



Council Agenda Report

From: Matt Thompson, Wastewater Resources Manager

Subject: Approval of Professional Services and Procedures for Construction of Tertiary Treatment Facilities

Date: February 7, 2017

Facts

A. Project Background

1. Recycled water is a component of the City's Urban Water Management Plan, both to conserve drinking water and to reduce demand on the Paso Robles Groundwater Basin.
2. City Council adopted a Recycled Water Master Plan in 2014. The Plan includes installation of tertiary (advanced) treatment facilities at the City's wastewater treatment plant to produce high quality recycled water and a purple piping system to distribute the recycled water to east Paso Robles, where it may be used to offset groundwater pumping for uses such as vineyard and golf course irrigation.
3. In 2014 and 2015, City Council authorized Black & Veatch (with the Covello Group) to design the Tertiary Treatment Facilities. The design is now complete and the project is ready to advertise for construction bids.
4. Preliminary design of the Recycled Water Distribution System is now underway. Details of this project routing, pipe sizing, turn out valves, and such are currently being design by RMC (contract engineers). This project (the purple pipe system) will come back for a City Council update when the Tertiary Treatment Facilities comes back to the City Council in May for bid award.
5. The Tertiary Treatment Facilities will include flow equalization, cloth media filtration, disinfection by ultraviolet light, and recycled water storage and pumping facilities. These facilities will cost approximately \$17.2 million (total project cost, including engineering and construction management services). Construction will take approximately 18 months.
6. The Tertiary Treatment Facilities will not only produce recyclable water, but also enable the City to comply with increasingly stringent requirements for discharge of wastewater to the Salinas River.

B. Services Needed for Construction Phase

7. Black & Veatch's engineering services are now needed for the bidding, construction, and startup phases of the project (commonly called "engineering services during construction"). These services differ from design and include important tasks such as review of technical submittals by the contractor, responding to requests for information, and preparation of as-built record drawings. Black & Veatch's fee for these services is \$967,225. Black & Veatch's detailed scope of work and fee document is attached, and is consistent with industry standards for this type and size of project.
8. Construction of the project will be complex and beyond the capacity of City staff to manage alone. The City requires the services of a professional firm that is experienced in management of large and complex treatment plant construction projects.
9. In 2012, after a qualifications-based selection process, the City hired Covello Group to manage construction of the Wastewater Treatment Plant (WWTP) Upgrade. In 2015, the City extended its contract with Covello Group for pre-construction services for the Tertiary Treatment Facilities. These services included special reviews of the plans and specifications to improve the project's biddability and constructability. Covello Group's services are now needed for the construction and startup phases of the project. Covello Group's scope of services will include materials testing (e.g.,

soil compaction and concrete strength), inspection, troubleshooting, and records management. Covello Group's fee for these construction management services is \$1,376,575. The detailed scope of work and fee document is attached, and is consistent with industry standards for this type and size of project.

10. SWCA Environmental prepared all environmental studies and documents for Tertiary Treatment Facilities and supported the City during the environmental review process. SWCA's services are now needed for environmental monitoring and reporting during the construction phase of the project, in order to meet the requirements of the low-interest loan and grant program. SWCA's fee for these services is \$59,791. SWCA's detailed scope of work and fee document is attached.
11. All three of these professional firms are proposing to use the same personnel that the City employed for the Wastewater Treatment Plant Upgrade. That project was successfully completed for \$2.4 million under budget, and with construction contract change orders that amounted to only 4.2% of the original construction contract value.

C. Funding & Financing

12. The Sewer Enterprise Fund will fund the project. In fall 2015, the City updated its Wastewater Rate Study, including the \$17.2 million cost of Tertiary Treatment Facilities. The project was subsequently included in the City's most recently adopted 2-year budget.
13. The City applied to the State's Revolving Fund (SRF) Loan Program for a low-interest loan and possible grant. In fall 2016, SRF completed its environmental review and credit review process. SRF staff informed the City the project is eligible for a low-interest loan and may be eligible for up to a \$4 million grant from the Green Project Reserve program.
14. SRF staff is currently preparing the financing agreement and has stated the agreement will be completed by March 2017. The financing will be in place well prior to City Council consideration of award of the construction contract.
15. Staff is preparing to advertise the Tertiary Treatment Facilities project for construction bids in late February 2017, with the intent to return to City Council in May 2017 for consideration of award of a construction contract. This will enable construction to begin in early summer 2017, thus benefiting from the dry construction season and minimizing construction duration and cost.

D. Change Order Procedures

16. Construction will occur at an active and crowded treatment plant site. Construction includes extensive underground work and complex mechanical and electrical systems. Although the City has taken extra precautions to eliminate uncertainties and potential surprises, there may be site conditions that differ from the plans and specifications and justify changes to the cost and duration of construction.
17. While we are taking actions to reduce the number and costs, there may be a number of change orders over the course of construction. Efficient processing of change orders is essential to keep construction on schedule and within budget.
18. The City's existing *Purchasing and Payment Procedures Manual* authorizes the City Manager to approve change orders (in total) up to 10% of the awarded contract amount.
19. In order to prevent delays that could result in additional project cost and/or claims by the contractor, the City Manager will need to delegate authority to approve smaller individual change orders to the Public Works Director, Wastewater Resources Manager, and Construction Manager.
20. The attached resolution would approve the following procedures regarding change orders during construction of the Tertiary Treatment Facilities Project:
 - The Public Works Director is authorized to approve individual change orders up to \$75,000. The City Manager must approve individual change orders greater than \$75,000;
 - The Wastewater Resources Manager is authorized to approve individual change orders up to \$20,000; and
 - In the event the contractor encounters a time-sensitive problem where time is not available to negotiate a settlement in advance of performing the work, the Construction Manager is

authorized to issue a field order to a maximum value of \$10,000 only if the Wastewater Resources Manager or Public Works Director can't be reached. All work done under a field order will be completed on a time-and-materials basis.

21. These are the same change order procedures that City Council approved for the WWTP Upgrade Project. These procedures effectively prevented delays and contractor claims for that project.

Options

1. Do nothing;
2. Authorize the City Manager to: 1) extend an agreement with Black & Veatch for engineering services during construction for an amount of \$967,225; 2) extend an agreement with Covello Group for construction management services for an amount of \$1,376,575; and 3) extend an agreement with environmental monitor SWCA Environmental for an amount of \$59,791; and 4) approve Resolution No. 17-XXX regarding construction change order procedures for the Tertiary Treatment Facilities project;
3. Amend or modify Option 2;

Analysis and Conclusions

The proposed Engineer, Black & Veatch, demonstrated good performance during all phases of the recently completed WWTP Upgrade project and design of the Tertiary Treatment Facilities. It would be in the City's best interest to retain Black & Veatch for engineering services during construction. Black & Veatch's fee for the entire scope of engineering services during construction of \$967,225. This is 6.9% of estimated construction value, which is normal for a project of this size and complexity, and an 18-month construction timeline.

The proposed Construction Manager, Covello Group, has extensive experience managing large and complex wastewater treatment plant construction projects for small cities, experience with SRF loan program requirements, demonstrated ability to deliver quality projects on time and within budget, and has excellent communication and dispute-avoidance-and-resolution skills. Covello Group helped the City successfully complete the WWTP Upgrade within budget. Covello Group is already familiar with the project site and City operations staff. Covello Group is in the best position to effectively and efficiently manage construction of the Tertiary Treatment Facilities. Covello Group's proposed fee of \$1,376,575 is 9.8% of estimated construction value, which is normal for a project of this size and complexity, and an 18-month construction timeline.

The Construction Manager and Engineer will have important differences in their roles during construction of the Tertiary Treatment Facilities. The Construction Manager will be the City's on-site representative and inspector in nearly all dealings with the Contractor, whereas the Engineer will have a more background technical support role. The Construction Manager specializes in construction procedures and will be primarily responsible for keeping the Contractor on schedule and within budget, whereas the Engineer specializes in treatment plant design and will be primarily responsible for providing the Contractor with technical information needed to properly build the project. This separation of functions helps keep all parties accountable and generally results in a high quality finished product.

Fiscal Impact

The proposed expenditures are part of the project costs that were included in the City's most recently adopted 2-year budget. These costs will be incorporated into the low-interest SRF loan. If the City receives a Green Project Reserve grant (up to \$4 million) it would lower the amount of the SRF loan and reduce the overall cost to the ratepayer. The City will pay back the SRF loan over 20 years, starting one year after completion of construction. These debt payments will come from the Sewer Enterprise Fund. Revenues from the sewer rates and facility charges adopted in 2011 (and reviewed in 2015) are sufficient to cover the debt payments.

