Amadi, Eric A - DNR

From: Amadi, Eric A - DNR
Sent: Monday, November 11, 2024 4:52 PM
To: Michelle Peters; Patrick Schloss
Cc: Melinda Dejewski; Lee Anderson; Jon Wallenkamp; Dave Wepking; Katlyn Nohr; Alessi, Timothy G - DNR
Subject: RE: Review of NR 716 SIR, NR 722 RAOR, NR 724 RAP. Revision 1; and NR 718 MMP, West Allis Waste Transfer Station, 5032 West Rogers Street, West Allis, WI 53219. BRRTS #: 02-41-594132; FID #: 341368390
Attachments: Figures_Revised Only_2024-10-29.pdf; T2_Soil Analytical Results_2024-10-29.pdf; 02-41-594132_NR 718 Material Movement Exemption_2024-10-29_revised.pdf

Hi Michelle and Patrick:

Please see the DNR comments below in **blue fonts** (following your responses).

Let us know if you have questions.

Thanks.

Eric

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Visit our survey at http://dnr.wi.gov/customersurvey to evaluate how I did.

Eric Amadi
Phone: (414) 405-0752
eric.amadi@wisconsin.gov

From: Michelle Peters <mpeters@ramboll.com>
Sent: Tuesday, October 29, 2024 1:56 PM
To: Amadi, Eric A - DNR <Eric.Amadi@wisconsin.gov>; Patrick Schloss <pschloss@westalliswi.gov>
Cc: Melinda Dejewski <MDejewski@westalliswi.gov>; Lee Anderson <Lee@kuenyarch.com>; Jon Wallenkamp <JonW@kuenyarch.com>; Dave Wepking <dwepking@westalliswi.gov>; Katlyn Nohr <Katlyn.Nohr@Ramboll.com>; Alessi, Timothy G - DNR <timothy.alessi@wisconsin.gov>
Subject: RE: Review of NR 716 SIR, NR 722 RAOR, NR 724 RAP. Revision 1; and NR 718 MMP, West Allis Waste Transfer Station, 5032 West Rogers Street, West Allis, WI 53219. BRRTS #: 02-41-594132; FID #: 341368390

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Hello Eric and Tim,

Thank you for this response letter and for your time to discuss the Department's feedback. They City of West Allis appreciates WDNR's collaboration on this redevelopment project. Based on the discussion during the call on October 24th, 2024, we are providing the responses below on each of the comments received. In support of these responses, revised figures and tables to accompany the SIR/RAOR/RAP report are attached. WDNR comments are displayed in

bold and responses are provided thereafter. We look forward to your review of these responses in anticipation of a planned start to construction activities in early November 2024. If Ramboll or the City of West Allis can provide any further clarity on the topics below, please do not hesitate to reach out.

Kind regards,
Michelle

Soil

Soil sample at SB-2 (9 - 11 feet bgs) showed elevated PCBs level. Determine the extent of PCBs.
There is a single soil sample (in boring SB-02) in which the detected concentration of PCBs exceeds the industrial direct contact (IDC) RCL. This sample came from deeper than 4 feet and as such is not within the direct contact interval. The exceedance contours on Ramboll's figures have been revised to include a contour for detections of PCBs relative the direct contact exceedances, regardless of sample depth. As shown on revised Figure 5B, there is a single exceedance IDC RCL exceedance for PCBs and PCBs above the direct contact interval are otherwise delineated to fill soils placed within the former Kinnickinnic Creek Channel.

Based on borings conducted for this investigation, the Site is underlain by 4 to 12 feet of re-worked soil/fill material. The observed depth of fill was greatest, approximately 10 to 12 feet, in soil borings advanced within the extent of the former Kinnickinnic Creek Channel. Based on observed thickness of fill, it is Ramboll's understanding that the former creek channel was filled in 1946 as part of the rerouting of the Kinnickinnic Creek Channel to the east of the site, prior to the placement of surficial fill across the site in support of its development as the City of West Allis waste incinerator facility. As such, the characteristics of the deeper fill within the former creek channel are somewhat different from other fill soils present at the site. Fill materials of varying thickness across the site were observed to be underlain by native silty clay.

Based on the delineation of PCB concentrations above the IDC RCL to within the former Kinnickinnic Creek Channel, specifically to a single sample (SB-02 [9-11']), and the understanding that deeper fill within the former channel was placed prior to the placement of surficial fill site-wide, the samples from within the former channel are representative of localized conditions and not site-wide conditions. PCBs were not detected above the IDC RCL in soil samples from MW-1 to the east, also collected from within the former channel. As shown on Figure 5B, the extent of PCBs at concentrations above the IDC RCL are defined to a limited area in the western portion of the former Kinnickinnic Creek Channel. Consistent with the approved remedy including a site-wide direct contact barrier, further sampling in this area is not warranted.

DNR Additional Comment:
The DNR requests additional PCBs vertical delineation of the impacts found at SB-2 (will be a new location within the Creek Channel but nearby due to the temporary well, TW-2), since this is a coordinated approval with USEPA. Figures and/or Cross Sections may be updated (based on the results).

.

On soil tables, compare soil concentrations to all RCLs (regardless of depth). Ramboll has added data flags for all RCLs to the tables, regardless of sample depth.

DNR Additional Comment:
Thank you for addressing our concern

On soil tables, include the columns "saturated vs. non-saturated" and "soil types (Fill/Native)". Ramboll has added "saturated vs. non-saturated" and "soil types (Fill/Native)" to each soil sample presented in the data tables.

DNR Additional Comment:
Thank you for addressing our concern

For fill related impacts, the RCL lines need to be extended to the site boundaries. As discussed, Ramboll has adjusted the contours for PAHs and metals for all RCLs to extend to the property boundaries, consistent with our understanding that these constituents are associated with site-wide fill placement. Exceedances of PCBs and PVOCs are defined to discrete areas. As such, those contours do not extend to the property boundary.

DNR Additional Comment:
PCBs RCL lines > IDC need to be dashed and pushed further towards the east, near MW-1; west, towards property boundary line and near SB-7; south, towards SB-6 and MW-3; and north, near SB-5 and MW-2 - Figure 5B

Similar exercise applies to VOCs RCL lines in Figure 5A.

Lines should not extend offsite at SB-7 and SB-8. Samples SB-07 and SB-08, which are located on the north and west-adjoining former Teledyne Motors property, have been excluded from site contours. This data will be presented in a forthcoming submittal related to the adjoining former Teledyne property.

DNR Additional Comment:
Thank you for addressing our concern

Groundwater
Proposal to re-install wells after redevelopment is acceptable. Noted.

DNR Additional Comment:
No further comment

A work plan will need to be submitted for the post-development well network. A work plan describing proposed post-construction groundwater monitoring, including the proposed placement/replacement of monitoring wells on the site and analytical sampling, will be provided to WDNR following the completion of construction activities on this site.

DNR Additional Comment:
Thank you in advance for addressing our concern.

Monitoring wells (MW-1 and TW-2) should be sampled for PCBs prior to abandonment. Ramboll is planning to sample these two wells for PCBs prior to the start of construction activities. For purposes of establishing baseline pre-construction conditions in groundwater, we anticipate using USEPA Method 8082A. Please confirm as soon as possible whether this method is acceptable to WDNR.

DNR Additional Comment:
Thank you for submitting the PCBs groundwater monitoring results for monitoring wells MW-1 and TW-2

Vapor
There are NAPL indicators of Benzene and Naphthalene within screening range of the proposed building. This will need to be taken into consideration for vapor screening of the proposed building. WDNR's letter uses the term 'building', implying that it is an 'occupied building', as described in vapor intrusion guidance document RR-800, but this is a cold storage structure, so we do not agree that the terms are equivalent. Per Wis. Admin. Code § NR 716.11(5)(g), sub-slab vapor sampling is required when soil, soil gas, or groundwater indicates vapor may migrate to the foundation of an occupied building. The future structure is a cold-storage structure intended to house seasonal tools and equipment in connection with the nearby Department of Public Works (DPW) facility, currently under construction. It will be accessed only by DPW employees, and only on a very limited basis for purposes of moving the seasonal tools. The figures have been revised to refer to the future structure as an "unoccupied storage structure" to clarify that this is not an occupied building and is accordingly not subject to the requirement for VI assessment as described in RR-800.

DNR Additional Comment:
Even though employees will only access the building on a limited basis, it still counts as "occupied" for our purposes and thus, our original vapor comments still stand.

Emerging Contaminants
The DNR has reviewed the emerging contaminant statement and evaluation contained within the Report and agrees that based on the historic use of the property, it is unlikely that emerging contaminants were used, stored, or handled on the site. Therefore, no sampling is needed to complete the investigation at this time. This decision may be reevaluated if new information is received in the future. Noted.

DNR Additional Comment:
No further comment

RAOR/RAP

The DNR concurs with the recommendation in the Report that implementation of a barrier cap sitewide is appropriate for the Site. Noted.

DNR Additional Comment:
No further comment

Soil Management Plan (MMP)
Include the exemption to place material within three (3) feet of water table (Locational Criteria). This selection has been included in the revised Form 4400-315 (attached).

DNR Additional Comment:
Thank you for addressing our concern

Uncheck the box for "Use of Industrial Land Use Soil Standards." This selection has been unchecked in the revised Form 4400-315 (attached).

DNR Additional Comment:
Thank you for addressing our concern

Other DNR Comments
In accordance with regulatory authority, the DNR has notified the USEPA of the PCBs detected at the Site. We will provide you with updates when we receive information from the USEPA.
Noted.

DNR Additional Comment:
No further comment

Michelle Peters, PE*

Managing Consultant

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* PE - CO, UT, WI

Classification: Confidential

From: Amadi, Eric A - DNR <Eric.Amadi@wisconsin.gov>
Sent: Monday, October 21, 2024 11:41 AM
To: Patrick Schloss <pschloss@westalliswi.gov>
Cc: Melinda Dejewski <MDejewski@westalliswi.gov>; Michelle Peters <mpeters@ramboll.com>; Lee Anderson <Lee@kuenyarch.com>; Jon Wallenkamp <JonW@kuenyarch.com>; Dave Wepking <dwepking@westalliswi.gov>; Katlyn Nohr <Katlyn.Nohr@Ramboll.com>; Alessi, Timothy G - DNR <timothy.alessi@wisconsin.gov>
Subject: Review of NR 716 SIR, NR 722 RAOR, NR 724 RAP. Revision 1; and NR 718 MMP, West Allis Waste Transfer Station, 5032 West Rogers Street, West Allis, WI 53219. BRRTS #: 02-41-594132; FID #: 341368390

Hi Patrick:

Please see the attached letter regarding the referenced subject. If you have questions, please let us know.

Thanks.

Eric

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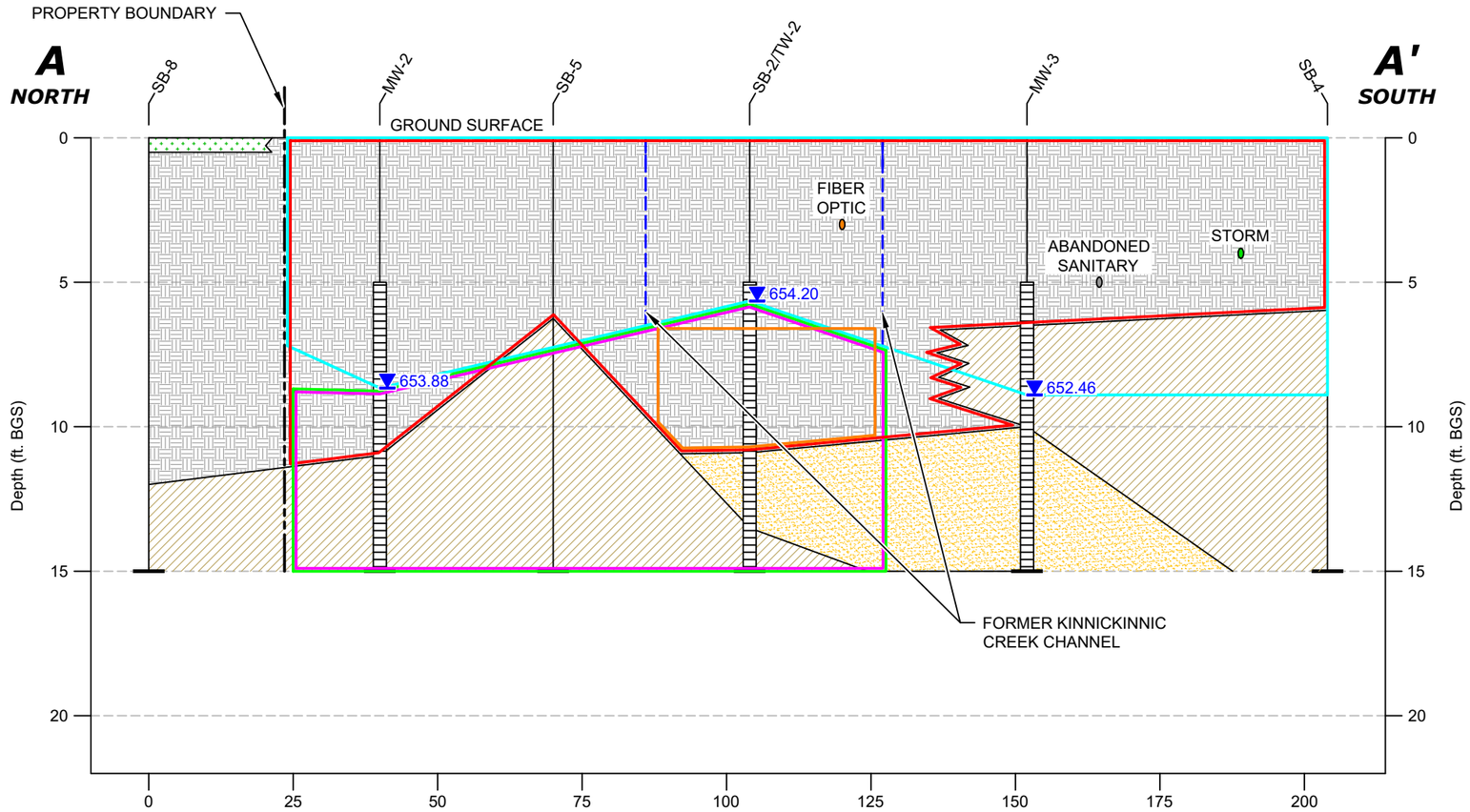
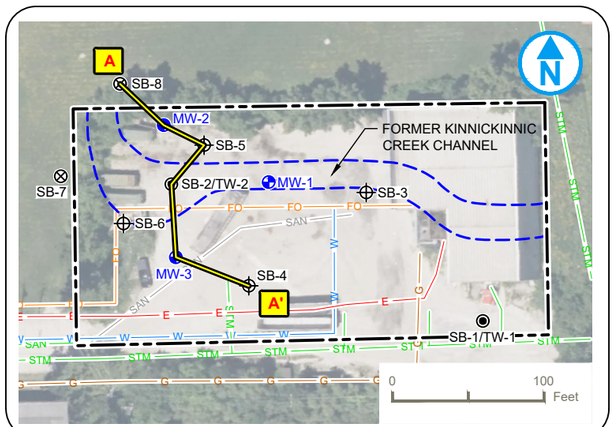
Visit our survey at http://dnr.wi.gov/customersurvey to evaluate how I did.

Eric Amadi
Phone: (414) 405-0752
eric.amadi@wisconsin.gov





SITE OVERVIEW

Aerial Imagery Source: Bing Maps © Microsoft Corporation 2024.

NOTES:
FT. AMSL = FEET ABOVE MEAN SEA LEVEL.
FT. BGS = FEET BELOW GROUND SURFACE.
UTILTY DEPTHS ARE APPROXIMATE.
ALL LITHOLOGIC CONTACTS AND EXCEEDANCE CONTOURS ARE INFERRED.

SAMPLE LOCATION
END OF BORING
LITHOLOGY CONTACT
SCREENED INTERVAL

TOPSOIL
FILL
CLAY/SILTY CLAY
SAND/SANDY CLAY/SAND-SILT MIXTURES
POTENTIOMETRIC SURFACE (FT. AMSL) - MARCH 19, 2024

NR 720 INDUSTRIAL AND NON-INDUSTRIAL DIRECT CONTACT EXCEEDANCE CONTOUR
NR 720 INDUSTRIAL DIRECT CONTACT EXCEEDANCE CONTOUR - PCBs (High Risk) and VOCs
NR 720 GROUNDWATER PATHWAY EXCEEDANCE CONTOUR
NR 140 PREVENTIVE ACTION LIMIT EXCEEDANCE CONTOUR
NR 140 ENFORCEMENT STANDARD EXCEEDANCE CONTOUR

GEOLOGIC CROSS-SECTION A-A'

CITY OF WEST ALLIS TRANSFER STATION
5032 WEST ROGERS STREET
WEST ALLIS, WISCONSIN

FIGURE 04A

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.
A RAMBOLL COMPANY
RAMBOLL

L:\Loop Project Files_CAD\1941\940106525_West Allis_WTS_PH\I\2024-10\04A_Geologic Cross-Section A-A'.dwg
DESIGNER: HJW
DATED: 10/28/2024
PROJECT: 1940106525

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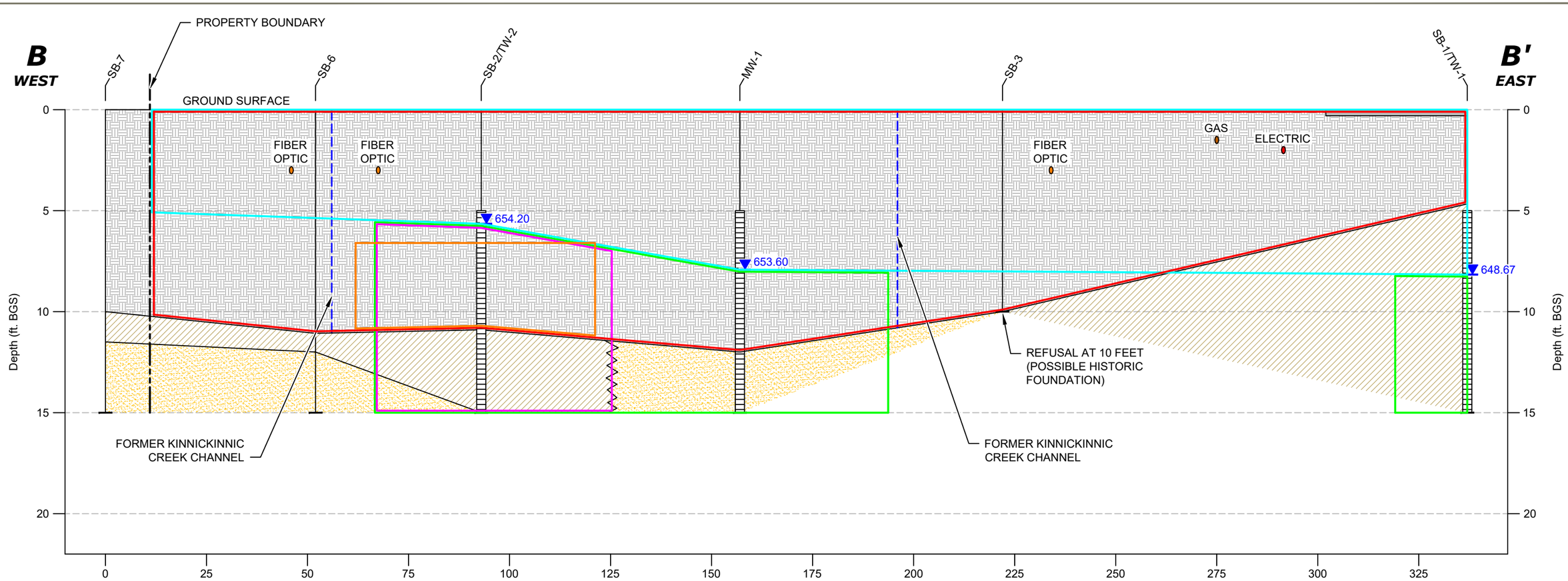
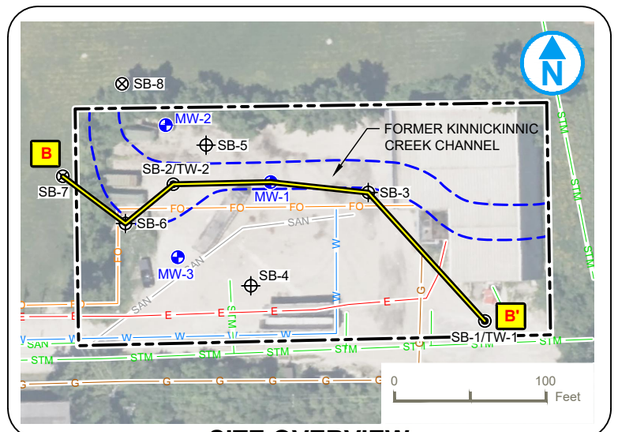


Horizontal Distance (ft.)
Vertical Exaggeration=5x



SITE OVERVIEW

Aerial Imagery Source: Bing Maps © Microsoft Corporation 2024.

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UTILTY DEPTHS ARE APPROXIMATE.
ALL LITHOLOGIC CONTACTS AND EXCEEDANCE CONTOURS ARE INFERRED.

