



December 19, 2022

Mr. Dan Martino
Martinis Master Drycleaners
7513 41st Avenue
Kenosha WI 53142
Via Email Only to danmartinosr@aol.com

KEEP THIS LEGAL DOCUMENT WITH YOUR PROPERTY RECORDS

SUBJECT: Case Closure with Continuing Obligations
Martinis, 3917 52nd Street, Kenosha, Wisconsin 53144
BRRTS #: 02-30-552186, FID #: 230007030

Dear Mr. Martino:

The Wisconsin Department of Natural Resources (DNR) is pleased to inform you that the Martinis case identified above met the requirements of Wisconsin Administrative (Wis. Admin.) Code chs. NR 700 to 799 for case closure with continuing obligations (COs). COs are legal requirements to address potential exposure to remaining contamination. No further investigation or remediation is required at this time for the reported hazardous substance discharge and/or environmental pollution.

However, you, future property owners and occupants of the property must comply with the COs as explained in this letter, which may include maintaining certain features and notifying the DNR and obtaining approval before taking specific actions. You must provide this letter and all enclosures to anyone who purchases, rents or leases this property from you. Some COs also apply to other properties or rights of way (ROWs) affected by the contamination as identified in the Continuing Obligation Summary section of this letter. You may be required to make a real estate condition report disclosure under Wis. Stat. ch 709.

This case closure decision is issued under Wis. Admin. Code chs. NR 700 to 799 and is based on information received by the DNR to date. The DNR reviewed the closure request for compliance with state laws and standards and determined the case closure request met the notification requirements of Wis. Admin. Code ch. NR 725, the response action goals of Wis. Admin. Code § NR 726.05(4), and the case closure criteria of Wis. Admin. Code §§ NR 726.05, 726.09 and 726.11, and Wis. Admin. Code ch. NR 140.

The Martinis site was investigated for a discharge of hazardous substances and/or environmental pollution from a dry-cleaning machine and its related components that were formerly located in the southwest area of the site building. Case closure is granted for the volatile organic compounds (VOCs), as documented in the case file. The site investigation and/or remedial action addressed soil, groundwater, and vapor. The remedial action, including source control actions for vapor intrusion, consisted of soil excavation and soil vapor extraction. Contamination remains in soil and groundwater across the source property and at surrounding properties, as detailed in the below "Summary of Continuing Obligations" table.

The case closure decision and COs required are based on the current use of the source property at 3917 52nd Street, Kenosha for commercial purposes, and the affected properties (listed in the table below) for residential or commercial purposes. The source property is currently zoned commercial, and the affected properties are currently zoned residential or commercial. Based on the land use and zoning, the site, including both the source property and the affected properties, meets the non-industrial land use classification under Wis. Admin. Code § NR 720.05(5) for application of residual contaminant levels in soil.

SUMMARY OF CONTINUING OBLIGATIONS

ADDRESS (CITY, WI)	COS APPLIED	DATE OF MAINTENANCE PLAN(S)
3917 52nd Street, Kenosha (Source Property) Parcel # 08-222-35-401-004	Residual Soil Contamination Cover (for soil) Structural Impediment Residual Groundwater Contamination VI - Commercial/Industrial Use VI - Future Concern	August 30, 2022
5231 40 th Avenue, Kenosha Parcel # 08-222-35-401-006	Residual Soil Contamination Residual Groundwater Contamination VI – Future Concern	
3909 52 nd Street, Kenosha Parcel # 08-222-35-401-018	Residual Soil Contamination Cover (for soil) Residual Groundwater Contamination VI - Commercial/Industrial Use VI – Future Concern	August 30, 2022
3931, 3931-A, 3933 and 3935 52 nd Street, Kenosha Parcel # 08-222-35-401-019	Residual Soil Contamination Cover (for soil) Residual Groundwater Contamination VI – Future Concern	August 30, 2022
3907 52 nd Street, Kenosha Parcel # 08-222-35-401-022	Residual Soil Contamination Cover (for soil) Residual Groundwater Contamination VI – Future Concern	August 30, 2022
No Address Established – Parcel # 08-222-35-401-008	Residual Soil Contamination Residual Groundwater Contamination VI – Future Concern	
No Address Established – Parcel # 08-222-35-401-009	Residual Soil Contamination Residual Groundwater Contamination VI – Future Concern	
No Address Established – Parcel # 08-222-35-401-020	VI – Future Concern	

CLOSURE CONDITIONS

Closure conditions are legally required conditions which include both COs and other requirements for case closure (Wis. Stat. § 292.12(2)). Under Wis. Stat. § 292.12(5), you, any subsequent property owners and occupants of the property must comply with the closure conditions as explained in this letter. The property owner must notify occupants for any condition specified in this letter under Wis. Admin. Code §§ NR

726.15(1)(b) and NR 727.05(2). If an occupant is responsible for maintenance of any closure condition specified in this letter, you and any subsequent property owner must include the condition in the lease agreement under Wis. Admin. Code § NR 727.05(3) and provide the maintenance plan to any occupant that is responsible.

DNR staff may conduct periodic pre-arranged inspections to ensure that the conditions included in this letter and the maintenance plan dated August 30, 2022, are met (Wis. Stat. § 292.11 (8)). If these requirements are not followed, the DNR may take enforcement action under Wis. Stat. ch. 292 to ensure compliance with the closure conditions.

SOIL

Continuing Obligations to Address Soil Contamination

Residual Soil Contamination (Wis. Admin. Code chs. NR 718, NR 500 to 599, and § NR 726.15(2)(b), and Wis. Stat. ch. 289)

Soil contamination remains beneath the site building and its adjacent properties and to the south of the site building and its adjacent properties, as indicated on the enclosed maps (Figure B.2.b.1., Residual Soil Contamination – Extent of Impacts Above Soil to Groundwater RCL, March 23, 2022, and Figure B.2.b.2., Residual Soil Contamination – Extent of Impacts Above Non-Industrial RCLs (0-4 feet bgs), December 7, 2022). If soil in the location(s) shown on the map is excavated in the future, the property owner or right of way holder at the time of excavation must sample and analyze the excavated soil. If sampling confirms that contamination is present, the property owner or right of way holder at the time of excavation will need to determine if the material is considered solid waste and ensure that any storage, treatment or disposal complies with applicable standards and rules. Contaminated soil may be managed under Wis. Admin. Code ch. NR 718 with prior DNR approval.

In addition, all current and future property owners, occupants and right of way holders need to be aware that excavation of the contaminated soil may pose an inhalation and direct contact hazard; special precautions may be needed to prevent a threat to human health.

Cover (for soil) (Wis. Stat. § 292.12(2)(a), Wis. Admin. Code §§ NR 724.13(1) and (2), NR 726.15(2)(d) and/or (e), NR 727.07(1))

The cap consisting of asphalt, concrete and gravel exists at the site and surrounding properties, as shown on the enclosed map (Figure D.2, Cap Extent and Components, August 24, 2022) shall be maintained in compliance with the enclosed maintenance plan, August 30, 2022. The purpose of the cover is to minimize the infiltration of water through contaminated soil and prevent direct contact with residual soil contamination that might otherwise pose a threat to human health.

The cover approved for this closure was designed to be protective for commercial or industrial land uses. Before using the property for residential purposes and before taking an action, the property owner must notify the DNR to determine if additional response actions are warranted. A cover intended for industrial land uses or certain types of commercial land uses may not be protective if the property changes to a residential use. This may include, but is not limited to, single or multiple family residences, a school, day care, senior center, hospital or similar settings. In addition, a cover designed for multi-family residential housing use may not be appropriate for use at a single-family residence.

To modify or replace a cover, the property owner must submit a request to the DNR under Wis. Admin. Code ch. NR 727. The DNR approval must be obtained before implementation. The replacement or modified cover must be a structure or similar permeability or be protective of the revised use of the property until contaminant levels no longer exceed Wis. Admin. Code ch. NR 720 groundwater pathway residual contaminant levels and direct contact residual contaminant levels (RCLs).

Structural Impediment (Wis. Stat. § 292.12(2)(b), Wis. Admin. Code §§ NR 726.15(2)(f), NR 727.07(2))

The remaining south and east foundation of the site building, the mechanical equipment room in the southwest corner of the site building, and the utilities in the alleyway to the south of the site building, as shown on Figure B.2.b.2., Residual Soil Contamination – Extent of Impacts Above Non-Industrial RCLs (0-4 feet bgs), December 7, 2022, and Attachment B.5., Structural Impediment Photos, dated May 10, 2017, May 9, 2017, and Nov. 22, 2016, made complete remediation of the contamination on this property impracticable. Upon removal of the structural impediments, the property owner shall investigate the degree and extent of the soil contamination obstructed by the structural impediment. If contamination is found at that time, the property owner shall remediate the contamination in accordance with Wis. Admin. Code chs. NR 700 to 799.

GROUNDWATER

Continuing Obligations to Address Groundwater Contamination and/or Monitoring Wells

Residual Groundwater Contamination (Wis. Admin. Code ch. NR 140 and § NR 812.09(4)(w))

Groundwater contamination which equals or exceeds the enforcement standards for tetrachloroethylene, trichloroethylene, cis-1,2-dichloroethene, trans-1,2- dichloroethane, 1,1-dichlorethene and vinyl chloride is present beneath the site building and its adjacent properties and to the south of the site building and its adjacent properties, as shown on the enclosed map (Figure B.3.b., Groundwater Isoconcentration Map, March 23, 2022). To construct a new well or reconstruct an existing well, the property owner must obtain prior DNR approval. Additional casing may be necessary to prevent contamination of the well.

VAPOR

Continuing Obligations to Address Vapor Contamination

Vapor intrusion (VI) is the movement of vapors coming from volatile chemicals in the soil or groundwater or within preferential pathways into buildings where people may breathe air contaminated by the vapors.

VI - Commercial/Industrial Use: (Wis. Stat. § 292.12(2), Wis. Admin. Code § NR 726.15(2)(k) or (m))

Soil and groundwater beneath the Martinos building and the 3909 52nd St building contains contamination at concentrations that pose a long-term risk to human health if allowed to migrate into an occupied building. See the enclosed map (Figure B.4.a.2., Sub-Slab Vapor and Indoor Air Sample Results, March 23, 2022). Case closure is based on the commercial or industrial use of these properties. Use of these properties is restricted to commercial or industrial use. If changes in property or land use are planned, the property owner must evaluate whether the closure is protective for the proposed use. The DNR may require additional response actions.

VI - Future Concern: (Wis. Stat. § 292.12(2), Wis. Admin. Code § NR 726.15(2)(L) or (m), as applicable.

Chlorinated VOCs remain in soil and groundwater beneath the site building, as shown on the enclosed maps, at concentrations that may be of concern for vapor intrusion in the future, if a building is constructed, renovated, or expanded in an area where no building currently exists or if an existing building is remodeled. At the time of closure, the site is occupied by a store front that is used as a drop-off and pick-up location for items that have been or will be dry cleaned at an off-site facility.

Vapor control technologies are required for new construction or for modification of occupied buildings on the property unless the property owner assesses the vapor pathway and the DNR agrees that vapor control technologies are not needed. The property owner shall maintain the current building use and layout

OTHER CLOSURE REQUIREMENTS

Maintenance Plan and Inspection Log (Wis. Admin. Code § NR 726.11(2), NR 726.15(1)(d), NR 727.05(1)(b)3., Wis Admin. Code § NR 716.14(2) for monitoring wells)

The property owner is required to comply with the enclosed maintenance plan dated August 30, 2022, for the cover, to conduct inspections annually and to use the inspection log (DNR Form 4400-305) to document the required inspections. The maintenance plan and inspection log are to be kept up-to-date and on-site. The property owner shall submit the inspection log to the DNR only upon request, using the RR Program Submittal Portal. See the DNR Notification and Approval Requirements section below for more information on how to access the Submittal Portal.

The limitations on activities are identified in the enclosed maintenance plan(s). The following activities are prohibited on any portion of this property where the cover is required, without prior DNR approval.

- Removal of the existing barrier.
- Replacement with another barrier.
- Excavating or grading of the land surface.
- Filling on capped or paved areas.
- Plowing for agricultural cultivation.
- Construction or placement of a building or other structure.

Pre-Approval Required for Well Construction (Wis. Admin. Code § NR 812.09(4)(w))

DNR approval is required before well construction or reconstruction for all sites identified as having residual contamination and/or COs. This requirement applies to private drinking water wells and high-capacity wells. To obtain approval, the property owner is required to complete and submit Form 3300-254, Continuing Obligations/Residual Contamination Well Approval Application, to the DNR Drinking Water and Groundwater program's regional water supply specialist. A well driller can help complete this form. The form can be obtained online at dnr.wi.gov, search "3300-254." Additional casing may be necessary to help prevent contamination of the well.

General Wastewater Permits for Construction-related Dewatering Activities (Wis. Admin. Code ch. NR 200)

The DNR's Water Quality Program regulates point source discharges of contaminated water, including discharges to surface waters, storm sewers, pits, or to the ground surface. This includes discharges from construction-related dewatering activities, including utility work and building construction.

If the property owner or any other person plans to conduct such activities, that person must contact the Water Quality Program and, if necessary, apply for the required discharge permit. If residual soil or groundwater contamination is likely to affect water collected in a pit/trench that requires dewatering, a general permit for discharge of *Contaminated Groundwater from Remedial Action Operations* may be needed. If water collecting in a pit/trench that requires dewatering is expected to be free of pollutants other than suspended solids, oil and grease, a general permit for pit/trench *Dewatering Operations* may be needed. Additional information can be obtained by visiting the DNR website at "dnr.wi.gov," search "wastewater general permits."

DNR NOTIFICATION AND APPROVAL REQUIREMENTS

Certain activities are limited at closed sites to maintain protectiveness to human health and the environment. The property owner is required to notify the DNR at least 45 days before and obtain approval from the DNR prior to taking the following actions (Wis. Admin. Code §§ NR 727.07, NR 726.15(2), Wis. Stat. § 292.12(6)).

- Before removing a cover or any portion of a cover
- Before removing a structural impediment

- Before changing the land use for sites where commercial or industrial exposure settings were used to determine vapor risk screening levels
- Before constructing a building and/or modifying use of or the construction of an existing building or changing property use. Certain activities are limited at closed sites to reduce the risk of exposure to residual contamination via vapor intrusion. For properties with a continuing obligation for addressing the future risk of vapor intrusion when buildings exist at the time of closure approval, changes to the current building use and layout are prohibited without prior DNR approval. This includes any change in building construction, reconstruction, or partial demolition. the DNR may require additional actions may be required at that time to re-assess for vapor intrusion and mitigate, as appropriate.

The DNR may require additional investigation and/or cleanup actions, if necessary, to be protective of human health and the environment. The case may be reopened under Wis. Admin. Code § NR 727.13 if additional information indicates that contamination on or from the site poses a threat, or for a lack of compliance with a CO or closure requirement. Compliance with the maintenance plan is considered when evaluating the reopening criteria.

