

December 29, 2022



Kelly & Brand, Attorneys at Law, LLC
303 Pearl Avenue, Suite A
P.O. Box 384
Oshkosh, WI 54903-0384

Attention: Ms. Catherine A. Drayna
Telephone: (920) 230-2100
E-mail: cdrayna@kellybrandlaw.com

RE: **Vapor Mitigation System Evaluation and Supplemental Site Investigation Work Plan**
Martinizing Dry Cleaners and Laundry Services
1233 Military Avenue
Green Bay, Wisconsin
BRRTS #02-05-217270
Terracon Project No. 58217038

Dear Ms. Drayna:

Per your December 16, 2022 electronic mail, Terracon Consultants, Inc. (Terracon) prepared this *Vapor Mitigation System Evaluation and Supplemental Site Investigation Work Plan* (Work Plan) for the Martinizing Dry Cleaners and Laundry Services property located at 1233 Military Avenue, Green Bay, Wisconsin ('site'). This Work Plan is presented to address the Wisconsin Department of Natural Resources (WDNR) request for vapor mitigation system (VMS) evaluation/documentation, and reporting, and evaluation of supplemental site investigation (SSI) in accordance with the Wisconsin Administrative Code, (WAC), NR 700 series. On November 30, 2022, Terracon prepared an *Ambient Air Sampling Work Plan* which provided a plan for indoor ambient air sampling subsequent to the installation of temporary air filtration units and/or activated carbon filters for the heating, ventilation, and air conditioning (HVAC) system at the site. On December 8, 2022, the WDNR provided notice to proceed in an electronic mail. This Work Plan is intended to provide an iterative approach to VMS evaluation and SSI. Project background information, the proposed scope of services, and schedule are provided in the following sections.

1.0 PROJECT BACKGROUND AND SITE INFORMATION

The site is located at 1233 Military Avenue in the City of Green Bay, Brown County, Wisconsin. The following information was presented in the GEI Consultants (GEI) June 30, 2020, *Documentation Report-Sub-Slab Vapor Mitigation System and Groundwater Sampling*. "There are five tenant spaces in the retail building. The largest tenant space located on the north end of the building is occupied by Jim's Music and consists of a retail sales area and a lesson area on the ground floor, and equipment storage and repair in the north basement (the south basement is unoccupied). The tenant space adjacent (south) to the lesson area is the One-Hour Martinizing



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dry cleaners. South of the dry cleaners is an unoccupied space, formerly Williams Tae Kwan Do. The final tenant space at the south end of the building is occupied by Edward Jones". A site diagram, prepared in November 2021, is attached (Exhibit 1).

The most current tenant space information Kelly & Brand provided follows:

- One Hour Martinizing (1233 South Military Avenue)
- Wakanda African Shop (1239 South Military Avenue). Currently in the build-out stage.
- Jim's Music & Teaching Center (1219 South Military Avenue)
- Jim's Music lesson space (1231 South Military Avenue)
- East Spa (1235 South Military Avenue). Beginning in January/February 2023 a tenant will be occupying the space.

Terracon submitted a *Sub-Slab Depressurization System (SSDS) Modifications and Supplemental Site Investigation Report*, dated November 8, 2021 to the WDNR. The report documented modifications/repairs to an existing sub-slab depressurization system (SSDS), and SSI performed at the site from June 2021 through August 2021. The SSI consisted of the construction of two NR 141, WAC compliant groundwater monitoring wells, collection of two basement ambient air samples, sampling of the groundwater monitoring well network, and compilation of historic data to evaluate soil, groundwater, and vapor quality relative to the documented chlorinated volatile organic compound (CVOC) release. Terracon is not aware of additional investigation work performed at the site since the report submittal.

Terracon understands the WDNR requested additional investigation, and that a WDNR enforcement conference occurred. Your November 22, 2022, electronic mail contained the following information from the enforcement conference:

"WDNR Enforcement Conference Summary:

On or before November 30, 2022 - Immediately deploy temporary air filtration units or another option that immediately decreases vapor concentrations to acceptable levels.

- a. Submit a brief workplan for indoor air vapor sampling to show temporary filtration is effective. If using the air treatment units, they should run for at least 24+ hours before obtaining the indoor air samples.
- b. Provide documentation of the initial indoor air sampling results to the department showing the temporary air units are effectively reducing vapor concentrations on or before November 30, 2022.
- c. Two to three rounds of indoor air sampling are needed, with at least one round performed during the heating season (i.e. winter) to ensure the sample results in the tenants' units are lower than the vapor action level of 180 ug/m³ for chlorinated volatile organic compounds (CVOCs).

