June 30, 2023

Mr. Riley D. Neumann
Wisconsin Department of Natural Resources
Southeast Region Office
Remediation and Redevelopment Program
1027 W. St. Paul Avenue
Milwaukee, WI 53233

Project # 40260A

Subject: **Additional Investigation Workplan**
Wisconsin Avenue Property LLC
612 W. Wisconsin Avenue, Milwaukee, WI
BRRTS #: 02-41-548332, FID: 341137830

Dear Mr. Neumann:

The Wisconsin Department of Natural Resources (WDNR) reviewed the Site Investigation Report (SIR) for compliance with Wis. Admin. Code Ch. NR 716 and requested additional work be performed in order to further define the extent contamination in relation to the subject property in a letter dated April 24, 2023. K. Singh and Associates, Inc. (KSingh) has prepared the following proposed workplan in order to respond to the requests made by the WDNR.

Additional Soil Sampling

Per the request by the WDNR for additional shallow (above the water table) soil sampling, six additional soil probes (B-7 through B-12) are planned in the basement parking garage of 612 West Wisconsin Avenue. Soil borings B-7 to B-11 will be advanced to 6 feet below ground surface (bgs) for the purpose of investigating unsaturated soils and soil boring B-12 will be advanced to 20 feet bgs for the purpose of installing a monitoring well (MW-6). All soil sampling will be performed in unsaturated soils. The locations of the proposed soil probes are shown on Figure 1. A schedule of soil borings and depths is included in Table 1. The actual locations of the soil probes may need to be modified in the field based on accessibility and the presence of utilities.

Soil probes will be conducted utilizing a low-profile drilling rig which has Hollow Stem Augers (HSAs) and hydraulic soil probing capabilities. The selected driller will be responsible for their equipment decontamination following company policies. Investigation derived waste from the soil borings will be drummed for characterization and disposal.

The drilling method utilized inside the building will be a dry process, soil probe type, which advances a 2" steel tube containing a plastic two-foot to five-foot sampling tube. The sampling is continuous, with the sampling tube being hydraulically pushed deeper into the substrata four feet per sample, in accordance with ASTM D 1587-08(2012)e1.

Soil samples will be subjected to qualitative screening in the field for volatile organic compounds using a

photoionization detector (PID). Soil samples for laboratory analysis will be selected based on PID readings and/or field observation.

One to two soil samples will be taken per borehole and tested for volatile organic compounds (VOCs). One sample will be tested in the top 4 feet for VOCs in all boreholes. A schedule of environmental sampling is included in Table 2. Soil samples will be preserved in the field and put on ice, transported to a certified laboratory using chain-of-custody procedures, and tested for VOCs. Soil cuttings will be stored in drums to await disposal.

Additional Monitoring Wells

Per the request by the WDNR for additional offsite groundwater monitoring downgradient of the subject site, two additional groundwater monitoring wells (MW-7 and MW-8) as well as one piezometer (PZ-1) are proposed to be installed on adjacent properties to the north (626 West Wisconsin Avenue) and west (723 North 6th Street). In addition, an additional groundwater monitoring well (MW-6) will be installed to the east of existing monitoring well MW-4 in order to delineate the extent of groundwater contamination on the subject property. Proposed well locations are depicted on Figure 1.

Based on the groundwater data obtained during previous investigations, groundwater is estimated to be present at approximately 20 feet below ground surface at the planned locations of the monitoring wells. Therefore, the wells on the exterior of the subject property will be set at approximately 30 feet below ground surface (bgs) in order to intersect the water table with 10-foot screens. Due to the decrease in elevation within the basement parking garage, the additional well on the subject property will be set at a depth of approximately 20 feet bgs with a 10-foot screen. The piezometer is proposed to be advanced to a depth of 37-42 feet bgs with a 5-foot screen. A schedule of well depths and screen intervals is included in Table 1.

Soil samples will be collected utilizing hollow stem augers with split spoon sampling in accordance with ASTM D 1586 for the installation of monitoring wells MW-6, MW-7, and MW-8, and piezometer PZ-1. Soil samples will be screened in the field utilizing a PID and the results recorded on a field boring log. The field boring log will also include all field observations of soil types, blow counts, and other field measurements. A final boring log will be prepared for

A schedule of environmental sampling is included in Table 2. One to two soil samples will be tested for VOCs per soil boring in unsaturated soils. In addition, one soil sample near the water table is proposed to be tested for total organic carbon for natural attenuation evaluation. Soil cuttings will be drummed and labeled to await characterization and disposal.

