REMEDIAL INVESTIGATION

PROJECT MANAGEMENT WORK PLAN

Fulton Avenue Site
(Garden City Park Industrial Area)
Town of North Hempstead, Nassau County
(Site Registry No. 1-30-073)

CONTRACT NO. D002708-20

Remed.

Dvirka and Bartilucci
Consulting Engineers

MARCH 1995

FOCUSED REMEDIAL INVESTIGATION
PROJECT MANAGEMENT WORK PLAN

APPROVED

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FOCUSED REMEDIAL INVESTIGATION
FOR THE
FULTON AVENUE SITE
(GARDEN CITY PARK INDUSTRIAL AREA)
TOWN OF NORTH HEMPSTEAD
NASSAU COUNTY, NEW YORK

CONTRACT NO. D002708-20

PREPARED FOR

NEW YORK STATE DEPARTMENT
OF ENVIRONMENTAL CONSERVATION

BY

DVIRKA AND BARTILUCCI
CONSULTING ENGINEERS
SYOSSET, NEW YORK

MARCH 1995

FOCUSED REMEDIAL INVESTIGATION
FULTON AVENUE
(GARDEN CITY PARK INDUSTRIAL AREA) SITE

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Section 1

1.0 INTRODUCTION

As part of New York State's program to investigate and remediate hazardous waste sites, the New York State Department of Environmental Conservation (NYSDEC) has entered into a contract with the firm of Dvirka and Bartilucci Consulting Engineers of Syosset, New York to conduct a Focused Remedial Investigation (RI) for the Fulton Avenue (Garden City Park Industrial Area) Site located in the Town of North Hempstead, Nassau County, New York. The RI for this site is being performed with funds allocated under the New York State Superfund Program.

The field program for the Fulton Avenue Site will involve air sampling, soil vapor survey and sampling, groundwater/soil probe survey and sampling, soil boring and monitoring well construction, subsurface soil sampling, groundwater sampling and pumping test.

The purpose of this Focused RI is to identify the source of groundwater contamination in the vicinity of the building located at 150 Fulton Avenue. The Focused RI will also identify the aerial and vertical extent of the contamination at the site, define the migration pathways at the site and determine the degree of contamination in all environmental media at the site. The data obtained as a result of this investigation will allow for definition of the threat to public health and the environment at the site and for recommendation of an appropriate Interim Remedial Measure (IRM).

This document, entitled "Focused Remedial Investigation Work Plan for the Fulton Avenue (Garden City Park Industrial Area) Site," has been prepared in accordance with NYSDEC Technical and Administrative Guidance Memoranda and contains a site-specific Sampling and Analysis Plan, Quality Assurance Project Plan, and Health And Safety Plan necessary to carry out all elements of the Focused RI. Each of these subplans are prepared essentially as "stand-alone" documents.

2.0 SUMMARY OF EXISTING INFORMATION

2.1 Site Location, Ownership and Access

The Fulton Avenue (Garden City Park Industrial Area) Site is located in the Town of North Hempstead, Nassau County, New York (see Figure 2-1). The site is less than one acre in size and is bordered by Atlantic Avenue on the south, Fulton Avenue on the north, and Thorens Avenue and a Long Island Lighting Company transformer station on the east. The Garden City Transmix facility and the Hub Spring facility borders the site to the west (see Figure 2-2).

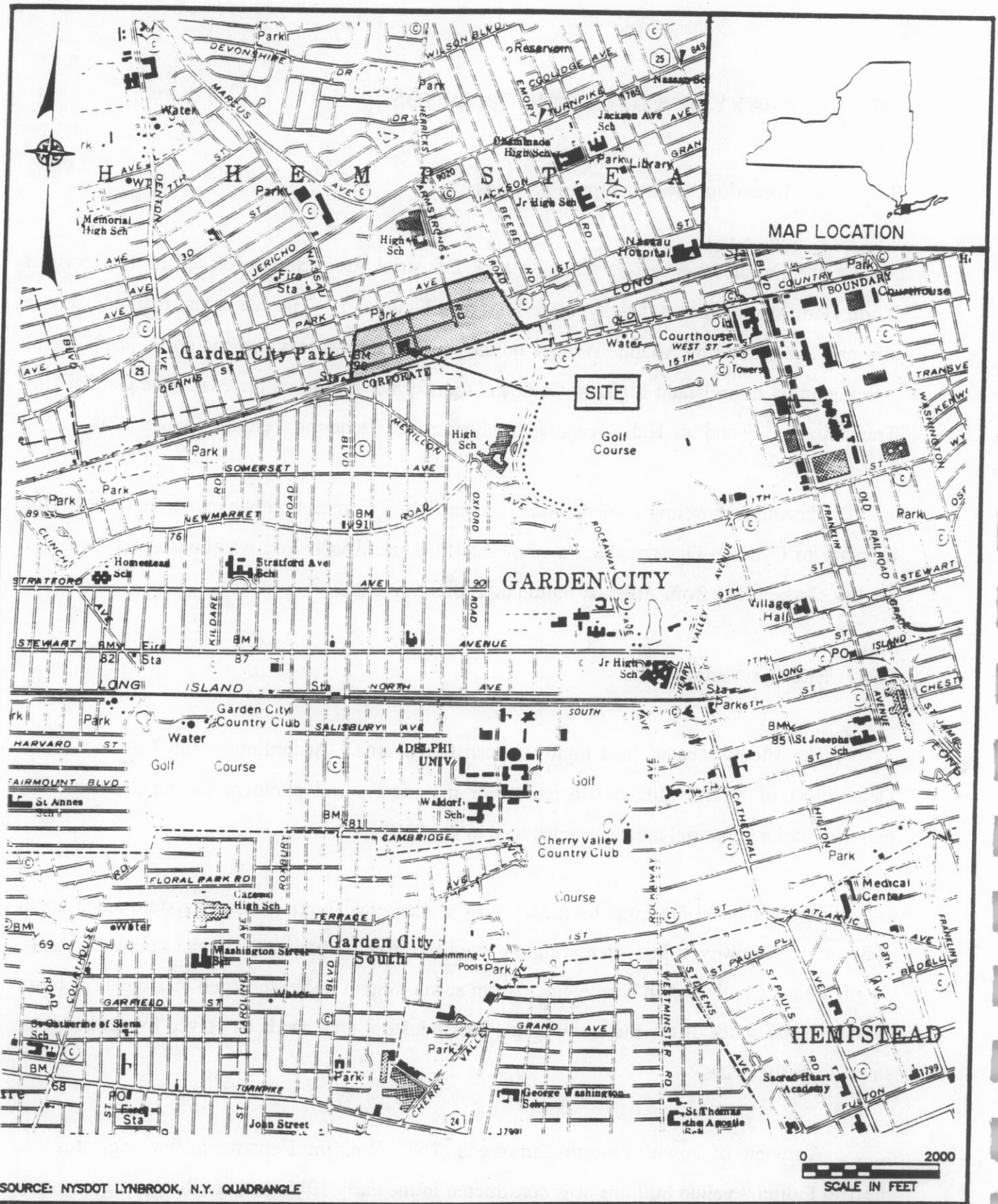
The site is currently owned by the Gorden-Fulton Corporation, which currently leases the property to Cymann Designs, Inc., a wholesale furniture distribution warehouse. Access to the facility can be made from Atlantic, Fulton or Thorens Avenues.

2.2 Site Description

The site is located in a highly industrialized area. According to the Nassau County Department of Health (NCDH), a review of historical aerial photographs indicates that the majority of the industrial area was developed in the 1950s.

The industrial area has been served by a municipal sanitary sewer system since about 1958 or 1959; however, prior to that time wastewater was discharged to on-site sanitary systems. Storm water is collected in a municipal storm sewer system and discharged to a recharge basin located to the south of the industrial area. The industrial area has been served by public water since the early 1920s.

A review of Town of North Hempstead (TNH) Building Department files indicates that the 150 Fulton Avenue building was constructed in the early 1960s. A certificate of occupancy was issued in December, 1964. A site inspection indicated the presence of roof drains located



SOURCE: NYSDOT LYNBROOK, N.Y. QUADRANGLE

FULTON AVENUE
(GARDEN CITY PARK INDUSTRIAL AREA SITE)
TOWN OF NORTH HEMPSTEAD, NEW YORK

SITE LOCATION MAP

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FIGURE 2 - 1

GARDEN CITY PARK
WATER DISTRICT

PARK AVENUE

PARKING LOT

BROADWAY AVENUE

BROADWAY AVENUE

NASSAU BOULEVARD

COURT HOUSE ROAD

CORNELIA AVENUE

THORENS AVENUE

ARMSTRONG ROAD

TULIP AVENUE

ROSE PLACE

HERRICKS ROAD

FULTON AVENUE

TRANSFORMER STATION

ATLANTIC AVENUE

PARKING LOT

LONG ISLAND RAILROAD

MERILLON AVE.

RECHARGE BASIN

LEGEND

— — SITE BOUNDARY

——— INDUSTRIAL AREA BOUNDARY

0 200 400

SCALE IN FEET

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FULTON AVENUE
(GARDEN CITY PARK INDUSTRIAL AREA) SITE
TOWN OF NORTH HEMPSTEAD, NEW YORK

SITE MAP

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FIGURE 2–2

along the interior perimeter walls of the building. The TNH Building Department files indicate that permits had been filed for connection to the municipal sewer system and for installation of dry wells for the roof drains. However, NCDH and Nassau County Department of Public Works' (NCDPW) files do not indicate that a sewer discharge permit has been issued for connection to the sewer system. In addition the TNH Building Department files indicate cesspools were inspected on the property in September 1964. The existence and locations of the dry wells and sewer connection are unknown.

