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NYSDEC CONTRACT NO. D003826

PROJECT MANAGEMENT WORK PLAN FOR PREFERRED ELECTRIC SITE REMEDIAL INVESTIGATION\FEASIBILITY STUDY (RI/FS)

WORK ASSIGNMENT NO. D003826-12

Submitted to:

New York State Department of Environmental Conservation
Albany, New York

Submitted by:

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PROJECT MANAGEMENT WORK PLAN
FOR PREFERRED ELECTRIC SITE
REMEDIAL INVESTIGATION\FEASIBILITY STUDY (RI/FS)

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1.0 INTRODUCTION

This Project Management Work Plan (PMWP) has been prepared by Harding Lawson Associates (HLA) in response to Work Assignment (WA) #D003826-12 from the New York State Department of Environmental Conservation (NYSDEC). This WA requested the preparation of a PMWP to document the overall scope, schedule, budget, and staffing plans for the Preferred Electric Motors (PEM) (Site) Remedial Investigation\Feasibility Study (RI\FS). A RI/FS Work Plan has been prepared under separate cover that includes the field activities plan, Health & Safety Plan (HASP), Quality Assurance Project Plan (QAPjP), and the Community Participation Plan.

The Main Project Tasks include:

Task 1 – Work Plan Development
Task 2 – Phase I/Phase II Remedial Investigation
Task 3 – Interim Remedial Measures (IRMs), if necessary
Task 4 – Feasibility Study
Task 5 – Standby Subcontracts

Attached to this PMWP are the following:

Attachment A – Tables
Attachment B – Figures
Attachment C – Schedule
Attachment D – Cost Tables

1.1 SITE INFORMATION

The Site is located at 42 Fernwood Avenue, in the City of Rochester, Monroe County, New York. (Figure 1-1). The Site is situated on 0.35 acres in a mixed commercial and residential use area of the City of Rochester. The property consists of a 13,215 square foot manufacturing building and a paved/gravel parking lot. The building is a one-story concrete building, with a small two story section.

PEM, an electric motor refurbishing company, began operations at the Site in 1951. In May 2000 PEM reported that a spill of chlorinated solvents had occurred at the Site from drums staged at the Site.

PEM removed approximately fifteen 55-gallon drums of spent solvent, and remove the

top several inches of soil from the Site yard for off-site disposal in May/June 2000. PEM stopped remedial activities due to lack of funds. The NYSDEC conducted limited post surface soil removal action surface and sub-surface soil sampling in June 2000.

Based on the high concentration of chlorinated solvents (maximum detected concentration of trichloroethene [TCE] was 290 milligrams per kilogram [mg/Kg], tetrachloroethene [PCE] was 2,400 mg/Kg, and 1,1,1-trichloroethane [1,1,1-TCA] was 290 mg/Kg) detected in surface and sub-surface soils at the site, the NYSDEC contracted MARCOR Remediation to remove approximately 470 tons of contaminated soil and a 1000-gallon underground storage tank (reportedly contained fuel product) from the Site yard. This work was completed in February 2001. The excavation was completed to bedrock at about eight-feet below ground surface (bgs).

In response to the high concentrations of chlorinated solvents detected in Site soils, the New York State Department of Health (NYSDOH) conducted indoor air sampling at adjacent residences in the Summer and fall of 2000, and the winter of 2001. TCE and PCE were detected at concentrations of 440 micrograms per cubic meter ($\mu g/m^3$) and 510 $\mu g/m^3$, respectively, in air samples collected from the basement of 40 Fernwood Avenue, prompting an IRM. NYS guidance value for PCE is 100 $\mu g/m^3$, and proposed guidance value for TCE is 5 $\mu g/m^3$. In August 2000 the NYSDEC contracted MARCOR Remediation to install a soil vapor extraction (SVE) system in the basement and crawl space of the residence at 40 Fernwood Avenue. The system, consisting of a blower, a carbon filter, and three perforated polyvinyl chloride collection lines (one below the finished basement, one below the unfinished basement, and one below ground between the Site and the residence), were completed and put on-line in November 2000. Samples collected from 40 Fernwood Avenue after installation of the SVE system were non-detect for TCE and PCE.

Groundwater investigations have not been conducted at the Site.

2.0 SCOPE OF WORK

Existing data indicates that there is a contravention of applicable standards, criteria and guidance values (SCGs) for chlorinated solvents in Site soil, as well as indoor air near the Site. The Site appears to be the source of the chlorinated solvents detected in indoor air in neighboring homes.

Existing data reviewed during Task 1; Work Plan Development, is not sufficient to evaluate the potential threat to human health and the environment, or to evaluate the remedial alternatives for the Site. Specifically, additional data collection is necessary to determine: 1) the vertical and areal extent of groundwater contamination, if present; 2) the extent of the source(s) of contamination; and 3) the migration paths and actual, or potential receptors.

The data collection and evaluation to satisfy these data needs will be conducted as Task 2 of the work assignment. Task 2 activities include the RI fieldwork, described below, and preparing the RI report. The objective of Task 2 activities is to gather sufficient data to determine the risk to human health and the environment, and to evaluate the remedial alternatives for the Site. Task 3, IRMs, will be completed if mitigation is deemed necessary to address potential human exposure, and if they are requested by the NYSDEC. The evaluation of the feasibility of the remedial alternatives will be conducted under Task 4; the preparation and distribution of the FS report. Task 5 covers the procurement of standby subcontractors.

2.1 TASK 1 –WORK PLAN DEVELOPMENT

Task 1 of the WA is the preparation of the Work Plan. Task one included review of existing Site data, a historical review, a Site visit with the NYSDEC, and a scoping session with the NYSDEC. A preliminary historical records review and title search was conducted during the preparation of this work plan. To the extent practical, HLA will collect additional information, as needed, to augment the existing data. Additional information will include locating building plans and an attempt to contact former Site employees. In addition, attempts will be made while on-site, to the extent practical, to locate additional floor drains and their discharge points.

2.2 TASK 2 – REMEDIAL INVESTIGATION

The RI fieldwork is anticipated to be conducted in two phases. The data reviewed from the first phase will be used to refine the data collection needs of the second phase.

Evaluations of Phase One data will be discussed with the NYSDEC prior to commencing Phase Two. General field activities, including mobilization, health and safety, and decontamination, are described in the following subsections. Upon approval of the Work Plan, HLA will begin procurement of subcontractors. See Table 3-1 for proposed field tasks and methodology.

Mobilization. Upon receiving the NYSDEC authorization, HLA and its subcontractors will mobilize to the Site and begin the RI fieldwork. Mobilization will include obtaining utility clearances and acquisition of the following:

- Transportation to and from the Site;
- Geoprobe® and drilling equipment and field supplies;
- health and safety equipment;
- decontamination supplies and equipment; and
- sampling equipment.

A field team orientation meeting will be held on-site with HLA and subcontractor personnel to familiarize field workers with Site history, health and safety requirements, equipment calibration procedures, and all other investigation methods and procedures.

Health and Safety. HLA anticipates that the RI fieldwork will be conducted at Level D personal protection. Specific investigation activities and required level of personal protection are set forth in the Site-specific HASP. Criteria for upgrading or downgrading the specified level of protection are also provided in the Site-specific HASP. Additional health and safety requirements are set forth in the Program HASP (ABB-ES, 1994). Should Site conditions pose a threat to those present on-site, and/or should Site conditions warrant an upgrade from Level D, as defined by the HASP, work will stop and the situation will be reevaluated by the NYSDEC and HLA.

Investigation Derived Wastes. The method of disposing investigation-derived wastes (IDW) generated during this RI will be based upon whether the wastes are considered hazardous or non-hazardous. The approach to field screening and handling of the IDW are described in the RI/FS Work Plan.

United States Department of Transportation approved 55-gallon containers filled during the

field investigation will be staged on-site in an area designated by the NYSDEC, and approved by the Site owner. Transport and disposal of these containers will be arranged by HLA on behalf of the NYSDEC. Containers will be labeled as described in the Site-specific QAPjP.

2.2.1 Site Survey and Base Map

HLA's survey subcontractor will complete a survey of the Site and surrounding area and create a base map. Horizontal locations will be tied to the New York State Plane (NYS) Coordinate System using North American Datum (NAD) of 1983. The site plan will provide horizontal locations of relevant Site features, including surrounding homes and businesses at a scale of 1 inch to 50 feet. Relevant features include, but are not limited to all structures, buildings, roads, fences, new monitoring wells, underground utilities, fire plugs, and power poles.

Vertical elevations of the six Phase One monitoring wells and potential six Phase Two monitoring wells will be tied to msl, National Geodetic Vertical Datum (NGVD) of 1927, and measured to an accuracy of 0.01 ft. Horizontal well measurements will be to an accuracy of 0.1 ft.

The base map will be used to accurately locate all Geoprobe® sample points, monitoring wells, and any other media sampling locations. The Base map will be completed after the installation of the Phase One wells. The Phase Two wells will be surveyed with a second mobilization.

2.2.2 Analytical Program

Selected samples from the RI field work will be submitted for laboratory analysis. See Table 3-2 for proposed sample analysis and identification.

PHASE I

PCB SAMPLING Prior to any subsurface sampling activities within the Site facility samples will be collected of oil located on the facility floor to evaluate the potential for polychlorinated biphenyl contamination.

FLOOR DRAIN EVALUATION / DRAIN WATER AND SEDIMENT SAMPLING Drain sediment and water samples will be collected from floor drains within the Site facility and a potential dry well located in the Site yard, if possible. Samples results will be used to evaluate whether drain water and/or sediments present within the lines are potentially

acting as continued source areas for groundwater and/or soil vapor contamination.

GEOPROBE® SOIL SAMPLING A Geoprobe® sampling device will be used to collect soil samples to identify potential chlorinated solvents and fuel related compounds. The Geoprobe® pushes and/or hammers rods and probe tips into the subsurface for sample collection. Samples will be collect over a three-day period. It is anticipated that up to 17 borings can be completed, including the collection of up to 34 soil samples for off-site analyses. The actual number of borings completed will depend on the location, number, and depth of samples collected from each boring. See Figure 3-1 for proposed locations.

GROUNDWATER MONITORING WELL INSTALLATION To determine groundwater quality upgradient, at, and downgradient of the Site, up to six groundwater monitoring wells will be installed. Characterization of groundwater flow conditions and distribution of potential contamination at the Site, and downgradient of the Site is required to define aquifer characteristics and potential receptors. Groundwater analytical data and permanent data monitoring points will be used to assess the extent of potential contamination in the vicinity of the Site, and to allow monitoring of that contamination, if present. See Figure 3-2 for proposed locations.

GEOPROBE® SOIL GAS SAMPLING If groundwater samples indicate the presence of contamination down gradient of the Site, up to ten soil gas samples will be collected to evaluate the potential vapor migration of contaminants from the groundwater. Soil gas samples will be collected using a Geoprobe® sampling device. Sample locations will be determined based on the results of the groundwater sampling.

INDOOR AIR AND SUB SLAB VAPOR SAMPLING Based on results of the Geoprobe® soil gas sampling, sub-slab vapor sampling and indoor air sampling may be conducted to evaluate potential vapor migration of contaminants from the groundwater and soil beneath the Site and surrounding residences/business into occupied indoor spaces. Up to 15 sub-slab vapor samples and 15 indoor air samples may be collected within the PEM facility building and neighboring buildings, as well as up to four ambient air samples from the exterior of the buildings.

PHASE II

GROUNDWATER MONITORING WELL INSTALLATION Based on groundwater samples collected from Phase One monitoring wells, up to six additional groundwater monitoring wells will be installed to further delineate the potential plume. Groundwater analytical data and permanent data monitoring points will be used to assess the distribution of potential contamination in the vicinity of the Site, and to allow monitoring of that

contamination, if present.

GEOPROBE® SOIL GAS SAMPLING Based on Phase One indoor air sample results, and Phase II groundwater sample results, up to ten soil gas samples may be collected to evaluate the potential vapor migration of contaminants from the groundwater. Soil gas samples will be collected using a Geoprobe® sampling device. Sample locations will be determined based on the results of the groundwater and indoor air sampling.

INDOOR AIR AND SUB SLAB VAPOR SAMPLING Based on analytical results of the Phase One sampling program, up to fifteen additional sub-slab vapor/indoor air samples (total of 30 samples) may be collected from additional private residences/businesses, as well as up to four ambient air samples.

2.3 REMEDIAL INVESTIGATION REPORT

Upon completion of field investigations and receipt of analytical data, HLA will initiate the preparation of the RI Report.

The RI Report will include a summary of the Site background and history developed during Task 1, including results of investigations conducted prior to the RI. Additional background information reviewed during subsequent tasks will be included. The RI Report will summarize results of the field investigations and laboratory analytical activities performed during the field portion of Task 2. The Human Health Evaluation (HHE) will be a characterization of the potential human exposure pathways under the current and potential future land use if no further remedial action is taken. The HHE will also identify the exposure pathways and chemicals of greatest significance from a public health risk perspective. Boring logs and environmental sampling data will be included as appendices to the RI Report. The information provided in the RI Report will be used to prepare and evaluate remedial alternatives for the Site during the FS.

Four copies of the Draft and seven copies of the Final RI Report will be sent to the NYSDEC Project Manager, Central Office, Albany. In addition, one copy of the Final RI Report will be submitted in electronic PDF format. The Draft report will be submitted for review and comment by the NYSDEC. The Final report will incorporate the NYSDEC review comments. The NYSDEC will be responsible for forwarding copies of the report to other state and county agencies.

2.4 TASK 3 – INTERIM REMEDIAL MEASURES

If it is determined during the course of the remedial investigation that human health or the environment are threatened, an IRM may be conducted. The IRM will be conducted to "prevent, mitigate, or remedy environmental damage or human exposure to contaminants while remedial alternatives are being considered". Based on historic indoor air data, there has been documented vapor migration of contaminants into indoor air at buildings adjacent to the Site, possibly from contaminants in Site soil (secondary source material below the PEM building) and groundwater. If a threat to public health from vapor migration is identified during the RI, HLA will complete the necessary IRMs upon approval of the NYSDEC.

The anticipated IRM (if necessary) may utilize sub-slab depressurization for off-site residences/businesses and the PEM building. Sub-slab depressurization systems (systems) are an example of an IRM that may be appropriate and may include venting sump(s) installed beneath the foundation connected to piping directed to the exterior of the building. Active extraction using blowers would be provided as necessary. After the installation of IRMs selected indoor air confirmation sampling will be performed to assess the performance of the systems.

Upon receipt of indoor air sample data, HLA will review these data with NYSDEC. If a need is identified, a letter form IRM Work Plan will be prepared and submitted to NYSDEC and NYSDOH for review and approval. For the purposes of this work plan, installations of up to 10 systems is planned. A budget has been established, based on these tentative systems, to provide immediate funding in the event that one or more IRMs are necessary. One to two systems are anticipated to be necessary for each off-site location. This work plan includes ten post-system installation indoor air confirmation samples (one for each system installed). HLA will provide scoping/planning and initial subcontractor coordination, subcontractor contracting should system installation become necessary, installation oversight, and post-system installation confirmation sampling.

