Sturtevant - 3/1/10

GILES ENGINEERING ASSOCIATES, INC.
N8 W22350 Johnson Road, Suite A1
Waukesha, Wisconsin 53186
Phone: (262) 544-0118
Fax: (262) 549-5868

LETTER OF TRANSMITTAL

TO: Wisconsin Dept. of Natural Resources
Sturtevant Service Center
9531 Rayne Road, Suite IV
Racine, Wisconsin 53177

PROJECT NUMBER: 1E-0909013 **DATE:** 03/01/10

ATTENTION: Ms. Shanna Laube-Anderson

RE: Enclosed Documents (see below)

WE ARE SENDING YOU the following items: ____ Attached ____ Under separate cover via ________

____ Prints ____ Plans ____ Specifications ____ Samples _X_ Report ____ Change Order

____ Other:

MAR - 2010
By

COPIES	DATE	NUMBER	DESCRIPTION
1	01/20/10	1E-0909013	Site Investigation Work Plan – Martinizing Racine

THESE ARE TRANSMITTED as checked below:

_X_ For approval ____ For your files ____ As requested _X_ For review and comment

____ Approved as submitted ____ Approved as noted ____ Returned for corrections ____ Fax Return

____ Other

REMARKS:

The enclosed copy is for your review and files. Please contact me at 262-544-0118 or via email at kbugel@gilesengr.com if you have additional questions or concerns regarding the enclosed documents.

Thank you,

Kevin Bugel

Waiting for costs - 4/1/10

SIGNED [signature]

COPY TO: Mr. Douglas Berry

If enclosures are not as noted, please notify us at once.

252251010

Site Investigation Work Plan

Martinizing Racine
1730 State Street
Racine, Wisconsin

Prepared for:

Mr. Douglas Berry
Racine, Wisconsin

January 20, 2010
Project No. 1E-0909013

GILES ENGINEERING ASSOCIATES, INC.

GILES
ENGINEERING ASSOCIATES, INC.
GEOTECHNICAL, ENVIRONMENTAL & CONSTRUCTION MATERIALS CONSULTANTS

- Atlanta, GA
- Baltimore/Wash. DC
- Dallas, TX
- Los Angeles, CA
- Milwaukee, WI
- Orlando, FL

January 20, 2010

BMP Realty, Inc.
3319 Nobb Hill Drive
Racine, WI 53406

Attention: Mr. Douglas Berry

Subject: Site Investigation Work Plan
Martinizing Racine
1730 State Street
Racine, Wisconsin
Giles Project No. 1E-0909003

Dear Mr. Berry:

In accordance with your request and subsequent authorization, we have completed a Site Investigation Work Plan on the above referenced property. Findings and conclusions are discussed in detail within the accompanying report.

We appreciate the opportunity to be of service on this project. If there are any questions regarding the information contained herein, or if we can be of any additional service, please contact the undersigned at your convenience.

Respectfully submitted,

GILES ENGINEERING ASSOCIATES, INC.

Kevin T. Bugel, P.G., C. P. G.
Environmental Division Manager

Distribution: BMP Realty, Inc.
Attn: Mr. Douglas Berry
Wisconsin Department of Natural Resources
Attn: Ms. Shanna Laube-Anderson

1E-0909013-Martinizing Racine SIWP Cover Letter/09env3/jms

N8 W22350 Johnson Drive • Suite A1 • Waukesha, WI 53186
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1730 STATE STREET
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PROJECT NO. 1E-0909013

SITE INVESTIGATION WORK PLAN

MARTINIZING RACINE
1730 STATE STREET
RACINE, WISCONSIN
PROJECT NO. 1E-0909013

1. INTRODUCTION

1.1. Objective and Purpose

Giles Engineering Associates, Inc. (Giles) has prepared this Site Investigation Work Plan (SIWP) on behalf of Mr. Douglas Berry, owner of Martinizing Racine (herein referred to as the "Site"), located at 1730 State Street, in Racine, Wisconsin (Figure 1). This SIWP was prepared in response to a release notification and subsequent "responsible party" ("RP") letter from the Wisconsin Department of Natural Resources (WDNR), dated August 2, 2007.

The purpose of this SIWP is to provide a written plan to guide the investigation of soil and groundwater impact, identified at the Site during the initial Site scoping activities performed by Northern Environmental Technologies in May 2007. The scope of services presented in the SIWP were developed to evaluate the presence, extent, and magnitude of chlorinated volatile organic compounds (VOCs) related soil and groundwater at the Site, resulting from the Drycleaner operations.

This SIWP was prepared in general accordance with Wisconsin Administrative Code (WAC), Chapter Natural Resources (NR) 716.09. In addition, the scope of services presented in this work plan will be accomplished in a manner, consistent with WAC, NR Ch. 169, of Drycleaner Environmental Response Program (DERP). The proposed scope of services will be performed in a manner to maximize reimbursement under the NR 169 Drycleaner Environmental Response Fund (DERF). The methods and procedures presented in the SIWP will be preformed in general accordance with applicable sections of Chapter NR 700 and WDNR regulatory guidance and requirements.

Upon Completion of the scope of services presented in the SIWP, the investigation results and Giles conclusions and recommendations will be presented in a Site Investigation Report (SIR). Important Information regarding this geoenvironmental report is included in Appendix A.

1.2. Site Location and Setting

The Site is located in the NE ¼ of the SE ¼ of Section 8, Township 3 North, Range 23 East of U.S. Public Land Survey, at 42.7337 degrees latitude and 87.8023 degrees longitude of the North American Datum (NAD83), in the City of Racine, Racine County, Wisconsin. The Site is located at 1730 State Street, Racine, Wisconsin. Figure 1 illustrates the general location of the Site.

The Site is 11,495 ft^2 in size, and is occupied by a 5,016.5 ft^2 building. Improvements at the site include a single-story, slab-on-grade, concrete block building. The building is situated on the north-central portion of the Site, with asphalt parking areas east, south, and west of the building. The Site is currently operated as a laundromat and dry cleaner drop-off facility.

The Site is bounded on the west by State Street, on the south by West Street, and on the east by Blake Avenue. A fence is located along the northern Site boundary, with commercial development further to the north. The Site is generally flat-lying with surface run-off directed southwest. The inferred direction of shallow groundwater flow is to the south, toward the Root River, approximately 500 feet from the Site.

1.3. Previous Studies

The following Site background information was reviewed and summarized in preparation of this SIWP including 1) limited excerpts of the initial Site Scoping document, prepared by Northern Environmental Technologies, Inc. (Northern, Inc.), provided with the RFP and 2) the WDNR Bureau of Remediation and Redevelopment's web-based Geographic Information System (GIS) database of closed environmental remediation sites.

The Site is currently owned and operated by BMP Realty, Inc. The Site began operations as a self-service coin laundry mat and a dry cleaner in 1970, and is currently operated as a self-service coin laundry mat and a dry cleaner drop-off; dry cleaning operations were performed at the Site until approximately 2004. The pre-1970 property usage was not known at the time this SIWP was prepared.

Based on Giles review of excerpts of the initial site scoping document (Northern, Inc.) three soil borings (B1 through B3) were completed on-Site to establish if a release of dry cleaning solvent had occurred. Boring B1 was completed proximate to the south end of the dry cleaning machine (DCM) to a depth of 8 feet below the ground surface (bgs), boring B2 was completed to 2 feet bgs proximate to the north end of the DCM, and B3 was completed exterior to the building proximate to the western service door entrance. Tetrachloroethene (aka Perchloroethene or PCE) and trichloroethylene (TCE) were identified in the three shallow soil samples (0 to 2 feet bgs). Cis-1,2,-dichloroethene (1,2,-DCE) was also detected in the shallow soil sample from boring B3.

A groundwater sample was also collected from boring B1. PCE, TCE, and intermediate chlorinated volatile organic compounds (VOCs) at concentrations that exceed the WDNR enforcement standard (ES).

The WDNR received release notification from the RP on June 1, 2007. The aforementioned notification was performed to maintain eligibility for reimbursement under Drycleaner Environmental Response Fund (DERF) in accordance with NR 169.

It is Giles' understanding that the WDNR has requested that a SI be performed at the site in accordance with NR 716, in an effort to evaluate the extent of the PCE-impacted soil and volatile organic compound (VOC)-impacted groundwater, resulting from historic Site use as a dry cleaner. A detailed description of Giles investigation strategy, scope of services, and schedule to complete the SI activities are presented in the subsequent sections.

