



August 27, 2021

Sent Via E-Mail

Erika Biemann
American Transmission Company, LLC
W234 N2000 Ridgeview Parkway Court
Pewaukee, WI 53188

Jeffery Jaeckels
Madison Gas & Electric
623 Railroad Street
Madison, WI 53703

KEEP THIS LEGAL DOCUMENT WITH YOUR PROPERTY RECORDS

SUBJECT: Case Closure with Continuing Obligations
ATC Transformer Fire- MG&E Blount Substation
722 East Main Street, Madison, WI 53703
BRRTS #: 02-13-584085, FID #: 113435520

Dear Ms. Biemann and Mr. Jaeckels:

The Wisconsin Department of Natural Resources (DNR) is pleased to inform you that the ATC Transformer Fire-MG&E Blount Substation case identified above met the requirements of Wisconsin Administrative (Wis. Admin.) Code chs. NR 700 to 799 for case closure with continuing obligations (COs). COs are legal requirements to address potential exposure to remaining contamination. No further investigation or remediation is required at this time for the reported hazardous substance discharge and/or environmental pollution.

However, you, future property owners and occupants of the property must comply with the COs as explained in this letter, which may include maintaining certain features and notifying the DNR and obtaining approval before taking specific actions. You must provide this letter and all enclosures to anyone who purchases, rents or leases this property from you.

This case closure decision is issued under Wis. Admin. Code chs. NR 700 to 799 and is based on information received by the DNR to date. The DNR reviewed the case closure request for compliance with state laws and standards and determined the case closure request met the notification requirements of Wis. Admin. Code ch. NR 725, the response action goals of Wis. Admin. Code § NR 726.05(4), and the case closure criteria of Wis. Admin. Code §§ NR 726.05, 726.09 and 726.11, and Wis. Admin. Code ch. NR 140.

The ATC Transformer Fire- MG&E Blount Substation site was investigated for a discharge of hazardous substances and/or environmental pollution associated with a fire that occurred on July 19, 2019. American Transmission Company, LLC (ATC) had a 138 kV transformer explode at the MGE Blount Substation in downtown Madison. The ruptured transformer released a portion of the approximately 17,000 gallons of mineral oil (a coolant) that it contained and caused a large fire. The Madison Fire Department (MFD) and Truax Fire

Case Closure of ATC Transformer Fire – MG&E Blount Substation
BRRTS #: 02-13-584085

Department (TFD) used aqueous film forming foam (AFFF) fire suppressant agents for firefighting that contained perfluoroalkyl and polyfluoroalkyl substances (PFAS). Case closure is granted for PFAS compounds and mineral oil as documented in the case file. The site investigation and/or remedial action addressed soil, groundwater, and surface water. The remedial actions consisted of excavation and off-site disposal of approximately 1,000 tons of shallow soils and recovery and treatment of approximately 165,000 gallons of impacted fire-fighting water that was pumped from storm sewers and vaults in the vicinity of the substation. Contamination remains in soil at the site.

The case closure decision and COs required were based on the current use of the site for industrial purposes. The site is currently zoned industrial. Based on the land use and zoning, the site meets the industrial use classification under Wis. Admin. Code § NR 720.05(5) for application of residual contaminant levels in soil.

SUMMARY OF CONTINUING OBLIGATIONS

COs are applied at the following locations:

ADDRESS (CITY, WI)	COS APPLIED
722 East Main Street, Madison (Source Property)	-Residual Soil Contamination -Structural Impediment

CLOSURE CONDITIONS

Closure conditions are legally required conditions which include both COs and other requirements for case closure (Wis. Stat. § 292.12(2)). Under Wis. Stat. § 292.12(5), you, any subsequent property owners and occupants of the property must comply with the closure conditions as explained in this letter. The property owner must notify occupants for any condition specified in this letter under Wis. Admin. Code §§ NR 726.15(1)(b) and NR 727.05(2). If an occupant is responsible for maintenance of any closure condition specified in this letter, you and any subsequent property owner must include the condition in the lease agreement under Wis. Admin. Code § NR 727.05(3) and provide the maintenance plan to any occupant that is responsible.

DNR staff may conduct periodic pre-arranged inspections to ensure that the conditions included in this letter met (Wis. Stat. § 292.11(8)). If these requirements are not followed, the DNR may take enforcement action under Wis. Stat. ch. 292 to ensure compliance with the closure conditions.

SOIL

Continuing Obligations to Address Soil Contamination

Residual Soil Contamination (Wis. Admin. Code chs. NR 718, NR 500 to 599, and § NR 726.15(2)(b) and Wis. Stat. ch. 289)

Soil contamination remains as indicated on the enclosed map (Figure B.2.b., Residual Soil Contamination, July 20, 2020). If soil in the location(s) shown on the map is excavated in the future, the property owner or right of way holder at the time of excavation must sample and analyze the excavated soil. If sampling confirms that contamination is present, the property owner or right of way holder at the time of excavation will need to determine if the material is considered solid waste and ensure that any storage, treatment or disposal complies

with applicable standards and rules. Contaminated soil may be managed under Wis. Admin. Code ch. NR 718 with prior DNR approval.

Structural Impediment (Wis. Stat. § 292.12(2)(b), Wis. Admin. Code §§ NR 726.15(2)(f), NR 727.07(2))

The existing substation structures and subsurface grounding grid present below the entire property made complete site investigation and/or remediation of the contamination on this property impracticable. Upon removal of the structural impediment, the property owner shall investigate the degree and extent of PFAS contamination obstructed by the structural impediment. If contamination is found at that time, the property owner shall remediate the contamination in accordance with Wis. Admin. Code chs. NR 700 to 799.

OTHER CLOSURE REQUIREMENTS

Pre-Approval Required for Well Construction (Wis. Admin. Code § NR 812.09(4)(w))

DNR approval is required before well construction or reconstruction for all sites identified as having residual contamination and/or COs. This requirement applies to private drinking water wells and high capacity wells. To obtain approval, the property owner is required to complete and submit Form 3300-254, Continuing Obligations/Residual Contamination Well Approval Application, to the DNR Drinking and Groundwater program's regional water supply specialist. A well driller can help complete this form. The form can be obtained online at dnr.wi.gov, search "3300-254." Additional casing may be necessary to help prevent contamination of the well.

General Wastewater Permits for Construction-related Dewatering Activities (Wis. Admin. Code ch. NR 200)

The DNR's Water Quality Program regulates point source discharges of contaminated water, including discharges to surface waters, storm sewers, pits, or to the ground surface. This includes discharges from construction-related dewatering activities, including utility work and building construction.

If the property owner or any other person plans to conduct such activities, that person must contact the Water Quality Program and, if necessary, apply for the required discharge permit. If residual soil or groundwater contamination is likely to affect water collected in a pit/trench that requires dewatering, a general permit for discharge of *Contaminated Groundwater from Remedial Action Operations* may be needed. If water collecting in a pit/trench that requires dewatering is expected to be free of pollutants other than suspended solids, oil and grease, a general permit for pit/trench *Dewatering Operations* may be needed. Additional information can be obtained by visiting the DNR website at "dnr.wi.gov," search "wastewater general permits."

DNR NOTIFICATION AND APPROVAL REQUIREMENTS

Certain activities are limited at closed sites to maintain protectiveness to human health and the environment. The property owner is required to notify the DNR at least 45 days before and obtain approval from the DNR prior to taking the following actions (Wis. Admin. Code §§ NR 727.07, NR 726.15 (2), Wis. Stat. § 292.12(6)).

- Before removing a structural impediment

The DNR may require additional investigation and/or cleanup actions if necessary, to be protective of human health and the environment. The case may be reopened under Wis. Admin. Code § NR 727.13 if additional information indicates that contamination on or from the site poses a threat, or for a lack of compliance with a CO or closure requirement.

SUBMITTALS AND CONTACT INFORMATION

Site, case-related information and DNR contacts can be found online in the Bureau for Remediation and Redevelopment Tracking System (BRRTS) on the Web (BOTW); go to dnr.wi.gov and search “BOTW.” Use the BRRTS ID # found at the top of this letter. The site can also be found on the map view, Remediation and Redevelopment Sites Map (RRSM) by searching “RRSM.”

Send written notifications to the DNR using the RR Program Submittal Portal at dnr.wi.gov, search “RR submittal portal” (<https://dnr.wi.gov/topic/Brownfields/Submittal.html>). Questions on using this portal can be directed to me or to the environmental program associate (EPA) for the regional DNR office. Visit dnr.wi.gov, search “RR contacts” and select the EPA tab (<https://dnr.wi.gov/topic/Brownfields/Contact.html>).

CLOSING

The DNR appreciates your efforts to restore the environment at this site. If you have any questions regarding this letter, please contact me at (608) 219-0112 or steven.l.martin@wisconsin.gov.

Sincerely,



Steven L. Martin, P.G.
South-Central Region Team Supervisor
Remediation & Redevelopment Program

Attachments:

Figure B.2.b., Residual Soil Contamination, July 20, 2020

cc. Leo Linnemanstons, AECOM, linnemanstons@aecom.com

Additional Resources:

The DNR fact sheets listed below can be obtained by visiting the DNR website at “dnr.wi.gov,” search the DNR publication number.

Guidance for Electronic Submittals for the Remediation and Redevelopment Program (RR-690)

Continuing Obligations for Environmental Protection (RR-819)

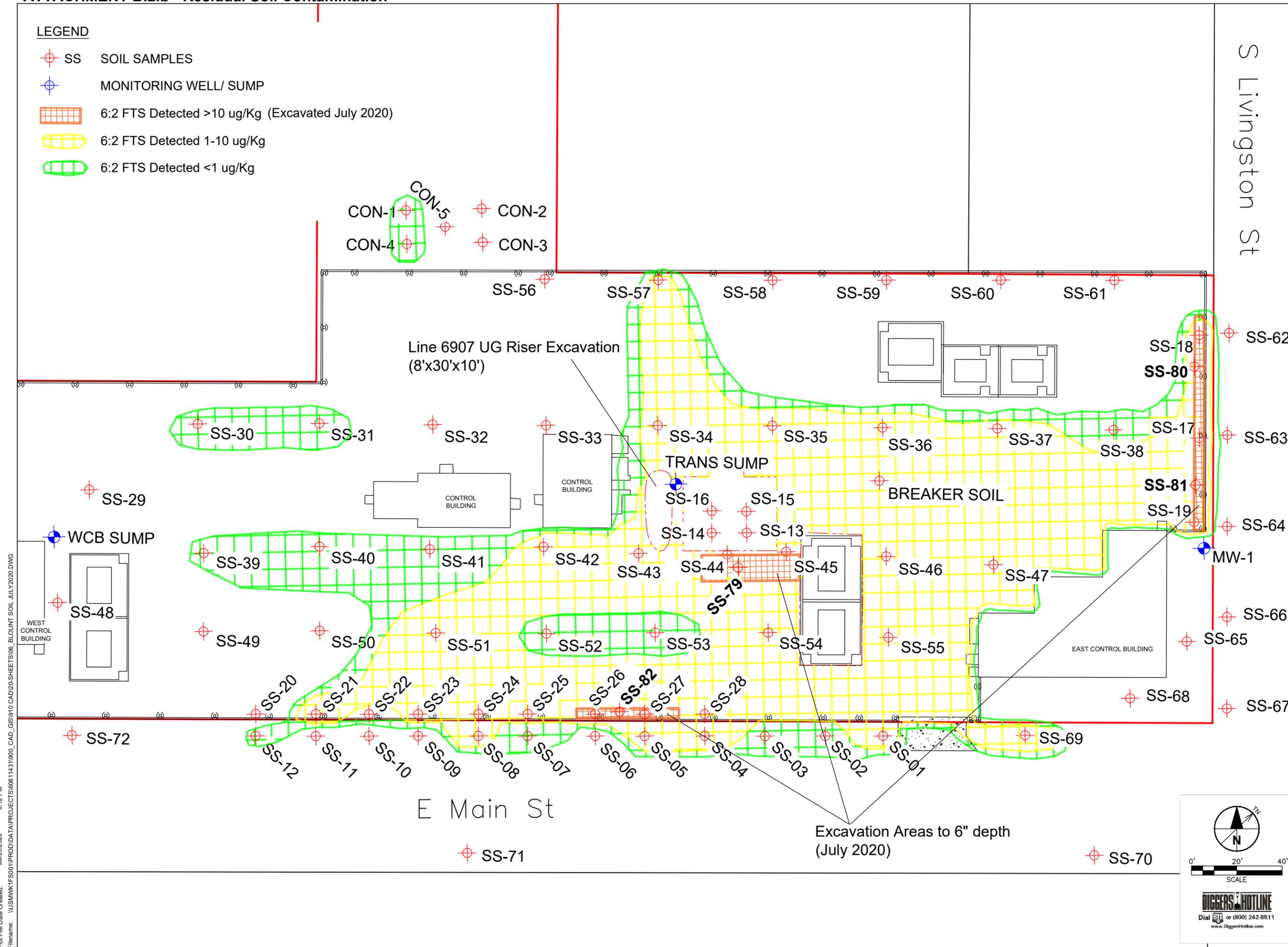
Environmental Contamination and Your Real Estate (RR-973)

Post-Closure Modifications: Changes to Property Conditions after a State-Approved Cleanup (RR-987)

ATTACHMENT B.2.b - Residual Soil Contamination

LEGEND

-  SS SOIL SAMPLES
-  MONITORING WELL/ SUMP
-  6:2 FTS Detected >10 ug/Kg (Excavated July 2020)
-  6:2 FTS Detected 1-10 ug/Kg
-  6:2 FTS Detected <1 ug/Kg



PROJECT
 ATC BLOUNT
 SUBSTATION
 RESPONSE AND
 CLEANUP
 MADISON, WISCONSIN

CLIENT
 AMERICAN
 TRANSMISSION CO.

2 FEN OAK CT.
 MADISON, WI 53718
 (866) 899-3204 tel
 www.atcllc.com

CONSULTANT
 AECOM
 1555 N RIVERCENTER DR.
 MILWAUKEE, WI 53212
 (414) 944-6080 tel
 www.aecom.com

REGISTRATION

ISSUE/REVISION

I/R	DATE	DESCRIPTION

KEY PLAN

PROJECT NUMBER

60611431

DRAWING TITLE

PFAS SOIL REMOVAL AREAS

DRAWING NUMBER

Figure 3

SHEET NUMBER

Plotted By: joel.mackinney
 Plot File Date Created: Jul/23/2020 6:12 PM
 Filename: \\USMVK\F5001\PROJ\DATA\PROJECTS\60611431\800_CAD_GIS\910_CAD\20-SHEETS\06_BLOUNT SOIL JULY 2020.DWG



May 20, 2021

Sent Via E-Mail

Erika Biemann
American Transmission Company, LLC
W234 N2000 Ridgeview Parkway Court,
Pewaukee, WI 53188

Subject: Remaining Actions Needed for Case Closure under Wis. Adm. Code chs. NR 700-754
ATC Transformer Fire – MG&E Blount Substation
722 East Main Street, Madison
DNR BRRTS #: 02-13-584085

Dear Ms. Biemann:

On May 7, 2021, the Department of Natural Resources (Department) reviewed your request for closure of the case described above. The Department reviews environmental remediation cases for compliance with applicable local, state and federal laws. The following actions are required prior to the DNR granting you case closure in compliance with Wis. Stat. ch. 292 and Wis. Adm. Code chs. NR 700-754. Upon completion of these actions, closure approval will be provided. Pursuant to Wis. Adm. Code § NR 726.09 (2) (g), provide this information to the DNR within 120 days of the date of this letter.

Remaining Actions Needed

Monitoring Well Sealing

Two monitoring wells (MW-1 and TransSump) at the site must be properly filled and sealed in accordance with Wis. Adm. Code ch. NR 141. Documentation of filling and sealing for all wells and boreholes must be submitted to me on DNR Form 3300-005. To download the form, go online at dnr.wi.gov [and search "form 3300-005"](#).

Documentation

When the required actions are completed, submit the appropriate documentation within 120 days of the date of this letter, to verify completion. At that point, your closure request can be approved and your case can be closed. The submittal of both an electronic and paper copy are required in accordance with Wis. Adm. Code s. NR 726.09 (1). See *Guidance for Electronic Submittals for the Remediation and Redevelopment Program, RR- 690* for additional information. To view the document online, go to dnr.wi.gov and search "RR 690".

Listing on Database

This site will be listed on the DNR's Bureau for Remediation and Redevelopment Tracking System on the Web (BOTW) and RR Sites Map, to provide public notice of remaining contamination and continuing obligations. The continuing obligations will be specified in the final case closure approval letter sent to you. Information that was submitted with your closure request application will be included on BOTW, located online at dnr.wi.gov.

In Conclusion

We appreciate your efforts to restore the environment at this site. If you have any questions regarding this letter, please contact me by telephone at 608-293-0112 or via e-mail at stevenl.martin@wisconsin.gov.

Sincerely,

Steven L. Martin, P.G.
South Central Region Team Supervisor
Remediation & Redevelopment Program

cc: Leo Linnemanstons, AECOM

SUBMIT AS UNBOUND PACKAGE IN THE ORDER SHOWN

Notice: Pursuant to ch. 292, Wis. Stats., and chs. NR 726 and 746, Wis. Adm. Code, this form is required to be completed for case closure requests. The closure of a case means that the Department of Natural Resources (DNR) has determined that no further response is required at that time based on the information that has been submitted to the DNR. All sections of this form must be completed unless otherwise directed by the Department. DNR will consider your request administratively complete when the form and all sections are completed, all attachments are included, and the applicable fees required under ch. NR 749, Wis. Adm. Code, are included, and sent to the proper destinations. 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.). Incomplete forms will be considered "administratively incomplete" and processing of the request will stop until required information is provided.

Site Information			
BRRTS No.	VPLE No.		
02-13-584085	02-13-584085		
Parcel ID No.			
070913303065			
FID No.	WTM Coordinates		
113435520	X	570852	Y 289861
BRRTS Activity (Site) Name	WTM Coordinates Represent:		
ATC Transformer Fire -MG&E Blount Substation	<input checked="" type="checkbox"/> Source Area <input type="checkbox"/> Parcel Center		
Site Address	City	State	ZIP Code
722 East Main Street	Madison	WI	53703
Acres Ready For Use	3.12		

Responsible Party (RP) Name			
Ms. Erika Biemann			
Company Name			
American Transmission Company, LLC			
Mailing Address	City	State	ZIP Code
W234 N2000 Ridgeview Parkway Court	Pewaukee	WI	53188
Phone Number	Email		
(262) 506-7602	ebiemann@atcllc.com		

Check here if the RP is the owner of the source property.

Environmental Consultant Name			
Mr. Leo B. Linnemanstons			
Consulting Firm			
AECOM Technical Services, Inc.			
Mailing Address	City	State	ZIP Code
1350 Deming Way, Suite 100	Middleton	WI	53562
Phone Number	Email		
(608) 828-8208	leo.linnemanstons@aecom.com		

Fees and Mailing of Closure Request

- Send a copy of page one of this form and the applicable ch. NR 749, Wis. Adm. Code, fee(s) to the DNR Regional EPA (Environmental Program Associate) at <http://dnr.wi.gov/topic/Brownfields/Contact.html#tabx3>. Check all fees that apply:

<input checked="" type="checkbox"/> \$1,050 Closure Fee	<input checked="" type="checkbox"/> \$300 Database Fee for Soil
<input type="checkbox"/> \$350 Database Fee for Groundwater or Monitoring Wells (Not Abandoned)	Total Amount of Payment \$ <u>\$1,350.00</u>
	<input type="checkbox"/> Resubmittal, Fees Previously Paid
- Send one paper copy and one e-copy on compact disk of the entire closure package to the Regional Project Manager assigned to your site. Submit as *unbound, separate documents* in the order and with the titles prescribed by this form. For electronic document submittal requirements, see <http://dnr.wi.gov/files/PDF/pubs/rr/RR690.pdf>.

Site Summary

If any portion of the Site Summary Section is not relevant to the case closure request, you must fully explain the reasons why in the relevant section of the form. All information submitted shall be legible. Providing illegible information will result in a submittal being considered incomplete until corrected.

1. General Site Information and Site History

- A. Site Location: Describe the physical location of the site, both generally and specific to its immediate surroundings.
The site is located in the historic industrial downtown on the isthmus in the City of Madison. The site occupies the majority of the City block bounded by East Washington Avenue, South Blount Street, East Main Street, and South Livingston Street. Commercial properties are located to the north and east, while industrial properties are located to the south and west.
- B. Prior and current site usage: Specifically describe the current and historic occupancy and types of use.
The site is currently an electrical substation and has been since the 1950s. During the 1940s and 1950s, a portion of the site was used for bulk coal storage for the adjacent electric power plant. Prior to the electric power plant, the site was part of a manufactured gasification plant (MGP) with a large gas holder adjacent to the subject area of this closure application.
- C. Current zoning (e.g., industrial, commercial, residential) for the site and for neighboring properties, and how verified (Provide documentation in Attachment G).
The site is zoned as a Traditional Employment District (TE) per the City of Madison. Based on communications, with the the City of Madison Zoning and Planning Department, the City does not consider this property presently suitable for residential or commercial use.
- D. Describe how and when site contamination was discovered.
The contamination addressed in this closure application was identified on July 19, 2019, when the City of Madison Fire Department discharged Aqueous Film Forming Foam (AFFF) to suppress an electrical transformer fire at the site. Based on information from the manufacturer, the AFFF product contained at least one of the Per- and Polyfluoroalkyl Substances (PFAS).
- E. Describe the type(s) and source(s) or suspected source(s) of contamination.
The release of PFAS contamination was as follows:
- * 120,000 gallons of City of Madison municipal water for fire suppression (only estimated, not metered)
 - * 55 gallons of AFFF from the MFD for fire suppression
 - * 4 gallons of AFFF from the Truax FD for fire suppression
- The 120,000 gallons of water mixed with AFFF overwhelmed the secondary containment berm surrounding the transformer and displaced the mineral oil across the eastern half of the substation causing soil staining. The AFFF mixture was observed flowing out of the substation at the nearby Main St entry gate and into the City street where the MFD directed flow into a nearby storm catch basin. Because the storm sewers in the area are generally surcharged by nearby surface water bodies, the AFFF mixture appeared to have only displaced into the storm system and did not flow further.
- F. Other relevant site description information (or enter Not Applicable).
This site is an existing closed Environmental Repair Program (ERP) site and is tracked in the WDNR's Bureau for Remediation and Redevelopment Tracking System (BRRTS) as 02-13-001567 Madison Gas & Electric Manufactured Gas Plant (MGP) site.
- The WDNR case file for the MGP contamination was opened in 1987 and was closed in June 2005 with deed restrictions related to residual soil contamination on the two affected parcels recorded as documents 4051774 and 4051775 with the Dane County Register of Deeds. Soil samples collected at the completion of remediation activities, prior to closure, contained PVOCs and PAHs greater than one or more applicable residual contaminant levels (RCLs). The deed restrictions require that the contaminated soil remain capped and that WDNR approve activities that might disturb the cap or expose the contaminated soil.
- The deed restriction associated with tank GH1, document 4051774, references parcel number 251/0709-133-0307-3; however, this parcel was retired on February 11, 2011, and the described real estate (Lots 8, 9, 10, 11, 12, and part of Lot 7, Block 132) have been incorporated into parcel 251/0709-133-0306-5. The deed restriction associated with tanks GH2 and GH3, document 4051775, references parcel number 251/0709-133-0306-5; however, this parcel is incorrect and the described real estate (Lots 8, 9, 10, and 11, Block 131) is part of parcel 251/0709-133-0401-3.
- G. List BRRTS activity/site name and number for BRRTS activities at this source property, including closed cases.
02-13-001567 Madison Gas & Electric Manufactured Gas Plant (MGP)
- H. List BRRTS activity/site name(s) and number(s) for all properties immediately adjacent to (abutting) this source property.
02-13-001567 Madison Gas & Electric Manufactured Gas Plant (MGP): Closed ERP Site
03-13-099172 Amoco #15568: Closed LUST Site
03-13-279262 Bosben Partnership Property: Closed LUST Site
03-13-116690 Madison Gas & Electric: Closed LUST Site

2. General Site Conditions

A. Soil/Geology

- i. Describe soil type(s) and relevant physical properties, thickness of soil column across the site, vertical and lateral variations in soil types.
Pleistocene glacial deposits (Lacustrine Plain) are present below the surficial fill soils on the subject property. These glacial deposits generally consist of fine-grained silt and clay with sand present near former shorelines and near stream inlets. These areas are often flat, poorly drained areas with peat accumulations (Michelson, 1983).
- ii. Describe the composition, location and lateral extent, and depth of fill or waste deposits on the site.
Based on historical information and recent observations during subgrade construction at the substation, the site is completely covered by historic fill materials including sand, silts and gravel to a depth of 4 to 10 feet below ground surface most of which is contaminated from the MGP site. Because of the long heavy industrial use of the site, the subsurface also contains numerous current and abandoned concrete and steel foundations, utility lines, and other former structures.
- iii. Describe the depth to bedrock, bedrock type, competency and whether or not it was encountered during the investigation.
The underlying bedrock formation is mapped as Cambrian sandstone underlain by the Prairie Du Chien, St. Peter Sandstone and Platteville, Decorah and Galena Formations. Bedrock was not encountered during this investigation but is anticipated to be present at depths ranging between 100 and 150 feet below existing ground surface.
- iv. Describe the nature and locations of current surface cover(s) across the site (e.g., natural vegetation, landscaped areas, gravel, hard surfaces, and buildings).
The surface soil within the substation walls consists of an approximately one-foot thickness of well-graded crushed gravel. The majority of the surface is developed with electrical substation equipment. Four small control buildings are also located on the property.

B. Groundwater

- i. Discuss depth to groundwater and piezometric elevations. Describe and explain depth variations, including high and low water table elevation and whether free product affects measurement of water table elevation. Describe the stratigraphic unit(s) where water table was found or which were measured for piezometric levels.
During the site investigation, the depth to groundwater at the site was observed to be between 3.3 and 5.3 ft below ground surface. Groundwater levels appear to respond rapidly to precipitation events that also affect the nearby lake levels.

Because of relatively easier infiltration through the substation gravel surface compared to the pavement of the surrounding area, shallow groundwater at the substation is likely slightly higher than the surrounding area. The City's storm sewer system is regularly surcharged throughout this area of the isthmus, which through granular backfill and leaky sewer pipes provides direct communication with the area's surface water bodies. Thus, changes in lake levels quickly result in changes in water levels across the isthmus.