Recommendation

Approve Option 2:

1. Authorize the City Manager to: 1) extend an agreement with Black & Veatch for engineering services during construction for an amount of \$967,225; 2) extend an agreement with Covello Group for construction management services for an amount of \$1,376,575; and 3) extend an agreement with environmental monitor SWCA Environmental for an amount of \$59,791;
2. Direct the City Manager and City Attorney to make any minor changes in the above agreements that are found necessary and consistent with the Council's overall direction;
3. Approve Resolution No. 17-XXX regarding construction change order procedures for the Tertiary Treatment Facilities project.

Attachments

1. Black & Veatch scope of work and fee
2. Covello Group scope of work and fee
3. SWCA Environmental scope of work and fee
4. Resolution No. 17-XXX, Change Order Procedures for Tertiary Treatment Facilities

City of Paso Robles Tertiary Treatment Facilities Project

Scope of Services for Design Refinement, Bid Phase, Engineering Services during Construction, and Start-Up Services

January 26, 2017

The City of El Paso de Robles (City or City of Paso Robles) owns and operates a 4.9 million gallon per day (MGD) secondary wastewater treatment plant (WWTP or plant). The WWTP is located at 3200 Sulphur Springs Road in Paso Robles. Current flows treated at the plant average 2.5 MGD. The WWTP was recently upgraded to a Biological Nutrient Removal (BNR) secondary treatment process and the upgraded facilities have been in operation since 2015.

To meet the current and anticipated discharge regulations, the City has retained Black & Veatch (B&V or Engineer) to provide the engineering services for the design of the Tertiary Treatment Facilities at the WWTP.

The Project is being implemented in three phases:

- ▶ Phase 1 – Environmental Documentation, Preliminary Design
- ▶ Phase 2 – Final Design, Constructability Review, Project Financing, and Permitting
- ▶ Phase 3 – Bid Phase and Construction

Phase 1 is complete and Phase 2 is nearing completion. B&V scope of services for Phase 3 includes refinement to plans prior to bidding, bid phase services, engineering services during construction, start-up, O&M manual, and training services. The scope of work is based on the understanding that the City will contract for construction management services through a third party (CM).

The scope of work is based on the following schedule:

Design Refinements Complete and Issue Bid Set – February 15, 2017

Bid Phase – February 15 to April 15, 2017

Contract Award and Execution – April 15 to June 2, 2017

Construction NTP – June 5, 2017

Construction Duration – 18 months

The following attachments are included with this scope of work

Attachment A – Estimated Level of Effort

Attachment B – Billing Rate Schedule

January 26, 2017

Scope below presents the detailed activities to be performed.

TASK 1. DESIGN REFINEMENTS PRIOR TO BIDDING

Task 1.1. Design Coordination

Engineer will participate in conference calls as required to complete the design refinements prior to bidding. Engineer will coordinate with the City and the CM to complete the design refinements.

Task 1.2. Design Refinements

B&V design refinement effort will include updating the design drawings and specifications to incorporate the following items:

- Incorporate comments from the City and CM on the 95% design submittal.
- Incorporate comments from the 95% design review meeting conducted on November 17, 2016
- Incorporate Plan Check Review Comments and resubmit the plans and specifications for final review and approval. As discussed with the City, the final bidding documents will be submitted to the City plan check department.
- Incorporate feedback from the Deep Soil Mixing Specialty Contractors and Fugro Engineers into the design.
- Finalize front end documents.
- Coordinate with PG&E related to electrical service upgrade required for the new facilities.

TASK 2. BID PHASE SERVICES

Engineer shall assist the City during the bid phase of the Project, including the following services:

Task 2.1. Pre-Bid Meeting

The pre-bid meeting will be attended by PM, EM, and Staff Engineer. The budget for this task has been developed based on a 4 hour meeting, plus travel time and expenses. The CM will be responsible for conducting the meeting and for preparation of agenda and meeting notes. Engineer will present a technical overview of the Project at the meeting.

Task 2.2. Response to Bidder's Questions

Engineer shall log and review bidder's questions received by the City. Responses will be prepared, as required, and will be sent in the form of project addenda (see Task 2.3 below).

Task 2.3. Preparation of Addenda

Engineer shall produce addenda, as required, and send electronically to the City for their distribution to the bidders. If a portion of a drawing requires clarification, an 8-1/2 x 11 sheet will be prepared and included with the addenda for clarification. The budget for this task has been developed based on preparation of up to two addenda during the bidding period.

Task 2.4. Bid Evaluation Assistance.

As requested by the City, the Engineer will provide assistance to help City and CM for technical considerations such as named equipment manufacturers.

Task 2.5. Conformed to Bid Documents

Engineer shall incorporate changes issued in the Addenda and produce Conformed to Bid drawings and specifications for use by the City, CM, and the Contractor. The conformed to bid documents will be produced and five full size copies of the drawings and specifications along with a CD of PDF documents will be sent to the City for distribution to the CM and selected Contractor.

TASK 3. ENGINEERING SERVICES DURING CONSTRUCTION

Task 3.1. Review of Shop Drawings and Submittals

Shop drawings and other data submitted by the Contractor as required by the construction contract documents shall be reviewed by the Engineer. Review shall be for general conformity to the construction contract drawings and specifications for the Project and shall not relieve the Contractor of any of his contractual responsibilities. Such reviews shall not extend to means, methods, techniques, sequences, or procedures of construction or to safety precautions and programs incident thereto.

The budget for this task has been based on the review of One Hundred and Seventy Five (175) shop drawings and includes provisions for an initial review and a second review of eighty (80) submittals (total of 1,156 hours). The contractor will be responsible for paying for third and greater submittals through deductions from progress payments or through credit change orders.

Submittal review comment sheets will be provided to the Construction Manager in electronic format (Acrobat PDF files). Annotated shop drawings will not be provided.

Task 3.2. Review and Evaluation of Contractor's Request for Information

The Engineer shall interpret the construction contract drawings and specifications, and respond to the Construction Manager in writing to Requests for Information (RFIs) from the Contractor relating to the design. The budget for this task is based on receipt of one hundred and eighty (180) RFIs including the CM and Contractor RFIs (total of 1,160 hours). This assumes that field issues, not needing design interpretation, will be handled directly by the CM and not forwarded to the Engineer for review).

Responses to RFIs will be provided to the Contractor in electronic format (Acrobat PDF files).

Task 3.3. Prepare Design Changes

The Engineer shall prepare design changes, as required, to facilitate the project construction. Design changes will be provided to the CM in electronic format (Acrobat PDF files) for approval and transmittal to the Contractor. The CM shall prepare the actual change order document and negotiate the change order with the Contractor. The budget for this task has been developed based on preparation of Seven (7) design changes (total of 316 hours).

Task 3.4. Review and Evaluate Change Orders

The Engineer shall participate in review of time/cost of change orders, resulting from the issuance of design changes, as requested by the City or CM. Recommendations shall be provided to the City regarding the validity and proposed cost associated with change order requests. The CM shall prepare the actual change order document and negotiate the change order with the Contractor. The budget for this task has been developed based on review of two (2) Change Orders (total of 52 hours).

Task 3.5. Construction Site Visits and Special Inspection

The Engineer shall conduct site visits, specialty inspection and witness testing as follows:

- One B&V Engineer will conduct monthly site visit to the construction site to observe progress of the work and consult with the City, the CM, and Contractor. The Engineer will tour the construction on weeks when progress meetings are attended in person. A total of 18 site visits are included in this task corresponding to the meetings under Task 5.1. Expenses for the visits are included under Task 5.1.
- The Engineer shall attend the control system Factory Acceptance Test. The budget for this task has been developed based on one visit to the control system supplier's facility (24 hours (budgeted including travel time) by one engineer.
- Engineer will witness the factory acceptance test for the UV Disinfection System as specified in Section 13704. The factory witness testing will be attended by B&V PM and Process Engineer. For budgeting purposes, 40 hours of time and expenses are budgeted for each person.
- Geotechnical field observation services will be provided by the Engineer's geotechnical subconsultant to confirm the exposed conditions are consistent with the geotechnical investigation report. In addition, the geotechnical consultant will also review the ground improvement design submittal and perform limited observation and testing of the Cement Deep Soil Mixing (CDSM) ground improvement in the recycled water pump station area. Fugro's proposal is included in Attachment C.

Task 3.6. Conformed to Construction Record Drawings

Engineer will utilize the Contractor's red-lined set of drawings to prepare a Conformed to Construction Record Drawing set. One set of 11x17 hard copy drawings will be submitted to the City along with AutoCAD electronic files. Specifications will not be updated.

TASK 4. START-UP AND COMMISSIONING ASSISTANCE

Task 4.1. Start-up and Commissioning Team Coordination Meetings

A start-up and commissioning team will be identified for the Project which shall be comprised of the City's representatives, Engineer's start-up and commissioning staff, CM, and other parties as identified by the City. The purpose of this team will be to oversee implementation of the start-up and commissioning plan by the Contractor. The CM will arrange coordination meetings between the team and the Contractor(s) prior to the start-up and commissioning phase of the project to confirm that the start-up and construction plan is successfully implemented and to address issues as they arise. The following meetings/conference calls are anticipated as part of this activity.

