

WORK PLAN

NEW YORK STATE SUPERFUND STANDBY CONTRACT
SOUTH HILL DUMP RI / LEHIGH REDESIGN

WORK ASSIGNMENT NO. D002478-45



APPROVED
Bradley Brown
1/30/97
1/31/97
LEHIGH

Prepared for:
New York State
Department of
Environmental Conservation
50 Wolf Road, Albany, New York 12233
John P. Cahill, Acting Commissioner

Division of Environmental Remediation
Michael J. O'Toole, Jr., Director

BY:

PARSONS ENGINEERING SCIENCE, INC.
Liverpool, New York

 **PARSONS**
JANUARY 1997

**RESPONSES TO COMMENTS ON DRAFT WORK PLAN
SOUTH HILL DUMP RI/LEHIGH REDESIGN
WORK ASSIGNMENT NO. D002478-45**

SOUTH HILL DUMP PORTION OF WORK PLAN:

Comment 1:

Only two quotes were obtained for the drilling/well installation work. A minimum of three quotes are still required even though Delta declined to bid.

Response:

As directed by the Department, a third drilling cost estimate, prepared by the NYSDEC project manager, has been submitted with the revised work plan.

Comment 2:

Task 2.3, Site preparation - Reduce to one Parsons ES employee to provide oversight and assist with brush clearing when the field trailer is delivered.

Response:

The revised work plan includes this modification.

Comment 3:

Task 2.5, Surface water and sediment sampling - Sample collection will be performed by the DEC. Samples will still be analyzed by the Parsons ES subcontractor.

Response:

The revised work plan includes this modification.

Comment 4:

Task 2.6, Soil borings and monitoring well installations - All well development will be performed by the DEC.

Response:

The revised work plan includes this modification.

Comment 5:

Task 2.7, Groundwater sampling - All sample collection will be performed by the DEC. Samples will be analyzed by the Parsons ES subcontractor.

Response:

The revised work plan includes this modification.

Comment 6:

While the above indicates a reduction in the level of effort, an additional task of data validation for all analytical samples is necessary.

Response:

The revised work plan includes this modification.

Comment 7:

The submittal also includes an increase of \$9,720 for the Work Plan Development costs, Task 1, for a total of \$21,720.36. Parsons ES has gone ahead with the procurement of all subcontracts for this project rather than wait for the finalization of the Work Plan, which account for the increase in the Work Plan Development costs. While the DEC project manager supports this increase, no further increase in work plan costs should be incurred.

Response:

Agreed.

Comment 8:

The analytical laboratory subcontract should be modified to include TCLP analysis for up to five samples.

Response:

The revised work plan includes this modification.

Comment 9:

The survey subcontractor deliverables should include the site survey in AutoCAD LT Release 2 or AutoCAD Release 13.

Response:

The revised work plan includes this modification.

LEHIGH RE-DESIGN PORTION OF WORK PLAN:

Comment 1:

Subtask 4.3 Specifications, page 8: Within the text description of this subtask please have Parsons ES remove the phrase, "and to be used by the Department in a future proposed change order" from the second sentence.

Response:

The phrase has been removed.

Comment 2:

Subtask 4.4, Drafting Revisions, page 8: Within the text description of this subtask Parsons ES indicates in the third sentence that ten (10) sets of revised drawings should be provided. However, based on a recent amendment to this portion of the W.A., Parson's ES will provide the Department with 75 copies of the drawings and one (1) stamped copy of the contract book.

Response:

The number of drawings and specifications have been revised. Schedule 2.11 (c and d) have been revised to include additional materials required for the final re-design as presented in two Parsons ES memoranda to Davis Chiusano of NYSDEC dated October 23 and 25, 1996, respectively.

Comment 3:

Project Schedule: Please have Parsons ES revise the Lehigh - re-design portion of schedule so that specific dates are replaced by "weeks from Notice to Proceed", similar to schedule for the South Hill Dump site.

Response:

The specific dates have been removed as suggested.

Comment 4:

Work plan appears, in some sections, not to be distinct for each site, and thus confusing at times to review.

Response:

The description of the work assignment budget assumptions was modified to clearly indicate that the South Hill Dump site RI will be conducted under Tasks 1 and 2 of the work assignment, and the Lehigh Redesign will be conducted under Tasks 3 and 4 of the work assignment.

Comment 5:

Overall cost for Lehigh re-design is consistent with amended budget recently approved by Michael O'Toole. However, the budget for work plan development

has increased slightly, while the budget for the remaining tasks have been decreased the proportion. (Overall amended budget is the same, however).

Response:

Agreed.

**TABLE 1
COST SUMMARY
SOUTH HILL DUMP RILEHIGH REDESIGN**

No.	TASK	DIRECT LABOR	DIRECT SALARY COSTS	INDIRECT SALARY COSTS	MATERIAL	TRAVEL	SUBTOTAL	FIXED FEE	SUBCONTRACT	TOTAL
		hrs	\$	\$	\$	\$	\$	\$	\$	\$
	1996 RATES			\$1.17				0.15		
Task 1	Scoping and Work Plans									
Task 1.1	Scoping	42.0	\$1,313.42	\$1,540.64	\$45.50	\$37.50	\$2,937.06	\$428.11		\$3,365.17
Task 1.2	Final Work Plans									
1.2.1	Solicit Quotations	56.0	\$1,477.60	\$1,733.22	\$286.50	\$0.00	\$3,497.32	\$481.62		\$3,978.95
1.2.2	Health and Safety Plan	19.0	\$483.22	\$566.82	\$9.00	\$0.00	\$1,059.04	\$157.51		\$1,216.54
1.2.3	QA/QC Plan	0.0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00
1.2.4	Field Sampling Plan	0.0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00
1.2.5	Budgets and Contract Schedules	76.0	\$1,923.60	\$2,256.38	\$116.00	\$0.00	\$4,295.98	\$627.00		\$4,922.98
1.2.6	Final RI Work Plan	52.0	\$1,291.20	\$1,514.58	\$98.00	\$0.00	\$2,903.78	\$420.87		\$3,324.64
Task 1.3	Task Management and Reporting	82.0	\$1,928.04	\$2,261.59	\$94.00	\$0.00	\$4,283.63	\$628.44		\$4,912.08
	Task 1 Subtotal	327.0	\$8,417.08	\$9,873.23	\$649.00	\$37.50	\$18,976.81	\$2,743.55	\$0.00	\$21,720.36
Task 2	Remedial Investigation									
2.1	Record Search	23.0	\$509.58	\$597.74	\$856.50	\$150.00	\$2,113.82	\$166.10		\$2,279.91
2.2	Site Survey and Base Map Preparation	20.0	\$436.74	\$512.30	\$159.25	\$75.00	\$1,183.29	\$142.36	\$ 3,905.00	\$5,230.64
2.3	Site Preparation	52.0	\$883.68	\$1,036.56	\$2,470.10	\$520.00	\$4,910.34	\$288.04	\$ 8,428.50	\$13,626.87
2.4	Test Pit & Drum Sampling	542.0	\$11,264.04	\$13,212.72	\$10,835.40	\$2,025.00	\$37,337.16	\$3,671.51	\$ 89,437.95	\$130,446.62
2.5	Surface Water and Sediment Sampling	5.0	\$81.59	\$95.71	\$412.50	\$205.00	\$794.80	\$26.59	\$ 13,891.50	\$14,712.89
2.6	Soil Boring and MW Installation	67.0	\$1,536.86	\$1,802.74	\$1,106.50	\$650.00	\$5,096.10	\$500.94	\$ 25,742.90	\$31,339.94
2.7	Groundwater Sampling	5.0	\$81.59	\$95.71	\$565.50	\$205.00	\$947.80	\$26.59	\$ 10,363.50	\$11,337.89
2.8	Fish and Wildlife Impact Assessment									
2.8.1	Work Plan	8.0	\$165.76	\$194.44	\$50.00	\$0.00	\$410.20	\$54.03		\$464.23
2.8.2	Step I	84.0	\$1,653.08	\$1,939.06	\$330.00	\$300.00	\$4,222.14	\$538.82		\$4,760.96
2.8.3	Step IIA	14.0	\$283.18	\$332.17	\$100.00	\$0.00	\$715.35	\$92.30		\$807.65
2.8.4	Draft Report	48.0	\$957.76	\$1,123.45	\$100.00	\$0.00	\$2,181.21	\$312.18		\$2,493.39
2.9	Data Validation	293.0	\$6,312.69	\$7,404.79	\$274.00	\$0.00	\$13,991.48	\$2,057.62		\$16,049.10
2.10	Task Management and Reporting	117.0	\$2,761.56	\$3,239.31	\$0.00	\$0.00	\$6,000.87	\$900.13		\$6,901.00
	Task 2 Subtotal	1278.0	\$ 26,928.11	\$ 31,586.67	\$ 17,259.75	\$ 4,130.00	\$ 79,904.53	\$ 8,777.22	\$151,769.35	\$ 240,451.10

