



# NAPA SANITATION DISTRICT

CAROLLO ENGINEERS - TASK ORDER No. 38

2021 TREATMENT PLANT IMPROVEMENTS PROJECT (CIP 20708)

ENGINEERING SERVICES DURING CONSTRUCTION

Date: \_\_\_\_\_

Issued under Professional Services Agreement dated \_\_\_\_\_.

To: Carollo Engineers

**Project Description:**

2021 Treatment Plant Improvements 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. 9 months)

**Time & Materials Not-to-Exceed Cost Limit:** \$69,499  
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 20708

**EXHIBIT A**  
**NAPA SANITATION DISTRICT**  
**2021 TREATMENT PLANT IMPROVEMENTS PROJECT**  
**ENGINEERING SERVICES DURING CONSTRUCTION**

**SCOPE OF SERVICES**  
**February 10, 2021**

**INTRODUCTION**

In February 2021, the District received bids for the 2021 Treatment Plant Improvements Project (Project). The Project is scheduled to begin construction in March 2021. 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 9 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 virtual 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 virtual pre-construction meeting call.

**Task 1.3 – Weekly Progress Calls.** Carollo shall participate in weekly progress calls with the District, Construction Manager, and Contractor. 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 16 progress calls by phone or other virtual meeting platform (i.e. Teams).

***Deliverables:***

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

**Task 1.4 – Site Visits.** Carollo shall include a limited number of site visits to resolve field issues under District and Consultant Covid safety protocols. Visits will be coordinated with the District, Construction Manager, and Contractor, on an as needed basis. The budget is based on a total of 3 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 12 RFIs assuming an average

review time of 3 hours to process and respond to each RFI. Note the budget allocated for this task may need to be adjusted if the final number of RFIs reviewed exceed this estimate, or if additional effort is required due to the lack of completeness of the RFI submitted by the Contractor.

***Deliverables:***

- Responses to RFIs (PDF Format).

**Task 4 – Review Shop Drawings / Submittals**

**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 in accordance with the contract documents. Submittal review comment 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 15 submittals assuming an average process and review time of 4 hours per submittal and 7 resubmittals assuming an average process and review time of 2 hours per submittal. Note the budget allocated for this task may need to be adjusted if the final number of submittals exceeds this estimate, or if additional effort is required by Carollo due to lack of completeness of the submittal package provided 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 – Design Clarifications.** Carollo shall prepare four design clarifications (12 hours each) to clarify 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 the intent of the contract documents.

***Deliverables:***

- Completed design clarifications in PDF.

**Task 5.2 – Final Inspection.** Carollo shall assist the Construction Manager with the final project “walk-through” inspection under District and Consultant Covid safety protocols. Carollo will assist in preparing a punch list of outstanding items to be completed by the Contractor to achieve final acceptance. For budget purposes, the project manager, and project engineer will attend.

***Deliverables:***

- Input on final punch-list.

**Assumptions:**

- Nine-month construction duration.
- Construction management by others including construction document management system.
- Note the scope may need to be adjusted if the final number of RFI, submittal, meetings and other scope items exceeds the estimate included herein, or if additional effort is required by Carollo due to lack of completeness by the Contractor.

EXHIBIT B															
LABOR AND BUDGET ESTIMATE															
NAPA SANITATION DISTRICT 2021 TREATMENT PLANT IMPROVEMENTS PROJECT ENGINEERING SERVICES DURING CONSTRUCTION (9 MONTHS)															
Task Task Description / 2020 Rates															
	PIC	PM	PE	Structural	Electrical	Staff	CAD Drafter	Admin Support	Total	Labor	PECE	Mileage		ODC	Total
	\$293	\$273	\$230	\$230	\$273	\$188	\$175	\$125	Hours	Cost	\$13.00	Trips	Amount	Total	Cost
1.0 Project Management and Meetings															
1.1 Project Management (9 months)	8	8	8	0	0	0	0	8	32	\$7,368	\$416	0	\$0	\$416	\$7,784
1.2 Pre-Construction Meeting (1)	0	4	4	0	0	0	0	0	8	\$2,012	\$104	1	\$35	\$139	\$2,151
1.2 Weekly Progress Calls (16)	0	16	16	0	0	0	0	0	32	\$8,048	\$416	0	\$0	\$416	\$8,464
1.4 Site Visits (3)	0	8	8	8	0	0	0	0	24	\$5,864	\$312	3	\$104	\$416	\$6,280
Task 1.0 Totals =	8	36	36	8	0	0	0	8	96	\$23,292				Task 1.0 Totals =	\$24,678
2.0 Conformed Drawings															
2.1 Conformed Drawings	0	1	2	0	0	0	4	4	11	\$1,933	\$143	0	\$0	\$143	\$2,076
Task 2.0 Totals =	0	1	2	0	0	0	4	4	11	\$1,933				Task 2.0 Totals =	\$2,076
3.0 Review RFIs															
3.1 Review RFIs (12)	0	4	16	8	0	8	2	0	38	\$8,466	\$494	0	\$0	\$494	\$8,960
Task 3.0 Totals =	0	4	16	8	0	8	2	0	38	\$8,466				Task 3.0 Totals =	\$8,960
4.0 Review Shop Drawings															
4.1 Review Shop Drawings (15/7)	0	8	24	16	4	24	2	0	78	\$17,338	\$1,014	0	\$0	\$1,014	\$18,352
Task 4.0 Totals =	0	8	24	16	4	24	2	0	78	\$17,338				Task 4.0 Totals =	\$18,352
5.0 Other Engineering Support Services															
5.1 Prepare Design Clarifications (4)	0	8	16	8	2	8	4	2	48	\$10,704	\$624	0	\$0	\$624	\$11,328
5.2 Final Inspection	0	4	8	4	0	0	0	0	16	\$3,852	\$208	1	\$46	\$254	\$4,106
Task 5.0 Totals =	0	12	24	12	2	8	4	2	64	\$14,556				Task 5.0 Totals =	\$15,434
Project Totals =	8	61	102	44	6	40	12	14	287	\$ 65,585		5		\$ 3,915	\$69,499
<div>Legend: PIC Principal-in-Charge PM Project Manager PE Project Engineer Struct Discipline / Structural Design Engineer Elect Discipline / Electrical/Instrumentation/ Control Engineer ENG Staff Engineer CAD Drafting Technician Admin Document Processor PECE Project Equipment Communication Expense</div> <div>ODC Unit Costs: PECE (\$/hr.): \$ 13 Mileage (\$/mi): \$ 0.58 Miles per Trip: 60</div>															