NEW YORK STATE SUPERFUND CONTRACT

PSA TASKS 1 TO 3 WORK PLANS FOR

NEW CASSEL INDUSTRIAL AREA MULTI-SITE PSA

SITE NO. 130043 H-K

WORK ASSIGNMENT NO. D002676-12

DRAFT

Prepared for:

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
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July 1995

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CHAPTER 1

WORK PLAN

1.1 INTRODUCTION

Lawler, Matusky & Skelly Engineers (LMS) has been given the work assignment of conducting a multi-site Preliminary Site Investigation (PSA) at the New Cassel Industrial Area (No. 130043) under the terms of the State Superfund Standby Contract. The objective of this assignment is to conduct a multi-site PSA on properties within four of the seven identified organic groundwater plumes to pinpoint areas of hazardous waste disposal and assess the level of threat, if any, that each identified source may pose to the environment.

1.2 BACKGROUND

The New Cassel Industrial Area (NCIA) is located in the unincorporated village of Westbury, in the Town of North Hempstead, Nassau County, New York (Figure 1-1). Approximately 200 industrial or commercial businesses occupy this 170-acre site (Figure 1-2).

The severe groundwater contamination in this industrial area was initially revealed in "Investigation of Contaminated Aquifer Segments, Nassau County, New York, June 1986," carried out by the Nassau County Department of Health (NCDH). The 1994 Site Investigation conducted by LMS has confirmed the widespread groundwater contamination with VOC's emanating from this industrial area in New Cassel. The site investigation has also identified four potential source areas in addition to seven confirmed source areas that are contributing to the contamination.

1.3 TASK 1: DEVELOPMENT OF WORK PLAN

Based on past work conducted by LMS at the New Cassel Industrial Area a Technical Scope of work for the PSA field investigation has been prepared which documents the necessary tasks to identify the specific sources of the four remaining plumes at the industrial area. LMS has also reviewed the Quality Assurance Project Plan (QAPP) and the Health and Safety Plan (HASP) used during the previous investigation and found them applicable to this work since many of the PSA tasks are the same as the tasks conducted during the previous investigation.

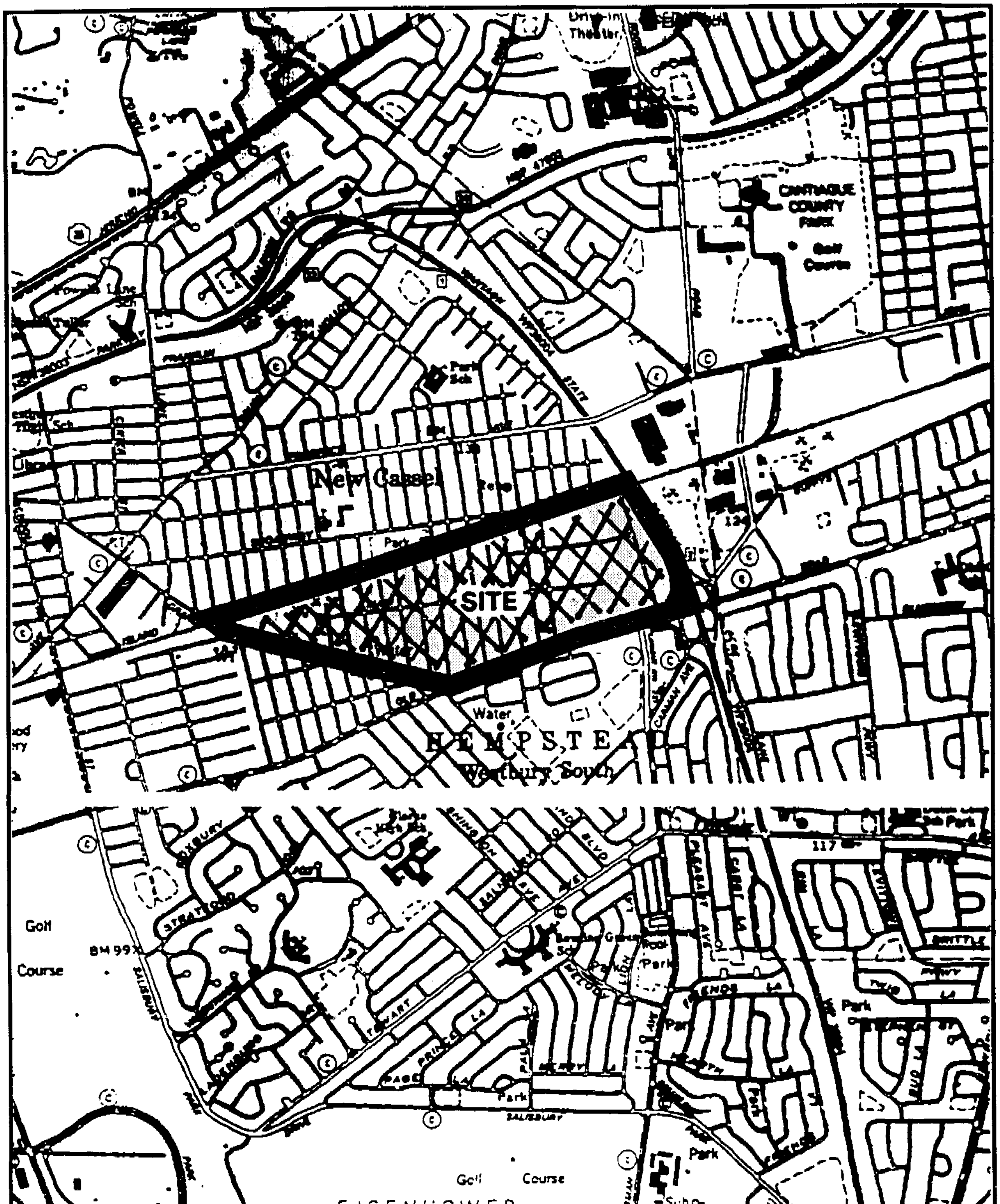


Figure 1-1 Site Location Map

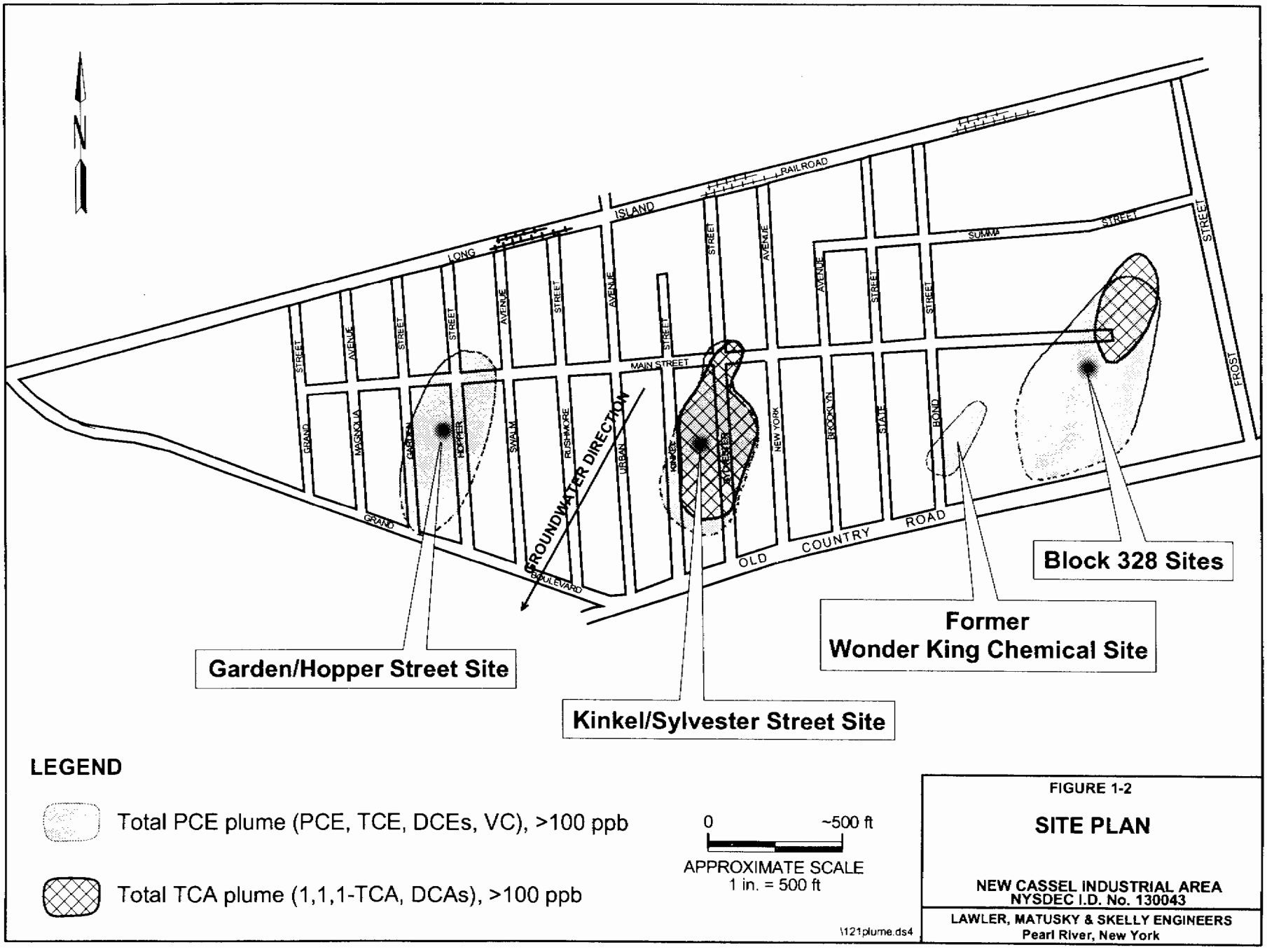
130043 New Cassel Industrial Area

NYSDOT Planimetric Quadrangles
Hicksville, Freeport

N

0 500 1000 1500 2000
FEET

Scale 1:24,000
December 15, 1994


N
LONG ISLAND RAILROAD
SUMMA STREET
STREET
AVENUE
STREET
AVENUE
STREET
AVENUE
STREET
AVENUE
STREET
STREET
STREET
MAIN STREET
GRAND
MAGNOLIA
GARDEN
HOPPER
SWALM
RUSHMORE
URBAN
KINKEL
SYLVESTER
NEW YORK
BROOKLYN
STATE
HOND
FROST
GRAND BOULEVARD
GROUNDWATER DIRECTION
OLD COUNTRY ROAD
Block 328 Sites
Former
Wonder King Chemical Site
Garden/Hopper Street Site
Kinkel/Sylvester Street Site
LEGEND
Total PCE plume (PCE, TCE, DCEs, VC), >100 ppb
Total TCA plume (1,1,1-TCA, DCAs), >100 ppb
0
~500 ft
APPROXIMATE SCALE
1 in. = 500 ft
\121plume.ds4
FIGURE 1-2
SITE PLAN
NEW CASSEL INDUSTRIAL AREA
NYSDEC I.D. No. 130043
LAWLER, MATUSKY & SKELLY ENGINEERS
Pearl River, New York

As required by contract and NYSDEC guidelines this task also included the bidding process (preparation of RFP's, evaluation of bids) for the geoprobe contractor, mobile lab and GPR contractor. This work was not scoped in the original Task 1 budget.

1.4 TASK 2: PSA FIELD INVESTIGATION

1.4.1 Subtask 2.1: Detailed Site History

A detailed site history for approximately 45 properties within the defined areas of the PSA's will be developed. Each site history will be developed based on the previously collected file review database, a aerial photography review, a historical map review, detailed file searches at the county, local, state, and interviews with former employees (if possible).

As part of the previous work conducted at the industrial area by LMS a very large and detailed database summarizing the current and past uses in the industrial area was developed. For each of the properties in the defined areas of the PSA's this information will be extracted from the database, reviewed for accuracy, and used to develop a preliminary site history which can be provided to county, local, and state agencies to cross reference with their files.

A aerial photography review dating back to the 1940 will be conducted on the areas defined by the PSA's. The aerial photography review will be limited to photographs at a scale of 1:24,000 or smaller to allow for the identification of small scale features. The aerial photographs will be obtained from the New York State Department of Transportation (NYSDOT) Map Information Unit, Cornell University's Laboratory for Environmental Application of Remote Sensing (CLEARS) or private vendors.

A historical map review dating back prior to the industrial park development will be conducted. This will include obtaining the Sanborn Maps and any other commercially available insurance and land use maps if available.

A detailed address by address file search will be conducted for the 45 properties within the PSA areas. For each property the applicable agency will be provided the preliminary site history such that they can search their files based on address and any former tenants or uses of the property. The following agencies or departments will be contacted: Nassau County Department of Heath (NCDOH), NYSDEC regional office, and any local building or health departments.

Based on information provided by the NYSDEC Public Participation Officer any former employees with knowledge of past uses or disposal practices will be interviewed to fill in any gaps in the site histories and suspected disposal areas.

1.4.2 Subtask 2.2: Mobilization and Demobilization

This task will involve all the necessary work to obtain the required permits, approvals, easements, and telephone and electrical service to conduct the required field investigation. Based on past work conducted at the site, road opening permits and temporary work easements are required by the town. In addition all of the necessary utilities markouts will be performed at each of the properties which will be sampled.