- ▼ One-eight (8) hour kick-off meeting with the Contractor to discuss the start-up requirements and work sequencing requirements.
- ▼ One -eight (8) hour meeting for coordination at the onset of /during the start-up phase.
- ▼ Engineer's start-up team will participate in the weekly/bi-weekly conference calls organized by the CM. For budgeting purposes, it is assumed that the Engineer's startup team will participate in six (6) conference calls.

Task 4.2. Start-up and Commissioning Assistance

During the Project start-up and commissioning phase, the Start-up and Commissioning Team will work closely with the Contractor and the City and provide assistance to facilitate start-up of the facilities. For budgeting purposes, the following start-up assistance effort is included:

- ▼ Facility Operation Team (1 Person). B&V operation specialist will be available by phone or email to provide assistance to the City as needed during startup and commissioning and for coordination and review of Contractor's start-up plan. For budgeting purposes, 48 hours of time is included.
- ▼ Controls and SCADA Team (1 Person). Two trips, each 5 days duration (not including weekends) are budgeted. All expenses associated with the trips including travel, accommodation, etc. are included. Additional time of 20 hours is included for coordination with the City and CM via phone.

Task 4.3. Assistance During UV Disinfection System – Spot Check Bioassay Testing Validation (Field Validation of Full Scale UV System)

As required by NWRI guidelines, a Spot Check Bioassay testing is required to validate the full scale UV system installed under the Project. This validation needs to be performed by an independent entity approved by California State Water Resources Control Board – Division of Drinking Water (CA-DDW). The test protocol and the test results need to be approved by CA-DDW. The Contractor will hire a third party independent entity to develop the test protocol and assist in getting DDW approval. B&V will provide the following assistance related to the onsite validation testing services:

- ▼ Coordination with the Third Party Entity hired by the Contractor and the UV System Supplier in the development of test protocol.
- ▼ Provide assistance as needed by the City during the DDW protocol review and approval process.

- ▼ Witness onsite validation test conducted by the UV System Supplier and the Contractor. 40 hours of onsite time is budgeted.
- ▼ Review the test report generated by the Contractor and UV System Supplier-hired third party entity and provide comments. 8 hours' time is budgeted to meet with DDW as requested by the City.

All costs associated with retesting, if required, would be borne by the UV vendor, as stipulated in the technical specifications.

TASK 5. PROJECT MANAGEMENT

Task 5.1. Weekly Progress Meetings

The Contractor and/or Construction Manager (CM) will facilitate weekly progress meetings at the project site to coordinate activities and discuss project status with the City, CM, and Engineer. Engineer will participate either by phone or in person at weekly meetings.

The following assumptions have been used to establish the budget for this task item:

- Construction duration – 18 months, assumes a total of 78 weekly meetings;
 - Project Manager (PM) will attend 14 meetings by phone and 5 meetings in person
 - Engineering Manager (EM) will attend 26 meetings by phone and 7 in person
 - Staff Engineers (2) will attend 69 meetings by phone and 9 meetings in person
 - Contractor and/or CM shall be responsible for preparation of agenda and meeting notes

It is assumed that a maximum of two people will attend each meeting to maximize coverage.

Task 5.2. Monthly Progress Reports / Invoicing

Monthly progress reports summarizing the status of the work will be prepared and submitted with the monthly invoices. Progress reports will include the following:

- ▶ A brief summary of each task that is completed, in-progress, or pending during the reporting period
- ▶ An estimate of the percentage complete for each task (i.e. a report on the number of submittals and RFIs processed)
- ▶ Summary of activities of subconsultants during the reporting period
- ▶ Explanation of deviations from the approved scope
- ▶ Summary of costs incurred during the period

Task 5.3. Project Administration

Project administration activities will include project documents log and file activities, scope, schedule, and budget status review, internal team coordination, and coordination with the CM and the City on project related matters.

ASSUMPTIONS

- By performance of this Scope of Work, Engineer shall not have the authority or responsibility to supervise, direct, or control the Contractor's work or the Contractor's means, methods, techniques, sequences, or procedures of construction. Engineer shall not have authority or responsibility for safety precautions and programs incident to the Contractor's work or for any failure of the Contractor to comply with laws, regulations, rules, ordinances, codes or orders applicable to the Contractor furnishing and performing the work.
- This scope of work does not include Construction Management or inspection services unless specifically noted in this Scope of Work. Engineer shall not be responsible for any materials testing or survey during construction.
- Engineer staff working in the field will utilize available space within the Construction Manager's field offices, or at the City's Operations Building.
- The Project's Information Management and Document Control System (IMS/DCS) "Procore", established by the CM organization will be used for storage and transmittal of project related information. Engineer shall utilize the selected system, as available to Engineer, but will not be responsible for purchasing/installing/training on an IMS/DCS for this Project.
- Control system programming and configuration services are not provided by the Engineer.
- Engineer has not included efforts for One Year Warranty participation with the City and CM. This assignment and effort can be coordinate with the City upon Project Completion.
- Engineer has not included the effort required to prepare the Engineering Report to secure Title 22 Recycled Water Permit
- Engineer has not included the effort associated with bid protests and rebidding
- Engineer has not included any effort associated with litigation, arbitration, or any legal proceedings in connection with bid protests, change orders, or construction incidents.

SUPPLEMENTAL SERVICES

Supplemental services are not in the scope of work for this contract. These services will be performed at Owner's request with compensation adjustments. Supplemental services that Owner might choose to add to the scope of services include, but are not limited to, the following items.

- Supplemental engineering work required to meet the requirements of regulatory or funding agencies that become effective subsequent to the date of this agreement is not included.
- Post-Construction Operations Assistance. B&V process engineer will be available to assist the City during operation of the newly commissioned facilities.

COMPENSATION

Refer to the attached estimated level of effort and billing rate schedule attached. Contract terms shall remain the same as the current contract for Final Design.

PROJECT TEAM

Our project team is as listed below:

Project Manager – Ashu Shirolkar

Engineering Manager – Ron Brown

Process Engineer – Gary Hunter, Ed Kobylinski

Staff Engineers – Kaitie Zusy, Kevin Reel

Attachment A
Estimated Level of Effort

City of Paso Robles Tertiary Treatment Plant Design Refinements, Bid Phase, Engineering Services During Construction, and Start-up Services Estimated Level of Effort																							
Task No.	Task Description	Classification	Project Mgr	Eng Mgr	Engineering								CAD Technicians		Estimating	Admin	Total Hours	Labor Cost	Direct Expenses	Sub-Cons	Total Cost		
					Specialist QA / QC	Senior Engineers	Staff Engineers	Architect	Structural	Geotech	Electrical	I&C	Mech Bldg Services	Senior Technician								Technician	
					Avg Rate	\$ 240	\$ 240	\$ 200	\$ 150	\$ 135	\$ 150	\$ 160	\$ 195	\$ 175								\$ 175	\$ 150
1	DESIGN REFINEMENTS PRIOR TO BIDDING																						
1.1	Design Coordination		16	32																			
1.2	Design Refinements		24	40	24	80	240	24	40	24	40	40	24	80	160		80						
	SUBTOTAL - DESIGN REFINEMENTS PRIOR TO BIDDING		40	72	24	80	240	24	40	24	40	40	24	80	160	0	80		968	\$ 144,760	\$ 8,470	\$ -	\$ 153,230
2	BID PHASE SERVICES																						
2.1	Pre-Bid Meeting		12	12			12																
2.2	Reponse to Bidder's Questions			8		16	16								8		24						
2.3	Preparation of Addenda			16		32	32	6	12	8	12	12	4	4	24		60						
2.4	Bid Evaluation Assistance		2	8		8																	
2.5	Conformed to Bid Documents			8		8	8							8	40		16						
	SUBTOTAL - BID PHASE SERVICES		14	52	0	64	68	6	12	8	12	12	4	12	72	0	100		436	\$ 62,460	\$ 4,820	\$ -	\$ 67,280
3	ENGINEERING SERVICES DURING CONSTRUCTION																						
3.1	Review of Shop Drawings and Submittals		40	80		160	800										76						
3.2	Review and Evaluation of Contractor's Request for Information		40	120		180	780										40						
3.3	Prepare Design Changes		8	40	12	80	80								80		16						
3.4	Review and Evaluate Change Orders		4	8		12	12									12	4						
3.5	Construction Site Visits and Special Inspections																						
	Site Vists		60	84			216																
	Special Inspections (Structural Inspections - NOT INCLUDED)								0														
	Witness Control System FAT										24												
	Witness FAT for UV Disinfection System		40		40																		
	Geotechnical Field Observation Services			16		16																	
3.6	Conformed to Construction Record Drawings		4	16			120								140								
	SUBTOTAL - ENGINEERING SERVICES DURING CONSTRUCTION		196	364	52	448	2,008	0	0	0	24	0	0	220	12	136		3,460	\$ 357,880	\$ 44,290	\$ 27,615	\$ 597,425	
4	START-UP AND COMMISSIONING ASSISTANCE																						
4.1	Start-up and Commissioning Team Coordination Meetings																						
	Kick-off Meeting		8	8	16												4						
	Pre-Startup Meeting		8	8	16												4						
	Conference Calls		6	6	12	6																	
4.2	Start-up and Commissioning Team Assistance																						
	Facility Operation Team Assistance		4	4	40																		
	Controls and SCADA Programming Team		4	20	100																		
4.3	Onsite Validation Testing Related Assistance		4	8	80												16						
	SUBTOTAL - START-UP AND COMMISSIONING ASSISTANCE		34	54	264	6	0	0	0	0	0	0	0	0	0	24		382	\$ 76,980	\$ 14,860	\$ -	\$ 91,840	
5	PROJECT MANAGEMENT																						
5.1	Weekly Progress Meetings																						
	- Onsite Meetings (Included in Task 3.5)																		0	\$0	\$0	0	\$0
	- Telephone Conference Calls		14	26	8		138		4		8	8											
5.2	Monthly Progress Reports/Invoicing		25														55						
5.3	Project Document Log and File		18	18													18						
	SUBTOTAL - PROJECT MANAGEMENT		57	44	8	0	138	0	4	0	8	8	0	0	0	73		340	\$ 54,480	\$ 2,970	\$ -	\$ 57,450	
	TOTAL=		341	586	348	598	2,454	30	56	32	60	84	28	92	452	12	413		5,586	\$ 696,560	\$ 75,410	\$ 27,615	\$ 967,225

