		WesTech Engineering, Inc.	<u>\$</u>	<u>\$</u>
Approved equal       \$       \$         11C       Grit Removal Equipment       \$         11C       Hydro International Wastewater       \$       \$         Approved equal       \$       \$       \$         11C       Hydro International Wastewater       \$       \$         Approved equal       \$       \$       \$         11D       Fine Bubble Aeration System       \$       \$         11D       Stamford Scientific Int'I.       \$       \$         Evoqua Water Technologies, LLC       \$       \$       \$         Approved equal       \$       \$       \$         11E       Coarse Bubble Aeration System       \$       \$         Sanitaire Corporation       \$       \$       \$         11E       Stamford Scientific Int'I.       \$       \$         Sanitaire Corporation       \$       \$       \$         Stamford Scientific Int'I.       \$       \$       \$         Evoqua Water Technologies, LLC       \$       \$       \$         Approved equal       \$       \$       \$       \$         11E       Stamford Scientific Int'I.       \$       \$       \$       \$         11F       F	11B	Parkson	<u>\$</u>	<u>\$</u>
Grit Removal Equipment       \$       \$         11C       Hydro International Wastewater       \$       \$         Approved equal       \$       \$       \$         11D       Fine Bubble Aeration System       \$       \$         11D       Stamford Scientific Int'l.       \$       \$         11E       Coarse Bubble Aeration System       \$       \$         Sanitaire Corporation       \$       \$       \$         11E       Stamford Scientific Int'l.       \$       \$         11E       Stamford Scientific Int'l.       \$       \$         11E       Stamford Scientific Int'l.       \$       \$         Evoqua Water Technologies, LLC       \$       \$       \$         Approved equal       \$       \$       \$         11E       Wet Pit Submersible Pumps, Mixers and Accessories       \$       \$         11F       Flygt       \$       \$       \$		Approved equal	<u>\$</u>	<u>\$</u>
11CHydro International Wastewater Approved equal\$\$4pproved equal\$\$5\$\$11DFine Bubble Aeration System Stamford Scientific Int'I.\$5\$\$11DStamford Scientific Int'I.\$Evoqua Water Technologies, LLC\$\$Approved equal\$\$11ECoarse Bubble Aeration System Sanitaire Corporation\$Sanitaire Corporation\$\$Sanitaire Corporation\$\$\$Sanitaire Corporation\$\$\$Stamford Scientific Int'I.\$\$\$Stamford Scientific Int'I.\$\$\$Approved equal\$\$\$\$\$11EStamford Scientific Int'I.\$\$Evoqua Water Technologies, LLC\$\$\$Approved equal\$\$\$11FFlygtABS\$ <t< td=""><td></td><td>Grit Removal Equipment</td><td></td><td></td></t<>		Grit Removal Equipment		
Approved equal\$\$Fine Bubble Aeration System\$Sanitaire Corporation\$Stamford Scientific Int'I.\$ <b>Evoqua Water Technologies, LLC</b> \$Approved equal\$\$\$Approved equal\$Sanitaire Corporation\$\$\$Approved equal\$\$\$Sanitaire Corporation\$\$\$Sanitaire Corporation\$\$\$Stamford Scientific Int'I.\$\$\$Stamford Scientific Int'I.\$\$\$Approved equal\$\$\$Wet Pit Submersible Pumps, Mixers and Accessories\$11FFlygt\$ABS\$\$\$	11C	Hydro International Wastewater	<u>\$</u>	<u>\$</u>