Locating a new staging area may be required since the previous staging area has been deeded to a private interest by the Town of North Hempstead. For purposes of this work plan it is assumed a suitable staging area must be leased for several months during the field work.

Once a staging area has been located a field office/lab trailer will be mobilized to the site as soon as possible as the electrical and telephone service connections can be a lengthy proposition. An approved contractor will be retained to hard wire the electric meter to the trailer. New York telephone will also be retained to connect the necessary telephone service to the trailer.

1.4.3 Subtask 2.3: Facility Inspections

Approximately 12 properties (3 from each of the PSA areas) will be inspected during the fieldwork. These will be short inspections that will identify the following:

- the various work areas in each building (office, storage and production spaces)
- the manufacturing process at each facility
- the number of years at each facility
- any potential discharge points located within or outside of each building (including any staining of surfaces, whether paved or bare soil)
- chemical storage locations, including USTs
- relative cleanliness of the operation (appearance of the manufacturing space)
- if possible, the location of any abandoned septic tank/leachpool systems

A few photographs of each facility will be taken to visually document each inspection. It is anticipated that NYSDEC will inform the property owners of the impending inspections; LMS will make the specific arrangements regarding the time and date of each inspection.

1.4.4 Subtask 2.4: SWL Survey

Groundwater elevations have not been conducted by LMS at the industrial area since 1993. During the conduct of the field work for the PSA's a round of static water level measurements will be taken on a representative set of monitoring wells to provide an additional set of water levels to guide the conclusions of this investigation, and provide a baseline of information for further remedial activities at the industrial area. The wells which will be measured if possible are show on Table 1-1. It is anticipated that additional wells (installed since 1994) may be available for water level measurements and they will be used on a as needed basis.

ALL static water level measured shall be made on the same day.

1.4.5 Subtask 2.5: GPR Survey

Discuss need to confirm with refer pt.

A Ground Penetrating Radar (GPR) survey will be conducted on those properties where leachpools or other types of discharges are suspected but have not been confirmed during the original facility inspections or the new PSA facility inspection. The purpose of the GPR is to locate the position of a leachpools in these areas to allow sampling within the pool areas. The open areas of approximately 15 properties in the PSA areas will be investigated with the GPR. The GPR survey is scheduled to be conducted over a 5 day period.

GPR is a nondestructive and nonintrusive geophysical exploration technique that uses radar waves to detect and record subsurface features. The method has been widely used in the environmental industry to locate buried features such as USTs, drums, and pipes. GPR involves scanning the subsurface with a device that emits and records the return signals of electromagnetic energy in the radar wavelength. The variation in return signals due to variable attenuation and reflection of the subsurface materials produces continuous, two-dimensional cross-section of the subsurface.

A GSSI Subsurface Interface Radar System 3 (SIR3) with a 500-MHz antenna or equivalent will be used to survey open areas suspected of containing leachpool or underground storage tanks. A grid spacing of 5 ft in most areas will be maintained to allow for detection drum sized or larger objects. As necessary the grid spacing will be refined based on existing site conditions.

TABLE 1-1

SWL SURVEY WELLS

New Cassel Multi-Site PSA

WELL I.D.	ELEVATION TOP OF PVC (ft above MSL)	TOTAL DEPTH OF WELL	DEPTH TO WATER (ft) 23 Aug 1993	WATER TABLE ELEVATION (ft above MSL) 23 Aug 1993	DEPTH TO WATER (ft) 8-9 Nov 1993	WATER TABLE ELEVATION (ft above MSL) 8-9 Nov 1993
NC-1	119.38	57.71	49.50	69.88	50.51	68.87
NC-3	122.02	57.53	51.78	70.24	52.77	69.25
NC-5	126.04	64.5	53.87	72.17	54.78	71.26
NC-7	117.41	53.46	48.27	69.14	--	--
NC-6	126.63	-	--	--	54.70	71.93
NC-8	118.77	54.99	49.59	69.18	--	--
NC-9	121.55	56.09	51.0	70.55	51.96	69.59
NC-10	119.28	55.6	49.95	69.33	50.83	68.46
NC-11	118.23	54.05	48.16	70.07	--	--
NC-14	130.90	67.29	57.27	73.63	58.14	72.76
NC-15	125.22	66.8	53.09	72.13	54.12	71.10
NC-16	123.27	63.20	51.89	71.38	52.95	70.32
NC-17	122.12	61.47	51.47	70.65	52.48	69.64
NC-18	117.11	57.9	48.00	69.11	48.99	68.12
NC-19	120.65	59.81	50.85	69.86	--	--
NC-20	117.68	56.0	48.81	68.87	49.74	67.84
NC-21	125.17	57.95	53.61	71.56	54.59	70.58
NC-23	122.84	62.33	51.17	71.67	52.03	70.81
NC-24	119.99	63.88	--	--	50.40	69.59
NC-25	118.94	57.49	48.00	70.94	--	--
N-11842	126.68	-	54.56	72.12	--	--
N-11843	121.53	-	51.16	70.37	--	--
N-11844	123.05	-	52.21	70.84	--	--
N-11845	123.60	-	52.45	71.15	--	--
N-11846	123.21	-	51.59	71.62	--	--
N-11849	115.61	-	46.77	68.84	--	--
N-11850	118.31	-	49.28	69.03	--	--
N-11854	119.60	59.39	49.20	70.40	--	--
N-11855	117.56	60.11	47.33	70.23	--	--
ANSON MW-3	127.95	-	54.92	73.03	--	--
ANSON MW-4	128.44	69.15	55.42	73.02	56.25	72.19
ANSON MW-6	124.68	-	52.20	72.48	53.33	71.35
ANSON MW-7	128.00	-	55.72	72.28	--	--
ANSON MW-8	122.58	-	51.05	71.53	--	--
ANSON MW-9	121.76	64.13	45.37	76.39	38.26	83.50
ANSON MW-10	120.18	56.2	49.10	71.08	--	--
ANSON MW-5	126.82	-	52.70	74.12	--	--

1.4.6 Subtask 2.6: Probes

LMS proposes to install approximately 60 probes to a depth of 90-95 ft, using the Geoprobe sampling system for the collection of soil and groundwater samples from PSA areas. Probing locations will be selected in the field in general the probe locations will be selected based on the following guidelines. Probes will be completed within or directly downgradient of any discharge locations or leachpools, which are discovered as part of the detailed site histories, facility inspections, and GPR survey. These probes are intended to document on-site hazardous waste disposal. If a on-site source cannot be identified, probes will be placed in a upgradient and downgradient positions of individual properties to provide comparison of upgradient and downgradient concentrations. If this comparison indicates a particular property is a likely source and a on-site source cannot be identified, additional upgradient and downgradient probes will be completed to fully document that the property is the likely source.

At approximately 25 of the probe locations two soil samples will be retrieved from a depth of 10-12 ft, just below any septic/leachpool systems and a depth of 25-30 ft to document the downward migration of any potential contamination. A 24-in. long by 0.875-in. diameter sampler fitted with a dedicated clear acetate liner will be used to collect each soil sample. The sampler will remain completely sealed during its descent to the selected sampling depth, thereby ensuring that a soil sample will be collected only from the specific interval required. Following collection of each soil sample, portable flame ionization detector (FID) and photoionization detector (PID) instruments will be used to screen for the presence of volatile organics. Soil will be placed in approved VOC vials and delivered immediately to the on-site lab for analysis. For the purposes of this work scope a total of approximately 50 soil samples will be collected and submitted to the mobil lab.

A maximum of three groundwater samples per hole will also be collected from each Geoprobe boring below the water table using new dedicated polyethylene tubing equipped with a bottom check valve. Based upon previous sampling data, the water table is anticipated to be approximately 50-55 ft below grade. One groundwater sample will be collected from each of three approximate depth intervals (at the water table, 73-75 and 93-95 ft below grade) for a total of approximately 180 samples. Samples will be obtained in reverse order (i.e., the first sample will be collected from 93-95 ft below grade, the second from 73-75 ft below grade, and the third from the watertable). Before each sample is obtained, groundwater will be purged (if possible) from the selected depth interval until a representative and relatively turbidity-free sample can be removed. Water will be conveyed to the surface by aspirating the tubing and by the added suction of a peristaltic pump. It should be noted that the Magothy Aquifer contains substantial fine-grained deposits and low turbidity may not be achievable. Samples will

be transferred from the bottom depths of the tubing into a laboratory-cleaned sample container and delivered immediately to the on-site laboratory for aromatic hydrocarbon, halogenated VOCs, and vinyl chloride analyses. A summary of the number of samples to be collected during the multi-site PSA is presented in Table 1-2. The total number of samples to be analyzed is estimated at 50 soil samples and 210 water samples (180 samples and 30 dilutions). Based on the previous investigation at the site, the groundwater concentrations of VOC's were at times very high and it was required that some of the samples be run at different dilutions to obtain all of the compounds of interest.

The majority of the samples will be analyzed onsite for chlorinated target compounds (PCE, TCE, TCA's, DCA's, DCE's, and VC) using a temperature-programmable gas chromatograph (GC) equipped with multiple detectors.

In addition to the groundwater and soil sampling completed by the probe several continuous soil conductivity logs will be collected during a two day period using the Geoprobe. These conductivity logs will provide basic stratigraphic information on the underlying glacial outwash sequence and the Magothy aquifer below it. The exact location for these probes will be determined in the field. Currently most of the conductivity probes will be completed in the 328 Block where the presence of a groundwater mound suggests contaminate transport may be controlled by the underlying stratigraphy. Conductivity logs in this area may also suggest the potential direction of movement of any DNAPL pool which is suspected in this area.

The basic procedure for the conductivity probes involves driving a 1 inch diameter conductivity probe using standard Geoprobe equipment. As the probe is driven conductivity and drive speed information are transmitted to data acquisition system via a shielded transmission cable. The logs are then compared to known borehole control to determine the probes response to various strata.

Decontamination. A central decontamination area will be set up; as currently proposed it will be located at the north end of Frost Street. If this is not found to be an acceptable location, another area will be used. All equipment will be steam cleaned at the start of the survey before work commences. During the initial Geoprobe investigation (10-11/93) it was found that steam cleaning of the drive rods and sampling equipment was necessary only once or twice a week. At all other times decontamination carried out using a non-phosphate detergent and a potable water, methanol, deionized water rinses was found to be satisfactory. All Geoprobe sampling equipment will be decontaminated as necessary between each sample using this latter method while at each boring location, until it is judged to be necessary to steam clean the tools.

Waste Handling and Disposal. Work-derived wastes include disposable personal protective equipment (PPE), decontamination rinse water, well development water, and general trash. These wastes will be handled as described below:

- **Purge Water**. Due to the small purge volumes generated using the Geoprobe system water generated during the purging of sample points prior to sampling will be discharged to the ground.

- **Decontamination Water**. Decontamination water generated during the Geoprobe installation will be discharged on the roadway surface at the decontamination site.

- **Disposable PPE and General Trash**. Used PPE and other trash will be stored in appropriate trash bags or 55-gal drums on-site. During the field activities, the trash generated will be transported back to LMS' laboratory for proper disposal.

Mobile Laboratory. The mobile laboratory will analyze all of the samples for volatile organic compounds using a gas chromatograph equipped with multiple detectors in accordance with EPA SW846 Method 8010/8020, a sample summary is found on Table 1-2. Daily calibration of the GC will be performed along with periodic quality assurance checks. Duplicate and blank analyses will also be performed to ensure that results remain comparable. As additional QA/QC, 5% of the water samples (15 total) will be split, bottled, and shipped to a base laboratory for analysis by Method 8010/8020. Based on past sampling results at the industrial area a large number of very highly concentrated samples will be taken. The decision to run additional dilutions on a individual sample will be at the discretion of LMS and the NYSDEC project manager.

Preliminary sample results for each probe location will be available in the field; due to the time required to complete each analysis, sampling depths will not be modified based on the results of the previously collected sample, and Geoprobe sampling will continue without the preliminary results of the previously collected sample. However, results from the previous day's sampling will be available to allow modifications of the scope as the data indicate or as the NYSDEC representative requests.

1.4.7 Subtask 2.7: Monitoring Well/Leachpool Sampling

As the field investigation proceeded it is anticipated that a number of leachpools will be found. As appropriate the media (water, bottom sediments, and soils) within the pools will be sampled and submitted to the mobil laboratory for analysis. For the purposes of this work scope it is assumed 10 pools will be found and 3 samples (water, sediments, and soil) collected from each for mobil laboratory analysis of target compounds.

TABLE 1-2

MOBILE LABORATORY SAMPLING AND ANALYSIS SUMMARY

New Cassel Multi-Site PSA

TASK	MATRIX	NO. OF SAMPLES
2.6 Groundwater probes	Soil	50[A]
	Groundwater	180
	Sample dilutions	30[B]
2.7 Monitoring well/ Leachpool sampling	Water	10[A]
	Bottom sediments	10[A]
	Soils	10[A]
	Monitoring well	10[A]
	TOTAL SAMPLES:	300

A - Estimates based on locating suitable sampling locations. Overall may differs depending on success of locating sampling points.

