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

Technical Assistance, Environmental Liability Clarification or Post-Closure Modification Request

Form 4400-237 (R 9/15)

Notice: Use this form to request **a written response (on agency letterhead)** from the Department of Natural Resources (DNR) regarding technical assistance, a post-closure change to a site, a specialized agreement or liability clarification for Property with known or suspected environmental contamination. A fee will be required as is authorized by s. 292.55, Wis. Stats., and NR 749, Wis. Adm. Code., unless noted in the instructions below. Personal information collected will be used for administrative purposes and may be provided to requesters to the extent required by Wisconsin's Open Records law [ss. 19.31 - 19.39, Wis. Stats.].

Definitions

"Property" refers to the subject Property that is perceived to have been or has been impacted by the discharge of hazardous substances.

"Liability Clarification" refers to a written determination by the Department provided in response to a request made on this form. The response clarifies whether a person is or may become liable for the environmental contamination of a Property, as provided in s. 292.55, Wis. Stats.

"Technical Assistance" refers to the Department's assistance or comments on the planning and implementation of an environmental investigation or environmental cleanup on a Property in response to a request made on this form as provided in s. 292.55, Wis. Stats.

"Post-closure modification" refers to changes to Property boundaries and/or continuing obligations for Properties or sites that received closure letters for which continuing obligations have been applied or where contamination remains. Many, but not all, of these sites are included on the GIS Registry layer of RR Sites Map to provide public notice of residual contamination and continuing obligations.

Select the Correct Form

This from should be used to request the following from the DNR:

- Technical Assistance
- Liability Clarification
- Post-Closure Modifications
- Specialized Agreements (tax cancellation, negotiated agreements, etc.)

Do not use this form if one of the following applies:

- Request for an **off-site liability exemption or clarification** for Property that has been or is perceived to be contaminated by one or more hazardous substances that originated on another Property containing the source of the contamination. Use DNR's Off-Site Liability Exemption and Liability Clarification Application Form 4400-201.
- Submittal of an Environmental Assessment for the **Lender Liability Exemption**, s 292.21, Wis. Stats., **if no response or review by DNR is requested**. Use the Lender Liability Exemption Environmental Assessment Tracking Form 4400-196.
- Request for an **exemption to develop on a historic fill site** or licensed landfill. Use DNR's Form 4400-226 or 4400-226A.
- **Request for closure** for Property where the investigation and cleanup actions are completed. Use DNR's Case Closure - GIS Registry Form 4400-202.

All forms, publications and additional information are available on the internet at: dnr.wi.gov/topic/Brownfields/Pubs.html.

Instructions

1. Complete sections 1, 2, 6 and 7 for all requests. Be sure to provide adequate and complete information.
2. Select the type of assistance requested: Section 3 for technical assistance or post-closure modifications, Section 4 for a written determination or clarification of environmental liabilities; or Section 5 for a specialized agreement.
3. Include the fee payment that is listed in Section 3, 4, or 5, unless you are a "Voluntary Party" enrolled in the Voluntary Party Liability Exemption Program **and** the questions in Section 2 direct otherwise. Information on to whom and where to send the fee is found in Section 8 of this form.
4. Send the completed request, supporting materials and the fee to the appropriate DNR regional office where the Property is located. See the map on the last page of this form. A paper copy of the signed form and all reports and supporting materials shall be sent with an electronic copy of the form and supporting materials on a compact disk. For electronic document submittal requirements see: http://dnr.wi.gov/files/PDF/pubs/rr/RR690.pdf"

The time required for DNR's determination varies depending on the complexity of the site, and the clarity and completeness of the request and supporting documentation.

Section 1. Contact and Recipient Information

Requester Information

This is the person requesting technical assistance or a post-closure modification review, that his or her liability be clarified or a specialized agreement and is identified as the requester in Section 7. DNR will address its response letter to this person.

Last Name	First	MI	Organization/ Business Name
Monnat	Bob		The Mandel Group

Mailing Address	City	State	ZIP Code
330 East Kilbourn Avenue; Suite 600 South	Milwaukee	WI	53202

Phone # (include area code)	Fax # (include area code)	Email
(414) 270-2741		rbmonnat@mandelgroup.com

The requester listed above: (select all that apply)

- ☐ Is currently the owner
- ☐ Is considering selling the Property
- ☐ Is renting or leasing the Property
- ☒ Is considering acquiring the Property
- ☐ Is a lender with a mortgagee interest in the Property
- ☐ Other. Explain the status of the Property with respect to the applicant:

Contact Information (to be contacted with questions about this request) ☐ Select if same as requester

Contact Last Name	First	MI	Organization/ Business Name
Frieseke	Rick	W	Friess Environmental Consulting, Inc.

Mailing Address	City	State	ZIP Code
6635 N. Sidney Place	Milwaukee	WI	53209

Phone # (include area code)	Fax # (include area code)	Email
(414) 228-9815	(414) 228-9816	rfrieseke@fecinc.us

Environmental Consultant (if applicable)

Contact Last Name	First	MI	Organization/ Business Name
Frieseke	Rick		Friess Environmental Consulting, Inc.

Mailing Address	City	State	ZIP Code
6635 N. Sidney Place	Milwaukee	WI	53209

Phone # (include area code)	Fax # (include area code)	Email
(414) 228-9815	(414) 228-9816	rfrieseke@fecinc.us

Property Owner (if different from requester)

Contact Last Name	First	MI	Organization/ Business Name
Schloss	Patrick		City of West Allis Economic Development

Mailing Address	City	State	ZIP Code
7525 W. Greenfield Avenue	West Allis	WI	53214

Phone # (include area code)	Fax # (include area code)	Email
(414) 302-8468		pschloss@westalliswi.gov

Section 2. Property Information

Property Name			FID No. (if known)	
700 Series Properties			341117040	
BRRTS No. (if known)		Parcel Identification Number		
02-41-544080		454-0648, 454-0649, and 454-0650-000		
Street Address		City	State	ZIP Code
6633-6709 West National Avenue		West Allis	WI	53214
County	Municipality where the Property is located		Property is composed of:	Property Size Acres
Milwaukee	◉ City ○ Town ○ Village of West Allis		○ Single tax parcel ◉ Multiple tax parcels	7

1. Is a response needed by a specific date? (e.g., Property closing date) Note: Most requests are completed within 60 days. Please plan accordingly.

○ No ◉ Yes

Date requested by: 12/15/2021

Reason:

2. Is the "Requester" enrolled as a Voluntary Party in the Voluntary Party Liability Exemption (VPLE) program?

◉ No. **Include the fee that is required for your request in Section 3, 4 or 5.**

○ Yes. **Do not include a separate fee.** This request will be billed separately through the VPLE Program.

Fill out the information in Section 3, 4 or 5 which corresponds with the type of request:
Section 3. Technical Assistance or Post-Closure Modifications;
Section 4. Liability Clarification; or Section 5. Specialized Agreement.

Section 3. Request for Technical Assistance or Post-Closure Modification

Select the type of technical assistance requested: **[Numbers in brackets are for WI DNR Use]**

☐ No Further Action Letter (NFA) (Immediate Actions) - NR 708.09, [183] - **Include a fee of $350.** Use for a written response to an immediate action after a discharge of a hazardous substance occurs. Generally, these are for a one-time spill event.

☐ Review of Site Investigation Work Plan - NR 716.09, [135] - **Include a fee of $700.**

☐ Review of Site Investigation Report - NR 716.15, [137] - **Include a fee of $1050.**

☐ Approval of a Site-Specific Soil Cleanup Standard - NR 720.10 or 12, [67] - **Include a fee of $1050.**

☒ Review of a Remedial Action Options Report - NR 722.13, [143] - **Include a fee of $1050.**

☐ Review of a Remedial Action Design Report - NR 724.09, [148] - **Include a fee of $1050.**

☐ Review of a Remedial Action Documentation Report - NR 724.15, [152] - **Include a fee of $350**

☐ Review of a Long-term Monitoring Plan - NR 724.17, [25] - **Include a fee of $425.**

☐ Review of an Operation and Maintenance Plan - NR 724.13, [192] - **Include a fee of $425.**

Other Technical Assistance - s. 292.55, Wis. Stats. [97] (For request to build on an abandoned landfill use Form 4400-226)

☐ Schedule a Technical Assistance Meeting - **Include a fee of $700.**

☐ Hazardous Waste Determination - **Include a fee of $700.**

☐ Other Technical Assistance - **Include a fee of $700.** Explain your request in an attachment.

Post-Closure Modifications - NR 727, [181]

☒ Post-Closure Modifications: Modification to Property boundaries and/or continuing obligations of a closed site or Property; sites may be on the GIS Registry. This also includes removal of a site or Property from the GIS Registry. **Include a fee of $1050, and:**

☐ Include a fee of $300 for sites with residual soil contamination; and

☐ Include a fee of $350 for sites with residual groundwater contamination, monitoring wells or for vapor intrusion continuing obligations.

Attach a description of the changes you are proposing, and documentation as to why the changes are needed (if the change to a Property, site or continuing obligation will result in revised maps, maintenance plans or photographs, those documents may be submitted later in the approval process, on a case-by-case basis).

Skip Sections 4 and 5 if the technical assistance you are requesting is listed above and complete Sections 6 and 7 of this form.

Section 5. Request for a Specialized Agreement

Select the type of agreement needed. Include the appropriate draft agreements and supporting materials. Complete Sections 6 and 7 of this form. More information and model draft agreements are available at: dnr.wi.gov/topic/Brownfields/lgu.html#tabx4.

☐ Tax cancellation agreement - s. 75.105(2)(d), Wis. Stats. [654]

- ❖ **Include a fee of $700, and the information listed below:**

(1) Phase I and II Environmental Site Assessment Reports,
(2) a copy of the Property deed with the correct legal description; and,
(3) a draft 75.105 agreement based on the DNR's model (dnr.wi.gov/topic/brownfields/documents/mod75-105agrmt.pdf).

☐ Agreement for assignment of tax foreclosure judgement - s.75.106, Wis. Stats. [666]

- ❖ **Include a fee of $700, and the information listed below:**

(1) Phase I and II Environmental Site Assessment Reports,
(2) a copy of the Property deed with the correct legal description; and,
(3) a draft 75.105 agreement based on the DNR's model (dnr.wi.gov/topic/brownfields/documents/mod75-106agrmt.pdf).

☐ Negotiated agreement - Enforceable contract for non-emergency remediation - s. 292.11(7)(d) and (e), Wis. Stats. [630]

- ❖ **Include a fee of $1400, and the information listed below:**

(1) a draft schedule for remediation; and,
(2) the name, mailing address, phone and email for each party to the agreement.

Section 6. Other Information Submitted

Identify all materials that are included with this request.

Include one copy of any document from any state agency files that you want the Department to review as part of this request. The person submitting this request is responsible for contacting other state agencies to obtain appropriate reports or information.

☒ Phase I Environmental Site Assessment Report - Date: 08/20/2021

☐ Phase II Environmental Site Assessment Report - Date: _____

☐ Legal Description of Property (required for all liability requests and specialized agreements)

☒ Map of the Property (required for all liability requests and specialized agreements)

Analytical results of the following sampled media: Select all that apply and include date of collection.

☒ Groundwater ☒ Soil ☐ Sediment ☐ Other medium - Describe: _____

Date of Collection: _____

☐ A copy of the closure letter and submittal materials

☐ Draft tax cancellation agreement

☐ Draft agreement for assignment of tax foreclosure judgment

☒ Other report(s) or information - Describe: RAP dated November 19, 2021; BRRTS # 02-41-560505

For Property with newly identified discharges of hazardous substances only: Has a notification of a discharge of a hazardous substance been sent to the DNR as required by s. NR 706.05(1)(b), Wis. Adm. Code?

◯ Yes - Date (if known): _____

◉ No

Note: The Notification for Hazardous Substance Discharge (non-emergency) form is available at: dnr.wi.gov/files/PDF/forms/4400/4400-225.pdf.

Section 7. Certification by the Person who completed this form

☐ I am the person submitting this request (requester)

☒ I prepared this request for: The Mandel Group
Requester Name

I certify that I am familiar with the information submitted on this request, and that the information on and included with this request is true, accurate and complete to the best of my knowledge. I also certify I have the legal authority and the applicant's permission to make this request.

[signature]	11/18/21
Signature	Date Signed
consultant	(414) 228-9815
Title	Telephone Number (include area code)

Section 8. DNR Contacts and Addresses for Request Submittals

Send or deliver one paper copy and one electronic copy on a compact disk of the completed request, supporting materials, and fee to the region where the property is located to the address below. Contact a DNR regional brownfields specialist with any questions about this form or a specific situation involving a contaminated property. For electronic document submittal requirements see: http://dnr.wi.gov/files/PDF/pubs/rr/RR690.pdf.

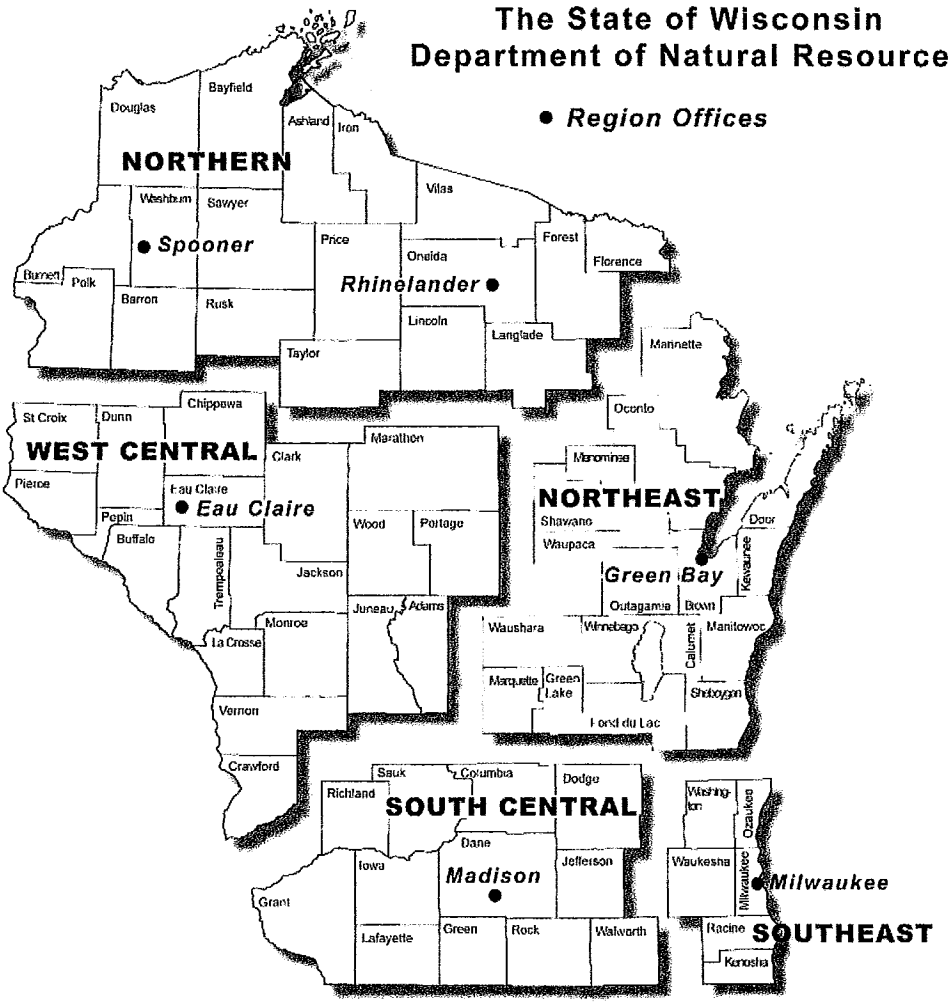
DNR NORTHERN REGION
Attn: RR Program Assistant
Department of Natural Resources
223 E Steinfest Rd Antigo, WI 54409

DNR NORTHEAST REGION
Attn: RR Program Assistant
Department of Natural Resources
2984 Shawano Avenue
Green Bay WI 54313

DNR SOUTH CENTRAL REGION
Attn: RR Program Assistant
Department of Natural Resources
3911 Fish Hatchery Road
Fitchburg WI 53711

DNR SOUTHEAST REGION
Attn: RR Program Assistant
Department of Natural Resources
2300 North Martin Luther King Drive
Milwaukee WI 53212

DNR WEST CENTRAL REGION
Attn: RR Program Assistant
Department of Natural Resources
1300 Clairemont Ave.
Eau Claire WI 54702



Note: These are the Remediation and Redevelopment Program's designated regions. Other DNR program regional boundaries may be different.

DNR Use Only			
Date Received	Date Assigned	BRRTS Activity Code	BRRTS No. (if used)
DNR Reviewer	Comments		
Fee Enclosed? ◯ Yes ◯ No	Fee Amount $	Date Additional Information Requested	Date Requested for DNR Response Letter
Date Approved	Final Determination		

November 19, 2021

Mr. Greg Michael
Wisconsin Department of Natural Resources
1027 West St. Paul Avenue
Milwaukee, WI 53233

RE: Remedial Action Plan for the SoNa Property (6633-6639 W. National Avenue - Parcel 705) Located in West Allis, Wisconsin — FEC Project No. 210807; DNR BRRTS No. 02-41-544080

Dear Mr. Michael:

Friess Environmental Consulting, Inc. (FEC) submits this letter to present a remedial action plan (RAP) to achieve site closure for the proposed South of National Avenue (SoNa) Property in West Allis, Wisconsin (the Site). This letter briefly describes the project background and sampling activities, summarizes the results of field and analytical testing for the SI activities, and presents our planned remedial actions to achieve closure of the Site. The RAP includes the construction of a 110-unit apartment complex with first floor retail, underground parking, at grade parking and access drives, outdoor patio and pool, and retail terrace. Three other lots are proposed for future retail and commercial development.

Project Description

The Site is situated at the southwest corner of the intersection of West National Avenue and South 66th Street in the City of West Allis. The Site is approximately 6.53-acres and currently vacant with asphalt paved areas on the northeast, northwest, and southeast portions of the Site. The remainder of the Site consists of vacant grass covered land with fill piles on the north-central portion of the Site. Storm sewer manholes were observed on the southern portion of the Site. The grade of the subject property slopes downwards from the north to the south with the asphalt areas being of higher elevation. The Site is illustrated on Figures 1 and 2.

The Site appears to have been developed dating back to at least 1910. Historically the Site has been utilized as a lumber yard, a coal yard, salvage yard, bulk plant, filling station, concrete block factory, steel fabricator, and for grinding and machining. Approximately five buildings were present on the northeastern portion, three buildings on the northwestern portion, and three buildings and three railroad spurs on the south-central portion of the Site dating back to at least 1937. Additions to three existing buildings were constructed between 1937 and 1951

and portions of other buildings were removed between 1951 and 1971. The south-central buildings were removed and replaced with a large building between 1971 and 1976 with all the buildings having been removed from the Site by 2005, except for the northwestern building, which was removed between 2005 and 2010. A large excavation area was observed in the northwestern portion with filling and grading activities apparent across the southern portion of the Site in 2005. The western, east central, and northeastern portions of the site were graded and paved in 2013 with filling and grading activities apparent across the central portion of the Site in 2018-19.

The Site (6633 - 6639 W. National Avenue – Parcel 705) is listed as a DNR Brownfield site with an approved historic fill construction exemption, on the DNR AST/UST database as having had a 6,000-gallon fuel oil UST removed from the Site on June 17, 2004, two 300-gallon USTs and a 500-gallon UST removed from the Site on May 12, 2005, and as an open DNR ERP site having soil and groundwater impacts from chlorinated solvents, VOCs, and petroleum. In addition, the Site is also listed as having been utilized to manage materials from the north adjoining property in 2018-19. The Site (6616 W. Mitchell Street – Milwaukee Ductile Iron Parcel 4) is listed as a closed DNR ERP site having soil and groundwater impacts from VOCs, PAHs, and lead and closed on January 28, 2016, with continuing obligations.

Description of Site SI Sampling and Activities

Historical soil and groundwater sampling have been conducted on the site dating back to approximately 2000. A remedial action plan was reviewed and approved by the DNR in May 2012 for a project similar to the project now proposed. The approved RAP included on site management of the soil and subsequent capping as part of the development. As requested by the DNR, FEC has completed this updated RAP to re-evaluate the current site conditions and development plans including the historic SI results and soils management activities that have occurred on the site. The scope and timeline of the investigative and remedial activities taken at the Site is outlined below.

Initial Investigation and Remediation (Petroleum)

A service station and fuel storage and supply facility (Cities Fuel & Supply Company) was in the northwestern area of the site. Leakage from a closed in-place 8,000-gallon gasoline UST near the west side of the building formerly located at 6633 - 6639 West National Avenue was investigated and remediated between 2002 to 2006. The contaminant plume had extended to the south and west toward the railroad ROW.

The initial SI included collecting soil and groundwater samples from twenty-nine soil borings (SB-1 to SB-24 and E-1 to E-5) and the installation of nine groundwater monitoring wells (MW-1 to MW-9) that focused on the former petroleum area. Based on the site conditions and proposed site redevelopment plan at the time, excavation of contaminated soil with off-site disposal was selected as the most cost-effective remedial option for the northwestern area of the site. As such, the first phase of soil excavation and removal from the site was conducted in April 2005 concurrent with demolition of the buildings in the south-central part of the site. Approximately 10,077 tons of petroleum contaminated soil were excavated from the northwestern area of the site over a one-week period in late April 2005. Samples were collected from a depth of approximately 11 feet bgs at the base of the excavation in April and June 2005 ("Excavation Bottom" 1 and 2 samples, as well as "Mid, N. End, NE, and Mid S").

As part of the backfill for the excavation, a composite sample of soil fill from a construction project elsewhere in the City of West Allis was collected and analyzed for potential contaminants (“off-site” sample in Tables) prior to placement of the fill in the completed excavation. The analytical data indicates the fill contained low levels of several PAH compounds, arsenic, and lead. The quantity of this fill was approximately 300-400 tons (200-250 cubic yards). It was placed in the bottom of the south end of the excavation from approximately 8 to 10 feet bgs. The remainder of the excavation was backfilled with clean, imported fill.

In April and May 2006, the remaining buildings were demolished. Following demolition, the second phase of the soil excavation was completed. The excavation extended west from the west wall of the original excavation and was completed to remove the farthest downgradient residual petroleum soil contamination. Approximately 1,454 tons of petroleum impacted soil were removed and disposed of at a licensed sanitary landfill. Samples were collected from a depth of approximately eight feet bgs at the walls of the excavation (EX-1 to EX-9). The soil sampling confirmed that successful remediation was conducted. The results of the soil and groundwater sampling in the petroleum area are included on the Tables and sampling locations shown on Figure 3. The areas of excavation associated with these activities are shown on Figure 4.

Subsequent Investigation (Fill Material)

Shallow fill and native soils at the Site are primarily silty clay. Due to the industrial history of the Site, shallow fill is present across the Site. The fill typically consists of mixtures of clay, silt, and sand, and occasionally includes debris such as brick,

concrete, and wood. Slag and cinder-like materials, foundry sand, and fly ash are also present in some locations. The historic fill was investigated in 2006.