SUBMITTALS AND CONTACT INFORMATION

Site, case-related information and DNR contacts can be found online in the Bureau for Remediation and Redevelopment Tracking System (BRRTS) on the Web (BOTW); go to dnr.wi.gov and search "BOTW." Use the BRRTS ID # found at the top of this letter. The site can also be found on the map view, Remediation and Redevelopment Sites Map (RRSM) by searching "RRSM."

Send written notifications and inspection logs to the DNR using the RR Program Submittal Portal at dnr.wi.gov, search "RR submittal portal" (<https://dnr.wi.gov/topic/Brownfields/Submittal.html>). Questions on using this portal can be directed to the Project Manager below or to the environmental program associate (EPA) for the regional DNR office. Visit dnr.wi.gov, search "RR contacts" and select the EPA tab (<https://dnr.wi.gov/topic/Brownfields/Contact.html>).

CLOSING

The DNR appreciates your efforts to restore the environment at this site. If you have any questions regarding this letter, please contact the DNR Project Manager, Jane Pfeiffer at (414) 435-8021, or at jane.pfeiffer@wisconsin.gov.

Sincerely,



Michele R. Norman
Southeast Region Team Supervisor
Remediation & Redevelopment Program

Attachments:

- Figure B.2.b.1., Residual Soil Contamination – Extent of Impacts Above Soil to Groundwater RCL, March 23, 2022
- Figure B.2.b.2., Residual Soil Contamination – Extent of Impacts Above Non-Industrial RCLs (0-4 feet bgs), December 7, 2022

Figure B.3.b., Groundwater Isoconcentration Map, March 23, 2022
Figure B.4.a.2., Sub-Slab Vapor and Indoor Air Sample Results, March 23, 2022
Attachment B.5., Structural Impediment Photos, dated May 10, 2017, May 9, 2017, and Nov. 22, 2016
Attachment D Maintenance Plan, August 30, 2022
Inspection Log (DNR Form 4400-305)

cc. Brian Kappen, EnviroForensics, LLC, bkappen@enviroforensics.com

Additional Resources:

The DNR fact sheets can be obtained by visiting the DNR website at "dnr.wi.gov" and searching DNR publication number.

Guidance for Electronic Submittals for the Remediation and Redevelopment Program (RR-690)

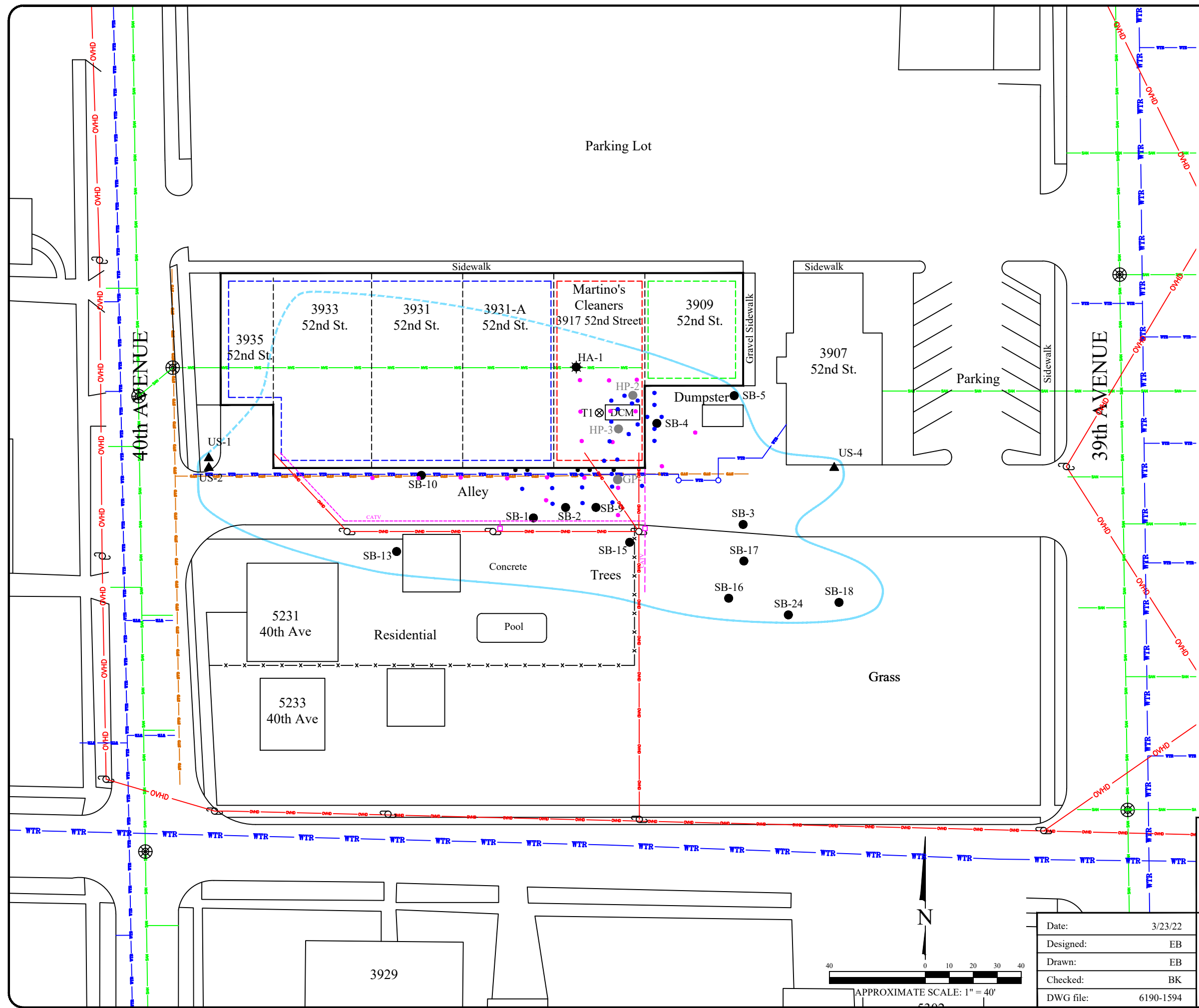
Continuing Obligations for Environmental Protection (RR-819)

Environmental Contamination and your Real Estate ((RR-973)

Post-Closure modifications: Changes to Property Conditions after a State-Approved Cleanup (RR-987)

Legend

- GP-1 ● Direct-Push soil boring (Giles)
- HP-2 ● Hand-auger soil boring (Giles)
- SB-1 ● Direct-Push soil boring
- HA-1 ● Hand-auger soil boring
- US-1 ▲ Utility corridor soil boring
- Waste characterization sample
- Excavation sidewall sample
- Excavation floor sample
- Confirmatory soil samples
- GAS — Underground gas utility line
- WTR — Underground water utility line
- SAN — Underground sanitary utility line
- OVHD — Over head electrical utility line
- CATV — Underground cable television utility line
- - - Slab foundation #1
- - - Slab foundation #2
- - - Slab foundation #3
- x-x-x-x-x- Fence line
- Extent of CVOC concentrations exceeding the soil to groundwater RCL



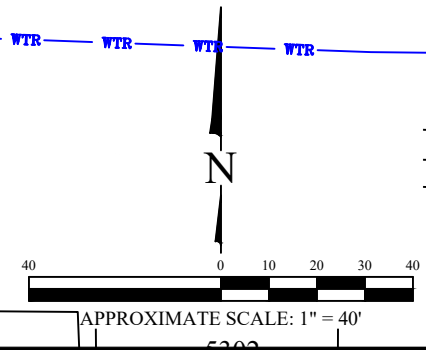
RESIDUAL SOIL CONTAMINATION - EXTENT OF IMPACTS ABOVE SOIL TO GROUNDWATER RCL

Martino's Cleaners
3917 52nd Street
Kenosha, Wisconsin

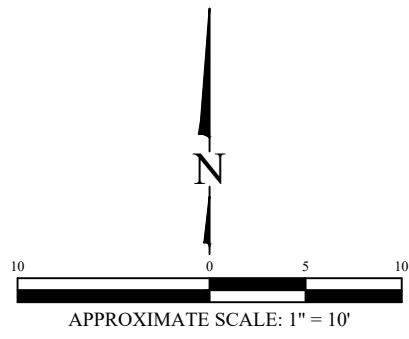


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Figure	3/23/22
B.2.b.1	EB
Project	EB
6190	BK
	DWG file: 6190-1594



Date:	3/23/22
Designed:	EB
Drawn:	EB
Checked:	BK
DWG file:	6190-1594



3931-A
52nd St.

3931
52nd St.

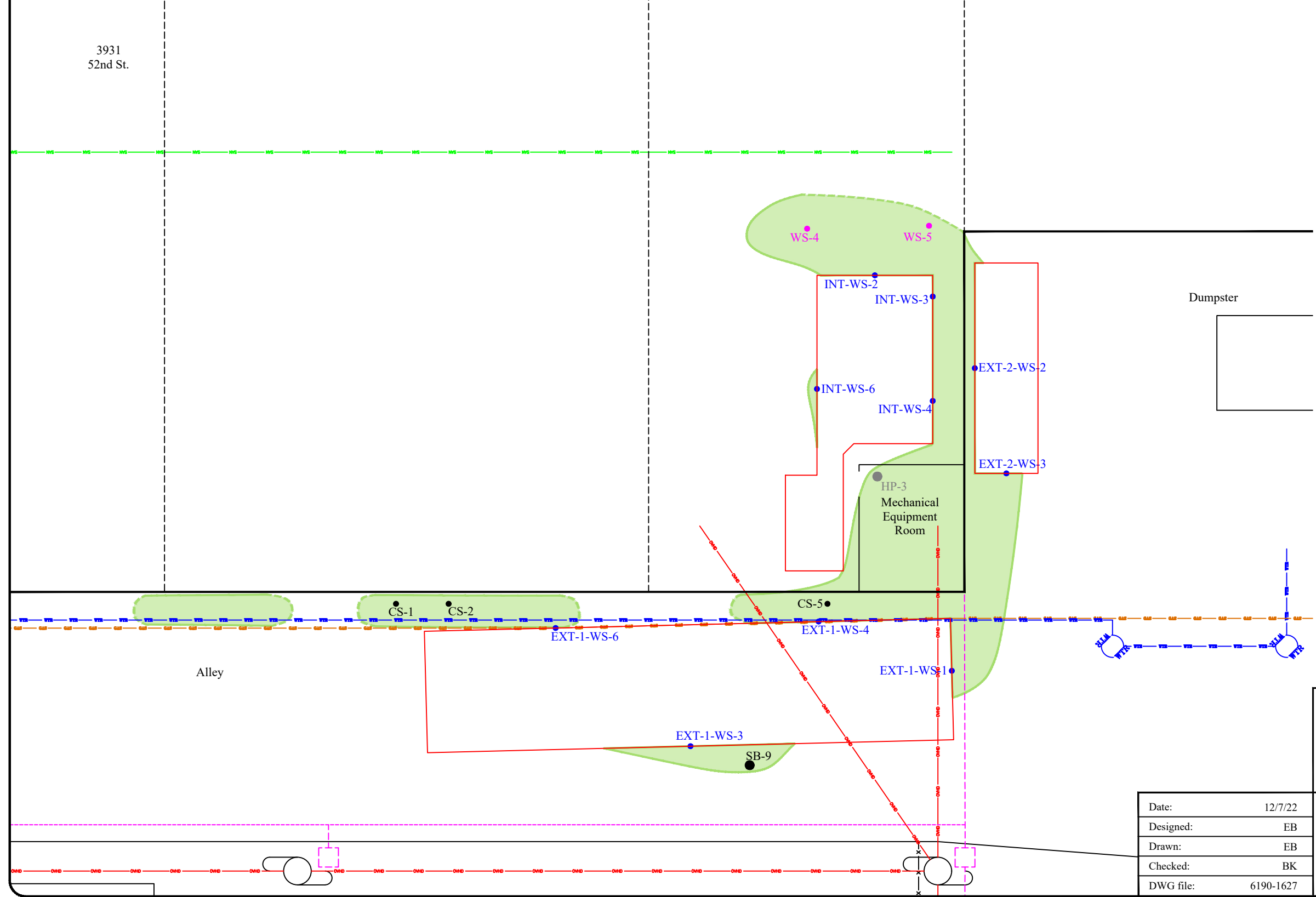
Martino's
Cleaners

3917 52nd Street

3909
52nd St.

Legend

- HP-2 ● Hand-auger soil boring (Giles)
- SB-1 ● Direct-Push soil boring
- SB-26/WS-1 ● Waste characterization sample
- WS-1 ● Excavation sidewall sample
- FS-1 ● Excavation floor sample
- CS-1 ● Confirmatory soil samples
- Excavation extents
- GAS — Underground gas utility line
- WTR — Underground water utility line
- SAN — Underground sanitary utility line
- OVHD — Over head electrical utility line
- CATV — Underground cable television utility line
- x-x-x-x-x- Fence line
- Extent of residual CVOC impacts in soil above non-industrial RCLs (0-4 feet bgs)
- Dashed boundaries are inferred



RESIDUAL SOIL CONTAMINATION - EXTENT OF
IMPACTS ABOVE THE NON-INDUSTIRAL RCL (0-4
FEET BGS)
Martino's Cleaners
3917 52nd Street
Kenosha, Wisconsin

