

**Summary of GWFFS Costs**

<b>Evaluated Alternatives</b>	<b>Description</b>	<b>Full or Partial Segment 1</b>	<b>Estimated Cost</b>
Alt 1 - Groundwater Pump and Treat	Pump & treat system alone	NA	\$7,800,000
Alt 2 - Upper Sheet Pile Wall	1,250' sheet pile wall 65' deep	Full	\$6,900,000
Alt 3 - Lower Sheet Pile Wall	750' sheet pile wall 65' deep; 500' sheet pile wall 85' deep	Full	\$7,300,000
Alt 4 - Upper Slurry Wall	1,250' slurry wall 65' deep	Full	\$7,800,000
Alt 5 - Lower Slurry Wall	750' slurry wall 65' deep; 500' slurry wall 85' deep	Full	\$8,100,000
Alt 6 - Upper Sheet Pile Wall Excluding Siltronic	630' sheet pile wall 65' deep	Partial	\$3,600,000
Alt 7 - Upper Slurry Wall Excluding Siltronic	630' slurry wall 65' deep	Partial	\$4,000,000
Alt 8 - Pump & Treat with Upper Sheet Pile Wall Including Siltronic	P&T with 1,250' sheet pile wall 65' deep	Full	\$14,700,000
Alt 9 - Pump & Treat with Lower Sheet Pile Wall Including Siltronic	P&T with 750' sheet pile wall 65' deep; 500' sheet pile wall 85' deep	Full	\$15,100,000
Alt 10 - Pump & Treat with Upper Slurry Wall Including Siltronic	P&T with 1,250' slurry wall 65' deep	Full	\$15,600,000
Alt 11 - Pump & Treat with Lower Slurry Wall Including Siltronic	P&T with 750' slurry wall 65' deep; 500' slurry wall 85' deep	Full	\$15,900,000
Alt 12 - Pump & Treat with Upper Sheet Pile Wall Excluding Siltronic	P&T with 1,250' sheet pile wall 65' deep	Partial	\$11,400,000
Alt 13 - Pump & Treat with Upper Slurry Wall Excluding Siltronic	P&T with 1,250' slurry wall 65' deep	Partial	\$11,800,000

Note: Alternatives 8 through 13 are combinations of Alternatives 1 through 7; therefore, separate cost estimates are not provided.

**Cost Estimate for Alternative 1 - Groundwater Pump & Treat**

Advanced Remedation Technologies Estimate

<b>Item</b>	<b>Cost</b>	<b>Segment 1 1250 57%</b>	<b>Segment 2 950 43%</b>
Capital Expenditures	\$1,395,675	\$792,997	\$602,678
Extraction Well Installation	\$600,000	\$300,000	\$300,000
Construction and Site Prep	\$259,725	\$147,571	\$112,154
Design & Engineering	\$85,800	\$48,750	\$37,050
Total	\$2,341,200	\$1,289,318	\$1,051,882
Yearly O&M	\$430,000		
Inflation rate	3%		
Interest	6%		
Years	30		
NPV	(\$8,276,000)	(\$4,702,273)	(\$3,573,727)
30% Contingency	\$3,185,160	\$1,797,477	\$1,387,683
<b>TOTAL</b>	<b>\$13,802,360</b>	<b>\$7,789,068</b>	<b>\$6,013,292</b>