Fine Bubble Aeration System\$Sanitaire Corporation\$Stamford Scientific Int'I.\$Evoqua Water Technologies, LLC\$Approved equal\$\$\$Coarse Bubble Aeration SystemSanitaire Corporation\$Sanitaire Corporation\$Stamford Scientific Int'I.\$Evoqua Water Technologies, LLC\$Sanitaire Corporation\$Stamford Scientific Int'I.\$Evoqua Water Technologies, LLC\$Approved equal\$Wet Pit Submersible Pumps, Mixers and Accessories\$11FFlygt ABS\$San\$		Approved equal	<u>\$</u>	<u>\$</u>
Sanitaire Corporation\$\$11DStamford Scientific Int'I.\$\$Evoqua Water Technologies, LLC\$\$Approved equal\$\$\$\$\$11ECoarse Bubble Aeration System\$Sanitaire Corporation\$\$\$\$\$11EStamford Scientific Int'I.\$Evoqua Water Technologies, LLC\$\$Approved equal\$\$\$\$\$11EStamford Scientific Int'I.\$Evoqua Water Technologies, LLC\$\$Approved equal\$\$\$\$\$11FFlygt\$Flygt\$\$ABS\$\$Abs\$\$		Fine Bubble Aeration System		
11DStamford Scientific Int'l.\$\$\$Evoqua Water Technologies, LLC\$\$\$Approved equal\$\$\$\$\$\$\$11ECoarse Bubble Aeration System Sanitaire Corporation\$\$\$\$\$\$11EStamford Scientific Int'l.\$\$Evoqua Water Technologies, LLC\$\$\$Approved equal\$\$\$11EWet Pit Submersible Pumps, Mixers and Accessories\$\$11FFlygt\$\$\$ABS\$\$\$		Sanitaire Corporation	<u>\$</u>	<u>\$</u>
Evoqua Water Technologies, LLC\$\$Approved equal\$\$\$\$\$\$\$\$Coarse Bubble Aeration System\$Sanitaire Corporation\$\$\$Stamford Scientific Int'I.\$\$\$Evoqua Water Technologies, LLC\$Approved equal\$\$\$Mixers and Accessories\$Flygt\$ABS\$\$\$	11D	Stamford Scientific Int'l.	<u>\$</u>	<u>\$</u>
Approved equal\$\$Image: Approved equal\$\$Sanitaire Corporation\$\$Sanitaire Corporation\$\$Stamford Scientific Int'l.\$\$Evoqua Water Technologies, LLC\$\$Approved equal\$\$Mixers and Accessories\$Flygt\$\$ABS\$\$		Evoqua Water Technologies, LLC	<u>\$</u>	<u>\$</u>
Coarse Bubble Aeration System\$Sanitaire Corporation\$\$ Sanitaire Corporation\$\$ Stamford Scientific Int'I.\$Evoqua Water Technologies, LLC\$Approved equal\$\$ Second Scientific Pumps, Mixers and Accessories11FFlygt ABS\$Sanitaire Corporation\$\$ Second Scientific Int'I.\$ Se		Approved equal	<u>\$</u>	<u>\$</u>
Sanitaire Corporation\$\$11EStamford Scientific Int'I.\$\$Evoqua Water Technologies, LLC\$\$Approved equal\$\$\$\$\$Mixers and Accessories\$Flygt\$\$ABS\$\$		Coarse Bubble Aeration System		
11EStamford Scientific Int'I.\$\$Evoqua Water Technologies, LLC\$\$\$Approved equal\$\$\$\$\$\$\$Mixers and Accessories\$\$Flygt\$\$\$ABS\$\$		Sanitaire Corporation	<u>\$</u>	<u>\$</u>
Evoqua Water Technologies, LLC       \$       <	11E	Stamford Scientific Int'l.	<u>\$</u>	<u>\$</u>
Approved equal     \$     \$ <u>Wet Pit Submersible Pumps, Mixers and Accessories</u>		Evoqua Water Technologies, LLC	<u>\$</u>	<u>\$</u>
Wet Pit Submersible Pumps, Mixers and Accessories     \$       11F     Flygt ABS     \$       \$     \$		Approved equal	<u>\$</u>	<u>\$</u>
11F         Flygt         \$ </td <td></td> <td>Wet Pit Submersible Pumps, Mixers and Accessories</td> <td></td> <td></td>		Wet Pit Submersible Pumps, Mixers and Accessories		
ABS <u>\$</u>	115	Flygt	<u>\$</u>	<u>\$</u>
	111	ABS	<u>\$</u>	\$
Approved equal <u>\$</u>		Approved equal	<u>\$</u>	<u>\$</u>