Date:	12/7/22
Designed:	EB
Drawn:	EB
Checked:	BK
DWG file:	6190-1627

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Figure	B.2.b.2
Project	6190

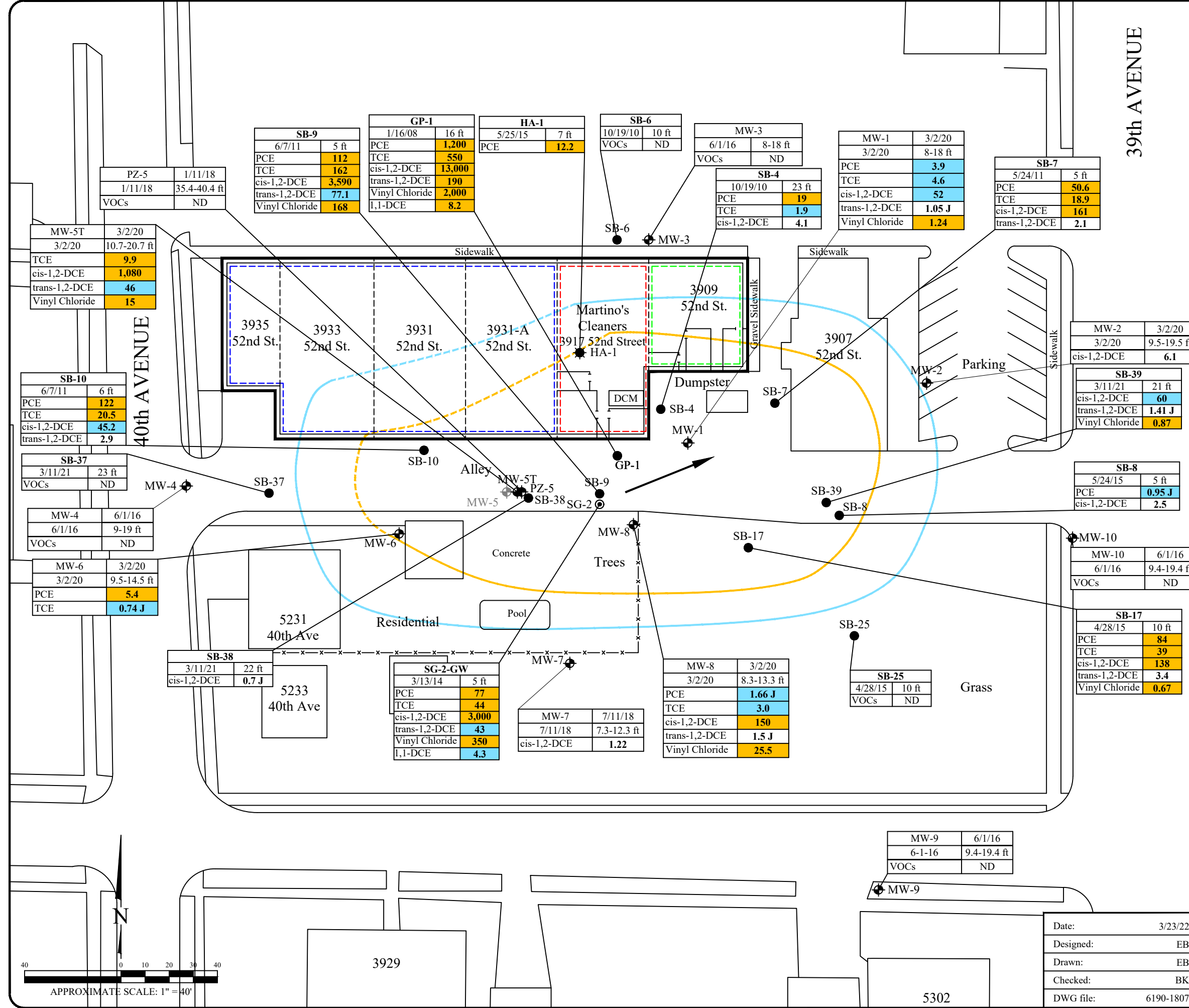
Legend

- MW-1 Monitoring well location
- MW-5 Abandoned Monitoring well location
- Slab foundation #1
- Slab foundation #2
- Slab foundation #3

Analytes	Public Health	
	Preventive Action Limit	Enforcement Standard
PCE	0.5	5
TCE	0.5	5
cis-1,2-DCE	7	70
trans-1,2-DCE	20	100
Vinyl Chloride	0.02	0.2
1,1-DCE	0.7	7

- Notes:
- Bold, shaded orange values exceed Public Health Enforcement Standard
 - Bold, shaded blue values exceed Public Health Preventive Action Limit
 - Bold values equal or exceed laboratory detection limits
 - Only compounds exceeding public health standards are shown in this figure
 - Results reported in micrograms per liter (ug/L)
 - PCE = Tetrachloroethene
 - TCE = Trichloroethene
 - cis-1,2-DCE - cis-1,2-Dichloroethene
 - trans-1,2-DCE = trans-1,2-Dichloroethene
 - 1,1-DCE - 1,1-Dichloroethene
 - VOCs = Volatile Organic Compounds
 - ND = Compounds not detected
 - J = Analyte concentration detected between the laboratory Reporting Limit and the laboratory Method Detection Limit
 - Samples analyzed for VOCs according to EPA Method 8260
 - * = Indicated the highest concentrations detected in duplicate sample are reported

- Extent of CVOC groundwater impacts above enforcement standards (dashed where inferred)
- Extent of CVOC groundwater impacts above preventive action limits (dashed where inferred)
- Direction of groundwater flow on March 16, 2020



GROUNDWATER ISOCONCENTRATION MAP

Martino's Cleaners
3917 52nd Street
Kenosha, Wisconsin

Date:	3/23/22
Designed:	EB
Drawn:	EB
Checked:	BK
DWG file:	6190-1807

Figure	B.3.b
Project	6190

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Legend

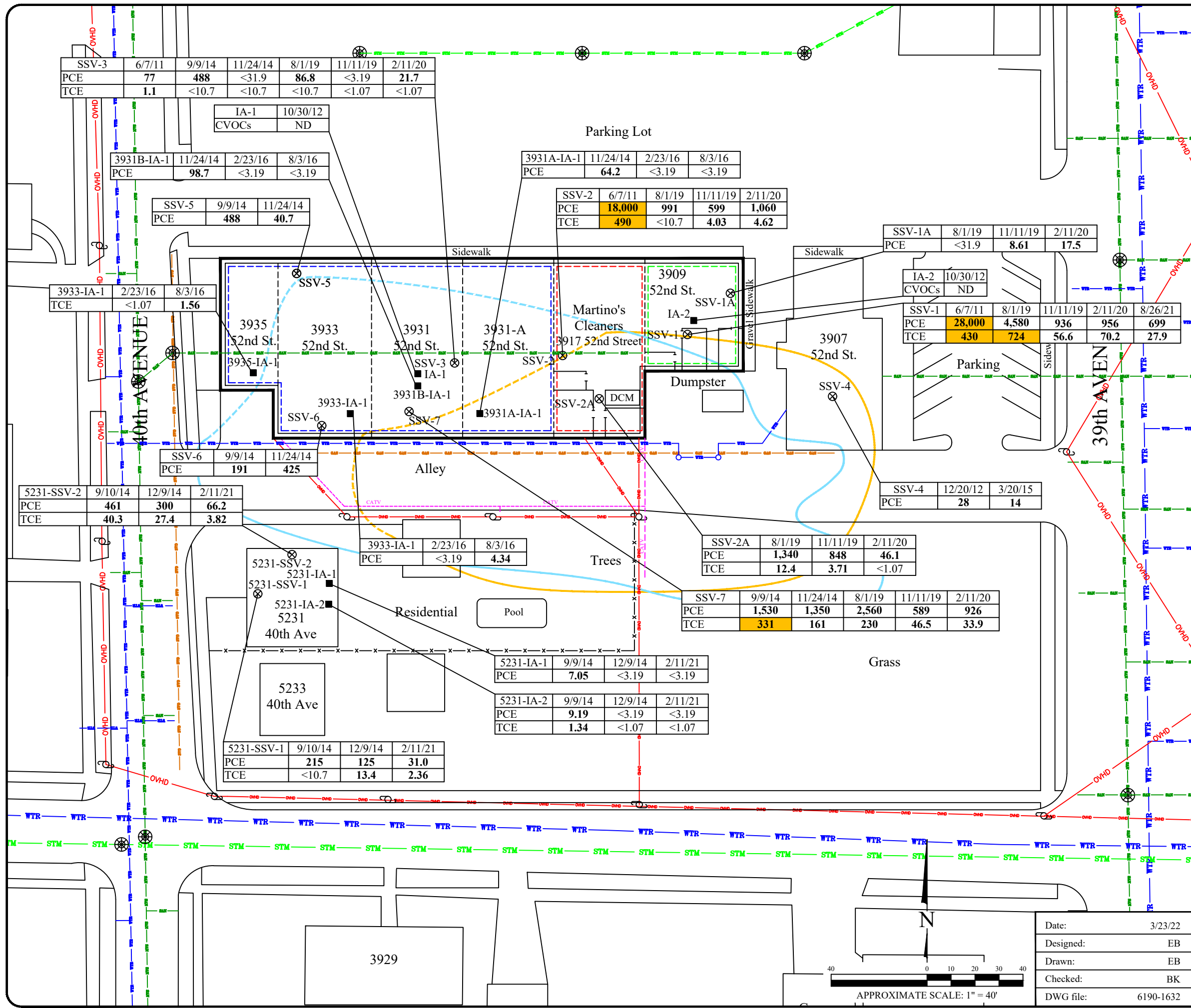
- SSV-1 ⊗ Sub-slab vapor sample location
- IA-1 ■ Indoor air sample location
- GAS — Underground gas utility line
- WTR — Underground water utility line
- SAN — Underground sanitary utility line
- STM — Underground storm utility line
- OVHD — Over head electrical utility line
- CATV — Underground cable television utility line
- Slab foundation #1
- Slab foundation #2
- Slab foundation #3
- x-x-x-x-x- Fence line

Indoor Air		
Analyte	Residential Vapor Action Level	Small Commercial Vapor Action Level
PCE	42	180
TCE	2.1	8.8

Sub-slab vapor		
Analyte	Residential Vapor Risk Screening Level	Small Commercial Vapor Risk Screening Level
PCE	1,400	5,800
TCE	70	290

- Note:
- Bolded and orange shaded values exceed the Small Commercial Vapor Risk Screening Level
 - Bolded and blue shaded values exceed the Residential Vapor Risk Screening Level
 - All results reported in micrograms per cubic meter (ug/m³)
 - Bold values equal or exceed laboratory detection limits
 - PCE = Tetrachloroethene
 - TCE = Trichloroethene
 - CVOCs = Chlorinated Volatile Organic Compounds
 - ND = Not detected
 - Only PCE and TCE concentrations are reported on this figure

- Extent of CVOC groundwater impacts above enforcement standards (dashed where inferred)
- Extent of CVOC concentrations exceeding the soil to groundwater RCL (dashed where inferred)



SUB-SLAB VAPOR AND INDOOR AIR SAMPLE RESULTS

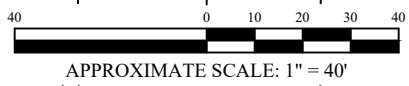
Martino's Cleaners
3917 52nd Street
Kenosha, Wisconsin

Date:	3/23/22
Designed:	EB
Drawn:	EB
Checked:	BK
DWG file:	6190-1632



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Figure	B.4.a.2
Project	6190



ATTACHMENT B.5 STRUCTURAL IMPEDIMENT PHOTOS



Photo 1, May 10, 2017. Overview of exterior excavation area 2, facing north. The exterior building walls (and footings) were structural impediments to expanded excavation west toward the source area.

ATTACHMENT B.5 STRUCTURAL IMPEDIMENT PHOTOS



Photo 2, May 9, 2017. Overview of exterior excavation area 1, facing east. The exterior building wall (and footing), and utility lines along the wall, were structural impediments to expanded excavation toward the source area.

ATTACHMENT B.5 STRUCTURAL IMPEDIMENT PHOTOS



Photo 3, November 22, 2016. Overview of interior excavation area, facing north. The door shown on the right edge of the photo leads into the mechanical equipment room containing a boiler, compressor, water heater, etc. The room is surrounded by a concrete block wall that comprised a structural impediment to expanded excavation inside the building.

ATTACHMENT D – MAINTENANCE PLANS AND PHOTOGRAPHS

D.1. Description of Required Maintenance Action

D.2 Location Maps

D.3 Photographs

D.4 Inspection Log



ATTACHMENT D.1 CAP MAINTENANCE PLAN

August 30, 2022

Property located at:

**3917 52nd Street
Kenosha, WI 53144
BRRTS# 02-30-552186**

LEGAL DESCRIPTION: That Part of the Southeast One-quarter (1/4) of Section 35 (35), Township Two (2) North, Range Twenty-two (22) East, in the City of Kenosha, Kenosha County, Wisconsin, described as follows: Begin at the Southwest corner of the intersection of 52nd Street and 39th Avenue: run thence South 02° 19' 28" East 268.93 feet along the West line of 39th Avenue; thence South 89° 43' 32" West 354.67 feet to the East line of 40th Avenue; thence North 02° 27' 28" West 268.93 feet along said east line to the south line of 52nd Street; thence North 89° 43' 32" East 355.83 feet along said South line to the place of beginning.

TAX ID#: 08-222-35-401-004

INTRODUCTION

This document is the Maintenance Plan for the surface materials (the "cap") covering soil and groundwater contaminated with chlorinated volatile organic compounds (CVOCs) at and adjoining the above-referenced property in accordance with the requirements of s. NR 724.13(2), Wis. Adm. Code. The contamination originated from the former dry cleaning operations performed at the property. The maintenance activities relate to the existing asphalt, concrete, gravel, and building foundations which occupy the area over the residual soil and groundwater contamination.

More site-specific information about source property/site may be obtained from:

- The case file in the Wisconsin Department of Natural Resources (WDNR) southeast regional office;
- BRRTS on the Web (WDNR's internet based database of contaminated sites) dnr.wi.gov/botw/SetUpBasicSearchForm.do;
- [RR Sites Map/GIS Registry layer](#) for a map view of the site, and
- The WDNR project manager.

DESCRIPTION OF CONTAMINATION

Soil contaminated by the dry cleaning solvent tetrachloroethene (PCE) and related CVOCs including trichloroethene, dichloroethene, and vinyl chloride exists at the site. Soil containing the highest concentrations of the compounds of concern was removed by excavation from interior and exterior areas. However, contaminated soil with CVOC concentrations above residual contaminant levels (RCLs) for the protection of groundwater remains present beneath the building and adjacent areas, including the majority of the south alleyway. The extent of residual CVOCs in soil at concentrations above soil to groundwater RCLs is depicted on **Figure D.2.a**. Residual contamination extends to depths ranging from 1 to 12 feet below ground surface.

Additionally, soil with CVOC concentrations above non-industrial direct-contact RCLs remains within four feet of the ground surface in certain areas. Specifically, elevated CVOC concentrations are present around the boundaries of the excavations, around the footings, beneath the mechanical room in the southeast corner of the building, and within the water and natural gas utility trench that parallels the south wall of the building at the property. The extent of residual CVOC contamination above direct-contact RCLs in soil is shown on the attached **Figure D.2.b**.

DESCRIPTION OF CAP

The location, extent, and components of the cap are depicted on **Figure D.2.c**. The cap consists of the following elements:

- The entire multi-tenant commercial building comprising the addresses 3909, 3917, 3931-A, 3931, 3933, and 3935 52nd Street;
- The entire 3907 52nd St building;
- The concrete trash corral south of 3909 52nd Street;
- The concrete patio west of 3935 52nd Street;
- Small landscaped areas along the east edge of the 3909 52nd Street building and west edge of 3907 52nd Street building with gravel at the surface; and
- The asphalt alley, driveway, and parking areas south of and between the buildings.

Location coordinates for each corner of the cap (State Plane, NAD 83, Wisconsin Southern Zone) are listed on **Figure D.2.c**.

