



GILES

ENGINEERING ASSOCIATES, INC.

GEOTECHNICAL, ENVIRONMENTAL & CONSTRUCTION MATERIALS CONSULTANTS

- Dallas, TX
- Los Angeles, CA
- Manassas, VA
- Milwaukee, WI

October 27, 2015

Revised July 8, 2020

Revised September 6, 2023

Revised December 18, 2023

Wisconsin Department of Natural Resources
Southeast Region
141 NW Barstow Street, Room 180
Waukesha, WI 53188

Attention: Ms. Shanna Laube-Anderson
Hydrogeologist Advanced
Subject: Change Order No. 3 - Proposed Additional Site Investigation & Cost Estimate
Martinizing Dry Cleaning Site
1730 State Street
Racine, Wisconsin 53404
Project No. 1E-0909013
Proposal No. 1EP-1904012
BRRTS No. 02-52-549890 / FID No. 252251010

Dear Ms. Laube-Anderson:

Giles Engineering Associates, Inc. (Giles) has prepared this Change Order #3 which includes a scope of services and cost estimate on behalf of BMP Realty LLC, owner of the Martinizing Racine property (the "Site"), located at 1730 State Street, in Racine, Wisconsin. Based on our previous correspondence and dialog, it is our understanding that the Wisconsin Department of Natural Resources (WDNR) has requested that additional site investigation (SI) work be completed to determine the vertical and horizontal extent of contamination on the periphery of the site and off-site to the north. In addition, up to four quarterly groundwater sampling events are required to establish the groundwater contaminant trends and extent.

A vapor mitigation system was installed on July 7, 2023, and a follow-up telephone conference call was conducted on July 26, 2023, with the WDNR. Additional scope that was discussed included performing Pressure Field Extension and indoor air testing, which are added to this change order.

In addition, sub-slab, and indoor air testing of a residential home (1015 Blake Ave., Racine, WI) was also added to the scope based on an email dated December 8, 2023, from the WDNR.

BACKGROUND

The Site operated as a gasoline filling station in the early 1930s to 1970. In 1970, the Site became a self-service coin laundromat and a dry-cleaning facility. Dry cleaning operations were performed at the Site until approximately 2004, when it became a drop-off for offsite dry-cleaning at another facility. Currently, the former dry-cleaning portion of the building Site is leased and occupied by a cell phone store (Metro PCS). The south portion of the building continues to operate as a laundromat (Coin Laundry). Site Plan illustrating the current building is included as Figure 1.

The results of the initial environmental investigation (2007) and the SI (2010) have shown that low-level petroleum volatile organic compounds (PVOCs) and elevated concentrations of chlorinated VOCs (CVOCs) were detected in the soil and groundwater at the Site. The petroleum impacts are inferred to be associated with the historic use of the Site as a gasoline station, and CVOCs are associated with the former on-Site dry-cleaning operation. The extent of soil impacts are shown on Figure 2 and groundwater impacts are shown on Figure 3.

The detected PVOCs in soil are generally present on the western portion of the Site at concentrations below the WDNR NR 720 residual contaminant levels (RCLs). CVOCs were detected in soil at levels exceeding the RCLs for protection of groundwater. The distribution of the CVOCs generally appears to be beneath the building and in the paved area (dumpster staging area) immediately northwest of the building. The highest soil concentrations exceed the WDNR landfill standard for Contaminated-Out, Non-Hazardous Material and are located immediately north and west of the service door on the north side of the building. Soil results are summarized in Table 1.

The direction of groundwater flow has been generally to the south or southwest across the Site. However, a "mounded" groundwater condition was noted during groundwater sampling events performed in August and December of 2010, with the high point being monitoring well MW-2, located on the north side of the building.

PVOCs were detected in the groundwater on the west portion of the Site. The detected concentration of benzene exceeded its NR 140 Enforcement Standard (ES) and/or Preventative Action Limit (PAL) in a groundwater grab sample from temporary well TW-1 in February 2010 and during the two quarterly groundwater sampling events in 2010 in wells MW-6 and MW-7.

Groundwater samples collected from monitoring wells located within the building (MW-1) and to the north, west, and south of the building (MW-2, MW-3, MW-4, MW-7, and MW-8) contained concentrations of CVOCs above their respective NR 140 ES and/or PAL. Groundwater results are summarized in Table 2.

Sub-slab vapor samples were collected from inside the on-Site building from vapor points VP-1 and VP-2. Vapor point VP-1 was located near the dry-cleaning machine, and VP-2 was located in the laundromat space. Both soil vapor samples contained Tetrachloroethene (PCE) which exceeded the Vapor Risk Screening Level (VRSL) for large commercial/industrial properties. In addition, Trichlorethene (TCE) was reported at a concentration exceeding the VRSL for large commercial/industrial properties at VP-2. The locations of the sampling points are shown on Figure 4 and the soil gas analytical results are summarized in Table 3.

At this time, it is our understanding that additional SI activities are necessary to determine the vertical and horizontal extent of contamination on the periphery of the site. In addition, the WDNR has requested that we establish the current groundwater contaminant trends, the extent of groundwater contamination to the north, west and east, and a vapor intrusion assessment for the property to the north. In addition, since a vapor mitigation system has been installed pressure field extension (PFE) testing and indoor air sampling have been added to the scope of services. The additional SI activities will be completed prior to bidding the remediation phase of this project.



PROPOSED SCOPE OF SERVICES

- Prepare this Change Order #3 to provide a description of the proposed soil, sub-slab vapor, groundwater, indoor air sampling services, plus PFE testing, and associated costs for WDNR review and approval.
- Establish top of casing elevations for the existing groundwater monitoring well network, wells MW-1 through MW-8, and gauge the groundwater elevations in each of the wells.
- Re-develop existing wells MW-1 through MW-8. The wells were last sampled in 2010; therefore, redevelopment is necessary to ensure representative groundwater samples are collected. Development water will be temporarily drummed and stored on-Site until Giles can arrange proper disposal.
- Collect one groundwater sample from each of the existing groundwater monitoring wells (MW-1 through MW-8) plus duplicate (nine total) to evaluate the current groundwater conditions at the Site. Groundwater samples will be collected using a peristaltic pump and low-flow sampling techniques. The groundwater samples will be submitted to a Wisconsin Licensed Analytical Laboratory for analysis of VOCs by U.S. EPA Method 8260.
- Evaluate the groundwater results from the initial groundwater sampling event within a brief letter summary (status report) which will include all previous groundwater data.
- Based on the results of the initial sampling event, Giles will install up to four WDNR Ch. NR-141 variance wells to 13-feet (bgs) below ground surface due to the shallow groundwater table, and up to two NR-141 variance piezometers (screened between 25 to 30 feet) to further define the extent of groundwater contamination at the Site (up to 6 new wells/piezometers total).
- The groundwater table monitoring wells will need a variance since the water table is shallow between 2 to 4 feet deep and Giles is planning on using direct-push sampling techniques to install $\frac{3}{4}$ -inch inside diameter (I.D.) prepacked well screens. The filter pack seal shall be reduced from 2 feet of fine sand material to 1 foot. The bentonite seal (granules) and annular space seal (bentonite granules) shall be placed as one unit and be 1 foot thick instead of 2. The proposed wells/piezometers will be finished with flushmount well covers with 1 foot of concrete as the surface seal.
- Piezometers will be installed in accordance with WDNR Ch. NR 141 requirements with a variance for $\frac{3}{4}$ -inch I.D. pre-packed well screens. Piezometers will be installed using direct-push sampling methods. Down-hole tooling and hand tools will be cleaned prior to arrival and cleaned in between each sample interval to minimize cross contamination.
- Survey and develop the newly installed wells/piezometers.
- Collect two soil samples from each boring during the completion of each new well/piezometer and submit them to a Wisconsin licensed analytical laboratory for analysis of VOCs by U.S. EPA Method 8260 (12 total soil samples).