BID FORM A – CONSTRUCTION (cont'd)

Sub- Section	Description	Price	Equipment Used in Base Bid (Show only one per Sub-Section)
	Effluent Reuse Vertical Turbine		
	Pumps, Associated Variable		
	Frequency Drives, Automatic		
	Accessories		
11G	Fairbank Nijhuis	<u>\$</u>	<u>\$</u>
	National Pump	<u>\$</u>	<u>\$</u>
	Approved equal	<u>\$</u>	<u>\$</u>
	High Efficiency Centrifugal Turbo		
	Blowers		
11H	Sulzer	<u>\$</u>	\$
	Approved equal	<u>\$</u>	<u>\$</u>
	Positive Displacement Blower		
	(Post Aeration)		
	Aerzen	<u>\$</u>	<u>\$</u>
11I	Gardner Denver	<u>\$</u>	<u>\$</u>
	Hardy Pro-Air	\$	<u>\$</u>
	Approved equal	<u>\$</u>	<u>\$</u>
	Manifold-Type Hydraulic Suction		
	Circular Clarifier Equipment		
	Evoqua Water Technologies, LLC	<u>\$</u>	<u>\$</u>
11J	WesTech Engineering, Inc.	<u>\$</u>	<u>\$</u>
	Ovivo USA, LLC	<u>\$</u>	<u>\$</u>
	Envirodyne Systems, Inc.	\$	\$
	Approved equal	<u>\$</u>	<u>\$</u>
	Conveying, Storage and Loading		
	Keystone Conveyor Corp	<u>\$</u>	<u>\$</u>
11K	Custom Conveyor Corp	<u>\$</u>	<u>\$</u>
	Approved equal	<u>\$</u>	<u>\$</u>

This document is a MODIFIED version of EJCDC<sup>®</sup> C-410, Copyright © 2013 by the National Society of Professional Engineers, American Society of Civil Engineers, and American Council of Engineering Companies, or is based in part on excerpts from EJCDC documents. Those portions of the text that originated in published EJCDC documents remain subject to the copyright.

# BID FORM A – CONSTRUCTION (cont'd)

Sub- Section	Description	Price	Equipment Used in Base Bid (Show only one per Sub-Section)
	Screw Press Equipment		
11L	Schwing Bioset, Inc.	<u>\$</u>	<u>\$</u>
	Approved equal	<u>\$</u>	<u>\$</u>
	Solar Drying Equipment		
11M	Thermal Process Systems, Inc.	<u>\$</u>	<u>\$</u>
	Approved equal	<u>\$</u>	<u>\$</u>
	Peracetic Acid Storage Tank and		
	Transfer Pump		
11N	PeroxyChem	<u>\$</u>	<u>\$</u>
	Approved equal	<u>\$</u>	<u>\$</u>
	Fabricated Slide Gates, Weir Gates		
	and Accessories		
110	Whipps Water Control Products	<u>\$</u>	<u>\$</u>
	R W Gate Company	<u>\$</u>	<u>\$</u>
	Approved equal	<u>\$</u>	<u>\$</u>
	Controls and Instrumentation		
	HTI, Inc.	<u>\$</u>	<u>\$</u>
11P	utilizing ABB Variable Frequency Drives		
		ć	ć
	utilizing Allen-Bradley	<u>Ş</u>	<u>2</u>
	Variable Frequency Drives		
	Approved equal	<u>\$</u>	<u>\$</u>

Pricing may not include applicable taxes. All applicable taxes shall be included in the Contractor's price under Bid Form A – Lump Sum Price.

# **BID FORM B – ADJUSTMENT ITEMS**

<u>NOTE</u>: The following items (Item Nos. 1 - 20) are for use in performing work not shown on the Plans or specified under the scope of BID FORM A, Lump Sum Price (which includes Equipment to be Furnished). Prices listed for adjustment items will be used only for accomplishing any field changes directed by the Engineer outside the scope of the Lump Sum Price.