2.4 TASK 4 - FEASIBILITY STUDY

Upon completion of the RI Report, a FS will be completed to evaluate the most applicable remedial alternatives. Prior to proposing a remedy for the Site, Remedial Action Objectives will be developed. The proposed remedy for the Site will be aimed at restoring the Site to pre-release conditions, or, at a minimum, eliminating or mitigating all significant threats to public and health and the environment posed by the contaminants. Scientific and engineering principles will be applied to determine the most

appropriate remedy for the Site, with the goal of protecting public health and the environment and complying with the state SCGs. The proposed remedial action will be based on the criteria outlined in 6 NYCRR 375-1.10.

For the Site, the likely media to be addressed are contaminated soil (secondary source material) anticipated to be beside and below the PEM building, contaminated groundwater as a result of contaminants leaching from secondary source material (soil), and contaminated air as a result of vapor migration into buildings from contaminated soil and groundwater. The contaminated air/vapor migration pathway into buildings and exposure to building occupants are likely to be addressed through IRMs discussed in Section 3.3 of this Work Plan. However, the FS will consider the air/vapor pathway to determine that the IRMs are adequate and cost effective. Based on the current conceptual model for the Site, surface water and sediment are not anticipated to be affected by Site contamination. Therefore, the FS will not plan to address surface water and sediment. Dense Non-Aqueous Phase Liquids (DNAPL) are not expected to be present at the Site, but will be considered during the RI Site characterization. If determined to be present, DNAPL will be addressed in the FS.

The FS will develop and evaluate alternatives related to contaminated soil and groundwater. Contaminated soil as secondary source material is anticipated to be present both in the Site yard and underneath the PEM building, thus direct sampling and remediation (i.e., excavation) of all areas of contamination may not be practicable. Therefore, more indirect/in-situ remedial actions are likely alternatives for some contaminated soil areas. Contaminated groundwater is relatively shallow (approximately 10 to 15 feet bgs) and anticipated to occur in bedrock. After alternatives for soil and groundwater have been identified, selected alternatives will be "screened" from further consideration to retain the most favorable and technically implementable alternatives. These alternatives will undergo a detailed analysis which will result in a recommended remedy. For this FS, three alternatives (including the no-action alternative) for each of the retained media (soil and groundwater) will receive a detailed analysis. Examples of soil alternatives might include:

1) No action
2) Soil vapor extraction
3) Chemical Oxidation (gas phase oxidants)
4) Excavation

Groundwater alternatives might include:

1) No action

2) Air Sparging
3) Chemical oxidation
4) Groundwater extraction and treatment
5) Enhanced in-situ bioremediation and Monitoring Natural Attenuation

Soil and groundwater alternatives will be combined, as appropriate, in the detailed analysis of alternatives (e.g., SVE with air sparging, SVE with groundwater extraction and treatment, etc…).

At this time, bench scale or pilot tests are not anticipated to be performed to support the detailed analysis of alternatives.

Upon completion of the detailed analysis of alternatives, a preferred remedy will be selected and the FS Report prepared to document the FS process and preferred remedy selection

2.5 TASK 5 – STANDBY SUBCONTRACTS

As an addition to the original WA request, HLA is providing the NYSDEC with updated standby contracts for analytical laboratories, drilling subcontractors, and GeoProbe subcontractors. Standby subcontractor requests and review and selection information is provided to the NYSDEC under separate cover from this PMWP.

3.0 PROJECT ORGANIZATION

Project organization, including principal functions and responsibilities, are described below.

Program Manager – William Weber, P.E. Mr. Weber has overall responsibility for organizing and setting program operating procedures with the NYSDEC, and confirming that work assignments are implemented in accordance with contract requirements.

Project Manager – John Peterson. Mr. Peterson will be the primary contact with Ms. Valerie Woodward., the NYSDEC Project Manager. He will be responsible for establishing protocols to be used on PE Work Assignment and confirming implementation, for maintaining quality and consistency within the PE RI/FS reports, and for monitoring the overall Work Assignment schedule and budget.

Site Manager – Charles Staples. Mr. Staples is responsible for managing execution of the Site scope of work and for task-specific budgeting and scheduling issues. During field activities, Mr. Staples will be the liaison among field staff, subcontractors, and representatives from the NYSDEC, and county or municipal agencies. Mr. Staples will be responsible for preparation of the RI deliverables.

Site Geologist – Jerry Rawcliffe. Mr. Rawcliffe will support, as necessary, the field data collection. Mr. Rawcliffe is experienced in various aspects of field data collection and has significant experience with bedrock drilling and well installation.

LU Engineering – LU Engineering is an approved NYS Minority Business Enterprise (MBE), based out of Penfield, NY (suburb of Rochester). They will provide HLA site clearance support, and site survey and base map. To help reduce travel costs, they will also provide one person for assisting with the Geoprobe® sampling and drain sampling, as well as two people for assisting with indoor air and sub-slab vapor sampling.

Analytical Laboratory – Columbia Analytical Services, Rochester, is a NYSDOH NELAP approved laboratory. They will provide analytical services for sample analyses.

Drilling and Geoprobe Subcontractor – Nothnagle Drilling is a NYS certified driller on HLA's NYSDEC standby drilling and Geoprobe contract list. They were selected based on lowest cost, and will provide both GeoProbe and drilling services

IDW Disposal Subcontractor – Onyx Environmental will provide disposal services for site IDW.

FS and IRM Lead – Stuart Pearson P.E.,. Mr. Pearson is responsible for managing the FS and IRM tasks. He will provide the potential remedial alternatives, recommend those alternatives that will receive a detailed evaluation, provide a detailed analysis, and recommend a preferred alternative. Mr. Pearson will also oversee the potential IRMs should indoor air contaminant concentration exceed IRM thresholds.

Human Health Exposure Assessment - Jay Peters. Mr. Peters will be responsible for the qualitative exposure assessment and characterization of the exposure setting.

Ecological Exposure Assessment – Andrea Fogg. Ms. Fogg is responsible for the qualitative exposure assessment, and the identification of potential exposure pathways and potential damage to natural resources.

Senior Project Assistant – Erva Gardner. Ms. Gardner will participate in budget tracking, management of files, data management, and report production.

Senior Technical Review – Peter Thompson, P.G. Mr. Thompson will provide technical guidance throughout the field program, data evaluation, and report preparation.

Health and Safety – Cynthia Sundquist, the Health and Safety Supervisor, is responsible for review and approval of the Site-specific HASP, and, throughout the duration of field activities, has authority to stop work should unacceptable health and safety risks occur. The on-site Health and Safety Officer will be appointed when the field investigation schedule is finalized.

4.0 PROJECT BUDGET, SCHEDULE AND ASSUMPTIONS

The proposed project schedule for the HVE Site RI/FS is provided in Attachment C.

The proposed schedule for execution of this program depends upon scheduled NYSDEC review and comment on deliverables, and the NYSDEC confirmation of Site access approval. Cost tables are provided in Attachment D.

The project schedule and costs are dependent on the following assumptions:

- No laboratory data validation, other than the NYSDEC DUSR will be required for the project.
- The NYSDEC will acquire permission from property owners to gain access for the subsurface and interior investigations. HLA will provide the NYSDEC with a list of property owners that need notification and will schedule work with the property owners once notification has been given.

ATTACHMENT A
TABLES

TABLE 3-1
PROPOSED FIELD TASKS AND METHODOLOGY
RI/FS WORK PLAN
PREFFERED ELECTRIC MOTORS
ROCHESTER, NEW YORK

LOCATION ID	DESCRIPTION AND METHODOLOGY	RATIONALE	ANALYTICAL
PHASE ONE			
OS-1 to OS-3	Collect up to 3 bulk oil samples from floor of Preferred Electric Motors facility.	Characterize oil on facility floor for potential PCB content to characterize facility and prevent tracking of PCB oils if present.	PCBs
Geophysics	Geophysics using ground penetrating radar and pipe and cable locator will be used over the Site yard, and proposed boring locations.	Determine location of prior soil removal, as well as mark out underground utilities and the potential dry well.	None
SW/SD 1 to SW/SD-4	Collect up to four surface water and sediment samples from Site drains and stormdrains, as well as from inside potential dry well, if possible.	Characterize potential contaminant entry paths and possible continued source areas.	TCL VOCs at all locations. TAL metals, SVOCs, and Pesticides/PCBs at one location.
GS-1 to GS-12	Collect up to 24 soil samples from 12 geoprobe points from within the site facility. Borings will be located in potential source areas (based on historical use, or visual observations), as well as spaced to cover a majority of the building footprint.	Characterize soil in the overburden and at the overburden/bedrock interface to assess potential source area locations, as well as general conditions below the building footprint.	TCL VOCs at all locations. TAL metals, SVOCs, and Pesticides/PCBs at four locations.
GS-13 to GS-17	Collect ten soil samples from four geoprobe points surrounding the former soil removal area within the gravel/paved yard.	Characterize soil in the overburden and at the overburden/bedrock interface to assess exterior soil conditions, as well as evaluate prior soil removal action boundaries.	TCL VOCs at all locations. TAL metals, SVOCs, and Pesticides/PCBs at two locations.
SS-1 to SS-4	Collect four off-site surface soil samples from non-industial areas.	Soils will be used for relative inorganic background levels in area soils. Additional inorganic surface soil samples will be collected during well drilling.	TAL metals.
MW-1 to MW-6	Install six shallow bedrock monitoring wells (Approximately 20-30 feet deep-water table wells). Collect up to two soil samples at each location (overburden and overburden/bedrock interface). In addition, collect MERC samples from bedrock fractures in source area well (3 samples).	Installation of groundwater monitoring points to evaluate groundwater quality and flow direction. Rock samples will be used to evaluate potential of contaminant mass to be sorbed to the rock matrix.	Soil samples will be collected for VOCs at all location, and one samples will be collected for, SVOCs, TAL metals, and Pesticides/PCBs from the on-site boring. (Plus 4 additional TAL metal samples for background analyses). VOC samples will be collected from bedrock fractures.

TABLE 3-1
PROPOSED FIELD TASKS AND METHODOLOGY
RI/FS WORK PLAN
PREFFERED ELECTRIC MOTORS
ROCHESTER, NEW YORK

LOCATION ID	DESCRIPTION AND METHODOLOGY	RATIONALE	ANALYTICAL
MW-1 to MW-6	Collect one round of groundwater samples using low flow techniques. Complete rising head tests (slug) at each well upon completion of sampling.	Characterize existing groundwater conditions at site.	TCL VOCs at all locations. TAL metals, SVOCs and Pesticides/PCBs at three locations.
GV-1 to GV-10	Collect up to 10 geoprobe soil gas samples with one liter, 20 minute flow, summa canisters from above the water table (approximately 6-8 feet bgs).	Characterize soil gas concentrations and potential for indoor air contamination. (locations partially based on groundwater plume location)	VOCs by Modified TO-15
SV-1 to SV-15	Collect up to 15 sub-slab vapor samples with 6-liter, 24-hour flow, summa canister from local homes and businesses (including two from the PEM facility).	Characterize soil vapor concentrations and potential for indoor air contamination. (locations based on geoprobe soil gas results)	VOCs by Modified TO-15
IA-1 to IA-15 AA-1-AA-4	Collect up to 15 indoor air samples to coincide with the 15 sub-slab vapor samples. Collect using 6-liter, 24-hour flow, Summa Canister. In addition, four ambient air sample will be collected.	Characterize indoor air concentrations for comparison to guidance values.	VOCs by Modified TO-15
PHASE TWO			
MW-7 to MW-12	Install up to six additional bedrock monitoring wells (three shallow [20-30 feet deep] and three deep [less than 70 feet deep]). Collect up to one soil samples at each location (overburden and overburden/bedrock interface). In addition, collect MERC samples from bedrock fractures in potential deep source area well (3 samples).	Installation of groundwater monitoring points to evaluate groundwater quality and flow direction. Rock samples will be used to evaluate potential of contaminant mass to be sorbed to the rock matrix.	Soil samples will be collected for VOCs at all location. VOC samples will be collected from bedrock fractures in source area.
MW-7 to MW-12	Collect one round of groundwater samples using low flow techniques. Complete rising and falling head tests (slug) at each deep well and two rising head tests at each shallow well upon completion of sampling.	Characterize existing groundwater conditions at site.	TCL VOCs at all locations. TAL metals, SVOCs and Pesticides/PCBs at up to three locations, based on analytes previously detected. MNA Parameters at all locations.
MW-1 to MW-6	Collect second round of groundwater samples using low flow techniques at same time as collecting first round from MW-6 to MW-12 .	Characterize existing groundwater conditions at site.	TCL VOCs at all locations. MNA Parameters at all locations.

TABLE 3-1
PROPOSED FIELD TASKS AND METHODOLOGY
RI/FS WORK PLAN
PREFFERED ELECTRIC MOTORS
ROCHESTER, NEW YORK

LOCATION ID	DESCRIPTION AND METHODOLOGY	RATIONALE	ANALYTICAL
GV-11 to GV-20	Collect up to 10 geoprobe soil gas samples with one liter, 20 minute flow, summa canisters from above the water table (approximately 6-8 feet bgs).	Characterize soil gas concentrations and potential for indoor air contamination. (locations partially based on groundwater plume location)	VOCs by Modified TO-15
SV-16 to SV-30	Collect an additional 15 sub-slab vapor samples with 6-liter, 24-hour flow, summa canister from local residences/businesses.	Characterize soil vapor concentrations and potential for indoor air contamination.	VOCs by Modified TO-15
IA-16 to IA-30 AA-5 to AA-8	Collect up to 15 additional indoor air samples to coincide with the 15 sub-slab vapor samples. Collect using 6-liter, 24-hour flow, Summa Canister. In addition, four ambient air sample will be collected.	Characterize indoor air concentrations for comparison to guidance values.	VOCs by Modified TO-15
MW-7 to MW-12	Collect second round of groundwater samples using low flow techniques.	Characterize existing groundwater conditions at site.	TCL VOCs at all locations.

Notes:
TCL-VOCs = Target Compound List Volatile Organic Compounds analyzed by USEPA OLM04.2 methods for soil and water using NYSDEC ASP protocols.
TAL metals = Target Analyte List metals analyzed by USEPA ILM04.2 methods for soil and water using NYSDEC ASP protocols.
SVOCs = Semi-Volatile Organic Compounds analyzed by USEPA OLM04.2 methods for soil and water using NYSDEC ASP protocols.
Pesticides/PCBs = Pesticides and polychlorinated biphenyls analyzed by USEPA OLM04.2 methods for soil and water using NYSDEC ASP protocols.
Modified TO-15 = Air and vapor samples analyzed for a modified VOC list by USEPA Method TO-15 using Selective Ion Monitoring quantitation.
Monitoring Natural Attenuation Parameters = TOC by USEPA Method 415.1, Nitrate by NYSDEC ASP Method 352.1, Nitrite by NYSDEC ASP Method 354.1, Sulfate by NYSDEC ASP Method 375.4, Sulfite by NYSDEC ASP Method 376.2, Methane/Ethane/Ethene by ASTM Method D-1945, carbon dioxide by HACH Method, Alkalinity by USEPA Method 310.1, and chloride by USEPA Method 325.3, and iron and manganese will be analyzed by USEPA Method 8260B. In addition, oxygen and reduction/oxydation potential will be measured during well sampling stabilization.