B - Estimated number of total dilutions which will be required.

A large number of monitoring wells exist at the industrial area and additional monitoring well are being installed at the industrial area on a on-going basis. If new wells are found which appear to be located such that sampling them would provide important data the wells owner will be contacted regarding sampling them. If permission is granted to obtain a sample the sample will be taken concurrent with the other field activities and submitted to the mobil laboratory for analysis. For the purposes of this work scope it is assumed that 10 monitoring wells will be sampled and a single water sample from each submitted to the mobil laboratory for analysis of target compounds.

1.4.8 Subtask 2.8: Data Analysis

This subtask will include all the necessary data processing and analysis required to summarize the data. The mobil laboratory will provide LMS with all the data in a digital format which will allow LMS to utilize its GIS system in processing and analyzing the data. This effort will require management of over 500 data records each containing numerous fields.

1.5 TASK 3: REPORT PREPARATION AND SUBMITTAL

After completion of the field investigation and data analysis, LMS will prepare a multi-site PSA report which will document the field investigation, present the data from the field investigation, and provide results and conclusions regarding the sources of the four remaining organic groundwater contamination plumes at the industrial area.

CHAPTER 2

MANAGEMENT APPROACH

2.1 PROJECT STAFFING PLAN

LMS, as prime contractor will be responsible for overall project technical direction and administration. Subcontractors will be utilized as necessary to complete certain tasks; the major subcontractors proposed for our project team consist of:

- YEC, Inc. P.C. - Professional Services
- Inchcape Testing Services, Aquatec Laboratories Inc. - Laboratory analyses
- Subsurface Informational Services - GPR
- Zebra Environmental - Geoprobe
- Commonwealth Analytical - Mobile Lab

Other minor subcontractors are presented below. The proposed project organization is shown on Figure 2-1.

Mr. Edward A. Maikish, P.E., director of LMS' Site Investigation Section (NSPE Grade 7), will be the program administrator for this work assignment. Mr. Maikish will be directly responsible to the NYSDEC for the conduct of the program and will provide overall supervision and guidance of project personnel. He will ensure staff and resources availability for completion of the project, approve assignments, work scopes, budgets, and staffing plans, and provide technical advice on the project approach.

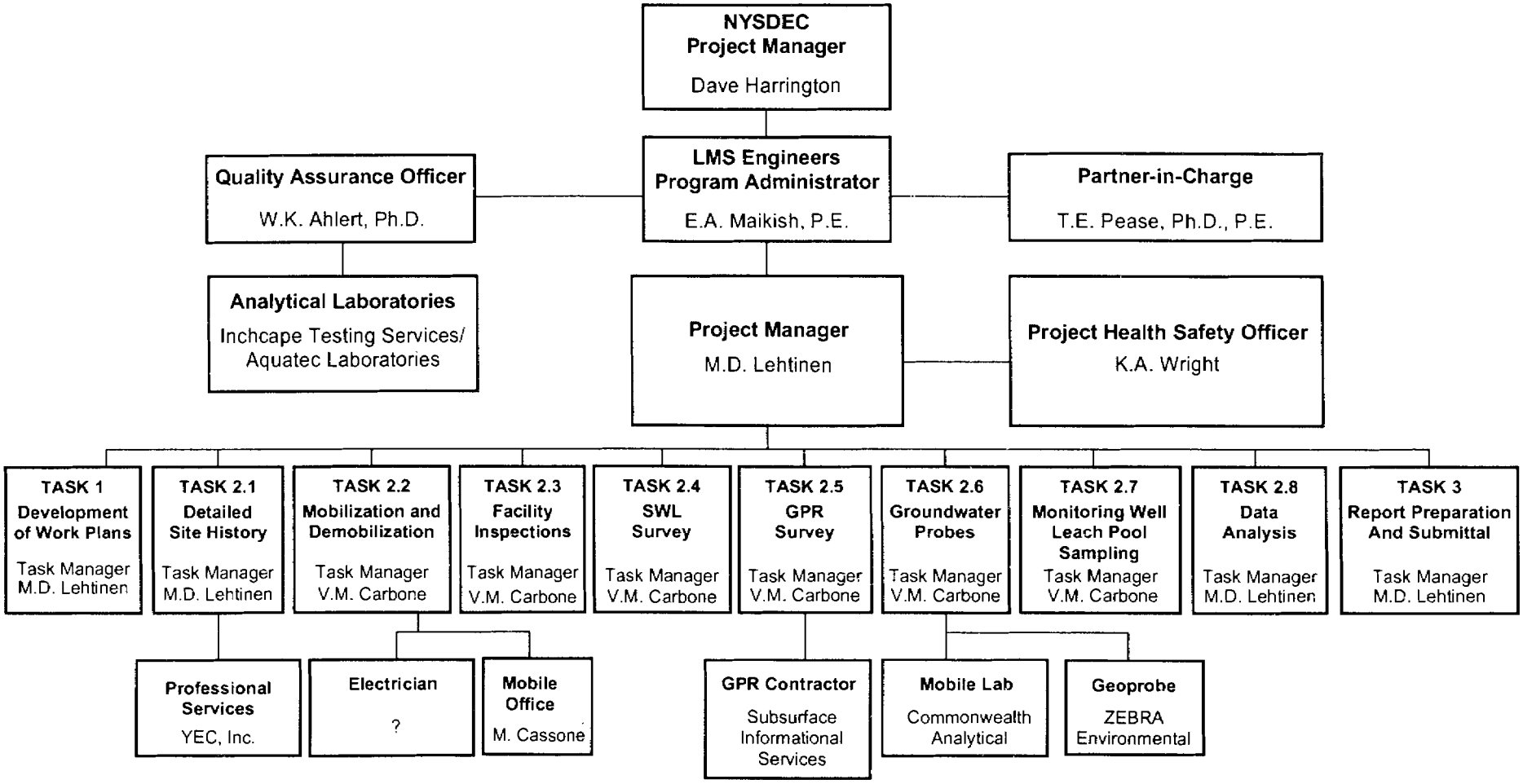
Dr. Thomas E. Pease, P.E., manager of LMS' Hazardous Waste & Geology Group (NSPE Grade 9), will be the partner-in-charge for this work assignment. As partner-in-charge he will review the major technical conclusions drawn and administrative decisions made.

Mr. Michael D. Lehtinen (NSPE Grade 2) will be the project manager for the New Cassel multi-site PSA and will be the primary LMS contact for the NYSDEC. Mr. Lehtinen's responsibilities will include technical and administrative management of task managers and subcontractors, personnel, and equipment scheduling, tracking and management of the project budget, and technical review of all submittals. Mr. Lehtinen will also serve as the projects on-

Figure 2-1

PROJECT STAFFING PLAN

New Cassel Multisite PSA



site Health and Safety officer. He will be primary author and coordinate the preparation of the PSA report.

Ms. Karen A. Wright (NSPE Grade 5), will be the project's Health and Safety Officer. In this role, she will be ensure compliance with the HASP provisions. Ms. Wright will also ensure that all field personnel have received appropriate health and safety, first aid, and CPR training, and have met the requirements of LMS' medical monitoring program.

Dr. William K. Ahlert (NSPE Grade 6) will be the project Quality Assurance Officer (QAO). In this capacity, Dr. Ahlert will provide ongoing surveillance of project activities to ensure conformance with the QAPjP, coordinate laboratory analyses of environmental and quality assurance/quality control (QA/QC) samples. Dr. Ahlert is also responsible for reviewing project sampling and analytical procedures to ensure representative sample collection and performance of analytical methodologies within specified criteria.

Mr. Vincent M. Carbone (NSPE Grade 1) will serve as task manager for Task 2 - PSA Field Investigation including oversight of all field activities. His duties will include technical and administrative coordination of the GPR, probing, environmental sampling, and scheduling of field activities. Mr. Carbone will also function as the on-site HSO during implementation of the field activities and as the project geologist, including evaluation of the field information obtained.

2.2 PROJECT SCHEDULE

LMS' proposed project schedule is presented on Table 2-1. The field schedule, which is slated to start on 2 October 1995, assumes that we receive NYSDEC approval and notice to proceed by 1 September 1995. If this approval is delayed, the field schedule and PSA deadline/reports will be similarly delayed.

2.3 PROJECT DELIVERABLES

A listing of the project deliverables is presented on Table 2-2. These deliverables are based on meeting the schedule listed on Table 2-1.

2.4 PROJECT SUBCONSULTANTS AND SUBCONTRACTORS

The list of subconsultants and subcontractors we propose to use on this project is presented in Table 2-3.

TABLE 2-1

PROJECT SCHEDULE

NYSDEC Standby Contract

New Cassel Multi-Site PSA Site No. 130043 H-K
Work Assignment No. D002676-12

TASK	SUBTASK	WORK TASK	DATE OR DUE DATE
1		Development of Work Plan	
	1.1	Draft technical scope of work	07/21/95
	1.2	Draft field operations/sampling plan	07/21/95
	1.3	Final QAPjP	07/21/95 and
	1.4	Final HASP	07/21/95
		Final Work Plan	08/15/95
		NYSDEC Approval and Notice to Proceed	09/01/95
2		PSA Field Investigation	
	2.1	Detailed site history	09/01/95 - 10/06/95
	2.2	Mobilization/demobilization	09/01/95 - 10/09/95 and 11/06/95 - 11/10/95
	2.3	Facility inspections	10/09/95 - 10/27/95
	2.4	SWL survey	10/09/95 - 10/13/95
	2.5	GPR survey	10/16/95 - 10/20/95
	2.6	Probes	10/09/95 - 11/10/95
	2.7	Monitoring well/leachpool sampling	10/16/95 - 10/20/95
	2.8	Data analysis	11/20/95 - 12/20/95
3		Report Preparation	
	3.1	Draft report	01/10/96
	3.2	Final report	02/14/96

TABLE 2-2

DELIVERABLES

NYSDEC Standby Contract

New Cassel Multi-Site PSA
Site No. 130043 H-K
Work Assignment No. D002676-12

TASK	DELIVERABLE[a]	PROPOSED DUE DATE	COPIES
1	Draft work plan, LOE budget	07/21/95	4
	HASP, QAPjP	07/28/95	4
	Final Work Plan	08/15/95	12
	Project Schedule	08/15/95	12
3	Draft PSA report	01/10/96	10
	Final PSA report	02/14/96	50

[a]All deliverables will be sent ot Dave Harrington as per NYSDEC work assignment.

TABLE 2-3

PROPOSED SUBCONTRACTORS LIST

New Cassel Multi-Site PSA

AREA OF SUBCONTRACTING	SCOPE OF WORK	PROPOSED SUBCONTRACTOR
Professional Engineering Services	Complete detailed site histories	YEC, Inc., P.C.
Analytical Laboratory	Perform chemical analysis on split samples	Inchcape Testing Services Aquatec Laboratories
GPR	Complete 5 day GPR survey of suspected leachpool areas	Subsurface informational services
Mobile Laboarotry	Provide on-site chemical analysis on all samples	Commonwealth Analytical
Probing	Perform soil probes and collect groundwater samples	Zebra Environmental Inc.
Printing	Prepare final PSA report	Marsden Printers (MBE)
Office Trailer	Provide on-site office trailer for use during field activities	Canssone Trailer and Container Company
Electrician	Hook-up of office trailer and provide electricity	Mr. Electric
Technical Editing	Technical editing of draft report	Mary Louise Pinkham (WBE)

YEC Inc., P.C. will provide professional engineering services. They are an approved minority business enterprise (MBE) who have established salary rates, overhead, and fee rates approved by NYSDEC on other Standby Contract assignments.

Inchcape Testing Services, Aquatec Laboratories, are under standby contract to LMS, and they are next inline for an assignment.

Subsurface Informational Services was selected to provide ground penetrating radar survey services based on a low bid received from them (see Appendix A).

Zebra Environmental was selected to provide Geoprobe and soil conductivity probing services. Documentation that their estimates are reasonable are presented in Appendix A.

Commonwealth Analytical was selected to provide mobile laboratory services based on a bid received from them. Documentation that their estimates are reasonable are presented in Appendix A.

2.5 MBE/WBE UTILIZATION PLAN

This document outlines Lawler, Matusky & Skelly Engineers'(LMS) Minority Business Enterprise/Women's Business Enterprise (MBE/WBE) utilization plan as required by the New York State Superfund Standby Contract. The purpose of the plan is to document our intent to comply with the regulations under 9NYCRR Part 543 entitled "Requirements and Procedures Regarding Business Participation Opportunities for Minorities and Women on State Contracts". LMS will make every effort to meet the goals established by those regulations, i.e., 15% MBE participation and 5% WBE participation, through implementation of our proposed utilization plan as described below.

