



NAPA SANITATION DISTRICT

**CAROLLO ENGINEERS - TASK ORDER No. 30
2019 TREATMENT PLANT PROJECT (CIP 18740)
ENGINEERING SERVICES DURING CONSTRUCTION**

Date: March 25, 2019

Issued under Professional Services Agreement dated September 8, 2017.

To: Carollo Engineers

Project Description:

2019 Treatment Plant Project - Engineering Services during Construction.

Description of Scope of Services to be performed by Consultant under this Task Order:

See Attachment 'A' – Scope of Services

Description of Services to be Provided by District: See Exhibit 'A' –Scope of Services

Deliverables: See Exhibit 'A' –Scope of Services

Consultant Project Manager: Doug Wing, PE

Consultant Quality Control Manager: Rick Chan, PE

Schedule to Perform Services: Dependent upon construction schedule
(est. 8 months)

Time & Materials Not-to-Exceed Cost Limit: \$138,443
See Exhibit 'B' – Labor and Budget Estimate

APPROVALS:

CAROLLO ENGINEERS

By: _____
Authorized Representative Date

NAPA SANITATION DISTRICT

By: _____
Purchasing Agent Date

NSD Account No.: CIP 18740

EXHIBIT A
NAPA SANITATION DISTRICT
2019 TREATMENT PLANT IMPROVEMENTS PROJECT
ENGINEERING SERVICES DURING CONSTRUCTION

SCOPE OF SERVICES

March 18, 2019

INTRODUCTION

In March 2019, the District received bids for the 2019 Treatment Plant Improvements Project (Project). The Project is scheduled to begin construction in May 2019. Construction Management services (general construction contract management and inspection) will be provided by others under a separate contract directly with the District. Carollo's Scope of Services herein is to provide engineering services during construction to the District and the third-party Construction Manager. This Scope of Services is based on a construction period of 8 months from Contractor's notice to proceed until final project acceptance and project closeout.

SCOPE OF SERVICES

This section presents the Scope of Services for the Project's Engineering Services During Construction.

Task 1 - Project Management and Meetings

Consultant shall provide project administration and management of this project and attend specified meetings herein during the construction period.

Task 1.1 - Project Management. Carollo shall provide project management and administration necessary for proper planning, execution, monitoring, quality control, and reporting of this project. Carollo shall also prepare a brief monthly progress summary email as well as the monthly invoice to track status of budget expenditures and key work activities completed during that billing period.

Deliverables:

- Monthly progress report summary email.

Task 1.2 – Pre-Construction Meeting. Carollo's project manager and project engineer shall attend a pre-construction meeting with the District, Construction Manager, and Contractor. The purpose of the meeting is to facilitate understanding of the contract requirements by all parties

involved. The meeting will be conducted by the Construction Manager. Meeting notes will be prepared by the Construction Manager.

Deliverables:

- Input on discussion topics to the District and Construction Manager prior to the meeting.
- Attendance and input at the pre-construction meeting.

Task 1.3 – Monthly Progress Meetings. Carollo shall attend monthly progress meetings with the District, Construction Manager, and Contractor. The purpose of these meetings is to discuss construction status and to review key issues with the Contractor. The meetings will be conducted by the Construction Manager. Meeting notes will be prepared by the Construction Manager. For budgeting purposes, Carollo's project manager or project engineer shall attend 6 progress meetings in person.

Deliverables:

- Input on discussion topics to the District and Construction Manager prior to the meeting.
- Attendance and input at the progress meetings.

Task 1.4 – Weekly Progress Calls. Carollo shall participate in weekly progress calls with the District, Construction Manager, and Contractor, except for weeks when the monthly progress meetings are scheduled. The purpose of these calls is to discuss construction status and to review key issues with the Contractor. The calls will be conducted by the Construction Manager. Meeting notes will be prepared by the Construction Manager. For budgeting purposes, Carollo's project manager or project engineer shall attend 25 progress calls by phone.

Deliverables:

- Input on discussion topics to the District and Construction Manager prior to the meeting.
- Attendance and input at the progress calls.

Task 1.5 – Site Visits. Carollo shall include a limited number of site visits to resolve field issues. Visits will be coordinated with the District, Construction Manager, and Contractor, on an as needed basis. The budget is based on a total of 6 site visits by project manager, project engineer, or discipline engineers.

Deliverables:

- Site visit notes in email format.

Task 2 – Conformed Documents

Carollo shall prepare conformed documents incorporating addenda into the contract documents.

Deliverables:

- Conformed Documents in PDF format

Task 3 – Review RFIs

Carollo shall review RFIs to assist the District and Construction Manager during the construction period.

Task 3.1 – Review RFIs. Carollo shall review and respond to requests for information (RFIs) from the Contractor forwarded by the Construction Manager. In responding to the RFIs, Consultant shall issue interpretations and clarifications to the contract documents. For budgeting purposes, Carollo shall respond to approximately 30 RFIs assuming an average review time of 3 hours to process and respond to each RFI. Note the budget allocated for this task may be higher or lower depending on the final number of RFIs reviewed and the complexity of each RFI submitted by the Contractor.

Deliverables:

- Responses to RFIs (PDF Format).

Task 4 – Review Shop Drawings / Submittals

Carollo shall provide review shop drawings and submittals to assist the District and Construction Manager during the construction period.

Task 4.1 – Review Shop Drawings. Carollo shall review and respond to shop drawings and submittals (excluding temporary shoring and any construction means/methods submittals) from the Contractor forwarded by the Construction Manager. Submittals shall be reviewed and marked-up in accordance with the contract documents. Marked-up submittals and submittal review comment lists will be returned to the Construction Manager for processing and distribution to the Contractor and other parties. For budgeting purposes, Carollo shall respond to approximately 45 submittals assuming an average process and review time of 4 hours per submittal and 15 resubmittals assuming an average process and review time of 2 hours per submittal. Note the budget allocated for this task may be higher or lower depending on the final number of submittals reviewed and the completeness of each shop drawing submitted by the Contractor.