During the period of sample collection for this investigation (July 2019 to October 2020), the City's storm sewer system was generally surcharged such that water samples could be collected from catchment basins. Between approximately December 2019 and June 2020, lake levels were lower and catch basins did not have enough water for sampling.
- ii. Discuss groundwater flow direction(s), shallow and deep. Describe and explain flow variations, including fracture flow if present.
Regional groundwater flow in the area considered to be across the isthmus from Lake Mendota (NWL 849 ft MSL) to the southeast toward Lake Monona (NWL 844 ft MSL). Based on the groundwater observations made during the MGP investigation, the shallow groundwater flow direction locally was not distinctly discernible across the site, which led to a general interpretation that shallow groundwater flow is radially away from the substation but with such a flat gradient that negligible migration was occurring.
- iii. Discuss groundwater flow characteristics: hydraulic conductivity, flow rate and permeability, or state why this information was not obtained.
Because of the heterogeneous nature of the fill materials and occurrence of preferential flow paths along buried utilities, specific measurements of hydraulic conductivity and permeabilities were not taken at the site. Based on the generally granular nature of the fill materials, the hydraulic conductivity and permeability would be allow for modest flow rates if a sufficient hydraulic gradient were present. However, the hydraulic gradients at the water table in the fill are relatively flat, so flow rates are expected to be low.
- iv. Identify and describe locations/distance of potable and/or municipal wells within 1200 feet of the site. Include general summary of well construction (geology, depth of casing, depth of screened or open interval).
The City of Madison Water Utility Well #24 is located approximately 800 feet north of the site at 101 N Livingston Street. Based on information provided in its wellhead protection plan, Well #24 is cased to a depth of 235 feet (120 feet into bedrock). In addition, MG&E owns a high capacity well (Permit #3022) located one block away that is reportedly used for boiler water supply.

3. Site Investigation Summary

A. General

- i. Provide a brief summary of the site investigation history. Reference previous submittals by name and date. Describe site investigation activities undertaken since the last submittal for this project and attach the appropriate documentation in Attachment C, if not previously provided.

The following lists memoranda and reports previously submitted to the WDNR as part of this investigation:

1. Preliminary Review of Initial PFAS Laboratory Data, ATC Blount Transmission Substation, Madison, Wisconsin. July 30, 2019.
2. Preliminary Summary of Environmental Laboratory Data, ATC Blount Transmission Substation, Madison, Wisconsin. September 9, 2019.
3. Operation & Maintenance Plan and Manual, American Transmission Company Blount Substation Fire Suppression Water Treatment and Discharge, Madison, Wisconsin. October 3, 2019.
4. Site Investigation Work Plan, ATC Blount Transmission Substation, Madison Wisconsin. October 15, 2019.
5. Start-up Sampling Results - Fire Suppression Water Treatment System, ATC Blount Transmission Substation, Madison, Wisconsin. October 21, 2019.
6. Confirmation Soil Results for Containment Pit Area, ATC Blount Transmission Substation, Madison, Wisconsin. November 12, 2019.
7. Operation and Monitoring Summary - Fire Suppression Water Treatment System, ATC Blount Transmission Substation, Madison, Wisconsin. December 9, 2019.
8. Interim Subsurface PFAS Investigation Results and Soil Removal Action, ATC Blount Transmission Substation, Madison, Wisconsin. February 4, 2020.
9. Soil Management Plan for Line 6907 Underground Repairs, ATC Blount Transmission Substation, Madison, Wisconsin. March 16, 2020.
10. Interim Surface Soil PFAS Results and Groundwater RCL Discussion, ATC Blount Transmission Substation, Madison, Wisconsin. June 10, 2020.
11. Site Investigation Report, ATC Blount Transmission Substation, Madison, Wisconsin. December 2020.

For additional details, including laboratory reports, please refer to previous submittals.

- ii. Identify whether contamination extends beyond the source property boundary, and if so describe the media affected (e.g., soil, groundwater, vapors and/or sediment, etc.), and the vertical and horizontal extent of impacts.
Based on the site investigation, PFAS impacts to soil and groundwater related to the AFFF discharged for fire suppression at the site appear to be limited to the site. Apparent unrelated PFAS impacts were detected in the City of Madison rights-of-way in street terraces surrounding the site. Soil PFAS impacts appeared to be limited to the ground surface to a depth of less than one foot, except in the immediate vicinity of the former transformer where PFAS impacts appear to have extended to the water table (approximately depth of 3 to 5 ft below ground surface). During construction for the replacement transformer, these impacted soils were excavated and properly disposed offsite at a licensed facility.
- iii. Identify any structural impediments to the completion of site investigation and/or remediation and whether these impediments are on the source property or off the source property. Identify the type and location of any structural impediment (e.g., structure) that also serves as the performance standard barrier for protection of the direct contact or the groundwater pathway.

The site has several impediments limiting the ability to conduct subsurface investigations. The presence of energized electrical equipment across the site both above and below ground surface limit the locations where borings or excavations can be conducted. In addition, because of the long history of industrial use, the site is known to contain numerous abandoned buried concrete and steel foundations and conduits that are also impediments to subsurface investigations.

None of these impediments are considered to serve as performance standard barriers for the protection of direct contact or the groundwater pathway for PFAS impacts.

B. Soil

- i. Describe degree and extent of soil contamination. Relate this to known or suspected sources and known or potential receptors/migration pathways.
Ninety-two (92) target soil samples (duplicates not included) were collected and analyzed for PFAS during this investigation. As expected, the highest concentrations observed during the investigation were soils immediately surrounding the transformer, where the AFFF was discharged. Concentrations decrease radially from the transformer, with slightly elevated values in areas where the overflow of the AFFF mixture was directed. PFAS was detected in all samples, including background type samples from the surrounding City rights-of-way. Low levels of PFAS are known to be present widespread in the environment around the City of Madison, and it was not unexpected to find detections across all the samples.

Using 6:2 FTS (the primary component of both AFFF products) as an indicator compound, the horizontal extent of AFFF impacts to soil was delineated. Residual PFAS impacts from the AFFF are primarily within the substation; however, low levels of the indicator compound were found outside the substation along the south terrace and possibly one sample outside to the east of the substation. Soil results also appear to indicate that PFOA and PFOS are detected

more often and in greater concentration outside the substation and are probably not connected to the AFFF application in July 2019.

Extensive soil removals were undertaken at the site since the fire. All the areas where 6:2 FTS was detected in excess of 10 ug/kg were excavated. The most significant mass removal was in the immediate vicinity of the former transformer where the AFFF application was concentrated (total PFAS > 100 ug/kg) and the remedial excavations were the largest (by volume). Additional mass removal was achieved by removing visually stained surface soils (total PFAS >10 ug/kg) around the inside of the substation. Overall, residual soils within and around the substation have low total PFAS concentrations of approximately 16 ug/kg or less. The primary residual PFAS within the substation is 6:2 FTS, while outside the substation is a variety of analytes but most notably PFOS. Note the average total PFAS concentration of residual soils inside the substation is 2.4 ug/kg, while it is 6.3 ug/kg outside the substation walls.

Based on this analysis, the source area was addressed to the extent practical through substantial removal actions at the source and in the immediate surrounding area. Furthermore, residual PFAS impacts inside the substation now appear to be on average less than the surrounding area, and the nature of the PFAS impacts outside the substation appear to be unrelated to the AFFF. The AFFF impacts appear to be characterized by the prevalence of 6:2 FTS, whereas PFAS impacts in the surrounding area appear to be characterized by a predominance of PFOS.

- ii. Describe the concentration(s) and types of soil contaminants found in the upper four feet of the soil column. The total detected PFAS in the soil samples ranged from 0.032 ug/kg to 320 ug/kg with an average value of 14 ug/kg. For reference, the non-industrial direct contact RCL for PFOA and PFOS is set at 1,260 ug/kg and 1,260,000 ug/kg for PFBS.
- iii. Identify the ch. NR 720, Wis. Adm. Code, method used to establish the soil cleanup standards for this site. This includes a soil performance standard established in accordance with s. NR 720.08, a Residual Contaminant Level (RCL) established in accordance with s. NR 720.10 that is protective of groundwater quality, or an RCL established in accordance with s. NR 720.12 that is protective of human health from direct contact with contaminated soil. Identify the land use classification that was used to establish cleanup standards. Provide a copy of the supporting calculations/information in Attachment C.

Direct Contact Soil RCLs were from the WDNR RCL Worksheets, but only three PFAS compounds are currently regulated: PFOA, PFAS, and PFBS.

Generic Groundwater Protection (GW) Residual Contaminant Levels (RCLs) were calculated for the two PFAS compounds (PFOA and PFOS) that the State of Wisconsin had previously proposed Chapter NR 140 groundwater standards. Calculations were performed following the WDNR Guidance (RR-890) for Soil RCL Determinations Using the USEPA Regional Screening Level Web Calculator. Based on these assumptions, both calculated GW RCLs have values that are less than the current laboratory limit of detection (LOD) for PFOA and PFOS.

C. Groundwater

- i. Describe degree and extent of groundwater contamination. Relate this to known or suspected sources and known or potential receptors/migration pathways. Specifically address any potential or existing impacts to water supply wells or interception with building foundation drain systems.

The State of Wisconsin does not currently have groundwater standards for PFAS promulgated in the Chapter NR 140, Wisconsin Administrative Code. However, on November 6, 2020, WDNR and Wisconsin Department of Health Services (WDHS) announced proposed enforcement standards (ES) and preventive action limits (PAL) for 16 PFAS, and 6:2 FTS is not included at this time. The most restrictive standards are the ES of 20 ng/L and PAL of 2 ng/L for 6 combined PFAS, which include PFOA and PFOS. While all groundwater samples exceeded the proposed combined PAL (2 ng/L), none of the groundwater samples from the final sample round exceeded the proposed combined ES (20 ng/L).

In general, groundwater PFAS concentrations (especially 6:2 FTS) decreased quickly with distance from the area of the transformer fire (AFFF source). The highest concentration of PFAS was for 6:2 FTS (primary constituent of AFFF), which was detected ranging from 3,500 to 6,700 ng/L adjacent to the transformer fire where the AFFF was applied.

- ii. Describe the presence of free product at the site, including the thickness, depth, and locations. Identify the depth and location of the smear zone.
PFAS was discharged as part of an aqueous film forming foam (AFFF). The AFFF was transported to the site by the responding fire departments in 5 gallon containers, which did not leak and were accounted for after the fire was extinguished. Therefore, no PFAS free product is believed to be present.

D. Vapor

- i. Describe how the vapor migration pathway was assessed, including locations where vapor, soil gas, or indoor air samples were collected. If the vapor pathway was not assessed, explain reasons why.
PFAS was discharged as part of an aqueous film forming foam (AFFF). Because the PFAS was understood to be in solution or adsorbed to soil particles, the vapor pathway is anticipated to have limited subsurface migration potential. The vapor pathway is not considered to be a concern.

- ii. Identify the applicable DNR action levels and the land use classification used to establish them. Describe where the DNR action levels were reached or exceeded (e.g., sub slab, indoor air or both).
Not applicable.

E. Surface Water and Sediment

- i. Identify whether surface water and/or sediment was assessed and describe the impacts found. If this pathway was not assessed, explain why.
Surface water was assessed in the storm sewers that border the site and at the outfall locations for the storm sewers into local surface water bodies. For the substation, two storm sewer branches were identified and tested. The first branch has impacted catch basins along Livingston St on the east side of the substation, which is then conveyed to an outfall on the Yahara River. The second branch has impacted catch basins along Blount St on the west side of the substation, which is then conveyed to an outfall into Lake Monona.
- ii. Identify any surface water and/or sediment action levels used to assess the impacts for this pathway and how these were derived. Describe where the DNR action levels were reached or exceeded.
No surface water or sediment action levels were used to assess the PFAS impacts for this pathway. Water samples collected from storm sewers and surface water were compared to proposed PFAS groundwater standards. Based on the lack of 6:2 FTS and the prevalence of unrelated PFAS in the surface water samples collected at the storm sewer outfalls (Blount St Outlet, Path Outlet, and River Outlet), PFAS impacts from the AFFF application do not appear to be present. Elevated detections of PFAS in two storm catchments directly connected to the interior of the substation (StormCeptor and LVN-6) are likely related to storm water contacting PFAS-impacted soil during removal actions conducted in September 2019 and July 2020. As with the groundwater results, although these water samples exceed the proposed combined PAL (2 ng/L), none from the final round exceed the proposed combined ES (20 ng/L).

4. Remedial Actions Implemented and Residual Levels at Closure

- A. General: Provide a brief summary of the remedial action history. List previous remedial action report submittals by name and date. Identify remedial actions undertaken since the last submittal for this project and provide the appropriate documentation in Attachment C.

Large amounts of PFAS-impacted water were collected during the spill response and subsequent cleanup and replacement of the destroyed transformer. Operation & Maintenance Plan and Manual, submitted on October 3, 2019, described the operation of the temporary water treatment plant. Approximately 150,000 gallons of PFAS impacted water was collected, treated, and discharged under a Wisconsin Pollution Elimination Discharge System (WPDES) permit. Additional details of water treatment are presented in Start-up Sampling Results - Fire Suppression Water Treatment System (October 21, 2019) and Operation and Monitoring Summary - Fire Suppression Water Treatment System (December 9, 2019).

During the remediation response, a temporary containment area was created for soil dewatering. Soil confirmation samples (CON-1 to CON-5) were collected after the temporary containment was removed. Those results are reported in Confirmation Soil Results for Containment Pit Area (November 12, 2019).

Source soils were excavated and removed following the spill response and cleanup. This included scraping areas underneath the buswork and a large excavation for the replacement transformer. Based on waste manifests from September and October 2019, a total of 485.89 tons of PFAS impacted soil were removed. This is documented in Interim Subsurface PFAS Investigation Results and Soil Removal Action submitted on February 4, 2020.

Following WDNR's review of the Interim Surface Soil PFAS Results and Groundwater RCL Discussion, dated June 10, 2020, three additional areas of residual PFAS-impacted soil greater than 10 ug/kg were removed in July 2020. NSEC completed the excavations on the southern, eastern, and central portions of the substation with an approximate volume removed of 20 cubic yards.

Additional source removal was accomplished through the construction excavation for the repairs to ATC's underground transmission line. The excavation was approximately 8 by 30 by 10 feet. Based on waste manifests from March and July 2020, a total of 505.06 tons of PFAS-impacted soil was removed and disposed at US Ecology's Wayne Disposal Facility in Belleville, Michigan.

During the excavation work in July 2020, PFAS-impacted excavation water was also removed and contained for disposal. Approximately 12,500 gallons of excavation water was transported for solidification and disposal offsite.

All PFAS-impacted soils removed from the substation were disposed as nonhazardous special waste at US Ecology's Wayne Disposal Facility in Belleville, Michigan.

- B. Describe any immediate or interim actions taken at the site under ch NR 708, Wis. Adm. Code.

Between July 19 and August 8, spill response activities performed by ATC and their contractors included the following:
Water (stored for treatment prior to discharge):

- * Removal of approximately 60,000 gallons of oil-water-AFFF mixture from oil skimming operations in cable vaults inside the substation and storm catch basins along Livingston and Blount Streets;
- * Removal of approximately 80,000 gallons of oil-water-AFFF mixture from bulk removal from the storm sewers at

Livingston and Blount Street adjacent to the substation.

* Additional removal: Approximately 40,000 gallons of oil-water-AFFF mixture was collected during the next two months from oil skimming and utility vault dewatering during construction to install a replacement transformer in the substation in August and September 2019.

Mineral Oil (beneficial reuse):

* Recovery of approximately 13,000 gallons of mineral oil from removal from the burned transformer and separating from the 140,000 gallons of oil-water-AFFF mixture stored in FRAC tanks from the water removals identified above.

Electrical Equipment (recycled as scrap):

* Removal of the burned transformer and other fire-damaged electrical equipment. Electrical remnants and debris from the fire and explosion that were strewn on the ground around the substation were scraped up and disposed. This also includes cleaning and removal of the entire concrete foundation that the burned transformer had been mounted on.

Soil (disposed as nonhazardous waste at Subtitle C Landfill):

* Removal of an estimated 60 to 80 cubic yards from the approximately 2 to 3 inches of the surface stained soil and gravel from the following areas:

- Immediate area around the burned transformer (approximate radius of 30 ft);
- Area east of the burned transformer to the Main Street substation gate and east perimeter substation wall.
- Area along the east perimeter substation wall (approximately 100 ft);
- Area along the south perimeter substation wall (approximately 400 ft);

On August 8, 2019 WDNR declared spill response complete. The associated activity generally regarding release of mineral oil was closed on January 17, 2020. The open ERP refers to the investigation of PFAS analytes associated with AFFF application at the site in July 2019.

- C. Describe the *active* remedial actions taken at the source property, including: type of remedial system(s) used for each media affected; the size and location of any excavation or in-situ treatment; the effectiveness of the systems to address the contaminated media and substances; operational history of the systems; and summarize the performance of the active remedial actions. Provide any system performance documentation in Attachment A.7.

The approximately 180,000 gallons of PFAS impacted water collected in and around the site were successfully treated and discharged with a WDNR-approved system and coverage under the WDPES General Permit. The treatment system consisted of filtration through organoclay and granular activated carbon (GAC) vessels. Treated water was discharged to the City of Madison storm sewer system under a non-storm discharge permit. Additional details of water treatment are presented in Start-up Sampling Results - Fire Suppression Water Treatment System (October 21, 2019) and Operation and Monitoring Summary - Fire Suppression Water Treatment System (December 9, 2019).

- D. Describe the alternatives considered during the Green and Sustainable Remediation evaluation in accordance with NR 722.09 and any practices implemented as a result of the evaluation.
Not Applicable.
- E. Describe the nature, degree and extent of residual contamination that will remain at the source property or on other affected properties after case [closure](#).
Based on surface soil sample results, only low levels of residual 6:2 FTS and other PFAS analytes remain in soils at the substation. The average total PFAS concentration inside the substation is 2.4 ug/kg, while it is 6.3 ug/kg outside the substation walls. These residual concentrations are substantially below the nonindustrial direct contact RCLs for PFOA and PFOS, and 6:2 FTS is unregulated. Furthermore, given the PFAS constituents identified in soil samples, the nature of the PFAS impacts outside the substation appear to be unrelated to the AFFF.
- F. Describe the residual soil contamination within four feet of ground surface (direct contact zone) that attains or exceeds RCLs established under s. NR 720.12, Wis. Adm. Code, for protection of human health from direct contact.
No PFAS-impacted soils above current direct contact RCLs are present at the site.
- G. Describe the residual soil contamination that is above the observed low water table that attains or exceeds the soil standard(s) for the groundwater pathway.
The WDNR has not established generic groundwater protection RCLs because groundwater standards for PFAS compounds have not been promulgated at this time. However, WDNR and WDHS recently proposed enforcement standards (ES) and preventive action limits (PAL) for 16 PFAS, and 6:2 FTS is not included at this time. The most restrictive standards are the ES of 20 ng/L and PAL of 2 ng/L for 6 combined PFAS, which include PFOA and PFOS. Calculated groundwater protection RCLs for PFOA and PFAS resulted in values that were less than current laboratory detection limits. Therefore, the residual PFAS soil contamination at the site is considered to likely exceed a PFAS-related groundwater protection RCL.
- H. Describe how the residual contamination will be addressed, including but not limited to details concerning: covers, engineering controls or other barrier features; use of natural attenuation of groundwater; and vapor mitigation systems or measures.

Listing on the WDNR Registry of Closed Site with notification of the residual PFAS contamination, so that excavated materials from the site are appropriately managed in the future. The entire site already is subject to a deed restriction

regarding the residual MGP-impacts in soil and groundwater, which is more restrictive than needed for the residual PFAS impacts.

- I. If using natural attenuation as a groundwater remedy, describe how the data collected supports the conclusion that natural attenuation is effective in reducing contaminant mass and concentration (e.g., stable or receding groundwater plume).
The State of Wisconsin does not currently have groundwater standards for PFAS, but WDNR and WDHS recently proposed enforcement standards (ES) and preventive action limits (PAL) for 16 PFAS, and 6:2 FTS is not included at this time. The most restrictive standards are the ES of 20 ng/L and PAL of 2 ng/L for 6 combined PFAS, which include PFOA and PFOS. While all groundwater samples at the substation exceeded the proposed combined PAL (2 ng/L), none of the groundwater samples from the final sample round exceeded the proposed combined ES (20 ng/L). Although elevated concentrations of 6:2 FTS were observed at two monitoring points (TransSump and MW-1), they do not appear to be increasing and are expected to decrease with time given that substantial source removal has been completed. Overall, given the limited PFAS-mass released and the substantial removal actions completed, groundwater concentrations are expected to be stable or decreasing with time.
- J. Identify how all exposure pathways (soil, groundwater, vapor) were removed and/or adequately addressed by immediate, interim and/or remedial action(s).
The soil direct contact pathway was addressed by removal of PFAS-impacted soil greater than 10 ug/kg total PFAS. Following removal actions, groundwater is not contaminated greater than proposed Enforcement Standards for PFAS. A vapor pathway was not considered to be present at the site.
- K. Identify any system hardware anticipated to be left in place after site closure, and explain the reasons why it will remain.
Not Applicable
- L. Identify the need for a ch. NR 140, Wis. Adm. Code, groundwater Preventive Action Limit (PAL) or Enforcement Standard (ES) exemption, and identify the affected monitoring points and applicable substances.
A Preventive Action Limit (PAL) exemption is requested for groundwater at the site (MW-1, TransSump, and WCBSump) for the combined PFAS concentration of FOSA, NEtFOSE, NEtFOSA, NEtFOSAA, PFOS, and PFOA.
- M. If a DNR action level for vapor intrusion was exceeded (for indoor air, sub slab, or both) describe where it was exceeded and how the pathway was addressed.
Not applicable
- N. Describe the surface water and/or sediment contaminant concentrations and areas after remediation. If a DNR action level was exceeded, describe where it was exceeded and how the pathway was addressed.
Because fire suppression water drained into the storm sewers, PFAS water samples were also collected from multiple locations to evaluate impacts. Based on the lack of 6:2 FTS and the prevalence of unrelated PFAS in the surface water samples collected at the storm sewer outfalls (Blount St Outlet, Path Outlet, and River Outlet), PFAS impacts from the AFFF application do not appear to be present any longer. Elevated detections of PFAS in two storm catchments directly connected to the interior of the substation (StormCeptor and LVN-6) are likely related to storm water contacting PFAS-impacted soil during removal actions conducted in September 2019 and July 2020. As with the groundwater results, although these water samples exceed the proposed combined PAL (2 ng/L), none from the final round exceed the proposed combined PFAS ES (20 ng/L).

5. Continuing Obligations: Includes all affected properties and rights-of-way (ROWs). In certain situations, maintenance plans are also required, and must be included in Attachment D.

Directions: For each of the 3 property types below, check all situations that apply to this closure request.

(NOTE: Monitoring wells to be transferred to another site are addressed in Attachment E.)

This situation applies to the following property or Right of Way (ROW):			Case Closure Situation - Continuing Obligation (database fees will apply, ii. - xiv.)	Maintenance Plan Required	
Property Type:					
Source Property	Affected Property (Off-Source)	ROW			
i.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	None of the following situations apply to this case closure request.	NA
ii.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Residual groundwater contamination exceeds ch. NR 140 ESs.	NA
iii.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Residual soil contamination exceeds ch. NR 720 RCLs.	NA
iv.				Monitoring Wells Remain:	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	• Not Abandoned (filled and sealed)	NA
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	• Continued Monitoring (requested or required)	Yes
v.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Cover/Barrier/Engineered Cover or Control for (soil) direct contact pathways (includes vapor barriers)	Yes
vi.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Cover/Barrier/Engineered Cover or Control for (soil) groundwater infiltration pathway	Yes
vii.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Structural Impediment: impedes completion of investigation or remedial action (not as a performance standard cover)	NA
viii.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Residual soil contamination meets NR 720 industrial soil RCLs, land use is classified as industrial	NA
ix.	<input type="checkbox"/>	<input type="checkbox"/>	NA	Vapor Mitigation System (VMS) required due to exceedances of vapor risk screening levels or other health based concern	Yes
x.	<input type="checkbox"/>	<input type="checkbox"/>	NA	Vapor: Dewatering System needed for VMS to work effectively	Yes
xi.	<input type="checkbox"/>	<input type="checkbox"/>	NA	Vapor: Compounds of Concern in use: full vapor assessment could not be completed	NA
xii.	<input type="checkbox"/>	<input type="checkbox"/>	NA	Vapor: Commercial/Industrial exposure assumptions used.	NA
xiii.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Vapor: Residual volatile contamination poses future risk of vapor intrusion	NA
xiv.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Site-specific situation: (e. g., fencing, methane monitoring, other) (<i>discuss with project manager before submitting the closure request</i>)	Site specific

6. Underground Storage Tanks

- A. Were any tanks, piping or other associated tank system components removed as part of the investigation or remedial action? Yes No
- B. Do any upgraded tanks meeting the requirements of ch. ATCP 93, Wis. Adm. Code, exist on the property? Yes No
- C. If the answer to question 6.B. is yes, is the leak detection system currently being monitored? Yes No

General Instructions

All information shall be legible. Providing illegible information will result in a submittal being considered incomplete until corrected. For each attachment (A-G), provide a Table of Contents page, listing all 'applicable' and 'not applicable' items by Closure Form titles (e.g., A.1. Groundwater Analytical Table, A.2. Soil Analytical Results Table, etc.). If any item is 'not applicable' to the case closure request, you must fully explain the reasons why.

Data Tables (Attachment A)

Directions for Data Tables:

- Use **bold** and italics font for information of importance on tables and figures. Use **bold** font for ch. NR 140, Wis. Adm. Code ES attainments or exceedances, and *italicized font* for ch. NR 140, Wis. Adm. Code, PAL attainments or exceedances.
- Use **bold** font to identify individual ch. NR 720 Wis. Adm. Code RCL exceedances. Tables should also include the corresponding groundwater pathway and direct contact pathway RCLs for comparison purposes. Cumulative hazard index and cumulative cancer risk exceedances should also be tabulated and identified on Tables A.2 and A.3.
- Do not use shading or highlighting on the analytical tables.
- Include on Data Tables the level of detection for results which are below the detection level (i.e., do not just list as no detect (ND)).
- Include the units on data tables.
- Summaries of all data must include information collected by previous consultants.
- Do not submit lab data sheets unless these have not been submitted in a previous report. Tabulate all data required in s. NR 716.15 (3)(c), Wis. Adm. Code, in the format required in s. NR 716.15(4)(e), Wis. Adm. Code.
- Include in Attachment A all of the following tables, in the order prescribed below, with the specific Closure Form titles noted on the separate attachments (e.g., Title: A.1. Groundwater Analytical Table; A.2. Soil Analytical Results Table, etc.).
- For required documents, each table (e.g., A.1., A.2., etc.) should be a separate Portable Document Format (PDF).