The SI associated with the historic fill and operations of the site included collecting soil and groundwater samples from twenty-eight additional soil borings (SB-25 to SB-52) across the Site.

Low level VOC impacts are limited (only two detections) in the fill material on the Site.

PAH contaminants in shallow soil fill are widely distributed throughout the site, except in the southeast corner of the site, and the area of the completed soil excavations (northwest area of the site), which were backfilled with clean, imported fill. PAH contamination is confined to the top five feet. This zone consists primarily of soil fill with varying amounts clay, silt, sand, gravel, and foundry sand.

The only RCL exceedances for metals remaining on the site are for arsenic and lead. The arsenic RCL exceedances are widespread throughout the shallow soil fill but are considered background (less than 8 mg/kg). Most of the exceedances of lead were detected on the northeast portion of the Site. The analytical results of the soil sampling for the historic fill are included on the Tables and sampling locations shown on Figure 3.

Proposed Redevelopment Sampling

Redevelopment of the property was originally planned to begin in 2012. In April 2012, four soil boring/temporary groundwater monitoring wells (TW-1 to TW-4) were drilled and installed to a depth of 15 feet bgs around the perimeter of the petroleum soil excavation in the northwest part of the site. Soil and groundwater samples were collected to determine residual contaminant levels around the perimeter of the excavation and to evaluate the need for any further groundwater monitoring at the site.

Depth to groundwater ranged between 2-7 ft bgs and generally flows to the southwest. Groundwater is likely perched in the fill soils present on the site. Low levels of residual petroleum impacts were noted in the soil and groundwater samples collected at TW-3. The analytical results of the soil and groundwater sampling are included on the Tables and sampling locations shown on Figure 3.

A remedial action plan (RAP) was submitted in May 2012 and conditionally approved by the DNR in July 2012 for a project similar to the project now proposed.

Redevelopment Soil Management

In 2012, as part of the proposed redevelopment and above-mentioned approved RAP, site grading and utility work was initiated that included defined areas of excavation for building pads, a retention basin, and utility installation on the central portion of the Site. These excavated soils were fully retained on the Site and placed under two separate asphalt parking lots on the east and west sides of the Site. The proposed redevelopment that was to make use of these improvements did not move forward, and no other soil disturbance occurred. No excess spoils were generated, and no soils were removed from or brought onto the Site in conjunction with this phase of activity. The areas of excavation and deposition associated with these activities are shown on Figure 5.

Off-site Investigative Sampling

A Phase I Environmental Site Assessment (ESA) of the south and west adjoining properties and southeast portion of the property was completed in September 2012 and indicated the southeast portion of the Site was first developed for manufacturing activities in about 1910. A subsequent Phase II ESA indicated impacts and the site was reported to the DNR (BRRTS No. 02-41-560505 – Ductile Iron Parcel 4). Additional site investigation was conducted in 2013 and 2015 that included six soil borings/temporary groundwater monitoring wells (GP-25 to GP-27 and GP-52 to GP-54) and installation of one groundwater monitoring well (MW-6).

Concentrations of PAHs were detected in shallow soil samples collected from GP-52 and GP-54, located on the southern property boundary of the Site, but were not detected in the deeper soil samples from these sampling locations. The shallow PAHs are anticipated to be associated with the fill materials encountered on the Site. In addition, VOC impacts were detected in deeper soil and groundwater samples collected from GP-25 and MW-6. The VOC constituents are likely migrating on to the Site from an off-site location. The former Ductile Iron Parcel 4 portion of the Site was submitted for closure in November 2015 and closed by the DNR with maintenance of the existing cap in January 2016. The analytical results of the soil and groundwater sampling are included on the Tables and sampling locations shown on Figure 3.

Imported Soil Management

As part of the remediation and redevelopment of the north adjoining former Pressed Steel property (BRRTS No. 02-41-385114) located across National Avenue, the Site was approved by the DNR to accept material generated during the construction project (BRRTS No. 15-41-580964). In 2018, approximately 10,225 cubic yards of soil were excavated from the former Pressed Steel property and stockpiled on the north-central portion of the Site. These soils were from areas with contaminant concentrations that did not exceed the non-industrial direct contact RCLs. Approximately 4,600 cubic yards of the stockpiled material was transported back to the former Pressed Steel property for use as cover material. As such, approximately 5,625 cubic yards of soil remain on the Site associated with these soil management activities. The area of soil deposition associated with these activities are shown on Figure 6.

Soil Sample Analytical Results

Subsurface information collected indicates that fill containing varying amounts of clay, silt, sand, gravel, wood, brick, concrete, slag, cinders, foundry sand, and fly ash extends to depths between 2 and 5 feet bgs. Beneath the fill is native silty clay. Soil samples were collected from across the Site and submitted for laboratory analysis of VOCs, PAHs, and RCRA metals.

The soil analytical results are discussed below and are summarized on Tables 1 through 3.

VOC Sampling

Sixty-five soil samples were collected and submitted for laboratory analysis of VOCs. The analytical results indicate that the highest VOC impacts were PVOCs located near the former petroleum USTs on the northwestern portion of the Site. PVOC impacts at SB-1 to SB-8, SB-13, E-2 and E-3, and MW-1 to MW-9 were removed to a depth of approximately 11 feet bgs during the remedial excavations. Based on the post-excavation sampling there are some residual PVOC impacts remaining (E-1, SB-24, Excav Bottom 1, EX-1, EX-3, EX-8, and TW-3) in and around the former excavation; however, none of the PVOCs exceed their NR 720 residual contaminant levels (RCLs) for direct contact. The CVOCs (PCE and TCE) were detected above their NR 720 RCLs for the protection of groundwater at SB-19 and SB-22; however, the concentrations are low and limited in area. In addition, 1,1,1-TCA was detected above its NR 720 RCLs for the protection of groundwater on the former Ductile Iron Parcel 4 portion of the Site at GP-25 and MW-6. The concentrations are present below the

water table and therefore would not be considered soil impacts, limited in area, and the DNR concurred are from an off-site source. The extent of the remaining VOC impacts is shown on Figure 7.

PAH Sampling

Fifty-five soil samples were collected and submitted for laboratory testing of PAHs. Several PAHs were detected above their NR 720 RCLs for non-industrial direct contact and the protection of groundwater at SB-24, SB-25, SB-33, SB-38, SB-40, SB-41, SB-44, SB-45, GP-52, and GP-54. Several PAHs were detected above their NR 720 RCLs for the protection of groundwater at SB-19, SB-31, SB-37, and SB-42. No PAHs were detected above their industrial direct contact RCLs. The PAH non-industrial direct contact RCLs were evaluated using the WDNR-approved cPAH calculator for the seven carcinogenic PAHs. This calculated risk is compared to a risk level of 5 x 10-6; if the calculated risk is less than 5 x 10-6, these seven carcinogenic PAHs are considered to not pose a risk from non-industrial direct contact. The calculations are attached, and the extent of the remaining PAH impacts is shown on Figure 8.

RCRA Metals Sampling

Thirty soil samples were submitted for laboratory analyses of RCRA metals. Arsenic was detected above its NR 720 RCLs for direct contact and groundwater protection in soil samples collected from across the Site; however, the concentrations are all below the USGS background concentration and would be considered background. Barium was detected above its RCL for the protection of groundwater at only one location (SB-3-704). Cadmium was only detected above its RCL for the protection of groundwater at two locations (SB-20 and SB-22) with only the sample from SB-20 above the USGS background concentration. Lead was detected above its RCL for direct contact at one location (SB-3-704) and above its RCL for the protection of groundwater at SB-19, SB-42, SB-48, SB-52, GP-26, and GP-27; however, the concentrations are all below the USGS background concentration except for SB-48 and GP-26. Selenium was only detected above its NR 720 RCL for the protection of groundwater at SB-3-704 and SB-22. Silver was detected above its RCL for the protection of groundwater at only one location (SB-22). Chromium and mercury were not detected at concentrations above their RCLs. The extent of the remaining metals impacts is shown on Figure 9.

The soil analytical results indicate that the soil impacts are adequately defined in soil at the Site.

Groundwater Evaluation

To evaluate groundwater quality nine groundwater monitoring wells (MW-1 to MW-9) were installed in March 2003 that focused on the former petroleum area. Depth to groundwater ranged between 1.7 to 6.75 ft bgs and groundwater generally flows southwest. Elevated levels of PVOCs above enforcement standards (ESs) were detected in MW-3, MW-5, MW-6, MW-7, MW-8, and MW-9. PAHs above their preventive action limits (PALs) were detected in MW-4, MW-5, and MW-6. Dissolved metals above their PALs were detected in MW-1, MW-4, MW-5, and MW-6. As discussed above, in 2005-2006 approximately 11,500 tons of petroleum impacted soils were excavated and disposed of at a licensed landfill from this area. All the groundwater monitoring wells were removed during the excavation. In addition, approximately 3,000-gallons of groundwater was pumped and disposed in the sanitary sewer through an MMSD permit. Soil sampling confirmed that successful remediation was conducted.

Four temporary groundwater monitoring wells were subsequently installed in April 2012 at the perimeter of the former petroleum excavation to confirm successful source removal was accomplished. A low level of benzene (10.1 ppb) at TW-3 was the only PVOC detection above the DNR groundwater quality standards. Three PAHs were detected at TW-3 at levels above their DNR groundwater quality standards. The groundwater investigation was deemed to be complete, and the temporary wells were approved for abandonment as part of the remedial action plan approval in May 2012.

Additional site investigation was conducted on the south end of the Site associated with the former Ductile Iron Parcel 4 site in 2013 and 2015 that included six soil borings/temporary groundwater monitoring wells (GP-25 to GP-27 and GP-52 to GP-54) and installation of one groundwater monitoring well (MW-6).

Low concentrations of the VOCs 1,1-dichloroethylene (1,1-DCE) and 1,1,1-trichloroethane (1,1,1-TCA) were detected in groundwater samples collected from GP-25 and MW-6 at levels above their DNR groundwater quality standards. The VOC constituents were believed to be migrating on to the Site from an off-site location. The former Ductile Iron Parcel 4 portion of the Site was submitted for closure in November 2015 and closed by the DNR with maintenance of the existing cap in January 2016. The groundwater analytical results are summarized on Tables 4 through 6 and the extent of the remaining groundwater impacts is shown on Figure 10.

Based on the groundwater analytical results, the residual soil impacts are not adversely impacting the groundwater beneath the Site, and the groundwater investigation is complete. A NR 140 PAL/ES exemption will likely be required for closure of the Site. The areas of residual groundwater impacts are within the area proposed for site grading/capping and will present no risk to the Site.

SI Conclusions

Based on the field observations and available laboratory data, the soil impacts appear to be adequately defined and are not adversely impacting the perched water at the Site. Further, the detected concentrations are all relatively low, given the history of the Site.

Consistent with our previous discussions, the most feasible method to achieve closure for the Site includes installation of a cap to mitigate residual direct contact issues across the entire Site and limit precipitation infiltration through the impacts, registration on the soil and groundwater Geographic Information System (GIS) databases, and implementation of a cap maintenance plan (CMP). The following section identifies the proposed remedial action for the Site and closure strategy.

Remedial Action Plan

Phase I of the project will include the development of Lot 2 with the construction of a 110-unit apartment complex with underground parking, first floor retail, at grade parking and access drives, outdoor patio and pool, and retail terrace. Three other lots are proposed for future retail and commercial development. Information of the proposed development is included in Appendix D.

The majority of the soils management during development will occur with the construction of the underground parking lot, bioretention area and foundations for the future buildings. The impacted soils removed will be relocated on site and capped as part of the development. A copy of the grading plan is included in Appendix D.

This RAP includes construction of the buildings, underground parking and surface parking lots and access drives, the pool deck area, and landscaped areas to cap the entire Site and address potential risk. Clean soil and topsoil are present on the site and will be used as capping material. The RAP will be implemented under the Soils Management Plan (SMP) and Contingency Plan described in this section.

Post-closure Modification for BRRTS No. 02-41-560505

As discussed above, the investigation and closure were completed on the former Ductile Iron Parcel 4. As part of the former Ductile Iron Parcel 4 closure a CMP was prepared and approved by the DNR to maintain the existing asphalt cap. No disturbance of the underlying soil impacts is proposed as part of the redevelopment; however, the former Ductile Iron Parcel 4 site is being redeveloped as part of the larger overall Site. Per DNR guidance RR 987 this post-closure modification would appear to fall into Category 4, which involves combining multiple sites or properties. The Ductile Iron Parcel 4 site capped continuing obligation remains in effect, and we intend to replace the existing cover with no soil removal/disturbance. The proposed RAP involves capping the shallow impacts in place, and as such will require placement of the Site on the DNR's soil GIS and implementation of a CMP. Following completion of the redevelopment, a revised GIS Registry and CMP for the Site (including the former Ductile Iron Parcel 4 site) will be prepared and submitted to the WDNR. We trust the information provided herein is sufficient for the WDNR to approve the Post-Closure Modification request for the recapping with a future building and clean fill in the landscaped areas.

Construction Exemption (Ch. NR 506.085 Wisconsin Administrative Code)

The DNR previously provided an exemption per Ch. NR 506.085 Wisconsin Administrative Code (WAC) for development on a historic fill site ("construction exemption") for the Site (BRRTS No. 07-41-558710) in July 2012. The fill observed at the Site and documented on the boring logs is inert in composition and does not generate methane. As indicated earlier, the underground parking structure will be vented to comply with applicable regulations. FEC will be submitting an updated exemption to include current site conditions and development plans.

NR 718 Exemptions

FEC requests that the DNR grant a written exemption to the location criteria requirements of Ch. NR 718.12(1)(c)5 WAC regarding placement of contaminated soil within three feet of the high groundwater level. As indicated earlier, the depth to groundwater ranged between 2 to 7 ft bgs but likely represents perched water conditions. This exemption is requested to allow on-site placement of low-level impacted soil at or near the central portion of the site that is proposed for parking and landscaped areas. This request is based on the widespread shallow fill related impacts, including PAHs, lead, and arsenic, which exist throughout the Site and the proposed activities at the Site.

Soils Management Plan (SMP)/Capping

Erosion control consisting of the following will be implemented prior to and during soil excavation, handling, and management activities at the Site.

- Obtain all necessary City of West Allis permits relating to erosion control, and stormwater management.
- Erosion control measures will be implemented and maintained at the Site.
- In the unlikely event that conditions are encountered that may be uncharacteristic of those which have been previously documented at the Site, this SMP identifies a contingency protocol for additional evaluation outside the typical soils management procedures.
- Concrete or asphalt rubble, wood, and other miscellaneous debris that may be encountered and deemed unsuitable or non-recyclable will be transported off-site for proper disposal.

Based on the site characteristics, excavation is required at the Site for construction purposes for the proposed buildings at the Site. The excavation of building foundations and underground parking and general site grading will likely encounter historic fill, which will be managed on site by consolidation under drives, parking areas, or on the central portion of the property beneath the pool deck, landscaped areas, and the parking lot. The Site will be graded to direct storm water to stormwater collection basins and subsequently the stormwater retention area to be constructed in the southwestern portion of the site. Following placement of the soils to rough grades, the drives and parking areas will receive pavement, landscaped areas will receive approximately 18-inches of clean fill, topsoil, and landscaping. Figure 11 illustrates the development plan for the Site. As the figure indicates, the entire Site will be covered with either the buildings, paved parking areas, or landscaped grassy areas. Consolidation of materials and installation of the barrier(s) will be documented per the requirements of the construction exemption, and the applicable requirements of Ch. NR 718 WAC. Excavation within areas of known impacts will be conducted for cap installation purposes and contamination may remain in place after excavation.

Soil Disposal Contingency Plan

Off-site disposal of materials will be minimized. The paved areas will provide the necessary direct contact mitigation, and the landscaped areas will be capped by 18-inches of clean fill and imported clean topsoil. The proposed RAP involves capping the shallow impacts in place, and as such will require placement of the

site on the DNR's soil GIS and implementation of a CMP. The capping will be conducted to achieve closure for the Site immediately following construction.

Upon completion of Site grading activities, off-site disposal may be necessary as part of the development to balance the Site. As such, FEC requests that the DNR grant a Ch. NR 718.12 WAC approval for approximately 2,000 cubic yards (CY) of soil for potential removal from the Site for off-site disposal at a contractor's disposal site. The soils for potential removal are the capping soils that were reviewed by the DNR and approved to be placed on the SoNa property from the neighboring former Pressed Steel development (DNR BRRTS # 15-41-580964). As discussed above, approximately 5,625 cubic yards of soil remain on the Site associated with the former Pressed Steel soil management activities. If necessary, a portion of the remaining former Pressed Steel soils would be disposed of at the R&R excavating site located near the intersection of Highway 60 and Highway I in the Town of Cedarburg.

The R&R excavating site meets the locational criteria outlined in Ch. NR 718.12(1)(c) WAC. The soils placed at the R&R Excavating site have not been and will not be located 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; or within 100 feet of any on-site water supply well or 300 feet of any off-site water supply well. In addition, soils will not be placed within three feet of the groundwater table. Information related to the R&R excavating site as it relates to the Ch. NR 718.12 locational criteria has been previously provided to and approved by the DNR. Any off-site soil disposal will be fully manifested and documented.

Contingency Plan

The Site has been well characterized through the SI activities conducted within the area where excavation is planned, and there are no known USTs or buried drums located at the Site. In the unlikely event that conditions are encountered that may be uncharacteristic of those which have been previously documented at the Site, this SMP identifies a contingency protocol for additional evaluation outside the typical soils management procedures. The contingency procedures are designed to remain consistent with the RAP and closure approach, identify interim actions to be conducted to minimize delays in site work, and properly manage non-exempt solid wastes. The contingency procedures are designed to track the elements of an "interim action" under Wis. Adm. Code Ch. NR 708.11.
The following procedures will be followed if the Contingency Plan is implemented:

A. USTs
   - Contact and coordinate with a certified UST remover/cleaner.
   - Assess whether a release has occurred.
   - Inform the DNR in the event of a confirmed release.
   - The certified remover/cleaner will conduct the closure of the UST in accordance with Wis. Adm. Code Ch. Comm 10:
     - Notify the appropriate agency for inspection.
     - Coordinate with a licensed subcontractor to remove, transport, and dispose surplus product or water contained within the UST.
     - Properly inert, remove, cut, clean, and dispose of the UST (recycle as scrap metal).
     - Coordinate with a licensed subcontractor to transport and dispose of tank sludges.
   - Collect confirmation samples for PID or laboratory analyses as appropriate.
   - Apply any additional laboratory results to this RAP to evaluate whether the area is required to be incorporated into the closure strategy.
   - Register the UST with the Wisconsin Department of Commerce.

B. Drums
   - The excavation contractor will remove any intact drums encountered and stage them on site pending laboratory analyses.
   - Sample the drum contents for laboratory analyses at a Wisconsin-Certified laboratory for characterization.
   - Collect confirmation samples for PID or laboratory analyses as appropriate.
   - Amend landfill profiles as needed per the laboratory characterization.
   - Coordinate proper disposal of the drum contents and any excavated materials associated with the drums per the laboratory characterization.

C. Additional Impacted Soils (Uncharacteristic of the SI)
   - Characterize impacted soils based on field indications such as free product, obvious solvent odors, etc.
   - Collect a sample of the impacted soils for characterization analyses, if necessary, based on the field analyses.
   - Apply any additional laboratory results to this RAP to evaluate whether excavation is warranted or if the area can be incorporated into the closure strategy as is.
   - If excavation is conducted, collect confirmation samples after completion of excavation.
   - Incorporate excavated soils into development plan and closure strategy if possible.
   - Update the landfill profile with new analytical results.
   - Coordinate and document landfill disposal if warranted.

FEC will inform the DNR before any soils are removed, upon discovery of any drums or USTs, or if it becomes necessary to implement any part of the above contingency plan. The contingency plan includes characterizing the soils in place for additional parameters deemed necessary based on the field observations made at that time. The characterization may include field screening and additional laboratory analyses. Soils will require excavation based on the construction schedule and will be stockpiled on site in accordance with ch. NR 718 until construction is complete. Stockpile areas primarily include the areas in the southern and central portions of the Site as shown on Figure 12. If warranted, excavation may be conducted under item “C“ of this Contingency Plan and confirmation samples will be collected; however, contamination may remain within the area following the excavation. The purpose of the confirmation samples will be to document the soil conditions at the time and obtain current information for the closure request. The impacts remaining on site will be capped and documented as part of the closure approach for the Site.

Vapor Intrusion

Vapor samples have not been collected from the Site to evaluate the potential for volatile vapors to collect. There are known areas of residual VOC soil impacts present beneath the proposed Phase I apartment complex that could potentially lead to the off gassing and accumulation of volatile vapors. The underground parking structure beneath the proposed Phase I apartment complex will be actively vented; therefore, a vapor barrier is not necessary beneath the parking structure. However, any stairwells and elevator shafts will be sealed with a vapor barrier to prevent potential vapors from migrating upward into the residential portion of the building. The proposed vapor barrier will consist of 30-mil thick polyethylene geomembrane or equivalent approved by the DNR. Filter fabric, fine sand, or other equivalent material shall be placed over the vapor barrier for protection. All penetrations and seams shall be sealed and/or welded, as necessary. The vapor barrier will not contain a passive venting system.

Case Closure

FEC will prepare the results of the capping and soil management activities in a RAP implementation report and subsequent closure request for DNR review and approval. The report and closure request will include a chronology of events, photographs of the development process, any updated analytical results, and appropriate information for closing the site with the proposed institutional controls (soil and groundwater GIS and CMP).

Conclusions and Recommendations

A comprehensive evaluation of the potential environmental issues and appropriate remedial actions for closure of the Site has been conducted. The remedial approach proposed in this report is consistent with the Site use and is protective of human health, welfare, and the environment.

Please review this report and provide your concurrence of the RAP, requested exemptions, and subsequent path to case closure for the Site contingent on the completion and documentation of the capping.

Thank you for your timely assistance with this project. The technical assistance form (4400-237) is included and the review fee of $1,050 has been paid to the DNR. If you have any questions or comments regarding this report, please call us at (414) 228-9815.

Respectfully,

Friess Environmental Consulting, Inc.