LMS is committed to equal opportunity employment, with corporate involvement meeting or exceeding the state regulations referenced in this contract. Evidence of this is provided by the fact that, as a whole, LMS currently employs 10.8% minorities and 32.3% women. To assure full implementation of the equal employment policy, we will take steps to ensure that:

a. Persons are recruited, hired, assigned, and promoted without regard to race, religion, marital status, color, sexual orientation, national origin, sex, veteran's status, age, or non job-related disability of any kind.

b. All other personnel actions, such as compensation, benefits, transfers, layoffs and recall from layoffs, access to training, education, tuition assistance and social

recreation programs are administered without regard to race, marital status, religion, color, sexual orientation, national origin, sex, veteran's status, age, or non job-related disability of any kind.

To date, LMS has made a good faith effort to obtain MBE/WBE subcontractors for completion of the New Cassel project. The MBE and WBE firms that will be utilized as subcontractors for this project are listed below. A number of other MBE/WBE firms were identified and contacted to provide bids on services to be conducted as part of this PSA, however, a number of factors precluded the use of some of these firms. Two WBE firms, Hager-Richtes Geoscience, and mid-Hudson Geosciences provided bids for the GPR work, however, they were not low bid and could not be used.

MBE Utilization:

- YEC, Inc., P.C.: This MBE firm was selected to provide professional engineering services for the New Cassel PSA's. The MBE utilization from the above subconsultant is $29,447.83.

- Marsden Printers, Inc.: This MBE firm was selected to provide printing services. The MBE utilization for this firm is $3,435.

- Mr. Electric - This MBE firm was selected to provide the necessary electric hook ups for the Mobile laboratory and field office the MBE utilization for this firm is $1,300.

The MBE contribution resulting from the utilization of the above subcontractors is $34,183 (11.7%).

WBE Utilization:

Mary Louise Pinkham, Technical Editor was selected to provide technical editing services during production of the draft report.

The WBE contribution resulting from the utilization of the above listed subcontractors is $1,400.00 (0.5%)

CHAPTER 3

PROJECT BUDGET

SCHEDULE 2.11 (a)

SUMMARY OF WORK ASSIGNMENT PRICE

Work Assignment Number D002676-12

LINE ITEM	AMOUNT ($)
1. Direct Salary Costs (Schedules 2.10 (a) and 2.11 (b))	53,154
2. Indirect Costs (Schedule (2.10 (g))	80,714
3. Direct Non-Salary Costs (Schedules 2.10 (d,e,f) and 2.11 (c,d)	25,999

Subcontract Costs:

Name of Subcontractor	Services to be Performed	Subcontract Price
1. YEC, Inc	Survey	29,448
4. Total Cost-Plus-Fixed Fee Subcontracts		29,448

Unit Price Subcontracts (Schedule 2.10 (f) and 2.11 (f))

Name of Subcontractor	Services to be Performed	Subcontract Price
1. Zebra Environmental	Drilling, soil sampling and well installation	35,700
2. Commonwealth Analytical	Mobile Laboratory	34,801
3. Inchcape Testing Laboratory (Aquatec)	Laboratory analysis	1,350
4. Marsden Reproduction	Reproduction	3,435
5. Mr. Electric Service (MBE)	Electrical Work	1,300
6. Spiegel Associates	Lease Space for Trailer	1,500
7. Technical Editor M.L. Pinkham (WBE)	Technical Editor	1,400
8. Sub-Surface Informational Surveys Inc.	GPR Services	6,670
9. Cassone Trailer	Trailer Rental	1,734
5. Total Unit Price Subcontracts		87,890
6. Subcontract Management Fee (Schedule 2.11[f])		3,525
7. Total Subcontract Costs (lines 4 + 5)		117,338
8. Fixed Fee (Schedule 2.10 (h))		13,387
9. Total Work Assignment Price (lines 1 + 2 + 3 + 6 + 7)		294,117

SCHEDULE 2.11(b)
LABOR COST SUMMARY
Work Assignment Number D002676-12

LABOR CATEGORY	IX	VIII	VII	VI	V	IV	III	II	I	WP	
AVERAGE SALARY RATE (1995)	$54.38	$41.81	$36.68	$34.36	$30.65	$23.97	$21.47	$20.88	$15.83	$14.09	TOTAL
SALARY RATE (1996)	$57.38	$44.11	$38.70	$36.25	$32.34	$25.29	$22.65	$22.02	$16.70	$14.87	HOURS
Task 1 (1995)	0.0	0.0	21.0	0.0	2.0	0.0	42.0	3.0	20.0	0.0	88.0
Task 2 (1995)	6.0	0.0	125.0	0.0	56.0	14.0	360.0	348.0	610.0	22.0	1,541.0
Task 3 (1996)	7.0	0.0	100.0	0.0	12.0	0.0	147.0	216.0	296.0	96.0	874.0
Subtotal 1995 Hours:	6.0	0.0	146.0	0.0	58.0	14.0	402.0	351.0	630.0	22.0	
Subtotal 1996 Hours:	7.0	0.0	100.0	0.0	12.0	0.0	147.0	216.0	296.0	96.0	
TOTAL HOURS:	13.0	0.0	246.0	0.0	70.0	14.0	549.0	567.0	926.0	118.0	2,503.0
Total Direct Labor Costs	727.94	0.00	9,225.28	0.00	2,165.78	335.58	11,960.49	12,085.20	14,916.10	1,737.50	53,153.87

INDIRECT LABOR COSTS:	80,714.14
SUBTOTAL:	53,153.87
FIXED FEE:	13,386.82
TOTAL BUDGETED LABOR COSTS:	66,540.69

ENGINEER/CONTRACT No.: Lawler, Matusky & Skelly Engineers
PROJECT NAME: New Cassel Multi-PSAs
WORK ASSIGNMENT No.: D002676-12

DATE PREPARED: 21 Jul 95

SCHEDULE 2.11(b-1)
DIRECT ADMINISTRATIVE LABOR HOURS BUDGETED

NSPE LABOR CLASSIFICATION	IX	VIII	VII	VI	V	IV	III	II	I	WP	TOTAL No. OF DIRECT ADMINISTRATIVE LABOR HOURS BUDGETED
Task 1	0	0	4	0	0	0	2	0	0	0	6
Task 2	2	0	50	0	12	0	12	20	10	12	118
Task 3	1	0	20	0	0	0	7	16	16	16	76
TOTAL HOURS:	3	0	74	0	12	0	21	36	26	28	200

Contract/Project administrative hours would include but not necessarily be limited to the following activities:

1. Work Plan Development
   - Conflict of Interest Check
   - Develop of budget schedules and supporting documentation
2. Review work assignment (WA) progress
   - Conduct progress reviews
   - Prepare monthly project report
   - Update WA progress schedule
   - Prepare monthly M/WBE Utilization Report
3. Review work assignment costs
   - Prepare monthly cost control report
   - Cost control reviews
4. CAP Preparation
   - Oversee and prepare monthly CAP
   - Respond to payment issues/disallowances
   - NSPE list updates
   - Equipment Inventory
5. Manage subcontracts
6. Implement and manage program management and staffing plans
7. Conduct Health and Safety Reviews
8. Word processing and graphic artists
9. Report editing

Contract/Project administration hours would NOT include activities such as:

1. QA/Qc reviews
2. Technical oversight by management
3. Develop subcontracts
4. Work plan development
5. Review of deliverables

Engineer/Contract Number: Lawler, Matusky & Skelly/ D002676
Project Name: New Cassel Multi-PSAs
Work Assignment Number: D002676-12

Date Prepared: 21 Jul 95

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

ADMINISTRATIVE TASK	WORK PLAN DEVELOPMENT																			
	CONFLICT OF INTERESTS CHECKS										SCHEDULES AND SUPPORTING DOCUMENTATION									
NSPE LEVEL	9	8	7	6	5	4	3	2	1	WP	9	8	7	6	5	4	3	2	1	WP
Task 1	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0
Task 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	0.0	0.0	0.0	0.0	0.0	0.0
Task 3	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	0.0	0.0	0.0	0.0	0.0	0.0
Subtotals	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0
Totals (all NSPE)	1.0										4.0									

Engineer/Contract Number: Lawler, Matusky & Skelly/ D002676
Project Name: New Cassel Multi-PSAs
Work Assignment Number: D002676-12

Date Prepared: 21 Jul 95

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

ADMINISTRATIVE TASK	REVIEW WORK ASSIGNMENT (WA) PROGRESS																			
	CONDUCT PROGRESS REVIEWS										PREPARE MONTHLY PROJECT REPORT AND UPDATE PROGRESS SHEDULE									
NSPE LEVEL	9	8	7	6	5	4	3	2	1	WP	9	8	7	6	5	4	3	2	1	WP
Task 1	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	0.0	0.0	0.0	0.0	0.0	0.0
Task 2	0.0	0.0	10.0	0.0	2.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	10.0	0.0	2.0	0.0	2.0	4.0	2.0	4.0
Task 3	0.0	0.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	0.0	0.0	0.0	1.0	4.0	4.0	6.0
Subtotals	0.0	0.0	14.0	0.0	2.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	14.0	0.0	2.0	0.0	3.0	8.0	6.0	10.0
Totals (all NSPE)	18.0										43.0									

Engineer/Contract Number: Lawler, Matusky & Skelly/ D002676
Project Name: New Cassel Multi-PSAs
Work Assignment Number: D002676-12

Date Prepared: 21 Jul 95

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

REVIEW WORK ASSIGNMENT (WA) PROGRESS

ADMINISTRATIVE TASK	MBE/WBE ACTIVITIES										PROGRAM MANAGEMENT									
NSPE LEVEL	9	8	7	6	5	4	3	2	1	WP	9	8	7	6	5	4	3	2	1	WP
Task 1	0.0	0.0	1.0	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	0.0	0.0	0.0	0.0
Task 2	0.0	0.0	4.0	0.0	0.0	0.0	1.0	4.0	2.0	0.0	1.0	0.0	8.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
Task 3	0.0	0.0	1.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	0.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtotals	0.0	0.0	6.0	0.0	0.0	0.0	1.0	6.0	4.0	0.0	1.0	0.0	13.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
Totals (all NSPE)	17.0										17.0									

Engineer/Contract Number: Lawler, Matusky & Skelly/ D002676
Project Name: New Cassel Multi-PSAs
Work Assignment Number: D002676-12

Date Prepared: 21 Jul 95

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

ADMINISTRATIVE TASK	MANAGE SUBCONTRACTS										CAP PREPARATION									
	PREPARE MONTHLY COST CONTROL REPORT AND CAP																			
NSPE LEVEL	9	8	7	6	5	4	3	2	1	WP	9	8	7	6	5	4	3	2	1	WP
Task 1	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	0.0	0.0	0.0	0.0	0.0	0.0
Task 2	0.0	0.0	2.0	0.0	2.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	4.0	0.0	2.0	0.0	2.0	4.0	2.0	0.0
Task 3	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	1.0	4.0	4.0	0.0
Subtotals	0.0	0.0	2.0	0.0	2.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	6.0	0.0	2.0	0.0	3.0	8.0	6.0	0.0
Totals (all NSPE)	7.0										25.0									

Engineer/Contract Number: Lawler, Matusky & Skelly/ D002676
Project Name: New Cassel Multi-PSAs
Work Assignment Number: D002676-12

Date Prepared: 21 Jul 95

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

ADMINISTRATIVE TASK	CAP PREPARATION										MISCELLANEOUS									
	OVERSEE CAP PREPARATION										NSPE LIST UPDATES									
NSPE LEVEL	9	8	7	6	5	4	3	2	1	WP	9	8	7	6	5	4	3	2	1	WP
Task 1	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	0.0	0.0	0.0	0.0	0.0	0.0
Task 2	1.0	0.0	10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	1.0	0.0	1.0	2.0	1.0	0.0
Task 3	1.0	0.0	4.0	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	0.0	2.0	2.0	0.0
Subtotals	2.0	0.0	14.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	1.0	0.0	1.0	4.0	3.0	0.0
Totals (all NSPE)	16.0										11.0									

Engineer/Contract Number: Lawler, Matusky & Skelly/ D002676
Project Name: New Cassel Multi-PSAs
Work Assignment Number: D002676-12

Date Prepared: 21 Jul 95

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

ADMINISTRATIVE TASK	MISCELLANEOUS																													
	EQUIPMENT USE AND INVENTORY										WORD PROCESSING AND REPORT PREPARATION										TOTAL DIRECT ADM. LABOR HOURS									
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
Task 1	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0
Task 2	0.0	0.0	0.0	0.0	0.0	0.0	1.0	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	4.0	1.0	8.0	2.0	0.0	50.0	0.0	12.0	0.0	12.0	20.0	10.0	12.0
Task 3	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	0.0	0.0	4.0	4.0	4.0	10.0	1.0	0.0	20.0	0.0	0.0	0.0	7.0	16.0	16.0	16.0
Subtotals	0.0	0.0	0.0	0.0	0.0	0.0	1.0	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	8.0	5.0	18.0	3.0	0.0	74.0	0.0	12.0	0.0	21.0	36.0	26.0	28.0
Totals (all NSPE)	5.0										36.0										200.0									

