

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

Task Order Name: Wastewater Collection System CM

Task Order No: 19-02, Amend. 01

Background

Task Order 19-02 authorized Forsgren to begin Construction Management (CM) services for the District's Carter Basin Wastewater Collection System (WWCS) improvements project. At the time that Task Order was issued, the project was still in the design phase. As such, there were numerous aspects of the project that had yet to be defined, and the construction schedule was unknown. Accordingly, the level of effort for the CM services was a rough estimate at that time. The design has now been completed, and the scope of the project defined. In addition, the construction contract has been awarded, and we now have a preliminary understanding of the construction schedule. This amendment increases the budget of the CM services to align with the current scope and schedule of the project.

Scope of Services:

Forsgren will provide CM services for the District's WWCS improvements project, as described in detail in the original Task Order No. 19-02. The scope of the CM services will include 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

The Pre-Construction phase of the project was extended significantly as the District worked through administrative issues with the State, and hence, the costs associated with these services were higher than originally anticipated. With construction expected to begin in mid-August, the effort associated with this task is essentially complete.

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), TCSD personnel, or visitors. Work will be photographed to document progress, or any problems. All photographs will be documented and catalogued. Our inspector will participate in daily safety meetings with the contractor, and will hold weekly construction meetings with contractor to review progress, discuss upcoming work, and to ferret out issues and attempt to resolve them 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 10 months.
- 160 days of construction will occur during the 10-month period.
- Construction activity will require one inspector per day.
- Inspectors will work 8 hours per day.
- Apart from weather constraints, contractor's work days will be reasonably contiguous.
- Daily inspection responsibilities will be divided evenly among our three inspectors, with actual assignments depending upon the nature of the work being performed, and when it is performed.
- Expenses include lodging, per diem, and mileage at standard government rates.
- Laboratory analysis costs have not been included in this proposal. Responsibilities for storm water sampling will be discussed and agreed to at the beginning of the project.

Task 3. Construction Administration

We will provide construction administration services in order to manage the host of anticipated Submittals, Requests for Information (RFI), Change Order (CO) requests, Certified Payroll Reports, 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.

Apart from the regularly scheduled contractor meetings and progress meetings, communication will be a daily function. Coordination with the contractor, Black Water, 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 plan and lead a preconstruction meeting in order to help the project team put faces to names, set expectations, establish procedures, draw lines of communication and authority, identify forms, and establish protocols for submittals, RFIs, COs, and Pay Requests. 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.

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.

Assumptions

- We will receive, log, and process 20 submittals.
- We will receive, log, and process 10 RFIs.
- We will receive, log, and process 10 CO requests.
- We will receive, log, and review 24 (weekly) certified payroll reports.
- We will receive, log, and review 10 Pay Requests.

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.

Assumptions

- Progress reports will include Forsgren's invoices, as well as construction project updates.
- Weekly teleconferences, 1 hour.
- Monthly Progress Meetings, 2 hours.

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.

Assumptions

- One hard and one electronic copy of the project construction file will be submitted.

Schedule:

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

Compensation:

This Amendment increases the estimated fee for the services from \$372,530 to \$600,000, an increase of \$227,470. The services will be charged on a time and materials basis, and the estimated fee will not be exceeded without prior authorization from TCSD. A spreadsheet showing the breakdown of this revised estimated fee is included as Attachment A.

Terms and Conditions:

The requested services will be performed in accordance with Forsgren's current Billing Rates, and Terms & Conditions included as part of the Master Services Agreement between Tuolumne City and Forsgren. If applicable, reference any flow-down contractual requirements here.

FORSGREN ASSOCIATES, INC.

TUOLUMNE CITY SANITARY DISTRICT

By:

**Printed
Name:**



Alan Driscoll

Title:

Principal

Date:

July 29, 2022

By:

**Printed
Name:**

Title:

Date:

COST ESTIMATE - Revised
Tuolumne City Sanitary District
Carter Basin WWCS - Construction Management

Forsgren Associates, Inc.