A. Data Tables

- Groundwater Analytical Table(s):** Table(s) showing the analytical results and collection dates for all groundwater sampling points (e.g., monitoring wells, temporary wells, sumps, extraction wells, potable wells) for which samples have been collected.
- Soil Analytical Results Table(s):** Table(s) showing all soil analytical results and collection dates. Indicate if sample was collected above or below the observed low water table (unsaturated versus saturated).
- Residual Soil Contamination Table(s):** Table(s) showing the analytical results of only the residual soil contamination at the time of closure. This table shall be a subset of table A.2 and should include only the soil sample locations that exceed an RCL. Indicate if sample was collected above or below the observed low water table (unsaturated versus saturated). Table A.3 is optional only if a total of fewer than 15 soil samples have been collected at the site.
- Vapor Analytical Table(s):** Table(s) showing type(s) of samples, sample collection methods, analytical method, sample results, date of sample collection, time period for sample collection, method and results of leak detection, and date, method and results of communication testing.
- Other Media of Concern (e.g., sediment or surface water):** Table(s) showing type(s) of sample, sample collection method, analytical method, sample results, date of sample collection, and time period for sample collection.
- Water Level Elevations:** Table(s) showing all water level elevation measurements and dates from all monitoring wells. If present, free product should be noted on the table.
- Other:** This attachment should include: 1) any available tabulated natural attenuation data; 2) data tables pertaining to engineered remedial systems that document operational history, demonstrate system performance and effectiveness, and display emissions data; and (3) any other data tables relevant to case closure not otherwise noted above. If this section is not applicable, please explain the reasons why.

Maps, Figures and Photos (Attachment B)

Directions for Maps, Figures and Photos:

- Provide on paper no larger than 11 x 17 inches, unless otherwise directed by the Department. Maps and figures may be submitted in a larger electronic size than 11 x 17 inches, in a PDF readable by the Adobe Acrobat Reader. However, those larger-size documents must be legible when printed.
- Prepare visual aids, including maps, plans, drawings, fence diagrams, tables and photographs according to the applicable portions of ss. NR 716.15(4), 726.09(2) and 726.11(3), (5) and (6), Wis. Adm. Code.
- Include all sample locations.
- Contour lines should be clearly labeled and defined.
- Include in Attachment B all of the following maps and figures, in the order prescribed below, with the specific Closure Form titles noted on the separate attachments (e.g., Title: B.1. Location Map; B.2. Detailed Site Map, etc.).
- For the electronic copies that are required, each map (e.g., B.1.a., B.2.a, etc.) should be a separate PDF.
- Maps, figures and photos should be dated to reflect the most recent revision.

B.1. Location Maps

- Location Map:** A map outlining all properties within the contaminated site boundaries on a United States Geological Survey (U.S.G.S.) topographic map or plat map in sufficient detail to permit easy location of all affected and/or adjacent parcels. If groundwater standards are exceeded, include the location of all potable wells, including municipal wells, within 1200 feet of the area of contamination.
- Detailed Site Map:** A map that shows all relevant features (buildings, roads, current ground surface cover, individual property boundaries for all affected properties, contaminant sources, utility lines, monitoring wells and potable wells) within the contaminated area. This map is to show the location of all contaminated public streets, and highway and railroad rights-of-way in relation to the source property and in relation to the boundaries of groundwater contamination attaining or exceeding a ch. NR 140 ES, and/or in relation to the boundaries of soil contamination attaining or exceeding a RCL. Provide parcel identification numbers for all affected properties.
- RR Sites Map:** From RR Sites Map ([http://dnrmaps.wi.gov/sl/?Viewer=RR Sites](http://dnrmaps.wi.gov/sl/?Viewer=RR%20Sites)) attach a map depicting the source property, and all open and closed BRRTS sites within a half-mile radius or less of the property.

B.2. Soil Figures

- B.2.a. **Soil Contamination:** Figure(s) showing the location of **all** identified unsaturated soil contamination. Use a single contour to show the horizontal extent of each area of contiguous soil contamination that exceeds a soil to groundwater pathway RCL as determined under ch. NR 720 Wis. Adm. Code. A separate contour line should be used to indicate the horizontal extent of each area of contiguous soil contamination that exceeds a direct contact RCL exceedances (0-4 foot depth).
- B.2.b. **Residual Soil Contamination:** Figure(s) showing only the locations of soil samples where unsaturated soil contamination remains at the time of closure (locations represented in Table A.3). Use a single contour to show the horizontal extent of each area of contiguous soil contamination that exceeds a soil to groundwater pathway RCL as determined under ch. NR 720 Wis. Adm. Code. A separate contour line should be used to indicate the horizontal extent of each area of contiguous soil contamination that exceeds a direct contact RCL exceedance (0-4 foot depth).

B.3. Groundwater Figures

- B.3.a. **Geologic Cross-Section Figure(s):** One or more cross-section diagrams showing soil types and correlations across the site, water table and piezometric elevations, and locations and elevations of geologic rock units, if encountered. Display on one or more figures all of the following:
- Source location(s) and vertical extent of residual soil contamination exceeding an RCL. Distinguish between direct contact and the groundwater pathway RCLs.
 - Source location(s) and lateral and vertical extent if groundwater contamination exceeds ch. NR 140 ES.
 - Surface features, including buildings and basements, and show surface elevation changes.
 - Any areas of active remediation within the cross section path, such as excavations or treatment zones.
 - Include a map displaying the cross-section location(s), if they are not displayed on the Detailed Site Map (Map B.1.b.)
- B.3.b. **Groundwater Isoconcentration:** Figure(s) showing the horizontal extent of the post-remedial groundwater contamination exceeding a ch. NR 140, Wis. Adm. Code, PAL and/or an ES. Indicate the date and direction of groundwater flow based on the most recent sampling data.
- B.3.c. **Groundwater Flow Direction:** Figure(s) representing groundwater movement at the site. If the flow direction varies by more than 20° over the history of the site, submit two groundwater flow maps showing the maximum variation in flow direction.
- B.3.d. **Monitoring Wells:** Figure(s) showing all monitoring wells, with well identification number. Clearly designate any wells that: (1) are proposed to be abandoned; (2) cannot be located; (3) are being transferred; (4) will be retained for further sampling, or (5) have been abandoned.

B.4. Vapor Maps and Other Media

- B.4.a. **Vapor Intrusion Map:** Map(s) showing all locations and results for samples taken to investigate the vapor intrusion pathway in relation to residual soil and groundwater contamination, including sub-slab, indoor air, soil vapor, soil gas, ambient air, and communication testing. Show locations and footprints of affected structures and utility corridors, and/or where residual contamination poses a future risk of vapor intrusion.
- B.4.b. **Other media of concern (e.g., sediment or surface water):** Map(s) showing all sampling locations and results for other media investigation. Include the date of sample collection and identify where any standards are exceeded.
- B.4.c. **Other:** Include any other relevant maps and figures not otherwise noted above. (This section may remain blank).

- B.5. **Structural Impediment Photos:** One or more photographs documenting the structural impediment feature(s) which precluded a complete site investigation or remediation at the time of the closure request. The photographs should document the area that could not be investigated or remediated due to a structural impediment. The structural impediment should be indicated on Figures B.2.a and B.2.b.

Documentation of Remedial Action (Attachment C)**Directions for Documentation of Remedial Action:**

- Include in Attachment C all of the following documentation, in the order prescribed below, with the specific Closure Form titles noted on the separate attachments (e.g., Title: C.1. Site Investigation Documentation; C.2. Investigative Waste, etc.).
- If the documentation requested below has already been submitted to the DNR, please note the title and date of the report for that particular document requested.
 - C.1. **Site investigation documentation**, that has not otherwise been submitted with the Site Investigation Report.
 - C.2. **Investigative waste** disposal documentation.
 - C.3. Provide a **description of the methodology** used along with all supporting documentation if the RCLs are different than those contained in the Department's RCL Spreadsheet available at: <http://dnr.wi.gov/topic/Brownfields/Professionals.html>.
 - C.4. **Construction documentation** or as-built report for any constructed remedial action or portion of, or interim action specified in s. NR 724.02(1), Wis. Adm. Code.
 - C.5. **Decommissioning of Remedial Systems.** Include plans to properly abandon any systems or equipment.
 - C.6. **Other.** Include any other relevant documentation not otherwise noted above (This section may remain blank).

Maintenance Plan(s) and Photographs (Attachment D)**Directions for Maintenance Plans and Photographs:**

Attach a maintenance plan for each affected property (source property, each off-source affected property) with continuing obligations requiring future maintenance (e.g., direct contact, groundwater protection, vapor intrusion). See Site Summary section 5 for all affected property(s) requiring a maintenance plan. Maintenance plan guidance and/or templates for: 1) Cover/barrier systems; 2) Vapor intrusion; and 3) Monitoring wells, can be found at: <http://dnr.wi.gov/topic/Brownfields/Professionals.html#tabx3>

- D.1. **Descriptions of maintenance action(s) required for maximizing effectiveness of the engineered control, vapor mitigation system, feature or other action for which maintenance is required:**
- Provide brief descriptions of the type, depth and location of residual contamination.

- Provide a description of the system/cover/barrier/monitoring well(s) to be maintained.
 - Provide a description of the maintenance actions required for maximizing effectiveness of the engineered control, vapor mitigation system, feature or other action for which maintenance is required.
 - Provide contact information, including the name, address and phone number of the individual or facility who will be conducting the maintenance.
- D.2. **Location map(s) which show(s):** (1) the feature that requires maintenance; (2) the location of the feature(s) that require(s) maintenance - on and off the source property; (3) the extent of the structure or feature(s) to be maintained, in relation to other structures or features on the site; (4) the extent and type of residual contamination; and (5) all property boundaries.
- D.3. **Photographs** for site or facilities with a cover or other performance standard, a structural impediment or a vapor mitigation system, include one or more photographs documenting the condition and extent of the feature at the time of the closure request. Pertinent features shall be visible and discernible. Photographs shall be submitted with a title related to the site name and location, and the date on which it was taken.
- D.4. **Inspection log**, to be maintained on site, or at a location specified in the maintenance plan or approval letter. The inspection and maintenance log is found at: <http://dnr.wi.gov/files/PDF/forms/4400/4400-305.pdf>.

Monitoring Well Information (Attachment E)

Directions for Monitoring Well Information:

For all wells that will remain in use, be transferred to another party, or that could not be located; attach monitoring well construction and development forms (DNR Form 4400-113 A and B: http://dnr.wi.gov/topic/groundwater/documents/forms/4400_113_1_2.pdf)

Select One:

- No monitoring wells were installed as part of this response action.
- All monitoring wells have been located and will be properly abandoned upon the DNR granting conditional closure to the site
- Select One or More:**
- Not all monitoring wells can be located, despite good faith efforts. Attachment E must include a description of efforts made to locate the wells.
- One or more wells will remain in use at the site after this closure. Attachment E must include documentation as to the reason (s) the well(s) will remain in use. When one or more monitoring wells will remain in use this is considered a continuing obligation and a maintenance plan will be required and must be included in Attachment D.
- One or more monitoring wells will be transferred to another owner upon case closure being granted. Attachment E should include documentation identifying the name, address and email for the new owner(s). Provide documentation from the party accepting future responsibility for monitoring well(s).

Source Legal Documents (Attachment F)

Directions for Source Legal Documents:

Label documents with the specific closure form titles (e.g., F.1. Deed, F.2. Certified Survey Map, etc.). Include all of the following documents, in the order listed:

- F.1. **Deed:** The most recent deed with legal description clearly listed.
- Note: If a property has been purchased with a land contract and the purchaser has not yet received a deed, a copy of the land contract which includes the legal description shall be submitted instead of the most recent deed. If the property has been inherited, written documentation of the property transfer should be submitted along with the most recent deed.*
- F.2. **Certified Survey Map:** A copy of the certified survey map or the relevant section of the recorded plat map for those properties where the legal description in the most recent deed refers to a certified survey map or a recorded plat map. In cases where the certified survey map or recorded plat map are not legible or are unavailable, a copy of a parcel map from a county land information office may be substituted. A copy of a parcel map from a county land information office shall be legible, and the parcels identified in the legal description shall be clearly identified and labeled with the applicable parcel identification number.
- F.3. **Verification of Zoning:** Documentation (e.g., official zoning map or letter from municipality) of the property's or properties' current zoning status.
- F.4. **Signed Statement:** A statement signed by the Responsible Party (RP), which states that he or she believes that the attached legal description(s) accurately describe(s) the correct contaminated property or properties. This section applies to the source property only. Signed statements for Other Affected Properties should be included in Attachment G.

Notifications to Owners of Affected Properties (Attachment G)**Directions for Notifications to Owners of Affected Properties:**

Complete the table on the following page for sites which require notification to owners of affected properties pursuant to ch. 292, Wis. Stats. and ch. NR 725 and 726, Wis. Adm. Code. 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.]. The DNR's "Guidance on Case Closure and the Requirements for Managing Continuing Obligations" (PUB-RR-606) lists specific notification requirements <http://dnr.wi.gov/files/PDF/pubs/rr/RR606.pdf>.

State law requires that the responsible party provide a 30-day, written advance notification to certain persons prior to applying for case closure. This requirement applies if: (1) the person conducting the response action does not own the source property; (2) the contamination has migrated onto another property; and/or (3) one or more monitoring wells will not be abandoned. Use form 4400-286, Notification of Continuing Obligations and Residual Contamination, at <http://dnr.wi.gov/files/PDF/forms/4400/4400-286.pdf>

Include a copy of each notification sent and accompanying proof of delivery, i.e., return receipt or signature confirmation.

Include the following documents for each property, keeping each property's documents grouped together and labeled with the letter G and the corresponding ID number from the table on the following page. (Source Property documents should only be included in Attachment F):

- **Deed:** The most recent deed with legal descriptions clearly listed for all affected properties.
Note: If a property has been purchased with a land contract and the purchaser has not yet received a deed, a copy of the land contract which includes the legal description shall be submitted instead of the most recent deed. If the property has been inherited, written documentation of the property transfer should be submitted along with the most recent deed.
- **Certified Survey Map:** A copy of the certified survey map or the relevant section of the recorded plat map for those properties where the legal description in the most recent deed refers to a certified survey map or a recorded plat map. In cases where the certified survey map or recorded plat map are not legible or are unavailable, a copy of a parcel map from a county land information office may be substituted. A copy of a parcel map from a county land information office shall be legible, and the parcels identified in the legal description shall be clearly identified and labeled with the applicable parcel identification number.
- **Verification of Zoning:** Documentation (e.g., official zoning map or letter from municipality) of the property's or properties' current zoning status.
- **Signed Statement:** A statement signed by the Responsible Party (RP), which states that he or she believes the attached legal description(s) accurately describe(s) the correct contaminated property or properties.

Signatures and Findings for Closure Determination

This page has been updated as of February 2019 to comply with the requirements of Wis. Admin. Code ch. NR 712.

Check the correct box for this case closure request and complete the corresponding certification statement(s) listed below to demonstrate that the requirements of Wis. Admin. Code ch. NR 712 have been met. The responsibility for signing the certification may not be delegated per Wis. Admin. Code § NR 712.09 (1). Per Wis. Admin. Code § 712.05 (1), the work must be conducted or supervised by the person certifying.

- The investigation and/or response action(s) for this site evaluated and/or addressed groundwater (including natural attenuation remedies). Both a professional engineer and a hydrogeologist must sign this document per Wis. Admin. Code ch. NR 712.
The investigation and the response action(s) for this site did not evaluate or address groundwater. A professional engineer must sign this document per Wis. Admin. Code ch. NR 712.

Engineering Certification

I, Timothy P. Wood, hereby certify that I am a registered professional engineer in the State of Wisconsin, registered in accordance with the requirements of ch. A-E 4, Wis. Adm. Code; that this document has been prepared in accordance with the Rules of Professional Conduct in ch. A-E 8, Wis. Adm. Code; and that, to the best of my knowledge, all information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code.

Signature [Handwritten Signature]

P. E. #

E-32222-006

Title Project Engineer

P.E. Stamp



Hydrogeologist Certification

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

Signature [Handwritten Signature]

Title Project Hydrogeologist

Date

1/15/2021

Case Closure – GIS Registry
ATC Transformer Fire – MG&E Blount Substation
722 East Main Street
BRRTS #02-013-584085 FID #113435520

ATTACHMENT A – DATA TABLES

A.1 Groundwater Analytical Tables

A.2 Soil Analytical Results Table

A.3 Residual Soil Contamination Table

A.4 Vapor Analytical Table – No attachment because the vapor intrusion pathway was screened out due to limited subsurface migration potential of PFAS compounds.

A.5 Other Media of Concern (e.g., sediment or surface water) – No attachment because there are no other media of concern at the site. Surface water sampling results are included in Table A.1.

A.6 Water Level Elevations

A.7 Other - None

Table A.1.
Groundwater Analytical Table
ATC Blount SS-Environmental Emergency Spill Response
60611431; 722 E. Main Street Madison, WI 53703

Order	Location	Location Type	Field ID	Media Type	Sampling Company	Sample Date	Sample Type	ABBR.	PFBA	PFBS	PFPeA	PFPeS	PFHxA	PFHxS	6:2 FTS	PFHpA	PFHpS	PFOA	APFO	PFOS
								Analyte:	Perfluorobutanoic acid (PFBA)	Perfluorobutane sulfonic acid (PFBS)	Perfluoropentanoic acid (PFPeA)	Perfluoropentanesulfonic acid (PFPeS)	Perfluorohexanoic acid (PFHxA)	Perfluorohexanesulfonic acid (PFHxS)	6:2 FTS	Perfluoroheptanoic acid (PFHpA)	Perfluoroheptanesulfonic acid (PFHpS)	Perfluorooctanoic acid (PFOA)	Ammonium Perfluorooctanoate	Perfluorooctanesulfonic acid (PFOS)
								CAS:	375-22-4	375-73-5	2706-90-3	2706-91-4	307-24-4	355-46-4	27619-97-2	375-85-9	375-92-8	335-67-1	3825-26-1	1763-23-1
								Units:	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L
								Proposed ES:	10000	450000	--	--	150000	40	--	--	--	See Combined Limit	--	See Combined Limit
								Proposed PAL:	2000	90000	--	--	30000	4	--	--	--	See Combined Limit	--	See Combined Limit
1	Surface Water	East	Surface Water	Surface Water	NSEC	7/19/2019	N	14	0.71 J	12	< 0.28	26	1.9 B	790	3	< 0.18	2.7	2.8	13 <i>CL</i>	
2	North Power Pole	East	North Power Pole	Groundwater	AECOM	7/24/2019	N	170	5.1 J	150	1.8 JI	230	18 B	4900	21	< 0.95	24	25	31	
3	Trans Sump	East	Trans Sump	Groundwater Sump	AECOM	10/28/2019	N	580 B	1.0 J	3600	< 0.29	1300	1.4 JB	3500	260	< 0.18	15	15	14	
4	Trans Sump	East	Trans Sump	Groundwater Sump	AECOM	5/21/2020	N	460 B	5.3 I	3100	< 0.28	1400	1.8 B	6700	230	< 0.17	14	15	41	
5	Trans Sump	East	Trans Sump	Groundwater Sump	AECOM	10/2/2020	N	480	< 3.8	2800	< 5.7	1400	< 11	4600	220	< 3.6	< 16	< 17	19 J	
6	ETW-1	East	ETW-1	Groundwater	AECOM	10/28/2019	N	240 B	2.0	1700	< 0.29	630	1.2 JB	1200	150	< 0.18	7.4	7.7	23 I	
7	MW-1	East	MW-1	Groundwater	AECOM	5/21/2020	N	97 B	1.1 J	630	< 0.29	210	0.69 JB	260	45	< 0.18	5.1	5.3	8.9	
8	MW-1	East	MW-1 FD	Groundwater	AECOM	5/21/2020	FD	98 B	1.0 J	550	< 0.28	210	0.78 JB	250	46	< 0.18	5.1	5.3	9	
9	MW-1	East	MW-1	Groundwater	AECOM	8/20/2020	N	300	2.3	1900	< 0.29	740	1.2 JB	1400	130	< 0.19	7.2	7.5	7.9	
10	Storm Ceptor	East	Catch Basin	Storm Sewer	NSEC	7/19/2019	N	4.3	0.33 J	3.2	< 0.27	7	0.81 J B	230	0.67 J	< 0.17	1.8	1.9	7 <i>CL</i>	
11	Storm Ceptor	East	Storm Ceptor	Storm Sewer	AECOM	7/25/2019	N	11	2.5	27	< 0.30	24	2.0 B	470	12	< 0.19	5.4	5.6	7	
12	Storm Ceptor	East	Storm Ceptor	Storm Sewer	AECOM	10/28/2019	N	58 B	2.8	350	< 0.28	140	2.5 B	110	21	< 0.18	4.6	4.8	5.6	
13	Storm Ceptor	East	Storm Ceptor	Storm Sewer	AECOM	8/20/2020	N	90	< 2.0	560	< 3.1	210	< 1.7	73 J	43	< 1.9	< 8.7	< 9.0	< 5.5	
14	LVN-6	East	LW1	Storm Sewer	SCS	7/19/2019	N	< 3.0	< 1.7	6.6 J	< 2.6	10 J	< 1.5	250	< 2.2	< 1.6	< 7.3	< 7.6	< 4.7	
15	LVN-6	East	LW (Basin)	Storm Sewer	NSEC	7/19/2019	N	1.8	0.21 J	1.5 J	< 0.27	6.3	0.40 J B	80	0.41 J	< 0.17	1.6 J	1.7 J	2.9 <i>CL</i>	
16	LVN-6	East	LW2	Storm Sewer	SCS	7/19/2019	N	1.8	< 0.17	1.5 J	< 0.26	5	0.29 J B	97	0.33 J	< 0.16	0.96 J	1.0 J	< 0.46	
17	LVN-6	East	LVN-6	Storm Sewer	AECOM	7/25/2019	N	5.0	< 0.20	1.7 J	< 0.30	2.2	0.49 JB	2.9 J	1.2 J	< 0.19	1.6 J	1.7 J	0.76 J	
18	LVN-6	East	LVN-6	Storm Sewer	AECOM	10/28/2019	N	26 B	1.7 J	140	< 0.29	53	1.2 JB	26	9.9	< 0.18	2.9	3.0	3.1	
19	LVN-6	East	LVN-6	Storm Sewer	AECOM	8/20/2020	N	54	3.0	310	< 0.28	120	2.1 B	87	25	< 0.18	3.8	3.9	5.4	
20	River Outlet	East	River Outlet	Surface Water	AECOM	7/25/2019	N	6.4	< 0.19	< 0.46	< 0.28	1.5 J	0.76 JB	< 1.9	0.88 J	< 0.18	1.8 J	1.9 J	1.1 J	
21	River Outlet	East	River Outlet	Surface Water	AECOM	10/28/2019	N	5.5 B	0.81 J	2.2	< 0.29	1.9	2.0 B	< 1.9	1.2 J	< 0.19	1.7 J	1.7 J	2.3	
22	River Outlet	East	River Outlet	Surface Water	AECOM	8/20/2020	N	4.3	1.0 J	1.5 J	< 0.29	1.3 J	0.98 JB	< 2.0	0.81 J	< 0.19	1.2 J	1.2 J	< 0.53	
50	WCB Sump	West	WCB Sump	Groundwater Sump	AECOM	10/28/2019	N	6.6 B	1.1 J	4.0	< 0.29	2.1	0.78 JB	< 1.9	1.1 J	< 0.18	1.9	2.0	4.6	
51	WCB Sump	West	WCB Sump Dup	Groundwater Sump	AECOM	10/28/2019	FD	6.4 B	1.2 J	3.9	< 0.29	1.9	0.91 JB	< 1.9	1.1 J	< 0.18	1.8 J	1.9 J	4.1	
52	WCB Sump	West	WCB Sump	Groundwater Sump	AECOM	5/21/2020	N	8.0 B	1.5 J	7.6	< 0.29	3.5	1.1 JB	< 1.9	1.5 J	< 0.19	1.9	2.0	3.8	
53	WCB Sump	West	WCB Sump	Groundwater Sump	AECOM	8/20/2020	N	8.7	2.6	7.6	< 0.29	3.9	1.2 JB	< 1.9	1.9	< 0.18	3.1	3.3	6.4	
54	WCB Sump	West	WCB Sump FD	Groundwater Sump	AECOM	8/20/2020	FD	8.8	2.4	8.2	< 0.29	3.9	1.3 JB	< 1.9	1.9	< 0.18	3.2	3.3	6.3	
55	BNT-3	West	BNT-3	Storm Sewer	AECOM	7/25/2019	N	15	2.9	17	0.78 J	11	5.7 B	30	5.0	0.29 J	6	6.2	13	
56	BNT-3	West	BNT-3	Storm Sewer	AECOM	10/28/2019	N	34 B	3.5	140	0.37 J	47	3.4 B	17 J	9.1	< 0.18	4.8	5.0	10	
57	BNT-3	West	BNT-3	Storm Sewer	AECOM	8/20/2020	N	5.7	2.1	4.2	1.3 J	3.9	8.2 B	< 1.9	1.8 J	< 0.18	3.2	3.3	14	
58	BNT-4	West	BNT-4	Storm Sewer	AECOM	7/25/2019	N	< 4.4	< 2.5	< 6.1	< 3.8	< 7.3	11 JB	49 J	< 3.1	< 2.4	12 J	13 J	14 J	
59	BNT-4	West	BNT-4	Storm Sewer	AECOM	10/28/2019	N	12 B	2.9	22	0.49 J	9.2	3.0 B	3.3 J	2.7	< 0.18	3	3.2	5.1	
60	BNT-4	West	BNT-4	Storm Sewer	AECOM	8/20/2020	N	5.7	2.5	3.5	1.3 J	3.7	8.4 B	< 1.9	1.9	< 0.18	3.1	3.2	13	
61	BNT-8	West	Blount	Storm Sewer	NSEC	7/19/2019	N	12	< 0.16	3.6	< 0.25	3.9	3.9 B	42	1.2 J	< 0.16	3	3.1	5.6	
62	BNT-8	West	Blount Street	Storm Sewer	NSEC	7/19/2019	N	9.5	1.8	2.8	< 0.26	3.9	4.4 B	45	1.5 J	< 0.16	3.2	3.4	6.1	
63	BNT-8	West	BNT-8	Storm Sewer	AECOM	7/25/2019	N	8.5	4.5	6.7	< 0.31	5.8	6.7 B	47	2.3	< 0.19	5	5.2	12	
64	BNT-8	West	BNT-8	Storm Sewer	AECOM	10/28/2019	N	9.9 B	2.6	16	0.43 J	8.1	3.6 B	2.6 J	2.2	< 0.19	3.3	3.4	5.7	
65	BNT-8	West	BNT-8	Storm Sewer	AECOM	8/20/2020	N	5.3	2.3	3.4	1.1 J	3.7	8.6 B	< 1.9	1.8 J	< 0.18	3	3.1	13	
66	Blount St Outlet	West	Blount St Outlet	Surface Water	AECOM	7/25/2019	N	9.0	3.6	5.6	1.3 J	5.7	8.2 B	19	2.7	< 0.18	4.9	5.1	13	
67	Blount St Outlet	West	Blount St Outlet FD	Surface Water	AECOM	7/25/2019	FD	10	4.0	5.6	1.1 J	5.5	8.7 B	29	2.8	0.25 J	5.4	5.6	12	
68	Blount St Outlet	West	Blount St Outlet	Surface Water	AECOM	10/28/2019	N	6.1 B	1.8 J	3.1	1.0 J	3.6	7.4 B	< 2.0	1.7 J	0.22 J	3	3.1	13	
69	Blount St Outlet	West	Blount St Outlet Dup	Surface Water	AECOM	10/28/2019	FD	6.5 B	1.7 J	3.1	0.99 J	3.6	7.3 B	< 1.9	1.6 J	< 0.18	2.8	3.0	15	
70	Blount St Outlet	West	Blount St Outlet	Surface Water	AECOM	8/20/2020	N	5.4	2.0	3.2	1.1 J	3.4	8.5 B	< 1.9	1.7 J	< 0.18	3	3.1	13	
71	Blount St Outlet	West	Blount St Outlet FD	Surface Water	AECOM	8/20/2020	FD	5.3	2.0	3.2	1.3 J	3.5	8.6 B	< 2.0	1.7 J	< 0.19	3.2	3.3	14	
72	Path Outlet	West	Path Outlet	Surface Water	AECOM	7/25/2019	N	8.6	1.9	3.6	1.3 J	3.3	8.2 B	3.0 J	1.6 J	< 0.18	3.9	4.0	18	
73	Path Outlet	West	Path Outlet	Surface Water	AECOM	10/28/2019	N	8.2 B	3.3	3.8	0.79 J	4.0	7.0 B	< 1.9	2.0	0.21 J	3.5	3.6	12	
74	Path Outlet	West	Path Outlet	Surface Water	AECOM	8/20/2020	N	5.6	2.1	3.3	1.2 J	3.6	8.4 B	< 2.0	1.8 J	< 0.19	3.1	3.3	16	