**Cost Estimate for Alternative 2 - 65 foot deep sheet pile wall on full Segment 1**

Item	Amount	Unit	Unit Cost	Total Cost	Notes
<b>Mobilization/Demobilization</b>					
General Mobilization	5%	Percent		\$232,000.00	
<b>Site Preparation</b>					
Survey Area	2.5	Acre	\$3,500.00	\$8,750.00	Assumes a 2,220 foot long by 50 foot wide area to survey
Construction Layout	5	Day	\$1,000.00	\$5,000.00	
Clearing and Grubbing	4.5	Acre	\$3,600.00	\$16,200.00	Assumes a 2.5 acre work area and a 2 acre staging zone
Temporary Access Road	1500	SY	\$8.00	\$12,000.00	Assumes 4 inch deep gravel on 20 foot wide 675 feet long road
Noise Abatement Curtain on Siltronics Segment	1	LS	\$700,000.00	\$700,000.00	Cost estimated by Severson
Field Offices	12	Month	\$550.00	\$6,600.00	Assumes 2 trailers for 12 month project
Security	4500	LF	\$5.50	\$24,750.00	Temporary fencing around entire trench area
<b>Trench Excavation and Fill</b>					
Excavate 10 foot Deep Trench	8148	CY	\$3.25	\$26,481.48	Assumes a 10 foot deep, 6 feet wide, 1250 foot long trench w/ 1H:1V side slopes & 10% extra
Disposal of Trench Soil	11400	Ton	\$100.00	\$1,140,000.00	Assumes trench dimensions above; T&D from previous Severson estimate
Fill Trench with Clean Material	8148	CY	\$20.00	\$162,962.96	Assumes all of excavated trench must be refilled with clean material; price approximated to account for aggregate and handling
<b>Construction of Groundwater Cutoff Sheet Pile Wall</b>					
Purchase, Deliver, and Store Sheet Pile at Site	81250	SF	\$14.00	\$1,137,500.00	Based on 65 foot deep sheet piles for a 1250 foot long wall; cost estimate based on McCormick and Baxter 2004 work and comparison of steel sheet pile prices in RS Means
Installation of Sheet Piles	81250	SF	\$5.80	\$471,250.00	Based on 65 foot deep sheet piles for a 1250 foot long wall; cost estimate based on McCormick and Baxter 2004 work and accounts for Severson proprietary sealant system
<b>Obstruction Removal Allowance</b>	1	LS	\$150,000.00	\$150,000.00	
<b>Outfalls and Utility Work</b>					
Temporarily Rerouting Outfalls	1	LS	\$775,000.00	\$775,000.00	
<b>Misc. Construction and Environmental Protection</b>					
Silt Fence	4600	LF	\$1.70	\$7,820.00	Assumes less than ideal installation conditions fence on both upland and river front portions of site
<b>Subtotal Construction Costs</b>				\$4,876,314.44	
Sales Tax	0%	Percent		\$0.00	No sales tax in Oregon
<b>Total Construction Costs</b>				\$4,876,314.44	
<b>Non Construction Costs</b>					
Engineering Design	1	LS	\$200,000.00	\$200,000.00	Professional judgment
Permitting	1	LS	\$100,000.00	\$100,000.00	Professional judgment
Environmental Monitoring	1	LS	\$100,000.00	\$100,000.00	Professional judgment
<b>Contingency</b>	30%	Percent		\$1,583,000.00	
<b>Total Estimated Project Cost</b>				\$6,859,000.00	

**Cost Estimate for Alternative 3 - 85 foot deep sheet pile wall (500 feet) and 65 foot deep sheet pile wall (750 feet) on full Segment 1**