**TABLE 1
COST SUMMARY
SOUTH HILL DUMP RI/LEHIGH REDESIGN**

No.	TASK	DIRECT LABOR	DIRECT SALARY COSTS	INDIRECT SALARY COSTS	MATERIAL	TRAVEL	SUBTOTAL	FIXED FEE	SUBCONTRACT	TOTAL \$
		hrs	\$	\$	\$	\$	\$	\$	\$	\$
	1996 RATES			\$1.17				0.15		
Task 3	Work Plan Development									
	Task 3 Subtotal	63.0	\$1,865.64	\$2,188.40	\$149.00	\$0.00	\$4,203.04	\$608.11		\$4,811.14
Task 4	Drainage System Re-Design									
4.1	Conceptual Layout	16.0	\$457.14	\$536.23	\$41.50	\$0.00	\$1,034.87	\$149.00		\$1,183.87
4.2	Drainage Computations	54.0	\$1,355.68	\$1,590.21	\$662.50	\$261.00	\$3,869.39	\$441.88		\$4,311.28
4.3	Specifications	31.0	\$737.74	\$865.37	\$79.00	\$0.00	\$1,682.11	\$240.47		\$1,922.58
4.4	Drafting Revisions	121.0	\$2,693.24	\$3,159.17	\$1,112.50	\$0.00	\$6,964.91	\$877.86		\$7,842.77
4.5	Engineers Cost Estimate	31.0	\$765.72	\$898.19	\$77.50	\$0.00	\$1,741.41	\$249.59		\$1,991.00
4.6	Contract Drawing Production	14.0	\$425.48	\$499.09	\$676.00	\$0.00	\$1,600.57	\$138.69		\$1,739.25
4.7	Task Management and Reporting	31.0	\$556.49	\$652.76	\$0.00	\$0.00	\$1,209.25	\$181.39		\$1,390.64
	Task 4 Subtotal	298.0	\$ 6,991.49	\$ 8,201.02	\$ 2,649.00	\$ 261.00	\$ 18,102.51	\$ 2,278.88	\$ -	\$ 20,381.38
	TOTAL HOURS/UNITS	1966.0								
	TOTAL \$		\$ 44,202.32	\$ 51,849.32	\$ 20,706.75	\$ 4,428.50	\$ 121,186.89	\$ 14,407.75	\$ 151,769.35	\$ 287,363.99

TABLE 2
LABOR HOURS AND COSTS
SOUTH HILL DUMP RI/LEHIGH REDESIGN

No.	TASK 1996 RATES	OFFICER		PRINCIPAL ENGR. 1		PRINCIPAL ENGR. 2		SUPERVISING SCIEN. 2		SENIOR SCIEN. 1		STAFF SCIEN. 1		STAFF SCIEN. 2		SCIEN. 1		SPECIAL. 1		WORD PROCESSOR	
		IX		VIII		VII		VI		V		IV		III		II		I		WP	
		\$51.00		\$46.50		\$35.64		\$32.79		\$26.69		\$24.77		\$21.87		\$19.57		\$12.98		\$12.84	
		Hrs	\$	Hrs	\$	Hrs	\$	Hrs	\$	Hrs	\$	Hrs	\$	Hrs	\$	Hrs	\$	Hrs	\$	Hrs	\$
Task 1	Scoping and Work Plans																				
Task 1.1	Scoping		\$ -	19.0	\$ 883.50		\$ -		\$ -		\$ -		\$ -		\$ -	20.0	\$ 391.40		\$ -	3.0	\$ 38.52
Task 1.2	Final Work Plans																				
1.2.1	Solicit Quotations		\$ -	12.0	\$ 558.00		\$ -		\$ -	12.0	\$ 320.28		\$ -		\$ -	28.0	\$ 547.96		\$ -	4.0	\$ 51.36
1.2.2	Health and Safety Plan		\$ -	4.0	\$ 186.00		\$ -		\$ -		\$ -	2.0	\$ 49.54		\$ -	12.0	\$ 234.84		\$ -	1.0	\$ 12.84
1.2.3	QA/QC Plan		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -
1.2.4	Field Sampling Plan		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -
1.2.5	Budgets and Contract Schedules		\$ -	20.0	\$ 930.00		\$ -		\$ -	8.0	\$ 213.52		\$ -		\$ -	24.0	\$ 469.68	16.0	\$ 207.68	8.0	\$ 102.72
1.2.6	Final RI Work Plan		\$ -	12.0	\$ 558.00		\$ -		\$ -	8.0	\$ 213.52		\$ -		\$ -	16.0	\$ 313.12	8.0	\$ 103.84	8.0	\$ 102.72
Task 1.3	Task Management and Reporting	0.0	\$ -	26.0	\$ 1,209.00	0.0	\$ -	0.0	\$ -	0.0	\$ -	0.0	\$ -	0.0	\$ -	0.0	\$ -	0.0	\$ -	56.0	\$ 719.04
Task 1 Subtotal		0.0	\$ -	93.0	\$ 4,324.50	0.0	\$ -	0.0	\$ -	28.0	\$ 747.32	2.0	\$ 49.54	0.0	\$ -	100.0	\$ 1,957.00	24.0	\$ 311.52	80.0	\$ 1,027.20
Task 2	Remedial Investigation																				
2.1	Record Search		\$ -	1.0	\$ 46.50		\$ -		\$ -		\$ -		\$ -	20.0	\$ 437.40		\$ -		\$ -	2.0	\$ 25.68
2.2	Site Survey and Base Map Preparation		\$ -	2.0	\$ 93.00		\$ -		\$ -		\$ -		\$ -	8.0	\$ 174.96	6.0	\$ 117.42		\$ -	4.0	\$ 51.36
2.3	Site Preparation		\$ -	2.0	\$ 93.00		\$ -		\$ -		\$ -		\$ -	16.0	\$ 349.92		\$ -	30.0	\$ 389.40	4.0	\$ 51.36
2.4	Test Pit & Drum Sampling		\$ -	16.0	\$ 744.00		\$ -		\$ -		\$ -	170.0	\$ 4,210.90	190.0	\$ 4,155.30		\$ -	160.0	\$ 2,076.80	6.0	\$ 77.04
2.5	Surface Water and Sediment Sampling		\$ -	0.5	\$ 23.25		\$ -		\$ -		\$ -		\$ -	0.0	\$ -		\$ -	4.0	\$ 51.92	0.5	\$ 6.42
2.6	Soil Boring and MW Installation		\$ -	4.0	\$ 186.00		\$ -		\$ -		\$ -		\$ -	60.0	\$ 1,312.20		\$ -	1.0	\$ 12.98	2.0	\$ 25.68
2.7	Groundwater Sampling		\$ -	0.5	\$ 23.25		\$ -		\$ -		\$ -		\$ -	0.0	\$ -		\$ -	4.0	\$ 51.92	0.5	\$ 6.42
2.8	Fish and Wildlife Impact Assessment																				
2.8.1	Work Plan		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	4.0	\$ 87.48	4.0	\$ 78.28		\$ -		\$ -
2.8.2	Step I		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	4.0	\$ 87.48	80.0	\$ 1,565.60		\$ -		\$ -
2.8.3	Step IIA		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	4.0	\$ 87.48	10.0	\$ 195.70		\$ -		\$ -
2.8.4	Draft Report		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	8.0	\$ 174.96	40.0	\$ 782.80		\$ -		\$ -
2.9	Data Validation		\$ -	2.0	\$ 93.00		\$ -		\$ -		\$ -		\$ -	275.0	\$ 6,014.25	0.0	\$ -		\$ -	16.0	\$ 205.44
2.10	Task Management and Reporting	0.0	\$ -	35.0	\$ 1,627.50	0.0	\$ -	0.0	\$ -	0.0	\$ -	0.0	\$ -	0.0	\$ -	12.0	\$ 234.84	3.0	\$ 38.94	67.0	\$ 860.28
Task 2 Subtotal		0.0	\$ -	63.0	\$ 2,929.50	0.0	\$ -	0.0	\$ -	0.0	\$ -	170.0	\$ 4,210.90	589.0	\$ 12,881.43	152.0	\$ 2,974.64	202.0	\$ 2,621.96	102.0	\$ 1,309.68

