



Mr. Patrick Schloss
City of West Allis
7525 W. Greenfield Avenue
West Allis, WI 53214

**Request For Change Order for Site Investigation of the Former
Waste Transfer Station at 5032 West Burnham Street, West Allis,
Wisconsin**

Dear Mr. Schloss:

February 16, 2024

In response to our recent discussion, Ramboll Americas Engineering Solutions, Inc. (Ramboll) has prepared this request for change order to conduct an NR 716 Site Investigation (SI) at the City of West Allis ("City") owned property located at 5032 West Rogers Street in West Allis, Wisconsin (the "site" or "property"). The scope of services associated with this request for change order are described in the attached NR 716 Work Plan for this site.

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SCHEDULE

Per your verbal authorization, the soil boring and well installation is currently scheduled for February 22, 2024. Groundwater sampling will be conducted the following week. This proposed schedule is dependent upon receipt of written authorization from the City.

Ref. 1940106525

Upon completion of the field activities described above, the results will be summarized in a SI Report that will be submitted to WDNR for their review. WDNR review fees are included in this change order.

ESTIMATED CHANGE ORDER COST

The scope of services described herein will be completed on a time and materials basis in accordance with the Master Contract with the City, dated March 8, 2017 and the attached fee schedule, provided in our Proposal for Professional Consulting Services, dated August 24, 2022. The total estimated cost to complete the Site Investigation scope of services, is summarized below.

Task	Estimated Cost
WDNR Notification/Work Plan Preparation	\$ 2,200
Field Investigation	\$22,100
NR 716 Site Investigation Report	\$ 11,500
Total Estimated Fees	\$ 35,800

Additional services, if requested, will be considered out of scope and will result in additional costs that will be billed on a time and materials basis, in accordance with the unit rates that are attached to this proposal and incorporated into the Master Contract.

Thank you for opportunity to be of service. If you find this change order acceptable, please provide a Proceed Order, using the City's standard procedure and referencing this proposal. If you have any questions or need further information, please contact us.

Sincerely,



Donna M. Volk, PG, CPG
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- Attachment 1 NR 716 Site Investigation Work Plan
- Attachment 2 Rate Schedule



ATTACHMENT 1
NR 716 SITE INVESTIGATION WORK PLAN

Prepared for:
City of West Allis

Prepared by:
Ramboll Americas Engineering Solutions, Inc.
Milwaukee, Wisconsin

Date:
February 16, 2024

Project Number:
1940106525

NR 716 SITE INVESTIGATION WORK PLAN

CITY OF WEST ALLIS

**5032 WEST ROGERS STREET
WEST ALLIS, WISCONSIN**

BRRTS NO: TO BE DETERMINED

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- Figure 1: Site Location Map
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CERTIFICATION

I, Donna M. Volk, hereby certify that I am a hydrogeologist as that term is defined in s. NR 712.03 (1), Wis. Adm. Code, am registered in accordance with the requirements of ch. GHSS 2, Wis. Adm. Code, or licensed in accordance with the requirements of ch. GHSS 3, Wis. Adm. Code, and that, to the best of my knowledge, all of the information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code.



Signature

Title: Senior Managing Consultant

February 16, 2024

Date

1. INTRODUCTION

Ramboll Americas Engineering Solutions, Inc. (Ramboll) is submitting this Wisconsin Administrative Code (WAC) NR 716 Work Plan for site investigation activities for the City of West Allis property (the “site” or “property”) located at 5032 West Rogers Street in West Allis, Milwaukee County, Wisconsin. The scope and detail of the field investigation were established based on the requirements outlined in WAC NR 716.

The proposed investigation activities include collecting soil samples, installation of permanent NR 141 compliant groundwater monitoring wells, and groundwater monitoring in areas where petroleum volatile organic compounds (PVOCs), Resource Conservation and Recovery Act (RCRA) Metals, polychlorinated biphenyls (PCBs), and polycyclic aromatic hydrocarbons (PAHs) were identified during a limited subsurface environmental site assessment (ESA) in January 2024. The need for additional environmental investigation activities will be determined following the completion of this phase of work.

Additionally, due to the impacts identified during the limited ESA Ramboll submitted the notification of a historical release using Form 4400-225 (Notification for Hazardous Substance Discharge) on February 15, 2024. It is anticipated that the WDNR will issue a Responsible Party letter to the City of West Allis and assign a Bureau of Remediation and Redevelopment Tracking System (BRRTS) Activity Number and Federal Identification Number.