Table Created By: CRS
Table Checked By: JWP

TABLE 3-2
PROPOSED SAMPLE IDENTIFICATION AND ANALYSES
RI/FS WORK PLAN
PREFERRED ELECTRIC MOTORS SITE
ROCHESTER, NEW YORK

				Water Samples								Soil/Sediment/Bulk Samples					Air Samples
Site Type	Media	Site ID	Sample ID	MS/MSD	DUP	RINS	VOCs	SVOCS	PEST/ PCBs	TAL Metals	MNA parameters	VOCs	SVOCS	PEST/ PCBs	TAL Metals	Percent Moisture	VOCs (TO-15)
PHASE ONE																	
Oil Sampling																	
Oil	Waste Oil	OS-1	PEOS00100001XX	1	1									1			
Oil	Waste Oil	OS-2	PEOS00200001XX											1			
Oil	Waste Oil	OS-3	PEOS00300001XX											1			
Surface Water/Sediment Drain Samples																	
Drain	Surface Water	SW-1	PESW001__01XX	1	1		1	1	1	1							
Drain	Surface Water	SW-2	PESW002__01XX				1										
Drain	Surface Water	SW-3	PESW003__01XX				1										
Drain	Surface Water	SW-4	PESW004__01XX				1										
Drain	Sediment	SD-1	PESD001__01XX	1	1							1	1	1	1	1	
Drain	Sediment	SD-2	PESD002__01XX									1				1	
Drain	Sediment	SD-3	PESD003__01XX									1				1	
Drain	Sediment	SD-4	PESD004__01XX									1				1	
Geoprobe Soil Sampling																	
Boring	Soil	GS-1	PEGS001__01XX		1	1						1	1	1	1	1	
Boring	Soil	GS-1	PEGS001__01XX									1				1	
Boring	Soil	GS-2	PEGS002__01XX									1				1	
Boring	Soil	GS-2	PEGS002__01XX									1				1	
Boring	Soil	GS-3	PEGS003__01XX	1								1	1	1	1	1	
Boring	Soil	GS-3	PEGS003__01XX									1				1	
Boring	Soil	GS-4	PEGS004__01XX									1				1	
Boring	Soil	GS-4	PEGS004__01XX									1				1	
Boring	Soil	GS-5	PEGS005__01XX									1				1	
Boring	Soil	GS-5	PEGS005__01XX									1				1	
Boring	Soil	GS-6	PEGS006__01XX									1	1	1	1	1	
Boring	Soil	GS-6	PEGS006__01XX									1				1	
Boring	Soil	GS-7	PEGS007__01XX		1							1				1	
Boring	Soil	GS-7	PEGS007__01XX									1				1	
Boring	Soil	GS-8	PEGS008__01XX									1				1	
Boring	Soil	GS-8	PEGS008__01XX									1				1	
Boring	Soil	GS-9	PEGS009__01XX									1	1	1	1	1	
Boring	Soil	GS-9	PEGS009__01XX									1				1	
Boring	Soil	GS-10	PEGS010__01XX									1				1	
Boring	Soil	GS-10	PEGS010__01XX									1				1	
Boring	Soil	GS-11	PEGS011__01XX									1				1	
Boring	Soil	GS-11	PEGS011__01XX									1				1	
Boring	Soil	GS-12	PEGS012__01XX									1				1	

TABLE 3-2
PROPOSED SAMPLE IDENTIFICATION AND ANALYSES
RI/FS WORK PLAN
PREFERRED ELECTRIC MOTORS SITE
ROCHESTER, NEW YORK

				Water Samples								Soil/Sediment/Bulk Samples					Air Samples
Site Type	Media	Site ID	Sample ID	MS/MSD	DUP	RINS	VOCs	SVOCS	PEST/ PCBs	TAL Metals	MNA parameters	VOCs	SVOCS	PEST/ PCBs	TAL Metals	Percent Moisture	VOCs (TO-15)
Boring	Soil	GS-12	PEGS012__01XX									1				1	
Boring	Soil	GS-13	PEGS013__01XX									1	1	1	1	1	
Boring	Soil	GS-13	PEGS013__01XX									1				1	
Boring	Soil	GS-14	PEGS014__01XX									1	1	1	1	1	
Boring	Soil	GS-14	PEGS014__01XX	1	1	1						1				1	
Boring	Soil	GS-15	PEGS015__01XX									1				1	
Boring	Soil	GS-15	PEGS015__01XX									1				1	
Boring	Soil	GS-16	PEGS016__01XX									1				1	
Boring	Soil	GS-16	PEGS016__01XX									1				1	
Boring	Soil	GS-17	PEGS017__01XX									1				1	
Boring	Soil	GS-17	PEGS017__01XX									1				1	
Surface Soil																	
Soil	Soil	SS-1	PESS001__01XX		1										1		
Soil	Soil	SS-2	PESS002__01XX												1		
Soil	Soil	SS-3	PESS003__01XX												1		
Soil	Soil	SS-4	PESS004__01XX												1		
Well Soil Borings																	
Boring	Soil	BS-1(MW1)	PEBS001__01XX									1	1	1	1	1	
Boring	Soil	BS-1(MW1)	PEBS001__01XX		1							1				1	
Boring	Soil	BS-2(MW2)	PEBS002__01XX									1				1	
Boring	Soil	BS-2(MW2)	PEBS002__01XX									1				1	
Boring	Soil	BS-3(MW3)	PEBS003__01XX									1			1	1	
Boring	Soil	BS-3(MW3)	PEBS003__01XX									1				1	
Boring	Soil	BS-4(MW4)	PEBS004__01XX									1			1	1	
Boring	Soil	BS-4(MW4)	PEBS004__01XX									1				1	
Boring	Soil	BS-5(MW5)	PEBS005__01XX									1			1	1	
Boring	Soil	BS-5(MW5)	PEBS005__01XX									1				1	
Boring	Soil	BS-6(MW6)	PEBS006__01XX	1	1	1						1			1	1	
Boring	Soil	BS-6(MW6)	PEBS006__01XX									1				1	
Well Rock Borings																	
Boring	Rock	BR-1(MW1)	PEBR001__01XX	1	1							1					
Boring	Rock	BR-1(MW1)	PEBR001__01XX									1					
Boring	Rock	BR-1(MW1)	PEBR001__01XX									1					
Well Sampling																	
WELL	Groundwater	MW-1	PEMW001__01XX	1	1		1	1	1	1							
WELL	Groundwater	MW-2	PEMW002__01XX				1	1	1	1							
WELL	Groundwater	MW-3	PEMW003__01XX				1										
WELL	Groundwater	MW-4	PEMW004__01XX				1										

TABLE 3-2
PROPOSED SAMPLE IDENTIFICATION AND ANALYSES
RI/FS WORK PLAN
PREFERRED ELECTRIC MOTORS SITE
ROCHESTER, NEW YORK

							Water Samples					Soil/Sediment/Bulk Samples					Air Samples
Site Type	Media	Site ID	Sample ID	MS/MSD	DUP	RINS	VOCs	SVOCS	PEST/ PCBs	TAL Metals	MNA parameters	VOCs	SVOCS	PEST/ PCBs	TAL Metals	Percent Moisture	VOCs (TO-15)
WELL	Groundwater	MW-5	PEMW005___01XX				1	1	1	1							
WELL	Groundwater	MW-6	PEMW006___01XX				1										
Geoprobe Soil Gas Sampling																	
Soil Gas	Vapor	GV-01	PEGV00100601XX		1												1
Soil Gas	Vapor	GV-02	PEGV00200601XX														1
Soil Gas	Vapor	GV-03	PEGV00300601XX														1
Soil Gas	Vapor	GV-04	PEGV00400601XX														1
Soil Gas	Vapor	GV-05	PEGV00500601XX														1
Soil Gas	Vapor	GV-06	PEGV00600601XX														1
Soil Gas	Vapor	GV-07	PEGV00700601XX														1
Soil Gas	Vapor	GV-08	PEGV00800601XX														1
Soil Gas	Vapor	GV-09	PEGV00900601XX														1
Soil Gas	Vapor	GV-10	PEGV01000601XX														1
Residence/Business Interior Sampling																	
Soil Gas	Vapor	SV-1	PESV00100101XX		1												1
Soil Gas	Vapor	SV-2	PESV00200101XX														1
Soil Gas	Vapor	SV-3	PESV00300101XX														1
Soil Gas	Vapor	SV-4	PESV00400101XX														1
Soil Gas	Vapor	SV-5	PESV00500101XX														1
Soil Gas	Vapor	SV-6	PESV00600101XX														1
Soil Gas	Vapor	SV-7	PESV00700101XX														1
Soil Gas	Vapor	SV-8	PESV00800101XX														1
Soil Gas	Vapor	SV-9	PESV00900101XX														1
Soil Gas	Vapor	SV-10	PESV01000101XX														1
Soil Gas	Vapor	SV-11	PESV01100101XX		1												1
Soil Gas	Vapor	SV-12	PESV01200101XX														1
Soil Gas	Vapor	SV-13	PESV01300101XX														1
Soil Gas	Vapor	SV-14	PESV01400101XX														1
Soil Gas	Vapor	SV-15	PESV01500101XX														1
Air	Indoor Air	IA-1	PEIA001XXX01XX		1												1
Air	Indoor Air	IA-2	PEIA002XXX01XX														1
Air	Indoor Air	IA-3	PEIA003XXX01XX														1
Air	Indoor Air	IA-4	PEIA004XXX01XX														1
Air	Indoor Air	IA-5	PEIA005XXX01XX														1
Air	Indoor Air	IA-6	PEIA006XXX01XX														1
Air	Indoor Air	IA-7	PEIA007XXX01XX														1
Air	Indoor Air	IA-8	PEIA008XXX01XX														1
Air	Indoor Air	IA-9	PEIA009XXX01XX														1

TABLE 3-2
PROPOSED SAMPLE IDENTIFICATION AND ANALYSES
RI/FS WORK PLAN
PREFERRED ELECTRIC MOTORS SITE
ROCHESTER, NEW YORK

							Water Samples					Soil/Sediment/Bulk Samples					Air Samples
Site Type	Media	Site ID	Sample ID	MS/MSD	DUP	RINS	VOCs	SVOCS	PEST/ PCBs	TAL Metals	MNA parameters	VOCs	SVOCS	PEST/ PCBs	TAL Metals	Percent Moisture	VOCs (TO-15)
Air	Indoor Air	IA-10	PEIA010XXX01XX														1
Air	Indoor Air	IA-11	PEIA011XXX01XX		1												1
Air	Indoor Air	IA-12	PEIA012XXX01XX														1
Air	Indoor Air	IA-13	PEIA013XXX01XX														1
Air	Indoor Air	IA-14	PEIA014XXX01XX														1
Air	Indoor Air	IA-15	PEIA015XXX01XX														1
Air	Ambient Air	AA-1	PEAA001XXX01XX		1												1
Air	Ambient Air	AA-2	PEAA002XXX01XX														1
Air	Ambient Air	AA-3	PEAA003XXX01XX														1
Air	Ambient Air	AA-4	PEAA004XXX01XX														1
PHASE TWO																	
Well Borings																	
Boring	Soil	BS-7(MW7)	PEBS007__01XX	1	1							1				1	
Boring	Soil	BS-8(MW8)	PEBS008__01XX									1				1	
Boring	Soil	BS-9(MW9)	PEBS009__01XX									1				1	
Boring	Soil	BS-10(MW10)	PEBS010__01XX									1				1	
Boring	Soil	BS-11(MW11)	PEBS011__01XX									1				1	
Boring	Soil	BS-12(MW12)	PEBS012__01XX									1				1	
Well Rock Borings																	
Boring	Rock	BR-7(MW7)	PEBR007__01XX									1					
Boring	Rock	BR-7(MW7)	PEBR007__01XX									1					
Boring	Rock	BR-7(MW7)	PEBR007__01XX									1					
Well Sampling																	
WELL	Groundwater	MW-1	PEMW001__02XX	1	1		1				1						
WELL	Groundwater	MW-2	PEMW002__02XX				1				1						
WELL	Groundwater	MW-3	PEMW003__02XX				1				1						
WELL	Groundwater	MW-4	PEMW004__02XX				1				1						
WELL	Groundwater	MW-5	PEMW005__02XX				1				1						
WELL	Groundwater	MW-6	PEMW006__02XX				1				1						
WELL	Groundwater	MW-7	PEMW007__01XX	1	1		1	1	1	1	1						
WELL	Groundwater	MW-8	PEMW008__01XX				1	1	1	1	1						
WELL	Groundwater	MW-9	PEMW009__01XX				1				1						
WELL	Groundwater	MW-10	PEMW010__01XX				1				1						
WELL	Groundwater	MW-11	PEMW011__01XX				1	1	1	1	1						
WELL	Groundwater	MW-12	PEMW012__01XX				1				1						
Geoprobe Soil Gas Sampling																	
Soil Gas	Vapor	GV-11	PEGV01100601XX		1												1

TABLE 3-2
PROPOSED SAMPLE IDENTIFICATION AND ANALYSES
RI/FS WORK PLAN
PREFERRED ELECTRIC MOTORS SITE
ROCHESTER, NEW YORK

							Water Samples					Soil/Sediment/Bulk Samples					Air Samples
Site Type	Media	Site ID	Sample ID	MS/MSD	DUP	RINS	VOCs	SVOCS	PEST/ PCBs	TAL Metals	MNA parameters	VOCs	SVOCS	PEST/ PCBs	TAL Metals	Percent Moisture	VOCs (TO-15)
Soil Gas	Vapor	GV-12	PEGV01200601XX														1
Soil Gas	Vapor	GV-13	PEGV01300601XX														1
Soil Gas	Vapor	GV-14	PEGV01400601XX														1
Soil Gas	Vapor	GV-15	PEGV01500601XX														1
Soil Gas	Vapor	GV-16	PEGV01600601XX														1
Soil Gas	Vapor	GV-17	PEGV01700601XX														1
Soil Gas	Vapor	GV-18	PEGV01800601XX														1
Soil Gas	Vapor	GV-19	PEGV01900601XX														1
Soil Gas	Vapor	GV-20	PEGV02000601XX														1
Residence/Business Interior Sampling																	
Soil Gas	Vapor	SV-16	PESV01600101XX		1												1
Soil Gas	Vapor	SV-17	PESV01700101XX														1
Soil Gas	Vapor	SV-18	PESV01800101XX														1
Soil Gas	Vapor	SV-19	PESV01900101XX														1
Soil Gas	Vapor	SV-20	PESV02000101XX														1
Soil Gas	Vapor	SV-21	PESV02100101XX														1
Soil Gas	Vapor	SV-22	PESV02200101XX														1
Soil Gas	Vapor	SV-23	PESV02300101XX														1
Soil Gas	Vapor	SV-24	PESV02400101XX														1
Soil Gas	Vapor	SV-25	PESV02500101XX														1
Soil Gas	Vapor	SV-26	PESV02600101XX		1												1
Soil Gas	Vapor	SV-27	PESV02700101XX														1
Soil Gas	Vapor	SV-28	PESV02800101XX														1
Soil Gas	Vapor	SV-29	PESV02900101XX														1
Soil Gas	Vapor	SV-30	PESV03000101XX														1
Air	Indoor Air	IA-16	PEIA001XXX01XX		1												1
Air	Indoor Air	IA-17	PEIA017XXX01XX														1
Air	Indoor Air	IA-18	PEIA018XXX01XX														1
Air	Indoor Air	IA-19	PEIA019XXX01XX														1
Air	Indoor Air	IA-20	PEIA020XXX01XX														1
Air	Indoor Air	IA-21	PEIA021XXX01XX														1
Air	Indoor Air	IA-22	PEIA022XXX01XX														1
Air	Indoor Air	IA-23	PEIA023XXX01XX														1
Air	Indoor Air	IA-24	PEIA024XXX01XX														1
Air	Indoor Air	IA-25	PEIA025XXX01XX														1
Air	Indoor Air	IA-26	PEIA026XXX01XX		1												1
Air	Indoor Air	IA-27	PEIA027XXX01XX														1
Air	Indoor Air	IA-28	PEIA028XXX01XX														1