- Complete two soil borings within the on-Site building to further define the extent of soil impacts. Two soil samples will be collected from each interior soil boring and submitted to a Wisconsin licensed analytical laboratory for analysis of VOCs by U.S. EPA Method 8260. These soil borings are expected to be 8 feet or less using a cart mounted rig. Moreover, two soil borings will be advanced between MW-3 and MW-7 on the western side of the property to a depth of 4 feet deep. Two soil samples will be collected from each exterior boring and submitted to a Wisconsin licensed analytical laboratory for analysis of VOCs by U.S. EPA Method 8260 (ideally a 2 to 4 foot deep sample).
- Install one sub-slab vapor point within the adjacent neighboring building to the north. Collect one sub-slab soil vapor sample for CVOCs by Method TO-15 for the following parameters:
 - Tetrachloroethene (PCE),
 - Trichloroethene (TCE),
 - *Cis*-1,2-Dichloroethene (*cis*-1,2-DCE),
 - *Trans*-1,2-Dichloroethene (*Trans*-1,2-DCE),
 - 1,1-Dichloroethene (1,1-DCE),
 - 1,2-Dichloroethane (1,2-DCA), and
 - Vinyl Chloride (VC).
- Install one sub-slab vapor point within a basement of a residential home located at 1015 Blake Ave. Collect one sub-slab soil vapor sample for CVOCs by Method TO-15 for the CVOCs listed above. In addition, collect one indoor air within the basement of the home using passive Radiello sampling methodology (RSD-130) with a 10-day sampling period.
- Perform up to three quarterly groundwater sampling events to include the existing (8) and newly installed (6) monitoring wells/piezometers, plus two (2) duplicate samples per sampling event (16 total samples per event, or 48 total for three sampling events). Groundwater will be collected using low-flow sampling techniques. The groundwater samples will be submitted to a Wisconsin Licensed Analytical Laboratory for analysis of VOCs by U.S. EPA Method 8260.
- Coordinate the transport and disposal of wastewater generated during development and from the groundwater sampling events, and soil spoils generated during the well installation.
- The Responsible Party has coordinated with a subcontractor for the installation of a sub-slab depressurization system beneath the existing on-Site building's concrete slab. The system required two separate manifolds due to the presence of a structural wall down the center of the building. **This task work has been completed already and was approved by the WDNR in a letter dated April 27, 2023.**
- Prepare a Vapor Mitigation Commissioning Plan and submit it to the WDNR for approval.
- Perform sub-slab Pressure Field Extension (PFE) test after installation of the depressurization system to ensure the system is working properly, and that an adequate pressure field is established (> or = to 0.004 inches of water). This will be performed for a total of three quarterly events (summer 2023, winter 2023, and spring 2024). An estimated 6 vapor ports on a grid system are planned.



- Perform 10-day passive indoor air sampling using the Radiello 130 for analysis of CVOCs as mentioned above. Air sampling will occur in both areas of the building on a quarterly basis as the PFE test (2 samples quarterly / 6 total indoor air samples).
- Prepare three commissioning reports (brief letter reports) to document the commissioning process. This will include the results of the PFE testing, indoor air sampling, figures and tables.
- Prepare a Supplemental Site Investigation Report summarizing the tasks performed, results of soil, sub-slab vapor, groundwater and indoor air chemical analyses, and provide conclusions and recommendations for additional delineation, site characterization, monitoring, or remediation.
- Proposed locations of the soil probes, groundwater wells, piezometers, sub-slab, PFE samples included in the scope of services are shown on Figure 1. The sub-slab depressurization system and locations of the two proposed sub-slab vapor points are shown on Figure 4.

COST

The estimated cost to complete referenced scope of services is **\$56,715**. The costs for soil and groundwater sampling assumes that in addition to the eight existing wells, four groundwater monitoring wells and two piezometers will be installed and sampled (total of 14 wells/piezometers in the groundwater monitoring network, plus duplicates {16 total}). The cost also assumes that the two interior soil borings will be completed the same day the additional wells/piezometers are installed. Should these wells/piezometers not be installed, the drilling costs for mobilization/demobilization costs and decontamination would still apply.

A detailed cost summary is attached as Table 4 and in the attached DERF Investigation Bid Sheet (WDNR Form 4400-233). The estimated costs have been prepared based on good-faith estimates submitted from qualified commodity service providers based on the proposed scope of services.

Due to the potential for WDNR revisions/additional to the scope of services, final compensation will be determined based on the actual lineal footage of borings drilled, waste disposal tipping and transportation fees, number of types of laboratory tests performed, and the actual costs for professional services. Also, it should be noted that the fees presented in the attached bid sheets do not include costs for expedited analytical turnaround time.

If project costs are envisioned to exceed the estimated amount due to circumstances listed in NR169.21(2)(e), Giles will not incur additional costs in excess of \$3,000.00 or 5 percent of the total project amount (whichever is lower) without prior authorization from you and the WDNR. Additional communication, correspondence, or supplemental reporting is not included in the scope of services or cost estimate.

SCHEDULE

Giles anticipates 14 months from the anticipated date of authorization to proceed to complete through the completion of the proposed scope of services.



CLOSURE

Thank you for the opportunity to offer our engineering services. Should you have any questions relating to the proposed services or if we can be of additional assistance, please do not hesitate to call.

Respectfully submitted,

GILES ENGINEERING ASSOCIATES, INC.

Daniel K. Pelczar, P.G., CPG
Senior Project Manager

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

ENCLOSURES

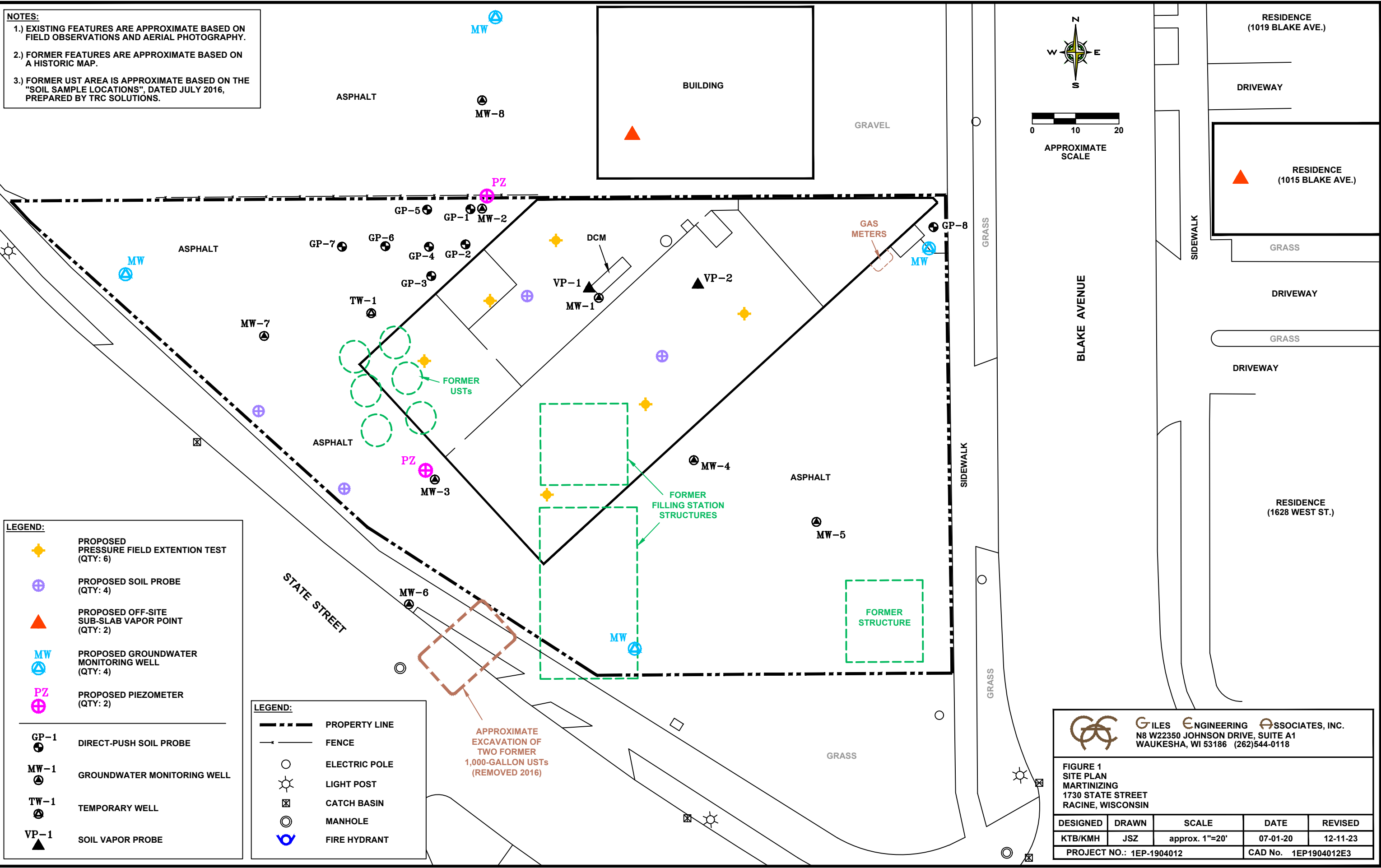
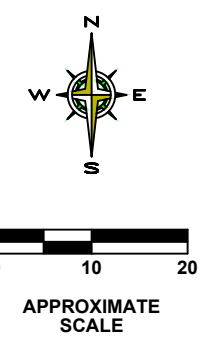
Figures: Figure 1 Site Plan
 Figure 2 Soil Analytical Results
 Figure 3 Groundwater Analytical Results
 Figure 4 Proposed Sub-Slab Depressurization System