2.3 Site History

Prior to the 1960s, the 150 Fulton Avenue Site was an undeveloped lot within the industrial area. As discussed above, it is believed that the building was constructed in the early 1960s.

According to information provided by the property owner, Genesco, Inc. leased the property between 1964 and 1976. From 1964 to 1969, the property was sublet to Knit-Fab Industries, a division of Flagg-Utica Corporation (which was merged into Genesco, Inc. in 1965). From 1969 to 1974, Halperin Knitting Mills occupied the building. From 1975 to 1976 Halknit Finishers, Inc. occupied the building. A NCDH survey inspection was conducted at Halknit Finishers in 1975. The inspection indicated that the company was a cutting mill that received knit fabrics in a tubular form, cut the fabric, cleaned the material and sewed the fabric together. The waste products generated at the facility were described as office paper, plastic bags, cardboard tubes and strips of material. Waste oils were also produced from a dry cleaning process. The oils were reported to be picked up by a private firm.

In 1977, Robelan Displays, Inc. leased the property. NCDH inspected the property again in 1978. Robelan Displays, Inc. was documented as manufacturing displays at the facility. They utilized paints and lacquer thinners in their process. All paints and lacquers were reported to be used up in the process. This facility was inspected two more times; once in 1981 and once again in 1986. No changes were noted since the initial inspection.

In 1988, Cymann Designs, Inc. leased the property. As discussed previously, Cymann Designs is a furniture distribution warehouse and does not use any chemicals at the facility.

2.4 Previous Investigations

In 1985 and 1986, NCDH conducted a groundwater contamination study entitled "Investigation of Contaminated Aquifer Segments, Nassau County, New York," for which a report was issued in June 1986. One of the five areas investigated in the study was the Garden City Park Industrial Area. As part of the investigation of this area, nine groundwater monitoring wells were installed and sampled (See Figure 2-3). In addition, information on groundwater quality was obtained from four existing groundwater monitoring wells and four public water supply wells in the area, and incorporated into the report. Two rounds of samples were collected at each of the nine wells, except for two wells, GCP-1 and GCP-2, which were sampled four and three times, respectively. The nine wells constructed as part of the investigation were installed at or just below the water table between 40 and 65 feet. The public water supply wells are between 405 and 480 feet deep, and the existing monitoring wells are between 76 and 96 feet deep. Samples were analyzed for volatile organic compounds (VOCs).

Results of sample analyses indicated the presence of VOCs exceeding the previous New York State standards and guidelines for drinking water in 9 of the 13 groundwater monitoring wells sampled. The primary contaminant detected was tetrachloroethene. The highest levels were detected in monitoring well GCP-1 at 36,000 ug/1 in December 1985 and 50,000 ug/l in January 1986. The investigation report concluded that "the extent of the contamination cannot be assessed based on available data. More consistent data over time, as well as additional wells are needed."

Subsequent to the 1986 investigation, in 1991 the NCDPW and NCDH conducted a cooperative study during which 12 additional monitoring wells were installed within and downgradient of the Garden City Park Industrial Area. Seven wells were screened at the water table and five were screened approximately 100 feet below the water table. In addition, two wells (one shallow and one deep) were installed upgradient of the site to provide background information on

GARDEN CITY PARK WATER DISTRICT
GCP–6
PARK AVENUE
GCP–10S
GCP–10D
GCP–16S
PARKING LOT
GCP–3
BROADWAY AVENUE
BROADWAY AVENUE
NASSAU BOULEVARD
COURT HOUSE ROAD
CORNELIA AVENUE
THORENS AVENUE
GCP–2
PF–3
PF–2
PF–1
ARMSTRONG ROAD
TULIP AVENUE
ROSE PLACE
HERRICKS ROAD
GCP–5
FULTON AVENUE
GCP–4
TRANSFORMER AREA
GCP–7S
GCP–1
ATLANTIC AVENUE
PARKING LOT
GCP–7D
LONG ISLAND RAILROAD
GCP–8
GCP–9
MERILLON AVE
RECHARGE BASIN
0 200 400
SCALE IN FEET

LEGEND
- SITE BOUNDARY
- INDUSTRIAL AREA BOUNDARY
- EXISTING MONITORING WELL LOCATION

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FULTON AVENUE
(GARDEN CITY PARK INDUSTRIAL AREA) SITE
TOWN OF NORTH HEMPSTEAD, NEW YORK

MONITORING WELL LOCATIONS

FIGURE 2–3

groundwater quality. Two rounds of groundwater samples were collected from both the existing wells and 14 new wells, and analyzed for VOCs. Results of this investigation are contained in a report entitled, "Garden City Park Groundwater Quality Study Preliminary Report" prepared by NCDH and NCDPW in April 1993. Results of the investigation confirmed the presence of high levels of VOCs in the groundwater with the highest level detected at well GCP-1 which contained 13,000 ug/1 of tetrachloroethene.

The results of the 1991 study also showed that some of the deeper downgradient wells contained greater concentrations of VOCs than the water table wells in the same location/cluster. As a result, the investigation report concluded that the plume is moving vertically downward as it migrates downgradient to the southwest. Additionally, the wells originally intended to be installed to define the downgradient limits of the plume (GCP-14S and GCP-14D) also contained elevated levels of VOCs. GCP-14D contained the highest levels of VOCs of all of the deep monitoring wells with 744 ug/1 of tetrachloroethene.

Seventeen public supply wells are believed to be currently impacted by what appears to be a single groundwater contaminant plume emanating from this industrial area. These wells are owned or operated by five suppliers which serve a combined population of approximately 215,000. At the present time, the impacted wells are either removed from service or treated to meet drinking water standards and guidelines.

Information provided in the 1991 investigation indicated that raw water quality in 13 of the 17 public water supply wells contained VOCs in excess of current drinking water standards/ guidelines. Raw water quality in the remaining four wells was within drinking water standards at the time of the study. However, because individual compounds, although below standards, were detected in these four wells, all 17 wells had either been previously removed from service or are currently being treated by the water suppliers. These wells are being impacted by tetrachloroethene and trichloroethene.

The majority of the impacted public water supply wells are screened within the lower Magothy aquifer, while the wells that currently meet the standards (prior to treatment) are screened much shallower. The report concludes that this confirms that the plume is migrating downward as it moves away from the site. The 1991 study recommended that additional investigation is needed to further determine the extent and source(s) of the plume.

As part of Nassau County's investigation of potential sources of groundwater contamination, industrial surveys were performed involving the facilities in the Garden City Park Industrial Area. Industrial surveys have been conducted by NCDH from as early as 1977. The most recent surveys were conducted in May, 1993. These surveys indicated a few users of the containments of concern including tetrachloroethene, trichloroethene and 1,1,1-trichloroethane in the industrial area.

As a result of the investigations conducted by NCDH and NCDPW, the Garden City Park Industrial Area was included on the New York State Superfund Program registry of potential hazardous waste sites. Under this program, Dvirka and Bartilucci Consulting Engineers (D&B), under contract to the NYSDEC, conducted a Preliminary Site Assessment (PSA) for the Garden City Park Industrial Area in April, 1994. The results of the investigation have been compiled into a Preliminary Site Assessment Report dated September, 1994. The report presented the results of an intensive groundwater survey conducted throughout the industrial area.

Although there was no documentation of hazardous waste disposal in the study area, significantly elevated levels of tetrachloroethene (up to 46,000 ug/l) were detected in groundwater in the vicinity of the 150 Fulton Avenue facility. Elevated levels of trichloroethene (up to 1,900 ug/l) and 1,1,1-trichloroethane (up to 260 ug/l) were also found in the vicinity of 150 Fulton Avenue.

As a result of this PSA, it was recommended that additional investigation be performed to determine the exact location of the source entry area. This Focused Remedial Investigation has been designed to locate the source of contamination so that an appropriate remedial action can be developed and implemented.

Section 3

3.0 PROJECT SCOPING

3.1 Approach and Objectives

The approach of the Focused Remedial Investigation (RI) at the Fulton Avenue (Garden City Park Industrial Area) Site is to conduct a field investigation to identify the source of groundwater contamination in the vicinity of the site. The RI will focus on locating the source entry area of the contamination, characterizing the contamination at the site and evaluating the impacts of the contamination on public health and the environment at the site.

The Work Plan contained in this document is structured to allow for a phased approach to the collection of field information during the investigation. This approach will provide sufficient information to recommend appropriate remedial actions.

Succinctly, the objectives of the RI are the following:

1. Determine the origin of the contaminant plume.
2. Define the aerial and vertical extent of contamination at the site.
3. Characterize the extent of contamination in all environmental media at the site.
4. Define the contaminant migration pathways and potential receptors at the site.

3.2 Project Description

3.2.1 Task 1 - Project Scoping and Work Plan Development

The initial phase of this Focused RI comprises project scoping and work plan development. Project scoping has included discussions with the New York State Department of Environmental Conservation (NYSDEC) regarding project objectives, and sampling locations

and procedures. These discussions have allowed for development of the scope of work for the project. Due to D&B's familiarity with the site, a formal scoping session was not required.

