

Client Name: Tuolumne City Sanitary District
Address: 18050 Box Factory Road
Tuolumne, CA 95379
Phone: 209-928-3517

Task Order Name: **WWTP Phase II Improvements - CM**

Task Order No: **23-01**

Scope of Services:

Forsgren Associates, Inc. (Forsgren) will provide Construction Management (CM) services for the Tuolumne City Sanitary District (TCSDD) Wastewater Treatment Plant (WWTP) Phase II Improvements project. As this project is still in the design phase, there are many aspects of the project that have yet to be defined; primarily the construction schedule. Accordingly, the level of effort for the CM services is estimated at this time. Similarly, the scope of the CM services may evolve as the project is better defined, but is expected to fall within the following five tasks: 1) Pre-Construction Services; 2) Construction Observation; 3) Construction Administration; 4) Project Management; and 5) Project Closeout. The anticipated scope for each of these tasks is described in more detail below.

Task 1. Pre-Construction Services

We will visit the project site and perform a constructability review of the design drawings, looking for opportunities to 1) improve requirements for materials and processes as necessary to improve performance or reduce costs, 2) eliminate potential disconnects between the design assumptions and field conditions, thereby decreasing the risk of change orders, 3) loosen design requirements where appropriate, thereby maximizing the potential for contractors to lower their bids, and 4) identify potential errors or omissions.

We will plan and lead a preconstruction meeting in order to set project expectations, establish procedures, draw lines of communication and authority, identify forms, establish protocols for submittals, RFIs, COs, and Pay Requests, and help the project team put faces to names. Once this groundwork has been laid, regularly scheduled progress meetings will be held to keep the project on track, and to air any issues that threaten to become problems.

Task 2. Construction Observation

We will provide an inspector as needed to perform observation during construction. Daily observation will include travel to/from the site, observation and documentation of weather, work performed, workers and visitors on site, and equipment utilized. Our inspector will document any significant communications with the contractor(s), TCSDD personnel, or visitors. Work will be photographed to document progress, or any problems. Photographs will be documented and catalogued. Our inspector will participate in safety meetings with the contractor, and construction meetings with District and contractor staff to review progress, discuss upcoming work, and to resolve issues before they become problems.

Our inspector will review relevant portions of the plans and specifications at the beginning of each day, and then refer to them throughout the day as warranted. When deviations are observed, our inspector will immediately bring it to the contractor's attention, discuss the issue, and attempt to resolve it in the field. If there is a disagreement, the inspector will contact the Forsgren Project Manager, and other project personnel will be brought in, as necessary, to resolve the issue as quickly as possible.

We will work closely with the District's contractor to help ensure that the Best Management Practices detailed in the SWPPP are appropriately implemented. If needed, we will collect and document stormwater samples as appropriate and report results as per the Plan's dictates.

We will work closely with the District's contractor to help ensure that the Best Management Practices detailed in the IS/MND are appropriately implemented, including the project's Mitigation Monitoring and Reporting Plan.

For this task we assume the following:

Assumptions

- Project duration will be 9 months.
- 12 weeks of construction will occur during the 9-month period.
- Construction activity will require one inspector per day.
- Inspector will work 8 hours per day.
- Apart from weather constraints, contractor's work days will be reasonably contiguous.
- Expenses include lodging, per diem, and mileage at standard government rates.

Task 3. Construction Administration

Apart from the regularly scheduled contractor meetings and progress meetings, communication will be a daily function. Coordination with the contractor, Engineer, TCSD, and other team members will be heavy early in the project, but will likely settle down as the project gets underway. We utilize email, cell phones, file sharing sites, and personal meetings to coordinate.

We will provide construction administration services in order to manage the anticipated Submittals, Requests for Information (RFI), Change Order (CO) requests, and Pay Requests. We will work collaboratively with Black Water Consulting Engineers and TCSD for expeditious reviews and processing of all construction documentation.

We will log and review all submittals, RFIs, and COs from the contractor, and utilize our inspectors, engineers, and specialists as appropriate to review and recommend actions to Black Water and TCSD.

We will review, log, and verify that the District's contractor submits relevant, accurate, and timely information to comply with State and federal labor law, as appropriate.

Days worked, labor and equipment on site, and other important information will be documented as part of the inspector's report, and utilized to evaluate contractor Pay Requests.

Relevant project documentation will be reviewed at construction meetings as agenda items, ensuring the contractor provides an accurate look ahead to schedules at the meetings.