Trenton J. Ott
Project Manager

Richard W. Frieseke, P.E.
President

Attachments

cc: Mr. Robert Monnat; Mandel Group
210807 RAP

Project Contacts

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West Allis, Wisconsin 53214
DNR BRRTS No. 02-41-544080

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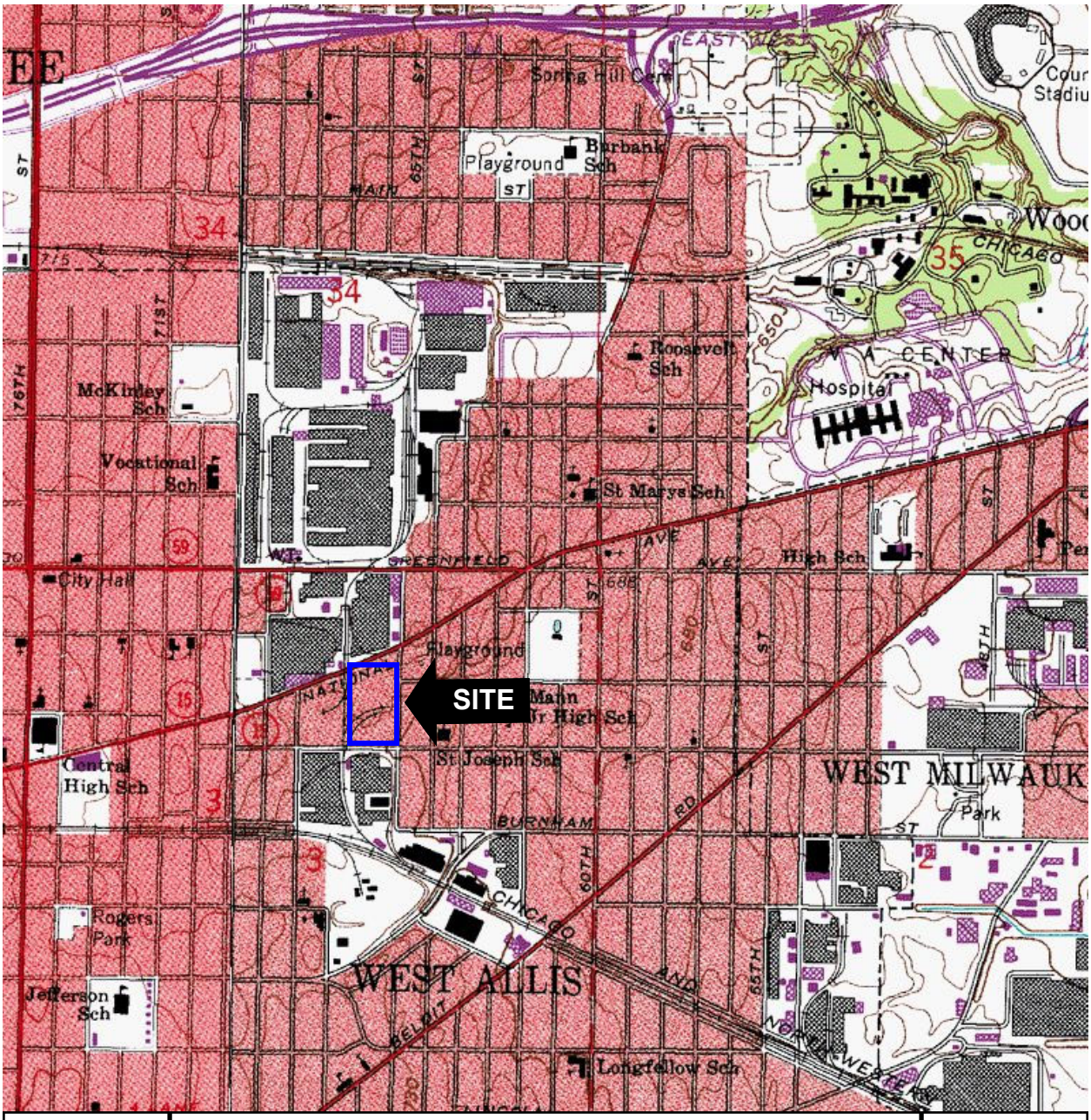
APPENDIX A
FIGURES

1.) Figure 1 – Vicinity Diagram
2.) Figure 2 – 2020 Site Aerial Diagram
3.) Figure 3 – Detailed Site Diagram
4.) Figure 4 – 2005 Excavation Diagram
5.) Figure 5 – 2012 Soil Excavation and Deposition Diagram
6.) Figure 6 – 2018 Soil Management Diagram
7.) Figure 7 – Extent of Residual VOC Soil Impacts Diagram
8.) Figure 8 - Extent of Residual PAH Soil Impacts Diagram
9.) Figure 9 - Extent of Residual Lead Soil Impacts Diagram
10.) Figure 10 – Extent of Residual Groundwater Impacts Diagram
11.) Figure 11 – Development Plan and Cap Diagram
12.) Figure 12 – Development and Soil Staging Diagram



Approximate Scale 1" = 1,650	United States Geologic Society Topographic Map Milwaukee Quadrangle NW & SW 1/4 of NE 1/4 of Sec 3, T6N, R21E	NORTH
FRIESS ENVIRONMENTAL CONSULTING, INC.	Vicinity Diagram South of National Avenue (SoNA) Property West Allis, WI	Figure 1

FRIESS ENVIRONMENTAL CONSULTING, INC.

NORTH

2020 Site Aerial Diagram
South of National Avenue (SoNA) Property
West Allis, WI

Figure 2

South 66th Street

West National Avenue

West Mitchell Street

Property Line

Property Line

SB-47
SB-16
SB-17
SB-3 (704)
SB-48
SB-49
SB-50
SB-44
SB-25
SB-27
SB-36
SB-43
SB-51
SB-45
SB-22
SB-46
SB-26
SB-28
SB-23
SB-35
SB-52
SB-29
SB-34
SB-37
SB-42
TW-1
SB-3
MW-6
NE
TW-2
SB-15
SB-30
SB-33
MW-2
SB-38
SB-41
SB-2
SB-4
MW-3
MW-4
Ex Bot 1
Mid
GP-27
GP-54
SB-8
Mid S
SB-1
SB-13
SB-14
SB-31
SB-32
SB-39
SB-40
N End
SB-18
GP-53
Ex Bot 2
MW-9
MW-6
SB-5
SB-7
TW-3
SB-21
MW-1
EX-1
SB-6
MW-8
GP-25
GP-26
GP-52
E-3
MW-7
EX-4
MW-5
EX-9
SB-19
EX-7
EX-8
E-2
SB-12
EX-2
EX-3
EX-5
EX-6
SB-9
SB-24
SB-20
TW-4
E-1
SB-10
SB-11
E-4
E-5

KEY

= SI monitoring well location
= SI boring location
= SI excavation sample location

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Checked By (PM): TJO	

Site Features Diagram
Parcel 705 - SoNa Property
6633 - 39 W. National Avenue
West Allis, Wisconsin

Scale
0 60
1 inch = 60 feet
All dimensions on this diagram are approximate

NORTH

Figure
3

South 66th Street

West National Avenue

West Mitchell Street

Property Line

Property Line

SB-47
SB-46
SB-48
SB-49
SB-50
SB-3 (704)
SB-44
SB-43
SB-51
SB-45
SB-52
SB-17
SB-16
SB-25
SB-27
SB-36
SB-22
SB-26
SB-28
SB-23
SB-35
SB-29
SB-34
SB-37
SB-42
SB-15
SB-30
SB-33
SB-38
SB-41
GP-27
GP-54
SB-31
SB-32
SB-39
SB-40
SB-18
GP-53
SB-21
SB-19
SB-12
GP-26
GP-52
SB-24
SB-20
SB-9
SB-10
SB-11
SB-14

2005 and 2006 Soil Excavation Area

TW-1
SB-3
MW-6
NE
TW-2
MW-2
SB-2
Ex Bot 1
SB-4
MW-3
MW-4
Mid
SB-8
Mid S
SB-13
SB-1
N End
Ex Bot 2
MW-9
SB-5
SB-6
SB-7
TW-3
MW-1
EX-1
E-3
MW-7
EX-4
MW-8
MW-5
EX-7
EX-8
EX-9
E-2
EX-2
EX-3
EX-5
EX-6
TW-4
E-1
E-4
E-5
MW-6
GP-25

KEY

= SI monitoring well location
= SI boring location
= SI excavation sample location

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	Drawn By: TJO
	Checked By (PM): TJO

2005 Soil Excavation Diagram
Parcel 705 - SoNa Property
6633 - 39 W. National Avenue
West Allis, Wisconsin

Scale
0 60
1 inch = 60 feet
All dimensions on this diagram are approximate

NORTH

Figure
4

South 66th Street

West National Avenue

West Mitchell Street

SB-47
SB-16
SB-17
SB-3 (704)
SB-48
SB-49
SB-50
SB-44
SB-25
SB-27
SB-36
SB-43
SB-51
SB-45
SB-22
SB-46
SB-26
SB-28
SB-23
SB-35
SB-52
SB-29
SB-34
SB-37
SB-42
TW-1
SB-3
MW-6
NE
TW-2
SB-15
SB-30
SB-33
MW-2
SB-2
SB-4
MW-3
MW-4
Ex Bot 1
Mid
SB-38
SB-41
GP-27
GP-54
SB-1
SB-8
Mid S
SB-13
SB-31
SB-32
N End
SB-14
SB-39
SB-40
SB-18
Ex Bot 2
GP-53
MW-6
SB-5
MW-9
SB-7
SB-21
GP-25
MW-1
SB-6
TW-3
MW-8
EX-1
EX-4
MW-5
GP-26
E-3
MW-7
EX-9
SB-19
GP-52
E-2
EX-7
EX-8
SB-12
EX-2
EX-3
EX-5
EX-6
SB-24
SB-20
SB-9
TW-4
E-1
SB-10
SB-11
E-4
E-5

2012 Redevelopment Soil Excavation Areas

2012 Redevelopment Soil Deposition Area

Approximate 3 Ft Cut

Approximate 3 Ft Cut

2012 Redevelopment Soil Deposition Area

Property Line

Property Line

KEY

- = SI monitoring well location
- = SI boring location
- = SI excavation sample location

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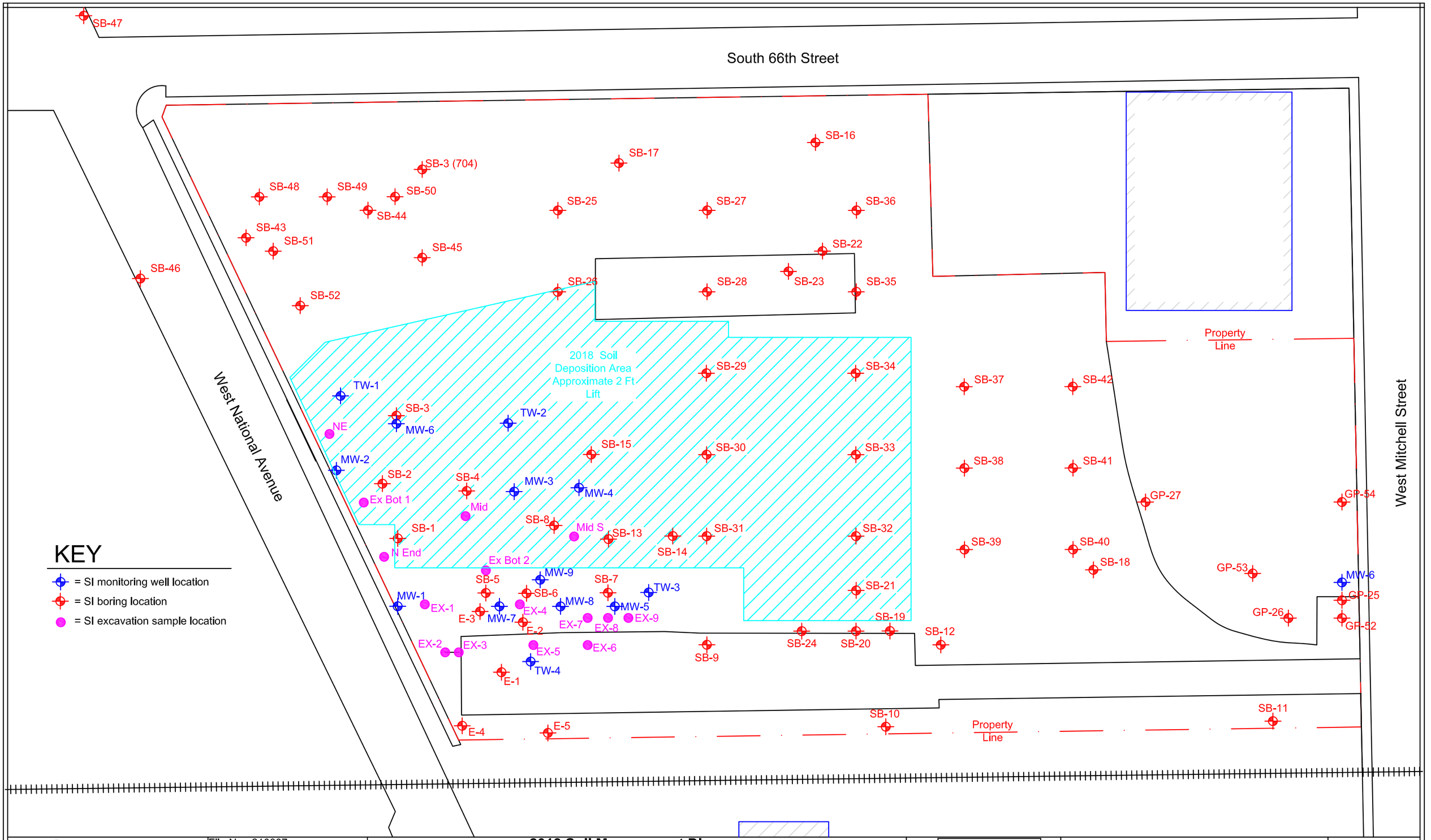
2012 Soil Excavation and Deposition Diagram
Parcel 705 - SoNa Property
6633 - 39 W. National Avenue
West Allis, Wisconsin

Scale
0 60
1 inch = 60 feet
All dimensions on this diagram are approximate

NORTH

Figure
5



KEY

- = SI monitoring well location
- = SI boring location
- = SI excavation sample location

FRIESS ENVIRONMENTAL CONSULTING, INC.	File No.: 210807 DWG Date: 10-24-21 Rev Date: Drawn By: TJO Checked By (PM): TJO	**2018 Soil Management Diagram** Parcel 705 - SoNa Property 6633 - 39 W. National Avenue West Allis, Wisconsin	Scale 0 – 60 1 inch = 60 feet All dimensions on this diagram are approximate NORTH Figure 6

South 66th Street

West National Avenue

West Mitchell Street

Property Line

Property Line

SB-47
SB-46
SB-48
SB-49
SB-50
SB-3 (704)
SB-44
SB-43
SB-51
SB-45
SB-52
SB-17
SB-16
SB-25
SB-27
SB-36
SB-22
SB-26
SB-28
SB-23
SB-35
SB-29
SB-34
SB-37
SB-42
TW-1
SB-3
MW-6
NE
TW-2
MW-2
SB-15
SB-30
SB-33
SB-38
SB-41
SB-2
Ex Bot 1
SB-4
MW-3
MW-4
Mid
GP-27
GP-54
SB-8
Mid S
SB-13
SB-31
SB-32
SB-1
N End
SB-14
SB-39
SB-40
SB-18
Ex Bot 2
GP-53
MW-6
SB-5
MW-9
SB-7
TW-3
SB-21
GP-25
MW-1
EX-1
SB-6
MW-8
MW-5
E-3
MW-7
EX-4
EX-9
GP-26
GP-52
E-2
EX-7
EX-8
SB-19
SB-12
EX-2
EX-3
EX-5
EX-6
SB-24
SB-20
SB-9
TW-4
E-1
SB-10
SB-11
E-4
E-5

KEY

= SI monitoring well location

= SI boring location

= Extent of residual VOCs

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Checked By (PM):	TJO

Extent of Residual VOC Soil Impacts Diagram
Parcel 705 - SoNa Property
6633 - 39 W. National Avenue
West Allis, Wisconsin

Scale
0 60
1 inch = 60 feet
All dimensions on this diagram are approximate

NORTH

Figure
7

South 66th Street

West National Avenue

West Mitchell Street

Property Line

Property Line

SB-47
SB-16
SB-17
SB-3 (704)
SB-48
SB-49
SB-50
SB-25
SB-27
SB-36
SB-44
SB-43
SB-51
SB-45
SB-22
SB-46
SB-26
SB-28
SB-23
SB-35
SB-52
SB-29
SB-34
SB-37
SB-42
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SB-3
MW-6
NE
TW-2
SB-15
SB-30
SB-33
MW-2
SB-38
SB-41
SB-2
SB-4
MW-3
MW-4
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GP-27
GP-54
SB-1
SB-8
Mid S
SB-13
SB-14
SB-31
SB-32
SB-39
SB-40
N End
Ex Bot 2
SB-18
GP-53
MW-6
SB-5
MW-9
SB-7
SB-21
SB-6
TW-3
GP-25
MW-1
EX-1
MW-8
MW-5
GP-26
E-3
MW-7
EX-4
EX-9
SB-19
GP-52
EX-7
EX-8
E-2
SB-12
EX-2
EX-3
EX-5
EX-6
SB-24
SB-20
SB-9
TW-4
E-1
SB-11
SB-10
E-4
E-5

KEY

= SI monitoring well location

= SI boring location

= Extent of residual PAHs

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Extent of Residual PAH Soil Impacts Diagram
Parcel 705 - SoNa Property
6633 - 39 W. National Avenue
West Allis, Wisconsin

Scale
0 60
1 inch = 60 feet
All dimensions on this diagram are approximate

NORTH

Figure
8

South 66th Street

West National Avenue

West Mitchell Street

Property Line

Property Line

SB-47
SB-48
SB-49
SB-3 (704)
SB-50
SB-44
SB-43
SB-51
SB-46
SB-52
SB-45
SB-16
SB-17
SB-25
SB-27
SB-36
SB-22
SB-26
SB-28
SB-23
SB-35
SB-29
SB-34
SB-37
SB-42
TW-1
SB-3
MW-6
NE
TW-2
SB-15
SB-30
SB-33
SB-38
SB-41
MW-2
SB-2
Ex Bot 1
SB-4
MW-3
MW-4
Mid
GP-27
GP-54
SB-8
Mid S
SB-13
SB-31
SB-32
SB-1
N End
SB-14
SB-39
SB-40
SB-18
GP-53
Ex Bot 2
MW-9
SB-5
SB-7
MW-6
SB-6
TW-3
SB-21
MW-1
EX-1
MW-8
GP-25
GP-26
E-3
MW-7
EX-4
MW-5
EX-9
GP-52
SB-19
SB-12
EX-7
EX-8
E-2
EX-2
EX-3
EX-5
EX-6
SB-24
SB-20
SB-9
E-1
TW-4
SB-10
SB-11
E-4
E-5

KEY

= SI monitoring well location

= SI boring location

= Extent of residual Lead

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File No.:	210807
DWG Date:	10-24-21
Rev Date:	
Drawn By:	TJO
Checked By (PM):	TJO

Extent of Residual Lead Soil Impacts Diagram
Parcel 705 - SoNa Property
6633 - 39 W. National Avenue
West Allis, Wisconsin

Scale
0 60
1 inch = 60 feet
All dimensions on this diagram are approximate

NORTH

Figure
9

South 66th Street

West National Avenue

West Mitchell Street

Property Line

Property Line

SB-47
SB-16
SB-17
SB-3 (704)
SB-48
SB-49
SB-50
SB-44
SB-25
SB-27
SB-36
SB-43
SB-51
SB-45
SB-22
SB-46
SB-26
SB-28
SB-23
SB-35
SB-52
SB-29
SB-34
SB-37
SB-42
TW-1
SB-3
MW-6
NE
TW-2
SB-15
SB-30
SB-33
MW-2
SB-38
SB-41
SB-2
SB-4
MW-3
MW-4
Ex Bot 1
Mid
GP-27
GP-54
SB-8
Mid S
SB-13
SB-31
SB-32
SB-1
SB-14
SB-39
SB-40
N End
SB-18
Ex Bot 2
GP-53
MW-6
SB-5
MW-9
SB-7
TW-3
SB-21
GP-25
SB-6
MW-1
EX-1
MW-8
MW-5
GP-26
E-3
MW-7
EX-4
EX-7
EX-8
EX-9
SB-19
GP-52
E-2
SB-12
EX-2
EX-3
EX-5
EX-6
SB-24
SB-20
SB-9
TW-4
E-1
SB-11
SB-10
E-4
E-5

KEY

= SI monitoring well location

= SI boring location

= Extent of residual GW Impacts

File No.: 210807	
DWG Date: 10-24-21	
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FRIESS ENVIRONMENTAL CONSULTING, INC.