Item Approximate No. Quantity		Approximate Quantity	Description with Unit Bid Price Written in Words	Unit Price	Total Price
	1. 100 C.Y.		Excavation in earth 0 to 5 feet deep For Dollars Cents, per cubic yard	<u>\$</u>	<u>\$</u>
	2.	100 C.Y.	Excavation in earth below 5 feet deep For Dollars Cents, per cubic yard	<u>\$</u>	<u>\$</u>
	3.	20 C.Y.	Class "A" Concrete for Footings, complete <u>not</u> including reinforcing steel or excavation For Dollars Cents, per cubic yard	<u>\$</u>	<u>\$</u>
	4.	40 C.Y.	Class "A" Concrete for piers, slabs or walls complete <u>not</u> including reinforcing steel or excavation For Dollars Cents, per cubic yard	<u>\$</u>	<u>\$</u>
	5.	40 C.Y.	Class "C" Concrete For Dollars Cents, per cubic yard	<u>\$</u>	<u>\$</u>

This document is a MODIFIED version of EJCDC<sup>®</sup> C-410, Copyright © 2013 by the National Society of Professional Engineers, American Society of Civil Engineers, and American Council of Engineering Companies, or is based in part on excerpts from EJCDC documents. Those portions of the text that originated in published EJCDC documents remain subject to the copyright.

ltem No.	Approximate Quantity	Description with Unit Bid Price Written in Words	Unit Price	Total Price
6.	4,000 Lbs.	Reinforcing Steel For		
		Dollars Cents, per lb.	<u>\$</u>	<u>\$</u>
7.	20 L.F.	Aluminum Pipe Handrails Top or Side Mounted For		
		Dollars Cents, per lb.	<u>\$</u>	<u>\$</u>
8.		PVC Pipe in Place (0'-8' Deep) Extra Depth will be paid for by including Item 1 or 2		
(a)	10 L.F.	4-inch DR-26 PVC Gravity Drain Pipe (0'-8') For		
		Dollars Cents, per linear foot	<u>\$</u>	<u>\$</u>
(b)	10 L.F.	6-inch DR-26 PVC Gravity Drain Pipe (0'-8') For		
		Dollars Cents, per linear foot	<u>\$</u>	<u>\$</u>
(c)	10 L.F.	8-inch DR-26 PVC Gravity Drain Pipe (0'-8') For		
		Dollars Cents, per linear foot	<u>\$</u>	<u>\$</u>

# BID FORM B - ADJUSTMENT ITEMS (cont'd)

ltem No.	Approximate Quantity	Description with Unit Bid Price Written in Words	Unit Price	Total Price
9.		Ductile Iron Pipe in Place (0'-8' Deep)		
		Extra Depth with be paid for by including Item 1 or 2		
(a)	10 L.F.	6-inch D.I.P For		
		Dollars		
		Cents, per linear foot	<u>\$</u>	<u>\$</u>
(b)	10 L.F.	8-inch D.I.P For		
		Dollars		
		Cents, per linear foot	<u>\$</u>	<u>\$</u>
(c)	10 L.F.	12-inch D.I.P For		
		Dollars		
		Cents, per linear foot	<u>\$</u>	<u>\$</u>
(d)	10 L.F.	18-inch D.I.P For		
		 Dollars		
		Cents, per linear foot	<u>\$</u>	<u>\$</u>
(e)	10 L.F.	24-inch D.I.P For		
		Dollars		
		Cents, per linear foot	<u>\$</u>	<u>\$</u>
(f)	10 L.F.	36-inch D.I.P For		
		 Dollars		
		Cents, per linear foot	<u>\$</u>	<u>\$</u>

# BID FORM B – ADJUSTMENT ITEMS (cont'd)

ltem No.	Approximate Quantity	Description with Unit Bid Price Written in Words	Unit Price	Total Price
(g)	10 L.F.	42-inch D.I.P For		
		Cents, per linear foot	<u>\$</u>	<u>\$</u>
(h)	10 L.F.	48-inch D.I.P For		
		Dollars Cents, per linear foot	<u>\$</u>	<u>\$</u>
10.	2,000 Lbs.	Flanged or M.J. Cast Iron or Ductile Iron Pipe Fittings, in place For		
		Dollars Cents, per lb.	<u>\$</u>	<u>\$</u>
11.	3,000 Lbs.	Flanged Ductile Iron Pipe 4-inch through 24-inch, complete in place For Dollars		
		Cents, per lb.	<u>\$</u>	<u>\$</u>
12.	1 Each	Yard Hydrant complete in place, including valve, pad, plaque and hose rack For		
		Dollars Cents, per each	<u>\$</u>	<u>\$</u>