2. TECHNICAL APPROACH AND SCOPE OF SERVICES

2.1. Technical Approach

The SI activities will be performed at the Site to evaluate soil and groundwater impact associated with the Drycleaner operations. The SI field effort will incorporate a soil boring/monitoring well network consisting of one interior, and three exterior soil borings/water table monitoring wells to assess the groundwater quality. One groundwater sampling event has been requested by the WDNR in their scope of work for the Site.

2.2. Scope of Services

The following services will be performed for the SI including:

- Prepare a SI Work Plan in general accordance with NR Ch. 716 for the SI activities to be performed.

- Prepare and implement a Site-specific health and safety plan in accordance with 29 CFR 1910 for field activities performed at the Property.

- Complete one interior boring to 16 feet bgs using direct-push soil sampling techniques, proximate to the DCM. In addition, complete three exterior borings one direct-push and three hollow stem auger (HSA) soil borings to depths of 16 feet bgs. Soil samples will be collected from each 2-foot interval. NR 141-compliant monitoring wells will be constructed in three of the HSA soil borings; a 1-inch monitoring well will be constructed in the direct-push boring completed within the building interior. The monitoring wells will be screened across the shallow water table (inferred to approximately 4 to 12 feet bgs). A temporary well will also be completed on the east central region of the property to define the limits of groundwater impact in this region. Proposed boring, monitoring well, and temporary well locations are shown on Figure 2.

- Subject the soil samples collected during the HSA drilling and direct-push sampling activities to a visual evaluation and field screening for the presence of volatile organic vapors utilizing a photoionization detector (PID) equipped with a 10.6 eV lamp and calibrated to benzene equivalents.

- Submit up to ten select soil samples (two samples per boring) to an analytical laboratory for the chemical analysis of VOCs by EPA Method 8260.

- Collect and submit one groundwater sample from the temporary well to an analytical laboratory for the chemical analysis of VOCs (8260).

- Develop the monitoring wells and survey the location and top of casing elevation of the monitoring wells.

- Perform a base-line groundwater sampling event. Collect groundwater samples from the four monitoring wells. Submit the groundwater samples to an analytical laboratory for the chemical analysis of VOCs (8260).

- Utilize Diggers Hotline utility markings, available utility drawings and plans, plat of survey information from the City of Racine Engineering Department (or provided by the Site owner), and measurements of existing features established during the SI field work to develop a Site Plan. The Site Plan will be used as a base map.

- If the review of data obtained from the baseline sampling event indicates the presence of chlorinated VOCs exceeding regulatory standards, Giles will petition the WDNR to perform three additional groundwater sampling events incorporating the four monitoring wells on a quarterly schedule and submit the groundwater samples and a duplicate sample to an analytical laboratory for the chemical analyses of VOCs (8260).

- Manage the removal and proper disposal of drummed soil and groundwater.

- Evaluate the results of the soil and groundwater chemical analysis, and the subsurface conditions that are encountered.

- Provide recommendations for additional SI soil borings/monitoring wells, if required.

- Prepare a WAC, ch. NR 716 compliant Site Investigation Report (SIR) which includes all soil and groundwater data and measurements, WDNR boring logs, well development forms, well construction forms, and the results of the quarterly groundwater sampling.

3. SITE INVESTIGATION METHODS AND PROCEDURES

This section describes the methods procedures for the SI sampling program. The field activities will be performed in conformance with The SHSP, prepared specifically for the Site activities. During the sampling work, field staff will describe and photograph the Site-specific features and features of general Site vicinity. Field staff will also note Site-specific conditions and prepare detailed sketches of these areas. These descriptions and sketches will include above-ground physical features, marked below grade utilities, and paved and un-paved areas of the Site.

3.1. Soil Sampling Methods

3.1.1. HSA Soil Sampling Methods

The HSA soil samples will be completed using 4.25-inch inside diameter, 8.5-inch outside diameter hollow-stem augers. Soil samples will be collected using a split-spoon sampler in accordance with the American Society for Testing and Materials (ASTM) Method D1586. Soil samples will be collected in a manner causing the least disturbance to the sample. To minimize volatilization of material in the soil, the split-spoon sampler will be opened immediately upon removal from the boring. Soil samples will be transferred from the split-spoon sampler directly to appropriate laboratory-cleaned sample containers immediately following opening the split-spoon.

Soil samples will be handled using new/clean latex gloves that will be changed between successive samples. The split-spoon sampler and any sampler devices, such as the spring catcher, will be cleaned and decontaminated between successive samples and the augers and drilling rods will be pressure washed or steam cleaned between successive boreholes.

Soil samples will be classified in the field in general accordance with the Unified Soil Classification System (USCS) and ASTM D-2488-75. The soil classifications will be documented on the *Record of Subsurface Exploration* forms.

3.1.2. Direct-Push Soil Sampling Methods

The direct-push sampling method uses a 1 or 2-inch diameter hollow stem sampling barrel to reach the top of the desired sampling depth. Once the sampling barrel is positioned at the desired depth, a clean disposable plastic liner dedicated to each soil sample is inserted into the barrel. To push the soil sample into the liner, the barrel is advanced 2 or 4 feet with a hydraulically driven percussion hammer.

When the liner containing soil is brought to the surface and removed from the barrel, the liner is cut open to allow access to the soil. Soil retrieved from the liner is used for PID screening and visual classification and collection of soil sample for laboratory analysis.

The sampling rod will be decontaminated between each sampling interval to prevent cross-contamination. A new plastic liner will be inserted into the sampling barrel to be advanced to the top of the next 2 or 4-foot depth interval. The sampling procedure will be repeated at 2 or 4-foot continuous depth intervals until the end of the boring.

The information collected during direct-push soil boring advancement will be presented on the final borehole logs that will be prepared on the Giles *Record of Subsurface Exploration* form. The logs will include information on sampling intervals and other pertinent information related to the direct-push activities.

Due to a minimum amount of soil cuttings generated during the direct-push advancement activities, no collection or disposal of the soil cuttings is anticipated. The used (spent) plastic liners will be disposed of in garbage containers.

3.1.3. Soil Sample Field Screening and Analysis

A replicate portion of each soil sample will be placed in an air-tight, re-sealable container for soil vapor field screening with a PID equipped with a 10.6 eV lamp. Screening results from the PID are registered in parts per million (ppm) based on an isobutylene standard which is referenced to the ionization potential of benzene. Screening results will be noted on the *Record of Subsurface Exploration*. The PID will be calibrated on a daily basis. The field staff will maintain a log of daily calibration that will be included as part of their field documentation. Replicate samples intended for laboratory analysis will not be used for PID screening.

Based on the results of the PID field screening and/or the specifications of the SIWP, replicate soil samples will be selected for laboratory analysis. Soil samples will be submitted a Wisconsin-certified laboratory for analysis.

3.2. Groundwater Well Installation, Development, and Sampling Methods

3.2.1. Monitoring Well Installation

Monitoring wells will be installed in a manor that permits the screened interval to intercept the water table through seasonal water table level fluctuations. Monitoring wells will be constructed of 0.01-inch slotted, 2-inch diameter (1-inch for the interior well), flush-threaded, Schedule 40 polyvinyl chloride (PVC) screen. The screen will be 10 feet in length for monitoring wells. The riser pipe will consist of Schedule 40, flush threaded PVC. A 4-inch long flush threaded, Schedule 40 PVC cap will be placed on the bottom of the monitoring well screens.

The annular space surrounding each well screen will be backfilled with clean, well-sorted silica sand as a filter between the formation material and the well screen. Monitoring wells will be constructed inside of the 4¼-inch inside diameter hollow-stem augers. Care will be taken to properly place a continuous filter pack between the well screen and the borehole wall. The filter packs will extend approximately 1 to 2 feet above the top of the well screens. The top of the filter pack will be measured with a weighted measuring tape for depth confirmation.

A bentonite seal, 2 to 3 feet thick, will be placed in the annular space above the filter pack. The seal will be composed of commercially-manufactured bentonite chips. The bentonite will be slowly poured through the hollow-stem augers to minimize the potential for bridging. The finished bentonite surface will be measured with a weighted measuring tape for depth confirmation. The well screen will be positioned so as to intercept the chemicals of concern or assess the hydrogeologic properties of the saturated zone.

