

**Compressed Biogas Fueling Facilities Project, Phase II**

Engineers Estimate \$6,100,000

February 7, 2018

**WESTERN WATER CONSTRUCTORS, INC. - SANTA ROSA, CA**

<b>ITEM NO.</b>	<b>ITEM DESCRIPTION</b>	<b>ESTIMATED QUANTITIES</b>	<b>UNIT</b>	<b>UNIT PRICE</b>	<b>TOTAL</b>
1	Mobilization, submittals, bonds, licenses, permits, fees, and insurance (maximum of 4% of total bid amount)	1	LS	\$ 277,000.00	\$ 277,000.00
2	SWPP Permit and Erosion Control	1	LS	\$ 14,000.00	\$ 14,000.00
3	Temporary Facilities, Temporary Power, Fences Roads, and Protection Of the Work	1	LS	\$ 266,000.00	\$ 266,000.00
4	Site Work, Clearing, Grubbing, Tree Removal, and Potholing	1	LS	\$ 5,000.00	\$ 5,000.00
5	General Excavation, Stripping, Grading, Site Work, and All Site Rough Grading.	1	LS	\$ 42,000.00	\$ 42,000.00
6	Placement and Compaction of Import Fill (Section 2300)	158	CY	\$ 48.00	\$ 7,584.00
7	General Fine Grading, in All Areas.	1	LS	\$ 39,000.00	\$ 39,000.00
8	Placement and Compaction of Base Rock (Section 2722)	1600	CY	\$ 81.00	\$ 129,600.00
9	Asphalt Paving, (Section 2742)	1090	TON	\$ 127.00	\$ 138,430.00
10	Asphalt Patching, and Repair.	1	LS	\$ 2,000.00	\$ 2,000.00
11	Pavement Markings White Thermoplastic. (Section 2762)	357	SF	\$ 6.00	\$ 2,142.00
12	6" Wide Pavement Markings Yellow Thermoplastic (Section 2762)	3255	LF	\$ 6.00	\$ 19,530.00
13	All Project Signage.	1	LS	\$ 35,000.00	\$ 35,000.00
14	Installation of Landscape Irrigation System.	1	LS	\$ 21,000.00	\$ 21,000.00
15	Installation of Landscaping and Rock in Landscape Areas.	1	LS	\$ 113,000.00	\$ 113,000.00
16	Installation of Hydroseeding in All Areas	30000	SF	\$ 0.10	\$ 3,000.00
17	Installation of All Manholes and Catch Basins.	1	LS	\$ 14,000.00	\$ 14,000.00
18	Installation of Chain Link Fence	1734	LF	\$ 30.00	\$ 52,020.00
19	Relocation of Entrance Gate and Installation of Rolling Gates, Man Gates, and Swing Gates at All Locations.	1	LS	\$ 144,000.00	\$ 144,000.00
20	Installation of Concrete Pad, Landings, Sidewalk, Building Foundation, and Miscellaneous Concrete at Vehicle Wash Station.	1	LS	\$ 121,000.00	\$ 121,000.00
21	Installation of Concrete Pads, Pipe Support Pads, and Miscellaneous Concrete at BioCNG Area.	1	LS	\$ 8,000.00	\$ 8,000.00
22	Installation of Pre-cast Concrete Utility Trenches at BioCNG and CNG Areas.	1	LS	\$ 76,000.00	\$ 76,000.00
23	Installation of Oil and Sand Separator and Controls at Vehicle Wash Station	1	LS	\$ 43,000.00	\$ 43,000.00
24	Installation of Concrete Paving at Vehicle Timed Fill Station Parking Areas.	1	LS	\$ 309,000.00	\$ 309,000.00
25	Installation of Concrete Pads, Utility Trenches, Support bases, Sidewalk, and Miscellaneous Concrete at CNG area.	1	LS	\$ 178,000.00	\$ 178,000.00
26	Installation of Concrete Building Foundation, landings, and Miscellaneous Concrete at CNG Electrical Building.	1	LS	\$ 17,000.00	\$ 17,000.00
27	Installation of Fixed Bollards in All Areas. (TYP/C132)	161	EA	\$ 381.00	\$ 61,341.00
28	Installation of Removable Bollards in All Areas. (TYP/C135)	6	EA	\$ 838.00	\$ 5,028.00
29	Installation of All Miscellaneous Metal Work for All Areas	1	LS	\$ 4,000.00	\$ 4,000.00
30	Installation of Pre-Engineered Metal Building at Vehicle Wash Station.	1	LS	\$ 88,000.00	\$ 88,000.00
31	Installation of Pre-Engineered Metal Building at CNG Area.	1	LS	\$ 100,000.00	\$ 100,000.00
32	Installation of all Mechanical Equipment, Vehicle Wash Equipment and Other Equipment at Vehicle Wash Station.	1	LS	\$ 67,000.00	\$ 67,000.00
33	Installation of All Mechanical buried and exposed Piping, Valves, regulators, back flow preventers, Pipe Insulation, and Supports at Vehicle Wash Station.	1	LS	\$ 103,000.00	\$ 103,000.00
34	Mechanical Equipment Testing and start up of All Wash Station Equipment and Other Specified Tests.	1	LS	\$ 5,000.00	\$ 5,000.00
35	Installation of Boiler, Pump, and all Mechanical Equipment at Digester Control Building No. 2.	1	LS	\$ 315,000.00	\$ 315,000.00
36	Installation of All Mechanical Piping, Valves, Pipe Insulation, and Supports at Digester Control Building No. 2.	1	LS	\$ 233,000.00	\$ 233,000.00
37	Purchase of BIOCNG Packaged Equipment per Specification Section 11386. (pre-negotiated price)	1	LS	\$ 827,269.50	\$ 827,269.50
38	Installation of All Equipment, Piping, Valves, and Supports for Digester Gas Equipment Including BIOCNG System, at Biogas Production Area.	1	LS	\$ 353,000.00	\$ 353,000.00
39	Mechanical Equipment Testing and start up of All BioCNG, Boilers, Pumps, and Equipment at Digester Control Building No. 2 and BioCNG area and Other Specified Tests.	1	LS	\$ 8,000.00	\$ 8,000.00