The task also includes development of a detailed work plan which is represented by this document. This Work Plan utilizes existing information gathered during the Preliminary Site Assessment for the Garden City Park Industrial Area, to prepare a focused field investigation strategy. This Work Plan includes the following site-specific subplans:

- Sampling and Analysis Plan;
- Quality Assurance Project Plan; and
- Health and Safety Plan.

This document presents the detailed activities comprising the components of this Focused RI, including sampling and analytical procedures, data validation and report preparation, and is prepared in accordance with all applicable NYSDEC Technical and Administrative Guidance Memoranda.

3.2.1.1 - Subcontractor Procurement

Conducted concurrently with the development of this Work Plan was the procurement of subcontractors for this Focused RI. Subcontractors will be utilized to conduct the following activities:

- Groundwater, soil and soil vapor probe survey
- Laboratory sample analysis
- Data validation
- Monitoring well installation and development

- Surveying
- Soil cutting and development water removal

3.2.2 Task 2 - Implementation of the Field Investigation

The second phase of the project will consist of implementation of the field investigation. This field investigation will proceed in a phased approach until the origin of the groundwater contamination has been documented. The field investigation currently developed for the Fulton Avenue (Garden City Park Industrial Area) Site will include the following:

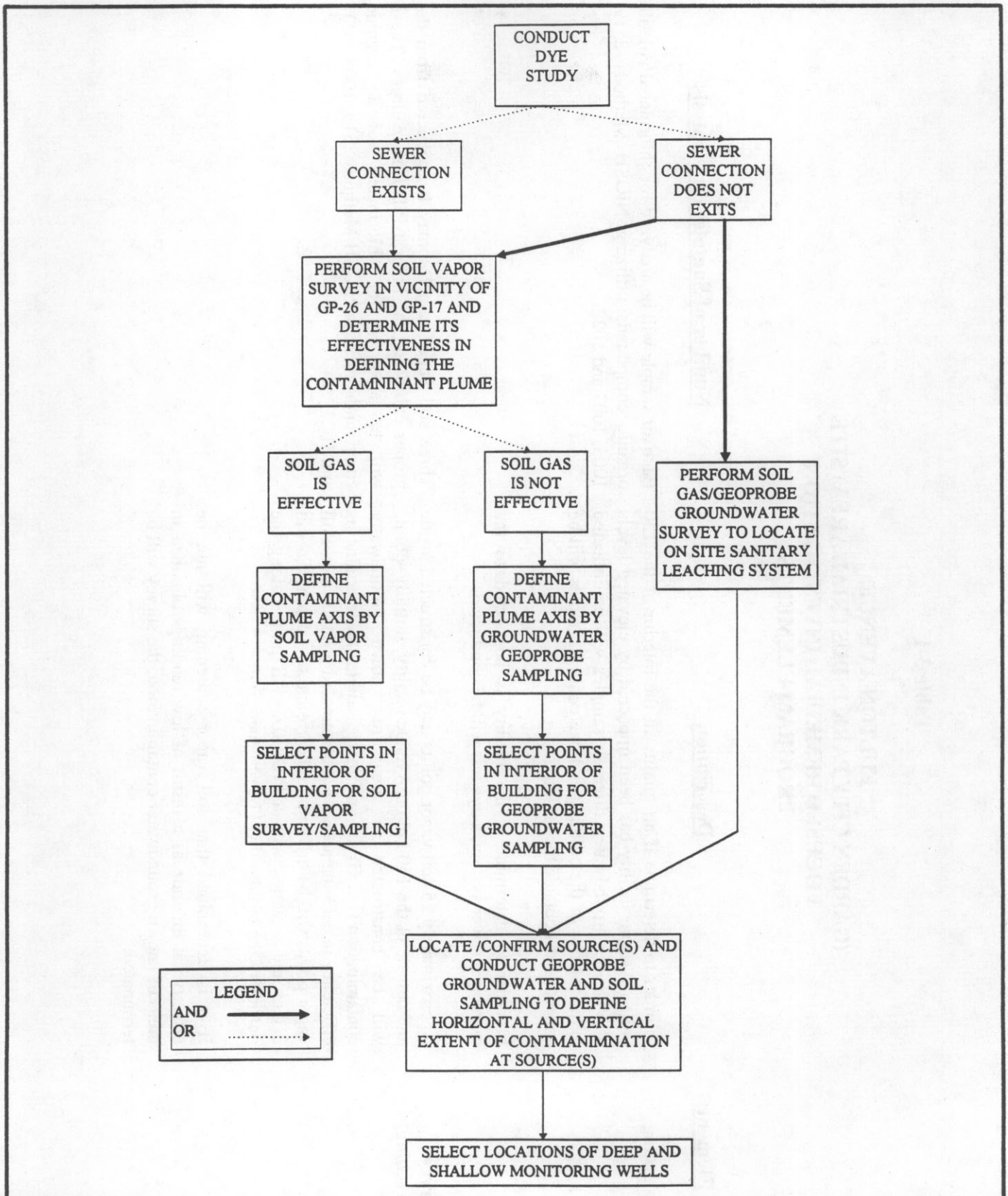
- Interior air sampling
- Dye test
- Soil vapor survey
- Soil vapor sampling (Geoprobe)
- Subsurface soil sampling (Geoprobe)
- Groundwater sampling (Geoprobe)
- Soil boring construction
- Monitoring well installation
- Subsurface soil sampling (soil boring)
- Groundwater sampling (monitoring well)
- Monitoring well elevation survey
- Groundwater level measurement
- Pumping test
- Air monitoring

A flow diagram presenting the rationale for the approach to the field program is presented in Figure 3-1. As discussed in Section 2.0, there is conflicting information on the existence and location of on-site dry wells and the connection to the municipal sanitary sewer system. Therefore, the first task of the field program will consist of conducting a dye test to determine if the building is connected to the sewer system. If the building is not connected, the field program will focus both on tracing known groundwater contamination to its source(s) and locating the on-site sanitary system and determining if it is a source of contamination.

If the building is connected to the sewer system, the field program will focus on utilizing the location of known groundwater contamination in order to track the contamination to its source(s). This will be completed by utilizing either a soil vapor survey or groundwater Geoprobe survey. Soil vapor sampling will be conducted initially in the area of known groundwater contamination to determine the effectiveness of the soil vapor sampling. If it is determined to be effective, it will be utilized to track the contamination to the source. If it is not effective, groundwater sampling utilizing the Geoprobe will be utilized. Once the source has been located, the vertical and aerial extent of contamination at the source will be defined vertically and horizontally. Once the source is located and defined, the location and depth of three shallow and three deep monitoring wells will be determined.

Based upon the results of groundwater sampling and groundwater level measurements, a scope of work for a pumping test will be developed and submitted to NYSDEC.

Description of the sampling procedures frequency and locations are described in detail in the Sampling and Analysis Plan in Section 5.0 of this Work Plan. A summary of the field investigation program is provided in Table 3-1.



FULTON AVENUE
(GARDEN CITY PARK INDUSTRIAL AREA) SITE
TOWN OF NORTH HEMPSTEAD, NEW YORK

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FIELD INVESTIGATION FLOW DIAGRAM

FIGURE 3–1

Table 3-1

FULTON AVENUE
(GARDEN CITY PARK INDUSTRIAL AREA) SITE
FOCUSED REMEDIAL INVESTIGATION
PROGRAM ELEMENTS

Program Element	Description	Number of Samples for Analysis
Interior Air Sampling	In order to determine if air quality in the interior of the 150 Fulton Avenue facility has been impacted by elevated levels of VOCs in groundwater, three air samples will be collected in the interior of the building and one control samples will be collected just outside the building.	Each air sample will be analyzed for chlorinated volatile organic compounds utilizing NIOSH Methods 2519, 1003, 1007 and 1022.
Dye Test	In order to determine if the facility is connected to the municipal sewer system, a dye test will be conducted.	
Soil Vapor Survey (horizontal screening)	Approximately 25 soil vapor points may be constructed inside and outside of the 150 Fulton Avenue facility. Initially, points will be constructed in areas of known groundwater contamination (i.e. GP-26 and downgradient) to determine its efficiency in defining areas of contaminated groundwater. Soil vapor points will be driven into the ground to a depth of about 3 feet and screened with a PID/FID. All points along the outside of the building will be screened first. If it is determined that soil vapor screening will not be effective at this site as a result of low readings obtained in areas of known groundwater contamination, the survey will be terminated.	Three soil vapor samples may be collected from the probes exhibiting the highest PID/FID readings. These will be analyzed for chlorinated volatile organic compounds utilizing NIOSH Methods 2519, 1003, 1007 and 1022.

