

2013 Leon Creek Water Recycling Center (WRC) Rehabilitation and Process Improvements

Solicitation No.: CO-00003

SAWS Job No.: 13-6505

Addendum No. 4

August 18, 2015

To Respondent of Record:

This addendum, applicable to the project referenced above, is an amendment to the bidding documents and as such will be a part of and included in the Contract Documents. Acknowledge receipt of this addendum by entering the addendum number and issuance date in the space provided in the bid proposal.

PART 1 – BIDDING AND CONTRACT DOCUMENTS

A. Revisions to PP-1 “PRICE PROPOSAL”

1. REMOVE and REPLACE in its entirety with the attached version.

B. Revisions to 01 33 00.01 “TABLE OF REQUIRED SUBMITTALS”

2. REMOVE and REPLACE in its entirety with the attached version.

C. Revisions to 01 35 00 “SPECIAL PROCEDURES”

1. Page 4, Section 1.07.N, Special Constraint Note #6.

REMOVE “...and Final Clarifiers 1-4.” in the first sentence and
REPLACE with “...and Final Clarifiers 1-7.”

2. Page 5, Section 1.07.N, Special Constraint Note #12. ADD the following as Paragraph 7:

“CONTRACTOR shall provide and install submeters on all connections to the plant electrical system to monitor and record electrical usage. CONTRACTOR is responsible for reimbursing SAWS for all electricity used throughout the project.”

- Page 7, Section 1.07.O, Concurrent Construction, Final Clarifiers (5-7) Weir Replacement, Paragraph 2.b. REMOVE “Drain clarifier basin if needed” and REPLACE with “Drain clarifier basin”.

PART 2 – TECHNICAL SPECIFICATIONS

A. Clarification

Engineer/Owner acknowledge that other manufacturers or integrators/installers may be acceptable; however, for this project, respondents shall base their proposals on the specific equipment or integrators/installers as described, and as indicated in the Technical Specifications and the Plan Drawings of the Contract Documents. Respondents are advised to reference the Technical Specifications of the Contract Documents, including Section 01 33 00 Submittal Procedures for requirements for review and approval of equipment and materials different than as explicitly shown in the Plan Drawings and Technical Specifications of the Contract Documents. (Note that the Owner/Engineer will not pre-approve any product or integrator/installer substitutions prior to Proposal Submittal).

B. Revisions to 40 90 01 “INSTRUMENTATION”

- Page 10, Paragraph 2.04 J, Chlorine Analyzer Table: REMOVE the table and REPLACE with the following:

Tag	Service	Range	Provided By
LCC-CL-AN-04	DIVERSION BOX “D”	0-5 mg/L	Primary PCSI
LCC-CL-AN-01	Chlorine Contact Basin No. 1	0-8 mg/L	Primary PCSI
LCC-CL-AN-02	Chlorine Contact Basin No. 2	0-8 mg/L	Primary PCSI
LCC-CL-AN-03	Chlorine Contact Basin No. 3	0-8 mg/L	Primary PCSI

- Page 15, Paragraph 2.07 H, Ammonia Analyzer Table: REMOVE the table and REPLACE with the following:

Tag FIT	Service	Range	Provided By
LCC-AM-AN-01	Aeration Basin	0.2-1000 mg/L	Primary PCSI
LCC-AM-AN-02	JUNCTION BOX E	0.05 – 20 mg/L	Primary PCSI

C. Revisions to 40 90 02 “SUPERVISORY CONTROL AND DATA ACQUISITION”

- Page 5, Paragraph 1.05.E:
REMOVE the following:
“Acceptable SCADA installers for the Disinfection Building PLC:”

And REPLACE with:

“Acceptable primary PCSI installers for the Disinfection Building PLC:”

2. Page 5, Paragraph 1.05: ADD the following as Paragraph F:

“F. Contact Siemens for coordination. Mitch Hylen (281)795-3637”

3. Page 6, Paragraph 2.03.C.: ADD the following as Paragraph C:

“C. PLC and components shall have conformal coating.”

4. Page 13, Paragraph 2.08.A.: REMOVE the paragraph in its entirety and REPLACE with the following:

“The system supplier shall provide a double conversion Uninterruptible Power Supply (UPS) for the programmable controllers and controls panels. The systems supplier shall size the UPS for connected load plus 20% spare capacity. Utilize Gel-cell type batteries. The UPS shall be equal to Liebert, and shall have capacity to supply power for a period not less than 15 minutes continuously for each Remote PLC.

D. Revisions to 40 90 02.01 “DISTRIBUTED CONTROL SYSTEM (DCS)”

1. Page 1, Paragraph 1.01.L.:

REMOVE the following:

“Emerson Process Management Power and Water Solutions (PWS) also known as the ASP shall be the supplier.”