Attachment B
Billing Rate Schedule

Black & Veatch Corporation
Billing Rate Schedule
For
City of Paso Robles Wastewater Treatment Plant Upgrade Project
Engineering Services during Construction
(Effective January 1, 2017 through December 31, 2018)

Classification	Typical Title	Hourly Rate
Vice President / Project Director	Project Director	295
Project Manager 3	Specialist / Senior Manager	260
Project Manager 2	Senior Project Manager	240
Project Manager 1	Project Manager	210
Engineer 9	Senior Specialist / Department Manager	220
Engineer 8	Specialist / Department Manager	215
Engineer 7	Senior Design Manager	200
Engineer 6	Design Manager	200
Engineer 5	Engineering Manager/Discipline Leads	195
Engineer 5	Project Engineer/Discipline Leads	175
Engineer 4	Project Engineer/Discipline Leads	160
Engineer 4	Senior Engineer/Discipline Leads	150
Engineer 3	Staff Engineer	135
Engineer 2	Staff Engineer	120
Engineer 1	Staff Engineer	110
Technical 8 *	Senior Technician	145
Technical 7 *	Senior Technician	140
Technical 6 *	Senior Technician	130
Technical 5 *	Advanced Technician	120
Technical 4 *	Advanced Technician	110
Technical 3 *	Technician	105
Technical 2 *	Technician	100
Technical 1 *	Technician	95
Contract Administrator *	Contract Administrator	110
Project Assistant *	Project Assistant	90
Clerical *	Clerical	90

Notes:

1. Office expenses shall be reimbursed on a basis of \$8.75 per labor hour billed to cover in-house reproduction and printing, telephone, computer, postage, local travel (within 50 miles of site) and other general office expenses.
2. Mileage shall be reimbursed at a rate of \$0.55 per mile (or current EPA rate).
3. Subconsultants and other direct costs, including outside reproduction charges, shall be reimbursed at cost plus 5%.
4. The fee schedule may be adjusted periodically to reflect salary increases for professional staff. The annual adjustment may not exceed 5 percent.
5. Professionals noted with an (*) are non-exempt classification.

Exhibit A
The City of Paso Robles
Tertiary Treatment Facilities Project
The Covello Group, Inc. – Construction Phase Scope of Services

1. General:

- a. Covello shall perform its services with due diligence and expedience consistent with sound professional construction management practices. Covello will administer and manage the Project as defined in this Scope of Services to facilitate completion of the Project within the time period in the Contract Documents.
- b. Covello will provide administration and coordination throughout construction of the Project in cooperation with Design Consultant (DC) to facilitate completion in accordance with the Project Schedule and Contract Documents. Covello is not responsible for delays to the Project other than those arising from its Services.
- c. Limitation on Authority: Covello is not authorized to change, revoke, alter, enlarge, relax or release (collectively, “change”) any material requirements of the Contract Documents or to approve or accept any portion of the Work not performed in accordance with the Contract Documents. For purposes of this paragraph, “material” means a change that affects the Contract Time(s), Contract Price, or the function or operation of the completed Project.

2. Preliminary Activities:

- a. Preconstruction Conference: Covello will prepare the agenda for the meeting, facilitate the meeting, address administrative and non-design issues, and prepare record of discussions of the meeting for distribution. The City, DC, and Contractor’s team will attend the meeting. The DC will address design issues.
- b. Preliminary Submittal List: Covello will prepare the preliminary submittal list which will be furnished to the Contractor at the Preconstruction Conference.
- c. Administration & Office Set-up: Covello will setup the files for the project prior to commencement of construction and coordinate with the City and Contractor for office trailer set-up.

2. Construction Administration

- a. Project Coordination: Covello will act as the project coordinator and the point of contact for all communications with the City and the Contractor. Covello will coordinate activities of the City, DC, and Contractor.
- b. Document Tracking System: Covello will establish, implement and maintain a web-based system (Procore) which will maintain and track all correspondence, documents, submittals, change orders, reports and other administrative matters on the Project. During construction, Covello will provide City with access the project files through Procore. At the conclusion of

the Project, Covello will extract the project documents from Procore and deliver them to the City in pdf format.

- c. Construction Administration Services: Covello will provide administrative and management services. Covello will receive all correspondence from the Contractor and address all inquiries from the Contractor and construction related correspondence. The DC will be responsible for providing any design input.
- d. Written Communications: Covello will exercise its judgment to determine when it is appropriate to commit various communications to the City and the contractor in writing. When appropriate, or specified in the Agreement, Covello will provide notice, recommendations, evaluations, advise, reports, responses, etc. in writing to the City or Contractor.

3. Meetings

- a. Covello will prepare the agenda for the weekly progress meetings and other construction meetings required during the Project.
- b. Covello will facilitate discussions for the progress meetings and other construction related meetings.
- c. Covello will prepare and distribute Records of Discussion of each meeting no later than 3 working days after the meeting takes place, and shall incorporate comments or corrections received from participants.

4. Scheduling

- a. Covello will review and provide written comments on the Contractor's initial 90 day Preliminary Schedule.
- b. Covello will facilitate a workshop with the Contractor, City and DC to review the project and schedule requirements prior to the Contractor's development of the initial Baseline schedule.
- c. Covello will review Contractor's initial Baseline schedule submittal to determine whether it is realistic and prepared in accordance with the Contract Documents, that the milestone and Substantial Completion dates meet the overall schedule and that no major conflicts exist. Covello will advise the City of our review determinations and provide written comments to the Contractor.
- d. Covello will review the schedule updates to track the actual progress of the work, track the progress of the work relative to the planned schedule, identify any potential delays, and report potential delays that could affect completion of the Project within the Contract Time(s) to the City promptly, in writing. Covello will review the Contractor's plan for remedial measures when required to recover or maintain progress. Covello will provide written comments on the reviewed schedule updates.

- e. Covello will review and evaluate the Contractor's requests for Contract Time extensions and make written recommendations to the City regarding entitlement and the number of days, if any, to be added to the Contract Time(s). If requested by City, Covello will provide a written assessment of the time request. Covello in conjunction with the City will negotiate schedule adjustments with the Contractor.

5. Submittals

- a. Covello shall develop and maintain an up-to-date log of all samples, material lists and certifications, mix designs, schedules, and other submittals, as required in the Contract Documents and received from Contractor. The log shall indicate whether submittals have been provided as specified.
- b. Covello will establish, implement and coordinate the web-based system for processing, logging and tracking submittals received from the Contractor. The system will indicate when the submittal was received, and when it was transmitted to other parties and the status of the submittal.
- c. Covello will identify with the DC long-lead and major procurement items. Covello will coordinate with the Contractor and DC to hold pre-submittal meetings with these equipment suppliers and establish the submittal schedule.
- d. Covello will receive the submittals from the Contractor and check the submittals for general conformity with the Contract requirements. If obvious deficiencies are apparent in the submittal, Covello will send the submittal back to the Contractor for correction.
- e. Covello will route the submittal to the DC for review and will route the reviewed submittal back to the Contractor. Covello will review comments on the submittals to determine if additional follow-up with the Contractor or DC is warranted and to identify any scope changes.
- f. Covello will maintain a log and tracking system for submittals. Covello will track the status of submittal review with the DC and the status of shop drawing resubmittals with the Contractor.
- g. DC to review all design related submittals and all submittals related to temporary plant process/operations related facilities, except for shoring and dewatering, for compliance with the Contract Documents.
- h. Covello will retain Fugro to review shoring and dewatering submittals for compliance with the Contract Documents.