Table 3-1 (continued)

FULTON AVENUE
(GARDEN CITY PARK INDUSTRIAL AREA) SITE
FOCUSED REMEDIAL INVESTIGATION
PROGRAM ELEMENTS

Program Element	Description	Number of Samples for Analysis
Soil Vapor Survey (horizontal screening) (continued)	In addition to the soil vapor probes constructed at the 150 Fulton Avenue facility, approximately five additional probe points may be constructed in downgradient residential areas where the plume is believed to extend.	Three soil vapor samples exhibiting the highest PID/FID readings may also be collected from the probes in the residential area and analyzed for chlorinated volatile organic compounds utilizing NIOSH Methods 2519, 1003, 1007 and 1022.
Groundwater Geoprobe Sampling	If it is determined that soil vapor sampling is not effective, approximately 15 groundwater probe samples will be collected in the interior and exterior of the building to locate the source of the contamination.	Each sample will be analyzed for TCL volatile organic compounds.
	Upon location of the source, approximately 10 groundwater probe samples will be collected at varying depths in the vicinity and immediately downgradient of the source to determine the vertical profile of the plume which will assist in placement of the groundwater monitoring wells.	Each sample will be analyzed for TCL volatile organic compounds.
Soil Geoprobe Sampling	Based upon the results of the soil vapor survey, approximately 10 soil probe samples will be collected at varying depths in the vicinity of the suspected source to confirm and to determine the depth of the source and contaminated soil in the vadose zone. Each sample will be screened with a PID/FID.	Each sample will be analyzed for TCL volatile organic compounds.

Table 3-1 (continued)

FULTON AVENUE
(GARDEN CITY PARK INDUSTRIAL AREA) SITE
FOCUSED REMEDIAL INVESTIGATION
PROGRAM ELEMENTS

Program Element	Description	Number of Samples for Analysis
Shallow Soil Borings/ Monitoring Wells	Three shallow borings (50 to 60 feet) will be constructed at and just downgradient of the source area. If shallow wells are not installed as a cluster, continuous split spoon sampling will be conducted to better define the geology of the site. A shallow monitoring well will be installed in the boring.	Two samples will be collected from each of the borings based upon PID/FID readings and analyzed for TCL volatile organic compounds. Two samples will also be collected from each of the boreholes in the vicinity of the source and analyzed for geotechnical parameters such as grain size analysis in accordance with ASTM D422-63.
Deep Soil Borings/ Monitoring Wells	Three deep borings (to the glacial/Magothy interface, approximately 120 feet deep or depth as defined by the vertical Geoprobe sampling) will be constructed at and just downgradient of the source area. Continuous split spoon sampling will be conducted to better define the geology of the site and to locate any clay lenses/confining units. Deep monitoring wells will be installed in each of the borings.	Based upon PID/FID readings, at least five samples will be collected from each of the borings and analyzed for TCL volatile organic compounds. A maximum of 10 samples will be collected from the saturated zone from the borings and analyzed for geotechnical parameters such as grain size analysis in accordance with ASTM D422-63.
Pumping Test	In order to design an Interim Remedial Measure for groundwater remediation, a pumping test will be conducted at the site. It will be necessary to install a well to conduct the pumping test. (The scope of work and costs associated with the pumping test will be prepared as part of an addendum to this Work Plan.)	

Table 3-1 (continued)

FULTON AVENUE
(GARDEN CITY PARK INDUSTRIAL AREA) SITE
FOCUSED REMEDIAL INVESTIGATION
PROGRAM ELEMENTS

Program Element	Description	Number of Samples for Analysis
Groundwater Sampling	Groundwater samples will be collected from each of the newly installed monitoring wells to provide additional information on groundwater quality in the vicinity of the source.	One round of samples will be collected from each of the six newly installed wells and analyzed for TCL volatiles and TCL metals for purposes of comprehensive documentation and design a groundwater treatment system.

3.2.3 Task 3 - Report Preparation

At the conclusion of the field investigation, a Focused Remedial Investigation Report will be prepared. The report will present the information and analytical data obtained from the field investigation. The report will also provided recommendations for appropriate remedial actions.

The results of the groundwater analysis will be compared to NYSDEC Class GA Groundwater Standards dated October 1993. Results of the air analysis will be compared to levels listed in the United States Environmental Protection Agency (USEPA) National VOC data base. Indoor Median Concentrations, as well as OSHA Permissible Exposure Limit levels.

Section 4

4.0 PROJECT MANAGEMENT

4.1 Project Schedule and Key Milestones/Reports

The Project Schedule for the Fulton Avenue (Garden City Park Industrial Area) Site Focused Remedial Investigation is provided in Figure 4-1. Key milestones are identified in order to monitor work progress. Specific deadlines for completion of tasks and subtasks are established throughout the Project Schedule to ensure timely completion of work. The following is the list of milestones for this project:

Milestone 1: Submittal of the Draft Focused Remedial Investigation Work Plan, including the Sampling and Analysis Plan, Quality Assurance Project Plan, and Health and Safety Plan.

Milestone 2: Submittal of the Draft Focused Remedial Investigation Report.

The field program will be completed in two phases. The first phase will be for determination of the source area plume delineation and installation of monitoring wells. The second phase will be performance of the pumping test.

4.2 Project Management, Organization and Key Technical Personnel

Dvirka and Bartilucci Consulting Engineers will be the prime consultant responsible for the Focused RI.

Firms which will be used as subcontractors for this project include:

- Om P. Popli, P.E. (Surveying) (MBE)
- Field Safety Corporation (Health and Safety) (WBE)
- Laboratory Resources, Inc. (Analytical Laboratory)
- Nancy Potak (Data Validation) (WBE)
- Zebra Environmental, Inc. (Geoprobe Installation and Sampling)
- Buffalo Drilling (Soil Boring Monitoring Well Construction)

FIGURE 4-1

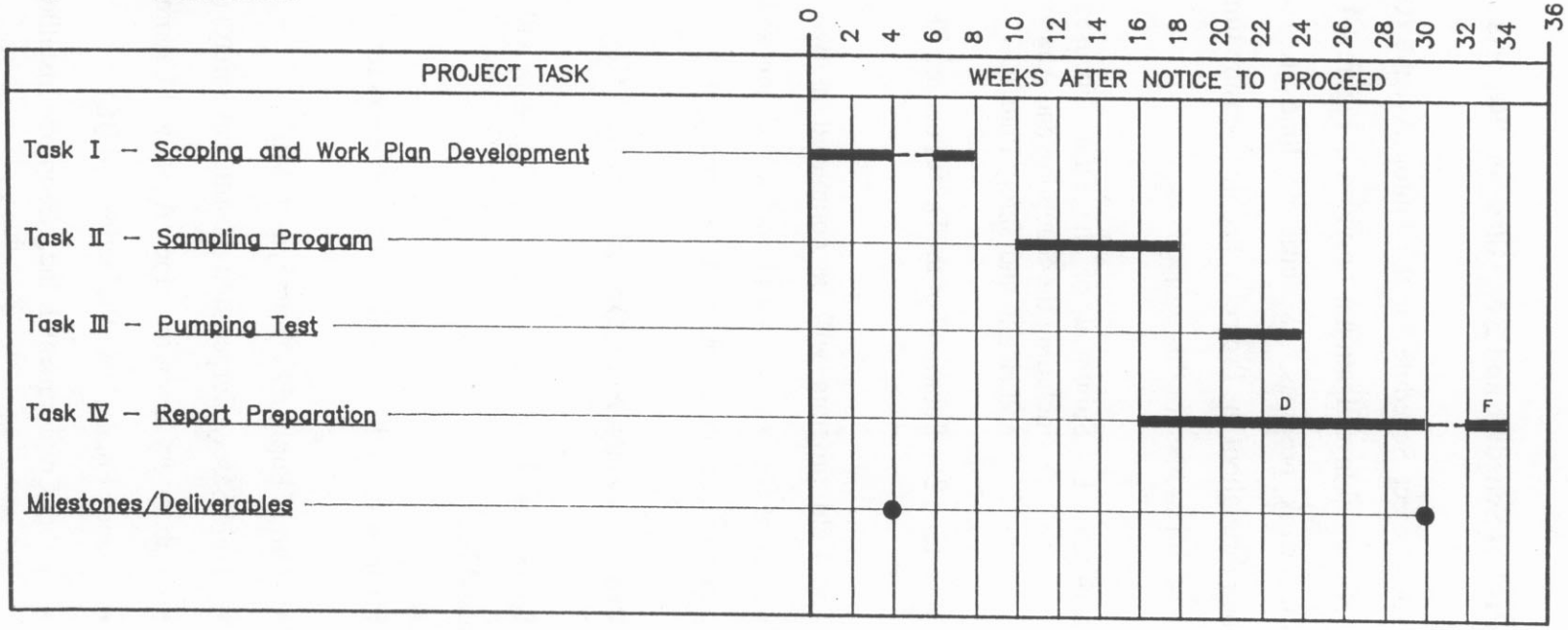
PROJECT SCHEDULE

FOR

FULTON AVENUE (GARDEN CITY PARK INDUSTRIAL AREA) SITE
FOCUSED REMEDIAL INVESTIGATION

LEGEND

- ——— = Planned Activity
- - - - = Agency Review
- D = Draft Report
- F = Final Report
- ● = Deliverable



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The Project Organization Chart for this Focused RI, illustrating both management and project responsibility functions for the project team and key personnel, is provided in Figure 4-2.

Monthly work assignment program reports and financial status reports will be prepared and submitted with the monthly invoice. Progress reports will provide detailed information by task, compliance with project schedule, accomplishments, problems and projected changes in project scope, as well as utilization of Minority and Woman-owned Business Enterprises.