Groundwater Sampling

Monitoring wells MW-6, MW-7, MW-8, and PZ-1 will be developed in accordance with NR 141, depth to water in each of the monitoring wells will be measured prior to sampling, purge volumes will be calculated in accordance with WDNR's Groundwater Sampling Field Manual, and sampling will be performed after purging is complete. Monitoring wells MW-6, MW-7, and MW-8, and piezometer PZ-1 are proposed to be developed in accordance with NR 141 and sampled for VOCs and perfluoroalkyl and polyfluoroalkyl substances (PFAS). Concurrently, an additional round of groundwater sampling is also proposed to be conducted of previously installed monitoring wells (MW-1 through MW-5) for VOCs and PFAs. Groundwater samples will be preserved on ice, transported to a certified laboratory using chain-of-custody procedures, and analyzed for VOC's in accordance with EPA Method 8260B, as well as PFAS. A schedule of environmental testing for groundwater is included in Table 2.

In addition to the testing for VOCs and PFAS, field measurements will be performed for natural attenuation parameters including pH, dissolved oxygen, and oxidation-reduction potential. Purge water from sampling will be drummed to await characterization and disposal.

Vapor Sampling

606 West Wisconsin Avenue

An additional round of sub-slab vapor sampling will be performed in the basement garage of the 606 West Wisconsin Avenue property, as well as one indoor air sample. Based on the requirements of WDNR Publication RR-800 "Addressing Vapor Intrusion at Remediation & Redevelopment Sites in Wisconsin", three sub-slab vapor pins (SVP-12 through SVP-14) are proposed to be installed. The locations of vapor pins and indoor air samples for 606 West Wisconsin Avenue are depicted on Figure 2.

612 West Wisconsin Avenue

Additional indoor air samples are proposed to be collected from the subject property. One passive indoor air sample will be collected from public spaces of each floor of the onsite building, including the basement. One indoor air sample will be collected from the two commercial spaces on the ground floor. One apartment on each floor, two total, will also be tested via passive sampling. In total, 8 passive samples are proposed to be collected. A map will be provided which shows the floor plan of each level and the locations of the passive samplers with the results.

Exterior Utilities

In order to determine whether utilities present a pathway for the migration of contamination, vapor sampling of utilities in the alleyway to the north of the subject property is proposed. Two air samples will be collected from the manholes with Summa canisters and the results will be reported to WDNR. The locations of the proposed air samples are included in Attachment A.

Closure

This work plan has been reviewed by Robert S. Fedorchak, P.E. of Patriot Engineering and Environmental Inc. of Indiana. Patriot Engineering was retained by Wisconsin Avenue, LLC to conduct a peer review of the work plan. Mr. Fedorchak is an expert and certified in radon investigation and mitigation.

Please contact us if you have any questions.