Granular bentonite will be placed above the bentonite seal to the ground surface. The bentonite will be slowly poured through the hollow-stem augers to minimize the potential for bridging. The bentonite will be backfilled until it is observed near the ground surface. The annular seal will be added in lifts; alternating between bentonite placement through the hollow-stem augers and auger removal.

During well construction, a cap will be installed at the top of the riser to prevent material from entering the well. A flush-mount (road box) type, protective casings will be used in high traffic areas. A lock on the compression cap will be installed on monitoring wells, completed with a road box; the protective casing cover will be bolted in place.

3.2.2. Monitoring Well Development

The Monitoring wells will be developed following well installation.

The objectives of the well development are to:

- assure that groundwater enters the well screen freely, thus yielding a representative groundwater sample and water level measurement;

- remove fine-grained sediment in the filter pack and the nearby formation adjacent to the filter pack to minimize groundwater sample turbidity and silting of the well; and,

- maximize the efficiency of the filter pack for aquifer hydraulic testing.

Well development will consist of alternating periods of surging with a disposable bailer and purging using a 2-inch diameter centrifugal pump, an air lift pump, or equivalent. The pumping rate will be set to correspond with the aquifer yield. Well development activities will continue until the groundwater effluent turbidity is reduced to clear conditions or until the suspended sediments have stabilized. For wells exhibiting low recharge (i.e. clay) development will consist of pumping until the well until it no longer yields water.

3.2.3. Monitoring Well Sampling

Groundwater samples from the NR 141-compliant monitoring wells will be collected in accordance with the WDNR, Bureau of Drinking Water and Groundwater, Groundwater Sampling Field Manual, dated September 1996 (PUBL-DG-03896).

Upon completion of purging, groundwater samples for laboratory analysis will be obtained using disposable bailers and rope. The sampler will put on new/clean latex gloves prior to purging and sampling each well. The gloves will be changed between successive samples. The bailer will be lowered to the water table, slowly, passed through the water table interface, and slowly extracted from the well once filled. Water samples will be transferred into laboratory supplied glassware vie bottom-emptying bailer devices. Samples will be tremmied from the bailer directly into the appropriate laboratory-supplied sample containers.

Groundwater collected for VOCs will be placed in 40-milliliter (mL) glass vials with Teflon® lined lids preserved with hydrochloric acid. Trip and field water blank samples will also be analyzed for VOCs for verification of laboratory quality control and quality assurance (QA/QC).

Upon completion of the sampling activities, the field personnel will re-secure the wellhead. Expandable locking caps will be reestablished, re-secured, and road box cover plates and bolts will be re-installed. Worn, damaged, or deteriorated components will be replaced at this time. Replacement components will be noted of the well sampling logs.

Quality control (QC) samples collected in association with groundwater sampling events include field blanks, field duplicates, and equipment blanks. If new disposable equipment is used for each sample, equipment blanks may not be required; such exceptions will be noted. Collection procedures for these QC sample categories include:

- A field blank will be collected at a frequency of 1 per a maximum of 20 samples collected or at least daily sample to verify absence of interferences or cross contamination during sample collection and handling.

- One groundwater sample will be split during sample collection to obtain a duplicate sample. The results of the two samples will be used as a general indication of the homogeneity of the contamination. A relative percent difference (RPD) will be calculated for the sample pair and the sample results will be qualified. At a minimum, one duplicate will be collected per 20 samples.

3.3. Labeling, Storage, and Chain-of-Custody Documentation

Immediately following sample collection, each sample will be placed in a cooler with ice. Sample containers will be labeled with the project name, project number, location, boring number, sample number, collection date, and collector's initials.

Each sample will be recorded and documented on a Chain-of-Custody form at the time of sampling. The Chain-of-Custody form will remain with the samples through collection, transport to the laboratory, and analysis of the samples. With the transfer of sample possession to a subsequent custodian, the Chain-of-Custody form will be signed by the person taking custody.

Sample coolers will be packed using bubble wrap or other inert packing material such that bottles will not shift during shipping in order to avoid breakage. Coolers will be sealed with a custody seal and taped shut. When sealing the cooler, the person packaging will ensure that drains on the cooler are also closed and properly seated. In addition, the drain port will be taped shut to assure it does not accidentally open during sample shipment. The custody seal will be signed and dated by the person packing the cooler.

Sample coolers will either be hand-delivered to the analytical laboratory or shipped via a common carrier with arrivals scheduled for next day delivery. If coolers are to be shipped via carrier, field personnel will confirm labeling requirements with the carrier to ensure that packages are properly labeled based on contents.

3.4. Decontamination Procedures

Field decontamination procedures for drilling and sampling equipment will be implemented to provide representative samples by reducing the potential for cross-contamination between sampling locations. The decontamination procedures for HSA drilling equipment include pressure washing or steam cleaned augers and drill rods between each soil boring. Split-spoon samplers will also be pressure washed or steam cleaned between borings or cleaned by manually removing gross residuals followed by a successive wash using a phosphate-free soap wash and a potable water rinse. Split-spoon samplers will be allowed sufficient time to air dry prior to use. If additional decontamination techniques are required (i.e. methanol, deionized water, or nitric acid rinses), they will be specified in the work plan for the field event. Finally, drill rigs will be pressure washed or steam cleaned prior to arrival to the Site and prior to Site departure.

Pumps used for monitoring well development and purging will be decontaminated before initial use and between wells. The inside and outside of the pump and cable, etc. will be decontaminated by washing with and pumping a phosphate free soap solution followed by a deionized water rinse. Disposable polyethylene tubing will be used for purging and sampling monitoring wells. This tubing will not be used between successive samples.

3.5. Investigation-Derived Waste Management

3.5.1. HSA Soil Cuttings Management

Soil cuttings from the HSA drilling activities will be placed in 55-gallon DOT-Approved Drums. One composite bulk soil sample will be prepared from representative portions of each drum and analyzed for disposal characterization at an appropriate licensed solid waste facility.

The drums will be labeled and staged on Site. Label information will include the generation date, RP name, Site Name, and will state "environmental soil waste, pending analysis." Upon receipt of the analytical results, a determination will be made regarding the final disposition of these wastes.

Expendable investigative waste (i.e. gloves and paper towels) generated during the field effort will be considered solid waste. These articles will be placed in trash bags and placed in trash containers located at the Site.

3.5.2. Purge and Development Water Management

Decontamination liquids, development, and purge water generated during the SI will be containerized in 55-gallon DOT-Approved Drums, labeled, sampled and staged at the Site. Upon receipt of the analytical results, a determination will be made regarding the final disposition of these wastes.

3.6. Site Surveying

Sampling locations will be documented on a Site Plan. Site physical features, monitoring well and direct push boring locations, and other pertinent above-ground features will be included. Site elevation data will be established to a temporary benchmark for future reference and elevations to the well top of casing and ground surface will be established for each monitoring well.

4. SCHEDULE

Giles anticipates four weeks for access coordination and utility clearance. The SI field activities will include the installation of one interior soil boring and completion as a monitoring well proximate to the drycleaner machine to assess the vertical soil profile and evaluate the potential presence of groundwater impacted with chlorinated VOCs. Giles will also mobilize a HSA drilling rig to the Site and install a well network consisting of three exterior water table monitoring wells and one temporary well to evaluate the extent of groundwater impact and assess contaminant trends.

A base-line groundwater sampling event and up to three additional quarterly groundwater sampling events may be required to establish data sufficient to demonstrate plume stability, prior to Site closure. Giles anticipates a ten working day turn around time for laboratory results. The SI activities, as listed, are expected to take up to 12 months to complete. We will provide copies of the final SIR six weeks after receipt of the laboratory results, if the extent of contamination is defined.

Site Investigation Work Plan

Martinizing Racine
1730 State Street
Racine, Wisconsin

Prepared for:

Mr. Douglas Berry
Racine, Wisconsin

January 20, 2010
Project No. 1E-0909013

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SITE INVESTIGATION WORK PLAN

MARTINIZING RACINE
1730 STATE STREET
RACINE, WISCONSIN
PROJECT NO. 1E-0909013

1. INTRODUCTION

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- Prepare a SI Work Plan in general accordance with NR Ch. 716 for the SI activities to be performed.

- Prepare and implement a Site-specific health and safety plan in accordance with 29 CFR 1910 for field activities performed at the Property.

