ENVIRONMENT
& HEALTH

Via Email: eric.amadi@wisconsin.gov

Mr. Eric Amadi, Hydrogeologist, Southeast Region
Remediation and Redevelopment Program
Wisconsin Department of Natural Resources
1027 West St. Paul Avenue
Milwaukee, WI 53233

RESPONSE TO WDNR COMMENTS ON CASE CLOSURE PACKET REVIEW MULTI-FAMILY RESIDENTIAL - AREA E NORTH (DREXEL TOWN SQUARE SITE), 7901 SOUTH 6TH STREET (FKA 7929 S. HOWELL AVENUE), OAK CREEK, WISCONSIN, BRRTS NO. 02-41-561204; FID NO. 241045750

Dear Mr. Amadi:

Ramboll Americas Engineering Solutions, Inc. (Ramboll), on behalf of Wispark LLC, submitted a case closure request (the "closure request") for the property located at 7901 South 6th Street (formerly known as [fka] 7929 S. Howell Avenue), Oak Creek, Wisconsin (the "site") to the Wisconsin Department of Natural Resources (WDNR) in January 2025. Prior to completing a detailed review by the WDNR project manager and presenting the closure request to the Case Closure Committee, the WDNR requested clarification to submittal items and additional information in an email to Ramboll dated March 7, 2025.

Accordingly, Ramboll has prepared this letter to respond to the WDNR's request for clarifications and additional information. WDNR's comments and Ramboll's responses are provided below.

March 27, 2025

Ramboll
234 W. Florida Street
Fifth Floor
Milwaukee, WI 53204
USA

T +1 414 837 3607
F +1 414 837 3608
www.ramboll.com

Ref. 1940107749

WDNR CASE CLOSURE PACKET REVIEW - COMMENTS

WDNR Comment 1

On Table A.2 (Soil Analytical Results) and Table A.3 (Residual Soil Contamination), add or include two rows for "Fill/Native" and "Saturated/Unsaturated."

Ramboll Response 1

The requested information has been added to Table A.2 (Soil Analytical Results) and Table A.3 (Residual Soil Contamination) and are attached.

WDNR Comment 2

The extent of impacted soils with PAHs and metals above RCLs are shown site-wide in the legend. Please specify which RCLs (industrial direct contact; non-industrial direct contact and/or groundwater pathway) is/are being referenced. In addition, does the site-wide extent of impacted soils (with PAHs and metals > RCLs) also represent the extent of residual soil impacts for similar parameters?

Ramboll Response 2

The subject site (Multi-Family Residential – Area E North) and the adjacent Bureau for Remediation and Redevelopment Tracking System (BRRTS) site (Multi-Family

Residential – Area E South; BRRTS No. 02-41-580014) were formerly combined as a singled site (Area E). The majority of the subject site (Area E North) was historically undeveloped agricultural land or a paved parking lot until the recent (mid-to-late 2010s) development of the site. Given the historic use, a limited number of soil samples, namely B-66, had been collected within Area E North. Table A.2 Soil Analytical Results has been conservatively prepared to include all soil samples that were within the extent of the former Area E (prior to splitting between the north and south areas). Polycyclic aromatic hydrocarbons (PAHs) were detected in several samples across the former combined Area E site, none of which were detected above Wisconsin Administrative Code (WAC) NR 720 Residual Contaminant Levels (RCLs). The figures incorrectly referenced PAH exceedances of WAC NR 720 RCLs. Select metals (arsenic, nickel, and selenium) were detected in soil sample B66-1-2 above their respective WAC NR 720 groundwater pathway RCL. Nickel and arsenic were detected their respective Background Threshold Values (BTV), and arsenic was detected above its WAC NR 720 industrial and non-industrial direct contact RCLs. Metals above WAC NR 720 non-industrial, industrial, and groundwater pathway RCLs have been conservatively assumed to be present across the extent of the Area E North site.

Updated Figure B.2.a Soil Contamination and Figure B.2.b Residual Soil Contamination have been prepared and are attached.

WDNR Comment 3

In the legend and on the attached figure (Location Map, Figure D.2), show and/or highlight the following surface cap types (including extent of site coverage):

- *Medical Center Building,*
- *Parking Structure,*
- *Asphalt Parking Lot, and*
- *Landscape areas/Elevated Landscape Island.*

You may use different shades or colors to highlight the cap types and extent of site coverage.

Ramboll Response 3

An updated Location Map (Figure D.2) highlighting the above referenced areas and noting the approximate acreage of each surface cover type is attached.

CLOSING

Thank you for the opportunity to respond to your comments. We look forward to continuing to work with the WDNR on this project.

Sincerely,

Ramboll Americas Engineering Solutions, Inc.

James L. Hutchens, PE
Senior Managing Consultant

D +1 763 400 9961
jlhutchens@ramboll.com

Andrew Mott, PG, CPG
Senior Managing Consultant

M +1 920 379 6024
amott@ramboll.com

ATTACHMENTS

Table A.2: Soil Analytical Results
Table A.3: Residual Soil Contamination
Figure B.2.a: Soil Contamination
Figure B.2.b: Residual Soil Contamination
Figure D.2: Location Map

TABLES

Table A.2
Soil Analytical Results Table
BRRTS No. 02-41-561204
Multi-Family Residential - Area E North
Oak Creek, Wisconsin