# BID FORM B – ADJUSTMENT ITEMS (cont'd)

ltem No.	Approximate Quantity	Description with Unit Bid Price Written in Words	Unit Price	Total Price				
13.	200 C.Y.	KYTC Crushed Stone, Size No. 57 or No. 9 for undercutting or backfill where directed by the Engineer, including filter fabric and excavation, complete in place For Dollars Cents, per cubic yard	<u>\$</u>	<u>\$</u>				
14.	200 C.Y.	Select shotrock fill for undercutting or backfill where directed by the Engineer, including geogrid, complete in place For Dollars Cents, per cubic yard	<u>\$</u>	<u>\$</u>				
15.	200 C.Y.	KYTC Crushed Stone, Size No. 1 for stabilization where directed by the Engineer For Dollars Cents, per cubic yard	<u>\$</u>	<u>\$</u>				
16.	200 S.Y.	Sodding where directed by the Engineer For Dollars Cents, per square yard	<u>\$</u>	<u>\$</u>				

17.	200 C.Y.	Dense Grade Aggregate Crushed Stone compacted in 6-inch lifts where directed by the Engineer For Dollars Cents, per cubic yard	<u>\$</u>	\$
18.	200 S.Y.	Hand Place Rip-Rap For Dollars Cents, per square yard	<u>\$</u>	<u>\$</u>
19.	1,000 L.F.	Chain Link Fence For Dollars Cents, per linear foot	<u>\$</u>	<u>\$</u>
20.	200 C.Y.	Remove and dewater WWTP solids over and above 200 C.Y. which is to be included in BID FORM A, Item No. 1. For Dollars Cents, per cubic yard	<u>\$</u>	<u>\$</u>

TOTAL BID FORM B	<u>\$</u>
------------------	-----------

#### BID FORM C- ALLOWANCE ITEMS

1.	Operations Building Furniture	\$20,000				
2.	Signage	\$8,000				

TOTAL BID FORM C	<u>\$28,000</u>
TOTAL BID FORM A (Repeat from Page BF-6)	<u>\$</u>
TOTAL BID (BID FORM A + B + C) FOR CONTRACT # 133-2019-01	<u>\$</u>

# DEDUCTIVE ALTERNATES

In the event the total amount of the bid for Contract # 133-2019-01 exceeds the available funds for the project, one of the following deducts may be subtracted from the total for Contract # 133-2019-01.

# Deductive Alternate No. 1

As shown on Sheet 4 of the Plans, delete Biosolids Storage, Solar Drying Units, and Solar Drying Electrical Building, and all associated electrical conductors. Note that electrical conduit shall be installed for future construction of the deleted facilities. All other proposed facilities shall be constructed and made fully functional as shown on the Plans.

TOTAL DEDUCTIVE ALTERNATE NO. 1 - (\$	)
	Dollars

\_\_\_\_\_Cents

# Deductive Alternate No. 2

As shown on Sheet 4 of the Plans, delete four (4) of the five (5) solar drying units and all associated electrical conductors. Note that electrical conduit shall be installed and piping stubouts shall be installed for future construction of the deleted facilities. All other proposed facilities shall be constructed and made fully functional as shown on the Plans.

TOTAL DEDUCTIVE ALTERNATE NO. 2 - (\$	)
	Dollars

\_\_\_\_\_Cents

Bidder acknowledges that (1) each Bid Price includes an amount considered by Bidder to be adequate to cover Contractor's overhead and profit for each separately identified item, and (2) estimated quantities are not guaranteed, and are solely for the purpose of comparison of Bids, and final payment for all unit price Bid items will be based on actual quantities, determined as provided in the Contract Documents.

# Note: The Owner reserves the right to award the Contract based on the TOTAL BID (Bid Form A + B + C) or based on the TOTAL BID (Bid Form A + B + C) less Deductive Alternate No. 1 or based on the TOTAL BID (Bid Form A + B + C) less Deductive Alternate No. 2.