SAMPLE LOCATION
END OF BORING
LITHOLOGY CONTACT
SCREENED INTERVAL

TOPSOIL
FILL
CLAY/SILTY CLAY
SAND/SANDY CLAY/SAND-SILT MIXTURES
POTENTIOMETRIC SURFACE (FT. AMSL) - MARCH 19, 2024

NR 720 INDUSTRIAL AND NON-INDUSTRIAL DIRECT CONTACT EXCEEDANCE CONTOUR
NR 720 INDUSTRIAL DIRECT CONTACT EXCEEDANCE CONTOUR - PCBs (High Risk) and VOCs
NR 720 GROUNDWATER PATHWAY EXCEEDANCE CONTOUR
NR 140 PREVENTIVE ACTION LIMIT EXCEEDANCE CONTOUR
NR 140 ENFORCEMENT STANDARD EXCEEDANCE CONTOUR

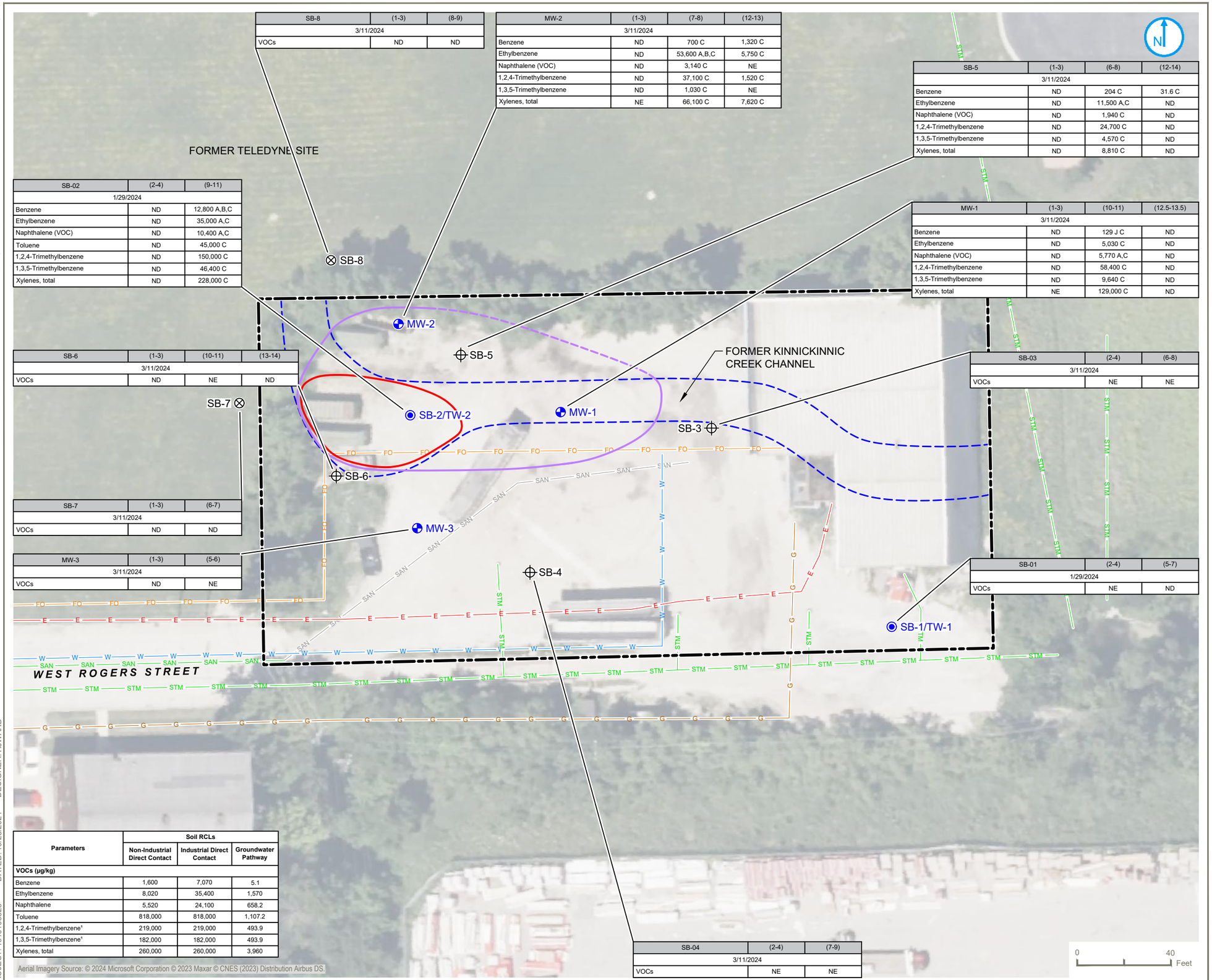
GEOLOGIC CROSS-SECTION B-B'

CITY OF WEST ALLIS TRANSFER STATION
5032 WEST ROGERS STREET
WEST ALLIS, WISCONSIN

FIGURE 04B

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.
A RAMBOLL COMPANY
RAMBOLL

DESIGNER: HJW
DATED: 10/28/2024
PROJECT: 1940106525



SB-8	(1-3)	(8-9)
3/11/2024		
VOCs	ND	ND

MW-2	(1-3)	(7-8)	(12-13)
3/11/2024			
Benzene	ND	700 C	1,320 C
Ethylbenzene	ND	53,600 A,B,C	5,750 C
Naphthalene (VOC)	ND	3,140 C	NE
1,2,4-Trimethylbenzene	ND	37,100 C	1,520 C
1,3,5-Trimethylbenzene	ND	1,030 C	NE
Xylenes, total	NE	66,100 C	7,620 C

SB-5	(1-3)	(6-8)	(12-14)
3/11/2024			
Benzene	ND	204 C	31.6 C
Ethylbenzene	ND	11,500 A,C	ND
Naphthalene (VOC)	ND	1,940 C	ND
1,2,4-Trimethylbenzene	ND	24,700 C	ND
1,3,5-Trimethylbenzene	ND	4,570 C	ND
Xylenes, total	ND	8,810 C	ND

SB-02	(2-4)	(9-11)
1/29/2024		
Benzene	ND	12,800 A,B,C
Ethylbenzene	ND	35,000 A,C
Naphthalene (VOC)	ND	10,400 A,C
Toluene	ND	45,000 C
1,2,4-Trimethylbenzene	ND	150,000 C
1,3,5-Trimethylbenzene	ND	46,400 C
Xylenes, total	ND	228,000 C

MW-1	(1-3)	(10-11)	(12.5-13.5)
3/11/2024			
Benzene	ND	129 J C	ND
Ethylbenzene	ND	5,030 C	ND
Naphthalene (VOC)	ND	5,770 A,C	ND
1,2,4-Trimethylbenzene	ND	58,400 C	ND
1,3,5-Trimethylbenzene	ND	9,640 C	ND
Xylenes, total	NE	129,000 C	ND

SB-6	(1-3)	(10-11)	(13-14)
3/11/2024			
VOCs	ND	NE	ND

SB-03	(2-4)	(6-8)
3/11/2024		
VOCs	NE	NE

SB-7	(1-3)	(6-7)
3/11/2024		
VOCs	ND	ND

MW-3	(1-3)	(5-6)
3/11/2024		
VOCs	ND	NE

SB-01	(2-4)	(5-7)
1/29/2024		
VOCs	NE	ND

SB-04	(2-4)	(7-9)
3/11/2024		
VOCs	NE	NE

Parameters	Soil RCLs		
	Non-Industrial Direct Contact	Industrial Direct Contact	Groundwater Pathway
VOCs (µg/kg)			
Benzene	1,600	7,070	5.1
Ethylbenzene	8,020	35,400	1,570
Naphthalene	5,520	24,100	658.2
Toluene	818,000	818,000	1,107.2
1,2,4-Trimethylbenzene[1]	219,000	219,000	493.9
1,3,5-Trimethylbenzene[1]	182,000	182,000	493.9
Xylenes, total	260,000	260,000	3,960

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SITE BOUNDARY

LIMITS OF FORMER KINNICKINNIC CREEK CHANNEL (APPROXIMATE)

SOIL PROBE/SMALL DIAMETER MONITORING WELL

SOIL PROBE

2-INCH DIAMETER MONITORING WELL

OFF-SITE SOIL PROBE

EXTENT OF IDC RCL EXCEEDANCES - VOCs

EXTENT OF GWP AND NIND DC RCL EXCEEDANCES - VOCs

* DASHED CONTOURS ARE APPROXIMATE

NOTES:
All units are in micrograms per kilogram (µg/kg).
VOCs = Volatile Organic Compounds.
µg/kg = micrograms per kilogram.
Direct Contact RCLs were compared to soil results collected from any depth.
A Parameter exceeds NR 720 Residual Contaminant Level (RCL) for Non-Industrial Direct Contact (NIDC).
B Parameter exceeds NR 720 RCL for Industrial Direct Contact (IDC).
C Parameter exceeds NR 720 RCL for Groundwater Pathway (GWP).
d3 Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
J The reported result is an estimated value.
L2 Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results may be biased low.
P6 Matrix spike recovery was outside laboratory control limits due to a parent sample concentration notably higher than the spike level.
R1 Relative Percent Difference (RPD) value was outside control limits.
ND = No detections.
NE = No NR 720 RCL exceedance.
[1] Groundwater Pathway RCL listed is for 1,2,4- and 1,3,5- Trimethylbenzenes combined.

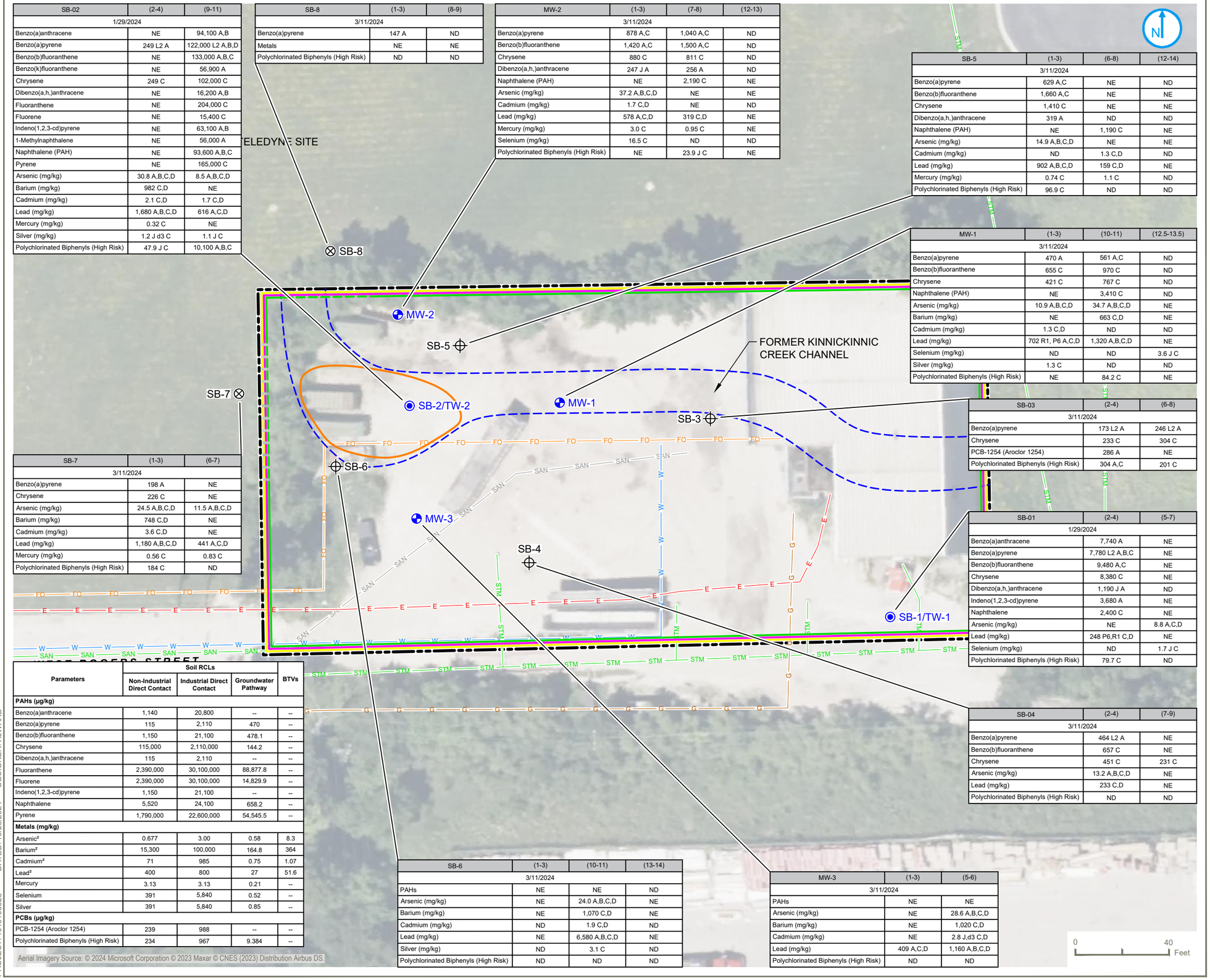
NR 720 SOIL STANDARD EXCEEDANCES - VOCs

CITY OF WEST ALLIS
TRANSFER STATION
5032 WEST ROGERS STREET
WEST ALLIS, WISCONSIN

FIGURE 5A

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.
A RAMBOLL COMPANY
RAMBOLL

L:\Loop Project Files_CAD\1941\1940106525_West Allis_WTS_PHII\2024-10\05A_Soil Quality.dwg
DESIGNER: HJWARD
DATED: 10/28/2024
PROJECT: 1940106525



SB-02	(2-4)	(9-11)
1/29/2024		
Benzo(a)anthracene	NE	94,100 A,B
Benzo(a)pyrene	249 L2 A	122,000 L2 A,B,D
Benzo(b)fluoranthene	NE	133,000 A,B,C
Benzo(k)fluoranthene	NE	56,900 A
Chrysene	249 C	102,000 C
Dibenzo(a,h,)anthracene	NE	16,200 A,B
Fluoranthene	NE	204,000 C
Fluorene	NE	15,400 C
Indeno(1,2,3-cd)pyrene	NE	63,100 A,B
1-Methylnaphthalene	NE	56,000 A
Naphthalene (PAH)	NE	93,600 A,B,C
Pyrene	NE	165,000 C
Arsenic (mg/kg)	30.8 A,B,C,D	8.5 A,B,C,D
Barium (mg/kg)	982 C,D	NE
Cadmium (mg/kg)	2.1 C,D	1.7 C,D
Lead (mg/kg)	1,680 A,B,C,D	616 A,C,D
Mercury (mg/kg)	0.32 C	NE
Silver (mg/kg)	1.2 J d3 C	1.1 J C
Polychlorinated Biphenyls (High Risk)	47.9 J C	10,100 A,B,C

SB-8	(1-3)	(8-9)
3/11/2024		
Benzo(a)pyrene	147 A	ND
Metals	NE	NE
Polychlorinated Biphenyls (High Risk)	ND	ND

MW-2	(1-3)	(7-8)	(12-13)
3/11/2024			
Benzo(a)pyrene	878 A,C	1,040 A,C	ND
Benzo(b)fluoranthene	1,420 A,C	1,500 A,C	ND
Chrysene	880 C	811 C	ND
Dibenzo(a,h,)anthracene	247 J A	256 A	ND
Naphthalene (PAH)	NE	2,190 C	NE
Arsenic (mg/kg)	37.2 A,B,C,D	NE	NE
Cadmium (mg/kg)	1.7 C,D	NE	ND
Lead (mg/kg)	578 A,C,D	319 C,D	NE
Mercury (mg/kg)	3.0 C	0.95 C	NE
Selenium (mg/kg)	16.5 C	ND	ND
Polychlorinated Biphenyls (High Risk)	NE	23.9 J C	NE

SB-5	(1-3)	(6-8)	(12-14)
3/11/2024			
Benzo(a)pyrene	629 A,C	NE	ND
Benzo(b)fluoranthene	1,660 A,C	NE	NE
Chrysene	1,410 C	NE	NE
Dibenzo(a,h,)anthracene	319 A	ND	ND
Naphthalene (PAH)	NE	1,190 C	NE
Arsenic (mg/kg)	14.9 A,B,C,D	NE	NE
Cadmium (mg/kg)	ND	1.3 C,D	ND
Lead (mg/kg)	902 A,B,C,D	159 C,D	NE
Mercury (mg/kg)	0.74 C	1.1 C	ND
Polychlorinated Biphenyls (High Risk)	96.9 C	ND	ND

MW-1	(1-3)	(10-11)	(12.5-13.5)
3/11/2024			
Benzo(a)pyrene	470 A	561 A,C	ND
Benzo(b)fluoranthene	655 C	970 C	ND
Chrysene	421 C	767 C	ND
Naphthalene (PAH)	NE	3,410 C	ND
Arsenic (mg/kg)	10.9 A,B,C,D	34.7 A,B,C,D	NE
Barium (mg/kg)	NE	663 C,D	NE
Cadmium (mg/kg)	1.3 C,D	ND	ND
Lead (mg/kg)	702 R1, P6 A,C,D	1,320 A,B,C,D	NE
Selenium (mg/kg)	ND	ND	3.6 J C
Silver (mg/kg)	1.3 C	ND	ND
Polychlorinated Biphenyls (High Risk)	NE	84.2 C	NE

SB-03	(2-4)	(6-8)
3/11/2024		
Benzo(a)pyrene	173 L2 A	246 L2 A
Chrysene	233 C	304 C
PCB-1254 (Aroclor 1254)	286 A	NE
Polychlorinated Biphenyls (High Risk)	304 A,C	201 C

SB-01	(2-4)	(5-7)
1/29/2024		
Benzo(a)anthracene	7,740 A	NE
Benzo(a)pyrene	7,780 L2 A,B,C	NE
Benzo(b)fluoranthene	9,480 A,C	NE
Chrysene	8,380 C	NE
Dibenzo(a,h,)anthracene	1,190 J A	ND
Indeno(1,2,3-cd)pyrene	3,680 A	NE
Naphthalene	2,400 C	NE
Arsenic (mg/kg)	NE	8.8 A,C,D
Lead (mg/kg)	248 P6,R1 C,D	NE
Selenium (mg/kg)	ND	1.7 J C
Polychlorinated Biphenyls (High Risk)	79.7 C	ND

SB-04	(2-4)	(7-9)
3/11/2024		
Benzo(a)pyrene	464 L2 A	NE
Benzo(b)fluoranthene	657 C	NE
Chrysene	451 C	231 C
Arsenic (mg/kg)	13.2 A,B,C,D	NE
Lead (mg/kg)	233 C,D	NE
Polychlorinated Biphenyls (High Risk)	ND	ND

SB-7	(1-3)	(6-7)
3/11/2024		
Benzo(a)pyrene	198 A	NE
Chrysene	226 C	NE
Arsenic (mg/kg)	24.5 A,B,C,D	11.5 A,B,C,D
Barium (mg/kg)	748 C,D	NE
Cadmium (mg/kg)	3.6 C,D	NE
Lead (mg/kg)	1,180 A,B,C,D	441 A,C,D
Mercury (mg/kg)	0.56 C	0.83 C
Polychlorinated Biphenyls (High Risk)	184 C	ND

Parameters	Soil RCLs: Non-Industrial Direct Contact	Soil RCLs: Industrial Direct Contact	Soil RCLs: Groundwater Pathway	BTVs
PAHs (µg/kg)				
Benzo(a)anthracene	1,140	20,800	--	--
Benzo(a)pyrene	115	2,110	470	--
Benzo(b)fluoranthene	1,150	21,100	478.1	--
Chrysene	115,000	2,110,000	144.2	--
Dibenzo(a,h,)anthracene	115	2,110	--	--
Fluoranthene	2,390,000	30,100,000	88,877.8	--
Fluorene	2,390,000	30,100,000	14,829.9	--
Indeno(1,2,3-cd)pyrene	1,150	21,100	--	--
Naphthalene	5,520	24,100	658.2	--
Pyrene	1,790,000	22,600,000	54,545.5	--
Metals (mg/kg)				
Arsenic[2]	0.677	3.00	0.58	8.3
Barium[2]	15,300	100,000	164.8	364
Cadmium[2]	71	985	0.75	1.07
Lead[2]	400	800	27	51.6
Mercury	3.13	3.13	0.21	--
Selenium	391	5,840	0.52	--
Silver	391	5,840	0.85	--
PCBs (µg/kg)				
PCB-1254 (Aroclor 1254)	239	988	--	--
Polychlorinated Biphenyls (High Risk)	234	967	9.384	--

SB-6	(1-3)	(10-11)	(13-14)
3/11/2024			
PAHs	NE	NE	ND
Arsenic (mg/kg)	NE	24.0 A,B,C,D	NE
Barium (mg/kg)	NE	1,070 C,D	NE
Cadmium (mg/kg)	ND	1.9 C,D	ND
Lead (mg/kg)	NE	6,580 A,B,C,D	NE
Silver (mg/kg)	ND	3.1 C	ND
Polychlorinated Biphenyls (High Risk)	ND	ND	ND

MW-3	(1-3)	(5-6)
3/11/2024		
PAHs	NE	NE
Arsenic (mg/kg)	NE	28.6 A,B,C,D
Barium (mg/kg)	NE	1,020 C,D
Cadmium (mg/kg)	NE	2.8 J,d3 C,D
Lead (mg/kg)	409 A,C,D	1,160 A,B,C,D
Polychlorinated Biphenyls (High Risk)	ND	ND

- SITE BOUNDARY
- LIMITS OF FORMER KINNICKINNIC CREEK CHANNEL (APPROXIMATE)
- SOIL PROBE/SMALL DIAMETER MONITORING WELL
- SOIL PROBE
- 2-INCH DIAMETER MONITORING WELL
- OFF-SITE SOIL PROBE
- EXTENT OF GWP RCL EXCEEDANCES
- EXTENT OF IDC RCL EXCEEDANCES - PCBs (High Risk)
- EXTENT OF IDC RCL EXCEEDANCES - Arsenic, Lead, PAHs
- EXTENT OF NIND RCL EXCEEDANCES

* DASHED CONTOURS ARE APPROXIMATE

NOTES:
All units are in micrograms per kilogram (µg/kg) unless otherwise noted.
Units for metals are in milligrams per kilogram (mg/kg).
PAHs = Polynuclear Aromatic Hydrocarbons.
PCBs = Polychlorinated Biphenyls.
BTV = Background Threshold Value.
µg/kg = micrograms per kilogram.
mg/kg = milligrams per kilogram.
Direct Contact RCLs were compared to soil results collected from any depth.
A Parameter exceeds NR 720 Residual Contaminant Level (RCL) for Non-Industrial Direct Contact (NIDC).
B Parameter exceeds NR 720 RCL for Industrial Direct Contact (IDC).
C Parameter exceeds NR 720 RCL for Groundwater Pathway (GWP).*
D Parameter exceeds Surficial BTV for metals.
* Metal groundwater pathway exceedances were only included if the metal also exceeded its BTV. Metals with BTV exceedances but no RCL exceedances were also not included.
d3 Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
J The reported result is an estimated value.
L2 Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results may be biased low.
P6 Matrix spike recovery was outside laboratory control limits due to a parent sample concentration notably higher than the spike level.
R1 Relative Percent Difference (RPD) value was outside control limits.
ND = No detections.
NE = No NR 720 RCL exceedance.
[2] Parameter BTV is larger than one or more of the RCLs or is the only standard available.
-- No RCL or Surficial BTV established.

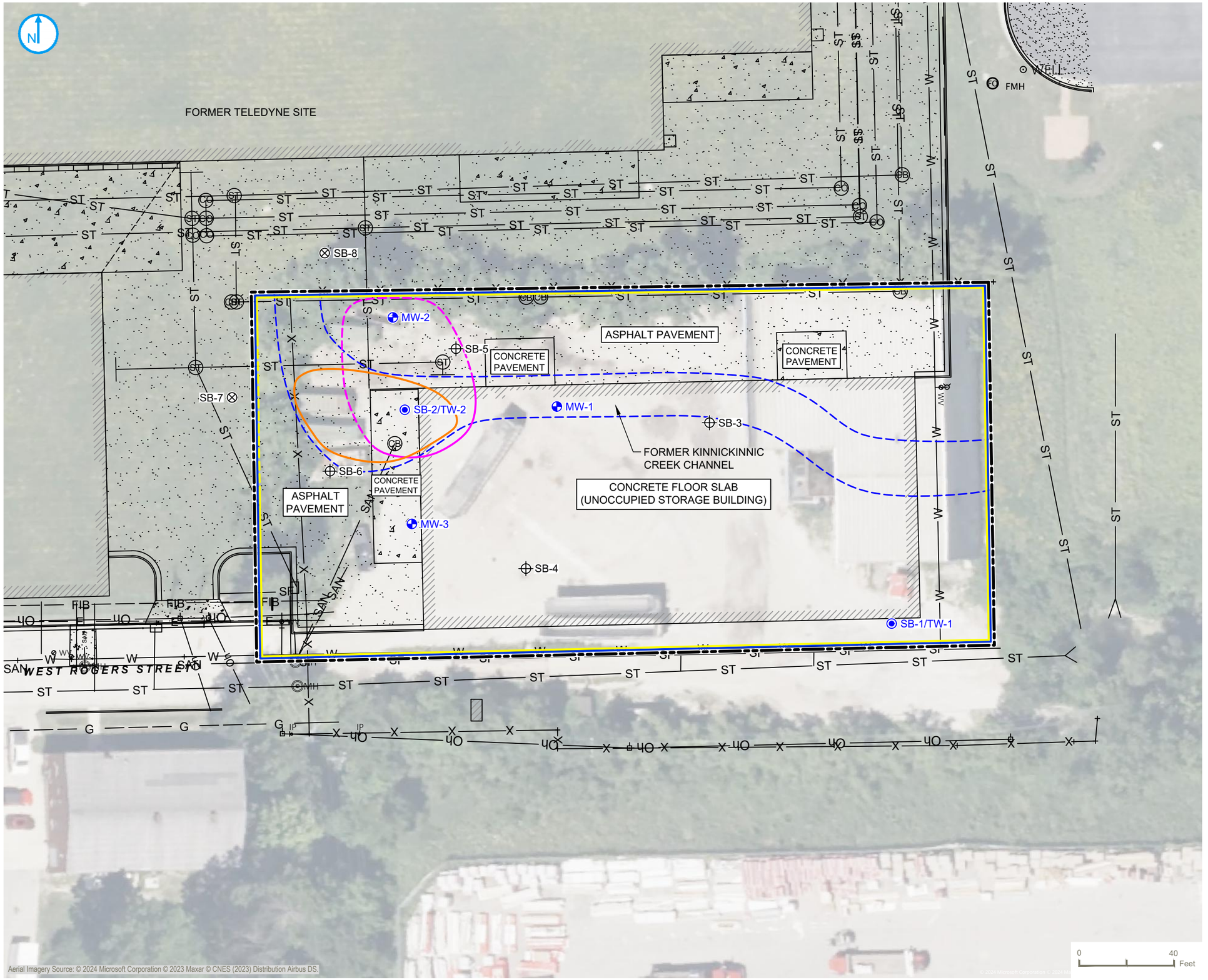
NR 720 SOIL STANDARD EXCEEDANCES - PAHs, METALS, PCBs

CITY OF WEST ALLIS TRANSFER STATION
5032 WEST ROGERS STREET
WEST ALLIS, WISCONSIN

FIGURE 5B

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.
A RAMBOLL COMPANY
RAMBOLL

L:\Loop Project Files_CAD\19401\940106525_West Allis_WTS_PHII\2024-10\05B_Soil Quality.dwg
DESIGNER: HJWARD
DATED: 10/25/2024
PROJECT: 1940106525



- SITE BOUNDARY
- LIMITS OF FORMER KINNICKINNIC CREEK CHANNEL (APPROXIMATE)
- SOIL PROBE/SMALL DIAMETER MONITORING WELL
- SOIL PROBE
- 2-INCH DIAMETER MONITORING WELL
- OFF-SITE SOIL PROBE
- EXTENT OF IDC RCL EXCEEDANCES - PCBs (High Risk) and VOCs
- EXTENT OF IDC RCL EXCEEDANCES - Arsenic, Lead, PAHs
- EXTENT OF ES EXCEEDANCES
- EXTENT OF PROPOSED DIRECT CONTACT BARRIER