Attachments: Table 1 Soil Analytical Results
 Table 2 Groundwater Analytical Results
 Table 3 Vapor Analytical Results
 Table 4 Proposed Cost Estimate
 DERF Site Investigation Bid Sheet Form 4400-233 (R4/04)

Distribution: Wisconsin Department of Natural Resources
 Attn: Ms. Shanna Laube-Anderson (via RR Program Submittal Portal)
 BMP Realty, Inc.
 Attn: Mr. Jason Berry (via email: jberry1907@gmail.com)

NOTES:

- 1.) EXISTING FEATURES ARE APPROXIMATE BASED ON FIELD OBSERVATIONS AND AERIAL PHOTOGRAPHY.
- 2.) FORMER FEATURES ARE APPROXIMATE BASED ON A HISTORIC MAP.
- 3.) FORMER UST AREA IS APPROXIMATE BASED ON THE "SOIL SAMPLE LOCATIONS", DATED JULY 2016, PREPARED BY TRC SOLUTIONS.



- LEGEND:**
- PROPOSED PRESSURE FIELD EXTENTION TEST (QTY: 6)
 - PROPOSED SOIL PROBE (QTY: 4)
 - PROPOSED OFF-SITE SUB-SLAB VAPOR POINT (QTY: 2)
 - PROPOSED GROUNDWATER MONITORING WELL (QTY: 4)
 - PROPOSED PIEZOMETER (QTY: 2)
-
- DIRECT-PUSH SOIL PROBE
 - GROUNDWATER MONITORING WELL
 - TEMPORARY WELL
 - SOIL VAPOR PROBE

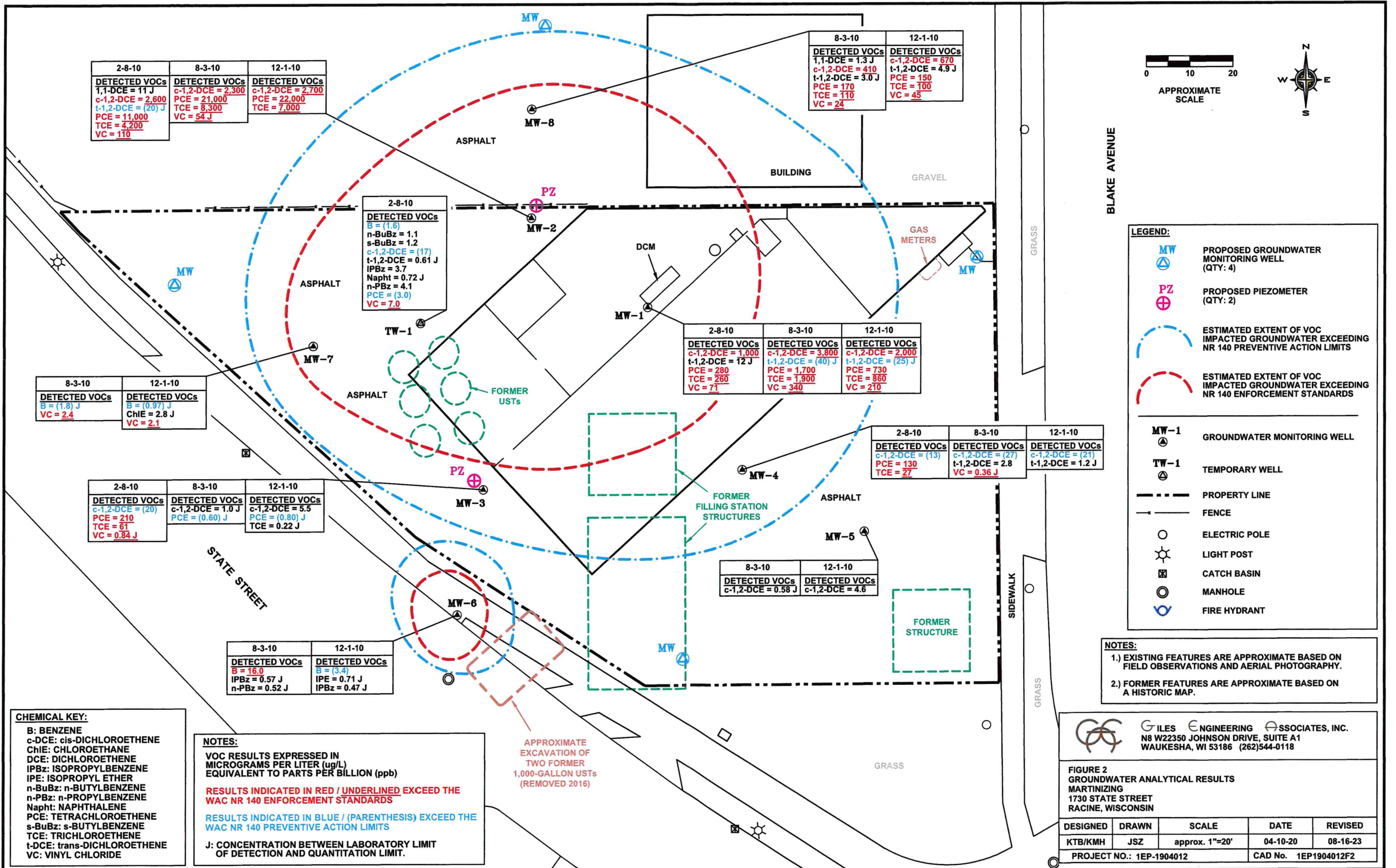
- LEGEND:**
- PROPERTY LINE
 - FENCE
 - ELECTRIC POLE
 - LIGHT POST
 - CATCH BASIN
 - MANHOLE
 - FIRE HYDRANT

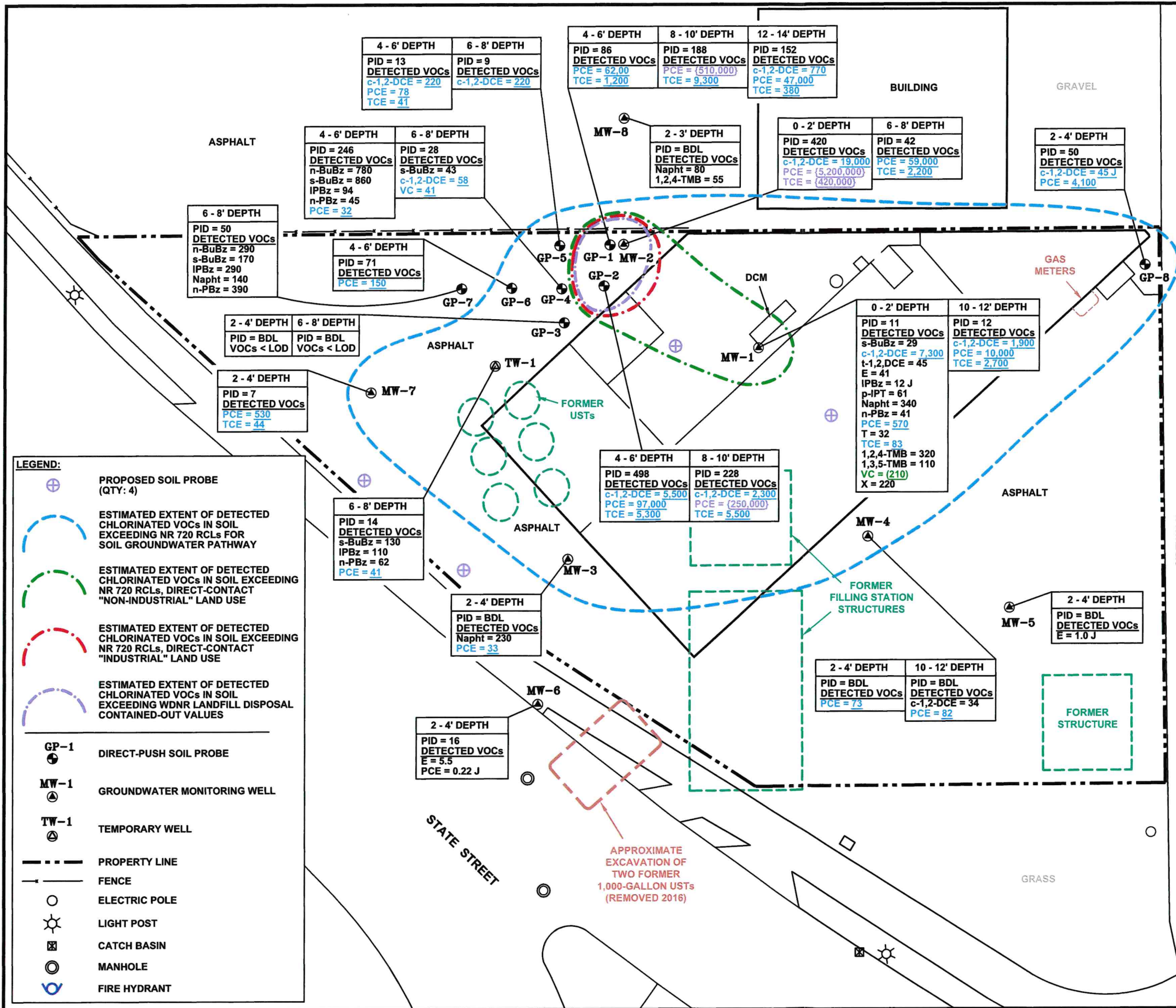
APPROXIMATE EXCAVATION OF TWO FORMER 1,000-GALLON USTs (REMOVED 2016)