The concrete/asphalt portions of the cap, which cover 99% of the cap area, are 3 to 6 inches thick. The cap is intended to be a barrier to both direct-contact with the soil and the infiltration of precipitation, which will minimize additional soil-to-groundwater contaminant migration.

Cap Maintenance Plan

3917 52nd Street, Kenosha, WI

Document: 6190-1605



ANNUAL INSPECTION

The cap will be visually inspected once per year for deterioration, cracks and other potential problems that would allow exposure to the underlying soil or a direct conduit for infiltration of precipitation. This is typically performed in the early spring after all snow and ice has melted and before the seasonal rains begin. The small landscaped areas with gravel at the surface will be maintained in their present condition, and the inspection will confirm that no significant erosion has occurred. The concrete floor slab, perimeter of the building foundation, and the asphalt surface shall be inspected. The inspections will be performed to evaluate damage due to settling, exposure to the weather, wear from traffic, increasing age, and other factors. Any area where large cracks or other openings have occurred or are likely to occur will be documented. The inspections will be performed by the property owner or their designated representative (i.e. tenant, property manager, etc.).

A log of the inspections and any repairs will be maintained by the property owner on WDNR Form 4400-305 (Continuing Obligations Inspection and Maintenance Log), included as **Appendix A**. The log will include recommendations for necessary repair of any areas where underlying soils are exposed. Once repairs are completed, they will be documented in the Inspection Log. A copy of this Cap Maintenance Plan and the Inspection Log will be kept at the property and available for submittal or review by WDNR representatives upon their request.

MAINTENANCE ACTIVITIES

If problems are noted during the annual inspections or at any other time during the year, repairs will be scheduled as soon as practical. Repairs can include patching, filling, asphalt resurfacing, or construction operations. In the event that maintenance activities involve soil removal and disposal is necessary, the property owner must sample any soil excavated from the site prior to disposal to ascertain if contamination is present. The soil must be stored, disposed, or treated by the owner in accordance with applicable local, state and federal law.

In the event the cap overlying the contaminated soil is removed or replaced, the replacement barrier must be equally impermeable. Any replacement barrier will be subject to the same maintenance and inspection guidelines as outlined in this Cap Maintenance Plan unless indicated otherwise by the WDNR or its successor. The property owner, in order to maintain the integrity of the cap, will maintain a copy of this Maintenance Plan on-site and make it available to all interested parties (i.e. on-site employees, contractors, future property owners, etc.) for viewing.



PROHIBITION OF ACTIVITIES AND NOTIFICATION

The following activities are prohibited on any portion of the property where the cap is required as depicted on the attached **Figure D.2.c**, unless prior written approval has been obtained from the WDNR: 1) removal of the existing barrier; 2) replacement with another barrier; 3) excavating or grading of the land surface; 4) filling on capped or paved areas; 5) plowing for agricultural cultivation; or 6) construction or placement of a building or other structure.

If removal, replacement or other changes to the cap are considered, the property owner will contact WDNR at least 45 days before taking such an action, to determine whether further action may be necessary to protect human health, safety, or welfare or the environment, in accordance with s. NR 727.07, Wis. Adm. Code.

AMENDMENT OR WITHDRAWAL OF MAINTENANCE PLAN

This Maintenance Plan can be amended or withdrawn by the property owner and its successors with the written approval of the WDNR.

CONTACT INFORMATION

Property Owner: DPM of Kenosha, Inc.
Dan Martino
7513 41st Avenue
Kenosha, WI 53142
262-694-7858

Signature: 

Consultant: EnviroForensics, LLC.
N16 W23390 Stone Ridge Dr., Suite G
Waukesha, WI 53188
(262) 290-4001

Sept 6 - 2022

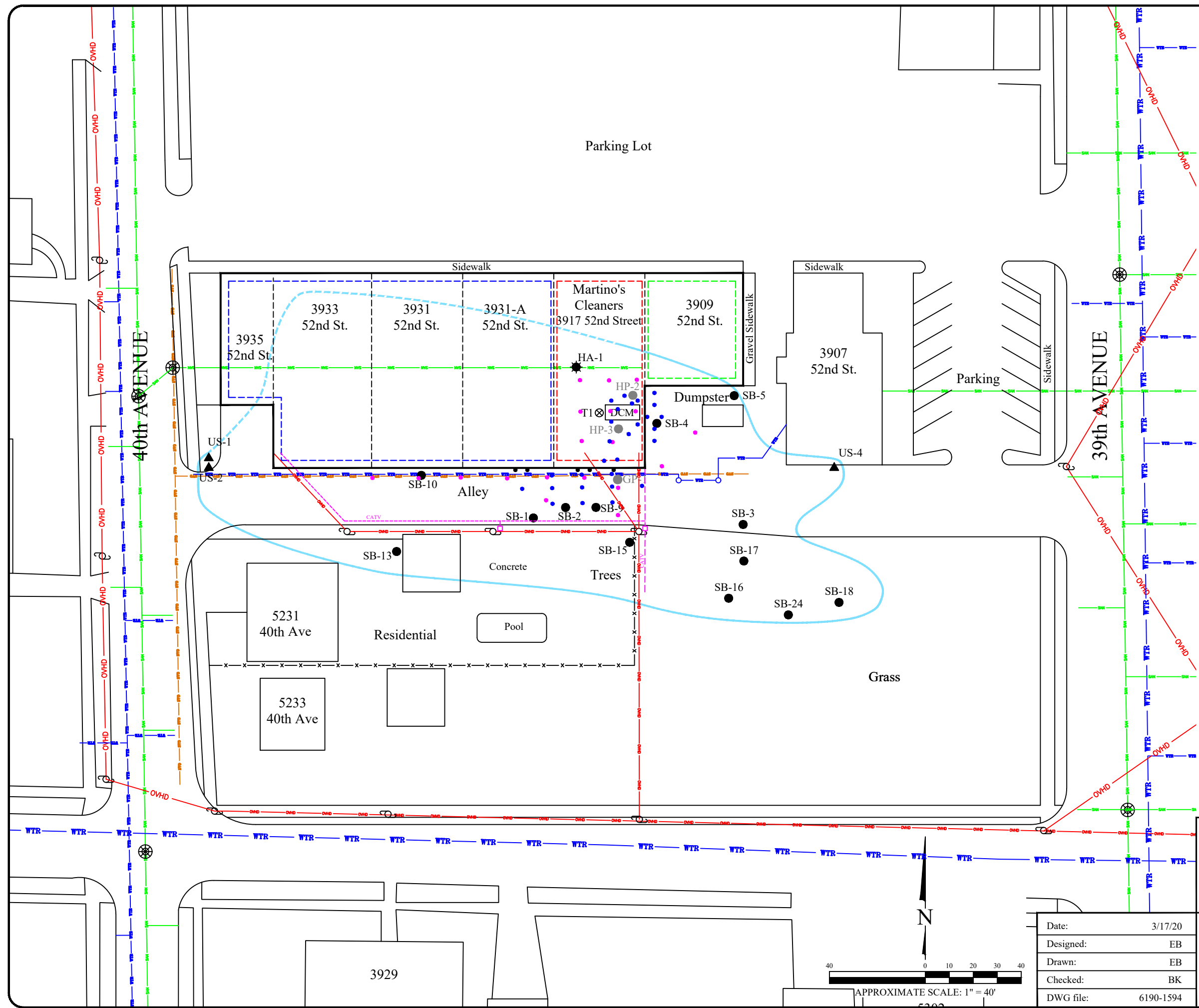
WDNR Project Manager: Jane Pfeiffer
Wisconsin Dept. of Natural Resources
1027 W. St. Paul Ave
Milwaukee, WI 53233
(414) 435-8021



**ATTACHMENT D.2
FIGURES**

Legend

- GP-1 ● Direct-Push soil boring (Giles)
- HP-2 ● Hand-auger soil boring (Giles)
- SB-1 ● Direct-Push soil boring
- HA-1 ● Hand-auger soil boring
- US-1 ▲ Utility corridor soil boring
- Waste characterization sample
- Excavation sidewall sample
- Excavation floor sample
- Confirmatory soil samples
- GAS — Underground gas utility line
- WTR — Underground water utility line
- SAN — Underground sanitary utility line
- OVHD — Over head electrical utility line
- CATV — Underground cable television utility line
- - - Slab foundation #1
- - - Slab foundation #2
- - - Slab foundation #3
- x-x-x-x-x- Fence line
- Extent of CVOC concentrations exceeding the soil to groundwater RCL



RESIDUAL SOIL CONTAMINATION - EXTENT OF IMPACTS ABOVE SOIL TO GROUNDWATER RCL

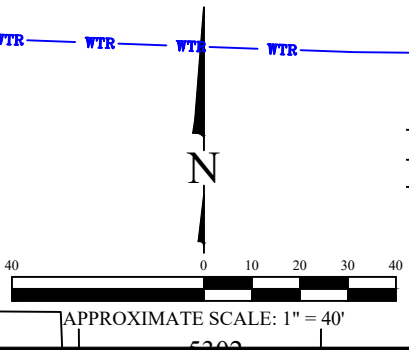
Martino's Cleaners
3917 52nd Street
Kenosha, Wisconsin

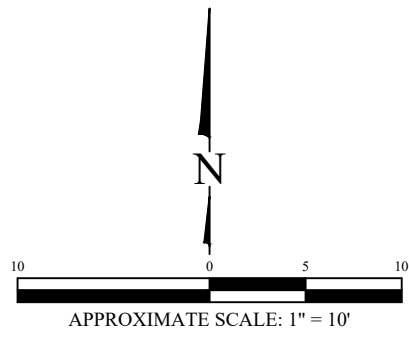


825 North Capitol Avenue • Indianapolis, IN 46204
EnviroForensics.com

Figure	D.2.a
Project	6190

Date:	3/17/20
Designed:	EB
Drawn:	EB
Checked:	BK
DWG file:	6190-1594





3931-A
52nd St.

3931
52nd St.

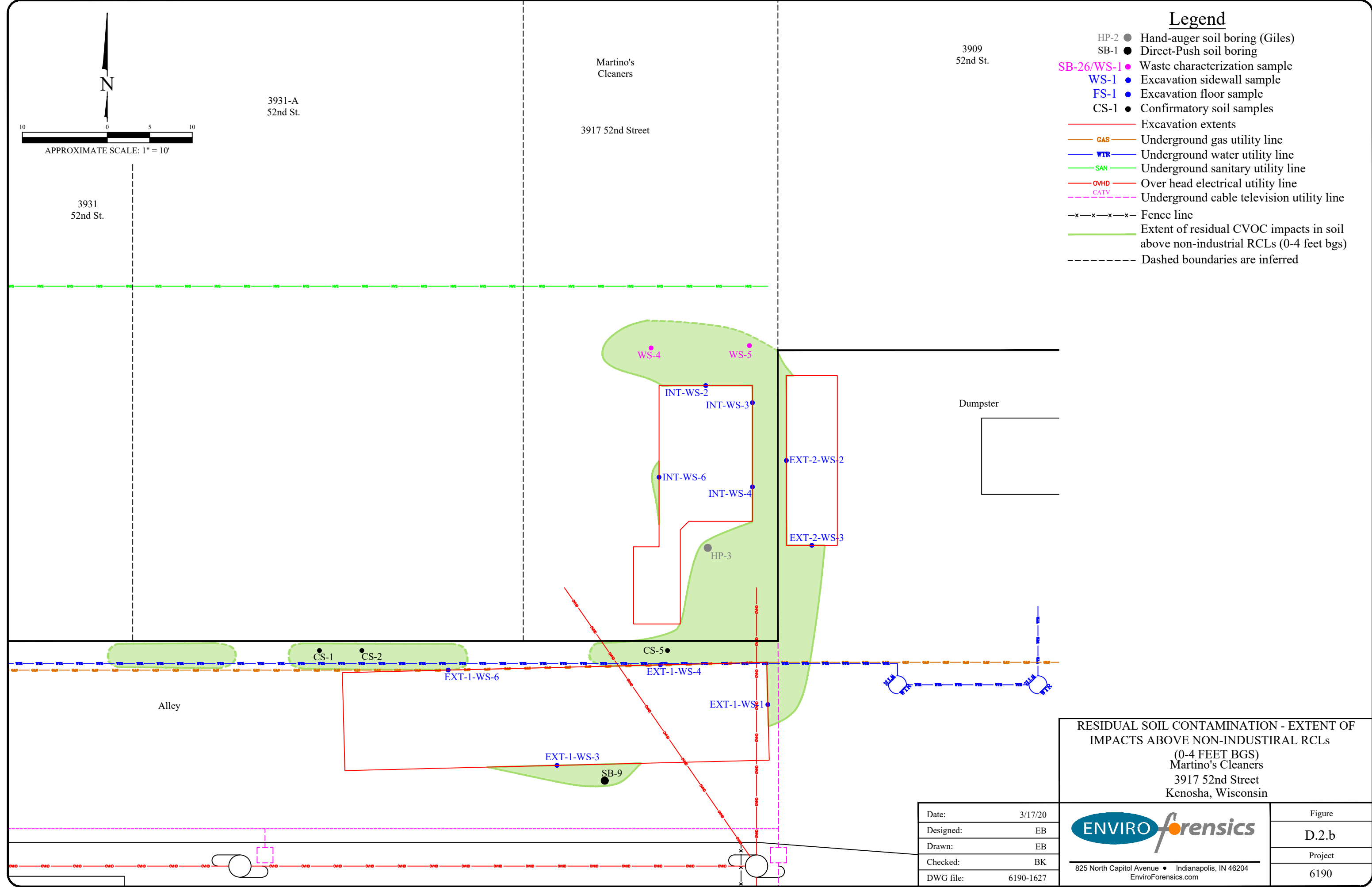
Martino's
Cleaners

3917 52nd Street

3909
52nd St.