6. Clarification Process

- a. Covello will establish, implement and coordinate the web-based system for processing, logging and tracking clarifications.

- b. Covello will receive all requests for information (RFIs) from the Contractor and determine if the request is a valid RFI; if not, Covello will promptly return the RFI to the Contractor.
- c. Covello will provide a response to the Contractor for any administrative and general RFIs.
- d. Covello will route all other RFIs to the DC or City as appropriate.
- e. The DC will review the RFIs and provide design response.
- f. Covello will review the DC's response, verify acceptability of response and transmit the clarification response to the Contractor.
- g. Covello will maintain a system for logging and tracking RFIs.
- h. The DC will prepare Design Clarifications where design issues are identified by Covello, the DC, or the City. Covello will prepare the Clarification Letter for transmittal to the Contractor of the DC's Design Clarification and other City clarifications.

7. Change Order Preparation, Negotiation & Processing

- a. Covello shall effectively manage the Project, including changes, to limit the City's exposure to change orders; to the extent such results are within Covello's control. Covello shall review the Contractor's requests for changes to the Contract Time and/or Contract Price, assemble information concerning the request, determine the validity of the request, and forward the information to City in such detail as the City may reasonably request.
- b. Covello shall make recommendations to the City concerning approval or denial of Contractor-initiated change orders prior to the response to change order requests. Covello will make the recommendation in writing at the City's request, or if the amount of the change order exceeds the amount the Project Manager can approve. Covello will prepare a written response to Contractor stating the rationale for its recommendation if requested by the City. Covello shall verify that change order work and adjustments of Contract Time(s), if any, required by approved change orders are incorporated into the Project Schedule.
- c. The DC will prepare design details for change requests.
- d. Covello will prepare and issue the change request to the Contractor with the appropriate design documents.
- e. Covello will prepare an independent cost estimate and/or verify the acceptability of the Contractor's cost proposal for each change request. The DC's input may be requested for specific equipment and material costs. Where work is performed on a Time and Materials basis, Covello shall obtain records of Contractor's cost of labor, materials, and equipment and the amount of payments to Sub-contractors. Where there is a change to work as described in the Contract Documents, Covello shall review Contractor's estimates of performing the work as initially specified. Covello shall review the cost information and make a written recommendation to the City regarding the amount of the change order to be issued, if any.

- f. Covello shall request from the Contractor information regarding the schedule impact of the change, review the time request, and make a written recommendation to the City regarding any adjustments to the Contract Time.
- g. In the event the Contractor encounters a time sensitive problem where time is not available to negotiate a settlement in advance of performing the work, Covello will issue a field order. All work done under a field order will be completed on a time and material basis. Covello will have authority for issuing field orders to a maximum value of \$10,000 without prior notice or approval from the City only if Covello can't reach the City's Representative via cellular or office phone. The aggregate of field orders Covello issues without City's approval shall not exceed \$100,000. As soon as practical, but no later than the next business day, Covello will advise the City of the issuance of such field order, and the City will ratify the field order. Covello will not issue any field orders with a value greater than \$10,000, or an aggregate value of \$100,000 without the City's review and approval.
- h. Covello will provide recommendations to the City on the change order negotiation and, subject to City approval as required above, will negotiate change orders with the Contractor.
- i. Covello will prepare change orders in a form acceptable to City for execution by the City and Contractor.
- j. Covello will implement and maintain a system for logging and tracking changes to the Contract Sum and Time(s), as well as potential change orders and change orders requested by Contractor that are denied.
- k. Covello will establish and maintain Issue Files. The Issues Files will compile all data related to changes to the work and contractor requests for change order, and specific items that arise that may have cost or time impacts.

8. Progress Payments

- a. Covello will review the initial cost breakdown prepared by the Contractor and work with the Contractor to develop a mutually agreeable schedule of values.
- b. Covello will review the payment applications submitted by Contractor and determine whether the application is complete, including all schedule updates, releases and other materials the Contract Documents require.
- c. If the application is complete, Covello shall determine whether the amount requested reflects the actual status of the Contractor's work in place, materials on site and other contract requirements.
- d. If the application is not complete, Covello shall return the payment application to Contractor with a written notice of non-compliance, with a copy to the City. Covello shall make appropriate adjustments and administrative deductions to each payment application and shall forward a Progress (or Final) Payment Report to the City. Covello shall take appropriate action on each payment application so that the City can respond in accordance with the time periods set forth in Public Contract Code Section 20104.50.

- e. Covello will prepare a Summary Cover Sheet for each progress payment stating the total Contract Sum, including adjustments to the Contract Sum administrative deductions, payments to date, current payment requested, including any payment for stored materials, retention earned, and a recommendation regarding amounts to be paid for the current period.
- f. Covello shall recommend amounts payable to the Contractor. Covello's recommendation of payment shall constitute a representation to the City based on Covello's observations at the site and on the data comprising the Contractor's Application for Payment that the Work has progressed to a stage corresponding to the amount to be paid, that the work for which payment is recommended is in accordance with the Contract Documents, and that the money is properly owed, subject to withholding for retention and other amounts as set forth in the Contract Documents.
- g. Covello will not recommend final payment to the Contractor until Covello has determined Contractor has complied with the project closeout requirements, including record documents, warranties, and operations and maintenance manuals.

9. State Revolving Fund (SRF) Loan Coordination

- a. Covello will assist in providing the required documentation for the SRF Loan Program. Covello will assist the City with preparing the necessary documentation for reimbursement requests. This includes project progress reports, progress payment reports, quarterly reports from the Contractor for Disadvantaged Business Enterprise participation, and Contractor progress invoices.
- b. Covello will tour the Project with the SRF representative during any construction visits and provide replies to any inquiries from SRF.
- c. Covello will retain a subconsultant to implement a Labor Compliance Program (LCP) to provide all reporting, documentation and oversight required by SRF. The budget estimate assumes that the LCP subconsultant will conduct the initial site interviews and project briefing to the Contractor. Covello will perform the other interviews unless special circumstances necessitate the LCP subconsultant's on-site assistance.
- d. Covello will review Contractor's and supplier's certifications of compliance with the American Iron and Steel (AIS) requirements. In the event deviations from the AIS requirements are identified, Covello will give notice of such to the Contractor and the City and will coordinate with the City and Contractor to obtain a resolution. Covello will compile the AIS documentation in a manner acceptable to SRF.

10. Public Outreach

- a. Covello will provide project information to the City to assist in the City's preparation and issuance of any project information to the public.

- b. Any meetings with the public will be facilitated by the City. Covello will attend meetings as requested by the City.
- c. Covello will assist the City's Public Information Officer with responding to public inquiries.
- d. Covello will refer all media inquiries to the City's Public Information Officer.
- e. Covello will work with the City and the Contractor to develop a Project announcement flyer when construction is initiated and will distribute the flyer to nearby residences and businesses.

11. Reporting and City Council Meetings

- a. Covello will prepare project reports as requested by the City.
- b. Covello will attend City Council meetings when requested by the City to assist the City's staff in updating the City's Council on the status of construction and responding to questions about the project.

12. Field Quality Control

- a. Covello shall establish and implement a program to monitor the quality of the construction and compliance with the Contract Documents. The purpose of the program shall be to guard the City against defects and deficiency in the Work. The program shall consist of the tasks described in this Scope of Services.
- b. Covello will provide field inspection/observation services to monitor compliance with the Contract Documents. Covello shall, to the extent reasonably possible with agreed levels of staffing and budget:
 - i. Verify that the materials and equipment being incorporated into the Project are handled, stored and installed properly and meet the requirements of the Contract Documents, and
 - ii. Take necessary precautions to guard against defects and deficiencies in the Work.
- c. Covello shall advise City in writing of any material deviations, defects or deficiencies that Covello observes in the Project.
- d. Covello will inspect the Work throughout construction and shall prepare Corrective Work Item list(s) with input from the City and DC. Covello will distribute the Corrective Work Item lists to contractor and confirm that the items identified in the Corrective Work Item list(s) are completed.
- e. Covello shall notify the City, in writing, of defective work and Work that does not conform to material provisions of the Contract Documents, or code requirements, or Applicable Laws, and shall make written recommendations to the City about acceptable corrective actions or credits.