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

**FIGURE 1
 SITE PLAN
 MARTINIZING
 1730 STATE STREET
 RACINE, WISCONSIN**

DESIGNED	DRAWN	SCALE	DATE	REVISED
KTB/KMH	JSZ	approx. 1"=20'	07-01-20	12-11-23
PROJECT NO.: 1EP-1904012			CAD No. 1EP1904012E3	





NOTES:

FIELD PID RESULTS EXPRESSED IN INSTRUMENT UNITS

VOC RESULTS EXPRESSED IN MICROGRAMS PER KILOGRAM (ug/kg) EQUIVALENT TO PARTS PER BILLION (ppb)

J: CONCENTRATION BETWEEN LABORATORY LIMIT OF DETECTION AND QUANTITATION LIMIT.

RESULTS INDICATED IN BLUE / UNDERLINED EXCEED THE WAC NR 720 RCLs FOR SOIL TO GROUNDWATER PATHWAY.

RESULTS INDICATED IN GREEN / (PARENTHESIS) EXCEED THE WAC NR 720 RCLs, DIRECT CONTACT, NON-INDUSTRIAL LAND USE.

RESULTS INDICATED IN PURPLE / (.....) EXCEED THE WDNR LANDFILL DISPOSAL CONTAINED-OUT VALUES.

ABBREVIATIONS:

BDL: BELOW DETECTION LIMIT
 LOD: LIMIT OF DETECTION
 PID: PHOTOIONIZATION DETECTOR (FIELD)
 RCLs: RESIDUAL CONTAMINANT LEVELS
 USEPA: UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 VOCs: VOLATILE ORGANIC COMPOUNDS
 WDNR: WISCONSIN DEPARTMENT OF NATURAL RESOURCES

CHEMICAL KEY:

c-DCE: cis-DICHLOROETHENE
 E: ETHYLBENZENE
 IPBz: ISOPROPYLBENZENE
 n-BuBz: n-BUTYLBENZENE
 n-PBz: n-PROPYLBENZENE
 Napht: NAPHTHALENE
 PCE: TETRACHLOROETHENE
 p-IPT: p-ISOPROPYLTOLUENE
 s-BuBz: sec-BUTYLBENZENE
 T: TOLUENE
 TCE: TRICHLOROETHENE
 t-DCE: trans-DICHLOROETHENE
 TMB: TRIMETHYLBENZENE
 VC: VINYL CHLORIDE
 X: XYLENE (TOTAL)

LEGEND:

- ⊕ PROPOSED SOIL PROBE (QTY: 4)
- ESTIMATED EXTENT OF DETECTED CHLORINATED VOCs IN SOIL EXCEEDING NR 720 RCLs FOR SOIL GROUNDWATER PATHWAY
- ESTIMATED EXTENT OF DETECTED CHLORINATED VOCs IN SOIL EXCEEDING NR 720 RCLs, DIRECT-CONTACT "NON-INDUSTRIAL" LAND USE
- ESTIMATED EXTENT OF DETECTED CHLORINATED VOCs IN SOIL EXCEEDING NR 720 RCLs, DIRECT-CONTACT "INDUSTRIAL" LAND USE
- ESTIMATED EXTENT OF DETECTED CHLORINATED VOCs IN SOIL EXCEEDING WDNR LANDFILL DISPOSAL CONTAINED-OUT VALUES
- GP-1 DIRECT-PUSH SOIL PROBE
- MW-1 GROUNDWATER MONITORING WELL
- TW-1 TEMPORARY WELL
- PROPERTY LINE
- FENCE
- ELECTRIC POLE
- ☀ LIGHT POST
- ☒ CATCH BASIN
- MANHOLE
- ⊕ FIRE HYDRANT

BLAKE AVENUE

SIDEWALK

GRASS

GRASS

GRASS

GRASS

STATE STREET

APPROXIMATE SCALE

0 10 20

W N E S

NOTES:

1.) EXISTING FEATURES ARE APPROXIMATE BASED ON FIELD OBSERVATIONS AND AERIAL PHOTOGRAPHY.

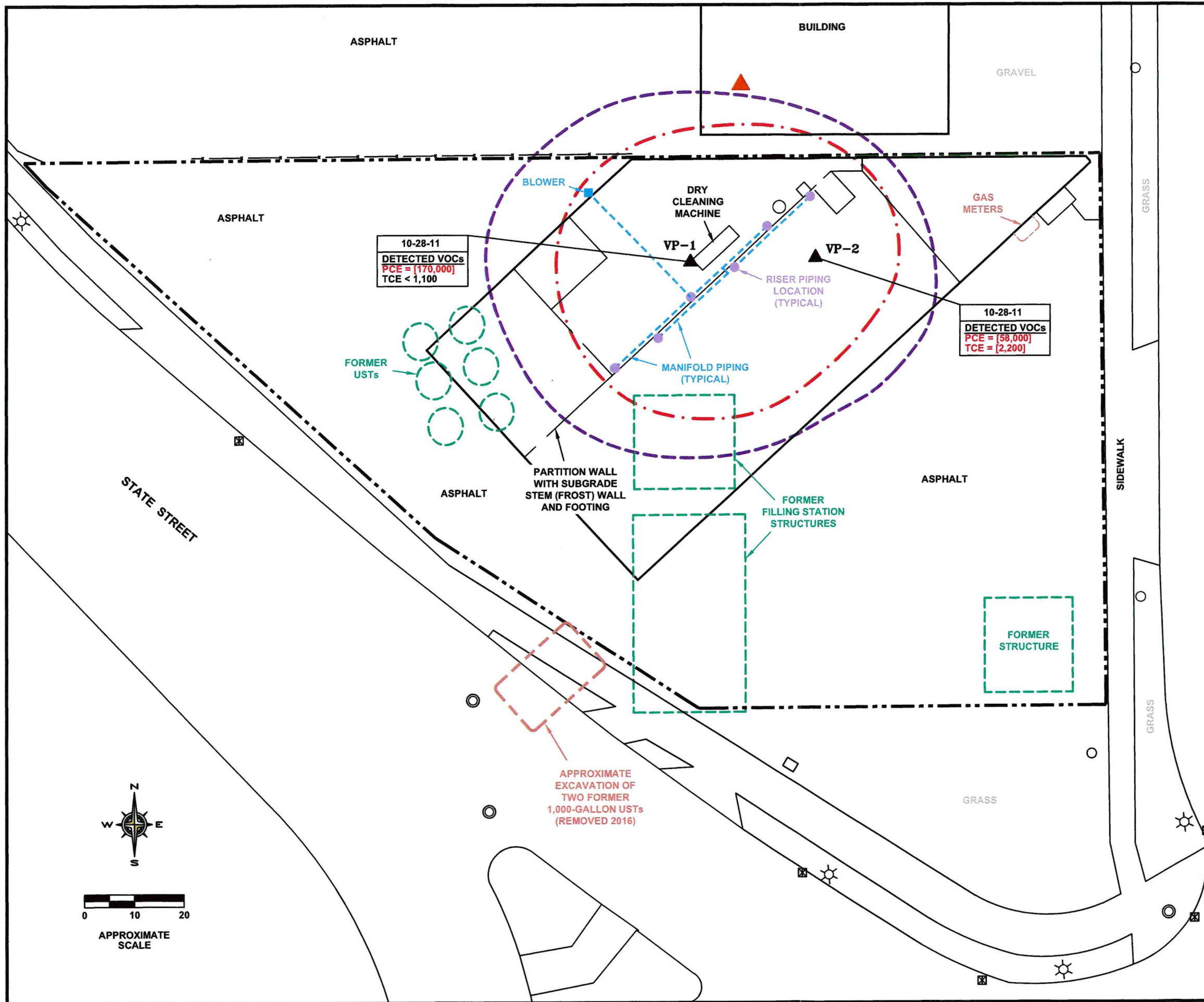
2.) FORMER FEATURES ARE APPROXIMATE BASED ON A HISTORIC MAP.