1.1 Site Location

The subject site is located at 5032 West Rogers Street in West Allis, Milwaukee County, Wisconsin. The property is described as a part of the NW quarter of the SE quarter of Section 2, in Township 6 North, Range 21 East, in the City of West Allis, Milwaukee County, Wisconsin (Figure 1). The site most recently operated as a solid waste refuse transfer station but was also used historically for municipal waste incineration. The site is bounded to the west by West Rogers Street and the former Teledyne Property located at 52** West Burnham, which also occupies the parcel to the north; South by the ABC Supply Company Inc., and undeveloped property to the east. The Parcel ID number and legal description obtained from the City of West Allis Property Record are as follows.

Parcel ID Number: 474-0003-000

Legal Description: ASSESSORS PLAT NO 272 LOT 2 & S 25 FT OF E 280 FT OF LOT 1 EXC N 475 FT OF LOT 2 BLK 2

1.2 Involved Parties

Site Owner/Operator: City of West Allis
Economic Development
7525 W. Greenfield Avenue
West Allis, WI 53214
Site Contact: Mr. Patick Schloss, Economic Development Executive Director,
(414) 302-8468, pschloss@westalliswi.gov

Consultant: Ramboll Americas Engineering Solutions, Inc.
234 W. Florida Street, Fifth Floor
Milwaukee, WI 53204
Contact: Ms. Donna Volk, (262) 901-3504, dvolk@ramboll.com

Agency: Wisconsin Department of Natural Resources
1027 W. St. Paul Avenue
Milwaukee, WI 53233

1.3 Background

The subject property is located at 5032 West Rogers Street in West Allis, Wisconsin (Figure 1). The Site is comprised of a single parcel of land totalling approximately 1.068 acres. The City acquired the property prior to 1949. The Site was historically developed with the City's incinerator. The incinerator was discontinued and razed in the 1950's. The Kinnickinnic Creek once flowed into the northwest corner of the Site from the north and turned to the east and flowed east through the middle of the Site to the east property line. The creek was rerouted to the east of the subject property via a concrete box culvert which daylights east of the Site. The Site is currently developed with an approximate 400 square foot, metal pole building that was most recently as a waste transfer station. The remaining part of the Site property is used for waste roll off storage.

WDNR Remediation and Redevelopment (RR) Sites web page indicate the facility is listed on UST and LUST databases. According to the RR Site, one 10,000-gallon fuel oil UST is registered at the facility as closed/removed. A petroleum release at the facility was reported to the WDNR on August 9, 2006 and assigned BRRTS #0341547895. The release was discovered during closure/removal of the UST. Approximately 200 tons of petroleum-impacted soil were removed and disposed of at a licensed landfill at that time. The WDNR closed BRRTS #0341547895 on October 12, 2006.

In January 2024, AECOM conducted a limited ESA of the site to evaluate potential site subsurface conditions for a possible redevelopment. The ESA field activities were conducted on January 29 and February 2, 2024. Four soil borings, SB-1 through SB-4 were advanced to depths of 10 to 15 feet (FT) below ground surface (bgs) on January 29, 2024. Two of the borings (SB-1 and SB-2) were converted into 1-inch diameter monitoring wells. Soil samples were collected for RCRA metals, volatile organic compounds (VOCs), PAHs, and PCBs. One round of groundwater samples was collected on February 2, 2024, for VOCs. Petroleum VOCs, PAHs, PCBs, and metals were detected above WAC NR 720 Residual Contaminant Levels (RCLs) in soils, as well as detections of VOCs in groundwater above WAC NR 140 groundwater quality standards on the Site. The highest concentrations of PVOCs, PAHs and PCBs were detected in soil and groundwater collected from SB-2/TW-2, which was located within the former creek bed. The results of the soil and groundwater analysis are summarized on the attached Table 1, Soil Analytical Results, and Table 2 Groundwater Analytical Results.

1.4 NR 716 Site Investigation Approach Overview

Based on the results of the ESA, Ramboll proposes to conduct site investigation activities which focus on assessing the magnitude and extent of soil and groundwater impacts around previously identified locations, as required under WAC NR 716. For sampling to achieve this goal, sampling will include:

- 1) additional soil sampling around locations identified as impacted; and
- 2) installation and sampling of NR 141 compliant monitoring wells.

Per WAC NR 716.07(7), currently available information and the impacts identified to date do not pose a risk of impacting public or private water supplies. Per WAC NR 716.07(8), the soil impacts are also not believed to pose an immediate risk of impact to species, habitat, or ecosystems sensitive to contamination, wetlands, or outstanding, exceptional resource waters, or site or facilities of historical or archaeological significance. The following summarizes the site investigation activities that will be performed.