Extent of ResidualGroundwater Impacts Diagram
Parcel 705 - SoNa Property
6633 - 39 W. National Avenue
West Allis, Wisconsin

Scale
0 60
1 inch = 60 feet
All dimensions on this diagram are approximate

NORTH

Figure
10

South 66th Street

West National Avenue

West Mitchell Street

Proposed Building

Proposed Building

Existing Building

Proposed Building

Proposed Building

KEY

- = SI monitoring well location
- = SI boring location
- = Concrete cap
- = Asphalt cap
- = Landscape cap

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Checked By (PM):	TJO

Development Plan and Cap Diagram
Parcel 705 - SoNa Property
6633 - 39 W. National Avenue
West Allis, Wisconsin

Scale
0 60
1 inch = 60 feet
All dimensions on this diagram are approximate

NORTH

Figure
11

South 66th Street

West National Avenue

West Mitchell Street

Area of Soil Cut

Temporary Soil Staging Area

Area of Soil Cut

Temporary Soil Staging Area

Area of Soil Fill

Temporary Soil Staging Area

Area of Soil Cut

Area of Soil Cut

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DWG Date:	10-24-21
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Drawn By:	TJO
Checked By (PM):	TJO

Development and Soil Staging Diagram
Parcel 705 - SoNa Property
6633 - 39 W. National Avenue
West Allis, Wisconsin

Scale
0 60
1 inch = 60 feet
All dimensions on this diagram are approximate

NORTH

Figure
12

APPENDIX B
TABLES

1.) Table 1 – VOC Analytical Results – Soil Samples
2.) Table 2 – PAH Analytical Results – Soil Samples
3.) Table 3 – Metals Analytical Results – Soil Samples
4.) Table 4 – VOC Analytical Results – Groundwater Samples
5.) Table 5 – PAH Analytical Results – Groundwater Samples
6.) Table 6 – Metals Analytical Results – Groundwater Samples

Table 1- Soil VOC Analytical Results (Page 1 of 2)
Parcel 705 - SoNa
6633-6639 West National Avenue
West Allis, Wisconsin

Sample Location	Sampling Date	Benzene (ppb)	Ethyl-benzene (ppb)	Methyl tert-butyl ether (ppb)	Naph-thalene (ppb)	Tetra-chloro-ethene (ppb)	Toluene (ppb)	1,1,1-Trichloro-ethane (ppb)	Trichloro-ethene (ppb)	Combined Trimethyl-benzenes (ppb)	Total Xylenes (ppb)
SB-1: 4-8 FT	06/19/02	*6,100*	*22,000*	<25.0	*20,000*	<25.0	*1,400*	<25.0	<25.0	*48,000*	*53,000*
SB-2: 4-8 FT	06/19/02	*30.0*	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0	<50.0
SB-3: 8-12 FT	06/19/02	*[13,000]*	*[41,000]*	<25.0	*19,000*	<25.0	*75,000*	<25.0	<25.0	*72,000*	*164,000*
SB-4: 8-12 FT	06/19/02	*1,000*	*2,200*	<25.0	*2,300*	<25.0	780	<25.0	<25.0	*3,300*	*5,000*
SB-5: 4-8 FT	06/19/02	*1,200*	*2,900*	<25.0	*1,700*	<25.0	400	<25.0	<25.0	*7,100*	*10,300*
SB-6: 8-12 FT	06/19/02	*280*	940	<25.0	*1000*	<25.0	100	<25.0	<25.0	700	800
SB-7: 0-4 FT	06/19/02	<25.0	<34.0	<25.0	190	<25.0	34.0	<25.0	<25.0	79.0	1,080
SB-8: 4-8 FT	06/19/02	*5,700*	*[44,000]*	<25.0	*27,000*	<25.0	*32,000*	<25.0	<25.0	*82,000*	*148,000*
SB-9: 4-8 FT	06/19/02	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0	<50.0
SB-10: 4-8 FT	06/19/02	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0	<50.0
SB-11: 8-12 FT	06/19/02	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0	<50.0
SB-12: 0-4 FT	06/19/02	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0	<50.0
SB-13: 4-8 FT	06/20/02	*180*	390	<25.0	350	<25.0	<25.0	<25.0	<25.0	480	420
SB-14: 4-8 FT	06/20/02	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0	<50.0
SB-15: 4-8 FT	06/20/02	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0	<50.0
SB-19: 1-2 FT	06/20/02	<25.0	<25.0	<25.0	48.0	<25.0	<25.0	<25.0	*31.0*	37.0	<50.0
E-1: 6-7.5 FT	07/16/02	*42.0*	34.0	NR	<25.0	NR	59.0	NR	<25.0	50.0 J	<50.0
E-2: 6-7 FT	07/16/02	<25.0	<25.0	NR	<25.0	NR	<25.0	NR	<25.0	<50.0	<50.0
E-3: 7-9 FT	07/16/02	*540*	100	NR	53.0	NR	31.0	NR	<25.0	58.0 J	96.0
E-4: 6-7 FT	07/16/02	<25.0	<25.0	NR	<25.0	NR	<25.0	NR	<25.0	<50.0	<50.0
E-5: 5-6 FT	07/16/02	<25.0	<25.0	NR	<25.0	NR	<25.0	NR	<25.0	<50.0	<50.0
SB-20: 3.5-4 FT	10/19/04	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0	<50.0
SB-21: 2.5-4 FT	10/19/04	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0	<50.0
SB-22: 1-4 FT	10/23/04	<25.0	<25.0	<25.0	<25.0	*41.0*	<25.0	<25.0	<25.0	<50.0	<50.0
SB-22:4-8 FT	10/23/04	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0	<50.0
SB-22:9-10 FT	10/23/04	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0	<50.0
SB-23:0.5-1.5 FT	01/05/05	<25.0	<25.0	<25.0	31.0	<25.0	<25.0	<25.0	<25.0	<50.0	<50.0
SB-23:7-8 FT	01/05/05	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0	<50.0
SB-24:2.5-4 FT	01/05/05	<25.0	61.0	<25.0	99.0	<25.0	<25.0	<25.0	<25.0	*8,710*	130
SB-24:7-8 FT	01/05/05	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0	<50.0
Excav Bottom 1 - 11 FT	04/22/05	*1,500*	*3,400*	<25.0	NA	NA	250	NA	NA	*3,170*	3,500
Excav Bottom 2 - 11 FT	04/22/05	<25.0	<25.0	<25.0	NA	NA	<25.0	NA	NA	<50.0	<75.0
Off-Site	04/22/05	<25.0	<25.0	<25.0	100	NA	65.0	NA	NA	56.0	113
Excav Mid - 11 FT	06/16/05	<25.0	<25.0	<25.0	NA	NA	<25.0	NA	NA	<50.0	<75.0
Excav N. End - 11 FT	06/16/05	<25.0	<25.0	<25.0	NA	NA	<25.0	NA	NA	<50.0	<75.0
Excav NE - 11 FT	06/16/05	<25.0	<25.0	<25.0	NA	NA	<25.0	NA	NA	<50.0	<75.0
Excav Mid S. - 11 FT	06/16/05	<25.0	<25.0	<25.0	NA	NA	<25.0	NA	NA	<50.0	<75.0
SB-46:2-4 FT	04/04/06	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0	<50.0
SB-47:1.5-2.5 FT	04/04/06	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0	<50.0
NR 720 Groundwater RCL		*5.1*	*1,570*	*27*	*658*	*4.5*	*1,107*	*140*	*3.6*	*1,379*	*3,960*
NR 720 Residential DC RCL		*1,600*	*8,020*	*63,800*	*5,520*	*33,000*	*818,000*	*640,000*	*1,300*	*219K/182K*	*260,000*
NR 720 Industrial DC RCL		*7,070*	*35,400*	*282,000*	*24,100*	*145,000*	*818,000*	*640,000*	*8,410*	*219K/182K*	*260,000*

Note: Only the detected compounds are presented.
Note: NR 720 values are calculated utilizing the U.S. EPA's Regional Screening Level Web-Calculator per DNR draft document RR-890 (updated December 2017) .
Note: Concentrations that exceed their respective RCLs for the protection of groundwater are in *blue italics* .
Note: Concentrations that exceed their respective non-industrial RCLs for direct contact are underlined.
Note: Concentrations that exceed their respective industrial RCLs for direct contact are in [brackets].
Note "J" indicates estimated concentration above the level of detection but less than the level of quantification.

Table 1- Soil VOC Analytical Results (Page 2 of 2)
Parcel 705 - SoNa
6633-6639 West National Avenue
West Allis, Wisconsin

Sample Location	Sampling Date	Benzene (ppb)	Ethyl-benzene (ppb)	Methyl tert-butyl ether (ppb)	Naph-thalene (ppb)	Tetra-chloro-ethene (ppb)	Toluene (ppb)	1,1,1-Trichloro-ethane (ppb)	Trichloro-ethene (ppb)	Combined Trimethyl-benzenes (ppb)	Total Xylenes (ppb)
EX-1: 8 FT	05/08/06	*37.0*	95.0	<25.0	138	NR	<25.0	NR	<25.0	128	<25.0
EX-2: 8 FT	05/08/06	<25.0	<25.0	<25.0	26.4	NR	<25.0	NR	<25.0	<50.0	<25.0
EX-3: 8 FT	05/08/06	*71.0*	<25.0	<25.0	<25.0	NR	<25.0	NR	<25.0	<50.0	<25.0
EX-4: 8 FT	05/08/06	<25.0	<25.0	<25.0	36.0	NR	<25.0	NR	<25.0	71.0	<25.0
EX-5: 8 FT	05/09/06	<25.0	<25.0	<25.0	<25.0	NR	<25.0	NR	<25.0	<50.0	<25.0
EX-6: 8 FT	05/09/06	<25.0	<25.0	<25.0	<25.0	NR	<25.0	NR	<25.0	<50.0	<25.0
EX-7: 8 FT	05/09/06	<25.0	<25.0	<25.0	<25.0	NR	<25.0	NR	<25.0	<50.0	<25.0
EX-8: 8 FT	05/09/06	*299*	<25.0	<25.0	29.3	NR	<25.0	NR	<25.0	<50.0	<25.0
EX-9: 8 FT	05/09/06	<25.0	<25.0	<25.0	<25.0	NR	<25.0	NR	<25.0	<50.0	<25.0
TW-1: 9 FT	04/05/12	<25.0	<25.0	NA	<25.0	NA	<25.0	NA	NA	<50.0	<50.0
TW-2: 6.5 FT	04/05/12	<25.0	<25.0	NA	<25.0	NA	<25.0	NA	NA	<50.0	<50.0
TW-3: 6-7 FT	04/05/12	*400*	249	NA	141	NA	111	NA	NA	223	486
TW-4: 6 FT	04/05/12	<25.0	<25.0	NA	<25.0	NA	<25.0	NA	NA	<50.0	<50.0
Ductile GP-25: 2-3 FT	11/02/12	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	82.7	<25.0	<50.0	<75.0
Ductile GP-25: 7-8 FT	11/02/12	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	*398*	<25.0	<50.0	<75.0
Ductile GP-26: 3-4 FT	11/02/12	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0	<75.0
Ductile GP-26: 8-9 FT	11/02/12	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0	<75.0
Ductile GP-27: 3-4 FT	11/02/12	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0	<75.0
Ductile GP-27: 7-8 FT	11/02/12	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0	<75.0
Ductile MW-6: 7-8 FT	08/27/13	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	*329*	<25.0	<50.0	<75.0
Ductile GP-52: 1-2 FT	04/01/15	<25.0	<25.0	<25.0	<40.0	<25.0	<25.0	<25.0	<25.0	<50.0	<75.0
Ductile GP-52: 5-6 FT	04/01/15	<25.0	<25.0	<25.0	<40.0	<25.0	<25.0	<25.0	<25.0	<50.0	<75.0
Ductile GP-53: 2-3 FT	04/01/15	<25.0	<25.0	<25.0	<40.0	<25.0	<25.0	<25.0	<25.0	<50.0	<75.0
Ductile GP-53: 5-6 FT	04/01/15	<25.0	<25.0	<25.0	<40.0	<25.0	<25.0	<25.0	<25.0	<50.0	<75.0
Ductile GP-54: 2-3 FT	04/01/15	<25.0	<25.0	<25.0	572	<25.0	<25.0	<25.0	<25.0	<50.0	<75.0
Ductile GP-54: 7-8 FT	04/01/15	<25.0	<25.0	<25.0	<40.0	<25.0	<25.0	<25.0	<25.0	<50.0	<75.0
NR 720 Groundwater RCL		*5.1*	*1,570*	*27*	*658*	*4.5*	*1,107*	*140*	*3.6*	*1,379*	*3,960*
NR 720 Residential DC RCL		*1,600*	*8,020*	*63,800*	*5,520*	*33,000*	*818,000*	*640,000*	*1,300*	*219K/182K*	*260,000*
NR 720 Industrial DC RCL		*7,070*	*35,400*	*282,000*	*24,100*	*145,000*	*818,000*	*640,000*	*8,410*	*219K/182K*	*260,000*

Note: Only the detected compounds are presented.
Note: NR 720 values are calculated utilizing the U.S. EPA's Regional Screening Level Web-Calculator per DNR draft document RR-890 (updated December 2017) .
Note: Concentrations that exceed their respective RCLs for the protection of groundwater are in *blue italics* .
Note: Concentrations that exceed their respective non-industrial RCLs for direct contact are underlined.
Note: Concentrations that exceed their respective industrial RCLs for direct contact are in [brackets].
Note "J" indicates estimated concentration above the level of detection but less than the level of quantification.

Table 2 - Soil PAH Results (Page 1 of 2)
Parcel 705 - SoNa
6633-6639 West National Avenue
West Allis, Wisconsin

Sample Location	Sampling Date	Acena-phthene (ppb)	Acena-phthylene (ppb)	Anthracene (ppb)	Benzo (a) anthra-cene (ppb)	Benzo (a) pyrene (ppb)	Benzo (b) fluor-anthene (ppb)	Benzo (g,h,i) perylene (ppb)	Benzo (k) fluor-anthene (ppb)	Chrysene (ppb)	Dibenzo (a,h) anthra-cene (ppb)	Fluor-anthene (ppb)	Fluorene (ppb)	Indeno (1,2,3-cd) pyrene (ppb)	1-Methyl Naph-thalene (ppb)	2-Methyl Naph-thalene (ppb)	Naph-thalene (ppb)	Phen-anthrene (ppb)	Pyrene (ppb)
SB-1 4-8 FT	6/19/2002	<210	<210	<170	<270	<300	<210	<410	<400	<190	<380	<210	<210	<350	2,400	5,300	*14,000*	130	<290
SB-19 1-2 FT	6/20/2002	<41.0	<42.0	38.0	93.0	110	120	100	100	*160*	<76.0	220	<41.0	<69.0	84.0	100	57.0	230	170
E-1: 6-7.5 FT	7/16/2002	<41.0	<42.0	37.0 J	<54.0	<59.0	<42.0	<82.0	<79.0	43.0 J	<76.0	89.0 J	<41.0	<69.0	73.0 J	85.0 J	68.0 J	160	84.0 J
SB-20 5-6 FT	10/19/2004	<41.0	<42.0	<34.0	<54.0	<59.0	<41.0	<82.0	<79.0	<38.0	<76.0	<42.0	<41.0	<69.0	<37.0	<72.0	<40.0	<20.0	<58.0
SB-22 1-4 FT	10/23/2004	<41.0	<42.0	<34.0	<54.0	<59.0	<41.0	<82.0	<79.0	<38.0	<76.0	<42.0	<41.0	<69.0	<37.0	<72.0	<40.0	<20.0	<58.0
SB-23 0.5-1.5 FT	1/5/2005	<41.0	<42.0	<34.0	71.0	64.0	96.0	<82.0	<79.0	102	<76.0	134	<41.0	<69.0	<37.0	<72.0	<40.0	128	143
SB-24 0.5-1.5 FT	1/5/2005	<41.0	<42.0	96.0	1,520	*1,500*	*1,860*	378	1,250	*1,800*	194	1,111	74.0	413	<37.0	<72.0	47.0	509	1,580
Off-Site	4/22/2005	<82.0	354	699	1,550	*1,420*	*2,140*	507	799	*1,610*	194	2,620	260	591	<74.0	<144	<80.0	*1,870*	2,420
SB-25 2-3 FT	3/13/2006	43.0	57.0	201	601	*539*	*913*	302	321	*549*	79.0	*1,400,000*	74.0	258	43.0	36.0	35.0	686	1,020
SB-25 6-7 FT	3/13/2006	<17.0	<19.0	<11.0	<12.0	<8.10	<7.50	<8.50	<14.0	<20.0	<11.0	<7.40	<9.50	<9.50	<11.0	<12.0	<17.0	<8.90	<11.0
SB-26 4-5 FT	3/13/2006	<17.0	<19.0	<11.0	<12.0	<8.10	<7.50	<8.50	<14.0	<20.0	<11.0	<7.40	<9.50	<9.50	<11.0	<12.0	<17.0	<8.90	<11.0
SB-26 5.5-6.5 FT	3/13/2006	<17.0	<19.0	<11.0	<12.0	<8.10	96.0	<8.50	<14.0	<20.0	<11.0	<7.40	<9.50	<9.50	<11.0	<12.0	<17.0	<8.90	<11.0
SB-27 3.5-5 FT	3/13/2006	<17.0	<19.0	<11.0	<12.0	<8.10	<7.50	<8.50	<14.0	<20.0	<11.0	<7.40	<9.50	<9.50	<11.0	<12.0	<17.0	<8.90	<11.0
SB-27 5.5-6.5 FT	3/13/2006	<17.0	<19.0	<11.0	<12.0	<8.10	<7.50	<8.50	<14.0	<20.0	<11.0	<7.40	<9.50	<9.50	<11.0	<12.0	<17.0	<8.90	<11.0
SB-28 5.5-6.5 FT	3/13/2006	<17.0	<19.0	<11.0	<12.0	<8.10	<7.50	<8.50	<14.0	<20.0	<11.0	<7.40	<9.50	<9.50	<11.0	<12.0	<17.0	<8.90	<11.0
SB-29 5.5-6.5 FT	3/13/2006	<17.0	<19.0	<11.0	<12.0	<8.10	<7.50	<8.50	<14.0	<20.0	<11.0	<7.40	<9.50	<9.50	<11.0	<12.0	<17.0	<8.90	<11.0
SB-30 5.5-6.5 FT	3/13/2006	<17.0	<19.0	<11.0	<12.0	<8.10	<7.50	<8.50	<14.0	<20.0	<11.0	<7.40	<9.50	<9.50	<11.0	<12.0	<17.0	<8.90	<11.0
SB-31 4-5 FT	3/13/2006	<17.0	<19.0	16.0	95.0	71.0	264	81.0	64.0	*157*	21.0	172	<9.50	61.0	22.0	17.0	<17.0	111	141
SB-31 6-7 FT	3/13/2006	<17.0	<19.0	<11.0	<12.0	<8.10	<7.50	<8.50	<14.0	<20.0	<11.0	<7.40	<9.50	<9.50	<11.0	<12.0	<17.0	<8.90	<11.0
SB-32 5.5-6.5 FT	3/13/2006	<17.0	<19.0	<11.0	<12.0	<8.10	<7.50	<8.50	<14.0	<20.0	<11.0	<7.40	<9.50	<9.50	<11.0	<12.0	<17.0	<8.90	<11.0
SB-33 4-5 FT	3/13/2006	<17.0	48.0	51.0	395	446	*1,070*	332	272	*484*	104	806	32.0	239	97.0	87.0	81.0	525	553
SB-33 7-8 FT	3/13/2006	<17.0	<19.0	<11.0	15.0	<8.10	<7.50	<8.50	<14.0	<20.0	<11.0	<7.40	<9.50	<9.50	<11.0	<12.0	<17.0	11.0	29.0
SB-34 4-5 FT	3/13/2006	<17.0	<19.0	<11.0	<12.0	<8.10	<7.50	<8.50	<14.0	<20.0	<11.0	<7.40	<9.50	<9.50	<11.0	<12.0	<17.0	<8.90	<11.0
SB-34 5.5-6.5 FT	3/13/2006	<17.0	<19.0	<11.0	<12.0	<8.10	<7.50	<8.50	<14.0	<20.0	<11.0	<7.40	<9.50	<9.50	<11.0	<12.0	<17.0	<8.90	<11.0
SB-35 0.5-1.5 FT	3/13/2006	<17.0	<19.0	<11.0	<12.0	<8.10	<7.50	<8.50	<14.0	<20.0	<11.0	<7.40	<9.50	<9.50	<11.0	<12.0	<17.0	<8.90	<11.0
SB-35 4-5 FT	3/13/2006	<17.0	<19.0	<11.0	<12.0	<8.10	<7.50	<8.50	<14.0	<20.0	<11.0	<7.40	<9.50	<9.50	<11.0	<12.0	<17.0	<8.90	<11.0
SB-36 1-2 FT	3/13/2006	<17.0	<19.0	<11.0	<12.0	<8.10	<7.50	<8.50	<14.0	<20.0	<11.0	<7.40	<9.50	<9.50	<11.0	<12.0	<17.0	<8.90	<11.0
SB-36 5-6 FT	3/13/2006	<17.0	<19.0	<11.0	<12.0	<8.10	<7.50	<8.50	<14.0	<20.0	<11.0	<7.40	<9.50	<9.50	<11.0	<12.0	<17.0	<8.90	<11.0
NR 720 Groundwater RCL		**38,000*	**700*	*196,949*	**17,000*	*470*	*478*	**6,800,000*	**870,000*	*144*	**38,000*	*88,878*	*14,830*	**680,000*	**23,000*	**20,000*	*658*	**1,800*	*54,546*
NR 720 Non-industrial DC RCL		*3,590,000*	*NS*	*17,900,000*	*1,140*	*115*	*1,150*	*NS*	*11,500*	*115,000*	*115*	*2,390,000*	*2,390,000*	*1,150*	*17,600*	*239,000*	*5,520*	*NS*	*1,790,000*
NR 720 Industrial DC RCL		*45,200,000*	*NS*	*100,000,000*	*20,800*	*2,110*	*21,100*	*NS*	*211,000*	*2,110,000*	*2,110*	*30,100,000*	*30,100,000*	*21,100*	*72,700*	*3,010,000*	*24,100*	*NS*	*22,600,000*

* indicates a suggested value.
Note: NR 720 values are calculated utilizing the U.S. EPA's Regional Screening Level Web-Calculator per DNR draft document RR-890 (updated December 2017) .
Note: Concentrations that exceed their respective RCLs for the protection of groundwater are in *blue italics* .
Note: Concentrations that exceed their respective non-industrial RCLs for direct contact are underlined.
Note: Concentrations that exceed their respective industrial RCLs for direct contact are in [brackets].
Note "J" indicates slight detection above the level of detection but less than the level of quantification.