Item	Amount	Unit	Unit Cost	Total Cost	Notes
<b>Mobilization/Demobilization</b>					
General Mobilization	5%	Percent		\$247,000.00	
<b>Site Preparation</b>					
Survey Area	2.5	Acre	\$3,500.00	\$8,750.00	Assumes a 2,220 foot long by 50 foot wide area to survey
Construction Layout	5	Day	\$1,000.00	\$5,000.00	
Clearing and Grubbing	4.5	Acre	\$3,600.00	\$16,200.00	Assumes a 2.5 acre work area and a 2 acre staging zone
Temporary Access Road	1500	SY	\$8.00	\$12,000.00	Assumes 4 inch deep gravel on 20 foot wide 675 feet long road
Noise Abatement Curtain on Siltronics Segment	1	LS	\$700,000.00	\$700,000.00	Cost estimated by Severson
Field Offices	12	Month	\$550.00	\$6,600.00	Assumes 2 trailers for 12 month project
Security	4500	LF	\$5.50	\$24,750.00	Temporary fencing around entire trench area
<b>Trench Excavation and Fill</b>					
Excavate 10 foot Deep Trench	8148	CY	\$3.25	\$26,481.48	Assumes a 10 foot deep, 6 feet wide, 1250 foot long trench w/ 1H:1V side slopes & 10% extra
Disposal of Trench Soil	11400	Ton	\$100.00	\$1,140,000.00	Assumes trench dimensions above; T&D from previous Severson estimate
Fill Trench with Clean Material	8148	CY	\$20.00	\$162,962.96	Assumes all of excavated trench must be refilled with clean material; price approximated to account for aggregate and handling
<b>Construction of Groundwater Cutoff Sheet Pile Wall</b>					
Purchase, Deliver, and Store Sheet Pile at Site	91250	SF	\$14.00	\$1,277,500.00	Based on 85 foot deep sheet piles for a 500 foot long wall and 65 foot wall for 750 foot long wall; cost estimate based on McCormick and Baxter 2004 work and comparison of steel sheet pile prices in RS Means
Installation of Sheet Piles	91250	SF	\$6.96	\$635,100.00	Based on 85 foot deep sheet piles for a 500 foot long wall and 65 foot wall for 750 foot long wall; cost estimate based on McCormick and Baxter 2004 work and accounts for Severson proprietary sealant system. Increased unit costs slightly to account for deeper section to be driven.
<b>Obstruction Removal Allowance</b>					
	1	LS	\$150,000.00	\$150,000.00	
<b>Outfalls and Utility Work</b>					
Temporarily Rerouting Outfalls	1	LS	\$775,000.00	\$775,000.00	
<b>Misc. Construction and Environmental Protection</b>					
Silt Fence	4600	LF	\$1.70	\$7,820.00	Assumes less than ideal installation conditions fence on both upland and river front portions of site
<b>Subtotal Construction Costs</b>					
Sales Tax	0%	Percent		\$0.00	No sales tax in Oregon
<b>Total Construction Costs</b>					
				\$5,195,164.44	
<b>Non Construction Costs</b>					
Engineering Design	1	LS	\$200,000.00	\$200,000.00	Professional judgment
Permitting	1	LS	\$100,000.00	\$100,000.00	Professional judgment
Environmental Monitoring	1	LS	\$100,000.00	\$100,000.00	Professional judgment
<b>Contingency</b>					
	30%	Percent		\$1,679,000.00	
<b>Total Estimated Project Cost</b>					
				\$7,274,000.00	