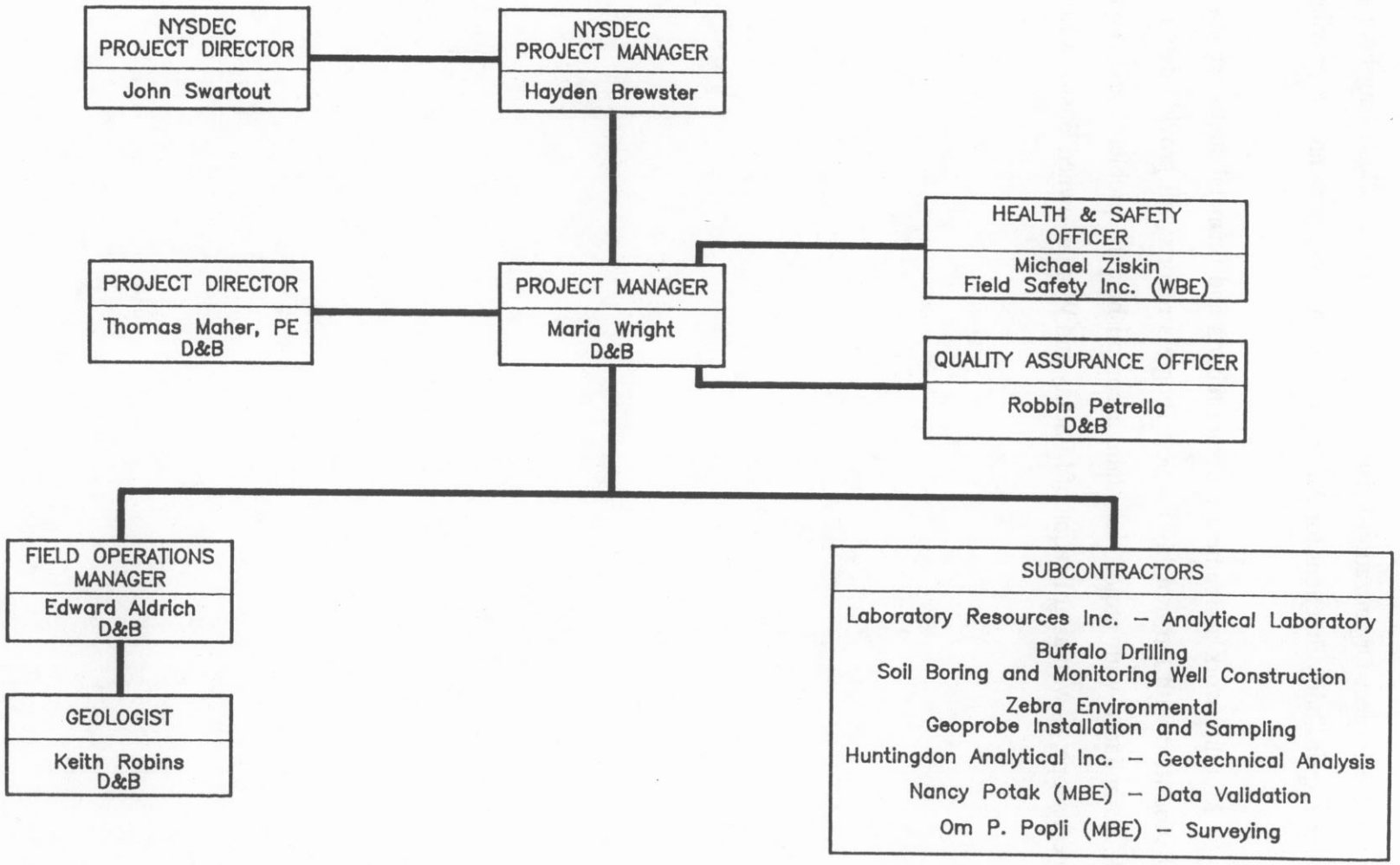
FIGURE 4–2

PROJECT TEAM ORGANIZATION CHART

FOR

FULTON AVENUE (GARDEN CITY PARK INDUSTRIAL AREA) SITE

FOCUSED REMEDIAL INVESTIGATION



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Section 5

5.0 SCHEDULE 2.11

Schedule 2.11 (a)

Summary of Work Assignment Price

Work Assignment Number D002708-20

Fulton Avenue
(Garden City Park Industrial Area)

1.	Direct Salary Costs (Schedules 2.10 (a) and (b))	$36,734.92
2.	Indirect Costs (Schedule 2.10 (g))	$58,151.38
3.	Direct Non-Salary Costs (Schedule 2.10 (d), (e), (f) and 2.11 (c) (d))	$19,773.50

Subcontract Costs

Cost-Plus-Fixed-Fee Subcontracts (Schedule 2.10 (e) and 2.11(e))

	Name of Subcontractor	Services To Be Performed	Subcontract Price
A.	Om P. Popli, P.E.	Surveying	$6,221.82
4.	Total Cost-Plus-Fixed-Fee Subcontracts		$6,221.82

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

	Name of Subcontractor	Services To Be Performed	Subcontract Price
A.	Zebra Environmental	Geoprobe Sampling	$24,222.00
B.	Laboratory Resources Inc.	Analytical Chemical Sample Analysis	$16,741.25
C.	Huntingdon Analytical	Geotechnical Sampling Analysis	$972.00
D.	Nancy Potak	Data Validation	$2,689.00
E.	Buffalo Driliing	Monitoring Well Installation	$31,827.00
F.	To be determined	Drum Removal	$0.00
5.	Total Unit Price Subcontracts		$76,451.25
6.	Subcontract Management Fee		$2,547.66
7.	Total Subcontract Costs (lines 4 + 5)		$85,220.73
8.	Fixed Fee (Schedule 2.10 (h))		$7,970.45
	Total Work Assignment Price (lines 1 + 2 + 3 + 6 + 7)		$207,850.98

Engineer/Contract #: Dvirka & Bartilucci/D002708

Date Prepared: 03/01/95

Project Name: Fulton Avenue (GCPIA) Site

Work Assignment No.: D002708-20

Schedule 2.11 (b)

Direct Labor Hours Budgeted

Labor Classification	P	SG/SS/AT	AE	S/AA/WP/JD	Total No. of Direct Labor Hrs. Budgeted
as of July 1,1994	$46.13	$25.43	$21.47	$16.92	
as of July 1,1995	$48.90	$26.95	$22.76	$17.94	
NSPE Level	IX	V	IV	II	
Task 1	20	52	80	48	200
Task 2	24	484	96	434	1038
Task 3	0	0	0	0	0
Task 4	16	112	120	176	424
Total Hours 1994	60	648	296	658	1662
Total Hours 1995	0	0	0	0	0
Subtotal 1994	$2,768	$16,479	$6,355	$11,133	$36,735
Subtotal 1995	$0	$0	$0	$0	$0
Total	$2,768	$16,479	$6,355	$11,133	$36,735

Labor Classification Key:

Principal	P	Associate Technician	AT	Word Processor	WP
Senior Geologist	SG	Assistant Engineer	AE	Administrative Assistant	AA
Senior Scientist	SS	Drafter	D	Junior Scientist	JS

Engineer/Contract #: Dvirka & Bartilucci/D002708

Date Prepared: 03/01/95

Project Name: Fulton Avenue (Garden City Park Industrial Area)

Schedule 2.11 (b-1)

Work Assignment No.: D002708-20

Direct Labor Hours Budgeted

NSPE Labor Classification / NSPE Level	IX	VII	V	IV	III	II	Total No. of Direct Administrative Labor Hrs. Budgeted
Task 1	0	0	0	0	0	8	8
Task 2	0	0	0	0	0	24	24
Task 3	0	0	0	0	0	0	0
Task 4	0	0	0	0	0	16	16
Total Hours	0	0	0	0	0	48	48

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

1. Work Plan development
2. Review work assignment progress
3. Review work assignment costs
4. CAP preparation
5. Manage subcontracts
6. Implement and manage program management and staffing plans
7. Conduct health and safety reviews
8. Word processing and graphics
9. Report editing

Schedule 2.11 (c)
Direct Non-Salary Costs
Work Assignment Number D002708-20

Item	Reimbursement* Rate	Est. No. of Units (Task 1)	Total Cost (Task 1)	Est. No. of Units (Task 2)	Total Cost (Task 2)	Est. No. of Units (Task 3)	Total Cost (Task 3)	Est. No. of Units (Task 4)	Total Cost (Task 4)	Total Estimated No. of Units	Total Estimated Cost
A. Miscellaneous (Travel)											
1. Transportation (Personal Car)	$0.29 /mile	0	$0.00	100	$29.00	0	$0.00	0	$0.00	100	$29.00
2. Van Rental	$325.00 /week	0	$0.00	8	$2,600.00	0	$0.00	0	$0.00	8	$2,600.00
3. Gas	$50.00 /week	0	$0.00	8	$400.00	0	$0.00	0	$0.00	8	$400.00
Subtotal (Travel)			$0.00		$3,029.00		$0.00		$0.00		$3,029.00
B. Miscellaneous (Expenses)											
1. Outside Services**	$200.00 /set	0	$0.00	0	$0.00	0	$0.00	2	$400.00	2	$400.00
2. Express Mail	$40.00 /package	3	$120.00	5	$200.00	0	$0.00	3	$120.00	11	$440.00
Subtotal (Misc. Expenses)			$120.00		$200.00		$0.00		$520.00		$840.00
C. Personal Protective Equipment											
1. Level D Safety Equipment	$14.00 ($/person/day)	0	$0.00	40	$560.00	0	$0.00	0	$0.00	40	$560.00
2. Level C Safety Equipment	$40.00 ($/person/day)	0	$0.00	20	$800.00	0	$0.00	0	$0.00	20	$800.00
3. Level B Safety Equipment	$50.00 ($/person/day)	0	$0.00	0	$0.00	0	$0.00	0	$0.00	0	$0.00
Subtotal (Protective Equipment)			$0.00		$1,360.00		$0.00		$0.00		$1,360.00
TOTAL			$120.00		$4,589.00		$0.00		$520.00		$5,229.00

Footnote:

In-house costs for computer services, postage, reproduction, printing, and telephone are not allowable as direct non-salary costs. These costs should be included in the indirect cost pool used to determine the indirect cost percentage for the engineer.