Table 2 - Soil PAH Results (Page 2 of 2)
Parcel 705 - SoNa
6633-6639 West National Avenue
West Allis, Wisconsin

Sample Location	Sampling Date	Acena-phthene (ppb)	Acena-phthylene (ppb)	Anthracene (ppb)	Benzo (a) anthra-cene (ppb)	Benzo (a) pyrene (ppb)	Benzo (b) fluor-anthene (ppb)	Benzo (g,h,i) perylene (ppb)	Benzo (k) fluor-anthene (ppb)	Chrysene (ppb)	Dibenzo (a,h) anthra-cene (ppb)	Fluor-anthene (ppb)	Fluorene (ppb)	Indeno (1,2,3-cd) pyrene (ppb)	1-Methyl Naph-thalene (ppb)	2-Methyl Naph-thalene (ppb)	Naph-thalene (ppb)	Phen-anthrene (ppb)	Pyrene (ppb)
SB-37 2-3 FT	3/13/2006	<17.0	<19.0	24.0	105	81.0	181	104	51.0	*200*	30.0	253	20.0	73.0	91.0	115	72.0	340	223
SB-37 5.5-6.5 FT	3/13/2006	<17.0	<19.0	<11.0	<12.0	<8.10	<7.50	<8.50	<14.0	<20.0	<11.0	<7.40	<9.5	<9.50	<11.0	<12.0	<17.0	<8.90	<11.0
SB-38 1.5-2.5 FT	3/13/2006	120	89.0	512	859	*842*	*1,230*	458	332	*791*	88.0	2,350	225	383	39.0	29.0	56.0	1,460	1,750
SB-38 5.5-6.5 FT	3/13/2006	<17.0	<19.0	<11.0	<12.0	<8.10	<7.50	<8.50	<14.0	<20.0	<11.0	<7.40	<9.50	<9.50	<11.0	<12.0	<17.0	<8.90	<11.0
SB-39 5.5-6.5 FT	3/13/2006	<17.0	<19.0	<11.0	<12.0	<8.10	<7.50	<8.50	<14.0	<20.0	<11.0	<7.40	<9.50	<9.50	<11.0	<12.0	<17.0	<8.90	<11.0
SB-40 2.5-3.5 FT	3/13/2006	<17.0	21.0	71.0	393	421	*852*	251	252	*549*	61.0	813	21.0	213	44.0	39.0	99.0	266	770
SB-40 7-8 FT	3/13/2006	<17.0	<19.0	<11.0	<12.0	<8.10	<7.50	<8.50	<14.0	<20.0	<11.0	<7.40	<9.50	<9.50	<11.0	<12.0	<17.0	<8.90	<11.0
SB-41 3-4 FT	3/13/2006	27.0	<19.0	43.0	195	308	*517*	224	148	*295*	33.0	450	17.0	192	25.0	22.0	36.0	211	370
SB-41 5.5-6.5 FT	3/13/2006	<17.0	<19.0	<11.0	<12.0	<8.10	<7.50	<8.50	<14.0	<20.0	<11.0	<7.40	<9.50	<9.50	<11.0	<12.0	<17.0	<8.90	<11.0
SB-42 3-4 FT	3/13/2006	<17.0	30.0	22.0	83.0	81.0	253	95.0	67.0	*157*	19.0	324	14.0	76.0	67.0	30.0	28.0	202	229
SB-42 5.5-6.5 FT	3/13/2006	<17.0	<19.0	<11.0	13.0	11.0	<7.50	<8.50	<14.0	<20.0	<11.0	15.0	<9.50	<9.50	<11.0	<12.0	<17.0	<8.90	<11.0
SB-43 2-3 FT	3/15/2006	<17.0	<19.0	<11.0	<12.0	<8.10	<7.50	<8.50	<14.0	<20.0	<11.0	<7.40	<9.50	<9.50	<11.0	<12.0	<17.0	<8.90	<11.0
SB-43 5.5-6.5 FT	3/15/2006	<17.0	<19.0	<11.0	<12.0	<8.10	<7.50	<8.50	<14.0	<20.0	<11.0	<7.40	<9.50	<9.50	<11.0	<12.0	<17.0	<8.90	<11.0
SB-44 3-4 FT	3/15/2006	55.0	23.0	164	446	408	*772*	294	273	*609*	39.0	1,510	54.0	259	17.0	13.0	23.0	869	1,390
SB-44 5.5-6.5 FT	3/15/2006	<17.0	<19.0	<11.0	<12.0	<8.10	<7.50	<8.50	<14.0	<20.0	<11.0	<7.40	<9.50	<9.50	<11.0	<12.0	<17.0	<8.90	<11.0
SB-45 2-3 FT	3/15/2006	23.0	<19.0	53.0	175	139	418	150	149	*332*	25.0	674	18.0	121	<11.0	<12.0	<17.0	320	546
SB-45 5.5-6.5 FT	3/15/2006	<17.0	<19.0	<11.0	<12.0	<8.10	<7.50	<8.50	<14.0	<20.0	<11.0	<7.40	<9.50	<9.50	<11.0	<12.0	<17.0	<8.90	<11.0
SB-46 2-4 FT	3/15/2006	<17.0	<19.0	<11.0	<12.0	<8.10	<7.50	<8.50	<14.0	<20.0	<11.0	<7.40	<9.50	<9.50	<11.0	<12.0	<17.0	<8.90	<11.0
SB-46 5-7 FT	3/15/2006	<17.0	<19.0	<11.0	<12.0	<8.10	<7.50	<8.50	<14.0	<20.0	<11.0	<7.40	<9.50	<9.50	<11.0	<12.0	<17.0	<8.90	<11.0
SB-47 1.5-2.5 FT	3/15/2006	<17.0	<19.0	<11.0	<12.0	<8.10	<7.50	<8.50	<14.0	<20.0	<11.0	<7.40	<9.50	<9.50	<11.0	<12.0	<17.0	<8.90	<11.0
SB-47 5.5-6.5FT	3/15/2006	<17.0	<19.0	<11.0	<12.0	<8.10	<7.50	<8.50	<14.0	<20.0	<11.0	<7.40	<9.50	<9.50	<11.0	<12.0	<17.0	19.0	<11.0
Ductile GP-25: 2-3 FT	11/2/2012	<10.1	<10.1	<2.10	<10.1	<10.1	<2.90	<10.1	<10.1	<2.30	<10.1	<10.1	<10.1	<10.1	<9.20	3.70 J	<3.80	5.80 J	<10.1
Ductile GP-26: 3-4 FT	11/2/2012	<10.1	12.9 J	24.0	102	112	118	71.1	90.1	117	27.1	189	<10.1	59.6	16.1 J	19.9 J	23.4	81.0	157
Ductile GP-27: 3-4 FT	11/2/2012	<10.8	<10.8	5.90 J	<10.8	<10.8	8.60 J	<10.8	<10.8	10.0 J	<10.8	22.2	<10.8	<10.8	10.5 J	13.1 J	11.8 J	31.1	16.1 J
Ductile GP-52: 1-2 FT	4/1/2015	146 J	225	688	1,910	*1,860*	*1,680*	1,170	1,700	*2,200*	436	3,350	152 J	1,110	194 J	235	265	*2,040*	2,800
Ductile GP-53: 2-3 FT	4/1/2015	<10.2	<9.10	<10.6	<7.10	<7.30	<10.2	<7.80	<11.3	<9.40	<7.50	<10.2	<10.2	<7.80	<10.2	<10.2	<10.2	<10.2	<10.2
Ductile GP-54: 2-3 FT	4/1/2015	675	<91.6	843	310	252	198 J	123 J	218	*327*	<75.1	1,020	1,140	121 J	283	321	542	*2,480*	765
NR 720 Groundwater RCL		**38,000*	**700*	*196,949*	**17,000*	*470*	*478*	**6,800,000*	**870,000*	*144*	**38,000*	*88,878*	*14,830*	**680,000*	**23,000*	**20,000*	*658*	**1,800*	*54,546*
NR 720 Non-industrial DC RCL		*3,590,000*	*NS*	*17,900,000*	*1,140*	*115*	*1,150*	*NS*	*11,500*	*115,000*	*115*	*2,390,000*	*2,390,000*	*1,150*	*17,600*	*239,000*	*5,520*	*NS*	*1,790,000*
NR 720 Industrial DC RCL		*45,200,000*	*NS*	*100,000,000*	*20,800*	*2,110*	*21,100*	*NS*	*211,000*	*2,110,000*	*2,110*	*30,100,000*	*30,100,000*	*21,100*	*72,700*	*3,010,000*	*24,100*	*NS*	*22,600,000*

* indicates a suggested value.
Note: NR 720 values are calculated utilizing the U.S. EPA's Regional Screening Level Web-Calculator per DNR draft document RR-890 (updated December 2017) .
Note: Concentrations that exceed their respective RCLs for the protection of groundwater are in *blue italics* .
Note: Concentrations that exceed their respective non-industrial RCLs for direct contact are underlined.
Note: Concentrations that exceed their respective industrial RCLs for direct contact are in [brackets].
Note "J" indicates slight detection above the level of detection but less than the level of quantification.

Table 3 - Soil Metals Results
Parcel 705 - SoNa
6633-6639 West National Avenue
West Allis, Wisconsin

Sample Location	Sampling Date	Arsenic (ppm)	Baruim (ppm)	Cadmium (ppm)	Chromium (ppm)	Lead (ppm)	Mercury (ppm)	Selenium (ppm)	Silver (ppm)
SB-3 (704): 1-2 FT	9/12/2001	*[3.40]*	*589*	<1.20	13.0	*484*	0.092	*3.60*	<3.00
SB-19: 1-2 FT	6/20/2002	<0.60	88.0	<0.70	21.0	*31.0*	0.037	<2.50	*5.60*
MW-7: 2.5-4.5 FT	3/20/2003	*2.30*	150	0.24	32.0	14.0	0.071	*0.67*	<0.024
MW-9: 2.5-4.5 FT	3/20/2003	*[6.60]*	81.0	0.38	13.0	*52.0*	0.052	*1.00*	0.10
SB-20: 5-6 FT	10/19/2004	*1.90*	120	*1.20*	32.0	14.0	0.039	<0.72	0.36
SB-22: 1-4 FT	10/23/2004	<0.60	120	*1.00*	41.0	2.00	<0.024	*6.00*	<0.30
Off-Site	4/22/2005	*[22.0]*	98.0	*4.70*	42.0	*88.0*	0.059	0.039	0.46
SB-26: 4-5 FT	3/13/2006	<0.015	NA	NA	NA	NA	NA	NA	NA
SB-26: 5.5-6.5 FT	3/13/2006	<0.015	NA	NA	NA	NA	NA	NA	NA
SB-27: 5.5-6.5 FT	3/13/2006	*[4.90]*	NA	NA	NA	8.40	NA	NA	NA
SB-33: 7-8 FT	3/13/2006	*1.60*	NA	NA	NA	19.0	NA	NA	NA
SB-34: 4-5 FT	3/13/2006	*1.20*	NA	NA	NA	17.0	NA	NA	NA
SB-37: 5.5-6.5 FT	3/13/2006	*[3.10]*	NA	NA	NA	7.60	NA	NA	NA
SB-40: 7-8 FT	3/13/2006	*2.30*	NA	NA	NA	13.0	NA	NA	NA
SB-42: 3-4 FT	3/13/2006	*[5.90]*	NA	NA	NA	*29.0*	NA	NA	NA
SB-46: 2-4 FT	4/4/2006	*[4.70]*	NA	NA	NA	17.0	NA	NA	NA
SB-47: 1.5-2.5 FT	4/4/2006	*[5.10]*	NA	NA	NA	17.0	NA	NA	NA
SB-48: 0-4 FT	5/24/2006	<2.50	NA	NA	NA	<5.00	NA	NA	NA
SB-48: 4-8 FT	5/24/2006	*[5.30]*	NA	NA	NA	*80.0*	NA	NA	NA
SB-49: 0-4 FT	5/24/2006	*[3.30]*	NA	NA	NA	<5.00	NA	NA	NA
SB-49: 4-8 FT	5/24/2006	<2.50	NA	NA	NA	<5.00	NA	NA	NA
SB-50: 0-4 FT	5/24/2006	<2.50	NA	NA	NA	<5.00	NA	NA	NA
SB-50: 4-8 FT	5/24/2006	*[4.70]*	NA	NA	NA	<5.00	NA	NA	NA
SB-51: 0-4 FT	5/24/2006	<2.50	NA	NA	NA	7.00	NA	NA	NA
SB-51: 4-8 FT	5/24/2006	<2.50	NA	NA	NA	8.80	NA	NA	NA
SB-52: 0-4 FT	5/24/2006	*[3.10]*	NA	NA	NA	*31.0*	NA	NA	NA
SB-52: 4-8 FT	5/24/2006	*[4.20]*	NA	NA	NA	*23.0*	NA	NA	NA
Ductile GP-25: 2-3 FT	11/2/2012	*[4.60]*	63.3	<0.032	32.2	13.5	0.034	<0.49	<0.22
Ductile GP-26: 3-4 FT	11/2/2012	*[6.20]*	69.2	<0.034	29.7	*66.0*	0.080	<0.52	<0.24
Ductile GP-27: 3-4 FT	11/2/2012	*[7.00]*	79.9	<0.034	27.8	*34.9*	0.025	<0.52	<0.24
NR 720 Groundwater RCL		*0.584*	*164.8*	*0.752*	*360,000*	*27*	*0.208*	*0.52*	*0.849*
NR 720 Non-industrial DC RCL		*0.677*	*15,300*	*71.1*	*0.3/100K*	*400*	*3.13*	*391*	*391*
NR 720 Industrial DC RCL		*3*	*100,000*	*985*	*6.36/100K*	*800*	*3.13*	*5,840*	*5,840*
USGS Background Values		*8.3*	*364*	*1.07*	*43.5*	*51.6*	*NS*	*NS*	*NS*

Note: NR 720 values are calculated utilizing the EPA's Regional Screening Level Web-Calculator per DNR document RR-890 (updated December 2018).
Note: Concentrations that exceed their respective RCLs for the protection of groundwater are in blue italics.
Note: Concentrations that exceed their respective non-industrial RCLs for direct contact are underlined.
Note: Concentrations that exceed their respective industrial RCLs for direct contact are in [brackets].
Note "J" indicates slight detection above the level of detection but less than the level of quantification.

Table 4 - GW VOC Results
Parcel 705 - SoNa
6633-6639 West National Avenue
West Allis, Wisconsin

Sample Location	Sampling Date	Benzene (ppb)	1,1-Dichloro-ethane (ppb)	1,1-Dichloro-ethene (ppb)	Ethyl-benzene (ppb)	Isopropyl-benzene (ppb)	MTBE (ppb)	Naph-thalene (ppb)	n-Propyl-benzene (ppb)	Toluene (ppb)	1,1,1-TCA (ppb)	Combined TMBs (ppb)	Total Xylenes (ppb)
MW-1	5/14/2003 6/8/2004	<0.41 <0.29	<0.57 NA	NR NA	<0.54 <0.56	<0.59 NA	<0.61 <0.20	<0.74 <0.60	<0.81 NA	<0.67 <0.57	<0.90 NA	<1.80 <1.17	<2.63 <1.74
MW-2	5/14/2003 6/8/2004	<0.41 <0.29	4.00 NA	NR NA	<0.54 <0.56	<0.59 NA	<0.61 <0.20	<0.74 <0.60	<0.81 NA	<0.67 <0.57	1.80 J NA	<1.80 <1.17	<2.63 <1.74
MW-3	5/14/2003 6/8/2004	**110** **51.0**	<1.50 NA	NR NA	*190* 10.0	7.90 NA	<1.20 <0.20	*42.0* 2.90	16.0 NA	60.0 7.20	<1.80 NA	82.0 5.43 J	353 18.1
MW-4	5/14/2003 6/8/2004	<0.41 <0.29	<0.57 NA	NR NA	<0.54 <0.56	<0.59 NA	<0.61 <0.20	<0.74 <0.60	<0.81 NA	<0.67 <0.57	<0.90 NA	<1.80 <1.17	<2.63 <1.74
MW-5	5/14/2003 6/8/2004	**170** **280**	<1.90 NA	NR NA	4.40 J 5.00	<1.50 NA	<1.50 <0.20	<1.80 1.20 J	<2.00 NA	3.50 J 6.60	<2.20 NA	<4.50 1.78 J	<6.60 8.34 J
MW-6	5/14/2003 6/8/2004	**2,900** **2,110**	<15.0 NA	NR NA	*250* *561*	16.0 J NA	<12.0 <10.0	*59.0* *48.5 J*	31.0 J NA	*530* 53.0 J	<18.0 NA	*137 J* 90.0 J	810 53.0 J
MW-7	5/14/2003 6/8/2004	**620** **340**	<19.0 NA	NR NA	72.0 57.0	<15.0 NA	<15.0 <0.20	<18.0 2.80	<20.0 NA	38.0 4.10	<22.0 NA	12.0 J 9.70	70.0 14.9
MW-8	5/14/2003 6/8/2004	**3,000** **370**	<19.0 NA	NR NA	*190* 10.0	<15.0 NA	<15.0 <0.20	<18.0 <0.60	<20.0 NA	67.0 8.20	<22.0 NA	<45.0 <1.17	49.0 J 3.16 J
MW-9	5/14/2003 6/8/2004	**3,600** **3,180**	<38.0 NA	NR NA	**1,100** **823**	69.0 J NA	<30.0 <10.0	**270** **224**	200 NA	*220* 146	<45.0 NA	*166 J* <58.5	670 J 244 J
TW-1	4/5/2012	<0.50	NA	NA	<0.78	NA	<0.80	<2.10	NA	<0.53	NA	<1.58	<1.10
TW-2	4/5/2012	<0.50	NA	NA	<0.78	NA	<0.80	<2.10	NA	<0.53	NA	1.89 J	<1.10
TW-3	4/5/2012	**10.1**	NA	NA	5.90	NA	<0.80	<2.10	NA	0.80 J	NA	<1.58	4.10
TW-4	4/5/2012	<0.50	NA	NA	<0.78	NA	<0.80	<2.10	NA	<0.53	NA	<1.58	<1.10
Ductile GP-25	11/6/2012	<0.41	3.50	**7.60**	<0.54	<0.59	<0.61	<0.89	<0.81	<0.67	*139*	<1.80	<2.63
Ductile GP-26	11/6/2012	<0.41	<0.75	<0.57	<0.54	<0.59	<0.61	<0.89	<0.81	<0.67	<0.90	<1.80	<2.63
Ductile GP-27	11/6/2012	<0.41	<0.75	<0.57	<0.54	<0.59	<0.61	<0.89	<0.81	<0.67	<0.90	<1.80	<2.63
Ductile GP-52	4/24/2015	<0.50	<0.24	<0.41	<0.50	<0.14	<0.17	<2.50	<0.50	<0.50	<0.50	<1.00	<1.50
Ductile GP-53	4/3/2015	<0.50	<0.24	<0.41	<0.50	<0.14	<0.17	<2.50	<0.50	<0.50	<0.50	<1.00	<1.50
Ductile GP-54	4/3/2015	<0.50	<0.24	<0.41	<0.50	<0.14	<0.17	<2.50	<0.50	<0.50	<0.50	<1.00	<1.50
Ductile MW-6	9/12/2013 4/24/2015	<0.50 <0.50	<0.28 2.10	<0.43 **7.10**	<0.50 <0.50	<0.34 <0.14	<0.49 <0.17	<2.50 <2.50	<0.50 <0.50	<0.44 <0.50	2.50 *121*	<1.00 <1.00	<1.32 <1.50
ES (ppb)	-	*5*	*850*	*7*	*700*	*NS*	*60*	*100*	*NS*	*1,000*	*200*	*480*	*10,000*
PAL (ppb)	-	*0.5*	*85*	*0.7*	*140*	*NS*	*12*	*10*	*NS*	*200*	*40*	*96*	*1,000*

Notes:

1. Only the detected compounds are presented.
2. Concentrations in ***blue italics*** exceed their respective NR 140 preventive action limits (PALs).
3. Concentrations in **red bold** exceed their respective NR 140 enforcement standards (ESs).

Table 5 - GW PAH Results
705 Parcel - SoNa
6633-6639 West National Avenue
West Allis, Wisconsin

Sample Location	Sampling Date	Acena-phthene (ppb)	Acena-phthylene (ppb)	Anthra-cene (ppb)	Benzo (a) anthra-cene (ppb)	Benzo (a) pyrene (ppb)	Benzo (b) fluor-anthene (ppb)	Benzo (g,h,i) perylene (ppb)	Benzo (k) fluor-anthene (ppb)	Chrysene (ppb)	Dibenzo (a,h) anthra-cene (ppb)	Fluor-anthrene (ppb)	Flourene (ppb)	Indeno (1,2,3-cd) pyrene (ppb)	1-Methyl Naph-thalene (ppb)	2-Methyl Naph-thalene (ppb)	Naph-thalene (ppb)	Phen-anthrene (ppb)	Pyrene (ppb)
MW-1	5/14/2003	<0.018	<0.019	<0.020	<0.012	<0.014	<0.013	<0.016	<0.019	<0.014	<0.016	<0.013	<0.013	<0.021	<0.018	<0.017	0.035 J	<0.016	<0.017
MW-4	5/14/2003	<0.018	0.033 J	0.088	0.13	*0.11*	*0.12*	0.082	0.10	*0.18*	0.027 J	0.20	0.029 J	0.071	0.032 J	0.059	0.057 J	0.19	0.28
MW-5	5/14/2003	<0.018	<0.019	<0.020	0.044	*0.042 J*	*0.057*	0.038 J	0.036 J	*0.054*	<0.016	0.072	<0.017	0.031 J	0.022 J	0.032 J	0.40	0.041 J	0.069
MW-6	5/14/2003	<0.36	<0.38	<0.40	<0.24	<0.28	<0.26	<0.32	<0.38	<0.28	<0.32	<0.26	<0.34	<0.42	1.10	1.20	*18.0*	<0.32	<0.34
TW-3	4/5/2012	<0.025	<0.019	0.03 J	0.118	*0.134*	**0.214**	0.131	0.073	*0.148*	0.028 J	0.207	<0.02	0.098	0.048 J	0.054 J	0.179	0.153	0.192
NR 140 ES		*NS*	*NS*	*3,000*	*NS*	*0.2*	*0.2*	*NS*	*NS*	*0.2*	*NS*	*400*	*400*	*NS*	*NS*	*NS*	*100*	*NS*	*250*
NR 140 PAL		*NS*	*NS*	*600*	*NS*	*0.02*	*0.02*	*NS*	*NS*	*0.02*	*NS*	*80*	*80*	*NS*	*NS*	*NS*	*10*	*NS*	*50*

Notes:

1. Only the detected compounds are presented.
2. Concentrations in ***blue italics*** exceed their respective NR 140 preventive action limits (PALs).
3. Concentrations in **red bold** exceed their respective NR 140 enforcement standards (ESs).

Table 6 - GW Metals Results
Parcel 705 - SoNa
6633-6639 West National Avenue
West Allis, Wisconsin

Sample Location	Sampling Date	Arsenic (ppb)	Baruim (ppb)	Cadmium (ppb)	Chromium (ppb)	Lead (ppb)	Mercury (ppb)	Selenium (ppb)	Silver (ppb)
MW-1	5/14/2003	0.75	*730*	0.29	3.80	0.46	<0.03	3.90	<0.07
MW-4	5/14/2003	*1.10*	250	<0.14	0.58 J	1.40	<0.03	2.20	<0.05
MW-5	5/14/2003	*4.00*	220	*1.70*	3.00	*2.20*	<0.03	2.40	<0.05
MW-6	5/14/2003	*2.00*	310	0.13 J	1.20	0.84	<0.03	3.50	<0.07
Ductile MW-6	9/12/2013	<4.20	NA	NA	NA	<2.70	NA	NA	NA
NR 140 PAL	-	*1.0*	*400*	*0.5*	*10*	*1.5*	*0.2*	*10*	*10*
NR 140 ES	-	*10*	*2,000*	*5.0*	*100*	*15*	*2.0*	*50*	*50*

Note: Concentrations in ***blue italics*** exceed their respective NR 140 preventive action limits (PALs).

Note: Concentrations in **red bold** exceed their respective NR 140 enforcement standards (ESs).

APPENDIX C
CUMULATIVE cPAH CALCULATIONS

NR 722 Direct-Contact ***Exceedance*** - ***Hazard*** - ***Risk*** Calculation Summary from Soil Data (Exclusive Cumulative-only Assessment of cPAHs)

Note: This Summary is OLD. Update with 'Get Summary' in Row 924 of the applicable *_DC_RCLs tab.

BRRTS # :
02-41-544080

SB-24: 0.5-1.5 ft

# of Soil-Concentration Entries: 7

(Cumulative) cPAH Cancer Risk	Number of Individual Exceedance	(Cumulative) Hazard Index	(Cumulative) Cancer Risk
1.8E-05	0	0.0843	1.8E-05

Bottom-Line: **NO! This NON-INDUSTRIAL site sampling location will need either further cleanup to lower contaminant levels or the construction of a cap/cover to address the direct-contact pathway.**

Date of Entry: 10/21/2021.
Date of Worksheet Used: 03/14/2017.

List below only has contaminants with data.

Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	BTV (mg/kg)	INPUTTED Site Data (mg/kg)	cPAH Cancer Risk from Data	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Benzo[a]pyrene	50-32-8	17.8	0.115	0.115	ca		1.5	1.30E-05	cPAH	0.0843	1.3E-05
Benz[a]anthracene	56-55-3	-	1.14	1.14	ca		1.52	1.33E-06	cPAH		1.3E-06
Benzo[b]fluoranthene	205-99-2	-	1.15	1.15	ca		1.86	1.62E-06	cPAH		1.6E-06
Benzo[k]fluoranthene	207-08-9	-	11.5	11.5	ca		1.25	1.09E-07	cPAH		1.1E-07
Chrysene	218-01-9	-	115.	115.	ca		1.8	1.57E-08	cPAH		1.6E-08
Dibenz[a,h]anthracene	53-70-3	-	0.115	0.115	ca		0.194	1.69E-06	cPAH		1.7E-06
Indeno[1,2,3-cd]pyrene	193-39-5	-	1.15	1.15	ca		0.413	3.59E-07	cPAH		3.6E-07

NR 722 Direct-Contact ***Exceedance*** - ***Hazard*** - ***Risk*** Calculation Summary from Soil Data (Exclusive Cumulative-only Assessment of cPAHs)

Note: This Summary is OLD. Update with 'Get Summary' in Row 924 of the applicable *_DC_RCLs tab.