Notes:
 PFAS = Per- and polyfluoroalkyl substances
 J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
 B = Compound was found in the blank and sample.
 I = Value is EMPC (estimated maximum possible concentration).
 CL = The peak identified by the data system exhibited chromatographic interference that could not be resolved. There is reason to suspect there may be a high bias.
 (1) Sum of FOSA, NEtFOSE, NEtFOSA, NEtFOSAA, PFOS, and PFOA
bold value = NR 140 Enforcement Standard (ES) Exceedance, Recommended/Proposed.
italic value = NR 140 Preventive Action Limit Exceedance, Recommended/Proposed.
 -- No NR 140 ES or PAL established.
 NA = Not analyzed

Table A.1.
Groundwater Analytical Table
ATC Blount SS-Environmental Emergency Spill Response
60611431; 722 E. Main Street Madison, WI 53703

Order	Location	Location Type	Field ID	Media Type	Sampling Company	Sample Date	Sample Type	ABBR.	8:2 FTS	PFNA	PFDA	10:2 FTS	PFTeDA	PFOSA	NEtFOSE	Sum of 6 Analytes (1)	Total PFAS	
								Analyte:	8:2 FTS	Perfluorononanoic acid (PFNA)	Perfluorodecanoic acid (PFDA)	10:2 FTS	Perfluorotetradecanoic acid (PFTeA)	Perfluorooctane sulfonamide (FOSA)	NEtFOSE	Comb_6 PFAS	TPFAS	
								CAS:	39108-34-4	375-95-1	335-76-2	120226-60-0	376-06-7	754-91-6	1691-99-2	20	--	
								Units:	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L
								Proposed ES:	--	30	300	--	10000	See Combined	See Combined	20	--	
								Proposed PAL:	--	3	60	--	2000	Limit	Limit	2	--	
1	Surface Water	East	Surface Water	Surface Water	NSEC	7/19/2019	N		21	0.60 J	0.68 J	1.1 J	0.60 J	< 0.32	NA	16	890	
2	North Power Pole	East	North Power Pole	Groundwater	AECOM	7/24/2019	N		17 J	<u>6.0 J</u>	5.1 JI	< 0.95	< 1.5	< 1.8	NA	55	5600	
3	Trans Sump	East	Trans Sump	Groundwater Sump	AECOM	10/28/2019	N		< 39	<u>3.8</u>	1.6 J	< 3.7	< 0.28	< 0.34	< 0.82	29	9300	
4	Trans Sump	East	Trans Sump	Groundwater Sump	AECOM	5/21/2020	N		< 92	<u>7.6</u>	2.7	< 8.7	< 0.27	0.43 J	< 0.78	55	12000	
5	Trans Sump	East	Trans Sump	Groundwater Sump	AECOM	10/2/2020	N		< 8.8	<u>7.5 J</u>	< 5.9	< 13	< 14	< 19	< 16	19	9500	
6	ETW-1	East	ETW-1	Groundwater	AECOM	10/28/2019	N		< 9.7	1.9	1.4 J	< 0.92	< 0.28	< 0.34	< 0.82	30	4000	
7	MW-1	East	MW-1	Groundwater	AECOM	5/21/2020	N		< 19	1.7 J	1.3 J	< 1.8	< 0.28	0.34 J	< 0.82	14	1300	
8	MW-1	East	MW-1 FD	Groundwater	AECOM	5/21/2020	FD		< 19	2.0	1.1 J	< 1.8	< 0.27	0.43 J	< 0.80	15	1200	
9	MW-1	East	MW-1	Groundwater	AECOM	8/20/2020	N		< 2.0	1.6 J	1.1 J	< 0.19	< 0.28	< 0.34	< 0.83	15	4500	
10	Storm Ceptor	East	Catch Basin	Storm Sewer	NSEC	7/19/2019	N		19	0.43 J	0.35 J	1.5 J	< 0.26	< 0.32	NA	8.8	280	
11	Storm Ceptor	East	Storm Ceptor	Storm Sewer	AECOM	7/25/2019	N		< 20	0.77 J	0.82 J	< 1.9	< 0.29	< 0.35	NA	12	570	
12	Storm Ceptor	East	Storm Ceptor	Storm Sewer	AECOM	10/28/2019	N		3.2 J	0.74 J	0.48 J	0.35 J	< 0.28	1.7 J	0.89 J	13	710	
13	Storm Ceptor	East	Storm Ceptor	Storm Sewer	AECOM	8/20/2020	N		< 2.0	< 2.8	< 3.2	< 1.9	< 3.0	< 3.6	< 8.7	< 200	980	
14	LVN-6	East	LW1	Storm Sewer	SCS	7/19/2019	N		< 17	< 2.3	< 2.7	< 1.6	< 2.5	< 3.0	NA	< 16	270	
15	LVN-6	East	LW (Basin)	Storm Sewer	NSEC	7/19/2019	N		2.5 J	< 0.25	< 0.28	0.87 J	< 0.26	< 0.32	NA	4.5	100	
16	LVN-6	East	LW2	Storm Sewer	SCS	7/19/2019	N		2.8 J	< 0.23	< 0.27	0.90 J	< 0.25	< 0.30	NA	0.96	110	
17	LVN-6	East	LVN-6	Storm Sewer	AECOM	7/25/2019	N		< 2.0	0.36 J	< 0.31	< 0.19	< 0.29	< 0.35	NA	2.4	18	
18	LVN-6	East	LVN-6	Storm Sewer	AECOM	10/28/2019	N		< 1.9	0.66 J	0.41 J	< 0.18	< 0.28	0.76 J	< 0.82	6.8	270	
19	LVN-6	East	LVN-6	Storm Sewer	AECOM	8/20/2020	N		< 1.9	0.92 J	0.82 J	< 0.18	< 0.27	< 0.33	< 0.80	9.2	620	
20	River Outlet	East	River Outlet	Surface Water	AECOM	7/25/2019	N		< 1.9	0.54 J	< 0.29	< 0.18	< 0.27	< 0.33	NA	2.9	15	
21	River Outlet	East	River Outlet	Surface Water	AECOM	10/28/2019	N		< 1.9	0.47 J	< 0.30	< 0.19	< 0.28	< 0.34	< 0.83	4.0	20	
22	River Outlet	East	River Outlet	Surface Water	AECOM	8/20/2020	N		< 2.0	0.34 J	< 0.30	< 0.19	< 0.28	0.51 J	< 0.83	1.7	13	
50	WCB Sump	West	WCB Sump	Groundwater Sump	AECOM	10/28/2019	N		< 1.9	0.68 J	0.54 J	< 0.18	< 0.28	< 0.34	< 0.82	6.5	25	
51	WCB Sump	West	WCB Sump Dup	Groundwater Sump	AECOM	10/28/2019	FD		< 1.9	0.59 J	0.55 J	< 0.18	< 0.28	< 0.34	< 0.83	5.9	24	
52	WCB Sump	West	WCB Sump	Groundwater Sump	AECOM	5/21/2020	N		< 1.9	0.57 J	0.49 J	< 0.19	< 0.28	0.51 J	< 0.83	6.2	32	
53	WCB Sump	West	WCB Sump	Groundwater Sump	AECOM	8/20/2020	N		< 1.9	1.2 J	0.81 J	< 0.18	< 0.28	0.98 J	< 0.81	10	42	
54	WCB Sump	West	WCB Sump FD	Groundwater Sump	AECOM	8/20/2020	FD		< 1.9	1.2 J	0.75 J	< 0.18	< 0.28	1.2 J	< 0.82	11	42	
55	BNT-3	West	BNT-3	Storm Sewer	AECOM	7/25/2019	N		< 2.0	1.0 J	0.71 JI	< 0.19	< 0.29	< 0.34	NA	19	110	
56	BNT-3	West	BNT-3	Storm Sewer	AECOM	10/28/2019	N		< 1.9	0.86 J	0.80 J	< 0.18	< 0.27	< 0.33	< 0.79	15	280	
57	BNT-3	West	BNT-3	Storm Sewer	AECOM	8/20/2020	N		< 1.9	0.92 J	< 0.30	< 0.18	< 0.28	0.37 J	< 0.82	18	49	
58	BNT-4	West	BNT-4	Storm Sewer	AECOM	7/25/2019	N		< 25	< 3.4	< 3.9	< 2.4	< 3.6	< 4.4	NA	26	99	
59	BNT-4	West	BNT-4	Storm Sewer	AECOM	10/28/2019	N		< 1.9	0.56 J	0.70 J	< 0.18	< 0.28	0.34 J	< 0.82	8.4	68	
60	BNT-4	West	BNT-4	Storm Sewer	AECOM	8/20/2020	N		< 1.9	0.56 J	< 0.29	< 0.18	< 0.27	0.89 J	< 0.80	17	48	
61	BNT-8	West	Blount	Storm Sewer	NSEC	7/19/2019	N		1.7 J	0.55 J	0.90 J	0.28 J	< 0.24	< 0.29	NA	8.6	82	
62	BNT-8	West	Blount Street	Storm Sewer	NSEC	7/19/2019	N		1.9 J	0.55 J	0.73 J	0.28 J	0.44 J	< 0.30	NA	9.3	86	
63	BNT-8	West	BNT-8	Storm Sewer	AECOM	7/25/2019	N		< 2.0	0.74 J	0.84 J	< 0.19	< 0.30	< 0.36	NA	17	110	
64	BNT-8	West	BNT-8	Storm Sewer	AECOM	10/28/2019	N		< 2.0	0.56 J	0.90 J	< 0.19	< 0.29	0.39 J	< 0.84	9.4	60	
65	BNT-8	West	BNT-8	Storm Sewer	AECOM	8/20/2020	N		< 1.9	< 0.25	< 0.29	< 0.18	< 0.27	0.61 J	< 0.79	17	46	
66	Blount St Outlet	West	Blount St.Outlet	Surface Water	AECOM	7/25/2019	N		< 1.9	0.60 J	0.75 J	< 0.18	< 0.28	< 0.34	NA	18	79	
67	Blount St Outlet	West	Blount St.Outlet FD	Surface Water	AECOM	7/25/2019	FD		< 2.0	0.66 J	0.94 J	< 0.19	< 0.30	< 0.36	NA	17	92	
68	Blount St Outlet	West	Blount St Outlet	Surface Water	AECOM	10/28/2019	N		< 2.0	0.57 J	< 0.31	< 0.19	< 0.29	0.4 J	< 0.84	16	45	
69	Blount St Outlet	West	Blount St Outlet Dup	Surface Water	AECOM	10/28/2019	FD		< 1.9	0.58 J	0.34 J	< 0.18	< 0.27	< 0.33	< 0.79	18	47	
70	Blount St Outlet	West	Blount St. Outlet	Surface Water	AECOM	8/20/2020	N		< 1.9	0.51 J	< 0.30	< 0.18	< 0.28	0.78 J	< 0.82	17	46	
71	Blount St Outlet	West	Blount St. Outlet FD	Surface Water	AECOM	8/20/2020	FD		< 2.0	0.38 J	< 0.31	< 0.19	< 0.29	0.42 J	< 0.85	18	47	
72	Path Outlet	West	Path Outlet	Surface Water	AECOM	7/25/2019	N		< 1.9	0.67 J	0.62 J	< 0.18	< 0.28	< 0.34	NA	22	59	
73	Path Outlet	West	Path Outlet	Surface Water	AECOM	10/28/2019	N		< 1.9	0.71 J	0.47 J	< 0.18	< 0.28	0.37 J	< 0.81	16	50	
74	Path Outlet	West	Path Outlet	Surface Water	AECOM	8/20/2020	N		< 2.0	0.61 J	< 0.30	< 0.19	< 0.28	0.88 J	< 0.83	20	50	

Notes:
 PFAS = Per- and polyfluoroalkyl substances
 J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
 B = Compound was found in the blank and sample.
 I = Value is EMPC (estimated maximum possible concentration).
 CL = The peak identified by the data system exhibited chromatographic interference that could not be resolved. There is reason to suspect there may be a high bias.
 (1) Sum of FOSA, NEtFOSE, NEtFOSA, NEtFOSAA, PFOS, and PFOA
Bold value = NR 140 Enforcement Standard (ES) Exceedance, Recommended/Proposed.
Italic value = NR 140 Preventive Action Limit Exceedance, Recommended/Proposed.
 -- No NR 140 ES or PAL established.
 NA = Not analyzed

Table A.2.
Soil Analytical Results Table
ATC Blount SS-Environmental Emergency Spill Response
60611431; 722 E. Main Street Madison, WI 53703

Parameters	ABBR.	Generic RCLs			BREAKER SOIL	CON-1	CON-2	CON-3	CON-4	CON-5	SS-01	RES-SS-01	SS-02	SS-03	SS-04	SS-05	SS-05 FD	SS-06
		Non-Industrial	Industrial	Groundwater Pathway	Surface 7/19/2019	2" 8/28/2019	2" 8/28/2019	2" 8/28/2019	2" 8/28/2019	2" 8/28/2019	8" 7/24/2019	12" 8/8/2019	9" 7/24/2019	10" 7/24/2019	8" 7/24/2019	7" 7/24/2019	7" 7/24/2019	9" 7/24/2019
PFAS (ug/kg)																		
Perfluorobutanoic acid	PFBA	--	--	--	0.16 ^{JB}	0.11 ^J	< 0.028	0.032 ^J	0.11 ^J	0.084 ^J	0.37 ^B	0.22 ^J	0.17 ^{JB}	0.13 ^{JB}	0.44 ^B	0.15 ^{JB}	0.16 ^{JB}	0.39 ^B
Perfluorobutanesulfonic acid	PFBS	1,260,000	16,400,000	--	< 0.026	0.066 ^{JB}	0.066 ^{JB}	< 0.025	0.077 ^J	< 0.026	< 0.027	< 0.031	< 0.026	< 0.027	< 0.031	0.045 ^J	0.047 ^J	< 0.031
4:2 Fluorotelomer Sulfonic Acid	4:2 FTS	--	--	--	< 0.39	< 0.37	< 0.37	< 0.37	< 0.40	< 0.38	< 0.40	< 0.46	< 0.38	< 0.39	< 0.46	< 0.44	< 0.44	< 0.45
Perfluoropentanoic acid	PFPeA	--	--	--	< 0.080	0.084 ^J	< 0.077	< 0.077	0.12 ^J	< 0.080	1.3	2.7	0.56	0.33	2.6	< 0.092	0.17 ^J	0.67
Perfluoropentane Sulfonic Acid	PFPeS	--	--	--	< 0.021	< 0.020	< 0.020	< 0.020	0.035 ^J	< 0.021	< 0.022	< 0.025	< 0.021	< 0.021	< 0.025	< 0.024	< 0.024	< 0.024
Perfluorohexanoic acid	PFHxA	--	--	--	< 0.044	0.071 ^J	< 0.042	< 0.042	0.13 ^J	< 0.044	0.56	1.2	0.17 ^J	0.18 ^J	0.95	0.13 ^J	0.13 ^J	0.41
Perfluorohexanesulfonic acid	PFHxS	--	--	--	< 0.032	< 0.031	< 0.031	< 0.031	0.049 ^J	< 0.032	0.055 ^J	0.18 ^J	0.047 ^J	0.078 ^J	0.066 ^J	0.053 ^J	0.069 ^J	0.093 ^J
6:2 Fluorotelomer sulfonic acid	6:2 FTS	--	--	--	7.7 ^{F1}	0.44 ^J	< 0.15	< 0.15	0.17 ^J	< 0.16	0.74 ^J	1.9 ^J	0.16 ^J	0.17 ^J	1.1 ^J	1.1 ^J	< 0.18	< 0.18
Perfluoroheptanoic acid	PFHpA	--	--	--	< 0.030	< 0.029	< 0.029	< 0.029	0.080 ^J	< 0.030	0.29	0.37	0.11 ^J	0.093 ^J	0.37	0.073 ^J	0.067 ^J	0.20 ^J
Perfluoroheptanesulfonic acid	PFHpS	--	--	--	< 0.037	< 0.035	< 0.035	< 0.035	0.042 ^J	< 0.036	< 0.038	< 0.044	< 0.036	< 0.037	< 0.044	< 0.042	< 0.042	< 0.043
Perfluorooctanoic acid	PFOA	1,260	16,400	--	< 0.09	< 0.087	< 0.086	< 0.086	0.10 ^J	< 0.089	0.11 ^J	0.27	< 0.088	< 0.091	0.27	0.25	0.30	0.44
Ammonium Perfluorooctanoate	APFO	--	--	--	< 0.093	< 0.090	< 0.089	< 0.089	0.11 ^J	< 0.092	0.12 ^J	0.29	< 0.091	< 0.095	0.28	0.26	0.31	0.46
Perfluorooctanesulfonic acid	PFOS	1,260	16,400	--	< 0.21	< 0.20	< 0.20	< 0.20	< 0.22	< 0.21	0.91	4.7	0.40 ^J	0.39 ^J	1.2	1.5	1.8	1.2
8:2 Fluorotelomer sulfonic acid	8:2 FTS	--	--	--	< 0.26	< 0.25	< 0.25	< 0.25	< 0.27	< 0.26	< 0.27	< 0.31	< 0.26	< 0.27	< 0.31	< 0.30	< 0.30	< 0.31
Perfluorononanoic acid	PFNA	--	--	--	< 0.038	< 0.036	< 0.036	< 0.036	0.043 ^J	< 0.037	0.061 ^J	0.16 ^J	< 0.037	< 0.038	0.10 ^J	0.13 ^J	0.14 ^J	0.16 ^J
Perfluorononanesulfonic acid	PFNS	--	--	--	< 0.021	< 0.020	< 0.020	< 0.020	0.039 ^J	< 0.021	< 0.022	< 0.025	< 0.021	< 0.021	< 0.025	< 0.024	< 0.024	< 0.024
Perfluorodecanoic acid	PFDA	--	--	--	< 0.023	< 0.022	< 0.022	< 0.022	0.045 ^J	< 0.023	0.19 ^J	0.6	0.26	0.12 ^J	0.54	0.34	0.34	0.93
Perfluorodecanesulfonic acid	PFDS	--	--	--	< 0.041	< 0.040	< 0.039	< 0.039	< 0.042	< 0.040	< 0.042	0.72	0.053 ^J	< 0.041	0.13 ^J	0.050 ^J	0.084 ^J	0.21 ^J
10:2 Fluorotelomer Sulfonic Acid	10:2 FTS	--	--	--	< 0.052 ^{F1}	< 0.051	< 0.050	< 0.050	< 0.054	< 0.052	< 0.054	< 0.063	< 0.051	< 0.053	< 0.062	< 0.060	< 0.059	< 0.061
Perfluoroundecanoic acid	PFUnA	--	--	--	< 0.038	< 0.036	< 0.036	< 0.036	0.046 ^J	< 0.037	0.051 ^J	0.14 ^J	0.11 ^J	0.043 ^J	0.17 ^J	0.062 ^J	0.067 ^J	0.39
Perfluorododecanoic acid	PFDaA	--	--	--	< 0.07	< 0.068	< 0.067	< 0.067	< 0.072	< 0.069	0.073 ^J	0.25	0.16 ^J	0.21	0.43	0.092 ^J	0.082 ^J	1.0
Perfluorododecanesulfonic acid	PFDoS	--	--	--	< 0.063	< 0.061	< 0.060	< 0.060	< 0.065	< 0.062	< 0.065	< 0.075	< 0.062	< 0.064	< 0.075	< 0.072	< 0.071	< 0.073
Perfluorotridecanoic acid	PFTTrDA	--	--	--	< 0.053	< 0.052	< 0.051	< 0.051	< 0.055	< 0.053	< 0.055	< 0.064	< 0.052	0.094 ^J	0.080 ^J	< 0.061	< 0.061	0.22 ^J
Perfluorotetradecanoic acid	PFTeDA	--	--	--	< 0.056	< 0.055	< 0.054	< 0.054	< 0.058	< 0.056	< 0.058	< 0.068	0.060 ^J	0.26	0.23 ^J	< 0.065	< 0.064	0.56
Perfluorohexadecanoic acid	PFHxDA	--	--	--	< 0.046 ^{F1}	< 0.045	< 0.044	< 0.044	< 0.047	< 0.046 ^{F1}	< 0.047 ^{F1}	< 0.055	< 0.045	0.054 ^J	0.075 ^J	< 0.053	< 0.052	0.15 ^J
Perfluorooctadecanoic acid	PFODA	--	--	--	< 0.029 ^{F1}	< 0.028	< 0.028	< 0.028	0.035 ^J	< 0.029 ^{F1}	< 0.030 ^{F1}	< 0.035	< 0.029	< 0.030	< 0.035	< 0.033	< 0.033	0.035 ^J
HFPO-DA	GenX	--	--	--	< 0.11	< 0.11	< 0.11	< 0.11	< 0.12	< 0.11	< 0.12	< 0.14	< 0.11	< 0.12	< 0.14	< 0.13	< 0.13	< 0.13
4,8-dioxa-3H-perfluorononanoic acid	DONA	--	--	--	< 0.019	< 0.018	< 0.018	< 0.018	0.031 ^J	< 0.019	< 0.019	< 0.023	< 0.019	< 0.019	< 0.022	< 0.022	< 0.021	< 0.022
NaDONA	NaDONA	--	--	--	< 0.02	< 0.019	< 0.019	< 0.019	0.033 ^J	< 0.020	< 0.020	< 0.024	< 0.020	< 0.020	< 0.024	< 0.023	< 0.023	< 0.023
ADONA	ADONA	--	--	--	< 0.02	< 0.019	< 0.019	< 0.019	0.033 ^J	< 0.020	< 0.020	< 0.024	< 0.020	< 0.020	< 0.024	< 0.023	< 0.023	< 0.023
Perfluorooctane sulfonamide	PFOSA	--	--	--	< 0.086	< 0.083	< 0.082	< 0.082	< 0.088	< 0.085	< 0.088	< 0.10	< 0.084	< 0.087	< 0.10	< 0.098	< 0.097	< 0.10
N-Ethyl perfluorooctane sulfonamide	NEtFOSA	--	--	--	NA	< 0.024	< 0.024	< 0.024	< 0.026	< 0.025	NA	NA	NA	NA	NA	NA	NA	NA
N-Ethyl perfluorooctane sulfonamidoethanol	NEtFOSE	--	--	--	NA	< 0.036	< 0.036	< 0.036	< 0.039	< 0.037	NA	NA	NA	NA	NA	NA	NA	NA
N-Methyl perfluorooctane sulfonamide	NMeFOSA	--	--	--	NA	< 0.042	< 0.041	< 0.041	< 0.044	< 0.042	NA	NA	NA	NA	NA	NA	NA	NA
N-Methyl perfluorooctane sulfonamidoethanol	NMeFOSE	--	--	--	NA	< 0.072	< 0.071	< 0.071	< 0.077	< 0.074	NA	NA	NA	NA	NA	NA	NA	NA
MeFOSAA	MeFOSAA	--	--	--	< 0.41	< 0.40	< 0.39	< 0.39	< 0.42	< 0.40	< 0.42	< 0.49	< 0.40	< 0.41	< 0.49	< 0.47	< 0.46	< 0.48
EtFOSAA	EtFOSAA	--	--	--	< 0.39	< 0.37	< 0.37	< 0.37	< 0.40	< 0.38	< 0.40	< 0.46	< 0.38	< 0.39	< 0.46	< 0.44	< 0.44	< 0.45
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic ac F-53B Major		--	--	--	< 0.028	< 0.027	< 0.027	< 0.027	0.041 ^J	< 0.028	< 0.029	< 0.034	< 0.028	< 0.029	< 0.034	< 0.032	< 0.032	< 0.033
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic ac F-53B Minor		--	--	--	< 0.023	< 0.022	< 0.022	< 0.022	0.028 ^J	< 0.023	< 0.024	< 0.028	< 0.023	< 0.023	< 0.027	< 0.026	< 0.026	< 0.027
Total PFAS		--	--	--	8	1	0	0	1	0	5	14	2	2	9	4	4	8

Table A.2.
Soil Analytical Results Table
ATC Blount SS-Environmental Emergency Spill Response
60611431; 722 E. Main Street Madison, WI 53703