We will coordinate with the TCSD team to schedule meetings, prepare agendas, administer the meetings, and then distribute meeting minutes that document decisions and action items. The frequency and timing of these meetings will be worked out with the TCSD team after award. Schedule status will be a standing agenda item at all construction meetings.

Task 4. Project Management

We will provide monthly progress reports that include a project status summary; estimated project percent complete by work, by payment, and by schedule; work completed for the month, work planned for the upcoming month, and our monthly invoice. We will document potential risks to the project, and actions being taken to mitigate those risks. We will summarize deliverables, milestones met, open change order requests, and other Key Performance Indicators. Our monthly invoice will include a thorough review of the scope, budget and schedule to stay on track. If there is a change to the scope, schedule, or budget, we will contact TCSD immediately to address the issue. Out of scope items or schedule changes due to unforeseen circumstances will be discussed immediately with TCSD.

Task 5. Project Close-Out

As work is completed, our inspector will ensure that project As-Builts are kept up to date, and are accurate. When As-Builts are completed, our inspector will forward them to Forsgren's office for review and approval, and submittal to Black Water and TCSD.

At the conclusion of the project, we will compile hard and electronic copies of all project documentation, bind and record them, as appropriate, and prepare a brief memorandum that memorializes the completion of the project, and documents the contents of the project construction file.

Schedule:


A schedule for Forsgren’s services will be developed in conjunction with TCSD after receipt of the contractor’s construction schedule.

Compensation:

The services will be performed on a time and materials basis for an estimated fee of \$230,000. This fee will not be exceeded without prior authorization from TCSD. A spreadsheet showing the breakdown of this estimated fee is included as Attachment A.

Terms and Conditions:

The requested services will be performed in accordance with the Billing Rates, and Terms & Conditions included as part of the Master Services Agreement between TCSD and Forsgren.

FORSGREN ASSOCIATES, INC.		TUOLUMNE CITY SANITARY DISTRICT	
By:		By:	
Printed Name:	Alan Driscoll	Printed Name:	
Title:	Vice President	Title:	
Date:	October 27, 2023	Date:	

COST ESTIMATE - Task Order No. 23-01
Tuolumne City Sanitary District
WWTP Phase II Improvements - CM

Forsgren Associates, Inc.