And REPLACE with:

“Emerson Process Management Power and Water Solutions (PWS) shall be the supplier. Contact Michael Rinaldi (412) 963-3613 Michael.Rinaldi@Emerson.com”

E. Revisions to 46 43 21 “FINAL CLARIFIER EQUIPMENT”

1. Page 5, Paragraph 1.04.B.2:

REMOVE the following:

“22,500 ft-lbs”

And REPLACE with:

“39,000 ft-lbs”

2. Page 8, Paragraph 2.02.E.1:

REMOVE the following:

“Siemens Industry, Inc.”

And REPLACE with:

“Evoqua Water Technologies (Siemens)”

F. Revisions to 46 51 20 “FINE BUBBLE DIFFUSER SYSTEM”

1. Page 2, Paragraph 1.03.A Submittals: ADD the following paragraph:

“11. Submit repair methods for leaking air distribution laterals, manifold piping, and leaking/damaged diffuser holders.”

2. Page 12, Paragraph 2.03.A.10.d Moisture Blow-off Assemblies: REMOVE the second sentence and REPLACE with the following:

“Extend this airlift line to a point above the tank water level and terminate with a horizontally mounted PVC ball valve at a minimum elevation of 2-feet above the top of the aeration basin. Secure/brace valve to the walkway guardrail.”

3. Page 16, Paragraph 3.04.C: REMOVE paragraph and REPLACE with the following:

“C. Uniformity and Leakage Procedures:

1. Cover diffuser caps with no more than 2 feet of non-potable water.
2. Introduce plant air at approximately 0.5 scfm.
3. Inspect air distribution laterals, manifold piping, and diffuser holders for leaks.
4. Any leaking piping, fittings, or diffuser caps must be cut out and replaced using approved solvent cement and solvent cement couplings.
5. If, in the opinion of the Engineer, there are areas of consistent low or high air quantity release, or leaks within the piping system, the Contractor shall make all necessary adjustments to correct those deficiencies.
6. If more than one leaking/damaged diffuser holder is found on any one section of air distribution lateral, the entire section must be replaced.
7. All repairs shall be completed in a dry environment. No below water surface repairs shall be permitted.
8. Contractor must allow appropriate time for solvent cement to cure (>24 hours) before retesting.
9. The system must be retested as described above following any repairs. Repeat repairs and testing until all leaking/damaged diffuser deficiencies are resolved.
10. Applying epoxy or solvent cement to repair minor leaks found on exterior of piping, fittings, or diffuser caps will not be permitted.”

PART 3 – DRAWINGS

A. Revisions to Sheet D-7

1. ADD the following General Note:

“7. Contractor shall remove existing grout on clarifier slabs, typical. Coordinate with proposed improvements for new grout installation.”

B. Revisions to Sheet M-11

1. ADD the following General Notes:

- “1. Demolish existing FRP weirs and baffles.
- 2. Remove and dispose of all solids in basins during isolation. It is the Contractor’s responsibility to follow all applicable codes and requirements for solids removal and offsite disposal and to obtain any required permits.
- 3. Provide all new 316 SS hardware for installation of new FRP weirs and baffles.”

C. Revisions to Sheet M-16

1. Detail 1, Coarse Bubble Diffuser, ADD the following Notes:

- “2. Refer to Sheet M-3 for actual diffuser configuration.
- 3. Field welds are not allowed.
- 4. Air header shall be 4” diameter.”

D. Revisions to Sheet E-3

1. REMOVE and REPLACE SHEET E-3 with the attached version.

E. Revisions to Sheet E-15

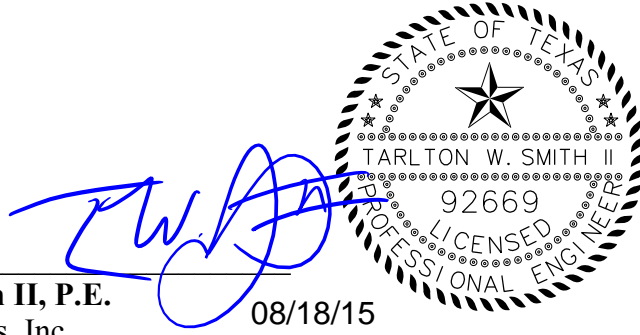
1. Modify the location of Note By Symbol 5 to be associated with the ammonia analyzer in Junction Box “E” and REMOVE and REPLACE the text with the following:

“Contractor shall provide 2 #10, #10G. 1” conduit for power to ammonia analyzer. Source shall be from a provided 30A single phase circuit breaker in the filter control building and field verify available space. The AIC rating of the circuit breaker shall match the AIC rating of the panel. LCC-AM-AN-02 is the wire tag for the ammonia analyzer power conductors. Modify the conductors tag to state: LCC-AM-AN-02P.”

