

Attachments:

- 8a Bakman Avoided Cost Estimated for New Well
- 8b San Joaquin Avoided Cost Estimated for New Well
- 8c Kerman Master Fee Schedule

ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST

BAKMAN WATER COMPANY - AVOIDED PROJECT NEW WELL, TREATMENT AND GRID TRANSMISSION MAIN

PRELIMINARY

Item No.	Item Description	Estimated Quantity	Unit	Unit Price	Amount
Well Design and Planning					
1	Hydrogeological and Geotechnical Investigation	1	LS	\$10,000	\$10,000
2	Drill Test Well (including hydrogeologist and lab work)	1	LS	\$100,000	\$100,000
3	Water Treatment Study	1	LS	\$30,000	\$30,000
4	Final Design and PS&E	1	LS	\$50,000	\$50,000
				SUBTOTAL	\$190,000
Well and Transmission Grid Main Construction					
5	Mobilization/Demobilization, Bonds, Insurance	1	LS	\$30,000	\$30,000
6	Abandon Test Hole	1	LS	\$10,000	\$10,000
7	Furnish and Install Conductor Casing	40	LF	\$275	\$11,000
8	Drill Pilot Hole	580	LF	\$50	\$29,000
9	Open Bore Hole	580	LF	\$50	\$29,000
10	Furnish and Install Blank Casing	400	LF	\$50	\$20,000
11	Furnish and Install Perforated Casing	200	LF	\$70	\$14,000
12	Furnish and Install 2" Dia. Sounding Tube	300	LF	\$7	\$2,100
13	Furnish and Install 3" Dia. Gravel Pipe	400	LF	\$8	\$3,200
14	Furnish and Install Gravel Pack	200	LF	\$50	\$10,000
15	Furnish and Install Annular Seal	400	LF	\$50	\$20,000
16	Fencing & Gates	500	LF	\$20	\$10,000
17	Backup Generator	1	LS	\$8,000	\$8,000
18	2,500 Gallon Hydropneumatic Tank	1	LS	\$15,000	\$15,000
19	Booster Pump	1	LS	\$5,000	\$5,000
20	10" C900 Water Main (assume 1/4 mile to connection)	1320	LF	\$30	\$39,600
21	4" C900 Water Main (onsite)	2800	LF	\$15	\$42,000
22	2" Water Service, Meter and RPBP	1	EA	\$4,600	\$4,600
23	Well Controls and SCADA System	1	LS	\$18,000	\$18,000
24	Cross Connection Study	1	LS	\$20,000	\$20,000
25	Onsite System Bifurcation Piping	1	LS	\$15,000	\$15,000
26	Environmental Permitting	1	LS	\$40,000	\$40,000
27	Contingency (20%)	1	LS	\$71,100	\$71,100
28	Engineering (10%)	1	LS	\$35,550	\$35,600
				SUBTOTAL	\$502,200

Well Treatment and Blending

DBCP Treatment					
32	Concrete Vessel Pad	1	LS	\$20,000	\$20,000
33	8' ø GAC Vessels and Installation	1	EA	\$115,000	\$115,000
34	Fill Vessels with GAC	1	EA	\$38,000	\$38,000
35	Site Piping, Meters and Vavles	1	LS	\$35,000	\$35,000
Nitrate Blending					
36	Nitrate Analyzers	3	EA	\$18,000.00	\$54,000
37	Electrical Controls and SCADA (1 Well)	1	LS	\$57,000.00	\$57,000
38	Site Piping, Meters and Vavles	1	LS	\$35,000	\$35,000
				SUBTOTAL	\$354,000

PRELIMINARY COST ESTIMATE:**\$1,046,200**

ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST

SAN JOAQUIN - AVOIDED PROJECT DRILL NEW WELL

Item No.	Item Description	Estimated Quantity	Unit	Unit Price	Amount
Well Design and Planning					
1	Hydrogeological and Geotechnical Investigation	1	LS	\$10,000	\$10,000
2	Drill Test Well	1	LS	\$100,000.00	\$100,000
3	Water Treatment Study	1	LS	\$30,000.00	\$30,000
4	Final Design and PS&E	1	LS	\$50,000.00	\$50,000
				SUBTOTAL	\$190,000
Well Rehabilitation					
5	Mobilization, Bonds and Insurance	1	LS	\$30,000	\$30,000
6	Abandon Test Hole	1	LS	\$10,000	\$10,000
7	Furnish and Install Conductor Casing	40	LF	\$275	\$11,000
8	Drill Pilot Hole	580	LF	\$50	\$29,000
9	Open Bore Hole	580	LF	\$50	\$29,000
10	Furnish and Install Blank Casing	400	LF	\$50	\$20,000
4	Furnish and Install Perforated Casing	200	LF	\$70	\$14,000
5	Furnish and Install 2" Dia. Sounding Tube	300	LF	\$7	\$2,100
6	Furnish and Install 3" Dia. Gravel Pipe	400	LF	\$8	\$3,200
7	Furnish and Install Gravel Pack	200	LF	\$50	\$10,000
8	Furnish and Install Annular Seal	400	LF	\$50	\$20,000
9	Fencing & Gates	500	LF	\$20	\$10,000
10	Backup Generator	1	LS	\$8,000	\$8,000
11	2,500 Gallon Hydropneumatic Tank	1	LS	\$15,000	\$15,000
12	Booster Pump	1	LS	\$5,000	\$5,000
13	4" C900 Water Main (onsite)	2800	LF	\$15	\$42,000
14	2" Water Service, Meter and RPBP	1	EA	\$4,600	\$4,600
15	Well Controls and SCADA System	1	LS	\$1,800	\$1,800
16	Cross Connection Study	1	LS	\$20,000	\$20,000
17	Environmental Permitting	1	LS	\$40,000	\$40,000
18	Contingency (20%)	1	LS	\$64,900	\$64,900
19	Engineering (10%)	1	LS	\$32,500	\$32,500
				SUBTOTAL	\$422,100

PRELIMINARY COST ESTIMATE: \$612,100

EXHIBIT 6

SUMMARY OF WATER RATES ADOPTED FOR JULY 1, 2012 - JUNE 30, 2013	
Non-Metered Customers	
Single-Family Residential (per customer)	Current \$27.67
Multi-Family Residential (per dwelling unit)	\$22.32
Commercial (per account)	\$27.67
Metered Customers	
Meter Charges (Fixed Monthly Charges)	Current
3/4" Meter	\$13.14
1" Meter	\$20.46
1.5" Meter	\$38.74
2" Meter	\$89.94
3" Meter	\$166.75
4" Meter	\$276.48
6" Meter	\$550.78
Volumetric Charge (Water Usage) per meter:	
Volume Charge (per 1,000 gallons)	\$0.765

Metered Water Examples:

Residential 3/4" Meter Using 8,000 gallons	Current \$19.26
Residential 3/4" Meter Using 16,000 gallons	\$25.38
Residential 3/4" Meter Using 24,000 gallons	\$31.50