2. SITE SETTING

2.1 Geologic Setting

Regional references indicate the native surficial soils in the vicinity of the subject property consist mainly of the Ozaukee-Morley-Mequon Association. The Ozaukee-Morley-Mequon Association consists of well-drained to somewhat poorly-drained soils that have a subsoil of silty clay loam and silty clay. These soils were formed in thin loess and silty clay loam glacial till on moraines (United States Department of Agriculture Soil Conservation Service, 1971). Glacial till deposits found below the surficial soils in the subject property vicinity are mapped as the Oak Creek Formation. The Oak Creek formation consists of fine-textured glacial till, lacustrine clay, silt, and sand, and some glaciofluvial sand and gravel (Mickelson, 1984).

The uppermost bedrock unit in the Site vicinity is the Silurian Racine Formation, which consists of medium to coarse grained, thin- to medium-bedded, very light to light gray dolomite (Evans, 2004). The depth to bedrock in the Site vicinity ranges from 150 feet to 200 feet below land surface (Evans, 2004).

The Site is underlain by 9 to 15 feet of re-worked soil/fill material. The fill material encountered in borings consisted of sandy gravel with reworked gravelly sandy silt with trace to some brick and organics. Broken glass and ceramics were also noted in SB-2. An odor was observed and elevated PID Units were observed in a strata from 10 ft to 14 ft bgs in SB-2/TW-2. An oil sheen was observed in SB-2/TW-2 at 10 ft to 11 ft bgs. A slight to moderate odor was observed in SB-4 at 7.5 to 9.0 ft bgs. These surface materials are underlain by native clayey silt.

Groundwater was encountered in the temporary wells at approximately 7.06 to 8.45 feet bgs at the Site. A slight odor and sheen were observed in groundwater purged from SB-2/TW-2. Based on the groundwater level measurements, the nearest surface water body and site topography, shallow groundwater in the vicinity of the Site likely flows to the south to southeast toward the Kinnickinnic Creek to the south and east, which is consistent with the regional topography and geographical setting.

2.2 Potential Migration Pathways and Receptors

The subject site is zoned M-1 for manufacturing use. Currently, there are no private wells or municipal water supplies at the site. The Kinnickinnic Creek is located just east of the site and is a potential receptor; however, based on the type of contaminants identified and the distance from the impacted area of the site, the potential for surface water impacts is not anticipated. The Creek connects to the Kinnickinnic River, located approximately one mile to the southeast of the subject property. Subsurface utilities that could represent contaminant migration pathways may include any subsurface utilities such as municipal water, gas, storm sewer, and sanitary sewer lines. Based on the type of contaminants identified at the site, vapor intrusion is possible if the site is redeveloped.

3. SCOPE OF WORK

The objective of the investigation is to determine the degree and extent of soil and groundwater impacted with PVOCs, PAHs, PCBs, and RCRA metals previously identified on site; further evaluate potential risks from past operations or activities on the site or from adjoining properties; and gather additional information in order to develop an appropriate WAC NR 718 Soil Management Plan (SMP) to ensure that impacted soil encountered during potential future development are handled appropriately. The following sections identify the tasks that have been developed for the site.

3.1 Notification for Hazardous Waste Discharge

Based on the detection of VOCs, PCBs, RCRA Metals, and PAHs identified in soil and groundwater during the January 2024 ESA, a *Notification for Hazardous Substance Discharge* (WDNR Form 4400-225) was submitted to the WDNR electronically on February 15, 2024.

3.2 Pre-Field Activities

Prior to on-site activities, a site-specific Health and Safety Plan (HASP) will be updated in accordance with Occupational Safety and Health Administration (OSHA) 29 CFR 1910 for the proposed field activities. Ramboll will review the HASP with all field personnel prior to commencing the field activities. Additionally, Ramboll will notify the state underground utility protection service (Digger's Hotline) to identify publicly owned utilities, if any, located on-site. Ramboll will review the proposed soil borings locations with on-site personnel and will contract with a private locator to clear the proposed soil boring locations relative to private utilities.

3.3 Soil Sampling

Five direct-push soil borings will be advanced to depths of approximately 5 feet below the water table and 2 feet into the apparent native soil, or to a depth of 15 to 20 feet bgs. Boring locations were selected based on previously identified soil RCL and groundwater standard exceedances. Proposed boring locations are depicted in Figure 2. The additional soil borings will be focused around SB-2/TW-2 where a high concentration of impacts was observed. Two additional soil borings will be contingency soil borings if contamination is observed going off-site onto the former Teledyne property. These locations may be adjusted in the field if access is limited due to trees/brush or stored materials or if subsurface obstructions or utilities are present. A drilling subcontractor will be retained to advance the 5 to 7 direct-push soil borings using a track-mounted hydraulic rig. The soil borings will be advanced utilizing a 2-inch diameter drive rod to collect a continuous soil sample. The soil samples will be collected inside of a plastic liner inserted into the end of the drive rod. Soil samples will be continuously collected from the borings and logged in the field per the Unified Soil Classification System. Soil characteristics (e.g., texture, color) along with visual and/or olfactory evidence of impacts will be noted on soil boring logs. The samples will be screened for VOCs using a photoionization detector (PID) with a 10.6 electron volt (eV) lamp. PID readings will be recorded on the soil boring logs. Two to three samples will be collected from each boring location. One soil sample will be collected from the upper 4 feet of the soil column, one soil sample will be collected at the highest PID reading or if no elevated PID readings are detected, from just above the water table. If there is an elevated PID reading, the third sample will be collected from a clean interval below.