- Complete one interior boring to 16 feet bgs using direct-push soil sampling techniques, proximate to the DCM. In addition, complete three exterior borings one direct-push and three hollow stem auger (HSA) soil borings to depths of 16 feet bgs. Soil samples will be collected from each 2-foot interval. NR 141-compliant monitoring wells will be constructed in three of the HSA soil borings; a 1-inch monitoring well will be constructed in the direct-push boring completed within the building interior. The monitoring wells will be screened across the shallow water table (inferred to approximately 4 to 12 feet bgs). A temporary well will also be completed on the east central region of the property to define the limits of groundwater impact in this region. Proposed boring, monitoring well, and temporary well locations are shown on Figure 2.

- Subject the soil samples collected during the HSA drilling and direct-push sampling activities to a visual evaluation and field screening for the presence of volatile organic vapors utilizing a photoionization detector (PID) equipped with a 10.6 eV lamp and calibrated to benzene equivalents.

- Submit up to ten select soil samples (two samples per boring) to an analytical laboratory for the chemical analysis of VOCs by EPA Method 8260.

- Collect and submit one groundwater sample from the temporary well to an analytical laboratory for the chemical analysis of VOCs (8260).

- Develop the monitoring wells and survey the location and top of casing elevation of the monitoring wells.

- Perform a base-line groundwater sampling event. Collect groundwater samples from the four monitoring wells. Submit the groundwater samples to an analytical laboratory for the chemical analysis of VOCs (8260).

- Utilize Diggers Hotline utility markings, available utility drawings and plans, plat of survey information from the City of Racine Engineering Department (or provided by the Site owner), and measurements of existing features established during the SI field work to develop a Site Plan. The Site Plan will be used as a base map.

- If the review of data obtained from the baseline sampling event indicates the presence of chlorinated VOCs exceeding regulatory standards, Giles will petition the WDNR to perform three additional groundwater sampling events incorporating the four monitoring wells on a quarterly schedule and submit the groundwater samples and a duplicate sample to an analytical laboratory for the chemical analyses of VOCs (8260).

- Manage the removal and proper disposal of drummed soil and groundwater.

- Evaluate the results of the soil and groundwater chemical analysis, and the subsurface conditions that are encountered.

- Provide recommendations for additional SI soil borings/monitoring wells, if required.

- Prepare a WAC, ch. NR 716 compliant Site Investigation Report (SIR) which includes all soil and groundwater data and measurements, WDNR boring logs, well development forms, well construction forms, and the results of the quarterly groundwater sampling.

3. SITE INVESTIGATION METHODS AND PROCEDURES

This section describes the methods procedures for the SI sampling program. The field activities will be performed in conformance with The SHSP, prepared specifically for the Site activities. During the sampling work, field staff will describe and photograph the Site-specific features and features of general Site vicinity. Field staff will also note Site-specific conditions and prepare detailed sketches of these areas. These descriptions and sketches will include above-ground physical features, marked below grade utilities, and paved and un-paved areas of the Site.

3.1. Soil Sampling Methods

3.1.1. HSA Soil Sampling Methods

The HSA soil samples will be completed using 4.25-inch inside diameter, 8.5-inch outside diameter hollow-stem augers. Soil samples will be collected using a split-spoon sampler in accordance with the American Society for Testing and Materials (ASTM) Method D1586. Soil samples will be collected in a manner causing the least disturbance to the sample. To minimize volatilization of material in the soil, the split-spoon sampler will be opened immediately upon removal from the boring. Soil samples will be transferred from the split-spoon sampler directly to appropriate laboratory-cleaned sample containers immediately following opening the split-spoon.

Soil samples will be handled using new/clean latex gloves that will be changed between successive samples. The split-spoon sampler and any sampler devices, such as the spring catcher, will be cleaned and decontaminated between successive samples and the augers and drilling rods will be pressure washed or steam cleaned between successive boreholes.

Soil samples will be classified in the field in general accordance with the Unified Soil Classification System (USCS) and ASTM D-2488-75. The soil classifications will be documented on the *Record of Subsurface Exploration* forms.

3.1.2. Direct-Push Soil Sampling Methods

The direct-push sampling method uses a 1 or 2-inch diameter hollow stem sampling barrel to reach the top of the desired sampling depth. Once the sampling barrel is positioned at the desired depth, a clean disposable plastic liner dedicated to each soil sample is inserted into the barrel. To push the soil sample into the liner, the barrel is advanced 2 or 4 feet with a hydraulically driven percussion hammer.

When the liner containing soil is brought to the surface and removed from the barrel, the liner is cut open to allow access to the soil. Soil retrieved from the liner is used for PID screening and visual classification and collection of soil sample for laboratory analysis.

The sampling rod will be decontaminated between each sampling interval to prevent cross-contamination. A new plastic liner will be inserted into the sampling barrel to be advanced to the top of the next 2 or 4-foot depth interval. The sampling procedure will be repeated at 2 or 4-foot continuous depth intervals until the end of the boring.

The information collected during direct-push soil boring advancement will be presented on the final borehole logs that will be prepared on the Giles *Record of Subsurface Exploration* form. The logs will include information on sampling intervals and other pertinent information related to the direct-push activities.

Due to a minimum amount of soil cuttings generated during the direct-push advancement activities, no collection or disposal of the soil cuttings is anticipated. The used (spent) plastic liners will be disposed of in garbage containers.

3.1.3. Soil Sample Field Screening and Analysis

A replicate portion of each soil sample will be placed in an air-tight, re-sealable container for soil vapor field screening with a PID equipped with a 10.6 eV lamp. Screening results from the PID are registered in parts per million (ppm) based on an isobutylene standard which is referenced to the ionization potential of benzene. Screening results will be noted on the *Record of Subsurface Exploration*. The PID will be calibrated on a daily basis. The field staff will maintain a log of daily calibration that will be included as part of their field documentation. Replicate samples intended for laboratory analysis will not be used for PID screening.

Based on the results of the PID field screening and/or the specifications of the SIWP, replicate soil samples will be selected for laboratory analysis. Soil samples will be submitted a Wisconsin-certified laboratory for analysis.

3.2. Groundwater Well Installation, Development, and Sampling Methods

3.2.1. Monitoring Well Installation

Monitoring wells will be installed in a manor that permits the screened interval to intercept the water table through seasonal water table level fluctuations. Monitoring wells will be constructed of 0.01-inch slotted, 2-inch diameter (1-inch for the interior well), flush-threaded, Schedule 40 polyvinyl chloride (PVC) screen. The screen will be 10 feet in length for monitoring wells. The riser pipe will consist of Schedule 40, flush threaded PVC. A 4-inch long flush threaded, Schedule 40 PVC cap will be placed on the bottom of the monitoring well screens.

The annular space surrounding each well screen will be backfilled with clean, well-sorted silica sand as a filter between the formation material and the well screen. Monitoring wells will be constructed inside of the 4¼-inch inside diameter hollow-stem augers. Care will be taken to properly place a continuous filter pack between the well screen and the borehole wall. The filter packs will extend approximately 1 to 2 feet above the top of the well screens. The top of the filter pack will be measured with a weighted measuring tape for depth confirmation.

A bentonite seal, 2 to 3 feet thick, will be placed in the annular space above the filter pack. The seal will be composed of commercially-manufactured bentonite chips. The bentonite will be slowly poured through the hollow-stem augers to minimize the potential for bridging. The finished bentonite surface will be measured with a weighted measuring tape for depth confirmation. The well screen will be positioned so as to intercept the chemicals of concern or assess the hydrogeologic properties of the saturated zone.

Granular bentonite will be placed above the bentonite seal to the ground surface. The bentonite will be slowly poured through the hollow-stem augers to minimize the potential for bridging. The bentonite will be backfilled until it is observed near the ground surface. The annular seal will be added in lifts; alternating between bentonite placement through the hollow-stem augers and auger removal.

During well construction, a cap will be installed at the top of the riser to prevent material from entering the well. A flush-mount (road box) type, protective casings will be used in high traffic areas. A lock on the compression cap will be installed on monitoring wells, completed with a road box; the protective casing cover will be bolted in place.

3.2.2. Monitoring Well Development

The Monitoring wells will be developed following well installation.

The objectives of the well development are to:

- assure that groundwater enters the well screen freely, thus yielding a representative groundwater sample and water level measurement;

- remove fine-grained sediment in the filter pack and the nearby formation adjacent to the filter pack to minimize groundwater sample turbidity and silting of the well; and,

- maximize the efficiency of the filter pack for aquifer hydraulic testing.