The remainder of the bid documents remains unchanged.

This addendum consists of eighteen (18) pages.

ALL RESPONDENTS SHALL ACKNOWLEDGE RECEIPT OF ADDENDUM NO. 4 IN THE PRICE PROPOSAL FORM AND BY HIS/HER SIGNATURE AFFIXED HERETO AND TO FILE SAME AS AN ATTACHMENT TO HIS/HER PROPOSAL. PRICE PROPOSAL FORMS SUBMITTED WITHOUT THIS ACKNOWLEDGEMENT WILL BE CONSIDERED INFORMAL.



08/18/15

Tarlton W. Smith II, P.E.
Freese and Nichols, Inc.

FREESE AND NICHOLS, INC.
TEXAS REGISTERED
ENGINEERING FIRM
F-2144

ACKNOWLEDGEMENT BY RESPONDENT

THE UNDERSIGNED ACKNOWLEDGES RECEIPT OF THIS ADDENDUM NO. 4 AND THE PROPOSAL SUBMITTED HERewith ARE IN ACCORDANCE WITH THE INFORMATION AND STIPULATION SET FORTH.

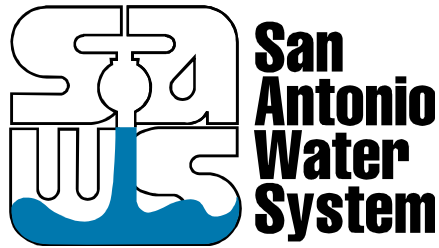
Signature of Respondent

Date

Appended hereto and part of Addendum No. 4 is:

1. CONTRACTOR QUESTIONS AND ANSWERS DOCUMENT
2. SECTION PP-1 "PRICE PROPOSAL"
3. SECTION 01 33 00.01 "TABLE OF REQUIRED SUBMITTALS"
4. SHEET E-3

END OF ADDENDUM NO. 4



2013 Leon Creek Water Recycling Center (WRC) Rehabilitation and Process Improvements

Solicitation No.: CO-00003
SAWS Job No.: 13-6505

Questions and Answers

August 18, 2015

- 1. Question:** Please reference the Table of Contents and section 01 33 00.01 Table of Required Submittals in the specification book. Sections 06 16 00 Sheathing, 07 42 13 Metal Wall Panels, 08 45 23 Fiberglass-Sandwich-Panel Assemblies and 33 05 01.10 Polyvinyl Chloride (PVC) Pressure Pipe and Fittings have not been provided in the specifications book for this project. Will these be added in an addendum?

➤ **Answer:** Please reference Addendum No. 4, Part I, Item B. Section 01 33 00.01 "TABLE OF REQUIRED SUBMITTALS" has been revised to remove the sections that were not included in the specification set.
- 2. Question:** Please reference bid item #9 and the project plans. There is no section or detail on the blower enclosure building, HVAC system, lighting, ect., in the project plans. Will these be added in an addendum?

➤ **Answer:** The scope of work for the blower enclosure is described in the performance specification Section 13 50 00 "BLOWER ENCLOSURE". There are no design plans developed by the Engineer for the enclosure. Existing drawings of the blower canopy (extracted from SAWS Job No. 06-6502) were included as an appendix to the project documents. The full set is available by request from SAWS Contracting.
- 3. Question:** What are the dimensions of existing blower pad and canopy where the new enclosure is to be designed? Please include details of the sizes of the existing structure.

➤ **Answer:** Existing drawings of the blower canopy (extracted from SAWS Job No. 06-6502) were included as an appendix to the project documents. The full set is available by request from SAWS Contracting.

4. **Question:** Please reference Sheet M-17 in the project plans. Detail 1 for the pavement repair detail and detail 2 for the embedded bollard detail are not shown anywhere on the plans to be installed or placed. Where do these items pertain to?
 - **Answer:** The bollard detail (M-17/2) pertains to bollards referenced on the electrical sheets for protection of control panels and additional electrical equipment. The pavement repair detail (M-17/1) pertains to the repair of plant roadway related to the installation of duct banks shown on the electrical sheets. Please see revised Sheet E-3 in Addendum No. 4 for further clarification on the locations of the bollards and pavement repairs.

5. **Question:** On August 28th there is a Water for People event. Can the bid date be changed to the September 1st?
 - **Answer:** No.