The soil samples will be collected, labelled, sealed, and placed in appropriately preserved, laboratory-supplied containers. The samples will be placed in an insulated cooler on ice immediately after collection pending delivery under chain-of-custody procedures to the laboratory for analysis.

Soil samples collected will be analyzed for the following parameters:

- PVOCs – United States Environmental Protection Agency (USEPA) SW-846 Method 8260;
- PCBs – 8082 GCS;
- PAHs – USEPA SW-846 Method 8270;
- RCRA Metals – USEPA SW-846 Method 6010/7470.

Soil samples for the analysis of toxicity characteristic leaching procedure (TCPL) for lead, PAHs, PVOCs, and PCBs may also be collected from the closest soil boring to SB-2/TW-2 at a depth of 9-11 ft bgs for

waste disposal characterization. The soil samples will be submitted to a Wisconsin-certified laboratory for a standard turnaround time (10 business days).

3.4 Groundwater Monitoring Well Installation and Development

Three of the seven soil boring locations will be over drilled and converted into groundwater Monitoring wells (MW-1 through MW-3). The monitoring wells will be installed and developed in accordance with WAC NR 141. Well locations were selected based on previously identified soil RCL and NR 140 groundwater exceedances. Proposed monitoring well locations are depicted on Figure 2. These locations may be modified in the field if subsurface obstructions or utilities are present.

Wells will be installed utilizing 4.25-inch inner diameter hollow stem auger drilling methodology up to a maximum depth of 20 feet below grade. The groundwater monitoring wells will be constructed using 2-inch diameter, flush thread Schedule 40 polyvinyl chloride (PVC) riser pipe, and 10 feet of 2-inch diameter PVC factory cut (0.010-inch) slotted well screen placed to intersect the water table. Medium-grained silica sand will be placed from 6 inches below the bottom of the boreholes to 1 to 2 feet above the top of the well screens. Following placement of the medium-grained sand, 0 to 1 feet of fine sand will be placed above the coarse filter sand, followed by hydrated bentonite chips to the ground surface. Monitoring wells will be completed with standard stick-up steel protective casings.

The newly-installed groundwater monitoring wells will be developed to remove residual materials remaining in the wells after installation and to re-establish the natural hydraulic flow conditions of the formations, which may have been disturbed by the well construction. Following installation, the top of casing elevations of all the monitoring wells will be surveyed to vertical accuracies of 0.01 feet to aid in the determination of groundwater flow direction and assessment of groundwater contaminant movement and distribution. Monitoring well construction and well development details will be documented on Wisconsin Department of Natural Resources forms 4400-113A and 4400-113B, respectively.

3.5 Groundwater Sampling

The groundwater monitoring wells will be sampled following installation and development to assess groundwater quality. Prior to the groundwater sampling activities, depth to groundwater measurements will be collected using a Heron electronic water level sensor, Model ET-94 (accuracy 0.01 feet) or similar equipment. The depth to groundwater, as well as the total well depth, will be recorded in a bound field notebook.

Ramboll will collect groundwater samples using low-flow sampling via peristaltic pump with disposable polyethylene tubing. Field parameters including dissolved oxygen (DO), pH, specific conductance, and oxidation reduction potential (ORP) will be measured at each well and recorded. Non-dedicated groundwater sampling equipment will be thoroughly decontaminated between each sampling location using an Alconox[®] solution and rinsed in deionized water. New disposable polyethylene tubing will be utilized for sample collection for each well location. A new pair of nitrile gloves will be used during the collection of each sample to minimize the potential for cross-contamination.

The groundwater samples will be collected, labelled, sealed, and placed in appropriately preserved, laboratory-supplied containers. Additionally, one quality assurance/quality control (QA/QC) duplicate groundwater sample and QA/QC laboratory trip blank will be submitted for VOC analysis. The samples will be placed in an insulated cooler on ice immediately after collection pending delivery under chain-of-custody procedures to the laboratory for analysis.

Groundwater samples collected from the NR 141-compliant monitoring wells will be analyzed for the following parameters:

- PVOCs – USEPA SW-846 Method 8260;
- PAHs – USEPA SW-846 Method 8270; and
- RCRA Metals – USEPA SW-846 Method 6020.