* DASHED CONTOURS ARE APPROXIMATE

PROPOSED DIRECT CONTACT BARRIER

CITY OF WEST ALLIS TRANSFER STATION
5032 WEST ROGERS STREET
WEST ALLIS, WISCONSIN

FIGURE 07

RAMBOLL AMERICAS ENGINEERING SOLUTIONS, INC.
A RAMBOLL COMPANY

L:\Loop Project Files_CAD\1940106525_West Allis_WTS_PHII\2024-10\07_Proposed Direct Contact Barrier.dwg
PROJECT: 1940106525 DATED: 10/29/2024 DESIGNER: HJWARD

Table 2. Soil Analytical Results
City of West Allis Waste Transfer Station
5032 West Rogers Street, West Allis, WI
Ramboll Project No. 1940106525

Sample ID and Depth (ft bgs)	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)	MW-1 (1-3)	MW-1 (10-11)	MW-1 (12.5-13.5)	MW-2 (1-3)	MW-2 (7-8)	MW-2 (12-13)
Sample Date	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	3/11/2024	3/11/2024	3/11/2024	3/11/2024	3/11/2024	3/11/2024
Soil Type					Fill	Native	Fill	Fill	Fill	Fill	Fill	Native	Fill	Native	Native	Fill	Fill	Native
Saturated vs. Unsaturated					Unsaturated	Unsaturated	Unsaturated	Saturated	Unsaturated	Unsaturated	Unsaturated	Saturated	Unsaturated	Saturated	Saturated	Unsaturated	Saturated	Saturated
Parameters																		
VOCs (µg/kg)																		
Benzene	1,600	7,070	5.1	--	<13.6	<18.8	<15.6	**12,800 A,B,C**	<13.4	<15.4	<14.7	<17.7	<16.3	**129 J C**	<15.7	<15.8	**700 C**	**1,320 C**
sec-Butylbenzene	145,000	145,000	--	--	<19.7	<27.1	<22.5	1,950	<19.3	<22.2	<21.1	213	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
n-Butylbenzene	108,000	108,000	--	--	<26.3	<36.2	<30.0	11,700	<25.7	<29.7	<28.2	<34.1	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Ethylbenzene	8,020	35,400	1,570	--	<13.6	<18.8	<15.6	**35,000 A,C**	<13.4	<15.4	<14.7	<17.7	<16.3	**5,030 C**	<15.7	<15.8	**53,600 A,B,C**	**5,750 C**
Isopropylbenzene	268,000	268,000	--	--	<15.5	<21.3	<17.7	6,300	<15.2	<17.5	<16.6	**70.3 J**	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
p-Isopropyltoluene	162,000	162,000	--	--	<19.5	<26.9	<22.3	1,800	<19.1	<22.0	<20.9	<25.3	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Naphthalene	5,520	24,100	658.2	--	102 J	<33.2	<27.6	**10,400 A,C**	78.2 J	125 J	57.4 J	<31.3	<28.7	**5,770 A,C**	<27.8	<27.9	**3,140 C**	230 J
n-Propylbenzene	264,000	264,000	--	--	<13.8	<19.0	<15.7	20,700	<13.5	<15.5	<14.8	<17.9	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
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	25.8 J	415	<16.7	40.6 J	497	41.2 J
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	<20.4	**58,400 C**	<19.7	<19.8	**37,100 C**	**1,520 C**
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	<22	**9,640 C**	<21.3	<21.4	**1,030 C**	232
o-Xylene	434,000	434,000	--	--	21.9 J	<23.7	<19.7	53,900	<16.8	<19.4	20.5 J	<22.3	<20.5	16,700	<19.8	31.4 J	1,520	421
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	50.6 J	112,000	<27.9	28.7 J	64,500	7,200
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	50.6 J	**129,000 C**	<47.7	60.0 J	**66,100 C**	**7,620 C**
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	16.7 J	212 J	<2.5	<50.4	29.1 J	<2.9
Acenaphthylene	--	--	--	--	<181	<2.7	16.6 J	<1180	6.4 J	9.7 J	92.7	<26.2	52.7 J	116 J	<2.4	<49	249	<2.9
Anthracene	17,900,000	100,000,000	196,949.2	--	4,310	<2.7	47.3	40,200	76.9	156	117	<25.8	104	174 J	<2.4	<48.2	332	<2.8
Benzo(a)anthracene	1,140	20,800	--	--	**7,740 A**	11.6 J	222	**94,100 A,B**	188	260	380	130 J	418	571	<2.5	858	835	<2.9
Benzo(a)pyrene	115	2,110	470	--	**7,780 L2 A,B,C**	12.8 J L2	**249 L2 A**	**122,000 L2 A,B,C**	**173 L2 A**	**246 L2 A**	**464 L2 A**	65.6 J L2	**470 A**	**561 A,C**	<2.2	**878 A,C**	**1,040 A,C**	<2.6
Benzo(b)fluoranthene	1,150	21,100	478.1	--	**9,480 A,C**	19.7 J	293	**133,000 A,B,C**	248	318	**657 C**	118 J	**655 C**	**970 C**	<2.7	**1,420 A,C**	**1,500 A,C**	<3.2
Benzo(ghi)perylene	--	--	--	--	4,900	14.1 J	245	93,700	140	174	469	48.6 J	386	480	<3.4	940	777	<4
Benzo(k)fluoranthene	11,500	211,000	--	--	3,930	6.9 J	173	**56,900 A**	102	133	281	44.7 J	227	286 J	<2.5	548	576	<2.9
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**	**421 C**	**767 C**	<3.7	**880 C**	**811 C**	<4.3
Dibenzo(a,h,)anthracene	115	2,110	--	--	**1,190 J A**	<3.0	60.4	**16,200 A,B**	37.1	39.3	93.5	<28.7	105	97.2 J	<2.7	**247 J A**	**256 A**	<3.1
Fluoranthene	2,390,000	30,100,000	88,877.8	--	18,500	26.2	412	**204,000 C**	595	770	643	348	770	1,580	<2.3	942	717	<2.7
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	23.9 J	289 J	<2.3	<46.6	45.4 J	<2.7
Indeno(1,2,3-cd)pyrene	1,150	21,100	--	--	**3,680 A**	8.9 J	167	**63,100 A,B**	102	126	304	<43.3	289	373 J	<4	648	683	<4.7
1-Methylnaphthalene	17,600	72,700	--	--	390 J	3.4 J	52.5	**56,000 A**	42.0	42.5	55.7 J	<30.3	82.3	2,390	<2.8	<56.7	975	<3.3
2-Methylnaphthalene	239,000	3,010,000	--	--	650 J	4.5 J	85.1	85,800	63.0	56.4	87.4	<30.4	114	3,150	<2.8	<56.8	1,560	<3.3
Naphthalene	5,520	24,100	658.2	--	**2,400 C**	5.7 J	61.3	**93,600 A,B,C**	46.1	45.7	75.7	48.3 J d3	98.5	**3,410 C**	<1.9	51.9 J	**2,190 C**	12.9 J
Phenanthrene	--	--	--	--	14,700	16.0 J	191	136,000	603	693	271	<23.8	409	1,420	<2.2	281 J	153	<2.6
Pyrene	1,790,000	22,600,000	54,545.5	--	14,300	21.0 J	324	**165,000 C**	435	589	559	278	648	1,300	<2.8	811	519	<3.3
Metals (mg/kg)																		
Arsenic[3]	0.677	3.00	0.58	8.3	5.9 A,B,C	**8.8 A,B,C,D**	**30.8 A,B,C,D**	**8.5 A,B,C,D**	2.0 J A,C	4.5 J d3 A,B,C	**13.2 A,B,C,D**	7.9 A,B,C	**10.9 A,B,C,D**	**34.7 A,B,C,D**	1.9 J A,C	**37.2 A,B,C,D**	5.9 A,B,C	2.9 J A,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	364 P6 C	**663 C,D**	22.8	238 C	127	75.4
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	**1.3 C,D**	<0.8 d3	<0.15	**1.7 C,D**	0.40 J	<0.17
Chromium	--	--	360,000	43.5	21.2 M0, R1	28.5	137 D	90.3 D	11.9	11.1	40.5	22.3	60.7 M0 D	53.3 D	9.8	23.1	43.0	35.7
Lead[3]	400	800	27	51.6	**248 P6, R1 C,D**	38.2 C	**1,680 A,B,C,D**	**616 A,C,D**	9.4	10.5	**233 C,D**	14.4	**702 R1,P6 A,C,D**	**1,320 A,B,C,D**	6.3	**578 A,C,D**	**319 C,D**	10.7
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	0.16	0.11	<0.011	**3.0 C**	**0.95 C**	0.015 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	<1.5	<7.9 d3	**3.6 J C**	**16.5 C**	<1.8	<1.7
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	**1.3 C**	<1.8 d3	<0.34	<0.33	0.44 J	<0.4
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	<18	<19.9	<17.6	<17.7	<21.8	<20.7
PCB-1254 (Aroclor 1254)	239	988	--	--	57.5	<19.6	20.9 J	**10,100 A,B**	**286 A**	183	<17.0	<185	<18	44.4 J	<17.6	<17.7	23.9 J	<20.7
PCB-1260 (Aroclor 1260)	243	1,000	--	--	22.2 J	<19.6	26.9 J	<206	<16.2	<17.5	<17.0	<185	<18	39.9 J	<17.6	<17.7	<21.8	<20.7
Polychlorinated Biphenyls (High Risk)	234	967	9.384	--	**79.7 C**	<19.6	**47.9 J C**	**10,100 A,B,C**	**304 A,C**	**201 C**	<17.0	<185	<18	**84.2 C**	<17.6	<17.7	**23.9 J C**	<20.7

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.

[3] Parameter BTV is larger than one or more of the RCLs or is the only standard available. Metal groundwater pathway exceedances are only included (bolded) if the metal also exceeded its BTV. Metals with BTV exceedances but no RCL exceedances are not bolded.

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.
d3 Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
J The reported result is an estimated value.
L2 Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results may be biased low.
M0 Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
P6 Matrix spike recovery was outside laboratory control limits due to a parent sample concentration notably higher than the spike level.
R1 Relative Percent Difference (RPD) value was outside control limits.
-- 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
Direct Contact RCLs were compared to soil results collected from any depth.

Table 2. Soil Analytical Results
City of West Allis Waste Transfer Station
5032 West Rogers Street, West Allis, WI
Ramboll Project No. 1940106525

Sample ID and Depth (ft bgs)	Soil RCLs			BTV	MW-3 (1-3)	MW-3 (5-6)	SB-5 (1-3)	SB-5 (6-8)	SB-5 (12-14)	SB-6 (1-3)	SB-6 (10-11)	SB-6 (13-14)	SB-7(1-3)	SB-7 (6-7)	SB-8 (1-3)	SB-8 (8-9)
Sample Date					3/11/2024	3/11/2024	3/11/2024	3/11/2024	3/11/2024	3/11/2024	3/11/2024	3/11/2024	3/11/2024	3/11/2024	3/11/2024	3/11/2024
Soil Type					Fill	Fill	Fill	Native	Native	Fill	Fill	Native	Fill	Fill	Fill	Fill
Saturated vs. Unsaturated					Unsaturated	Unsaturated	Unsaturated	Saturated	Saturated	Unsaturated	Saturated	Saturated	Unsaturated	Unsaturated	Unsaturated	Saturated
Parameters	Non-Industrial Direct Contact	Industrial Direct Contact	Groundwater Pathway													
VOCs (µg/kg)																
Benzene	1,600	7,070	5.1	--	<17.7	<17.1	<19.2	**204 C**	**31.6 C**	<16.8	<24.8	<17.7	<15.5	<21.4	<13.2	<16.2
sec-Butylbenzene	145,000	145,000	--	--	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
n-Butylbenzene	108,000	108,000	--	--	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Ethylbenzene	8,020	35,400	1,570	--	<17.7	<17.1	<19.2	**11,500 A,C**	<16.4	<16.8	32.8 J	<17.7	<15.5	<21.4	<13.2	<16.2
Isopropylbenzene	268,000	268,000	--	--	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
p-Isopropyltoluene	162,000	162,000	--	--	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Naphthalene	5,520	24,100	658.2	--	<31.3	<30.2	<33.9	**1,940 C**	<29	<29.7	<43.8	<31.3	<27.5	<37.8	<23.4	<28.6
n-Propylbenzene	264,000	264,000	--	--	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Toluene	818,000	818,000	1,107.2	--	<18.7	23.3 J	<20.3	55.5 J	<17.4	<17.8	<26.2	<18.8	<16.5	<22.6	<14	<17.1
1,2,4-Trimethylbenzene[1]	219,000	219,000	493.9	--	<22.2	<21.4	<24	**24,700 C**	<20.5	<21.1	<31	<22.2	<19.5	<26.8	<16.5	<20.2
1,3,5-Trimethylbenzene[1]	182,000	182,000	493.9	--	<23.9	<23.2	<26	**4,570 C**	<22.2	<22.8	<33.5	<24	<21	<28.9	<17.9	<21.9
o-Xylene	434,000	434,000	--	--	<22.3	<21.6	<24.2	161 J	<20.7	<21.2	<31.2	<22.3	<19.6	<26.9	<16.7	<20.4
m-&p-Xylene[2]	388,000	388,000	--	--	<31.4	<30.3	<34	8,650	<29.1	<29.8	92.0 J	<31.4	<27.6	<37.9	<23.4	<28.6
Xylenes, total	260,000	260,000	3,960	--	<53.7	<51.9	<58.2	**8,810 C**	<49.8	<51	92.0 J	<53.7	<47.1	<64.9	<40.1	<49
PAHs (µg/kg)																
Acenaphthene	3,590,000	45,200,000	--	--	<2.7	<2.6	57.8 J	<14.8	<2.6	<2.6	8.1 J	<2.7	10.9 J	<3	8.0 J	9.4 J
Acenaphthylene	--	--	--	--	<2.6	<2.6	<13.8	<14.4	<2.5	4.2 J	7.7 J	<2.6	19.6 J	<2.9	<2.2	<2.5
Anthracene	17,900,000	100,000,000	196,949.2	--	3.1 J	<2.5	179	15.3 J	<2.5	14.7 J	7.3 J	<2.6	58.3	<2.9	6.4 J	7.5 J
Benzo(a)anthracene	1,140	20,800	--	--	10.0 J	8.2 J	940	38.6 J	<2.6	78.4	41.2	<2.7	175	5.8 J	75.3	<2.5
Benzo(a)pyrene	115	2,110	470	--	11.1 J	8.9 J	**629 A,C**	46.9 J	<2.3	94.1	47.2	<2.4	**198 A**	5.1 J	**147 A**	<2.2
Benzo(b)fluoranthene	1,150	21,100	478.1	--	18.0 J	17.4 J	**1,660 A,C**	73.5 J	3.4 J	132	67.8	<2.9	383	7.4 J	227	<2.7
Benzo(ghi)perylene	--	--	--	--	10.9 J	8.9 J	871	54.3 J	4.7 J	79.7	42.8	<3.6	224	<4.1	197	<3.5
Benzo(k)fluoranthene	11,500	211,000	--	--	6.7 J	5.9 J	373	27.9 J	<2.5	50.1	26.1	<2.7	102	<3	63.5	<2.5
Chrysene	115,000	2,110,000	144.2	--	12.5 J	10.9 J	**1,410 C**	41.3 J	5.7 J	85.8	46.8	<3.9	**226 C**	5.0 J	105	4.6 J
Dibenzo(a,h,)anthracene	115	2,110	--	--	3.7 J	<2.8	**319 A**	<15.8	<2.7	19.9 J	8.8 J	<2.9	62.5	<3.2	35.9	<2.7
Fluoranthene	2,390,000	30,100,000	88,877.8	--	14.6 J	9.5 J	1,600	41.6 J	3.3 J	143	92.9	<2.5	333	9.2 J	94.8	14.7 J
Fluorene	2,390,000	30,100,000	14,829.9	--	<2.5	<2.4	48.9 J	18.9 J	<2.4	<2.4	5.4 J	<2.5	10.8 J	<2.8	6.1 J	22.2
Indeno(1,2,3-cd)pyrene	1,150	21,100	--	--	8.2 J	6.5 J	545	39.5 J	<4.1	59.8	32.2	<4.3	159	<4.9	120	<4.1
1-Methylnaphthalene	17,600	72,700	--	--	6.1 J	3.5 J	<15.9	743	<2.9	8.3 J	7.7 J	<3	52.2	<3.4	25.1	37.8
2-Methylnaphthalene	239,000	3,010,000	--	--	8.8 J	5.1 J	16.5 J	835	<2.9	10.3 J	5.9 J	<3	90.8	7.5 J	66.6	123
Naphthalene	5,520	24,100	658.2	--	18.2 J	3.9 J	31.0 J	**1,190 C**	2.5 J	9.2 J	31.1	<2	91.5	14.4 J	48.0	50.2
Phenanthrene	--	--	--	--	12.9 J	6.9 J	979	56.4 J	3.7 J	58.2	31.3	<2.4	265	9.9 J	65.7	34.3
Pyrene	1,790,000	22,600,000	54,545.5	--	11.1 J	10.3 J	1,220	35.1 J	4.6 J	113	66.3	<3.1	253	8.4 J	92.7	14.1 J
Metals (mg/kg)																
Arsenic[3]	0.677	3.00	0.58	8.3	6.0 A,B,C	**28.6 A,B,C,D**	**14.9 A,B,C,D**	5.2 A,B,C	5.2 A,B,C	5.2 A,B,C	**24.0 A,B,C,D**	4.2 A,B,C	**24.5 A,B,C,D**	**11.5 A,B,C,D**	<1.5	<1.6
Barium[3]	15,300	100,000	164.8	364	226 C	**1,020 C,D**	190 C	169 C	48.8	78.5	**1,070 C,D**	24.5	**748 C,D**	176 C	10.4	5.5
Cadmium[3]	71	985	0.75	1.07	0.73	**2.8 J d3 C,D**	<0.34 d3	**1.3 C,D**	<0.16	<0.16	**1.9 C,D**	<0.16	**3.6 C,D**	0.81 C	<0.14	<0.15
Chromium	--	--	360,000	43.5	33.3	59.5 D	23.8	39.9	19.7	29.9	61.6 D	11.7	174 D	31.9	37.2	22.2
Lead[3]	400	800	27	51.6	**409 A,C,D**	**1,160 A,B,C,D**	**902 A,B,C,D**	**159 C,D**	8.0	34.8 C	**6,580 A,B,C,D**	8.3	**1,180 A,B,C,D**	**441 A,C,D**	7.7	4.7
Mercury	3.13	3.13	0.21	--	0.18	0.078	**0.74 C**	**1.1 C**	<0.012	0.016 J	0.079	<0.012	**0.56 C**	**0.83 C**	<0.01	<0.011
Selenium	391	5,840	0.52	--	<1.6	<7.9 d3	<3.3 d3	<1.7	<1.5	<1.6	<2	<1.6	<7.5 d3	<1.8	<1.4	<1.5
Silver	391	5,840	0.85	--	0.58 J	<1.8 d3	<0.78 d3	0.70 J	<0.36	<0.37	**3.1 C**	<0.37	<1.8 d3	0.56 J	<0.32	<0.34
PCBs (µg/kg)																
PCB-1242 (Aroclor 1242)	235	972	--	--	<18.9	<18.6	<19.9	<20.8	<18.1	<18.3	<236	<18.9	<17.6	<21.2	<16	<17.9
PCB-1254 (Aroclor 1254)	239	988	--	--	<18.9	<18.6	46.0 J	<20.8	<18.1	<18.3	<236	<18.9	97.4	<21.2	<16	<17.9
PCB-1260 (Aroclor 1260)	243	1,000	--	--	<18.9	<18.6	50.9 J	<20.8	<18.1	<18.3	<236	<18.9	87.0	<21.2	<16	<17.9
Polychlorinated Biphenyls (High Risk)	234	967	9.384	--	<18.9	<18.6	**96.9 C**	<20.8	<18.1	<18.3	<236	<18.9	**184 C**	<21.2	<16	<17.9

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.

[3] Parameter BTV is larger than one or more of the RCLs or is the only standard available. Metal groundwater pathway exceedances are only included (bolded) if the metal also exceeded its BTV. Metals with BTV exceedances but no RCL exceedances are not bolded.

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.
d3 Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference
J The reported result is an estimated value.
L2 Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results may be biased low.
M0 Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
P6 Matrix spike recovery was outside laboratory control limits due to a parent sample concentration notably higher than the spike level.
R1 Relative Percent Difference (RPD) value was outside control limits.
-- 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
Direct Contact RCLs were compared to soil results collected from any depth.

State of Wisconsin
Department of Natural Resources
Madison WI 53707-7921
dnr.wi.gov

Recommended Template for Request to Manage Materials under Wis. Admin. Code § NR 718.12 or NR 718.15

Form 4400-315 (R 11/20)

Purpose

The purpose of this document is to provide an optional template format for a request to manage material under Wis. Admin. Code § NR 718.12 or NR 718.15. This document may be included as part of an interim or remedial action plan (RAP) or post-closure modification request, or can be submitted by itself depending on the activities conducted at the site. Using this recommended format will likely result in a faster Department of Natural Resources (DNR) review. At a minimum, all requests must satisfy the requirements outlined in Wis. Admin. Code § NR 718.12 (1) and (2) (b).

Introduction

Contaminated soil and other solid waste generated from a response action site as part of an interim or remedial action may be managed at a site or facility that is not an operating licensed landfill if an exemption from the Waste and Materials Management Program requirements established in Wis. Stat. ch. 289 and Wis. Admin. Code ch. NR 500 to NR 538 is obtained under Wis. Admin. Code §§ NR 718.12 or NR 718.15. An approval under Wis. Admin. Code § NR 718.12 can be granted when contaminated soil is being managed as part of an interim action under Wis. Admin. Code ch. NR 708 or a remedial action under Wis. Admin. Code ch. NR 722. An approval through Wis. Admin. Code § NR 718.15 can be granted when other solid waste material is managed as part of an interim or remedial action on the site from which it was generated. Managing material under either section requires prior written approval from the DNR. For more information see "Management of Contaminated Soil and Other Solid Wastes, Wis. Admin. Code §§ NR 718.12 and NR 718.15" (RR-060), by visiting dnr.wi.gov, search "RR-060."

If this approval request involves contaminated material impacted by a discharge of a hazardous substance that has not been reported to the DNR, a "Notification for Hazardous Substance Discharge (non-emergency)", DNR Form 4400-225, must be completed and submitted immediately as required by Wis. Admin. Code § NR 706, unless an alternate method of reporting is approved by the DNR. This form can be found by visiting dnr.wi.gov, search "4400-225."

This template is not intended to be used for immediate actions under Wis. Admin. Code § NR 708.05, as prior DNR approval is not required if: 1) the requirements of Wis. Admin. Code § NR 718.12 (1) are met, 2) contaminant concentrations do not exceed Wis. Admin. Code ch. NR 720 soil residual contaminant levels, 3) and the quantity of material managed is less than 100 cubic yards total.

Requests to manage material under Wis. Admin. Code ch. NR 718 for projects involving large-scale disposal or requiring items such as a liner system, leachate treatment and an engineered cap, or projects proposing to place the material below the groundwater table, should not be requested using this template. Consult with DNR staff before submitting such a proposal

Document Instructions

In order to expedite processing, complete all applicable sections of this document as instructed. **Fields/sections required by administrative code are marked with a red asterisk (*)**. All other fields are optional and are included to assist DNR staff in gathering additional information to expedite review of the request.

Some portions of the document may be filled in directly as indicated, other responses may need to be completed separately and attached. If a field is not relevant, explaining why will further assist staff in reviewing the request.

In this document, "generating site or facility" means the site or facility where the response action is generating the contaminated material subject to this approval request. "Receiving site or facility" means the site or facility where the contaminated material is proposed to be managed. The "receiving site or facility" may be the same site or facility as the generating site or facility, or it may be a different site or facility.

Submittal Instructions

Please submit this form and related documents using the RR Program Submittal Portal at dnr.wi.gov, search "RR Submittal Portal". All accompanying attachments should be combined into a separate PDF. Please see RR-690 for up-to-date information on submitting documents.

For questions on this form, please contact Judy Fassbender at judy.fassbender@wisconsin.gov.

Section 1 – Purpose of Request

Identify the purpose of the request by checking each box that applies:

☐ Manage contaminated soil as part of an interim or remedial action or post-closure modification on the same response action site from which it was generated (Wis. Admin. Code §§ NR 718.12 (1) and (2)).

☒ Manage contaminated soil as part of an interim or remedial action or post-closure modification at a site or facility that is different from the response action site from which it was generated (Wis. Admin. Code §§ NR 718.12 (1) and (2)).

☐ Manage other solid waste other than contaminated soil, as part of a response action, at the same site from which it was generated (Wis. Admin. Code § NR 718.15).

If none of the above boxes are checked, the proposed materials management activity cannot be exempted from solid waste rules under Wis. Admin. Code ch. NR 718. Management of solid waste material generated as a result of a non-NR 700 action may be allowed after obtaining a "low hazard exemption" from the DNR Waste and Material Management Program. Please see the DNR publication "Exempting Low-Hazard Wastes from Solid Waste Regulations" (PUB-WA 1645), which can be found by visiting dnr.wi.gov, search "WA1645."