SCHEDULE 2.11(c) - DIRECT NON-SALARY COSTS
Work Assignment Number D002676-12

ITEM	MAXIMUM REIMBURSEMENT RATE ($)	UNIT	ESTIMATED NUMBER OF UNITS	TOTAL ESTIMATED COST ($)
A. Material Costs:				
Telephone	1.00	(at cost)	933.0	933.00
Electric Usage (trailer/office)	1.00	(at cost)	300.0	300.00
Reproduction	0.07	(per page)	17,570.0	1,229.90
General PC usage	1.50	(per hr)	601.0	901.50
Auto CADD	15.00	(per hr)	140.0	2,100.00
Fax	1.00	(per page)	374.0	374.00
Overnight shipping	1.00	(at cost)	450.0	450.00
Well Permits	1.00	(at cost)	150.0	150.00
Photography	1.00	(at cost)	120.0	120.00
Lg/ print repro (24X36)	1.35	(per page)	540.0	729.00
Decon Chemicals	1.00	(at cost)	50.0	50.00
Decon D.I. Water	0.12	(per gal.)	260.0	31.20
Misc*	1.00	(at cost)	215.0	215.00
LILCO Application fee	1.00	(at cost)	400.0	400.00
Trailer Permits	1.00	(at cost)	100.0	100.00
Road Opening Permit	1.00	(at cost)	400.0	400.00
			SUBTOTAL:	8,483.60
B. Travel Costs:				
Auto rental	70.00	(per day)	25.0	1,750.00
Truck/van rental	31.34	(per day)	28.0	877.52
Truck/van mileage	0.133	(per mile)	1,850.0	246.05
Personal mileage	0.23	(per mile)	1,200.0	276.00
Per diem	151.00	(per day)	59.0	8,909.00
Tolls	1.00	(at cost)	280.0	280.00
			SUBTOTAL:	12,338.57
C. Equipment Costs:				
Personal Protective Equipment:				
Level D	12.00	(per day)	65.0	780.00
2" Submersible Pump (110 V)	15.00	(per day)	4.0	60.00
Generators - Honda (6,500 watt)	51.00	(per day)	29.0	1,479.00
High pressure washer - Landa (110 volt)	92.00	(per day)	29.0	2,668.00
PID - HNu (HW-101) @	0.00	(per day)	34.0	0.00
FID - Foxboro (OVA-128) @	0.00	(per day)	34.0	0.00
Combustible gas indicator - Exotech (40-OFH) @	0.00	(per day)	30.0	0.00
Static well level - Slope Ind. Co. (51453) @	0.00	(per day)	6.0	0.00
Teflon bailer - Timco (White-2.4)	19.00	(per day)	10.0	190.00
			SUBTOTAL:	5,177.00
			TOTAL DIRECT NON-SALARY COSTS:	25,999.17

SCHEDULE 2.11(e)

COST-PLUS FIXED FEE SUBCONTRACTS

Work Assignment Number D002676-12

NAME OF SUBCONTRACTOR	SERVICES TO BE PERFORMED	SUBCONTRACT PRICE
1. YEC, Inc	Survey	$29,447.83

A. Direct Salary Costs

PROFESSIONAL RESPONSIBILITY LEVEL	LABOR CLASS.	AVERAGE REIMB. RATE ($/hr)	ESTIMATED NUMBER OF HOURS	TOTAL ESTIMATED DIRECT SALARY COST ($)
Principal	VIII	42.39	12	$508.68
Sr Geologist/Scientist/Eng.	V	33.35	56	$1,867.60
Licensed Surveyor/Staff Geo./Sci./Eng	IV	27.88	40	$1,115.20
Staff Geo./Sci./ Eng./Sr Draftsperon	III	20.91	40	$836.40
Sr. Tech./Staff Eng./Sci./Geo.	II	16.78	392	$6,577.76
		TOTAL DIRECT SALARY COSTS:		$10,905.64

FOOTNOTES:

1 - These rates will be held firm until October 31, 1995.
2 - Reimbursement will be limited to the lesser of either the individuals actual hourly rate or the maximum rate for each labor category.
3 - Reimbursement will be limited to the maximum reimbursement rate for the professional responsibility level of the actual work performed.
4 - Only those labor classifications indicated with an asterix will be entitled to overtime.
5 - Reimbursement for technical time of principals, owners and officers will be limited to the maximum maximum reimbursement rate of that labor category, the actual hourly labor rate paid, or the Federal GS-18 rate, whichever is lower.
6 - The maximium rates in each labor category can be modified only by mutual written agreement and approved by both the Department and the Comptroller.
7 - This footnote applies to Schedules for years 4 thru 7 only. If the U.S. cost-of-living index increases at a rate greater than 6% compounded annually, the maximum salary rates will be subjuect to renegotiation for future years of the contract.

SCHEDULE 2.11(e)

COST-PLUS FIXED FEE SUBCONTRACTS

Work Assignment Number D002676-12

B. Indirect Costs

Indirect costs shall be paid based on a percentage of direct salary costs incurred which shall not exceed a maximum of 125% or the actual rate calculated in accordance with 48 CFR Federal Acquisition Regulations, whichever is lower.

Amount budgeted for indirect costs: $13,632.05

C. Maximum Reimbursement Rates for Direct Non-Salary Costs

ITEM	$ MAX REIMBURSEMENT RATE (Specify Unit)	EST. NO. OF UNITS	TOTAL EST. COST ($)
Travel	$0.25 /mi	2636	$659.00
Supplies	$1,125.00 /ls	1	$1,125.00
Subcontractor	$400.00	1	$400.00
	TOTAL DIRECT NON-SALARY COSTS:		$2,184.00

D. Fixed Fee

The fixed fee is:

See Schedule 2.10(h) for how the fixed fee should be claimed: $2,726.14

TOTAL: $29,447.83

SCHEDULE 2.11(f)

UNIT PRICE SUBCONTRACTS

Work Assignment Number D002676-12

NAME OF SUBCONTRACTOR	SERVICES TO BE PERFORMED	SUBCONTRACT PRICE	MGMT. FEE
1. Zebra Environmental	Drilling, soil sampling and well installation	$35,700.00	$1,785.00

ITEM	$ MAX REIMBURSEMENT RATE (Specify Unit)	EST. NO. OF UNITS	TOTAL EST. COST ($)
TASK 2.6 Probes			
Daily rate including 2 person crew and probe unit (assumes 8 hours on-site):	$990 /day	25	$24,750.00
Overtime rate (including 2 person crew and probe unit):	$150 /hr	50	$7,500.00
Sampling charge for soils:	$15 /sample	50	$750.00
Sampling charge for groundwater:	$15 /sample	180	$2,700.00
Mob/demob (ls)	No charge	-	$0.00
Per diem (per manday)	No charge	-	$0.00
Soil conductivity logging*	No charge	2	$0.00
		Subcontract Total:	$35,700.00
		Subcontract Management Fee:	$1,785.00

SCHEDULE 2.11(f)

UNIT PRICE SUBCONTRACTS

Work Assignment Number D002676-12

NAME OF SUBCONTRACTOR	SERVICES TO BE PERFORMED	SUBCONTRACT PRICE	MGMT. FEE
2. Commonwealth Analytical	Mobile Laboratory	$34,801.00	$1,740.05

ITEM	MATRIX	METHOD	COST/SAMPLE ($)	EST. NO. OF UNITS	TOTAL EST. COST ($)
TASK 2.6 Probes					
VOC	Water	8010/8020	$106.00	170	$18,020.00
VOC	Soil/sediment	8010/8020	$112.00	38	$4,256.00
Minimum rate (per day)*	-	-	$900.00	10	$9,000.00
Mob/demob (ls)	-	-	$400.00	1	$400.00
Per diem (per man per day)	-	-	$125.00	25	$3,125.00
Optional items:					
Trailer (per day)			$40.00	0	
Trailer mob/demob (ls)			$750.00	0	
				SUBTOTAL:	$34,801.00
				Subcontract Subtotal:	$34,801.00
				Subcontract Management Fee:	$1,740.05

NOTE: A subcontract management fee of 5% will be allowed on subcontracts over $10,000 subject to the terms specified in the management fee protocol.

* The minimum daily rate will apply if LMS is unable to provide a specified number of samples

SCHEDULE 2.11(f)

UNIT PRICE SUBCONTRACTS

Work Assignment Number D002676-12

NAME OF SUBCONTRACTOR	SERVICES TO BE PERFORMED	SUBCONTRACT PRICE	MGMT. FEE
3. Inchcape Testing Laboratory (Aquatec)	Laboratory analysis	$1,350.00	$0.00

ITEM	$ MAX REIMBURSEMENT RATE (Specify Unit)	METHOD	EST. NO. OF UNITS	TOTAL EST. COST ($)
TASK 2.4 SW Survey				
VOCs	$90.00 /ea	8010/8020	15	$1,350
			SUBTOTAL:	$1,350
			Subcontract Subtotal:	$1,350.00
			Subcontract Management Fee:	$0.00

SCHEDULE 2.11(f)

UNIT PRICE SUBCONTRACTS

Work Assignment Number D002676-12

NAME OF SUBCONTRACTOR	SERVICES TO BE PERFORMED	SUBCONTRACT PRICE	MGMT. FEE
4. Marsden Reproduction	Reproduction	$3,435.00	$0.00

ITEM	$ MAX REIMBURSEMENT RATE (Specify Unit)	EST. NO. OF UNITS	TOTAL EST. COST ($)
TASK 3.2 Final Report			
Final report (BW, color copies, binding, and covers)	$68.70 /ea	50	$3,435.00
		SUBTOTAL:	$3,435.00
		Subcontract Total:	$3,435.00
		Subcontract Management Fee:	$0.00

NOTE: A subcontract management fee of 5% will be allowed on subcontracts over $10,000 subject to the terms specified in the management fee protocol.

SCHEDULE 2.11(f)

UNIT PRICE SUBCONTRACTS

Work Assignment Number D002676-12

NAME OF SUBCONTRACTOR	SERVICES TO BE PERFORMED	SUBCONTRACT PRICE	MGMT. FEE
5. Mr. Electric Service (MBE)	Electrical Work	$1,300.00	$0.00

ITEM	$ MAX REIMBURSEMENT RATE (Specify Unit)	EST. NO. OF UNITS	TOTAL EST. COST ($)
TASK 2.2 Mob/Demob			
Power hook-up	$1,300 /ls	1	$1,300.00
		SUBTOTAL:	$1,300
		Subcontract Total:	$1,300.00
		Subcontract Management Fee:	$0.00

NOTE: **A subcontract management fee of 5% will be allowed on subcontracts over $10,000 subject to the terms specified in the management fee protocol.**

SCHEDULE 2.11(f)

UNIT PRICE SUBCONTRACTS

Work Assignment Number D002676-12

NAME OF SUBCONTRACTOR	SERVICES TO BE PERFORMED	SUBCONTRACT PRICE	MGMT. FEE
6. Spiegel Associates	Lease Space for Trailer	$1,500.00	$0.00

ITEM	$ MAX REIMBURSEMENT RATE (Specify Unit)	EST. NO. OF UNITS	TOTAL EST. COST ($)
TASK 2.2 Mob/Demob			
Property at 123 Frost Street	$750 /mn	2	$1,500.00
		SUBTOTAL:	$1,500
		Subcontract Total:	$1,500.00
		Subcontract Management Fee:	$0.00

NOTE: A subcontract management fee of 5% will be allowed on subcontracts over $10,000 subject to the terms specified in the management fee protocol.

SCHEDULE 2.11(f)

UNIT PRICE SUBCONTRACTS

Work Assignment Number D002676-12

NAME OF SUBCONTRACTOR	SERVICES TO BE PERFORMED	SUBCONTRACT PRICE	MGMT. FEE
7. Technical Editor M.L. Pinkham (WBE)	Technical Editor	$1,400.00	$0.00

ITEM	$ MAX REIMBURSEMENT RATE (Specify Unit)	EST. NO. OF UNITS	TOTAL EST. COST ($)
TASK 3.1 Draft Report			
Editorial services	$35 /hr	40	$1,400.00
		SUBTOTAL:	$1,400.00
		Subcontract Total:	$1,400.00
		Subcontract Management Fee:	$0.00

NOTE: A subcontract management fee of 5% will be allowed on subcontracts over $10,000 subject to the terms specified in the management fee protocol.

SCHEDULE 2.11(f)

UNIT PRICE SUBCONTRACTS

Work Assignment Number D002676-12

NAME OF SUBCONTRACTOR	SERVICES TO BE PERFORMED	SUBCONTRACT PRICE	MGMT. FEE
8. Sub-Surface Informational Surveys Inc.	GPR Services	$6,670.00	$0.00

ITEM	$ MAX REIMBURSEMENT RATE (Specify Unit)	EST. NO. OF UNITS	TOTAL EST. COST ($)
TASK 2.5 GPR Survey			
Daily rate (includes personnel & vehicle)	$1,202 /day	5	$6,010.00
Report (ls)	No charge	1	$0.00
Mob/demob (ls)	No charge	1	$0.00
Per diem (for 2 personnel per day)	$132 /manday	5	$660.00
		SUBTOTAL:	$6,670.00
		Subcontract Total:	$6,670.00
		Subcontract Management Fee:	$0.00

NOTE: A subcontract management fee of 5% will be allowed on subcontracts over $10,000 subject to the terms specified in the management fee protocol.