Sincerely,

K. SINGH & ASSOCIATES, INC.

Robert T. Reineke

Pratap N. Singh

Robert T. Reineke, PE
Project Manager

Pratap N. Singh, Ph.D., PE
Principal Engineer

cc: Mr. Samir Siddique / Wisconsin Avenue Property, LLC

KSingh | Engineers Scientists Consultants

Figures

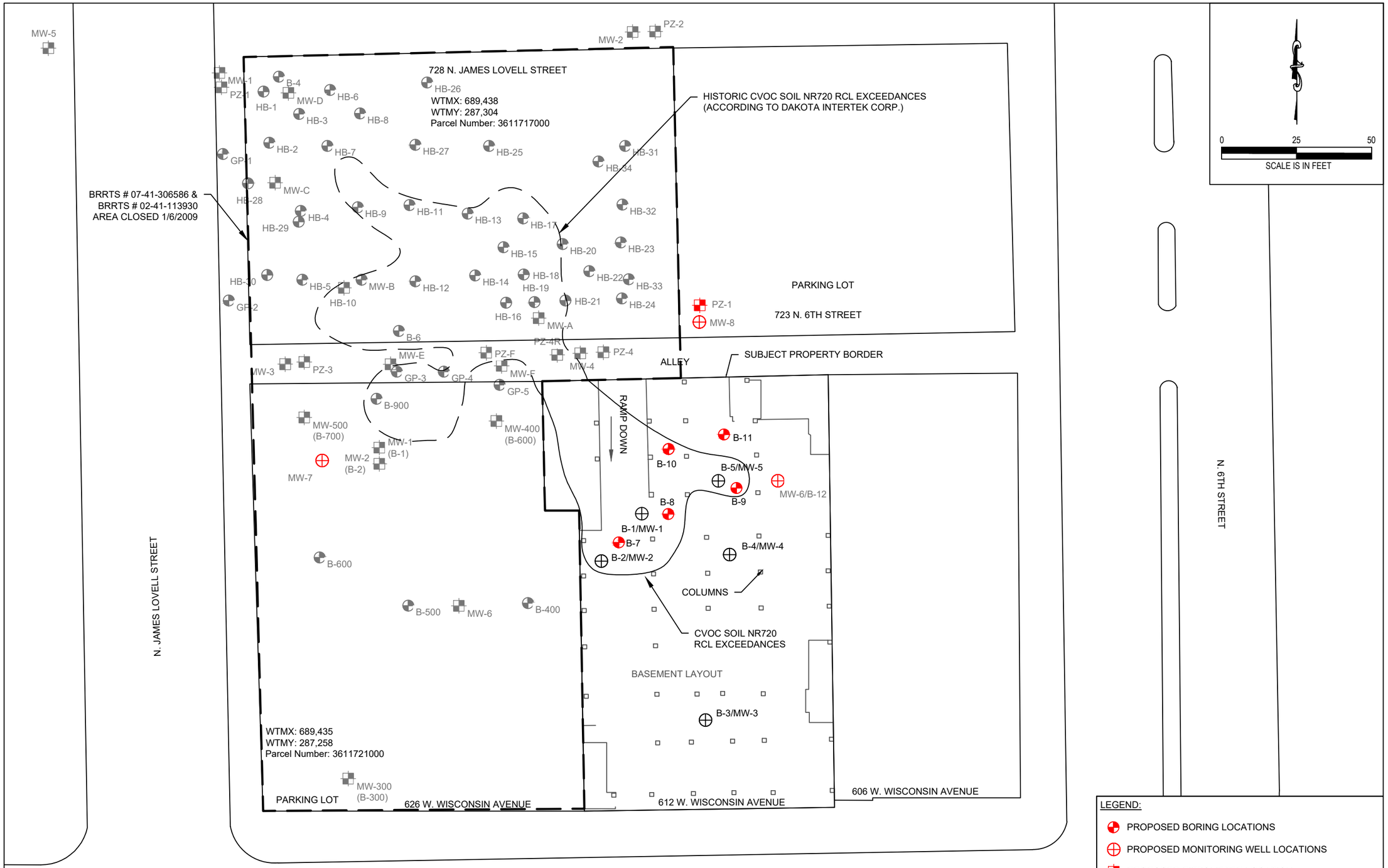
Figure 1 – Proposed Soil Boring and Monitoring Well Location Map
Figure 2 – Proposed Sub-Slab Vapor Probe Location Map

Tables

Table 1 – Additional Site Investigation Schedule
Table 2 – Environmental Sampling Schedule

Attachment A – Proposed Utility Air Sampling Locations

FIGURES



Contaminant	Units	Method	NR 720 RCLs for GW Protection	NR 720 RCLs - Non-Industrial Use for Direct Contact Protection	NR 720 RCLs - Industrial Use for Direct Contact Protection	Background Threshold Value
Tetrachloroethene	mg/kg	8260B	**0.0045**	**33**	**145**	---
Trichlorofluoromethane	mg/kg	8260B	**---**	**1,230**	**1,230**	---

LEGEND:

- PROPOSED BORING LOCATIONS
- PROPOSED MONITORING WELL LOCATIONS
- PROPOSED PIEZOMETER LOCATION
- HISTORIC BORING LOCATION
- HISTORIC MONITORING WELL LOCATION
- SOIL BORING / MONITORING WELL LOCATION (2019)