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d. As noted in the enforcement conference, temporary air units are not to be used for long-term use. The VMS modifications may be iterative until it is shown to be effective.”

“On or before December 31, 2022 - Submit a workplan to address the violations above, including:

- a. Modifying the VMS to make it effective and provide the analytical data to the department.
- b. Provide updated VMS construction documentation report and OM&M plan, including long term monitoring, within 60 days of VMS being effective.
- c. Move forward with the site investigation (SI) per the ch. NR 700, Wis. Adm. Code series to complete the investigation, to include: defining the degree and extent of soil and groundwater contamination (e.g. installation additional soil borings and/or wells and piezometers), groundwater monitoring, utility and preferential pathway investigation, vapor intrusion at other on-Site buildings and off-site properties, and scoping of emerging contaminants (please reference the letter sent to you on August 17, 2020).
- d. If the above vapor sampling shows the VMS is not effective, then additional modifications are needed, and temporary air units need to remain running.
- e. Conduct remediation at the site to remove the source of vapors. “

On November 30, 2022, Terracon prepared an *Ambient Air Sampling Work Plan* to address the first set of WDNR-requested work and provided a plan for indoor ambient air sampling subsequent to the installation of temporary air filtration units and/or activated carbon filters for the HVAC system at the site. On December 8, 2022, the WDNR provided notice to proceed in an electronic mail, with the following comments:

“The DNR understands that four temporary air treatment units (ATUs) have been ordered and are en route to the One Hour Martinizing site. As discussed in Terracon’s workplan, there are five tenant spaces in the main building on the property. Jim’s Music occupies 1219 and 1231, One Hour Martinizing occupies 1233, East Spa will be occupying 1235 in January/February of 2023, and Wakanda African Shop will be occupying 1239 S. Military Avenue. Based on review of the workplan and knowledge of previous vapor action level (VAL) exceedances, DNR has the following comments:

1. DNR recommends that more than one ATU be placed in Jim’s Music as this tenant space has a large area to cover. There is no mention of treatment within the northern basement of Jim’s Music, and this area is occupied and had VAL exceedances. The northern basement at Jim’s Music requires reduction in concentrations and an indoor air sample as well.
2. Air treatment within the active drycleaner is not necessary at this time, and DNR has concerns that treatment within the drycleaner may spend the filter very quickly. It may be more worthwhile to place this ATU in the Jim’s Music tenant space.

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3. Summa Canisters may be in short supply; keep DNR informed if these are difficult to obtain in a timely manner.
4. DNR is still in need of documentation of work (e.g. sealing of possible points of entry) that was performed by SWAT Environmental”.

It is understood that Innovative Properties Group, LLC (IPG) installed the temporary air filtration units on December 15, 2022. The first round of ambient air samples is scheduled to be collected on December 30, 2022.

2.0 SCOPE OF SERVICES

Terracon proposes the following scope of services to address the WDNR’s second set of requested work, pertaining to VMS documentation/reporting, and SSI.

2.1 Health and Safety Plan

Terracon is committed to the safety of all its employees. As such, and in accordance with our Incident and Injury Free® safety goals, Terracon will review and (if needed) update the existing safety plan to be used by our personnel during field services. Prior to commencement of on-site activities, Terracon will hold a brief health and safety meeting to review health and safety needs for this specific project. At this time, we anticipate performing fieldwork in a United States Environmental Protection Agency (USEPA) Level D work uniform consisting of hard hats, safety glasses, protective gloves, and steel-toed boots. It may become necessary to upgrade this level of protection, at additional cost, during sampling activities in the event that we encounter petroleum or chemical constituents in soils or groundwater that present an increased risk for personal exposure. In addition, Terracon retains the right to stop work without penalty at any time Terracon believes it is in the best interests of Terracon’s employees or subcontractors to do so in order to reduce the risk of exposure to the coronavirus. Innovative Properties agrees it will respond quickly to all requests for information made by Terracon related to Terracon’s pre-task planning and risk assessment processes. Innovative Properties acknowledges its responsibility for notifying Terracon of any circumstances that present a risk of exposure to the coronavirus or individuals who have tested positive for COVID-19 or are self-quarantining due to exhibiting symptoms associated with the coronavirus.