TABLE 2
LABOR HOURS AND COSTS
SOUTH HILL DUMP R/LEHIGH REDESIGN

No.	TASK 1996 RATES	OFFICER		PRINCIPAL ENGR. 1		PRINCIPAL ENGR. 2		SUPERVISING SCIEN. 2		SENIOR SCIEN. 1		STAFF SCIEN. 1		STAFF SCIEN. 2		SCIEN. 1		SPECIAL. 1		WORD PROCESSOR	
		IX		VIII		VII		VI		V		IV		III		II		I		WP	
		\$51.00		\$46.50		\$35.64		\$32.79		\$26.69		\$24.77		\$21.87		\$19.57		\$12.98		\$12.84	
		Hrs	\$	Hrs	\$	Hrs	\$	Hrs	\$	Hrs	\$	Hrs	\$	Hrs	\$	Hrs	\$	Hrs	\$	Hrs	\$
Task 3	Work Plan Development																				
	Task 3 Subtotal		\$ -	21.0	\$ 976.50		\$ -		\$ -	14.0	\$ 373.66	4.0	\$ 99.08		\$ -	16.0	\$ 313.12	4.0	\$ 51.92	4.0	\$ 51.36
Task 4	Drainage System Re-Design																				
4.1	Conceptual Layout		\$ -		\$ -	2.0	\$ 71.28	2.0	\$ 65.58	12.0	\$ 320.28		\$ -		\$ -		\$ -		\$ -		\$ -
4.2	Drainage Computations		\$ -		\$ -	2.0	\$ 71.28	2.0	\$ 65.58	26.0	\$ 693.94		\$ -	24.0	\$ 524.88		\$ -		\$ -		\$ -
4.3	Specifications		\$ -		\$ -	1.0	\$ 35.64	2.0	\$ 65.58	20.0	\$ 533.80		\$ -		\$ -		\$ -		\$ -	8.0	\$ 102.72
4.4	Drafting Revisions		\$ -		\$ -	1.0	\$ 35.64	4.0	\$ 131.16	36.0	\$ 960.84		\$ -		\$ -	80.0	\$ 1,565.60		\$ -		\$ -
4.5	Engineers Cost Estimate		\$ -		\$ -	1.0	\$ 35.64	2.0	\$ 65.58	22.0	\$ 587.18		\$ -		\$ -		\$ -	2.0	\$ 25.96	4.0	\$ 51.36
4.6	Contract Drawing Production		\$ -	4.0	\$ 186.00		\$ -		\$ -	8.0	\$ 213.52		\$ -		\$ -		\$ -	2.0	\$ 25.96		\$ -
4.7	Task Management and Reporting	0.0	\$ -	1.0	\$ 46.50	0.0	\$ -	0.0	\$ -	9.0	\$ 240.21	0.0	\$ -	0.0	\$ -	0.0	\$ -	1.0	\$ 12.98	20.0	\$ 256.80
	Task 4 Subtotal	0.0	\$ -	5.0	\$ 232.50	7.0	\$ 249.48	12.0	\$ 393.48	133.0	\$ 3,549.77	0.0	\$ -	24.0	\$ 524.88	80.0	\$ 1,565.60	5.0	\$ 64.90	32.0	\$ 410.88
TOTAL HOURS/UNITS		0.0		182.0		7.0		12.0		175.0		176.0		613.0		348.0		235.0		218.0	
TOTAL \$			\$ -		\$ 8,463.00		\$ 249.48		\$ 393.48		\$ 4,670.75		\$ 4,359.52		\$ 13,406.31		\$ 6,810.36		\$ 3,050.30		\$ 2,799.12

**TABLE 2
LABOR HOURS AND COSTS
SOUTH HILL DUMP RI/LEHIGH REDESIGN**

No.	TASK	Total Hours	Direct Salary Costs	Indirect Costs	Subtotal	Fixed Fee	Total
			\$	\$	\$	\$	\$
	1996 RATES			1.17		0.15	
Task 1	Scoping and Work Plans						
Task 1.1	Scoping	42.0	\$1,313.42	\$1,540.64	\$2,854.06	\$428.11	\$3,282.17
Task 1.2	Final Work Plans						
1.2.1	Solicit Quotations	56.0	\$1,477.60	\$1,733.22	\$3,210.82	\$481.62	\$3,692.45
1.2.2	Health and Safety Plan	19.0	\$483.22	\$566.82	\$1,050.04	\$157.51	\$1,207.54
1.2.3	QA/QC Plan	0.0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
1.2.4	Field Sampling Plan	0.0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
1.2.5	Budgets and Contract Schedules	76.0	\$1,923.60	\$2,256.38	\$4,179.98	\$627.00	\$4,806.98
1.2.6	Final RI Work Plan	52.0	\$1,291.20	\$1,514.58	\$2,805.78	\$420.87	\$3,226.64
Task 1.3	Task Management and Reporting	82.0	\$1,928.04	\$2,261.59	\$4,189.63	\$628.44	\$4,818.08
	Task 1 Subtotal	327.00	\$ 8,417.08	\$ 9,873.23	\$ 18,290.31	\$ 2,743.55	\$ 21,033.86
Task 2	Remedial Investigation						
2.1	Record Search	23.0	\$509.58	\$597.74	\$1,107.32	\$166.10	\$1,273.41
2.2	Site Survey and Base Map Preparation	20.0	\$436.74	\$512.30	\$949.04	\$142.36	\$1,091.39
2.3	Site Preparation	52.0	\$883.68	\$1,036.56	\$1,920.24	\$288.04	\$2,208.27
2.4	Test Pit & Drum Sampling	542.0	\$11,264.04	\$13,212.72	\$24,476.76	\$3,671.51	\$28,148.27
2.5	Surface Water and Sediment Sampling	5.0	\$81.59	\$95.71	\$177.30	\$26.59	\$203.89
2.6	Soil Boring and MW Installation	67.0	\$1,536.86	\$1,802.74	\$3,339.60	\$500.94	\$3,840.54
2.7	Groundwater Sampling	5.0	\$81.59	\$95.71	\$177.30	\$26.59	\$203.89
2.8	Fish and Wildlife Impact Assessment						
2.8.1	Work Plan	8.0	\$165.76	\$194.44	\$360.20	\$54.03	\$414.23
2.8.2	Step I	84.0	\$1,653.08	\$1,939.06	\$3,592.14	\$538.82	\$4,130.96
2.8.3	Step IIA	14.0	\$283.18	\$332.17	\$615.35	\$92.30	\$707.65
2.8.4	Draft Report	48.0	\$957.76	\$1,123.45	\$2,081.21	\$312.18	\$2,393.39
2.9	Data Validation	293.0	\$6,312.69	\$7,404.79	\$13,717.48	\$2,057.62	\$15,775.10
2.10	Task Management and Reporting	117.0	\$2,761.56	\$3,239.31	\$6,000.87	\$900.13	\$6,901.00
	Task 2 Subtotal	1278.0	\$ 26,928.11	\$ 31,586.67	\$ 58,514.78	\$ 8,777.22	\$ 67,292.00

TABLE 2
LABOR HOURS AND COSTS
SOUTH HILL DUMP R/W/LEHIGH REDESIGN

No.	TASK	Total Hours	Direct Salary Costs	Indirect Costs	Subtotal	Fixed Fee	Total
			\$	\$	\$	\$	\$
	1996 RATES			1.17		0.15	
Task 3	Work Plan Development						
	Task 3 Subtotal	63.0	\$1,865.64	\$2,188.40	\$4,054.04	\$608.11	\$4,662.14
Task 4	Drainage System Re-Design						
4.1	Conceptual Layout	16.0	\$457.14	\$536.23	\$993.37	\$149.00	\$1,142.37
4.2	Drainage Computations	54.0	\$1,355.68	\$1,590.21	\$2,945.89	\$441.88	\$3,387.78
4.3	Specifications	31.0	\$737.74	\$865.37	\$1,603.11	\$240.47	\$1,843.58
4.4	Drafting Revisions	121.0	\$2,693.24	\$3,159.17	\$5,852.41	\$877.86	\$6,730.27
4.5	Engineers Cost Estimate	31.0	\$765.72	\$898.19	\$1,663.91	\$249.59	\$1,913.50
4.6	Contract Drawing Production	14.0	\$425.48	\$499.09	\$924.57	\$138.69	\$1,063.25
4.7	Task Management and Reporting	31.0	\$556.49	\$652.76	\$1,209.25	\$181.39	\$1,390.64
	Task 4 Subtotal	298.0	\$ 6,991.49	\$ 8,201.02	\$ 15,192.51	\$ 2,278.88	\$ 17,471.38
	TOTAL HOURS/UNITS	1966.0					
	TOTAL \$		\$ 44,202.32	\$ 51,849.32	\$ 96,051.64	\$ 14,407.75	\$ 110,459.39