Parameters	Soil RCLs			BTV	B55-1-2	B55-5-6	S-1 (SOUTH)	S-2 (NORTH)	B60 0-2	B60 4-6	B61 0.5-2.5
	Non-Industrial Direct Contact	Industrial Direct Contact	Groundwater Pathway		1-2' 4/26/2011	5-6' 4/26/2011	0-0.5' 4/27/2011	0-0.5' 4/27/2011	0-2' 4/28/2011	4-6' 4/28/2011	0.5-2.5' 4/28/2011
				Soil Type	Native	Native	Fill	Fill	Fill	Native	Fill
			Saturated/Unsaturated		Unsaturated	Saturated	Saturated[4]	Saturated[4]	Unsaturated	Saturated	Unsaturated
VOCs (µg/kg)											
Benzene	1,600	7,070	5.1	--	<25.0	<25.0	#N/A	#N/A	<25.0	<25.0	<25.0
Bromobenzene	342,000	679,000	--	--	<25.0	<25.0	#N/A	#N/A	<25.0	<25.0	<25.0
Bromochloromethane	216,000	906,000	--	--	<25.0	<25.0	#N/A	#N/A	<25.0	<25.0	<25.0
Bromodichloromethane	418	1,830	0.3	--	<25.0	<25.0	#N/A	#N/A	<25.0	<25.0	<25.0
Bromoform	25,400	113,000	2.3	--	<25.9	<25.9	#N/A	#N/A	<25.9	<25.9	<25.9
Bromomethane	9,600	43,000	5.1	--	<25.0	<25.0	#N/A	#N/A	<25.0	<25.0	<25.0
2-Butanone (MEK)	28,400,000	28,400,000	1,666.1	--	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
sec-Butylbenzene	145,000	145,000	--	--	<25.0	<25.0	#N/A	#N/A	<25.0	<25.0	<25.0
tert-Butylbenzene	183,000	183,000	--	--	<25.0	<25.0	#N/A	#N/A	<25.0	<25.0	<25.0
n-Butylbenzene	108,000	108,000	--	--	<40.4	<40.4	#N/A	#N/A	<40.4	<40.4	<40.4
Carbon tetrachloride	916	4,030	3.9	--	<25.0	<25.0	#N/A	#N/A	<25.0	<25.0	<25.0
Chlorobenzene	370,000	761,000	135.8	--	<25.0	<25.0	#N/A	#N/A	<25.0	<25.0	<25.0
Chlorodibromomethane	8,280	38,900	32	--	<25.0	<25.0	#N/A	#N/A	<25.0	<25.0	<25.0
Chloroethane	2,120,000	2,120,000	226.6	--	<25.0	<25.0	#N/A	#N/A	<25.0	<25.0	<25.0
Chloroform	454	1,980	3.3	--	<25.0	<25.0	#N/A	#N/A	<25.0	<25.0	<25.0
Chloromethane	159,000	669,000	15.5	--	<25.0	<25.0	#N/A	#N/A	<25.0	<25.0	**88 C**
2-Chlorotoluene	907,000	907,000	--	--	<25.0	<25.0	#N/A	#N/A	<25.0	<25.0	<25.0
4-Chlorotoluene	253,000	253,000	--	--	<25.0	<25.0	#N/A	#N/A	<25.0	<25.0	<25.0
1,2-Dibromo-3-chloropropane	7.50	92.3	0.17	--	<82.3	<82.3	#N/A	#N/A	<82.3	<82.3	<82.3
1,2-Dibromoethane	50.0	221	0.0282	--	<25.0	<25.0	#N/A	#N/A	<25.0	<25.0	<25.0
Dibromomethane	34,000	143,000	--	--	<25.0	<25.0	#N/A	#N/A	<25.0	<25.0	<25.0
1,2-Dichlorobenzene	376,000	376,000	1,168	--	<44.4	<44.4	#N/A	#N/A	<44.4	<44.4	<44.4
1,3-Dichlorobenzene	297,000	297,000	1,152.8	--	<25.0	<25.0	#N/A	#N/A	<25.0	<25.0	<25.0
1,4-Dichlorobenzene	3,740	16,400	144	--	<25.0	<25.0	#N/A	#N/A	<25.0	<25.0	<25.0
Dichlorodifluoromethane	126,000	530,000	3,086.3	--	<25.0	<25.0	#N/A	#N/A	<25.0	<25.0	<25.0
1,1-Dichloroethane	5,060	22,200	483.4	--	<25.0	<25.0	#N/A	#N/A	<25.0	<25.0	<25.0
1,2-Dichloroethane	652	2,870	2.84	--	<25.0	<25.0	#N/A	#N/A	<25.0	<25.0	<25.0
1,1-Dichloroethene	320,000	1,190,000	5.02	--	<25.0	<25.0	#N/A	#N/A	<25.0	<25.0	<25.0
cis-1,2-Dichloroethene	156,000	2,340,000	41.2	--	<25.0	<25.0	#N/A	#N/A	<25.0	<25.0	<25.0
trans-1,2-Dichloroethene	1,560,000	1,850,000	62.6	--	<25.0	<25.0	#N/A	#N/A	<25.0	<25.0	<25.0
1,2-Dichloropropane	3,400	15,000	3.3	--	<25.0	<25.0	#N/A	#N/A	<25.0	<25.0	<25.0
1,3-Dichloropropane	1,490,000	1,490,000	--	--	<25.0	<25.0	#N/A	#N/A	<25.0	<25.0	<25.0
2,2-Dichloropropane	191,000	191,000	--	--	<25.0	<25.0	#N/A	#N/A	<25.0	<25.0	<25.0
1,1-Dichloropropene	--	--	--	--	<25.0	<25.0	#N/A	#N/A	<25.0	<25.0	<25.0
cis-1,3-Dichloropropene	1,210,000	1,210,000	--	--	<25.0	<25.0	#N/A	#N/A	<25.0	<25.0	<25.0
trans-1,3-Dichloropropene	1,510,000	1,510,000	--	--	<25.0	<25.0	#N/A	#N/A	<25.0	<25.0	<25.0
Diisopropyl ether	2,260,000	2,260,000	--	--	<25.0	<25.0	#N/A	#N/A	<25.0	<25.0	<25.0
Ethylbenzene	8,020	35,400	1,570	--	<25.0	<25.0	#N/A	#N/A	<25.0	<25.0	<25.0
Fluorotrichloromethane	1,230,000	1,230,000	4,477.5	--	<25.0	<25.0	#N/A	#N/A	<25.0	<25.0	<25.0
Hexachlorobutadiene	1,630	7,190	--	--	<26.4	<26.4	#N/A	#N/A	<26.4	<26.4	<26.4
Hexachloroethane	2,520	11,100	--	--	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Isopropylbenzene	268,000	268,000	--	--	<25.0	<25.0	#N/A	#N/A	<25.0	<25.0	<25.0
p-Isopropyltoluene	162,000	162,000	--	--	<25.0	<25.0	#N/A	#N/A	<25.0	<25.0	<25.0
Methylene chloride	61,800	1,150,000	2.56	--	**33 J C**	**69 J C**	#N/A	#N/A	<25.0	<25.0	<25.0
Methyl-tert-butyl-ether	63,800	282,000	27	--	<25.0	<25.0	#N/A	#N/A	<25.0	<25.0	<25.0
1-Methylnaphthalene	17,600	72,700	--	--	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Naphthalene	5,520	24,100	658.2	--	<25.0	<25.0	#N/A	#N/A	<25.0	<25.0	<25.0
Nitrobenzene	7,420	32,400	--	--	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
n-Propylbenzene	264,000	264,000	--	--	<25.0	<25.0	#N/A	#N/A	<25.0	<25.0	<25.0
Pyridine	78,200	1,170,000	6.9	--	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Styrene	867,000	867,000	220	--	<25.0	<25.0	#N/A	#N/A	<25.0	<25.0	<25.0
1,1,2,2-Tetrachloroethane	810	3,600	0.16	--	<25.0	<25.0	#N/A	#N/A	<25.0	<25.0	<25.0
1,1,1,2-Tetrachloroethane	2,780	12,300	53.4	--	<25.0	<25.0	#N/A	#N/A	<25.0	<25.0	<25.0
Tetrachloroethene	33,000	145,000	4.54	--	<25.0	<25.0	#N/A	#N/A	<25.0	<25.0	<25.0
Toluene	818,000	818,000	1,107.2	--	<25.0	<25.0	#N/A	#N/A	<25.0	<25.0	<25.0
1,2,3-Trichlorobenzene	62,600	934,000	--	--	<25.0	<25.0	#N/A	#N/A	<25.0	<25.0	<25.0
1,2,4-Trichlorobenzene	24,000	113,000	408	--	<25.0	<25.0	#N/A	#N/A	<25.0	<25.0	<25.0
1,1,1-Trichloroethane	640,000	640,000	140.2	--	<25.0	<25.0	#N/A	#N/A	<25.0	<25.0	<25.0
1,1,2-Trichloroethane	1,590	7,010	3.2	--	<25.0	<25.0	#N/A	#N/A	<25.0	<25.0	<25.0
Trichloroethene	1,300	8,410	3.6	--	<25.0	<25.0	#N/A	#N/A	<25.0	<25.0	<25.0
1,2,3-Trichloropropane	5.10	109.0	51.9	--	<25.0	<25.0	#N/A	#N/A	<25.0	<25.0	<25.0
1,1,2-Trichlorotrifluoroethane	910,000	910,000	--	--	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
1,2,4-Trimethylbenzene[1]	219,000	219,000	493.9	--	<25.0	<25.0	#N/A	#N/A	<25.0	<25.0	<25.0
1,3,5-Trimethylbenzene[1]	182,000	182,000	493.9	--	<25.0	<25.0	#N/A	#N/A	<25.0	<25.0	<25.0
Vinyl chloride	66.8	2,080	0.1	--	<25.0	<25.0	#N/A	#N/A	<25.0	<25.0	<25.0
o-Xylene	434,000	434,000	--	--	<25.0	<25.0	#N/A	#N/A	<25.0	<25.0	<25.0
m-Xylene	388,000	388,000	--	--	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
p-Xylene	390,000	390,000	--	--	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
m-&p-Xylene[2]	388,000	388,000	--	--	<50.0	<50.0	#N/A	#N/A	<50.0	<50.0	<50.0
Xylenes, total	260,000	260,000	3,960	--	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A

Table A.2
Soil Analytical Results Table
BRRTS No. 02-41-561204
Multi-Family Residential - Area E North
Oak Creek, Wisconsin

Parameters	Soil RCLs			BTV	B55-1-2	B55-5-6	S-1 (SOUTH)	S-2 (NORTH)	B60 0-2	B60 4-6	B61 0.5-2.5
	Non-Industrial Direct Contact	Industrial Direct Contact	Groundwater Pathway		1-2' 4/26/2011	5-6' 4/26/2011	0-0.5' 4/27/2011	0-0.5' 4/27/2011	0-2' 4/28/2011	4-6' 4/28/2011	0.5-2.5' 4/28/2011
				Soil Type	Native	Native	Presumed Fill	Presumed Fill	Fill	Native	Fill
			Saturated/Unsaturated		Unsaturated	Saturated	Saturated[4]	Saturated[4]	Unsaturated	Saturated	Unsaturated
VOCs (µg/kg)											
PAHs (µg/kg)											
Acenaphthene	3,590,000	45,200,000	--	--	<2.9	<2.8	#N/A	#N/A	<2.6	<2.7	<2.7
Acenaphthylene	--	--	--	--	<3.3	<3.2	#N/A	#N/A	<3.0	<3.1	<3.1
Anthracene	17,900,000	100,000,000	196,949	--	<4.8	<4.6	#N/A	#N/A	<4.4	<4.5	<4.5
Benzo(a)anthracene	1,140	20,800	--	--	<2.9	<2.8	#N/A	#N/A	9.5 J	<2.7	<2.8
Benzo(a)pyrene	115	2,110	470.0	--	<3.3	<3.2	#N/A	#N/A	9.3 J	<3.2	<3.2
Benzo(b)fluoranthene	1,150	21,100	478.1	--	<3.5	<3.4	#N/A	#N/A	7.6 J	<3.3	<3.4
Benzo(ghi)perylene	--	--	--	--	<2.7	<2.6	#N/A	#N/A	6.8 J	<2.5	<2.6
Benzo(k)fluoranthene	11,500	211,000	--	--	<3.8	<3.7	#N/A	#N/A	8.3 J	<3.6	<3.6
Chrysene	115,000	2,110,000	144.2	--	<3.7	<3.6	#N/A	#N/A	13.2 J	<3.5	<3.5
Dibenzo(a,h,)anthracene	115	2,110	--	--	<5.6	<5.4	#N/A	#N/A	<5.1	<5.2	<5.3
Fluoranthene	2,390,000	30,100,000	88,877.8	--	<10.2	<9.9	#N/A	#N/A	24.0	<9.6	<9.8
Fluorene	2,390,000	30,100,000	14,829.9	--	<5.1	<4.9	#N/A	#N/A	<4.7	<4.8	<4.9
Indeno(1,2,3-cd)pyrene	1,150	21,100	--	--	<2.9	<2.8	#N/A	#N/A	5.6 J	<2.7	<2.8
1-Methylnaphthalene	17,600	72,700	--	--	<3.1	<3.0	#N/A	#N/A	<2.9	<2.9	<3.0
2-Methylnaphthalene	239,000	3,010,000	--	--	<3.1	<3.0	#N/A	#N/A	<2.9	<2.9	<3.0
Naphthalene	5,520	24,100	658.2	--	<3.6	<3.5	#N/A	#N/A	<3.3	<3.4	25.7
Phenanthrene	--	--	--	--	<4.5	<4.4	#N/A	#N/A	11.4 J	<4.2	<4.3
Pyrene	1,790,000	22,600,000	54,545.5	--	<3.7	<3.6	#N/A	#N/A	18.6 J	<3.5	<3.6
Inorganic Parameters (mg/kg)											
Antimony	31.3	467	0.54	--	#N/A	#N/A	#N/A	#N/A	<0.27	0.32 J	<0.28
Arsenic[3]	0.677	3.00	0.58	8.3	**6.0 A,B,C**	**5.3 C**	**6.3 A,B,C**	**6.6 A,B,C**	**4.9 A,B,C**	**5.7 C**	**7.4 A,B,C**
Barium[3]	15,300	100,000	164.8	364	69.9	66.9	59.3	58.6	36.6	55.1	81.0
Beryllium	156	2,300	6.32	--	#N/A	#N/A	#N/A	#N/A	0.42 J	0.55	1.0
Cadmium[3]	71	985	0.75	1.07	0.15 J	0.22 J	0.22 J	0.15 J	0.19 J	0.12 J	0.20 J
Chromium	--	--	360,000	43.5	28.9	26.4	22.9	22.5	16.5	21.0	33.1
Lead[3]	400	800	27	51.6	9.3	10.1	15.2	9.4	8.2	8.5	12.4
Mercury	3.13	3.13	0.21	--	0.021	0.022	0.024	0.014	0.019	0.021	0.028
Nickel[3]	1,550	22,500	13.06	30.8	#N/A	#N/A	#N/A	#N/A	**16.6 C**	**22.3 C**	**37.6 C,D**
Selenium	391	5,840	0.52	--	0.19 J	<0.17	**0.66 J C**	0.32 J	0.27 J	0.49 J	0.28 J
Silver	391	5,840	0.85	--	0.16 J	0.0720 J	<0.067	<0.053	<0.050	<0.046	<0.052
Cyanide	27.1	195.0	4.04	--	#N/A	#N/A	0.61 J	<0.33	<0.29	<0.25	<0.25
PCBs (mg/kg)											
PCB-1016 (Aroclor 1016)	4.11	28.0	--	--	<29.0	<28.1	<35.7	<30.5	<26.6	<27.3	<27.7
PCB-1221 (Aroclor 1221)	0.21	0.883	--	--	<29.0	<28.1	<35.7	<30.5	<26.6	<27.3	<27.7
PCB-1232 (Aroclor 1232)	0.19	0.792	--	--	<29.0	<28.1	<35.7	<30.5	<26.6	<27.3	<27.7
PCB-1242 (Aroclor 1242)	0.24	0.972	--	--	<29.0	<28.1	<35.7	<30.5	<26.6	<27.3	<27.7
PCB-1248 (Aroclor 1248)	0.24	0.975	--	--	<29.0	<28.1	<35.7	<30.5	<26.6	<27.3	<27.7
PCB-1254 (Aroclor 1254)	0.239	0.988	--	--	<29.0	<28.1	<35.7	<30.5	<26.6	<27.3	<27.7
PCB-1260 (Aroclor 1260)	0.243	1	--	--	<29.0	<28.1	<35.7	<30.5	<26.6	<27.3	<27.7
Polychlorinated Biphenyls (High Risk)	0.234	0.967	0.0094	--	<29.0	<28.1	<35.7	<30.5	<26.6	<27.3	<27.7