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2.2 VMS Construction Documentation and Reporting

The VMS at the site is comprised of five (B1 through B5) sub-slab vapor depressurization systems (SSDSs). On June 11, 2021, four existing sub-slab vapor depressurization systems (SSDSs) (B1 through B4) were reinstalled and modified by SWAT Environmental (SWAT) beneath Jim's Music. One additional SSDS, B5, was previously installed beneath the remainder of the strip-mall properties, but was not operational. The electrical wiring for the VMS was completed, and the SSDS were fully operational on July 20, 2021. Modifications were made to the four SSDS (B1 through B4) as requested. Readings collected from the interior gauges on August 23, 2021 indicated that each SSDS was operational. The sumps were sealed, and sampling ports installed.

On May 6, 2022, IPG retained SWAT to inspect the VMS and perform patching/sealing of walls and pipe penetrations. SWAT did not prepare a report; however, they did provide photos of the repair work. Terracon will attempt to identify the patching/repair locations from the SWAT photos and mark them on a map, and/or include them in a photo log.

2.2.1 VMS Performance Monitoring

In conjunction with the ambient indoor air sampling discussed below, Terracon personnel will collect manometer readings and other VMS operational data at each SSDS to confirm the systems are operational. Terracon will utilize the inspection log as presented in the WDNR's *Maintenance Plans for Vapor Mitigation Systems/Vapor Intrusion Response Actions/Vapor Barriers* (RR-981). A Sub-Slab Vapor Mitigation System Diagram is attached as Figure 2.

2.2.2 Pressure Field Extension Testing

Terracon personnel will collect differential pressure measurements at each sub-slab vapor point (M-1 through M-5). Differential pressure measurements will be used to evaluate VMS performance. A DM1 portable digital micro-manometer (DM1) will be used to read the pressure at each sub-slab point. The DM1 will be zeroed and connected to each point for 5 minutes or until the pressure reading stabilizes. Photoionization detector (PID) readings will also be collected at each sub-slab vapor monitoring point. The sub-slab vapor monitoring point will be purged for at least 10 minutes, prior to recording PID readings.

2.2.3 Ambient Air Sampling

After a minimum of 24-hours after the start of air treatment unit operation, the first round of ambient air samples will be collected from the tenant spaces listed below using laboratory-prepared 6-liter Summa canisters with a flow regulator calibrated for 8-hour sample collection. A

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second round of indoor ambient air samples will be collected from the tenant spaces in January/February 2023.

- Wakanda African Shop (1239 South Military Avenue)
- Jim's Music & Teaching Center (1219 South Military Avenue)
- Jim's Music Lesson space (1231 South Military Avenue)
- Jim's Music Lesson (Northern Basement- 1231 South Military Avenue)
- East Spa (1235 South Military Avenue)

The sample locations will be determined in the field based on observations in each tenant space.

The ambient indoor air samples will be submitted under chain-of-custody protocol to Pace, a Wisconsin certified laboratory, for analysis of tetrachloroethene (PCE), trichloroethene (TCE), trans-dichloroethene (DCE), cis-DCE, and vinyl chloride (VC) using USEPA Method TO-15.

2.2.4 VMS Construction Documentation and Ambient Air Sampling Report

Terracon will utilize available documentation/reports to generate a VMS construction documentation report in general accordance with the WDNR guidance *Addressing Vapor Intrusion at Remediation & Redevelopment Sites in Wisconsin* (RR 800). The report will include individual SSDS (B1 through B5) construction installation detail, historical SSDS performance readings, and subsequent performance monitoring, including sub-slab vapor analytical results and pressure field extension (PFE) measurements, and ambient air sampling analytical results. A *Vapor Mitigation System Inspection Log* (Form 4400-321) and a long-term operation, monitoring, and maintenance (OM&M) plan will be prepared for each SSDS that specifies the conditions that must be maintained and monitored for continued long-term protection from vapor intrusion.

2.3 Supplemental Site Investigation

2.3.1 Vapor Intrusion Evaluation

Terracon will obtain additional underground utility information from the City of Green Bay Engineering Department to evaluate utility and potential vapor intrusion preferential pathways in general accordance with the WDNR's guidance document *RR-649 Guidance for Documenting Human-Made Preferential Pathways Including Utility Corridors* (June 2021).