**Cost Estimate for Alternative 4 - 65 foot deep slurry wall on full Segment 1**

Item	Amount	Unit	Unit Cost	Total Cost	Notes
<b>Mobilization/Demobilization</b>					
General Mobilization	5%	Percent		\$265,000.00	
<b>Site Preparation</b>					
Survey Area	2.5	Acre	\$3,500.00	\$8,750.00	Assumes a 2,220 foot long by 50 foot wide area to survey
Construction Layout	5	Day	\$1,000.00	\$5,000.00	
Clearing and Grubbing	4.5	Acre	\$3,600.00	\$16,200.00	Assumes a 2.5 acre work area and a 2 acre staging zone
Temporary Access Road	1500	SY	\$8.00	\$12,000.00	Assumes 4 inch deep gravel on 20 foot wide 675 feet long road
Noise Abatement Curtain on Siltronics Segment	1	LS	\$700,000.00	\$700,000.00	Cost estimated by Severson
Field Offices	12	Month	\$550.00	\$6,600.00	Assumes 2 trailers for 12 month project
Security	4500	LF	\$5.50	\$24,750.00	Temporary fencing around entire trench area
<b>Trench Excavation and Fill</b>					
Excavate 0.5 foot Deep Working Trench	16250	CY	\$3.00	\$48,750.00	Assumes a 0.50 foot deep, 25 feet wide (at base), 1250 foot long trench with 2:1 side walls
Disposal of Trench Soil	23600	Ton	\$100.00	\$2,360,000.00	Assumes all of excavated trench material must be disposed of; T&D from previous Severson estimate
Fill Trench with Clean Material	16250	CY	\$20.00	\$325,000.00	Assumes all of excavated trench must be refilled with clean material (clean material will be used to construct berms on both sides of the working trench (0.50 feet wide, 1.5 feet tall above ground surface (2 feet tall above bottom of trench), 2:1 side wal
<b>Construction of Groundwater Cutoff Slurry Wall</b>					
Slurry Wall Installation	81250	SF	\$6.50	\$528,000.00	Assumes a 30 inch wide by 1250 feet long by 65 feet deep slurry wall; for price information see Note 7 on Included Price Estimates Page
Disposal of Extra Excavated Material and Slurry	3300	Ton	\$100.00	\$330,000.00	Assumes 30% of excavated material must be disposed of; T&D from previous Severson estimate
<b>Obstruction Removal Allowance</b>					
	1	LS	\$150,000.00	\$150,000.00	
<b>Outfalls and Utility Work</b>					
Temporarily Rerouting Outfalls	1	LS	\$775,000.00	\$775,000.00	
<b>Misc. Construction and Environmental Protection</b>					
Silt Fence	4600	LF	\$1.70	\$7,820.00	Assumes less than ideal installation conditions fence on both upland and river front portions of site
<b>Subtotal Construction Costs</b>				\$5,562,870.00	
Sales Tax	0%	Percent		\$0.00	No sales tax in Oregon
<b>Total Construction Costs</b>				\$5,562,870.00	
<b>Non Construction Costs</b>					
Engineering Design	1	LS	\$200,000.00	\$200,000.00	Professional judgment
Permitting	1	LS	\$100,000.00	\$100,000.00	Professional judgment
Environmental Monitoring	1	LS	\$100,000.00	\$100,000.00	Professional judgment
<b>Contingency</b>				\$1,789,000.00	
<b>Total Estimated Project Cost</b>				\$7,752,000.00	

**Cost Estimate for Alternative 5 - 85 foot deep slurry wall (500 feet) and 65 foot deep slurry wall (750 feet) on full Segment 1**