TABLE 3-2
PROPOSED SAMPLE IDENTIFICATION AND ANALYSES
RI/FS WORK PLAN
PREFERRED ELECTRIC MOTORS SITE
ROCHESTER, NEW YORK

							Water Samples					Soil/Sediment/Bulk Samples					Air Samples
Site Type	Media	Site ID	Sample ID	MS/MSD	DUP	RINS	VOCs	SVOCS	PEST/ PCBs	TAL Metals	MNA parameters	VOCs	SVOCS	PEST/ PCBs	TAL Metals	Percent Moisture	VOCs (TO-15)
Air	Indoor Air	IA-29	PEIA029XXX01XX														1
Air	Indoor Air	IA-30	PEIA030XXX01XX														1
Air	Ambient Air	AA-5	PEAA005XXX01XX														1
Air	Ambient Air	AA-6	PEAA006XXX01XX														1
Air	Ambient Air	AA-7	PEAA007XXX01XX														1
Air	Ambient Air	AA-8	PEAA008XXX01XX														1
Additional Round Well Sampling																	
WELL	Groundwater	MW-7	PEMW007__02XX	1	1		1										
WELL	Groundwater	MW-8	PEMW008__02XX				1										
WELL	Groundwater	MW-9	PEMW009__02XX				1										
WELL	Groundwater	MW-10	PEMW010__02XX				1										
WELL	Groundwater	MW-11	PEMW011__02XX				1										
WELL	Groundwater	MW-12	PEMW012__02XX				1										
TOTAL SAMPLES							28	7	7	7	12	62	8	11	16	56	88

Notes:
Sample ID = 14-digit sample identification as outlined in the QAPjP. The 8,9, and 10 digit locations represent the sample depth below ground surface (__ = be determined in field)
MS/MSD = matrix spike and matrix spike duplicate sample collected
DUP = Duplicate sample collected
RINS = rinseate sample collected
VOCs water and air = Target Compond List Volatile Organic Compounds analyzed by NYSDEC ASP 2000 - OLM04.2 methods for soil and water.
SVOCs = Semi-Volatile Organic Compounds analyzed by NYSDEC ASP 2000 OLM04.2 methods.
PEST/PCBs = Pesticides and polychlorinated biphenyls analyzed by NYSDEC ASP 2000 OLM04.2 methods.
TAL metals = Target Analyte List metals analyzed by NYSDEC ASP 2000 ILM04.2 methods.
MNA Parameters = Monitoring Natural Attenuation Parameters = TOC by USEPA Method 415.1, Nitrate by NYSDEC ASP Method 352.1, Nitrite by NYSDEC ASP Method 354.1, Sulfate by NYSDEC ASP Method 375.4, Sulfide by NYSDEC ASP Method 376.2, Methane/Ethane/Ethene by ASTM Method D-1945, carbon dioxide by Hach Method, Alkalinity by USEPA Method 310.1, chloride by USEPA Method 325.3, and iron and manganese will be analyzed by USEPA Method 6010B. In addition, oxyen and reduction/oxydation potential will be measured during well stabilization.
TO-15 = Air and vapor samples analyzed for a modified VOC list by USEPA Method TO-15 using selective ion monitoring quantitation.
Sample totals do not include QA/QC samples.

Table Created By: CRS
Table Checked By: JWP

ATTACHMENT B
FIGURES

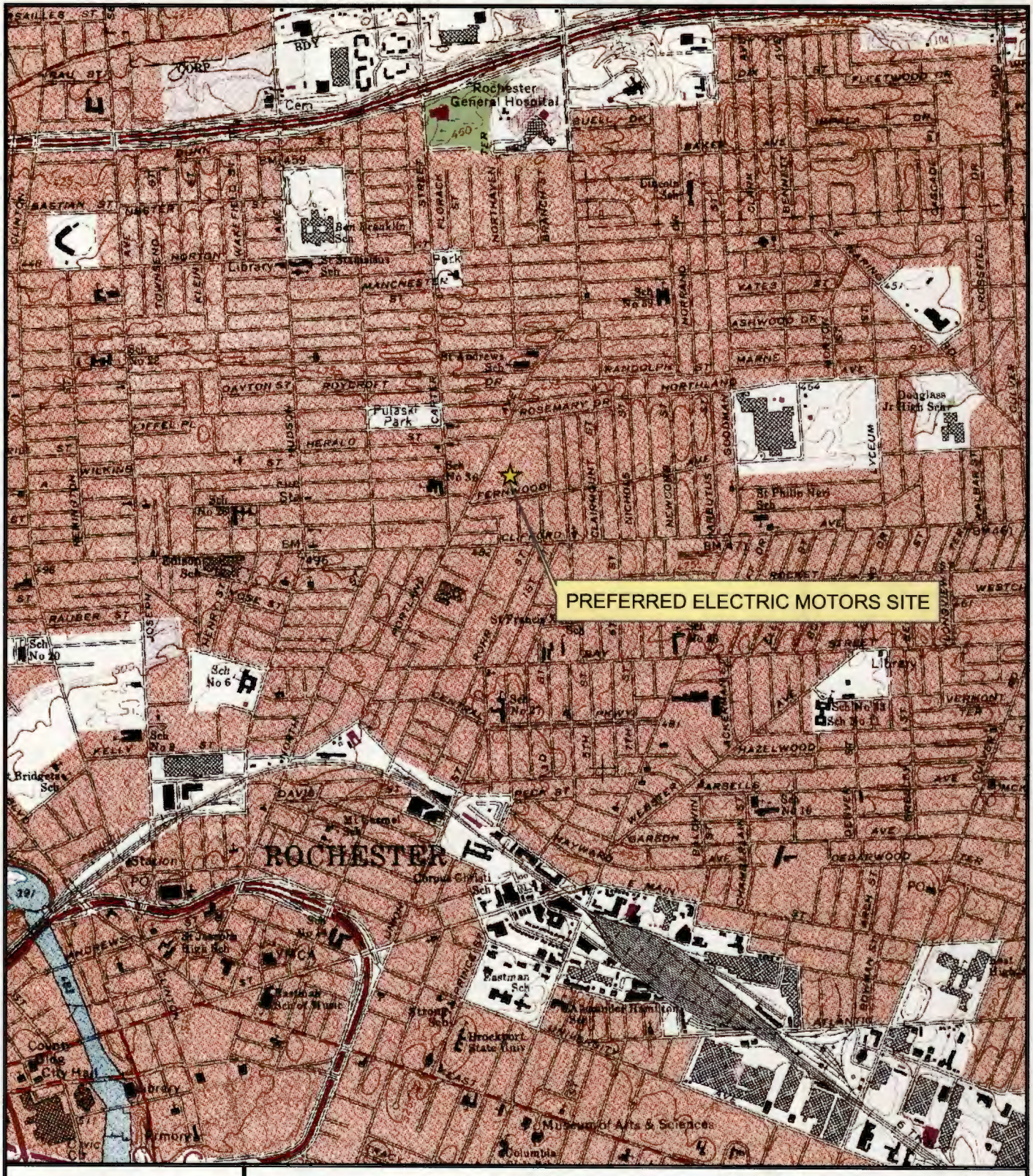

FIGURE 1-1
SITE LOCATION
RI/FS WORK PLAN
PREFERRED ELECTRIC MOTORS SITE
ROCHESTER, NEW YORK

Harding Lawson Associates

Document: P:\Projects\NYSDEC1\PROJECTS\Preferred Electric\4.0 Project Deliverables\4.5 Databases\GIS Data\PE base map.mxd PDF: P:\Projects\NYSDEC1\PROJECTS\Preferred Electric\4.0 Project Deliverables\4.2 Work Plans\Work Plan\Figures\Site Location.pdf 12/09/2004 12:07 PM crstaples

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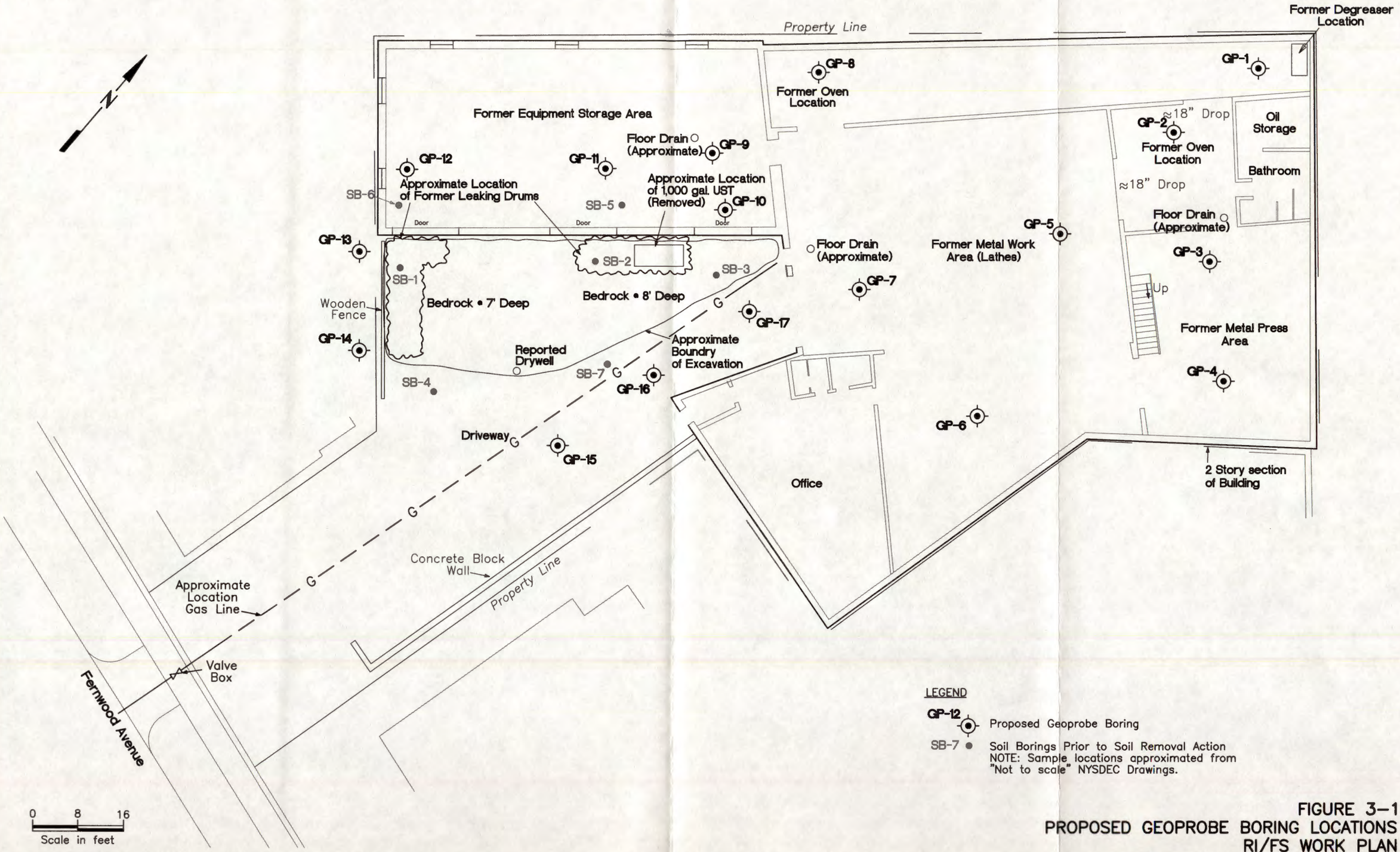


PREPARED BY:	CRS
CHECKED BY:	PHT

NOTE: BUILDING AND PROPERTY LAYOUT FROM THOMAS W. BOYDE, ARCHITECT, DATED AUGUST 12, 1975.

LEGEND

GP-12 — Proposed Geoprobe Boring

SB-7 • — Soil Borings Prior to Soil Removal Action
NOTE: Sample locations approximated from "Not to scale" NYSDEC Drawings.