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.
[4] Samples S-1 (SOUTH) and S-2 (NORTH) were sediment samples collected collected from the banks of the pond using extendable sampling tools to access the interior pond sediment. The samples are therefore considered saturated.
[5] Exact sample depth unknown. Field documentation indicates sample was collected from the base of the excavation. Sample assumed to be saturated and from native material.

A Parameter exceeds NR 720 Residual Contaminant Level (RCL) for Non-Industrial Direct Contact.
B Parameter exceeds NR 720 RCL for Industrial Direct Contact.
C Parameter exceeds NR 720 RCL for Groundwater Pathway.
D Parameter exceeds Surficial BTV for metals.
J Estimated concentration at or above the Limit of Detection (LOD) and below the Limit of Quantification (LOQ).
-- No RCL or Surficial BTV established.
#N/A = Not analyzed
Direct contact RCL exceedances apply to soil from 0 to 4 feet below ground surface.
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
The highlighted sample was collected on-site (BRRTS No. 02-41-561204). The remaining samples were collected on the adjacent, closed site (BRRTS No. 02-41-580014)

Table A.2
Soil Analytical Results Table
BRRTS No. 02-41-561204
Multi-Family Residential - Area E North
Oak Creek, Wisconsin

Parameters	Soil RCLs			BTV	B62 0-2	B66-1-2	B45 1-3'	B52 1-3'	B54 1-3'	B56 1-3'	S-1	S-2
	Non-Industrial Direct Contact	Industrial Direct Contact	Groundwater Pathway		0-2'	1-2'	1-3'	1-3'	1-3'	1-3'	0-3'	3-6'
					4/28/2011	4/29/2011	4/28/2011	4/29/2011	4/29/2011	4/29/2011	5/30/2013	5/30/2013
				Soil Type	Fill	Native	Fill	Native	Native	Native	Fill	Native
				Saturated/Unsaturated	Unsaturated	Unsaturated	Unsaturated	Unsaturated	Unsaturated	Unsaturated	Unsaturated	Saturated
VOCs (µg/kg)												
Benzene	1,600	7,070	5.1	--	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
Bromobenzene	342,000	679,000	--	--	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
Bromochloromethane	216,000	906,000	--	--	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
Bromodichloromethane	418	1,830	0.3	--	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
Bromoform	25,400	113,000	2.3	--	<25.9	<25.9	<25.9	<25.9	<25.9	<25.9	<25.0	<25.0
Bromomethane	9,600	43,000	5.1	--	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
2-Butanone (MEK)	28,400,000	28,400,000	1,666.1	--	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
sec-Butylbenzene	145,000	145,000	--	--	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	116	<25.0
tert-Butylbenzene	183,000	183,000	--	--	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
n-Butylbenzene	108,000	108,000	--	--	<40.4	<40.4	<40.4	<40.4	<40.4	<40.4	98	<25.0
Carbon tetrachloride	916	4,030	3.9	--	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
Chlorobenzene	370,000	761,000	135.8	--	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
Chlorodibromomethane	8,280	38,900	32	--	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
Chloroethane	2,120,000	2,120,000	226.6	--	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
Chloroform	454	1,980	3.3	--	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
Chloromethane	159,000	669,000	15.5	--	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
2-Chlorotoluene	907,000	907,000	--	--	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
4-Chlorotoluene	253,000	253,000	--	--	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
1,2-Dibromo-3-chloropropane	7.50	92.3	0.17	--	<82.3	<82.3	<82.3	<82.3	<82.3	<82.3	<49.8	<49.8
1,2-Dibromoethane	50.0	221	0.0282	--	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
Dibromomethane	34,000	143,000	--	--	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
1,2-Dichlorobenzene	376,000	376,000	1,168	--	<44.4	<44.4	<44.4	<44.4	<44.4	<44.4	<25.0	<25.0
1,3-Dichlorobenzene	297,000	297,000	1,152.8	--	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
1,4-Dichlorobenzene	3,740	16,400	144	--	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
Dichlorodifluoromethane	126,000	530,000	3,086.3	--	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
1,1-Dichloroethane	5,060	22,200	483.4	--	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
1,2-Dichloroethane	652	2,870	2.84	--	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
1,1-Dichloroethene	320,000	1,190,000	5.02	--	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
cis-1,2-Dichloroethene	156,000	2,340,000	41.2	--	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
trans-1,2-Dichloroethene	1,560,000	1,850,000	62.6	--	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
1,2-Dichloropropane	3,400	15,000	3.3	--	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
1,3-Dichloropropane	1,490,000	1,490,000	--	--	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
2,2-Dichloropropane	191,000	191,000	--	--	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
1,1-Dichloropropene	--	--	--	--	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
cis-1,3-Dichloropropene	1,210,000	1,210,000	--	--	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
trans-1,3-Dichloropropene	1,510,000	1,510,000	--	--	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
Diisopropyl ether	2,260,000	2,260,000	--	--	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
Ethylbenzene	8,020	35,400	1,570	--	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
Fluorotrichloromethane	1,230,000	1,230,000	4,477.5	--	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
Hexachlorobutadiene	1,630	7,190	--	--	<26.4	<26.4	<26.4	<26.4	<26.4	<26.4	<25.0	<25.0
Hexachloroethane	2,520	11,100	--	--	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Isopropylbenzene	268,000	268,000	--	--	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	29 J	<25.0
p-Isopropyltoluene	162,000	162,000	--	--	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
Methylene chloride	61,800	1,150,000	2.56	--	<25.0	**114 C**	**39 J C**	**89 C**	**81 C**	**99 C**	<25.0	<25.0
Methyl-tert-butyl-ether	63,800	282,000	27	--	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
1-Methylnaphthalene	17,600	72,700	--	--	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Naphthalene	5,520	24,100	658.2	--	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	242	<25.0
Nitrobenzene	7,420	32,400	--	--	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
n-Propylbenzene	264,000	264,000	--	--	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	60 J	<25.0
Pyridine	78,200	1,170,000	6.9	--	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Styrene	867,000	867,000	220	--	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
1,1,2,2-Tetrachloroethane	810	3,600	0.16	--	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
1,1,1,2-Tetrachloroethane	2,780	12,300	53.4	--	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
Tetrachloroethene	33,000	145,000	4.54	--	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
Toluene	818,000	818,000	1,107.2	--	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
1,2,3-Trichlorobenzene	62,600	934,000	--	--	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
1,2,4-Trichlorobenzene	24,000	113,000	408	--	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
1,1,1-Trichloroethane	640,000	640,000	140.2	--	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
1,1,2-Trichloroethane	1,590	7,010	3.2	--	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
Trichloroethene	1,300	8,410	3.6	--	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
1,2,3-Trichloropropane	5.10	109.0	51.9	--	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
1,1,2-Trichlorotrifluoroethane	910,000	910,000	--	--	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
1,2,4-Trimethylbenzene[1]	219,000	219,000	493.9	--	<25.0	51 J	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
1,3,5-Trimethylbenzene[1]	182,000	182,000	493.9	--	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
Vinyl chloride	66.8	2,080	0.1	--	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
o-Xylene	434,000	434,000	--	--	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
m-Xylene	388,000	388,000	--	--	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
p-Xylene	390,000	390,000	--	--	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
m-&p-Xylene[2]	388,000	388,000	--	--	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
Xylenes, total	260,000	260,000	3,960	--	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A

Table A.2
Soil Analytical Results Table
BRRTS No. 02-41-561204
Multi-Family Residential - Area E North
Oak Creek, Wisconsin