BRRTS # :
02-41544080

SB-25: 2-3 ft

# of Soil-Concentration Entries: 7

(Cumulative) cPAH Cancer Risk	Number of Individual Exceedance	(Cumulative) Hazard Index	(Cumulative) Cancer Risk
7.0E-06	0	0.0303	7.0E-06

Bottom-Line: **NO! This NON-INDUSTRIAL site sampling location will need either further cleanup to lower contaminant levels or the construction of a cap/cover to address the direct-contact pathway.**

Date of Entry: 10/21/2021.
Date of Worksheet Used: 03/14/2017.

List below only has contaminants with data.

Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	BTV (mg/kg)	INPUTTED Site Data (mg/kg)	cPAH Cancer Risk from Data	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Benzo[a]pyrene	50-32-8	17.8	0.115	0.115	ca		0.539	4.69E-06	cPAH	0.0303	4.7E-06
Benz[a]anthracene	56-55-3	-	1.14	1.14	ca		0.601	5.27E-07	cPAH		5.3E-07
Benzo[b]fluoranthene	205-99-2	-	1.15	1.15	ca		0.913	7.94E-07	cPAH		7.9E-07
Benzo[k]fluoranthene	207-08-9	-	11.5	11.5	ca		0.321	2.79E-08	cPAH		2.8E-08
Chrysene	218-01-9	-	115.	115.	ca		0.549	4.77E-09	cPAH		4.8E-09
Dibenz[a,h]anthracene	53-70-3	-	0.115	0.115	ca		0.079	6.87E-07	cPAH		6.9E-07
Indeno[1,2,3-cd]pyrene	193-39-5	-	1.15	1.15	ca		0.258	2.24E-07	cPAH		2.2E-07

NR 722 Direct-Contact ***Exceedance*** - ***Hazard*** - ***Risk*** Calculation Summary from Soil Data (Exclusive Cumulative-only Assessment of cPAHs)

Note: This Summary is OLD. Update with 'Get Summary' in Row 924 of the applicable *_DC_RCLs tab.

BRRTS # :
02-41-544080

SB-33: 4-5 ft

# of Soil-Concentration Entries: 7

(Cumulative) cPAH Cancer Risk	Number of Individual Exceedance	(Cumulative) Hazard Index	(Cumulative) Cancer Risk
6.3E-06	0	0.0251	6.3E-06

Bottom-Line: **NO! This NON-INDUSTRIAL site sampling location will need either further cleanup to lower contaminant levels or the construction of a cap/cover to address the direct-contact pathway.**

Date of Entry: 10/21/2021.
Date of Worksheet Used: 03/14/2017.

List below only has contaminants with data.

Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	BTV (mg/kg)	INPUTTED Site Data (mg/kg)	cPAH Cancer Risk from Data	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Benzo[a]pyrene	50-32-8	17.8	0.115	0.115	ca		0.446	3.88E-06	cPAH	0.0251	3.9E-06
Benz[a]anthracene	56-55-3	-	1.14	1.14	ca		0.395	3.46E-07	cPAH		3.5E-07
Benzo[b]fluoranthene	205-99-2	-	1.15	1.15	ca		1.07	9.30E-07	cPAH		9.3E-07
Benzo[k]fluoranthene	207-08-9	-	11.5	11.5	ca		0.272	2.37E-08	cPAH		2.4E-08
Chrysene	218-01-9	-	115.	115.	ca		0.484	4.21E-09	cPAH		4.2E-09
Dibenz[a,h]anthracene	53-70-3	-	0.115	0.115	ca		0.104	9.04E-07	cPAH		9.0E-07
Indeno[1,2,3-cd]pyrene	193-39-5	-	1.15	1.15	ca		0.239	2.08E-07	cPAH		2.1E-07

NR 722 Direct-Contact ***Exceedance*** - ***Hazard*** - ***Risk*** Calculation Summary from Soil Data (Exclusive Cumulative-only Assessment of cPAHs)

Note: This Summary is OLD. Update with 'Get Summary' in Row 924 of the applicable *_DC_RCLs tab.

BRRTS # :
02-41-544080

SB-38: 1.5-2.5 ft

# of Soil-Concentration Entries: 7

(Cumulative) cPAH Cancer Risk	Number of Individual Exceedance	(Cumulative) Hazard Index	(Cumulative) Cancer Risk
1.0E-05	0	0.0473	1.0E-05

Bottom-Line: **NO! This NON-INDUSTRIAL site sampling location will need either further cleanup to lower contaminant levels or the construction of a cap/cover to address the direct-contact pathway.**

Date of Entry: 10/21/2021.
Date of Worksheet Used: 03/14/2017.

List below only has contaminants with data.

Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	BTV (mg/kg)	INPUTTED Site Data (mg/kg)	cPAH Cancer Risk from Data	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Benzo[a]pyrene	50-32-8	17.8	0.115	0.115	ca		0.842	7.32E-06	cPAH	0.0473	7.3E-06
Benz[a]anthracene	56-55-3	-	1.14	1.14	ca		0.859	7.54E-07	cPAH		7.5E-07
Benzo[b]fluoranthene	205-99-2	-	1.15	1.15	ca		1.23	1.07E-06	cPAH		1.1E-06
Benzo[k]fluoranthene	207-08-9	-	11.5	11.5	ca		0.332	2.89E-08	cPAH		2.9E-08
Chrysene	218-01-9	-	115.	115.	ca		0.791	6.88E-09	cPAH		6.9E-09
Dibenz[a,h]anthracene	53-70-3	-	0.115	0.115	ca		0.088	7.65E-07	cPAH		7.7E-07
Indeno[1,2,3-cd]pyrene	193-39-5	-	1.15	1.15	ca		0.383	3.33E-07	cPAH		3.3E-07

NR 722 Direct-Contact ***Exceedance*** - ***Hazard*** - ***Risk*** Calculation Summary from Soil Data (Exclusive Cumulative-only Assessment of cPAHs)

Note: This Summary is OLD. Update with 'Get Summary' in Row 924 of the applicable *_DC_RCLs tab.

BRRTS # :
02-41-544080

SB-40: 2.5-3.5 ft

# of Soil-Concentration Entries: 7

(Cumulative) cPAH Cancer Risk	Number of Individual Exceedance	(Cumulative) Hazard Index	(Cumulative) Cancer Risk
5.5E-06	0	0.0237	5.5E-06

Bottom-Line: **NO! This NON-INDUSTRIAL site sampling location will need either further cleanup to lower contaminant levels or the construction of a cap/cover to address the direct-contact pathway.**

Date of Entry: 10/21/2021.
Date of Worksheet Used: 03/14/2017.

List below only has contaminants with data.

Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	BTV (mg/kg)	INPUTTED Site Data (mg/kg)	cPAH Cancer Risk from Data	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Benzo[a]pyrene	50-32-8	17.8	0.115	0.115	ca		0.421	3.66E-06	cPAH	0.0237	3.7E-06
Benz[a]anthracene	56-55-3	-	1.14	1.14	ca		0.393	3.45E-07	cPAH		3.4E-07
Benzo[b]fluoranthene	205-99-2	-	1.15	1.15	ca		0.852	7.41E-07	cPAH		7.4E-07
Benzo[k]fluoranthene	207-08-9	-	11.5	11.5	ca		0.252	2.19E-08	cPAH		2.2E-08
Chrysene	218-01-9	-	115.	115.	ca		0.549	4.77E-09	cPAH		4.8E-09
Dibenz[a,h]anthracene	53-70-3	-	0.115	0.115	ca		0.061	5.30E-07	cPAH		5.3E-07
Indeno[1,2,3-cd]pyrene	193-39-5	-	1.15	1.15	ca		0.213	1.85E-07	cPAH		1.9E-07

NR 722 Direct-Contact ***Exceedance*** - ***Hazard*** - ***Risk*** Calculation Summary from Soil Data (Exclusive Cumulative-only Assessment of cPAHs)

Note: This Summary is OLD. Update with 'Get Summary' in Row 924 of the applicable *_DC_RCLs tab.

BRRTS # :
02-41-544080

SB-41: 3-4 ft

# of Soil-Concentration Entries: 7

Bottom-Line:

(Cumulative) cPAH Cancer Risk	Number of Individual Exceedance	(Cumulative) Hazard Index	(Cumulative) Cancer Risk
3.8E-06	0	0.0173	3.8E-06

Yes, levels are below direct-contact concern.

Date of Entry: 10/21/2021.
Date of Worksheet Used: 03/14/2017.

List below only has contaminants with data.

Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	BTV (mg/kg)	INPUTTED Site Data (mg/kg)	cPAH Cancer Risk from Data	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Benzo[a]pyrene	50-32-8	17.8	0.115	0.115	ca		0.308	2.68E-06	cPAH	0.0173	2.7E-06
Benz[a]anthracene	56-55-3	-	1.14	1.14	ca		0.195	1.71E-07	cPAH		1.7E-07
Benzo[b]fluoranthene	205-99-2	-	1.15	1.15	ca		0.517	4.50E-07	cPAH		4.5E-07
Benzo[k]fluoranthene	207-08-9	-	11.5	11.5	ca		0.148	1.29E-08	cPAH		1.3E-08
Chrysene	218-01-9	-	115.	115.	ca		0.295	2.57E-09	cPAH		2.6E-09
Dibenz[a,h]anthracene	53-70-3	-	0.115	0.115	ca		0.033	2.87E-07	cPAH		2.9E-07
Indeno[1,2,3-cd]pyrene	193-39-5	-	1.15	1.15	ca		0.192	1.67E-07	cPAH		1.7E-07

NR 722 Direct-Contact ***Exceedance*** - ***Hazard*** - ***Risk*** Calculation Summary from Soil Data (Exclusive Cumulative-only Assessment of cPAHs)

Note: This Summary is OLD. Update with 'Get Summary' in Row 924 of the applicable *_DC_RCLs tab.

BRRTS # :
02-41-544080

SB-44: 3-4 ft

# of Soil-Concentration Entries: 7

(Cumulative) cPAH Cancer Risk	Number of Individual Exceedance	(Cumulative) Hazard Index	(Cumulative) Cancer Risk
5.2E-06	0	0.0229	5.2E-06

Bottom-Line: **NO! This NON-INDUSTRIAL site sampling location will need either further cleanup to lower contaminant levels or the construction of a cap/cover to address the direct-contact pathway.**

Date of Entry: 10/21/2021.
Date of Worksheet Used: 03/14/2017.

List below only has contaminants with data.

Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	BTV (mg/kg)	INPUTTED Site Data (mg/kg)	cPAH Cancer Risk from Data	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Benzo[a]pyrene	50-32-8	17.8	0.115	0.115	ca		0.408	3.55E-06	cPAH	0.0229	3.5E-06
Benz[a]anthracene	56-55-3	-	1.14	1.14	ca		0.446	3.91E-07	cPAH		3.9E-07
Benzo[b]fluoranthene	205-99-2	-	1.15	1.15	ca		0.772	6.71E-07	cPAH		6.7E-07
Benzo[k]fluoranthene	207-08-9	-	11.5	11.5	ca		0.273	2.37E-08	cPAH		2.4E-08
Chrysene	218-01-9	-	115.	115.	ca		0.609	5.30E-09	cPAH		5.3E-09
Dibenz[a,h]anthracene	53-70-3	-	0.115	0.115	ca		0.039	3.39E-07	cPAH		3.4E-07
Indeno[1,2,3-cd]pyrene	193-39-5	-	1.15	1.15	ca		0.259	2.25E-07	cPAH		2.3E-07

NR 722 Direct-Contact ***Exceedance*** - ***Hazard*** - ***Risk*** Calculation Summary from Soil Data (Exclusive Cumulative-only Assessment of cPAHs)

Note: This Summary is OLD. Update with 'Get Summary' in Row 924 of the applicable *_DC_RCLs tab.

BRRTS # :
02-41-544080

SB-45: 2-3 ft

# of Soil-Concentration Entries: 7

Bottom-Line:

(Cumulative) cPAH Cancer Risk	Number of Individual Exceedance	(Cumulative) Hazard Index	(Cumulative) Cancer Risk
2.1E-06	0	0.0078	2.1E-06

Yes, levels are below direct-contact concern.

Date of Entry: 10/21/2021.
Date of Worksheet Used: 03/14/2017.

List below only has contaminants with data.

Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	BTV (mg/kg)	INPUTTED Site Data (mg/kg)	cPAH Cancer Risk from Data	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Benzo[a]pyrene	50-32-8	17.8	0.115	0.115	ca		0.139	1.21E-06	cPAH	0.0078	1.2E-06
Benz[a]anthracene	56-55-3	-	1.14	1.14	ca		0.175	1.54E-07	cPAH		1.5E-07
Benzo[b]fluoranthene	205-99-2	-	1.15	1.15	ca		0.418	3.63E-07	cPAH		3.6E-07
Benzo[k]fluoranthene	207-08-9	-	11.5	11.5	ca		0.149	1.30E-08	cPAH		1.3E-08
Chrysene	218-01-9	-	115.	115.	ca		0.332	2.89E-09	cPAH		2.9E-09
Dibenz[a,h]anthracene	53-70-3	-	0.115	0.115	ca		0.025	2.17E-07	cPAH		2.2E-07
Indeno[1,2,3-cd]pyrene	193-39-5	-	1.15	1.15	ca		0.121	1.05E-07	cPAH		1.1E-07

NR 722 Direct-Contact ***Exceedance*** - ***Hazard*** - ***Risk*** Calculation Summary from Soil Data (Exclusive Cumulative-only Assessment of cPAHs)

Note: This Summary is OLD. Update with 'Get Summary' in Row 924 of the applicable *_DC_RCLs tab.

BRRTS # :
02-41-544080

GP-54: 2-3 FT

# of Soil-Concentration Entries: 7

Bottom-Line: Yes, levels are below direct-contact concern.

(Cumulative) cPAH Cancer Risk	Number of Individual Exceedance	(Cumulative) Hazard Index	(Cumulative) Cancer Risk
3.1E-06	0	0.0142	3.1E-06

Date of Entry: 11/9/2021.
Date of Worksheet Used: 03/14/2017.

List below only has contaminants with data.

Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	BTV (mg/kg)	INPUTTED Site Data (mg/kg)	cPAH Cancer Risk from Data	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Benzo[a]pyrene	50-32-8	17.8	0.115	0.115	ca		0.252	2.19E-06	cPAH	0.0142	2.2E-06
Benz[a]anthracene	56-55-3	-	1.14	1.14	ca		0.31	2.72E-07	cPAH		2.7E-07
Benzo[b]fluoranthene	205-99-2	-	1.15	1.15	ca		0.198	1.72E-07	cPAH		1.7E-07
Benzo[k]fluoranthene	207-08-9	-	11.5	11.5	ca		0.218	1.90E-08	cPAH		1.9E-08
Chrysene	218-01-9	-	115.	115.	ca		0.327	2.84E-09	cPAH		2.8E-09
Dibenz[a,h]anthracene	53-70-3	-	0.115	0.115	ca		0.0375	3.26E-07	cPAH		3.3E-07
Indeno[1,2,3-cd]pyrene	193-39-5	-	1.15	1.15	ca		0.121	1.05E-07	cPAH		1.1E-07

APPENDIX D
DEVELOPMENT
PLANS

SoNa PARCEL PLAN - AERIAL VIEW

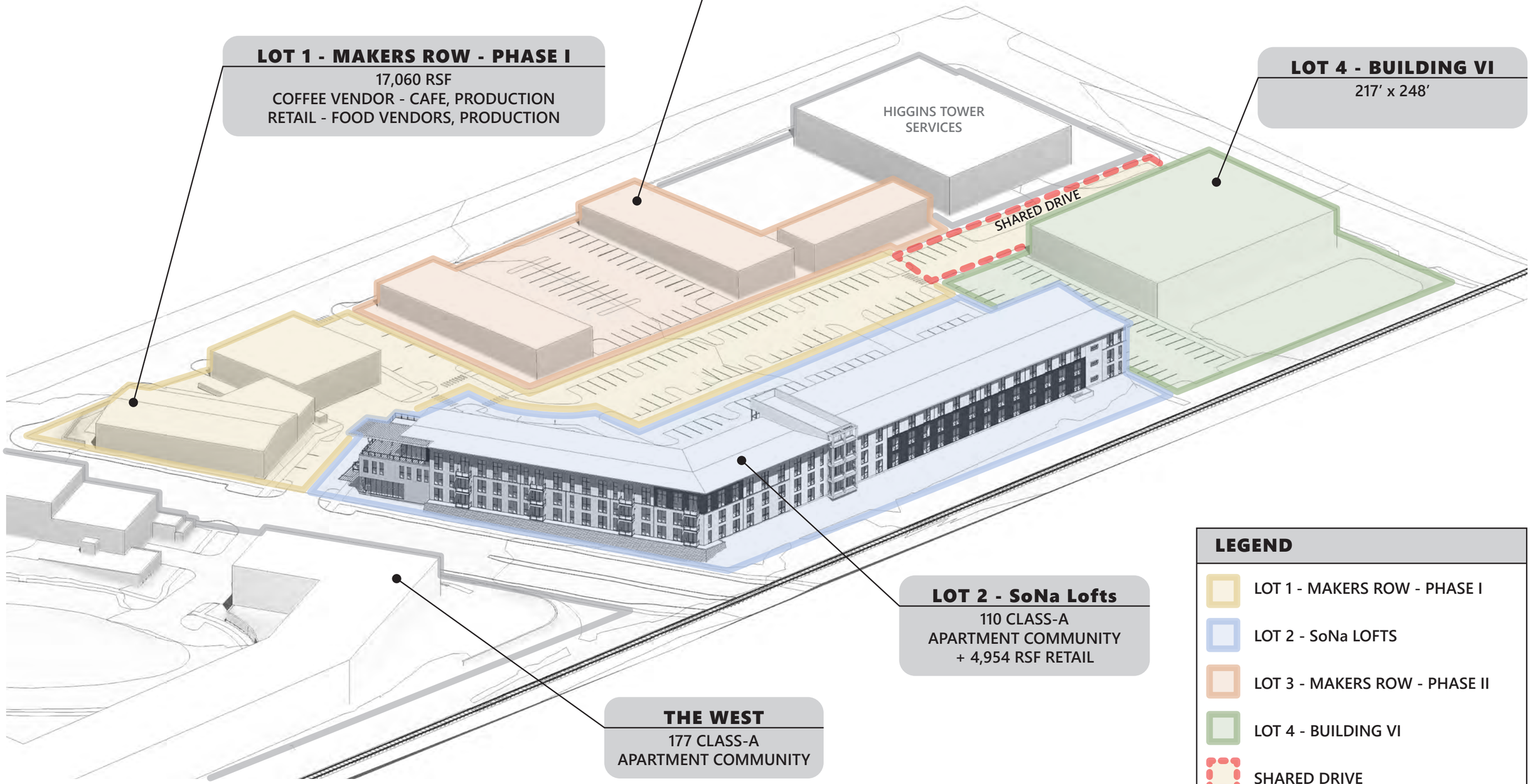
11 . 06 . 2020

MANDEL GROUP

LOT 3 - MAKERS ROW - PHASE II
164’ x 248’ &
48’ x 120’

LOT 1 - MAKERS ROW - PHASE I
17,060 RSF
COFFEE VENDOR - CAFE, PRODUCTION
RETAIL - FOOD VENDORS, PRODUCTION

LOT 4 - BUILDING VI
217’ x 248’



LOT 2 - SoNa Lofts
110 CLASS-A
APARTMENT COMMUNITY
+ 4,954 RSF RETAIL

THE WEST
177 CLASS-A
APARTMENT COMMUNITY

LEGEND

- LOT 1 - MAKERS ROW - PHASE I
- LOT 2 - SoNa LOFTS
- LOT 3 - MAKERS ROW - PHASE II
- LOT 4 - BUILDING VI
- SHARED DRIVE

MANDEL GROUP

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Suite 600 South
Milwaukee, Wisconsin 53202
414 . 347 . 3600
mandelgroup.com

November 6, 2020

SoNa Development Submission
PROJECT OVERVIEW | DESIGN STRATEGY

Mandel Group conceived of a highly interactive mixed-use project called "The Market at Six Points". Since our original submission and selection by the City of West Allis, Mandel Group has completed investment of over $50 million on lands north of National Avenue and west of 66th Street. We are now focusing on the area south of National Avenue, referred to as "SoNa" for "south of National" and are submitting for approval plans for a highly detailed mixed-use commercial and residential project. An additional $25-35 million of new development is envisioned once all parcels of SoNa are developed.

BACKGROUND

The concept of mixed-use land development is important to understand in the context of the SoNa project. Several years ago we were offered for purchase Six Points Apartments due east of The West. As part of our underwriting we interviewed the property manager. The takeaway was that people were interested in trying West Allis and this location as a place to live but that after living there for some time their interest faded. The objection most heard by property management was "There's just not anything happening around us."

Fast forward to 2015-16 when the initial plans for The Market at Six Points developed. We knew from market information like above, and from our 30 years of developing urban housing, that developing a multi-functional neighborhood was as important as the quality of the apartments themselves. Our housing would not enjoy long-term sustainability unless we added goods, services and diversions to the setting in which it was developed for a diverse mixed-use urban neighborhood.

Our initial concept for SoNa was a food-centric cluster of uses incorporating two or more restaurants and an international market grocery. Other related food industry tenants were also contacted and showed interest. The erosion of economics in the grocery industry scuttled multiple attempts to attract a food store, and restaurants showed substantial interest but little financial capacity to contribute to the capitalization of a new-build location. With the presence of so many vacant buildings in West Allis that present adaptive reuse potential, restaurant prospects have routinely opted for this more cost-effective alternative.

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SoNa DESIGN CONCEPT

We investigated alternative approaches to achieving the above-stated goals and objectives. We are presenting a plan for SoNa that has two major components: unique commercial buildings detailed to recall the character of repurposed industrial buildings, together with a residential building that reflects on the character of its neighboring commercial structures.

The photo above is of a repurposed industrial service building in Nashville, TN. The conversion now houses Diskin Cider's production operations, tasting room and events space. The interior reflects the industrial character of the original steel-framed building while the exterior has been reskinned with a sharp-looking, tasteful palette of materials together with carefully selected glazing, signage and lighting. This project was visited by Mandel Group in April 2019 as part of our conceptualization for Makers Row, the food-centric commercial component of the SoNa development.

Mandel Group, Inc. Mandel Development, Inc. Mandel Group Properties LLC Mandel Property Services, Inc.