**TABLE 3
MATERIAL COSTS
SOUTH HILL DUMP RI/LEHIGH REDESIGN**

No.	TASK	TELEPHONE (\$)	PHOTOCOPY (COPY)	POSTAGE/ SHIPPING (\$)	BLUELINE PRINTS (SHEET)	REPRODUC. PRINTS (SHEET)	MATERIALS/ SUPPLIES (\$)	TELECOPY DOMESTIC (PAGE)	TELECOPY OVERSEAS (PAGE)	PC'S/ WORD PROC (HR)	AUTO CAD (HR)	FIELD EQUIP (\$)	LEVEL D EQUIP (DAY)	LEVEL C EQUIP (DAY)	LEVEL B EQUIP (DAY)	TOTAL \$		
	1996 RATES	\$1.00	\$0.05	\$1.00	\$1.00	\$3.00	\$1.00	\$1.00	\$5.00	\$1.50	\$15.00	\$1.00	\$19.00	\$40.00	\$100.00			
Task 1	Scoping and Work Plans																	
Task 1.1	Scoping	10.0	20.0					5.0		3.0	1.0	10.0					\$45.50	
Task 1.2	Final Work Plans																	
1.2.1	Solicit Quotations	100.0	400.0	50.0				100.0		11.0							\$286.50	
1.2.2	Health and Safety Plan	5.0	50.0							1.0							\$9.00	
1.2.3	QA/QC Plan																\$0.00	
1.2.4	Field Sampling Plan																\$0.00	
1.2.5	Budgets and Contract Schedules	50.0	100.0					25.0		24.0							\$116.00	
1.2.6	Final RI Work Plan	25.0	400.0	20.0						12.0	1.0						\$98.00	
Task 1.3	Task Management and Reporting	15.0	500.0	30.0						16.0							\$94.00	
	Task 1 Subtotal	205.0	1470.0	100.0	0.0	0.0	0.0	130.0	0.0	67.0	2.0	10.0	0.0	0.0	0.0		\$649.00	
Task 2	Remedial Investigation																	
2.1	Record Search	20.0	500.0	10.0			800.0			1.0							\$856.50	
2.2	Site Survey and Base Map Preparation	20.0	25.0	10.0	10.0	2.0				2.0	6.0		1.0				\$159.25	
2.3	Site Preparation	50.0	500.0	10.0				20.0		4.0		2283.1	4.0				\$2,470.10	
2.4	Test Pit & Drum Sampling	100.0	500.0	1750.0				10.0		6.0		5341.4		15.0	30.0		\$10,835.40	
2.5	Surface Water and Sediment Sampling	10.0	0.0	300.0								64.5	2.0				\$412.50	
2.6	Soil Boring and MW Installation	20.0	500.0	250.0				10.0		6.0		697.5	5.0				\$1,106.50	
2.7	Groundwater Sampling	10.0	0.0	300.0								217.5	2.0				\$565.50	
2.8	Fish and Wildlife Impact Assessment																	
2.8.1	Work Plan	25.0	500.0														\$50.00	
2.8.2	Step I	25.0								66.7		205.0					\$330.00	
2.8.3	Step IIA									66.7							\$100.00	
2.8.4	Draft Report									66.7							\$100.00	
2.9	Data Validation	50.0	3000.0	25.0				25.0		16.0							\$274.00	
2.10	Task Management and Reporting																\$0.00	
	Task 2 Subtotal	330.0	5525.0	2655.0	10.0	2.0	800.0	65.0	0.0	235.0	6.0	8809.0	14.0	15.0	30.0		\$ 17,259.75	

**TABLE 3
MATERIAL COSTS
SOUTH HILL DUMP R/LEHIGH REDESIGN**

No.	TASK	TELEPHONE (\$)	PHOTOCOPY (COPY)	POSTAGE/ SHIPPING (\$)	BLUELINE PRINTS (SHEET)	REPRODUC. PRINTS (SHEET)	MATERIALS/ SUPPLIES (\$)	TELECOPY DOMESTIC (PAGE)	TELECOPY OVERSEAS (PAGE)	PC'S/ WORD PROC (HR)	AUTO CAD (HR)	FIELD EQUIP (\$)	LEVEL D EQUIP (DAY)	LEVEL C EQUIP (DAY)	LEVEL B EQUIP (DAY)	TOTAL \$
	1996 RATES	\$1.00	\$0.05	\$1.00	\$1.00	\$3.00	\$1.00	\$1.00	\$5.00	\$1.50	\$15.00	\$1.00	\$19.00	\$40.00	\$100.00	
Task 3	Work Plan Development															
	Task 3 Subtotal	50.0	500.0	35.0						26.0						\$149.00
Task 4	Drainage System Re-Design															
4.1	Conceptual Layout	10.0	50.0					5.0		16.0						\$41.50
4.2	Drainage Computations		50.0	10.0						16.0		550.0	4.0			\$662.50
4.3	Specifications	10.0	200.0	10.0				25.0		16.0						\$79.00
4.4	Drafting Revisions	10.0	50.0		20.0						72.0					\$1,112.50
4.5	Engineers Cost Estimate		150.0	20.0				50.0								\$77.50
4.6	Contract Drawing Production			100.0	546.0	10.0										\$676.00
4.7	Task Management and Reporting															\$0.00
	Task 4 Subtotal	30.0	500.0	140.0	566.0	10.0	0.0	80.0	0.0	48.0	72.0	550.0	4.0	0.0	0.0	\$ 2,649.00
	TOTAL HOURS/UNITS	615.0	7995.0	2930.0	576.0	12.0	800.0	275.0	0.0	376.0	80.0	9369.0	18.0	15.0	30.0	
	TOTAL \$	\$615.00	\$399.75	\$2,930.00	\$576.00	\$36.00	\$800.00	\$275.00	\$0.00	\$564.00	\$1,200.00	\$9,369.00	\$342.00	\$600.00	\$3,000.00	\$ 20,706.75

TABLE 4
TRAVEL COSTS
SOUTH HILL DUMP RI/LEHIGH REDESIGN

No.	TASK	AIR FARE	AUTO	TRUCK/VAN	PERSONAL	PER DIEM	MISC.	TOTAL
		(TRIP)	RENTAL	RENTAL	MILEAGE	(NIGHT)	(\$)	\$
	1996 RATES	\$1.00	\$75.00	\$130.00	\$0.25	Erie Co. \$106.00	\$1.00	
Task 1	Scoping and Work Plans							
Task 1.1	Scoping		0.5					\$37.50
Task 1.2	Final Work Plans							
1.2.1	Solicit Quotations							\$0.00
1.2.2	Health and Safety Plan							\$0.00
1.2.3	QA/QC Plan							\$0.00
1.2.4	Field Sampling Plan							\$0.00
1.2.5	Budgets and Contract Schedules							\$0.00
1.2.6	Final RI Work Plan							\$0.00
Task 1.3	Task Management and Reporting							\$0.00
	Task 1 Subtotal	0.0	0.5	0.0	0.0	0.0	0.0	\$37.50
Task 2	Remedial Investigation							
2.1	Record Search		2.0					\$150.00
2.2	Site Survey and Base Map Preparation		1.0					\$75.00
2.3	Site Preparation			4.0				\$520.00
2.4	Test Pit & Drum Sampling		1.0	15.0				\$2,025.00
2.5	Surface Water and Sediment Sampling		1.0	1.0				\$205.00
2.6	Soil Boring and MW Installation			5.0				\$650.00
2.7	Groundwater Sampling		1.0	1.0				\$205.00
2.8	Fish and Wildlife Impact Assessment							
2.8.1	Work Plan							\$0.00
2.8.2	Step I		4.0					\$300.00
2.8.3	Step IIA							\$0.00
2.8.4	Draft Report							\$0.00
2.9	Data Validation							\$0.00
2.10	Task Management and Reporting							\$0.00
	Task 2 Subtotal	0.0	10.0	26.0	0.0	0.0	0.0	\$ 4,130.00

TABLE 4
TRAVEL COSTS
SOUTH HILL DUMP RI/LEHIGH REDESIGN

No.	TASK	AIR FARE (TRIP)	AUTO RENTAL (DAY)	TRUCK/VAN RENTAL (DAY)	PERSONAL MILEAGE (MILE)	PER DIEM (NIGHT)	MISC. (\$)	TOTAL \$
	1996 RATES	\$1.00	\$75.00	\$130.00	\$0.25	Erie Co. \$106.00	\$1.00	
Task 3	Work Plan Development							
	Task 3 Subtotal							\$0.00
Task 4	Drainage System Re-Design							
4.1	Conceptual Layout							\$0.00
4.2	Drainage Computations			1.0		1.0	25.0	\$261.00
4.3	Specifications							\$0.00
4.4	Drafting Revisions							\$0.00
4.5	Engineers Cost Estimate							\$0.00
4.6	Contract Drawing Production							\$0.00
4.7	Task Management and Reporting							\$0.00
	Task 4 Subtotal	0.0	0.0	1.0	0.0	1.0	25.0	\$ 261.00
	TOTAL HOURS/UNITS	0.0	10.5	27.0	0.0	1.0	25.0	
	TOTAL \$	\$0.00	\$787.50	\$3,510.00	\$0.00	\$106.00	\$25.00	\$ 4,428.50