Parameters	Soil RCLs			BTV	B62 0-2	B66-1-2	B45 1-3'	B52 1-3'	B54 1-3'	B56 1-3'	S-1	S-2
	Non-Industrial Direct Contact	Industrial Direct Contact	Groundwater Pathway		0-2'	1-2'	1-3'	1-3'	1-3'	1-3'	0-3'	3-6'
					4/28/2011	4/29/2011	4/28/2011	4/29/2011	4/29/2011	4/29/2011	5/30/2013	5/30/2013
				Soil Type	Fill	Native	Fill	Native	Native	Native	Fill	Native
			Saturated/Unsaturated		Unsaturated	Unsaturated	Unsaturated	Unsaturated	Unsaturated	Unsaturated	Unsaturated	Saturated
VOCs (µg/kg)												
PAHs (µg/kg)												
Acenaphthene	3,590,000	45,200,000	--	--	3.2 J	<2.9	2.7 J	<2.7	<2.8	<2.8	#N/A	#N/A
Acenaphthylene	--	--	--	--	<3.1	<3.3	<2.9	<3.0	<3.2	<3.2	#N/A	#N/A
Anthracene	17,900,000	100,000,000	196,949	--	7.8 J	4.8 J	<4.3	<4.5	<4.7	<4.7	#N/A	#N/A
Benzo(a)anthracene	1,140	20,800	--	--	28.0	15.5 J	<2.6	<2.7	<2.9	<2.9	#N/A	#N/A
Benzo(a)pyrene	115	2,110	470.0	--	30.0	16.3 J	<3.0	<3.1	<3.3	<3.3	#N/A	#N/A
Benzo(b)fluoranthene	1,150	21,100	478.1	--	24.7	16.3 J	<3.2	<3.3	<3.5	<3.5	#N/A	#N/A
Benzo(ghi)perylene	--	--	--	--	18.7 J	14.7 J	<2.4	<2.5	<2.7	<2.7	#N/A	#N/A
Benzo(k)fluoranthene	11,500	211,000	--	--	31.8	17.7 J	<3.4	<3.6	<3.7	<3.7	#N/A	#N/A
Chrysene	115,000	2,110,000	144.2	--	32.6	21.8	<3.3	<3.5	<3.6	<3.6	#N/A	#N/A
Dibenzo(a,h,)anthracene	115	2,110	--	--	6.1 J	<5.6	<5.0	<5.2	<5.5	<5.5	#N/A	#N/A
Fluoranthene	2,390,000	30,100,000	88,877.8	--	64.3	46.5	<9.2	<9.6	<10.0	<10.0	#N/A	#N/A
Fluorene	2,390,000	30,100,000	14,829.9	--	<4.9	<5.1	9.7 J	<4.8	<5.0	<5.0	#N/A	#N/A
Indeno(1,2,3-cd)pyrene	1,150	21,100	--	--	16.8 J	12.0 J	<2.6	<2.7	<2.9	<2.9	#N/A	#N/A
1-Methylnaphthalene	17,600	72,700	--	--	<3.0	<3.1	<2.8	<2.9	<3.1	<3.1	#N/A	#N/A
2-Methylnaphthalene	239,000	3,010,000	--	--	<3.0	<3.1	<2.8	<2.9	<3.1	<3.1	#N/A	#N/A
Naphthalene	5,520	24,100	658.2	--	<3.4	6.1 J	<3.2	<3.4	<3.5	<3.5	#N/A	#N/A
Phenanthrene	--	--	--	--	32.1	13.5 J	<4.0	<4.2	<4.4	<4.4	#N/A	#N/A
Pyrene	1,790,000	22,600,000	54,545.5	--	53.9	33.9	<3.4	<3.5	<3.7	<3.7	#N/A	#N/A
Inorganic Parameters (mg/kg)												
Antimony	31.3	467	0.54	--	#N/A	<0.29	<0.25	#N/A	#N/A	#N/A	#N/A	#N/A
Arsenic[3]	0.677	3.00	0.58	8.3	**5.5 A,B,C**	**9.1 A,B,C,D**	**5.0 A,B,C**	**4.0 A,B,C**	**6.9 A,B,C**	**7.1 A,B,C**	#N/A	#N/A
Barium[3]	15,300	100,000	164.8	364	88.2	99.9	46.4	20.3	79.1	78.9	#N/A	#N/A
Beryllium	156	2,300	6.32	--	#N/A	1.2	0.52	#N/A	#N/A	#N/A	#N/A	#N/A
Cadmium[3]	71	985	0.75	1.07	0.14 J	0.19 J	0.078 J	0.17 J	0.12 J	0.15 J	#N/A	#N/A
Chromium	--	--	360,000	43.5	30.2	36.3	17.5	9.7	31.4	27.7	#N/A	#N/A
Lead[3]	400	800	27	51.6	10.3	13.6	7.7	5.6	11.3	10.2	#N/A	#N/A
Mercury	3.13	3.13	0.21	--	0.020	0.058	0.022	0.018	0.027	0.036	#N/A	#N/A
Nickel[3]	1,550	22,500	13.06	30.8	#N/A	**34.6 C,D**	**17.3 C**	#N/A	#N/A	#N/A	#N/A	#N/A
Selenium	391	5,840	0.52	--	0.28 J	**0.58 J C**	<0.16	0.21 J	0.31 J	0.40 J	#N/A	#N/A
Silver	391	5,840	0.85	--	<0.049	<0.053	<0.045	<0.046	<0.052	<0.048	#N/A	#N/A
Cyanide	27.1	195.0	4.04	--	#N/A	<0.22	<0.19	#N/A	#N/A	#N/A	#N/A	#N/A
PCBs (mg/kg)												
PCB-1016 (Aroclor 1016)	4.11	28.0	--	--	<27.7	<28.9	<26.0	<27.1	<28.5	<28.5	#N/A	#N/A
PCB-1221 (Aroclor 1221)	0.21	0.883	--	--	<27.7	<28.9	<26.0	<27.1	<28.5	<28.5	#N/A	#N/A
PCB-1232 (Aroclor 1232)	0.19	0.792	--	--	<27.7	<28.9	<26.0	<27.1	<28.5	<28.5	#N/A	#N/A
PCB-1242 (Aroclor 1242)	0.24	0.972	--	--	<27.7	<28.9	<26.0	<27.1	<28.5	<28.5	#N/A	#N/A
PCB-1248 (Aroclor 1248)	0.24	0.975	--	--	<27.7	<28.9	<26.0	<27.1	<28.5	<28.5	#N/A	#N/A
PCB-1254 (Aroclor 1254)	0.239	0.988	--	--	<27.7	<28.9	<26.0	<27.1	<28.5	<28.5	#N/A	#N/A
PCB-1260 (Aroclor 1260)	0.243	1	--	--	<27.7	<28.9	<26.0	<27.1	<28.5	<28.5	#N/A	#N/A
Polychlorinated Biphenyls (High Risk)	0.234	0.967	0.0094	--	<27.7	<28.9	<26.0	<27.1	<28.5	<28.5	#N/A	#N/A

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.
[4] Samples S-1 (SOUTH) and S-2 (NORTH) were sediment samples collected collected from the banks of the pond using extendable sampling tools to access the interior pond sediment. The samples are therefore considered saturated.
[5] Exact sample depth unknown. Field documentation indicates sample was collected from the base of the excavation. Sample assumed to be saturated and from native material.

A Parameter exceeds NR 720 Residual Contaminant Level (RCL) for Non-Industrial Direct Contact.
B Parameter exceeds NR 720 RCL for Industrial Direct Contact.
C Parameter exceeds NR 720 RCL for Groundwater Pathway.
D Parameter exceeds Surficial BTV for metals.
J Estimated concentration at or above the Limit of Detection (LOD) and below the Limit of Quantification (LOQ).
-- No RCL or Surficial BTV established.
#N/A = Not analyzed
Direct contact RCL exceedances apply to soil from 0 to 4 feet below ground surface.
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
The highlighted sample was collected on-site (BRRTS No. 02-41-561204). The remaining samples were collected on the adjacent, closed site (BRRTS No. 02-41-580014)

Table A.2
Soil Analytical Results Table
BRRTS No. 02-41-561204
Multi-Family Residential - Area E North
Oak Creek, Wisconsin