* See Schedule 2.10(b) for rates.

** Includes photo finishing, slides, aerial photograph reproduction and any other costs not associated with in-house capabilities.

Schedule 2.11 (d) 1

Equipment Purchased Under the Contract

Work Assignment No. D002708-20

Item	Estimated Purchase Price	No. of Units	O & M Rate * (per month)	Term of Usage (months)	Estimate Usage Cost (Col. 2 + (3x4))
				Total	$0.00

*Will be invoiced at actual costs for operation and maintenance including calibration gases, probe repair and factory maintenance.

Schedule 2.11 (d) 2

Maximum Reimbursement Rates for Consultant/Subconsultant - Owned Equipment

Work Assignment No. D002708-20

	Item	Usage Rate* ($/day)	Estimated Usage (days)	Estimate Usage Cost (Col. 2 + (3x4))
1.	Gillian 513AC air sampling pumps	$40.00	5	$200.00
			Total	$200.00

*Usage Rate = Capital Recovery Rate + O&M rate

The maximum usage rate for an item of equipment reverts to the O&M rate when the total usage reimbursement exceed 85% of the purchase price.

Schedule 2.11 (d) 3

Maximum Reimbursement Rates for Vendor - Rented Equipment

Work Assignment No. D002708-20

	Item	Maximum Reimbursement Rate* ($/day)	Maximum Reimbursement Rate* ($/week)	Maximum Reimbursement Rate* ($/month)	Estimated Usage (days)	Estimate Usage Cost (Col. 2 + (3x4))
1.	Century OVA 128	$125.00	$350.00	$870.00	35	$4,375.00
2.	Photovac Microtip	$125.00	$350.00	$760.00	35	$4,375.00
3.	MIE Miniram Digital Dust Indicator	$85.00	$150.00	$460.00	35	$2,975.00
4.	Horiba 190 Water Quality Checker	$55.00	$195.00	$542.00	15	$825.00
5.	Solinst Water Level Indicator	$25.00	$65.00	$220.00	15	$375.00
6.	Generator	$55.00	$150.00		5	$275.00
	Percusion Rotary Drill	$65.00			5	$325.00
					Total	$13,525.00

*Reimbursement will be paid at the Maximum Reimbursement rate or the actual rate.

Schedule 2.11 (d) 4

Expendable Supplies

Work Assignment No. D002708-20

	Item	Estimated Quantity	Units	Unit Cost*	Total Budget Cost (Col. 2 x 3)
1.	Voss disposable polyethylene weighted bailers	1	case of 24	$170.00	$170.00
2.	Sterile polystyrene sampling scoops	0.5	case of 100	$78.00	$39.00
3.	1" poly tubing	650	feet	$0.17	$110.50
				Total	$319.50

*Estimated

Schedule 2.11 (d) 5

Consumable Supplies Supplies

Work Assignment No. D002708-20

	Item	Estimated Quantity	Units	Unit Cost	Total Budgeted Cost (Col. 2 x 3)
1.	Miscellaneous				$500.00
2.					
3.					
				Total	$500.00

*Reimbursement will be paid at the Maximum Reimbursement rate or the actual rate.

Schedule 2.11 (e)
Cost Plus-Fixed-Fee Subcontracts

Fulton Avenue
Garden City Park, Long Island

1. NAME OF SUBCONTRACTOR	SERVICES TO BE PERFORMED	SUBCONTRACT PRICE
OM P. POPLI, PE, LS, PC	Surveying Services	$6,225.0

A. Direct Salary Costs

Professonal Responsibility Levle (NSPE)	Labor Class-ification	Average Reimbursement Rate ($/hr.)	Maximum Reimbursement Rate($/hr.)	Estimated No. of Hours	Total Estimated Direct Salary Cost
VII	Principal Engineer	$44.19	$48.16	4	$176.76
IV	Surveyor	$23.99	$26.39	0	
III	Surveyor	$18.12	$20.11	44	$797.28
III	CADD Technician	$18.12	$20.11	20	$362.40
II	Surveyor	$16.44	$18.41	28	$460.32
I	Surveyor	$13.87	$15.54	0	$0.00

TOTAL DIRECT SALARY COSTS: (A) $1,796.76

FOOTNOTES:

1) These rates will be held firm until December 31, 1995.
2) Reimbursement will be limited to the lesser of either the individual's acutal hourly rate or the maximum rate for each labor category.
3) Reimbursement will be limited to the maximum reimbursement rate for the professional responsibility of the actual work performed
4) Only those labor classifications indicated with an astelsk (*) will be entitled to overtime
5) Reimbursement for technical time of principals, owners and officers will be limited to the maximum reimbursement rate of that labor category, the actual hourly labor rate paid, or the State of New York M-5 rate, whichever is lower.
6) The maximum rates in each labor category can be modified only by mututal written agreement and approved by both the Department and the Comptroller
7) Maximum reimbursement rates may be exceeded for work assignment activities that are under the jurisdiction of Schedule of Prevailing Wage Rates sent by the New York State Department of Labor.
8) Proposal based upon non-prevailing wage rates not subject to NYSDOL.
9) Existing verticle site control to be furnished by D&B and will be utilized.
10) Random baselines will be established for the horizontal location of monitoring wells.

B. Indirect Costs

Indirect costs shall be paid based on a percentage of direct salary costs incurred which shall not exceed a maximum of 117% or the actual rate calculated in accordance with 48 CFR Federal Acquisition Regulation, whichever is lower.

Amount budgeted for indirect costs is ($1,796.76 x 1.17) $2,102.21 (B)

C. Maximum Reimbursement Rates for Direct Non-Salary Costs

Item	Max. Reimbursement Rate (specify unit)		Est. No. of Units		Total Estimated Cost
1. Travel:					
Lodging & Per Diem	$178	day @ 6	mandays	=	$1,068.00
Survey Van	$75.00	day @ 4	days	=	$300.00
Auto CADD Station	$7.60	hour @ 20	hours	=	$152.00
HNU	$60.00	day @ 1	days	=	$60.00
Tolls, Telephone, Copies, Etc.			L.S.	=	$50.00
					$1,630.00
2. Supplies					
Level "D" Safety Equipment:					
	$18.00 /day	@ 6	mandays	=	$108.00

Total Direct Non-Salary Costs $1,738.00 (C)

D. Fixed Fee

The Fixed Fee is (15% of D.T.L. + Indirect Costs) $584.85 (D)
See Schedule 2.10(h) for how the fixed fee shoulds be claimed.

TOTAL OF A + B + C + D $6,221.82
Say $6,225.00

ESTIMATE OF MANHOURS

Fulton Avenue

Garden City Park, Long Island

2 - Man Field Crew

Labor Classification NSPE Level	Principal Engineer VII	Surveyor IV	Surveyor II	Surveyor I	Surveyor III	CADD Technician III
PROJECT MANAGEMENT						
FIELD						
Travel To & From Site			16		16	
Establish Baseline (random) Horizontal & Vertical Controls			4		4	
Locate Site Features, such as: All Buildings & Building face around Monitoring Well area, Edge of Pavement, Sidewalk, etc. (N.I.C)			0		0	
Locate Monitoring Wells (6), Soil Samples, Surface Water Sample Subsurface Sample Locations			4		4	
Elevate Monitoring Wells (6)			4		4	
OFFICE						
Tax Maps & Deed Research					8	
Notes Reduction						
Base Mapping - incorporate existing site features						8
Miscellaneious Office Work (Report, Etc.)	4				8	12
TOTAL HOURS =	4		28		44	20

SCHEDULE 2.11 (f) 1
MAXIMUM REIMBURSEMENT RATES FOR
UNIT PRICE SUBCONTRACTS
FULTON AVENUE (GARDEN CITY PARK INDUSTRIAL AREA)
Work Assignment No: D002708-20

NAME OF SUBCONTRACTOR	SERVICES TO BE PERFORMED	SUBCONTRACT PRICE
Buffalo Drilling	Monitoring Well Installation	$32,940.95