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3636 North 124th Street
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262-821-1171

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TITLE: RESPONSE TO WDNR REVIEW OF SITE INVESTIGATION REPORT

PROJECT TITLE: 612 W WISCONSIN AVENUE PROPERTY

CLIENT: WISCONSIN AVENUE PROPERTY, LLC

PROJECT LOCATION: 612 WEST WISCONSIN AVENUE, MILWAUKEE, WI

REVISIONS	DATE	DESCRIPTION

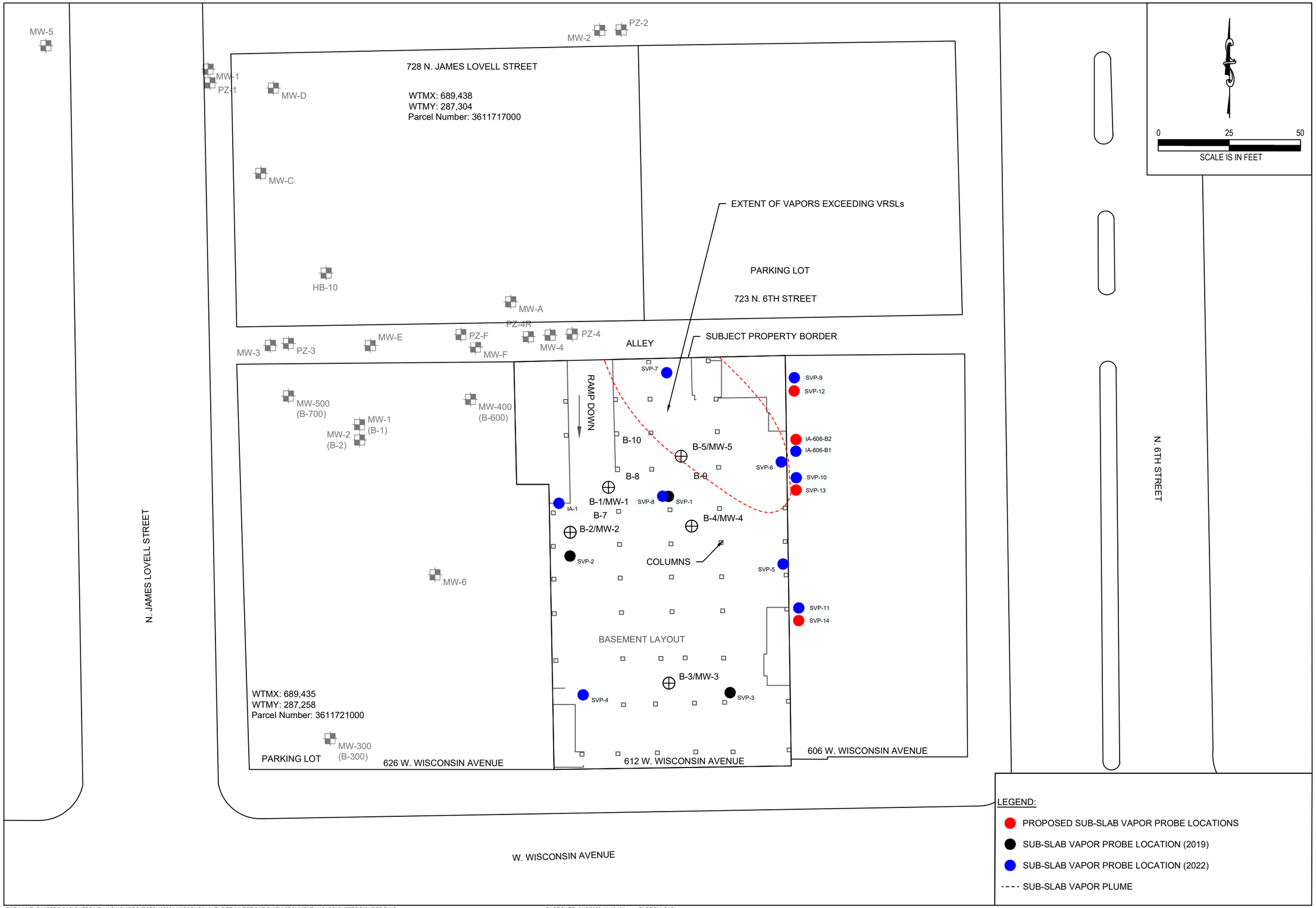
DRAWN BY AMH	DATE 03/14/2023
CHECKED BY RTR	DATE 03/14/2023