- f. Covello will prepare daily inspection reports in the Daily Log form attached hereto as Attachment A documenting observed field activities, weather conditions, contractors present at the Project site, equipment present at the site, work done on the site, numbers of workers by contractor, work accomplished, major deliveries made, problems encountered, and other similar relevant data as the City may require. Covello shall ensure that the daily inspection report is available for use and review by the City on Procore and use reasonable diligence to discover work performed by Contractor(s) that is not in compliance with the Contract Documents.
- g. An allowance is included in the budget for overtime inspection.
- h. Covello will provide photographic documentation of the project site prior to construction.
- i. Covello will provide and maintain digital photographs of field activities for status monitoring of the project and to document field/quality, site conditions, change orders and other issues. The photographs shall be organized in a manner that can later be used as a historical archive of the Project.
- j. Covello will perform Special Inspection as required by the Contract Documents for concrete, rebar, and concrete anchors.
- k. Other Special Inspections and Materials Testing: Covello will retain Earth Systems to furnish the following materials testing and periodic Special Inspections:
 - i. Special Inspection and materials testing will include:
 - a. Soils compaction and relevant testing
 - b. Asphalt compaction and relevant testing
 - c. Concrete sampling and testing
 - d. Structural steel welding and high strength bolts
 - ii. The DC will provide a Structural Engineer for periodic structural observation.
 - iii. The DC will conduct any necessary special equipment or material inspection at the place of manufacturer.
 - iv. Covello will schedule and coordinate the material testing services and has oversight responsibility for the specialty inspections and testing services.
 - v. The attached Scope of Work and Budget from Earth Systems for special inspections and materials testing are the estimate of the Scope of Services for the work to be performed. If the Contractor's operations vary from the assumptions utilized to prepare this estimate, as described in Earth Systems' Scope of Work and Budget, an amendment may be required for the additional services required.

- l. Coatings: Covello will retain a subconsultant, Advantage Technical Services (ATS), for inspection of special coatings and linings. The specialty coating inspection is to cover the epoxy coating of the concrete filter basins and UV channels, exposed ductile iron piping, buildings structural steel, and administration and management support services for this work. The attached proposal from ATS includes the scope and budget for the work to be performed.
- m. Cathodic Protection: Covello will retain a subconsultant, Advantage Technical Services, for inspection of cathodic protection systems; an allowance is included in the budget estimate for this work.
- n. Surveying: The Contractor will be responsible for providing its own surveyor for project layout, line and grade surveying/staking and construction operations.
- o. Electrical: Covello will retain a subconsultant, Beecher Engineering, for technical support, assistance and periodic observation of the installation and testing of the critical components of the electrical and instrumentation portions of the Work.
- p. Hazardous Materials: No provision has been included in the scope of work or budget for observation, testing and handling of hazardous materials.

13. Record Documents

- a. Covello will maintain a record set of Contract Documents to track changes due to RFIs, Clarifications, Change Orders, and field adjustments.
- b. Covello will evaluate the Contractor's record documents on a monthly basis to determine if they are being maintained by the Contractor and are in substantial conformance with Covello's information and the Contract Documents. Covello will maintain a log of reviews of the Contractor's record drawings and provide comments to Contractor on what actions appear necessary to correct or add to the drawings. Covello will review updated drawings with Contractor.

14. System Outages

- a. Covello will coordinate the System Outage Requests (SORs) for any shutdowns and tie-ins of the existing plant facilities.
- b. Covello will review the Contractor's initial SOR and if complete will forward to the City's Operations Manager for his review, comment and approval.
- c. SORs will be a standing item at the weekly progress meetings.

15. Environmental Documentation

- a. The City will contract with an environmental consulting firm to furnish environmental services during the Project.

- b. The Environmental consultant will be responsible for training construction personnel on environmental requirements. Covello's employees shall attend training as provided by the Environmental consultant or otherwise needed to meet regulatory requirements.
- c. The Environmental consultant will be responsible for surveying, monitoring and reporting as required by the Project permits and to document compliance with the mitigation measures.
- d. Covello will schedule and coordinate the work of the Environmental consultant.

16. Storm Water Pollution Prevention Plan (SWPPP)

- a. Covello will coordinate with the Contractor and City on the filing of the NOI and implementation of the SWPPP.
- b. Covello will review the Contractor's SWPPP and will coordinate with the Contractor to have the Contractor upload the SWPPP to the SMARTS site for certification by the City's Legally Responsible Person (LRP). Covello will coordinate with the Contractor for their uploading of monitoring and reporting data to the SMARTS site.
- c. Covello will review Contractor's records to determine if the Contractor's responsible personnel are trained as required by the State permit.
- d. Covello will monitor and document the Contractor's performance with the SWPPP and the Project BMPs.
- e. Covello will confirm that the Contractor is logging and tracking any Rain Event Action Plans (REAPs) required by the SWPPP.

17. Testing and Training

- a. The Scope and Budget do not include Covello's participation in factory witness testing.
- b. Covello will coordinate training requirements and activities.
- c. The DC will provide design assistance during testing operations.
- d. Covello will work with the Contractor, DC and the City on the development of the Startup Plan.
- e. Covello will provide oversight and administration of training and testing, and will verify that all training and testing required by the Contract Documents is performed before recommending that the City make final payment to the Contractor.

18. Corrective Work Item List

- a. Covello will inspect the Work throughout construction and shall prepare the Corrective Work Item list(s) with input from the City and DC.

- b. Covello will confirm that all items identified in the Corrective Work Item list(s) are completed or transferred to a punch list to accompany the Substantial Completion Certificate before recommending that the City execute a Substantial Completion Certificate.
- c. Covello will prepare the Substantial Completion Certificate(s) for execution by the City and the Contractor when the corrective work items are completed to the City's and Covello's satisfaction.

19. Means and Methods of Construction: Covello will not have responsibility for directing the means and methods of construction. The Contractor shall be solely responsible for the means and methods of construction.

20. Safety

- a. Covello will comply with appropriate regulatory, project and City regulations regarding necessary safety equipment and procedures used during performance of Covello's work and shall take necessary precautions for safe operation of Covello's work, and the protection of Covello's personnel from injury and damage from such work.
- b. Neither the professional activities of Covello, nor the presence of Covello's employees or sub-consultants at the construction/project site, shall relieve the Contractor and any other entity of their obligations, duties and responsibilities including, but not limited to, construction means, methods, sequence, techniques or procedures necessary for performing, superintending, or coordinating their work in accordance with the Contract Documents, City regulations, and any health or safety precautions required by any regulatory agencies. City shall provide in the Contract Documents that Covello and its subconsultants shall be named as additional insureds in general liability insurance coverage provided by the Contractor, and that Covello and its subconsultants shall be named as indemnitees under the obligation of the Contractor to defend and indemnify City, to the same extent as the obligation pertains to City.

21. Dispute Resolution

- a. Resolution of routine disputes between the City and Contractor through the normal efforts of Covello's day-to-day operations will be performed by Covello with the assistance of City and DC as necessary.
- b. Dispute resolution requiring extraordinary efforts or services beyond those listed in this Scope of Work, causing Covello to exceed our Budget or Contract period or requiring dispute resolution services using third parties or special processes (e.g. Mediation, Arbitration, Mini-Trials, Dispute Consultants), are not included in this Scope of Work. If such non-routine dispute resolution activities or services are required, either an amendment or a separate task order will be executed.
- c. Covello will prepare written analysis of each issue that remains in dispute at the time of Final Completion, whether initiated by Contractor or City, and deliver those to City no later than final payment. The analysis will include supporting documentation including but not

limited to correspondence, project records, photographs, test reports, logs, and such other material as may be necessary or helpful in resolving the disputes.

22. Construction Manager's Trailer: The Contractor will furnish the CM trailer, furnishings, equipment, and services under the requirements defined in the Contract Documents.

23. Determining Completion/Partial Completion of the Work. Covello shall assist the City in determining when the Project or a designated portion thereof is substantially complete. To this end, Covello shall prepare for the City a summary of the status of the work of the Contractor(s), listing changes in the previously issued certificates of substantial completion of the work and recommending the times within which Contractor(s) shall complete uncompleted items. Covello shall also make recommendations to the City in instances when Covello observes work that, in its opinion, is defective, missing or not in conformance with the Project Contract Documents. Covello shall, further, assist the City in conducting close-out inspections.

24. Final Inspection and Punchlist

- a. Coordination of Final Inspection of Work. Following the City's issuance of a certificate of substantial completion for the Project or designated portion thereof, if one is issued, Covello shall evaluate the completion of the work of the Contractor(s) and make recommendations to the City when work is ready for final inspection. Covello shall assist the City and any City inspector in conducting final inspections. Covello shall transmit to the City the required guarantees, affidavits, releases, bonds and waivers.
- b. Covello will have primary responsibility for conducting the final inspection.
- c. The City will participate and provide input on the final inspection.
- d. DC will provide design input on final inspection items if determined necessary by the City.
- e. Covello will have oversight and final review responsibility for the final inspection.
- f. Covello will prepare and issue the punchlist(s).
- g. Covello will have primary responsibility for verifying that the punchlist work is complete.
- h. Covello will provide estimates of the cost of any incomplete punchlist work items for the City's use in determining amounts to be withheld from final payment to the Contractor.

25. Covello will calculate and make a written recommendation to the City regarding assessment of liquidated damages or other offsets and withholdings from payment to Contractor.