Parameters	Soil RCLs			BTV	MIDDLE TANK 1	MIDDLE TANK 2	FUEL OIL TANK COMPOSITE	SOUTH TANK 1	SOUTH TANK 2	NORTH TANK 1	NORTH TANK 2
	Non-Industrial Direct Contact	Industrial Direct Contact	Groundwater Pathway		9.5'	9.5'	0-9.5'	--	--	--	--
					8/21/2013	8/21/2013	8/21/2013	8/28/2013	8/28/2013	9/3/2013	9/3/2013
				Soil Type	Native	Native	Fill/Native	Native[5]	Native[5]	Native[5]	Native[5]
			Saturated/Unsaturated		Saturated	Saturated	Saturated	Saturated[5]	Saturated[5]	Saturated[5]	Saturated[5]
VOCs (µg/kg)											
Benzene	1,600	7,070	5.1	--	<25.0	<25.0	<5.0	<25.0	<25.0	<25.0	<25.0
Bromobenzene	342,000	679,000	--	--	<25.0	<25.0	#N/A	<25.0	<25.0	<25.0	<25.0
Bromochloromethane	216,000	906,000	--	--	<25.0	<25.0	#N/A	<25.0	<25.0	<25.0	<25.0
Bromodichloromethane	418	1,830	0.3	--	<25.0	<25.0	#N/A	<25.0	<25.0	<25.0	<25.0
Bromoform	25,400	113,000	2.3	--	<25.0	<25.0	#N/A	<25.0	<25.0	<25.0	<25.0
Bromomethane	9,600	43,000	5.1	--	<25.0	<25.0	#N/A	<25.0	<25.0	<25.0	<25.0
2-Butanone (MEK)	28,400,000	28,400,000	1,666.1	--	#N/A	#N/A	<27.0	#N/A	#N/A	#N/A	#N/A
sec-Butylbenzene	145,000	145,000	--	--	<25.0	<25.0	#N/A	<25.0	<25.0	<25.0	<25.0
tert-Butylbenzene	183,000	183,000	--	--	<25.0	<25.0	#N/A	<25.0	<25.0	<25.0	<25.0
n-Butylbenzene	108,000	108,000	--	--	<25.0	<25.0	#N/A	<25.0	<25.0	<25.0	<25.0
Carbon tetrachloride	916	4,030	3.9	--	<25.0	<25.0	<3.7	<25.0	<25.0	<25.0	<25.0
Chlorobenzene	370,000	761,000	135.8	--	<25.0	<25.0	<3.6	<25.0	<25.0	<25.0	<25.0
Chlorodibromomethane	8,280	38,900	32	--	<25.0	<25.0	#N/A	<25.0	<25.0	<25.0	<25.0
Chloroethane	2,120,000	2,120,000	226.6	--	<25.0	<25.0	#N/A	<25.0	<25.0	<25.0	<25.0
Chloroform	454	1,980	3.3	--	<25.0	<25.0	<6.9	<25.0	<25.0	<25.0	<25.0
Chloromethane	159,000	669,000	15.5	--	<25.0	<25.0	#N/A	<25.0	<25.0	<25.0	<25.0
2-Chlorotoluene	907,000	907,000	--	--	<25.0	<25.0	#N/A	<25.0	<25.0	<25.0	<25.0
4-Chlorotoluene	253,000	253,000	--	--	<25.0	<25.0	#N/A	<25.0	<25.0	<25.0	<25.0
1,2-Dibromo-3-chloropropane	7.50	92.3	0.17	--	<49.8	<49.8	#N/A	<49.8	<49.8	<49.8	<49.8
1,2-Dibromoethane	50.0	221	0.0282	--	<25.0	<25.0	#N/A	<25.0	<25.0	<25.0	<25.0
Dibromomethane	34,000	143,000	--	--	<25.0	<25.0	#N/A	<25.0	<25.0	<25.0	<25.0
1,2-Dichlorobenzene	376,000	376,000	1,168	--	<25.0	<25.0	#N/A	<25.0	<25.0	<25.0	<25.0
1,3-Dichlorobenzene	297,000	297,000	1,152.8	--	<25.0	<25.0	#N/A	<25.0	<25.0	<25.0	<25.0
1,4-Dichlorobenzene	3,740	16,400	144	--	<25.0	<25.0	#N/A	<25.0	<25.0	<25.0	<25.0
Dichlorodifluoromethane	126,000	530,000	3,086.3	--	<25.0	<25.0	#N/A	<25.0	<25.0	<25.0	<25.0
1,1-Dichloroethane	5,060	22,200	483.4	--	<25.0	<25.0	#N/A	<25.0	<25.0	<25.0	<25.0
1,2-Dichloroethane	652	2,870	2.84	--	<25.0	<25.0	<4.8	<25.0	<25.0	<25.0	<25.0
1,1-Dichloroethene	320,000	1,190,000	5.02	--	<25.0	<25.0	<4.3	<25.0	<25.0	<25.0	<25.0
cis-1,2-Dichloroethene	156,000	2,340,000	41.2	--	<25.0	<25.0	#N/A	<25.0	<25.0	<25.0	<25.0
trans-1,2-Dichloroethene	1,560,000	1,850,000	62.6	--	<25.0	<25.0	#N/A	<25.0	<25.0	<25.0	<25.0
1,2-Dichloropropane	3,400	15,000	3.3	--	<25.0	<25.0	#N/A	<25.0	<25.0	<25.0	<25.0
1,3-Dichloropropane	1,490,000	1,490,000	--	--	<25.0	<25.0	#N/A	<25.0	<25.0	<25.0	<25.0
2,2-Dichloropropane	191,000	191,000	--	--	<25.0	<25.0	#N/A	<25.0	<25.0	<25.0	<25.0
1,1-Dichloropropene	--	--	--	--	<25.0	<25.0	#N/A	<25.0	<25.0	<25.0	<25.0
cis-1,3-Dichloropropene	1,210,000	1,210,000	--	--	<25.0	<25.0	#N/A	<25.0	<25.0	<25.0	<25.0
trans-1,3-Dichloropropene	1,510,000	1,510,000	--	--	<25.0	<25.0	#N/A	<25.0	<25.0	<25.0	<25.0
Diisopropyl ether	2,260,000	2,260,000	--	--	<25.0	<25.0	#N/A	<25.0	<25.0	<25.0	<25.0
Ethylbenzene	8,020	35,400	1,570	--	<25.0	<25.0	#N/A	<25.0	<25.0	<25.0	<25.0
Fluorotrichloromethane	1,230,000	1,230,000	4,477.5	--	<25.0	<25.0	#N/A	<25.0	<25.0	<25.0	<25.0
Hexachlorobutadiene	1,630	7,190	--	--	<25.0	<25.0	#N/A	<25.0	<25.0	<25.0	<25.0
Hexachloroethane	2,520	11,100	--	--	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Isopropylbenzene	268,000	268,000	--	--	<25.0	<25.0	#N/A	<25.0	<25.0	<25.0	<25.0
p-Isopropyltoluene	162,000	162,000	--	--	<25.0	<25.0	#N/A	<25.0	<25.0	<25.0	<25.0
Methylene chloride	61,800	1,150,000	2.56	--	<25.0	<25.0	#N/A	<25.0	<25.0	<25.0	<25.0
Methyl-tert-butyl-ether	63,800	282,000	27	--	<25.0	<25.0	#N/A	<25.0	<25.0	<25.0	<25.0
1-Methylnaphthalene	17,600	72,700	--	--	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Naphthalene	5,520	24,100	658.2	--	<25.0	<25.0	#N/A	<25.0	<25.0	<25.0	<25.0
Nitrobenzene	7,420	32,400	--	--	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
n-Propylbenzene	264,000	264,000	--	--	<25.0	<25.0	#N/A	<25.0	<25.0	<25.0	<25.0
Pyridine	78,200	1,170,000	6.9	--	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Styrene	867,000	867,000	220	--	<25.0	<25.0	#N/A	<25.0	<25.0	<25.0	<25.0
1,1,2,2-Tetrachloroethane	810	3,600	0.16	--	<25.0	<25.0	#N/A	<25.0	<25.0	<25.0	<25.0
1,1,1,2-Tetrachloroethane	2,780	12,300	53.4	--	<25.0	<25.0	#N/A	<25.0	<25.0	<25.0	<25.0
Tetrachloroethene	33,000	145,000	4.54	--	<25.0	<25.0	<4.7	<25.0	<25.0	<25.0	<25.0
Toluene	818,000	818,000	1,107.2	--	<25.0	<25.0	#N/A	<25.0	<25.0	<25.0	<25.0
1,2,3-Trichlorobenzene	62,600	934,000	--	--	<25.0	<25.0	#N/A	<25.0	<25.0	<25.0	<25.0
1,2,4-Trichlorobenzene	24,000	113,000	408	--	<25.0	<25.0	#N/A	<25.0	<25.0	<25.0	<25.0
1,1,1-Trichloroethane	640,000	640,000	140.2	--	<25.0	<25.0	#N/A	<25.0	<25.0	<25.0	<25.0
1,1,2-Trichloroethane	1,590	7,010	3.2	--	<25.0	<25.0	#N/A	<25.0	<25.0	<25.0	<25.0
Trichloroethene	1,300	8,410	3.6	--	<25.0	<25.0	<4.3	<25.0	<25.0	<25.0	<25.0
1,2,3-Trichloropropane	5.10	109.0	51.9	--	<25.0	<25.0	#N/A	<25.0	<25.0	<25.0	<25.0
1,1,2-Trichlorotrifluoroethane	910,000	910,000	--	--	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
1,2,4-Trimethylbenzene[1]	219,000	219,000	493.9	--	<25.0	<25.0	#N/A	<25.0	<25.0	<25.0	<25.0
1,3,5-Trimethylbenzene[1]	182,000	182,000	493.9	--	<25.0	<25.0	#N/A	<25.0	<25.0	<25.0	<25.0
Vinyl chloride	66.8	2,080	0.1	--	<25.0	<25.0	<1.8	<25.0	<25.0	<25.0	<25.0
o-Xylene	434,000	434,000	--	--	<25.0	<25.0	#N/A	<25.0	<25.0	<25.0	<25.0
m-Xylene	388,000	388,000	--	--	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
p-Xylene	390,000	390,000	--	--	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
m-&p-Xylene[2]	388,000	388,000	--	--	<50.0	<50.0	#N/A	<50.0	<50.0	<50.0	<50.0
Xylenes, total	260,000	260,000	3,960	--	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A

Table A.2
Soil Analytical Results Table
BRRTS No. 02-41-561204
Multi-Family Residential - Area E North
Oak Creek, Wisconsin