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FIGURE 3
 SOIL ANALYTICAL RESULTS
 MARTINIZING
 1730 STATE STREET
 RACINE, WISCONSIN

DESIGNED	DRAWN	SCALE	DATE	REVISED
KTB/KMH	JSZ	approx. 1"=20'	07-01-20	08-16-23

PROJECT NO.: 1EP-1904012 CAD No. 1EP1904012G2



CHEMICAL KEY:
PCE: TETRACHLOROETHENE
TCE: TRICHLOROETHENE

ABBREVIATIONS:
VOCs: VOLATILE ORGANIC COMPOUNDS
VRSL: VAPOR RISK SCREENING LEVEL

NOTES:
VOC RESULTS EXPRESSED IN MICROGRAMS PER CUBIC METER (ug/m³)
RESULTS INDICATED IN RED/[BRACKETS] EXCEEDED THE SUB-SLAB VAPOR VRSL LARGE COMMERCIAL / INDUSTRIAL LAND USE.

LEGEND:

- PROPOSED OFF-SITE SUB-SLAB VAPOR POINT (QTY: 1)
- APPROXIMATE EXTENT OF SUB-SLAB VAPOR EXCEEDING SMALL COMMERCIAL LAND USE
- APPROXIMATE EXTENT OF SUB-SLAB VAPOR EXCEEDING LARGE COMMERCIAL / INDUSTRIAL LAND USE
- VP-1 SOIL VAPOR PROBE
- PROPERTY LINE
- FENCE
- ELECTRIC POLE
- LIGHT POST
- CATCH BASIN
- MANHOLE
- FIRE HYDRANT

NOTES:

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

FIGURE 4
SUB-SLAB DEPRESSURIZATION SYSTEM
MARTINIZING
1730 STATE STREET
RACINE, WISCONSIN

DESIGNED	DRAWN	SCALE	DATE	REVISED
KTB/KMH	JSZ	approx. 1"=20'	07-01-20	08-16-23
PROJECT NO.: 1EP-1904012			CAD No. 1EP1904012H2	

**TABLE 1
SOIL ANALYTICAL RESULTS**

Martinizing Racine
1730 State Street
Racine, Wisconsin
1E-0909013

Analyte	Sample Location										NR 720 RCLs ¹ (µg/kg)			WDNR Landfill Disposal Contained-Out Values ³		
	TW-1	MW-1		MW-2		MW-3	MW-4		MW-5	MW-6	MW-7	MW-8	Soil to Groundwater Pathway		Direct Contact ²	
Sample Depth (feet)	6 - 8	0 - 2	10 - 12	0 - 2	6 - 8	2 - 4	2 - 4	10 - 12	2 - 4	2 - 4	2 - 4	2 - 3				
Sample Date	1/21/10	1/21/10	1/21/10	1/21/10	1/21/10	1/21/10	1/21/10	1/21/10	1/21/10	7/23/10	7/23/10	7/23/10	7/23/10			
PID	14	11	12	420	42	BDL	BDL	BDL	BDL	16	7	BDL				
Detected VOCs (µg/kg)																
n-Butylbenzene	<29	<28	<58	<14,000	<300	<27	<31	<29	<31	<31	<31	<34	NS	108,000	108,000	NS
sec-Butylbenzene	130	29	<58	<14,000	<300	<27	<31	<29	<31	<31	<31	<34	NS	145,000	145,000	NS
cis-1,2-Dichloroethene	<29	<u>7,300</u>	<u>1,900</u>	<u>19,000</u>	<300	<27	<31	34	<31	<31	<31	<34	41.2	156,000	2,340,000	NS
trans-1,2-Dichloroethene	<29	45	<58	<14,000	<300	<27	<31	<29	<31	<31	<31	<34	62.6	1,560,000	1,850,000	NS
Ethylbenzene	<29	41	<58	<14,000	<300	<27	<31	<29	1.0 J	5.5	<31	<34	1,570	8,020	35,400	NS
Isopropylbenzene	110	12 J	<58	<14,000	<300	<27	<31	<29	<31	<31	<31	<34	NS	268,000	268,000	NS
p-Isopropyltoluene	<29	61	<58	<14,000	<300	<27	<31	<29	<31	<31	<31	<34	NS	162,000	162,000	NS
Naphthalene	<58	340	<120	<28,000	<610	230	<63	<57	<62	<61	<62	80	658.2	5,520	24,100	NS
n-Propylbenzene	62	41	<58	<14,000	<300	<27	<31	<29	<31	<31	<31	<34	NS	264,000	264,000	NS
Tetrachloroethene	41	<u>570</u>	<u>10,000</u>	<u>{5,200,000}</u>	<u>59,000</u>	<u>33</u>	<u>73</u>	<u>82</u>	<31	<31	<u>530</u>	<34	4.5	33,000	145,000	153,000
Toluene	<29	32	<58	<14,000	<300	<27	<31	<29	<31	<31	<31	<34	1,107	818,000	818,000	NS
Trichloroethene	<29	<u>83</u>	<u>2,700</u>	<u>{420,000}</u>	<u>2,200</u>	<27	<31	<29	<31	0.22 J	<u>44</u>	<34	3.6	1,300	8,410	8,800
1,2,4-Trimethylbenzene	<29	320	<58	<14,000	<300	<27	<31	<29	<31	<31	<31	55	1,379 ⁴	219,000	219,000	NS
1,3,5-Trimethylbenzene	<29	110	<58	<14,000	<300	<27	<31	<29	<31	<31	<31	<34		182,000	182,000	NS
Vinyl chloride	<41	<u>(210)</u>	<82	<20,000	<420	<38	<44	<40	<44	<43	<43	<47	0.1	67	2,080	2,000
total Xylenes	<99	220	<200	<47,000	<1,000	<93	<110	<98	<110	<100	<110	<110	3,960	260,000	260,000	NS

NOTES:

¹Wisconsin Administrative Code Natural Resources Chapter (NR) 720 Residual Contaminant Levels were obtained from the Wisconsin Department of Natural Resources (WDNR) spreadsheet, last updated December 2018

²Direct Contact RCLs only apply to soil samples collected within four feet of the ground surface

³WDNR Landfill Disposal "Contained-Out" Values obtained from the fact sheet titled "Contained-Out Values for PCE, TCE, and Vinyl Chloride" (RR-969) effective as of November of 2013

⁴Soil to Groundwater Pathway RCLs for 1,2,4- and 1,3,5-Trimethylbenzene are combined

PID: Photoionization Detector

BDL: Below Detection Limit

VOCs: Volatile organic compounds

µg/kg: Micrograms per kilogram; equivalent to parts per billion (ppb)

J: Result is below the method quantitation limit (MQL)

NS: No Standard Established

<xx.x: Result detected below the method detection limit of x

xx.x: Underlined results exceed the NR 720 RCL for the Soil to Groundwater Pathway

(xx.x): Parenthesized results exceed the NR 720 RCL for Non-Industrial Direct Contact

[xx.x]: Bracketed results exceed the NR 720 RCL for Industrial and Non-Industrial Direct Contact