Groundwater samples collected from the small-diameter monitoring wells will be analyzed for PVOCs only.

The groundwater samples will be submitted to a Wisconsin-certified laboratory for a standard turnaround time (10 business days).

3.6 Investigation Derived Waste Management

The excess soil and groundwater generated during the investigation (e.g., soil cuttings, wash water, and purge water) will be placed into appropriately labelled 55-gallon drums, which will be temporarily staged on site until proper disposal methods are determined.

3.7 Reporting

Following completion of the investigation activities described above and receipt of all the analytical results, Ramboll will review the data collected as part of the investigation activities and compare that information to applicable WAC NR 720 RCLs and NR 140 groundwater quality standards. The results will be incorporated into a Site Investigation (SI) Report prepared in conformance with WAC NR 716. The SI Report will include the site investigation results, including documentation of field activities, soil boring logs, site and boring location figures, tabulated analytical laboratory results, geologic cross-sections, an evaluation of the data, conclusions, and recommendations.

4. SCHEDULING

Due to the City's expedited schedule on the proposed public works facility, Ramboll has tentatively planned the drilling and groundwater sampling field activities for mid to late February 2024. The laboratory analytical results will be available within 10 business days of sample collection. The draft SI report will be completed within approximately one month following receipt of laboratory results.

TABLES

Table 1. Soil Analytical Results
 City of West Allis Waste Transfer Station
 5032 West Rogers Street, West Allis, WI
 Ramboll Project No. 1940106525