6. **Question:** Section 40 90 02; Part 1.01 C.2.c. In previous discussions with the consulting engineering firm, Freese and Nichols, Inc., it is our understanding that Remote PLC Cabinets A & B should each be equipped with a PLC and HMI. The intent is to establish two new stand-alone master control panels in addition to the existing master control panel. Please confirm if this is the intent.
 - **Answer:** Yes, this is the intent.

7. **Question:** Our records indicate that the existing master control panel has conformal coding on the PLC, HMI and Ethernet switches. Please confirm if conformal coding will be required for this solicitation.
 - **Answer:** Yes, conformal coating is added under the 40 90 02 “Supervisory Control and Data Acquisition (SCADA)” specification.

8. **Question:** N-Tron Ethernet switches were supplied with the existing master control panel. Please confirm if N-Tron Ethernet switches are required.
 - **Answer:** N Tron switches will be required in each of the Remote PLC panels.

9. **Question:** Section 40 90 02-13; Part 2.08.A. It appears that the last sentence contains a typo. Please confirm that the UPS is required to provide power for a period not less than 15 minutes.
 - **Answer:** Correct. The UPS shall be required to provide power for a minimum of 15 minutes. Clarification has been made.

10. **Question:** Section 40 90 02-7; Part 2.04.I.1. It is stated that I/O modules shall be segregated on a train basis. Please define the term train. Is this one basin? Multiple basins? Individual control zone?
 - **Answer:** A train is considered to be one basin.

11. **Question:** For section C.1.b.i.-iv. (page SIR-3), would you allow us to list the current WRIP Twin Oaks Pump Station Phase 1 as a similar project, even though it’s not yet completed?

- **Answer:** As noted in Paragraph C.1.b.i. of SIR-3, the projects listed must be completed at the time of submittal.
12. **Question:** I wanted to clarify that we are able to submit all potential subcontractors' information within our proposal and include a checklist of all those subcontractors, but check off which ones will actually be used in our bid price.
- **Answer:** Correct, this method for providing subcontractor information is acceptable as discussed during the pre-proposal meeting.
13. **Question:** In reference to section B.2.IV. (page SIR-3), will the subcontractor information be part of our 50-page count limit?
- **Answer:** Subcontractor information will be counted towards the 50-page limit for all SELECTED subcontractors. Any additional information for subcontractors that are not selected will not be counted towards the 50-page count limit.
14. **Question:** Are team member resumes included in the 50-page count limit?
- **Answer:** Yes, team member resumes are included in the 50-page count limit.
15. **Question:** Refer to system SS-10 in the protective coating schedule, (page 12 of section 09960001). Question: is this system intended to be applied to the new grouted floors in clarifiers 1-4?
- **Answer:** SS-10 is NOT intended to be used on the new grouted floors in clarifiers 1-4.
16. **Question:** Refer to section 2.02B in specification 46 43 21. "All submerged ferrous items shall be hot-dipped galvanized after fabrication". Question: Is the submerged clarifier steel equipment meant to be galvanized only, or to field painted also with system SS-4 in specification 099600.01?
- **Answer:** Per Section 46 43 21, Paragraph 2.02.A, shop prime painting shall be in accordance with Section 09 96 00.01. Galvanized steel shall be shop painted (not field painted) with protective coating SS-4 in accordance to the schedule provided in Section 46 43 21.
17. **Question:** Please note that Siemens is one of the specified final clarifier manufacturers. Their name has been changed to Evoqua Water Technologies. If possible, can their name be changed in the spec by addendum so not to confuse the bidding contractors. Also, Evoqua would like to know if there are any "buy America" rules on this project. They need to know if any of the raw materials need to be sourced out domestically.
- **Answer:** Please reference Addendum No. 4, Part 2, Section E.2. "Siemens" has been revised to "Evoqua Water Technologies (Siemens)". There are no "Buy America" requirements for this project.

PRICE PROPOSAL

PROPOSAL OF _____, a corporation
a partnership consisting of _____
an individual doing business as _____.

THE SAN ANTONIO WATER SYSTEM:

Pursuant to Instructions and Invitation for Competitive Sealed Proposals, the undersigned proposes to furnish all labor and materials as specified and perform the work required for the project as specified, in accordance with the Plans and Specifications for the following prices to wit:

(PLEASE SEE ATTACHED PDF LIST OF PROPOSAL ITEMS)

TOTAL PROPOSAL PRICE

\$ _____

Mobilization shall be limited to the maximum percentage shown. **If the percentage exceeds the allowable maximum stated for mobilization, SAWS reserves the right to cap the amount at the percentages shown and adjust the extensions of the proposal items accordingly.**

RESPONDENT'S SIGNATURE & TITLE

FIRM'S NAME (TYPE OR PRINT)

FIRM'S ADDRESS

FIRM'S PHONE NO. /FAX NO.