Legend

- HP-2 ● Hand-auger soil boring (Giles)
- SB-1 ● Direct-Push soil boring
- SB-26/WS-1 ● Waste characterization sample
- WS-1 ● Excavation sidewall sample
- FS-1 ● Excavation floor sample
- CS-1 ● Confirmatory soil samples
- Excavation extents
- GAS — Underground gas utility line
- WTR — Underground water utility line
- SAN — Underground sanitary utility line
- OVHD — Over head electrical utility line
- CATV — Underground cable television utility line
- x-x-x-x-x- Fence line
- Extent of residual CVOC impacts in soil above non-industrial RCLs (0-4 feet bgs)
- Dashed boundaries are inferred



Dumpster

Alley

RESIDUAL SOIL CONTAMINATION - EXTENT OF
IMPACTS ABOVE NON-INDUSTRIAL RCLs
(0-4 FEET BGS)
Martino's Cleaners
3917 52nd Street
Kenosha, Wisconsin

Date:	3/17/20
Designed:	EB
Drawn:	EB
Checked:	BK
DWG file:	6190-1627



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EnviroForensics.com

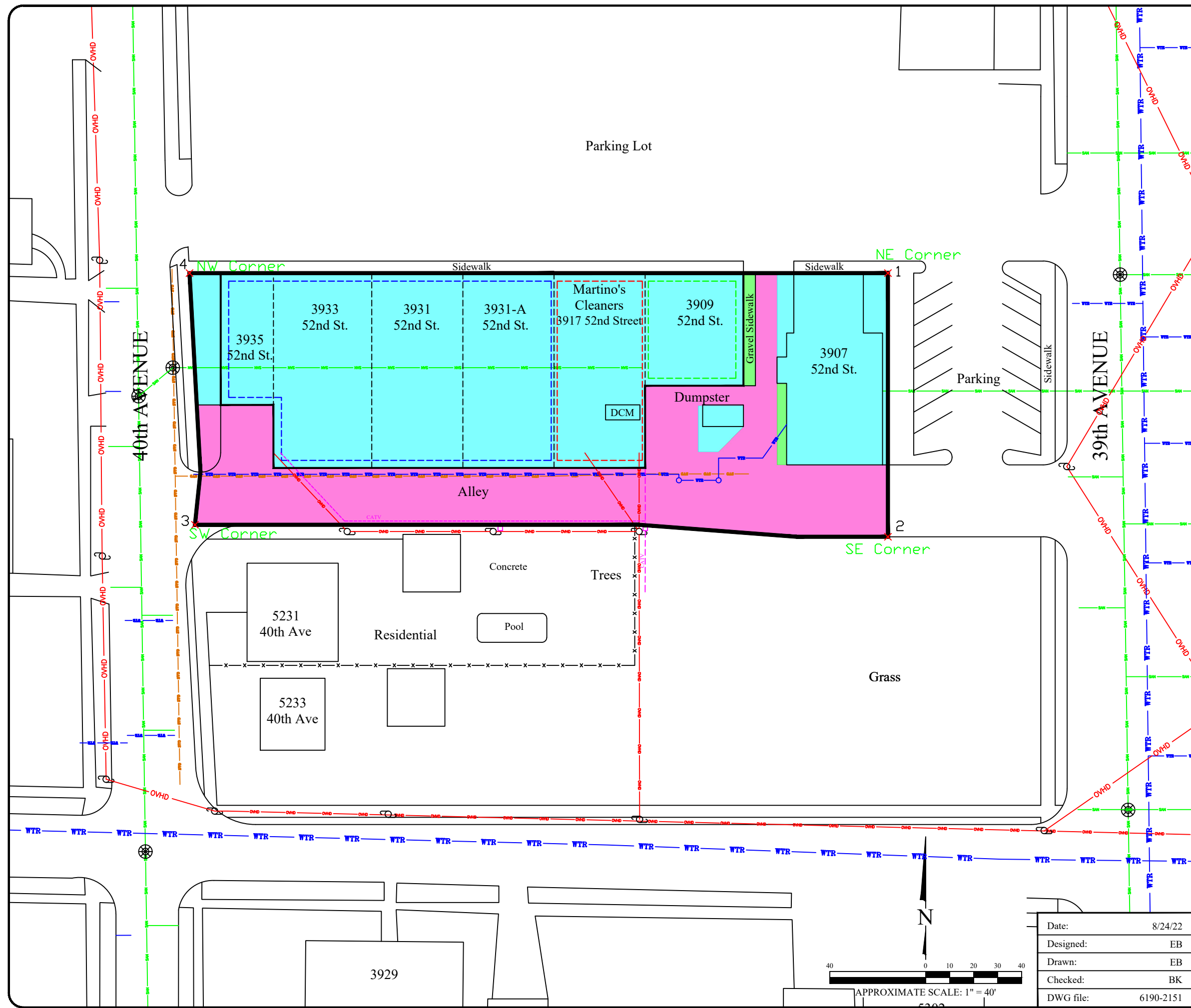
Figure	D.2.b
Project	6190

Legend

- GAS — Underground gas utility line
- WTR — Underground water utility line
- SAN — Underground sanitary utility line
- OVHD — Over head electrical utility line
- - - CATV — Underground cable television utility line
- - - Slab foundation #1
- - - Slab foundation #2
- - - Slab foundation #3
- x - x - x - x - Fence line
- Boundary of Cap Area
- Asphalt Cap
- Concrete Cap
- Gravel cap

Points are in State plane NAD 83 Wisconsin South

PointNo.	Northing(Y)	Easting(X)	Elev(Z)	Description
1	221651.0952	2545810.9582	0.0000	NE Corner
2	221541.0952	2545810.9582	0.0000	SE Corner
3	221546.0952	2545521.9759	0.0000	SW Corner
4	221651.0952	2545519.6988	0.0000	NW Corner



CAP EXTENT AND COMPONENTS

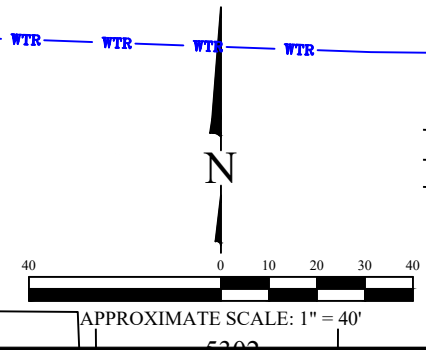
Martino's Cleaners
3917 52nd Street
Kenosha, Wisconsin



825 North Capitol Avenue • Indianapolis, IN 46204
EnviroForensics.com

Figure	D.2.c
Project	6190

Date:	8/24/22
Designed:	EB
Drawn:	EB
Checked:	BK
DWG file:	6190-2151





**ATTACHMENT D.3
PHOTOGRAPHS**



Asphalt cap east of Site building, facing northwest.



Asphalt cap east of Site building, facing north.



Asphalt cap south of 3909 52nd Street, facing west.



Overview of alleyway portion of the asphalt cap south of 3917 52nd Street, facing west



Overview of alleyway portion of the asphalt cap south of 3931 52nd Street, facing west



Overview of alleyway portion of the asphalt cap south of 3933 52nd Street, facing west



Concrete cap in trash corral south of 3909 52nd Street



Overview of alleyway portion of the asphalt cap south of 3909 52nd Street, facing east



Asphalt cap between the 3909 and 3907 52nd Street buildings, facing north



East side of the 3907 52nd Street building, facing north



North side of the 3907 52nd Street building, facing southwest



West side of the 3907 52nd Street building, facing northeast



South side of the 3917 52nd Street building, facing northeast



North side of the 3909 and 3917 52nd Street commercial buildings, facing west



Concrete cap (building floor slab) inside 3917 52nd Street, including excavation repair and seal.



**ATTACHMENT D.4
APPENDIX A**

Continuing Obligations Inspection and Maintenance Log

Directions: In accordance with s. NR 727.05 (1) (b) 3., Wis. Adm. Code, use of this form for documenting the inspections and maintenance of certain continuing obligations is required. Personal information collected will be used for administrative purposes and may be provided to requesters to the extent required by Wisconsin's Open Records law [ss. 19.31-19.39, Wis. Stats.]. When using this form, identify the condition that is being inspected. See the closure approval letter for this site for requirements regarding the submittal of this form to the Department of Natural Resources. A copy of this inspection log is required to be maintained either on the property, or at a location specified in the closure approval letter. Do NOT delete previous inspection results. This form was developed to provide a continuous history of site inspection results. The Department of Natural Resources project manager is identified in the closure letter. The project manager may also be identified from the database, BRRTS on the Web, at <http://dnr.wi.gov/botw/SetUpBasicSearchForm.do>, by searching for the site using the BRRTS ID number, and then looking in the "Who" section.

Activity (Site) Name Martino's Cleaners	BRRTS No. 02-30-552186
---	----------------------------------

Inspections are required to be conducted (see closure approval letter): <input checked="" type="radio"/> annually <input type="radio"/> semi-annually <input type="radio"/> other – specify _____	When submittal of this form is required, submit the form electronically to the DNR project manager. An electronic version of this filled out form, or a scanned version may be sent to the following email address (see closure approval letter): <p style="text-align: center;">jane.pfeiffer@wisconsin.gov</p>
--	---

Inspection Date	Inspector Name	Item	Describe the condition of the item that is being inspected	Recommendations for repair or maintenance	Previous recommendations implemented?	Photographs taken and attached?
		<input type="checkbox"/> monitoring well <input checked="" type="checkbox"/> cover/barrier <input type="checkbox"/> vapor mitigation system <input type="checkbox"/> other:	Condition of the asphalt/concrete cap described and shown in the Cap Maintenance Plan		<input type="radio"/> Y <input type="radio"/> N	<input type="radio"/> Y <input type="radio"/> N
		<input type="checkbox"/> monitoring well <input type="checkbox"/> cover/barrier <input type="checkbox"/> vapor mitigation system <input type="checkbox"/> other:			<input type="radio"/> Y <input type="radio"/> N	<input type="radio"/> Y <input type="radio"/> N
		<input type="checkbox"/> monitoring well <input type="checkbox"/> cover/barrier <input type="checkbox"/> vapor mitigation system <input type="checkbox"/> other:			<input type="radio"/> Y <input type="radio"/> N	<input type="radio"/> Y <input type="radio"/> N
		<input type="checkbox"/> monitoring well <input type="checkbox"/> cover/barrier <input type="checkbox"/> vapor mitigation system <input type="checkbox"/> other:			<input type="radio"/> Y <input type="radio"/> N	<input type="radio"/> Y <input type="radio"/> N
		<input type="checkbox"/> monitoring well <input type="checkbox"/> cover/barrier <input type="checkbox"/> vapor mitigation system <input type="checkbox"/> other:			<input type="radio"/> Y <input type="radio"/> N	<input type="radio"/> Y <input type="radio"/> N
		<input type="checkbox"/> monitoring well <input type="checkbox"/> cover/barrier <input type="checkbox"/> vapor mitigation system <input type="checkbox"/> other:			<input type="radio"/> Y <input type="radio"/> N	<input type="radio"/> Y <input type="radio"/> N

{Click to Add/Edit Image}

Date added:

Title:

{Click to Add/Edit Image}

Date added:

Title:

Data Tables

Tables that follow are for reference only and were not included in the Department's closure documentation sent to affected parties

TABLE A.3
RESIDUAL SOIL CONTAMINATION TABLE

Martino's Master Drycleaners
3917 52nd Street, Kenosha, Wisconsin

Boring Identification	Sample Depth (feet bgs)	Date Sampled	Saturation	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride
Industrial RCL ¹				145,000	8,410	2,340,000	1,850,000	2,080
Non-Industrial RCL ¹				33,000	1,300	156,000	1,560,000	67
Soil to Groundwater RCL ¹				4.5	3.6	41.2	62.6	0.1
GP-1	4-6	1/16/2008	P	<30	<30	1,000	<30	<42
HA-1	2-3	5/25/2011	U	83.8	<25.0	<25.0	<25.0	<25.0
HP-2	8-10	1/16/2008	S	73,000	3,900	950	<300	<420
HP-3	2-4	1/16/2008	U	110,000	<600	<600	<600	<830
	8-10	1/16/2008	S	84,000	5,100	1,800	<290	<410
SB-1	3-5	10/19/2010	P	<25.0	<25.0	77.6	<25.0	<25.0
SB-3	4-6	10/19/2010	P	<25.0	<25.0	828	36.6	<25.0
SB-5	16-18	10/19/2010	S	35.1	<25.0	<25.0	<25.0	<25.0
SB-9	2-4	5/25/2011	U	<25.0	<25.0	411	<25.0	106
SB-10	2-4	5/25/2011	U	23,800	736	164 J	<100	<100
US-1	3	10/18/2011	U	38 J	<30	<30	<30	<30
US-2	3.5	10/18/2011	U	30 J	<29	<29	<29	<29
US-4	3.5	10/18/2011	U	120	<26	<26	<26	<26
SB-13	2	10/22/2014	U	259	<28	<24	<29	<21
	6	10/22/2014	P	316	<28	<24	<29	<21
	10	10/22/2014	U	68 J	<28	<24	<29	<21
SB-15	2	10/22/2014	U	214	<28	<24	<29	<21
	6	10/22/2014	P	126 J	40 J	320	<29	<21
SB-16	6	4/21/2015	P	<54	99 J	350	<24	<10
SB-17	5	4/28/2015	P	3,200	340	262	<2.4	<10
	6	4/21/2015	P	7,200	840	570	<24	<10
	8	4/21/2015	U	<54	<42	560	<24	<10
	8	4/28/2015	U	<54	<42	530	<24	<10
SB-18	6	4/21/2015	P	<54	<42	53 J	<24	<10
SB-24	6	4/28/2015	P	<54	<42	82	<24	<10
	8	4/28/2015	U	<54	<42	32 J	<24	<10
WS-1	3-4	9/16/2016	U	500	<42	<21	<24	<10
	7-8	9/16/2016	S	199	<42	139	<24	<10
WS-2	4-6	9/16/2016	U	18,800	330	91	<24	<10
	6-7	9/16/2016	S	2,860	1,320	180	80	<10
WS-3	3-4	9/20/2016	U	250	<42	<21	<24	<10
WS-4	0.5-1	9/20/2016	U	37,000	166	<21	<24	<10
	7-8	9/20/2016	U	<54	179	870	<24	<10
	8-10	9/20/2016	S	304	<42	1,450	39 J	<10
WS-5	4-5.5	9/20/2016	U	151,000	9,000	1,500	26 J	<10
	8-10	9/20/2016	S	281,000	9,700	1,290	<24	<10

TABLE A.3
RESIDUAL SOIL CONTAMINATION TABLE
 Martino's Master Drycleaners
 3917 52nd Street, Kenosha, Wisconsin