According to STS Consultants, LTD *Site Investigation Addendum Report*, dated March 2001, the sanitary sewer, installed in the center of St. Agnes Drive, varies in depth between 7 and 9 feet below ground surface (bgs), and is pitched at a 0.31% towards the intersection of St. Agnes Drive

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and Ninth Street. A storm sewer and water main are also present beneath St. Agnes Drive. Each of the tenant spaces' sanitary sewer, storm sewer, and water laterals exit the site and discharge to the mains beneath St. Agnes. Terracon will try to obtain as-built underground utility information.

2.3.2 Sanitary Sewer Vapor Assessment

Traffic control will be necessary for Terracon personnel to collect a vapor sample from the sanitary sewer manhole located at the intersection of St. Agnes Drive and Ninth Street. The invert depth will be measured, and a sewer vapor sample will be collected by inserting Monoflex silicon tubing attached to a 6-liter summa canister to approximately 1 to 2 feet above the bottom of the manhole. The sample will be collected within the summa canister with a flow controller calibrated for 30-minute sample collection. The vapor sample will be submitted for analytical testing of PCE, TCE, trans-DCE, cis-1,2-DCE, and VC using EPA Method TO-15.

2.3.3 Groundwater Sampling

Terracon personnel will collect groundwater samples from the groundwater monitoring well network on a semi-annual basis. The monitoring wells' expandable caps will be opened, and groundwater elevations allowed to equilibrate prior to measuring static water levels from the entire groundwater monitoring well network prior to sampling. Groundwater will then be extracted from the groundwater monitoring wells using a peristaltic pump, with dedicated polyethylene drop tubing used for each well. Field measurements of dissolved oxygen (DO), temperature, pH, specific conductivity, and oxidation-reduction potential (ORP) will be recorded with a water quality meter during the low-flow sampling procedure until stable measurements are obtained. Generally, a goal of three consecutive readings within 10% taken a minimum of three minutes apart during purging is indicative that groundwater in the well has stabilized. After groundwater conditions stabilized, groundwater samples will then be collected.

Groundwater samples will be collected from groundwater monitoring wells MW-1 through MW-3, MW-4R, MW-5, MW-6, MW-7R, PZ-1, PZ-2, and PZ-6 in laboratory-supplied sample containers, placed on ice, and submitted under chain of custody control to Pace for laboratory analysis of volatile organic compounds (VOCs) by USEPA Method 8260B. Water samples will also be collected from the basement sumps using disposable bailers or a peristaltic pump with dedicated tubing, placed in laboratory-supplied sample containers, placed on ice, and submitted under chain of custody control to Pace for laboratory analysis of VOCs by USEPA Method 8260B.

One trip blank sample will be transported with groundwater samples submitted for laboratory analyses, and a duplicate groundwater sample will also be collected. The trip blank and duplicate groundwater samples will be submitted for analysis of VOCs by USEPA Method 8260B.

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3.0 EMERGING CONTAMINANTS STATEMENT

The WDNR sent a letter dated August 17, 2020, to all responsible parties (RPs) that have an “open contamination site” on the WDNR’s Bureau for Remediation and Redevelopment Tracking System (BRRTS). The purpose of the letter was to remind RPs to assess sites for the potential presence of emerging contaminants, such as per- and polyfluoroalkyl substances (PFAS) and 1,4-dioxane. Terracon, on behalf of IPG, prepared this statement to document the consideration of emerging contaminants during site investigation scoping for the site. This statement was prepared using the WDNR guidance document “Site Investigation Scoping: Identifying Contaminants of Concern” (RR-101) for potential/emerging contaminants in general, and the Interstate Technology Regulatory Council (ITRC) fact sheet “History and Use of Per- and Polyfluoroalkyl Substances (PFAS)” for PFAS.

A Phase I Environmental Site Assessment (ESA) is not available. Terracon obtained information regarding site development and usage history from previous investigation reports. The site is located in a one-story strip-mall developed with commercial businesses. The parent parcel is bordered to the east by a residential area and to the north, south, and west by commercial areas. The One-Hour Martinizing (OHM) site has operated as a dry-cleaning facility on the site for more than 35 years. In 1967, Marti-Chic Corporation of Madison, Wisconsin, opened an OHM franchised dry cleaning facility at the 1233 South Military Avenue location. The strip-mall continues to operate with an active dry-cleaning establishment (OHM), with other tenants including Jim’s Music (north adjoining). According to Brown County Tax Records, the site is zoned G-2, Commercial.