SCHEDULE 2.11(f)

UNIT PRICE SUBCONTRACTS

Work Assignment Number D002676-12

NAME OF SUBCONTRACTOR	SERVICES TO BE PERFORMED	SUBCONTRACT PRICE	MGMT. FEE
9. Cassone Trailer	Trailer Rental	$1,734.00	$0.00

ITEM	$ MAX REIMBURSEMENT RATE (Specify Unit)	EST. NO. OF UNITS	TOTAL EST. COST ($)
TASK 2.2 Mob/Demob			
Trailer rental (mobile office)	$278 /mn	3	$834.00
Delivery	$150 /ls	1	$150.00
Return	$150 /ls	1	$150.00
Road Permit	$85 /ls	1	$85.00
Knockdown/level	$125 /ls	1	$125.00
Stairs	$25 /mn	3	$75.00
Security package (window/door)	$35 /ls	9	$315.00
		SUBTOTAL:	$1,734.00
		Subcontract Total:	$1,734.00
		Subcontract Management Fee:	$0.00

NOTE: A subcontract management fee of 5% will be allowed on subcontracts over $10,000 subject to the terms specified in the management fee protocol.

ENGINEER: Lawler, Matusky & Skelly Engineers
CONTRACT No.: D002676
PROJECT NAME: New Cassel PSAs
WORK ASSIGNMENT No.: D002676-12
TASK No./NAME: Summary
COMPLETE: 0%

MONTHLY COST CONTROL REPORT
SUMMARY OF FISCAL INFORMATION

DATE PREPARED: 21 Jul 95
BILLING PERIOD:
INVOICE No.:
CAP No.:

EXPENDITURE CATEGORY	A COST CLAIMED THIS PERIOD	B PAID TO DATE	C TOTAL DISSALLOWED TO DATE	D TOTAL COSTS PAID TO DATE (A+B)	E ESTIMATED COSTS TO COMPLETION	F ESTIMATED TOTAL WORK ASSIGNMENT PRICE (A+B+E	G APPROVED BUDGET	H ESTIMATED UNDER/OVER (G-F)
1. Direct Salary Costs:	0.00	0.00	0.00	0.00	53,153.87	53,153.87	53,153.87	0.00
2. Indirect Salary Costs (1.5185):	0.00	0.00	0.00	0.00	80,714.14	80,714.14	80,714.14	0.00
3. Subtotal Direct Salary and Indirect Costs:	0.00	0.00	0.00	0.00	133,868.01	133,868.01	133,868.01	0.00
4. Travel:	0.00	0.00	0.00	0.00	12,338.57	12,338.57	12,338.57	0.00
5. Other Non-Salary Costs:								
Material Costs:	0.00	0.00	0.00	0.00	8,483.60	8,483.60	8,483.60	0.00
Equipment Costs:	0.00	0.00	0.00	0.00	5,177.00	5,177.00	5,177.00	0.00
6. Subtotal Direct Non-Salary Costs:	0.00	0.00	0.00	0.00	25,999.17	25,999.17	25,999.17	0.00
7. Subs:								
Subconsultants:								
YEC, Inc.	0.00	0.00	0.00	0.00	29,447.83	29,447.83	29,447.83	0.00
Subcontractors:								
Zebra	0.00	0.00	0.00	0.00	35,700.00	35,700.00	35,700.00	0.00
Inchcape Testing Laboratory (	0.00	0.00	0.00	0.00	1,350.00	1,350.00	1,350.00	0.00
Mobile Laboratory	0.00	0.00	0.00	0.00	34,801.00	34,801.00	34,801.00	0.00
Sub-Surface Informational Sur	0.00	0.00	0.00	0.00	6,670.00	6,670.00	6,670.00	0.00
Cassone Leasing (Site Trailer)	0.00	0.00	0.00	0.00	1,734.00	1,734.00	1,734.00	0.00
Mr. Electric Service (MBE)	0.00	0.00	0.00	0.00	1,300.00	1,300.00	1,300.00	0.00
Marsden Reproduction	0.00	0.00	0.00	0.00	3,435.00	3,435.00	3,435.00	0.00
Lease Space for Trailer	0.00	0.00	0.00	0.00	1,500.00	1,500.00	1,500.00	0.00
Technical Editor M.L. Pinkham	0.00	0.00	0.00	0.00	1,400.00	1,400.00	1,400.00	0.00
8. Total Work Assignment Costs:	0.00	0.00	0.00	0.00	277,205.01	277,205.01	277,205.01	0.00
9. Fees:								
Fixed Fee:	0.00	0.00	0.00	0.00	13,386.82	13,386.82	13,386.82	0.00
Management Fee:	0.00	0.00	0.00	0.00	3,525.05	3,525.05	3,525.05	0.00
10. Total Work Assignment Price:	0.00	0.00	0.00	0.00	294,116.88	294,116.88	294,116.88	0.00

Project Manager (Engineer): _____ Date: _____

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Lawler, Matusky & Skelly Engineers

ENGINEER: Lawler, Matusky & Skelly Engineers
CONTRACT No.: D002676
PROJECT NAME: New Cassel PSAs
WORK ASSIGNMENT No.: D002676-12
TASK No./NAME: Task 1
COMPLETE: 0%

SCHEDULE 2.11(g)

MONTHLY COST CONTROL REPORT
SUMMARY OF FISCAL INFORMATION

DATE PREPARED: 21 Jul 95
BILLING PERIOD:
INVOICE No.:
CAP No.:

EXPENDITURE CATEGORY	A COST CLAIMED THIS PERIOD	B PAID TO DATE	C TOTAL DISSALLOWED TO DATE	D TOTAL COSTS PAID TO DATE (A+B)	E ESTIMATED COSTS TO COMPLETION	F ESTIMATED TOTAL WORK ASSIGNMENT PRICE (A+B+E)	G APPROVED BUDGET	H ESTIMATED UNDER/OVER (G-F)
1. Direct Salary Costs:	0.00	0.00	0.00	0.00	2,112.56	2,112.56	2,112.56	0.00
2. Indirect Salary Costs (1.5185):	0.00	0.00	0.00	0.00	3,207.92	3,207.92	3,207.92	0.00
3. Subtotal Direct Salary and Indirect Costs:	0.00	0.00	0.00	0.00	5,320.48	5,320.48	5,320.48	0.00
4. Travel:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5. Other Non-Salary Costs:								
Material Costs:	0.00	0.00	0.00	0.00	385.50	385.50	385.50	0.00
Equipment Costs:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6. Subtotal Direct Non-Salary Costs:	0.00	0.00	0.00	0.00	385.50	385.50	385.50	0.00
7. Subs:								
Subconsultants:								
Subcontractors:								
8. Total Work Assignment Costs:	0.00	0.00	0.00	0.00	5,705.98	5,705.98	5,705.98	0.00
9. Fees:								
Fixed Fee:	0.00	0.00	0.00	0.00	532.07	532.07	532.07	0.00
Management Fee:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10. Total Work Assignment Price:	0.00	0.00	0.00	0.00	6,238.05	6,238.05	6,238.05	0.00

Project Manager (Engineer): _____ **Date:** _____

ENGINEER: Lawler, Matusky & Skelly Engineers
CONTRACT No.: D002676
PROJECT NAME: New Cassel PSAs
WORK ASSIGNMENT No.: D002676-12
TASK No./NAME:
COMPLETE: 0%

DATE PREPARED: 21 Jul 95
BILLING PERIOD:
INVOICE No.:
CAP No.:

MONTHLY COST CONTROL REPORT
SUMMARY OF FISCAL INFORMATION

EXPENDITURE CATEGORY	A COST CLAIMED THIS PERIOD	B PAID TO DATE	C TOTAL DISSALLOWED TO DATE	D TOTAL COSTS PAID TO DATE (A+B)	E ESTIMATED COSTS TO COMPLETION	F ESTIMATED TOTAL WORK ASSIGNMENT PRICE (A+B+E	G APPROVED BUDGET	H ESTIMATED UNDER/OVER (G-F)
1. Direct Salary Costs:	0.00	0.00	0.00	0.00	31,924.98	31,924.98	31,924.98	0.00
2. Indirect Salary Costs (1.5185):	0.00	0.00	0.00	0.00	48,478.08	48,478.08	48,478.08	0.00
3. Subtotal Direct Salary and Indirect Costs:	0.00	0.00	0.00	0.00	80,403.06	80,403.06	80,403.06	0.00
4. Travel:	0.00	0.00	0.00	0.00	12,134.57	12,134.57	12,134.57	0.00
5. Other Non-Salary Costs:								
Material Costs:	0.00	0.00	0.00	0.00	6,056.10	6,056.10	6,056.10	0.00
Equipment Costs:	0.00	0.00	0.00	0.00	5,177.00	5,177.00	5,177.00	0.00
6. Subtotal Direct Non-Salary Costs:	0.00	0.00	0.00	0.00	23,367.67	23,367.67	23,367.67	0.00
7. Subs:								
Subconsultants:								
YEC, Inc.	0.00	0.00	0.00	0.00	29,447.83	29,447.83	29,447.83	0.00
Subcontractors:								
Zebra	0.00	0.00	0.00	0.00	35,700.00	35,700.00	35,700.00	0.00
Inchcape Testing Laboratory (	0.00	0.00	0.00	0.00	1,350.00	1,350.00	1,350.00	0.00
Mobile Laboratory	0.00	0.00	0.00	0.00	34,801.00	34,801.00	34,801.00	0.00
Sub-Surface Informational Su	0.00	0.00	0.00	0.00	6,670.00	6,670.00	6,670.00	0.00
Cassone Leasing (Site Trailer)	0.00	0.00	0.00	0.00	1,734.00	1,734.00	1,734.00	0.00
Mr. Electric Service (MBE)	0.00	0.00	0.00	0.00	1,300.00	1,300.00	1,300.00	0.00
Lease Space for Trailer	0.00	0.00	0.00	0.00	1,500.00	1,500.00	1,500.00	0.00
8. Total Work Assignment Costs:	0.00	0.00	0.00	0.00	216,273.56	216,273.56	216,273.56	0.00
9. Fees:								
Fixed Fee:	0.00	0.00	0.00	0.00	8,040.30	8,040.30	8,040.30	0.00
Management Fee:	0.00	0.00	0.00	0.00	3,525.05	3,525.05	3,525.05	0.00
10. Total Work Assignment Price:	0.00	0.00	0.00	0.00	227,838.91	227,838.91	227,838.91	0.00

Project Manager (Engineer): _____ Date: _____

Lawler, Matusky & Skelly Engineers

ENGINEER: Lawler, Matusky & Skelly Engineers
CONTRACT No.: D002676
PROJECT NAME: New Cassel PSAs
WORK ASSIGNMENT No.: D002676-12
TASK No./NAME: Task 2B
COMPLETE: 0%

SCHEDULE 2.11(g)

MONTHLY COST CONTROL REPORT
SUMMARY OF FISCAL INFORMATION

DATE PREPARED: 21 Jul 95
BILLING PERIOD:
INVOICE No.:
CAP No.:

EXPENDITURE CATEGORY	A COST CLAIMED THIS PERIOD	B PAID TO DATE	C TOTAL DISSALLOWED TO DATE	D TOTAL COSTS PAID TO DATE (A + B)	E ESTIMATED COSTS TO COMPLETION	F ESTIMATED TOTAL WORK ASSIGNMENT PRICE (A + B + E)	G APPROVED BUDGET	H ESTIMATED UNDER/OVER (G-F)
1. Direct Salary Costs:	0.00	0.00	0.00	0.00	19,116.33	19,116.33	19,116.33	0.00
2. Indirect Salary Costs (1.5185):	0.00	0.00	0.00	0.00	29,028.14	29,028.14	29,028.14	0.00
3. Subtotal Direct Salary and Indirect Costs:	0.00	0.00	0.00	0.00	48,144.47	48,144.47	48,144.47	0.00
4. Travel:	0.00	0.00	0.00	0.00	204.00	204.00	204.00	0.00
5. Other Non-Salary Costs:								
Material Costs:	0.00	0.00	0.00	0.00	2,042.00	2,042.00	2,042.00	0.00
Equipment Costs:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6. Subtotal Direct Non-Salary Costs:	0.00	0.00	0.00	0.00	2,246.00	2,246.00	2,246.00	0.00
7. Subs:								
Subconsultants:								
Subcontractors:								
Marsden Reproduction	0.00	0.00	0.00	0.00	3,435.00	3,435.00	3,435.00	0.00
Technical Editor M.L. Pinkham	0.00	0.00	0.00	0.00	1,400.00	1,400.00	1,400.00	0.00
8. Total Work Assignment Costs:	0.00	0.00	0.00	0.00	55,225.47	55,225.47	55,225.47	0.00
9. Fees:								
Fixed Fee:	0.00	0.00	0.00	0.00	4,814.45	4,814.45	4,814.45	0.00
Management Fee:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10. Total Work Assignment Price:	0.00	0.00	0.00	0.00	60,039.92	60,039.92	60,039.92	0.00

Project Manager (Engineer): _____ **Date:** _____

ENGINEER: Lawler, Matusky & Skelly Engineers
CONTRACT No.: D002676
PROJECT NAME: New Cassel PSAs
WORK ASSIGNMENT No.: D002676-12