26. Project Closeout

- a. Promptly upon the City's approval of completion of the Project, and in addition to any additional submittals required by this Agreement, Covello shall collect and submit the following close-out documentation to the City:

- i. Operations and maintenance data for equipment as required by the Contract Documents for the Project (including, without limitation, complete sets of manuals containing manufacturers' instructions on the operation of each item and apparatus furnished under such Project Contract Documents);
 - ii. Marked up drawings or electronic files provided by the Contractor(s) for the Project in accordance with the Contract Documents.
 - iii. Warranties and bonds for equipment put into service. The warranties shall be catalogued by equipment type and duration.
 - iv. Keys;
 - v. Tools, spare parts and maintenance materials;
 - vi. As prepared by the Contractor, a list of all Contractors, major subcontractors, vendors and materialmen providing services, equipment and/or materials in connection with the Project, in a formal, adequately bound, catalogued form, which shall include the names, addresses, telephone numbers and fax numbers of such persons, and shall further include notices as to where pertinent persons can and may be reached for emergency service, inclusive of nights, weekends and holidays; and
 - vii. All guaranties and warranties from all Contractors as required by the Contract Documents for the Project.
- b. Final Price and Time: Covello will address any outstanding items with the Contractor, including but not limited to disputed change orders and adjustments to the Contract Sum or Contract Time(s).
- c. Acceptance: Covello will prepare necessary City documentation recommending acceptance of the completed work by the Council.
- d. Construction Report:
- i. Covello will prepare and submit a final Construction Report to the City which shall be an organized record of the complete Project, including a final accounting of the Contract Sum, payments made to the Contractor, liquidated damages and other withholdings, adjustments made to the Contract Sum and Contract Time, and unresolved disputes. Covello will provide written recommendations regarding resolution of any issues that remain in dispute between the City and the Contractor at the end of the project.
 - ii. Covello will prepare a final progress report and similar information as needed by the City for the final report to the SRF in accordance with that agency's procedures.
 - iii. Covello will turnover all project documentation, whether in paper or electronic form, to the City at the end of the Project. To the extent practical and as supported by the Procore electronic document management system, documentation will be provided to the City in electronic format. This will include correspondence, submittals, RFI's,

change orders, meeting records, plans and specifications, daily reports, photos, SOR's, schedules, Operations manuals furnished by the Contractor, final Record Documents (hard copy), and any third party agreements related to operation of equipment furnished by the Contractor.

- iv. Covello will deliver complete copies of all Project records, including Procore files, to the City at the end of the Project. Covello will not deliver to the City Issue Files, but will retain those files and make them available to the City upon request.

e. Warranty Coordination

- i. Covello will maintain a warranty file during construction.
- ii. Covello will participate in the one-year warranty review with the City and DC, document any items to be repaired or replaced, and provide a written recommendation to City regarding remedial work to be performed or existing conditions to be accepted.

**CITY OF PASO ROBLES - TERTIARY TREATMENT FACILITIES PROJECT
CONSTRUCTION PHASE
The Covello Group, Inc. - Staff Effort and Budget Estimate for Construction Management Services**

				Month #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	
				Amount	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	
Covello Construction Management Team																											
Principal	B.Presser	132	\$ 236	\$31,152	16	16	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	16	16	4	4		
CM	S.Wrightson	2,750	\$ 221	\$607,750	100	160	160	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	120	
Inspector / Engineer		2,900	\$ 145	\$420,500	-	100	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	80		
Inspector / Engineer - Overtime		200	\$ 145	\$29,000			20	20	20						20	20	20	20	20	20	20						
Intern		500	\$ 60	\$30,000								80					140	140	140								
	Subtotal	6,482		\$1,118,402																							
	Escalation July 2018	3.5%		\$14,912																							
Subconsultants																											
	Electrical Support - Beecher Engineering			\$30,000																							
	Materials Testing/Special Inspection- Earth Systems			\$107,687																							
	Special Coatings (ATS Consultants)			\$43,000																							
	Cathodic Protection Allowance			\$0																							
	Surveying			\$0																							
	Labor Compliance - RGM			\$50,990																							
	Subconsultant Subtotal			\$231,677																							
	Markup on Subs(5%)			\$11,584																							
	Subconsultant Total			\$243,261																							
	TOTAL ESTIMATE			\$1,376,575																							

Notes & Assumptions:

Construction Cost Estimate: \$13,590,000
NTP: 6/19/2017
Substantial Completion: 17-Dec-18 (plus DDW review period)
Final Completion: 15-Feb-19 (plus DDW review period)
Closeout Period: 8 weeks
Time for 1-year Warranty Inspection included in February 2019

SCOPE OF WORK

SWCA Environmental Consultants (SWCA) has prepared this scope of work and cost estimate for the City of Paso Robles (City) to provide environmental monitoring services for the proposed construction of the Recycled Water Production Facility (project).

TASK 1: BIOLOGICAL RESOURCES TASKS

TASK 1.1: USFWS APPROVAL PROCESS

Prior to commencement of project activities, SWCA will submit resumes to the City to be forwarded to the State Water Resources Control Board (SWRCB) in order to obtain approval from the U.S. Fish and Wildlife Service (USFWS) for biologists that will be involved with any activities related to San Joaquin kit fox (SJKF; *Vulpes macrotis mutica*), California red-legged frog (CRLF; *Rana draytonii*), and least Bell's vireo (LBV; (*Vireo bellii pusillus*). It is expected that the same staff will be utilized for this as were approved previously by USFWS for the Wastewater Treatment Plant Upgrade Project.

TASK 1.2: PRE-CONSTRUCTION SURVEY

Prior to any construction-related activities, SWCA biologists that have been approved by USFWS will conduct a pre-construction survey for SJKF, CRLF, LBV, and all other nesting bird species covered under the Migratory Bird Treaty Act of 1918. In coordination with the City, SWCA assumes that all three surveys would be completed in the same day by SWCA Biologist Jackie Hancock, who has previously been approved by USFWS for all three species.

Pre-construction surveys for SJKF and CRLF would be conducted in conjunction with the nesting bird survey. USFWS requires that the survey for SJKF be conducted no less than 14 days and no more than 30 days prior to construction activity. USFWS also requires that the CRLF survey occur no more than 24 hours prior to start of work. SWCA will document all observations during the pre-construction survey and submit a letter report to the City for review and to forward to the SWRCB. SWRCB would forward the report to USFWS, documenting project compliance with the permit conditions and applicable project mitigation measures.

TASK 1.3: CONSTRUCTION WORKER TRAINING

As required by the USFWS letter of concurrence, SWCA will conduct a brief Construction Worker Training prior to any ground-disturbing activities associated with the project. The training would inform the construction team as to the sensitive issues surrounding the project, identification of sensitive species known to occur within the area, and a protocol on how to respond to a sensitive species issue, should one arise. The training would take place prior to the start of ground disturbance associated with the project and would involve construction team personnel. Personnel will be requested to sign an acknowledgement sheet, documenting their understanding and willingness to comply with the project permit conditions. A scanned copy of these forms will be provided to the City for their records. SWCA would be available to conduct additional training sessions. It is assumed these could be conducted in conjunction with a monitoring visit. Therefore, no additional budget would be necessary.

TASK 1.4: BIOLOGICAL MONITORING

Full-time biological monitoring is not required for the proposed project. However, USFWS requires that a biological monitor be onsite at a "frequency necessary to ensure compliance with all avoidance and minimization measures for the least Bell's vireo, California red-legged frog, and other migratory bird species." At a minimum, USFWS requires that

weekly surveys be conducted during the nesting bird season (considered to be March 15 through September 15). USFWS also requires that any excavations, holes, or trenches be inspected for frogs prior to backfilling. SWCA assumes that the City and their contractor will assume this responsibility, as a biologist is not required to inspect all of these excavations. However, USFWS does require that a biologist conduct daily surveys for CRLF when work is occurring within 100 feet of the Salinas River.

SWCA assumes that a Notice to Proceed will be issued on June 19, 2017. For the first year of construction, weekly biological monitoring would occur from June 19 through September 15, for a total of 13 weeks. In 2018, weekly nesting bird surveys would be conducted from March 15 to September 15, for a total of 26 weeks.

For work within 100 feet of the Salinas River, SWCA assumes construction in this area would occur for no longer than 2 weeks. SWCA has budgeted for daily spot check monitoring during this time. However, this time may be reduced depending upon the level of impacts in this area and construction activity.

TASK 1.5: REPORTING

On an annual basis, SWCA will prepare a monitoring report that documents project compliance by providing a table summary of dates and times of survey efforts, photo-documentation, discussion of observations, and any compliance issues identified and how they were resolved. If necessary, a Lessons Learned section will also be included for future consideration by USFWS on similar projects. This report would be submitted to the City for review and approval. The City would submit the report to SWRCB to forward to USFWS and the National Oceanic and Atmospheric Administration National Marine Fisheries Service (NOAA Fisheries), as needed.