FIRM'S EMAIL ADDRESS

The Contractor herein acknowledges receipt of the following:
Addendum Nos. _____

OWNER RESERVES THE RIGHT TO ACCEPT THE OVERALL MOST RESPONSIBLE PROPOSAL.

PROPOSAL

The Respondent offers to construct the Project in accordance with the Contract Documents for the contract price, and to complete the Project within **635** calendar days after the start date, as set forth in the Authorization to Proceed. **The Respondent understands and accepts the provisions of the Contract Documents relating to liquidated damages of the Project if not completed on time.**

Complete the additional requirements of the Proposal which are included on the following pages.

Quotes

Line No.	Item No.	Quote Category	SOV Item	Item Description	Unit	Quantity	Unit Bid Price	Total Price
1	1	General Water Proposal Items	01.4600.00.0002 - Construction	Trench Excavation and Safety Protection- The total amount for furnishing all labor, materials, tools, equipment, and incidentals required for the development, design, and implementation of a trench safety system as required by the Occupational Safety and Health Administration (OSHA) and the assumption of responsibility for said system, in accordance with the contract documents, complete in place.	LS	1		\$ -
2	2	General Water Proposal Items	01.4600.00.0002 - Construction	Chlorination/Dechlorination Electrical and Instrumentation Upgrades- The total amount for furnishing all labor, materials, tools, equipment, and incidentals required to automate the chlorination/de-chlorination system, including chlorine residual analyzers, sampling pumps, sample piping, fiberglass enclosures, and electrical wiring and programming, in accordance with the contract documents, complete in place.	LS	1		\$ -
3	3	General Water Proposal Items	01.4600.00.0002 - Construction	Aeration Electrical and Instrumentation Upgrades provided by Siemens- The total amount for furnishing all labor, materials, tools, equipment, and incidentals required to automate the aeration system, including the installation of 45 D.O. sensors, 47 modulating valves, and 47 air flow meters with completed programming and the installation of the blow-off valve assembly on the 60" main air header line, in accordance with the contract documents, complete in place.	LS	1		\$ -
4	4	General Water Proposal Items	01.4600.00.0002 - Construction	Aeration Basin Improvements- The total amount for furnishing all labor, materials, tools, equipment, and incidentals required for replacement of all membrane diffusers, air grid piping, drop legs, basin headers and related appurtenances for 15 aeration basins, in accordance with the contract documents, complete in place.	LS	1		\$ -
5	5	General Water Proposal Items	01.4600.00.0002 - Construction	Emerson (Distributed Control System [DCS]) Package - The total amount for furnishing all labor, programming, testing, incidentals, and training required for the aeration basin system screen modifications and chemical feed improvements, in accordance with the contract documents, complete in place.	LS	1		\$ -
6	6	General Water Proposal Items	01.4600.00.0002 - Construction	Influent Channel Aeration System- The total amount for furnishing all labor, materials, tools, equipment, and incidentals required for the installation of new header pipes from the main air piping header that spans the distance of the influent channel with new drop legs, coarse bubble diffusers and related appurtenances, in accordance with the contract documents, complete in place.	LS	1		\$ -
7	7	General Water Proposal Items	01.4600.00.0002 - Construction	Clarifier 1-4 Rehabilitation- The total amount for furnishing all labor, materials, tools, equipment, and incidentals required for the replacement of all existing equipment with new suction header type clarification equipment and related appurtenances, in accordance with the contract documents, complete in place.	LS	1		\$ -
8	8	General Water Proposal Items	01.4600.00.0002 - Construction	Clarifier 5-7 Weir and Baffle Replacement- The total amount for furnishing all labor, materials, tools, equipment, and incidentals required for the replacement of all weirs and baffles to match the design elevation, in accordance with the contract documents, complete in place.	LS	1		\$ -