Boring Identification	Sample Depth (feet bgs)	Date Sampled	Saturation	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride
Industrial RCL ¹				145,000	8,410	2,340,000	1,850,000	2,080
Non-Industrial RCL ¹				33,000	1,300	156,000	1,560,000	67
Soil to Groundwater RCL ¹				4.5	3.6	41.2	62.6	0.1
WS-6	8-10	9/20/2016	S	138,000	10,800	2,430	51 J	<10
WS-7	8-10	9/20/2016	S	8,700	5,000	2,700	41 J	<10
WS-8	7.5-8	9/20/2016	U	47,000	3,300	1,980	<24	<10
SB-28	3-4	3/9/2017	U	<32	<41	73 J	<28	<19
SB-29	2.5-4	3/9/2017	U	<32	<41	209	<28	<19
SB-33	3-5	3/9/2017	P	<32	<41	120	<28	<19
SB-34	3-5	3/9/2017	P	217	370	171	<28	<19
SB-35	3-5	3/9/2017	P	<32	<41	52 J	<28	<19
SB-36	3-5	3/9/2017	P	<32	<41	115	<28	105
INT-WS-1	3	11/17/2016	U	<54	<42	39 J	<24	<10
	6	11/17/2016	U	<54	<42	93	<24	<10
INT-WS-2	3	11/17/2016	U	76,000	222	44 J	<24	<10
	6	11/17/2016	U	34,000	790	2,160	41 J	<10
INT-WS-3	3	11/17/2016	U	64,000	152	39 J	<24	<10
	6	11/17/2016	U	4,900	2,120	1,110	<24	<10
INT-WS-4	3	11/17/2016	U	38,000	<42	27.2 J	<24	<10
	6	11/17/2016	U	14,500	1,220	2,000	<24	<10
INT-WS-5	3	11/17/2016	U	16,200	<42	<21	<24	<10
	6	11/17/2016	U	7,900	890	870	<24	<10
INT-WS-6	3	11/17/2016	U	69,000	360	40 J	<24	<10
	6	11/17/2016	U	890	<42	288	<24	<10
INT-WS-7	3	11/21/2016	U	25,500	44 J	<21	<24	<10
	6	11/21/2016	U	7,200	370	234	<24	<10
INT-WS-8	3	11/21/2016	U	7,900	<42	<21	<24	<10
	6	11/21/2016	U	43,000	960	370	<24	<10
INT-WS-9	3	11/21/2016	U	17,000	<42	<21	<24	<10
INT-FS-1	7.5	11/17/2016	U	22,500	3,500	1,900	28.4 J	<10
INT-FS-2	7	11/17/2016	U	6,300	3,900	1,450	<24	<10
EXT-1-WS-1	2.5	5/9/2017	U	3,900	286 J	28,200	1,470	2,690
EXT-1-WS-2	2.5	5/9/2017	U	89 J	<41	119	<28	<19
EXT-1-WS-3	2.5	5/9/2017	U	<640	<820	16,000	<560	2,570
EXT-1-WS-4	2.5	5/9/2017	U	36,000	12,400	8,300	<560	<560
EXT-1-WS-6	2.5	5/9/2017	U	236,000	74,000	115,000	1,430 J	<560
EXT-1-WS-7	2.5	5/9/2017	U	<32	<41	65 J	<28	<19
EXT-1-FS-1	5.5	5/9/2017	P	130	<41	2,240	41 J	125
EXT-1-FS-2	5	5/9/2017	P	<32	<41	580	<28	58 J
EXT-1-FS-3	5.5	5/9/2017	P	183	87 J	1,500	36 J	54 J

TABLE A.3
RESIDUAL SOIL CONTAMINATION TABLE

Martino's Master Drycleaners
3917 52nd Street, Kenosha, Wisconsin

Boring Identification	Sample Depth (feet bgs)	Date Sampled	Saturation	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride
Industrial RCL ¹				145,000	8,410	2,340,000	1,850,000	2,080
Non-Industrial RCL ¹				33,000	1,300	156,000	1,560,000	67
Soil to Goundwater RCL ¹				4.5	3.6	41.2	62.6	0.1
EXT-2-WS-1	2.5	5/8/2017	U	<i>1,950</i>	<41	<32	<28	<19
EXT-2-WS-2	2.5	5/8/2017	U	107,000	1,440	84 <i>J</i>	<28	<19
EXT-2-WS-3	2.5	5/8/2017	U	157,000	122 <i>J</i>	47 <i>J</i>	<28	<19
EXT-2-WS-4	2.5	5/8/2017	U	6,400	314	40 <i>J</i>	<28	<19
EXT-2-FS-1	5	5/8/2017	P	33,000	410	<32	<28	<19
EXT-2-FS-2	5	5/8/2017	P	183,000	740	103	<28	<19
CS-1	3-4	2/11/2020	U	53,000	1,770	<32	<28	<19
CS-2	2.5-3	2/11/2020	U	38,000	1,470	<32	<28	<19
CS-3	3-3.5	2/11/2020	U	1,900	440	340	<28	<19
CS-4	3-4	2/11/2020	U	17,800	211	45 <i>J</i>	<28	<19
CS-5	2.5-3	2/11/2020	U	165,000	2,080	174	<28	<19

Notes:

¹ Residual Contaminant Levels calculated according to the procedures described in WDNR Publication RR-890

All concentrations reported in micrograms per kilogram µg/kg

Samples analyzed using EPA SW-846 Method 8260

Bolded values exceed the Industrial Residual Contaminant Level

Bolded and italicized values exceed the Non-Industrial Residual Contaminant Level

Italicized values exceed the Soil to Groundwater Residual Contaminant Level

Shaded values were likely reduced by vapor extraction from the horizontal piping installed beneath the building floor (EP-C)

J = Analyte concentration detected between the laboratory Method Detection Limit and Reporting Limit

NA = Not Analyzed

ND = Not Detected

RCL = Residual Contaminant Level

** = Several petroleum VOCs unrelated to dry cleaning were detected in sample, all below direct-contact RCLs.

S = Saturated; U = Unsaturated; P = Potentially in perched groundwater

TABLE A.1.a
GROUNDWATER ANALYTICAL TABLE - MONITORING WELL SAMPLES
 Martino's Master Drycleaners
 3917 52nd Street, Kenosha, Wisconsin

Well Identification	Sample Date	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride	Naphthalene	1,2,4-Trimethylbenzene	Methyl Tert-Butyl Ether
Enforcement Standard		5	5	70	100	0.2	100	480¹	60
<i>Preventive Action Limit</i>		<i>0.5</i>	<i>0.5</i>	<i>7</i>	<i>20</i>	<i>0.02</i>	<i>10</i>	<i>96¹</i>	<i>12</i>
MW-1	10/20/2011	1.3 J	0.43 J	0.60 J	<0.50	<0.20	1.8 J	0.34 J	<0.50
	10/30/2012	<0.17	0.56	<0.12	<0.25	<0.10	<0.16	<0.14	<0.24
	3/22/2013 *	<0.17	0.47 J	3.7	<0.25	<0.10	<0.16	<0.31	<0.24
	7/17/2013 *	<0.17	1.4	9.9	<0.25	<0.10	<0.16	<0.31	<0.24
	9/30/2013	0.64 J	4.1	19.4	0.65 J	<0.18	<1.7	<2.2	<0.23
	12/30/2013 *	<0.33	2.27	14.9	<0.35	<0.18	<1.7	<2.2	<0.23
	3/11/2014	0.57 J	1.49	7.8	<0.35	<0.18	<1.7	<2.2	<0.23
	6/5/2014 *	0.44 J	3.2	25.4	0.52 J	<0.18	<1.7	<2.2	<0.23
	9/8/2014 *	0.37 J	2.1	26.2	0.77 J	<0.18	<1.7	<2.2	<0.23
	12/8/2014 *	1.31	5.1	70	2.15	<0.18	<1.7	<2.2	<0.23
	3/16/2015	278	3.8	12.8	<0.54	<0.17	<1.6	<1.7	<1.1
	6/17/2015 *	8.1	2.59	16.4	<0.54	<0.17	<1.6	<1.7	<1.1
	9/16/2015	6.5	4.2	25.1	<0.54	<0.17	<1.6	<1.6	<1.1
	12/3/2015	7.8	3.7	14.1	<0.54	<0.17	<1.6	<1.6	<1.1
	2/23/2016	5.7	4.9	29.6	0.64 J	<0.17	<1.6	<1.6	<1.1
	6/1/2016	9	7.6	61	1.45 J	<0.17	<1.6	<1.6	<1.1
	9/19/2016	6.4	6.0	46	0.82 J	<0.17	<1.6	<1.6	<1.1
	1/19/2017	6.7	8.8	76	5.1	<0.19	<2.17	< 1.14	<0.82
	7/6/2017	8.4	10.2	75	5.3	<0.19	<2.17	< 1.14	<0.82
	1/11/2018 *	5.2	6.9	55	0.48 J	<0.19	<2.17	< 1.14	<0.82
7/11/2018 *	7.6	7.4	50	0.97 J	<0.2	<2.1	<0.8	<0.28	
2/21/2019 *	12.7	12.6	79	1.42	<0.2	<2.1	<0.8	<0.28	
8/1/2019	10	11.5	85	1.95	0.31 J	<2.1	<0.8	<0.28	
3/2/2020*	3.9	4.6	52	1.05 J	1.24	<1.1	<0.3	<0.47	
MW-2	10/20/2011	<0.50	<0.20	4.6	<0.50	0.26 J	0.29J	<0.20	<0.50
	10/30/2012	<0.17	<0.19	4.3	<0.25	<0.10	<0.16	<0.14	<0.24
	3/22/2013	<0.17	<0.19	3.7	<0.25	<0.10	<0.16	<0.14	<0.24
	7/17/2013	<0.17	<0.19	4.0	<0.25	<0.10	<0.16	<0.14	<0.24
	9/30/2013	<0.33	<0.33	6.0	<0.35	0.21 J	<1.7	<2.2	<0.23
	12/30/2013	<0.33	<0.33	3.6	<0.35	<0.18	<1.7	<2.2	<0.23
	3/11/2014	<0.33	<0.33	2.83	<0.35	0.21 J	<1.7	<2.2	<0.23
	6/5/2014	<0.33	<0.33	1.21	<0.35	<0.18	<1.7	<2.2	<0.23
	9/8/2014	<0.33	<0.33	4.3	<0.35	<0.18	<1.7	<2.2	<0.23
	12/8/2014	<0.33	<0.33	4.6	<0.35	0.23 J	<1.7	<2.2	<0.23
	3/17/2015	<0.74	<0.47	4.5	<0.54	<0.17	<1.6	<1.7	<1.1
	6/17/2015	<0.74	<0.47	4.8	<0.54	<0.17	<1.6	<1.7	<1.1
	9/16/2015	<0.49	<0.47	4.6	<0.54	<0.17	<1.6	<1.6	<1.1
	12/4/2015	<0.49	<0.47	3.2	<0.54	<0.17	<1.6	<1.6	<1.1
	2/24/2016	<0.49	<0.47	5.5	<0.54	<0.17	<1.6	<1.6	<1.1
	6/1/2016	<0.49	<0.47	4.9	<0.54	<0.17	<1.6	<1.6	<1.1
	9/19/2016	<0.49	<0.47	6.3	<0.54	<0.17	<1.6	<1.6	<1.1
	1/19/2017	<0.48	<0.45	1.21 J	< 0.35	< 0.19	< 2.17	< 1.14	< 0.82
	1/11/2018	<0.48	<0.45	7.4	<0.35	<0.19	< 2.17	< 1.14	< 0.82
	7/11/2018	<0.38	<0.3	3.7	<0.34	<0.2	<2.1	<0.8	<0.28
8/1/2019	<0.38	<0.3	4.6	<0.34	<0.2	<2.1	<0.8	<0.28	
3/2/2020	<0.33	<0.47	6.1	<0.37	<0.2	<1.1	<0.3	<0.47	

TABLE A.1.a
GROUNDWATER ANALYTICAL TABLE - MONITORING WELL SAMPLES
 Martino's Master Drycleaners
 3917 52nd Street, Kenosha, Wisconsin

Well Identification	Sample Date	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride	Naphthalene	1,2,4-Trimethylbenzene	Methyl Tert-Butyl Ether
Enforcement Standard		5	5	70	100	0.2	100	480¹	60
<i>Preventive Action Limit</i>		<i>0.5</i>	<i>0.5</i>	<i>7</i>	<i>20</i>	<i>0.02</i>	<i>10</i>	<i>96¹</i>	<i>12</i>
MW-3	10/20/2011	<0.50	<0.20	<0.50	<0.50	<0.20	<0.25	<0.20	1.0 J
	10/30/2012	<0.17	<0.19	<0.12	<0.25	<0.10	<0.16	<0.14	0.81 J
	3/22/2013	<0.17	<0.19	<0.12	<0.25	<0.10	<0.16	<0.14	0.70 J
	7/17/2013	<0.17	<0.19	<0.12	<0.25	<0.10	<0.16	<0.14	0.70 J
	9/30/2013	<0.33	<0.33	<0.38	<0.35	<0.18	<1.7	<2.2	0.39 J
	12/30/2013	<0.33	<0.33	<0.38	<0.35	<0.18	<1.7	<2.2	<0.23
	3/11/2014	<0.33	<0.33	<0.38	<0.35	<0.18	<1.7	<2.2	0.62 J
	6/5/2014	<0.33	<0.33	<0.38	<0.35	<0.18	<1.7	<2.2	0.53 J
	9/8/2014	<0.33	<0.33	<0.38	<0.35	<0.18	<1.7	<2.2	1.04
	12/9/2014	<0.33	<0.33	<0.38	<0.35	<0.18	<1.7	<2.2	1.03
	3/17/2015	<0.74	<0.47	<0.45	<0.54	<0.17	<1.6	<1.7	<1.1
	6/17/2015 *	<0.74	<0.47	<0.45	<0.54	<0.17	<1.6	<1.7	<1.1
	9/16/2015 *	<0.49	<0.47	<0.45	<0.54	<0.17	<1.6	<1.6	1.24 J
	12/2/2015	<0.49	<0.47	<0.45	<0.54	<0.17	<1.6	<1.6	<1.1
2/24/2016	<0.49	<0.47	<0.45	<0.54	<0.17	<1.6	<1.6	<1.1	
6/1/2016	<0.49	<0.47	<0.45	<0.54	<0.17	<1.6	<1.6	<1.1	
MW-4	10/20/2011	<0.50	<0.20	<0.50	<0.50	<0.20	<0.25	<0.20	<0.50
	10/30/2012	<0.17	<0.19	<0.12	<0.25	<0.10	<0.16	<0.14	<0.24
	3/22/2013	<0.17	<0.19	<0.12	<0.25	<0.10	<0.16	<0.14	<0.24
	7/17/2013	<0.17	<0.19	<0.12	<0.25	<0.10	<0.16	<0.14	<0.24
	9/30/2013	<0.33	<0.33	<0.38	<0.35	<0.18	<1.7	<2.2	<0.23
	12/30/2013	<0.33	<0.33	<0.38	<0.35	<0.18	<1.7	<2.2	<0.23
	3/11/2014	<0.33	<0.33	<0.38	<0.35	<0.18	<1.7	<2.2	<0.23
	6/5/2014	<0.33	<0.33	<0.38	<0.35	<0.18	<1.7	<2.2	<0.23
	9/8/2014	<0.33	<0.33	<0.38	<0.35	<0.18	<1.7	<2.2	<0.23
	12/8/2014	<0.33	<0.33	<0.38	<0.35	<0.18	<1.7	<2.2	<0.23
	3/17/2015	<0.74	<0.47	<0.45	<0.54	<0.17	<1.6	<1.7	<1.1
	6/17/2015	<0.74	<0.47	<0.45	<0.54	<0.17	<1.6	<1.7	<1.1
	9/15/2015	<0.49	<0.47	<0.45	<0.54	<0.17	<1.6	<1.6	<1.1
	12/4/2015	<0.49	<0.47	<0.45	<0.54	<0.17	<1.6	<1.6	<1.1
2/24/2016	<0.49	<0.47	<0.45	<0.54	<0.17	<1.6	<1.6	<1.1	
6/1/2016	<0.49	<0.47	<0.45	<0.54	<0.17	<1.6	<1.6	<1.1	