SUMMARY OF BID FORM VALUES

# Option No. 1 – No Solar Drying

TOTAL BID (BID FORM A+B+C) LESS DEDUCTIVE ALTERNATE NO. 1	\$	
<u> Option No. 2 – Partial (20%) Solar Drying</u>		
TOTAL BID (BID FORM A+B+C)	ć	
LESS DEDUCTIVE ALTERNATE NO. 2	<u>2</u>	
<u>Option No. 3 – Solar Drying</u>		

TOTAL BID (BID FORM A+B+C)

#### **ARTICLE 6 – TIME OF COMPLETION**

6.01 Bidder agrees that the Work will be completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions on or before the dates or within the number of calendar days indicated in the Agreement.

\$

6.02 Bidder accepts the provisions of the Agreement as to liquidated damages.

# **ARTICLE 7 – ATTACHMENTS TO THIS BID**

- 7.01 The following documents are submitted with and made a condition of this Bid:
  - A. Required Bid security;
  - B. List of Proposed Subcontractors;
  - C. List of Proposed Suppliers;
  - D. List of Project References;
  - E. Evidence of authority to do business in the state of the Project; or a written covenant to obtain such license within the time for acceptance of Bids;
  - F. Required Bidder Qualification Statement with supporting data; and
  - G. Required Affidavit for Bidders, Offerors and Contractors Claiming Qualified Bidder Status; and

H. Required Affidavit for Bidders, Offerors and Contractors Claiming Resident Bidder Status;

# **ARTICLE 7A – MEASURABLE CRITERIA FOR EVALUATION OF BIDS**

• ARTICLE 7 – ATTACHMENTS TO THIS BID

PASS/FAIL

• PRICE 100 POINTS / TOTAL POINTS 100

Each Contractor is responsible for submitting all relevant, factual and correct information with their Bid to enable the evaluator(s) to afford each Contractor the Pass/Fail designation based on the available data submitted by the Contractor. The Contractor shall explicitly adhere to the BID FORM which contains adequate space for the Contractor's pricing.

Bid Price (100 Points)

The bidder with the lowest Bid Price receives the maximum score. The bidder with the next lowest Price receives points by dividing the lowest Price by the next lowest Price and multiplying that percentage by the available points. For example, 100 points is allocated to the lowest Price criteria for this procurement, Bidder "A" bids \$3.00 as the lowest bidder and receives the maximum 100 points ( $$3.00 / $3.00 = 1.00 \times 100 = 100$ ). Assume Bidder "B" is next lowest bidder at \$4.00, then "B" receives 75 points ( $$3.00 / $4.00 = .75 \times 100 = 75$ ).

# **ARTICLE 8 – DEFINED TERMS**

8.01 The terms used in this Bid with initial capital letters have the meanings stated in the Instructions to Bidders, the General Conditions, and the Supplementary Conditions.

# **ARTICLE 9 – BID SUBMITTAL**

BIDDER: [Indicate correct name of bidding entity]

By: [Signature]
[Printed name]
(If Bidder is a corporation, a limited liability company, a partnership, or a joint venture, attach evidence of authority to sign.)
Attest: [Signature]
[Printed name]
Title:
Submittal Date:
Address for giving notices:
Telephone Number:
Fax Number:
Contact Name and e-mail address:
Bidder's License No.: (where applicable)