Section 2 – Applicable Fees

Fees are assessed for each type of Wis. Admin. Code § NR 718.12 or NR 718.15 request (plus database fee) **per site or facility** where contaminated material is excavated or managed. The below tables are provided to assist you in calculating the appropriate Wis. Admin. Code § NR 749 fee required for the review of your submittal.

Identify the Wis. Admin. Code § NR 749 review fees for this submittal by checking the applicable "On-Site Management Fee" in section A, column D. If material will be managed at a site(s) or facility(ies) other than the response action site, also select the appropriate "Off-Site Management Fee" in section B, and indicate the number of applicable receiving sites in column E. Please send a single check to the regional office managing your request. Specific directions will be detailed in your submittal confirmation.

A. Fee Assessed to Excavate or Manage Soil or Other Solid Waste on the Generating Site or Facility

A	B	C	D
Action	**Action Fee**	**Database Fee**	**On-Site Mgmt Fee**
MMP as part of Interim Action per NR 708.11, with residual soil CO	$700	$300	☐ $1000
MMP as part of Interim Action per NR 708.11, without residual soil CO	$700	No fee	☐ $700
MMP as part of Remedial Action Plan approval, with residual soil CO	$1050	$300	☐ $1350
MMP as part of a Remedial Action Plan approval without residual soil CO	$1050	No fee	☐ $1050
Closed Sites: MMP as part of a CO modification action, with residual soil CO	$1050	$300	☐ $1350
Closed Sites: MMP as part of a CO modification action, without residual soil CO	$1050	No fee	☐ $1050
MMP separate from RAP or CO mod, with residual soil CO	$700	$300	☐ $1000
MMP separate from RAP or CO mod, without residual soil CO	$700	No fee	☐ $700

B. Fee Assessed to Manage Soil on a Site or Facility other than the Generating Site or Facility

A	B	C	D	E	F
Action	**Action Fee**	**Database Fee**	**Off-Site Mgmt Fee**	**# of receiving sites subject to action**	**Total for row**
MMP as part of interim action, remedial action, modification to COs, etc., with residual soil CO	$700	$300	☒ $1000	1	$1,000
MMP as part of interim action, remedial action, modification to COs, etc., without residual soil CO	$700	No fee	☐ $700		
Total of Off-Site Management Fee					$1,000
Total of On-Site and Off-Site Management Fee					**$1,000**

1) **MMP** – A Material Management Plan submitted in accordance with Wis. Admin. Code §§ NR 718.12 (1) and (2) or NR 718.15.
2) "**With residual soil CO**" - site will have a residual soil continuing obligation (e.g. engineering control, cap, or cover) applied at the generating site or facility at the end of the applicable action; remedial action approval, or approval by an addendum to the closure letter.
3) "**Without residual soil CO**" - site that will not have a residual soil continuing obligation applied at the generating site or facility at the end of the applicable action.

Section 3 –Property and Contact Information

A. Information about the generating site or facility (from which material is proposed to be excavated)

BRRTS #(s) (include Materials Management #s and VPLE #s if assigned)	BRRTS Activity (Site) Name(s)	FID #(s)
02-41-5568 02	Former Teledyne Industries	241008900
- -		

Response Action Site Address* (physical, not mailing address)
52** W. Burnham Street (aka 1910 S. 53rd Street)

City*	State*	Parcel ID #(s)
West Allis	WI	474-0002-001

County*	ZIP Code*
Milwaukee	53219

WTM Coordinates*
X: 684870
Y: 283749

Lat/Long Coordinates decimal degrees
(min. of 6 digits right of decimal, e.g., -89.123456)*
Lat: 43.00941
Long: -87.977845

Coordinates Represent:
(●) Center of Project
( ) Parcel Center

¼ * NW ¼* SE Section* 2 Township* 06 N Range* 21 (●) E ( ) W

Current Zoning:	Current Land Use:
Industrial (I-1)	Vacant/Active Redevelopment for DPW Facility

B. Responsible Party (RP) of the generating site or facility

The Wis. Admin. Code §§ NR 718.12 or NR 718.15 approval will be issued to the Wis. Admin. Code NR 700 series responsible party identified below and to the owner of the receiving site or facility, if different than the generating site or facility. If there is more than one responsible party or property owner, include the information requested below for each.

Responsible Party (RP) Name*	Organization / Business Name		
Patrick Schloss	City of West Allis		
Mailing Address*	**City***	**State***	**ZIP Code***
7525 W. Greenfield Ave.	West Allis	WI	53214
Phone # (include area code)*	**Email***		
(414) 302-8468	pschloss@westallis.gov		

C. Property owner(s) information for generating site or facility if different than RP

☐ *Check here if the property owner of the generating site or facility is different than the responsible party, and enter the property owner's information below.*

Property Owner Name(s)	Organization / Business Name		
Mailing Address	**City**	**State**	**ZIP Code**
Phone # (include area code)	**Email**		

D. Consultant / contractor information

Consultant / Contractor Name*	Organization / Business Name*		
Michelle Peters	Ramboll Americas Engineering Solutions, Inc.		
Mailing Address*	**City***	**State***	**ZIP Code***
234 W. Florida Street, 5th Floor	Milwaukee	WI	53204
Phone # (include area code)*	**Email**		
(262) 901-0133	mpeters@ramboll.com		

E. Contact information for questions about this request

Contact Name	Organization / Business Name		
Michelle Peters	Ramboll Americas Engineering Solutions, Inc.		
Mailing Address	**City**	**State**	**ZIP Code**
234 W. Florida St., 5th Floor	Milwaukee	WI	53204
Phone # (include area code)	**Email**		
(262) 901-0133	mpeters@ramboll.com		

Relationship to the Requestor (Same, Consultant, Developer, Etc.):
Consultant

F. Information about the receiving site or facility (where contaminated soil will be disposed), if at a different location than the generating site or facility

BRRTS #(s) (include Materials Management #s and VPLE #s if assigned)	BRRTS Activity (Site) Name(s)	FID #(s)
02-41-594132	West Allis Waste Transfer Station	341368390
__ __ - __ __ - __ __ __ __ __ __		

Receiving Site Address* (physical, not mailing address)
5032 West Rogers Street

City*	State	Parcel ID #(s)
West Allis	WI	474-0003-000
County*		**ZIP Code***
Milwaukee		53219

WTM Coordinates*
X: 684870
Y: 283749

Lat/Long Coordinates decimal degrees
(min. of 6 digits right of decimal, e.g., -89.123456)*
Lat: 43.008539
Long: -87.977012

Coordinates Represent:
◉ Center of Project
○ Parcel Center

¼ * NE ¼* SW Section* 2 Township* 06 N Range* 21 ◉ E ○ W

Property Owner Name(s)*	Phone # (include area code)*		
Patrick Schloss, City of West Allis	(414) 302-8468		
Mailing Address*	**City***	**State***	**ZIP Code***
7525 W. Greenfield Ave.	West Allis	WI	53214
Current Zoning:	**Current Land Use:**		
Manufacturing (M-1)	Vacant		

Add an Additional Receiving Site or Facility =>

Section 4 – Results of Analyses Performed and Characteristics of Waste

The following information is necessary for the DNR to review the request for compliance with Wis. Admin. Code §§ NR 718.12 (1) (d) 1, NR 718.12 (2) (b) 2. and NR 718.12 (2) (b) 6. In this section, describe the characteristics of the contaminated soil and/or other solid waste material that will be managed under this request, describe the sampling activities conducted and demonstrate how it has been adequately characterized. Narrative boxes have a limit of 2500 characters. Please attach additional pages if necessary, clearly labeling the section of the form to which you are responding.

A. Enter the total volume of contaminated soil and/or other solid waste to be managed (cubic yards) *:
5,650

B. Describe the characteristics of the material proposed to be managed,* which may include general makeup, physical characteristics, the homogeneity of the material, the proportion of soil to other solid waste, and any other pertinent descriptors.
Historical releases of volatile organic compounds (VOCs), polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), and Resource Conservation and Recovery Act (RCRA) metals have been identified at the generating site in subsurface investigations completed on the site beginning in 2010. Specifically, a layer of foundry sand fill materials have been identified in soil borings advanced on the property, which likely dates back to initial site

development for industrial use in 1910; elevated concentrations of PAHs and metals were detected in samples collected from within the foundry sand fill layer. VOC and PCB-impacted materials are delineated outside of the extent of the proposed materials to be managed.

Samples collected from the materials proposed to be managed contain PAHs and metals exceeding Wisconsin Administrative Code (WAC) NR 720 Groundwater Pathway Residual Contaminant Levels (RCLs) or Industrial Direct Contact RCLs. No VOCs have been detected in samples collected from the materials proposed to be managed.

Fill/re-worked soils are present across the site at thicknesses generally between 6 and 8 feet below ground surface (bgs) and as deep as 14 feet bgs. Fill soils consist of a variety of soil types, predominantly silty sand. Other fill materials observed include foundry sand and occasional slag as well as construction debris such as concrete, brick, metal, glass, wood, and asphalt. Underlying the fill materials is native clay and silty clay. Materials proposed to be managed are located at a maximum depth of 11 feet bgs and are expected to consist of both fill materials and underlying native soils. No municipal waste has been observed in subsurface investigation completed at the generating site.

C. Describe the historic and current land use of the generating site or facility where the contaminated soil or other solid waste originates, including how this site or facility is zoned.

The generating site was initially developed in 1910 by the Wisconsin Motor Manufacturing company to produce water- and air-cooled engines for automobiles and other industrial uses. Wisconsin Motor Manufacturing became Teledyne Motors in 1968 and continued to use the site for manufacturing purposes for several decades. Site activities on the property included machining, heat treating, engine assembly, painting, engine testing, shipping, and carpentry functions. Several historical records indicate the facility was historically improved with over a dozen USTs of petroleum products; some USTs are not listed as to their prior contents. A generally north-south flowing stream was historically located on the east-central portion of the site until the 1940s, when it was relocated and directed through a 6 by 8-foot box culvert on the east side of the property. Teledyne Industries sold the property in 1993, and the site was used as a storage facility.

A subsurface investigation was conducted in 2010 which identified elevated concentrations of PAHs and metals. The storage facility was demolished in 2012, which involved the removal of seven USTs on the generating site. The entire site was capped with 6 inches of clay and 4 inches of topsoil at the completion of demolition. Identified releases at the site were reported to the WDNR, and the site was subsequently registered in the Wisconsin Environmental Repair Program (ERP) and Leaking Underground Storage Tank (LUST) databases in 2011 and 2012. Investigation to determine the degree and extent of the soil and groundwater impacts was conducted between 2017 and 2021.

The site remained vacant, undeveloped land after the facility demolition in 2012 and was foreclosed on by Milwaukee County on April 4, 2017. The City of West Allis purchased the property from Milwaukee County on April 12, 2023 and began construction of a new Department of Public Works facility in May 2024.

D. Describe identified contaminants and the source(s). Indicate whether contaminant concentrations exceed Wis. Admin. Code § NR 720 Residual Contaminant Levels.

Based on the extensive investigation conducted at the generating site to date, the contaminant sources of the site and associated impacts have been identified as historic fill. A layer of foundry sand fill materials has been identified in soil borings advanced on the property, which likely dates back to initial site development for industrial use in 1910; elevated concentrations of PAHs and metals have been detected above their respective RCLs in multiple samples collected from within the foundry sand fill layer during site investigation activities.

Several other sources and identified contaminants including elevated PCBs, lead, and trichlorethene (TCE) are present at the generating site; however, those delineated extents of impacts are outside of the areas identified for management in this request. No samples within the areas proposed in this request have detections of VOCs, and lead concentrations are below NR 720 Industrial Direct Contact RCLs. Materials proposed to be managed contain PAHs and metals exceeding WAC NR 720 Industrial Direct Contact or Groundwater Pathway RCLs.

E. Describe the sampling activities conducted to characterize the material including where the samples were collected, how sample locations were chosen, the sampling methods used, and when sampling activities were conducted.

In October 2010, a Phase II ESA was completed by AECOM with the objective of evaluating location-specific RECs identified by the 2010 Phase I ESA report, including suspect UST areas, chemical handling areas, transformers, etc., as well as investigating the broader REC of the site having been occupied by a motor manufacturer for many years. The scope of the 2010 Phase II ESA included performance of a geophysical survey in the area of proposed soil borings to evaluate the potential for orphan USTs; advancement of 21 soil borings to depths of approximately 16 feet bgs; collection and analysis of soil samples for RCRA metals, VOCs, PAHs, and/or PCBs; installation of 21 temporary groundwater monitoring wells in each of the soil boring locations; and collection and analysis of groundwater samples for VOCs. Two of these soil boring/temporary well locations are within the delineated proposed areas for reuse.

Additional site investigation was conducted by Braun Intertec between March and May 2019. Investigation activities included the completion of 13 standard penetration borings, 23 direct push soil borings, 36 test pits, four soil vapor points, and sampling of two new and five existing monitoring wells. One of these boring locations and one test pit location are within the proposed areas for management. See attached Table 2 for anaytical results of samples within management areas.

F. Explain how the sampling activities adequately characterized the contaminated soil or other solid waste proposed to be managed. Indicate whether the samples were analyzed for all contaminants previously identified at the generating site or facility and analyzed for all contaminants potentially present at the site or facility considering current and historic land use. Discuss how samples were collected from areas most likely to be contaminated and from material that will actually be managed under this request.

The sampling activities have adequately characterized the impacted fill/soil proposed to be managed. During the Site investigation, soil samples were collected from areas that were considered most likely to be contaminated as identified in the 2011 and 2019 Phase I ESA. A total of 264 soil samples from the Former Teledyne site (generating site) were collected during this period and included analysis for VOCs, PAHs, metals, and pesticides. Of those, 6 samples are from directly within the proposed areas for management

G. Enter the total number of samples collected from this material and analyzed for contaminants of concern.

6

H. Enter the rate of sample collection per volume. One sample per 942 yards of contaminated material.

i. Wis. Admin. Code § NR 718.12 (1) (e) requires that samples collected to characterize soil be collected at a rate of one sample per 100 cubic yards (for the first 600 cubic yards) and one sample for each additional 300 cubic yards of material, with a minimum of two samples. If the DNR pre-approved an alternative sampling plan, describe how the sampling that was conducted complied with a pre-approved plan. Please also provide the date the sampling plan was pre-approved and the name of the DNR staff person who approved the plan.

The DNR previously approved the NR 718 Request on May 17, 2024 for material generated at the Former Teledyne site (generating site) to be managed within the same site in designated fill areas. This NR 718 Request is seeking approval for management of the same material (same locations and maximum depths) which has been previously approved for re-location within the Former Teledyne site to also be re-located to the West Allis Waste Transfer Station site (receiving site).

Section 5 – Project description/material management plan

The following information is necessary for the DNR to review the request for compliance with Wis. Admin. Code §§ NR 718.12 (2) (b) (5), (7) and (8). In this section, describe how the contaminated materials will be managed, the proposed schedule for managing the material, and provide sufficient information to justify that the placement of the contaminated materials will meet the requirements of Wis. Admin. Code §§ NR 726.12 (1) (b) 1. to 5. Narrative boxes have a limit of 2500 characters. Please attach additional pages if necessary, clearly labeling the section of the form to which you are responding.

A. Describe the material management activities to take place.* Provide details on how and where the material will be generated, transported and placed. Describe the depth of the proposed excavation of contaminated soil or other solid waste, and the depth that it will be placed at the receiving site or facility. Describe any response actions proposed for the receiving site or facility to address the relocated contaminated material (such as the construction of a cap). Discuss how material management activities will fit in with the overall property remediation and/or redevelopment plans.

Material management activities will be implemented during utility trench excavations on the generating site. Soil will be excavated, transported, and relocated from the generating site to the receiving site using conventional earthwork equipment. The maximum depth of proposed excavation within the reuse areas is 11 feet bgs to accommodate the underground stormwater management system beneath the west parking lots and beneath the eastern/southeastern driveway areas. The maximum depth for placement of relocated soils is anticipated to be approximately 4 feet bgs for general grading at the receiving site, which will occur prior to construction of the proposed direct contact cap.

B. Summarize the proposed schedule for implementation of the activities including anticipated start and end dates. *

Excavation of the identified reuse areas may be conducted prior to WAC NR 718 soil/fill management. The NR 718 soil management will be conducted in conjunction with redevelopment at the receiving site. Soil management is anticipated to begin in November 2024. Completion of soil management and construction of proposed direct contact barrier at the receiving site is anticipated to be completed by December 2026.

C. Confirm the proposed management activities will comply with Wis. Admin. Code § NR 726.13 (1) (b) 1. through 5.*

The proposed soil management activities will comply with WAC NR 726.13 (1)(b) 1. through 5.

1. The soil managed between the generating and receiving sites will not pose a threat to public health, safety, or welfare or the environment, as impacted soils will be relocated at the receiving site below a direct contact cap, consisting of asphalt- or concrete-paved surfaces. As the receiving site is adjoining the generating site, soils will be directly transported from the generating site to the receiving site with no exposure to the public.
2. Soil management activities will not cause a violation of WAC NR 140 groundwater quality enforcement standards. Relocated soil will be placed near the surface and is not anticipated to be in contact with groundwater at the receiving site. It should be noted that historic fill material at the receiving site is already in contact with site groundwater and minimal PAL and ES exceedances have been detected. Also, the City of West Allis and their next nearest neighbor, the Village of West Milwaukee both source their drinking water from Lake Michigan.
3. Surface water quality violations will not occur as a result of the soil management activities because all impacted soils will be placed below a direct contact cap, as descried above. In addition, stormwater management/erosion control practices will be employed during construction.
4. Air quality standards violations will not occur as a result of the soil management activities based on the low contaminant concentrations being placed below paved surfaces. No soils with detected VOCs are proposed to be relocated. In addition, standard construction dust control practices, including dust suppression using water, will be employed as necessary.
5. The proposed redevelopment at the receiving site consists of unoccupied cold storage buildings and outdoor paved areas. Because there are no occupied buildings proposed as part of the receiving site redevelopment, soil management activities will not cause a vapor action level in indoor air to be attained or exceeded as there is no building to qualify as indoor air.

D. Describe any procedures that have been established, or methods that will be used, to identify previously undocumented contamination during the completion of this project (such as instrument field screening, visual inspections, etc.). Also describe any contingency procedures that have been established to address unexpected contamination.

Ramboll staff will be on site during key soil management activities, including utility trench excavation in the proposed management areas and relocation to the receiving site. The soil will be inspected using visual and/or field screening instrumentation based on conditions encountered. Field screening will be conducted using a photoionization detector equipped with a 10.6 eV bulb. If unusual conditions are encountered during removal or replacement or if the soil appears inconsistent with material identified for reuse, the material may be temporarily stockpiled in accordance with WAC NR 718.05, placed in roll-off boxes, and/or directly transferred to an appropriately licensed facility. If conditions or contaminants are encountered that are inconsistent with the prior site investigation activities, then the WDNR will be contacted to determine if a new release should be reported.

E. Summarize how the proposed management activities will prevent or minimize adverse environmental impacts and potential threats to human health and welfare, including worker safety, by assessing how all potential exposure and migration pathways of concern, including direct contact exposure, vapor intrusion, ground water, surface water, sediment and any other relevant pathway will be addressed by the proposed management.

Due to the relatively low concentrations of PAHs and metals and no detections of VOCs in the soil being managed under this request, no adverse impacts to human health and the environment have been identified that would be different than the residual impacts that would be expected to remain at the receiving site following redevelopment. Additionally, the construction of a direct contact cap will add an increased level of protection.

Worker safety will be addressed by the preparation and adherence to a site specific health and safety plan developed by the contractors working on the sites.

Soil management activities will not cause a violation of WAC NR 140 groundwater quality enforcement standards. Relocated soil will be placed near the shallow groundwater surface and is not anticipated to be in contact with groundwater at the receiving site. It should be noted that historic fill material at the receiving site is already in contact with site groundwater and minimal PAL and ES exceedances have been detected. Also, the City of West Allis and their next nearest neighbor, the Village of West Milwaukee both source their drinking water from Lake Michigan.

Surface water quality violations will not occur as a result of the soil management activities because all impacted soils will be placed below a direct contact cap, as descried above. In addition, stormwater management/erosion control practices will be employed during construction.

Air quality standards violations will not occur as a result of the soil management activities based on the low contaminant concentrations being placed below paved surfaces. No soils with detected VOCs are proposed to be relocated. In addition, standard construction dust control practices, including dust suppression using water, will be employed as necessary.

The proposed redevelopment at the receiving site consists of one unoccupied cold storage building and outdoor paved areas. Because there are no occupied buildings proposed as part of the receiving site redevelopment, soil management activities will not cause a vapor action level in indoor air to be attained or exceeded as there is no building to qualify as indoor air.

Section 6 - Receiving site or facility information

The following information is necessary for the DNR to review the request for compliance with Wis. Admin. Code §§ NR 718.12 (2) (c) 3. In this section, describe the site or facility receiving the material by addressing the following items. Narrative boxes have a limit of 2500 characters. Please attach additional pages if necessary, clearly labeling the section of the form to which you are responding.

A. Briefly discuss the geology and hydrogeology of the receiving site(s) or facility(ies), including information from any previous remedial investigations, and well logs or well construction records from nearby wells. Please also provide the information requested below, indicating whether the response is based on regional or site-specific information. *

A site investigation was conducted at the receiving site between January and March 2024. Results of the site investigation indicated that the geology and hydrogeology of the receiving site is similar to the generating site, in addition to the fact that they are adjoining properties. Fill soils were encountered at depths of 4 to 12 feet bgs, with maximum depths within the alignment of a former Kinnickinnic Creek channel running from the northwestern corner

to the eastern property boundary generally 10 to 12 feet bgs, overlying native silty clay. Bedrock was not encountered in the deepest borings conducted (15 feet bgs).

Depth to Bedrock (ft. below ground surface):	150	◉ Regional	○ Site Specific
Bedrock Type:	○ Sandstone	◉ Limestone / Dolomite	○ Metamorphic / Igneous
High Groundwater Level (ft. below ground surface):	5.47	○ Regional	◉ Site Specific
Groundwater Flow Direction:	east	○ Regional	◉ Site Specific

B. Briefly describe any previous environmental site investigations or remedial actions conducted at the receiving site(s) or facility(ies). Describe the environmental condition of the portion of the receiving site(s) or facility(ies) where material will be placed including what contaminants are present, the environmental sampling conducted in that area, and whether identified contaminant concentrations exceed applicable standards. *

The receiving site is listed on the WDNR Bureau for Remediation and Redevelopment Tracking System (BRRTS) on the Web (BOTW) leaking underground storage tank (LUST) database with closed status as of October 2006. According to an August 2006 Underground Storage Tank Assessment & Soil Excavation Report prepared by Kapur and Associates, Inc. downloaded from BOTW, one 10,000 gallon fuel oil underground storage tank (UST) and associated piping were removed in June 2005. Soil sampling completed during tank removal activities identified petroleum-impacts to soil. A notification of hazardous substance discharge was reported to the WDNR on August 9, 2006, and the Site was assigned BRRTS No. 03-41-547895 (WEST ALLIS INCINERATOR FMR). Approximately 200 tons of petroleum-impacted soil were removed and disposed of at a licensed landfill in June 2006. A No Further Action (NFA) letter was issued by the WDNR on October 12, 2006.

A site investigation was conducted at the receiving site by Ramboll between January and March 2024, which included the collection of soil and groundwater samples from a total of eleven soil borings, two temporary monitoring wells, and three WAC NR 141-compliant monitoring wells. Soil and groundwater samples were analyzed for VOCs, PAHs, and RCRA metals. Fill soils exceeding NR 720 Groundwater Pathway and Non-Industrial Direct Contact RCL exceedances for PAHs and metals, and the Industrial Direct Contact RCL for arsenic are present throughout the site. Soils containing VOCs exceeding NR 720 Groundwater Pathway RCL, and/or PAHs or lead exceeding NR 720 Industrial Direct Contact RCLs are present in limited areas of the site. Groundwater concentrations above the NR 140 PAL for PVOCs and metals have been detected in the four wells located within/near the extents of the former Kinnickinnic Creek channel. Groundwater concentrations above the NR 140 Enforcement Standard (ES) for benzene have been detected at two wells in the northwest portion of the site, where the thickness of fill soils is the deepest.

C. Describe any environmentally sensitive areas at or near the receiving site(s) or facility(s) where the contaminated material will be managed.

None.

D. Describe the historic, current and proposed land use of the receiving site(s) or facility(ies) where the contaminated soil or other solid waste will be managed. How are these site(s) or facility(ies) zoned?

The receiving site was historically developed with the City of West Allis's incinerator, which was razed in the 1950s. The site was recently used as a waste transfer station and waste roll-off container storage. The proposed land use is as ancillary cold storage and paved areas in support of the new City of West Allis Department of Public Works facility on the adjoining Former Teledyne Motors property, construction for which began in summer 2024 and is anticipated to complete by December 2026. The receiving site is zoned for Manufacturing (M-1).