9	9	General Water Proposal Items	01.4600.00.0002 - Construction	Blower Area Building Enclosure- The total amount for furnishing all labor, materials, tools, equipment, and incidentals required for the design, fabrication, and installation of structural members, wall panels, HVAC equipment, acoustical panels, etc. to completely enclose the existing blower area, in accordance with the contract documents, complete in place.	LS	1	\$	-
10	10	General Water Proposal Items	01.4600.00.0002 - Construction	Solids Removal and Disposal- The total amount for furnishing all labor, materials, tools, equipment, dewatering, transportation, and incidentals required for the removal and disposal of all accumulated grit, rags, and other debris accumulated in the aeration basins, influent channel, mixing chamber, RAS channel, and Final Clarifiers No. 1-7, in accordance with the contract documents, complete in place.	DRY TON	42	\$	-
11	11	General Water Proposal Items	01.4600.00.0002 - Construction	Concrete Crack Repair- The total amount for furnishing all the necessary materials, labor, tools, equipment and other incidentals required to repair or modify part of the existing concrete that show minor cracking at the aeration basin influent channel, aeration basins and final clarifiers per Section 03 90 10 Concrete Crack Repair and the contract documents, complete in place.	LF	200	\$	-
12	12	General Water Proposal Items	01.4600.00.0002 - Construction	Subsurface Utility Investigation- This item includes all the labor, equipment, tools, materials and incidentals required to complete the task of utility location and depth verification to identify all underground tie-in locations and underground utility conflicts with the proposed improvements. CONTRACTOR shall be required to hydro vacuum extract, hand dig, or otherwise perform the excavation in a manner that does not harm the existing utilities.	LS	1	\$	-
13	13	General Water Proposal Items	01.4600.00.0002 - Construction	Permitting Fees- Allowance for \$25,000.00 permitting fees associated with the project. This shall include furnishing all labor, materials, tools, equipment and incidentals required to obtain all necessary permits. Contractor to pay and be reimbursed actual amount by SAWS.	LS	1	\$	-
14	14	General Water Proposal Items	01.4600.00.0002 - Construction	Pre-startup/Commissioning Construction Items- Allowance for \$100,000.00 for unforeseen construction related items (not included in the project scope) associated with the pre-start up, start-up and commissioning services that are necessary to provide for an operational and functional system. This shall include furnishing all labor, materials, tools, equipment and incidentals required to construct these project related items at SAWS request's and to be negotiated under the contract terms and conditions for complete in place.	LS	1	\$	-
15	15	General Water Proposal Items	01.4600.00.0002 - Construction	Mobilization and Demobilization- This item includes project move-in and move-out of personnel and equipment, for work shall include furnishing all labor, materials, tools, equipment and incidentals required to mobilize, demobilize, bond and insure the Work for the Project, in accordance with the contract documents, complete in place. Maximum of 3% of the total of Line Items 1 through 12.	LS	1	\$	-

01 33 00.01 TABLE OF REQUIRED SUBMITTALS

1.00 GENERAL

1.01 REQUIRED SUBMITTALS

- A. The following tabulation list the anticipated submittals required for each Submittal Section. Each Specification section may provide more detailed information regarding the data to be provided for each product, materials, equipment or component required by the specification. Provide additional documentation as required by the Contract Documents in accordance with Section 01 33 00 "Submittal Procedures" and each Specification section and as reasonably requested by the Owner and Engineer.
- B. Incorporate each submittal in the Construction Schedule and Indicate the date each submittal is anticipated to be submitted.