SCHEDULE 2.11(g) - SUPPLEMENTAL

COST CONTROL REPORT
SUBCONTRACTOR

DATE PREPARED: 21 Jul 95
BILLING PERIOD:
INVOICE No.:
CAP No.:

	SUBCONTRACT NAME	A SUBCONTRACT COST CLAIMED THIS APPLICATION INCLUDING RESUBMITTALS	B SUBCONTRACT COST APPROVED FOR PAYMENT ON PREVIOUS APPLICATIONS	C TOTAL SUBCONTRACT COSTS TO DATE (A PLUS B)	D SUBCONTRACT APRROVED BUDGET	E MANAGEMENT FEE BUDGET	F MANAGEMENT FEE PAID	G TOTAL COSTS TO DATE (C PLUS F)
1.	Zebra	0.00	0.00	0.00	35,700.00	1,785.00	0.00	0.00
2.	Inchcape Testing Laboratory (Aquatec)	0.00	0.00	0.00	1,350.00	0.00	0.00	0.00
3.	Mobile Laboratory	0.00	0.00	0.00	34,801.00	1,740.05	0.00	0.00
4.	Sub-Surface Informational Surveys Inc.	0.00	0.00	0.00	6,670.00	0.00	0.00	0.00
5.	Cassone Leasing (Site Trailer)	0.00	0.00	0.00	1,734.00	0.00	0.00	0.00
6.	Mr. Electric Service (MBE)	0.00	0.00	0.00	1,300.00	0.00	0.00	0.00
7.	Marsden Reproduction	0.00	0.00	0.00	3,435.00	0.00	0.00	0.00
8.	Lease Space for Trailer	0.00	0.00	0.00	1,500.00	0.00	0.00	0.00
9.	Technical Editor M.L. Pinkham	0.00	0.00	0.00	1,400.00	0.00	0.00	0.00
	TOTALS:	0.00	0.00	0.00	87,890.00	3,525.05	0.00	0.00

Project Manager: _____ **Date:** _____

Notes: (1) Costs listed in columns A, B, C & D do not include any management fee costs.
(2) Management fee is applicable to only properly procured, satisfactorily completed, unit price subcontracts over $10,000.
(3) Total line, column G should equal line 7 (subcontractors), column D of Summary Cost Control Report.

ENGINEER: Lawler, Matusky & Skelly Engineers
CONTRACT No.: D002676
PROJECT NAME: New Cassel PSAs
WORK ASSIGN. No.: D002676-12

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

DATE PREPARED: 21 Jul 95
BILLING PERIOD:
INVOICE No.:

LABOR CLASSIFICATION / SALARY RATE	IX $48.86		VIII $37.56		VII $32.96		VI $30.87		V $27.54		IV $21.54		III $19.28		II $17.78		I $13.48		WP $12.66		TOTAL NO. OF DIRECT LABOR HRS.	
	EXP.	/EST.	EXP.	/EST.	EXP.	/EST.	EXP.	/EST.	EXP.	/EST.	EXP.	/EST.	EXP.	/EST.	EXP.	/EST.	EXP.	/EST.	EXP.	/EST.	EXP.	/EST.
Task 1	0.0	0.0	0.0	0.0	0.0	21.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	42.0	0.0	3.0	0.0	20.0	0.0	0.0	0.0	88.0
Task 2	0.0	6.0	0.0	0.0	0.0	125.0	0.0	0.0	0.0	56.0	0.0	14.0	0.0	360.0	0.0	348.0	0.0	610.0	0.0	22.0	0.0	1,541.0
Task 3	0.0	7.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	12.0	0.0	0.0	0.0	147.0	0.0	216.0	0.0	296.0	0.0	96.0	0.0	874.0
																					0.0	2,503.0
TOTAL HOURS:	0.0	13.0	0.0	0.0	0.0	246.0	0.0	0.0	0.0	70.0	0.0	14.0	0.0	549.0	0.0	567.0	0.0	926.0	0.0	118.0		2,503.0

NOTES:

ENGINEER: Lawler, Matusky & Skelly Engineers
CONTRACT No.: D002676
PROJECT NAME: New Cassel PSAs
WORK ASSIGN. No.: D002676-12

SCHEDULE 2.11(h)

MONTHLY COST CONTROL REPORT

SUMMARY OF LABOR HOURS

Number of Direct Labor Hours Budgeted/Expended Number of Direct Labor Hours

DATE PREPARED: 21 Jul 95
BILLING PERIOD:
INVOICE No.:

LABOR CLASSIFICATION / SALARY RATE	IX $48.86		VIII $37.56		VII $32.96		VI $30.87		V $27.54		IV $21.54		III $19.28		II $17.78		I $13.48		WP $12.66		TOTAL NO. OF DIRECT LABOR HRS.	
	BUD	EXP.	BUD	EXP.	BUD	EXP.	BUD	EXP.	BUD	EXP.	BUD	EXP.	BUD	EXP.	BUD	EXP.	BUD	EXP.	BUD	EXP.	BUD	EXP.
Task 1	0.0	0.0	0.0	0.0	21.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	42.0	0.0	3.0	0.0	20.0	0.0	0.0	0.0	88.0	0.0
Task 2	6.0	0.0	0.0	0.0	125.0	0.0	0.0	0.0	56.0	0.0	14.0	0.0	360.0	0.0	348.0	0.0	610.0	0.0	22.0	0.0	1,541.0	0.0
Task 3	7.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	12.0	0.0	0.0	0.0	147.0	0.0	216.0	0.0	296.0	0.0	96.0	0.0	874.0	0.0
																					2,503.0	0.0
TOTAL HOURS:	13.0	0.0	0.0	0.0	246.0	0.0	0.0	0.0	70.0	0.0	14.0	0.0	549.0	0.0	567.0	0.0	926.0	0.0	118.0	0.0		

NOTES:

LABOR HOURS AND COSTS
TASK SUMMARY

NSPE/ASCE LABOR CLASS	1995 HOURLY RATE ($)	1996 HOURLY RATE ($)	TASK 1: 1995 RATES	TASK 2: 1995 RATES	TASK 3: 1996 RATES	TOTAL HOURS	SUBTOTAL ($)
IX	54.38	57.38	0.0	6.0	7.0	13	727.94
VIII	41.81	44.11	0.0	0.0	0.0	0	0.00
VII	36.68	38.70	21.0	125.0	100.0	246	9,225.28
VI	34.36	36.25	0.0	0.0	0.0	0	0.00
V	30.65	32.34	2.0	56.0	12.0	70	2,165.78
IV	23.97	25.29	0.0	14.0	0.0	14	335.58
III	21.47	22.65	42.0	360.0	147.0	549	11,960.49
II	20.88	22.02	3.0	348.0	216.0	567	12,085.20
I	15.83	16.70	20.0	610.0	296.0	926	14,916.10
WP	14.09	14.87	0.0	22.0	96.0	118	1,737.50
TOTAL UNITS:			88	1,541	874	2,503	
DIRECT SALARY COSTS ($):			2,112.56	31,924.98	19,116.33		53,153.87
INDIRECT SALARY COSTS ($): 1.5185			3,207.92	48,478.08	29,028.14		80,714.14
SUBTOTAL ($):			5,320.48	80,403.06	48,144.47		133,868.01
FIXED FEE ($): 0.10			532.07	8,040.30	4,814.45		13,386.82
MATERIAL COSTS ($):			385.50	6,056.10	2,042.00		8,483.60
TRAVEL COSTS ($):			0.00	12,134.57	204.00		12,338.57
FIELD EQUIPMENT ($):			0.00	5,177.00	0.00		5,177.00
SUBS ($):			0.00	112,502.83	4,835.00		117,337.83
MGMT FEE ($): 0.05			0.00	3,525.05	0.00		3,525.05
TOTAL ($):			6,238.05	227,838.91	60,039.92		294,116.88

TABLE 1 (Page 1 of 2)

LABOR HOURS AND COSTS

TASK 1: DETAILED WORK PLAN DEVELOPMENT

NSPE/ASCE LABOR CLASS	HOURLY RATE ($)	1.1 TECHNICAL SCOPE OF WORK	1.2 FIELD OPERATIONS/SAMPLING PLAN	1.3 QAPP	1.4 HASP	1.8 TASK MANAGEMENT	TOTAL HOURS	SUBTOTAL ($)
IX	54.38	0.0	0.0	0.0	0.0	0.0	0	0.00
VIII	41.81	0.0	0.0	0.0	0.0	0.0	0	0.00
VII	36.68	8.0	8.0	1.0	0.0	4.0	21	770.28
VI	34.36	0.0	0.0	0.0	0.0	0.0	0	0.00
V	30.65	0.0	0.0	0.0	2.0	0.0	2	61.30
IV	23.97	0.0	0.0	0.0	0.0	0.0	0	0.00
III	21.47	20.0	20.0	0.0	0.0	2.0	42	901.74
II	20.88	0.0	0.0	1.0	2.0	0.0	3	62.64
I	15.83	10.0	10.0	0.0	0.0	0.0	20	316.60
WP	14.09	0.0	0.0	0.0	0.0	0.0	0	0.00
TOTAL UNITS:		38	38	2	4	6	88	
DIRECT SALARY COSTS ($):		881.14	881.14	57.56	103.06	189.66		2,112.56
INDIRECT SALARY COSTS ($): 1.5185:		1,338.01	1,338.01	87.40	156.50	288.00		3,207.92
SUBTOTAL ($):		2,219.15	2,219.15	144.96	259.56	477.66		5,320.48
FIXED FEE ($): 0.10:		221.92	221.92	14.50	25.96	47.77		532.07
MATERIAL COSTS ($):		97.00	127.00	75.50	77.00	9.00		385.50
TRAVEL COSTS ($):		0.00	0.00	0.00	0.00	0.00		0.00
FIELD EQUIPMENT ($):		0.00	0.00	0.00	0.00	0.00		0.00
SUBS ($):		0.00	0.00	0.00	0.00	0.00		0.00
MGMT FEE ($): 0.05:		0.00	0.00	0.00	0.00	0.00		0.00
TOTAL ($):		2,538.07	2,568.07	234.96	362.52	534.43		6,238.05

TABLE 1 (Page 2 of 2)

MATERIAL COSTS

TASK 1: DETAILED WORK PLAN DEVELOPMENT

ITEM	RATE BASE	ESTIMATED $ PER UNIT	1.1 TECHNICAL SCOPE OF WORK	1.2 FIELD OPERATIONS/SAMPLING PLAN	1.3 QAPP	1.4 HASP	1.8 TASK MANAGEMENT	TOTAL ($)
Telephone	(at cost)	1.00	5	2	2	2	2	13.00
Reproduction	(per page)	0.07	100	1,000	1,000	1,000	100	224.00
General PC usage	(per hr)	1.50	30	30	1	2	0	94.50
Fax	(per page)	1.00	10	10	2	2	0	24.00
Overnight shipping	(at cost)	1.00	30	0	0	0	0	30.00
Information purchases	(at cost)	1.00	0	0	0	0	0	0.00
Photography	(at cost)	1.00	0	0	0	0	0	0.00
Photo/print enlarge	(at cost)	144.00	0	0	0	0	0	0.00
Aerial photos/enlarge	(at cost)	480.00	0	0	0	0	0	0.00
Miscellaneous*	(at cost)	1.00	0	0	0	0	0	0.00
	TOTAL UNITS:		175	1,042	1,005	1,006	102	
	TASK TOTAL ($):		97.00	127.00	75.50	77.00	9.00	385.50

TABLE 2 (Page 1 of 5)