Item	Amount	Unit	Unit Cost	Total Cost	Notes
<b>Mobilization/Demobilization</b>					
General Mobilization	5%	Percent		\$276,000.00	
<b>Site Preparation</b>					
Survey Area	2.5	Acre	\$3,500.00	\$8,750.00	Assumes a 2,220 foot long by 50 foot wide area to survey
Construction Layout	5	Day	\$1,000.00	\$5,000.00	
Clearing and Grubbing	4.5	Acre	\$3,600.00	\$16,200.00	Assumes a 2.5 acre work area and a 2 acre staging zone
Temporary Access Road	1500	SY	\$8.00	\$12,000.00	Assumes 4 inch deep gravel on 20 foot wide 675 feet long road
Noise Abatement Curtain on Siltronics Segment	1	LS	\$700,000.00	\$700,000.00	Cost estimated by Severson
Field Offices	12	Month	\$550.00	\$6,600.00	Assumes 2 trailers for 12 month project
Security	4500	LF	\$5.50	\$24,750.00	Temporary fencing around entire trench area
<b>Trench Excavation and Fill</b>					
Excavate 0.5 foot Deep Working Trench	16250	CY	\$3.00	\$48,750.00	Assumes a 0.50 foot deep, 25 feet wide (at base), 1250 foot long trench with 2:1 side walls
Disposal of Trench Soil	23600	Ton	\$100.00	\$2,360,000.00	Assumes all of excavated trench material must be disposed of; T&D from previous Severson estimate
Fill Trench with Clean Material	16250	CY	\$20.00	\$325,000.00	Assumes all of excavated trench must be refilled with clean material (clean material will be used to construct berms on both sides of the working trench (0.50 feet wide, 1.5 feet tall above ground surface (2 feet tall above bottom of trench), 2:1 side wal
<b>Construction of Groundwater Cutoff Slurry Wall</b>					
Slurry Wall Installation	91250	SF	\$7.80	\$712,000.00	Assumes a 30 inch wide by 500 feet long by 85 feet deep slurry wall and 750 feet long by 65 feet deep slurry wall; for price information see Note 7 on Included Price Estimates Page; increased unit cost to account for deeper depth and more difficulty
Disposal of Extra Excavated Material and Slurry	3700	Ton	\$100.00	\$370,000.00	Assumes 30% of excavated material must be disposed of; T&D from previous Severson estimate
<b>Obstruction Removal Allowance</b>	1	LS	\$150,000.00	\$150,000.00	Approximate based on other cost estimates
<b>Outfalls and Utility Work</b>					
Temporarily Rerouting Outfalls	1	LS	\$775,000.00	\$775,000.00	
<b>Misc. Construction and Environmental Protection</b>					
Silt Fence	4600	LF	\$1.70	\$7,820.00	Assumes less than ideal installation conditions fence on both upland and river front portions of site
<b>Subtotal Construction Costs</b>					
Sales Tax	0%	Percent		\$0.00	No sales tax in Oregon
<b>Total Construction Costs</b>					
				\$5,797,870.00	
<b>Non Construction Costs</b>					
Engineering Design	1	LS	\$200,000.00	\$200,000.00	Professional judgment
Permitting	1	LS	\$100,000.00	\$100,000.00	Professional judgment
Environmental Monitoring	1	LS	\$100,000.00	\$100,000.00	Professional judgment
<b>Contingency</b>					
	30%	Percent		\$1,859,000.00	
<b>Total Estimated Project Cost</b>				\$8,057,000.00	

**Cost Estimate for Alternative 6 - 65 foot deep sheet pile wall on partial Segment 1 (No Siltronic)**

Item	Amount	Unit	Unit Cost	Total Cost	Notes
<b>Mobilization/Demobilization</b>					
General Mobilization	5%	Percent		\$112,000.00	
<b>Site Preparation</b>					
Survey Area	2.5	Acre	\$3,500.00	\$8,750.00	Assumes a 2,220 foot long by 50 foot wide area to survey
Construction Layout	5	Day	\$1,000.00	\$5,000.00	
Clearing and Grubbing	4.5	Acre	\$3,600.00	\$16,200.00	Assumes a 2.5 acre work area and a 2 acre staging zone
Temporary Access Road	1500	SY	\$8.00	\$12,000.00	Assumes 4 inch deep gravel on 20 foot wide 675 feet long road
Noise Abatement Curtain for work near Siltronics Segment	1	LS	\$300,000.00	\$300,000.00	Reduced cost estimated by Sevenson for smaller structure
Field Offices	12	Month	\$550.00	\$6,600.00	Assumes 2 trailers for 12 month project
Security	4500	LF	\$5.50	\$24,750.00	Temporary fencing around entire trench area
<b>Trench Excavation and Fill</b>					
Excavate 10 foot Deep Trench	4107	CY	\$3.25	\$13,346.67	Assumes a 10 foot deep, 6 feet wide, 1250 foot long trench w/ 1H:1V side slopes & 10% extra
Disposal of Trench Soil	5700	Ton	\$100.00	\$570,000.00	Assumes trench dimensions above; T&D from previous Sevenson estimate
Fill Trench with Clean Material	4107	CY	\$20.00	\$82,133.33	Assumes all of excavated trench must be refilled with clean material; price approximated to account for aggregate and handling
<b>Construction of Groundwater Cutoff Sheet Pile Wall</b>					
Purchase, Deliver, and Store Sheet Pile at Site	40950	SF	\$14.00	\$573,300.00	Based on 65 foot deep sheet piles for a 630 foot long wall; cost estimate based on McCormick and Baxter 2004 work and comparison of steel sheet pile prices in RS Means
Installation of Sheet Piles	40950	SF	\$5.80	\$237,510.00	Based on 65 foot deep sheet piles for a 630 foot long wall; cost estimate based on McCormick and Baxter 2004 work and accounts for Sevenson proprietary sealant system
<b>Obstruction Removal Allowance</b>					
	1	LS	\$150,000.00	\$150,000.00	
<b>Outfalls and Utility Work</b>					
Temporarily Rerouting Outfalls	1	LS	\$232,500.00	\$232,500.00	Only Gasco outfall
<b>Misc. Construction and Environmental Protection</b>					
Silt Fence	4600	LF	\$1.70	\$7,820.00	Assumes less than ideal installation conditions fence on both upland and river front portions of site
<b>Subtotal Construction Costs</b>					
Sales Tax	0%	Percent		\$0.00	No sales tax in Oregon
<b>Total Construction Costs</b>					
				\$2,351,910.00	
<b>Non Construction Costs</b>					
Engineering Design	1	LS	\$200,000.00	\$200,000.00	Professional judgment
Permitting	1	LS	\$100,000.00	\$100,000.00	Professional judgment
Environmental Monitoring	1	LS	\$100,000.00	\$100,000.00	Professional judgment
<b>Contingency</b>					
	30%	Percent		\$826,000.00	
<b>Total Estimated Project Cost</b>					
				\$3,578,000.00	