TASK 1 COST ESTIMATE

The cost for this task would be **\$27,006**.

TASK 2: ARCHAEOLOGICAL RESOURCES TASKS

TASK 2.1: CONSTRUCTION WORKER TRAINING

SWCA will conduct a brief Construction Worker Training prior to any ground disturbing activities associated with the project. The training would educate the construction team to understand the role of the archaeological monitor and the native American monitor, the regulatory conditions that the project are being held to, an overview of how to recognize potentially occurring cultural resources that may be encountered, and the appropriate steps that would be taken in the event of discovery. The training would take place prior to the start of ground disturbance associated with the project and would involve key construction team personnel involved with excavation activities. An acknowledgment form with signatures from attendees will be obtained, documenting their attendance and understanding of the training.

TASK 2.2: ARCHAEOLOGICAL MONITORING

Prior to conducting any monitoring of construction activities, SWCA would develop an Archaeological Monitoring Plan. The Archaeological Monitoring Plan will outline the roles and responsibilities, lines of communication, and the steps taken should resources be identified. SWCA will request approval of the final version of this document from the City.

As will be described in the Archaeological Monitoring Plan, the archaeological monitor will observe ground-disturbing activities within native soil identified for the project impact area (i.e., all project excavations associated with the proposed improvements). The monitor will observe excavation equipment in progress and examine excavated sediments and excavation sidewalls for evidence of native soil and intact archaeological features, artifact concentrations, human remains, or unique isolated finds. The archaeological monitor may screen portions of the excavated soils in order to

assist in the characterization of the integrity of the sub-surface deposit, or in the event of potentially significant and/or concentrated artifactual discovery. As necessary, the monitor will take photographs of each excavation location in native soil, and produce detailed sketch maps of certain excavation sidewall profiles. The archaeological monitor will have the authority to temporarily halt or divert activities away from any discoveries in order to further evaluate a potential archaeological resource. If unanticipated cultural resources are encountered during excavations, a change order would be necessary to formally evaluate the resource.

Per the Section 106 concurrence letter from the State Historic Preservation Office (SHPO), monitoring is only required when excavation occurs in native soil. Based on the project schedule provided to SWCA in preparation of this proposal, coordination with City staff, and taking into account the known locations of fill material within the project site, it is anticipated that native soil would only have the potential to occur during the excavation of the Recycled Water Storage Pond and associated pipelines to connect the Pump Station. It is also anticipated that this would last no longer than 14 days for the pond and no more than 3 days for the pipeline infrastructure, for a total of 17 days. Depending on field observations during the excavation, the level of effort may be reduced in coordination with the City and Native American representation. However, for the purposes of this cost proposal, it has been anticipated that the monitoring would be full time during all 17 days.

In order to maintain compliance with SHPO, SWCA would also spot-check all excavation activities that are currently assumed to be within disturbed fill material. Based on coordination with the City, it is estimated that only 10 weekly spot checks would be needed for the duration of the project, through completion in 2018. SWCA assumes a minimum daily billing of 2 hours when a cultural resources monitor is needed on-site for a spot check. It should be noted herein that, if at any time during the project, the archaeological monitor determines project ground-disturbing activities have a negligible chance of encountering and/or impacting unknown archaeological resources, monitoring efforts may be scaled back or ceased. To cease archaeological monitoring altogether, coordination with the Native American Representative, the City, SWRCB, and SHPO may be required.

At the request of the City, SWCA also assumes additional time will be required to coordinate with the Native American monitor in the event that native soil is found present within an excavation. Presence of a Native American monitor during excavation in native soils is also required per the Section 106 concurrence letter. The budget for the Native American monitor labor and expenses is not included within SWCA's budget. It is assumed that the monitor would bill the City directly.

TASK 2.3: REPORTING

At the conclusion of each work day, the cultural resource monitor will complete a Daily Monitoring Log, which documents the day's activities and discoveries, if any. The cultural resources monitor will also provide a weekly summary report, via email, that will include information regarding locations monitored or surveyed, what type of construction activities were observed, and whether or not cultural resources were identified during the course of monitoring. Upon completion of excavation associated with the project, SWCA will prepare a Cultural Resources Monitoring report that describes the methods and results of the monitoring activities, and any further recommendations (if needed).

TASK 2 COST ESTIMATE

The cost for this task would be **\$26,503**.

TASK 3: PROJECT MANAGEMENT

For the period of a year and a half, SWCA assumes no more than 40 hours of project management time would be needed to facilitate staff scheduling, Quality Assurance/Quality Control, coordination with the City, processing invoices, or attendance at meetings. Project management would be conducted by SWCA Natural Resources Team Leader Jon Claxton.

TASK 3 COST ESTIMATE

The cost for this task would be **\$6,282**.

COST ESTIMATE

The budget for this project is a time and materials, not-to-exceed estimate of **\$59,791**. We have attempted to be conservative in preparation of the budget with regard to the level of effort required so that the overall cost estimates are reasonable for your planning purposes. SWCA will not proceed with any work in excess of the time and materials, not-to-exceed budget without prior authorization to proceed from the City.

SWCA Environmental Consultants
Project Budget Template - Executive Summary



Project Name: Recycled Water Production Facility

Phase Name	Task Name	Labor Hours	Labor Dollars	Expense Dollars	Total Budget \$
Phase 01: Biological Resources Tasks	Task 01: USFWS Approval Process	5	\$ 640	\$ -	\$ 640
Phase 01: Biological Resources Tasks	Task 02: Pre-Construction Survey	12	\$ 1,152	\$ 20	\$ 1,172
Phase 01: Biological Resources Tasks	Task 03: Construction Worker Training	8	\$ 996	\$ 20	\$ 1,016
Phase 01: Biological Resources Tasks	Task 04: Biological Monitoring	206	\$ 20,346	\$ 1,990	\$ 22,336
Phase 01: Biological Resources Tasks	Task 05: Reporting	18	\$ 1,842	\$ -	\$ 1,842
Phase 02: Archaeological Resources Tasks	Task 01: Construction Worker Training	8	\$ 864	\$ 20	\$ 884
Phase 02: Archaeological Resources Tasks	Task 02: Archaeological Monitoring	158	\$ 20,698	\$ 1,096	\$ 21,794
Phase 02: Archaeological Resources Tasks	Task 03: Reporting	32	\$ 3,824	\$ -	\$ 3,824
Phase 03: Project Management	Task 01: Project Management / QA-QC	40	\$ 6,120	\$ 162	\$ 6,282
Total		487	\$ 56,482	\$ 3,309	\$ 59,791

RESOLUTION NO. 17-XXX

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF EL PASO DE ROBLES
APPROVING PROCEDURES REGARDING CHANGE ORDERS DURING CONSTRUCTION OF THE
CITY'S TERTIARY TREATMENT FACILITIES

WHEREAS, the City is preparing to advertise the Tertiary Treatment Facilities for construction bids in 2017. These facilities will cost approximately \$17.2 million (total project cost) and require approximately 18 months to build; and,

WHEREAS, construction will occur at an active and crowded treatment plant site. Construction includes extensive underground work and complex mechanical and electrical systems. Although the City has taken extra precautions to eliminate uncertainties and potential surprises, there may be site conditions that differ from the plans and specifications and warrant changes to the cost and duration of construction; and,

WHEREAS, there may be a number of change orders over the course of construction. Efficient processing of change orders is essential to keep construction on schedule and within budget; and,

WHEREAS, the City's existing *Purchasing and Payment Procedures Manual* authorizes the City Manager to approve change orders (in total) up to 10% of the awarded contract amount. Change orders in excess of this limit must be approved by the City Council; and,

WHEREAS, in order to prevent delays that could result in additional project cost and/or claims by the contractor, the City Manager will need to delegate authority to approve smaller individual change orders to the Public Works Director, Wastewater Resources Manager, and Construction Manager.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF EL PASO DE ROBLES DOES HEREBY RESOLVE AS FOLLOWS:

Section 1. All of the above recitals are true and correct and incorporated herein by reference.

Section 2. The City Council hereby approves the following procedures regarding change orders during construction of the City's Tertiary Treatment Facilities:

- a. The Public Works Director is authorized to approve individual change orders up to \$75,000. The City Manager must approve individual change orders greater than \$75,000.
- b. The Wastewater Resources Manager is authorized to approve individual change orders up to \$20,000.
- c. In the event the contractor encounters a time-sensitive problem where time is not available to negotiate a settlement in advance of performing the work, the Construction Manager is authorized to issue a field order to a maximum value of \$10,000 only if the Wastewater Resources Manager or Public Works Director can't be reached. All work done under a field order will be completed on a time and material basis.

APPROVED this 7th day of February 2017, by the following votes:

AYES:
NOES:
ABSENT:
ABSTAIN:

Steven W. Martin, Mayor

ATTEST:

Kristen L. Buxkemper, Deputy City Clerk