LABOR HOURS AND COSTS

TASK 2: PSA FIELD INVESTIGATION

NSPE/ASCE LABOR CLASS	HOURLY RATE ($)	2.1 DETAILED SITE HISTORY	2.2 MOBILIZATION/ DEMOBILIZATION	2.3 FACILITY INPECTIONS	2.4 SWL SURVEY	2.5 GPR SURVEY	2.6 PROBES	2.7 MW/DRYWELL SAMPLING	2.8 DATA ANALYSIS	2.9 TASK MANAGEMENT	TOTAL HOURS	SUBTOTAL ($)
IX	54.38	0.0	2.0	0.0	0.0	0.0	1.0	0.0	1.0	2.0	6	326.28
VIII	41.81	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.00
VII	36.68	4.0	20.0	2.0	2.0	2.0	25.0	0.0	20.0	50.0	125	4,585.00
VI	34.36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.00
V	30.65	0.0	0.0	4.0	0.0	0.0	20.0	0.0	20.0	12.0	56	1,716.40
IV	23.97	0.0	0.0	0.0	4.0	4.0	0.0	2.0	4.0	0.0	14	335.58
III	21.47	40.0	40.0	16.0	16.0	20.0	160.0	16.0	40.0	12.0	360	7,729.20
II	20.88	20.0	40.0	16.0	16.0	20.0	160.0	16.0	40.0	20.0	348	7,266.24
I	15.83	10.0	20.0	4.0	36.0	10.0	340.0	20.0	160.0	10.0	610	9,656.30
WP	14.09	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0	12.0	22	309.98
TOTAL UNITS:		74	122	42	74	56	706	54	295	118	1,541	
DIRECT SALARY COSTS ($):		1,581.42	2,852.96	936.88	1,416.72	1,174.54	13,742.58	1,042.14	5,864.56	3,313.18		31,924.98
INDIRECT SALARY COSTS ($):	**1.5185:**	2,401.39	4,332.22	1,422.65	2,151.29	1,783.54	20,868.11	1,582.49	8,905.33	5,031.06		48,478.08
SUBTOTAL ($):		3,982.81	7,185.18	2,359.53	3,568.01	2,958.08	34,610.69	2,624.63	14,769.89	8,344.24		80,403.06
FIXED FEE ($):	**0.10:**	398.28	718.52	235.95	356.80	295.81	3,461.07	262.46	1,476.99	834.42		8,040.30
MATERIAL COSTS ($):		345.00	688.50	107.00	59.00	233.00	1,725.00	58.60	2,654.00	186.00		6,056.10
TRAVEL COSTS ($):		0.00	391.00	452.00	503.29	452.00	10,002.70	333.58	0.00	0.00		12,134.57
FIELD EQUIPMENT ($):		0.00	0.00	24.00	48.00	60.00	4,365.00	680.00	0.00	0.00		5,177.00
SUBS ($):		29,447.83	4,534.00	0.00	0.00	6,670.00	71,851.00	0.00	0.00	0.00		112,502.83
MGMT FEE ($):	**0.05:**	0.00	0.00	0.00	0.00	0.00	3,525.05	0.00	0.00	0.00		3,525.05
TOTAL ($):		34,173.92	13,517.20	3,178.48	4,535.10	10,668.89	129,540.51	3,959.27	18,900.88	9,364.66		227,838.91

MATERIAL COSTS
TASK 2: PSA FIELD INVESTIGATION

ITEM	RATE BASE	ESTIMATED $ PER UNIT	2.1 DETAILED SITE HISTORY	2.2 MOBILIZATION/ DEMOBILIZATION	2.3 FACILITY INPECTIONS	2.4 SWL SURVEY	2.5 GPR SURVEY	2.6 PROBES	2.7 MW/DRY/WELL SAMPLING	2.8 DATA ANALYSIS	2.9 TASK MANAGEMENT	TOTAL ($)
Telephone	(at cost)	1.00	200	100	20	20	140	150	20	40	100	790.00
Electric Usage (trailer/office)	(at cost)	1.00	0	0	0	0	0	300	0	0	0	300.00
Reproduction	(per page)	0.07	500	50	200	100	100	1,000	20	4,000	300	438.90
General PC usage	(per hr)	1.50	40	10	2	8	4	60	4	300	30	687.00
Auto CADD	(per hr)	15.00	0	0	0	0	0	0	0	100	0	1,500.00
Fax	(per page)	1.00	20	10	0	0	0	150	0	20	20	220.00
Overnight shipping	(at cost)	1.00	20	50	0	0	20	200	0	40	0	330.00
Well Permits	(at cost)	1.00	0	0	0	0	0	150	0	0	0	150.00
Photography	(at cost)	1.00	0	0	50	0	50	20	0	0	0	120.00
Lg/ print repro (24X36)	(per page)	1.35	0	0	0	0	0	0	0	240	0	324.00
Disposable Field Items:												
Decon Chemicals	(at cost)	1.00	0	0	0	0	0	40	10	0	0	50.00
Decon D.I. Water	(per gal.)	0.12	0	0	0	0	0	250	10	0	0	31.20
Misc*	(at cost)	1.00	10	10	20	20	10	125	20	0	0	215.00
LILCO Application fee	(at cost)	1.00	0	400	0	0	0	0	0	0	0	400.00
Trailer Permits	(at cost)	1.00	0	100	0	0	0	0	0	0	0	100.00
Road Opening Permit	(at cost)	1.00	0	0	0	0	0	400	0	0	0	400.00
	TOTAL UNITS:		790	730.00	292	148	324	2,845	84	4,740	450	
	TASK TOTAL ($):		345.00	688.50	107.00	59.00	233.00	1,725.00	58.60	2,654.00	186.00	6,056.10

* - Marking paint, ice, stakes, etc..

TRAVEL COSTS

TASK 2: PSA FIELD INVESTIGATION

ITEM	RATE BASE	ESTIMATED $ PER UNIT	2.1 DETAILED SITE HISTORY	2.2 MOBILIZATION/ DEMOBILIZATION	2.3 FACILITY INPECTIONS	2.4 SWL SURVEY	2.5 GPR SURVEY	2.6 PROBES	2.7 MW/DRYWELL SAMPLING	2.8 DATA ANALYSIS	2.9 TASK MANAGEMENT	TOTAL ($)
Auto rental	(per day)	70.00	0	0	2	2	2	18	1	0	0	1,750.00
Truck/van rental	(per day)	31.34	0	0	0	1	0	25	2	0	0	877.52
Truck/van mileage	(per mile)	0.133	0	0	0	150	0	1,400	300	0	0	246.05
Personal mileage	(per mile)	0.23	0	300	0	0	0	100	0	0	0	92.00
Per diem	(per day)	151.00	0	2	2	2	2	50	1	0	0	8,909.00
Tolls	(at cost)	1.00	0	20	10	10	10	200	10	0	0	260.00
	TOTAL UNITS:		0	322	14	165	1	1,793	314	0	0	
	TASK TOTAL ($):		0.00	391.00	452.00	503.29	452.00	10,002.70	333.58	0.00	0.00	12,134.57

FIELD EQUIPMENT COSTS
TASK 2: PSA FIELD INVESTIGATION

ITEM	RATE BASE	ESTIMATED $ PER UNIT	2.1 DETAILED SITE HISTORY	2.2 MOBILIZATION/ DEMOBILIZATION	2.3 FACILITY INPECTIONS	2.4 SWL SURVEY	2.5 GPR SURVEY	2.6 PROBES	2.7 MW/DRYWELL SAMPLING	2.8 DATA ANALYSIS	2.9 TASK MANAGEMENT	TOTAL ($)
Personal Protective Equipment:												
Level D	(per day)	12	0	0	2	4	5	50	4	0	0	780.00
2" Submersible Pump (110 V)	(per day)	15	0	0	0	0	0	0	4	0	0	60.00
Generators - Honda (6,500 watt)	(per day)	51	0	0	0	0	0	25	4	0	0	1,479.00
High pressure washer - Landa (110 volt)	(per day)	92	0	0	0	0	0	25	4	0	0	2,668.00
PID - HNu (HW-101) @	(per day)	0	0	0	2	0	0	25	4	0	0	0.00
FID - Foxboro (OVA-128) @	(per day)	0	0	0	2	0	0	25	4	0	0	0.00
Combustible gas indicator - Exotech (40-OFH) @	(per day)	0	0	0	2	0	0	25	0	0	0	0.00
Static well level - Slope Ind. Co. (51453) @	(per day)	0	0	0	2	4	0	0	0	0	0	0.00
Teflon bailer - Timco (White-2.4)	(per day)	19	0	0	0	0	0	10	0	0	0	190.00
	SUBTOTAL:		0	0	0	0	0	0	0	0	0	
	TOTAL UNITS:		0	0	10	8	5	185	24	0	0	
	TASK TOTALS ($):		0.00	0.00	24.00	48.00	60.00	4,365.00	680.00	0.00	0.00	5,177.00

@ - NYSDEC meters to be used.

SUBCONSULTANTS/SUBCONTRACTORS COSTS

TASK 2: PSA FIELD INVESTIGATION

ITEM	2.1 DETAILED SITE HISTORY	2.2 MOBILIZATION/ DEMOBILIZATION	2.3 FACILITY INPECTIONS	2.4 SWL SURVEY	2.5 GPR SURVEY	2.6 PROBES	2.7 MW/DRYWELL SAMPLING	2.8 DATA ANALYSIS	2.9 TASK MANAGEMENT	TOTAL ($)
Subconsultants:										
YEC Inc.	29,447.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29,447.83
SUBTOTAL:	29,447.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29,447.83
Subcontractors:										
Zebra	0.00	0.00	0.00	0.00	0.00	35,700.00	0.00	0.00	0.00	35,700.00
Inchcape Testing Laboratory (Aquatec)	0.00	0.00	0.00	0.00	0.00	1,350.00	0.00	0.00	0.00	1,350.00
Mobile Laboratory	0.00	0.00	0.00	0.00	0.00	34,801.00	0.00	0.00	0.00	34,801.00
Sub-Surface Informational Surveys Inc.	0.00	0.00	0.00	0.00	6,670.00	0.00	0.00	0.00	0.00	6,670.00
Cassone Leasing (Site Trailer)	0.00	1,734.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,734.00
Mr. Electric Service	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,300.00
Lease Space for Trailer	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,500.00
SUBTOTAL:	0.00	4,534.00	0.00	0.00	6,670.00	71,851.00	0.00	0.00	0.00	83,055.00
TOTAL:	29,447.83	4,534.00	0.00	0.00	6,670.00	71,851.00	0.00	0.00	0.00	112,502.83

TABLE 3 (Page 1 of 4)

LABOR HOURS AND COSTS

TASK 3: REPORT PREPARATION

NSPE/ASCE LABOR CLASS	1996 HOURLY RATE ($)	3.1 DRAFT REPORT	3.2 FINAL REPORT	3.3 TASK MANAGEMENT	TOTAL HOURS	SUBTOTAL ($)
IX	57.38	2.0	4.0	1.0	7	401.66
VIII	44.11	0.0	0.0	0.0	0	0.00
VII	38.70	40.0	40.0	20.0	100	3,870.00
VI	36.25	0.0	0.0	0.0	0	0.00
V	32.34	10.0	2.0	0.0	12	388.08
IV	25.29	0.0	0.0	0.0	0	0.00
III	22.65	100.0	40.0	7.0	147	3,329.55
II	22.02	160.0	40.0	16.0	216	4,756.32
I	16.70	200.0	80.0	16.0	296	4,943.20
WP	14.87	60.0	20.0	16.0	96	1,427.52
TOTAL UNITS:		572	226	76	874	
DIRECT SALARY COSTS ($):		12,006.56	5,262.40	1,847.37		19,116.33
INDIRECT SALARY COSTS ($):	**1.5185**	18,231.96	7,990.95	2,805.23		29,028.14
SUBTOTAL ($):		30,238.52	13,253.35	4,652.60		48,144.47
FIXED FEE ($):	**0.10**	3,023.85	1,325.34	465.26		4,814.45
MATERIAL COSTS ($):		1,260.00	700.00	82.00		2,042.00
TRAVEL COSTS ($):		125.00	79.00	0.00		204.00
FIELD EQUIPMENT ($):		0.00	0.00	0.00		0.00
SUBS ($):		1,400.00	3,435.00	0.00		4,835.00
MGMT FEE ($):	**0.05**	0.00	0.00	0.00		0.00
TOTAL ($):		36,047.37	18,792.69	5,199.86		60,039.92

MATERIAL COSTS
TASK 3: REPORT PREPARATION

ITEM	RATE BASE	ESTIMATED $ PER UNIT	3.1 DRAFT REPORT	3.2 FINAL REPORT	3.3 TASK MANAGEMENT	TOTAL ($)
Telephone	(at cost)	1.00	30	50	50	130.00
Reproduction	(per page)	0.07	4,000	4,000	100	567.00
General PC usage	(per hr)	1.50	60	10	10	10.00
Auto CADD	(per hr)	15.00	30	10	0	600.00
Fax	(per page)	1.00	100	20	10	130.00
Overnight shipping	(at cost)	1.00	40	50	0	90.00
Lg/ print repro (24X36)	(per page)	1.35	200	100	0	405.00
		TOTAL UNITS:	4,460	4,240	170	
		TASK TOTAL ($):	1,260.00	700.00	82.00	2,042.00

TRAVEL COSTS

TASK 3: REPORT PREPARATION

ITEM	RATE BASE	ESTIMATED $ PER UNIT	3.1 DRAFT REPORT	3.2 FINAL REPORT	3.3 TASK MANAGEMENT	TOTAL ($)
Personal mileage	(per mile)	0.23	500	300	0	184.00
Tolls	(at cost)	1.00	10	10	0	20.00
	TOTAL UNITS:		510	310	0	
	TASK TOTAL ($):		125.00	79.00	0.00	204.00

* - Tolls, parking, shipping, permits, stakes, etc.

SUBCONSULTANTS/SUBCONTRACTORS COSTS
TASK 3: REPORT PREPARATION

ITEM		3.1 DRAFT REPORT	3.2 FINAL REPORT	3.3 TASK MANAGEMENT	TOTAL ($)
Subconsultants:					
YEC Inc.		0.00	0.00	0.00	0.00
	SUBTOTAL:	0.00	0.00	0.00	0.00
Subcontractors:					
Marsden Reproduction		0.00	3,435.00	0.00	3,435.00
Technical Editor M.L. Pinkham		1,400.00	0.00	0.00	1,400.00
	SUBTOTAL:	1,400.00	3,435.00	0.00	4,835.00
	TOTAL:	1,400.00	3,435.00	0.00	4,835.00