MANDEL GROUP

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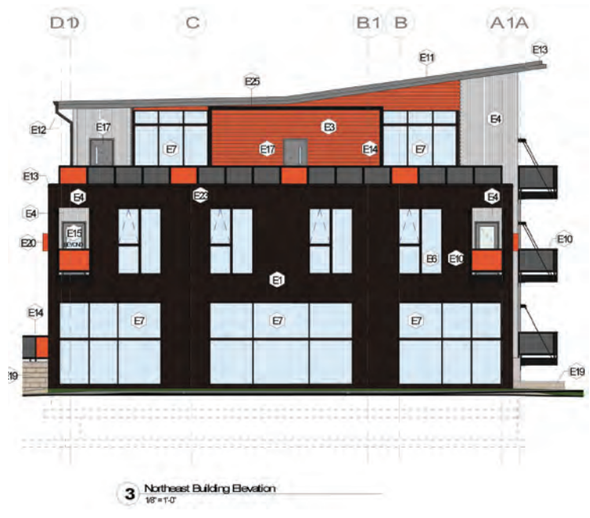
Makers Row Phase I is an 18,000 square foot collection of buildings designed to appear as individual buildings constructed over a period of time. An anchor tenant of 12,000 square feet is joined by a 6,000 square foot southern building that will be subdivided for smaller users. This southern building is set up in particular to appeal to ghost kitchen/food truck operators who may also want to stage periodic retail operations, such as during events at the Farmers Market.

Makers Row Phase II is 17,500 square feet of additional space that is attracting attention from similar food + beverage producers/retail operations as occur in Phase I. The intent is that the same approach will be used to detail these buildings.

The SoNa Lofts apartment building takes its inspiration from historic loft structures and borrows certain exterior palette materials from Makers Row. The masonry base of the building is complemented with ribbed metal skin and pops of color to make the finished product a contemporary, memorable design statement. The overall form of the building is unique and will present a high-quality design statement along National Avenue.



The architectural drawing above is a study of materials and window fenestration. A masonry brick base supports a rooftop terrace amenity space. The upper floor is sheathed in a combination of vertical ribbed metal panel and horizontally laid deep-profile metal panel with a burnt orange accent color.

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OTHER SoNa OPPORTUNITIES

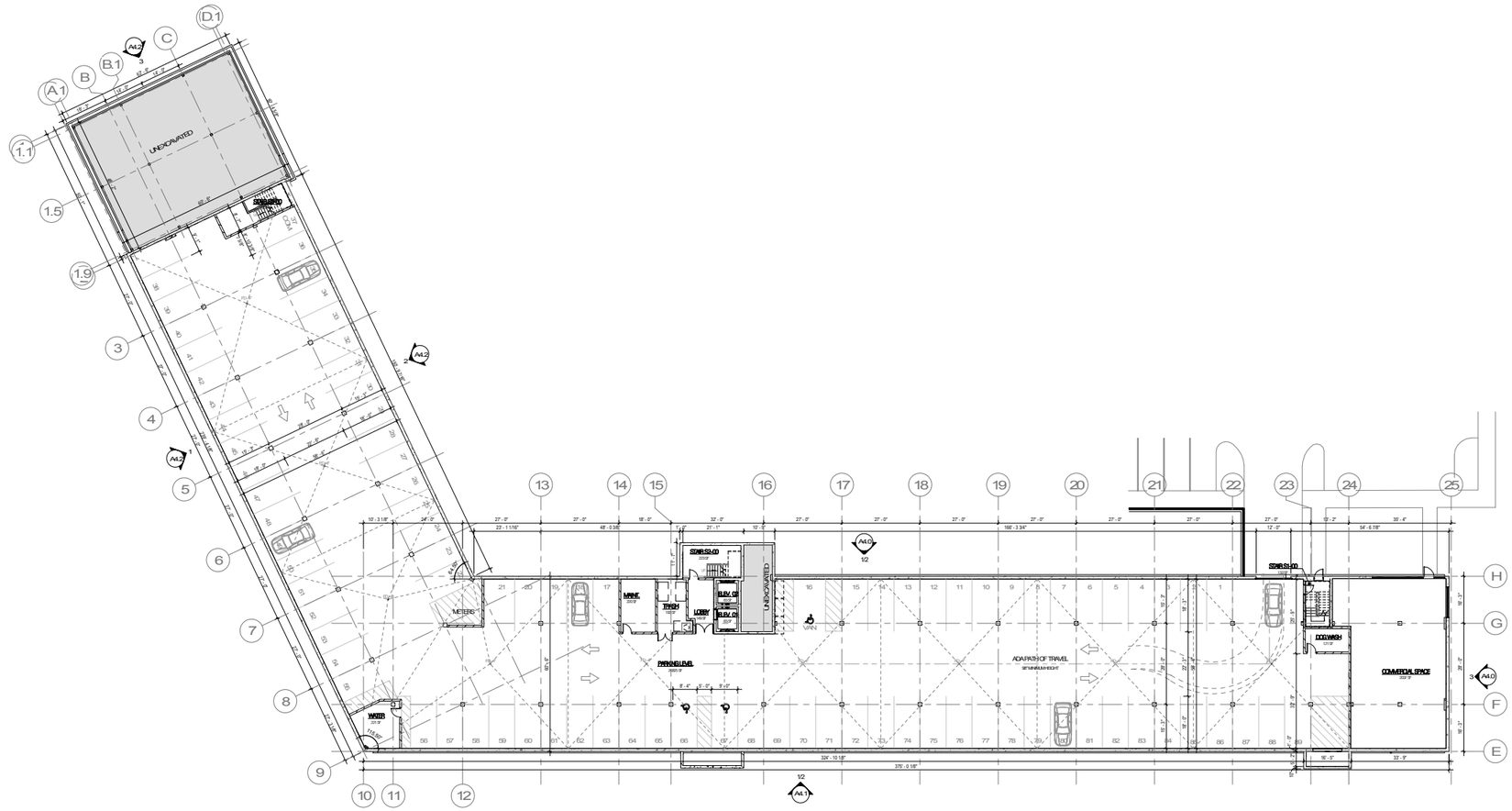
The site design for SoNa creates a final parcel at the south end of the property fronting on Mitchell Street. This adjoins an access drive and a retention pond. A wide variety of uses could be accommodated here, from a larger scale food producing employment generator (which we have been in contact with in the past) or even additional residential units.
Once the infrastructure to support this is in place it is intended that Makers Row Phase II and this remaining southerly parcel will be pursued for an immediate subsequent phase of development.

LANDSCAPE

Estimated cost of landscaping & screening:

SoNa Lofts: $130,330
Makers Row: $30,000

Mandel Group, Inc. Mandel Development, Inc. Mandel Group Properties LLC Mandel Property Services, Inc.



ZIMMERMAN
ARCHITECTURAL STUDIOS, INC.
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TELEPHONE (414) 476.9500
FACSIMILE (414) 476.8582

Developer/Owner:

MANDEL GROUP

Consultant:

Project:

SoNa Apartments

NOT FOR CONSTRUCTION

Location:
6700 W. National Avenue
West Allis, WI 53214

Key Plan:

TRUE NORTH

Sheet:

PARKING LEVEL - OVERALL

Phase:

Planning Commission Submittal

Scale:

1/16" = 1'-0"

Revisions:

No	Date	Description

Date:

11.06.20

Project No:

200054.00

Sheet No:

A2.0

Zimmerman
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Developer/Owner:

MANDEL GROUP

Consultant:

Project:

SoNa Apartments

NOT FOR CONSTRUCTION

Location:
6700 W. National Avenue
West Allis, WI 53214

Key Plan:

Sheet:

FIRST FLOOR PLAN - OVERALL

Phase:

Planning Commission Submittal

Scale:

1/16" = 1'-0"

Revisions:

No:	Date:	Description:

Date:

11.06.20

Project No:

200054.00

Sheet No:

A2.1

ZIMMERMAN ARCHITECTURAL STUDIOS, INC.
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Developer/Owner:

MANDEL GROUP

Consultant:

Project:

SoNa Apartments

NOT FOR CONSTRUCTION

Location:
6700 W. National Avenue
West Allis, WI 53214

Key Plan:

Sheet:

PERSPECTIVE VIEWS

Phase:
Planning Commission Submittal

Scale:

Revisions:

No.	Date	Description

Date:
11.06.20

Project No:
20.0054.00

Sheet No:

R1.1

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Developer/Owner:

MANDEL GROUP

Consultant:

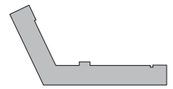
Project:

SoNa Apartments

NOT FOR CONSTRUCTION

Location:
6700 W. National Avenue
West Allis, WI 53214

Key Plan:



Sheet:

PERSPECTIVE VIEWS

Phase:
Planning Commission Submittal

Scale:

Revisions:

No.	Date	Description

Date:
11.06.20

Project No:
200054.00

Sheet No:

R1.1

LEGEND	
(hatched box)	CONCRETE SIDEWALK - 6" CRUSHED AGGREGATE BASE COURSE (1-1/2" DENSE GRADED LIMESTONE) - 5" PCC (6x6 WELDED WIRE FABRIC PER RACI 315-92)
(15)	PARKING COUNT (FOR INFORMATION ONLY, NOT TO BE PAINTED)

PARKING DATA

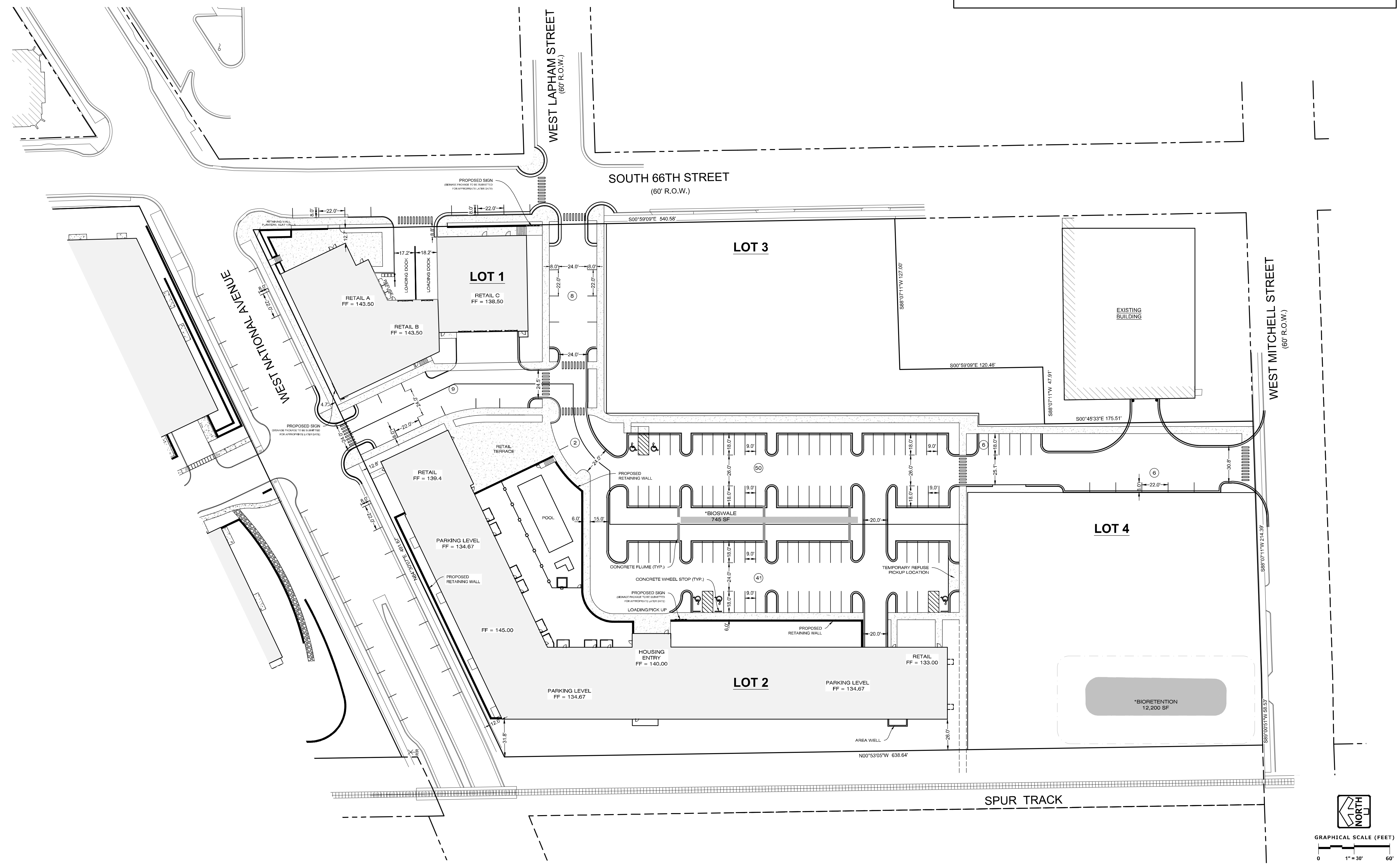
ON-SITE PARKING: 120 STALLS

ADA REQUIREMENTS:

-REQUIRED: 5 ADA STALLS, 1 VAN ACCESSIBLE
-PROVIDED: 5 ADA STALLS, 2 VAN ACCESSIBLE

SITE DATA

	LOT 1	LOT 2	LOT 3	LOT 4	SITE TOTAL
TOTAL AREA:	1.88 AC	2.42 AC	1.03 AC	1.21 AC	6.54 AC
BUILDING:	0.36 AC / 19.1%	0.81 AC / 33.5%	0.00 AC / 0.0%	0.00 AC / 0.0%	1.17 AC / 17.9%
IMPERVIOUS:	1.49 AC / 79.3%	1.65 AC / 68.2%	0.00 AC / 0.0%	0.00 AC / 0.0%	3.14 AC / 48.0%
GREEN SPACE:	0.39 AC / 20.7%	0.77 AC / 31.8%	1.03 AC / 100.0%	1.21 AC / 100.0%	3.40 AC / 52.0%



FOR REVIEW ONLY

PLAN | DESIGN | DELIVER
www.pinnacle-engr.com

PINNACLE ENGINEERING GROUP
ENGINEERING | NATURAL RESOURCES | SURVEYING

WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO | MILWAUKEE | NATIONWIDE

SONA LOFTS
W. NATIONAL AVENUE
WEST ALLIS, WI

SITE PLAN

REVISIONS
PLANNING COMMISSION SUBMITTAL 11/06/20

PEG JOB No. 650.00-WI
PEG PM AEK
START DATE 11/06/20
SCALE 1" = 30'

SHEET C1.0 OF C3.0

SITE PLAN

DRAFTED: MRG
DESIGNED: AEK
REVIEWED: AEK

Z:\PROJECTS\2016\650.00-WI\CAD\SHEETS\SONA\C1.0 SITE PLAN.DWG

Elevations Table			
Number	Color	Minimum	Maximum
1		-16.00	-12.00
2		-12.00	-8.00
3		-8.00	-4.00
4		-4.00	0.00
5		0.00	4.00
6		4.00	8.00
7		8.00	12.00
8		12.00	16.00

ESTIMATE OF EARTHWORK QUANTITIES
FOR
SONA

PINNACLE ENGINEERING GROUP
Plan | Design | Deliver
www.pinnacle-engr.com

DESIGN BY: AEK
PROJECT NUMBER: 650.00
DATE: 11/12/2021

RAW CUT/FILL (EXISTING CONTOURS VS. FINAL CONTOURS)

TOTAL SITE AREA 6.4 ACRES

6,177	CY CUT
21,203	CY FILL
5	% SHRINKAGE FACTOR ON FILL
22,263	ADJUSTED FILL
16,086	CY RAW IMPORT

SURFACE ADJUSTMENTS

TOPSOIL STRIPING		0 IN OVER	6.4 AC =	-	CY LESS STRUCTURAL
Topsoil depth is based on actual borings or field data					
PAVEMENT SUBCUT		12 IN OVER	122,484 SF =	4,536	CY ADDED STRUCTURAL
18" IMPORTED CAP		18 IN OVER	91,600 SF =	5,089	CY ADDED STRUCTURAL
UTILITY TRENCH SPOILS		TRENCH SIZE - WIDTH BY DEPTH			
SANITARY	200 LF	4 FT BY	12 FT =	356	CY ADDED STRUCTURAL
WATER	820 LF	3 FT BY	7 FT =	638	CY ADDED STRUCTURAL
STORM	1800 LF	4 FT BY	5 FT =	1,333	CY ADDED STRUCTURAL
BUILDING ADJUSTMENTS					
SLAB ON GRADE (OR BASEMENT FLOOR SLAB)		12 IN OVER	64,700 SF =	2,396	CY ADDED STRUCTURAL
		TRENCH SIZE - WIDTH BY DEPTH			
FOOTINGS	3600 LF	4 FT BY	5 FT =	2,667	CY ADDED STRUCTURAL
SONA LOFTS FOOTINGS & PIER UNDERCUT				2,430	CY ADDED STRUCTURAL

ESTIMATE OF NET STRUCTURAL EXPORT	3,359 CY
TOPSOIL REMAINING	(5,089) CY
TOPSOIL STOCKPILES ONSITE	6,000 CY
MATIERAL NEEDED TO BE IMPORTED FOR CAP (AFTER TOPSOIL USED UP)	911 CY

SOUTH 66TH STREET
(60' R.O.W.)
WEST LAPH
(60' F
WEST NATIONAL AVENUE
CONCRETE PAVEMENT
CONCRETE MEDIAN
SPUR TRACK
CHAINLINK FENCE EAST OF PROPERTY LINE
RETAIL A
FF = 143.50
RETAIL B
FF = 143.50
RETAIL C
FF = 138.50
RETAIL
FF = 139.4
FF = 133.7
FF = 133.7
TRASH ZONE
SERVICE COURT
FF = 135.6
RECEPTION
GARDEN
PARKING LEVEL
FF = 134.67
FF = 145.00
HOUSING
ENTRY
FF = 140.00
PARKING LEVEL
FF = 134.67
PARKING LEVEL
FF = 134.67
RETAIL
FF = 133.00
SIGN
CATV
OHW
MHO
NORTH
GRAPHICAL SCALE (FEET)
0
1" = 30'
60'

SONA- EARTHWORK

PINNACLE ENGINEERING GROUP

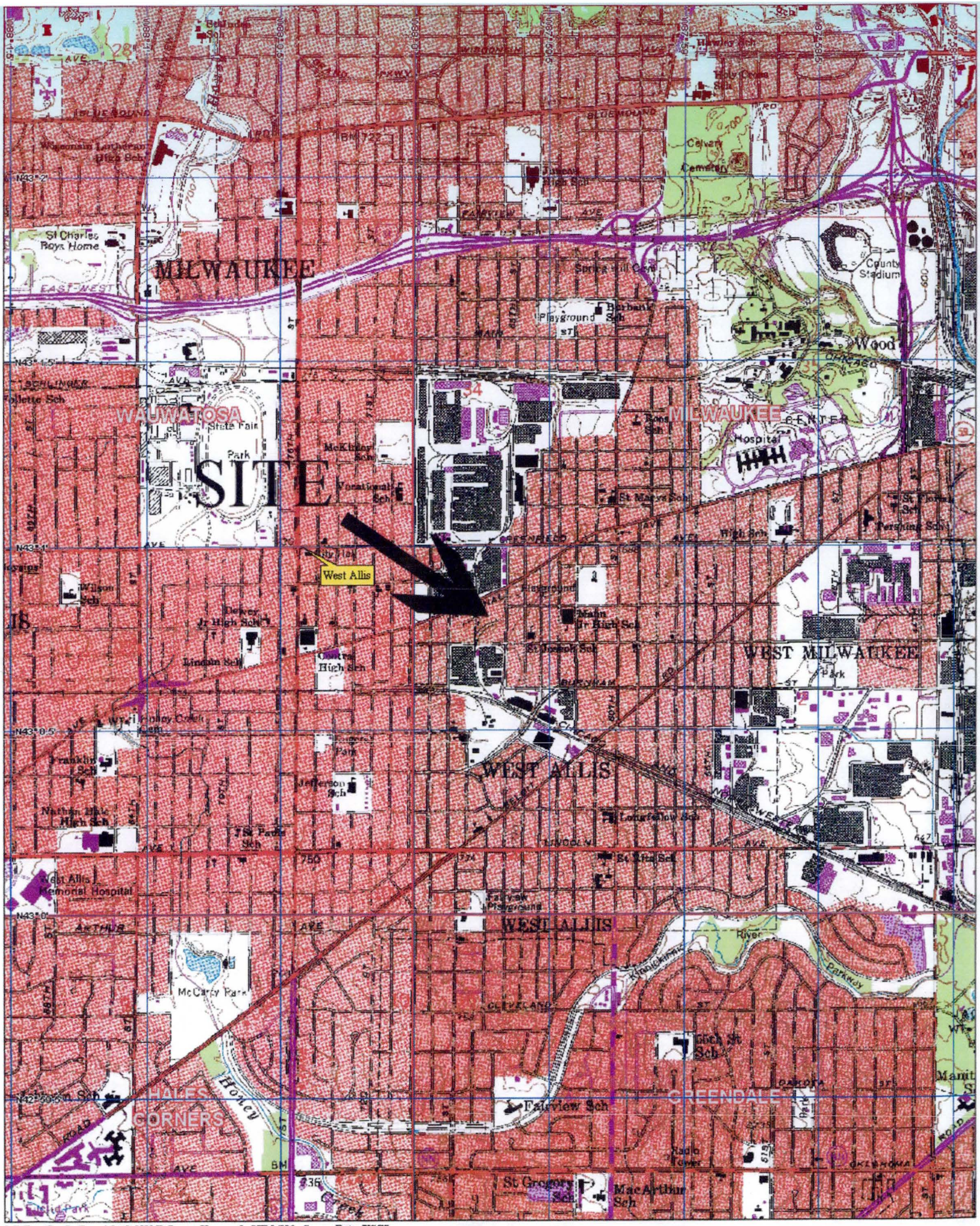
20725 WATERTOWN ROAD | SUITE 100 | BROOKFIELD, WI 53186 | WWW.PINNACLE-ENGR.COM |

PLAN | DESIGN | DELIVER

11/12/2021

PEGJOB# 650.00

APPENDIX E
2012 RAP DIAGRAMS



3-D TopoQuads Copyright © 1999 DeLorme Yarmouth, ME 04096 Source Data: USGS 750 ft Scale: 1 : 25,000 Detail: 13-0 Datum: WGS84

LEGEND

PROPERTY LINES

SCALE

30′ 0′ 30′ 60′

1″ = 60′

THE ENVIRONMENTAL MANAGEMENT COMPANY LLC	
DATE: 04/28/12	DRAWN BY: TJM
LOCATION: 6633-39 W. NATIONAL AVE WEST ALLIS, WISCONSIN	

FIGURE 2

SOIL BORING, MONITORING WELL, AND TEMPORARY WELL LOCATIONS

SPUR TRACK

ELECTRIC

6" GAS MAIN

GAS & WATER

SB-11

SB-10

SB-12

SB-9

SB-19

SB-20

SB-24

SB-21

TW-4

MW-8

MW-7

MW-5

SB-6

SB-5

MW-1

SB-7

TW-3

MW-9

BLDG. S

BLDG. R

SB-18

SB-40

SB-39

SB-32

SB-31

SB-14

SB-13

SB-8

SB-1

MW-4

SB-4

SB-2

MW-3

SB-41

SB-38

SB-33

SB-30

SB-15

MW-2

MW-6

SB-3

TW-2

TW-1

BLDG. Q

SB-42

SB-37

SB-34

SB-29

SB-35

SB-28

SB-26

SB-52

SB-46

SB-23

SB-45

SB-51

SB-43

SB-22

SB-36

SB-27

SB-25

SB-44

SB-50

SB-49

SB-48

BLDG. P

BLDG. N

SB-16

SB-17

SB-3
(#704)