SHEET TITLE
PROPOSED SOIL BORING AND MONITORING WELL LOCATION MAP

FIGURE 1

SHEET of SHEET

FILE NAME :C:\USERS\CAD\ONEDRIVE - K SINGH\PROJECTS\40260A WISCONSIN AVE. SITE INVESTIGATION\ENVIRONMENTAL\CADD\SHEETS\FIGURES.DWG PLOT DATE :5/12/2023 11:13 AM PLOT BY :CAD



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CHECKED BY	DATE
RTR	03/14/2023

SHEET TITLE

PROPOSED SUB-SLAB VAPOR PROBE LOCATION MAP

FIGURE 2

SHEET of SHEET

FILE NAME :C:\USERS\CAD\ONEDRIVE - K SINGH\PROJECTS\40260A WISCONSIN AVE. SITE INVESTIGATION\ENVIRONMENTAL\CADD\SHEETS\FIGURES.DWG PLOT DATE :5/12/2023 11:15 AM PLOT BY :CAD

TABLES

Table 1
Additional Site Investigation Schedule
612 West Wisconsin Avenue

Borehole Identification	Depth (feet)	Screened Interval (feet)
B-7	6	---
B-8	6	---
B-9	6	---
B-10	6	---
B-11	6	---
B-12 / MW-6	20	10 to 20
MW-7	30	20 to 30
MW-8	30	20 to 30
PZ-1	42	37 to 42