**TABLE 5
FIELD EQUIPMENT COSTS
SOUTH HILL DUMP RI/LEHIGH REDESIGN**

Item	Estimated Quantity	Unit	Unit Cost	Total Budgeted Cost
TASK 2.3 - SITE PREPARATION				
Brush Hog	4	Day	\$10.00	\$40.00
Camera (DEC)	4	Day	\$0.00	\$0.00
Cable Locator	4	Day	\$21.00	\$84.00
Chain Saw	4	Day	\$8.00	\$32.00
Explosimeter	4	Day	\$4.00	\$16.00
Field Notebook	1	Each	\$10.00	\$10.00
Field Trailer Rental (incl. steps)	4	Month	\$145.00	\$580.00
Field Trailer Mob. and Demob.	1	Lump	\$399.00	\$399.00
First Aid Kit	4	Day	\$5.00	\$20.00
Machette	4	Day	\$1.00	\$4.00
Photoionization Detector (DEC)	4	Day	\$0.00	\$0.00
Portable Restroom	4	Month	\$74.90	\$299.60
Roll Flagging	1	Each	\$1.50	\$1.50
Spray Paint	1	Each	\$7.00	\$7.00
Stakes (marker)	1	Per 2	\$10.00	\$10.00
Tape Measure (DEC)	1	Day	\$0.00	\$0.00
Telephone (incl. hook-up)	1	Lump	\$700.00	\$700.00
Telephone Service	4	Month	\$20.00	\$80.00
TASK TOTAL				\$2,283.10
TASK 2.4 - TEST PITS AND DRUM SAMPLING				
Air Tanks	30	Tank	\$25.00	\$750.00
Camera (DEC)	15	Day	\$0.00	\$0.00
Cable Locator	15	Day	\$21.00	\$315.00
Draeger Bellows	15	Day	\$0.00	\$0.00
Draeger Tubes (10 per box)	8	Box	\$50.00	\$400.00
Explosimeter	15	Day	\$4.00	\$60.00
Field Notebook	2	Each	\$10.00	\$20.00
First Aid Kit	15	Each	\$5.00	\$75.00
Hazardous Waste Containers	20	Set	\$176.42	\$3,528.40
Misc. Supplies	15	Day	\$10.00	\$150.00
Photoionization Detector No. 1 (D)	15	Day	\$0.00	\$0.00
Photoionization Detector No. 2 (D)	15	Day	\$0.00	\$0.00
Roll Flagging	2	Each	\$1.50	\$3.00
Stakes (marker)	4	Per 2	\$10.00	\$40.00
Tape Measure (DEC)	15	Day	\$0.00	\$0.00
TASK TOTAL				\$5,341.40

TABLE 5 - CONTINUED
FIELD EQUIPMENT COSTS
SOUTH HILL DUMP RI/LEHIGH REDESIGN

Item	Estimated Quantity	Unit	Unit Cost	Total Budgeted Cost
TASK 2.5 - SURFACE WATER AND SEDIMENT SAMPLING				
Decontamination supplies	1	Day	\$20.00	\$20.00
First Aid Kit	1	Each	\$5.00	\$5.00
Shipping Supplies	1	Day	\$10.00	\$10.00
pH, Conductivity, Temp. Meter	2	Day	\$9.00	\$18.00
Photoionization Detector (DEC)	2	Day	\$0.00	\$0.00
Roll Flagging	1	Each	\$1.50	\$1.50
SS Bowls (DEC)	2	Day	\$0.00	\$0.00
SS Spoons (DEC)	2	Day	\$0.00	\$0.00
Stakes (marker)	1	Per 2	\$10.00	\$10.00
TASK TOTAL				\$64.50
TASK 2.6 - BORINGS AND MONITORING WELL INSTALLATIONS				
Camera (DEC)	5	Day	\$0.00	\$0.00
Cable Locator	5	Day	\$21.00	\$105.00
Decontamination supplies	5	Day	\$20.00	\$100.00
Explosimeter	5	Day	\$4.00	\$20.00
Field Notebook	1	Each	\$10.00	\$10.00
First Aid Kit	5	Day	\$5.00	\$25.00
Misc. Supplies	5	Day	\$10.00	\$50.00
pH, Conductivity, Temp. Meter	5	Day	\$9.00	\$45.00
Photoionization Detector (DEC)	5	Day	\$0.00	\$0.00
Submersible Pump	5	Day	\$50.00	\$250.00
SS Bowls (DEC)	5	Day	\$0.00	\$0.00
SS Spoons (DEC)	5	Day	\$0.00	\$0.00
Tubing	150	Feet	\$0.25	\$37.50
Turbidity Meter	5	Day	\$10.00	\$50.00
Water Level Indicator	5	Day	\$1.00	\$5.00
TASK TOTAL				\$697.50

**TABLE 5 - CONTINUED
FIELD EQUIPMENT COSTS
SOUTH HILL DUMP RI/LEHIGH REDESIGN**

Item	Estimated Quantity	Unit	Unit Cost	Total Budgeted Cost
TASK 2.7 - GROUNDWATER SAMPLING				
Decontamination supplies	1	Day	\$20.00	\$20.00
First Aid Kit	2	Day	\$5.00	\$10.00
Shipping Supplies	1	Day	\$10.00	\$10.00
pH, Conductivity, Temp. Meter	2	Day	\$9.00	\$18.00
Photoionization Detector (DEC)	2	Day	\$0.00	\$0.00
Submersible Pump	2	Day	\$50.00	\$100.00
Tubing	150	Feet	\$0.25	\$37.50
Turbidity Meter	2	Day	\$10.00	\$20.00
Water Level Indicator	2	Day	\$1.00	\$2.00
TASK TOTAL				\$217.50
Task 2.8.2 Fish and Wildlife Impact Assessment - Step I				
Field Notebook	1	ea	\$10.00	\$10.00
Decontamination supplies	3	Day	\$30.00	\$90.00
First Aid Kit	3	Day	\$5.00	\$15.00
Misc. Supplies	3	Day	\$30.00	\$90.00
SS Bowls (DEC)	3	Day	\$0.00	\$0.00
SS Spoons (DEC)	3	Day	\$0.00	\$0.00
TASK TOTAL				\$205.00

**TABLE 5 - CONTINUED
FIELD EQUIPMENT COSTS
SOUTH HILL DUMP RI/LEHIGH REDESIGN**

Item	Estimated Quantity	Unit	Unit Cost	Total Budgeted Cost
Task 4.2 Drainage Computations				
Backhoe Mob/Demob	2	hr	\$60.00	\$120.00
Backhoe Rental	2	Day	\$215.00	\$430.00
TASK TOTAL				\$550.00

Schedule 2.11(a)
SUMMARY OF TOTAL CONTRACT PRICE
WORK ASSIGNMENT D002478-45
Work Assignment Summary

1	Direct Salary Costs (Schedules 2.10(a) and 2.11(b))	\$	44,202.32
2	Indirect Costs (Schedule 2.10(g))	\$	51,849.32
3	Direct Non-Salary Costs (Schedules 2.10(d,e,f) and 2.11(c,d))	\$	25,135.25
Subcontract Costs			
Cost-Plus-Fixed-Fee Subcontracts (Schedule 2.10(e) and 2.11(e))			
	<u>Name of Subcontractor</u>	<u>Services to be Performed</u>	<u>Subcontract Price</u>
4	Total Cost-Plus-Fixed-Fee Subcontracts		\$ -
Unit Price Subcontracts (Schedule 2.10(f) and 2.11(f))			
	<u>Name of Subcontractor</u>	<u>Services to be Performed</u>	<u>Subcontract Price</u>
	Atlas Fence	Fencing	\$ 8,428.50
	SJB Services	Drilling and Well Installation	\$ 8,147.00
	ERD Environmental	Test Pit Excavation	\$ 25,300.00
	NYTEST Environmental, Inc.	Analytical Laboratory Services	\$ 99,737.00
	S. F. THEW, P.E.,L.S.	Field Survey & Base Map Preparation	\$ 3,905.00
5	Total Unit Price Subcontracts		\$145,517.50
6	Subcontract Management Fee		\$ 6,251.85
7	Total Subcontract Costs (4+5+6)		\$ 151,769.35
8	Fixed Fee (Schedule 2.10(h))		\$ 14,407.75
9	Total Work Assignment Price (Lines 1+2+3+7+8)		\$ 287,363.99