FIGURE 3-1
PROPOSED GEOPROBE BORING LOCATIONS
RI/FS WORK PLAN
PREFERRED ELECTRIC MOTORS SITE
ROCHESTER, NEW YORK
Harding Lawson Associates

N

0 25 50 Feet

Prepared by CRS | Checked by PHT

Legend

- Proposed Wells
- Sewer Mains
- Site Boundary
- Buildings
- Property Lines

Note:
2002 Aerial photo from NYS GIS Clearing House.
Property lines, sewer lines and buildings from Monroe County GIS Services

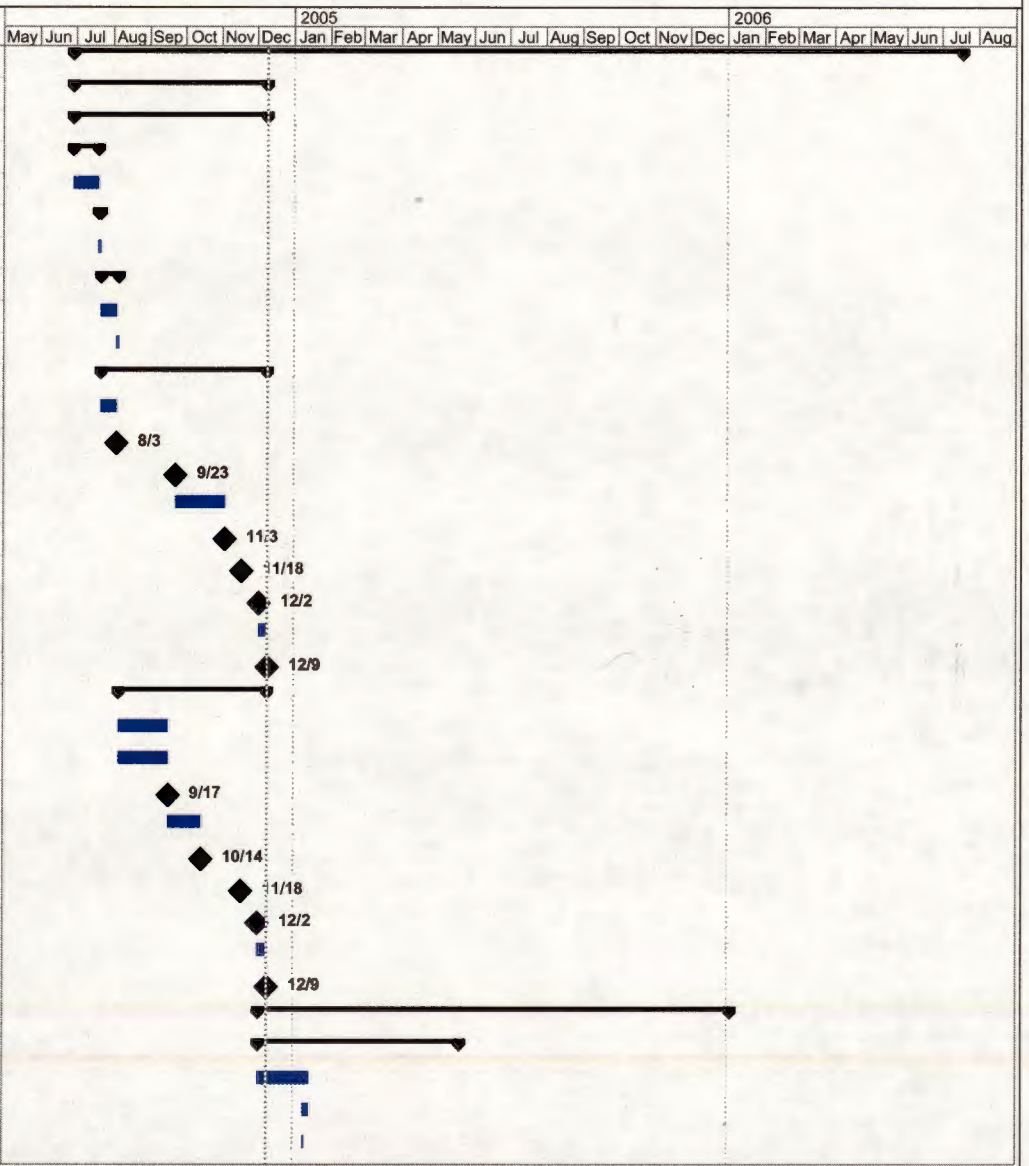
FIGURE 3-2
PROPOSED MONITORING WELL LOCATIONS
RI/FS WORK PLAN
PREFERRED ELECTRIC MOTORS SITE
ROCHESTER. NEW YORK
Harding Lawson Associates

Document: P:\Projects\NYSDEC1\PROJECTS\Preferred Electric\GIS Data\Proposed wells2.mxd PDF: P:\Projects\NYSDEC1\PROJECTS\Preferred Electric\Work Plan\Figures\Proposed wells.pdf 09/09/2004 9:49 AM cnstaples

ATTACHMENT C
SCHEDULE

APPENDIX
Preferred Electric RI/FS Schedule
Work Assignment D003526-12

ID	Task Name	Duration	Start	Finish
1	**Preferred Electric RI/FS**	**536 days**	**Tue 6/29/04**	**Tue 7/18/06**
2	**Task 1 - Work Plan Development**	**118 days**	**Tue 6/29/04**	**Thu 12/9/04**
3	**1.1 Project Management Work Plan**	**118 days**	**Tue 6/29/04**	**Thu 12/9/04**
4	**1.1.1 Historical Records and Title Search**	**15 days**	**Tue 6/29/04**	**Mon 7/19/04**
5	Data Gathering and Review	15 days	Tue 6/29/04	Mon 7/19/04
6	**1.1.2 Site Visit\Building Inspection**	**2 days**	**Tue 7/20/04**	**Wed 7/21/04**
7	Site Visit\Building Inspection	2 days	Tue 7/20/04	Wed 7/21/04
8	**1.1.3 Scoping Session**	**11 days**	**Thu 7/22/04**	**Thu 8/5/04**
9	Prepare for Scoping Session	9 days	Thu 7/22/04	Tue 8/3/04
10	Attend Scoping Session	2 days	Wed 8/4/04	Thu 8/5/04
11	**1.1.4 Project Management Work Plan**	**101 days**	**Thu 7/22/04**	**Thu 12/9/04**
12	Prepare PWMP	9 days	Thu 7/22/04	Tue 8/3/04
13	Submit Preliminary PMWP to NYSDEC	0 days	Tue 8/3/04	Tue 8/3/04
14	Submit Draft PWMP to NYSDEC	0 days	Thu 9/23/04	Thu 9/23/04
15	NYSDEC Review PWMP	30 days	Thu 9/23/04	Wed 11/3/04
16	Receive Comments	0 days	Wed 11/3/04	Wed 11/3/04
17	Submit Responses to NYSDEC	0 days	Thu 11/18/04	Thu 11/18/04
18	NYSDEC Approves Resonses	0 days	Thu 12/2/04	Thu 12/2/04
19	Prepare Final PWMP	4 days	Fri 12/3/04	Wed 12/8/04
20	Submit Final PWMP to NYSDEC	0 days	Thu 12/9/04	Thu 12/9/04
21	**1.2 RI/FS Work Plan**	**90 days**	**Fri 8/6/04**	**Thu 12/9/04**
22	Prepare Draft Work Plan	30 days	Fri 8/6/04	Thu 9/16/04
23	Standby Contracting	30 days	Fri 8/6/04	Thu 9/16/04
24	Submit Draft To NYSDEC	0 days	Fri 9/17/04	Fri 9/17/04
25	NYSDEC & NYSDOH Review	20 days	Fri 9/17/04	Thu 10/14/04
26	Receive Comments	0 days	Thu 10/14/04	Thu 10/14/04
27	Submit Responses to NYSDEC	0 days	Thu 11/18/04	Thu 11/18/04
28	NYSDEC Approves Resonses	0 days	Thu 12/2/04	Thu 12/2/04
29	Prepare Final Work Plan	6 days	Thu 12/2/04	Thu 12/9/04
30	Submit Final Work Plan	0 days	Thu 12/9/04	Thu 12/9/04
31	**Task 2 - RI**	**283 days**	**Fri 12/3/04**	**Tue 1/3/06**
32	**2.1 Phase I RI**	**121 days**	**Fri 12/3/04**	**Fri 5/20/05**
33	Obtain Site Access	31 days	Fri 12/3/04	Fri 1/14/05
34	Mobilization/Subcontractor Coordination	5 days	Mon 1/10/05	Fri 1/14/05
35	Site Clearance (Incl. Geophysics)	1 day	Mon 1/10/05	Mon 1/10/05

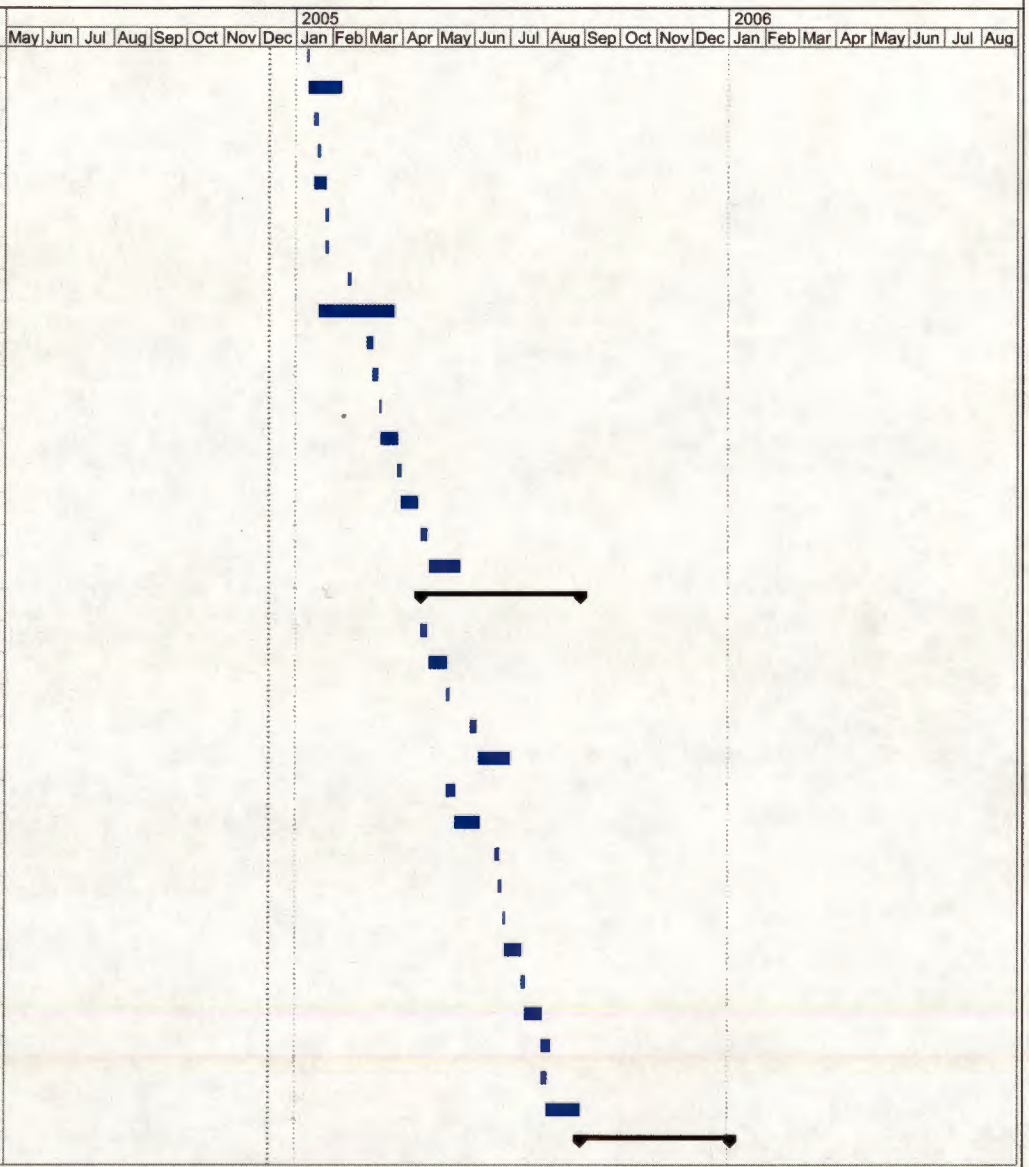


Project: Preferred Electric
Date: Thu 12/9/04

Task — Milestone — External Tasks
Split — Summary — External Milestone
Progress — Project Summary — Deadline

APPENDIX
Preferred Electric RI/FS Schedule
Work Assignment D003526-12

ID	Task Name	Duration	Start	Finish
36	Building floor samples (3)	1 day	Tue 1/11/05	Tue 1/11/05
37	Lab Analysis	20 days	Wed 1/12/05	Tue 2/8/05
38	Geoprobe Sampling (17)	3 days	Mon 1/17/05	Wed 1/19/05
39	SS/SW/SD Sampling (6)	2 days	Thu 1/20/05	Fri 1/21/05
40	Drilling and Well installation (6)	8 days	Mon 1/17/05	Wed 1/26/05
41	Well Development (6)	2 days	Thu 1/27/05	Fri 1/28/05
42	Location Survey	2 days	Thu 1/27/05	Fri 1/28/05
43	GW Sampling (6)	2 days	Tue 2/15/05	Wed 2/16/05
44	Laboratory Analysis	46 days	Fri 1/21/05	Fri 3/25/05
45	Review Preliminary Laboratory Results	3 days	Thu 3/3/05	Mon 3/7/05
46	Discuss Results with NYSDEC	4 days	Tue 3/8/05	Fri 3/11/05
47	Geoprobe Soil Gas Sampling	1 day	Mon 3/14/05	Mon 3/14/05
48	Laboratory Analysis	10 days	Tue 3/15/05	Mon 3/28/05
49	Review and Discuss Data with NYSDEC	3 days	Tue 3/29/05	Thu 3/31/05
50	Notify Residences	10 days	Fri 4/1/05	Thu 4/14/05
51	Air Sampling	5 days	Mon 4/18/05	Fri 4/22/05
52	Laboratory Analysis	20 days	Mon 4/25/05	Fri 5/20/05
53	**2.2 Phase II RI**	**96 days**	**Mon 4/18/05**	**Mon 8/29/05**
54	Site Clearance	5 days	Mon 4/18/05	Fri 4/22/05
55	Drilling & Well Installation (6)	11 days	Mon 4/25/05	Mon 5/9/05
56	Well Development (6)	2 days	Tue 5/10/05	Wed 5/11/05
57	GW Sampling (12)	5 days	Mon 5/30/05	Fri 6/3/05
58	Laboratory Analysis	20 days	Mon 6/6/05	Fri 7/1/05
59	Location Survey	5 days	Tue 5/10/05	Mon 5/16/05
60	Base Map Preparation	15 days	Tue 5/17/05	Mon 6/6/05
61	Review Preliminary Laboratory Results	3 days	Mon 6/20/05	Wed 6/22/05
62	Discuss Results with NYSDEC	2 days	Thu 6/23/05	Fri 6/24/05
63	Geoprobe Soil Gas Sampling	1 day	Mon 6/27/05	Mon 6/27/05
64	Laboratory Analysis	10 days	Tue 6/28/05	Mon 7/11/05
65	Review and Discuss Data with NYSDEC	3 days	Tue 7/12/05	Thu 7/14/05
66	Notify Residences	10 days	Fri 7/15/05	Thu 7/28/05
67	Air Sampling	5 days	Fri 7/29/05	Thu 8/4/05
68	GW Sampling (6)	2 days	Fri 7/29/05	Mon 8/1/05
69	Laboratory Analysis	20 days	Tue 8/2/05	Mon 8/29/05
70	**2.3 RI Report**	**91 days**	**Tue 8/30/05**	**Tue 1/3/06**