**Cost Estimate for Alternative 7 - 65 foot deep slurry wall on partial Segment 1 (No Siltronic)**

Item	Amount	Unit	Unit Cost	Total Cost	Notes
<b>Mobilization/Demobilization</b>					
General Mobilization	5%	Percent		\$128,000.00	
<b>Site Preparation</b>					
Survey Area	2.5	Acre	\$3,500.00	\$8,750.00	Assumes a 2,220 foot long by 50 foot wide area to survey
Construction Layout	5	Day	\$1,000.00	\$5,000.00	
Clearing and Grubbing	4.5	Acre	\$3,600.00	\$16,200.00	Assumes a 2.5 acre work area and a 2 acre staging zone
Temporary Access Road	1500	SY	\$8.00	\$12,000.00	Assumes 4 inch deep gravel on 20 foot wide 675 feet long road
Noise Abatement Curtain on Siltronics Segment	1	LS	\$300,000.00	\$300,000.00	Reduced cost estimated by Severson for smaller structure
Field Offices	12	Month	\$550.00	\$6,600.00	Assumes 2 trailers for 12 month project
Security	4500	LF	\$5.50	\$24,750.00	Temporary fencing around entire trench area
<b>Trench Excavation and Fill</b>					
Excavate 0.5 foot Deep Working Trench	8190	CY	\$3.00	\$24,570.00	Assumes a 0.50 foot deep, 25 feet wide (at base), 630 foot long trench with 2:1 side walk
Disposal of Trench Soil	11900	Ton	\$100.00	\$1,190,000.00	Assumes all of excavated trench material must be disposed of; T&D from previous Severson estimate
Fill Trench with Clean Material	8190	CY	\$20.00	\$163,800.00	Assumes all of excavated trench must be refilled with clean material (clean material will be used to construct berms on both sides of the working trench (0.50 feet wide, 1.5 feet tall above ground surface (2 feet tall above bottom of trench), 2:1 side wal
<b>Construction of Groundwater Cutoff Slurry Wall</b>					
Slurry Wall Installation	40950	SF	\$6.50	\$266,000.00	Assumes a 30 inch wide by 630 feet long by 65 feet deep slurry wall; for price information see Note 7 of Included Price Estimates Page
Disposal of Extra Excavated Material and Slurry	1600	Ton	\$100.00	\$160,000.00	Assumes 30% of excavated material must be disposed of; T&D from previous Severson estimate
<b>Obstruction Removal Allowance</b>	1	LS	\$150,000.00	\$150,000.00	Approximate based on other cost estimates
<b>Outfalls and Utility Work</b>					
Temporarily Rerouting Outfalls	1	LS	\$232,500.00	\$232,500.00	Only Gasco outfall
<b>Misc. Construction and Environmental Protection</b>					
Silt Fence	4600	LF	\$1.70	\$7,820.00	Assumes less than ideal installation conditions fence on both upland and river front portions of site
<b>Subtotal Construction Costs</b>					
Sales Tax	0%	Percent		\$0.00	No sales tax in Oregon
<b>Total Construction Costs</b>					
				\$2,695,990.00	
<b>Non Construction Costs</b>					
Engineering Design	1	LS	\$200,000.00	\$200,000.00	Professional judgment
Permitting	1	LS	\$100,000.00	\$100,000.00	Professional judgment
Environmental Monitoring	1	LS	\$100,000.00	\$100,000.00	Professional judgment
<b>Contingency</b>					
	30%	Percent		\$929,000.00	
<b>Total Estimated Project Cost</b>				\$4,025,000.00	