E. Identify current uses of all properties adjacent to the receiving site or facility. Check all that apply.

	N	S	E	W	NE	NW	SE	SW
Agricultural	☐	☐	☐	☐	☐	☐	☐	☐
Industrial	☒	☒	☒	☒	☐	☐	☐	☐
Recreational	☐	☐	☐	☐	☐	☐	☐	☐
Residential	☐	☐	☐	☐	☐	☐	☐	☐
Undeveloped	☐	☐	☐	☐	☐	☐	☐	☐
Commercial	☐	☐	☐	☐	☐	☐	☐	☐
Other	☐	☐	☐	☐	☐	☐	☐	☐

Describe "other" property use below:

F. Describe any other features of this property not addressed above that influence the suitability of the receiving site(s) or facility(ies) for the management of the contaminated soil or other solid waste.
There are no other features of this property that would influence the suitability of the receiving site for the management of contaminated soil/fill.

Section 7 – Locational criteria

The following information is necessary for the DNR to review the request for compliance with Wis. Admin. Code §§ NR 718.12 (1) (c). Indicate if excavated material will be placed in any of the following locations*:

- ☐ Within a floodplain.
- ☐ Within 100 feet of any wetland or critical habitat area.
- ☒ Within 300 feet of any navigable river, stream, lake, pond, or flowage.
- ☐ Within 100 feet of any on-site water supply well or 300 feet of any off-site water supply well.
- ☒ Within three (3) feet of the high groundwater level.
- ☐ At a depth greater than the depth of the original excavation from which the contaminated soil was removed.

If any of the above boxes are checked, an exemption from the indicated criteria must be requested as described below. If none of the above boxes are checked, and the proposed placement of material will not otherwise pose a threat to the public health, safety, or welfare or the environment, the proposed management activities will comply with the locational criteria of Wis. Admin. Code § NR 718.12 (1) (c) and you may skip the following question.

Include an explanation of why granting an exemption to the Wis. Admin. Code § NR 718.12 (1) (c) locational criteria will not cause a threat to public health, safety, or welfare or the environment by assessing how all potential exposure and migration pathways of concern, including direct contact exposure, vapor intrusion, ground water, surface water, sediment and any other relevant pathway will be addressed by the proposed management. Consider the quantity and characteristics of the material being managed, the geologic and hydrogeological characteristics of the receiving site or facility, the unavailability of other environmentally suitable alternatives, and whether the activities will comply with other state and federal regulations including other portions of Wis. Admin. Code chs. NR 700 to NR 754.
The 43rd Street Ditch (also formerly known as the Kinnickinnic Creek) daylights just east of the receiving site. Most of this ditch/creek has been channeled into below-grade box culverts along the east side of the site. The ditch flows generally east at the surface for approximately 2,200 feet, before it is redirected into below-grade box culverts, eventually connecting to the Kinnickinnic river approximately 0.9 miles southeast of the receiving site. Historic fill is already in place at the receiving site, presumed to extent to the site boundary just east of the ditch/creek. he improvements proposed by the redevelopment, including asphalt- and concrete-pavement will reduce infiltration of surface water through fill materials and subsequent migration to down-gradient receptors.

Some of the material is anticipated to be managed within 3 feet of the high groundwater table. The historic fill at the receiving site is already present at this depth, thus this movement of soil/fill does not increase the threat to public health, safety, or welfare or the environment. The improvements proposed by the redevelopment, including asphalt- and concrete-pavement will reduce potential for direct contact and migration to down-gradient receptors.

Section 8 – Additional information for non-metallic mine receiving sites or facilities

If the material to be managed is proposed for use in reclaiming a non-metallic mine, the disposal of such a material must be specifically allowed in the mine's reclamation plan. If not, the reclamation plan needs to be modified prior to DNR approving the management of the contaminated soil at the mine. Complete this section if the proposed receiving site or facility is a non-metallic mine.

A. Current depth to groundwater at facility (feet below ground surface): _____

B. Has the facility been dewatered to allow mining? ◯ Yes ◯ No

If yes, indicate the expected natural groundwater level when dewatering is terminated (feet below ground surface):

C. Is material proposed to be placed within 10 feet of the natural water table? ◯ Yes* ◯ No

If yes, provide information to justify a variance approval under Wis. Admin. Code ch. NR 503.

D. Include a copy of the reclamation plan indicating the placement of low level contaminated material is acceptable.

E. Describe any design criteria established for the disposal site, include restrictions on material placement, engineered barrier requirements, etc.

Section 9 – Continuing obligations at receiving site or facility

The following information is necessary for the DNR to review the request for compliance with Wis. Admin. Code §§ NR 718.12 (2) (d) and (e).Check the applicable boxes to indicate which continuing obligations will be specifically required to address the material being managed on the receiving site or facility. The associated language will appear in the Wis. Admin. Code ch. NR 718 Approval Letter.

☐ No Continuing Obligations

☒ Residual Soil Contamination:

If contaminated soil that was managed as proposed in the material management plan is excavated in the future, the property owner at the time of excavation will have the following responsibilities per Wis. Admin. Code § NR 725.05 (l) (d):

- determine if contamination is present,
- determine whether the soil is considered solid or hazardous waste; and
- ensure that any storage, is in compliance with applicable statutes and rules.

Excavated contaminated soil may be managed in accordance with Wis. Admin. Code ch. NR 718, with prior DNR approval. In addition, all current and future property owners and occupants of the property and right-of-way holders need to be aware that excavation of the contaminated soil may pose a hazard and special precautions may be necessary to prevent a health threat to humans. A historic fill exemption is required prior to construction of any structures over fill materials.

Depending on site-specific conditions, construction over contaminated soil or groundwater may also result in vapor migration of contaminants into enclosed structures or migration along underground utility lines. The potential for vapor intrusion and means of mitigation should be evaluated when planning any future redevelopment, and measures may need to be taken to ensure the continued protection of public health, safety, welfare and the environment at the site.

☒ Maintenance of a cover:

A soil cover/engineered cover/other is proposed to be installed and maintained over contaminated soil. Inspections will be required per Wis. Admin. Code § NR 724.13, and submittal of inspection reports may be required per Wis. Admin. Code § NR 727.05 (1) (b) 3. Certain activities which would disturb the cover or barrier will be prohibited. If the cover is approved for industrial land use, notification of the DNR is required before changing to a non-industrial use, to determine if the cover will be protective for that use per Wis. Admin. Code § NR 727.07 (3). A maintenance plan is attached, which describes the maintenance activities to be required. An updated maintenance plan must be provided to the DNR once the barrier has been constructed if changes are required and must address actual site conditions (Wis. Admin. Code § NR 724.15 (3) (h)). A map is attached which shows the location of the extent of contaminated materials and the extent of the cover.

☐ Use of Industrial Land Use Soil Standards:

Direct contact risk posed by contaminated material managed under this approval was assessed using residual contaminant levels for industrial land use. The DNR must be notified if the property land use will change from industrial use to a non-industrial land use per Wis. Admin. Code § NR 727.07 (3). Additional investigation and remediation may be required prior to the change in land use to ensure the site conditions are protective for the planned land use.

☒ Vapor: Future Actions to Address Vapor Intrusion:

While vapor intrusion does not currently exist, if a building is constructed or reconstructed on this property, or if use of an existing building is changed to a non-industrial use, vapor intrusion may become a concern. The DNR must be notified before construction of a building or changing the use of an existing building to non-industrial use per Wis. Admin. Code § NR 727.07. The use of vapor control technologies or an assessment of the potential for vapor intrusion will be required at that time per Wis. Admin. Code §§ NR 722.15 (2) (e) 4 and 5.

☐ Site specific condition:

Describe the site specific condition:

Section 10 – Figures

Providing figures as part of the material management plan will allow DNR staff to more quickly evaluate the compliance of the request with the requirements of Wis. Admin. Code §§ NR 718.12 (1) and (2) and NR 718.15. The following are recommended figures to be submitted with this request.

The DNR recommends that all maps are drawn to scale not larger than 1 inch equal to 100 feet and labeled with the site or facility name and address. The location of the property and the specific management area should be provided in sufficient detail to allow DNR personnel to inspect these areas in the future. Providing a "cut/fill" map that clearly depicts how much material will be removed or added to different areas of the involved property(ies) and depicting how material will be moved across the site is also highly recommended. Providing cross sections that depict site conditions before and after material management activities is also recommended.

Attach appropriate figures to this form. Use the following checklist to ensure recommended items are included in the attached figures.

☒ The boundaries of each property involved in the project as well as named and unnamed roads or access points, buildings and other surface features, underground utilities, land uses on adjacent properties, and known and potential sources of hazardous substances. See Figure 2.

☒ The location of wetlands, critical habitat areas, floodplains, surface water bodies, water supply wells, or other possible receptors located near or within the area where material will be managed. See Figure 2.

☒ The lateral extent and depth of planned excavation, grading, or otherwise disturbed areas. See Figures 04, 08A, and 08 B.

☒ The lateral extent and thickness of excavated material placement locations. See Figures 8A and 8B.

☒ Soil sample locations at the response action site and receiving site(s) or facility(ies). Depict applicable soil contaminant concentration data and sample depths. Indicate the extent of contamination exceeding a RCL. See Figures 5A and 5B.

☒ Depth to groundwater. See Figures 3, 4A, and 4B.

☒ The extent of any performance standards (such as a barrier or cap) that will be required at the completion of management activities. See Figure 7.

Section 11 - Additional Attachments

The following documents are recommended for inclusion with a Wis. Admin. Code § NR 718.12 or a Wis. Admin. Code § 718.15 request. Indicate which of these documents are included in this request by checking the boxes below.

☒ A table summarizing the analytical results of all soil/waste samples collected at the generating site or facility that meets the requirements of Wis. Admin. Code § 716.15 (4) (e). Clearly indicate which of these samples were collected from material that is proposed to be managed.

☐ The analytical package for all samples listed on the above table. The package should include the sample results, chain of custody, sampling methods, and QA/QC data.

☒ A maintenance plan for any performance standard needed to address the material proposed to be managed. The plan should follow the format found in DNR Form 4400-202, Attachment D.

☐ A copy of the reclamation plan for the receiving site or facility if it is a nonmetallic mine. Confirm the plan allows for acceptance of contaminated soil by marking relevant plan sections.

☐ Power of Attorney (if applicable, see Section 12).

☐ Deed for the property receiving the contaminated material. If a certified survey map or plat map is referenced by this deed then also include those documents.

☒ Provide a copy of a parcel map depicting the property(ies) boundaries.

Section 12 - Certification Statements

Wis. Admin. Code ch. NR 712, entitled “Personnel Qualifications for Conducting Environmental Response Actions,” establishes minimum standards for experience and professional qualifications for persons who perform certain environmental services. All requests submitted to manage contaminated soil or other solid waste as an interim action or remedial action under Wis. Admin. Code chs. NR 708 or NR 722 must be prepared by, or prepared under, the supervision of a professional engineer per Wis. Admin. Code ch. NR 712. The professional engineer who prepared or supervised this request should complete the following section. This law applies to work conducted under Wis. Admin. Code ch. NR 718, unless specifically exempted.

Per Wis. Admin. Code § NR 712.09 (3) (a), the following certification shall be attached to any submittal that is required to be prepared by, or under the supervision of, a professional engineer under s. NR 712.07 (2), (3) or (5):

"I, Michelle Peters, hereby certify that I am a registered professional engineer in the State of Wisconsin, registered in accordance with the requirements of ch. A-E 4, Wis. Adm. Code; that this document has been prepared in accordance with the Rules of Professional Conduct in ch. A-E 8, Wis. Adm. Code; and that, to the best of my knowledge, all 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."

Michelle M. Peters — Managing Consultant, PE No. E-46453
Signature, title and P.E. number

In addition, if the work certified included investigation or evaluation of groundwater conditions, or groundwater related conclusions or recommendations, Wis. Admin. Code § NR 712.09 (3) (b) requires the following certification shall be attached to any submittal that is required to be prepared or to have its preparation supervised by a certified hydrogeologist under s. NR 712.07 (2), (4) or (5):

I, Andrew Mott, 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."

Senior Managing Consultant, PG No. 1266 — October 4, 2024
Signature and title — Date

Section 13 - Signatures

Owner(s) of receiving site(s) or facility(ies) if different than generating site

Each property owner of receiving site(s) or facility(ies) involved in the management project must provide their signature as part of this request. If one of the owners of the receiving site(s) or facility(ies) is acting on behalf of other owners, a power of attorney form or statement must be signed and attached to this agreement clearly granting the agent the authority to accept the contaminated materials on behalf of all other owners of the receiving site(s) or facility(ies) whose signatures are not included on this agreement.

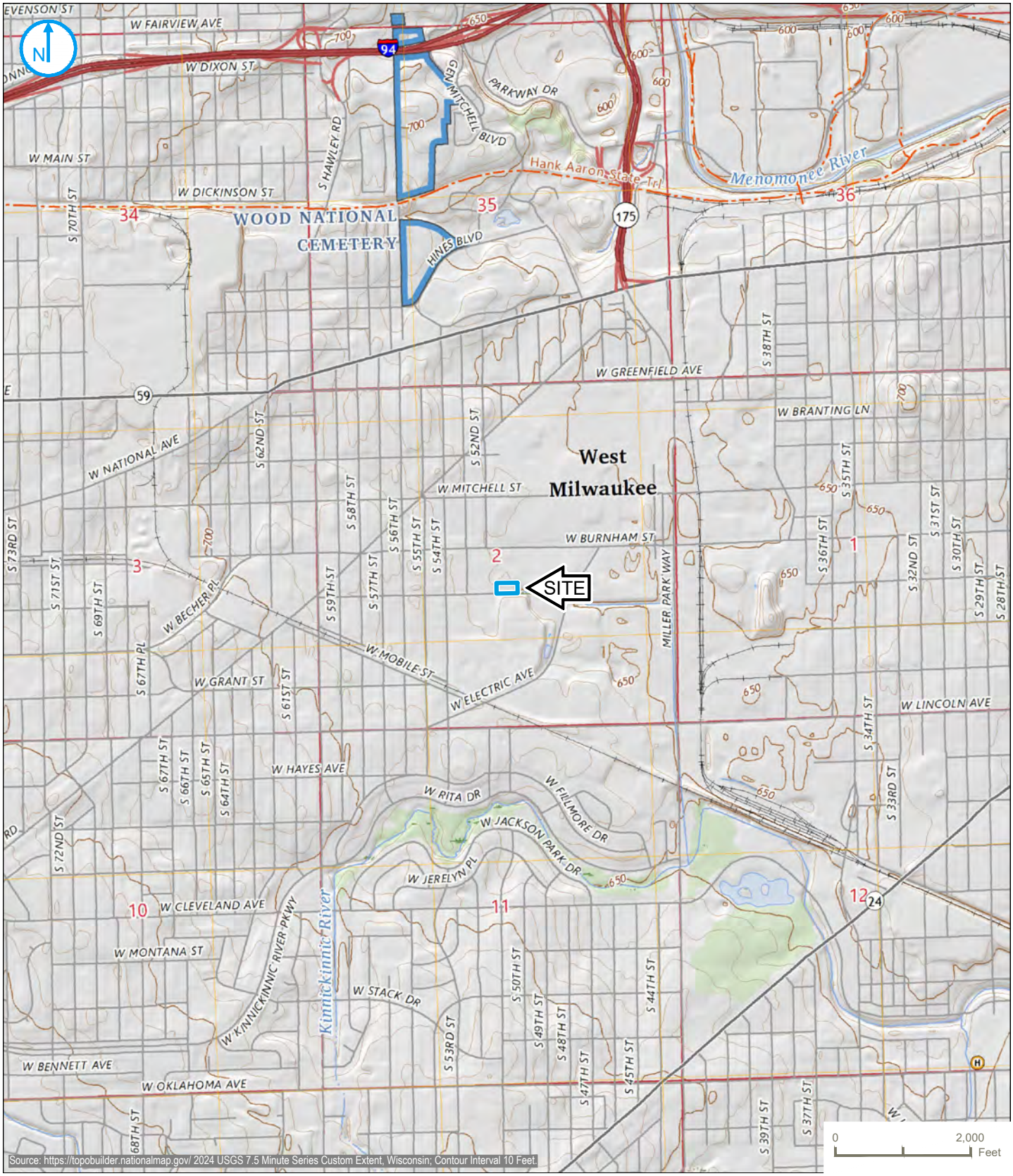
I understand that by signing this application I certify that I will follow the conditions and limitations required by law and specified in the approval issued to me as owner of the site or facility that will receive the contaminated soil. Further, I certify that the contaminated soil proposed to be managed under this approval will be at a property that meets the definition of "site" or "facility" under Wis. Stats. ch.292 and Wis. Admin. Code chs. NR 700 – 799, and I understand that the material must be managed any time in the future as a solid waste with the department's approval. I understand that this approval will be tracked in the Wisconsin Remediation and Redevelopment Database, and if required, will include maintenance and inspection by me of any continuing obligations, such as maintaining an engineering control or barrier over the contaminated soil, and will also be subject to inspection by the department. I understand that the conditions on my site or facility may be subject to Wis. Stats. ch. 709, Disclosures by Owners of Real Estate. I believe that the legal description for all properties where material will be managed is included with this submittal.

Receiving site or facility address as listed in Section 3F: 5032 West Rogers Street, West Allis, Wisconsin 53219

Print Name	Signature	Date
Patrick Schloss		10-3-24

Print Name	Signature	Date

FIGURES



C:\Users\hjward\OneDrive - Ramboll\Desktop\1940106525_West Allis_WTS_PHII\01_Site Location Map.dwg

DESIGNER: HJWARD

DATED: 4/4/2024

PROJECT: 1940106525

Map Scale: 1:24,000 | Map Center: 43.0086, -87.9770

KEY MAP

SITE LOCATION MAP

CITY OF WEST ALLIS
TRANSFER STATION
5032 WEST ROGERS STREET
WEST ALLIS, WISCONSIN

FIGURE 01

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.
A RAMBOLL COMPANY

RAMBOLL

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SITE BOUNDARY

LIMITS OF FORMER KINNICKINNIC CREEK CHANNEL (APPROXIMATE)

SOIL PROBE/SMALL DIAMETER MONITORING WELL

SOIL PROBE

2-INCH DIAMETER MONITORING WELL

OFF-SITE SOIL PROBE

STM — STORM SEWER

SAN — SANITARY SEWER

W — WATER MAIN

G — GAS MAIN

E — BURIED ELECTRIC

FO — FIBER OPTIC

SITE LAYOUT AND SAMPLING LOCATIONS

CITY OF WEST ALLIS
TRANSFER STATION
5032 WEST ROGERS STREET
WEST ALLIS, WISCONSIN

FIGURE 02

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.
A RAMBOLL COMPANY

RAMBOLL

PROJECT: 1940106525 DATED: 3/30/2024 DESIGNER: HJWARD

SITE BOUNDARY

LIMITS OF FORMER KINNICKINNIC CREEK CHANNEL (APPROXIMATE)

SOIL PROBE/SMALL DIAMETER MONITORING WELL

SOIL PROBE

2-INCH DIAMETER MONITORING WELL

OFF-SITE SOIL PROBE

STM — STORM SEWER

SAN — SANITARY SEWER

W — WATER MAIN

G — GAS MAIN

E — BURIED ELECTRIC

FO — FIBER OPTIC

653.88 — GROUNDWATER ELEVATION (FEET ABOVE MSL)

GROUNDWATER ELEVATION COUNTOUR

GROUNDWATER FLOW DIRECTION

GROUNDWATER ELEVATION AND FLOW - MARCH 19, 2024

CITY OF WEST ALLIS TRANSFER STATION
5032 WEST ROGERS STREET
WEST ALLIS, WISCONSIN

FIGURE 03

RAMBOLL AMERICAS ENGINEERING SOLUTIONS, INC.
A RAMBOLL COMPANY

RAMBOLL

PROJECT: 1940106525 DATED: 4/2/2024 DESIGNER: HJWARD

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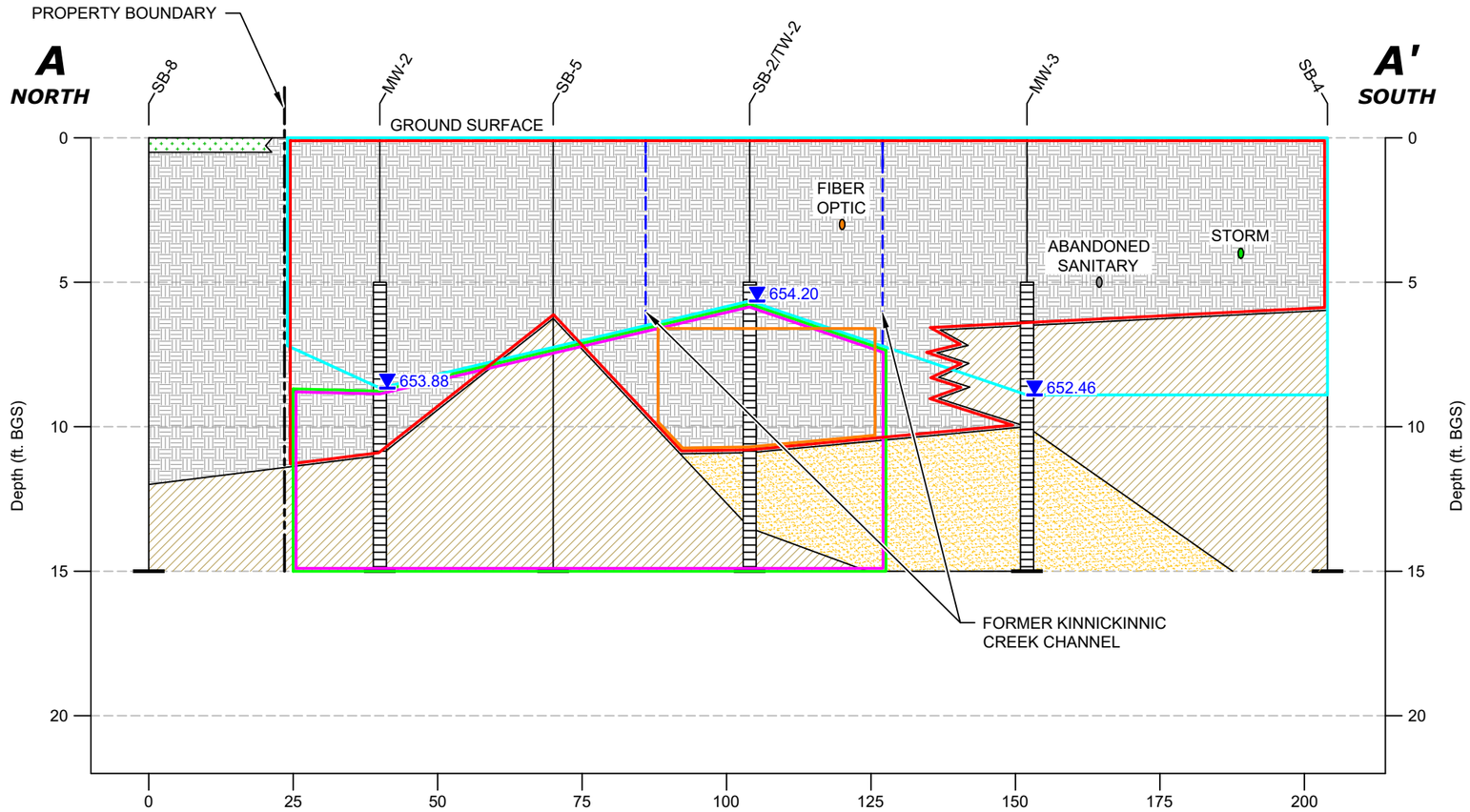

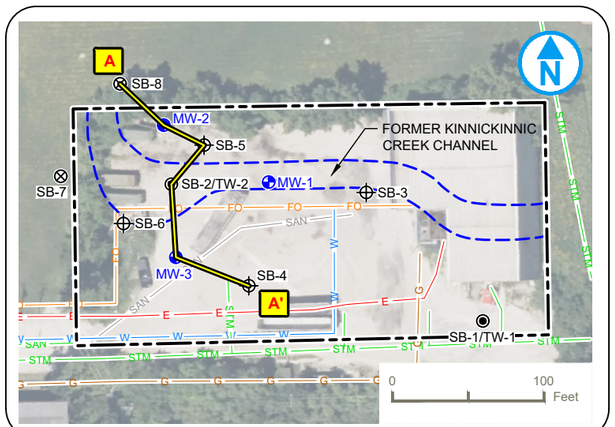

SITE OVERVIEW

Aerial Imagery Source: Bing Maps © Microsoft Corporation 2024.

NOTES:
FT. AMSL = FEET ABOVE MEAN SEA LEVEL.
FT. BGS = FEET BELOW GROUND SURFACE.
UTILTY DEPTHS ARE APPROXIMATE.
ALL LITHOLOGIC CONTACTS AND EXCEEDANCE CONTOURS ARE INFERRED.