Deliverables:

- Marked-up submittals and resubmittals, and submittal review comments, PDF format.

Task 5 – Other Engineering Support Services

Carollo shall provide other engineering support services specified herein to assist the District and Construction Manager during the construction period.

Task 5.1 – Prepare Major Design Clarifications. Carollo shall prepare two major design clarifications (16 hours each) to clarify and/or change the intent of the contract documents at the request of the District and/or Construction Manager. In preparing the design clarification, Carollo shall issue revised specifications, drawings, and/or sketches, if necessary, to clarify and/or change the intent of the contract documents.

Deliverables:

- Completed design clarifications.

Task 5.2 – Prepare Minor Design Clarifications. Carollo shall prepare two minor design clarifications (8 hours each) to clarify and/or change the intent of the contract documents at the request of the District and/or Construction Manager. In preparing the design clarification, Carollo shall issue revised specifications, drawings, and/or sketches, if necessary, to clarify and/or change the intent of the contract documents.

Deliverables:

- Completed design clarifications.

Task 5.3 – Final Inspection. Carollo shall assist the Construction Manager with the final project “walk-through” inspection in preparing a punch list of outstanding items to be completed by the Contractor to achieve final acceptance. For budget purposes, the project manager, project engineer, and electrical engineer will attend.

Deliverables:

- Input on final punch-list.

Task 6 – Record Drawings

Carollo shall prepare record drawings using Carollo’s standard format to include changes made during the construction period after contract closeout. It is assumed that the Contractor and Construction Manager will maintain a current set of marked-up drawings detailing field changes and clarifications. Carollo will not be responsible for field measuring as-built conditions and will

rely solely on the information provided by the Construction Manager as a basis for preparing the record drawings.

Deliverables:

- Record Drawings in PDF format

Assumptions:

- Eight month construction duration.
- Construction management by others including construction document management system.

EXHIBIT B

LABOR AND BUDGET ESTIMATE

NAPA SANITATION DISTRICT
2019 TREATMENT PLANT IMPROVEMENTS PROJECT
ENGINEERING SERVICES DURING CONSTRUCTION (8 MONTHS)

Task Task Description								CAD Drafter	Admin Support	Total	Labor					Total
		PIC	PM	PE	Structural	Electrical	Staff					PECE	Mileage		ODC	
		\$294	\$252	\$213	\$213	\$213	\$174	\$175	\$115	Hours	Cost	\$12.00	Trips	Amount	Total	Cost
1.0 Project Management and Meetings																
1.1 Project Management (8 months)		8	8	0	0	0	0	16	32	\$6,208	\$384	0	\$0	\$384	\$6,592	
1.2 Pre-Construction Meeting (1)		0	4	4	0	0	0	0	8	\$1,860	\$96	1	\$35	\$131	\$1,991	
1.3 Monthly Progress Meetings (6)		0	12	12	8	0	2	0	34	\$7,632	\$408	6	\$209	\$617	\$8,249	
1.4 Weekly Progress Calls (25)		0	8	16	8	0	2	0	34	\$7,476	\$408	0	\$0	\$408	\$7,884	
1.5 Site Visits (6)		0	8	16	16	0	8	0	48	\$10,224	\$576	6	\$209	\$785	\$11,009	
Task 1.0 Totals =		8	40	48	32	0	12	0	156	\$33,400			Task 1.0 Totals =		\$35,724	
2.0 Conformed Drawings																
2.1 Conformed Drawings		0	4	8	0	0	0	20	40	\$7,132	\$480	0	\$0	\$480	\$7,612	
Task 2.0 Totals =		0	4	8	0	0	0	20	40	\$7,132			Task 2.0 Totals =		\$7,612	
3.0 Review RFIs																
3.1 Review RFIs (30)		0	4	24	32	2	20	0	90	\$17,762	\$1,080	0	\$0	\$1,080	\$18,842	
Task 2.0 Totals =		0	4	24	32	2	20	0	90	\$17,762			Task 2.0 Totals =		\$18,842	
4.0 Review Shop Drawings																
4.1 Review Shop Drawings (45)		0	8	36	80	8	74	0	206	\$41,304	\$2,472	0	\$0	\$2,472	\$43,776	
Task 3.0 Totals =		0	8	36	80	8	74	0	206	\$41,304			Task 3.0 Totals =		\$43,776	
5.0 Other Engineering Support Services																
5.1 Prepare Major Design Clarifications (2)		2	4	16	8	0	6	4	40	\$8,452	\$480	0	\$0	\$480	\$8,932	
5.2 Prepare Minor Design Clarifications (2)		0	4	4	8	0	0	4	20	\$4,264	\$240	0	\$0	\$240	\$4,504	
5.3 Final Inspection		0	4	4	4	0	0	0	12	\$2,712	\$144	1	\$35	\$179	\$2,891	
Task 4.0 Totals =		2	12	24	20	0	6	8	72	\$15,428			Task 4.0 Totals =		\$16,327	
6.0 Record Drawings																
6.1 Record Drawings		0	4	16	0	0	16	40	84	\$15,120	\$1,008	1	\$35	\$1,043	\$16,163	
Task 2.0 Totals =		0	4	16	0	0	16	40	84	\$15,120			Task 2.0 Totals =		\$16,163	
Project Totals =		10	72	156	164	10	128	68	648	\$ 130,146		15		\$ 7,255	\$138,443	