Table 2

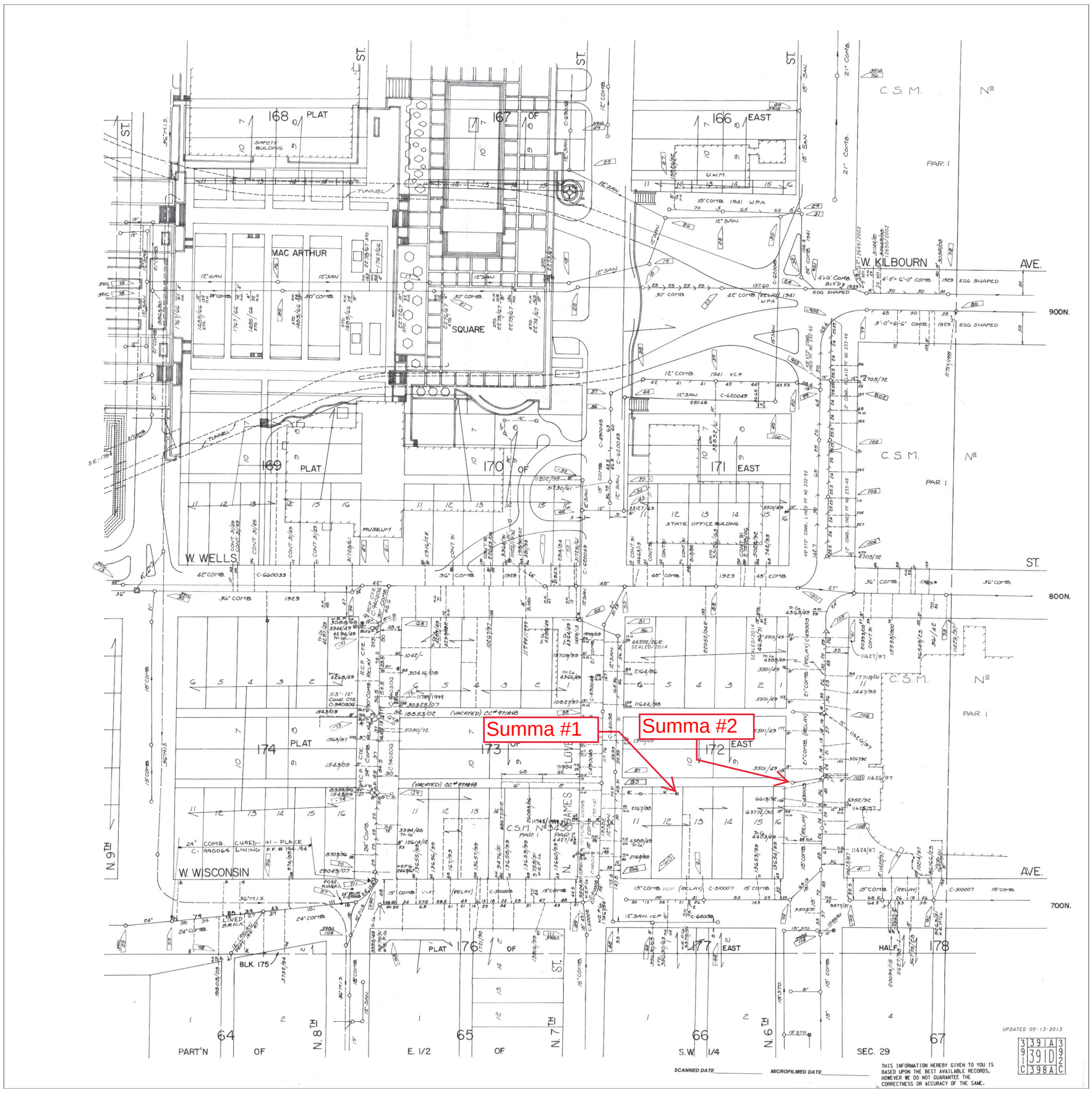
Environmental Sampling Schedule

612 W Wisconsin Avenue, Milwaukee, WI

Location	Soil Sampling	Monitoring Well Field Measurement	Groundwater Sampling
B-7	VOCs (0 to 2', 4 to 6')	---	---
B-8	VOCs (2 to 4', 4 to 6')	---	---
B-9	VOCs (0 to 2', 4 to 6')	---	---
B-10	VOCs (2 to 4', 4 to 6')	---	---
B-11	VOCs (0 to 4')	---	---
B-12 / MW-6	VOCs (0 to 4')	Depth to Water, Dissolved Oxygen, ORP, and pH	VOCs, PFAS
B-1 / MW-1	---	Depth to Water, Dissolved Oxygen, ORP, and pH	VOCs, PFAS
B-2 / MW-2	---	Depth to Water, Dissolved Oxygen, ORP, and pH	VOCs, PFAS
B-3 / MW-3	---	Depth to Water, Dissolved Oxygen, ORP, and pH	VOCs, PFAS
B-4 / MW-4	---	Depth to Water, Dissolved Oxygen, ORP, and pH	VOCs, PFAS
B-5 / MW-5	---	Depth to Water, Dissolved Oxygen, ORP, and pH	VOCs, PFAS
MW-7	VOCs (0 to 4', 13.5 to 15')	Depth to Water, Dissolved Oxygen, ORP, and pH	VOCs, PFAS
MW-8	VOCs (0 to 4', 13.5 to 15')	Depth to Water, Dissolved Oxygen, ORP, and pH	VOCs, PFAS
PZ-1	Total Organic Carbon (13.5 to 15')	Depth to Water, Dissolved Oxygen, ORP, and pH	VOCs, PFAS

Attachment A

Proposed Utility Air Sampling Locations


Summa #1
Summa #2
W. WISCONSIN
AVE.
W. KILBOURN
AVE.
W. WELLS
ST.
N. 9TH
N. 8TH
N. 7TH
N. 6TH
MAC ARTHUR
SQUARE
SAFETY BUILDING
MUSEUM
STATE OFFICE BUILDING
TUNNEL
168
PLAT
OF
167
166
EAST
169
170
171
174
173
172
176
177
178
HALF
BLK. 175
C.S.M. N°
900N.
800N.
700N.
PART'N
OF
E. 1/2
S.W. 1/4
SEC. 29
64
65
66
67
UPDATED 05-13-2013
SCANNED DATE
MICROFILMED DATE
THIS INFORMATION HEREBY GIVEN TO YOU IS BASED UPON THE BEST AVAILABLE RECORDS, HOWEVER WE DO NOT GUARANTEE THE CORRECTNESS OR ACCURACY OF THE SAME.