



# Memorandum

January 30, 2024

<b>To</b>	Jeffery Dewey	<b>Project No.</b>	003978
<b>Copy to</b>	Jeffery Paddock	<b>Email</b>	oj.ojinaga@ghd.com
<b>From</b>	Daniel (OJ) Ojinaga/lg/6	<b>Contact No.</b>	003978 Lonsdorf-Wausau Superfund
<b>Project Name</b>	Lonsdorf-Wausau Superfund RD/RA		
<b>Subject</b>	EPA Request for Additional Data and Information Relating to the Wausau Groundwater Contamination Superfund Site		

## 1. Introduction

In a letter dated January 5, 2024, the U.S. Environmental Protection Agency (EPA) requested seven action items to be addressed at the Wausau Water Supply NPL Site in Wausau, Wisconsin. This memo has been generated to address action items #1 and #2 as summarized below. The EPA requests not outlined in this letter will be addressed at a later date.

(1) West Bank VI Sampling – Previous and contemporary vapor intrusion (VI) sampling on the west bank of the Wisconsin River at “Marathon Electric Building A” (Building A) and “Marathon Electric Building B” (Building B) has produced evidence that chlorinated volatile organic compound (CVOC) sub-slab vapor concentrations have increased significantly and steadily between 2017 and 2023. Moreover, the current sub-slab vapor concentrations for trichloroethene (TCE) in at least one location of each building are 10 times greater than the vapor intrusion screening levels (VISLs) for the Site (880 micrograms per cubic meter). In Building A, CVOC sub-slab vapor concentrations increase towards an enclosed laboratory space where employees may be exposed for hours-long periods of time. EPA requests the Settling Defendants sample indoor air in the Building A laboratory and any offices where an employee works for a hours-long period of time. EPA also requests the Settling Defendants sample sub-slab vapor beneath the offices and other areas deemed necessary by EPA to delineate the extent of sub-slab vapor exceedances and ensure the Site remedy is protective of human health. The west bank sampling must take place between January and February to capture seasonal (winter) affects. The precise sampling locations should be determined no later than January 31, 2024, following discussions with EPA and a site visit by EPA and Wisconsin Department of Natural Resources (WDNR).

(2) East Bank VI Sampling – Sub-slab vapor sampling on the east bank has generally identified concentrations of CVOCs that do not exceed Site VISLs. However, one building, Thrive Foodery, is located directly above the CVOC groundwater plume. Sub-slab vapor and indoor air have not been sampled at this location despite extended human occupancy within the building. EPA requests the Settling Defendants sample sub-slab vapor and indoor air at Thrive Foodery on the east bank to ensure the remedy is protective of human health. EPA can assist with building access if this is, or has been, an issue. The east bank sampling must take place between January and February to capture seasonal (winter) affects. The precise sampling location(s) should be determined no later than January 31, 2024, following discussions with EPA and a site visit by EPA and/or WDNR.

## 1.1 Scope and Limitations

GHD will collect sub-slab and indoor air samples from four existing locations and up to five new additional locations, as depicted on Figure 1. All sub-slab and indoor air samples will be collected and analyzed following the procedures outlined in the approved 2023 Addendum 2: Vapor Intrusion Evaluation Work Plan submitted on August 4, 2023.

Proposed fieldwork includes:

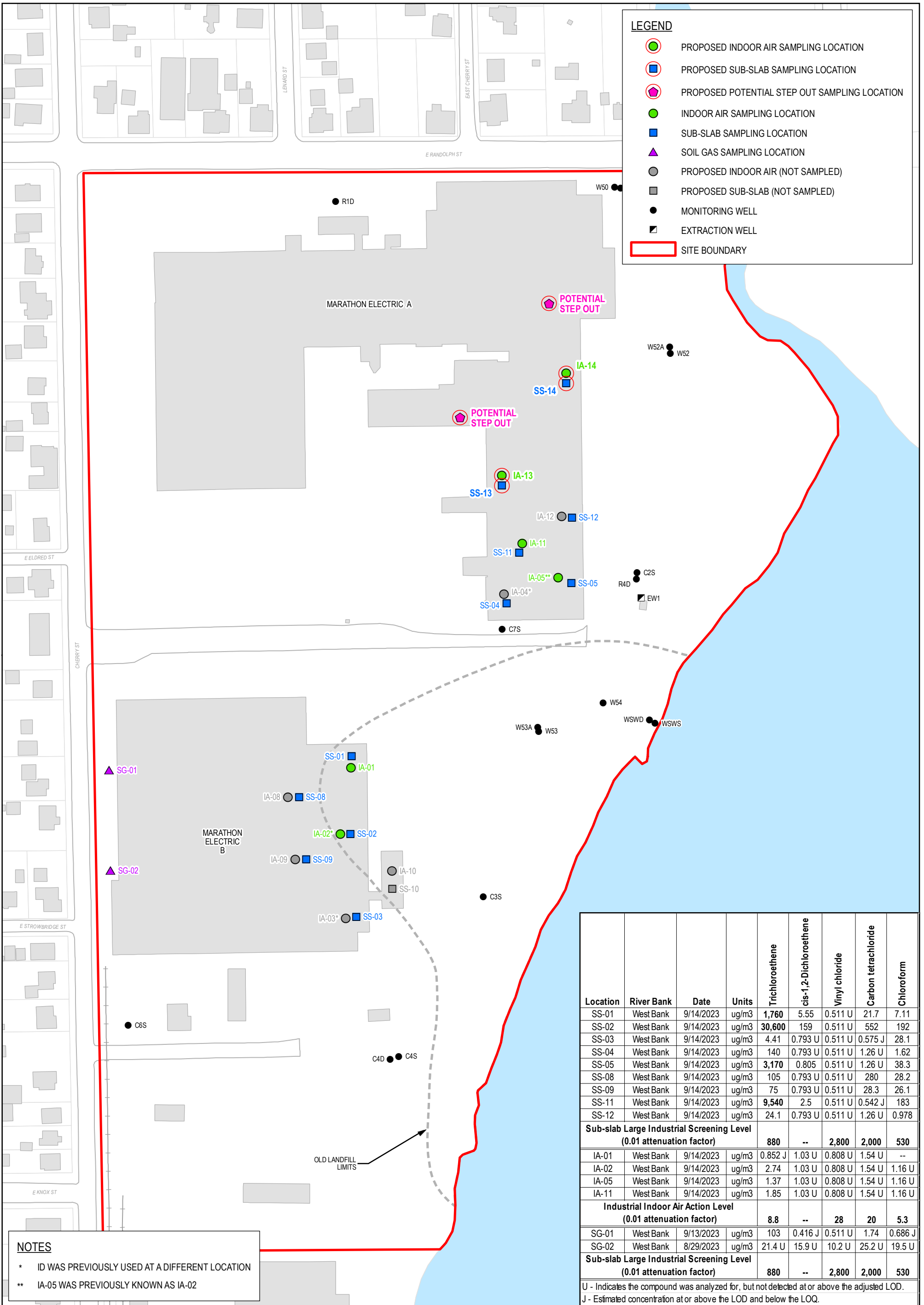
1. West Bank:
  - Install two new sub-slab probes at locations SS-13 and SS-14 in Marathon Electric’s north building. The sub-slab locations will either be inside or within two feet of the wall to the lab and HR offices for SS-13 and SS-14 respectively.
  - Collect paired sub-slab and indoor air samples from the (Marathon Electric north and south buildings) at the following existing locations: SS-01/IA-01, SS-02/IA-02, SS-05/IA-05, SS-11/IA-11, SS-13/IA-13, and SS-14/IA-14. Paired indoor air samples for SS-13 and SS-14 will be taken from inside the lab and HR offices for each location respectively.
  - Potential Step-out locations: Two potential step-out locations will be installed and sampled during the winter months if Site related chemicals of concern (COCs) are detected at concentrations above the Sub-slab Large Industrial Screening Levels from either of the new delineation locations (SS-13 and SS-14). See Figure 1 for potential step-out locations.
2. East Bank:
  - Contingent on obtaining access, one new sub-slab probe (SS-15) will be installed at the Thrive Foodary restaurant (Thrive) building.
  - Collect a paired sub-slab and indoor air sample (SS-15/IA-15) from within the Thrive building. See Figure 2.
  - If access to Thrive is not obtained, a temporary soil gas probe will instead be installed in the right-of-way near Thrive Foodary, and a soil gas sample will be collected.

