

YOLO COUNTY AGREEMENT NO. 19-113

(FIFTH AMENDMENT to Agreement No. 18-29 with EEI WSD Joint Venture, relating to Wastewater Recycling Facility Repairs and Replacement, to revise Services and Compensation terms)

THIS FIFTH AMENDMENT to Agreement No. 18-29 ("Fifth Amendment") is made and entered into as of this 4th day of June, 2019, by and between the **County of Yolo**, a political subdivision of the State of California, ("County"), and **EEI WSD Joint Venture**, a partnership consisting of Gary Wert, Environmental Enterprises, Inc. and James Neher, Western Site Development, ("Contractor"), who agree as follows.

WHEREAS, on or about February 6, 2018, the parties entered into an agreement for Contractor to provide wastewater recycling facility repairs and replacement services to the County (Agreement No. 18-29); and

WHEREAS, on or about March 8, 2018, the parties amended Yolo County Agreement No. 18-29 to revise service and compensation terms ("First Amendment"); and,

WHEREAS, on or about July 24, 2018 the parties further amended Agreement No. 18-29 to revise service and compensation term; and,

WHEREAS, on or about December 31, 2018 the parties further amended Agreement No. 18-29 to revise the term; and,

WHEREAS, on or about January 29, 2019 the parties further amended Agreement No. 18-29 to revise services and compensation terms to include installation of a server in the WWTP control room for the water system ("Fourth Amendment", and collectively with Agreement No. 18-29 and all previous amendments, the "Agreement"); and,

WHEREAS, the parties wish to amend the Agreement to revise the additional services and compensation and reimbursement terms.

NOW, THEREFORE, IT IS HEREBY AGREED AS FOLLOWS:

1. Article II of the Agreement is hereby amended to read as follows:

II. ADDITIONAL SERVICES

Contractor shall only perform the following additional services upon prior written authorization from the Administrator:

1. Golf Irrigation Project
 - a) Install pipe, valves, control system, coordinate Rain for Rent equipment setup to enable effluent from the tertiary filter to be pumped to the Rain for Rent storage tanks during the night time
 - b) Allow stored effluent in the Rain for Rent tanks to be discharged to the golf course irrigation pump lift station
2. Aeration Blower Replacement
 - a) Replace existing aeration system blowers including providing two each Republic Model HRC 1452 regenerative blowers with pressure kit and one each Republic Model HRC

402 regenerative blower

- b) Remove existing blowers and install new regenerative blowers as part of the aeration system
3. Unforeseen plant repair or replacement work performed as authorized in a written Work Authorization signed by the Administrator.
4. Lift Station B Upgrade
 - a) Purchase and replace existing pumps with 2 Goulds WS5032D3 5HP, 230 volt, 3 phase 3" sewage pumps and 30' electrical connection chords, and purchase a spare pump and chord.
 - a) Purchase and install 1 Vega Radar Level Transmitter.
 - b) Connect transmitter to MicroLogix 1500 PLC.
5. Replace Existing Radios on the Potable Water System
 - a) Purchase and install 10 Phoenix Contact radio equipment for 1 master radio located at SCADA control room at wastewater treatment plant and 9 remote slave sites.
6. Additions/Changes to the WW-1 Control Panel
 - a) Provision, installation, wiring, drawing additions/changes for 4 door located VFD potentiometers; 2 door located VFD HOA and Pilot Light assemblies; 1 1769-1A16 Input Module; and 1 1769-OA16 Output Module.
 - b) Provision, installation, wiring, drawing additions/changes and PLC/HMI programming for 1 FVNR Motor Starter for the Barge Pump; 3 110 VAC Fractional Horsepower Control Relays for the Clarifier Sample Pump, Polymer Pump and Chlorine Contact Tank Sample Pump; and 1 110 VAC large frame Fractional Horsepower Control Relay for the "Rain for Rent" Motorized Valve.
7. Additions/Changes to the WW-2 Control Panel
 - a) Addition and off-site pre-construction of additional physical control panel.
 - b) Addition of pre-wiring of all selector switches and pilot lights.
8. Install Base Rock Next to Filter
9. Install New Floats at Various Locations
10. Install a Post EQ Bypass
11. Install Radar Level Transmitters
12. Lift Station A Upgrade
 - a) Install Banner radio.