Well development will consist of alternating periods of surging with a disposable bailer and purging using a 2-inch diameter centrifugal pump, an air lift pump, or equivalent. The pumping rate will be set to correspond with the aquifer yield. Well development activities will continue until the groundwater effluent turbidity is reduced to clear conditions or until the suspended sediments have stabilized. For wells exhibiting low recharge (i.e. clay) development will consist of pumping until the well until it no longer yields water.

3.2.3. Monitoring Well Sampling

Groundwater samples from the NR 141-compliant monitoring wells will be collected in accordance with the WDNR, Bureau of Drinking Water and Groundwater, Groundwater Sampling Field Manual, dated September 1996 (PUBL-DG-03896).

Upon completion of purging, groundwater samples for laboratory analysis will be obtained using disposable bailers and rope. The sampler will put on new/clean latex gloves prior to purging and sampling each well. The gloves will be changed between successive samples. The bailer will be lowered to the water table, slowly, passed through the water table interface, and slowly extracted from the well once filled. Water samples will be transferred into laboratory supplied glassware vie bottom-emptying bailer devices. Samples will be tremmied from the bailer directly into the appropriate laboratory-supplied sample containers.

Groundwater collected for VOCs will be placed in 40-milliliter (mL) glass vials with Teflon® lined lids preserved with hydrochloric acid. Trip and field water blank samples will also be analyzed for VOCs for verification of laboratory quality control and quality assurance (QA/QC).

Upon completion of the sampling activities, the field personnel will re-secure the wellhead. Expandable locking caps will be reestablished, re-secured, and road box cover plates and bolts will be re-installed. Worn, damaged, or deteriorated components will be replaced at this time. Replacement components will be noted of the well sampling logs.

Quality control (QC) samples collected in association with groundwater sampling events include field blanks, field duplicates, and equipment blanks. If new disposable equipment is used for each sample, equipment blanks may not be required; such exceptions will be noted. Collection procedures for these QC sample categories include:

- A field blank will be collected at a frequency of 1 per a maximum of 20 samples collected or at least daily sample to verify absence of interferences or cross contamination during sample collection and handling.

- One groundwater sample will be split during sample collection to obtain a duplicate sample. The results of the two samples will be used as a general indication of the homogeneity of the contamination. A relative percent difference (RPD) will be calculated for the sample pair and the sample results will be qualified. At a minimum, one duplicate will be collected per 20 samples.

3.3. Labeling, Storage, and Chain-of-Custody Documentation

Immediately following sample collection, each sample will be placed in a cooler with ice. Sample containers will be labeled with the project name, project number, location, boring number, sample number, collection date, and collector's initials.

Each sample will be recorded and documented on a Chain-of-Custody form at the time of sampling. The Chain-of-Custody form will remain with the samples through collection, transport to the laboratory, and analysis of the samples. With the transfer of sample possession to a subsequent custodian, the Chain-of-Custody form will be signed by the person taking custody.

Sample coolers will be packed using bubble wrap or other inert packing material such that bottles will not shift during shipping in order to avoid breakage. Coolers will be sealed with a custody seal and taped shut. When sealing the cooler, the person packaging will ensure that drains on the cooler are also closed and properly seated. In addition, the drain port will be taped shut to assure it does not accidentally open during sample shipment. The custody seal will be signed and dated by the person packing the cooler.

Sample coolers will either be hand-delivered to the analytical laboratory or shipped via a common carrier with arrivals scheduled for next day delivery. If coolers are to be shipped via carrier, field personnel will confirm labeling requirements with the carrier to ensure that packages are properly labeled based on contents.

3.4. Decontamination Procedures

Field decontamination procedures for drilling and sampling equipment will be implemented to provide representative samples by reducing the potential for cross-contamination between sampling locations. The decontamination procedures for HSA drilling equipment include pressure washing or steam cleaned augers and drill rods between each soil boring. Split-spoon samplers will also be pressure washed or steam cleaned between borings or cleaned by manually removing gross residuals followed by a successive wash using a phosphate-free soap wash and a potable water rinse. Split-spoon samplers will be allowed sufficient time to air dry prior to use. If additional decontamination techniques are required (i.e. methanol, deionized water, or nitric acid rinses), they will be specified in the work plan for the field event. Finally, drill rigs will be pressure washed or steam cleaned prior to arrival to the Site and prior to Site departure.

Pumps used for monitoring well development and purging will be decontaminated before initial use and between wells. The inside and outside of the pump and cable, etc. will be decontaminated by washing with and pumping a phosphate free soap solution followed by a deionized water rinse. Disposable polyethylene tubing will be used for purging and sampling monitoring wells. This tubing will not be used between successive samples.

3.5. Investigation-Derived Waste Management

3.5.1. HSA Soil Cuttings Management

Soil cuttings from the HSA drilling activities will be placed in 55-gallon DOT-Approved Drums. One composite bulk soil sample will be prepared from representative portions of each drum and analyzed for disposal characterization at an appropriate licensed solid waste facility.

The drums will be labeled and staged on Site. Label information will include the generation date, RP name, Site Name, and will state “environmental soil waste, pending analysis.” Upon receipt of the analytical results, a determination will be made regarding the final disposition of these wastes.

Expendable investigative waste (i.e. gloves and paper towels) generated during the field effort will be considered solid waste. These articles will be placed in trash bags and placed in trash containers located at the Site.

3.5.2. Purge and Development Water Management

Decontamination liquids, development, and purge water generated during the SI will be containerized in 55-gallon DOT-Approved Drums, labeled, sampled and staged at the Site. Upon receipt of the analytical results, a determination will be made regarding the final disposition of these wastes.