Parameters	ABBR.	Generic RCLs			SS-07	SS-08	RES-SS-08	SS-09	SS-10	SS-11	SS-12	RES-SS-12	SS-13	SS-14	SS-15	SS-16	SS-17	SS-17 FD
		Non-Industrial	Industrial	Groundwater Pathway	9 " 7/24/2019	10 " 7/24/2019	12 " 8/8/2019	8 " 7/24/2019	9 " 7/24/2019	8 " 7/24/2019	9 " 7/24/2019	12 " 8/8/2019	Surface 7/24/2019	Surface 7/24/2019	Surface 7/24/2019	Surface 7/24/2019	Surface 7/24/2019	Surface 7/24/2019
Perfluorobutanoic acid	PFBA	--	--	--	0.15 ^{JB}	0.099 ^{JB}	0.15 ^J	0.13 ^{JB}	0.13 ^{JB}	0.20 ^{JB}	< 0.034	0.27 ^J	1.3 ^B	4.4 ^B	1.6 ^B	2.0 ^B	0.58 ^B	0.22 ^B
Perfluorobutanesulfonic acid	PFBS	1,260,000	16,400,000	--	< 0.026	< 0.028	< 0.031	0.048 ^J	< 0.026	0.061 ^J	0.065 ^J	< 0.037	< 0.027	< 0.026	< 0.025	< 0.028	< 0.027	< 0.027
4:2 Fluorotelomer Sulfonic Acid	4:2 FTS	--	--	--	< 0.39	< 0.42	< 0.46	< 0.46	< 0.38	< 0.45	< 0.46	< 0.55	< 0.40	< 0.38	< 0.38	< 0.42	< 0.40	< 0.40
Perfluoropentanoic acid	PFPeA	--	--	--	0.29	0.42	0.63	0.18 ^J	0.17 ^J	0.36	< 0.095	0.44	0.30	0.56	0.25	0.40	0.59	0.43
Perfluoropentane Sulfonic Acid	PFPeS	--	--	--	< 0.021	< 0.022	< 0.025	< 0.025	< 0.021	< 0.024	< 0.025	< 0.030	< 0.022	< 0.021	< 0.020	< 0.022	< 0.022	< 0.022
Perfluorohexanoic acid	PFHxA	--	--	--	0.15 ^J	0.17 ^J	0.28	0.17 ^J	0.073 ^J	0.28	0.058 ^J	0.15 ^J	1.7	3.7	2.0	2.4	0.43	0.26
Perfluorohexanesulfonic acid	PFHxS	--	--	--	< 0.033	0.035 ^J	< 0.039	0.096 ^J	0.042 ^J	0.058 ^J	0.17 ^J	0.14 ^J	< 0.034	< 0.032	< 0.032	< 0.035	< 0.033	< 0.034
6:2 Fluorotelomer sulfonic acid	6:2 FTS	--	--	--	0.29 ^J	1.3 ^J	0.87 ^J	< 0.19	< 0.16	< 0.18	< 0.18	0.36 ^J	120	310	140	140	15	6.6
Perfluoroheptanoic acid	PFHpA	--	--	--	0.062 ^J	0.13 ^J	0.16 ^J	0.12 ^J	0.062 ^J	0.27	0.11 ^J	0.10 ^J	0.075 ^J	0.16 ^J	0.040 ^J	0.075 ^J	0.087 ^J	0.067 ^J
Perfluoroheptanesulfonic acid	PFHpS	--	--	--	< 0.037	< 0.039	< 0.044	< 0.043	< 0.036	< 0.043	< 0.043	< 0.052	< 0.038	< 0.036	< 0.036	< 0.039	< 0.038	< 0.038
Perfluorooctanoic acid	PFOA	1,260	16,400	--	< 0.091	0.16 ^J	< 0.11	0.39	0.20 ^J	0.85	0.71	0.36	< 0.093	< 0.089	< 0.087	< 0.097	< 0.093	< 0.094
Ammonium Perfluorooctanoate	APFO	--	--	--	< 0.094	0.17 ^J	< 0.11	0.41	0.21 ^J	0.88	0.73	0.37	< 0.096	< 0.092	< 0.090	< 0.10	< 0.096	< 0.097
Perfluorooctanesulfonic acid	PFOS	1,260	16,400	--	0.22 ^J	0.58	< 0.25	1.6	0.50 ^J	1.6	2.7	2.9	< 0.22	< 0.21	0.26 ^J	0.32 ^J	< 0.22	< 0.22
8:2 Fluorotelomer sulfonic acid	8:2 FTS	--	--	--	< 0.26	< 0.28	< 0.31	< 0.31	< 0.26	< 0.30	< 0.31	< 0.37	< 0.27	1.4 ^J	< 2.5	< 0.28	0.30 ^J	< 0.27
Perfluorononanoic acid	PFNA	--	--	--	< 0.038	0.10 ^J	< 0.045	0.12 ^J	0.065 ^J	0.29	0.30	0.13 ^J	< 0.039	< 0.037	< 0.037	< 0.040	< 0.039	< 0.039
Perfluorononanesulfonic acid	PFNS	--	--	--	< 0.021	< 0.022	< 0.025	< 0.025	< 0.021	< 0.024	< 0.025	< 0.030	< 0.022	< 0.021	< 0.020	< 0.022	< 0.022	< 0.022
Perfluorodecanoic acid	PFDA	--	--	--	0.17 ^J	0.21 ^J	0.081 ^J	0.38	0.31	0.76	0.30	0.41	< 0.024	< 0.023	< 0.022	< 0.025	< 0.024	< 0.024
Perfluorodecanesulfonic acid	PFDS	--	--	--	< 0.041	0.057 ^J	< 0.049	0.12 ^J	0.045 ^J	0.060 ^J	< 0.048	0.29 ^J	< 0.042	< 0.040	< 0.040	< 0.044	< 0.042	< 0.043
10:2 Fluorotelomer Sulfonic Acid	10:2 FTS	--	--	--	< 0.053	< 0.056	< 0.063	< 0.062	< 0.052	< 0.061	< 0.061	< 0.074	< 0.054	0.64	< 0.051	< 0.056	0.14 ^J	< 0.055
Perfluoroundecanoic acid	PFUnA	--	--	--	0.11 ^J	0.095 ^J	< 0.045	0.11 ^J	0.088 ^J	0.089 ^J	0.048 ^J	0.10 ^J	0.043 ^J	< 0.037	< 0.037	0.049 ^J	< 0.039	< 0.039
Perfluorododecanoic acid	PFDaA	--	--	--	0.24	0.17 ^J	< 0.084	0.17 ^J	0.19 ^J	0.15 ^J	0.096 ^J	0.17 ^J	< 0.072	< 0.069	< 0.068	< 0.075	< 0.072	< 0.073
Perfluorododecanesulfonic acid	PFDoS	--	--	--	< 0.063	< 0.067	< 0.075	< 0.074	< 0.062	< 0.073	< 0.074	< 0.089	< 0.065	< 0.062	< 0.061	< 0.067	< 0.065	< 0.066
Perfluorotridecanoic acid	PFTrDA	--	--	--	< 0.054	< 0.057	< 0.064	< 0.063	< 0.053	< 0.062	< 0.063	< 0.075	< 0.055	< 0.053	< 0.052	0.087 ^J	< 0.055	< 0.056
Perfluorotetradecanoic acid	PFTeDA	--	--	--	0.068 ^J	0.076 ^J	< 0.068	0.074 ^J	0.091 ^J	0.091 ^J	< 0.066	< 0.080	< 0.058	< 0.056	< 0.055	0.064 ^J	< 0.058	< 0.059
Perfluorohexadecanoic acid	PFHxDA	--	--	--	< 0.047	< 0.049	< 0.055	< 0.054	< 0.045	< 0.054	< 0.054	< 0.065	< 0.048	< 0.045	< 0.045	< 0.049	< 0.047	< 0.048
Perfluorooctadecanoic acid	PFODA	--	--	--	< 0.030	< 0.031	< 0.035	< 0.035	< 0.029	< 0.034	< 0.034	< 0.041	< 0.030	< 0.029	< 0.028	< 0.031	< 0.030	< 0.031
HFPO-DA	GenX	--	--	--	< 0.12	< 0.12	< 0.14	< 0.14	< 0.11	< 0.13	< 0.14	< 0.16	< 0.12	< 0.11	< 0.11	< 0.12	< 0.12	< 0.12
4,8-dioxa-3H-perfluorononanoic acid	DONA	--	--	--	< 0.019	< 0.020	< 0.023	< 0.022	< 0.019	< 0.022	< 0.022	< 0.027	< 0.019	< 0.019	< 0.018	< 0.020	< 0.019	< 0.020
NaDONA	NaDONA	--	--	--	< 0.020	< 0.021	< 0.024	< 0.023	< 0.020	< 0.023	< 0.023	< 0.028	< 0.021	< 0.020	< 0.019	< 0.021	< 0.020	< 0.021
ADONA	ADONA	--	--	--	< 0.020	< 0.021	< 0.024	< 0.023	< 0.020	< 0.023	< 0.023	< 0.028	< 0.021	< 0.020	< 0.019	< 0.021	< 0.020	< 0.021
Perfluorooctane sulfonamide	PFOSA	--	--	--	< 0.087	< 0.092	< 0.10	< 0.10	< 0.085	< 0.10	< 0.10	< 0.12	< 0.089	< 0.085	< 0.083	< 0.092	< 0.088	< 0.090
N-Ethyl perfluorooctane sulfonamide	NEtFOSA	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Ethyl perfluorooctane sulfonamidoethanol	NEtFOSE	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Methyl perfluorooctane sulfonamide	NMeFOSA	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Methyl perfluorooctane sulfonamidoethanol	NMeFOSE	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MeFOSAA	MeFOSAA	--	--	--	< 0.41	< 0.44	< 0.49	< 0.48	< 0.40	< 0.47	< 0.48	< 0.58	< 0.42	< 0.40	< 0.40	< 0.44	< 0.42	< 0.43
EtFOSAA	EtFOSAA	--	--	--	< 0.39	< 0.42	< 0.46	< 0.46	< 0.38	< 0.45	< 0.46	< 0.55	< 0.40	< 0.38	< 3.8	< 0.42	< 0.40	< 0.40
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic ac F-53B Major		--	--	--	< 0.029	< 0.030	< 0.034	< 0.033	< 0.028	< 0.033	< 0.033	< 0.040	< 0.029	< 0.028	< 0.027	< 0.030	< 0.029	< 0.029
11-chloroeicosafuoro-3-oxaundecane-1-sulfonic ac F-53B Minor		--	--	--	< 0.023	< 0.025	< 0.028	< 0.027	< 0.023	< 0.027	< 0.027	< 0.033	< 0.024	< 0.023	< 0.022	< 0.025	< 0.024	< 0.024
Total PFAS		--	--	--	2	4	2	4	2	6	5	6	120	320	140	150	17	8

Table A.2.
Soil Analytical Results Table
ATC Blount SS-Environmental Emergency Spill Response
60611431; 722 E. Main Street Madison, WI 53703

Parameters	ABBR.	Generic RCLs			SS-18	SS-19	SS-20	SS-21	SS-22	SS-23	SS-24	SS-25	SS-26	SS-27	SS-28	SS-29	SS-30	SS-31
		Non-Industrial	Industrial	Groundwater Pathway	Surface 7/26/2019	Surface 10/29/2019	Surface 10/29/2019	Surface 10/29/2019										
PFAS (ug/kg)																		
Perfluorobutanoic acid	PFBA	--	--	--	0.59 ^B	3.4 ^B	0.14 ^{JB}	0.17 ^{JB}	0.12 ^{JB}	0.24 ^B	0.21 ^B	0.31 ^B	0.86 ^B	0.58 ^B	< 0.030	0.37 ^B	0.085 ^{JB}	0.13 ^{JB}
Perfluorobutanesulfonic acid	PFBS	1,260,000	16,400,000	--	< 0.025	< 0.028	< 0.026	< 0.027	< 0.028	< 0.026	< 0.025	< 0.027	< 0.027	< 0.026	< 0.027	< 0.026	< 0.026	< 0.025
4:2 Fluorotelomer Sulfonic Acid	4:2 FTS	--	--	--	< 0.38	< 0.41	< 0.38	< 0.39	< 0.41	< 0.39	< 0.38	< 0.39	< 0.39	< 0.39	< 0.39	< 0.39	< 0.39	< 0.38
Perfluoropentanoic acid	PFPeA	--	--	--	0.22	0.38	< 0.080	< 0.082	< 0.085	< 0.080	0.17 ^J	0.11 ^J	0.31	0.42	< 0.082	0.12 ^J	0.11 ^J	0.59
Perfluoropentane Sulfonic Acid	PFPeS	--	--	--	< 0.020	< 0.022	< 0.021	< 0.021	< 0.022	< 0.021	< 0.020	< 0.021	< 0.021	< 0.021	< 0.021	< 0.021	< 0.021	< 0.020
Perfluorohexanoic acid	PFHxA	--	--	--	0.26	1.0	< 0.044	< 0.045	< 0.047	0.050 ^J	0.083 ^J	0.088 ^J	0.28	0.50	< 0.045	0.050 ^J	< 0.044	0.26
Perfluorohexanesulfonic acid	PFHxS	--	--	--	< 0.032	< 0.034	< 0.032	< 0.033	< 0.034	< 0.032	< 0.031	< 0.033	< 0.033	0.038 ^J	0.035 ^{J1}	0.040 ^J	< 0.032	< 0.032
6:2 Fluorotelomer sulfonic acid	6:2 FTS	--	--	--	11	130	< 0.16	1.5 ^J	0.44 ^J	2.0 ^J	3.8	1.2 ^J	9.8	13	1.6 ^J	< 0.16	0.16 ^J	0.66 ^J
Perfluoroheptanoic acid	PFHpA	--	--	--	0.031 ^J	0.18 ^J	< 0.030	< 0.031	< 0.032	< 0.030	0.032 ^J	< 0.031	0.070 ^J	0.056 ^J	< 0.031	0.043 ^J	< 0.030	0.068 ^J
Perfluoroheptanesulfonic acid	PFHpS	--	--	--	< 0.036	< 0.039	< 0.036	< 0.037	< 0.039	< 0.037	< 0.035	< 0.037	< 0.037	< 0.037	< 0.037	< 0.037	< 0.036	< 0.036
Perfluorooctanoic acid	PFOA	1,260	16,400	--	< 0.088	< 0.095	< 0.089	< 0.091	< 0.095	< 0.090	< 0.087	< 0.092	< 0.092	< 0.091	< 0.091	< 0.090	< 0.090	< 0.087
Ammonium Perfluorooctanoate	APFO	--	--	--	< 0.091	< 0.098	< 0.092	< 0.094	< 0.099	< 0.093	< 0.090	< 0.095	< 0.095	< 0.094	< 0.095	< 0.093	< 0.093	< 0.090
Perfluorooctanesulfonic acid	PFOS	1,260	16,400	--	< 0.20	< 0.22	< 0.21	< 0.21	< 0.22	< 0.21	< 0.20	0.24 ^J	< 0.21	< 0.21	< 0.21	< 0.21	0.21 ^J	< 0.20
8:2 Fluorotelomer sulfonic acid	8:2 FTS	--	--	--	0.62 ^J	< 2.8	< 0.26	< 0.27	< 0.28	< 0.26	< 0.25	< 0.27	< 0.27	< 0.26	< 0.27	< 0.26	< 0.26	< 0.25
Perfluorononanoic acid	PFNA	--	--	--	< 0.037	< 0.040	< 0.037	< 0.038	< 0.040	< 0.038	< 0.036	< 0.038	< 0.038	< 0.038	< 0.038	< 0.038	< 0.037	< 0.037
Perfluorononanesulfonic acid	PFNS	--	--	--	< 0.020	< 0.022	< 0.021	< 0.021	< 0.022	< 0.021	< 0.020	< 0.021	< 0.021	< 0.021	< 0.021	< 0.021	< 0.021	< 0.020
Perfluorodecanoic acid	PFDA	--	--	--	< 0.022	0.030 ^J	< 0.023	< 0.023	< 0.024	< 0.023	< 0.022	0.058 ^J	0.042 ^J	< 0.023	< 0.023	0.024 ^J	< 0.023	< 0.022
Perfluorodecanesulfonic acid	PFDS	--	--	--	< 0.040	< 0.043	< 0.040	< 0.041	< 0.043	< 0.041	< 0.040	< 0.042	< 0.042	< 0.041	< 0.041	< 0.041	< 0.041	< 0.040
10:2 Fluorotelomer Sulfonic Acid	10:2 FTS	--	--	--	0.20	0.44	< 0.052	< 0.053	< 0.055	< 0.052	< 0.051	< 0.053	0.11 ^J	0.11 ^J	< 0.053	< 0.052	< 0.052	< 0.051
Perfluoroundecanoic acid	PFUnA	--	--	--	< 0.037	< 0.040	< 0.037	< 0.038	< 0.040	< 0.038	< 0.036	0.043 ^J	0.065 ^J	< 0.038	< 0.038	< 0.038	< 0.037	< 0.037
Perfluorododecanoic acid	PFDaA	--	--	--	< 0.068	< 0.074	< 0.070	< 0.071	< 0.074	< 0.070	< 0.068	< 0.071	< 0.071	< 0.071	< 0.071	< 0.070	< 0.070	< 0.068
Perfluorododecanesulfonic acid	PFDoS	--	--	--	< 0.061	< 0.066	< 0.062	< 0.064	< 0.066	< 0.063	< 0.061	< 0.064	< 0.064	< 0.063	< 0.064	< 0.063	< 0.062	< 0.061
Perfluorotridecanoic acid	PFTTrDA	--	--	--	< 0.052	< 0.056	< 0.053	< 0.054	< 0.057	< 0.053	< 0.052	< 0.054	< 0.054	< 0.054	< 0.054	< 0.053	< 0.053	< 0.052
Perfluorotetradecanoic acid	PFTeDA	--	--	--	< 0.055	< 0.059	< 0.056	< 0.057	< 0.060	< 0.056	< 0.055	< 0.057	< 0.058	< 0.057	< 0.057	< 0.057	< 0.056	< 0.055
Perfluorohexadecanoic acid	PFHxDA	--	--	--	< 0.045	< 0.048	< 0.046	< 0.047	< 0.049	< 0.046	< 0.045	< 0.047	< 0.047	< 0.046	< 0.047	< 0.046	< 0.046	< 0.045
Perfluorooctadecanoic acid	PFODA	--	--	--	< 0.028	< 0.031	< 0.029	< 0.030	< 0.031	< 0.029	< 0.028	< 0.030	< 0.030	< 0.029	< 0.030	< 0.029	< 0.029	< 0.028
HFPO-DA	GenX	--	--	--	< 0.11	< 0.12	< 0.11	< 0.12	< 0.12	< 0.11	< 0.11	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.11	< 0.11
4,8-dioxa-3H-perfluorononanoic acid	DONA	--	--	--	< 0.018	< 0.020	< 0.019	< 0.019	< 0.020	< 0.019	< 0.018	< 0.019	< 0.019	< 0.019	< 0.019	< 0.019	< 0.019	< 0.018
NaDONA	NaDONA	--	--	--	< 0.019	< 0.021	< 0.020	< 0.020	< 0.021	< 0.020	< 0.019	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.019
ADONA	ADONA	--	--	--	< 0.019	< 0.021	< 0.020	< 0.020	< 0.021	< 0.020	< 0.019	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.019
Perfluorooctane sulfonamide	PFOSA	--	--	--	< 0.083	< 0.090	< 0.085	< 0.087	< 0.091	< 0.086	< 0.083	< 0.087	< 0.087	< 0.086	< 0.087	< 0.086	< 0.085	< 0.083
N-Ethyl perfluorooctane sulfonamide	NEtFOSA	--	--	--	NA	< 0.025	< 0.025	< 0.024										
N-Ethyl perfluorooctane sulfonamidoethanol	NEtFOSE	--	--	--	NA	< 0.038	< 0.037	< 0.037										
N-Methyl perfluorooctane sulfonamide	NMeFOSA	--	--	--	NA	< 0.043	< 0.043	< 0.042										
N-Methyl perfluorooctane sulfonamidoethanol	NMeFOSE	--	--	--	NA	< 0.074	< 0.074	< 0.072										
MeFOSAA	MeFOSAA	--	--	--	< 0.40	< 0.43	< 0.40	< 0.41	< 0.43	< 0.41	< 0.40	< 0.42	< 0.42	< 0.41	< 0.41	< 0.41	< 0.41	< 0.40
EtFOSAA	EtFOSAA	--	--	--	< 0.38	< 0.41	< 0.38	< 0.39	< 0.41	< 0.39	< 0.38	< 0.39	< 0.39	< 0.39	< 0.39	< 0.39	< 0.39	< 0.38
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic ac F-53B Major		--	--	--	< 0.027	< 0.030	< 0.028	< 0.029	< 0.030	< 0.028	< 0.027	< 0.029	< 0.029	< 0.028	< 0.029	< 0.028 ^{F1}	< 0.028	< 0.027
11-chloroeicosafuoro-3-oxaundecane-1-sulfonic ac F-53B Minor		--	--	--	< 0.022	< 0.024	< 0.023	< 0.023	< 0.024	< 0.023	< 0.022	< 0.023	< 0.023	< 0.023	< 0.023	< 0.023	< 0.023	< 0.022
Total PFAS		--	--	--	13	140	0	2	1	2	4	2	12	15	2	1	1	2

Table A.2.
Soil Analytical Results Table
ATC Blount SS-Environmental Emergency Spill Response
60611431; 722 E. Main Street Madison, WI 53703