TABLE A.1.a
GROUNDWATER ANALYTICAL TABLE - MONITORING WELL SAMPLES
 Martino's Master Drycleaners
 3917 52nd Street, Kenosha, Wisconsin

Well Identification	Sample Date	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride	Naphthalene	1,2,4-Trimethylbenzene	Methyl Tert-Butyl Ether
Enforcement Standard		5	5	70	100	0.2	100	480¹	60
<i>Preventive Action Limit</i>		<i>0.5</i>	<i>0.5</i>	<i>7</i>	<i>20</i>	<i>0.02</i>	<i>10</i>	<i>96¹</i>	<i>12</i>
MW-5 (Abandoned)	10/20/2011	<0.50	<0.20	0.66 J	<0.50	<0.20	<0.25	<0.20	<0.50
	10/30/2012	<0.85	14	2,000	<i>66</i>	21	<0.80	<0.70	<1.2
	3/22/2013	34	64	1,300	<i>46</i>	14	<0.80	<0.70	<1.2
	7/17/2013	75	150	1,900	<i>54</i>	21	<0.32	<0.28	<0.48
	9/30/2013 *	46	128	1,570	<i>53</i>	16.2	<1.7	<2.2	<0.23
	12/30/2013	27.5	63	1,190	<i>31.5</i>	12.2	<17	<22	<2.3
	3/11/2014 *	36	48	540	<i>16.1</i>	<1.8	<17	<22	<2.3
	6/5/2014	78	140	1,230	<i>39</i>	12.9	<17	<22	<2.3
	3/13/2014*	77	44	3,000	<i>43</i>	350	<1.7	<2.2	<0.23
	9/8/2014	86	163	1,060	<i>37</i>	12.8	<17	<22	<2.3
12/8/2014	55	79	610	<i>23.3</i>	<1.8	<17	<22	<2.3	
MW-5T	10/24/2014	<16.5	<16.5	1,350	<i>38 J</i>	11.5 J	<85	<110	<11.5
	12/9/2014	<3.3	23.7	1,190	<i>41</i>	3.3 J	<17	<22	<2.3
	3/17/2015	<7.4	25	810	<i>25.6</i>	<1.7	<16	<17	<11
	6/17/2015	<7.4	7.7 J	500	<i>22.1</i>	2.9 J	<16	<17	<11
	9/16/2015	<4.9	8.6 J	410	<i>16.6</i>	5.5	<16	<16	<11
	12/4/2015	<2.45	7.6	670	<i>23.6</i>	2.3 J	<8	<8	<5.5
	2/23/2016	<2.45	8.1	560	<i>21.9</i>	1.35 J	<8	<8	<5.5
	6/1/2016	<4.9	7.1 J	740	<i>34</i>	3.3 J	<16	<16	<11
	9/19/2016	<4.9	6.6 J	610	<i>26.3</i>	10.9	<16	<16	<11
	1/19/2017	<4.8	<4.5	700	<i>33</i>	<1.9	<21.7	<11.4	<8.2
	7/6/2017	<2.4	12.9	740	<i>52</i>	14.1	<10.85	<5.7	<4.1
	1/11/2018	<4.8	9.5 J	650	<i>22.4</i>	22.2	<21.7	<11.4	<8.2
	7/11/2018	<3.8	9.5	770	<i>29.5</i>	10.4	<21	<8	<2.8
	2/21/2019	<3.8	<i>3.4 J</i>	730	<i>29.6</i>	<2	<21	<8	<2.8
	8/1/2019	<1.9	<i>3.3 J</i>	980	<i>38</i>	2.1 J	<10.5	<4	<1.4
3/2/2020	<1.65	9.9	1,080	<i>46</i>	15	<5.5	<1.5	<2.35	
PZ-5	6/18/2015	<0.74	<0.47	<0.45	<0.54	<0.17	<1.6	<1.7	<1.1
	9/15/2015	<0.49	<0.47	1.67	<0.54	<0.17	<1.6	<1.6	<1.1
	12/4/2015	<0.49	<0.47	<0.45	<0.54	<0.17	<1.6	<1.6	<1.1
	2/23/2016	<0.49	<0.47	<0.45	<0.54	<0.17	<1.6	<1.6	<1.1
	6/1/2016	<0.49	<0.47	<0.45	<0.54	<0.17	<1.6	<1.6	<1.1
	1/11/2018	<0.48	<0.45	<0.41	<0.35	<0.19	<2.17	<1.14	<0.82
MW-6	10/24/2014	Dry							
	12/9/2014	<i>4.4</i>	<i>0.92 J</i>	0.45 J	<0.35	<0.18	<1.7	<2.2	<0.23
	3/17/2015	<i>1.67 J</i>	<0.47	<0.45	<0.54	<0.17	<1.6	<1.7	<1.1
	6/18/2015	<i>1.79 J</i>	<i>0.71 J</i>	0.75 J	<0.54	<0.17	<1.6	<1.7	<1.1
	9/16/2015	<i>2.19</i>	<i>0.54 J</i>	<0.45	<0.54	<0.17	<1.6	<1.6	<1.1
	12/3/2015 *^	<i>3.2</i>	<i>0.94 J</i>	0.52 J	<0.54	<0.17	<1.6	<1.6	<1.1
	2/24/2016	<i>0.81 J</i>	<0.47	<0.45	<0.54	<0.17	<1.6	<1.6	<1.1
	1/11/2018	<i>2.66</i>	<0.45	<0.41	<0.35	<0.19	<2.17	<1.14	<0.82
	7/11/2018	<i>3.9</i>	<i>0.86 J</i>	0.59 J	<0.34	<0.2	<2.1	<0.8	<0.28
	2/21/2019	5.1	<i>0.90 J</i>	0.48 J	<0.34	<0.22	<2.1	<0.8	<0.28
	8/1/2019	6.5	<i>1.35</i>	0.61 J	<0.34	<0.2	<2.1	<0.8	<0.28
3/2/2020	5.4	<i>0.74 J</i>	<0.39	<0.37	<0.2	<1.1	<0.3	<0.47	

TABLE A.1.a
GROUNDWATER ANALYTICAL TABLE - MONITORING WELL SAMPLES
 Martino's Master Drycleaners
 3917 52nd Street, Kenosha, Wisconsin

Well Identification	Sample Date	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride	Naphthalene	1,2,4-Trimethylbenzene	Methyl Tert-Butyl Ether
Enforcement Standard		5	5	70	100	0.2	100	480¹	60
<i>Preventive Action Limit</i>		<i>0.5</i>	<i>0.5</i>	<i>7</i>	<i>20</i>	<i>0.02</i>	<i>10</i>	<i>96¹</i>	<i>12</i>
MW-7	10/24/2014	0.46 J	0.48 J	2.24	<0.35	<0.18	<1.7	<2.2	<0.23
	12/9/2014 ^	<i>0.67 J</i>	<i>0.63 J</i>	1.99	0.39 J	<0.18	<1.7	<2.2	<0.23
	3/17/2015 *^	<0.74	<0.47	2.44	<0.54	<0.17	<1.6	<1.7	<1.1
	6/17/2015 ^	<0.74	<i>0.58 J</i>	4.9	<0.54	<0.17	<1.6	<1.7	<1.1
	9/16/2015 ^	<0.49	<0.47	2.95	<0.54	<0.17	<1.6	<1.6	<1.1
	12/3/2015 ^	<0.49	<0.47	1.65	<0.54	<0.17	<1.6	<1.6	<1.1
	2/23/2016 ^	<i>0.50 J</i>	<0.47	9.3	<0.54	<0.17	<1.6	<1.6	<1.1
	6/1/2016	<0.49	<i>0.55 J</i>	<i>11.8</i>	<0.54	<0.17	<1.6	<1.6	<1.1
	9/19/2016	<0.49	<0.47	4.6	<0.54	<0.17	<1.6	<1.6	<1.1
	1/19/2017 ^	<0.48	<0.45	2.81	<0.35	<0.19	<2.17	<1.14	<0.82
1/11/2018	<0.48	<0.45	1.17 J	<0.35	<0.19	<2.17	<1.14	<0.82	
7/11/2018 ^	<0.38	<0.3	1.22	<0.34	<0.2	<2.1	<0.8	<0.28	
MW-8	10/24/2014	<1.65	<i>3.15 J</i>	120	3.15 J	12.4	<8.5	<11	<1.15
	12/9/2014 ^	<i>0.73 J</i>	3.8	192	5.4	3.3	<1.7	<2.2	<0.23
	3/16/2015	226	6.4	169	4.1	6.1	<1.6	<1.7	<1.1
	6/17/2015	155	6.9	<i>61</i>	1.48 J	5.7	<1.6	<1.7	<1.1
	9/16/2015	47	37	650	12.4	21.8	<1.6	<1.6	<1.1
	2/23/2016	10.9 J	12.2 J	133	<5.4	5.6	<1.6	<1.6	<1.1
	1/11/2018	4.8	7.5	203	3.3	29.7	<2.17	<1.14	<0.82
	7/11/2018 ^	6.1	8.6	190	4.0	22.2	<2.1	<0.8	<0.28
	8/1/2019 ^	3.2	6.7	262	3.1	56	<4.2	<1.6	<0.56
3/2/2020	<i>1.66 J</i>	<i>3.0</i>	150	1.5 J	25.5	<1.1	<0.3	<0.47	
MW-9	6/18/2015	<0.74	<0.47	<0.45	<0.54	<0.17	<1.6	<1.7	<1.1
	9/15/2015	<0.49	<0.47	<0.45	<0.54	<0.17	<1.6	<1.6	<1.1
	12/3/2015	<0.49	<0.47	<0.45	<0.54	<0.17	<1.6	<1.6	<1.1
	2/23/2016	<0.49	<0.47	<0.45	<0.54	<0.17	<1.6	<1.6	<1.1
	6/1/2016	<0.49	<0.47	<0.45	<0.54	<0.17	<1.6	<1.6	<1.1
MW-10	6/18/2015	<0.74	<0.47	<0.45	<0.54	<0.17	<1.6	<1.7	<1.1
	9/15/2015	<0.49	<0.47	<0.45	<0.54	<0.17	<1.6	<1.6	<1.1
	12/4/2015	<0.49	<0.47	<0.45	<0.54	<0.17	<1.6	<1.6	<1.1
	2/24/2016	<0.49	<0.47	<0.45	<0.54	<0.17	<1.6	<1.6	<1.1
	6/1/2016	<0.49	<0.47	<0.45	<0.54	<0.17	<1.6	<1.6	<1.1

Notes:

Samples analyzed for VOCs according to EPA Method 8260

Only detected compounds are listed

All concentrations reported in micrograms per liter (µg/L)

* Indicates the highest concentrations detected in duplicate samples are reported

^ Indicates detection of chloroform or toluene less than enforcement standards

¹ Value applies to total combined trimethylbenzenes

Bolded values are above Public Health Enforcement Standard

Italicized values are above Public Health Preventive Action Limit

J = Analyte concentration detected between the Method Detection Limit and Reporting Limit

TABLE A.4.b
VAPOR ANALYTICAL TABLE - COMMERCIAL SUB-SLAB VAPOR
Martino's Master Drycleaners
3917 52nd Street, Kenosha, Wisconsin