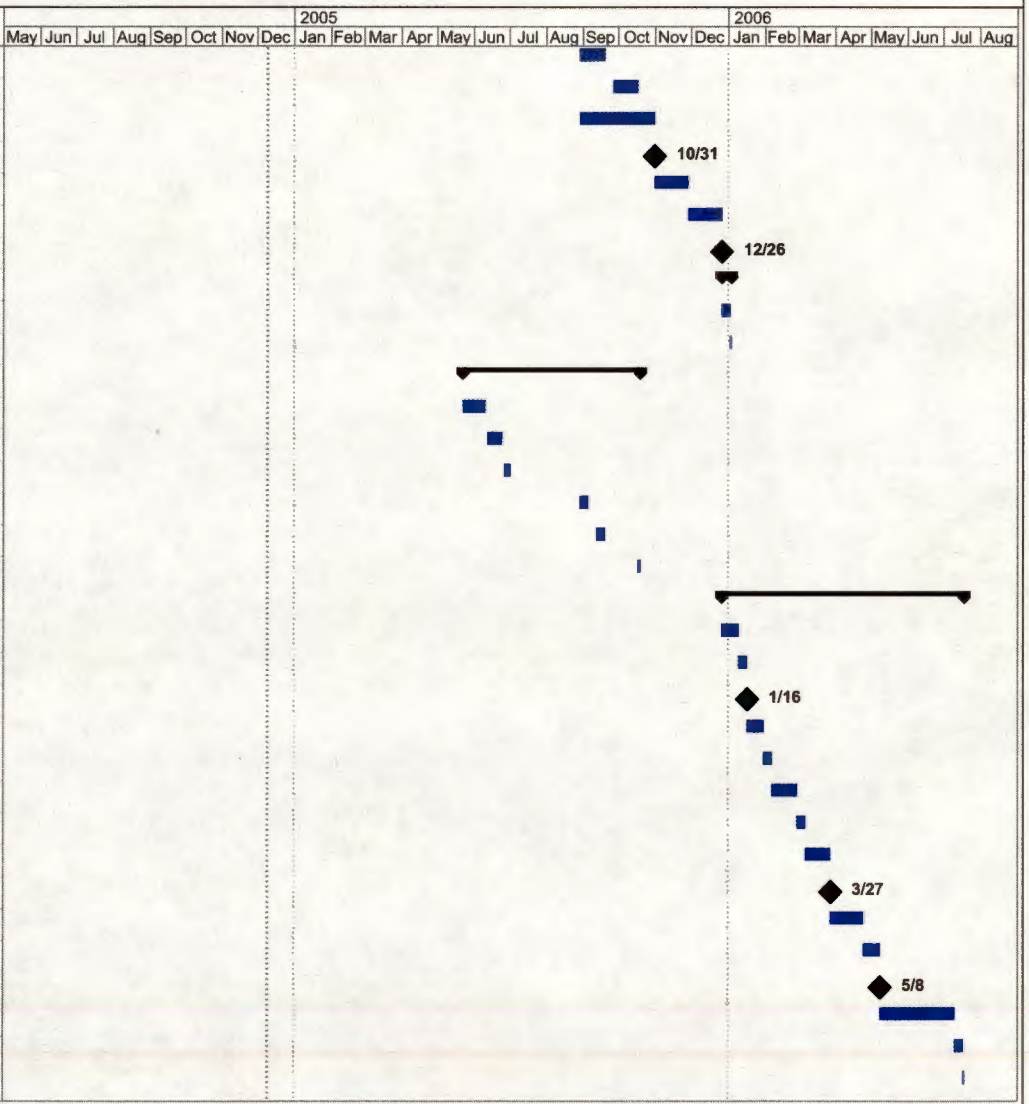


Project: Preferred Electric
Date: Thu 12/9/04

Task
Split
Progress
Milestone
Summary
Project Summary
External Tasks
External Milestone
Deadline

APPENDIX
Preferred Electric RI/FS Schedule
Work Assignment D003526-12

ID	Task Name	Duration	Start	Finish
71	Data Validation/Usability Report	15 days	Tue 8/30/05	Mon 9/19/05
72	Exposure Assessment	15 days	Tue 9/27/05	Mon 10/17/05
73	Prepare Draft RI Report	45 days	Tue 8/30/05	Mon 10/31/05
74	Submit Draft RI Report for NYSDEC Review	0 days	Mon 10/31/05	Mon 10/31/05
75	NYSDEC Review Draft RI Report	20 days	Tue 11/1/05	Mon 11/28/05
76	Prepare Final RI Report	20 days	Tue 11/29/05	Mon 12/26/05
77	Submit Final RI Report	0 days	Mon 12/26/05	Mon 12/26/05
78	**RI Public Meeting**	**6 days**	**Tue 12/27/05**	**Tue 1/3/06**
79	Prepare for RI Report Public Meeting	5 days	Tue 12/27/05	Mon 1/2/06
80	Conduct/Attend Public Meeting	1 day	Tue 1/3/06	Tue 1/3/06
81	**Task 3 - Interim Remedial Measures**	**108 days**	**Mon 5/23/05**	**Wed 10/19/05**
82	Scoping\Planning\Subcontract Coordination	15 days	Mon 5/23/05	Fri 6/10/05
83	Mobilize IRM Subcontractor	10 days	Mon 6/13/05	Fri 6/24/05
84	Install Phase I Systems (5)	5 days	Mon 6/27/05	Fri 7/1/05
85	Review Air Data with NYSDEC	5 days	Tue 8/30/05	Mon 9/5/05
86	Install Phase II Systems (5)	5 days	Tue 9/13/05	Mon 9/19/05
87	Confirmation Sampling	2 days	Tue 10/18/05	Wed 10/19/05
88	**Task 4 - Feasibility Study**	**146 days**	**Tue 12/27/05**	**Tue 7/18/06**
89	Development of Remedial Alternatives	10 days	Tue 12/27/05	Mon 1/9/06
90	Preliminary Screening of Alternatives	5 days	Tue 1/10/06	Mon 1/16/06
91	Submit List of Alternatives to NYSDEC	0 days	Mon 1/16/06	Mon 1/16/06
92	NYSDEC Review List of Alternatives	10 days	Tue 1/17/06	Mon 1/30/06
93	Prepare Final List of Alternatives	5 days	Tue 1/31/06	Mon 2/6/06
94	Detailed Analysis of Alternatives	15 days	Tue 2/7/06	Mon 2/27/06
95	Remedy Selection	5 days	Tue 2/28/06	Mon 3/6/06
96	Prepare Draft FS Report	15 days	Tue 3/7/06	Mon 3/27/06
97	Submit Draft FS Report to NYSDEC	0 days	Mon 3/27/06	Mon 3/27/06
98	NYSDEC Review Draft FS	20 days	Tue 3/28/06	Mon 4/24/06
99	Prepare Final FS	10 days	Tue 4/25/06	Mon 5/8/06
100	Submit Final FS	0 days	Mon 5/8/06	Mon 5/8/06
101	NYSDEC Prepares PRAP	45 days	Tue 5/9/06	Mon 7/10/06
102	Prepare for PRAP Public Meeting	5 days	Tue 7/11/06	Mon 7/17/06
103	Conduct/Attend Public Meeting	1 day	Tue 7/18/06	Tue 7/18/06



Project: Preferred Electric
Date: Thu 12/9/04

Task — Milestone — External Tasks
Split — Summary — External Milestone
Progress — Project Summary — Deadline

ATTACHMENT D
COST TABLES

Engineer: Harding Lawson Associates, Inc. Date Prepared: 12/09/04
Contract No.: D003826
Project Name: Preferred Electric
Work Assigment No.: D003826-12

Schedule 2.11(a)
Summary of Work Assignment Price

1	DIRECT SALARY COSTS (Schedules 2.10(a) and 2.11 (b))	**$62,041**
2	INDIRECT COSTS (Schedule 2.10(g))	**$96,661**
3	DIRECT NON-SALARY COSTS (Schedules 2.10(d)(e)(f) and 2.11 (c) and (d))	**$30,761**

SUBCONTRACT COSTS
COST-PLUS-FIXED-FEE SUBCONTRACTS
(Schedule 2.11(e))

NAME OF SUBCONTRACTOR	SERVICES TO BE PERFORMED	SUBCONTRACT PRICE
LU Engineering	Sampling & Inspection (Task 2)	$ 23,938

4	TOTAL COST-PLUS-FIXED-FEE SUBCONTRACTS	$23,938

UNIT PRICE SUBCONTRACTS
(Schedule 2.11(f))

NAME OF SUBCONTRACTOR	SERVICES TO BE PERFORMED	SUBCONTRACT PRICE
Scientific Testing	IRM Services (Task 3)	$25,000
Nothnagle Drilling	Drilling and Direct Push (Task 2)	$57,272
Columbia Analytical	Analytical Laboratory Services (Task 2)	$38,195
Columbia Analytical	Analytical Laboratory Services (Task 4)	$29,090
Onyx Environmental Services	IDW Services (Task 2)	$9,038
Columbia Analytical	IRM Services (Task 3)	$3,550

5	TOTAL UNIT PRICE SUBCONTRACTS	$162,145
6	SUBCONTRACT MANAGEMENT FEE	$6,124
7	TOTAL SUBCONTRACT COSTS (Lines 4 + 5 + 6)	**$192,207**
8	FIXED FEE (Schedule 2.10(h))	**$11,110**
9	**TOTAL WORK ASSIGNMENT PRICE (Lines 1 + 2 + 3 + 7 + 8)**	**$392,781**

Engineer: Harding Lawson Associates, Inc.
Contract No.: D003826
Project Name: Preferred Electric
Work Assigment No.: D003826-12

Date Prepared: 12/9/2004

Schedule 2.11(b)
Direct Labor Hours Budgeted

GRADE LEVEL	IX	VIII	VII	VI	V	IV	III	II	I	TOTAL DIRECT LABOR HOURS	TOTAL DIRECT LABOR DOLLARS
2004 RATES	$53.44	$47.94	$44.30	$39.39	$35.43	$32.00	$29.63	$25.95	$21.18		
2005 RATES	$54.44	$48.94	$45.30	$40.39	$36.43	$33.00	$30.63	$26.95	$22.18		
LABOR CLASSIFICATION - SUMMARY											
TASK 1 - Work Plan Development											
TOTAL HOURS (2004)	5	0	0	44	0	4	0	146	16	215	
TOTAL LABOR COST	$267	$0	$0	$1,733	$0	$128	$0	$3,789	$339		$6,256
TASK 2 - Remedial Investigation											
TOTAL HOURS (2004)	16	44	14	112	18	148	466	435	12	1265	
TOTAL LABOR COST	$855	$2,109	$620	$4,412	$638	$4,736	$13,808	$11,288	$254		$38,720
TASK 3 - Interim Remedial Measures (IRMs)											
TOTAL HOURS (2004)	2	0	0	10	0	14	0	80	2	108	
TOTAL LABOR COST	$107	$0	$0	$394	$0	$448	$0	$2,076	$42		$3,067
TASK 4 - Feasibility Study											
TOTAL HOURS (2005)	8	14	0	46	0	160	0	60	30	318	
TOTAL LABOR COST	$436	$685	$0	$1,858	$0	$5,280	$0	$1,617	$665		$10,541
TASK 5 - Standby Subcontracts											
TOTAL HOURS (2004)	4	0	0	22	0	0	0	90	2	118	
TOTAL LABOR COST	$214	$0	$0	$867	$0	$0	$0	$2,336	$42		$3,458
2004 Total Labor Hours	27	44	14	188	18	166	466	751	32	1706	
2004 Total Direct Labor Cost ($)	$1,443	$2,109	$620	$7,405	$638	$5,312	$13,808	$19,488	$678		$51,501
2005 Total Labor Hours	8	14	0	46	0	160	0	60	30	318	
2005 Total Direct Labor Cost ($)	$436	$685	$0	$1,858	$0	$5,280	$0	$1,617	$665		$10,541
TOTAL LABOR HOURS	35	58	14	234	18	326	466	811	62	2,024	
TOTAL DIRECT LABOR COST	$1,878	$2,795	$620	$9,263	$638	$10,592	$13,808	$21,105	$1,343		$62,041

NOTE: Direct administrative labor hours budgeted are broken out on Schedule 2.11(b-1).

Engineer: Harding Lawson Associates, Inc.
Contract No.: D003826
Project Name: Preferred Electric
Work Assigment No.: D003826-12

Date Prepared: 12/09/04

Schedule 2.11(b-1)
Direct Adminstrative Labor Hours Budgeted

GRADE LEVEL	IX	VIII	VII	VI	V	IV	III	II	I	TOTAL DIRECT LABOR HOURS	TOTAL DIRECT LABOR DOLLARS
2004 RATES	$53.44	$47.94	$44.30	$39.39	$35.43	$32.00	$29.63	$25.95	$21.18		
2005 RATES	$54.44	$48.94	$45.30	$40.39	$36.43	$33.00	$30.63	$26.95	$22.18		
LABOR CLASSIFICATION - SUMMARY											
TASK 1 - Work Plan Development											
TOTAL HOURS (2004)	4	0	0	24	0	0	0	2	4	34	
TOTAL LABOR COST	$214	$0	$0	$945	$0	$0	$0	$52	$85		$1,296
TASK 2 - Remedial Investigation											
TOTAL HOURS (2004)	2	0	0	12	0	0	0	8	12	34	
TOTAL LABOR COST	$107	$0	$0	$473	$0	$0	$0	$208	$254		$1,041
TASK 3 - Interim Remedial Measures (IRMs)											
TOTAL HOURS (2004)	1	0	0	4	0	0	0	0	2	7	
TOTAL LABOR COST	$53	$0	$0	$158	$0	$0	$0	$0	$42		$253
TASK 4 - Feasibility Study											
TOTAL HOURS (2005)	2	0	0	8	0	0	0	4	4	18	
TOTAL LABOR COST	$109	$0	$0	$323	$0	$0	$0	$108	$89		$629
TASK 5 - Standby Subcontracts											
TOTAL HOURS (2004)	2	0	0	2	0	0	0	0	2	6	
TOTAL LABOR COST	$107	$0	$0	$79	$0	$0	$0	$0	$42		$228
2004 Total Labor Hours	9	0	0	42	0	0	0	10	20	81	
2004 Total Direct Labor Cost ($)	$481	$0	$0	$1,654	$0	$0	$0	$260	$424		$2,818
2005 Total Labor Hours	2	0	0	8	0	0	0	4	4	18	
2005 Total Direct Labor Cost ($)	$109	$0	$0	$323	$0	$0	$0	$108	$89		$629
TOTAL LABOR HOURS	11	0	0	50	0	0	0	14	24	99	
TOTAL DIRECT LABOR COST	$590	$0	$0	$1,978	$0	$0	$0	$367	$512		$3,447

Contract/Project administrative hours would include (subject to contract allowability) but not necessarily be limited to the following activities:

1) Work Plan Development
   - Conflict of Interest
   - Develop budget schedules & 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 WA costs
   - Prepare monthly cost control report
   - Cost control reviews

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

1) QA/QC reviews
2) Technical oversight by management
3) Develop subcontracts
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
10) Review of deliverables

Engineer: Harding Lawson Associates, Inc. Date Prepared: 12/09/04
Contract No.: D003826
Project Name: Preferred Electric
Work Assigment No.: D003826-12

Schedule 2.11(c)
Direct Non-Salary Costs

Item	Maximum Reimbursement Rate	Unit	Estimated No. of Units	Total Estimated Cost
A) Sample Analysis Rates (In-House Cost Only)				
1)	$0.00	each	0	$0.00
2)	$0.00	each	0	$0.00
3)	$0.00	each	0	$0.00
TOTAL				**$0.00**
B) Miscellaneous				
1) TRAVEL				
Lodging	$77.00	night	50	$3,850.00
Meals	$47.00	day	53	$2,491.00
Car Rental	$70.00	day	61	$4,270.00
Cargo Van Rental	$390.00	week	0	$0.00
Mileage	$0.38	mile	0	$0.00
Parking	$7.00	day	0	$0.00
Gas	Actual Costs	N/A	$ 610.00	$610.00
Air Fare	Actual Costs	round trip	18	$6,840.00
TOTAL				**$18,061.00**
2) CONSULTANT OTHER DIRECT COSTS				
Printing/Photocopy	$0.05	page	25000	$1,250.00
CAD Computer	$7.50	hour	100	$750.00
Telephone	Actual Costs	N/A	N/A	$565.00
Shipping	Actual Costs	N/A	N/A	$1,696.00
Consumable Supplies	Actual Costs	N/A	N/A	$2,669.94
Other	$0.00	N/A	N/A	$370.00
TOTAL				**$7,301.00**
Total ODCs				**$25,362.00**

Engineer: Harding Lawson Associates, Inc. Date Prepared: 12/09/04
Contract No.: D003826
Project Name: Preferred Electric
Work Assigment No.: D003826-12

Schedule 2.11(d) 3
Maximum Reimbursement Rates for Vendor Rented Equipment

(1) Item	(2) Max. Reimbursement Rate ($)*	(3) Est. Usage (Unit of Time) +		(4) Est. Rental Cost ($) (Col. 2 x 3)
Geopump	$60	3	wk	$180
Horiba U-22 w/ flow cell	$240	6	wk	$1,440
Turbidity Meter	$64	5	wk	$320
Minirae PID	$160	9	wk	$1,440
Hermit 3000 Data Logger	$283	2	wk	$566
Transducer	$84	2	wk	$168
Hammer Drill	$140	4	wk	$560
Dust Meter	$145	5	wk	$725
Total Vendor Rented Equipment				$5,399

Notes:
* Reimbursement will be made at the Maximum Reimbursement rate or the actual rental rate, whichever is less.
+ Usage time includes shipping to and from site.

