

**Hydrometrics, Inc.**  
Calculation Sheet



1. Purpose

Determine Quantities & Approximate Costs for Construction of the Timbrshor HOA Well No. 4 PWS.  
Compare HEI Estimate to Hydrometrics Estimate

2. References

- A Urecon Price Quote #36599 dated 11/22/21 - \$120,000 for 2,600 LF pipe
- B 2020 RS Means
- C Ace Drilling Quote dated 7/29/21
- D Multiple Supplier Quotes and References
- E 2018 Letter to Board from HEI.

Job Number: 21001  
Client: Timbrshor Homeowners Associatino  
Project: Well No. 4 PWS  
By: RKK 3/01/2022  
Checked by:  
K:\project\21001-THOA\Opinion of Probable Capital Costs

3. Assumptions

- 1 See Below
- 2 Service connections will be the responsibility of each homeowner and are not included in this opinion of probable capital costs.

4. Calculations

**Well No. 4 PWS**

Item #	Bid Item	QNTY	Unit	Price/Unit	Cost	Source/Calculation	Cost Source
1	Mobilization/Demobilization/Cleanup	1	LS	\$30,000.00	\$30,000		~10% of Subtotal
<b>Item #1 - Subtotal Mobilization/Demobilization/Cleanup:</b>							<b>\$30,000</b>
2a	Pumphouse #4-Grading and Site Preparation	1000	SF	\$10.00	\$10,000		RS Means Section 31
2b	Pumphouse #4-Pumphouse #4 Foundation	450	SF	\$60.00	\$27,000		Estimated Cost
2c	Pumphouse #4-Pumphouse #4 Building	450	SF	\$100.00	\$45,000		Estimated Cost
2d	Pumphouse #4-6,000 Gallon Water Storage Tanks	2	EA	\$5,000.00	\$10,000		Online Supplier Quote. Assumed 50% labor, 50% Equipment
2e	Pumphouse #4-Booster Pumps	1	LS	\$15,000.00	\$15,000		Supplier Quote
2f	Pumphouse #4-Piping, Meters and Valves, Pressure Tank	1	LS	\$15,000.00	\$15,000		Estimated Cost
2g	Pumphouse #4-VFDs	1	LS	\$7,500.00	\$7,500		Supplier Quote (\$2,500 Ea w/ Enclosure + \$2,500 Install)
2h	Pumphouse #4-Electrical & Controls (Including lighting, electrical, etc.)	1	LS	\$25,000.00	\$25,000	=2742*5*1.25+10000	Estimated Cost. RS Means 2020 Crew R1C-1wk, \$10,000 Materials
<b>Item #2 - Subtotal Pumphouse:</b>							<b>\$154,500</b>
3a	Water Mains-Well No. 4 Water Main #1	515	LF	\$75.00	\$38,625		Supplier Quote (\$50/LF)+\$25/LF Excavation & Backfill (Includes all Heat Trace)
3b	Water Mains-Well No. 4 Water Main #2	100	LF	\$75.00	\$7,500		"
3c	Water Mains-Raw Water Main	30	LF	\$100.00	\$3,000		Excavation/Backfill @ \$75/LF, Pipe at \$25/LF
3d	Water Mains-Potable Water-Sanitary Sewer Crossings	8	EA	\$200.00	\$1,600		Combination of Supplier Quotes
3e	Water Mains-Surface Restoration	615	LF	\$10.00	\$6,150		3-Ft Wide, Similar Cost to Asphalt Paving
3f	Water Mains-Service Line Connections	20	EA	\$250.00	\$5,000		Combination of Supplier Quotes
<b>Item #3 - Subtotal Water Mains:</b>							<b>\$61,875</b>
4	Generator Building & Generator	1	LS	\$15,000.00	\$15,000		\$10,000 Generator, \$5,000 Building. (Online Product Quotes)
5	Propane Tank and Gas Line	1	LS	\$4,000.00	\$4,000		Online Product Cost
6	Buried Electric Cable	160	LF	\$45.00	\$7,200		(2020 RS Means 26.05.13.16L0800(\$10.50*1.25)+\$25/LF Excav&Backfill+\$5/LF Pipe)
<b>Item # 4,5,6 - Subtotal Backup Power Facilities :</b>							<b>\$26,200</b>
7	Site Restoration	1	LS	\$8,000.00	\$8,000	=74.76*40*2	(RS Means Crew A-2=2 wk)
8	Start-Up, Demonstration & Instruction of Systems	1	LS	\$30,000.00	\$30,000	=168*2*40*2	168 Hours * 2 for Start-Up and Instruction - 2 Persons @ \$40/HR
9	Special Bedrock Excavation	50	CY	\$211.00	\$10,550	=615*2*1/27*1.25	2020 RS Means 31 23 16.30.2200
<b>Item #7,8,9 - Subtotal Additional Project Work:</b>							<b>\$48,550</b>
<b>SUBTOTAL:</b>					<b>\$321,125</b>		
Final Engineering Plans, Well Pump Testing & Reporting (Separate Contract)					\$34,681	=28961.13+5720	Hydrometrics 2022 Proposal + Final Design (40hrs @\$143/HR)
Driller Well No. 4 Construction and Development Cost (Separate & Existing Contract)					\$28,650		7/28/21 Ace Drilling Contract
Driller Well No. 4 Pumping and Testing Cost (Separate & Existing Contract)					\$10,000		4/2/21 Ace Drilling Proposal
<b>Subtotal Well Cost</b>							<b>\$73,331</b>
Surveying (5%)					\$16,100		Typical Assumption
Contractor Profit (5%)					\$16,100		Typical Assumption
Part-time Construction Observation and Engineering Support During Construction					\$35,000		10 Weeks of Construction (1 Site Visit per Week) + \$10,000 of In-Office Construction Support
Contingency (15%) {HEI Contingency is 10%}					\$48,200		Level of Capital Cost Opinion
<b>Subtotal Construction Support &amp; Contingency:</b>							<b>\$115,400</b>
<b>Well No. 4 PWS - Opinion of Probable Capital Costs</b>					<b>\$509,900</b>		
Number of Units					20		
<b>Cost Per Unit</b>					<b>\$25,495</b>		

5. Conclusions

1 See above