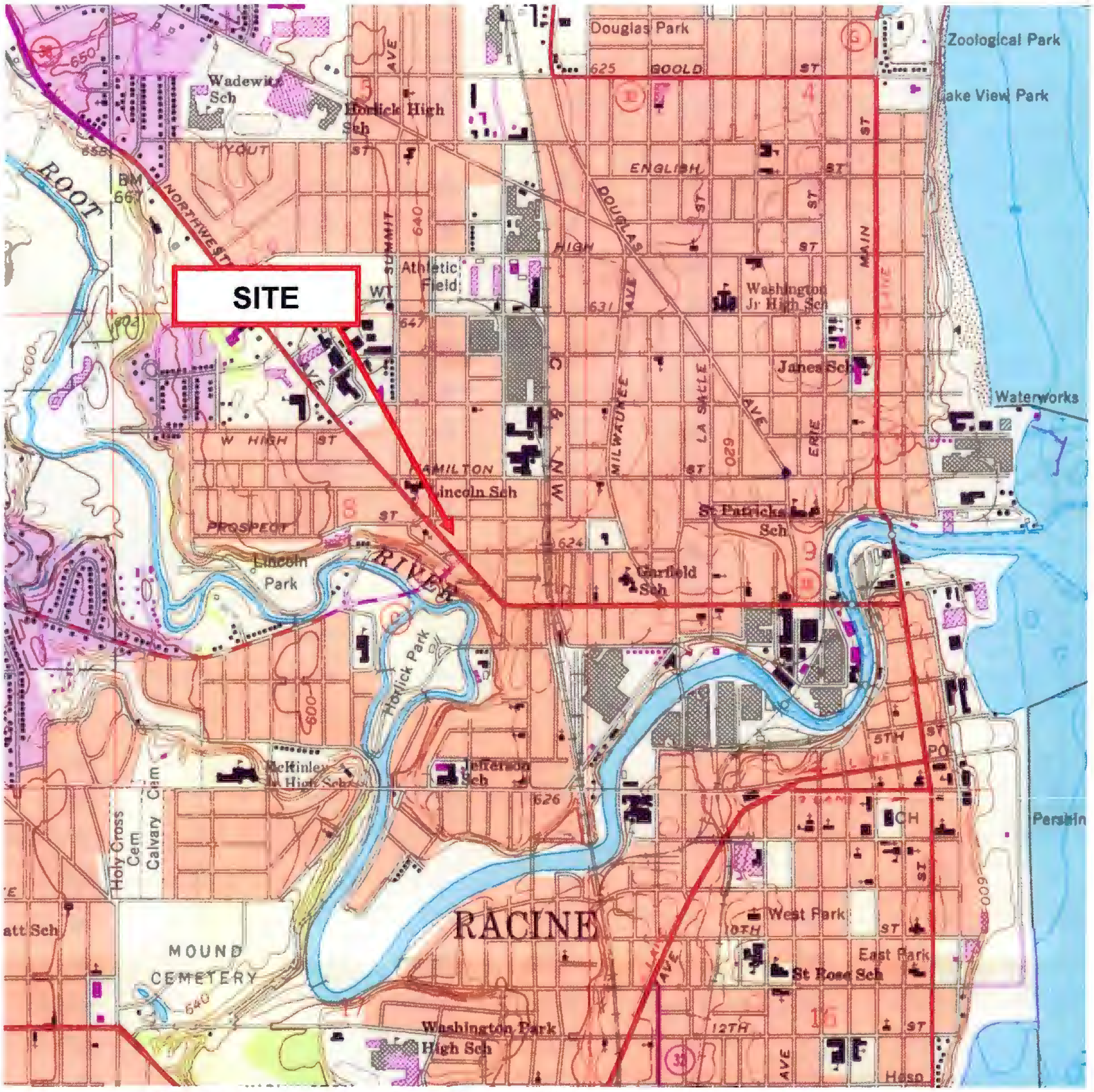
3.6. Site Surveying

Sampling locations will be documented on a Site Plan. Site physical features, monitoring well and direct push boring locations, and other pertinent above-ground features will be included. Site elevation data will be established to a temporary benchmark for future reference and elevations to the well top of casing and ground surface will be established for each monitoring well.

4. SCHEDULE

Giles anticipates four weeks for access coordination and utility clearance. The SI field activities will include the installation of one interior soil boring and completion as a monitoring well proximate to the drycleaner machine to assess the vertical soil profile and evaluate the potential presence of groundwater impacted with chlorinated VOCs. Giles will also mobilize a HSA drilling rig to the Site and install a well network consisting of three exterior water table monitoring wells and one temporary well to evaluate the extent of groundwater impact and assess contaminant trends.

A base-line groundwater sampling event and up to three additional quarterly groundwater sampling events may be required to establish data sufficient to demonstrate plume stability, prior to Site closure. Giles anticipates a ten working day turn around time for laboratory results. The SI activities, as listed, are expected to take up to 12 months to complete. We will provide copies of the final SIR six weeks after receipt of the laboratory results, if the extent of contamination is defined. A project Schedule in included in Appendix B.



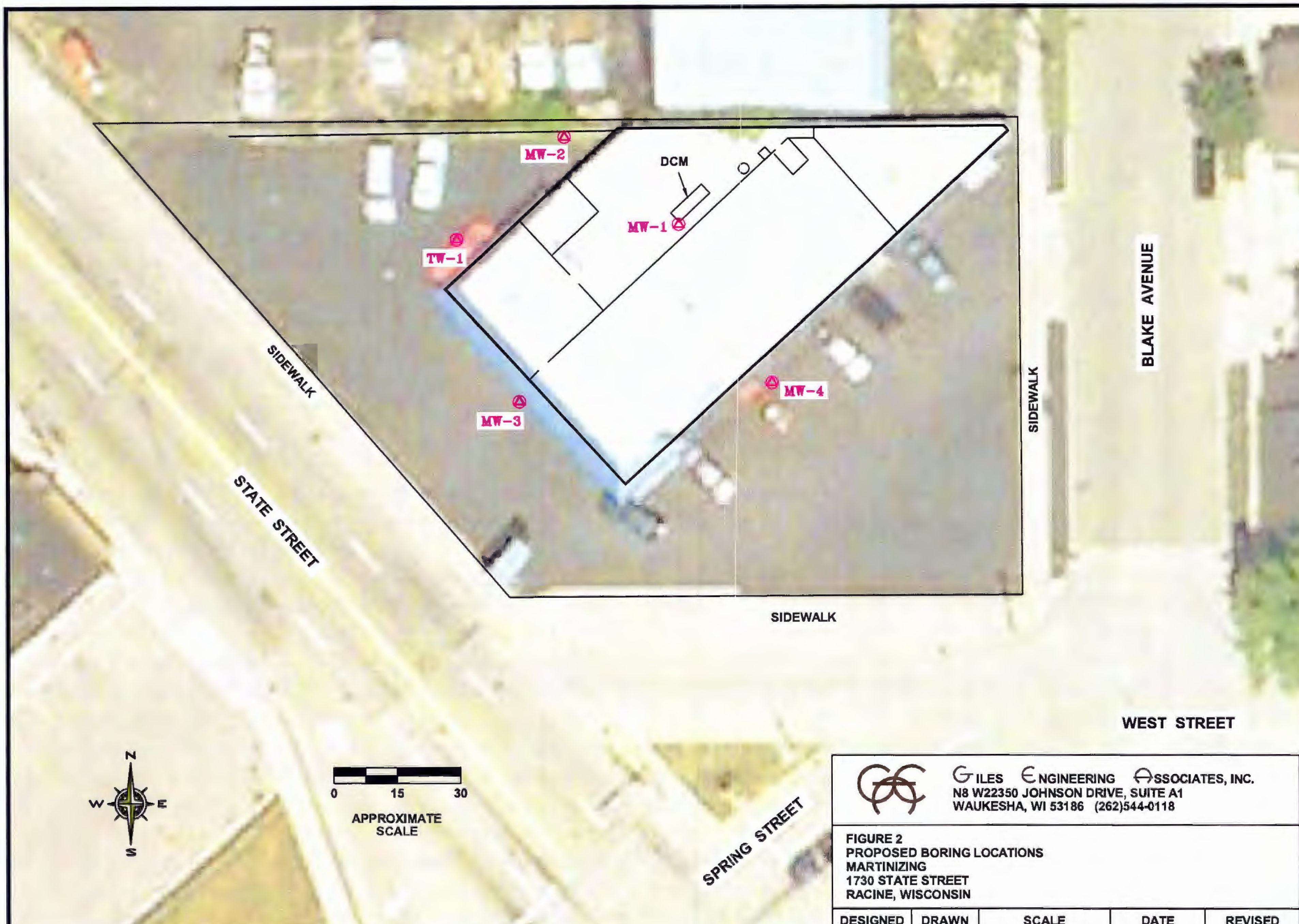
Source: USGS *Racine South, Wisconsin* 7.5-Minute Series (topographic) Quadrangle Map (1958; photorevised in 1971 and 1976)

Scale: 1:24,000
Contour Interval: 10 Feet

FIGURE 1
SITE LOCATION MAP

Martinizing Racine
1730 State Street
Racine, Wisconsin
Project No. 1E-0909013

GILES
ENGINEERING ASSOCIATES, INC.



GILES ENGINEERING ASSOCIATES, INC.
N8 W22350 JOHNSON DRIVE, SUITE A1
WAUKESHA, WI 53186 (262)544-0118

FIGURE 2
PROPOSED BORING LOCATIONS
MARTINIZING
1730 STATE STREET
RACINE, WISCONSIN

DESIGNED	DRAWN	SCALE	DATE	REVISED
KTB	JSZ	approx. 1"=30'	01-20-10	--
PROJECT NO.: 1E-0909013			CAD No. 1E0909013A	

NOTES:
1.) BASE MAP DEVELOPED FROM AERIAL PHOTOGRAPHY.

Important Information About Your
Geoenvironmental Report

Geoenvironmental studies are commissioned to gain information about environmental conditions on and beneath the surface of a site. The more comprehensive the study, the more reliable the assessment is likely to be. But remember: Any such assessment is to a greater or lesser extent based on professional opinions about conditions that cannot be seen or tested. Accordingly, no matter how many data are developed, risks created by unanticipated conditions will always remain. *Have realistic expectations.* Work with your geoenvironmental consultant to manage known and unknown risks. Part of that process should already have been accomplished, through the risk allocation provisions you and your geoenvironmental professional discussed and included in your contract's general terms and conditions. This document is intended to explain some of the concepts that may be included in your agreement, and to pass along information and suggestions to help you manage your risk.

Beware of Change; Keep Your Geoenvironmental Professional Advised

The design of a geoenvironmental study considers a variety of factors that are subject to change. Changes can undermine the applicability of a report's findings, conclusions, and recommendations. *Advise your geoenvironmental professional about any changes you become aware of.* Geoenvironmental professionals cannot accept responsibility or liability for problems that occur because a report fails to consider conditions that did not exist when the study was designed. Ask your geoenvironmental professional about the types of changes you should be particularly alert to. Some of the most common include:

- modification of the proposed development or ownership group,
- sale or other property transfer,
- replacement of or additions to the financing entity,
- amendment of existing regulations or introduction of new ones, or
- changes in the use or condition of adjacent property.