{xx.x}: Braced results exceed the WDNR Landfill Disposal Contained-Out Value

**TABLE 1 (Continued)
SOIL ANALYTICAL RESULTS**

Martinizing Racine
1730 State Street
Racine, Wisconsin
1E-0909013

Analyte	Sample Location														NR 720 RCLs ¹ (µg/kg)			WDNR Landfill Disposal Contained-Out Values ³
	GP-1			GP-2		GP-3		GP-4		GP-5		GP-6	GP-7	GP-8	Soil to Groundwater Pathway	Direct Contact ²		
Sample Depth (feet)	4 - 6	8 - 10	12 - 14	4 - 6	8 - 10	2 - 4	6 - 8	4 - 6	6 - 8	4 - 6	6 - 8	4 - 6	6 - 8	2-4		Non-Industrial Land Use	Industrial Land Use	
Sample Date	6/23/10	6/23/10	6/23/10	6/23/10	6/23/10	6/23/10	6/23/10	6/23/10	6/23/10	6/23/10	6/23/10	6/23/10	6/23/10	10/28/10				
PID	86	188	152	498	228	BDL	BDL	246	28	13	9	71	50	50				
Detected VOCs (µg/kg)																		
n-Butylbenzene	<290	<2,900	<290	<580	<1,400	<31	<29	780	<29	<31	<29	<28	290	<30	NS	108,000	108,000	NS
sec-Butylbenzene	<290	<2,900	<290	<580	<1,400	<31	<29	860	43	<31	<29	<28	170	<30	NS	145,000	145,000	NS
cis-1,2-Dichloroethene	<290	<2,900	<u>770</u>	<u>5,500</u>	<u>2,300</u>	<31	<29	<31	<u>58</u>	<u>220</u>	<u>220</u>	<28	<31	<u>45 J</u>	41.2	156,000	2,340,000	NS
trans-1,2-Dichloroethene	<290	<2,900	<290	<580	<1,400	<31	<29	<31	<29	<31	<29	<28	<31	<30	62.6	1,560,000	1,850,000	NS
Ethylbenzene	<290	<2,900	<290	<580	<1,400	<31	<29	<31	<29	<31	<29	<28	<31	<30	1,570	8,020	35,400	NS
Isopropylbenzene	<290	<2,900	<290	<580	<1,400	<31	<29	94	<29	<31	<29	<28	290	<30	NS	268,000	268,000	NS
p-Isopropyltoluene	<290	<2,900	<290	<580	<1,400	<31	<29	<31	<29	<31	<29	<28	<31	<30	NS	162,000	162,000	NS
Naphthalene	<590	<2,900	<570	<1200	<2,900	<62	<58	<61	<58	<63	<58	<57	140	<30	658.2	5,520	24,100	NS
n-Propylbenzene	<290	<2,900	<290	<580	<1,400	<31	<29	45	<29	<31	<29	<28	390	<30	NS	264,000	264,000	NS
Tetrachloroethene	<u>62,000</u>	<u>{510,000}</u>	<u>47,000</u>	<u>97,000</u>	<u>{250,000}</u>	<31	<29	<u>32</u>	<29	<u>78</u>	<29	150	<31	<u>4,100</u>	4.5	33,000	145,000	153,000
Toluene	<290	<2900	<290	<580	<1400	<31	<29	<31	<29	<31	<29	<28	<31	<30	1,107	818,000	818,000	NS
Trichloroethene	<u>1,200</u>	<u>9,300</u>	<u>380</u>	<u>5,300</u>	<u>5,500</u>	<31	<29	<31	<29	<31	<29	<28	<31	<30	3.6	1,300	8,410	8,800
1,2,4-Trimethylbenzene	<290	<2,900	<290	<580	<1,400	<31	<29	<31	<29	<31	<29	<28	<31	<30	1,379 ⁴	219,000	219,000	NS
1,3,5-Trimethylbenzene	<290	<2,900	<290	<580	<1,400	<31	<29	<31	<29	<31	<29	<28	<31	<30	182,000	182,000	182,000	NS
Vinyl chloride	<410	<4,100	<400	<810	<2,000	<43	<41	<43	<u>41</u>	<44	<40	<40	<43	<30	0.1	67	2,080	2,000
total Xylenes	<1,000	<9,900	<980	<2,000	<4,900	<110	<99	<100	<99	<110	<98	<97	<100	<89	3,960	260,000	260,000	NS

NOTES:

¹Wisconsin Administrative Code Natural Resources Chapter (NR) 720 Residual Contaminant Levels were obtained from the Wisconsin Department of Natural Resources (WDNR) spreadsheet, last updated December 2018

²Direct Contact RCLs only apply to soil samples collected within four feet of the ground surface

³WDNR Landfill Disposal "Contained-Out" Values obtained from the fact sheet titled "Contained-Out Values for PCE, TCE, and Vinyl Chloride" (RR-969) effective as of November of 2013

⁴Soil to Groundwater Pathway RCLs for 1,2,4- and 1,3,5-Trimethylbenzene are combined

PID: Photoionization Detector

BDL: Below Detection Limit

VOCs: Volatile organic compounds

µg/kg: Micrograms per kilogram; equivalent to parts per billion (ppb)

J: Result is below the method quantitation limit (MQL)

NS: No Standard Established

<xx.x: Result detected below the method detection limit of x

xx.x: Underlined results exceed the NR 720 RCL for the Soil to Groundwater Pathway

(xx.x): Parenthesized results exceed the NR 720 RCL for Non-Industrial Direct Contact

[xx.x]: Bracketed results exceed the NR 720 RCL for Industrial and Non-Industrial Direct Contact

{xx.x}: Braced results exceed the WDNR Landfill Disposal Contained-Out Value

**TABLE 2
GROUNDWATER ANALYTICAL RESULTS**

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

Analyte	Sample Location									NR 140 ¹ (µg/L)	
	MW-1			MW-2			MW-3			PAL	ES
Sample Date	02/08/10	08/03/10	12/01/10	02/08/10	08/03/10	12/01/10	02/08/10	08/03/10	12/01/10		
Detected VOCs (µg/L)											
Benzene	<3.2	<8.0	<10	<2.0	<40	<50	<0.40	<0.20	<0.20	0.5	5
n-Butylbenzene	<3.2	<8.0	<10	<2.0	<40	<50	<0.40	<0.20	<0.20	NS	NS
sec-Butylbenzene	<4.0	<10	<13	<2.5	<50	<63	<0.50	<0.25	<0.25	NS	NS
chloroethane	<16	<40	<50	<10	<200	<250	<2.0	<1.0	<1.0	80	400
1,1-Dichloroethene	<8.0	<20	<25	11 J	<100	<130	<1.0	<0.50	<0.50	0.7	7
cis-1,2-Dichloroethene	1,000	3,800	2,000	2,600	2,300	2,700	(20)	1.0 J	5.5	7	70
trans-1,2-Dichloroethene	12 J	(40 J)	(25 J)	(20 J)	<100	<130	<1.0	<0.50	<0.50	20	100
isopropyl ether	<8.0	<20	<25	<5.0	<100	<130	<1.0	<0.50	<0.50	NS	NS
Isopropylbenzene	<3.2	<8.0	<10	<2.0	<40	<50	<0.40	<0.20	<0.20	NS	NS
Naphthalene	<4.0	<10	<13	<2.5	<50	<63	<0.50	<0.25	<0.25	10	100
n-Propylbenzene	<8.0	<20	<25	<5.0	<100	<130	<1.0	<0.50	<0.50	NS	NS
Tetrachloroethene	280	1,700	730	11,000	21,000	22,000	210	(0.60 J)	(0.80 J)	0.5	5
Trichloroethene	260	1,900	860	4,200	8,300	7,000	61	<0.20	0.22 J	0.5	5
Vinyl chloride	71	340	210	110	54 J	<50 J	0.84 J	<0.20	<0.20	0.02	0.2

NOTES:

¹Wisconsin Administrative Code Natural Resources Chapter (NR) 140

PAL: Preventive Action Limit

ES: Enforcement Standard

VOCs: Volatile Organic Compounds

µg/L: Micrograms per Liter; equivalent to parts per billion (ppb)

J: Result is less than the reporting limit but greater than the method detection limit and the concentration is an approximate value