	Role	PM	Technical Expert	Senior Engineer	Environ./ Scheduling	Project Engineer	Inspector (OT)	Inspector	Project Asst.	Total Labor Hours	Total Labor Costs	Travel & Expenses		Related Project Fee	Total
		ENG/SCI VI	ENG/SCI VII	ENG/SCI IV	ENG/SCI IV	ENG/SCI II	INSP IV	INSP IV	CLE II			Fees	Mark-Up		
		Driscoll	Noll	Gach	Wickman	Vallarino	Bolton/Kram	Bolton/Kram	Dela Cruz						
		Employee Rate	\$245	\$265	\$195	\$195	\$150	\$210	\$140			\$90	15%	\$5.00	
TASK 1 - PRE-CONSTRUCTION SERVICES															
Previous Billed from Start Through 10/25/21										0	\$ -	\$ 43,940	\$ -	\$ -	\$ 43,940
Previous Billed from 10/26/21 Through 2/25/22										0	\$ -	\$ 27,244	\$ -	\$ -	\$ 27,244
Coordination		16				10			10	36	\$ 6,320		\$ -	\$ 180	\$ 6,500
Design Review Meeting		2	4	4				6	2	18	\$ 3,350		\$ -	\$ 90	\$ 3,440
Coordination Meetings (6)										0	\$ -		\$ -	\$ -	\$ -
Schedule Mtg, Prepare Agenda, and Lead Meeting		6			6	4			6	22	\$ 3,780		\$ -	\$ 110	\$ 3,890
Prepare Mtg Notes incl. Action Items and Decision Log		6			6	4			6	22	\$ 3,780		\$ -	\$ 110	\$ 3,890
Compliance Schedule										0	\$ -		\$ -	\$ -	\$ -
Update/Maintain Contractor Compliance Schedule		4			4	2				10	\$ 2,060		\$ -	\$ 50	\$ 2,110
Pre-Construction Meeting										0	\$ -		\$ -	\$ -	\$ -
Schedule Mtg, Prepare Agenda, and Lead Meeting		4			2	4		6	8	24	\$ 3,530		\$ -	\$ 120	\$ 3,650
Prepare Mtg Notes incl. Action Items and Decision Log		2			2	2		2	4	12	\$ 1,820		\$ -	\$ 60	\$ 1,880
Environmental Clearance Coordination										0	\$ -		\$ -	\$ -	\$ -
Coordinate pre-construction Environmental Compliance Activties		2			4	2			2	10	\$ 1,750		\$ -	\$ 50	\$ 1,800
										0	\$ -		\$ -	\$ -	\$ -
	Subtotal Task 1	42	4	4	24	28	0	14	38	154	\$ 26,390	\$ 71,184	\$ -	\$ 770	\$ 98,344
TASK 2 - CONSTRUCTION OBSERVATION: 8/1/22 - 5/31/23 (10 mos/44 wks)															
Observation										0	\$ -		\$ -	\$ -	\$ -
Construction Observation										0	\$ -		\$ -	\$ -	\$ -
28 weeks @ 5 days/wk @ 8 hrs/day = 1120 hrs								1120		1120	\$ 156,800	\$ 1,375	\$ 206	\$ 5,600	\$ 163,981
22 days w/ 4 hrs OT = 80 hrs OT							88			88	\$ 18,480		\$ -	\$ 440	\$ 18,920
4 weeks @ 5 days/wk @ 8 hrs/day = 160 hrs						160				160	\$ 24,000		\$ -	\$ 800	\$ 24,800
										0	\$ -		\$ -	\$ -	\$ -
	Subtotal Task 2	0	0	0	0	160	88	1120	0	1368	\$ 199,280	1375	206	6840	\$ 207,701
TASK 3 - CONSTRUCTION ADMINISTRATION: 8/1/22 - 5/31/23 (10 mos/44 wks)															
Meetings										0	\$ -		\$ -	\$ -	\$ -
Construction Mtgs. (20 - bi-weekly, On-site + Videoconference)		60			16	40			80	196	\$ 31,020		\$ -	\$ 980	\$ 32,000
Construction Mtgs. (6 - On-Site)		72			6				72	150	\$ 25,290	\$ 750	\$ 113	\$ 750	\$ 26,903
Misc. Videoconferences (10 - as needed)		20			5	20			20	65	\$ 10,675		\$ -	\$ 325	\$ 11,000
Administration										0	\$ -		\$ -	\$ -	\$ -
Daily Reports		2				18			55	75	\$ 8,140		\$ -	\$ 375	\$ 8,515
Photograph Management									55	55	\$ 4,950		\$ -	\$ 275	\$ 5,225
Compliance w/ Plans & Specs		24		32	20				2	78	\$ 16,200		\$ -	\$ 390	\$ 16,590

COST ESTIMATE - Revised
Tuolumne City Sanitary District
Carter Basin WWCS - Construction Management

Forsgren Associates, Inc.