- b) Identify wires between Lift Station A and control room to implement new control system WW-1.
13. Install Remove Access Router
 14. Provide Spare Banner Radios
 15. Replace Filter Solenoid Valve
 16. UPS Units and Enclosure
 - a) Install 2 UPSs for WW-1 and WW-2 control panels.
 - b) Install enclosures for protection.
 17. Flash Mixer Replacement
 18. Install Check Values and Pressure Gauge on Blower Discharge Pipe
 19. Replace Existing 2" Scum Return Pipe
 20. Provide Back-up Goulds Pump for Lift Station A
 21. Control Room Modifications
 - a) Install 2 UPSs for WW-1 and WW-2 control panels.
 - b) Install enclosures for protection.
 22. Volute Press
 - a) Provide and install one (1) new PWTech® Model ES-201 Volute Dewatering System at the Wastewater Treatment Plant. Installation will include making modifications to the existing handrail, grating and providing a support system for the dewatering system. The dewatering system will include the volute dewatering press, polymer preparation system, influent sludge flow meter, and control system. Start-up of the dewatering system shall be provided by Contractor.
 23. Blower System Modifications
 - a) Provide and install one (1) new equivalent blower to accompany the two existing blowers at the Wastewater Treatment Plant. This new unit will have the capability to be operated by a VFD which could vary the amount of air being delivered to the system. The current two blowers will be operated as they are now operated as they would alternate as currently programmed. The new third blower would operate on a continuous basis and would be adjusted by the use of the VFD to supply additional air into the system to meet the required amount of air to the aeration system. Additionally, Contractor shall provide one (1) spare motor for backup of the blower system.
 24. Micro Processor Replacement

- a) Contractor shall replace the 1761-L20BWB-5A Micrologix 1000 Processor at site C6 with a new equivalent processor and provide one (1) new additional processor as a spare for 7 sites. Additionally, (1) new spare 1764-LRP Micrologix 1500 Processor shall be provided by Contractor as a spare for three sites (Pintail, Canvas Back, and Lift Station B). This section includes a total of (3) processors.

25. Water System Control Trouble Shooting

- a) Perform programmer and existing piping system evaluation to determine the operational condition of the existing systems at various sites in the water system (including Pin Tail, Canvas Back, and remote sites).

26. Operational Support

- a) During the time in which the plant was being operated by a contract operator(SUSP), Contractor was asked to provide recommendations, repairs, maintenance support and operational instruction related to the wastewater plant.

27. Install Radar Level Transmitter in Lift Station B

- a) Having determined that a pressure transducer type level control would not work due to depth and turbulent conditions in Lift Station B, Contractor will install a Vega Radar Level Transmitter in the pump station. The scope of work includes material, tax, and labor for complete installation and programming.

28. Replace Turbidity Meters Supply Pipe

- a) The existing supply pipe lines that feed the 2 turbidity meters is in the condition and physical routing that allows algae and sediment to accumulate in the pipe line. This in turn leads to false readings in the turbidity meters. Contractor shall replace the existing tubing with ½" schedule 80 PVC pipe and valves to eliminate the existing condition.

29. As-Needed Additional Services

- a) Contractor shall perform as-needed services that may arise as a result of an emergency situation at the plant. Contractor may only provide these services in the event of a qualifying emergency and with prior written approval of Administrator.

30. Phase 1 of Migrate Wonderware Screens and Content to Ignition System

Contractor shall perform the following:

- a) Continue using the SLC500 processor (in the control room at the wastewater facility) to communicate with all of the remote sites using their existing PLC's.
- b) Migrate all screen content and functionality (with exclusions noted in this item) from Wonderware SCADA platform over to the Ignition GMI system. Note: Displays and functionality for the following sites will be excluded from the migration in Phase 1; Remote Site B6E, Remote Site C1, and Remote Site C4.
- c) Communicate directly between Ignition and the SLC500 for all tags required by the migration.
- d) Migrate current dial-out alarm annunciation functionality from the current ScadaPhone system (software running on the Wonderware PC) to the Ignition PC using a newly

added Ignition Voice Notification Module that will be added to the Ignition system to provide similar dial-out capability.

- e) Purchase and install a new AB PLC Hardware for only Remote Site B2 and integrate this site over Ethernet IP (using existing Phoenix radios) as proof of concept for Phase 2 implementation plans.
- f) At Remote site B2 of the existing Cla-Val shall be removed and a 24 volt electric actuated ball valve shall be installed. Four Trojan L16P deep-cycle flooded/wet lead-acid batteries shall be installed in series to provide 24 volt power for the new valve. A concrete pad will be provided and enclosure to house the battery system.

31. Provide a complete and comprehensive Operations & Maintenance (O&M) Manual for the Wild Wings Wastewater Treatment Facility. The manual shall include the following sections: Introduction, Plant Overview, System Description, Design Information, System Component Summary, Electrical System Description, PLC Control System, Equipment O&M Manuals, Instrumentation Equipment, and Standard Operation Procedure Forms. The manual shall include, at a minimum, the sections described in Exhibit C: O&M Manual outline, attached hereto and incorporated herein. Changes to the minimum sections required in the manual may be approved in writing by the Administrator. A hardbound copy of the O&M Manuals shall be made available at the plant control room. A hardbound copy shall be made to be kept at a location specified by County. County shall assist in printing any email format manuals that are received from various equipment vendors for the purpose of preparing the O&M Manual.