Northern Environmental prepared a Phase II ESA, dated March 23, 1999 for the site. The Phase II ESA was prepared to determine the presence/absence of contamination associated with historical dry-cleaning operations. The Phase II ESA included the installation and sampling of soil from an interior soil boring installed near the dry-cleaning machine, and two exterior soil borings which contained CVOCs in both soil and groundwater. Additional site investigation of the soil, groundwater, and vapor was conducted to delineate the extent and assess the magnitude of the release. Terracon was retained to assist with SSDS modifications, and conduct a supplemental site investigation to further evaluate soil, groundwater, and vapor impacted by CVOCs. Soil, groundwater, and ambient air samples were submitted for VOC laboratory analysis. CVOCs continue to be detected in several groundwater samples at concentrations above their NR 140, WAC, ESs.

The initial site investigation scope of work was developed in 1999-2000, prior to the issuance of the above-referenced WDNR and ITRC documents. Terracon used these documents to further evaluate the site history with respect to emerging contaminants. The WDNR guidance document lists several classes of contaminants and associated chemicals and commercial/industrial

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operations. Table 2-4 of the ITRC document lists industries and applications associated with PFAS usage. PFAS has been used in a wide range of consumer products, including garment waterproofing and stain resisting agents.

Historically, the site operated as offices, stores, and dry-cleaning operations for OHM. OHM has been the sole operator of the dry-cleaning operations at this site since operations began approximately 35 years ago. It is not believed that waterproofing or stain resisting applications have been performed at the facility nor have PFAS products been stored onsite.

The emerging contaminant 1,4-dioxane was used as a stabilizer in solvents, primarily 1,1,1-trichloroethane (1,1,1-TCA). Chlorinated VOCs were detected within the soil and groundwater samples at the site; however, 1,1,1-TCA was not detected within the soil, and only in groundwater from MW-1 in June 1999, then below analytical limits of detection in 6 subsequent events. Terracon spoke with the OHM manager, Mr. Lee Novy, and he had no knowledge of garment waterproofing or stain resisting agents being used at the facility. Therefore, it is not believed that 1,1-TCA was used at the site, and historical operations and CVOC results indicate that neither PFAS nor emerging contaminants associated with solvents (i.e., 1,4-dioxane) are associated with the historical uses of the site, are not likely present, or anticipated to be present at the site.

4.0 ANTICIPATED SCHEDULE

Terracon proposes to initiate this Work Plan following WDNR approval. Specifically, the proposed schedule is as follows:

TASK	ANTICIPATED COMPLETION DATE*
Ambient Air Sampling-1 st Round Subsequent to Filtration Unit Installation	December 30, 2022
Ambient Air Sampling-2 nd Round Subsequent to Filtration Unit Installation	February 3, 2023
VMS Construction Documentation & Ambient Air Sampling Report	February-March 2023
VMS Readings, PFE Measurements & Groundwater Sampling	February 2023
Vapor Intrusion Evaluation	January-March 2023
Sanitary Sewer Vapor Assessment	January-March 2023
VMS Readings, PFE Measurements & Groundwater Sampling	August 2023

*Anticipated completion dates are contingent upon WDNR and client review time, weather, and the schedules of Terracon, laboratory, and subcontractors.

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If you have any questions or comments regarding this Work Plan or require additional information, please contact us at (414) 423-0255.