ITEM	UNITS	RATE	TOTAL PRICE
1. A. MOBILIZATION/DEMOBILIZATION	800 MILES	$5.00 /MILE	$4,000.00
B. CONST. & REMOVAL OF DECON PAD	LUMP SUM	$500.00	$500.00
C. SITE SETUP AND REMOVAL	LUMP SUM	$200.00	$200.00
D. WELL/BORING SETUP	6 WELLS	$100.00 /WELL	$600.00
2. A . HOLLOW STEM AUGER			
1. 0-50 FT			
b. 4.25 IN H.S.A.	300 FT	$11.00 /FT	$3,300.00
1. 50-100 FT			
b. 4.25 IN H.S.A.	195 FT	$15.00 /FT	$2,925.00
1. 100-150 FT			
b. 4.25 IN H.S.A.	60 FT	$15.00 /FT	$900.00
5. SPLIT SPOON SAMPLING			
1. 0-50 FT.			
a. 2 IN. OD	150 SAMPLES	$6.00 /SAMP	$900.00
2. 50-100 FT.			
a. 2 IN. OD	100 SAMPLES	$10.00 /SAMP	$1,000.00
3. 100-150 FT.			
a. 2 IN. OD	30 SAMPLES	$10.00 /SAMP	$300.00
6. PVC WELL RISER, SCHEDULE 40			
A. 2 IN ID	450 FT	$5.00 /FT	$2,250.00
7. PVC WELL SCREEN, SCHEDULE 40			
2. 2 IN ID #10 SLOT, 15 FOOT	90 FT	$15.00 /FT	$1,350.00
8. SAND PACK	30 BAG	$10.00 /BAG	$300.00
9. BENTONITE			
A. PELLETS	15 BUCKETS	$50.00 /BUCKET	$750.00
B. POWDER	25 BAG	$30.00 /BAG	$750.00
10. GROUT			
A. PORTLAND CEMENT TYPE I	100 BAGS	$12.00 /BAG	$1,200.00
B. PORTLAND CEMENT TYPE II	15 BAGS	$12.00 /BAG	$180.00
11. PRO-CASING			
A. 4 IN ID FLUSH MOUNT SURFACE CASING	6 CASINGS	$150.00 /CASING	$900.00
B. LOCKS	6 LOCKS	$12.00 /LOCK	$72.00
12. CONTAINERIZATION OF DRILLING MATERIAL			
STAGING ON PALLETS			
A. DRILL/DEVELOPMENT WATER	40 DRUMS	$50.00 /DRUM	$2,000.00
B. SOIL CUTTINGS	30 DRUMS	$50.00 /DRUM	$1,500.00
C. PERSONAL PROTECTIVE EQUIPMENT	4 DRUMS	$50.00 /DRUM	$200.00
15. WELL DEVELOPMENT	15 HRS	$125.00 /HR	$1,875.00
16. STANDBY TIME	15 HRS	$125.00 /HR	$1,875.00
17. PER DIEM	40 DAYS	$50.00 /DAY	$2,000.00
	SUBTOTAL		$31,827.00
	SUBCONTRACT MANAGEMENT FEE		$1,113.95
	TOTAL		$32,940.95

SCHEDULE 2.11 (f) 2
MAXIMUM REIMBURSEMENT RATES FOR
UNIT PRICE SUBCONTRACTS
FULTON AVENUE (GARDEN CITY PARK INDUSTRIAL AREA) SITE
Work Assignment No. D002708-20

NAME OF SUBCONTRACTOR	SERVICES TO BE PERFORMED	SUBCONTRA
Laboratory Resources, Inc.	Chemical Sample Analysis	$17,327.19

Item	Method	Quantity	Rate	Total Price
Groundwater				
Chlorinated Vocs	91-1	25	$263.25 /sample*	$6,581.25
Vocs	91-1	6	$135.00 /sample	$810.00
Metals	Superfund CLP Inorganics	6	$160.00 /sample	$960.00
Cyanide	335.2	6	$20.00 /sample	$120.00
Subsurface soil				
Chlorinated Vocs	91-1	31	$135.00 /sample	$4,185.00
Air	NIOSH	4	$175.00 /sample	$700.00
Soil Gas	NIOSH	6	$175.00 /sample	$1,050.00
QA/QC Samples				
Blanks				
Air (NIOSH)		1	$175.00 /sample	$175.00
Groundwater				
Matrix Spike				
Vocs	91-1	2	$135.00 /sample	$270.00
Metals	Superfund CLP Inorganics	1	$160.00 /sample	$160.00
Cyanide	335.2	1	$20.00 /sample	$20.00
Matrix Spike Duplicate				
Vocs	91-1	2	$135.00 /sample	$270.00
Metals	Superfund CLP Inorganics	1	$160.00 /sample	$160.00
Cyanide	335.2	1	$20.00 /sample	$20.00
Matrix Spike Blank				
Vocs	91-1	2	$135.00 /sample	$270.00
Metals	Superfund CLP Inorganics	1	$160.00 /sample	$160.00
Cyanide	335.2	1	$20.00 /sample	$20.00
Soil				
Matrix Spike				
Vocs	91-1	2	$135.00 /sample	$270.00
Matrix Spike Duplicate				
Vocs	91-1	2	$135.00 /sample	$270.00
Matrix Spike Blank				
Vocs	91-1	2	$135.00 /sample	$270.00

*Cost for sample analysis based upon 24-hour turnaround

SUBTOTAL	$16,741.25
SUBCONTRACT MANAGEMENT FEE	$585.94
TOTAL	$17,327.19

SCHEDULE 2.11 (f) 4
MAXIMUM REIMBURSEMENT RATES FOR
UNIT PRICE SUBCONTRACTS
FULTON AVENUE (GARDEN CITY PARK INDUSTRIAL AREA) SITE
Work Assignment No. D002708-20

NAME OF SUBCONTRACTOR	SERVICES TO BE PERFORMED		SUBCONTRACT PRICE	
Nancy Potak	Data Validation			$2,689.00
Item	Quantity		Rate	Total Price
Groundwater				
Chlorinated Vocs	91-1	25	$25.00 /sample	$625.00
Vocs	91-1	6	$25.00 /sample	$150.00
Metals	Superfund CLP Inorganics	6	$35.00 /sample	$210.00
Cyanide	335.2	6	$1.00 /sample	$6.00
Subsurface soil				
Chlorinated Vocs	91-1	31	$30.00 /sample	$930.00
Air	NIOSH	4	$30.00 /sample	$120.00
Soil Gas	NIOSH	6	$30.00 /sample	$180.00
QA/QC Samples				
Blanks				
Air (NIOSH)		1	$30.00 /sample	$30.00
Groundwater				
Matrix Spike				
Vocs	91-1	2	$25.00 /sample	$50.00
Metals	Superfund CLP Inorganics	1	$35.00 /sample	$35.00
Cyanide	335.2	1	$1.00 /sample	$1.00
Matrix Spike Duplicate				
Vocs	91-1	2	$25.00 /sample	$50.00
Metals	Superfund CLP Inorganics	1	$35.00 /sample	$35.00
Cyanide	335.2	1	$1.00 /sample	$1.00
Matrix Spike Blank				
Vocs	91-1	2	$25.00 /sample	$50.00
Metals	Superfund CLP Inorganics	1	$35.00 /sample	$35.00
Cyanide	335.2	1	$1.00 /sample	$1.00
Soil				
Matrix Spike				
Vocs	91-1	2	$30.00 /sample	$60.00
Matrix Spike Duplicate				
Vocs	91-1	2	$30.00 /sample	$60.00
Matrix Spike Blank				
Vocs	91-1	2	$30.00 /sample	$60.00

SCHEDULE 2.11 (f) 5
MAXIMUM REIMBURSEMENT RATES FOR
UNIT PRICE SUBCONTRACTS
FULTON AVENUE (GARDEN CITY PARK INDUSTRIAL AREA)
Work Assignment No. D002708-20

NAME OF SUBCONTRACTOR	SERVICES TO BE PERFORMED	SUBCONTRACT PRICE
Huntingdon Analytical	Geotechnocal Sample Analysis	$972.00

Item	Quantity	Rate	Total Price
Subsurface soil			
Grain size analysis with hydrometer	12	$81.00 /sample	$972.00

SCHEDULE 2.11 (f) 6
MAXIMUM REIMBURSEMENT RATES FOR
UNIT PRICE SUBCONTRACTS
FULTON AVENUE (GARDEN CITY PARK INDUSTRIAL AREA)
Work Assignment No. D002708-20

NAME OF SUBCONTRACTOR	SERVICES TO BE PERFORMED	SUBCONTRACT PRICE
Zebra Environmental	**Geoprobe Sampling**	**$25,069.77**

	Item	Quantity	Rate	Total Price
1	Mobilization and Demobilization, Including, Site Set Up and Installation of a Temporary Decontamination Pad.	1 Lump Sum	$900.00	$900.00
2	Geoprobe System or Equivalent with 2 man Crew, includes 8 hours of On-site work	17 Days	$1,075.00	$18,275.00
3	Overtime Charge for On-site Work in Excess of 8 hours	15 Hours	$175.00	$2,625.00
4	Probe Sampling			
	a. Groundwater Samples	25 Samples	$19.00	$475.00
	b. Soil samples	10 Samples	$27.00	$270.00
	c. Soil gas samples	5 Samples	$19.00	$95.00
5	Portland Cement (Type I or II)	5 Bags	$9.00	$45.00
6	Bentonite Powder	5 Bags	$32.00	$160.00
7	Bentonite Pellets	1 Bags	$32.00	$32.00
8	Standby time	10 Hours	$80.00	$800.00
9	Site Restoration			
	a. Cleanfill	20 Cu Ft	$9.00	$180.00
	b. Grass Seeding	5 Sq Ft	$1.00	$5.00
	c. Asphalt	20 Cu Ft	$9.00	$180.00
	d. Concrete	20 Cu Ft	$9.00	$180.00
	SUBTOTAL			$24,222.00
	SUBCONTRACT MANAGEMENT FEE			$847.77
	TOTAL			$25,069.77