SAMPLE LOCATION
END OF BORING
LITHOLOGY CONTACT
SCREENED INTERVAL

TOPSOIL
FILL
CLAY/SILTY CLAY
SAND/SANDY CLAY/SAND-SILT MIXTURES
POTENTIOMETRIC SURFACE (FT. AMSL) - MARCH 19, 2024

NR 720 INDUSTRIAL AND NON-INDUSTRIAL DIRECT CONTACT EXCEEDANCE CONTOUR
NR 720 INDUSTRIAL DIRECT CONTACT EXCEEDANCE CONTOUR - PCBs (High Risk) and VOCs
NR 720 GROUNDWATER PATHWAY EXCEEDANCE CONTOUR
NR 140 PREVENTIVE ACTION LIMIT EXCEEDANCE CONTOUR
NR 140 ENFORCEMENT STANDARD EXCEEDANCE CONTOUR

GEOLOGIC CROSS-SECTION A-A'

CITY OF WEST ALLIS TRANSFER STATION
5032 WEST ROGERS STREET
WEST ALLIS, WISCONSIN

FIGURE 04A

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.
A RAMBOLL COMPANY
RAMBOLL

L:\Loop Project Files_CAD\1941\940106525_West Allis_WTS_PH\I\2024-10\04A_Geologic Cross-Section A-A'.dwg
DESIGNER: HJW
DATED: 10/28/2024
PROJECT: 1940106525

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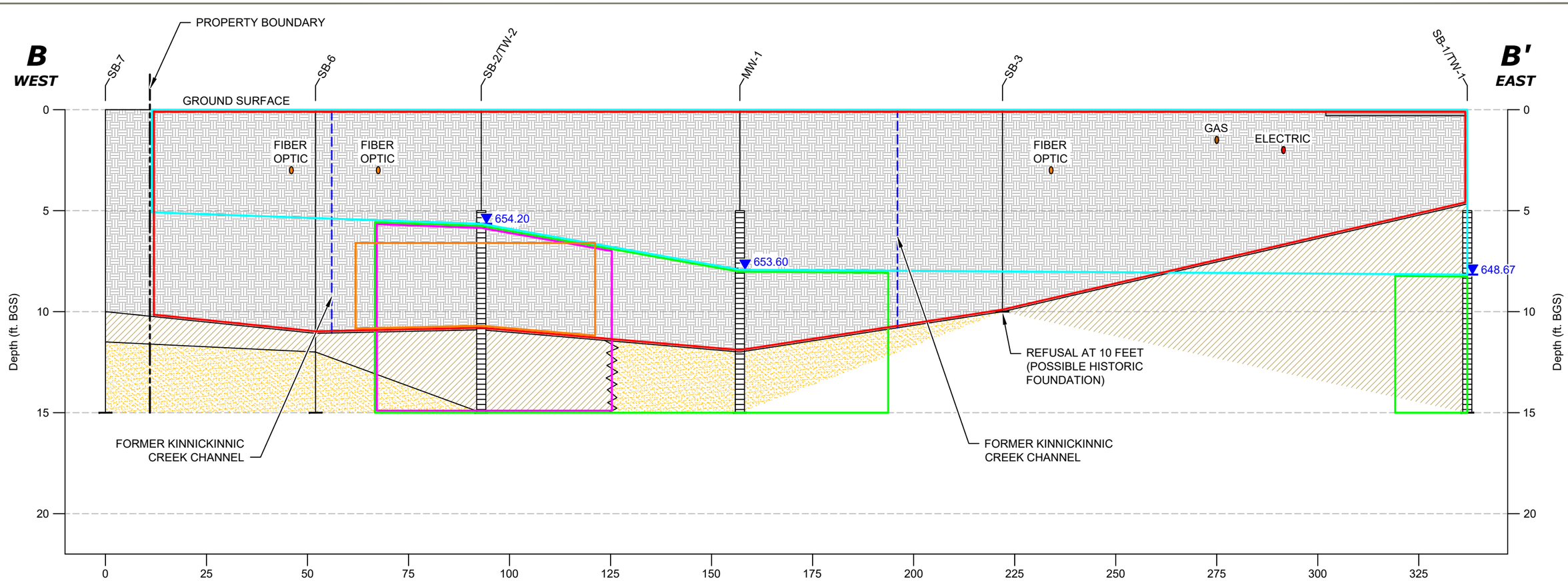
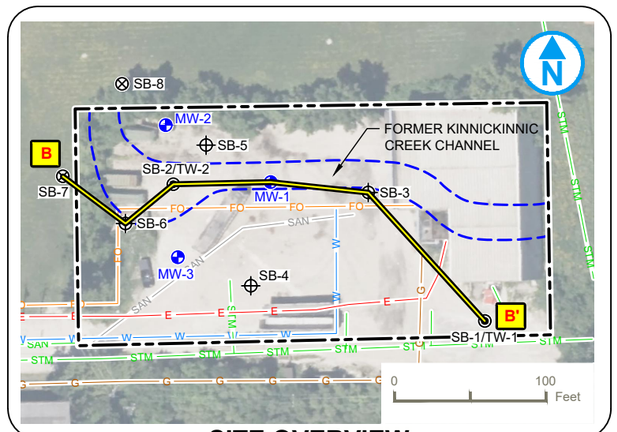


Horizontal Distance (ft.)
Vertical Exaggeration=5x



SITE OVERVIEW

Aerial Imagery Source: Bing Maps © Microsoft Corporation 2024.

NOTES:
FT. AMSL = FEET ABOVE MEAN SEA LEVEL.
FT. BGS = FEET BELOW GROUND SURFACE.
UTILTY DEPTHS ARE APPROXIMATE.
ALL LITHOLOGIC CONTACTS AND EXCEEDANCE CONTOURS ARE INFERRED.

SAMPLE LOCATION
END OF BORING
LITHOLOGY CONTACT
SCREENED INTERVAL

TOPSOIL
FILL
CLAY/SILTY CLAY
SAND/SANDY CLAY/SAND-SILT MIXTURES
POTENTIOMETRIC SURFACE (FT. AMSL) - MARCH 19, 2024

NR 720 INDUSTRIAL AND NON-INDUSTRIAL DIRECT CONTACT EXCEEDANCE CONTOUR
NR 720 INDUSTRIAL DIRECT CONTACT EXCEEDANCE CONTOUR - PCBs (High Risk) and VOCs
NR 720 GROUNDWATER PATHWAY EXCEEDANCE CONTOUR
NR 140 PREVENTIVE ACTION LIMIT EXCEEDANCE CONTOUR
NR 140 ENFORCEMENT STANDARD EXCEEDANCE CONTOUR

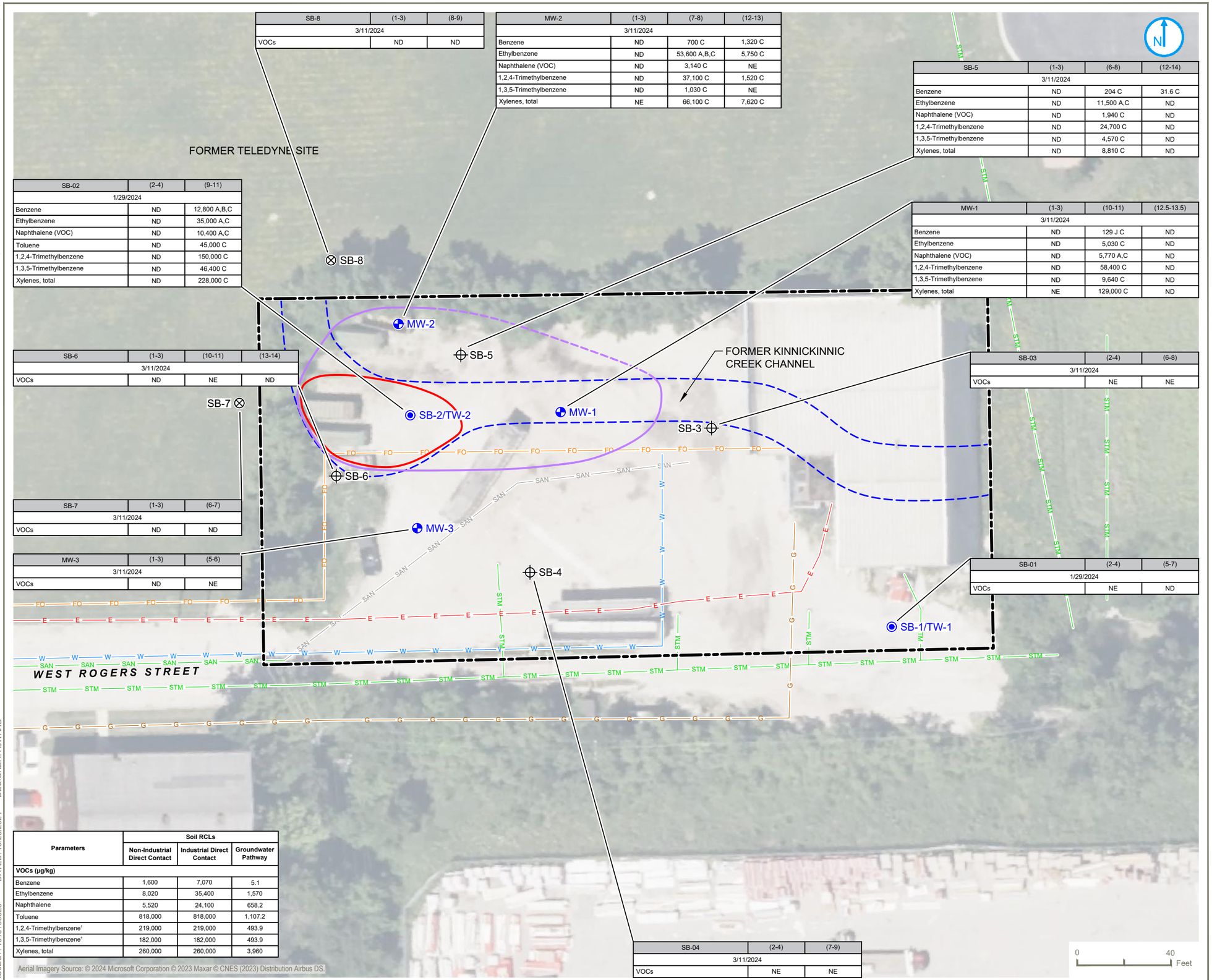
GEOLOGIC CROSS-SECTION B-B'

CITY OF WEST ALLIS TRANSFER STATION
5032 WEST ROGERS STREET
WEST ALLIS, WISCONSIN

FIGURE 04B

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.
A RAMBOLL COMPANY
RAMBOLL

DESIGNER: HJW
DATED: 10/28/2024
PROJECT: 1940106525



SB-8	(1-3)	(8-9)
3/11/2024		
VOCs	ND	ND

MW-2	(1-3)	(7-8)	(12-13)
3/11/2024			
Benzene	ND	700 C	1,320 C
Ethylbenzene	ND	53,600 A,B,C	5,750 C
Naphthalene (VOC)	ND	3,140 C	NE
1,2,4-Trimethylbenzene	ND	37,100 C	1,520 C
1,3,5-Trimethylbenzene	ND	1,030 C	NE
Xylenes, total	NE	66,100 C	7,620 C

SB-5	(1-3)	(6-8)	(12-14)
3/11/2024			
Benzene	ND	204 C	31.6 C
Ethylbenzene	ND	11,500 A,C	ND
Naphthalene (VOC)	ND	1,940 C	ND
1,2,4-Trimethylbenzene	ND	24,700 C	ND
1,3,5-Trimethylbenzene	ND	4,570 C	ND
Xylenes, total	ND	8,810 C	ND

SB-02	(2-4)	(9-11)
1/29/2024		
Benzene	ND	12,800 A,B,C
Ethylbenzene	ND	35,000 A,C
Naphthalene (VOC)	ND	10,400 A,C
Toluene	ND	45,000 C
1,2,4-Trimethylbenzene	ND	150,000 C
1,3,5-Trimethylbenzene	ND	46,400 C
Xylenes, total	ND	228,000 C

MW-1	(1-3)	(10-11)	(12.5-13.5)
3/11/2024			
Benzene	ND	129 J C	ND
Ethylbenzene	ND	5,030 C	ND
Naphthalene (VOC)	ND	5,770 A,C	ND
1,2,4-Trimethylbenzene	ND	58,400 C	ND
1,3,5-Trimethylbenzene	ND	9,640 C	ND
Xylenes, total	NE	129,000 C	ND

SB-6	(1-3)	(10-11)	(13-14)
3/11/2024			
VOCs	ND	NE	ND

SB-03	(2-4)	(6-8)
3/11/2024		
VOCs	NE	NE

SB-7	(1-3)	(6-7)
3/11/2024		
VOCs	ND	ND

MW-3	(1-3)	(5-6)
3/11/2024		
VOCs	ND	NE

SB-01	(2-4)	(5-7)
1/29/2024		
VOCs	NE	ND

SB-04	(2-4)	(7-9)
3/11/2024		
VOCs	NE	NE

Parameters	Soil RCLs		
	Non-Industrial Direct Contact	Industrial Direct Contact	Groundwater Pathway
VOCs (µg/kg)			
Benzene	1,600	7,070	5.1
Ethylbenzene	8,020	35,400	1,570
Naphthalene	5,520	24,100	658.2
Toluene	818,000	818,000	1,107.2
1,2,4-Trimethylbenzene[1]	219,000	219,000	493.9
1,3,5-Trimethylbenzene[1]	182,000	182,000	493.9
Xylenes, total	260,000	260,000	3,960

Aerial Imagery Source: © 2024 Microsoft Corporation © 2023 Maxar © CNES (2023) Distribution Airbus DS.

SITE BOUNDARY

LIMITS OF FORMER KINNICKINNIC CREEK CHANNEL (APPROXIMATE)

SOIL PROBE/SMALL DIAMETER MONITORING WELL

SOIL PROBE

2-INCH DIAMETER MONITORING WELL

OFF-SITE SOIL PROBE

EXTENT OF IDC RCL EXCEEDANCES - VOCs

EXTENT OF GWP AND NIND DC RCL EXCEEDANCES - VOCs

* DASHED CONTOURS ARE APPROXIMATE

NOTES:
All units are in micrograms per kilogram (µg/kg).
VOCs = Volatile Organic Compounds.
µg/kg = micrograms per kilogram.
Direct Contact RCLs were compared to soil results collected from any depth.
A Parameter exceeds NR 720 Residual Contaminant Level (RCL) for Non-Industrial Direct Contact (NIDC).
B Parameter exceeds NR 720 RCL for Industrial Direct Contact (IDC).
C Parameter exceeds NR 720 RCL for Groundwater Pathway (GWP).
d3 Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
J The reported result is an estimated value.
L2 Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results may be biased low.
P6 Matrix spike recovery was outside laboratory control limits due to a parent sample concentration notably higher than the spike level.
R1 Relative Percent Difference (RPD) value was outside control limits.
ND = No detections.
NE = No NR 720 RCL exceedance.
[1] Groundwater Pathway RCL listed is for 1,2,4- and 1,3,5- Trimethylbenzenes combined.

NR 720 SOIL STANDARD EXCEEDANCES - VOCs

CITY OF WEST ALLIS
TRANSFER STATION
5032 WEST ROGERS STREET
WEST ALLIS, WISCONSIN

FIGURE 5A

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.
A RAMBOLL COMPANY
RAMBOLL

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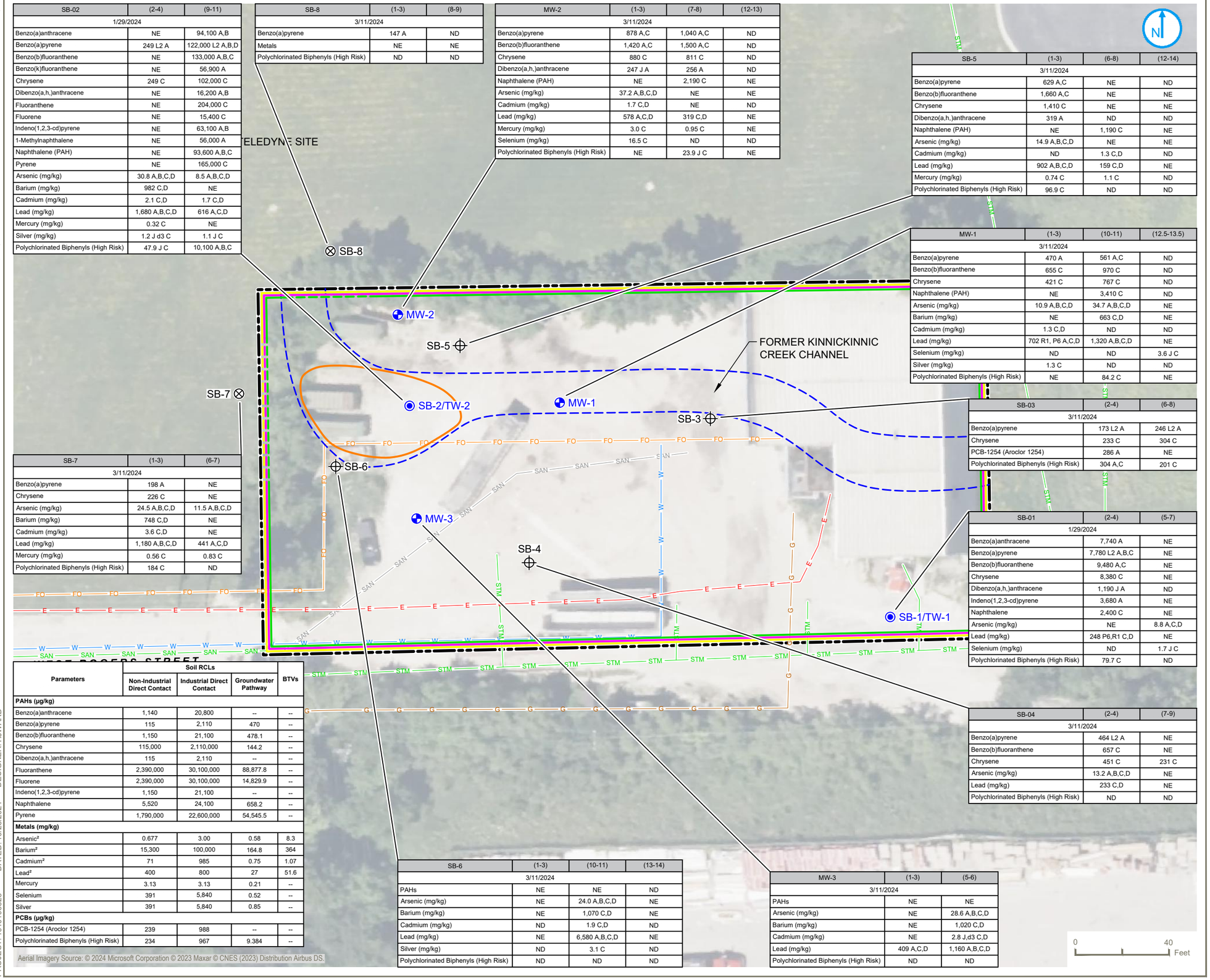
DESIGNER: HJWARD
DATED: 10/28/2024
PROJECT: 1940106525



SB-02	(2-4)	(9-11)
1/29/2024		
Benzo(a)anthracene	NE	94,100 A,B
Benzo(a)pyrene	249 L2 A	122,000 L2 A,B,D
Benzo(b)fluoranthene	NE	133,000 A,B,C
Benzo(k)fluoranthene	NE	56,900 A
Chrysene	249 C	102,000 C
Dibenzo(a,h,)anthracene	NE	16,200 A,B
Fluoranthene	NE	204,000 C
Fluorene	NE	15,400 C
Indeno(1,2,3-cd)pyrene	NE	63,100 A,B
1-Methylnaphthalene	NE	56,000 A
Naphthalene (PAH)	NE	93,600 A,B,C
Pyrene	NE	165,000 C
Arsenic (mg/kg)	30.8 A,B,C,D	8.5 A,B,C,D
Barium (mg/kg)	982 C,D	NE
Cadmium (mg/kg)	2.1 C,D	1.7 C,D
Lead (mg/kg)	1,680 A,B,C,D	616 A,C,D
Mercury (mg/kg)	0.32 C	NE
Silver (mg/kg)	1.2 J d3 C	1.1 J C
Polychlorinated Biphenyls (High Risk)	47.9 J C	10,100 A,B,C

SB-8	(1-3)	(8-9)
3/11/2024		
Benzo(a)pyrene	147 A	ND
Metals	NE	NE
Polychlorinated Biphenyls (High Risk)	ND	ND

MW-2	(1-3)	(7-8)	(12-13)
3/11/2024			
Benzo(a)pyrene	878 A,C	1,040 A,C	ND
Benzo(b)fluoranthene	1,420 A,C	1,500 A,C	ND
Chrysene	880 C	811 C	ND
Dibenzo(a,h,)anthracene	247 J A	256 A	ND
Naphthalene (PAH)	NE	2,190 C	NE
Arsenic (mg/kg)	37.2 A,B,C,D	NE	NE
Cadmium (mg/kg)	1.7 C,D	NE	ND
Lead (mg/kg)	578 A,C,D	319 C,D	NE
Mercury (mg/kg)	3.0 C	0.95 C	NE
Selenium (mg/kg)	16.5 C	ND	ND
Polychlorinated Biphenyls (High Risk)	NE	23.9 J C	NE

SB-5	(1-3)	(6-8)	(12-14)
3/11/2024			
Benzo(a)pyrene	629 A,C	NE	ND
Benzo(b)fluoranthene	1,660 A,C	NE	NE
Chrysene	1,410 C	NE	NE
Dibenzo(a,h,)anthracene	319 A	ND	ND
Naphthalene (PAH)	NE	1,190 C	NE
Arsenic (mg/kg)	14.9 A,B,C,D	NE	NE
Cadmium (mg/kg)	ND	1.3 C,D	ND
Lead (mg/kg)	902 A,B,C,D	159 C,D	NE
Mercury (mg/kg)	0.74 C	1.1 C	ND
Polychlorinated Biphenyls (High Risk)	96.9 C	ND	ND

MW-1	(1-3)	(10-11)	(12.5-13.5)
3/11/2024			
Benzo(a)pyrene	470 A	561 A,C	ND
Benzo(b)fluoranthene	655 C	970 C	ND
Chrysene	421 C	767 C	ND
Naphthalene (PAH)	NE	3,410 C	ND
Arsenic (mg/kg)	10.9 A,B,C,D	34.7 A,B,C,D	NE
Barium (mg/kg)	NE	663 C,D	NE
Cadmium (mg/kg)	1.3 C,D	ND	ND
Lead (mg/kg)	702 R1, P6 A,C,D	1,320 A,B,C,D	NE
Selenium (mg/kg)	ND	ND	3.6 J C
Silver (mg/kg)	1.3 C	ND	ND
Polychlorinated Biphenyls (High Risk)	NE	84.2 C	NE

SB-03	(2-4)	(6-8)
3/11/2024		
Benzo(a)pyrene	173 L2 A	246 L2 A
Chrysene	233 C	304 C
PCB-1254 (Aroclor 1254)	286 A	NE
Polychlorinated Biphenyls (High Risk)	304 A,C	201 C

SB-01	(2-4)	(5-7)
1/29/2024		
Benzo(a)anthracene	7,740 A	NE
Benzo(a)pyrene	7,780 L2 A,B,C	NE
Benzo(b)fluoranthene	9,480 A,C	NE
Chrysene	8,380 C	NE
Dibenzo(a,h,)anthracene	1,190 J A	ND
Indeno(1,2,3-cd)pyrene	3,680 A	NE
Naphthalene	2,400 C	NE
Arsenic (mg/kg)	NE	8.8 A,C,D
Lead (mg/kg)	248 P6,R1 C,D	NE
Selenium (mg/kg)	ND	1.7 J C
Polychlorinated Biphenyls (High Risk)	79.7 C	ND

SB-04	(2-4)	(7-9)
3/11/2024		
Benzo(a)pyrene	464 L2 A	NE
Benzo(b)fluoranthene	657 C	NE
Chrysene	451 C	231 C
Arsenic (mg/kg)	13.2 A,B,C,D	NE
Lead (mg/kg)	233 C,D	NE
Polychlorinated Biphenyls (High Risk)	ND	ND

SB-7	(1-3)	(6-7)
3/11/2024		
Benzo(a)pyrene	198 A	NE
Chrysene	226 C	NE
Arsenic (mg/kg)	24.5 A,B,C,D	11.5 A,B,C,D
Barium (mg/kg)	748 C,D	NE
Cadmium (mg/kg)	3.6 C,D	NE
Lead (mg/kg)	1,180 A,B,C,D	441 A,C,D
Mercury (mg/kg)	0.56 C	0.83 C
Polychlorinated Biphenyls (High Risk)	184 C	ND