		Role	Principal	Technical Expert	Senior Engineer	Environ./ Schedule	PM	CM	Inspector (OT)	Inspector	Project Asst.	Total Labor Hours	Total Labor Costs	Travel & Expenses		Related Project Fee	Total
		Title Code Employee Rate	ENG/SCI 8 Driscoll	ENG/SCI 8 Broome	ENG/SCI 6 Gach	ENG/SCI 5 Wickman	ENG/SCI 5 Jensen	ENG/SCI 3 Vallarino	ENG/SCI 2 TBD	ENG/SCI 2 TBD	CLE 3 Dela Cruz			Fees	Mark-Up		
			\$265	\$265	\$225	\$210	\$210	\$175	\$180	\$120	\$105						
TASK 1 - PRE-CONSTRUCTON SVCES (12 Weeks)																	
Coordination			8								8	16	\$ 2,960		\$ -	\$ 80	\$ 3,040
Coordination Meetings, Bi-weekly			6			6		12			12	36	\$ 6,210		\$ -	\$ 180	\$ 6,390
Constructability Review			2	4	8		8	16		16	2	56	\$ 10,000		\$ -	\$ 280	\$ 10,280
Compliance Schedule												0	\$ -		\$ -	\$ -	\$ -
Develop Contractor Compliance Schedule			2			8		4				14	\$ 2,910		\$ -	\$ 70	\$ 2,980
Pre-Construction Meeting												0	\$ -		\$ -	\$ -	\$ -
Schedule Mtg, Prepare Agenda, and Lead Meeting			12			4	12	16		8	8	60	\$ 11,140		\$ -	\$ 300	\$ 11,440
Prepare Mtg Notes incl. Action Items			2			4		4			4	14	\$ 2,490		\$ -	\$ 70	\$ 2,560
Environmental Clearance Coordination												0	\$ -		\$ -	\$ -	\$ -
Coordinate pre-construction Environmental Compliance Activties			4			16					8	28	\$ 5,260		\$ -	\$ 140	\$ 5,400
												0	\$ -		\$ -	\$ -	\$ -
	Subtotal Task 1		36	4	8	38	20	52	0	24	42	224	\$ 40,970	\$ -	\$ -	\$ 1,120	\$ 42,090
TASK 2 - CONSTRUCTION OBSERVATION (3 months)																	
Observation												0	\$ -		\$ -	\$ -	\$ -
Construction Observation												0	\$ -		\$ -	\$ -	\$ -
Observation: 12 weeks @ 5 days/wk @ 8 hrs/day = 480 hrs										480		480	\$ 57,600	\$ 12,666	\$ 1,900	\$ 2,400	\$ 74,566
Observation (OT): 12 weeks @ 2 days/wk @ 2 hrs/day =48 hrs.									48			48	\$ 8,640		\$ -	\$ 240	\$ 8,880
												0	\$ -		\$ -	\$ -	\$ -
	Subtotal Task 2		0	0	0	0	0	0	48	480	0	528	\$ 66,240	12666	1900	2640	\$ 83,446
TASK 3 - CONSTRUCTION ADMINISTRATION (6 months)																	
Meetings												0	\$ -		\$ -	\$ -	\$ -
Construction Meetings (weekly, during construction, hybrid)			12			24		36			36	108	\$ 18,300		\$ -	\$ 540	\$ 18,840
Administration												0	\$ -		\$ -	\$ -	\$ -
Daily Field Reports												0	\$ -		\$ -	\$ -	\$ -
Photographs												0	\$ -		\$ -	\$ -	\$ -
Compliance w/ Plans & Specs												0	\$ -		\$ -	\$ -	\$ -
Compliance w/ SWPPP			6			12		12				30	\$ 6,210		\$ -	\$ 150	\$ 6,360
Compliance w/ Permits/Environmental			6			12		12				30	\$ 6,210		\$ -	\$ 150	\$ 6,360
Submittals (Assume 12)			6		6			12			12	36	\$ 6,300		\$ -	\$ 180	\$ 6,480
RFIs (Assume 12)			6		6			12			12	36	\$ 6,300		\$ -	\$ 180	\$ 6,480
Pay Requests (Assume 6)			3					6			6	15	\$ 2,475		\$ -	\$ 75	\$ 2,550
Maintain Construction Drawing Redlines (Field Set + Office Set)												0	\$ -		\$ -	\$ -	\$ -
File/Document Management			18					18			36	72	\$ 11,700		\$ -	\$ 360	\$ 12,060
												0	\$ -		\$ -	\$ -	\$ -
	Subtotal Task 3		57	0	12	48	0	108	0	0	102	327	\$ 57,495	\$ -	\$ -	\$ 1,635	\$ 59,130

COST ESTIMATE - Task Order No. 23-01
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		Employee	Rate	\$265	\$265	\$225	\$210	\$210	\$175	\$180	\$120			\$105	15%	\$5.00	
TASK 4 - PROJECT CLOSE-OUT																	
Punch List			2					16			2	20	\$ 3,540		\$ -	\$ 100	\$ 3,640
Walk -Through			4					12				16	\$ 3,160		\$ -	\$ 80	\$ 3,240
Revised Punch List			2					12			2	16	\$ 2,840		\$ -	\$ 80	\$ 2,920
2nd Walk-Through			4					12				16	\$ 3,160		\$ -	\$ 80	\$ 3,240
Review Redlines w/ Engineer								8				8	\$ 1,400		\$ -	\$ 40	\$ 1,440
Review As-Built's prepared by Engineer								4				4	\$ 700		\$ -	\$ 20	\$ 720
Project Completion Report			4			4	8	24			12	52	\$ 9,040		\$ -	\$ 260	\$ 9,300
												0	\$ -		\$ -	\$ -	\$ -
	Subtotal Task 4		16	0	0	4	8	88	0	0	16	132	\$ 23,840	\$ -	\$ -	\$ 660	\$ 24,500
TASK 5 - PROJECT MANAGEMENT																	
Project Management (9 Months)												0	\$ -		\$ -	\$ -	\$ -
Resource Mgmt, Cost/Schedule Control, and Coordination			36								36	72	\$ 13,320		\$ -	\$ 360	\$ 13,680
Monthly Status Reports (9)												0	\$ -		\$ -	\$ -	\$ -
Prepare Report w. updated Status, Schedule, and Financials			18								18	36	\$ 6,660		\$ -	\$ 180	\$ 6,840
												0	\$ -		\$ -	\$ -	\$ -
	Subtotal Task 5		54	0	0	0	0	0	0	0	54	108	\$ 19,980	\$ -	\$ -	\$ 540	\$ 20,520
PROJECT TOTALS			163	4	20	90	28	248	48	504	214	1,319	\$ 208,525	\$ 12,666	\$ 1,900	\$ 6,595	\$ 229,686