	Role	PM	Tecnical Expert	Senior Engineer	Environ./ Scheduling	Project Engineer	Inspector (OT)	Inspector	Project Asst.	Total Labor Hours	Total Labor Costs	Travel & Expenses		Related Project Fee	Total
	Title Code Employee Rate	ENG/SCI VI	ENG/SCI VII	ENG/SCI IV	ENG/SCI IV	ENG/SCI II	INSP IV	INSP IV	CLE II			Fees	Mark-Up		
		Driscoll	Noll	Gach	Wickman	Vallarino	Bolton/Kram	Bolton/Kram	Dela Cruz						
		\$245	\$265	\$195	\$195	\$150	\$210	\$140	\$90					15%	
Compliance w/ SWPPP		8			20				2	30	\$ 6,040		\$ -	\$ 150	\$ 6,190
Compliance w/ Permits/Environmental		20			40				8	68	\$ 13,420		\$ -	\$ 340	\$ 13,760
Submittals (Assume 20)		2				10			20	32	\$ 3,790		\$ -	\$ 160	\$ 3,950
Field Orders (Assume 20)		2				20			20	42	\$ 5,290		\$ -	\$ 210	\$ 5,500
Work Change Directives (Assume 20)		4				32			40	76	\$ 9,380		\$ -	\$ 380	\$ 9,760
RFIs (Assume 20)		2				10			10	22	\$ 2,890		\$ -	\$ 110	\$ 3,000
Change Orders (Assume 10)		4				28			20	52	\$ 6,980		\$ -	\$ 260	\$ 7,240
Pay Requests (Assume 10)		2				4			5	11	\$ 1,540		\$ -	\$ 55	\$ 1,595
Payroll Documentation (Coord. and Filing Only)									10	10	\$ 900		\$ -	\$ 50	\$ 950
Maintain Construction Drawing Redlines (Field Set + Office Set)									12	12	\$ 1,080		\$ -	\$ 60	\$ 1,140
File/Document Management		2				20			88	110	\$ 11,410	\$ 1,000	\$ 150	\$ 550	\$ 13,110
										0	\$ -		\$ -	\$ -	\$ -
	Subtotal Task 3	224	0	32	107	202	0	0	519	1084	\$ 158,995	\$ 1,750	\$ 263	\$ 5,420	\$ 166,428
TASK 4 - PROJECT CLOSE-OUT: 6/1/23 - 3/31/24 (10 mos/44 wks)															
Punch List										0	\$ -		\$ -	\$ -	\$ -
Punch List		6		8				16	2	32	\$ 5,450		\$ -	\$ 160	\$ 5,610
Walk -Through		6		12				12	2	32	\$ 5,670		\$ -	\$ 160	\$ 5,830
Revised Punch List		4		4				8	2	18	\$ 3,060		\$ -	\$ 90	\$ 3,150
2nd Walk-Through		6		12				12	2	32	\$ 5,670		\$ -	\$ 160	\$ 5,830
As-Built Drawings										0	\$ -		\$ -	\$ -	\$ -
Review Redlines w/ Engineer		2		4		8		8	4	26	\$ 3,950		\$ -	\$ 130	\$ 4,080
Review As-Builts prepared by Engineer		2		4		8		4	2	20	\$ 3,210		\$ -	\$ 100	\$ 3,310
Record of Construction Report										0	\$ -		\$ -	\$ -	\$ -
Prepare/Submit Draft Report		20		16	20	40		20	80	196	\$ 27,920		\$ -	\$ 980	\$ 28,900
Prepare/Submit Final Report		10		8	10	20		10	40	98	\$ 13,960		\$ -	\$ 490	\$ 14,450
										0	\$ -		\$ -	\$ -	\$ -
	Subtotal Task 4	56	0	68	30	76	0	90	134	454	\$ 68,890	\$ -	\$ -	\$ 2,270	\$ 71,160
TASK 5 - PROJECT MANAGEMENT: 11/1/21-3/31/24 (30 mos/ 126 wks)															
Project Management										0	\$ -		\$ -	\$ -	\$ -
Resource Mgmt, Cost/Schedule Control, and Coordination		58				90			116	264	\$ 38,150		\$ -	\$ 1,320	\$ 39,470
Monthly Reports										0	\$ -		\$ -	\$ -	\$ -
Prepare Report w. updated Status, Schedule, and Financials		26				36			52	114	\$ 16,450		\$ -	\$ 570	\$ 17,020
										0	\$ -		\$ -	\$ -	\$ -
	Subtotal Task 5	84	0	0	0	126	0	0	168	378	\$ 54,600	\$ -	\$ -	\$ 1,890	\$ 56,490
PROJECT TOTALS		406	4	104	161	592	88	1,224	859	3,438	\$ 508,155	\$ 74,309	\$ 469	\$ 17,190	\$ 600,123