T SI	YPE: ERV	ICE	<u>277/4</u>	80 V	'., 3 PI	., 4 ₩.	F	PANE		//	H4″	(EQUIF W/SUI _UGS>	PPED 3 FEED	BUS MAI	S AN NS:_	1PA	CIT	Y: M.L.I	400 <i>4</i> ].	<u>.                                    </u>	
PI LI X	ILES ICA SUI	S: TIDN RFA	1: <u>Bios</u> i CE	3 DLIDS	DEWAT	<u>ering b</u> ldg. SH	* UI Condui	NLESS DTH TS PER NE	ierv IC,	VISI BAS	E NOTEI	, SIZ (PE 1	Έ ΓΗΗΝ.	NEL SHOR ⊠ №	JTRA T CIR JEMA	AL:. CUII A 1	r Rat	<u>ull</u> ING: _ NEM	65,0 A G	<u>100</u> 3R	
CI MA	<Т. К` МЪВ	√A ¢r	CB TRIP	DNDUIT	WIRE	LC	]AD Ne	AME			L	DAD	NAME		WIRE	DNDUIT	CB TRIP	CK MA	(Т. К Мв	∕A dr	
Ψ⊓ [3.3]	<u>Ψ</u> υ	Ψ0	20/3	*υ 3/4	#10		HEATER	"FUH-1BS"	43	44	FXHAUST	FAN	"FF-1BS"		#10	*∪ 3/4	15/3	Ψ <sup></sup> 0.7	μ	ΨΟ	
	3.3		20/0	0, 1	#10	ELECTRIC	HEATER	"EUH-1BS"	45	46	EXHAUST	FAN	"EF-1BS"		#10		10, 0		0.7	—	
_		3.3			#10	ELECTRIC	HEATER	"EUH-1BS"	47	48	EXHAUST	FAN	"EF-1BS"		#10			_	Ι	0.7	
3.3		—	20/3	3/4	#10		HEATER	"EUH-2BS"	49	50	EXHAUST	FAN	"EF-2BS"		#10	3/4	15/3	0.7		—	
_	3.3	3.3			#10		HEATER	"FUH-2BS"	53	54	EXHAUST	FAN FAN	"FF-2BS"		#10			_	0.7	0.7	
2.5	_		15/3	3/4	#10	ELECTRIC	HEATER	"EUH-3BS"	55	56	SPARE						15/3				
—	2.5				#10	ELECTRIC	HEATER	"EUH-3BS"	57	58	SPARE							—		—	
—	—	2.5			#10	ELECTRIC	HEATER	"EUH-3BS"	59	60	SPARE							—	-		
2.5		_	15/3	3/4	#10	ELECTRIC	HEATER	"EUH-4BS"	61	62	SPARE						30/3			—	
_	2.5	25			#10 #10		HEATER	"EUH-4BS"	63	64	SPARE							_	_		
1.5	_	<u> </u>	20/1	3/4	#10		HEATER	"FWH-18S"	67	68	SPACE								-		
		_	20/1	0/ 1		SPARE			69	70	SPACE							—		—	
—	—		20/1			SPARE			71	72	SPACE							—	—		
		_				SPACE			73	74	SPACE								I	-	
		_				SPACE			75	76	SPACE							—			
		-				SPACE			1//	/8	SPACE							—	_		
						SPACE			81	82	SPACE									_	
						SPACE			83	84	SPACE							_	-		
25.9	20.6	24.5	то	TAL		NECTED KN	/A:2	30.6										53.2	53.2	53.2	
						SHEET	E35	of <u>38</u>		SE CON	WER NTRAC	SY T N	STEM 0. 133	IM 5-20	PR 019	0∖ _0	/EN 1	IEN	TS		
							REVISIO	NS		IAM	MOND-W	OOD	WASTEW	ATER	TREA	ATME	NT I		ΓEΧ	PANS	SION
							DDENDU /31/20	IM NO. 6	E			<b>CA</b>	L PA	NEL	_ S	SCF	HED	DUL	.ES	_	
							DDENDU /4/20	IM NO. 7	F												
									 	HO EN	PKIN VIRO	S VI NMF	LLE \ ENT /	NA1 AUT	ER HC	RI	ΤY				
										SC	ALE		Λ/ΛΙ		-	) [	) <b>Г</b>	)	DI	ESIGNE JDP	D
									^	აა		V			C	/ [`	ヽL	/		DRAWN	1
																			1		
						Pf	ROJECT N	UMBER		DA	TE	J. R. Nas	. Wauford & Co hville, Tennes	mpany, C ssee	onsultin	g Engi	neers, Ir	nc.		TWR	