Parameters	ABBR.	Generic RCLs			SS-32	SS-33	SS-34	SS-34 DUP	SS-35	SS-36	SS-37	SS-38	SS-39	SS-40	SS-41	SS-42	SS-43	SS-44
		Non-Industrial	Industrial	Groundwater Pathway	Surface 10/29/2019	Surface 10/29/2019	Surface 10/29/2019	Surface 10/29/2019	Surface 10/29/2019	Surface 10/29/2019	Surface 10/29/2019	Surface 10/29/2019	Surface 10/29/2019	Surface 10/29/2019	Surface 10/29/2019	Surface 10/29/2019	Surface 10/29/2019	Surface 10/29/2019
Perfluorobutanoic acid	PFBA	--	--	--	0.090 ^{JB}	0.082 ^{JB}	0.12 ^{JB}	0.11 ^{JB}	0.21 ^B	0.63 ^B	0.10 ^{JB}	0.081 ^{JB}	0.063 ^{JB}	0.092 ^{JB}	0.14 ^{JB}	0.093 ^{JB}	0.070 ^{JB}	0.79 ^B
Perfluorobutanesulfonic acid	PFBS	1,260,000	16,400,000	--	< 0.025	< 0.026	< 0.026	< 0.025	0.17 ^J	0.071 ^J	0.11 ^J	0.052 ^J	< 0.027	0.041 ^J	< 0.025	< 0.026	< 0.025	0.034 ^J
4:2 Fluorotelomer Sulfonic Acid	4:2 FTS	--	--	--	< 0.37	< 0.39	< 0.38	< 0.37	< 0.38	< 0.37	< 0.38	< 0.38	< 0.40	< 0.40	< 0.37	< 0.38	< 0.37	< 0.39
Perfluoropentanoic acid	PFPeA	--	--	--	0.30	0.17 ^J	0.15 ^J	0.20	0.58	2.4	0.086 ^J	0.090 ^J	< 0.083	< 0.083	0.49	0.15 ^J	< 0.078	1.3
Perfluoropentane Sulfonic Acid	PFPeS	--	--	--	< 0.020	< 0.021	< 0.021	< 0.020	0.051 ^J	< 0.020	0.045 ^J	< 0.021	< 0.022	< 0.022	< 0.020	< 0.021	< 0.020	< 0.021
Perfluorohexanoic acid	PFHxA	--	--	--	0.17 ^J	0.056 ^J	0.17 ^J	0.17 ^J	0.28	1.6	0.077 ^J	0.065 ^J	< 0.045	0.046 ^J	0.14 ^J	0.15 ^J	0.077 ^J	0.70
Perfluorohexanesulfonic acid	PFHxS	--	--	--	< 0.031	< 0.033	< 0.032	0.031 ^J	0.10 ^J	0.035 ^J	0.063 ^J	< 0.032	< 0.033	0.036 ^J	< 0.031	< 0.032	0.034 ^J	0.040 ^J
6:2 Fluorotelomer sulfonic acid	6:2 FTS	--	--	--	< 0.15	< 0.16	0.83 ^J	1.2 ^J	1.7 ^J	2.4	1.9 ^J	0.32 ^J	0.29 ^J	0.48 ^J	0.71 ^J	8.9	4.4	36
Perfluoroheptanoic acid	PFHpA	--	--	--	0.030 ^J	< 0.031	0.057 ^J	0.068 ^J	0.14 ^J	0.13 ^J	0.043 ^J	0.031 ^J	< 0.031	< 0.031	0.10 ^J	< 0.030	< 0.029	0.27
Perfluoroheptanesulfonic acid	PFHpS	--	--	--	< 0.035	< 0.037	< 0.036	< 0.035	0.057 ^J	< 0.035	0.043 ^J	< 0.036	< 0.038	< 0.038	< 0.035	< 0.036	< 0.035	< 0.037
Perfluorooctanoic acid	PFOA	1,260	16,400	--	< 0.087	< 0.091	< 0.089	< 0.087	0.095 ^J	< 0.087	< 0.088	< 0.088	< 0.093	< 0.093	< 0.086	< 0.089	< 0.087	< 0.091
Ammonium Perfluorooctanoate	APFO	--	--	--	< 0.090	< 0.094	< 0.092	< 0.090	0.099 ^J	< 0.090	< 0.091	< 0.091	< 0.096	< 0.096	< 0.089	< 0.092	< 0.090	< 0.094
Perfluorooctanesulfonic acid	PFOS	1,260	16,400	--	< 0.20	< 0.21	< 0.21	< 0.20	< 0.21	< 0.20	< 0.20	< 0.21	< 0.22	< 0.22	< 0.20	< 0.21	< 0.20	< 0.21
8:2 Fluorotelomer sulfonic acid	8:2 FTS	--	--	--	< 0.25	< 0.26	< 0.26	< 0.25	0.29 ^J	< 0.25	0.48 ^J	< 0.26	< 0.27	< 0.27	< 0.25	0.35 ^J	< 0.25	< 0.26
Perfluorononanoic acid	PFNA	--	--	--	< 0.036	< 0.038	< 0.037	0.039 ^J	0.089 ^J	0.043 ^J	0.043 ^J	< 0.037	0.040 ^J	< 0.039	0.077 ^J	< 0.037	0.036 ^J	0.047 ^J
Perfluorononanesulfonic acid	PFNS	--	--	--	< 0.020	< 0.021	< 0.021	< 0.020	0.068 ^J	0.025 ^J	0.039 ^J	< 0.021	< 0.022	< 0.022	< 0.020	< 0.021	< 0.020	< 0.021
Perfluorodecanoic acid	PFDA	--	--	--	< 0.022	0.035 ^J	< 0.023	0.046 ^J	0.070 ^J	< 0.022	0.057 ^J	< 0.023	0.075 ^J	0.16 ^J	0.026 ^J	< 0.023	0.054 ^J	0.052 ^J
Perfluorodecanesulfonic acid	PFDS	--	--	--	< 0.039	< 0.041	< 0.040	< 0.039	0.057 ^J	< 0.039	0.041 ^J	< 0.040	< 0.042	< 0.042	< 0.039	< 0.040	< 0.039	< 0.041
10:2 Fluorotelomer Sulfonic Acid	10:2 FTS	--	--	--	< 0.051	< 0.053	< 0.052	0.068 ^J	0.078 ^J	< 0.050	0.086 ^J	< 0.051	< 0.054	< 0.054	< 0.050	0.10 ^J	< 0.051	< 0.053
Perfluoroundecanoic acid	PFUnA	--	--	--	< 0.036	0.060 ^J	< 0.037	0.045 ^J	0.084 ^J	0.044 ^J	0.054 ^J	< 0.037	0.045 ^J	0.10 ^J	< 0.036	0.044 ^J	< 0.036	< 0.038
Perfluorododecanoic acid	PFDaA	--	--	--	< 0.068	< 0.071	< 0.069	< 0.068	< 0.069	< 0.068	< 0.069	< 0.069	< 0.072	0.17 ^J	< 0.067	< 0.069	< 0.068	< 0.071
Perfluorododecanesulfonic acid	PFDoS	--	--	--	< 0.061	< 0.063	< 0.062	< 0.061	< 0.062	< 0.061	< 0.061	< 0.062	< 0.065	< 0.065	< 0.060	< 0.062	< 0.061	< 0.064
Perfluorotridecanoic acid	PFTrDA	--	--	--	< 0.052	< 0.054	< 0.053	< 0.052	0.068 ^J	< 0.052	< 0.052	< 0.052	< 0.055	0.065 ^J	< 0.051	< 0.053	< 0.052	< 0.054
Perfluorotetradecanoic acid	PFTeDA	--	--	--	< 0.055	< 0.057	< 0.056	< 0.055	0.068 ^J	< 0.055	< 0.055	< 0.055	< 0.058	0.091 ^J	< 0.054	< 0.056	< 0.055	< 0.057
Perfluorohexadecanoic acid	PFHxDA	--	--	--	< 0.045	< 0.046	< 0.046	< 0.044	0.069 ^J	< 0.044	< 0.045	< 0.045	< 0.047	< 0.048	< 0.044	< 0.045	< 0.045	< 0.047
Perfluorooctadecanoic acid	PFODA	--	--	--	< 0.028	< 0.030	< 0.029	< 0.028	0.079 ^J	< 0.028	0.055 ^J	< 0.029	< 0.030	< 0.030	< 0.028	< 0.029	< 0.028	< 0.030
HFPO-DA	GenX	--	--	--	< 0.11	< 0.12	< 0.11	< 0.11	3.3	1.0	2.2	0.48	0.46	0.60	0.19 ^J	0.26	0.19 ^J	0.19 ^J
4,8-dioxa-3H-perfluorononanoic acid	DONA	--	--	--	< 0.018	< 0.019	< 0.019	< 0.018	0.046 ^J	< 0.018	0.026 ^J	< 0.018	< 0.019	< 0.019	< 0.018	< 0.019	< 0.018	< 0.019
NaDONA	NaDONA	--	--	--	< 0.019	< 0.020	< 0.020	< 0.019	0.049 ^J	< 0.019	0.028 ^J	< 0.019	< 0.021	< 0.021	< 0.019	< 0.020	< 0.019	< 0.020
ADONA	ADONA	--	--	--	< 0.019	< 0.020	< 0.020	< 0.019	0.048 ^J	< 0.019	0.028 ^J	< 0.019	< 0.021	< 0.021	< 0.019	< 0.020	< 0.019	< 0.020
Perfluorooctane sulfonamide	PFOSA	--	--	--	< 0.083	< 0.087	< 0.085	< 0.083	< 0.085	< 0.083	< 0.084	< 0.084	< 0.089	< 0.089	< 0.082	< 0.084	< 0.083	< 0.087
N-Ethyl perfluorooctane sulfonamide	NEtFOSA	--	--	--	< 0.024	< 0.025	< 0.025	0.056 ^J	< 0.025	< 0.024	< 0.025	< 0.025	< 0.026	< 0.026	< 0.024	< 0.025	< 0.024	< 0.025
N-Ethyl perfluorooctane sulfonamidoethanol	NEtFOSE	--	--	--	< 0.036	< 0.038	0.048 ^J	0.098 ^J	0.089 ^J	< 0.036	< 0.037	0.048 ^J	< 0.039	< 0.039	0.046 ^J	< 0.037	< 0.036	< 0.038
N-Methyl perfluorooctane sulfonamide	NMeFOSA	--	--	--	< 0.041	< 0.043	< 0.042	0.069 ^J	< 0.042	< 0.041	< 0.042	< 0.042	< 0.044	< 0.044	< 0.041	< 0.042	< 0.042	< 0.043
N-Methyl perfluorooctane sulfonamidoethanol	NMeFOSE	--	--	--	< 0.072	< 0.075	< 0.074	0.12 ^J	< 0.074	< 0.072	< 0.073	< 0.073	< 0.077	< 0.077	< 0.071	< 0.073	< 0.072	< 0.075
MeFOSAA	MeFOSAA	--	--	--	< 0.39	< 0.41	< 0.40	< 0.39	< 0.40	< 0.39	< 0.40	< 0.40	< 0.42	< 0.42	< 0.39	< 0.40	< 0.39	< 0.41
EtFOSAA	EtFOSAA	--	--	--	< 0.37	< 0.39	< 0.38	< 0.37	< 0.38	< 0.37	< 0.38	< 0.38	< 0.40	< 0.40	< 0.37	< 0.38	< 0.37	< 0.39
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic ac F-53B Major	F-53B Major	--	--	--	< 0.027	< 0.029	< 0.028	< 0.027	0.069 ^J	< 0.027	0.038 ^J	< 0.028	< 0.029	< 0.029	< 0.027	< 0.028	< 0.027	< 0.029
11-chloroeicosafuoro-3-oxaundecane-1-sulfonic ac F-53B Minor	F-53B Minor	--	--	--	< 0.022	< 0.023	< 0.023	< 0.022	0.049 ^J	< 0.022	0.032 ^J	< 0.023	< 0.024	< 0.024	< 0.022	< 0.023	< 0.022	< 0.023
Total PFAS		--	--	--	1	0	1	2	8	8	6	1	1	2	2	10	5	39

Table A.2.
Soil Analytical Results Table
ATC Blount SS-Environmental Emergency Spill Response
60611431; 722 E. Main Street Madison, WI 53703

Parameters	ABBR.	Generic RCLs			SS-45	SS-46	SS-46 DUP	SS-47	SS-48	SS-49	SS-49 DUP	SS-50	SS-51	SS-52	SS-53	SS-54	SS-55	MW-1
		Non-Industrial	Industrial	Groundwater Pathway	Surface 10/29/2019	Surface 10/29/2019	Surface 10/29/2019	Surface 10/29/2019	Surface 10/29/2019	Surface 10/29/2019	Surface 10/29/2019	Surface 10/29/2019	Surface 10/29/2019	Surface 10/29/2019	Surface 10/29/2019	Surface 10/29/2019	Surface 10/29/2019	Surface 4/7/2020
PFAS (ug/kg)																		
Perfluorobutanoic acid	PFBA	--	--	--	0.30 ^B	0.058 ^{JB}	0.056 ^{JB}	0.12 ^{JB}	0.057 ^{JB}	0.12 ^{JB}	0.13 ^{JB}	0.075 ^{JB}	0.066 ^{JB}	0.11 ^{JB}	0.067 ^{JB}	0.23 ^B	0.20 ^B	0.090 ^{JB}
Perfluorobutanesulfonic acid	PFBS	1,260,000	16,400,000	--	< 0.025	< 0.026	< 0.028	< 0.026	< 0.025	< 0.028	< 0.026	< 0.025	< 0.026	< 0.027	< 0.025	< 0.027	< 0.025	< 0.028
4:2 Fluorotelomer Sulfonic Acid	4:2 FTS	--	--	--	< 0.37	< 0.39	< 0.41	< 0.38	< 0.37	< 0.42	< 0.38	< 0.37	< 0.38	< 0.40	< 0.37	< 0.40	< 0.37	< 0.41
Perfluoropentanoic acid	PFPeA	--	--	--	0.093 ^J	0.13 ^J	0.098 ^J	0.12 ^J	< 0.077	< 0.087	< 0.080	< 0.077	< 0.080	< 0.083	< 0.077	0.43	0.40	< 0.085
Perfluoropentane Sulfonic Acid	PFPeS	--	--	--	< 0.020	< 0.021	< 0.022	< 0.021	< 0.020	< 0.023	< 0.021	< 0.020	< 0.021	< 0.022	< 0.020	< 0.022	< 0.020	< 0.022
Perfluorohexanoic acid	PFHxA	--	--	--	0.21	0.078 ^J	< 0.047	0.12 ^J	< 0.042	< 0.048	< 0.043	< 0.042	< 0.044	< 0.045	< 0.042	0.20 ^J	0.21	< 0.046
Perfluorohexanesulfonic acid	PFHxS	--	--	--	0.034 ^J	< 0.032	< 0.035	< 0.032	< 0.031	< 0.035	< 0.032	< 0.031	< 0.032	< 0.033	< 0.031	< 0.033	< 0.031	0.15 ^J
6:2 Fluorotelomer sulfonic acid	6:2 FTS	--	--	--	33	2.4	1.5 ^J	5.0	< 0.15	< 0.17	< 0.16	< 0.15	1.3 ^J	0.20 ^J	0.30 ^J	7.6	2.7	< 0.17
Perfluoroheptanoic acid	PFHpA	--	--	--	< 0.029	< 0.030	< 0.032	< 0.030	< 0.029	< 0.033	< 0.030	< 0.029	< 0.030	< 0.031	< 0.029	0.092 ^J	0.061 ^J	< 0.032
Perfluoroheptanesulfonic acid	PFHpS	--	--	--	< 0.035	< 0.037	< 0.039	< 0.036	< 0.035	< 0.040	< 0.036	< 0.035	< 0.036	< 0.038	< 0.035	< 0.038	< 0.035	< 0.039
Perfluorooctanoic acid	PFOA	1,260	16,400	--	< 0.087	< 0.090	< 0.096	< 0.089	< 0.086	< 0.098	< 0.089	< 0.087	< 0.089	< 0.093	< 0.086	< 0.093	< 0.087	0.11 ^J
Ammonium Perfluorooctanoate	APFO	--	--	--	< 0.090	< 0.093	< 0.10	< 0.092	< 0.090	< 0.10	< 0.092	< 0.090	< 0.092	< 0.096	< 0.089	< 0.096	< 0.090	0.12 ^J
Perfluorooctanesulfonic acid	PFOS	1,260	16,400	--	< 0.20	< 0.21	< 0.22	< 0.20 ^H	< 0.20	< 0.23	< 0.21	0.20 ^{JB*}	< 0.21	< 0.22	< 0.20	0.47 ^{JB*}	< 0.20	2.4 ^B
8:2 Fluorotelomer sulfonic acid	8:2 FTS	--	--	--	0.36 ^J	< 0.26	< 0.28	< 0.26	< 0.25	< 0.28	< 0.26	< 0.25	< 0.26	< 0.27	< 0.25	< 0.27	< 0.25	< 0.28
Perfluorononanoic acid	PFNA	--	--	--	< 0.036	< 0.038	< 0.040	< 0.037	< 0.036	0.047 ^J	0.067 ^J	< 0.036	< 0.037	< 0.039	< 0.036	< 0.039	< 0.036	0.063 ^J
Perfluorononanesulfonic acid	PFNS	--	--	--	< 0.020	< 0.021	< 0.022	< 0.021	< 0.020	< 0.020	< 0.021	< 0.020	< 0.021	< 0.022	< 0.020	< 0.022	< 0.020	< 0.022
Perfluorodecanoic acid	PFDA	--	--	--	< 0.022	< 0.023	< 0.025	< 0.023	< 0.022	< 0.025	0.087 ^J	0.043 ^J	0.079 ^J	0.065 ^J	< 0.022	0.043 ^J	< 0.022	0.33
Perfluorodecanesulfonic acid	PFDS	--	--	--	< 0.039	< 0.041	< 0.044	< 0.040	< 0.039	< 0.044	< 0.040	< 0.039	< 0.040	< 0.042	< 0.039	< 0.042	< 0.039	0.47
10:2 Fluorotelomer Sulfonic Acid	10:2 FTS	--	--	--	0.20	< 0.052	< 0.056	< 0.052	< 0.050	< 0.057	< 0.052	< 0.050	< 0.052	< 0.054	< 0.050	0.055 ^J	< 0.051	< 0.055
Perfluoroundecanoic acid	PFUnA	--	--	--	< 0.036	< 0.038	< 0.040	< 0.037	< 0.036	< 0.041	< 0.037	0.037 ^J	< 0.037	0.064 ^J	< 0.036	0.051 ^J	< 0.036	0.069 ^J
Perfluorododecanoic acid	PFDaA	--	--	--	< 0.068	< 0.070	< 0.075	< 0.069	< 0.067	< 0.076	< 0.069	< 0.067	< 0.069	< 0.072	< 0.067	< 0.072	< 0.068	0.18 ^J
Perfluorododecanesulfonic acid	PFDoS	--	--	--	< 0.061	< 0.063	< 0.067	< 0.062	< 0.060	< 0.068	< 0.062	< 0.060	< 0.062	< 0.065	< 0.060	< 0.065	< 0.061	< 0.066
Perfluorotridecanoic acid	PFTrDA	--	--	--	< 0.052	< 0.053	< 0.057	< 0.053	< 0.051	< 0.058	< 0.053	< 0.051	< 0.053	< 0.055	< 0.051	< 0.055	< 0.052	< 0.056
Perfluorotetradecanoic acid	PFTeDA	--	--	--	< 0.055	< 0.057	< 0.060	< 0.056	< 0.054	< 0.061	< 0.056	< 0.054	< 0.056	< 0.058	< 0.054	< 0.058	< 0.055	0.067 ^J
Perfluorohexadecanoic acid	PFHxDA	--	--	--	< 0.045	< 0.046	< 0.049	< 0.045	< 0.044	< 0.050	< 0.046	< 0.044	< 0.046	< 0.047	< 0.044	< 0.047	< 0.045	< 0.049
Perfluorooctadecanoic acid	PFODA	--	--	--	< 0.028	< 0.029	< 0.031	< 0.029	< 0.028	< 0.032	< 0.029	< 0.028	< 0.029	< 0.030	< 0.028	< 0.030	< 0.028	< 0.031
HFPO-DA	GenX	--	--	--	0.19 ^J	< 0.12	< 0.12	< 0.11	< 0.11	< 0.12	< 0.11	< 0.11	< 0.11	< 0.12	< 0.11	< 0.12	< 0.11	< 0.12
4,8-dioxa-3H-perfluorononanoic acid	DONA	--	--	--	< 0.018	< 0.019	< 0.020	< 0.019	< 0.018	< 0.020	< 0.019	< 0.018	< 0.019	< 0.019	< 0.018	< 0.019	< 0.018	< 0.020
NaDONA	NaDONA	--	--	--	< 0.019	< 0.020	< 0.021	< 0.020	< 0.019	< 0.022	< 0.020	< 0.019	< 0.020	< 0.020	< 0.019	< 0.020	< 0.019	< 0.021
ADONA	ADONA	--	--	--	< 0.019	< 0.020	< 0.021	< 0.020	< 0.019	< 0.022	< 0.020	< 0.019	< 0.020	< 0.020	< 0.019	< 0.020	< 0.019	< 0.021
Perfluorooctane sulfonamide	PFOSA	--	--	--	< 0.083	< 0.086	< 0.092	< 0.085	< 0.082	< 0.093	< 0.085	< 0.083	< 0.085	< 0.088	< 0.082	< 0.088	< 0.083	< 0.091
N-Ethyl perfluorooctane sulfonamide	NEtFOSA	--	--	--	< 0.024	< 0.025	< 0.027	< 0.025	< 0.024	< 0.027	< 0.025	< 0.024	< 0.025	< 0.026	< 0.024	< 0.026	< 0.024	< 0.027
N-Ethyl perfluorooctane sulfonamidoethanol	NEtFOSE	--	--	--	< 0.036	< 0.038	< 0.040	0.051 ^{JH}	< 0.036	< 0.041	< 0.037	0.078 ^{JB}	< 0.037	< 0.039	< 0.036	< 0.039	< 0.036	0.36
N-Methyl perfluorooctane sulfonamide	NMeFOSA	--	--	--	< 0.041	< 0.043	< 0.046	< 0.042	< 0.041	< 0.046	< 0.042	< 0.041	< 0.042	< 0.044	< 0.041	< 0.044	< 0.041	< 0.045
N-Methyl perfluorooctane sulfonamidoethanol	NMeFOSE	--	--	--	< 0.072	< 0.074	< 0.079	< 0.072 ^{HF2}	< 0.071	< 0.081	< 0.073	0.076 ^J	< 0.074	< 0.077	< 0.071	0.10 ^J	< 0.072	0.81
MeFOSAA	MeFOSAA	--	--	--	< 0.39	< 0.41	< 0.44	< 0.40	< 0.39	< 0.44	< 0.40	< 0.39	< 0.40	< 0.42	< 0.39	< 0.42	< 0.39	< 0.43
EtFOSAA	EtFOSAA	--	--	--	< 0.37	< 0.39	< 0.41	< 0.38	< 0.37	< 0.42	< 0.38	< 0.37	< 0.38	< 0.40	< 0.37	< 0.40	< 0.37	< 0.41
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic ac F-53B Major		--	--	--	< 0.027	< 0.028	< 0.030	< 0.028	< 0.027	< 0.031	< 0.028	< 0.027	< 0.028	< 0.029	< 0.027	< 0.029	< 0.027	< 0.030
11-chloroeicosafuoro-3-oxaundecane-1-sulfonic ac F-53B Minor		--	--	--	< 0.022	< 0.023	< 0.025	< 0.023	< 0.022	< 0.025	< 0.023	< 0.022	< 0.023	< 0.024	< 0.022	< 0.024	< 0.022	< 0.024
Total PFAS		--	--	--	34	3	2	5	0	0	0	1	1	0	0	9	4	5.2

Table A.2.
Soil Analytical Results Table
ATC Blount SS-Environmental Emergency Spill Response
60611431; 722 E. Main Street Madison, WI 53703

Parameters	ABBR.	Generic RCLs			SS-56	SS-57	SS-58	SS-59	SS-60	SS-61	SS-62	SS-63	SS-64	SS-65	SS-66	SS-67	SS-68	SS-69
		Non-Industrial	Industrial	Groundwater Pathway	Surface 4/7/2020	Surface 4/7/2020	Surface 4/7/2020	Surface 4/7/2020	Surface 4/7/2020	Surface 4/7/2020	Surface 4/7/2020	Surface 4/7/2020	Surface 4/7/2020	Surface 4/7/2020	Surface 4/7/2020	Surface 4/7/2020	Surface 4/7/2020	Surface 4/7/2020
PFAS (ug/kg)																		
Perfluorobutanoic acid	PFBA	--	--	--	< 0.028	0.11 ^{JB}	< 0.028	0.081 ^{JB}	0.15 ^{JB}	0.20 ^{JB}	0.11 ^{JB}	0.073 ^{JB}	0.098 ^{JB}	0.11 ^{JB}	0.18 ^{JB}	0.16 ^{JB}	0.092 ^{JB}	0.11 ^{JB}
Perfluorobutanesulfonic acid	PFBS	1,260,000	16,400,000	--	< 0.025	< 0.026	< 0.025	< 0.024	< 0.026	< 0.026	0.035 ^J	< 0.030	< 0.028	0.044 ^J	0.047 ^J	0.056 ^J	0.043 ^J	0.028 ^J
4:2 Fluorotelomer Sulfonic Acid	4:2 FTS	--	--	--	< 0.36	< 0.38	< 0.38	< 0.35	< 0.39	< 0.38	< 0.41	< 0.44	< 0.41	< 0.43	< 0.42	< 0.41	< 0.44	< 0.42
Perfluoropentanoic acid	PFPeA	--	--	--	< 0.076	0.15 ^J	0.094 ^J	0.076 ^J	< 0.080	< 0.080	0.24	< 0.092	< 0.086	0.12 ^J	0.10 ^J	0.23	0.13 ^J	0.39
Perfluoropentane Sulfonic Acid	PFPeS	--	--	--	< 0.020	< 0.020	< 0.020	< 0.019	< 0.021	< 0.021	< 0.022	< 0.024	< 0.022	< 0.024	< 0.022	< 0.022	< 0.024	< 0.023
Perfluorohexanoic acid	PFHxA	--	--	--	< 0.041	0.080 ^J	0.058 ^J	< 0.040	< 0.044	< 0.043	0.11 ^J	< 0.050	< 0.047	0.054 ^J	0.11 ^J	0.23	< 0.050	0.51
Perfluorohexanesulfonic acid	PFHxS	--	--	--	< 0.030	< 0.032	< 0.032	0.032 ^J	< 0.032	< 0.032	0.30	0.33	0.17 ^J	< 0.036	0.057 ^J	0.085 ^J	0.038 ^J	0.37
6:2 Fluorotelomer sulfonic acid	6:2 FTS	--	--	--	< 0.15	1.2 ^J	< 0.15	< 0.14	< 0.16	< 0.16	< 0.17	< 0.18	< 0.17	< 0.18	< 0.17	< 0.17	< 0.18	1.3 ^J
Perfluoroheptanoic acid	PFHpA	--	--	--	< 0.029	< 0.030	< 0.029	< 0.028	< 0.030	< 0.030	0.053 ^J	0.035 ^J	0.049 ^J	0.040 ^J	0.082 ^J	0.15 ^J	0.055 ^J	0.21 ^J
Perfluoroheptanesulfonic acid	PFHpS	--	--	--	< 0.034	< 0.036	< 0.036	< 0.034	< 0.036	< 0.036	< 0.039	< 0.042	< 0.039	< 0.041	< 0.039	< 0.039	< 0.042	< 0.039
Perfluorooctanoic acid	PFOA	1,260	16,400	--	< 0.085	< 0.088	< 0.087	< 0.082	< 0.090	< 0.089	0.19 ^J	0.24	0.23	< 0.10	0.24	0.56	0.11 ^J	0.15 ^J
Ammonium Perfluorooctanoate	APFO	--	--	--	< 0.088	< 0.091	< 0.090	< 0.085	< 0.093	< 0.092	0.20 ^J	0.25	0.24	0.10 ^J	0.25	0.58	0.11 ^J	0.15 ^J
Perfluorooctanesulfonic acid	PFOS	1,260	16,400	--	< 0.20	0.21 ^{JB}	< 0.20	0.28 ^{JB}	0.22 ^{JB}	< 0.21	5.8 ^B	6.4 ^B	4.5 ^B	0.71 ^B	1.3 ^B	2.6 ^B	0.87 ^B	5.9 ^B
8:2 Fluorotelomer sulfonic acid	8:2 FTS	--	--	--	< 0.25	< 0.26	< 0.25	< 0.24	< 0.26	< 0.26	< 0.28	< 0.30	< 0.28	< 0.29	< 0.28	< 0.28	< 0.30	< 0.28
Perfluorononanoic acid	PFNA	--	--	--	< 0.035	< 0.037	< 0.037	< 0.034	< 0.037	< 0.037	0.14 ^J	0.14 ^J	0.13 ^J	0.051 ^J	0.095 ^J	0.20 ^J	0.057 ^J	0.11 ^J
Perfluorononanesulfonic acid	PFNS	--	--	--	< 0.020	< 0.020	< 0.020	< 0.019	< 0.021	< 0.021	< 0.022	< 0.024	< 0.022	< 0.024	< 0.022	< 0.022	< 0.024	< 0.023
Perfluorodecanoic acid	PFDA	--	--	--	< 0.022	0.032 ^J	0.031 ^J	< 0.021	0.040 ^J	< 0.023	0.70	0.67	0.59	0.093 ^J	0.31	0.57	0.093 ^J	0.81
Perfluorodecanesulfonic acid	PFDS	--	--	--	< 0.038	< 0.040	< 0.040	< 0.037	< 0.041	< 0.040	0.86	0.82	0.41	< 0.046	0.058 ^J	0.060 ^J	0.047 ^J	1.0
10:2 Fluorotelomer Sulfonic Acid	10:2 FTS	--	--	--	< 0.049	0.080 ^J	< 0.051	< 0.048	< 0.052	< 0.052	< 0.055	< 0.060	< 0.056	< 0.059	< 0.056	< 0.056	< 0.060	< 0.056
Perfluoroundecanoic acid	PFUnA	--	--	--	< 0.035	< 0.037	< 0.037	< 0.034	< 0.037	< 0.037	0.12 ^J	0.14 ^J	0.091 ^J	< 0.042	0.070 ^J	0.11 ^J	0.071 ^J	0.21 ^J
Perfluorododecanoic acid	PFDaA	--	--	--	< 0.066	< 0.069	< 0.068	< 0.064	< 0.070	< 0.069	0.31	0.34	0.19 ^J	< 0.079	0.16 ^J	0.27	< 0.080	0.47
Perfluorododecanesulfonic acid	PFDaS	--	--	--	< 0.059	< 0.061	< 0.061	< 0.057	< 0.062	< 0.062	< 0.066	< 0.072	< 0.067	< 0.071	< 0.067	< 0.067	< 0.072	< 0.068
Perfluorotridecanoic acid	PFTrDA	--	--	--	< 0.050	< 0.052	< 0.052	< 0.049	< 0.053	< 0.053	< 0.056	< 0.061	< 0.057	< 0.060	< 0.057	< 0.057	< 0.061	< 0.057
Perfluorotetradecanoic acid	PFTeDA	--	--	--	< 0.053	< 0.055	< 0.055	< 0.052	< 0.056	< 0.056	0.10 ^J	0.13 ^J	0.061 ^J	< 0.063	0.078 ^J	0.093 ^J	< 0.065	0.13 ^J
Perfluorohexadecanoic acid	PFHxDA	--	--	--	< 0.043	< 0.045	< 0.045	< 0.042	< 0.046	< 0.046	< 0.049	< 0.053	< 0.049	< 0.052	< 0.049	< 0.049	< 0.053	< 0.050
Perfluorooctadecanoic acid	PFODA	--	--	--	< 0.028	< 0.029	< 0.028	< 0.027	< 0.029	< 0.029	< 0.031	< 0.033	< 0.031	< 0.033	< 0.031	< 0.031	< 0.034	< 0.032
HFPO-DA	GenX	--	--	--	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	0.16 ^J	< 0.13	< 0.12	< 0.13	< 0.12	< 0.12	< 0.13	< 0.12
4,8-dioxa-3H-perfluorononanoic acid	DONA	--	--	--	< 0.018	< 0.018	< 0.018	< 0.017	< 0.019	< 0.019	< 0.020	< 0.022	< 0.020	< 0.021	< 0.020	< 0.020	< 0.022	< 0.020
NaDONA	NaDONA	--	--	--	< 0.019	< 0.019	< 0.019	< 0.018	< 0.020	< 0.020	< 0.021	< 0.023	< 0.021	< 0.022	< 0.021	< 0.021	< 0.023	< 0.021
ADONA	ADONA	--	--	--	< 0.019	< 0.019	< 0.019	< 0.018	< 0.020	< 0.020	< 0.021	< 0.023	< 0.021	< 0.022	< 0.021	< 0.021	< 0.023	< 0.021
Perfluorooctane sulfonamide	PFOSA	--	--	--	< 0.081	< 0.084	< 0.083	< 0.079	< 0.085	< 0.085	< 0.091	< 0.098	< 0.091	< 0.096	< 0.092	< 0.092	< 0.098	< 0.092
N-Ethyl perfluorooctane sulfonamide	NEtFOSA	--	--	--	< 0.024	< 0.025	< 0.024	< 0.023	< 0.025	< 0.025	< 0.027	< 0.029	< 0.027	< 0.028	< 0.027	< 0.027	< 0.029	< 0.027
N-Ethyl perfluorooctane sulfonamidoethanol	NEtFOSE	--	--	--	0.057 ^J	0.18 ^J	< 0.037	< 0.034	0.15 ^J	< 0.037	1.2	1.3	0.64	0.083 ^J	0.32	0.35	0.23 ^J	1.2
N-Methyl perfluorooctane sulfonamide	NMeFOSA	--	--	--	< 0.040	< 0.042	< 0.042	< 0.039	< 0.043	< 0.042	< 0.045	< 0.049	< 0.046	< 0.048	< 0.046	< 0.046	< 0.049	< 0.046
N-Methyl perfluorooctane sulfonamidoethanol	NMeFOSE	--	--	--	< 0.070	< 0.073	< 0.072	< 0.068	< 0.074	< 0.073	1.6	1.8	0.79	< 0.083	< 0.080	< 0.080	< 0.085	2.0
MeFOSAA	MeFOSAA	--	--	--	< 0.38	< 0.40	< 0.40	< 0.37	< 0.41	< 0.40	< 0.43	< 0.47	< 0.44	< 0.46	< 0.44	< 0.44	< 0.47	0.50 ^J
EtFOSAA	EtFOSAA	--	--	--	< 0.36	< 0.38	< 0.38	< 0.35	< 0.39	< 0.38	< 0.41	< 0.44	< 0.41	< 0.43	< 0.42	< 0.41	< 0.44	< 0.42
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic ac F-53B Major		--	--	--	< 0.027	< 0.028	< 0.027	< 0.026	< 0.028	< 0.028	< 0.030	< 0.032	< 0.030	< 0.032	< 0.030	< 0.030	< 0.032	< 0.030
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic ac F-53B Minor		--	--	--	< 0.022	< 0.023	< 0.022	< 0.021	< 0.023	< 0.023	< 0.024	< 0.026	< 0.025	< 0.026	< 0.025	< 0.025	< 0.026	< 0.025
Total PFAS		--	--	--	0	2	0	0	1	0	12	13	8	1	4	6	2	16

