APPENDIX I

COST ESTIMATES AND FUNDING EVALUATIONS FOR WWTP UPGRADE ALTERNATIVES

Appendix I - COST ESTIMATES AND FUNDING EVALUATIONS FOR ALTERNATIVE WWTP UPGRADES

Table 1 - Preliminary Determination of DOE Grant Eligibility for the SBC Alternative
GSP Estimate Updated MARCH 1, 1999

G&0 PROJECT NO. 876.44

ITEM NO.	ITEM DESCRIPTION	QUANTITY	UNIT PRICE	AMOUNT	DOE LOAN ELIGIBLE ONLY	DOE GRANT AND/OR LOAN ELIGIBLE
1	Mobilization/Demobilization	1 L.S.	$ 245,000	$ 245,000	$ 3,651	$ 241,350
2	Site Work	1 L.S.	$ 150,000	$ 150,000	$ 2,235	$ 147,765
3	Upgrade Grit Removal Equipment	1 L.S.	$ 50,000	$ 50,000	$ 50,000	$ -
4	Construct New Primary Clarifier	1 L.S.	$ 420,000	$ 420,000	$ -	$ 420,000
5	Construct New S.B.C. Units	2 L.S.	$ 455,000	$ 910,000	$ -	$ 910,000
6	Construct New Secondary Clarifier	1 L.S.	$ 450,000	$ 450,000	$ -	$ 450,000
7	Construct New U.V. Disinfection System	1 L.S.	$ 200,000	$ 200,000	$ -	$ 200,000
8	Construct New Solids Thickening System	1 L.S.	$ 100,000	$ 100,000	$ -	$ 100,000
9	Construct New Anaerobic Digestion System	1 L.S.	$ 1,070,000	$ 1,070,000	$ -	$ 1,070,000
10	Construct New Lab Building	1 L.S.	$ 135,000	$ 135,000	$ -	$ 135,000
11	Shop/Maintenance Building Modifications	1 L.S.	$ 75,000	$ 75,000	$ 1,118	$ 73,883
12	Yard Piping, Fittings, Valves & Accessories	1 L.S.	$ 250,000	$ 250,000	$ 3,725	$ 246,275
13	Upgrade Effluent Pumps	1 L.S.	$ 30,000	$ 30,000	$ -	$ 30,000
14	Electrical/Instrumentation & Controls	1 L.S.	$ 220,000	$ 220,000	$ 3,278	$ 216,722
	Subtotal			$ 4,305,000	$ 64,006	$ 4,240,994
	Construction Contingency @ 15%			$ 645,750	$ 9,601	$ 636,149
	Estimated Construction Cost Subtotal			$ 4,950,750	$ 73,607	$ 4,877,143
	Estimated Design & Survey @ 8.1%			401,011	$ 401,011	$ -
	Admin., Legal & Const. Phase Eng. @ 21.9 %			$ 1,084,214	$ 16,155	$ 1,068,059
	State Sales Tax @ 7.5% (Const. Cost Subtotal)			$ 371,306	$ 5,500	$ 365,800
	Land Acquistion			$ 160,000	$ 160,000	$ -
	TOTAL ESTIMATED PROJECT COST			$ 6,967,281	$ 656,273	$ 6,311,002
	DOE Grant Eligibility as a % of Total Estimated Project Cost			100%	9%	91%

Appendix I - COST ESTIMATES AND FUNDING EVALUATIONS FOR ALTERNATIVE WWTP UPGRADES

Table 2 - Preliminary Determination of DOE Grant Eligibility for Pump Station NO. 4 and the Force Main Improvements
GSP Estimate Updated MARCH 1, 1999

G&0 PROJECT NO. 876.44

ITEM NO.	ITEM DESCRIPTION	QUANTITY	UNIT PRICE	AMOUNT	DOE LOAN ELIGIBLE ONLY	DOE GRANT AND/OR LOAN ELIGIBLE
1	PUMP STATION NO. 4	1 L.S.	$ 152,610	$ 152,610	$ 102,610	$ 50,000
2	PHASE 1 FORCEMAIN UPGRADE	1 L.S.	$ 28,115	$ 28,115	$ 28,115	$ -
	Subtotal			$180,725	$130,725	$50,000
	Construction Contingency @ 15%			$27,109	$19,609	$7,500
	Estimated Construction Cost Subtotal			$207,834	$150,334	$57,500
	Estimated Design & Survey @ 12.65%			$26,291	$26,291	$0
	Admin., Legal & Const. Phase Eng. @ 27.35 %			$36,059	$27,133	$8,926
	State Sales Tax @ 7.5% (Const. Cost Subtotal)			$15,588	$11,275	$4,313
	TOTAL ESTIMATED PROJECT COST			$285,772	$215,033	$70,739
	DOE Grant Eligibility as a % of Total Estimated Project Cost			100%	75%	25%

Appendix I - COST ESTIMATES AND FUNDING EVALUATIONS FOR ALTERNATIVE WWTP UPGRADES

Table 3 - Preliminary Determination of DOE Grant Eligibility for the SBR Alternative
GSP Estimate Prepared November 10, 1999