The additional requested VI investigation activities will provide additional lines of evidence to better determine potential VI risks. Due to the seasonal time constraint, GHD will transmit the investigation findings to the EPA via email to expedite the implementation of potential step-out activities, if needed.

Regards,



**Daniel (OJ) Ojinaga**  
Project Manager



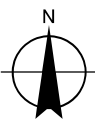
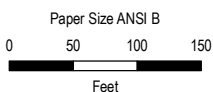
**LEGEND**

- PROPOSED INDOOR AIR SAMPLING LOCATION
- PROPOSED SUB-SLAB SAMPLING LOCATION
- ▲ PROPOSED POTENTIAL STEP OUT SAMPLING LOCATION
- INDOOR AIR SAMPLING LOCATION
- SUB-SLAB SAMPLING LOCATION
- ▲ SOIL GAS SAMPLING LOCATION
- PROPOSED INDOOR AIR (NOT SAMPLED)
- PROPOSED SUB-SLAB (NOT SAMPLED)
- MONITORING WELL
- ▣ EXTRACTION WELL
- SITE BOUNDARY

Location	River Bank	Date	Units	Trichloroethene	cis-1,2-Dichloroethene	Vinyl chloride	Carbon tetrachloride	Chloroform
SS-01	West Bank	9/14/2023	ug/m3	1,760	5.55	0.511 U	21.7	7.11
SS-02	West Bank	9/14/2023	ug/m3	30,600	159	0.511 U	552	192
SS-03	West Bank	9/14/2023	ug/m3	4.41	0.793 U	0.511 U	0.575 J	28.1
SS-04	West Bank	9/14/2023	ug/m3	140	0.793 U	0.511 U	1.26 U	1.62
SS-05	West Bank	9/14/2023	ug/m3	3,170	0.805	0.511 U	1.26 U	38.3
SS-08	West Bank	9/14/2023	ug/m3	105	0.793 U	0.511 U	280	28.2
SS-09	West Bank	9/14/2023	ug/m3	75	0.793 U	0.511 U	28.3	26.1
SS-11	West Bank	9/14/2023	ug/m3	9,540	2.5	0.511 U	0.542 J	183
SS-12	West Bank	9/14/2023	ug/m3	24.1	0.793 U	0.511 U	1.26 U	0.978
<b>Sub-slab Large Industrial Screening Level (0.01 attenuation factor)</b>				<b>880</b>	<b>--</b>	<b>2,800</b>	<b>2,000</b>	<b>530</b>
IA-01	West Bank	9/14/2023	ug/m3	0.852 J	1.03 U	0.808 U	1.54 U	--
IA-02	West Bank	9/14/2023	ug/m3	2.74	1.03 U	0.808 U	1.54 U	1.16 U
IA-05	West Bank	9/14/2023	ug/m3	1.37	1.03 U	0.808 U	1.54 U	1.16 U
IA-11	West Bank	9/14/2023	ug/m3	1.85	1.03 U	0.808 U	1.54 U	1.16 U
<b>Industrial Indoor Air Action Level (0.01 attenuation factor)</b>				<b>8.8</b>	<b>--</b>	<b>28</b>	<b>20</b>	<b>5.3</b>
SG-01	West Bank	9/13/2023	ug/m3	103	0.416 J	0.511 U	1.74	0.686 J
SG-02	West Bank	8/29/2023	ug/m3	21.4 U	15.9 U	10.2 U	25.2 U	19.5 U
<b>Sub-slab Large Industrial Screening Level (0.01 attenuation factor)</b>				<b>880</b>	<b>--</b>	<b>2,800</b>	<b>2,000</b>	<b>530</b>
U - Indicates the compound was analyzed for, but not detected at or above the adjusted LOD. J - Estimated concentration at or above the LOD and below the LOQ.								