Parameters	Soil RCLs			BTV	MIDDLE TANK 1	MIDDLE TANK 2	FUEL OIL TANK COMPOSITE	SOUTH TANK 1	SOUTH TANK 2	NORTH TANK 1	NORTH TANK 2
	Non-Industrial Direct Contact	Industrial Direct Contact	Groundwater Pathway		9.5'	9.5'	0-9.5'	--	--	--	--
					8/21/2013	8/21/2013	8/21/2013	8/28/2013	8/28/2013	9/3/2013	9/3/2013
				Soil Type	Native	Native	Fill/Native	Native[5]	Native[5]	Native[5]	Native[5]
			Saturated/Unsaturated		Saturated	Saturated	Saturated	Saturated[5]	Saturated[5]	Saturated[5]	Saturated[5]
VOCs (µg/kg)											
PAHs (µg/kg)											
Acenaphthene	3,590,000	45,200,000	--	--	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Acenaphthylene	--	--	--	--	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Anthracene	17,900,000	100,000,000	196,949	--	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Benzo(a)anthracene	1,140	20,800	--	--	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Benzo(a)pyrene	115	2,110	470.0	--	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Benzo(b)fluoranthene	1,150	21,100	478.1	--	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Benzo(ghi)perylene	--	--	--	--	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Benzo(k)fluoranthene	11,500	211,000	--	--	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Chrysene	115,000	2,110,000	144.2	--	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Dibenzo(a,h,)anthracene	115	2,110	--	--	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Fluoranthene	2,390,000	30,100,000	88,877.8	--	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Fluorene	2,390,000	30,100,000	14,829.9	--	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Indeno(1,2,3-cd)pyrene	1,150	21,100	--	--	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
1-Methylnaphthalene	17,600	72,700	--	--	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
2-Methylnaphthalene	239,000	3,010,000	--	--	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Naphthalene	5,520	24,100	658.2	--	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Phenanthrene	--	--	--	--	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Pyrene	1,790,000	22,600,000	54,545.5	--	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Inorganic Parameters (mg/kg)											
Antimony	31.3	467	0.54	--	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Arsenic[3]	0.677	3.00	0.58	8.3	#N/A	#N/A	<0.12	#N/A	#N/A	#N/A	#N/A
Barium[3]	15,300	100,000	164.8	364	#N/A	#N/A	<1.2	#N/A	#N/A	#N/A	#N/A
Beryllium	156	2,300	6.32	--	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Cadmium[3]	71	985	0.75	1.07	#N/A	#N/A	<0.0025	#N/A	#N/A	#N/A	#N/A
Chromium	--	--	360,000	43.5	#N/A	#N/A	<0.12	#N/A	#N/A	#N/A	#N/A
Lead[3]	400	800	27	51.6	#N/A	#N/A	0.017 J	#N/A	#N/A	#N/A	#N/A
Mercury	3.13	3.13	0.21	--	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Nickel[3]	1,550	22,500	13.06	30.8	#N/A	#N/A	<0.12	#N/A	#N/A	#N/A	#N/A
Selenium	391	5,840	0.52	--	#N/A	#N/A	<0.12	#N/A	#N/A	#N/A	#N/A
Silver	391	5,840	0.85	--	#N/A	#N/A	<0.12	#N/A	#N/A	#N/A	#N/A
Cyanide	27.1	195.0	4.04	--	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
PCBs (mg/kg)											
PCB-1016 (Aroclor 1016)	4.11	28.0	--	--	#N/A	#N/A	<27.0	#N/A	#N/A	#N/A	#N/A
PCB-1221 (Aroclor 1221)	0.21	0.883	--	--	#N/A	#N/A	<27.0	#N/A	#N/A	#N/A	#N/A
PCB-1232 (Aroclor 1232)	0.19	0.792	--	--	#N/A	#N/A	<27.0	#N/A	#N/A	#N/A	#N/A
PCB-1242 (Aroclor 1242)	0.24	0.972	--	--	#N/A	#N/A	<27.0	#N/A	#N/A	#N/A	#N/A
PCB-1248 (Aroclor 1248)	0.24	0.975	--	--	#N/A	#N/A	<27.0	#N/A	#N/A	#N/A	#N/A
PCB-1254 (Aroclor 1254)	0.239	0.988	--	--	#N/A	#N/A	<27.0	#N/A	#N/A	#N/A	#N/A
PCB-1260 (Aroclor 1260)	0.243	1	--	--	#N/A	#N/A	<27.0	#N/A	#N/A	#N/A	#N/A
Polychlorinated Biphenyls (High Risk)	0.234	0.967	0.0094	--	#N/A	#N/A	<27.0	#N/A	#N/A	#N/A	#N/A

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.

[4] Samples S-1 (SOUTH) and S-2 (NORTH) were sediment samples collected collected from the banks of the pond using extendable sampling tools to access the interior pond sediment. The samples are therefore considered saturated.

[5] Exact sample depth unknown. Field documentation indicates sample was collected from the base of the excavation. Sample assumed to be saturated and from native material.

A Parameter exceeds NR 720 Residual Contaminant Level (RCL) for Non-Industrial Direct Contact.
B Parameter exceeds NR 720 RCL for Industrial Direct Contact.
C Parameter exceeds NR 720 RCL for Groundwater Pathway.
D Parameter exceeds Surficial BTV for metals.
J Estimated concentration at or above the Limit of Detection (LOD) and below the Limit of Quantification (LOQ).
-- No RCL or Surficial BTV established.
#N/A = Not analyzed
Direct contact RCL exceedances apply to soil from 0 to 4 feet below ground surface.
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
The highlighted sample was collected on-site (BRRTS No. 02-41-561204). The remaining samples were collected on the adjacent, closed site (BRRTS No. 02-41-580014)

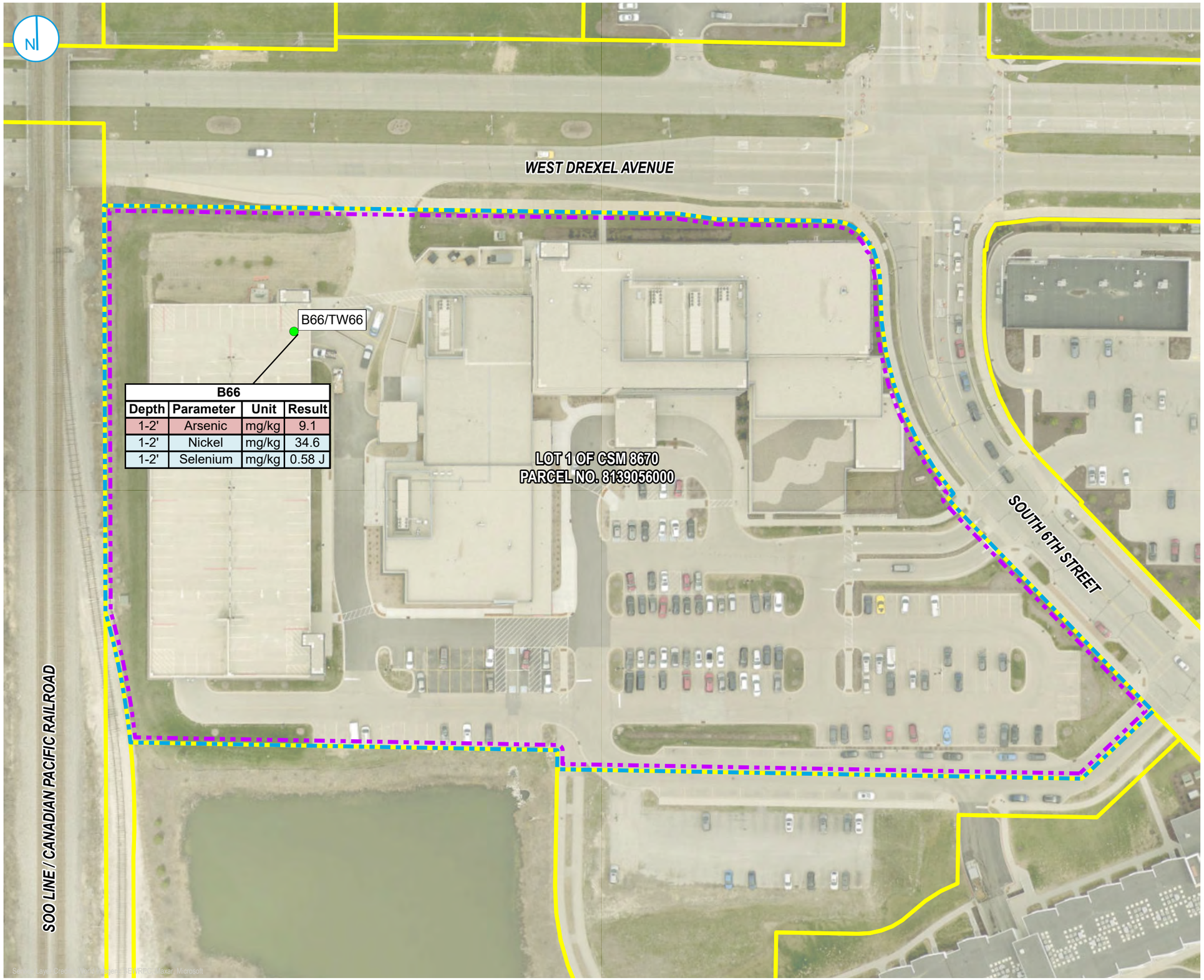
Table A.3
Residual Soil Contamination Table
BRRTS No. 02-41-561204
Multi-Family Residential - Area E North
Oak Creek, Wisconsin