COMPLETED SOIL EXCAVATION/
SOIL REMOVED TO
OFF-SITE BIOTREATMENT

W. MITCHELL STREET ℄

W. NATIONAL AVE ℄

ELECTRIC

6" GAS MAIN

SOUTH 66TH STREET ℄

78′ EAST

SB-47

THE ENVIRONMENTAL MANAGEMENT COMPANY LLC	
DATE: 04/28/12	DRAWN BY: TJM
LOCATION: 6633-39 W. NATIONAL AVE WEST ALLIS, WISCONSIN	

FIGURE 3.1
SOIL CONTAMINANT DISTRIBUTION
VOC & DRO

LEGEND

PROPERTY LINES

SCALE
30′ 0′ 30′ 60′
1″ = 60′

N

SPUR TRACK

ELECTRIC

6″ GAS MAIN

GAS & WATER

SB-11

SB-10

SB-12

SB-19

SB-20

SB-24

SB-21

SB-18

BLDG. S

BLDG. R

BLDG. Q

BLDG. P

BLDG. N

SB-9

SB-6

SB-5

SB-7

TW-3

TW-4

SB-14

SB-13

SB-8

SB-15

SB-1

SB-4

SB-2

TW-2

SB-3

TW-1

SB-23

SB-22

SB-16

SB-17

SB-3
(#704)

SB-46

SB-47

78′ EAST

W. NATIONAL AVE ℄

W. MITCHELL STREET ℄

SOUTH 66TH STREET ℄

CONTAMINANT		RCL
BEN	BENZENE	0.0055
ETH	ETHYLBENZENE	2.9
NAP	NAPHTHALENE	0.4
TOL	TOLUENE	1.5
XYL	XYLENES (TOTAL)	4.1
DRO	DIESEL RANGE ORGANICS	250

ALL CONTAMINANTS REPORTED IN MILLIGRAMS PER KILOGRAM

ONLY CONTAMINANT LEVELS ABOVE RESIDUAL CONTAMINANT LEVELS SHOWN

CONTAM	DETECT	DEPTH	DATE
BEN	0.28	8-12	6/19/02
NAP	1	8-12	6/19/02

CONTAM	DETECT	DEPTH	DATE
DRO	540	0-4	6/19/02

CONTAM	DETECT	DEPTH	DATE
BEN	0.4	6-7	4/3/12

CONTAM	DETECT	DEPTH	DATE
BEN	0.18	4-8	6/19/02

CONTAM	DETECT	DEPTH	DATE
BEN	5.7	4-8	6/19/02
ETH	44	4-8	6/19/02
NAP	27	4-8	6/19/02
TOL	32	4-8	6/19/02
XYL	148	4-8	6/19/02
DRO	350	4-8	6/19/02

CONTAM	DETECT	DEPTH	DATE
BEN	13	8-12	6/19/02
ETH	41	8-12	6/19/02
NAP	19	8-12	6/19/02
TOL	75	8-12	6/19/02
XYL	164	8-12	6/19/02

CONTAM	DETECT	DEPTH	DATE
BEN	0.03	4-8	6/19/02

CONTAM	DETECT	DEPTH	DATE
BEN	L2	4-8	6/19/02
ETH	2.9	4-8	6/19/02
NAP	L7	4-8	6/19/02
XYL	10.3	4-8	6/19/02

CONTAM	DETECT	DEPTH	DATE
BEN	6.1	4-8	6/19/02
ETH	22	4-8	6/19/02
NAP	20	4-8	6/19/02
XYL	52.8	4-8	6/19/02

COMPLETED SOIL EXCAVATION/
SOIL REMOVED TO
OFF-SITE BIOTREATMENT

CONTAM	DETECT	DEPTH	DATE
BEN	1	8-12	6/19/02
NAP	2.3	8-12	6/19/02
XYL	5	8-12	6/19/02

THE ENVIRONMENTAL MANAGEMENT COMPANY LLC	
DATE: 04/28/12	DRAWN BY: TJM
LOCATION: 6633-39 W. NATIONAL AVE WEST ALLIS, WISCONSIN	

FIGURE 3.2
SOIL CONTAMINANT DISTRIBUTION
PAH

LEGEND

PROPERTY LINES

SCALE
30′ 0′ 30′ 60′
1″ = 60′

N

SPUR TRACK

ELECTRIC

6″ GAS MAIN

GAS & WATER

COMPLETED SOIL EXCAVATION/
SOIL REMOVED TO
OFF-SITE BIOTREATMENT

BLDG. S

BLDG. R

BLDG. Q

BLDG. P

BLDG. N

SB-11
SB-10
SB-19
SB-20
SB-24
SB-21
SB-7
SB-6
SB-5
SB-18
SB-40
SB-39
SB-32
SB-14
SB-13
SB-31
SB-8
SB-1
SB-4
SB-2
SB-41
SB-38
SB-33
SB-30
SB-15
SB-3
SB-42
SB-37
SB-34
SB-29
SB-35
SB-28
SB-26
SB-23
SB-22
SB-36
SB-27
SB-25
SB-45
SB-46
SB-43
SB-44
SB-16
SB-3 (#704)

SB-19

CONTAM	DETECT	DEPTH	DATE
B(a)A	0.0933	1-2	6/20/02
B(a)P	0.10	1-2	6/20/02
B(b)F	0.1	1-2	6/20/02

SB-24

CONTAM	DETECT	DEPTH	DATE
B(a)A	1.52	0.5-1.5	01/05/05
B(a)P	1.5	0.5-1.5	01/05/05
B(b)F	1.86	0.5-1.5	01/05/05
B(k)F	1.25	0.5-1.5	01/05/05
D(a,h)A	0.194J	0.5-1.5	01/05/05
I(1)P	0.413	0.5-1.5	01/05/05

SB-40

CONTAM	DETECT	DEPTH	DATE
B(a)A	0.393	2.5-3.5	03/13/06
B(a)P	0.421	2.5-3.5	03/13/06
B(b)F	0.852	2.5-3.5	03/13/06
D(a,h)A	0.061	2.5-3.5	03/13/06
I(1)P	0.213	2.5-3.5	03/13/06

SB-31

CONTAM	DETECT	DEPTH	DATE
B(a)A	0.095	4-5	03/13/06
B(a)P	0.071	4-5	03/13/06
B(b)F	0.264	4-5	03/13/06
D(a,h)A	0.021J	4-5	03/13/06

SB-41

CONTAM	DETECT	DEPTH	DATE
B(a)A	0.195	3-4	03/13/06
B(a)P	0.308	3-4	03/13/06
B(b)F	0.517	3-4	03/13/06
D(a,h)A	0.033J	3-4	03/13/06
I(1)P	0.192	3-4	03/13/06

SB-33

CONTAM	DETECT	DEPTH	DATE
B(a)A	0.395	4-5	03/13/06
B(a)P	0.446	4-5	03/13/06
B(b)F	1.070	4-5	03/13/06
D(a,h)A	0.104	4-5	03/13/06
I(1)P	0.239	4-5	03/13/06

SB-38

CONTAM	DETECT	DEPTH	DATE
B(a)A	0.859	1.5-2.5	03/13/06
B(a)P	0.842	1.5-2.5	03/13/06
B(b)F	1.230	1.5-2.5	03/13/06
D(a,h)A	0.088	1.5-2.5	03/13/06
I(1)P	0.383	1.5-2.5	03/13/06

SB-42

CONTAM	DETECT	DEPTH	DATE
B(a)A	0.083	3-4	03/13/06
B(a)P	0.081	3-4	03/13/06
B(b)F	0.253	3-4	03/13/06
D(a,h)A	0.019J	3-4	03/13/06
I(1)P	0.076	3-4	03/13/06
B(a)P	0.011J	5.5-6.5	03/13/06

SB-37

CONTAM	DETECT	DEPTH	DATE
B(a)A	0.105	2-3	03/13/06
B(a)P	0.081	2-3	03/13/06
B(b)F	0.181	2-3	03/13/06
D(a,h)A	0.030J	2-3	03/13/06

SB-23

CONTAM	DETECT	DEPTH	DATE
B(a)P	0.064J	0.5-1.5	01/05/05
B(b)F	0.096J	0.5-1.5	01/05/05

SB-25

CONTAM	DETECT	DEPTH	DATE
B(a)A	0.601	2-3	03/13/06
B(a)P	0.539	2-3	03/13/06
B(b)F	0.913	2-3	03/13/06
D(a,h)A	0.079	2-3	03/13/06
I(1)P	0.258	2-3	03/13/06

SB-45

CONTAM	DETECT	DEPTH	DATE
B(a)A	0.175	2-3	03/15/06
B(a)P	0.139	2-3	03/15/06
B(b)F	0.418	2-3	03/15/06
D(a,h)A	0.025J	2-3	03/15/06
I(1)P	0.121	2-3	03/15/06

SB-44

CONTAM	DETECT	DEPTH	DATE
B(a)A	0.466	2-3	03/15/06
B(a)P	0.408	2-3	03/15/06
B(b)F	0.772	2-3	03/15/06
D(a,h)A	0.039	2-3	03/15/06
I(1)P	0.259	2-3	03/15/06

PAH CONTAMINANT- NI-DC RCL

B(a)A	BENZO (a) ANTHRACENE	0.088
B(a)P	BENZO (a) PYRENE	0.0088
B(b)F	BENZO (b) FLUORANTHENE	0.088
B(k)F	BENZO (k) FLUORANTHENE	0.88
D(a,h)A	DIBENZ (a,h) ANTHRACENE	0.0088
I(1)P	INDENO (1,2,3-cd) PYRENE	0.088

ALL CONTAMINANTS REPORTED
IN MILLIGRAMS PER KILOGRAM

ONLY CONTAMINANT LEVELS ABOVE
RESIDUAL CONTAMINANT LEVELS SHOWN

W. MITCHELL STREET ℄

W. NATIONAL AVE ℄

SOUTH 66TH STREET ℄

78′ EAST

THE ENVIRONMENTAL MANAGEMENT COMPANY LLC

DATE: 04/28/12 | DRAWN BY: TJM

LOCATION: 6633-39 W. NATIONAL AVE, WEST ALLIS, WISCONSIN

FIGURE 3.3
SOIL CONTAMINANT DISTRIBUTION METALS

LEGEND

PROPERTY LINES

SCALE
30' 0' 30' 60'
1" = 60'

N

SPUR TRACK

W. MITCHELL STREET ℄

SOUTH 66TH STREET ℄

W. NATIONAL AVE ℄

ELECTRIC

6" GAS MAIN

GAS & WATER

ELECTRIC

6" GAS MAIN

BLDG. S

BLDG. R

BLDG. Q

BLDG. P

BLDG. N

COMPLETED SOIL EXCAVATION/ SOIL REMOVED TO OFF-SITE BIOTREATMENT

78' EAST

CONTAMINANT		RCL
ARS	ARSENIC	0.039
LEAD	LEAD	50

ALL CONTAMINANTS REPORTED IN MILLIGRAMS PER KILOGRAM

ONLY CONTAMINANT LEVELS ABOVE RESIDUAL CONTAMINANT LEVELS SHOWN

SB-19, SB-20, SB-21, SB-24, SB-32, SB-31, SB-40, SB-39, SB-41, SB-38, SB-42, SB-37, SB-33, SB-30, SB-34, SB-29, SB-35, SB-28, SB-23, SB-22, SB-36, SB-27, SB-26, SB-25, SB-45, SB-52, SB-51, SB-46, SB-43, SB-44, SB-50, SB-49, SB-48, SB-3 (#704), SB-47

SB-20
CONTAM	DETECT	DEPTH	DATE
ARS	1.9	5-6	10/19/04

SB-40
CONTAM	DETECT	DEPTH	DATE
ARS	2.3	7-8	03/13/06

SB-33
CONTAM	DETECT	DEPTH	DATE
ARS	1.6J	7-8	03/13/06

SB-42
CONTAM	DETECT	DEPTH	DATE
ARS	5.9	3-4	03/13/06

SB-34
CONTAM	DETECT	DEPTH	DATE
ARS	1.2	4-5	03/13/06

SB-37
CONTAM	DETECT	DEPTH	DATE
ARS	3.1	5.5-6.5	03/13/06

SB-26
CONTAM	DETECT	DEPTH	DATE
ARS	1.2	4-5	03/13/06

SB-27
CONTAM	DETECT	DEPTH	DATE
ARS	4.9	5.5-6.5	03/13/06

SB-50
CONTAM	DETECT	DEPTH	DATE
LEAD	<5	0-4	05/24/06
ARS	4.7	4-8	05/24/06

SB-52
CONTAM	DETECT	DEPTH	DATE
ARS	3.1	0-4	05/24/06
ARS	4.2	4-8	05/24/06
LEAD	7.0	0-4	05/24/06
LEAD	8.8	4-8	05/24/06

SB-51
CONTAM	DETECT	DEPTH	DATE
LEAD	7.0	0-4	05/24/06
LEAD	8.8	4-8	05/24/06

SB-46
CONTAM	DETECT	DEPTH	DATE
ARS	4.7J	2-4	04/04/06

SB-49
CONTAM	DETECT	DEPTH	DATE
ARS	3.3	0-4	05/24/06

SB-48
CONTAM	DETECT	DEPTH	DATE
ARS	5.3	4-8	05/24/06
LEAD	80	4-8	05/24/06

SB-3
CONTAM	DETECT	DEPTH	DATE
LEAD	484	1-2	09/12/01

SB-47
CONTAM	DETECT	DEPTH	DATE
ARS	5.1	1.5-2.5	04/04/06

LEGEND

PROPERTY LINES

SCALE

30′ 0′ 30′ 60′

1″ = 60′

THE ENVIRONMENTAL MANAGEMENT COMPANY LLC	
DATE: 04/29/12	DRAWN BY: TJM
LOCATION: 6633-39 W. NATIONAL AVE WEST ALLIS, WISCONSIN	

FIGURE 4
GROUNDWATER CONTAMINANT DISTRIBUTION

SPUR TRACK

BLDG. S

BLDG. R

BLDG. Q

BLDG. P

BLDG. N

6" GAS & WATER

ELECTRIC

6" GAS MAIN

ELECTRIC

W. MITCHELL STREET ℄

W. NATIONAL AVE ℄

SOUTH 66TH STREET ℄

TW-4

TW-3

TW-2

TW-1

MW-1

MW-2

MW-3

MW-4

MW-5

MW-6

MW-7

MW-8

MW-9

MW-8

CONTAM	DETECT	STANDARD	DATE
BEN	3,600	ES	05/14/03
BEN	370	ES	06/08/04

MW-7

CONTAM	DETECT	STANDARD	DATE
BEN	620	ES	05/14/03
BEN	340	ES	06/08/04

MW-5

CONTAM	DETECT	STANDARD	DATE
BEN	170	ES	05/14/03
BEN	280	ES	06/08/04

MW-9

CONTAM	DETECT	STANDARD	DATE
BEN	3,600	ES	05/14/03
ETH	1,100	ES	05/14/03
NAP	270	ES	05/14/03
BEN	3,180	ES	06/08/04
ETH	823	ES	06/08/04
NAP	224	ES	06/08/04

TW-3

CONTAM	DETECT	STANDARD	DATE
BEN	10.1	ES	04/05/12
BKbF	0.214	ES	04/05/12

MW-6

CONTAM	DETECT	STANDARD	DATE
BEN	2,900	ES	05/14/03
NAP	59	ES	05/14/03
BEN	2,110	ES	06/08/04
NAP	48.5J	ES	06/08/04

MW-3

CONTAM	DETECT	STANDARD	DATE
BEN	110	ES	05/14/03
NAP	42	ES	05/14/03
BEN	51	ES	06/08/04

COMPLETED SOIL EXCAVATION/ SOIL REMOVED TO OFF-SITE BIOTREATMENT

VOC	CONTAMINANT	ES
BEN	BENZENE	5
EBEN	ETHYLBENZENE	700
TBUT	tert-BUTYLBENZENE	-
NBUT	n-BUTYLBENZENE	-
SBUT	sec-BUTYLBENZENE	-
NBUT	n-BUTYLBENZENE	-
CHLM	CHLOROMETHANE	-
CHLE	CHLOROETHANE	400
PISO	p-ISOPROPYLTOLUENE	-
11DCA	1,1-DICHLOROETHANE	7
11DCE	1,1-DICHLOROETHENE	70
C12	cis-1,2-DICHLOROETHENE	70
ISOP	ISOPROPYLBENZENE	-
T12	trans-1,2-DICHLOROETHENE	100
NPRO	n-PROPYLBENZENE	-
TOL	TOLUENE	1000
TCE	TRICHLOROETHENE	5
TMB	TRIMETHYLBENZENES	480
VC	VINYL CHLORIDE	0.2
NAP	NAPHTHALENE	40
XYL	XYLENES	10000

ALL CONTAMINANTS SHOWN IN ug/L MICROGRAMS PER LITER

ES ENFORCEMENT STANDARD

ONLY ES EXCEEDANCES SHOWN

LEGEND

PROPERTY LINES

SCALE

30′ 0′ 30′ 60′

1″ = 60′

THE ENVIRONMENTAL MANAGEMENT COMPANY LLC	
DATE: 04/29/12	DRAWN BY: TJM
LOCATION: 6633-39 W. NATIONAL AVE WEST ALLIS, WISCONSIN	

FIGURE 5
DIRECTION OF GROUNDWATER FLOW

DIRECTION OF GROUNDWATER FLOW

93.16 ***MAY 15, 2003***

93.72 JUNE 8, 2004

SPUR TRACK

ELECTRIC

6" GAS MAIN

GAS & WATER

BLDG. S

BLDG. R

BLDG. Q

BLDG. P

BLDG. N

MW-1 **92.32** 92.00

MW-2

MW-3 **95.41** 95.31

MW-4 **94.77** 94.45

MW-5 **93.31** 92.60

MW-6

MW-7 93.72 **93.16**

MW-8 93.15 **93.60**

MW-9 93.94 **94.18**

W. MITCHELL STREET ℄

W. NATIONAL AVE ℄

SOUTH 66TH STREET ℄

LEGEND

PROPERTY LINES

EXCAVATION SOIL SAMPLES

SCALE
30′ 0′ 30′ 60′
1″ = 60′

THE ENVIRONMENTAL MANAGEMENT COMPANY LLC	
DATE: 04/29/12	DRAWN BY: TJM
LOCATION: 6633-39 W. NATIONAL AVE WEST ALLIS, WISCONSIN	

FIGURE 6
EXCAVATION SOIL SAMPLE LOCATIONS

SPUR TRACK

ELECTRIC

6" GAS MAIN

GAS & WATER

LF-1
LF-2
LF-3

EX-8 EX-6 EX-5 EX-3 EX-2 EX-9 EX-7 EX-4 EX-1

LF-10 LF-8 LF-11 LF-12 LF-7 EXC.BOT-2 N END

MID S LF-9 LF-17 MID EXC.BOT-1

LF-13 LF-14 LF-18 LF-5 LF-6 LF-15 LF-20 LF-19 LF-21 LF-16 NE LF-4

COMPLETED SOIL EXCAVATION/
SOIL REMOVED TO
OFF-SITE BIOTREATMENT

W. MITCHELL STREET ℄

W. NATIONAL AVE ℄

SOUTH 66TH STREET ℄

THE ENVIRONMENTAL MANAGEMENT COMPANY LLC	
DATE: 04/29/12	DRAWN BY: TJM
LOCATION: 6633-39 W. NATIONAL AVE WEST ALLIS, WISCONSIN	

FIGURE 7
AREAS AND DEPTH INTERVALS OF SOIL CONTAMINATION ABOVE RCL'S

LEGEND

PROPERTY LINES

SCALE
30' 0' 30' 60'
1" = 60'

N

SPUR TRACK

ELECTRIC
6" GAS MAIN
GAS & WATER

SB-11
SB-10

SB-12 0'-3'
1-2
0'-1.5' SB-19
SB-20 3'-6'
0.5-1.5
2.5-4
SB-24 0'-4'
2'-5'
SB-9
SB-21 1.5'-2.5'

BLDG. S
BLDG. R
BLDG. Q
BLDG. P
BLDG. N

TW-4
TW-3
TW-2
TW-1

MW-5
MW-8
MW-7
MW-9
MW-3
MW-4
MW-6

SB-18 0'-2'
2.5-3.5
7-8
SB-40
2.5'-4'
5.5-6.5
1.5'-3'
SB-39
4'-5.5'
SB-32
5.5-6.5
2.5'-5.5'
6-7
SB-7
SB-6
SB-5
SB-14
2'-4.5'
SB-31 3.5'-5.5'
4-5
6-7
SB-13
SB-8
SB-1
SB-4
SB-2
SB-15 2'-5'
NONE'
SB-41 3-4
5.5-6.5
SB-38 NONE'
1.5-2.5
5.5-6.5
SB-33 3'-6'
4-5
7-8
SB-30 3'-4.5'
5.5-6.5
NONE'
SB-42 3-4
5.5-6.5
SB-37 2'-3'
2-3
5.5-6.5
SB-34 3.5'-4'
4-5
5.5-6.5
SB-29 3'-4'
5.5-6.5
4'-5'

0.5-1.5
4-5
SB-35 NONE'
SB-28 2'-3.5'
5.5-6.5
SB-26 2'-4'
4-5
5.5-6.5
SB-23 0.5'-1.5'
1-4
1'-3' SB-22
SB-36 NONE'
1-2
5-6
SB-27 NONE'
3.5-5.0
5.5-6.5
SB-25 2'-3'
2-3
6-7
SB-16 NONE'
SB-17 NONE'
2-3
5.5-6.5
SB-45
NONE'
SB-44
NONE'
2-3
6-7
SB-43
NONE'
4-8
0-4
SB-3
(#704)
1-2
2-3
5.5-6.5
SB-46

AREAS WITH NO CONTAMINATED SOIL

- 1-2 / 4-5 = DEPTH INTERVALS OF SOIL SAMPLES ANALYZED
- ☐ = NO CONTAMINANT DETECTIONS ABOVE ANY RCL
- 2'-3' = DEPTH INTERVAL OF SOIL LAYER CONTAINING FOUNDRY SAND
- DEPTH INTERVALS OF VOC AND LEAD CONTAMINATION SHOWN ONLY IF LEVEL EXCEEDS AN RCL

COMPLETED SOIL EXCAVATION/
SOIL REMOVED TO
OFF-SITE BIOTREATMENT

AREA WITH NO SOIL CONTAMINATION
ABOVE ANY RCL

78' EAST
SB-47

W. MITCHELL STREET ℄
SOUTH 66TH STREET ℄
W. NATIONAL AVE ℄