



Hazen and Sawyer
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September 1, 2020

Eastern Municipal Water District
Mr. Erik Jorgensen, PE
2270 Trumble Rd
Perris, CA 92570

**Re: MVRWRF Solids Handling MCC Replacement Project
Engineering Services During Construction (Revision 2)**

Dear Mr. Jorgensen:

EMWD has requested that Hazen provide engineering services during construction for the MVRWRF Solids Handling MCC Replacement Project which bid August 25, 2020. Attached is the scope and fees related to these services.

We appreciate the opportunity to continue providing professional engineering services on the project. Please contact me with any questions at cthunhorst@hazenandsawyer.com or at my cell (949) 343-9728.

Very Truly Yours,

Chris Thunhorst
Project Manager

Enclosures

Scope of Work

Task 1 Engineering Services During Construction

Task 1.1 Project Management During Construction

Hazen will provide project management during the 14-month construction phase at 6 hours per month. This includes general coordination, monthly reports, and conference calls.

Task 1.2 Project Meetings and Site Visits

Hazen will attend project meetings at the construction site with one engineering representative on a monthly frequency over the duration of the 14-month construction. Hazen will provide site visits, as necessary. An average of 4 hours will be designated for each combined meeting and site visit.

Task 1.3 Engineering Field Support

Hazen will provide on-site field engineering services for two days (6 hour per day) per month for one representative for the duration of the 14-month construction. The focus on this support will be review of electrical installations as it relates to the design, although all disciplines areas will be reviewed as needed. A field report will be provided to EMWD each week following the site visit. Categorial billing rate are inclusive of expenses.

Task 1.4 Submittal Reviews

Hazen will review up to 20 submittals and 10 resubmittals received from the Contractor at an average review time of 6 hours each. A submittal log will be submitted on a monthly basis.

Task 1.5 Response to Clarifications

Hazen will respond to up to 30 requests for information at an average of 4 hours each. Responses will be issued in a word document format with pdf drawings attached as required. An RFI log will be submitted on a monthly basis.

Task 1.6 Change Order Reviews

Hazen will review up to 3 change orders for technical conformity to the design and cost justification. Hazen will provide a recommendation to EMWD's construction manager for technical conformance, justification based on contract documents, and review of price.

Task 1.7 Technical and Special Inspections

Hazen will provide up to 6 technical and special inspections at 6 hours each.

Task 1.8 Start-up Support Services

Hazen will perform four days (8 hours per day) of start-up services that will include an electrical/I&C engineer.

Task 1.9 Project Closeout and Record Drawings

Hazen will attend a substantial completion walk-through with EMWD staff and the Contractor. A substantial completion punch-list will be provided to EMWD's construction manager. Hazen will attend a final completion walk-through with EMWD staff and the contractor. A final completion punch list will be provided to EMWD's construction manager.

Hazen will review the as-built drawings provided by the Contractor via EMWD’s construction manager. Record drawings will be produced based on the as-built drawings provided. Record drawings will be provided in pdf and AutoCAD format.

Task 2.0 Electronic Operations and Maintenance Manuals

Hazen will work with EMWD to add operation and maintenance data from the Solids Handling MCC Replacement Project to EMWD’s existing electronic operations and maintenance manual system. Hazen will perform this task on a time and expenses basis not to exceed the allowance included below.

Compensation

Hazen proposes to complete the scope on a time and expense basis for a not to exceed amount of \$179,490.

**MVRWRF Solids Handling MCC Replacement Project
Engineering Services During Construction
September 1, 2020**

Task	Description	SPC	SA	A	SPE2	AE	Tech	Total	Fee		
		\$ 265	\$ 235	\$ 200	\$ 195	\$ 130	\$ 130	Hours	Labor	Expense	Total
1	Engineering Services During Construction										
1.1	Construction Project Management		56		28			84	\$ 18,620	\$ -	\$ 18,620
1.2	Attend Project Meetings and Site Visits		56					56	\$ 13,160	\$ 600	\$ 13,760
1.3	Engineering Field Support				168			168	\$ 32,760	\$ -	\$ 32,760
1.4	Submittal Reviews		12	20	50	98		180	\$ 29,310	\$ -	\$ 29,310
1.5	Response to Clarifications		8	8	50	54		120	\$ 20,250	\$ -	\$ 20,250
1.6	Change Order Reviews		12	4	8			24	\$ 5,180	\$ -	\$ 5,180
1.7	Technical and Special Inspections		10	4	22			36	\$ 7,440	\$ 800	\$ 8,240
1.8	Startup Support Services				32			32	\$ 6,240	\$ -	\$ 6,240
1.9	Project Closeout and Record Drawings	2	12	4	8	12	60	98	\$ 15,070	\$ 60	\$ 15,130
2.0	Electronic O&M Manuals (Allowance)								\$ 30,000		\$ 30,000
	Total	2	166	40	366	164	60	798	\$ 178,030	\$ 1,460	\$ 179,490

Labor Classifications
SPC - Sr Principal Consultant
SA - Sr Associate / Project Manager
SPE2 - Senior Principal Engineer 2
AE - Assistant Engineer
Tech - Technician / Designer / Admin