40	Purchase of CNG Compressor Equipment per Specification Section 13600.	1	LS	\$ 1,105,000.00	\$ 1,105,000.00
41	Purchase of RCNG Low Pressure Storage Tanks per Section 13600.	2	EA	\$ 60,500.00	\$ 121,000.00
42	Purchase of CNG High Pressure Storage Tanks and Support Stands per Specification Section 13600.	15	EA	\$ 30,000.00	\$ 450,000.00
43	Purchase of CNG and RCNG Dryers per Specification Section 13600.	1	LS	\$ 144,000.00	\$ 144,000.00
44	Purchase of CNG Fill Station Canopy per Specification Section 13625.	1	LS	\$ 101,000.00	\$ 101,000.00
45	Purchase of CNG Electrical Panels, Control Panels, Fill Stations, Instruments, and Remaining CNG equipment per Specification Section 13600.	1	LS	\$ 690,000.00	\$ 690,000.00
46	Installation of All CNG Equipment, Canopy, Tanks, Piping, Valves, Supports, Electrical wire and Conduits, Duct Banks, Pull boxes, Fast Fill Stations, Slow Fill Stations, and Packaged CNG Compression, Storage, and Handling Equipment For Complete CNG system per Specification Section 13600 and Indicated on the Drawings.	1	LS	\$ 1,230,155.50	\$ 1,230,155.50
47	Mechanical Equipment Testing and Start Up, of All CNG Equipment Testing, Pump Testing, and Other Specified Tests.	1	LS	\$ 48,000.00	\$ 48,000.00
48	Cleaning, Sand Blasting, Coating and Painting for All Piping, Building Interiors, and Equipment in CNG area.	1	LS	\$ 46,000.00	\$ 46,000.00
49	Cleaning, Sand Blasting, Coating and Painting for All Piping, Building Interiors, and Equipment at Vehicle Wash Areas.	1	LS	\$ 6,000.00	\$ 6,000.00
50	Cleaning, Sand Blasting, Coating and Painting for All Remaining Areas.	1	LS	\$ 13,000.00	\$ 13,000.00
51	Installation of All Electrical Duct Banks and Pull Boxes outside of CNG area.	1	LS	\$ 90,000.00	\$ 90,000.00
52	Installation of all other Electrical and Control Conduit, Wiring, Supports, Lighting, and All Other Miscellaneous Electrical Items for all areas outside of CNG area.	1	LS	\$ 289,000.00	\$ 289,000.00
53	Installation PLCs, PLC Control Panels, and Networking Equipment.	1	LS	\$ 14,000.00	\$ 14,000.00
54	Installation of Ethernet Video Camera System	1	LS	\$ 12,000.00	\$ 12,000.00
55	Programming of all New and Existing, PLCs.	1	LS	\$ 14,000.00	\$ 14,000.00
56	Installation of All IFIX SCADA programming.	1	LS	\$ 14,000.00	\$ 14,000.00
57	Installation of All CMMS Analysis and Programming.	1	LS	\$ 308,000.00	\$ 308,000.00
58	Installation of All Instruments, Preparation of Interconnect and Loop Drawings, and As-built Drawings.	1	LS	\$ 26,000.00	\$ 26,000.00
59	Electrical Equipment Testing, Wire Testing, and Other Specified Tests.	1	LS	\$ 23,000.00	\$ 23,000.00
60	Phased Startup of all Equipment, Systems, and Owner Training.	1	LS	\$ 9,000.00	\$ 9,000.00
61	Demobilization, Warranty paper work, and Project Closeout (minimum of 1%).	1	LS	\$ 18,700.00	\$ 18,700.00
62	Miscellaneous Items Specified or Indicated Elsewhere But Not Listed Above.	1	LS	\$ 100.00	\$ 100.00
63	Construction Manager's Trailer and Ongoing Maintenance per Section 01500.	1	LS	\$ 29,000.00	\$ 29,000.00
64	Additional Cost for Providing All Shoring and Bracing On All Bid Items Above Including But Not Limited to That as Required By Section 6700-6708 of the Labor Code.	1	LS	\$ 100.00	\$ 100.00
BID TOTAL:					\$ 9,047,000.00