Parameters	Soil RCLs			BTV	B66-1-2 1-2' 4/29/2011	
	Non-Industrial Direct Contact	Industrial Direct Contact	Groundwater Pathway			
				Soil Type	Native	
				Saturated/Unsaturated	Unsaturated	
VOCs (µg/kg)						
Benzene	1,600	7,070	5.1	--	<25.0	
Bromobenzene	342,000	679,000	--	--	<25.0	
Bromochloromethane	216,000	906,000	--	--	<25.0	
Bromodichloromethane	418	1,830	0.3	--	<25.0	
Bromoform	25,400	113,000	2.3	--	<25.9	
Bromomethane	9,600	43,000	5.1	--	<25.0	
2-Butanone (MEK)	28,400,000	28,400,000	1,666.1	--	#N/A	
sec-Butylbenzene	145,000	145,000	--	--	<25.0	
tert-Butylbenzene	183,000	183,000	--	--	<25.0	
n-Butylbenzene	108,000	108,000	--	--	<40.4	
Carbon tetrachloride	916	4,030	3.9	--	<25.0	
Chlorobenzene	370,000	761,000	135.8	--	<25.0	
Chlorodibromomethane	8,280	38,900	32	--	<25.0	
Chloroethane	2,120,000	2,120,000	226.6	--	<25.0	
Chloroform	454	1,980	3.3	--	<25.0	
Chloromethane	159,000	669,000	15.5	--	<25.0	
2-Chlorotoluene	907,000	907,000	--	--	<25.0	
4-Chlorotoluene	253,000	253,000	--	--	<25.0	
1,2-Dibromo-3-chloropropane	7.50	92.3	0.17	--	<82.3	
1,2-Dibromoethane	50.0	221	0.0282	--	<25.0	
Dibromomethane	34,000	143,000	--	--	<25.0	
1,2-Dichlorobenzene	376,000	376,000	1,168	--	<44.4	
1,3-Dichlorobenzene	297,000	297,000	1,152.8	--	<25.0	
1,4-Dichlorobenzene	3,740	16,400	144	--	<25.0	
Dichlorodifluoromethane	126,000	530,000	3,086.3	--	<25.0	
1,1-Dichloroethane	5,060	22,200	483.4	--	<25.0	
1,2-Dichloroethane	652	2,870	2.84	--	<25.0	
1,1-Dichloroethene	320,000	1,190,000	5.02	--	<25.0	
cis-1,2-Dichloroethene	156,000	2,340,000	41.2	--	<25.0	
trans-1,2-Dichloroethene	1,560,000	1,850,000	62.6	--	<25.0	
1,2-Dichloropropane	3,400	15,000	3.3	--	<25.0	
1,3-Dichloropropane	1,490,000	1,490,000	--	--	<25.0	
2,2-Dichloropropane	191,000	191,000	--	--	<25.0	
1,1-Dichloropropene	--	--	--	--	<25.0	
cis-1,3-Dichloropropene	1,210,000	1,210,000	--	--	<25.0	
trans-1,3-Dichloropropene	1,510,000	1,510,000	--	--	<25.0	
Diisopropyl ether	2,260,000	2,260,000	--	--	<25.0	
Ethylbenzene	8,020	35,400	1,570	--	<25.0	
Fluorotrichloromethane	1,230,000	1,230,000	4,477.5	--	<25.0	
Hexachlorobutadiene	1,630	7,190	--	--	<26.4	
Hexachloroethane	2,520	11,100	--	--	#N/A	
Isopropylbenzene	268,000	268,000	--	--	<25.0	
p-Isopropyltoluene	162,000	162,000	--	--	<25.0	
Methylene chloride	61,800	1,150,000	2.56	--	**114**	**C**
Methyl-tert-butyl-ether	63,800	282,000	27	--	<25.0	
1-Methylnaphthalene	17,600	72,700	--	--	#N/A	
Naphthalene	5,520	24,100	658.2	--	<25.0	
Nitrobenzene	7,420	32,400	--	--	#N/A	
n-Propylbenzene	264,000	264,000	--	--	<25.0	
Pyridine	78,200	1,170,000	6.9	--	#N/A	
Styrene	867,000	867,000	220	--	<25.0	
1,1,2,2-Tetrachloroethane	810	3,600	0.16	--	<25.0	
1,1,1,2-Tetrachloroethane	2,780	12,300	53.4	--	<25.0	
Tetrachloroethene	33,000	145,000	4.54	--	<25.0	
Toluene	818,000	818,000	1,107.2	--	<25.0	
1,2,3-Trichlorobenzene	62,600	934,000	--	--	<25.0	
1,2,4-Trichlorobenzene	24,000	113,000	408	--	<25.0	
1,1,1-Trichloroethane	640,000	640,000	140.2	--	<25.0	
1,1,2-Trichloroethane	1,590	7,010	3.2	--	<25.0	
Trichloroethene	1,300	8,410	3.6	--	<25.0	
1,2,3-Trichloropropane	5.10	109.0	51.9	--	<25.0	
1,1,2-Trichlorotrifluoroethane	910,000	910,000	--	--	#N/A	
1,2,4-Trimethylbenzene[1]	219,000	219,000	493.9	--	51	J
1,3,5-Trimethylbenzene[1]	182,000	182,000	493.9	--	<25.0	
Vinyl chloride	66.8	2,080	0.1	--	<25.0	
o-Xylene	434,000	434,000	--	--	<25.0	
m-Xylene	388,000	388,000	--	--	#N/A	
p-Xylene	390,000	390,000	--	--	#N/A	
m-&p-Xylene[2]	388,000	388,000	--	--	<50.0	
Xylenes, total	260,000	260,000	3,960	--	#N/A	
PAHs (µg/kg)						
Acenaphthene	3,590,000	45,200,000	--	--	<2.9	
Acenaphthylene	--	--	--	--	<3.3	
Anthracene	17,900,000	100,000,000	196,949.2	--	4.8	J
Benzo(a)anthracene	1140	20,800	--	--	15.5	J
Benzo(a)pyrene	115	2110	470	--	16.3	J
Benzo(b)fluoranthene	1150	21,100	478.1	--	16.3	J
Benzo(ghi)perylene	--	--	--	--	14.7	J
Benzo(k)fluoranthene	11,500	211,000	--	--	17.7	J
Chrysene	115,000	2,110,000	144.2	--	21.8	
Dibenzo(a,h,)anthracene	115	2110	--	--	<5.6	
Fluoranthene	2,390,000	30,100,000	88,877.8	--	46.5	
Fluorene	2,390,000	30,100,000	14,829.9	--	<5.1	
Indeno(1,2,3-cd)pyrene	1150	21,100	--	--	12.0	J
1-Methylnaphthalene	17,600	72,700	--	--	<3.1	
2-Methylnaphthalene	239,000	3,010,000	--	--	<3.1	
Naphthalene	5,520	24,100	658.2	--	6.1	J
Phenanthrene	--	--	--	--	13.5	J
Pyrene	1,790,000	22,600,000	54,545.5	--	33.9	
Inorganic Parameters (mg/kg)						
Antimony	31.3	467	0.54	--	<0.29	
Arsenic[3]	0.677	3.00	0.58	8.3	**9.1**	**A,B,C,D**
Barium[3]	15,300	100,000	164.8	364	99.9	
Beryllium	156	2,300	6.32	--	1.2	
Cadmium[3]	71	985	0.75	1.07	0.19	J
Chromium	--	--	360,000	43.5	36.3	
Lead[3]	400	800	27	51.6	13.6	
Mercury	3.13	3.13	0.21	--	0.058	
Nickel[3]	1,550	22,500	13.06	30.8	**34.6**	**C,D**
Selenium	391	5,840	0.52	--	**0.58**	**J C**
Silver	391	5,840	0.85	--	<0.053	
Cyanide	27.1	195.0	4.04	--	<0.22	
PCBs (mg/kg)						
PCB-1016 (Aroclor 1016)	4.11	28.0	--	--	<28.9	
PCB-1221 (Aroclor 1221)	0.21	0.883	--	--	<28.9	
PCB-1232 (Aroclor 1232)	0.19	0.792	--	--	<28.9	
PCB-1242 (Aroclor 1242)	0.24	0.972	--	--	<28.9	
PCB-1248 (Aroclor 1248)	0.24	0.975	--	--	<28.9	
PCB-1254 (Aroclor 1254)	0.239	0.988	--	--	<28.9	
PCB-1260 (Aroclor 1260)	0.243	1	--	--	<28.9	
Polychlorinated Biphenyls (High Risk)	0.234	0.967	0.0094	--	<28.9	

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.
A Parameter exceeds NR 720 Residual Contaminant Level (RCL) for Non-Industrial Direct Contact.
B Parameter exceeds NR 720 RCL for Industrial Direct Contact.
C Parameter exceeds NR 720 RCL for Groundwater Pathway.
D Parameter exceeds Surficial BTV for metals.
J Estimated concentration at or above the Limit of Detection (LOD) and below the Limit of Quantification (LOQ).
-- No RCL or Surficial BTV established.
#N/A = Not analyzed
Direct contact RCL exceedances apply to soil from 0 to 4 feet below ground surface.
Soil RCLs and surficial BTVs established by the WDNR RR program using the EPA's RSL web-calculator with WAC NR 720 default parameters (WDNR PUB-RR-890, June 2014 - updated RCL spreadsheet, December 2018).
The highlighted sample was collected on site (BRRTS No. 02-41-561204).

FIGURES



B66			
Depth	Parameter	Unit	Result
1-2'	Arsenic	mg/kg	9.1
1-2'	Nickel	mg/kg	34.6
1-2'	Selenium	mg/kg	0.58 J

Soil Boring Location

Extent of Impacted Soils with Metals Above WAC NR 720 Industrial and Non-Industrial Direct Contact and Groundwater Pathway RCLs

Multi-Family Residential - Area E North (BRRTS No. 02-41-561204)

Parcel Boundary

Parameters	Soil Residual Contaminant Levels			Background Threshold Value
	Non-Industrial Direct Contact	Industrial Direct Contact	Groundwater Pathway	
Metals (mg/kg)				
Arsenic	0.677	3.00	0.58	8.3
Nickel	1,550	22,500	13.06	30.8
Selenium	391	5,840	0.52	--

Notes

Arsenic exceeded its WAC NR 720 non-industrial and industrial direct contact RCLs, groundwater pathway RCL, and BTV at soil sample B66 (1-2'). Nickel and selenium exceeded their respective WAC NR 720 groundwater pathway RCLs at soil sample B66 (1-2'); nickel also exceeded its BTV.