Engineer: Harding Lawson Associates, Inc. Date Prepared: 12/09/04
Contract No.: D003826
Project Name: Preferred Electric
Work Assigment No.: D003826-12

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

Name of Subcontractor	Services to be Performed	Subcontract Price
LU Engineers	Sampling & Inspection/Survey & Base Map	$ 23,938

A) Direct Salary Costs

Professional Responsibility Level	Labor Classification	Ave. Reimbursement Rate ($/hr)	Max. Reimbursement Rate ($/hr)	Est. No. of Hours	Total Est. Direct Salary Cost (Ave. Reimb. Rate x Est. # of Hrs.)
Task 1 - Health & Safety Plan					
Mgt. Engineer	NSPE VIII	$ 50.00		1	$ 50.00
Sr. Engineer	NSPE III	$ 25.26		4	$ 101.04
Engineer	NSPE II	$ 21.24		2	$ 42.48
Task 2a - Phase I Survey Services					
Mgt. Engineer	NSPE VIII	$ 50.00		1	$ 50.00
Sr. Engineer	NSPE III	$ 25.26		40	$ 1,010.40
Engr. Tech.	NSPE I	$ 17.82		48	$ 855.36
Task 2b-1 - Phase I Geoprobe Sampling/Geophysics					
Mgt. Engineer	NSPE VIII	$ 50.00		0	$ -
Sr. Engineer (geophysics)	NSPE III	$ 25.26		12	$ 303.12
Engineer	NSPE II	$ 21.24		30	$ 637.20
Task 2b-2 - Phase I Drain, Sediment and Water Sampling					
Mgt. Engineer	NSPE VIII	$ 50.00		0	$ -
Engineer	NSPE II	$ 21.24		20	$ 424.80
Task 2c - Phase I Subslab/Indoor Air Sampling Assistance					
Mgt. Engineer	NSPE VIII	$ 50.00		1	$ 50.00
Engineer	NSPE II	$ 21.24		50	$ 1,062.00
Engr. Tech.	NSPE I	$ 17.82		20	$ 356.40
Task 3a - Phase II Survey Services					
Mgt. Engineer	NSPE VIII	$ 50.00		1	$ 50.00
Sr. Engineer	NSPE III	$ 25.26		8	$ 202.08
Engr. Tech.	NSPE I	$ 17.82		12	$ 213.84
Task 3b - Phase II Utilities Stake Out					
Mgt. Engineer	NSPE VIII	$ 50.00		0	$ -
Engineer	NSPE II	$ 21.24		8	$ 169.92
Task 3c - Phase II Subslab/Indoor Air Sampling Assistance					
Mgt. Engineer	NSPE VIII	$ 50.00		1	$ 50.00
Engineer	NSPE II	$ 21.24		50	$ 1,062.00
Engr. Tech.	NSPE I	$ 17.82		20	$ 356.40
Total Direct Salary Costs					$ 7,047.04

Notes:
1) These rates will be held firm until May 31, 2005.
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 asterisk will be entitled to overtime premium.
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 M-6 job rate, whichever is lower.
6) The maximum 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 through 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 subject to renegotiation for future years of the contract. There shall be no retroactive adjustments of payment as a result of renegotiated salary schedules.

Engineer: Harding Lawson Associates, Inc. Date Prepared: 12/09/04
Contract No.: D003826
Project Name: Preferred Electric
Work Assigment No.: D003826-12

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

B) Indirect Costs

Indirect costs shall be paid based on a percentage of direct salary costs incurred which shall not exceed a maximum of 145% or the actual rate calculated in accordance with 48 CFR Federal Acquisition Regulation, whichever is lower.

Amount budgeted for indirect costs is:	$	10,218.21

C) Maximum Reimbursement Rates for Direct Non-Salary Costs

Item	Max. Reimbursement Rate (Specify Unit)	Est. No. of Units	Total Est. Cost
Travel			
Overnight Expenses	$ 80.00		$ -
Dinner Only	$ 24.00		$ -
Breakfast Only	$ 6.00		$ -
Mileage	$ 0.34	200	$ 68.00
Supplies			
Postage	$ 15.00		$ -
Total Station w/Tripod	$ 146.00	6	$ 876.00
Misc Expenses (incl. PPE)	$ 150.00	1	$ 150.00
Reproduction	$ 0.04	50	$ 2.00
GPR/EM Clearance	3,850.00	1	$ 3,850.00
Total Direct Non-Salary Costs			$ 4,946.00

D) Fixed Fee

The fixed fee is: (10% of Total Direct and Indirect Salary Costs) See Schedule 2.10(h) for how the fixed fee should be claimed.	$	1,726.52

Engineer: Harding Lawson Associates, Inc. Date Prepared: 12/09/04
Contract No.: D003826
Project Name: Preferred Electric
Work Assigment No.: D003826-12

Schedule 2.11(f)
Unit Price Subcontracts

NAME OF SUBCONTRACTOR	SERVICE	PRICE	MGMT FEE*
IRM Subcontractor Scientific Testing		$25,000	$1,000
ITEM		Unit Cost	Total Cost
Task 3 **Install Sub-Slab Depressurization Systems** Residences	10	$2,500	$25,000
Price is based on budgetary estimates from subcontractors Unit price may vary depending on the actual number of systems installed Required number of bids will be obtained when the actual number of systems to be installed are determined			

Note: Task 3

Subtotal Cost:	$25,000
Management Fee:	$1,000
Total:	**$26,000**

* Work assignment aggregate subcontract is greater than $10,000.

Engineer: Harding Lawson Associates, Inc. Date Prepared: 12/09/04
Contract No.: D003826
Project Name: Preferred Electric
Work Assigment No.: D003826-12

Schedule 2.11(f)
Unit Price Subcontracts
(continued)

NAME OF SUBCONTRACTOR	SERVICE	PRICE	MGMT FEE*
Nothnagle Drilling	Drilling/Direct Push	$57,272	$2,291
ITEM	Number of Units	Unit Cost	Total Cost
Direct Push			
Mob/Demob	1	$0.00	$0
Day Rate Level D - Special Acess ATV	3	$1,300.00	$3,900
Decon Pad	1	$100.00	$100
Concrete	6	$10.00	$60
Soil Gas Sampling (Phase I)	1	$1,300.00	$1,300
Cost per soil gas sample point	10	$50.00	$500.00
Soil Gas Sampling (Phase II)	1	$1,300.00	$1,300
Cost per soil gas sample point	10	$50.00	$500.00
Drilling			
Mob/Demob	2	$300.00	$600
4.25" HAS Drillling	120	$10.00	$1,200
2-inch OD SS (2 foot) Sample	60	$10.00	$600
Decon Rig and Augers	13	$130.00	$1,690
Install PVC Well Screen	120	$14.00	$1,680
Install PVC Riser	450	$8.00	$3,600
Install new 6" flush mount well cover	12	$150.00	$1,800
MW Development	24	$130.00	$3,120
Standbby	10	$130.00	$1,300
55 Gallon Drum - soil	20	$30.00	$600
Transport Soil drums to staging area	20	$25.00	$500.00
55 Gallon Drum - water	50	$30.00	$1,500.00
Transprot Soil drums to staging area	50	$25.00	$1,250.00
HX Coring 0-50	420	$48.00	$20,160.00
HX Coring 50-100	60	$50.00	$3,000.00
Ream Cored Hole	210	$18.00	$3,780.00
Sand Pack 0-50	117	$3.50	$409.50
Sand Pack 50-100	39	$4.00	$156.00
Pellet Seal 0-50	27	$10.00	$270.00
Pellet Seal 50-100	9	$10.50	$94.50
Riser Backfill 0-50	216	$5.00	$1,080.00
Riser Backfill 50-100	162	$6.00	$972.00
Decon Pad	1	$250.00	$250.00

Note: Task 2

Subtotal Cost:	$57,272
Management Fee:	$2,291
Total:	**$59,563**

* Work assignment aggregate subcontract is greater than $10,000.

Engineer: Harding Lawson Associates, Inc. Date Prepared: 12/09/04
Contract No.: D003826
Project Name: Preferred Electric
Work Assigment No.: D003826-12

Schedule 2.11(f)
Unit Price Subcontracts
(continued)

NAME OF SUBCONTRACTOR	SERVICE	PRICE	MGMT FEE *
Columbia Analytical	Analytical	$38,195	$1,528
ITEM	Number of Units	Unit Cost	Total Cost
Phase I			
PCB bulk samples			
Pest/PCB	6	$135.00	$ 810.00
Sediment Samples - floor drains			
TCL - VOCs	8	$85.00	$ 680.00
TCL - SVOCs	4	$175.00	$ 700.00
TCL - Metals	4	$105.00	$ 420.00
Pest/PCB	4	$135.00	$ 540.00
Surface Water Samples - floor drains			
TCL - VOCs	8	$85.00	$ 680.00
TCL - SVOCs	4	$175.00	$ 700.00
TCL - Metals	4	$105.00	$ 420.00
Pest/PCB	4	$135.00	$ 540.00
Soil Samples-Geoprobe			
TCL - VOCs	46	$85.00	$ 3,910.00
TCL - SVOCs	10	$175.00	$ 1,750.00
TCL - Metals	10	$105.00	$ 1,050.00
Pest/PCB	10	$135.00	$ 1,350.00
Soil Samples-Drilling			
TCL - VOCs	22	$85.00	$ 1,870.00
TCL - SVOCs	1	$175.00	$ 175.00
TCL - Metals	5	$105.00	$ 525.00
Pest/PCB	1	$135.00	$ 135.00
Bedrock Samples-Drilling			
TCL - VOCs	6	$85.00	$510.00
Soil Samples-background			
TCL - Metals	5	$105.00	$525.00
Soil Gas Samples (geoprobe)			
TCL-VOCs	11	$355.00	$3,905.00
Soil Vapor Samples (sub-slab)			
TCL-VOCs	17	$355.00	$6,035.00
Indoor Air Samples			
TCL-VOCs	21	$355.00	$7,455.00
Monitoring Well Water Samples			
TCL - VOCs	12	$85.00	$1,020.00
TCL - SVOCs	6	$175.00	$1,050.00

Note: Task 2

Subtotal Cost:	$38,195
Management Fee:	$1,528
Total:	**$39,723**

* Work assignment aggregate subcontract is greater than $10,000.

Engineer: Harding Lawson Associates, Inc. Date Prepared: 12/09/04
Contract No.: D003826
Project Name: Preferred Electric
Work Assigment No.: D003826-12

Schedule 2.11(f)
Unit Price Subcontracts
(continued)

NAME OF SUBCONTRACTOR	SERVICE	PRICE	MGMT FEE *
Columbia Analytical	Analytical	$29,090	$1,164
ITEM	Number of Units	Unit Cost	Total Cost
Phase II			
Soil Samples-Drilling			
TCL - VOCs	15	$85.00	$ 1,275.00
Bedrock Samples-Drilling			
TCL - VOCs	3	$85.00	$ 255.00
Water Samples			
TCL - VOCs-Cat B	20	$85.00	$ 1,700.00
TCL - SVOCs	6	$175.00	$ 1,050.00
TCL - Metals	6	$105.00	$ 630.00
Pest/PCB	6	$135.00	$ 810.00
TOC	12	$20.00	$ 240.00
Nitrate	12	$15.00	$ 180.00
Nitrite	12	$15.00	$ 180.00
Sulfate	12	$15.00	$ 180.00
Sulfide	12	$20	$ 240.00
Methane/Ethane/Ethene	12	$90	$ 1,080.00
CO2	12	$80	$ 960.00
Alkalinity	12	$15	$ 180.00
Chloride	12	$15	$ 180.00
Manganese/iron	12	$20	$ 240.00
Soil Gas Samples (geoprobe)			
TCL-VOCs	11	$355.00	$3,905.00
Soil Vapor Samples (sub-slab)			
TCL-VOCs	17	$355.00	$6,035.00
Indoor Air Samples			
TCL-VOCs	21	$355.00	$ 7,455.00
Water Samples			
TCL - VOCs-Cat A	13	$80	$ 1,040.00
Drum Sampling			
TCL - VOCs soil	5	$85	$ 425.00
TCL - VOCs water	10	$85	$ 850.00

Note: Task 2

Subtotal Cost:	$29,090
Management Fee:	$1,164
Total:	**$30,254**

* Work assignment aggregate subcontract is greater than $10,000.

Engineer: Harding Lawson Associates, Inc. Date Prepared: 12/09/04
Contract No.: D003826
Project Name: Preferred Electric
Work Assigment No.: D003826-12

Schedule 2.11(f)
Unit Price Subcontracts
(continued)

NAME OF SUBCONTRACTOR	SERVICE	PRICE	MGMT FEE *
Onyx Environmental Services	IDW Disposal	$9,038	$0
ITEM	Number of Units	Unit Cost	Total Cost
soil drums	20	$111.30	$2,226.00
liquid drums	50	$105.74	$5,286.75
Labor (hrs)	6	$105.74	$634.41
Service Charge (trip)	2	$445.20	$890.40

Note: Task 2

Subtotal Cost:	$9,038
Management Fee:	$0
Total:	**$9,038**

* Work assignment aggregate subcontract is less than $10,000.