Parameters	Soil RCLs: Non-Industrial Direct Contact	Soil RCLs: Industrial Direct Contact	Soil RCLs: Groundwater Pathway	BTVs
PAHs (µg/kg)				
Benzo(a)anthracene	1,140	20,800	--	--
Benzo(a)pyrene	115	2,110	470	--
Benzo(b)fluoranthene	1,150	21,100	478.1	--
Chrysene	115,000	2,110,000	144.2	--
Dibenzo(a,h,)anthracene	115	2,110	--	--
Fluoranthene	2,390,000	30,100,000	88,877.8	--
Fluorene	2,390,000	30,100,000	14,829.9	--
Indeno(1,2,3-cd)pyrene	1,150	21,100	--	--
Naphthalene	5,520	24,100	658.2	--
Pyrene	1,790,000	22,600,000	54,545.5	--
Metals (mg/kg)				
Arsenic[2]	0.677	3.00	0.58	8.3
Barium[2]	15,300	100,000	164.8	364
Cadmium[2]	71	985	0.75	1.07
Lead[2]	400	800	27	51.6
Mercury	3.13	3.13	0.21	--
Selenium	391	5,840	0.52	--
Silver	391	5,840	0.85	--
PCBs (µg/kg)				
PCB-1254 (Aroclor 1254)	239	988	--	--
Polychlorinated Biphenyls (High Risk)	234	967	9.384	--

SB-6	(1-3)	(10-11)	(13-14)
3/11/2024			
PAHs	NE	NE	ND
Arsenic (mg/kg)	NE	24.0 A,B,C,D	NE
Barium (mg/kg)	NE	1,070 C,D	NE
Cadmium (mg/kg)	ND	1.9 C,D	ND
Lead (mg/kg)	NE	6,580 A,B,C,D	NE
Silver (mg/kg)	ND	3.1 C	ND
Polychlorinated Biphenyls (High Risk)	ND	ND	ND

MW-3	(1-3)	(5-6)
3/11/2024		
PAHs	NE	NE
Arsenic (mg/kg)	NE	28.6 A,B,C,D
Barium (mg/kg)	NE	1,020 C,D
Cadmium (mg/kg)	NE	2.8 J,d3 C,D
Lead (mg/kg)	409 A,C,D	1,160 A,B,C,D
Polychlorinated Biphenyls (High Risk)	ND	ND

- SITE BOUNDARY
- LIMITS OF FORMER KINNICKINNIC CREEK CHANNEL (APPROXIMATE)
- SOIL PROBE/SMALL DIAMETER MONITORING WELL
- SOIL PROBE
- 2-INCH DIAMETER MONITORING WELL
- OFF-SITE SOIL PROBE
- EXTENT OF GWP RCL EXCEEDANCES
- EXTENT OF IDC RCL EXCEEDANCES - PCBs (High Risk)
- EXTENT OF IDC RCL EXCEEDANCES - Arsenic, Lead, PAHs
- EXTENT OF NIND RCL EXCEEDANCES

* DASHED CONTOURS ARE APPROXIMATE

NOTES:
All units are in micrograms per kilogram (µg/kg) unless otherwise noted.
Units for metals are in milligrams per kilogram (mg/kg).
PAHs = Polynuclear Aromatic Hydrocarbons.
PCBs = Polychlorinated Biphenyls.
BTV = Background Threshold Value.
µg/kg = micrograms per kilogram.
mg/kg = milligrams per kilogram.
Direct Contact RCLs were compared to soil results collected from any depth.
A Parameter exceeds NR 720 Residual Contaminant Level (RCL) for Non-Industrial Direct Contact (NIDC).
B Parameter exceeds NR 720 RCL for Industrial Direct Contact (IDC).
C Parameter exceeds NR 720 RCL for Groundwater Pathway (GWP).*
D Parameter exceeds Surficial BTV for metals.
* Metal groundwater pathway exceedances were only included if the metal also exceeded its BTV. Metals with BTV exceedances but no RCL exceedances were also not included.
d3 Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
J The reported result is an estimated value.
L2 Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results may be biased low.
P6 Matrix spike recovery was outside laboratory control limits due to a parent sample concentration notably higher than the spike level.
R1 Relative Percent Difference (RPD) value was outside control limits.
ND = No detections.
NE = No NR 720 RCL exceedance.
[2] Parameter BTV is larger than one or more of the RCLs or is the only standard available.
-- No RCL or Surficial BTV established.

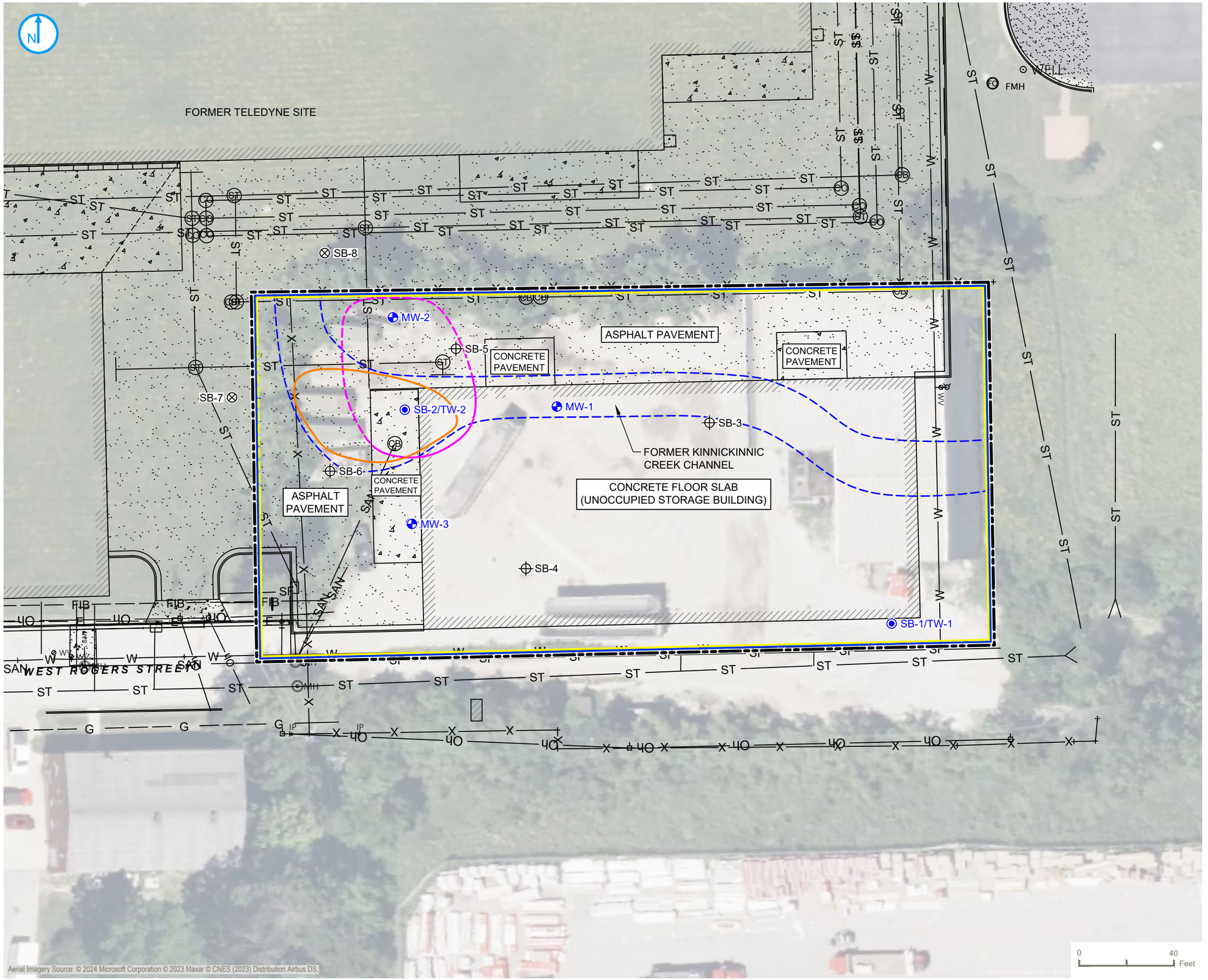
NR 720 SOIL STANDARD EXCEEDANCES - PAHs, METALS, PCBs

CITY OF WEST ALLIS TRANSFER STATION
5032 WEST ROGERS STREET
WEST ALLIS, WISCONSIN

FIGURE 5B

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.
A RAMBOLL COMPANY
RAMBOLL

L:\Loop Project Files_CAD\19401\940106525_West Allis_WTS_PHII\2024-10\05B_Soil Quality.dwg
DESIGNER: HJWARD
DATED: 10/25/2024
PROJECT: 1940106525



- SITE BOUNDARY
- LIMITS OF FORMER KINNICKINNIC CREEK CHANNEL (APPROXIMATE)
- SOIL PROBE/SMALL DIAMETER MONITORING WELL
- SOIL PROBE
- 2-INCH DIAMETER MONITORING WELL
- OFF-SITE SOIL PROBE
- EXTENT OF IDC RCL EXCEEDANCES - PCBs (High Risk) and VOCs
- EXTENT OF IDC RCL EXCEEDANCES - Arsenic, Lead, PAHs
- EXTENT OF ES EXCEEDANCES
- EXTENT OF PROPOSED DIRECT CONTACT BARRIER

* DASHED CONTOURS ARE APPROXIMATE

PROPOSED DIRECT CONTACT BARRIER

CITY OF WEST ALLIS TRANSFER STATION
5032 WEST ROGERS STREET
WEST ALLIS, WISCONSIN

FIGURE 07

RAMBOLL AMERICAS ENGINEERING SOLUTIONS, INC.
A RAMBOLL COMPANY

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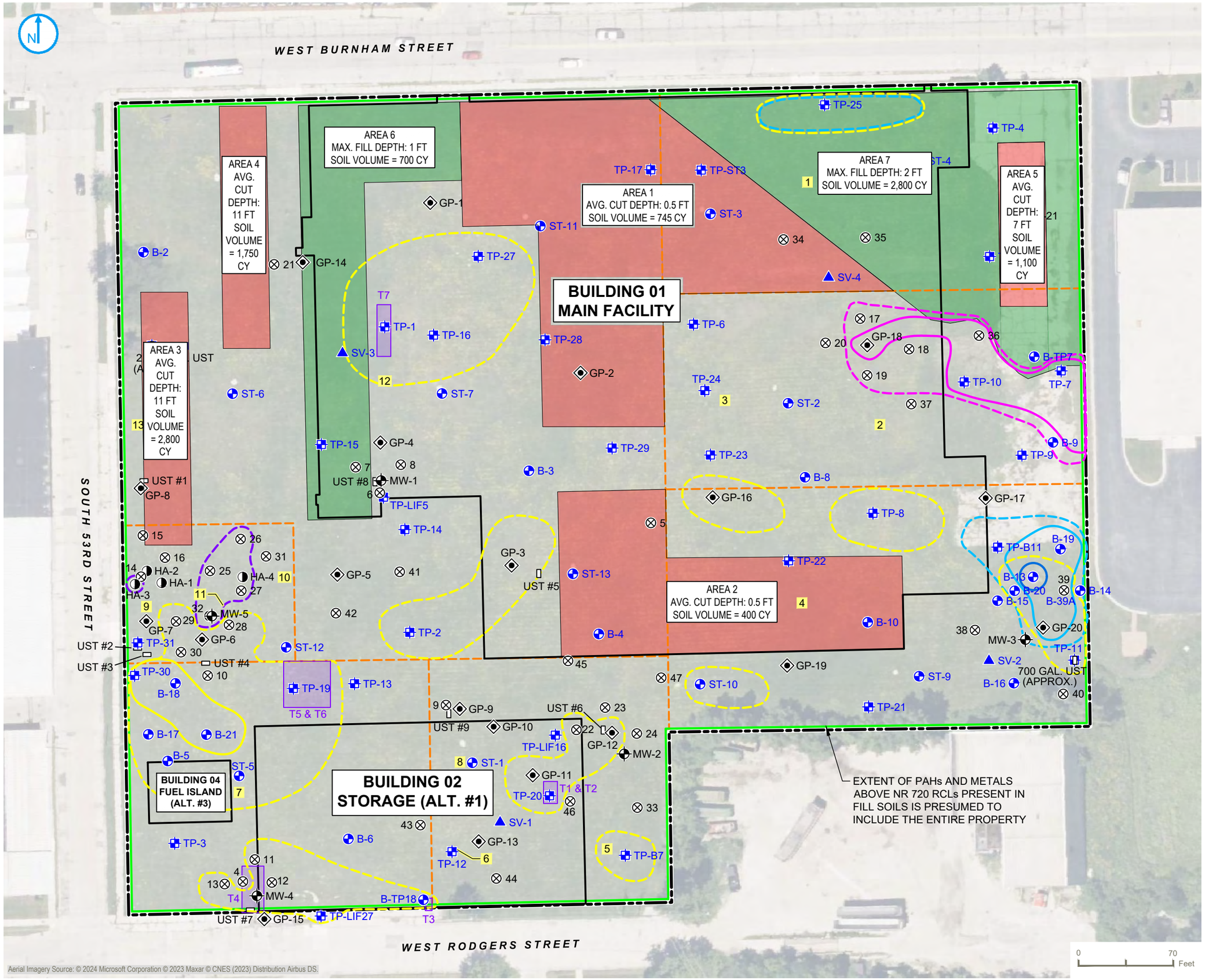
PROJECT: 1940106525 DATED: 10/29/2024 DESIGNER: HJWARD



PROPERTY BOUNDARY
PARCEL BOUNDARY (APPROXIMATE)
BORING LOCATION (BRAUN)
TEST PIT LOCATION (BRAUN)
SOIL VAPOR INVESTIGATION (BRAUN)
UNDERGROUND STORAGE TANK
TSSA CONFIRMATION SAMPLES (2012 SYBIONT)
SOIL SAMPLE (2017 TETRA TECH)
SOIL BORING AND MONITORING WELL (2017 TETRA TECH)
SOIL PROBES/TEMPORARY WELLS (2010 AECOM)
HAND AUGER LOCATIONS (2010 AECOM)
LEAD - INDUSTRIAL RCL (800 mg/kg)
LEAD - NON-INDUSTRIAL RCL (400 mg/kg)
TCE - INDUSTRIAL RCL (8.41 mg/kg)
TCE - NON-INDUSTRIAL RCL (1.3 mg/kg)
TCE - GW RCL (0.0036 mg/kg)
PCB - GW RCL (0.0094 mg/kg)
PVOCs - GW RCLs
PVOCs - INDUSTRIAL RCLs
PAHs AND METALS EXCEEDING NR 720 RCLs

FORMER SITE FEATURES:
1 FINISHED MATERIAL WAREHOUSE
2 LOADING DOCK AREA
3 RAMP
4 STORAGE AND TRAINING AREA
5 ENGINE TEST ROOM
6 OIL AND PAINT STORAGE AREA
7 SHIPPING AND STORAGE
8 FREIGHT ELEVATOR
9 OIL STORAGE AREA
10 BOILER ROOM
11 ELECTRICAL SUBSTATION AREA
12 MAIN MANUFACTURING AREA
13 GARAGE

Note: TCE detections from outside of the TCE hot spot area qualified by the laboratory as estimtated ("J" flagged) are not presented on this figure.

CUT AND FILL AREAS

FORMER TELEDYNE SITE ONLY

FORMER TELDYNE INDUSTRIES
5200 WEST BURNHAM STREET
WEST ALLIS, WISCONSIN

FIGURE 04

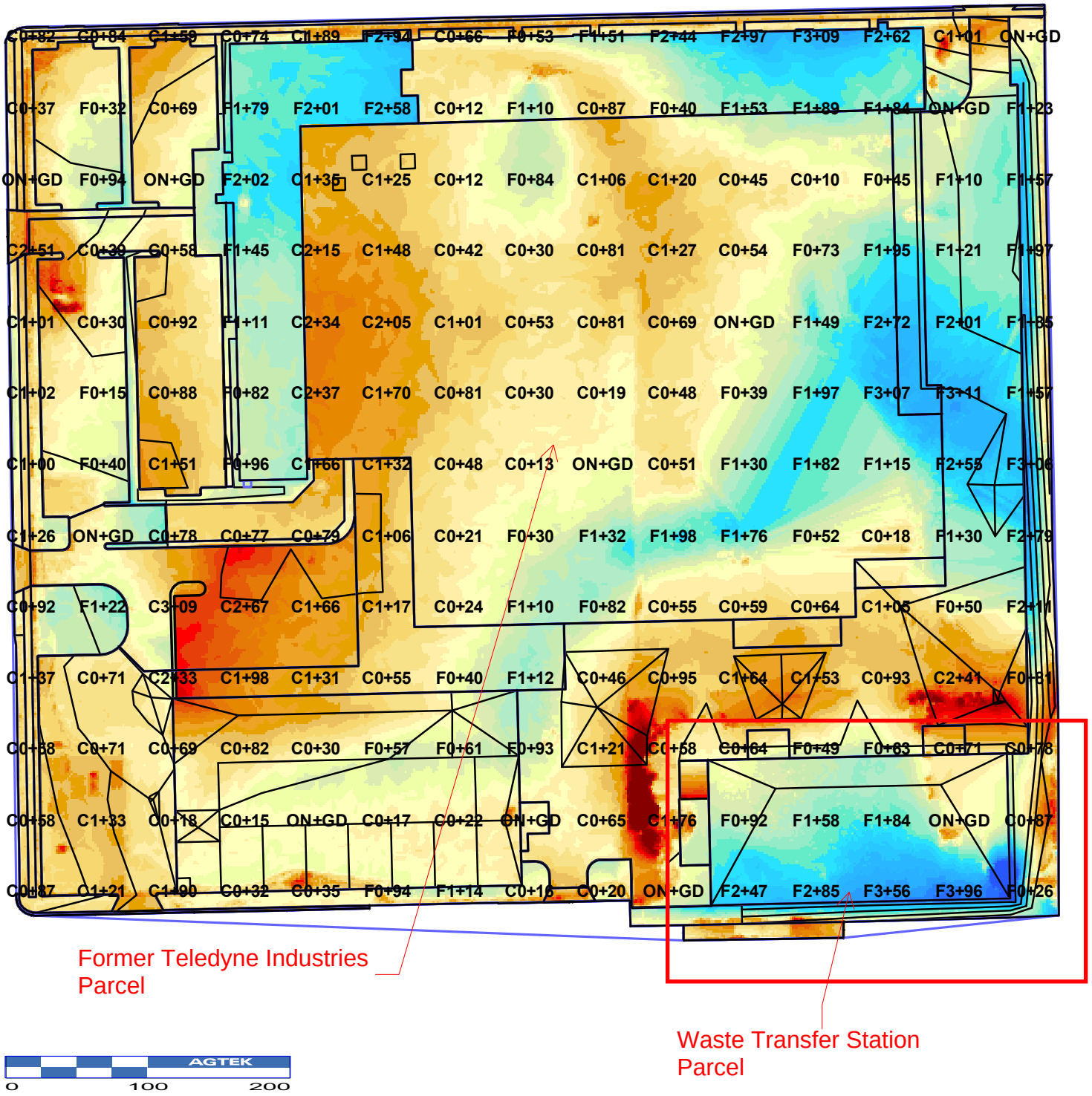
RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.
A RAMBOLL COMPANY
RAMBOLL

L:\Loop Project Files_CAD\1690030431_West_Allis_Assessment\2024-05\04_Cut and Fill Areas.dwg
PROJECT: 1690030431 DATED: 6/20/2024 DESIGNER: HJWARD

City of West Allis Department of Public Works Redevelopment
Former Teledyne Industries & Waste Transfer Station Properties
52 West Burnham Street, West Allis, Wisconsin**

Figure 08A - Cut/Fill Heat Map

Blue represents fill areas ("F"), red represents cut areas ("C")



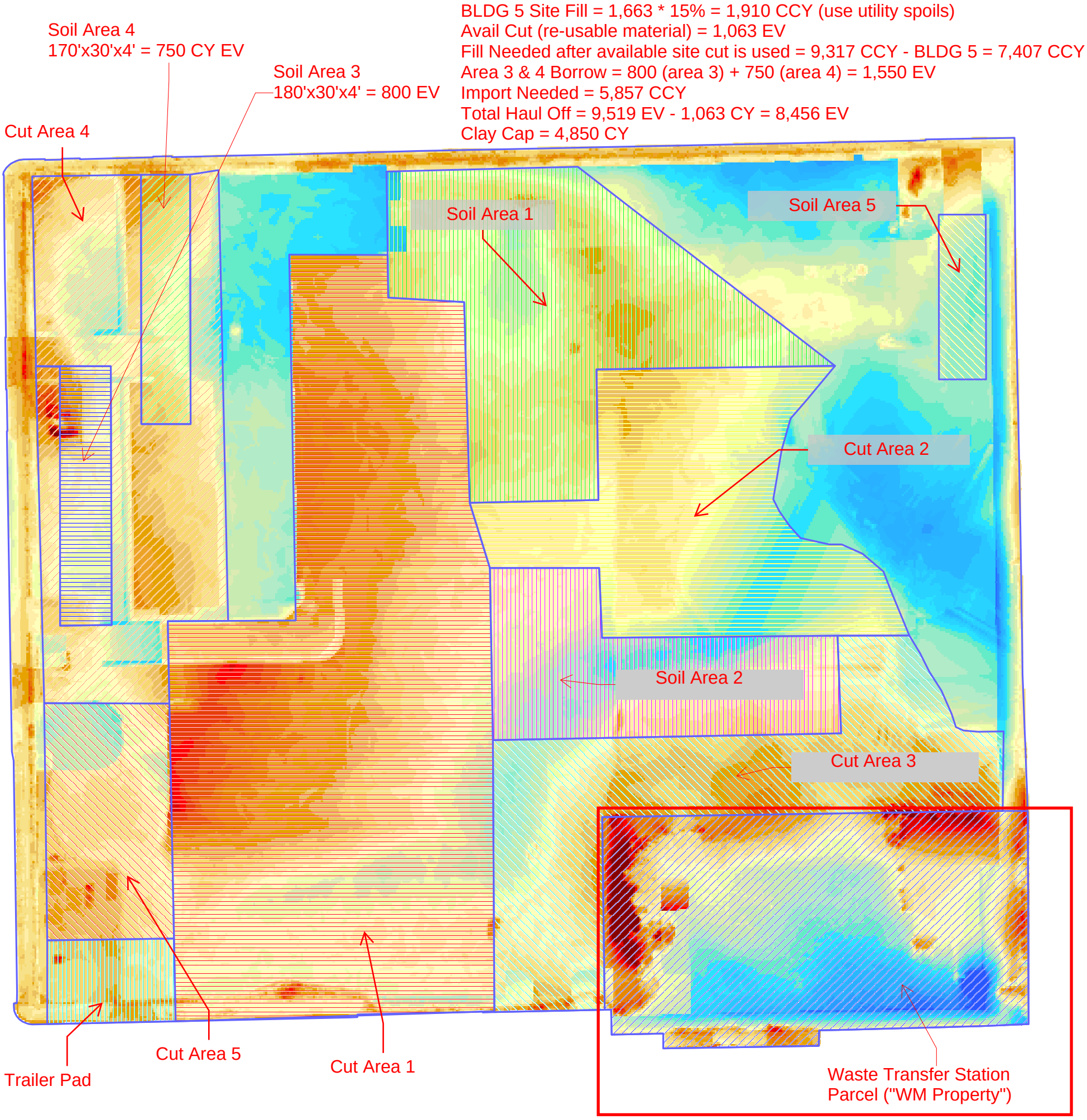
City of West Allis Department of Public Works Redevelopment
Former Teledyne Industries & Waste Transfer Station Properties
52 West Burnham Street, West Allis, Wisconsin`**
Figure 08B - NR 718 Cut & Fill Areas

Job: West Allis DPW 7-23-24 Topo VS Subgrade
Units: Ft-CY
Thu Jul 25, 2024 08:51:28 Page 1

Haul Report
Subgrade vs Existing

	Area				Volume					
	Total	Cut	Fill	OnGrade	Cut	Fill	Fill Factor	Haul Distance	Average Slope	Export -Import
Cut Area 1	98,340	74,587	13,558	10,195	3,582	232	1.00	183	0.1%	3,350
Cut Area 2	35,679	16,036	16,837	2,806	337	688	1.00	124	-0.9%	-351
Cut Area 3	36,916	26,916	7,750	2,250	1,068	230	1.00	81	-0.7%	838
Cut Area 4	35,268	20,467	11,818	2,983	692	333	1.00	30	-0.3%	359
Cut Area 5	15,442	10,991	3,632	819	317	114	1.00	87	0.4%	203
Cut Sub:	**221,645**	**148,997**	**53,595**	**19,053**	**5,996**	**1,597**		**125**	**-0.2%**	**4,399**
Soil Area 1	39,420	28,611	7,662	3,147	728	187	1.00	56	-0.4%	541
Soil Area 2	21,952	6,090	13,003	2,859	103	457	1.00	72	-1.3%	-354
Soil Area 3	6,886	3,375	1,925	1,586	99	25	1.00	88	-0.1%	74
Soil Area 4	6,376	5,025	730	621	133	10	1.00	36	-0.1%	123
Soil Area 5	4,028	0	4,013	15	0	200	1.00	0	0.0%	-200
Soil Sub:	**78,662**	**43,101**	**27,333**	**8,228**	**1,063**	**879**		**59**	**-0.6%**	**184**
Trailer Pad	5,512	5,411	12	89	183	0	1.00	26	4.6%	183
WM Property	48,822	20,259	26,310	2,253	1,343	1,663	1.00	83	-1.1%	-320
Regions Total	**354,641**	**217,768**	**107,250**	**29,623**	**8,585**	**4,139**		**103**	**-0.4%**	**4,446**