NS: No Standard Established

<xx.x: Result concentration was detected below the method detection limit of x

(xx.x): Result exceeds the NR 140 Preventive Action Limit

xx.x: Result exceeds the NR 140 Enforcement Standard

TABLE 2 (Continued)
GROUNDWATER ANALYTICAL RESULTS

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

Analyte	Sample Location												NR 140 ¹ (µg/L)	
	MW-4			MW-5		MW-6		MW-7		MW-8		TW-1	PAL	ES
Sample Date	02/08/10	08/03/10	12/01/10	08/03/10	12/01/10	08/03/10	12/01/10	08/03/10	12/01/10	08/03/10	12/01/10	02/08/10		
Detected VOCs (µg/L)														
Benzene	<1.0	<0.20	<0.20	<0.20	<0.20	16.0	<i>(3.4)</i>	<i>(1.8 J)</i>	<i>(0.97 J)</i>	<0.40	<1.0	<i>(1.6)</i>	0.5	5
n-Butylbenzene	<1.0	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.40	<1.0	1.1	NS	NS
sec-Butylbenzene	<1.2	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<1.3	1.2	NS	NS
chloroethane	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	2.8 J	<2.0	<5.0	<1.0	80	400
1,1-Dichloroethene	<2.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<i>(1.3 J)</i>	<2.5	<0.5	0.7	7
cis-1,2-Dichloroethene	<i>(13)</i>	<i>(27)</i>	<i>(21)</i>	0.58 J	4.6	<0.50	<0.50	<0.50	<0.50	410	670	<i>(17)</i>	7	70
trans-1,2-Dichloroethene	<2.5	2.8	1.2 J	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	3.0 J	4.9 J	0.61 J	20	100
isopropyl ether	<2.5	<0.50	<0.50	<0.50	<0.50	<0.50	0.71 J	<0.50	<0.50	<1.0	<2.5	<0.50	NS	NS
Isopropylbenzene	<1.0	<0.20	<0.20	<0.20	<0.20	0.57 J	0.47 J	<0.20	<0.20	<0.40	<1.0	3.7	NS	NS
Naphthalene	<1.2	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<1.3	0.72 J	10	100
n-Propylbenzene	<2.5	<0.50	<0.50	<0.50	<0.50	0.52 J	<0.50	<0.50	<0.50	<1.0	<2.5	4.1	NS	NS
Tetrachloroethene	130	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	170	150	<i>(3.0)</i>	0.5	5
Trichloroethene	27	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	110	100	<0.2	0.5	5
Vinyl chloride	<1.0	0.36 J	<0.20	<0.20	<0.20	<0.20	<0.20	2.4	2.1	24	45	7.0	0.02	0.2

NOTES:

¹Wisconsin Administrative Code Natural Resources Chapter (NR) 140

PAL: Preventive Action Limit

ES: Enforcement Standard

VOCs: Volatile Organic Compounds

µg/L: Micrograms per Liter; equivalent to parts per billion (ppb)

J: Result is less than the reporting limit but greater than the method detection limit and the concentration is an approximate value

NS: No Standard Established

<xx.x: Result concentration was detected below the method detection limit of x

(xx.x): Result exceeds the NR 140 Preventive Action Limit

xx.x: Result exceeds the NR 140 Enforcement Standard

Table 3
Sub-Slab Soil Gas Analytical Results

Marinizing Cleaners
1730 State St.
Racine, Wisconsin
BRRTS Number #: 02-52-549890
Project Number 1E-0909013

Sample Location	VP-1	VP-2	Sub-Slab VRSL [^] (µg/m ³)		
			Land Use		
Sample Depth	sub-slab	sub-slab	Residential	Small Commercial	Large Commercial / Industrial
Sample Date	10/28/2011	10/28/2011			
Detected VOCs (µg/m³)					
Tetrachloroethene (PCE)	[170,000]	[58,000]	1,400	5,800	18,000
Trichloroethene (TCE)	<1,100	[2,200]	70	290	880

Notes:

VRSL: Vapor Risk Screening Level

VOCs: Volatile Organic Compounds

µg/m³: Micrograms per cubic meter

[xx.x]: Bracketed results exceed the sub-slab VRSL for Residential, Small Commercial, and Large Commercial/Industrial land uses

[^]VRSLs were obtained/calculated from the Wisconsin Vapor Quick Look-Up Table based on the May 2023 US EPA Regional Screening Levels.

VRSLs are based on a Target Risk for Carcinogens of 1×10^{-5} and a Target Hazard Quotient for Non-Carcinogens of 1.

TABLE 4
Proposed Cost Estimate
Martinizing Drycleaning (1730 State St.)
Racine, Wisconsin
Change Order #3
1E-0909013

Task Number	Task Description	Consultant Fees			Subcontractor Fees	Regulatory Fees	Budget
		Labor	Expenses	Equipment			
TASK 01:	Sampling Plan Preparation	\$1,180	\$0	\$0	\$0	\$0	\$1,180
TASK 02:	SHSP & Utility Locate	\$1,040	\$0	\$0	\$350	\$0	\$1,390
TASK 03:	Well Re-Development, Survey & Gauging	\$1,570	\$60	\$175	\$0	\$0	\$1,805
TASK 04:	GW Sampling (Initial Event)	\$1,080	\$60	\$235	\$720	\$0	\$2,095
TASK 05:	Evaluate GW Results (Status Report)	\$1,450	\$0	\$0	\$0	\$0	\$1,450
TASK 06:	Additional Soil Probes/Wells/Piez, Dev. & Survey	\$2,020	\$180	\$250	\$4,605	\$0	\$7,055
TASK 07:	Interior/Exterior Soil Probes	\$670	\$0	\$75	\$865	\$0	\$1,610
TASK 08:	Off Site Sub-Slab Vapor Testing	\$520	\$0	\$100	\$250	\$0	\$870
TASK 09:	GW Sampling (3 Quarterly Events & Disposal)	\$5,370	\$180	\$705	\$4,815	\$0	\$11,070
TASK 10:	Vapor Mitigation Commissioning Plan	\$2,145	\$0	\$0	\$0	\$0	\$2,145
TASK 11:	PFE & Indoor Air Testing (3 total)	\$3,060	\$360	\$475	\$1,130	\$0	\$5,025
TASK 12:	Commissioning Reports (3 total)	\$3,765	\$0	\$0	\$0	\$0	\$3,765
TASK 13:	SI Report Preparation	\$8,820	\$0	\$0	\$0	\$0	\$8,820
TASK 14:	Project Managemnet & Coordination	\$5,470	\$0	\$0	\$0	\$0	\$5,470
TASK 15:	1015 Blake Ave. Sampling	\$2,330	\$120	\$100	\$415	\$0	\$2,965
Total Cost Estimate		\$40,490	\$960	\$2,115	\$13,150	\$0	\$56,715

Subcontractor Fees Detail					Subcontractor Fees Total
TASK 01:	Sampling Plan Preparation				\$0
TASK 02:	SHSP & Utility Locate				\$350
	Private Utility Locator				\$350
TASK 03:	Well Re-Development, Survey & Gauging				\$0
TASK 04:	GW Sampling (Initial Event)				\$720
	Laboratory Subcontractor Costs				\$720
TASK 05:	Evaluate GW Results (Status Report)				\$0
TASK 06:	Additional Soil Probes/Wells/Piez, Dev. & Survey				\$4,605
	Laboratory Subcontractor Costs				\$960
	Direct-push Subcontractor Costs				\$3,570
	Drilling Subcontractor Costs				\$75
TASK 07:	Interior/Exterior Soil Probes				\$865
	Laboratory Subcontractor Costs				\$480
	Direct-push Subcontractor Costs				\$385
TASK 08:	Off Site Sub-Slab Vapor Testing				\$250
	Laboratory Subcontractor Costs				\$250
TASK 09:	GW Sampling (3 Quarterly Events & Disposal)				\$4,815
	Laboratory Subcontractor Costs				\$3,840
	Soil Waste Disposal Subcontractor Costs				\$375
	Waste Water Disposal Subcontractor Costs				\$600
TASK 10:	Vapor Mitigation Commissioning Plan				\$0
TASK 11:	PFE & Indoor Air Testing (3 total)				\$1,130
	Laboratory Subcontractor Costs				\$1,130
TASK 12:	Commissioning Reports (3 total)				\$0
TASK 13:	SI Report Preparation				\$0
TASK 14:	Project Managemnet & Coordination				\$0
TASK 15:	1015 Blake Ave. Sampling				\$415
	Laboratory Subcontractor Costs				\$415

TOTALS: \$13,150

**DERF Site Investigation Bid Summary
 Consultant Selection Cover Sheet**

Notice: Use this form to notify the Department of Natural Resources of the consultant you are selecting to conduct a site investigation and to submit and summarize the bids required in the Dry Cleaner Environmental Response Fund (DERF) Program. This form is authorized under s. 292.65, Wis. Stats. and s. NR 169.23, Wis. Adm. Code. Completion of this form is mandatory for any person applying for DERF reimbursement. Persons who do not submit a completed form will not be eligible for reimbursement under DERF. Personal information will be used to manage the DERF program, and be made available to requesters under Wisconsin's Open Records laws (ss. 19.32-19.39, Wis. Stats.) and requirements.

Complete the following information and submit it to your DNR regional project manager. Copy this form as necessary.