Schedule 2.11(a-1)
SUMMARY OF COSTS
WORK ASSIGNMENT D002478-45
 Work Assignment Summary

Task	Direct Labor	Indirect Labor	Fixed Fee	Travel & Subsistence	Other Costs	Subcontract Costs	Subtotal Labor Hrs.
South Hills Dump Site	\$ 35,345.19	\$ 41,459.91	\$ 11,520.76	\$ 4,167.50	\$ 17,908.75	\$ 151,769.35	\$ 262,171.46
Lehigh Redesign	\$ 8,857.13	\$ 10,389.41	\$ 2,866.98	\$ 261.00	\$ 2,798.00	\$ -	\$ 25,192.53
Total	\$ 44,202.32	\$ 51,849.32	\$ 14,407.75	\$ 4,428.50	\$ 20,706.75	\$ 151,769.35	\$ 287,363.99

Schedule 2.11(b)
NUMBER OF DIRECT LABOR HOURS BUDGETED
WORK ASSIGNMENT D002478-45
Work Assignment Summary

No.	Task	Officer	Principal Engr. 1	Principal Engr. 2	Supervising Scien./Engr. 1	Supervising Scien./Engr. 2	Staff Scien. Engr. 1	Staff Scien. Engr. 2	Scient. 1	Specialist 1.00	Word Processor	Subtotal Labor Hrs.
		IX	VIII	VII	VI	V	IV	III	II	I	WP	
	Maximum Reimbursement Rates	\$51.00	\$46.50	\$35.64	\$32.79	\$26.69	\$24.77	\$21.87	\$19.57	\$12.98	\$12.84	
	South Hills Dump Site											
Task 1	Scoping and Work Plans	0.0	93.0	0.0	0.0	28.0	2.0	0.0	100.0	24.0	80.0	327.0
Task 2	Remedial Investigation	0.0	63.0	0.0	0.0	0.0	170.0	589.0	152.0	202.0	102.0	1278.0
	Lehigh Redesign											
Task 3	Task 3 Subtotal	0.0	21.0	0.0	0.0	14.0	4.0	0.0	16.0	4.0	4.0	63.0
Task 4	Drainage System Re-Design	0.0	5.0	7.0	12.0	133.0	0.0	24.0	80.0	5.0	32.0	298.0
	Total Hours/Units	0.0	182.0	7.0	12.0	175.0	176.0	613.0	348.0	235.0	218.0	1966.0
	Total Direct Labor Cost	\$ -	\$ 8,463.00	\$ 249.48	\$ 393.48	\$ 4,670.75	\$ 4,359.52	\$ 13,406.31	\$ 6,810.36	\$ 3,050.30	\$ 2,799.12	\$ 44,202.32

Schedule 2.11(b-1)
NUMBER OF DIRECT ADMINISTRATIVE LABOR HOURS BUDGETED
WORK ASSIGNMENT D002478-45
Work Assignment Summary

No.	Task	Officer	Principal Engr. 1	Principal Engr. 2	Supervising Scien./Engr. 1	Supervising Scien./Engr. 2	Staff Scien. Engr. 1	Staff Scien. Engr. 2	Scient. 1	Specialist 1.00	Word Processor	Subtotal Labor Hrs.
		IX	VIII	VII	VI	V	IV	III	II	I	WP	
	Maximum Reimbursement Rates	\$51.00	\$46.50	\$35.64	\$32.79	\$26.69	\$24.77	\$21.87	\$19.57	\$12.98	\$12.84	
South Hills Dump Site												
Task 1	Scoping and Work Plans	0.0	26.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	56.0	82.0
Task 2	Remedial Investigation	0.0	35.0	0.0	0.0	0.0	0.0	0.0	12.0	3.0	67.0	117.0
Lehigh Redesign												
Task 3	Task 3 Subtotal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Task 4	Drainage System Re-Design	0.0	1.0	0.0	0.0	9.0	0.0	0.0	0.0	1.0	20.0	31.0
	Total Hours/Units	0.0	62.0	0.0	0.0	9.0	0.0	0.0	12.0	4.0	143.0	230.0
	Total Direct Labor Cost	\$ -	\$ 2,883.00	\$ -	\$ -	\$ 240.21	\$ -	\$ -	\$ 234.84	\$ 51.92	\$ 1,836.12	\$ 5,246.09

Engineer/Contract Number D002478
 Project Name South Hills Dump Site / Lehigh Redesign
 Work Assignment Number D002478-45

**DETAILED BREAKDOWN OF DIRECT ADMINISTRATIVE
 LABOR HOURS BUDGETED ON SCHEDULE 2.11(b-1)**

Date Prepared 11/14/96

ADMINISTRATIVE TASKS	Work Plan Development																			CAP Preparation																												
	Conflict of Interest Checks										Schedules & Supporting Documentation									Prepare Monthly Cost Control Report and CAP									Oversee CAP Preparation																			
	9	8	7	6	5	4	3	2	1	WP	9	8	7	6	5	4	3	2	1	WP	9	8	7	6	5	4	3	2	1	WP	9	8	7	6	5	4	3	2	1	WP								
Task 1		2								2																													40	10								
Task 2																																							48	12								
Task 3																																																
Task 4																																							16				4					
SUBTOTALS	0	2	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	104	0	22	0	0	4	0	0	0	0
TOTAL (ALL NSPE)	4										0									104									26																			

Engineer/Contract Number D002478
 Project Name South Hills Dump Site / Lehigh Redesign
 Work Assignment Number D002478-45

**DETAILED BREAKDOWN OF DIRECT ADMINISTRATIVE
 LABOR HOURS BUDGETED ON SCHEDULE 2.11(b-1)**

Date Prepared 11/14/96

ADMINISTRATIVE TASKS	Manage Subcontractors										Review Work Assignment (WA) Progress																													
											Conduct Progress Reviews					Prepare Monthly Progress Report & Schedule Update					M/WBE Activities																			
NSPE LEVEL	9	8	7	6	5	4	3	2	1	WP	9	8	7	6	5	4	3	2	1	WP	9	8	7	6	5	4	3	2	1	WP	9	8	7	6	5	4	3	2	1	WP
Task 1												1									10									10		1								2
Task 2		6										1									12									12		1								2
Task 3																																								
Task 4												1			1											4				4										
SUBTOTALS	0	6	0	0	0	0	0	12	0	0	0	3	0	0	1	0	0	0	0	0	0	22	0	0	4	0	0	0	0	26	0	2	0	0	0	0	0	0	0	4
TOTAL (ALL NSPE)	18										4					52					6																			

Engineer/Contract Number D002478
 Project Name South Hills Dump Site / Lehigh Redesign
 Work Assignment Number D002478-45

**DETAILED BREAKDOWN OF DIRECT ADMINISTRATIVE
 LABOR HOURS BUDGETED ON SCHEDULE 2.11(b-1)**

Date Prepared 11/14/96

ADMINISTRATIVE TASKS	Program Management										Miscellaneous										Word Processing and Report Preparation																			
	NSPE List Updates										Equipment Use and Inventory																													
NSPE LEVEL	9	8	7	6	5	4	3	2	1	WP	9	8	7	6	5	4	3	2	1	WP	9	8	7	6	5	4	3	2	1	WP	9	8	7	6	5	4	3	2	1	WP
Task 1		2								2																														
Task 2		2								2		1																												
Task 3																																								
Task 4																													1											
SUBTOTALS	0	4	0	0	0	0	0	0	0	4	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	3	0	0	0	0	0	0	0	0	0	0
TOTAL (ALL NSPE)	8										1										7										0									

Engineer/Contract Number D002478
 Project Name South Hills Dump Site /Lehigh Redevelopment
 Work Assignment Number D002478-45

DETAILED BREAKDOWN OF DIRECT ADMINISTRATIVE
 LABOR HOURS BUDGETED ON SCHEDULE 2.11(b-1)

ADMINISTRATIVE TASKS	Total Direct Administrative Labor Hours											Total
	9	8	7	6	5	4	3	2	1	WP		
NSPE LEVEL												
Task 1	0	26	0	0	0	0	0	0	0	56	82	
Task 2	0	35	0	0	0	0	0	12	3	67	117	
Task 3												
Task 4	0	1	0	0	9	0	0	0	1	20	31	
SUBTOTALS	0	62	0	0	9	0	0	12	4	143	230	
TOTAL (ALL NSPE)	230											

Schedule 2.11(c and d)
MAXIMUM REIMBURSEMENT RATES FOR DIRECT NON-SALARY COSTS
WORK ASSIGNMENT D002478-45
Work Assignment Summary