**GASCO  
Groundwater Treatment System  
Preliminary Cost and Schedule  
Portland, Oregon**

ID	Task Name	Cost	W2							W3							W4							W5							W6							W7							W8		
			M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T								
1	<b>GASCO Shoreline Groundwater Treatment System</b>	<b>\$2,014,800.00</b>	[Summary bar]																																												
2																																															
3	<b>Design &amp; Engineering</b>	<b>\$85,800.00</b>	[Summary bar]																																												
4	Civil Engineering	\$21,100.00	[Task bar]																																												
5	Mechanical Engineering	\$24,500.00	[Task bar]																																												
6	Electrical Engineering	\$40,200.00	[Task bar]																																												
7																																															
8	<b>Capital Expendures</b>	<b>\$1,395,675.00</b>	[Summary bar]																																												
9	Pump and Transducer Installation (10 wells)	\$70,500.00	[Task bar]																																												
10	Well Head and Distribution Piping	\$62,775.00	[Task bar]																																												
11	Product recovery system (6wells)	\$54,000.00	[Task bar]																																												
12	Oxidation Treatment System (300 gpm)	\$455,000.00	[Task bar]																																												
13	Duplex Pumps w/VFD control	\$32,000.00	[Task bar]																																												
14	LOX System (1500-gallon AST)	\$27,000.00	[Task bar]																																												
15	Sand Filter System (4-pod 300 gpm)	\$82,000.00	[Task bar]																																												
16	GAC/OC Pressure Vessel (use exisitng)	\$0.00	[Task bar]																																												
17	O/W separtor Product Storage System (use exisitng)	\$0.00	[Task bar]																																												
18	Pre-Treatment Iron Reduction 50 gpm (cynaide segment)	\$221,700.00	[Task bar]																																												
19	Pre-Treatment Iron/VOCs Reduction 50 gpm (Siltronics)	\$237,700.00	[Task bar]																																												
20	Main Control Panel	\$45,000.00	[Task bar]																																												
21	Steel Building 60'x120'	\$108,000.00	[Task bar]																																												
22																																															
23	<b>Construction and Site Prep</b>	<b>\$259,725.00</b>	[Summary bar]																																												
24	Permits	\$7,500.00	[Task bar]																																												
25	Utility Services	\$11,000.00	[Task bar]																																												
26	Treatment Site Prep	\$37,805.00	[Task bar]																																												
27	Building Construction	\$80,470.00	[Task bar]																																												
28	Equipment Installation	\$64,075.00	[Task bar]																																												



Task Progress Summary Rolled Up Split Rolled Up Progress Project Summary   
 Split Milestone Rolled Up Task Rolled Up Milestone External Tasks

Date: Mon 9/24/07