Sincerely,



Timothy P. Welch, P.G.
Senior Project Manager

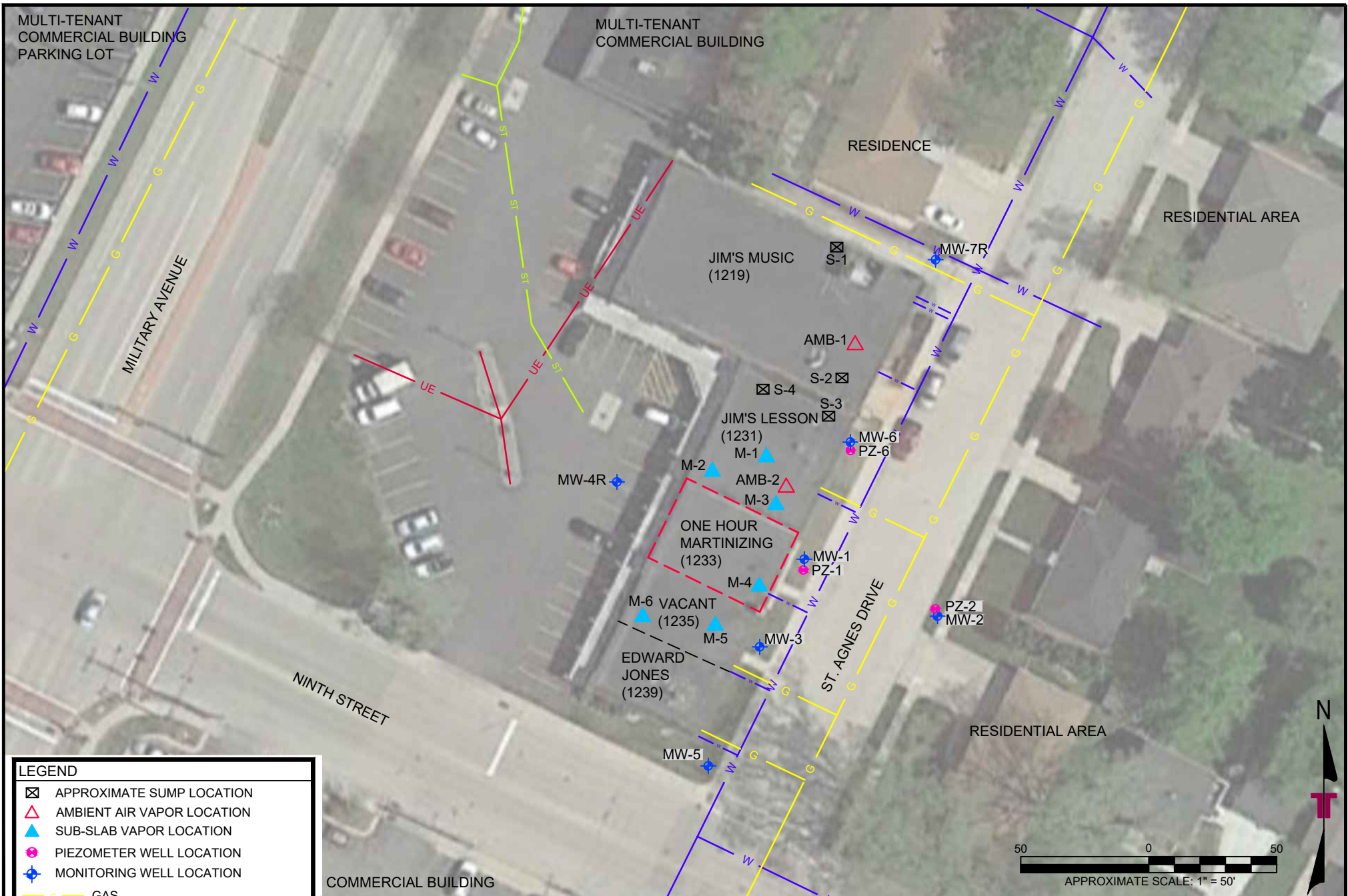
Edmund A. Buc, P.E., CHMM
Department Manager

Attachments - Exhibit 1- Site Diagram

Figure 2-Sub-Slab Vapor Mitigation System Diagram (GEI)

Copy to: Mr. Qefli Neziri-Innovative Properties Group LLC

EAB/TPW:tpw: \\58217038\Project Documents\Work Plan-Dec 2022\OHM VMS & SSI Work Plan _12292022-.docx



LEGEND	
	APPROXIMATE SUMP LOCATION
	AMBIENT AIR VAPOR LOCATION
	SUB-SLAB VAPOR LOCATION
	PIEZOMETER WELL LOCATION
	MONITORING WELL LOCATION
	GAS
	WATER
	STORM SEWER
	APPROXIMATE SITE BOUNDARY

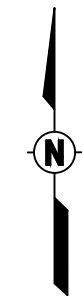
IMAGE SOURCE: GOOGLE EARTH PRO
 DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

Project Mngr:	TPW	Project No.	58217038
Drawn By:	JLM (41)	Scale:	AS SHOWN
Checked By:	TPW	File No.	58217038C1
Approved By:	TPW	Date:	11/2021

Terracon
 Consulting Engineers and Scientists
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SITE DIAGRAM
 MARTINIZING DRY CLEANERS AND LAUNDRY SERVICES
 1233 SOUTH MILITARY AVENUE
 GREEN BAY, WISCONSIN