Item	Maximum Reimbursement Rate	Unit	Estimated Number of Units	Total Estimated Cost
A In-House Costs				
1. Telephone	\$1.00	Actual Cost	615.00	\$ 615.00
2. Photocopies	\$0.05	Page	7995.00	\$ 399.75
3. Postage	\$1.00	Actual Cost	2930.00	\$ 2,930.00
4a. Blueline Prints	\$1.00	Page	576.00	\$ 576.00
4b. Reproducible Prints	\$3.00	Page	12.00	\$ 36.00
5. Materials and Supplies	\$1.00	Page	800.00	\$ 800.00
6a. Telecopies (Domestic)	\$1.00	Page	275.00	\$ 275.00
6b. Telecopies (Overseas)	\$5.00	Page	0.00	\$ -
7. Personal Computer	\$1.50	Hour	376.00	\$ 564.00
8. Auto Cad	\$15.00	Hour	80.00	\$ 1,200.00
9. Field Equipment	\$1.00	Actual Cost	9369.00	\$ 9,369.00
10. Level D Equipment	\$19.00	Day	18.00	\$ 342.00
11. Level C Equipment	\$40.00	Day	15.00	\$ 600.00
12. Level B Equipment	\$100.00	Day	30.00	\$ 3,000.00
Subtotal				\$ 20,706.75
B. Miscellaneous				
Travel				
a. Air Fare	\$1.00	Actual Cost	0.00	\$ -
b1. Auto Rental	\$75.00	Day	10.50	\$ 787.50
b2. Truck/Van Rental	\$130.00	Day	27.00	\$ 3,510.00
c. Personal Mileage	\$0.25	Miles	0.00	\$ -
d. Per Diem	\$106.00	Day	1.00	\$ 106.00
e. Miscellaneous Expense	\$1.00	Actual Cost	25.00	\$ 25.00
Subtotal				\$ 4,428.50
Total				\$ 25,135.25

Schedule 2.11(g)
MONTHLY COST CONTROL REPORT
SUMMARY OF FISCAL INFORMATION

Date Prepared 17-Jan-97

Billing Period NA

Invoice No. NA

Engineer Engineering Science, Inc.
 Contract No. D002478-45
 Project Name South Hill Dump Site RI/Lehigh Redesign
 Task No./Name Work Assignment Summary
 Complete _____%

	A	B	C	D	E	F	G	H
Expenditure Category	Costs Claimed This Period	Paid to Date	Total Disallowed To Date	Total Costs Incurred To Date (A+B+C)	Estimated Costs To Completion	Estimated Total Work Assignment Price (A+B+E)	Approved Budget	Estimated Under/Over (G-F)
1. Direct Salary Costs							\$ 44,202.32	
2. Indirect Costs 117.3%							\$ 51,849.32	
3. Subtotal Direct Salary Costs and Indirect Costs							\$96,051.64	
4. Travel							\$ 4,428.50	
5. Other Non-Salary Costs							\$ 20,706.75	
6. Subtotal Direct Non-Salary Costs							\$25,135.25	
7. Subcontractors							\$ 151,769.35	
8. Total Contract Cost							\$272,956.24	
9. Fixed Fee 15%							\$ 14,407.75	
10. Total Contract Price							\$287,363.99	

Project Manager (Engineer)



Date

1/17/97

Engineer Engineering Science, Inc.
 Contract No. D002478-45
 Project Name South Hill Dump Site RI/Lehigh Redesign
 Complete _____%

Schedule 2.11(g) - Supplemental
MONTHLY COST CONTROL REPORT
SUBCONTRACTS

Page 1 of 1
 Date Prepared 17-Jan-97
 Billing Period NA
 Invoice No.

	A	B	C	D	E	F	G
Subcontract Name	Subcontract Costs Claimed This Application Incl. Resubmittals	Subcontract Costs Approved for Payment on Previous Appl.	Total Subcontract Costs to Date (A+B)	Subcontract Approved Budget	Management Fee Budget*	Management Fee Paid	Total Costs to Date (C+F)
SJB Services			\$ -	\$ 8,147.00	\$ -		\$ -
ERD Environmental			\$ -	\$ 25,300.00	\$ 1,265.00		\$ -
NYTEST Environmental, Inc.			\$ -	\$ 99,737.00	\$ 4,986.85		\$ -
Atlas Fence			\$ -	\$ 8,428.50	\$ -		\$ -
S. F. THEW, P.E., L.S.			\$ -	\$ 3,905.00	\$ -		\$ -
Totals	\$ -	\$ -	\$ -	\$ 145,517.50	\$ 6,251.85	\$ -	\$ -

Project Manager (Engineer) *Robert M. Filiano*

Date 1/17/97

* Total Subcontract Value on Work Assignment Exceeds \$10,000

Schedule 2.11(h)
MONTHLY COST CONTROL REPORT
SUMMARY OF LABOR HOURS

NUMBER OF DIRECT LABOR HOURS EXPENDED TO DATE/ESTIMATED NUMBER OF DIRECT LABOR HOURS TO COMPLETION

Engineer Engineering-Science, Inc.
Contract No. D002478-45
Project Name South Hill Dump Site RI/Lehigh Redesign
Complete _____%

Date Prepared 14-Nov-96
Billing Period NA
Invoice No. NA

No.	Maximum Reimbursement Rates Task	Officer IX		Principal Engr. 1 VIII		Principal Engr. 2 VII		Supervising Scien./Engr. 1 VI		Supervising Scien./Engr. 2 V		Staff Scien. Engr. 1 IV		Staff Scien. Engr. 2 III		Staff Scien. 1 II		Specialist 1.00 I		Word Processor WP		Total No. of Direct Labor Hours		
		\$51.00		\$46.50		\$35.64		\$32.79		\$26.69		\$24.77		\$21.87		\$19.57		\$12.98		\$12.84		EXP	EST	
		EXP	EST	EXP	EST	EXP	EST	EXP	EST	EXP	EST	EXP	EST	EXP	EST	EXP	EST	EXP	EST	EXP	EST	EXP	EST	
South Hills Dump Site																								
Task 1	Scoping and Work Plans		0.0		93.0		0.0		0.0		28.0		2.0		0.0		100.0		24.0		80.0		0.0	327.0
Task 2	Remedial Investigation		0.0		63.0		0.0		0.0		0.0		170.0		589.0		152.0		202.0		102.0		0.0	1278.0
Lehigh Redesign																								
Task 3	Task 3 Subtotal		0.0		21.0		0.0		0.0		14.0		4.0		0.0		16.0		4.0		4.0		0.0	63.0
Task 4	Drainage System Re-Design		0.0		5.0		7.0		12.0		133.0		0.0		24.0		80.0		5.0		32.0		0.0	298.0
Total Hours/Units			0.0		182.0		7.0		12.0		175.0		176.0		613.0		348.0		235.0		218.0		0.0	1966.0

Schedule 2.11(a)
SUMMARY OF TOTAL CONTRACT PRICE
WORK ASSIGNMENT D002478-45
South Hill Dump Site

1	Direct Salary Costs (Schedules 2.10(a) and 2.11(b))	\$	35,345.19
2	Indirect Costs (Schedule 2.10(g))	\$	41,459.91
3	Direct Non-Salary Costs (Schedules 2.10(d,e,f) and 2.11(c,d))	\$	22,076.25
Subcontract Costs			
Cost-Plus-Fixed-Fee Subcontracts (Schedule 2.10(e) and 2.11(e))			
	<u>Name of Subcontractor</u>	<u>Services to be Performed</u>	<u>Subcontract Price</u>
4	Total Cost-Plus-Fixed-Fee Subcontracts	\$	
Unit Price Subcontracts (Schedule 2.10(f) and 2.11(f))			
	<u>Name of Subcontractor</u>	<u>Services to be Performed</u>	<u>Subcontract Price</u>
	Atlas Fence	Fencing	\$ 8,428.50
	SJB Services	Drilling and Well Installation	\$ 8,147.00
	ERD Environmental	Test Pit Excavation	\$ 25,300.00
	NYTEST Environmental, Inc.	Analytical Laboratory Services	\$ 99,737.00
	S. F. THEW, P.E.,L.S.	Field Survey & Base Map Preparation	\$ 3,905.00
5	Total Unit Price Subcontracts	\$	145,517.50
6	Subcontract Management Fee	\$	6,251.85
7	Total Subcontract Costs (4+5+6)	\$	151,769.35
8	Fixed Fee (Schedule 2.10(h))	\$	11,520.76
9	Total Work Assignment Price (Lines 1+2+3+7+8)	\$	262,171.46

Schedule 2.11(b)
NUMBER OF DIRECT LABOR HOURS BUDGETED
WORK ASSIGNMENT D002478-45
 South Hill Dump Site