32. Install a server in the WWTP control room for the water system, which installation shall include all labor, material and tax and include the following:

- a) Provide one server enclosure with the following items:
 - i. Dell Server
 - ii. 30" x 30" x 12" enclosure
 - iii. 1000 BTU air conditioner
 - iv. Enclosure LED light
 - v. Receptacle for server
 - vi. Circuit breakers for power distribution
 - vii. Autocad drawings
 - viii. Install two 120 volt, 15 amp circuits from existing UPS
 - ix. Split duplex receptacle inside server enclosure
 - x. Install Cat6 from server enclosure to location on wall in control room.

2. Article III of the Agreement is hereby amended to read as follows:

III. COMPENSATION AND REIMBURSEMENT

A. For the services described in Paragraphs I and II above, and subject to the condition that the services have been completed in a manner satisfactory to the Administrator, County shall compensate Contractor as follows:

- 1. The total amount of compensation payable to Contractor for the services required by this Agreement shall not exceed One Million, Two Hundred Sixty-Three Thousand, Three-Hundred Forty-One Dollars (\$1,287,116), allocated as follows:

New Aeration Drops: \$74,600

Spiral Screen:	\$137,500
Control system upgrades:	\$206,800
EQ Tank to Emergency Pond:	\$22,000
Tankage & Piping from Clarifier to Filter:	\$70,860
Connection Between Filter & Irrigation Pump:	\$11,136
¼ HP Gould Pump for EQ Back-Up:	\$1,700
Replacement Skimmer:	\$560
De-Chlor Tablet Feeders (w) in Filter:	\$3,500

Additional Services:

Golf Irrigation Project:	\$25,000
Aeration Blower Replacement	\$0
WW-1 Control Panel	\$20,550
WW-2 Control Panel	\$17,580
Base Rock Next to Filter	\$3,075
New Floats	\$2,587
Post EQ Bypass	\$2,045
Radar Level Transmitters	\$6,485
Lift Station A Upgrade	\$7,400
Remote Access Router	\$2,875
Spare Banner Radios	\$2,950
Filter Solenoid Valve	\$860
UPS Units and Enclosure	\$8,734
Flash Mixer Replacement	\$5,553
Check Valves & Blower Discharge Pipe Pressure Gauge.....	\$1,228
Scum Return Pipe.....	\$17,300
Back-Up Pump for Lift Station A	\$6,080
Control Room Modifications	\$12,600
Lift Station B Upgrade	\$44,758
Radio Replacement	\$45,925
Volute Press	\$205,400
Blower System Modifications	\$52,332
Micro Processor Replacement	\$7,309
Water System Control Trouble Shooting	\$7,874
Operational Support	\$9,115
Radar Level Transmitter	\$5,660
Replace Turbidity Meters Supply Pipe	\$2,610
As-Needed Additional Services	\$60,000
Phase 1 of Migrate Wonderware Screens and Content to Ignition system	\$89,800
O&M Manual	\$61,000
Install New Server and Enclosure in WWTP Control Building	\$23,775

2. County will make down payments when required by manufacturers for products related to the services listed above upon receipt of the manufacturer documentation requiring down payment. Such down payments shall be made subject to the maximum compensation limit for each task as set forth above. Contractor shall be responsible for financing any down payment and other costs related to services provided under this Agreement and not authorized in Advance by the Administrator.
3. County shall render payment, subject to the work being performed in a manner satisfactory to the Administrator, on amounts payable for each task set forth above, including any balances due after a down payment is made, based on a percentage of

completion for each task, on a scale of 0% to 100%.

4. County shall compensate Contractor for services performed in excess of the services outlined above pursuant to written work authorization in accordance with the rates set forth in Exhibit B.
- B. The compensation set forth in Section A above includes reimbursement for all expenses incurred by Contractor in the performance of this Agreement, including all freight and taxes.
3. Except as set forth in this Fifth Amendment, all other terms and conditions of the Agreement remain in full force and effect.

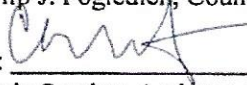
IN WITNESS WHEREOF, the parties hereto have executed this Fifth Amendment as of the day and year first written above.

CONTRACTOR
By: 
Gary Wert
EEI WSD Joint Venture

COUNTY:
By: 
Don Saylor, Chair
Board of Supervisors

Attest:
Julie Dachtler, Clerk
Board of Supervisors
By: 
Deputy (Seal)



Approved as to Form:
Philip J. Pogledich, County Counsel
By: 
Carrie Scarlata Assistant County Counsel