Fill = 9,026 * 15% = 10,380 CCY
BLDG 5 Site Fill = 1,663 * 15% = 1,910 CCY (use utility spoils)
Avail Cut (re-usable material) = 1,063 EV
Fill Needed after available site cut is used = 9,317 CCY - BLDG 5 = 7,407 CCY
Area 3 & 4 Borrow = 800 (area 3) + 750 (area 4) = 1,550 EV
Import Needed = 5,857 CCY
Total Haul Off = 9,519 EV - 1,063 CY = 8,456 EV
Clay Cap = 4,850 CY



ADDITIONAL ATTACHMENTS

Tables

Table 1. Monitoring Well Groundwater Elevations
West Allis Waste Transfer Station
5032 W. Rogers St.
West Allis, Wisconsin
Ramboll Project No. 1940106525

Well	Measurement Date	Top of Casing Elevation (feet-amsl)	Ground Surface Elevation (feet-amsl)	Well Screen Depths (feet-bgs)	Depth to Groundwater (feet-bTOC)	Depth to Groundwater (feet-bgs)	Groundwater Elevation (feet-amsl)
TW-1	2/2/2024	656.83	657.05	4.82 - 14.82	8.45	8.67	648.38
	3/19/2024				8.16	8.38	648.67
TW-2	2/2/2024	659.85	660.10	4.80 - 14.80	7.06	7.32	652.79
	3/19/2024				5.65	5.91	654.20
MW-1	3/13/2024	661.52	659.07	7.47 - 17.47	8.27	5.82	653.25
	3/19/2024				7.92	5.47	653.60
MW-2	3/13/2024	662.54	659.82	7.58 - 17.58	8.82	6.10	653.72
	3/19/2024				8.66	5.94	653.88
MW-3	3/13/2024	661.36	659.00	7.47 - 17.47	9.21	6.85	652.15
	3/19/2024				8.90	6.54	652.46

Notes:
Elevation in feet above mean sea level using Horizontal Datum WI State Plane NAD83 and Vertical Datum USGS NGVD 88.
amsl = above mean sea level
bgs = below ground surface
bTOC = below top of casing

Table 2. Soil Analytical Results - Proposed Management Material

NR718 Exemption Request
Former Teledyne Industries / West Allis Waste Transfer Station
BRRTS No. 02-41-556802 / 02-41-594132
City of West Allis, Milwaukee County, Wisconsin

Sample Location:		WI Soil BTV Backgrounds	*WI Soil GW Pathways RCL, DF 2*	**WI Soil Industrial DC RCLs**	WI Soil Non-Industrial DC RCLs	GP-8		GP-8		GP-21		GP-21		ST-8		TP-B1	
Sample Depth (feet bgs):						2-4		6-8		2-4		4-7		2-3.5		8	
Sample Date:						7/7/2010		7/7/2010		7/8/2010		7/8/2010		4/1/2019		3/27/2019	
Parameter | Reporting Units						Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
VOC																	
All Reported VOCs [1]	--	--	--	--	--	<MDL		<MDL		<MDL		<MDL		<MDL		<MDL	
PAH																	
Acenaphthene	mg/kg	NS	*NS*	**45,200**	3,590	<0.011	U	<0.011	U	0.28	J	<0.011	U	<0.007	U	<0.007	U
Acenaphthylene	mg/kg	NS	*NS*	**NS**	NS	<0.011	U	<0.011	U	0.25	J	<0.011	U	<0.005	U	<0.005	U
Anthracene	mg/kg	NS	*196.9492*	**100,000**	17,900	<0.0093	U	<0.0093	U	1.3		<.0093	U	<0.007	U	<0.007	U
Benzo(a)anthracene	mg/kg	NS	*NS*	**20.8**	1.14	<0.0077	U	0.027	J	4.6		<0.0077	U	<0.005	U	0.009	J
Benzo(a)pyrene	mg/kg	NS	*0.47*	**2.11**	0.115	<0.0074	U	0.022	J	***4.2***		<0.0074	U	<0.008	U	0.03	J
Benzo(b)fluoranthene	mg/kg	NS	*0.4781*	**21.1**	1.15	<0.0078	U	0.031	J	*8.4*		<0.0078	U	<0.009	U	0.012	J
Benzo(g,h,i)perylene	mg/kg	NS	*NS*	**NS**	NS	<0.0095	U	<0.0095	U	0.560		<0.0095	U	<0.013	U	<0.013	U
Benzo(k)fluoranthene	mg/kg	NS	*NS*	**211**	11.5	<0.012	U	0.016	J	2.500		<0.012	U	<0.012	U	<0.012	U
Chrysene	mg/kg	NS	*0.1442*	**2,110**	115	<0.0091	U	0.030	J	*3.9*		<0.0091	U	<0.011	U	0.012	J
Dibenz(a,h)anthracene	mg/kg	NS	*NS*	**2.11**	0.115	<0.011	U	<0.011	U	0.240	J	<0.011	U	<0.008	U	0.026	J
Fluoranthene	mg/kg	NS	*88.8778*	**30,100**	2,390	<0.0079	U	0.063		11.0		<0.0079	U	<0.007	U	0.019	J
Fluorene	mg/kg	NS	*14.8299*	**30,100**	2,390	<0.0095	U	<0.0095	U	0.51		<0.0095	U	<0.006	U	<0.006	U
Indeno(1,2,3-cd)pyrene	mg/kg	NS	*NS*	**21.1**	1.15	<0.011	U	<0.011	U	0.64		<0.011	U	<0.01	U	0.029	J
Naphthalene	mg/kg	NS	*0.6582*	**24.1**	5.52	<0.016	U	<0.016	U	0.22	J	<0.016	U	<0.006	U	<0.006	U
Phenanthrene	mg/kg	NS	*NS*	**NS**	NS	0.0097	J	0.048		6.0		<0.0073	U	<0.006	U	0.01	J
Pyrene	mg/kg	NS	*54.5455*	**22,600**	1,790	<0.0089	U	0.039		7.2		<0.0089	U	<0.008	U	0.013	J
Metal																	
Arsenic, Total	mg/kg	8.3	*0.584*	**8.3**	8.3	<1.6	U	<1.6	U	*7.1*		*3.8*		*6.2*		*3.5*	
Barium, Total	mg/kg	364	*164.8*	**100,000**	15,300	140		29		*200*		86		59		18	
Cadmium, Total [2]	mg/kg	1	*0.752*	**985**	71.1	0.3		*0.81*		0.41		0.095	J	0.11	J,B	0.10	J
Chromium, Total [3]	mg/kg	44	*360,000*	**100,000**	100,000	14		8		13		30		24		12	
Lead, Total	mg/kg	52	*27*	**800**	400	*59*		*70*		*200*		7.2		13		6.8	
Mercury, Total	mg/kg	NS	*0.208*	**3.13**	3.13	<0.010	U	0.019	J	0.13		0.027		0.084	B	0.012	J
Selenium, Total	mg/kg	NS	*0.52*	**5,840**	391	<1.6	U	<1.6	U	<0.32	U	*1.8*		<0.65	U	<0.63	U
Silver, Total	mg/kg	NS	*0.8491*	**5,840**	391	0.22	J	0.23	J	<0.16	U	<0.16	U	*3.1*		*3.9*	

Notes:

Blue	exceeds the WI Soil BTV
Italic	exceeds the Soil-to-Groundwater Pathway RCL, DF 2
Bold	exceeds the Industrial Direct Contact RCL
Underlined	exceeds the Non-Industrial Direct Contact RCL
Bold Border	exceeds the Soil to GW Pathways and/or Industrial DC RCL

BTV and Direct Contact RCLs were compared to all soil results.
Soil-to-GW Pathways were compared to all soil results.

Results & Flags:
-- = Analysis not performed
< = Concentration is less than reported limit
J = Estimated concentration
U = Concentration was not detected above the reported limit

Acronyms:
bgs = below ground surface
BRRTS = Bureau for Remediation and Redevelopment Tracking System
BTV = Background Threshold Value
DC (or D-C) = Direct-Contact
DF 2 = Dilution Factor of 2
MDL = method detection limit
mg/kg = milligrams per kilogram
NS = No Standard
PAH = Polycyclic Aromatic Hydrocarbon
RCL = NR720 Soil Residual Contaminant Level (WDNR)
VOC = Volatile Organic Compound
WI = Wisconsin

Notes:
1. All VOCs were analyzed by USEPA Method 8260 and none were reported above method detection limits.
2. The Cadmium (Diet) Direct Contact RCL was used.
3. The Chromium(III) Direct Contact RCLs (both 100,000 mg/kg) and the Total Chromium Groundwater Pathway RCL (360,00 mg/kg DF 2 if no Cr-VI) were used.
4. Screening criteria are derived from the WDNR NR720 Soil RR (Remediation and Redevelopment Program) RCLs last updated December 2018
5. Sample results for GP-8 and GP-21 were transcribed from AECOM Phase II Environmental Site Assessment report, October 2010. Sample results for ST-8 and TP-B1 were transcribed from Braun Intertec NR 716 Site Investigation Report, August 2019.

RAMBOLL

ADDITIONAL ATTACHMENTS

Barrier Maintenance Plan

ATTACHMENT D

BARRIER MAINTENANCE PLAN

Date: October 2024

Property Located at: West Allis Waste Transfer Station
5032 West Rogers Street, West Allis, WI 53219

BRRTS No. 02-41-594132, FID No. 341368390

Legal Description: Part of the Northwest ¼ of the Fractional Southeast ¼ in Section 2, Township 6 North, Range 21 East, in the City of West Allis, Milwaukee County, Wisconsin.
Parcel Identification No. 474-0003-000

INTRODUCTION

This document is the Barrier Maintenance Plan for the former West Allis Waste Transfer Station soil barrier consisting of a building structure and paved areas at 5032 West Rogers Street, West Allis, Wisconsin, in accordance with the requirements of s. NR 724.13 (2), Wisconsin Administrative Code (WAC). The maintenance activities relate to the proposed site direct contact barrier which will address and occupy the area over the soils partially affected with volatile organic compounds (VOCs), polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), and metals above their respective WAC NR 720 Residual Contaminant Levels (RCLs).

More site-specific information about this property may be found in:

- the case file in the WDNR Southeast office;
- BRRTS on the Web (WDNR's internet-based data base of contaminated sites) for the link to a PDF for site-specific information at the time of closure and on continuing obligations;
- RR Sites Map/GIS Registry layer for a map view of the site, and
- the WDNR project manager for Milwaukee County.

D.1. Descriptions

Description of Contamination

The site is contaminated from the historical emplacement of urban fill soils during the initial development of the site, including in the former Kinnickinnic Creek Channel. The extent of low-level contamination is widespread across the site due to the nature of the fill. PAHs, RCRA metals, and PCBs were detected in fill/soil, considered to extend to the property boundaries, at concentrations exceeding Wisconsin Administrative Code (WAC) NR 720 Groundwater Pathway and Non-Industrial Direct Contact Residual Contaminant Levels (RCLs), in addition to arsenic detections exceeding the WAC NR 720 Industrial Direct Contact RCL. In limited areas of the site, PAHs and lead have been detected exceeding the WAC NR 720 Industrial Direct Contact site. VOCs have been detected exceeding the WAC NR 720 Groundwater Pathway RCLs in a limited northwestern portion of the site, within the former backfilled creek channel.

Fill thickness on the site has been documented to be between 4 to 12 feet of re-worked soil/fill material. The observed depth of fill was greatest, approximately 10 to 12 feet, in soil brings advanced in the extent of the former Kinnickinnic Creek Channel. The fill material encountered in borings consisted of sandy gravel and gravelly sandy slit with trace to some organics. Debris encountered within the fill included trace such as brick, broken glass, ceramic, and metal. These observed fill materials are not methane-generating. Native

silty clay was observed under fill. No organic clays or other methane-generating soils have been observed at the site.

Benzene has been detected in the groundwater above the Enforcement Standard (ES) at two wells in the northwestern corner, and above the Preventative Action Limit (PAL) in four of the five wells. Several other VOCs and metals have been detected above their respective PALs in the four wells near the former Kinnickinnic Creek Channel. Groundwater contamination appears to be localized to the northwestern corner of the site, within and adjacent to the former Kinnickinnic Creek Channel and likely associated with the fill material used to backfill the former channel and northwestern portion of the site.

Soil vapor samples were not collected on the site. A vapor intrusion assessment was performed due to the presence of PVOCs, which concluded that vapor intrusion into existing structures is not a concern at the site. Future redevelopment of the site will not include the construction of any occupied buildings for which vapor mitigation measures would be warranted.

Description of the Barrier to be Maintained

The proposed site barrier is an ancillary unoccupied cold storage structure in support of the new Department of Public Works (DPW) facility for the City at the adjoining Former Teledyne Industries site. It will include an unoccupied slab-on-grade cold storage structure as well as installation of new asphalt- or concrete-paved areas, which will act as a direct contact barrier.

The proposed structures will be slab-on-grade construction with concrete foundations and building slabs. The structure foundation slab will be constructed with 4 to 8 inches thick concrete and will be underlain by 4 to 8 inches of crushed aggregate base course. As the proposed redevelopment of an ancillary cold storage structure will not include the construction of any occupied building, no vapor mitigation measures are warranted in accordance with guidance provided in WDNR guidance document RR-800. Asphalt parking/driveway areas along the northern and western portions of the site will consist of 4 to 6 inches of asphalt over 8 to 12 inches of crushed aggregate base course layer.

In order to maintain the integrity of the barrier, the property owner will maintain a copy of this Barrier Maintenance Plan at the site and make it available to all interested parties (i.e., on-site employees, contractors, future property owners, etc.) for viewing.

Cover/Building/Slab/Barrier Purpose

The proposed building and paved areas overlying the contaminated soils serve as a barrier to prevent direct human contact with the residual soil contamination present at the site that might otherwise pose a threat to human health.

Inspection

The proposed barrier overlying contaminated soil at the site, as depicted in Figure D.2, will be inspected regularly. The building will be inspected annually for signs of deterioration, cracks, leaks, and other issues. The pavement will be inspected annually in the spring after all snow and ice is gone for deterioration, cracks, and other potential problems that can cause additional infiltration into or exposure to underlying soils. Vegetation and landscaped areas will also be inspected annually.

The inspections will be performed by the property owner or its designated representative. 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 contaminated soil has become or is likely to become exposed will be documented.

A log of the inspections and any repairs will be maintained by the property owner and is included as Attachment D.4, Form 4400-305, Continuing Obligations Inspection and Maintenance Log. The log will include recommendations for necessary repair of any areas where underlying soils are exposed. If repairs are completed, they will also be documented in the inspection log. A copy of the Barrier Maintenance Plan and inspection log will be kept at the site.

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 possible. Repairs can include patching and filling, larger resurfacing, or construction operations. If maintenance activities expose the underlying contaminated soil, the owner must inform maintenance workers of the direct contact exposure hazard and provide them with appropriate personal protection equipment (PPE). The owner must also sample any soil that is excavated from the site prior to disposal to ascertain if contamination remains. The soil must be treated, stored, and disposed of by the owner in accordance with applicable local, state, and federal law.

In the event that any part of the overlying soil barrier is removed or replaced, the replacement barrier must be equally protective. Any replacement barrier will be subject to the same maintenance and inspection guidelines as outlined in this Barrier Maintenance Plan unless indicated otherwise by the WDNR or its successor.

In order to maintain the integrity of the overlying soil barrier, the property owner will maintain a copy of this Barrier Maintenance Plan at the site and will make it available to all interested parties (i.e., on-site employees, contractors, future property owners, etc.) for viewing.

Prohibition of Activities and Notification of WDNR Prior to Actions Affecting a Cover/Barrier

The following activities are prohibited on any portion of the property where buildings, pavement or vegetated soil cover is required as shown on the attached map, 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; 6) construction or placement of a building or other structure; or 7) changing the use or occupancy of the property to single-family residential use.

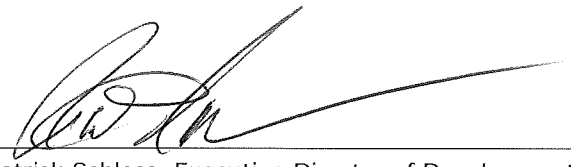
If the removal, replacement, or other changes to an overlying barrier are considered, the property owner will contact the WDNR at least 45 days before taking such an action, to determine whether further action may be necessary to protect human health, safety, welfare, or the environment, in accordance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

Amendment or Withdrawal of Barrier Maintenance Plan

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

Contact Information as of October 2024

Site Owner and Operator: City of West Allis
7525 West Greenfield Avenue
West Allis, WI 53214
Contact: Patrick Schloss, (414) 302-8468

Signature: 

Patrick Schloss, Executive Director of Development

Consultant: Ramboll Americas Engineering Solutions, Inc.
234 W. Florida Street, Fifth Floor
Milwaukee, WI 53204
Contact: Michelle Peters, (262) 901-0133

Agency: Wisconsin Department of Natural Resources
1027 West St. Paul Avenue
Milwaukee, WI 53233
Contact: Eric Amadi, (414) 405-0752

D.2 Location Maps

Location maps providing proposed barrier, location of proposed barrier, extent of barrier to be maintained, extent and type of residual contamination, and all property boundaries are provided as Attachment D.2.

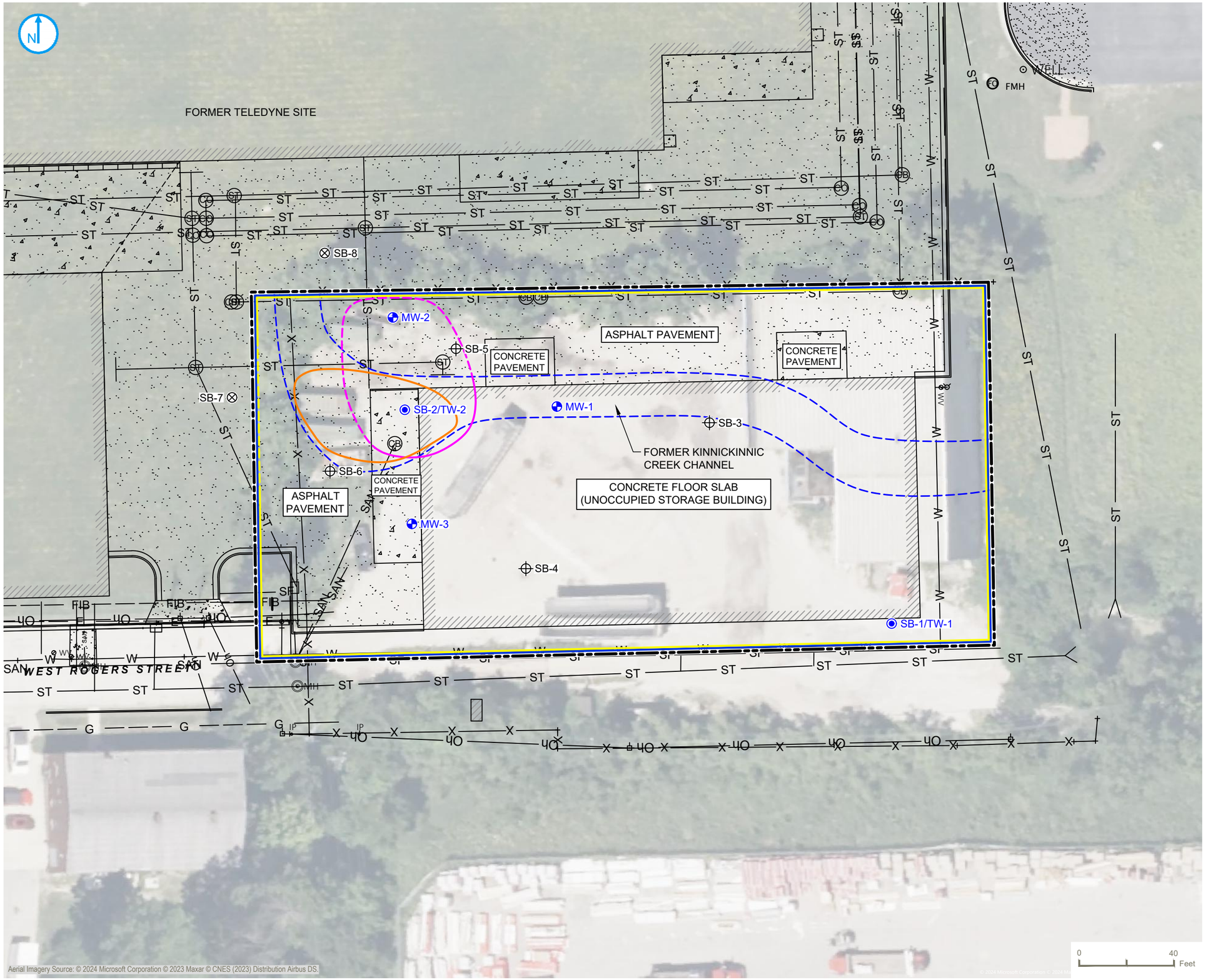
D.3 Photographs of Cover/Barrier

Photos documenting the condition and extent of the site cover will be provided as Attachment D.3 once the barrier is constructed.

D.4 Continuing Obligations Inspection and Maintenance Log

WDNR Fillable Form 4400-305 will be used to document inspection and maintenance.

D.2 Location Maps



SITE BOUNDARY
LIMITS OF FORMER KINNICKINNIC CREEK CHANNEL (APPROXIMATE)
SOIL PROBE/SMALL DIAMETER MONITORING WELL
SOIL PROBE
2-INCH DIAMETER MONITORING WELL
OFF-SITE SOIL PROBE
EXTENT OF IDC RCL EXCEEDANCES - PCBs (High Risk) and VOCs
EXTENT OF IDC RCL EXCEEDANCES - Arsenic, Lead, PAHs
EXTENT OF ES EXCEEDANCES
EXTENT OF PROPOSED DIRECT CONTACT BARRIER

* DASHED CONTOURS ARE APPROXIMATE

PROPOSED DIRECT CONTACT BARRIER

CITY OF WEST ALLIS TRANSFER STATION
5032 WEST ROGERS STREET
WEST ALLIS, WISCONSIN

FIGURE D.2

RAMBOLL AMERICAS ENGINEERING SOLUTIONS, INC.
A RAMBOLL COMPANY

L:\Loop Project Files_CAD\194\1940106525_West Allis_WTS_PHII\2024-10\07_Proposed Direct Contact Barrier.dwg

PROJECT: 1940106525 DATED: 10/29/2024 DESIGNER: HJWARD

D.3 Photographs of Cover / Barrier

Photos documenting the condition and extent of the site cover will be provided once the barrier is constructed.

D.4 Continuing Obligations Inspection and Maintenance Log

Save... | Print... | Clear Data | Submit by Email

State of Wisconsin
Department of Natural Resources
dnr.wi.gov

Continuing Obligations Inspection and Maintenance Log

Form 4400-305 (R 7/20)

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 Public 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	BRRTS No.
West Allis Waste Transfer Station Site	02-41-594132

Inspections are required to be conducted (see closure approval letter):

- (●) annually
- ( ) semi-annually
- ( ) 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):

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?
		☐ monitoring well ☒ cover/barrier for soil ☐ sediment cap ☐ other:			○ Y ○ N	○ Y ○ N
		☐ monitoring well ☐ cover/barrier for soil ☐ sediment cap ☐ other:			○ Y ○ N	○ Y ○ N
		☐ monitoring well ☐ cover/barrier for soil ☐ sediment cap ☐ other:			○ Y ○ N	○ Y ○ N
		☐ monitoring well ☐ cover/barrier for soil ☐ sediment cap ☐ other:			○ Y ○ N	○ Y ○ N
		☐ monitoring well ☐ cover/barrier for soil ☐ sediment cap ☐ other:			○ Y ○ N	○ Y ○ N
		☐ monitoring well ☐ cover/barrier for soil ☐ sediment cap ☐ other:			○ Y ○ N	○ Y ○ N

Add Row

Save...

{Click to Add/Edit Image} Date added: X

Title: To be provided after construction

{Click to Add/Edit Image} Date added: X

Title:

Add Image

Save...