Should you become aware of any change, *do not rely on a geoenvironmental report.* Advise your geoenvironmental professional immediately; follow the professional's advice.

Recognize the Impact of Time

A geoenvironmental professional's findings, recommendations, and conclusions cannot remain valid indefinitely. The more time that passes, the more likely it is that important latent changes will occur. *Do not rely on a geoenvironmental report if too much time has elapsed since it was completed.* Ask your environmental professional to define "too much time." In the case of Phase I Environmental Site Assessments (ESAs), for example, more than 180 days after submission is generally considered "too much."

Prepare To Deal with Unanticipated Conditions

The findings, recommendations, and conclusions of a Phase I ESA report typically are based on a review of historical information, interviews, a site "walkover," and other forms of noninvasive research. When site subsurface conditions are not sampled in any way, the risk of unanticipated conditions is higher than it would otherwise be.

While borings, installation of monitoring wells, and similar invasive test methods can help reduce the risk of unanticipated conditions, *do not overvalue the effectiveness of testing.* Testing provides information about actual conditions only at the precise locations where samples are taken, and only when they are taken. Your geoenvironmental professional has applied that specific information to develop a general opinion about environmental conditions. *Actual conditions in areas not sampled may differ (sometimes sharply) from those predicted in a report.* For example, a site may contain an unregistered underground storage tank that shows no surface trace of its existence. *Even conditions in areas that were tested can change,* sometimes suddenly, due to any number of events, not the least of which include occurrences at adjacent sites. Recognize, too, that *even some conditions in tested areas may go undiscovered,* because the tests or analytical methods used were designed to detect only those conditions assumed to exist.

Manage your risks by retaining your geoenvironmental professional to work with you as the project proceeds. Establish a contingency fund or other means to enable your geoenvironmental professional to respond rapidly, in order to limit the impact of unforeseen conditions. And to help prevent any misunderstanding, identify those empowered to authorize changes and the administrative procedures that should be followed.

Do Not Permit Any Other Party To Rely on the Report

Geoenvironmental professionals design their studies and prepare their reports to meet the specific needs of the clients who retain them, in light of the risk management methods that the client and geoenvironmental professional agree to, and the statutory, regulatory, or other requirements that apply. The study designed for a developer may differ sharply from one designed for a lender, insurer, public agency...or even another developer. *Unless the report specifically states otherwise, it was developed for you and only you.* Do not unilaterally permit any other party to rely on it. The report and the study underlying it may not be adequate for another party's needs, and you could be held liable for shortcomings your geoenvironmental professional was powerless to prevent or anticipate. Inform your geoenvironmental professional when you know or expect that someone else—a third-party—will want to use or rely on the report. *Do not permit third-party use or reliance until you first confer with the geoenvironmental professional who prepared the report.* Additional testing, analysis, or study may be required and, in any event, appropriate terms and conditions should be agreed to so both you and your geoenvironmental professional are protected from third-party risks. *Any party who relies on a geoenvironmental report without the express written permission of the professional who prepared it and the client for whom it was prepared may be solely liable for any problems that arise.*

Avoid Misinterpretation of the Report

Design professionals and other parties may want to rely on the report in developing plans and specifications. They need to be advised, in writing, that their needs may not have been considered when the study's scope was developed, and, even if their needs were considered, they might misinterpret geoenvironmental findings, conclusions, and recommendations. *Commission your geoenvironmental professional to explain pertinent elements of the report to others who are permitted to rely on it, and to review any plans, specifications or other instruments of professional service that incorporate any of the report's findings, conclusions, or recommendations.* Your geoenvironmental professional has the best understanding of the issues involved, including the fundamental assumptions that underpinned the study's scope.

Give Contractors Access to the Report

Reduce the risk of delays, claims, and disputes by giving contractors access to the full report, *providing that it is accompanied by a letter of transmittal that can protect you* by making it unquestionably clear that: 1) the study was not conducted and the report was not prepared for purposes of bid development, and 2) the findings, conclusions, and recommendations included in the report are based on a variety of opinions, inferences, and assumptions and are subject to interpretation. Use the letter to also advise contractors to consult with your geoenvironmental professional to obtain clarifications, interpretations, and guidance (a fee may be required for this service), and that—in any event—they should conduct additional studies to obtain the specific type and extent of information each prefers for preparing a bid or cost estimate. Providing access to the full report, with the appropriate caveats, helps prevent formation of adversarial attitudes and claims of concealed or differing conditions. If a contractor elects to ignore the warnings and advice in the letter of transmittal, it would do so at its own risk. Your geoenvironmental professional should be able to help you prepare an effective letter.

Do Not Separate Documentation from the Report

Geoenvironmental reports often include supplemental documentation, such as maps and copies of regulatory files, permits, registrations, citations, and correspondence with regulatory agencies. If subsurface explorations were performed, the report may contain final boring logs and copies of laboratory data. If remediation activities occurred on site, the report may include: copies of daily field reports; waste manifests; and information about the disturbance of subsurface materials, the type and thickness of any fill placed on site, and fill placement practices, among other types of documentation. *Do not separate supplemental documentation from the report. Do not, and do not permit any other party to redraw or modify any of the supplemental documentation for incorporation into other professionals' instruments of service.*

Understand the Role of Standards

Unless they are incorporated into statutes or regulations, standard practices and standard guides developed by the American Society for Testing and Materials (ASTM) and other recognized standards-developing organizations (SDOs) are little more than aspirational methods agreed to by a consensus of a committee. The committees that develop standards may not comprise those best-qualified to establish methods and, no matter what, no standard method can possibly consider the infinite client- and project-specific variables that fly in the face of the theoretical "standard conditions" to which standard practices and standard guides apply. In fact, these variables can be so pronounced that geoenvironmental professionals who comply with every directive of an ASTM or other standard procedure could run afoul of local custom and practice, thus violating the standard of care.

Accordingly, when geoenvironmental professionals indicate in their reports that they have performed a service "in general compliance" with one standard or another, it means they have applied professional judgement in creating and implementing a scope of service designed for the specific client and project involved, and which follows some of the general precepts laid out in the referenced standard. To the extent that a report indicates "general compliance" with a standard, you may wish to speak with your geoenvironmental professional to learn more about what was and was not done. *Do not assume a given standard was followed to the letter.* Research indicates that that seldom is the case.

Realize That Recommendations May Not Be Final

The technical recommendations included in a geoenvironmental report are based on assumptions about actual conditions, and so are preliminary or tentative. Final recommendations can be prepared only by observing actual conditions as they are exposed. For that reason, you should retain the geoenvironmental professional of record to observe construction and/or remediation activities on site, to permit rapid response to unanticipated conditions. *The geoenvironmental professional who prepared the report cannot assume responsibility or liability for the report's recommendations if that professional is not retained to observe relevant site operations.*

Understand That Geotechnical Issues Have Not Been Addressed

Unless geotechnical engineering was specifically included in the scope of professional service, a report is not likely to relate any findings, conclusions, or recommendations about the suitability of subsurface materials for construction purposes, especially when site remediation has been accomplished through the removal, replacement, encapsulation, or chemical treatment of on-site soils. The equipment, techniques, and testing used by geotechnical engineers differ markedly from those used by geoenvironmental professionals; their education, training, and experience are also significantly different. If you plan to build on the subject site, but have not yet had a geotechnical engineering study conducted, your geoenvironmental professional should be able to provide guidance about the next steps you should take. The same firm may provide the services you need.

Read Responsibility Provisions Closely

Geoenvironmental studies cannot be exact; they are based on professional judgement and opinion. Nonetheless, some clients, contractors, and others assume geoenvironmental reports are or certainly should be unerringly precise. Such assumptions have created unrealistic expectations that have led to wholly unwarranted claims and disputes. To help prevent such problems, geoenvironmental professionals have developed a number of report provisions and contract terms that explain who is responsible for what, and how risks are to be allocated. Some people mistake these for "exculpatory clauses," that is, provisions whose purpose is to transfer one party's rightful responsibilities and liabilities to someone else. Read the responsibility provisions included in a report and in the contract you and your geoenvironmental professional agreed to. *Responsibility provisions are not "boilerplate."* They are important.

Rely on Your Geoenvironmental Professional for Additional Assistance

Membership in ASFE exposes geoenvironmental professionals to a wide array of risk management techniques that can be of genuine benefit for everyone involved with a geoenvironmental project. Confer with your ASFE-member geoenvironmental professional for more information.