G&O Project No. 876.44

ITEM NO.	ITEM DESCRIPTION	QUANTITY		UNIT PRICE	AMOUNT	DOE LOAN ELIGIBLE ONLY	DOE GRANT AND/OR LOAN ELIGIBLE
1	Mobilization/Demobilization	1	L.S.	$ 280,000	$ 280,000	$ 54,600	$ 225,400
2	Site Work	1	L.S.	$ 175,000	$ 175,000	$ 34,125	$ 140,875
3	Construct New Headworks	1	L.S.	$ 225,000	$ 225,000	$ 225,000	$ -
4	Construct SBR Treatment Units	1	L.S.	$ 1,400,000	$ 1,400,000	$ 287,000	$ 1,113,000
5	Construct New U.V. Disinfection System	1	L.S.	$ 300,000	$ 300,000		$ 300,000
6	Construct New Aerobic Digestion System	1	L.S.	$ 1,150,000	$ 1,150,000	$ 235,750	$ 914,250
7	Construct New Lab Building	1	L.S.	$ 150,000	$ 150,000		$ 150,000
8	Yard Piping, Fittings, Valves & Accessories	1	L.S.	$ 250,000	$ 250,000	$ 48,750	$ 201,250
9	Upgrade Effluent Pumps	1	L.S.	$ 125,000	$ 125,000		$ 125,000
10	Electrical/Instrumentation & Controls	1	L.S.	$ 385,000	$ 385,000	$ 75,075	$ 309,925
11	Demolition of Existing Treatment Units	1	L.S.	$ 350,000	$ 350,000		$ 350,000
12	Upgrade Outfall Pipeline with 24" D.I. Pipe	1	L.S.	$ 125,000	$ 125,000	$ 24,750	$ 100,250
	Subtotal				$ 4,915,000	$ 985,050	$ 3,929,950
	Construction Contingency @ 15%				$ 738,000	148,000	$ 590,000
	Estimated Construction Cost Subtotal				$ 5,653,000	$ 1,133,050	$ 4,519,950
	Admin., Permits, Legal & Engineering				$ 1,100,000	$ 450,000	$ 650,000
	State Sales Tax @ 7.5% (Const. Cost Subtotal)				$ 425,000	$ 85,000	$ 340,000
	Aquire Additional Land for WWTP Site	2	Acres	$ 100,000	$ 200,000	$ 200,000	$ -
	TOTAL ESTIMATED PROJECT COST				$ 7,378,000	$ 1,868,050	$ 5,509,950
	DOE Grant Eligibility as a % of Total Estimated Project Cost				100%	25%	75%

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Table 4 - Preliminary Determination of Costs Related to Growth to Determine the Eligibility of the Project for PWTF Loans
GSP Estimate Prepared November 10, 1999

G&O Project No. 876.44

ITEM NO.	ITEM DESCRIPTION	QUANTITY		UNIT PRICE	AMOUNT	DOE LOAN ELIGIBLE ONLY	DOE GRANT AND/OR LOAN ELIGIBLE
1	Mobilization/Demobilization	1	L.S.	$ 280,000	$ 280,000	$ 41,580	$ 238,420
2	Site Work	1	L.S.	$ 175,000	$ 175,000	$ 25,900	$ 149,100
3	Construct New Headworks	1	L.S.	$ 225,000	$ 225,000		$ 225,000
4	Construct SBR Treatment Units	1	L.S.	$ 1,400,000	$ 1,400,000	$ 287,000	$ 1,113,000
5	Construct New U.V. Disinfection System	1	L.S.	$ 300,000	$ 300,000		$ 300,000
6	Construct New Aerobic Digestion System	1	L.S.	$ 1,150,000	$ 1,150,000	$ 235,750	$ 914,250
7	Construct New Lab Building	1	L.S.	$ 150,000	$ 150,000		$ 150,000
8	Yard Piping, Fittings, Valves & Accessories	1	L.S.	$ 250,000	$ 250,000	$ 37,125	$ 212,875
9	Upgrade Effluent Pumps	1	L.S.	$ 125,000	$ 125,000		$ 125,000
10	Electrical/Instrumentation & Controls	1	L.S.	$ 385,000	$ 385,000	$ 56,980	$ 328,020
11	Demolition of Existing Treatment Units	1	L.S.	$ 350,000	$ 350,000		$ 350,000
12	Upgrade Outfall Pipeline with 24" D.I. Pipe	1	L.S.	$ 125,000	$ 125,000	$ 24,750	$ 100,250
	Subtotal				$ 4,915,000	$ 709,085	$ 4,205,915
	Construction Contingency @ 15%				$ 738,000	106,500	$ 631,500
	Estimated Construction Cost Subtotal				$ 5,653,000	$ 815,585	$ 4,837,415
	Admin., Permits, Legal & Engineering				$ 1,100,000	$ 163,500	$ 936,500
	State Sales Tax @ 7.5% (Const. Cost Subtotal)				$ 425,000	$ 61,500	$ 363,500
	Aquire Additional Land for WWTP Site	2	Acres	$ 100,000	$ 200,000		$ 200,000
	TOTAL ESTIMATED PROJECT COST				$ 7,378,000	$ 1,040,585	$ 6,337,415
	PWTF Grant Eligibility as a % of Total Estimated Project Cost				100%	14%	86%