**NOTES**

- \* ID WAS PREVIOUSLY USED AT A DIFFERENT LOCATION
- \*\* IA-05 WAS PREVIOUSLY KNOWN AS IA-02

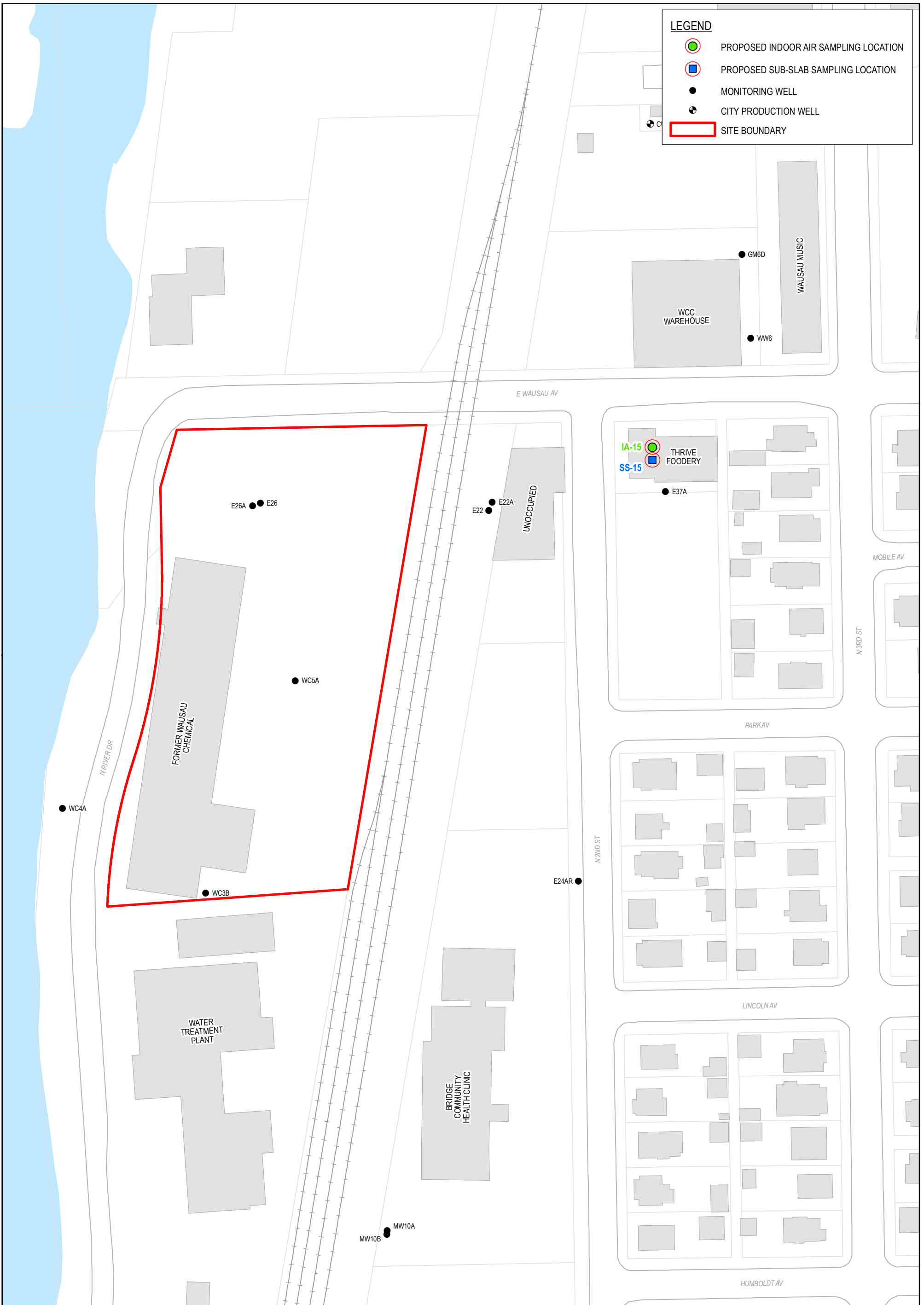


**WAUSAU WATER SUPPLY NPL SITE  
WAUSAU, WISCONSIN**

**PROPOSED SUB-SLAB AND  
INDOOR AIR SAMPLING LOCATIONS  
WEST BANK**

Project No. 003978-00  
Revision No. -  
Date 01/24/2024

**FIGURE 1**



**WAUSAU WATER SUPPLY NPL SITE  
 WAUSAU, WISCONSIN**

**PROPOSED SUB-SLAB AND  
 INDOOR AIR SAMPLING LOCATIONS  
 EAST BANK**

**FIGURE 2**