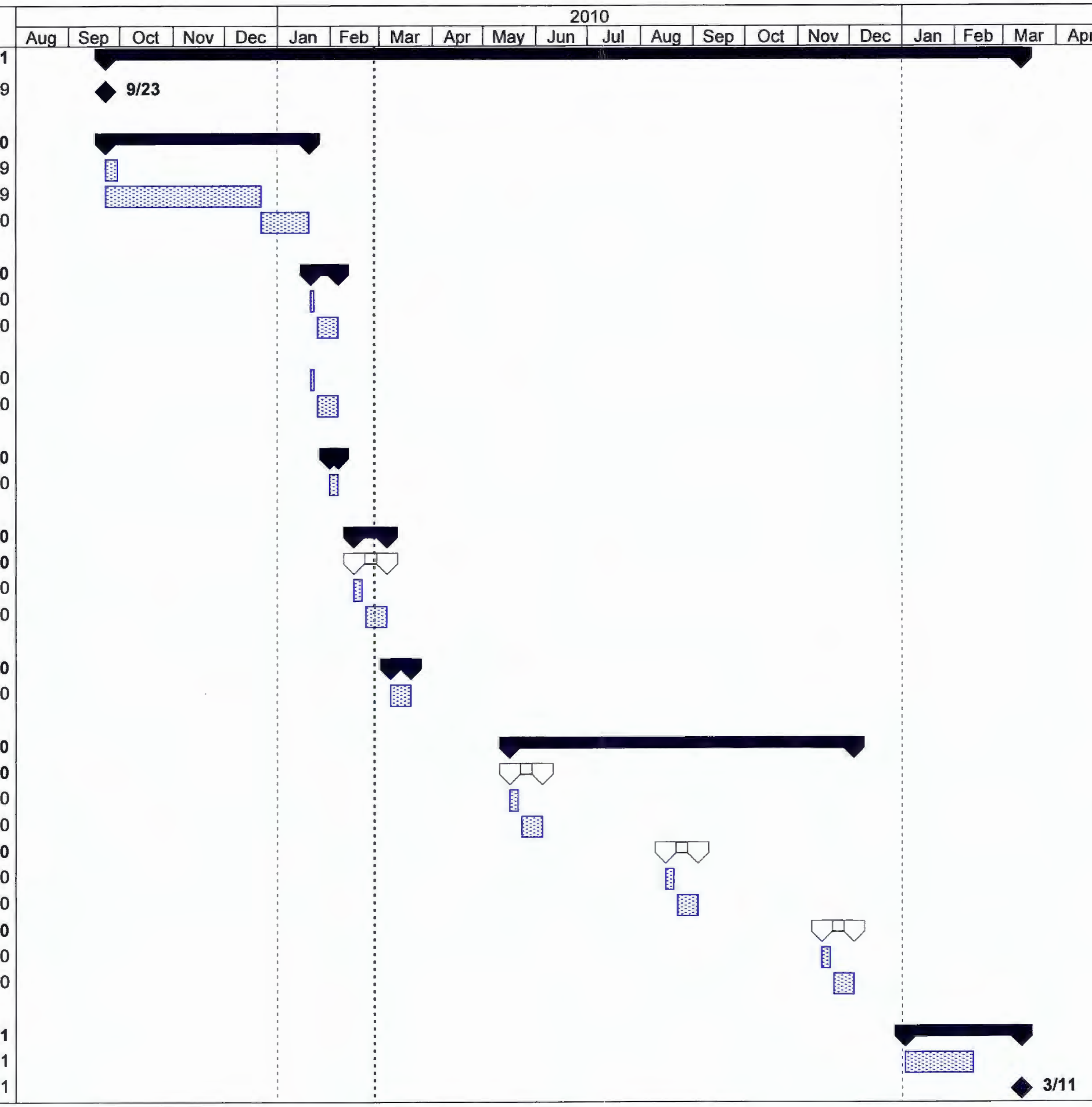
ASFE
THE BEST PEOPLE ON EARTH

8811 Colesville Road/Suite G106, Silver Spring, MD 20910
Telephone: 301/565-2733 Facsimile: 301/589-2017
e-mail: info@asfe.org www.asfe.org

IIGR06055.0M

SITE INVESTIGATION PROJECT SCHEDULE
MARTINIZING RACINE
1730 STATE STREET
RACINE, WI

ID	Task Name	Duration	Start	Finish
1	**MARTINIZING RACINE**	**383 days**	**Wed 9/23/09**	**Fri 3/11/11**
2	**CLIENT AUTHORIZATION TO PROCEED**	0 days	Wed 9/23/09	Wed 9/23/09
3				
4	**PRELIMINARY REMEDIATION ACTIVITIES**	**85 days**	**Wed 9/23/09**	**Tue 1/19/10**
5	Site Health & Safety Plan Preparation	1 wk	Wed 9/23/09	Tue 9/29/09
6	Insurance Review	13 wks	Wed 9/23/09	Tue 12/22/09
7	SIWP Preparation	4 wks	Wed 12/23/09	Tue 1/19/10
8				
9	**SOIL BORING INSTALLATION/MW COMPLETION**	**12 days**	**Thu 1/21/10**	**Fri 2/5/10**
10	Fieldwork (Interior Boring/MW Installation)	2 days	Thu 1/21/10	Fri 1/22/10
11	Soil Laboratory Analysis	2 wks	Mon 1/25/10	Fri 2/5/10
12				
13	Fieldwork (Exterior Boring/MW Installation)	2 days	Thu 1/21/10	Fri 1/22/10
14	Soil Laboratory Analysis	2 wks	Mon 1/25/10	Fri 2/5/10
15				
16	**MONITORING WELL DEVELOPMENT**	**5 days**	**Mon 2/1/10**	**Fri 2/5/10**
17	Fieldwork	1 wk	Mon 2/1/10	Fri 2/5/10
18				
19	**BASE-LINE GROUNDWATER (GW) QUARTERLY SAMPLING EVENT**	**15 days**	**Mon 2/15/10**	**Fri 3/5/10**
20	**GW Monitoring Event No. 1**	**15 days**	**Mon 2/15/10**	**Fri 3/5/10**
21	Fieldwork	1 wk	Mon 2/15/10	Fri 2/19/10
22	Groundwater Laboratory Analysis	2 wks	Mon 2/22/10	Fri 3/5/10
23				
24	**INVESTIGATION DERIVED WASTE DISPOSAL**	**10 days**	**Mon 3/8/10**	**Fri 3/19/10**
25	Drummed Soil Cuttings and Development/Purge Water Disposal	2 wks	Mon 3/8/10	Fri 3/19/10
26				
27	**QUARTERLY GW MONITORING (CONDITIONAL UPON WDNR APPROVAL)**	**145 days**	**Mon 5/17/10**	**Fri 12/3/10**
28	**GW Monitoring Event No. 2**	**15 days**	**Mon 5/17/10**	**Fri 6/4/10**
29	Fieldwork	1 wk	Mon 5/17/10	Fri 5/21/10
30	Groundwater Laboratory Analysis	2 wks	Mon 5/24/10	Fri 6/4/10
31	**GW Monitoring Event No. 3**	**15 days**	**Mon 8/16/10**	**Fri 9/3/10**
32	Fieldwork	1 wk	Mon 8/16/10	Fri 8/20/10
33	Groundwater Laboratory Analysis	2 wks	Mon 8/23/10	Fri 9/3/10
34	**GW Monitoring Event No. 4**	**15 days**	**Mon 11/15/10**	**Fri 12/3/10**
35	Fieldwork	1 wk	Mon 11/15/10	Fri 11/19/10
36	Groundwater Laboratory Analysis	2 wks	Mon 11/22/10	Fri 12/3/10
37				
38	**SI REPORT PREPARATION (IF EXTENT OF CONTAMINATION DEFINED)**	**50 days**	**Mon 1/3/11**	**Fri 3/11/11**
39	Data Reduction & Report Preparation	6 wks	Mon 1/3/11	Fri 2/11/11
40	Report Submittal	0 days	Fri 3/11/11	Fri 3/11/11



Project: PROJ SCH
Date: Fri 2/26/10

Task | Progress | Milestone | Summary | Rolled Up Task | Rolled Up Milestone | Rolled Up Progress | Split | External Tasks | Project Summary | External Milestone | Deadline