2.00 PRODUCTS (NOT APPLICABLE)

3.00 EXECUTION (NOT APPLICABLE)

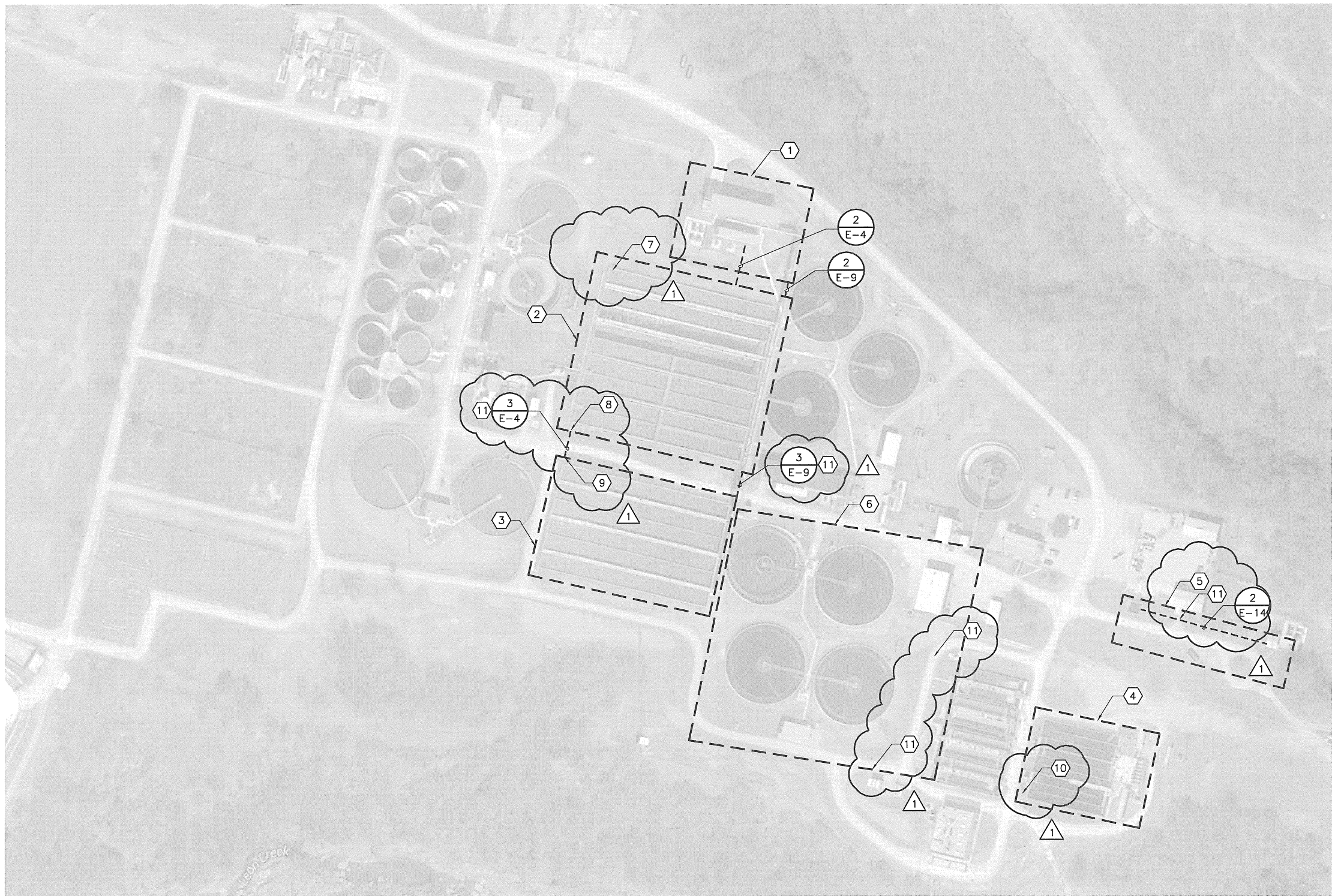
ANTICIPATED SUBMITTAL SCHEDULE													
Spec Number	Description	Shop Drawing	Sample	Certified Test Report	Certification of Local Field Service	Extended Warranty	Extended Service Agreement	Certificate of Adequacy of Design	Certification of Applicator/Subcontractor	Record Data	Operation and Maintenance Manuals	Equipment Installation Report	Process Performance Bond
01 29 00	Schedule of Values	X											
01 31 00	Safety Plan	X											
01 32 34	Video and Photographic Documentation									X			
01 35 00	Special Procedures (Construction Sequencing Plan and Shutdown Plans of Action)	X											
01 40 00	Quality Requirements			X						X			
01 57 00	Temporary Controls									X			
02 41 00	Demolition, Cutting and Patching									X			
02 90 01	Facility Cleaning	X											
03 30 53	Miscellaneous Cast-In Place Concrete	X		X									
03 60 00	Grout	X											
03 90 00	Modifications and Repair to Concrete									X			
03 90 10	Concrete Crack Repair									X			
05 52 00	Aluminum Handrails and Railings	X	X										
06 82 10	Fiberglass Weirs, Baffles, and Troughs	X				X						X	

ANTICIPATED SUBMITTAL SCHEDULE													
Spec Number	Description	Shop Drawing	Sample	Certified Test Report	Certification of Local Field Service	Extended Warranty	Extended Service Agreement	Certificate of Adequacy of Design	Certification of Applicator/Subcontractor	Record Data	Operation and Maintenance Manuals	Equipment Installation Report	Process Performance Bond
07 42 13	Metal Wall Panels	X	X	X							X		
08 33 23	Overhead Coiling Doors	X	X								X		
09 96 00.01	High-Performance Coatings	X	X	X					X				
13 35 00	Blower Enclosure	X	X	X				X	X	X	X	X	X
26 05 00	Common Work Results for Electrical												
26 05 19	Low-Voltage Electrical Power Conductors and Cables	X		X		X							
26 05 26	Grounding and Bonding for Electrical Systems	X		X									
26 05 29	Hangers and Supports for Electrical Systems	X											
26 05 33.01	Conduits	X											
26 05 33.02	Wireways	X											
26 05 33.04	Pull and Junction Boxes For Electrical Systems	X											
26 05 53	Identification for Electrical Systems	X											
26 05 73	Overcurrent Protective Device Coordination Study	X									X		
26 24 16.01	Distribution Panelboards	X				X					X		
26 29 13.01	Vendor Furnished Panels	X				X					X	X	