No.	Task	Officer	Principal Engr. 1	Principal Engr. 2	Supervising Scien./Engr. 1	Supervising Scien./Engr. 2	Staff Scien. Engr. 1	Staff Scien. Engr. 2	Scient. 1	Specialist 1.00	Word Processor	Subtotal Labor Hrs.
		IX	VIII	VII	VI	V	IV	III	II	I	WP	
	Maximum Reimbursement Rates	\$51.00	\$46.50	\$35.64	\$32.79	\$26.69	\$24.77	\$21.87	\$19.57	\$12.98	\$12.84	
Task 1	Scoping and Work Plans	0.0	93.0	0.0	0.0	28.0	2.0	0.0	100.0	24.0	80.0	327.0
Task 2	Remedial Investigation	0.0	63.0	0.0	0.0	0.0	170.0	589.0	152.0	202.0	102.0	1278.0
	Total Hours/Units	0.0	156.0	0.0	0.0	28.0	172.0	589.0	252.0	226.0	182.0	1605.0
	Total Direct Labor Cost	\$ -	\$ 7,254.00	\$ -	\$ -	\$ 747.32	\$ 4,260.44	\$ 12,881.43	\$ 4,931.64	\$ 2,933.48	\$ 2,336.88	\$ 35,345.19

Schedule 2.11(b-1)
NUMBER OF DIRECT ADMINISTRATIVE LABOR HOURS BUDGETED
WORK ASSIGNMENT D002478-45
 South Hill Dump Site

No.	Task	Officer IX	Principal Engr. 1 VIII	Principal Engr. 2 VII	Supervising Scien./Engr. 1 VI	Supervising Scien./Engr. 2 V	Staff Scien. Engr. 1 IV	Staff Scien. Engr. 2 III	Scient. 1 II	Specialist 1.00 I	Word Processor WP	Subtotal Labor Hrs.
	Maximum Reimbursement Rates	\$51.00	\$46.50	\$35.64	\$32.79	\$26.69	\$24.77	\$21.87	\$19.57	\$12.98	\$12.84	
Task 1	Scoping and Work Plans	0.0	26.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	56.0	82.0
Task 2	Remedial Investigation	0.0	35.0	0.0	0.0	0.0	0.0	0.0	12.0	3.0	67.0	117.0
	Total Hours/Units	0.0	61.0	0.0	0.0	0.0	0.0	0.0	12.0	3.0	123.0	199.0
	Total Direct Labor Cost	\$ -	\$ 2,836.50	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 234.84	\$ 38.94	\$ 1,579.32	\$ 4,689.60

Schedule 2.11(c and d)
MAXIMUM REIMBURSEMENT RATES FOR DIRECT NON-SALARY COSTS
WORK ASSIGNMENT D002478-45
 South Hill Dump Site

Item	Maximum Reimbursement Rate	Unit	Estimated Number of Units	Total Estimated Cost
A In-House Costs				
1. Telephone	\$1.00	Actual Cost	535.00	\$ 535.00
2. Photocopies	\$0.05	Page	6995.00	\$ 349.75
3. Postage	\$1.00	Actual Cost	2755.00	\$ 2,755.00
4a. Blueline Prints	\$1.00	Page	10.00	\$ 10.00
4b. Reproducible Prints	\$3.00	Page	2.00	\$ 6.00
5. Materials and Supplies	\$1.00	Page	800.00	\$ 800.00
6a. Telecopies (Domestic)	\$1.00	Page	195.00	\$ 195.00
6b. Telecopies (Overseas)	\$5.00	Page	0.00	\$ -
7. Personal Computer	\$1.50	Hour	302.00	\$ 453.00
8. Auto Cad	\$15.00	Hour	8.00	\$ 120.00
9. Field Equipment	\$1.00	Actual Cost	8819.00	\$ 8,819.00
10. Level D Equipment	\$19.00	Day	14.00	\$ 266.00
11. Level C Equipment	\$40.00	Day	15.00	\$ 600.00
12. Level B Equipment	\$100.00	Day	30.00	\$ 3,000.00
			Subtotal	\$ 17,908.75
B. Miscellaneous				
Travel				
a. Air Fare	\$1.00	Actual Cost	0.00	\$ -
b1. Auto Rental	\$75.00	Day	10.50	\$ 787.50
b2. Truck/Van Rental	\$130.00	Day	26.00	\$ 3,380.00
c. Personal Mileage	\$0.25	Miles	0.00	\$ -
d. Per Diem	\$106.00	Day	0.00	\$ -
e. Miscellaneous Expense	\$1.00	Actual Cost	0.00	\$ -
			Subtotal	\$ 4,167.50
			Total	\$ 22,076.25

Schedule 2.11(f)
 UNIT PRICE SUBCONTRACT
 WORK ASSIGNMENT D002478-45
 South Hill Dump Site

<u>NAME OF SUBCONTRACTOR</u>	<u>SERVICES TO BE PERFORMED</u>	<u>SUBCONTRACT PRICE</u>
1. Atlas Fence	Fencing	\$ 8,428.50

Item	MAXIMUM REIMBURSEMENT RATE	UNIT	EST NO UNITS	TOTAL ESTIMATED COST	WEEK DELIVERY IS ANTICIPATED
Mobilization/Demobilization	\$390	ls	1	\$390	
Fence-line Installed	\$17	lf	409	\$6,749	
Access Gate, 16-ft wide	\$475	ea	2	\$950	
Remove and dispose of existing fencing	\$2	lf	42	\$84	
Remove and dispose of existing gate	\$120	ls	1	\$120	
Borings to set gate posts	\$20	ea	4	\$80	
Padlocks	\$28	ea	2	\$56	
				TOTAL COST =	\$ 8,428.50
				SUBCONTRACT MANAGEMENT FEE =	\$ -
				TOTAL COST =	\$ 8,428.50

Schedule 2.11(f)
UNIT PRICE SUBCONTRACT
WORK ASSIGNMENT D002478-45
South Hill Dump Site

<u>NAME OF SUBCONTRACTOR</u>	<u>SERVICES TO BE PERFORMED</u>	<u>SUBCONTRACT PRICE</u>
1. SJB Services	Drilling and Well Installation	\$ 8,147.00

Item	MAXIMUM REIMBURSEMENT RATE	UNIT	EST NO UNITS	TOTAL ESTIMATED COST	WEEK DELIVERY IS ANTICIPATED
TASK 2.6 -- MONITORING WELL INSTALLATION					
<u>BEDROCK WELL INSTALLATION</u>					
6.25-Inch ID HSA Drilling	\$16	ft	52	\$832	
Continuous 2" SS Sampling	\$7	Sample	24	\$168	
5-Inch Roller Bit Drilling (Rock Socket)	\$35	ft	8	\$280	
HX Rock Coring (0 to 50 feet)	\$35	ft	40	\$1,400	
Rock Core Boxes	\$0	ft	4	\$0	
Install 4-Inch Steel Riser Casing (Including grout)	\$20	ft	72	\$1,440	
Locking Cap for 4-Inch Steel Riser Casing	\$75	Cap	4	\$300	
			SUBTOTAL =	\$4,420	
<u>OVERBURDEN WELL INSTALLATION</u>					
4.25" * HSA Drilling	\$10	ft	40	\$400	
2-Inch, Schedule 40, PVC Screen (0.010-inch slot)	\$3	ft	20	\$60	
2-Inch, Schedule 40, PVC Riser Casing	\$2	ft	32	\$64	
Sand Pack (No. 1 Morie or equivalent, Installed)	\$12	ft	28	\$336	
Bentonite Pellet Well Seal (Installed)	\$13	ft	8	\$104	
Grout PVC Riser Casing	\$7	ft	4	\$28	
4-Inch Steel Protective Casing with Locking Cap	\$110	Well	4	\$440	
			SUBTOTAL =	\$1,432	
<u>Additional Items</u>					
Mobilization/Demobilization	\$500	ls	1.00	\$500	
ATV Surcharge	\$200	ls	1.00	\$200	
Steam Cleaner	\$50	day	5.00	\$250	
Generator	\$50	day	5.00	\$250	
Water Truck	\$75	day	5.00	\$375	
Decontamination	\$120	hr	6.00	\$720	
Well Development by Pumping	\$150	hr	0.00	\$0	
Standby	\$120	hr	0.00	\$0	
Per Diem	\$0	day	5	\$0	
			SUBTOTAL =	\$2,295	
DRILLING AND MONITORING WELL INSTALLATION				TOTAL COST = \$	8,147.00
				SUBCONTRACT MANAGEMENT FEE = \$	-
DRILLING AND MONITORING WELL INSTALLATION				TOTAL COST = \$	8,147.00