Table A.2.
Soil Analytical Results Table
ATC Blount SS-Environmental Emergency Spill Response
60611431; 722 E. Main Street Madison, WI 53703

Parameters	ABBR.	Generic RCLs			SS-70	SS-71	SS-72	SS-73	SS-74	SS-75	SS-76	SS-77	SS-78	SS-79	SS-80	SS-81	SS-82
		Non-Industrial	Industrial	Groundwater Pathway	Surface 4/7/2020	Surface 4/7/2020	Surface 4/7/2020	Surface 4/7/2020	Surface 4/7/2020	Surface 4/7/2020	Surface 4/7/2020	Surface 4/7/2020	Surface 4/7/2020	Surface 7/9/2020	Surface 7/9/2020	Surface 7/9/2020	Surface 7/10/2020
Perfluorobutanoic acid	PFBA	--	--	--	0.19 ^{JB}	0.069 ^{JB}	0.076 ^{JB}	0.051 ^{JB}	< 0.36	0.28 ^B	0.12 ^{JB}	< 0.034	< 0.034	0.67 ^B	0.21 ^B	0.27 ^B	0.27 ^B
Perfluorobutanesulfonic acid	PFBS	1,260,000	16,400,000	--	0.035 ^J	0.029 ^J	0.035 ^J	< 0.028	< 0.32	0.075 ^J	0.21 ^J	< 0.031	0.038 ^J	< 0.026	< 0.025	< 0.025	< 0.027
4:2 Fluorotelomer Sulfonic Acid	4:2 FTS	--	--	--	< 0.42	< 0.42	< 0.41	< 0.42	< 4.8	< 0.46	< 0.49	< 0.45	< 0.46	< 0.39	< 0.38	< 0.37	< 0.40
Perfluoropentanoic acid	PFPeA	--	--	--	< 0.088	0.12 ^J	0.16 ^J	< 0.087	< 0.99	0.30	0.14 ^J	< 0.094	< 0.095	1.5	0.090 ^J	0.37	< 0.084
Perfluoropentane Sulfonic Acid	PFPeS	--	--	--	< 0.023	< 0.023	< 0.022	< 0.023	< 0.26	< 0.025	< 0.026	< 0.024	< 0.025	< 0.021	< 0.020	< 0.020	< 0.022
Perfluorohexanoic acid	PFHxA	--	--	--	0.11 ^J	0.069 ^J	0.13 ^J	< 0.047	< 0.54	0.29	0.17 ^J	0.067 ^J	0.056 ^J	0.61	0.046 ^J	0.17 ^J	< 0.046
Perfluorohexanesulfonic acid	PFHxS	--	--	--	0.067 ^J	0.23	0.41	0.24	< 0.40	0.053 ^J	0.060 ^J	0.051 ^J	0.054 ^J	< 0.032	< 0.032	< 0.031	< 0.034
6:2 Fluorotelomer sulfonic acid	6:2 FTS	--	--	--	< 0.17	< 0.17	< 0.17	< 0.17	< 1.9	< 0.19	< 0.20	< 0.18	< 0.18	13	< 0.15	1.3 ^J	3.6
Perfluoroheptanoic acid	PFHpA	--	--	--	0.15 ^J	0.075 ^J	0.32	< 0.033	< 0.37	0.18 ^J	0.076 ^J	0.050 ^J	< 0.036	0.26	< 0.030	0.039 ^J	< 0.032
Perfluoroheptanesulfonic acid	PFHpS	--	--	--	< 0.040	< 0.040	< 0.039	< 0.039	< 0.45	< 0.044	< 0.046	< 0.043	< 0.043	< 0.037	< 0.036	< 0.035	< 0.038
Perfluorooctanoic acid	PFOA	1,260	16,400	--	0.32	0.17 ^J	0.39	< 0.097	< 1.1	0.52	0.19 ^J	0.18 ^J	0.11 ^J	< 0.090	< 0.088	< 0.086	< 0.094
Ammonium Perfluorooctanoate	APFO	--	--	--	0.33	0.18 ^J	0.41	< 0.10	< 1.1	0.54	0.20 ^J	0.19 ^J	0.11 ^J	< 0.093	< 0.091	< 0.089	< 0.097
Perfluorooctanesulfonic acid	PFOS	1,260	16,400	--	1.7 ^B	6.1 ^B	7.8 ^B	4.5 ^B	4.0 ^{JB}	1.2	1.1	0.82	0.89	0.30 ^{JB}	< 0.20	< 0.20	< 0.22
8:2 Fluorotelomer sulfonic acid	8:2 FTS	--	--	--	< 0.28	< 0.28	< 0.28	< 0.28	< 3.2	< 0.31	< 0.33	< 0.31	< 0.31	< 0.26	< 0.25	< 0.25	< 0.27
Perfluorononanoic acid	PFNA	--	--	--	0.15 ^J	0.19 ^J	0.22	0.081 ^J	< 0.46	0.23 ^J	0.090 ^J	0.098 ^J	0.057 ^J	< 0.038	< 0.037	< 0.036	< 0.039
Perfluorononanesulfonic acid	PFNS	--	--	--	< 0.023	< 0.023	< 0.022	< 0.023	< 0.26	< 0.025	< 0.026	< 0.024	< 0.025	< 0.021	< 0.020	< 0.020	< 0.022
Perfluorodecanoic acid	PFDA	--	--	--	0.93	0.93	1.0	0.84	1.3 ^J	0.72	0.18 ^J	0.20 ^J	0.15 ^J	< 0.023	< 0.022	< 0.022	< 0.024
Perfluorodecanesulfonic acid	PFDS	--	--	--	0.17 ^J	0.88	1.1	0.78	< 0.50	0.13 ^J	< 0.051	< 0.048	< 0.048	< 0.041	< 0.040	< 0.039	< 0.043
10:2 Fluorotelomer Sulfonic Acid	10:2 FTS	--	--	--	< 0.057	< 0.057	< 0.056	< 0.056	< 0.64	< 0.063	< 0.066	< 0.061	< 0.062 ^{F1}	< 0.052	< 0.051	< 0.050	< 0.055
Perfluoroundecanoic acid	PFUnA	--	--	--	0.28	0.16 ^J	0.18 ^J	0.15 ^J	< 0.46	0.27	< 0.047	< 0.044	< 0.044	< 0.038	< 0.037	< 0.036	< 0.039
Perfluorododecanoic acid	PFDaA	--	--	--	0.75	0.40	0.42	0.33	< 0.86	0.47	< 0.088	< 0.082	< 0.083	< 0.070	< 0.068	< 0.067	< 0.073
Perfluorododecanesulfonic acid	PFDoS	--	--	--	< 0.068	< 0.068	< 0.067	< 0.068	< 0.77	< 0.075	< 0.079	< 0.073	< 0.074 ^{F1}	< 0.063	< 0.061	< 0.060	< 0.066
Perfluorotridecanoic acid	PFTrDA	--	--	--	0.058 ^J	< 0.058	0.063 ^J	< 0.057	< 0.66	0.070 ^J	< 0.067	< 0.062	< 0.063	< 0.053	< 0.052	< 0.051	< 0.056
Perfluorotetradecanoic acid	PFTeDA	--	--	--	0.20 ^J	0.13 ^J	0.13 ^J	0.097 ^J	< 0.70	0.19 ^J	< 0.071	< 0.066	< 0.067	< 0.056	< 0.055	< 0.054	< 0.059
Perfluorohexadecanoic acid	PFHxDA	--	--	--	0.071 ^J	< 0.050	< 0.049	< 0.050	< 0.57	0.060 ^J	< 0.058	< 0.054	< 0.054	< 0.046	< 0.045	< 0.044	< 0.048
Perfluorooctadecanoic acid	PFODA	--	--	--	< 0.032	< 0.032	< 0.031	< 0.032	< 0.36	< 0.035	< 0.037	< 0.034	< 0.034	< 0.029	< 0.029	< 0.028	< 0.031
HFPO-DA	GenX	--	--	--	< 0.13	< 0.12	< 0.12	< 0.12	< 1.4	< 0.14	< 0.14	< 0.13	< 0.14	< 0.11	< 0.11	< 0.11	< 0.12
4,8-dioxa-3H-perfluorononanoic acid	DONA	--	--	--	< 0.021	< 0.020	< 0.020	< 0.020	< 0.23	< 0.023	< 0.024	< 0.022	< 0.022 ^{F1}	< 0.019	< 0.018	< 0.018	< 0.020
NaDONA	NaDONA	--	--	--	< 0.022	< 0.022	< 0.021	< 0.021	< 0.24	< 0.024	< 0.025	< 0.023	< 0.023 ^{F1}	< 0.020	< 0.019	< 0.019	< 0.021
ADONA	ADONA	--	--	--	< 0.022	< 0.022	< 0.021	< 0.021	< 0.24	< 0.024	< 0.025	< 0.023	< 0.023 ^{F1}	< 0.020	< 0.019	< 0.019	< 0.021
Perfluorooctane sulfonamide	PFOSA	--	--	--	< 0.093	< 0.093	< 0.091	< 0.092	< 1.1	< 0.10	< 0.11	< 0.10	< 0.10	< 0.086	< 0.084	< 0.082	< 0.090
N-Ethyl perfluorooctane sulfonamide	NEtFOSA	--	--	--	< 0.027	< 0.027	< 0.027	< 0.027	< 0.31	< 0.030	< 0.032	< 0.029	< 0.030	< 0.025	< 0.024	< 0.024	< 0.026
N-Ethyl perfluorooctane sulfonamidoethanol	NEtFOSE	--	--	--	0.57	1.1	1.2	0.92	0.95 ^J	0.34	0.15 ^J	< 0.044	0.20 ^J	0.048 ^J	< 0.037	< 0.036	< 0.039
N-Methyl perfluorooctane sulfonamide	NMeFOSA	--	--	--	< 0.047	< 0.046	< 0.046	< 0.046	< 0.53	< 0.051	< 0.054	< 0.050	< 0.050	< 0.043	< 0.042	< 0.041	< 0.045
N-Methyl perfluorooctane sulfonamidoethanol	NMeFOSE	--	--	--	0.19 ^J	1.4	1.4	1.4	< 0.91	< 0.089	< 0.093	< 0.087	< 0.087	< 0.074	< 0.072	< 0.071	< 0.078
MeFOSAA	MeFOSAA	--	--	--	< 0.44	< 0.44	0.44 ^J	< 0.44	< 5.0	< 0.49	< 0.51	< 0.48	< 0.48	< 0.41	< 0.40	< 0.39	< 0.43
EtFOSAA	EtFOSAA	--	--	--	< 0.42	< 0.42	< 0.41	< 0.42	< 4.8	< 0.46	< 0.49	< 0.45	< 0.46	< 0.39	< 0.38	< 0.37	< 0.40
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic ac F-53B Major		--	--	--	< 0.031	< 0.031	< 0.030	< 0.030	< 0.35	< 0.034	< 0.035	< 0.033	< 0.033 ^{F1}	< 0.028	< 0.028	< 0.027	< 0.029
11-chloroeicosafuoro-3-oxaundecane-1-sulfonic ac F-53B Minor		--	--	--	< 0.025	< 0.025	< 0.024	< 0.025	< 0.28	< 0.028	< 0.029	< 0.027	< 0.027	< 0.023	< 0.022	< 0.022	< 0.024
Total PFAS		--	--	--	6	12	16	9	6	6	3	2	2	16	0	2	4

Table A.2.
Soil Analytical Results Table
ATC Blount SS-Environmental Emergency Spill Response
60611431; 722 E. Main Street Madison, WI 53703

Notes:

^J Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

^B Compound was found in the blank and sample

[.] Isotope dilution and/or LCS/LCSD is outside acceptance limits

^{F1} MS and/or MSD Recovery is outside acceptance limits

-- No Generic RCL established.

Generic RCLs from WDNR RR-890: WDNR RCL Calculator December 2017

PFAS = Per-Fluorinated Alkyl Substances

NA = Not analyzed

mg/kg = milligrams per kilogram

ug/kg = micrograms per kilogram

Table A.3.
Residual Soil Results Table
ATC Blount SS-Environmental Emergency Spill Response
60611431; 722 E. Main Street Madison, WI 53703

Parameters	ABBR.	Generic RCLs			BREAKER SOIL	CON-1	CON-2	CON-3	CON-4	CON-5	SS-01	RES-SS-01	SS-02	SS-03	SS-04	SS-05	SS-05 FD	SS-06
		Non-Industrial	Industrial	Groundwater Pathway	Surface 7/19/2019	2" 8/28/2019	2" 8/28/2019	2" 8/28/2019	2" 8/28/2019	2" 8/28/2019	8" 7/24/2019	12" 8/8/2019	9" 7/24/2019	10" 7/24/2019	8" 7/24/2019	7" 7/24/2019	7" 7/24/2019	9" 7/24/2019
PFAS (ug/kg)																		
Perfluorobutanoic acid	PFBA	--	--	--	0.16 ^{JB}	0.11 ^J	< 0.028	0.032 ^J	0.11 ^J	0.084 ^J	0.37 ^B	0.22 ^J	0.17 ^{JB}	0.13 ^{JB}	0.44 ^B	0.15 ^{JB}	0.16 ^{JB}	0.39 ^B
Perfluorobutanesulfonic acid	PFBS	1,260,000	16,400,000	--	< 0.026	0.066 ^{JB}	0.066 ^{JB}	< 0.025	0.077 ^J	< 0.026	< 0.027	< 0.031	< 0.026	< 0.027	< 0.031	0.045 ^J	0.047 ^J	< 0.031
4:2 Fluorotelomer Sulfonic Acid	4:2 FTS	--	--	--	< 0.39	< 0.37	< 0.37	< 0.37	< 0.40	< 0.38	< 0.40	< 0.46	< 0.38	< 0.39	< 0.46	< 0.44	< 0.44	< 0.45
Perfluoropentanoic acid	PFPeA	--	--	--	< 0.080	0.084 ^J	< 0.077	< 0.077	0.12 ^J	< 0.080	1.3	2.7	0.56	0.33	2.6	< 0.092	0.17 ^J	0.67
Perfluoropentane Sulfonic Acid	PFPeS	--	--	--	< 0.021	< 0.020	< 0.020	< 0.020	0.035 ^J	< 0.021	< 0.022	< 0.025	< 0.021	< 0.021	< 0.025	< 0.024	< 0.024	< 0.024
Perfluorohexanoic acid	PFHxA	--	--	--	< 0.044	0.071 ^J	< 0.042	< 0.042	0.13 ^J	< 0.044	0.56	1.2	0.17 ^J	0.18 ^J	0.95	0.13 ^J	0.13 ^J	0.41
Perfluorohexanesulfonic acid	PFHxS	--	--	--	< 0.032	< 0.031	< 0.031	< 0.031	0.049 ^J	< 0.032	0.055 ^J	0.18 ^J	0.047 ^J	0.078 ^J	0.066 ^J	0.053 ^J	0.069 ^J	0.093 ^J
6:2 Fluorotelomer sulfonic acid	6:2 FTS	--	--	--	7.7 ^{F1}	0.44 ^J	< 0.15	< 0.15	0.17 ^J	< 0.16	0.74 ^J	1.9 ^J	0.16 ^J	0.17 ^J	1.1 ^J	1.1 ^J	< 0.18	< 0.18
Perfluoroheptanoic acid	PFHpA	--	--	--	< 0.030	< 0.029	< 0.029	< 0.029	0.080 ^J	< 0.030	0.29	0.37	0.11 ^J	0.093 ^J	0.37	0.073 ^J	0.067 ^J	0.20 ^J
Perfluoroheptanesulfonic acid	PFHpS	--	--	--	< 0.037	< 0.035	< 0.035	< 0.035	0.042 ^J	< 0.036	< 0.038	< 0.044	< 0.036	< 0.037	< 0.044	< 0.042	< 0.042	< 0.043
Perfluorooctanoic acid	PFOA	1,260	16,400	--	< 0.09	< 0.087	< 0.086	< 0.086	0.10 ^J	< 0.089	0.11 ^J	0.27	< 0.088	< 0.091	0.27	0.25	0.30	0.44
Ammonium Perfluorooctanoate	APFO	--	--	--	< 0.093	< 0.090	< 0.089	< 0.089	0.11 ^J	< 0.092	0.12 ^J	0.29	< 0.091	< 0.095	0.28	0.26	0.31	0.46
Perfluorooctanesulfonic acid	PFOS	1,260	16,400	--	< 0.21	< 0.20	< 0.20	< 0.20	< 0.22	< 0.21	0.91	4.7	0.40 ^J	0.39 ^J	1.2	1.5	1.8	1.2
8:2 Fluorotelomer sulfonic acid	8:2 FTS	--	--	--	< 0.26	< 0.25	< 0.25	< 0.25	< 0.27	< 0.26	< 0.27	< 0.31	< 0.26	< 0.27	< 0.31	< 0.30	< 0.30	< 0.31
Perfluorononanoic acid	PFNA	--	--	--	< 0.038	< 0.036	< 0.036	< 0.036	0.043 ^J	< 0.037	0.061 ^J	0.16 ^J	< 0.037	< 0.038	0.10 ^J	0.13 ^J	0.14 ^J	0.16 ^J
Perfluorononanesulfonic acid	PFNS	--	--	--	< 0.021	< 0.020	< 0.020	< 0.020	0.039 ^J	< 0.021	< 0.022	< 0.025	< 0.021	< 0.021	< 0.025	< 0.024	< 0.024	< 0.024
Perfluorodecanoic acid	PFDA	--	--	--	< 0.023	< 0.022	< 0.022	< 0.022	0.045 ^J	< 0.023	0.19 ^J	0.6	0.26	0.12 ^J	0.54	0.34	0.34	0.93
Perfluorodecanesulfonic acid	PFDS	--	--	--	< 0.041	< 0.040	< 0.039	< 0.039	< 0.042	< 0.040	< 0.042	0.72	0.053 ^J	< 0.041	0.13 ^J	0.050 ^J	0.084 ^J	0.21 ^J
10:2 Fluorotelomer Sulfonic Acid	10:2 FTS	--	--	--	< 0.052 ^{F1}	< 0.051	< 0.050	< 0.050	< 0.054	< 0.052	< 0.054	< 0.063	< 0.051	< 0.053	< 0.062	< 0.060	< 0.059	< 0.061
Perfluoroundecanoic acid	PFUnA	--	--	--	< 0.038	< 0.036	< 0.036	< 0.036	0.046 ^J	< 0.037	0.051 ^J	0.14 ^J	0.11 ^J	0.043 ^J	0.17 ^J	0.062 ^J	0.067 ^J	0.39
Perfluorododecanoic acid	PFDaA	--	--	--	< 0.07	< 0.068	< 0.067	< 0.067	< 0.072	< 0.069	0.073 ^J	0.25	0.16 ^J	0.21	0.43	0.092 ^J	0.082 ^J	1.0
Perfluorododecanesulfonic acid	PFDaS	--	--	--	< 0.063	< 0.061	< 0.060	< 0.060	< 0.065	< 0.062	< 0.065	< 0.075	< 0.062	< 0.064	< 0.075	< 0.072	< 0.071	< 0.073
Perfluorotridecanoic acid	PFTrDA	--	--	--	< 0.053	< 0.052	< 0.051	< 0.051	< 0.055	< 0.053	< 0.055	< 0.064	< 0.052	0.094 ^J	0.080 ^J	< 0.061	< 0.061	0.22 ^J
Perfluorotetradecanoic acid	PFTeDA	--	--	--	< 0.056	< 0.055	< 0.054	< 0.054	< 0.058	< 0.056	< 0.058	< 0.068	0.060 ^J	0.26	0.23 ^J	< 0.065	< 0.064	0.56
Perfluorohexadecanoic acid	PFHxDA	--	--	--	< 0.046 ^{F1}	< 0.045	< 0.044	< 0.044	< 0.047	< 0.046 ^{F1}	< 0.047 ^{F1}	< 0.055	< 0.045	0.054 ^J	0.075 ^J	< 0.053	< 0.052	0.15 ^J
Perfluorooctadecanoic acid	PFODA	--	--	--	< 0.029 ^{F1}	< 0.028	< 0.028	< 0.028	0.035 ^J	< 0.029 ^{F1}	< 0.030 ^{F1}	< 0.035	< 0.029	< 0.030	< 0.035	< 0.033	< 0.033	0.035 ^J
HFPO-DA	GenX	--	--	--	< 0.11	< 0.11	< 0.11	< 0.11	< 0.12	< 0.11	< 0.12	< 0.14	< 0.11	< 0.12	< 0.14	< 0.13	< 0.13	< 0.13
4,8-dioxa-3H-perfluorononanoic acid	DONA	--	--	--	< 0.019	< 0.018	< 0.018	< 0.018	0.031 ^J	< 0.019	< 0.019	< 0.023	< 0.019	< 0.019	< 0.022	< 0.022	< 0.021	< 0.022
NaDONA	NaDONA	--	--	--	< 0.02	< 0.019	< 0.019	< 0.019	0.033 ^J	< 0.020	< 0.020	< 0.024	< 0.020	< 0.020	< 0.024	< 0.023	< 0.023	< 0.023
ADONA	ADONA	--	--	--	< 0.02	< 0.019	< 0.019	< 0.019	0.033 ^J	< 0.020	< 0.020	< 0.024	< 0.020	< 0.020	< 0.024	< 0.023	< 0.023	< 0.023
Perfluorooctane sulfonamide	PFOSA	--	--	--	< 0.086	< 0.083	< 0.082	< 0.082	< 0.088	< 0.085	< 0.088	< 0.10	< 0.084	< 0.087	< 0.10	< 0.098	< 0.097	< 0.10
N-Ethyl perfluorooctane sulfonamide	NEtFOSA	--	--	--	NA	< 0.024	< 0.024	< 0.024	< 0.026	< 0.025	NA	NA	NA	NA	NA	NA	NA	NA
N-Ethyl perfluorooctane sulfonamidoethanol	NEtFOSE	--	--	--	NA	< 0.036	< 0.036	< 0.036	< 0.039	< 0.037	NA	NA	NA	NA	NA	NA	NA	NA
N-Methyl perfluorooctane sulfonamide	NMeFOSA	--	--	--	NA	< 0.042	< 0.041	< 0.041	< 0.044	< 0.042	NA	NA	NA	NA	NA	NA	NA	NA
N-Methyl perfluorooctane sulfonamidoethanol	NMeFOSE	--	--	--	NA	< 0.072	< 0.071	< 0.071	< 0.077	< 0.074	NA	NA	NA	NA	NA	NA	NA	NA
MeFOSAA	MeFOSAA	--	--	--	< 0.41	< 0.40	< 0.39	< 0.39	< 0.42	< 0.40	< 0.42	< 0.49	< 0.40	< 0.41	< 0.49	< 0.47	< 0.46	< 0.48
EtFOSAA	EtFOSAA	--	--	--	< 0.39	< 0.37	< 0.37	< 0.37	< 0.40	< 0.38	< 0.40	< 0.46	< 0.38	< 0.39	< 0.46	< 0.44	< 0.44	< 0.45
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic ac F-53B Major		--	--	--	< 0.028	< 0.027	< 0.027	< 0.027	0.041 ^J	< 0.028	< 0.029	< 0.034	< 0.028	< 0.029	< 0.034	< 0.032	< 0.032	< 0.033
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic ac F-53B Minor		--	--	--	< 0.023	< 0.022	< 0.022	< 0.022	0.028 ^J	< 0.023	< 0.024	< 0.028	< 0.023	< 0.023	< 0.027	< 0.026	< 0.026	< 0.027
Total PFAS		--	--	--	8	1	0	0	1	0	5	14	2	2	9	4	4	8