Parameters	Soil RCLs			BTV	SB-01 (2-4)	SB-01 (5-7)	SB-02 (2-4)	SB-02 (9-11)	SB-03 (2-4)	SB-03 (6-8)	SB-04 (2-4)	SB-04 (7-9)
	Non-Industrial Direct Contact	Industrial Direct Contact	Groundwater Pathway		1/29/2024	1/29/2024	1/29/2024	1/29/2024	1/29/2024	1/29/2024	1/29/2024	1/29/2024
VOCs (µg/kg)												
Benzene	1,600	7,070	5.1	--	<13.6	<18.8	<15.6	12,800 C	<13.4	<15.4	<14.7	<17.7
sec-Butylbenzene	145,000	145,000	--	--	<19.7	<27.1	<22.5	1,950	<19.3	<22.2	<21.1	213
n-Butylbenzene	108,000	108,000	--	--	<26.3	<36.2	<30.0	11,700	<25.7	<29.7	<28.2	<34.1
Ethylbenzene	8,020	35,400	1,570	--	<13.6	<18.8	<15.6	35,000 C	<13.4	<15.4	<14.7	<17.7
Isopropylbenzene	268,000	268,000	--	--	<15.5	<21.3	<17.7	6,300	<15.2	<17.5	<16.6	70.3 J
p-Isopropyltoluene	162,000	162,000	--	--	<19.5	<26.9	<22.3	1,800	<19.1	<22.0	<20.9	<25.3
Naphthalene	5,520	24,100	658.2	--	102 J	<33.2	<27.6	10,400 C	78.2 J	125 J	57.4 J	<31.3
n-Propylbenzene	264,000	264,000	--	--	<13.8	<19.0	<15.7	20,700	<13.5	<15.5	<14.8	<17.9
Toluene	818,000	818,000	1,107.2	--	14.8 J	<19.9	<16.5	45,000 C	<14.2	<16.3	27.8 J	<18.8
1,2,4-Trimethylbenzene ¹	219,000	219,000	493.9	--	20.6 J	<23.5	<19.5	150,000 C	<16.7	<19.3	23.4 J	<22.2
1,3,5-Trimethylbenzene ¹	182,000	182,000	493.9	--	<18.5	<25.4	<21.1	46,400 C	<18.1	<20.9	<19.8	<24.0
o-Xylene	434,000	434,000	--	--	21.9 J	<23.7	<19.7	53,900	<16.8	<19.4	20.5 J	<22.3
m-&p-Xylene ²	388,000	388,000	--	--	27.0 J	<33.3	<27.7	174,000	<23.7	<27.3	37.2 J	<31.4
Xylenes, total	260,000	260,000	3,960	--	48.9 J	<57.0	<47.3	228,000 C	<40.6	<46.8	57.7 J	<53.8
PAHs (µg/kg)												
Acenaphthene	3,590,000	45,200,000	--	--	2,620	<2.8	6.7 J	12,600	24.1 J	88.8	19.3 J	68.0 J
Acenaphthylene	--	--	--	--	<181	<2.7	16.6 J	<1180	6.4 J	9.7 J	92.7	<26.2
Anthracene	17,900,000	100,000,000	196,949.2	--	4,310	<2.7	47.3	40,200	76.9	156	117	<25.8
Benzo(a)anthracene	1,140	20,800	--	--	7,740 A	11.6 J	222	94,100	188	260	380	130 J
Benzo(a)pyrene	115	2,110	470	--	7,780 L2 A,B,C	12.8 J L2	249 L2 A	122,000 L2 C	173 L2 A	246 L2	464 L2 A	65.6 J L2
Benzo(b)fluoranthene	1,150	21,100	478.1	--	9,480 A,C	19.7 J	293	133,000 C	248	318	657 C	118 J
Benzo(ghi)perylene	--	--	--	--	4,900	14.1 J	245	93,700	140	174	469	48.6 J
Benzo(k)fluoranthene	11,500	211,000	--	--	3,930	6.9 J	173	56,900	102	133	281	44.7 J
Chrysene	115,000	2,110,000	144.2	--	8,380 C	17.2 J	249 C	102,000 C	233 C	304 C	451 C	231 C
Dibenzo(a,h)anthracene	115	2,110	--	--	1,190 J A	<3.0	60.4	16,200	37.1	39.3	93.5	<28.7
Fluoranthene	2,390,000	30,100,000	88,877.8	--	18,500	26.2	412	204,000 C	595	770	643	348
Fluorene	2,390,000	30,100,000	14,829.9	--	2,250	<2.6	11.0 J	15,400 C	4.5 J	70.1	21.1 J	<24.9
Indeno(1,2,3-cd)pyrene	1,150	21,100	--	--	3,680 A	8.9 J	167	63,100	102	126	304	<43.3
1-Methylnaphthalene	17,600	72,700	--	--	390 J	3.4 J	52.5	56,000	42.0	42.5	55.7 J	<30.3
2-Methylnaphthalene	239,000	3,010,000	--	--	650 J	4.5 J	85.1	85,800	63.0	56.4	87.4	<30.4
Naphthalene	5,520	24,100	658.2	--	2,400 C	5.7 J	61.3	93,600 C	46.1	45.7	75.7	48.3 J D3
Phenanthrene	--	--	--	--	14,700	16.0 J	191	136,000	603	693	271	<23.8
Pyrene	1,790,000	22,600,000	54,545.5	--	14,300	21.0 J	324	165,000 C	435	589	559	278
Metals (mg/kg)												
Arsenic ³	0.677	3.00	0.58	8.3	5.9 A,B,C	8.8 C,D	30.8 A,B,C,D	8.5 C,D	2.0 J A,C	4.5 J D3 C	13.2 A,B,C,D	7.9 C
Barium ³	15,300	100,000	164.8	364	117 P6	90.6	982 C,D	136	56.9	55.6	345 C	55.5
Cadmium ³	71	985	0.75	1.07	0.82 C	0.56 J	2.1 C,D	1.7 C,D	<0.13	<0.29 D3	0.55 J D3	<0.16
Chromium	--	--	360,000	43.5	21.2 M0, R1	28.5	137 D	90.3 D	11.9	11.1	40.5	22.3
Lead ³	400	800	27	51.6	248 P6, R1 C,D	38.2 C	1,680 A,B,C,D	616 C,D	9.4	10.5	233 C,D	14.4
Mercury	3.13	3.13	0.21	--	0.11	0.12	0.32 C	0.13 M0, R1	<0.010	<0.011	0.048	0.016 J
Selenium	391	5,840	0.52	--	<1.4	1.7 J C	<2.9 D3	<1.7	<1.3	<2.9 D3	<2.7 D3	<1.6
Silver	391	5,840	0.85	--	0.38 J	<0.38	1.2 J D3 C	1.1 J C	<0.30	<0.68 D3	<0.63 D3	<0.37
PCBs (µg/kg)												
PCB-1242 (Aroclor 1242)	235	972	--	--	<16.3	<19.6	<17.7	<206	17.5 J	18.3 J	<17.0	<185
PCB-1254 (Aroclor 1254)	239	988	--	--	57.5	<19.6	20.9 J	10,100	286 A	183	<17.0	<185
PCB-1260 (Aroclor 1260)	243	1,000	--	--	22.2 J	<19.6	26.9 J	<206	<16.2	<17.5	<17.0	<185
Polychlorinated Biphenyls (High Risk)	234	967	9.384	--	79.7 C	<19.6	47.9 J C	10,100 C	304 A,C	201 C	<17.0	<185

Notes:

- VOCs = Volatile Organic Compounds
- PAHs = Polynuclear Aromatic Hydrocarbons
- PCBs = Polychlorinated Biphenyls
- RCL = Residual Contaminant Level
- BTV = Background Threshold Value
- µg/kg = micrograms per kilogram
- mg/kg = milligrams per kilogram
- ¹ Groundwater Pathway RCL listed is for 1,2,4- and 1,3,5-Trimethylbenzenes combined.
- ² Direct Contact RCL listed is for the more stringent m-Xylene.
- A** Parameter exceeds NR 720 Residual Contaminant Level (RCL) for Non-Industrial Direct Contact.
- B** Parameter exceeds NR 720 RCL for Industrial Direct Contact.
- C** Parameter exceeds NR 720 RCL for Groundwater Pathway.
- D** Parameter exceeds Surficial BTV for metals.
- J** Estimated concentration at or above the LOD and below the LOQ.
- No RCL or Surficial BTV established.
- #N/A = Not analyzed
- Soil RCLs and surficial BTVs established by the WDNR RR program using the EPA's RSL web-calculator with WAC NR 720 default parameters (WDNR PUB-RR-890, June 2014 - updated RCL spreadsheet, December 2018).

Table 2. Groundwater Analytical Results

City of West Allis Waste Transfer Station
5032 West Rogers Street, West Allis, WI
Ramboll Project No. 1940106525

Parameters	NR 140 Standards		TW01	TW02
	ES	PAL	02/02/24	02/02/24
VOCs (µg/L)				
Benzene	5	0.5	<u>3.1</u>	1110
sec-Butylbenzene	--	--	< 0.42	1.5 J
Ethylbenzene	700	140	0.50 J	83.1
Isopropylbenzene	--	--	< 1.0	15.1
Naphthalene	100	10	< 1.9	<u>20.4</u>
n-Propylbenzene	--	--	< 0.35	33.1
Styrene	100	10	< 0.36	3.5
Toluene	800	160	1.2	<u>190</u>
1,2,4-Trimethylbenzene ¹	480	96	1.0	<u>239</u>
1,3,5-Trimethylbenzene ¹	480	96	< 0.36	27.3
m&p-Xylene ²	2,000	400	2.1 J	378
o-Xylene ²	2,000	400	0.62 J	113
Xylenes, total	2,000	400	2.7 J	<u>491</u>

Notes:

Only detected parameters are displayed in the table above.

VOC = Volatile Organic Compound

Bold value = NR 140 ES Exceedance

Italic value = NR 140 PAL Exceedance

µg/L = micrograms per liter

PAL = Preventive Action Limit

ES = Enforcement Standard

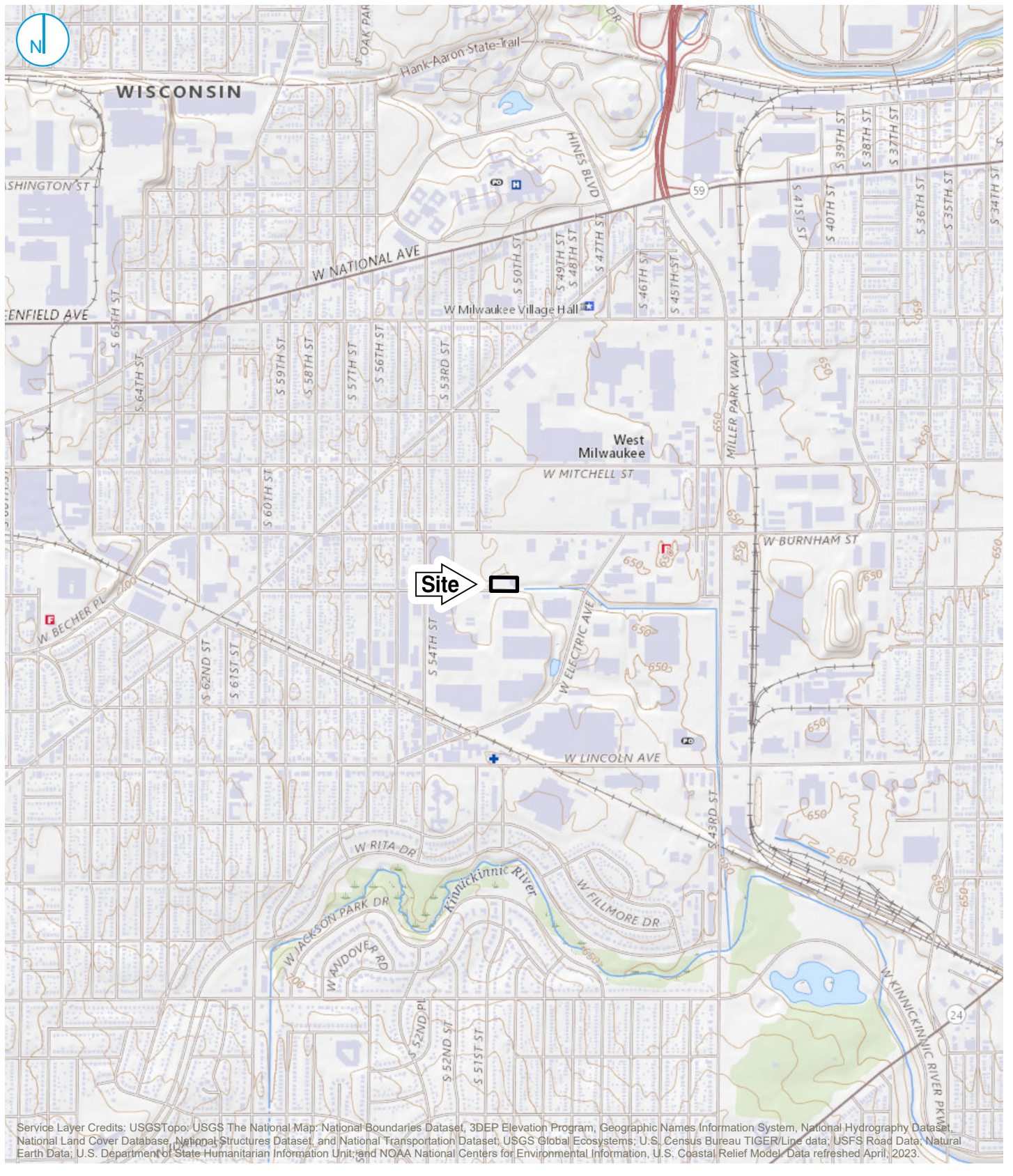
J = The reported result is an estimated value.