Engineer: Harding Lawson Associates, Inc. Date Prepared: 12/09/04
Contract No.: D003826
Project Name: Preferred Electric
Work Assigment No.: D003826-12

Schedule 2.11(f)
Unit Price Subcontracts
(continued)

NAME OF SUBCONTRACTOR	SERVICE	PRICE	MGMT FEE *
Columbia Analytical	Analytical	$3,550	$142
ITEM	Number of Units	Unit Cost	Total Cost
Indoor Air Samples			
TCL-VOCs	10	$355.00	$ 3,550.00

Note: Task 3

Subtotal Cost:	$3,550
Management Fee:	$142
Total:	**$3,692**

* Work assignment aggregate subcontract is greater than $10,000.

SCHEDULE 2.11(g)

MONTHLY COST CONTROL REPORT
SUMMARY OF FISCAL INFORMATION

Engineer: Harding Lawson Associates, Inc.
Contract No.: D003826
Project Name: Preferred Electric
Work Assigment No.: D003826-12
Task #/Name: All Tasks
Complete: 0.0%

Page: 1 OF 6
Date Prepared: 12/09/04
Billing Period:
Invoice No.

Expenditure Category	A Costs Claimed This Period	B Paid To Date	C Total Disallowed To Date	D Total Costs Incurred To Date (A+B+C)	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	0.00	0.00	$62,042	0.00
2. Indirect Costs 155.8%	0.00	0.00	0.00	0.00	0.00	0.00	$96,661	0.00
3. Subtotal Direct Salary Costs and Indirect Costs	0.00	0.00	0.00	0.00	0.00	0.00	$158,703	0.00
4. Travel	0.00	0.00	0.00	0.00	0.00	0.00	$18,061	0.00
5. Other Non-Salary Costs	0.00	0.00	0.00	0.00	0.00	0.00	$12,700	0.00
6. Subtotal Direct Non-Salary Costs	0.00	0.00	0.00	0.00	0.00	0.00	$30,761	0.00
7. Subcontractors	0.00	0.00	0.00	0.00	0.00	0.00	$192,207	0.00
8. Total Site Cost	0.00	0.00	0.00	0.00	0.00	0.00	$381,671	0.00
9. Fixed Fee 7%	0.00	0.00	0.00	0.00	0.00	0.00	$11,110	0.00
10. Total Site Price	0.00	0.00	0.00	0.00	0.00	0.00	$392,781	0.00

Program Manager (Engineer) _____ Date: _____

SCHEDULE 2.11(g)

MONTHLY COST CONTROL REPORT
SUMMARY OF FISCAL INFORMATION

Engineer: Harding Lawson Associates, Inc.
Contract No.: D003826
Project Name: Preferred Electric
Work Assigment No.: D003826-12
Task #/Name: TASK 1 - Work Plan Development
Complete: 0.0%

Page: 2 OF 6
Date Prepared: 12/09/04
Billing Period:
Invoice No.

Expenditure Category	A Costs Claimed This Period	B Paid To Date	C Total Disallowed To Date	D Total Costs Incurred To Date (A+B+C)	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	0.00	0.00	$6,256.00	0.00
2. Indirect Costs 155.8%	0.00	0.00	0.00	0.00	0.00	0.00	$9,747.00	0.00
3. Subtotal Direct Salary Costs and Indirect Costs	0.00	0.00	0.00	0.00	0.00	0.00	$16,003.00	0.00
4. Travel	0.00	0.00	0.00	0.00	0.00	0.00	$711.00	0.00
5. Other Non-Salary Costs	0.00	0.00	0.00	0.00	0.00	0.00	$530.00	0.00
6. Subtotal Direct Non-Salary Costs	0.00	0.00	0.00	0.00	0.00	0.00	$1,241.00	0.00
7. Subcontractors	0.00	0.00	0.00	0.00	0.00	0.00	$0.00	0.00
8. Total Task Cost	0.00	0.00	0.00	0.00	0.00	0.00	$17,244.00	0.00
9. Fixed Fee 7%	0.00	0.00	0.00	0.00	0.00	0.00	$1,120.00	0.00
10. Total Task Price	0.00	0.00	0.00	0.00	0.00	0.00	$18,364.00	0.00

Program Manager (Engineer) _____ Date: _____

SCHEDULE 2.11(g)

MONTHLY COST CONTROL REPORT
SUMMARY OF FISCAL INFORMATION

Engineer: Harding Lawson Associates, Inc.
Contract No.: D003826
Project Name: Preferred Electric
Work Assigment No.: D003826-12
Task #/Name: TASK 2 - Remedial Investigation
Complete: 0.0%

Page: 3 OF 6
Date Prepared: 12/09/04
Billing Period:
Invoice No.

Expenditure Category	A Costs Claimed This Period	B Paid To Date	C Total Disallowed To Date	D Total Costs Incurred To Date (A+B+C)	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	0.00	0.00	$38,720	0.00
2. Indirect Costs 155.8%	0.00	0.00	0.00	0.00	0.00	0.00	$60,326	0.00
3. Subtotal Direct Salary Costs and Indirect Costs	0.00	0.00	0.00	0.00	0.00	0.00	$99,046	0.00
4. Travel	0.00	0.00	0.00	0.00	0.00	0.00	$14,068	0.00
5. Other Non-Salary Costs	0.00	0.00	0.00	0.00	0.00	0.00	$10,305	0.00
6. Subtotal Direct Non-Salary Costs	0.00	0.00	0.00	0.00	0.00	0.00	$24,373	0.00
7. Subcontractors	0.00	0.00	0.00	0.00	0.00	0.00	$162,515	0.00
8. Total Task Cost	0.00	0.00	0.00	0.00	0.00	0.00	$285,934	0.00
9. Fixed Fee 7%	0.00	0.00	0.00	0.00	0.00	0.00	$6,933	0.00
10. Total Task Price	0.00	0.00	0.00	0.00	0.00	0.00	$292,867	0.00

Program Manager (Engineer) _____ Date: _____

SCHEDULE 2.11(g)

MONTHLY COST CONTROL REPORT
SUMMARY OF FISCAL INFORMATION

Engineer: Harding Lawson Associates, Inc.
Contract No.: D003826
Project Name: Preferred Electric
Work Assigment No.: D003826-12
Task #/Name: TASK 3 - Interim Remedial Measures (IRMs)
Complete: 0.0%

Page: 4 OF 6
Date Prepared: 12/09/04
Billing Period:
Invoice No.

Expenditure Category	A Costs Claimed This Period	B Paid To Date	C Total Disallowed To Date	D Total Costs Incurred To Date (A+B+C)	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	0.00	0.00	$3,067	0.00
2. Indirect Costs 155.8%	0.00	0.00	0.00	0.00	0.00	0.00	$4,779	0.00
3. Subtotal Direct Salary Costs and Indirect Costs	0.00	0.00	0.00	0.00	0.00	0.00	$7,846	0.00
4. Travel	0.00	0.00	0.00	0.00	0.00	0.00	$2,494	0.00
5. Other Non-Salary Costs	0.00	0.00	0.00	0.00	0.00	0.00	$365	0.00
6. Subtotal Direct Non-Salary Costs	0.00	0.00	0.00	0.00	0.00	0.00	$2,859	0.00
7. Subcontractors	0.00	0.00	0.00	0.00	0.00	0.00	$29,692	0.00
8. Total Task Cost	0.00	0.00	0.00	0.00	0.00	0.00	$40,397	0.00
9. Fixed Fee 7%	0.00	0.00	0.00	0.00	0.00	0.00	$549	0.00
10. Total Task Price	0.00	0.00	0.00	0.00	0.00	0.00	$40,946	0.00

Program Manager (Engineer) _____ Date: _____

SCHEDULE 2.11(g)

MONTHLY COST CONTROL REPORT
SUMMARY OF FISCAL INFORMATION

Engineer: Harding Lawson Associates, Inc.
Contract No.: D003826
Project Name: Preferred Electric
Work Assigment No.: D003826-12
Task #/Name: TASK 4 - Feasibility Study
Complete: 0.0%

Page: 5 OF 6
Date Prepared: 12/09/04
Billing Period:
Invoice No.

Expenditure Category	A Costs Claimed This Period	B Paid To Date	C Total Disallowed To Date	D Total Costs Incurred To Date (A+B+C)	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	0.00	0.00	$10,541	0.00
2. Indirect Costs 155.8%	0.00	0.00	0.00	0.00	0.00	0.00	$16,423	0.00
3. Subtotal Direct Salary Costs and Indirect Costs	0.00	0.00	0.00	0.00	0.00	0.00	$26,964	0.00
4. Travel	0.00	0.00	0.00	0.00	0.00	0.00	$788	0.00
5. Other Non-Salary Costs	0.00	0.00	0.00	0.00	0.00	0.00	$950	0.00
6. Subtotal Direct Non-Salary Costs	0.00	0.00	0.00	0.00	0.00	0.00	$1,738	0.00
7. Subcontractors	0.00	0.00	0.00	0.00	0.00	0.00	$0	0.00
8. Total Task Cost	0.00	0.00	0.00	0.00	0.00	0.00	$28,702	0.00
9. Fixed Fee 7%	0.00	0.00	0.00	0.00	0.00	0.00	$1,887	0.00
10. Total Task Price	0.00	0.00	0.00	0.00	0.00	0.00	$30,589	0.00

Program Manager (Engineer) _____ Date: _____

SCHEDULE 2.11(g)

MONTHLY COST CONTROL REPORT
SUMMARY OF FISCAL INFORMATION

Engineer: Harding Lawson Associates, Inc.
Contract No.: D003826
Project Name: Preferred Electric
Work Assigment No.: D003826-12
Task #/Name: TASK 5 - Standby Subcontracts
Complete: 0.0%

Page: 6 OF 6
Date Prepared: 12/09/04
Billing Period:
Invoice No.

Expenditure Category	A Costs Claimed This Period	B Paid To Date	C Total Disallowed To Date	D Total Costs Incurred To Date (A+B+C)	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	0.00	0.00	$3,458.00	0.00
2. Indirect Costs 155.8%	0.00	0.00	0.00	0.00	0.00	0.00	$5,388.00	0.00
3. Subtotal Direct Salary Costs and Indirect Costs	0.00	0.00	0.00	0.00	0.00	0.00	$8,846.00	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	0.00	0.00	0.00	0.00	0.00	0.00	$550.00	0.00
6. Subtotal Direct Non-Salary Costs	0.00	0.00	0.00	0.00	0.00	0.00	$550.00	0.00
7. Subcontractors	0.00	0.00	0.00	0.00	0.00	0.00	$0.00	0.00
8. Total Task Cost	0.00	0.00	0.00	0.00	0.00	0.00	$9,396.00	0.00
9. Fixed Fee 7%	0.00	0.00	0.00	0.00	0.00	0.00	$619.00	0.00
10. Total Task Price	0.00	0.00	0.00	0.00	0.00	0.00	$10,015.00	0.00

Program Manager (Engineer) _____ Date: _____

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

Engineer: Harding Lawson Associates, Inc.
Contract No.: D003826
Project Name: Preferred Electric
Work Assigment No.: D003826-12
Task #/Name: TASK 2 - Remedial Investigation

Page 1 of 1
Date Prepared: 12/09/04
Billing Period:
Invoice No.

Subcontract Name	A Subcontract Costs Claimed This Application Incl. Resubmittals	B Subcontract Costs Approved For Payment on Previous Applications	C Total Subcontract Costs To Date (A plus B)	D Subcontract Approved Budget	E Management Fee Budget	F Management Fee Paid	G Total Costs To Date (C plus F)
1. Nothnagle Drilling				$57,272	$2,291		
2. Columbia Analytical Phase One Phase Two				 $38,195 $29,090	 $1,528 $1,164		
3. Onyx Environmental Services				$9,038	$0		
4. LU Engineers				$23,938	$0		
TOTALS				$157,532	$4,982		

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) Line 11, Column G should equal Line 7 (Subcontractors), Column D of Summary Cost Control Report.

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

Engineer: Harding Lawson Associates, Inc.
Contract No.: D003826
Project Name: Preferred Electric
Work Assigment No.: D003826-12
Task #/Name: TASK 3 - Interim Remedial Measures (IRMs)

Page 1 of 1
Date Prepared: 12/09/04
Billing Period:
Invoice No.

Subcontract Name	A Subcontract Costs Claimed This Application Incl. Resubmittals	B Subcontract Costs Approved For Payment on Previous Applications	C Total Subcontract Costs To Date (A plus B)	D Subcontract Approved Budget	E Management Fee Budget	F Management Fee Paid	G Total Costs To Date (C plus F)
1. Scientific Testing				$25,000	$1,000		
2. Columbia Analytical				$3,550	$142		
TOTALS				$28,550	$1,142		

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) Line 11, Column G should equal Line 7 (Subcontractors), Column D of Summary Cost Control Report.

SCHEDULE 2.11(h)
MONTHLY COST CONTROL REPORT
SUMMARY OF LABOR HOURS
Number of Direct Labor Hours Expended to Date/Estimated Number of Direct Labor Hours to Completion

Engineer: Harding Lawson Associates, Inc.
Contract No.: D003826
Project Name: Preferred Electric
Work Assigment No.: D003826-12

Date Prepared: 12/09/04
Billing Period:
Invoice #:

NSPE Labor Classification	IX Exp/Est*		VIII Exp/Est		VII Exp/Est		VI Exp/Est		V Exp/Est		IV Exp/Est		III Exp/Est		II Exp/Est		I Exp/Est		Total No. of Direct Labor Hours Exp/Est	
TASK 1 - Work Plan Development	0.0	5	0.0	0	0.0	0	0.0	44	0.0	0	0.0	4	0.0	0	0.0	146	0.0	16	0.0	215
TASK 2 - Remedial Investigation	0.0	16	0.0	44	0.0	14	0.0	112	0.0	18	0.0	148	0.0	466	0.0	435	0.0	12	0.0	1265
TASK 3 - Interim Remedial Measures (IRMs)	0.0	2	0.0	0	0.0	0	0.0	10	0.0	0	0.0	14	0.0	0	0.0	80	0.0	2	0.0	108
TASK 4 - Feasibility Study	0.0	8	0.0	14	0.0	0	0.0	46	0.0	0	0.0	160	0.0	0	0.0	60	0.0	30	0.0	318
TASK 5 - Standby Subcontracts	0.0	4	0.0	0	0.0	0	0.0	22	0.0	0	0.0	0	0.0	0	0.0	90	0.0	2	0.0	118
Total Hours	0.0	35	0.0	58	0.0	14	0.0	234	0.0	18	0.0	326	0.0	466	0.0	811	0.0	62	0.0	2024

* Expended/Estimated