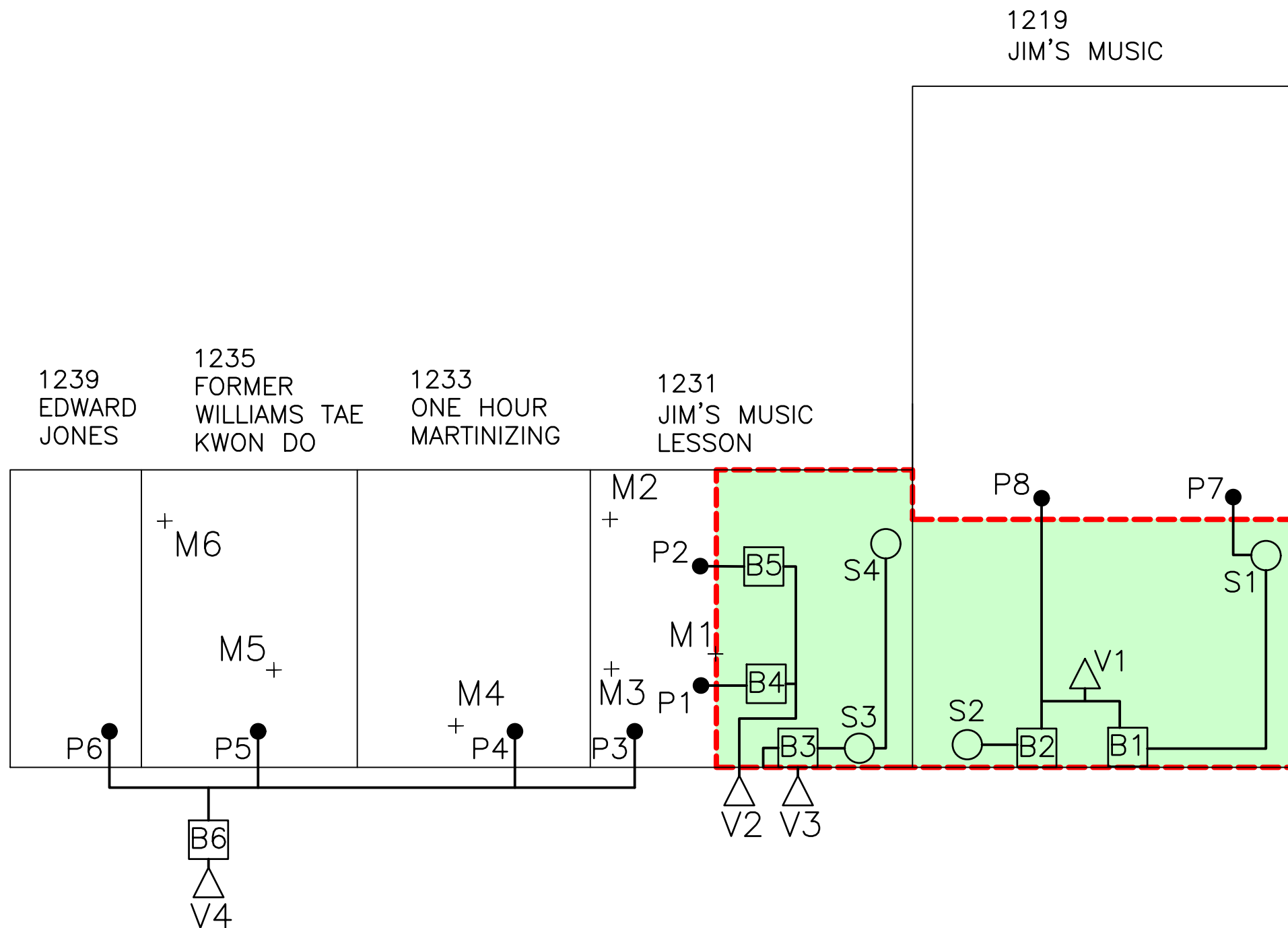
EXHIBIT
 1



NOT TO SCALE

LEGEND

- S1 ○ SUBGRADE SUMP
- B1 □ VACUUM BLOWER
- V1 △ DISCHARGE VENT
- P1 ● VAPOR EXTRACTION POINT
- M1+ SUB-SLAB VACUUM MONITORING PIN
- BASEMENT AREA



SUB-SLAB VAPOR MITIGATION SYSTEM

INNOVATIVE PROPERTIES
GREEN BAY, WI



Project: 2002226

SUB-SLAB VAPOR MITIGATION SYSTEM DIAGRAM

JUNE 2020

FIG-2