Sample Address	Sample Identification	Sample Date	Sample Collection Method	Time Period	Leak Detection Method(s)	Leak Detection Result	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride	Acetone	Benzene	Bromodichloromethane	Carbon Disulfide	Chloroform	Chloromethane	Cyclohexane	1,4 Dichlorobenzene	1,1 Dichloroethane	1,2 Dichloroethane	Ethyl Acetate	Ethyl Benzene	
Small Commercial Vapor Risk Screening Level¹							5,800	290	NE	5,800	930	4,700,000	520	110	100,000	180	13,000	870,000	370	2,600	160	NE	1,600	
3907 52nd St	6190-SSV-4	12/20/2012	Vapor Pin	Grab (5 min)	He Shroud/Shut-In	Passed	28	<11	<7.9	NA	<5.1	NA	<6.4	NA	NA	<9.8	<10	NA	<12	<8.1	<8.1	NA	<8.7	
		3/20/2015	Vapor Pin	Grab (5 min)	Water Dam/Shut-In	Passed	14	<11	<7.9	NA	<5.1	NA	NA	<6.4	NA	NA	<9.8	<10	NA	<12	<8.1	<8.1	NA	<8.7
3909 52nd St	6190-SSV-1	6/7/2011	Vapor Pin	Grab (5 min)	He Shroud/Shut-In	Passed	28,000	430	<0.60	1.0	<0.39	27,000	2.5	<1.0	0.95	2.4	<0.40	<0.52	1.7	<0.62	<0.62	<0.92	2.7	
		8/1/2019	Vapor Pin	Grab (5 min)	Water Dam/Shut-In	Passed	4,580	724	<198	<396	<12.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
		11/11/2019	Vapor Pin	Grab (5 min)	Water Dam/Shut-In	Passed	936	56.6	<19.8	<39.6	<1.28	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		2/11/2020	Vapor Pin	Grab (5 min)	Water Dam/Shut-In	Passed	956	70.2	<19.8	<39.6	<1.28	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		8/26/2021	Vapor Pin	Grab (5 min)	Water Dam/Shut-In	Passed	699	27.9	<198	<396	<12.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	6190-SSV-1A	8/1/2019	Vapor Pin	Grab (5 min)	Water Dam/Shut-In	Passed	<31.9	<10.7	<198	<396	<12.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		11/11/2019	Vapor Pin	Grab (5 min)	Water Dam/Shut-In	Passed	8.61	<1.07	<19.8	<39.6	<1.28	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		2/11/2020	Vapor Pin	Grab (5 min)	Water Dam/Shut-In	Passed	17.5	<1.07	<19.8	<39.6	<1.28	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3917 52nd St	6190-SSV-2	6/7/2011	Vapor Pin	Grab (5 min)	He Shroud/Shut-In	Passed	18,000	490	7.1	3.0	<0.39	1,500	15	<1.0	1.7	300	2.3	19	3.7	16	<0.62	82	9.3	
		8/1/2019	Vapor Pin	Grab (5 min)	Water Dam/Shut-In	Passed	991	<10.7	<198	<396	<12.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
		11/11/2019	Vapor Pin	Grab (5 min)	Water Dam/Shut-In	Passed	599	4.03	<19.8	<39.6	<1.28	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
		2/11/2020	Vapor Pin	Grab (5 min)	Water Dam/Shut-In	Passed	1,060	4.62	<19.8	<39.6	<1.28	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	6190-SSV-2A	8/1/2019	Vapor Pin	Grab (5 min)	Water Dam/Shut-In	Passed	1,340	12.4	<198	<396	<12.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		11/11/2019	Vapor Pin	Grab (5 min)	Water Dam/Shut-In	Passed	848	3.71	<19.8	<39.6	<1.28	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3931 52nd St	6190-SSV-3	6/7/2011	Vapor Pin	Grab (5 min)	He Shroud/Shut-In	Passed	77	1.1	<0.60	<0.60	0.44	980	2.1	1.2	1.0	230	<0.40	<0.52	4.3	<0.62	4.4	28	2.8	
		9/9/2014	Vapor Pin	Grab (5 min)	Water Dam/Shut-In	Passed	488	<10.7	<198	<396	<12.8	<23,800	<16.0	<5.36	<3,110	<8.30	<206	<55,100	<6.01	<40.5	<4.05	<18,000	<86.8	
		11/24/2014	Vapor Pin	Grab (5 min)	Water Dam/Shut-In	Passed	<31.9	<10.7	<198	<396	<12.8	<23,800	<16.0	<5.36	<3,110	<8.30	<206	<55,100	<6.01	<40.5	<4.05	<18,000	<86.8	
		8/1/2019	Vapor Pin	Grab (5 min)	Water Dam/Shut-In	Passed	86.8	<10.7	<198	<396	<12.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		11/11/2019	Vapor Pin	Grab (5 min)	Water Dam/Shut-In	Passed	<3.19	<1.07	<19.8	<39.6	<1.28	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	6190-SSV-7	2/11/2020	Vapor Pin	Grab (5 min)	Water Dam/Shut-In	Passed	21.7	<1.07	<19.8	<39.6	<1.28	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		9/9/2014	Vapor Pin	Grab (5 min)	Water Dam/Shut-In	Passed	1,530	331	<198	<396	<12.8	<23,800	<16.0	<5.36	<3,110	<8.30	<206	<55,100	<6.01	<40.5	<4.05	<18,000	<86.8	
		11/24/2014	Vapor Pin	Grab (5 min)	Water Dam/Shut-In	Passed	1,350	161	<198	<396	<12.8	<23,800	<16.0	<5.36	<3,110	<8.30	<206	<55,100	<6.01	<40.5	<4.05	<18,000	<86.8	
		8/1/2019	Vapor Pin	Grab (5 min)	Water Dam/Shut-In	Passed	2,560	230	<198	<396	<12.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		11/11/2019	Vapor Pin	Grab (5 min)	Water Dam/Shut-In	Passed	589	46.5	<19.8	<39.6	<1.28	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3933 52nd St	6190-SSV-5	9/9/2014	Vapor Pin	Grab (5 min)	Water Dam/Shut-In	Passed	997	<10.7	<198	<396	<12.8	<23,800	<16.0	<5.36	<3,110	<8.30	<206	<55,100	<6.01	<40.5	<4.05	<18,000	<86.8	
		11/24/2014	Vapor Pin	Grab (5 min)	Water Dam/Shut-In	Passed	40.7	<10.7	<198	<396	<12.8	<23,800	<16.0	<5.36	<3,110	<8.30	<206	<55,100	<6.01	<40.5	<4.05	<18,000	<86.8	
	6190-SSV-6	9/9/2014	Vapor Pin	Grab (5 min)	Water Dam/Shut-In	Passed	191	<10.7	<198	<396	<12.8	<23,800	<16.0	<5.36	<3,110	14.6	<206	<55,100	<6.01	<40.5	<4.05	<18,000	<86.8	
		11/24/2014	Vapor Pin	Grab (5 min)	Water Dam/Shut-In	Passed	425	<10.7	<198	<396	<12.8	<23,800	<16.0	<5.36	<3,110	<8.30	<206	<55,100	<6.01	<40.5	<4.05	<18,000	<86.8	

Notes:

¹ The vapor risk screening levels for small commercial structures are calculated in accordance with the procedures described in WDNR Publication RR-800 and subsequent guidance
All concentrations reported in units in micrograms per cubic meter = µg/m³
All samples collected in 1-liter vacuum canisters and analyzed by EPA Test Method TO-15
Only detected compounds are listed
Bolded values exceed the small commercial Vapor Risk Screening Level
NA = Not Analyzed
NE = Not Established

TABLE A.4.b
VAPOR ANALYTICAL TABLE - COMMERCIAL SUB-SLAB VAPOR
 Martino's Master Drycleaners
 3917 52nd Street, Kenosha, Wisconsin

Sample Address	Sample Identification	Sample Date	Sample Collection Method	Time Period	Leak Detection Method(s)	Leak Detection Result	4-ethyltoluene	Trichlorofluoromethane (Freon 11)	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	Dichlorodifluoromethane (Freon 12)	Heptane	Hexane	Isopropyl Alcohol	Methyl Butyl Ketone	Methyl Ethyl Ketone	Methyl Isobutyl Ketone	Styrene	1,1,1-Trichloroethane	Toluene	1,2,4 Trimethylbenzene	1,3,5 Trimethylbenzene	m&p Xylene	o-Xylene		
Small Commercial Vapor Risk Screening Level¹							NE	NE	NE	NE	NE	100,000	NE	NE	730,000	430,000	150,000	730,000	730,000	8,700	8,700	15,000	15,000		
3907 52nd St	6190-SSV-4	12/20/2012	Vapor Pin	Grab (5 min)	He Shroud/Shut-In	Passed	NA	110	<15	18	NA	NA	NA	NA	NA	NA	<8.5	<11	15	<9.8	<9.8	<8.7	<8.7		
		3/20/2015	Vapor Pin	Grab (5 min)	Water Dam/Shut-In	Passed	NA	<11	<15	<9.9	NA	NA	NA	NA	NA	NA	NA	<8.5	<11	<7.5	<9.8	<9.8	<8.7	<8.7	
3909 52nd St	6190-SSV-1	6/7/2011	Vapor Pin	Grab (5 min)	He Shroud/Shut-In	Passed	2.1	1.5	1.3	2.7	<0.62	<0.54	<0.37	<1.2	<0.90	<1.2	3.6	53	170	11	4.1	11	2.7		
		8/1/2019	Vapor Pin	Grab (5 min)	Water Dam/Shut-In	Passed	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
		11/11/2019	Vapor Pin	Grab (5 min)	Water Dam/Shut-In	Passed	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
		2/11/2020	Vapor Pin	Grab (5 min)	Water Dam/Shut-In	Passed	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
		8/26/2021	Vapor Pin	Grab (5 min)	Water Dam/Shut-In	Passed	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	6190-SSV-1A	8/1/2019	Vapor Pin	Grab (5 min)	Water Dam/Shut-In	Passed	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
		11/11/2019	Vapor Pin	Grab (5 min)	Water Dam/Shut-In	Passed	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
		2/11/2020	Vapor Pin	Grab (5 min)	Water Dam/Shut-In	Passed	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3917 52nd St	6190-SSV-2	6/7/2011	Vapor Pin	Grab (5 min)	He Shroud/Shut-In	Passed	4.9	1.9	23	3.0	36	70	220	<1.2	22	2.9	<0.65	2,100	34	19	8.2	19	7.7		
		8/1/2019	Vapor Pin	Grab (5 min)	Water Dam/Shut-In	Passed	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
		11/11/2019	Vapor Pin	Grab (5 min)	Water Dam/Shut-In	Passed	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
		2/11/2020	Vapor Pin	Grab (5 min)	Water Dam/Shut-In	Passed	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	6190-SSV-2A	8/1/2019	Vapor Pin	Grab (5 min)	Water Dam/Shut-In	Passed	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
		11/11/2019	Vapor Pin	Grab (5 min)	Water Dam/Shut-In	Passed	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3931 52nd St	6190-SSV-3	6/7/2011	Vapor Pin	Grab (5 min)	He Shroud/Shut-In	Passed	<0.75	2.5	1.4	3.1	<0.62	<0.54	<0.37	6.0	27	5.0	13	1.6	19	14	<0.75	8.5	3.0		
		9/9/2014	Vapor Pin	Grab (5 min)	Water Dam/Shut-In	Passed	<4,920	<5,620	<5,620	<495	<4,100	<1,760	NA	NA	NA	NA	NA	<4,260	<5,460	<37,700	<49.2	<49.2	<434	<434	
		11/24/2014	Vapor Pin	Grab (5 min)	Water Dam/Shut-In	Passed	<4,920	<5,620	<5,620	<495	<4,100	<1,760	NA	NA	NA	NA	NA	<4,260	<5,460	<37,700	<49.2	<49.2	<434	<434	
		8/1/2019	Vapor Pin	Grab (5 min)	Water Dam/Shut-In	Passed	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
		11/11/2019	Vapor Pin	Grab (5 min)	Water Dam/Shut-In	Passed	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	6190-SSV-7	2/11/2020	Vapor Pin	Grab (5 min)	Water Dam/Shut-In	Passed	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
		9/9/2014	Vapor Pin	Grab (5 min)	Water Dam/Shut-In	Passed	<4,920	<5,620	<5,620	<495	<4,100	<1,760	NA	NA	NA	NA	NA	NA	<4,260	<5,460	<37,700	<49.2	<49.2	<434	<434
		11/24/2014	Vapor Pin	Grab (5 min)	Water Dam/Shut-In	Passed	<4,920	<5,620	<5,620	<495	<4,100	<1,760	NA	NA	NA	NA	NA	NA	<4,260	<5,460	<37,700	<49.2	<49.2	<434	<434
		8/1/2019	Vapor Pin	Grab (5 min)	Water Dam/Shut-In	Passed	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
		11/11/2019	Vapor Pin	Grab (5 min)	Water Dam/Shut-In	Passed	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3933 52nd St	6190-SSV-5	9/9/2014	Vapor Pin	Grab (5 min)	Water Dam/Shut-In	Passed	<4,920	<5,620	<5,620	<495	<4,100	<1,760	NA	NA	NA	NA	NA	<4,260	<5,460	<37,700	<49.2	<49.2	<434	<434	
		11/24/2014	Vapor Pin	Grab (5 min)	Water Dam/Shut-In	Passed	<4,920	<5,620	<5,620	<495	<4,100	<1,760	NA	NA	NA	NA	NA	<4,260	<5,460	<37,700	<49.2	<49.2	<434	<434	
	6190-SSV-6	9/9/2014	Vapor Pin	Grab (5 min)	Water Dam/Shut-In	Passed	<4,920	<5,620	<5,620	<495	<4,100	<1,760	NA	NA	NA	NA	NA	<4,260	<5,460	<37,700	<49.2	<49.2	<434	<434	
		11/24/2014	Vapor Pin	Grab (5 min)	Water Dam/Shut-In	Passed	<4,920	<5,620	<5,620	<495	<4,100	<1,760	NA	NA	NA	NA	NA	<4,260	<5,460	<37,700	<49.2	<49.2	<434	<434	

Notes:

- ¹ The vapor risk screening levels for small commercial structures are calculated in accordance with the procedures described in WDNR Publication RR-800 and subsequent guidance
- All concentrations reported in units in micrograms per cubic meter = µg/m³
- All samples collected in 1-liter vacuum canisters and analyzed by EPA Test Method TO-15
- Only detected compounds are listed
- Bolded** values exceed the small commercial Vapor Risk Screening Level
- NA = Not Analyzed
- NE = Not Established

TABLE A.4.d
VAPOR ANALYTICAL TABLE - RESIDENTIAL VAPOR INTRUSION

Martino's Master Drycleaners
 3917 52nd Street, Kenosha, Wisconsin

Sample Identification	Sample Location	Sample Date	Sample Collection Method	Time Period	Leak Detection Method(s)	Leak Detection Result	Tetrachloroethene	Trichloroethene	Benzene	1,2-Dichloroethane	Acetone	Chloroform
INDOOR/OUTDOOR AIR												
Residential Vapor Action Level							42	2.1	3.6	1.1	32,000	1.2
6190-5231-OA	Outdoor	9/9/2014	6-Liter Canister	24 hour	NA	NA	<3.19	<1.07	<1.60	<0.40	<2,380	<0.83
		12/9/2014	6-Liter Canister	24 hour	NA	NA	<3.19	<1.07	<1.60	<0.40	<2,380	<0.83
		2/10/2021	6-Liter Canister	24 hour	NA	NA	<3.19	<1.07	NA	NA	NA	NA
6190-5231-IA-1	Basement	9/9/2014	6-Liter Canister	24 hour	NA	NA	7.05	<1.07	1.73	8.86	<2,380	2.59
		12/9/2014	6-Liter Canister	24 hour	NA	NA	<3.19	<1.07	<1.60	<0.40	<2,380	1.37
		2/10/2021	6-Liter Canister	24 hour	NA	NA	<3.19	<1.07	NA	NA	NA	NA
6190-5231-IA-2	First Floor	9/9/2014	6-Liter Canister	24 hour	NA	NA	9.16	1.34	1.63	8.46	2,560	2.64
		12/9/2014	6-Liter Canister	24 hour	NA	NA	<3.19	<1.07	<1.60	1.82	<2,380	1.27
		2/10/2021	6-Liter Canister	24 hour	NA	NA	<3.19	<1.07	NA	NA	NA	NA
SUB-SLAB VAPOR												
Residential Vapor Risk Screening Level							1,400	70	120	37	1,067,000	40
6190-5231-SSV-1	Basement	9/10/2014	Vapor Pin, 1-Liter Canister	Grab (5 min)	Water Dam/Shut-In	Passed	215	<10.7	<16.0	<4.05	<23,800	<8.30
		12/9/2014	Vapor Pin, 1-Liter Canister	Grab (5 min)	Water Dam/Shut-In	Passed	125	13.4	<16.0	<4.05	<23,800	9.28
		2/11/2021	Vapor Pin, 1-Liter Canister	Grab (5 min)	Water Dam/Shut-In	Passed	31.0	2.36	NA	NA	NA	NA
6190-5231-SSV-2	Basement	9/10/2014	Vapor Pin, 1-Liter Canister	Grab (5 min)	Water Dam/Shut-In	Passed	461	40.3	<16.0	<4.05	<23,800	<8.30
		12/9/2014	Vapor Pin, 1-Liter Canister	Grab (5 min)	Water Dam/Shut-In	Passed	300	27.4	<16.0	<4.05	<23,800	9.28
		2/11/2021	Vapor Pin, 1-Liter Canister	Grab (5 min)	Water Dam/Shut-In	Passed	66.2	3.82	NA	NA	NA	NA

Notes:

Results reported in micrograms per cubic meter ($\mu\text{g}/\text{m}^3$)

Analysis performed by Envision Laboratories according to EPA Method TO-15

Bolded values exceed the applicable residential screening or action level

IA = Indoor Air

NA = Not applicable

OA = Outdoor air (background)

SSV = Sub-slab vapor