-- = No NR 140 ES or PAL established.

¹ Standards are for 1,2,4- and 1,3,5-Trimethylbenzene

² Standards are for Total Xylenes (-m, -p and -o).

FIGURES



Service Layer Credits: USGSTopo: USGS The National Map, National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National Structures Dataset, and National Transportation Dataset; USGS Global Ecosystems; U.S. Census Bureau TIGER/Line data; USFS Road Data; Natural Earth Data; U.S. Department of State Humanitarian Information Unit; and NOAA National Centers for Environmental Information, U.S. Coastal Relief Model. Data refreshed April, 2023.

Map Scale: 1:25,000 | Map Center: 87°58'37"W 43°0'31"N



Site Limits

Note
Site limits correspond to City of West Allis tax parcel: 474-0003-000



SITE LOCATION MAP

FIGURE 1

City of West Allis Transfer Station
5032 W Rogers Street
City of West Allis, Wisconsin

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.
A RAMBOLL COMPANY





FORMER TELEDYNE MOTORS SITE



- Site Limits
- Approximate Limits of Former Kinnickinnic Creek Chanel (within Site Limits)
- Approximate Locations**
- Soil Probe/Small Diameter Monitoring Well
- Soil Probe
- Proposed Monitoring Well
- Proposed Soil Boring
- Proposed Off-Site Contingency Soil Boring

Notes

Site limits correspond to City of West Allis tax parcel: 474-0003-000

The Former Kinnickinnic Creek Chanel was digitalized by reference of the City of West Allis "Proposed Relocation of Kinnickinnic Creek" plan document dated December 5, 1943.



PROPOSED INVESTIGATION SAMPLE LOCATIONS

City of West Allis Transfer Station
5032 W Rogers Street
City of West Allis, Wisconsin

FIGURE 2



**ATTACHMENT 2
RATE SCHEDULE**

Ramboll Project Fees

Ramboll proposes the following fee schedule for work conducted under RFP #22-006:

Table 1: Labor

Labor Category (Invoice Title)	Labor Rate	Estimated % Time
Project Principal (Principal)	\$200	1%
Senior Managing Consultant	\$175	2%
Managing Consultant	\$155	15%
Sr. Consultant 2	\$130	5%
Sr. Consultant 1	\$120	5%
Engineer/Geologist (Consultant 3)	\$110	20%
Engineer/Geologist (Consultant 2)	\$100	20%
Field Staff (Consultant 1)	\$85	20%
CAD/GIS Drafting	\$80	7%
Administrative Support	\$65	5%

Table 2: Field Instruments/Equipment¹

Description	Units	Unit Cost
PID (10.6 ev lamp)	day	\$70
Water Level Meter	day	\$30
0.45-micron filters	each	\$25
Peristaltic Pump	day	\$50
Concrete Corer	day	\$150
Personal Vehicle Mileage (federal rate) ²	mile	\$0.585

Notes:

1: Other supplies/equipment will be rented/purchased as needed and the invoices will be passed through to the WDNR with no mark-up applied.

2: Based on project needs, distance to site and other factors, Ramboll may elect to rent a vehicle for field work. Typical vehicle rental rates, based on our company preferred provider fee schedule are between \$40 and \$70/day. Gasoline is additional.

A 10% mark-up will be added to all subcontractor services.