Site Information

Site name: Martinizing Drycleaning Facility Name: Martinizing Drycleaning BRRTS # 02-52-549890

Consultant Selected

Consultant Name: Giles Engineering Associates, Inc. Consultant Address: N8 W22350 Johnson Dr., SuiteA1, Waukesha, WI 53186

Summary of Costs:

Consultant Name: Giles Engineering Associates, Inc.	
Consulting costs:	\$40,380
Drilling costs:	\$4,119
Analytical costs:	\$7,816
Miscellaneous costs:	\$4,400
Total Costs:	\$56,715

Consultant Name:	
Consulting costs:	
Drilling costs:	
Analytical costs:	
Miscellaneous costs:	
Total Costs:	

Consultant Name:	
Consulting costs:	
Drilling costs:	
Analytical costs:	
Miscellaneous costs:	
Total Costs:	

Optional 4th bid information:

Consultant Name:	
Consulting costs:	
Drilling costs:	
Analytical costs:	
Miscellaneous costs:	
Total Costs:	

Justification for Selection:

Martinizing Drycleaners has selected Giles Engineering Associates, Inc. to perform the requested services of the RFP because their proposal provides a thorough and complete approach to accomplish the requested work.

Applicant Information and Certification

I certify that the information contained above is true and correct to the best of my knowledge.

Applicant Name: Laurie Berry

Date: 12/12/2023

Street Address: 3319 Nobb Hill Drive

City: Mt. Pleasant

State: WI

Zip Code: 53406

Signature: *Laurie Berry*

Department Use Only

Project Manager Approval Signature

Phone Number

Date

If not approved, reason for non-approval:

**DERF Site Investigation Bid Sheet
Consultant Bid Summary**

Form 4400-233 (R 4/04) Page 2 of 6

Site Information

Site Name: Martinizing Drycleaning, 1730 State St., Racine, WI

Consultant Name: Giles Engineering Associates, Inc.

Applicant Name: Daniel K. Pelczar, CPG,
P.G.

Bid Summary

Drilling Costs Total =	\$4,119
Analytical Costs Total =	\$7,816
Consulting Costs Total =	\$40,380
Misc Costs Total =	\$4,400
Grand Total =	\$56,715

I certify that the costs are an accurate estimate of my total projected costs for the site investigation and I understand and will adhere to s.292.65 Stats. and ch NR 169, Wis. Adm. Code.

Consultant Signature:

Dan Pelczar

Date:

12/12/2023

Please attach to these forms a written narrative specifying how the tasks outlined in these sheets will be performed.

Consultant Name:
 Site Name:
 BRRTS #:
 Date:

DERF Site Investigation Bid Sheet

Drilling Costs

Form 4400-233 (R 4/04) Page 3 of 6

Drilling Costs						
Task	Interval	Number of Borings or Wells	Number of Days	Total Number Feet Drilled	Cost/feet, Day or Well	Total Cost
Well installation and Completion						
NR 141 Variance Wells	0 ft to 13 ft	4				\$925
NR 141 Variance Piezometers	0 ft to 30 ft	2				\$930
Decontamination Costs						\$150
Mobilization Costs						\$550
Auger Borings (continuous sampling)						
	___ ft to ___ ft					
	___ ft to ___ ft					
	___ ft to ___ ft					
	> ___ ft					
Decontamination Costs						
Mobilization Costs						
Auger Borings (specify split spoon sampling interval)						
	___ ft to ___ ft					
	___ ft to ___ ft					
	___ ft to ___ ft					
	> ___ ft					
Decontamination Costs						
Mobilization Costs						
Direct Push Borings (per point)						
Cart Rig (Interior)	8 ft depth	2				385
Soil Probes (exterior)	4 ft depth	2				115
	> ___ ft depth					
Decontamination Costs						
Mobilization Costs						
Well Development (if done by subcontractor)						
	Monitoring Wells					
	Piezometers					
	Recovery Wells					
Other						
Drums		1			75	\$75
Drilling Expendables		1			89	\$89
Flush Mount Covers		6			150	\$900
Total Drilling Costs						\$4,119

Consultant Name:
 Site Name:
 BRRTS #:
 Date:

DERF Site Investigation Bid Sheet
Analytical Costs

Form 4400-233 (R 4/04) Page 4 of 6

Parameter	WI Certified Lab			Field Test/Field Kit			Mobile Lab			Total Costs
	\$/sample	# samples	Method Used	\$/sample	# samples	Method Used	\$/Sample \$/Day	# Samples # Days	Method Used	
Solids Analysis										
VOCs (6 new wells/pz)	\$80.00	12	8260							\$960.00
VOCs (interior soil probes)	\$80.00	4	8260							\$320.00
VOCs (exterior soil probes)	\$80.00	2	8260							\$160.00
Water Analysis (low flow sampling assumed unless otherwise indicated at bottom of this sheet)										
VOCs (8 existing wells+dups.)	\$80.00	36	8260							\$2,880.00
VOCs (6 new wells/pz+Dups.)	\$80.00	21	8260							\$1,680.00
										\$0.00
Air Analysis										
VOCs (Sub-Slab)	\$250	2	TO-15							\$500.00
VOCs - (Indoor Air)	\$188	7	RAD							\$1,316.00
Total Analytical Costs										\$7,816.00

* Natural Attenuation parameters required for consideration of NA as remedy.

Consultant Name:
 Site Name:
 BRRTS #:
 Date:

DERF Site Investigation Bid Summary
Consultant Costs

Form 4400-233 (R 4/04) Page 5 of 6

Position (specify)	Hourly Rate	Hours/Task														Total Costs				
		Sampling Plan Preparation	SHSP Preparation & Utility Locate	Well Re-Development, Survey & Gauging	GW Sampling (Initial Event)	Evaluate GW Results (Status Report)	Additional Soil Probes, Wells, Piez. Dev. & Survey	Interior/Exterior Soil Probes	Off-Site Sub-Slab/Vapor Testing	GW Sampling (3 Quarterly Events & Disposal)	Vapor Mitigation Commissioning Plan	PFE & Indoor Air Testing (3 total)	Commissioning Reports (3 Total)	SI Report Preparation	Project Management & Coordination		Other (specify)			
																	1015 Blake Ave.			
Professional Staff																				
Division Manager	115					1						2		3	4	8				\$2,070.00
Senior Project Manager	110	8	4	2	3	8	2	2	2	12	16	6	12	50	40	12				\$19,690.00
Field Staff																				
Staff Geologist I/II	75	4	8	18	10	4	24	6	4	54		32	24	24	2	12				\$16,950.00
																				\$0.00
Office Support Staff																				
CAD Operator	55					2						2		3	16					\$1,265.00
Clerical	45					1						1		3	4					\$405.00
																				\$0.00
Total Consulting Costs																				\$40,380.00

Consultant Name:
 Site Name:
 BRRTS #:
 Date:

DERF Site Investigation Bid Summary Sheet

Miscellaneous Costs

Form 4400-233 (R 4/04) Page 6 of 6

Major Activity	Specifications	Commodity Unit (specify)	Unit Rate	Number of Units	Total Cost
IDW Disposal					
Soil Disposal - Special Waste	Non-Hazardous	per drum	\$125	1	\$125
Soil Disposal - Direct Subtitle C	Hazardous	per drum			
Soil Drum Transportation		trip	\$250	1	\$250
Groundwater Disposal					
Groundwater Disposal	Non-hazardous	per drum	\$100	5	\$500
Groundwater Disposal	Hazardous	per drum			
Groundwater Transportation		trip	\$100	1	\$100
Field Supplies (list)					
PID			\$75	2	\$150
Water Level Indicator			\$20	6	\$120
Peristaltic Sampling Pump			\$40	6	\$240
Water Quality Meter			\$100	4	\$400
Vapor Pin Assembly			\$75	8	\$600
Hammer Drill & Supplies			\$50	1.5	\$75
Survey Equipment			\$40	2	\$80
Drums			\$75	6	\$450
Surveying					
Personal Protection Equipment (list)					
Sample Shipping Costs					
Other (specify)					
Private Utility Locator			\$350.00	1	\$350
Mileage (Not Eligible)		100 Miles/rnd/trip	\$0.60	1600	\$960
Total Miscellaneous Costs					\$4,400.00

Reminders: DERF does not reimburse for attorney, closure or GIS fees. Mileage and meals are also non-reimbursable. Also, costs to prepare a reimbursement application and discuss the application with the department are not reimbursable. No expedited shipping w/o prior PM approval.