TYPE:BUS AMPACITY: 400 A.														<u>.                                    </u>								
SERVICE: 277/480 V., 3 PH., 4 V. PANEL "H4" LUGS)														MAINS: <u>M.L.D.</u>								
														45 00	<u></u>							
SURFACE □ FLUSH CONDUITS PER NEC. BASE ON TYPE THHN. SIGN CIRCUIT RATING OG															<u>вэ,00</u> IA Э	R						
CKT. KVA CB 5													1	СВ	CKT. KVA							
¢Α	¢В	фС	TRIP	COND COND	WIRE	LUAD NAME				LUAU NA	AME		WIRE		TRIP	¢Α	¢В	¢с	_			
0.6			15/3	1″	#10	SLUDGE TANK 2 VALVE	1	2	SCREW F	RESS PLC CO	INTROL	PANEL	#2/0	2"	200/3	34.3	$\sim$	$\simeq$	$\sum$			
_	0.6	0.6			#10 #10	SLUDGE TANK 2 VALVE	3	4	SCREW F	RESS PLC CE	INTROL INTROL		#2/0			_	34.3	34.3	കു			
0.6	_		15/3	1″	#10	WAS VALVE	7	8	SCREW PR	ESS DISCHARGE	E CONVE	EYOR CP	#8		40/3	7.6	$\sim$	2				
—	0.6				#10	WAS VALVE	9	10	SCREW PR	ESS DISCHARGE	e conve	eyor Cp	#8			—	7.6	—				
	—	0.6	1 - 1 -		#10	WAS VALVE	11	12	SCREW PR	ESS DISCHARGE	<u>CONVE</u>	eyor Cp	#8			—	—	7.6				
0.3		-	15/3	1″	#10	POLYMER FEED SKID NO. 1	13	14	ISHOP D	VERHEAD I			#10	3/4	15/3	1.2	12	_				
	0.3	0.3			#10	POLYMER FEED SKID NO. 1	17	18	<u>знор о</u> Скир о	VERHEAD I			#10			_	1.C	1.2				
0.3	—		15/3	1″	#10	POLYMER FEED SKID NO. 2	19	20	SCREW P	RESS RM. DVE	RHEAD	DOORS	#10	3/4	15/3	1.2	—					
	0.3	_			#10	POLYMER FEED SKID NO. 2	21	22	SCREW P	RESS RM. DVE	RHEAD	DOORS	#10			—	1.2	—				
—	—	0.3			#10	POLYMER FEED SKID NO. 2	23	24	SCREW P	<u>RESS RM. DVE</u>	RHEAD	DOORS	#10			—	—	1.2				
	_	_	20/1			SPARE	25	26	AIR CO	MPRESSOR			#6	1″	60/3	7.5		_				
=	_		20/1			SPACE	20	20		MPRESSUR			#6			_	7.5	7.5				
	—	_				SPACE	31	32	SPACE								—					
—		-				SPACE	33	34	SPACE							—		—				
_	—					SPACE	35	36	SPACE							—	—					
11.0			100/3	1 1/2	#3	TRANSFORMER "TL4"	37	38	SURGE	PROTECTIO	N DEN				60/3		_	_				
=	7.2	11.1			#3		<u>39</u> 41	40	SURGE	PROTECTION	N DEN	/ICE /ICE				_	_	_				
							11					102										
							<	SF	WFR	SYST	FM	IM	PR	$\overline{O}$	/FN	IFN	TS					
						SHEET EJJ OF JO		201		CT NO	13	3-20	19.	-0	1							
	REVISIONS HAMMOND-WOOD WASTEWATER TREATMENT PLANT EXPAN														PANS	ION						
						A ADDENDUM NO. 6	F		FOTE		D۸	NEI	C			ווור	F۵	_				
	1/31/20   ELECTRICAL FAINEL SCHEDULE													LJ.								
	A ADDENDUM NO. 7 PAGE 2																					
						∠⊂ 2/4/20																
								1U - N 1						יחי	<b>T</b> \/							
										NMEN		AU I	HU	IN	IY							
																		U				
								<u> </u>		J. R. Wauf	ford & Co	ompany, C	DRAWN any, Consulting Engineers, Inc.									
									0040	Nashville (615)88	, Tenne 3-3243	ssee		5 .5"	, .			HECKE				
						1902	+	ĿВ.	2019	www.jrw	auford.	com						JDP				