Abbreviations

mg/kg = milligrams per kilogram
RCL = Residual Contaminant Level
WAC = Wisconsin Administrative Code

0 60 120 Feet

SOIL CONTAMINATION

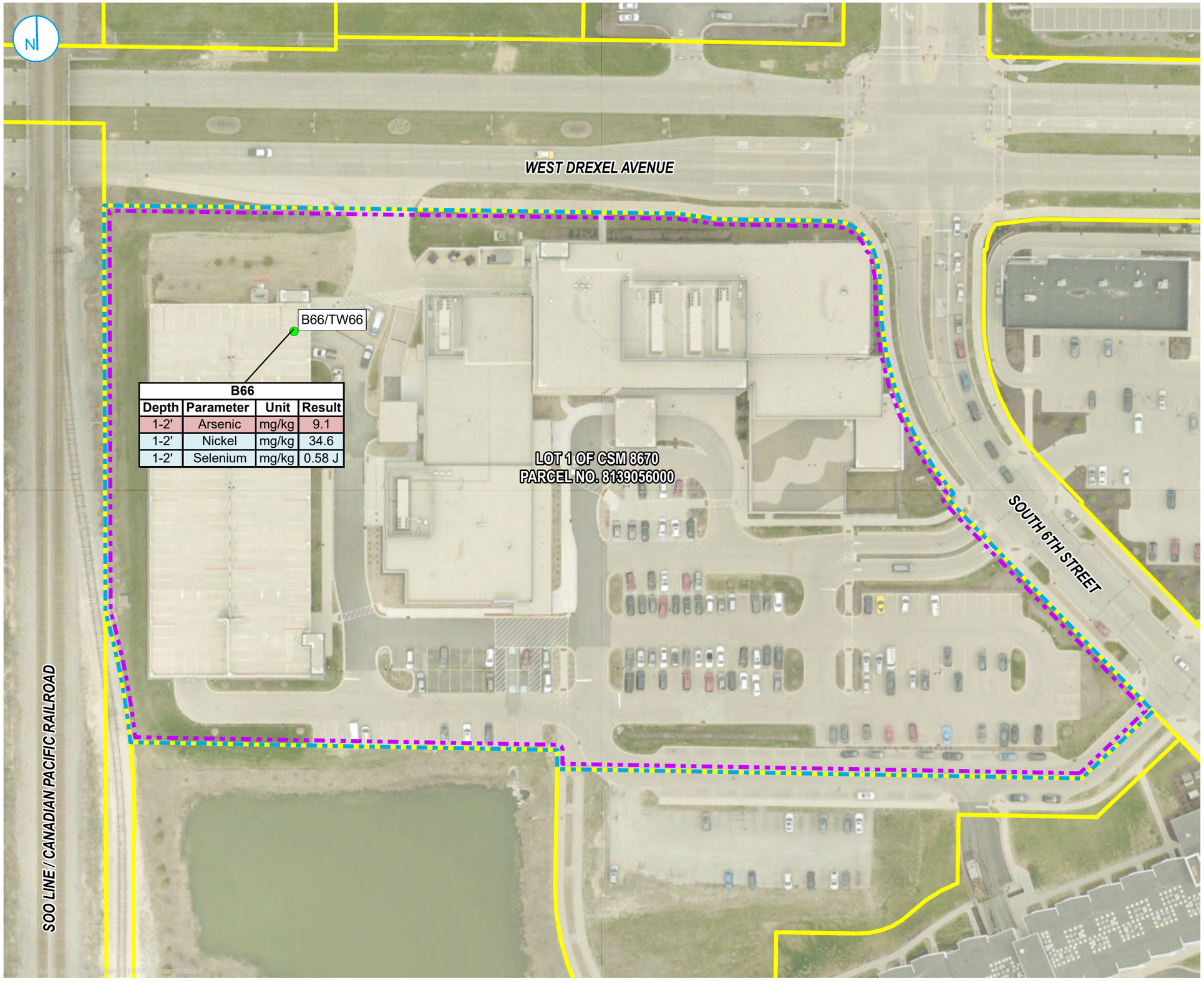
Area E North - Multi-Family Residential
7901 S. 6th Street
Oak Creek, Wisconsin

FIGURE B.2.A

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.
A RAMBOLL COMPANY

RAMBOLL

C:\Users\mileventhagen\OneDrive - Ramboll\Desktop\GIS\DTS\Area E North\MXD\B2a_Soil Contamination_20250314.aprx\B2a_Soil Contamination_20250314
PROJECT: 1940107828 | DATED: 3/14/2025 | DESIGNER: MILEVENHAGEN



B66			
Depth	Parameter	Unit	Result
1-2'	Arsenic	mg/kg	9.1
1-2'	Nickel	mg/kg	34.6
1-2'	Selenium	mg/kg	0.58 J

Soil Boring Location

Extent of Impacted Soils with Metals Above WAC NR 720 Industrial and Non-Industrial Direct Contact and Groundwater Pathway RCLs

Multi-Family Residential - Area E North (BRRTS No. 02-41-561204)

Parcel Boundary

Parameters	Soil Residual Contaminant Levels			Background Threshold Value
	Non-Industrial Direct Contact	Industrial Direct Contact	Groundwater Pathway	
Metals (mg/kg)				
Arsenic	0.677	3.00	0.58	8.3
Nickel	1,550	22,500	13.06	30.8
Selenium	391	5,840	0.52	--

Notes

Arsenic exceeded its WAC NR 720 non-industrial and industrial direct contact RCLs, groundwater pathway RCL, and BTV at soil sample B66 (1-2'). Nickel and selenium exceeded their respective WAC NR 720 groundwater pathway RCLs at soil sample B66 (1-2'); nickel also exceeded its BTV.

Abbreviations

mg/kg = milligrams per kilogram
RCL = Residual Contaminant Level
WAC = Wisconsin Administrative Code

0 60 120 Feet

RESIDUAL SOIL CONTAMINATION

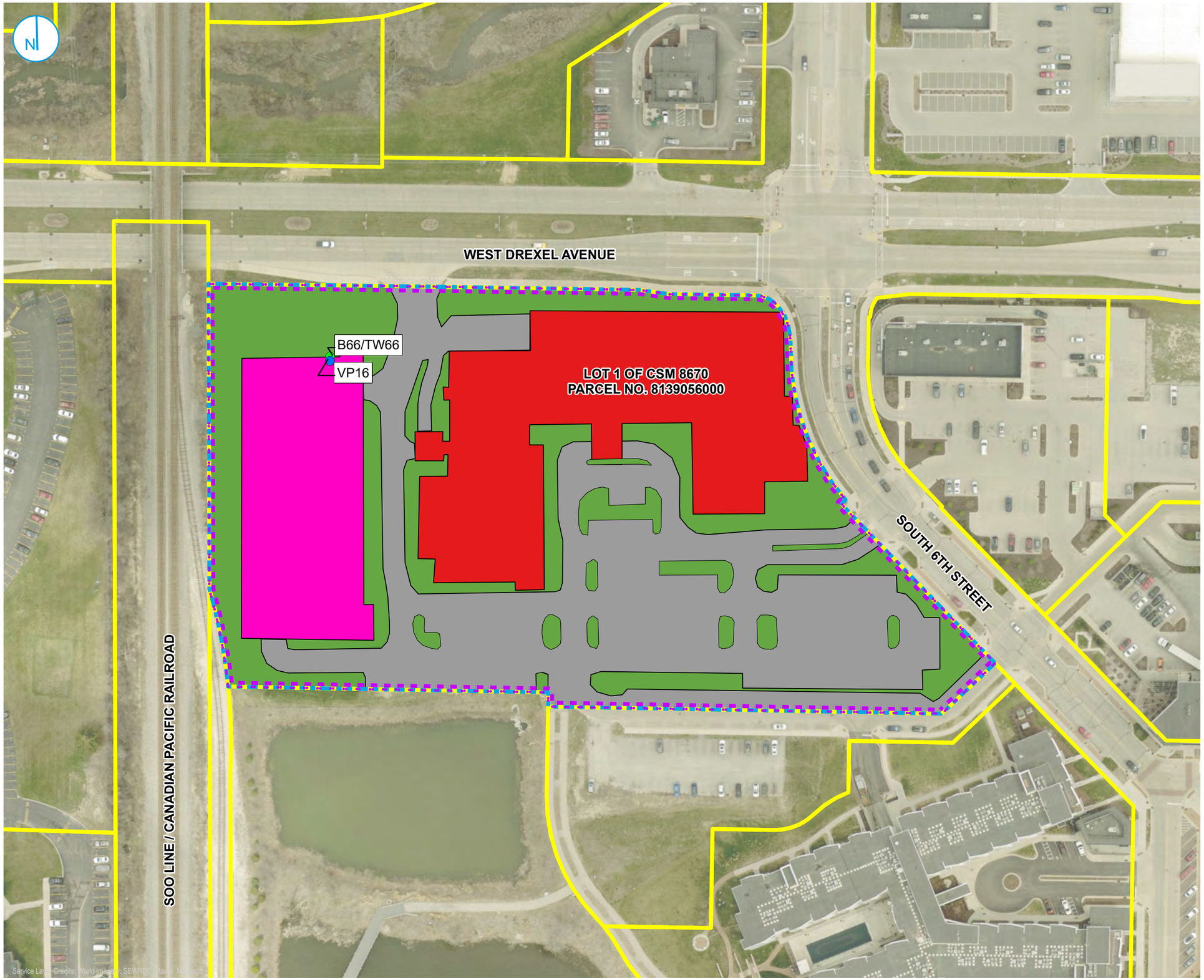
Area E North - Multi-Family Residential
7901 S. 6th Street
Oak Creek, Wisconsin

FIGURE B.2.B

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.
A RAMBOLL COMPANY

RAMBOLL

C:\Users\mlevenhagen\OneDrive - Ramboll\Desktop\GIS\DTS\Area E North\MXD\B2b_Residual Soil Contamination_20250314.aprx\B2b_Residual Soil Contamination_20250314
PROJECT: 1940107828 | DATED: 3/14/2025 | DESIGNER: MLEVENHAGEN



Soil Boring Location

Soil Vapor Probe Sample Location

Extent of Impacted Soils with Metals Above WAC NR 720 Industrial and Non-Industrial Direct Contact and Groundwater Pathway RCLs

Multi-Family Residential - Area E North (BRRTS No. 02-41-561204)

Parcel Boundary

Surface Cap Types

Medical Center Building

Parking Structure

Paved Parking Lot and Drives

Elevated Landscape Islands, Sidewalks, and Landscaped Areas

Notes

BRRTS No. 02-41-561204
Approximate surface area (in acres) per cover type:
Parking Structure = 0.90 acres
Medical Center Building = 1.60 acres
Paved Parking Lot and Drives = 2.67 acres
Elevated Landscape Islands, Sidewalks, and Landscaped Areas = 1.72 acres

120 60 0 Feet

LOCATION MAP

Area E North - Multi-Family Residential
7901 S. 6th Street
Oak Creek, Wisconsin

FIGURE D.2

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.
A RAMBOLL COMPANY

RAMBOLL

C:\Users\mlevenhagen\OneDrive - Ramboll\Desktop\GIS\DTS\Area E North\MXD\D2_Location Map_20250313\D2_Location Map_20250313.aprx\D2_Location Map_20250314

PROJECT: 169000XXXX | DATED: 3/14/2025 | DESIGNER: MLEVENHAGEN