ANTICIPATED SUBMITTAL SCHEDULE													
Spec Number	Description	Shop Drawing	Sample	Certified Test Report	Certification of Local Field Service	Extended Warranty	Extended Service Agreement	Certificate of Adequacy of Design	Certification of Applicator/Subcontractor	Record Data	Operation and Maintenance Manuals	Equipment Installation Report	Process Performance Bond
26 36 00	Transfer Switches	X				X					X		
32 92 13	Hydro-Mulching									X			
33 12 16.26	Butterfly Valves for Low Pressure Air	X		X		X					X		
33 35 30	Miscellaneous Valves	X									X		
40 05 13	Plant Piping - General	X											
40 05 13.23	Piping System, Stainless Steel	X		X		X							
40 05 13.73	Piping System, PVC and CPVC			X						X			
40 05 14	Piping Specialties	X									X		
40 05 15	Supports and Hangers	X											
40 05 53	Identification for Process Piping and Equipment	X								X			
40 80 00	Commissioning of Process System	X									X		
40 90 00	Instrumentation and Control for Process Systems	X				X					X		
40 90 01	Instrumentation	X				X					X		
40 90 02	Supervisory Control and Data Acquisition (SCADA) System	X		X							X		
40 90 02.01	Distributive Control Systems and SCADA (DCSS)	X		X		X					X		

ANTICIPATED SUBMITTAL SCHEDULE													
Spec Number	Description	Shop Drawing	Sample	Certified Test Report	Certification of Local Field Service	Extended Warranty	Extended Service Agreement	Certificate of Adequacy of Design	Certification of Applicator/Subcontractor	Record Data	Operation and Maintenance Manuals	Equipment Installation Report	Process Performance Bond
46 20 01	Equipment General Provisions												
46 43 21	Final Clarifier Equipment	X		X		X					X	X	
46 51 20	Fine Bubble Diffuser System	X		X		X					X	X	
46 51 21	Coarse Bubble Diffuser System	X		X		X					X	X	
Sheet M-13	FRP Enclosure	X				X							
Sheet M-13	Sample Pump	X											

END OF SECTION



1 OVERALL SITE PLAN
1" = 100'

NOTES BY SYMBOL "⬡"

1. BLOWER AND ELECTRICAL BUILDING AREA, RE: 1/E-11 FOR ADDITIONAL WORK IN THIS AREA.
2. AERATION BASINS 7-15 AREA, RE: 1/E-8 FOR ADDITIONAL WORK IN THIS AREA.
3. AERATION BASINS 1-6 AREA, RE: 1/E-7 FOR ADDITIONAL WORK IN THIS AREA.
4. CHLORINE CONTACT BASIN AREA, RE: 1/E-13 FOR ADDITIONAL WORK IN THIS AREA.
5. DIVERSION BOX "D" AREA, RE: 1/E-14 FOR ADDITIONAL WORK IN THIS AREA.
6. CLARIFIERS AREA, RE: 1/E-15 FOR ADDITIONAL WORK IN THIS AREA.
7. CONTRACTOR SHALL INSTALL TWO BOLLARDS IN FRONT OF PANELS 13 AND 13A. RE: 2/M-17 FOR DETAILS.
8. CONTRACTOR SHALL INSTALL TWO BOLLARDS IN FRONT OF PANEL 13B. RE: 2/M-17 FOR DETAILS.
9. CONTRACTOR SHALL INSTALL TWO BOLLARDS IN FRONT OF PANEL 13C. RE: 2/M-17 FOR DETAILS.
10. CONTRACTOR SHALL INSTALL TWO BOLLARDS IN FRONT OF MEDIA CONVERTER PANEL. RE: 2/M-17.
11. CONTRACTOR SHALL PATCH ASPHALT AFTER INSTALLING DUCT BANK. RE: 1/M-17 FOR DETAILS.

App.	JWM	Revisions	ADDENDUM NO.4	Freese and Nichols, Inc. Job No. SWB14115
Date	8/18/15	No.	1	Freese and Nichols, Inc. Texas Registered Engineering Firm F-2144 9/19/2015

Date:	SEPT. 2014
Designed by:	JWM
Drawn by:	CJR
Checked by:	JWM
Scale:	

FREESSE & NICHOLS
4040 Broadway Street, Suite 800
San Antonio, Texas 78209-6350
Phone - (210) 298-3800
Fax - (210) 298-3801

SAN ANTONIO WATER SYSTEM

SAWS JOB NO. 13-6505
2013 LEON CREEK WRC REHABILITATION AND PROCESS IMPROVEMENTS
OVERALL SITE PLAN