Engineer/Contract #: Dvirka & Bartilucci/D002708

Date Prepared: 03/01/95

Project Name: Fulton Avenue (Garden City Park Industrial Area)

Work Assignment No.: D002708-20

Scedule 2.11 (h)

Monthly Cost Control Report

Summary of Labor Hours

Labor Classification	P(PD)	SG/SS/AT	AE	JS/AA/WP/J	Total No. Labor Hrs.
as of July 1, 1994	$46.13	$25.43	$21.47	$16.92	
as of July 1, 1995	$48.90	$26.95	$22.76	$17.94	
NSPE Level	IX	V	IV	II	
Task 1	0/ 20	0/ 52	0/ 80	0/ 48	0/ 200
Task 2	0/ 24	0/ 484	0/ 96	0/ 434	0/ 1038
Task 3	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0
Task 4	0/ 16	0/ 112	0/ 120	0/ 176	0/ 424
Total Hours 1994	0/ 60	0/ 648	0/ 296	0/ 658	0/ 1662
Total Hours 1995	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0
Subtotal 1994	$2,768	$16,479	$6,355	$11,133	$36,735
Subtotal 1995	$0	$0	$0	$0	$0
Total	$2,768	$16,479	$6,355	$11,133	$36,735

Labor Classification Key:

Principal	P	Senior Scientist	SS	Junior Scientist	JS
Project Director	PD	Associate Techninician	AT	Word Processor	WP
Senior Geologist	SG	Administrative Assistant	AA		

Engineer: Dvirka & Bartilucci
Contract No.: D002708
Project Name: Fulton Avenue
Work Assignment No.: D002708-20
Task No./Name: All Tasks
Complete: 0.00%

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

Date Prepared:
Billing Period:
Invoice No.:

	A Costs Claimed This Period	B Paid To Date	B1 Disallowances Recorded This Month	C Total Disallowed To Date	D Total Costs Incurred To Date (A+B+B1)	E F-D Estimated Costs To Completion	F 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	0.00	0.00	0.00	36,734.92	0.00
2. Indirect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	58,151.38	0.00
3. Subtotal Direct Salary Costs and Indirect Costs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	94,886.30	0.00
4. Travel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3,029.00	0.00
5. Other Non-Salary Costs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16,744.50	0.00
6. Subtotal Direct Non-Salary Costs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	19,773.50	0.00
7. Subcontractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	85,220.73	0.00
8. Total Work Assignment Cost	0.00	0.00	0.00	0.00	0.00	0.00	0.00	199,880.53	0.00
9. Fixed Fee	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7,970.45	0.00
10. Total Work Assignment Price	0.00	0.00	0.00	0.00	0.00	0.00	0.00	207,850.98	0.00

Project Manager (Engineer) _____ Date _____

Engineer: Dvirka & Bartilucci
Contract No.: D002708
Project Name: Fulton Avenue (GCPIA)
Work Assignment No.: D002708-20

Date Prepared:
Billing Period:
Invoice No.:

SCHEDULE 2.11(g) SUPPLEMENTAL
MONTHLY COST CONTROL REPORT
SUBCONTRACTS

Subcontract Name	Subcontract Costs Claimed this Application Incl. Resubmittals	Subcontract Costs Approved for Payment on Previous Application	Total Subcontract Costs to Date (A plus B)	Subcontract Approved Budget
1. Om P. Popli, P.E.	0.00	0.00	0.00	6221.82
2. Laboratory Resources, Inc.	0.00	0.00	0.00	17327.19
3. Nancy Potak	0.00	0.00	0.00	2689.00
4. Huntingdon Analytical	0.00	0.00	0.00	972.00
5. Zebra Environmental Inc.	0.00	0.00	0.00	25069.77
6. Parrat Wolffe, Inc.	0.00	0.00	0.00	32940.95
Total				85220.73

Engineer: Dvirka & Bartilucci
Contract No.: D002708
Project Name: Fulton Avenue (GCPIA) site
Work Assignment No.: D002708-20
Task No./Name: 1/ Scoping and Work Plan Development
Complete: 0.00%

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

Date Prepared:
Billing Period:
Invoice No.:

	A Costs Claimed This Period	B Paid To Date	B1 Disallowances Recorded This Month	C Total Disallowed To Date	D Total Costs Incurred To Date (A+B+B1)	E F-D Estimated Costs To Completion	F 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	0.00	0.00	0.00	4,774.72	0.00
2. Indirect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7,558.38	0.00
3. Subtotal Direct Salary Costs and Indirect Costs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12,333.10	0.00
4. Travel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5. Other Non-Salary Costs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	120.00	0.00
6. Subtotal Direct Non-Salary Costs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	120.00	0.00
7. Subcontractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8. Total Work Assignment Cost	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12,453.10	0.00
9. Fixed Fee	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,035.98	0.00
10. Total Work Assignment Price	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13,489.08	0.00

Project Manager (Engineer) _____ Date _____

Engineer: Dvirka & Bartilucci
Contract No.: D002708
Project Name: Fulton Avenue (GCPIA) site
Work Assignment No.: D002708-20
Task No./Name: 2/Field Investigation
Complete: 0.00%

Date Prepared:
Billing Period:
Invoice No.:

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

	A Costs Claimed This Period	B Paid To Date	B1 Disallowances Recorded This Month	C Total Disallowed To Date	D Total Costs Incurred To Date (A+B+B1)	E F-D Estimated Costs To Completion	F 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	0.00	0.00	0.00	22,819.64	0.00
2. Indirect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	36,123.49	0.00
3. Subtotal Direct Salary Costs and Indirect Costs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	58,943.13	0.00
4. Travel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3,029.00	0.00
5. Other Non-Salary Costs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16,104.50	0.00
6. Subtotal Direct Non-Salary Costs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	19,133.50	0.00
7. Subcontractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	85,220.73	0.00
8. Total Work Assignment Cost	0.00	0.00	0.00	0.00	0.00	0.00	0.00	163,297.36	0.00
9. Fixed Fee	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4,951.22	0.00
10. Total Work Assignment Price	0.00	0.00	0.00	0.00	0.00	0.00	0.00	168,248.58	0.00

Project Manager (Engineer) _____ Date _____

Engineer: Dvirka & Bartilucci
Contract No.: D002708
Project Name: Fulton Avenue (GCPIA) site
Work Assignment No.: D002708-20
Task No./Name: 3/Pumping Test
Complete: 0.00%

Date Prepared:
Billing Period:
Invoice No.:

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

	A	B	B1	C	D	E	F	G	H
	Costs Claimed This Period	Paid To Date	Disallowances Recorded This Month	Total Disallowed To Date	Total Costs Incurred To Date (A+B+B1)	F-D Estimated Costs To Completion	Total Work Assignment Price (A+B+E)	Approved Budget	Estimated Under/(Over) (G-F)
1. Direct Salary Costs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2. Indirect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3. Subtotal Direct Salary Costs and Indirect Costs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4. Travel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5. Other Non-Salary Costs	0.00	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	0.00	0.00	0.00	0.00	0.00
7. Subcontractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8. Total Work Assignment Cost	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9. Fixed Fee	0.00	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	0.00	0.00	0.00	0.00	0.00

Project Manager (Engineer) _____ Date _____

Engineer: Dvirka & Bartilucci
Contract No.: D002708
Project Name: Fulton Avenue (GCPIA) site
Work Assignment No.: D002708-20
Task No./Name: 4/Report Preparation
Complete: 0.00%

Date Prepared:
Billing Period:
Invoice No.:

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

	A	B	B1	C	D	E	F	G	H
	Costs Claimed This Period	Paid To Date	Disallowances Recorded This Month	Total Disallowed To Date	Total Costs Incurred To Date (A+B+B1)	F-D Estimated Costs To Completion	Total Work Assignment Price (A+B+E)	Approved Budget	Estimated Under/(Over) (G-F)
1. Direct Salary Costs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9,140.56	0.00
2. Indirect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14,469.51	0.00
3. Subtotal Direct Salary Costs and Indirect Costs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	23,610.07	0.00
4. Travel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5. Other Non-Salary Costs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	520.00	0.00
6. Subtotal Direct Non-Salary Costs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	520.00	0.00
7. Subcontractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8. Total Work Assignment Cost	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24,130.07	0.00
9. Fixed Fee	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,983.25	0.00
10. Total Work Assignment Price	0.00	0.00	0.00	0.00	0.00	0.00	0.00	26,113.31	0.00

Project Manager (Engineer) _____ Date _____

MBE/WBE
UTILIZATION PLAN
FULTON AVENUE (GCPIA) SITE
Work Assignment No. D002708-20

Areas to be Subcontracted	Subcontractor Name	MBE/WBE	Total Subcontract Value	% MBE/WBE Utilization
1. Data Validation	Nancy Potak	WBE	$2,689.00	1.3%
2. Surveying Services	Om P Popli, P.E.	MBE	$6,221.82	2.9%
3. Field Safety Corporation	Health and Safety	WBE	$2,500.00	1.2%
Total MBE Utilization	MBE Subcontract Value / Total Contract Value	=	$6,222 / $211,785	2.9%
Total WBE Utilization	WBE Subcontract Value / Total Contract Value	=	$5,189 / $211,785	2.5%