Table A.3.
Residual Soil Results Table
ATC Blount SS-Environmental Emergency Spill Response
60611431; 722 E. Main Street Madison, WI 53703

Parameters	Generic RCLs			SS-07	SS-08	RES-SS-08	SS-09	SS-10	SS-11	SS-12	RES-SS-12	SS-13	SS-14	SS-15	SS-16	SS-17	SS-17 FD	
	Non-Industrial	Industrial	Groundwater Pathway	9 " 7/24/2019	10 " 7/24/2019	12 " 8/8/2019	8 " 7/24/2019	9 " 7/24/2019	8 " 7/24/2019	9 " 7/24/2019	12 " 8/8/2019	Surface 7/24/2019	Surface 7/24/2019	Surface 7/24/2019	Surface 7/24/2019	Surface 7/24/2019	Surface 7/24/2019	
PFAS (ug/kg)																		
ABBR.																		
Perfluorobutanoic acid	PFBA	--	--	--	0.15 ^{JB}	0.099 ^{JB}	0.15 ^J	0.13 ^{JB}	0.13 ^{JB}	0.20 ^{JB}	< 0.034	0.27 ^J	1.3 ^B	4.4 ^B	1.6 ^B	2.0 ^B	0.58 ^B	0.22 ^B
Perfluorobutanesulfonic acid	PFBS	1,260,000	16,400,000	--	< 0.026	< 0.028	< 0.031	0.048 ^J	< 0.026	0.061 ^J	0.065 ^J	< 0.037	< 0.027	< 0.026	< 0.025	< 0.028	< 0.027	< 0.027
4:2 Fluorotelomer Sulfonic Acid	4:2 FTS	--	--	--	< 0.39	< 0.42	< 0.46	< 0.46	< 0.38	< 0.45	< 0.46	< 0.55	< 0.40	< 0.38	< 0.38	< 0.42	< 0.40	< 0.40
Perfluoropentanoic acid	PFPeA	--	--	--	0.29	0.42	0.63	0.18 ^J	0.17 ^J	0.36	< 0.095	0.44	0.30	0.56	0.25	0.40	0.59	0.43
Perfluoropentane Sulfonic Acid	PFPeS	--	--	--	< 0.021	< 0.022	< 0.025	< 0.025	< 0.021	< 0.024	< 0.025	< 0.030	< 0.022	< 0.021	< 0.020	< 0.022	< 0.022	< 0.022
Perfluorohexanoic acid	PFHxA	--	--	--	0.15 ^J	0.17 ^J	0.28	0.17 ^J	0.073 ^J	0.28	0.058 ^J	0.15 ^J	1.7	3.7	2.0	2.4	0.43	0.26
Perfluorohexanesulfonic acid	PFHxS	--	--	--	< 0.033	0.035 ^J	< 0.039	0.096 ^J	0.042 ^J	0.058 ^J	0.17 ^J	0.14 ^J	< 0.034	< 0.032	< 0.032	< 0.035	< 0.033	< 0.034
6:2 Fluorotelomer sulfonic acid	6:2 FTS	--	--	--	0.29 ^J	1.3 ^J	0.87 ^J	< 0.19	< 0.16	< 0.18	< 0.18	0.36 ^J	120	310	140	140	15	6.6
Perfluoroheptanoic acid	PFHpA	--	--	--	0.062 ^J	0.13 ^J	0.16 ^J	0.12 ^J	0.062 ^J	0.27	0.11 ^J	0.10 ^J	0.075 ^J	0.16 ^J	0.040 ^J	0.075 ^J	0.087 ^J	0.067 ^J
Perfluoroheptanesulfonic acid	PFHpS	--	--	--	< 0.037	< 0.039	< 0.044	< 0.043	< 0.036	< 0.043	< 0.043	< 0.052	< 0.038	< 0.036	< 0.036	< 0.039	< 0.038	< 0.038
Perfluorooctanoic acid	PFOA	1,260	16,400	--	< 0.091	0.16 ^J	< 0.11	0.39	0.20 ^J	0.85	0.71	0.36	< 0.093	< 0.089	< 0.087	< 0.097	< 0.093	< 0.094
Ammonium Perfluorooctanoate	APFO	--	--	--	< 0.094	0.17 ^J	< 0.11	0.41	0.21 ^J	0.88	0.73	0.37	< 0.096	< 0.092	< 0.090	< 0.10	< 0.096	< 0.097
Perfluorooctanesulfonic acid	PFOS	1,260	16,400	--	0.22 ^J	0.58	< 0.25	1.6	0.50 ^J	1.6	2.7	2.9	< 0.22	< 0.21	0.26 ^J	0.32 ^J	< 0.22	< 0.22
8:2 Fluorotelomer sulfonic acid	8:2 FTS	--	--	--	< 0.26	< 0.28	< 0.31	< 0.31	< 0.26	< 0.30	< 0.31	< 0.37	< 0.27	1.4 ^J	< 2.5	< 0.28	0.30 ^J	< 0.27
Perfluorononanoic acid	PFNA	--	--	--	< 0.038	0.10 ^J	< 0.045	0.12 ^J	0.065 ^J	0.29	0.30	0.13 ^J	< 0.039	< 0.037	< 0.037	< 0.040	< 0.039	< 0.039
Perfluorononanesulfonic acid	PFNS	--	--	--	< 0.021	< 0.022	< 0.025	< 0.025	< 0.021	< 0.024	< 0.025	< 0.030	< 0.022	< 0.021	< 0.020	< 0.022	< 0.022	< 0.022
Perfluorodecanoic acid	PFDA	--	--	--	0.17 ^J	0.21 ^J	0.081 ^J	0.38	0.31	0.76	0.30	0.41	< 0.024	< 0.023	< 0.022	< 0.025	< 0.024	< 0.024
Perfluorodecanesulfonic acid	PFDS	--	--	--	< 0.041	0.057 ^J	< 0.049	0.12 ^J	0.045 ^J	0.060 ^J	< 0.048	0.29 ^J	< 0.042	< 0.040	< 0.040	< 0.044	< 0.042	< 0.043
10:2 Fluorotelomer Sulfonic Acid	10:2 FTS	--	--	--	< 0.053	< 0.056	< 0.063	< 0.062	< 0.052	< 0.061	< 0.061	< 0.074	< 0.054	0.64	< 0.051	< 0.056	0.14 ^J	< 0.055
Perfluoroundecanoic acid	PFUnA	--	--	--	0.11 ^J	0.095 ^J	< 0.045	0.11 ^J	0.088 ^J	0.089 ^J	0.048 ^J	0.10 ^J	0.043 ^J	< 0.037	< 0.037	0.049 ^J	< 0.039	< 0.039
Perfluorododecanoic acid	PFDaA	--	--	--	0.24	0.17 ^J	< 0.084	0.17 ^J	0.19 ^J	0.15 ^J	0.096 ^J	0.17 ^J	< 0.072	< 0.069	< 0.068	< 0.075	< 0.072	< 0.073
Perfluorododecanesulfonic acid	PFDoS	--	--	--	< 0.063	< 0.067	< 0.075	< 0.074	< 0.062	< 0.073	< 0.074	< 0.089	< 0.065	< 0.062	< 0.061	< 0.067	< 0.065	< 0.066
Perfluorotridecanoic acid	PFTrDA	--	--	--	< 0.054	< 0.057	< 0.064	< 0.063	< 0.053	< 0.062	< 0.063	< 0.075	< 0.055	< 0.053	< 0.052	0.087 ^J	< 0.055	< 0.056
Perfluorotetradecanoic acid	PFTeDA	--	--	--	0.068 ^J	0.076 ^J	< 0.068	0.074 ^J	0.091 ^J	0.091 ^J	< 0.066	< 0.080	< 0.058	< 0.056	< 0.055	0.064 ^J	< 0.058	< 0.059
Perfluorohexadecanoic acid	PFHxDA	--	--	--	< 0.047	< 0.049	< 0.055	< 0.054	< 0.045	< 0.054	< 0.054	< 0.065	< 0.048	< 0.045	< 0.045	< 0.049	< 0.047	< 0.048
Perfluorooctadecanoic acid	PFODA	--	--	--	< 0.030	< 0.031	< 0.035	< 0.035	< 0.029	< 0.034	< 0.034	< 0.041	< 0.030	< 0.029	< 0.028	< 0.031	< 0.030	< 0.031
HFPO-DA	GenX	--	--	--	< 0.12	< 0.12	< 0.14	< 0.14	< 0.11	< 0.13	< 0.14	< 0.16	< 0.12	< 0.11	< 0.11	< 0.12	< 0.12	< 0.12
4,8-dioxa-3H-perfluorononanoic acid	DONA	--	--	--	< 0.019	< 0.020	< 0.023	< 0.022	< 0.019	< 0.022	< 0.022	< 0.027	< 0.019	< 0.019	< 0.018	< 0.020	< 0.019	< 0.020
NaDONA	NaDONA	--	--	--	< 0.020	< 0.021	< 0.024	< 0.023	< 0.020	< 0.023	< 0.023	< 0.028	< 0.021	< 0.020	< 0.019	< 0.021	< 0.020	< 0.021
ADONA	ADONA	--	--	--	< 0.020	< 0.021	< 0.024	< 0.023	< 0.020	< 0.023	< 0.023	< 0.028	< 0.021	< 0.020	< 0.019	< 0.021	< 0.020	< 0.021
Perfluorooctane sulfonamide	PFOSA	--	--	--	< 0.087	< 0.092	< 0.10	< 0.10	< 0.085	< 0.10	< 0.10	< 0.12	< 0.089	< 0.085	< 0.083	< 0.092	< 0.088	< 0.090
N-Ethyl perfluorooctane sulfonamide	NEtFOSA	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Ethyl perfluorooctane sulfonamidoethanol	NEtFOSE	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Methyl perfluorooctane sulfonamide	NMeFOSA	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Methyl perfluorooctane sulfonamidoethanol	NMeFOSE	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MeFOSAA	MeFOSAA	--	--	--	< 0.41	< 0.44	< 0.49	< 0.48	< 0.40	< 0.47	< 0.48	< 0.58	< 0.42	< 0.40	< 0.40	< 0.44	< 0.42	< 0.43
EtFOSAA	EtFOSAA	--	--	--	< 0.39	< 0.42	< 0.46	< 0.46	< 0.38	< 0.45	< 0.46	< 0.55	< 0.40	< 0.38	< 3.8	< 0.42	< 0.40	< 0.40
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic ac F-53B Major		--	--	--	< 0.029	< 0.030	< 0.034	< 0.033	< 0.028	< 0.033	< 0.033	< 0.040	< 0.029	< 0.028	< 0.027	< 0.030	< 0.029	< 0.029
11-chloroeicosafuoro-3-oxaundecane-1-sulfonic ac F-53B Minor		--	--	--	< 0.023	< 0.025	< 0.028	< 0.027	< 0.023	< 0.027	< 0.027	< 0.033	< 0.024	< 0.023	< 0.022	< 0.025	< 0.024	< 0.024
Total PFAS		--	--	--	2	4	2	4	2	6	5	6	120	320	140	150	17	8

Table A.3.
Residual Soil Results Table
ATC Blount SS-Environmental Emergency Spill Response
60611431; 722 E. Main Street Madison, WI 53703

Parameters	ABBR.	Generic RCLs			SS-18	SS-19	SS-20	SS-21	SS-22	SS-23	SS-24	SS-25	SS-26	SS-27	SS-28	SS-29	SS-30	SS-31
		Non-Industrial	Industrial	Groundwater Pathway	Surface 7/26/2019	Surface 10/29/2019	Surface 10/29/2019	Surface 10/29/2019										
PFAS (ug/kg)																		
Perfluorobutanoic acid	PFBA	--	--	--	0.59 ^B	3.4 ^B	0.14 ^{JB}	0.17 ^{JB}	0.12 ^{JB}	0.24 ^B	0.21 ^B	0.31 ^B	0.86 ^B	0.58 ^B	< 0.030	0.37 ^B	0.085 ^{JB}	0.13 ^{JB}
Perfluorobutanesulfonic acid	PFBS	1,260,000	16,400,000	--	< 0.025	< 0.028	< 0.026	< 0.027	< 0.028	< 0.026	< 0.025	< 0.027	< 0.027	< 0.026	< 0.027	< 0.026	< 0.026	< 0.025
4:2 Fluorotelomer Sulfonic Acid	4:2 FTS	--	--	--	< 0.38	< 0.41	< 0.38	< 0.39	< 0.41	< 0.39	< 0.38	< 0.39	< 0.39	< 0.39	< 0.39	< 0.39	< 0.39	< 0.38
Perfluoropentanoic acid	PFPeA	--	--	--	0.22	0.38	< 0.080	< 0.082	< 0.085	< 0.080	0.17 ^J	0.11 ^J	0.31	0.42	< 0.082	0.12 ^J	0.11 ^J	0.59
Perfluoropentane Sulfonic Acid	PFPeS	--	--	--	< 0.020	< 0.022	< 0.021	< 0.021	< 0.022	< 0.021	< 0.020	< 0.021	< 0.021	< 0.021	< 0.021	< 0.021	< 0.021	< 0.020
Perfluorohexanoic acid	PFHxA	--	--	--	0.26	1.0	< 0.044	< 0.045	< 0.047	0.050 ^J	0.083 ^J	0.088 ^J	0.28	0.50	< 0.045	0.050 ^J	< 0.044	0.26
Perfluorohexanesulfonic acid	PFHxS	--	--	--	< 0.032	< 0.034	< 0.032	< 0.033	< 0.034	< 0.032	< 0.031	< 0.033	< 0.033	0.038 ^J	0.035 ^{J1}	0.040 ^J	< 0.032	< 0.032
6:2 Fluorotelomer sulfonic acid	6:2 FTS	--	--	--	11	130	< 0.16	1.5 ^J	0.44 ^J	2.0 ^J	3.8	1.2 ^J	9.8	13	1.6 ^J	< 0.16	0.16 ^J	0.66 ^J
Perfluoroheptanoic acid	PFHpA	--	--	--	0.031 ^J	0.18 ^J	< 0.030	< 0.031	< 0.032	< 0.030	0.032 ^J	< 0.031	0.070 ^J	0.056 ^J	< 0.031	0.043 ^J	< 0.030	0.068 ^J
Perfluoroheptanesulfonic acid	PFHpS	--	--	--	< 0.036	< 0.039	< 0.036	< 0.037	< 0.039	< 0.037	< 0.035	< 0.037	< 0.037	< 0.037	< 0.037	< 0.037	< 0.036	< 0.036
Perfluorooctanoic acid	PFOA	1,260	16,400	--	< 0.088	< 0.095	< 0.089	< 0.091	< 0.095	< 0.090	< 0.087	< 0.092	< 0.092	< 0.091	< 0.091	< 0.090	< 0.090	< 0.087
Ammonium Perfluorooctanoate	APFO	--	--	--	< 0.091	< 0.098	< 0.092	< 0.094	< 0.099	< 0.093	< 0.090	< 0.095	< 0.095	< 0.094	< 0.095	< 0.093	< 0.093	< 0.090
Perfluorooctanesulfonic acid	PFOS	1,260	16,400	--	< 0.20	< 0.22	< 0.21	< 0.21	< 0.22	< 0.21	< 0.20	0.24 ^J	< 0.21	< 0.21	< 0.21	< 0.21	0.21 ^J	< 0.20
8:2 Fluorotelomer sulfonic acid	8:2 FTS	--	--	--	0.62 ^J	< 2.8	< 0.26	< 0.27	< 0.28	< 0.26	< 0.25	< 0.27	< 0.27	< 0.26	< 0.27	< 0.26	< 0.26	< 0.25
Perfluorononanoic acid	PFNA	--	--	--	< 0.037	< 0.040	< 0.037	< 0.038	< 0.040	< 0.038	< 0.036	< 0.038	< 0.038	< 0.038	< 0.038	< 0.038	< 0.037	< 0.037
Perfluorononanesulfonic acid	PFNS	--	--	--	< 0.020	< 0.022	< 0.021	< 0.021	< 0.022	< 0.021	< 0.020	< 0.021	< 0.021	< 0.021	< 0.021	< 0.021	< 0.021	< 0.020
Perfluorodecanoic acid	PFDA	--	--	--	< 0.022	0.030 ^J	< 0.023	< 0.023	< 0.024	< 0.023	< 0.022	0.058 ^J	0.042 ^J	< 0.023	< 0.023	0.024 ^J	< 0.023	< 0.022
Perfluorodecanesulfonic acid	PFDS	--	--	--	< 0.040	< 0.043	< 0.040	< 0.041	< 0.043	< 0.041	< 0.040	< 0.042	< 0.042	< 0.041	< 0.041	< 0.041	< 0.041	< 0.040
10:2 Fluorotelomer Sulfonic Acid	10:2 FTS	--	--	--	0.20	0.44	< 0.052	< 0.053	< 0.055	< 0.052	< 0.051	< 0.053	0.11 ^J	0.11 ^J	< 0.053	< 0.052	< 0.052	< 0.051
Perfluoroundecanoic acid	PFUnA	--	--	--	< 0.037	< 0.040	< 0.037	< 0.038	< 0.040	< 0.038	< 0.036	0.043 ^J	0.065 ^J	< 0.038	< 0.038	< 0.038	< 0.037	< 0.037
Perfluorododecanoic acid	PFDaA	--	--	--	< 0.068	< 0.074	< 0.070	< 0.071	< 0.074	< 0.070	< 0.068	< 0.071	< 0.071	< 0.071	< 0.071	< 0.070	< 0.070	< 0.068
Perfluorododecanesulfonic acid	PFDoS	--	--	--	< 0.061	< 0.066	< 0.062	< 0.064	< 0.066	< 0.063	< 0.061	< 0.064	< 0.064	< 0.063	< 0.064	< 0.063	< 0.063	< 0.061
Perfluorotridecanoic acid	PFTrDA	--	--	--	< 0.052	< 0.056	< 0.053	< 0.054	< 0.057	< 0.053	< 0.052	< 0.054	< 0.054	< 0.054	< 0.054	< 0.053	< 0.053	< 0.052
Perfluorotetradecanoic acid	PFTeDA	--	--	--	< 0.055	< 0.059	< 0.056	< 0.057	< 0.060	< 0.056	< 0.055	< 0.057	< 0.058	< 0.057	< 0.057	< 0.057	< 0.056	< 0.055
Perfluorohexadecanoic acid	PFHxDA	--	--	--	< 0.045	< 0.048	< 0.046	< 0.047	< 0.049	< 0.046	< 0.045	< 0.047	< 0.047	< 0.046	< 0.047	< 0.046	< 0.046	< 0.045
Perfluorooctadecanoic acid	PFODA	--	--	--	< 0.028	< 0.031	< 0.029	< 0.030	< 0.031	< 0.029	< 0.028	< 0.030	< 0.030	< 0.029	< 0.030	< 0.029	< 0.029	< 0.028
HFPO-DA	GenX	--	--	--	< 0.11	< 0.12	< 0.11	< 0.12	< 0.12	< 0.11	< 0.11	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.11	< 0.11
4,8-dioxa-3H-perfluorononanoic acid	DONA	--	--	--	< 0.018	< 0.020	< 0.019	< 0.019	< 0.020	< 0.019	< 0.018	< 0.019	< 0.019	< 0.019	< 0.019	< 0.019	< 0.019	< 0.018
NaDONA	NaDONA	--	--	--	< 0.019	< 0.021	< 0.020	< 0.020	< 0.021	< 0.020	< 0.019	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.019
ADONA	ADONA	--	--	--	< 0.019	< 0.021	< 0.020	< 0.020	< 0.021	< 0.020	< 0.019	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.019
Perfluorooctane sulfonamide	PFOSA	--	--	--	< 0.083	< 0.090	< 0.085	< 0.087	< 0.091	< 0.086	< 0.083	< 0.087	< 0.087	< 0.086	< 0.087	< 0.086	< 0.085	< 0.083
N-Ethyl perfluorooctane sulfonamide	NEtFOSA	--	--	--	NA	< 0.025	< 0.025	< 0.024										
N-Ethyl perfluorooctane sulfonamidoethanol	NEtFOSE	--	--	--	NA	< 0.038	< 0.037	< 0.037										
N-Methyl perfluorooctane sulfonamide	NMeFOSA	--	--	--	NA	< 0.043	< 0.043	< 0.042										
N-Methyl perfluorooctane sulfonamidoethanol	NMeFOSE	--	--	--	NA	< 0.074	< 0.074	< 0.072										
MeFOSAA	MeFOSAA	--	--	--	< 0.40	< 0.43	< 0.40	< 0.41	< 0.43	< 0.41	< 0.40	< 0.42	< 0.42	< 0.41	< 0.41	< 0.41	< 0.41	< 0.40
EtFOSAA	EtFOSAA	--	--	--	< 0.38	< 0.41	< 0.38	< 0.39	< 0.41	< 0.39	< 0.38	< 0.39	< 0.39	< 0.39	< 0.39	< 0.39	< 0.39	< 0.38
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic ac F-53B Major		--	--	--	< 0.027	< 0.030	< 0.028	< 0.029	< 0.030	< 0.028	< 0.027	< 0.029	< 0.029	< 0.028	< 0.029	< 0.028 ^{F1}	< 0.028	< 0.027
11-chloroeicosafuoro-3-oxaundecane-1-sulfonic ac F-53B Minor		--	--	--	< 0.022	< 0.024	< 0.023	< 0.023	< 0.024	< 0.023	< 0.022	< 0.023	< 0.023	< 0.023	< 0.023	< 0.023	< 0.023	< 0.022
Total PFAS		--	--	--	13	140	0	2	1	2	4	2	12	15	2	1	1	2

Table A.3.
Residual Soil Results Table
ATC Blount SS-Environmental Emergency Spill Response
60611431; 722 E. Main Street Madison, WI 53703

Parameters	ABBR.	Generic RCLs			SS-32	SS-33	SS-34	SS-34 DUP	SS-35	SS-36	SS-37	SS-38	SS-39	SS-40	SS-41	SS-42	SS-43	SS-44
		Non-Industrial	Industrial	Groundwater Pathway	Surface 10/29/2019	Surface 10/29/2019	Surface 10/29/2019	Surface 10/29/2019	Surface 10/29/2019	Surface 10/29/2019	Surface 10/29/2019	Surface 10/29/2019	Surface 10/29/2019	Surface 10/29/2019	Surface 10/29/2019	Surface 10/29/2019	Surface 10/29/2019	Surface 10/29/2019
Perfluorobutanoic acid	PFBA	--	--	--	0.090 ^{JB}	0.082 ^{JB}	0.12 ^{JB}	0.11 ^{JB}	0.21 ^B	0.63 ^B	0.10 ^{JB}	0.081 ^{JB}	0.063 ^{JB}	0.092 ^{JB}	0.14 ^{JB}	0.093 ^{JB}	0.070 ^{JB}	0.79 ^B
Perfluorobutanesulfonic acid	PFBS	1,260,000	16,400,000	--	< 0.025	< 0.026	< 0.026	< 0.025	0.17 ^J	0.071 ^J	0.11 ^J	0.052 ^J	< 0.027	0.041 ^J	< 0.025	< 0.026	< 0.025	0.034 ^J
4:2 Fluorotelomer Sulfonic Acid	4:2 FTS	--	--	--	< 0.37	< 0.39	< 0.38	< 0.37	< 0.38	< 0.37	< 0.38	< 0.38	< 0.40	< 0.40	< 0.37	< 0.38	< 0.37	< 0.39
Perfluoropentanoic acid	PFPeA	--	--	--	0.30	0.17 ^J	0.15 ^J	0.20	0.58	2.4	0.086 ^J	0.090 ^J	< 0.083	< 0.083	0.49	0.15 ^J	< 0.078	1.3
Perfluoropentane Sulfonic Acid	PFPeS	--	--	--	< 0.020	< 0.021	< 0.021	< 0.020	0.051 ^J	< 0.020	0.045 ^J	< 0.021	< 0.022	< 0.022	< 0.020	< 0.021	< 0.020	< 0.021
Perfluorohexanoic acid	PFHxA	--	--	--	0.17 ^J	0.056 ^J	0.17 ^J	0.17 ^J	0.28	1.6	0.077 ^J	0.065 ^J	< 0.045	0.046 ^J	0.14 ^J	0.15 ^J	0.077 ^J	0.70
Perfluorohexanesulfonic acid	PFHxS	--	--	--	< 0.031	< 0.033	< 0.032	0.031 ^J	0.10 ^J	0.035 ^J	0.063 ^J	< 0.032	< 0.033	0.036 ^J	< 0.031	< 0.032	0.034 ^J	0.040 ^J
6:2 Fluorotelomer sulfonic acid	6:2 FTS	--	--	--	< 0.15	< 0.16	0.83 ^J	1.2 ^J	1.7 ^J	2.4	1.9 ^J	0.32 ^J	0.29 ^J	0.48 ^J	0.71 ^J	8.9	4.4	36
Perfluoroheptanoic acid	PFHpA	--	--	--	0.030 ^J	< 0.031	0.057 ^J	0.068 ^J	0.14 ^J	0.13 ^J	0.043 ^J	0.031 ^J	< 0.031	< 0.031	0.10 ^J	< 0.030	< 0.029	0.27
Perfluoroheptanesulfonic acid	PFHpS	--	--	--	< 0.035	< 0.037	< 0.036	< 0.035	0.057 ^J	< 0.035	0.043 ^J	< 0.036	< 0.038	< 0.038	< 0.035	< 0.036	< 0.035	< 0.037
Perfluorooctanoic acid	PFOA	1,260	16,400	--	< 0.087	< 0.091	< 0.089	< 0.087	0.095 ^J	< 0.087	< 0.088	< 0.088	< 0.093	< 0.086	< 0.089	< 0.087	< 0.091	
Ammonium Perfluorooctanoate	APFO	--	--	--	< 0.090	< 0.094	< 0.092	< 0.090	0.099 ^J	< 0.090	< 0.091	< 0.091	< 0.096	< 0.096	< 0.089	< 0.092	< 0.090	< 0.094
Perfluorooctanesulfonic acid	PFOS	1,260	16,400	--	< 0.20	< 0.21	< 0.21	< 0.20	< 0.21	< 0.20	< 0.20	< 0.21	< 0.22	< 0.22	< 0.20	< 0.21	< 0.20	< 0.21
8:2 Fluorotelomer sulfonic acid	8:2 FTS	--	--	--	< 0.25	< 0.26	< 0.26	< 0.25	0.29 ^J	< 0.25	0.48 ^J	< 0.26	< 0.27	< 0.27	< 0.25	0.35 ^J	< 0.25	< 0.26
Perfluorononanoic acid	PFNA	--	--	--	< 0.036	< 0.038	< 0.037	0.039 ^J	0.089 ^J	0.043 ^J	0.043 ^J	< 0.037	0.040 ^J	< 0.039	0.077 ^J	< 0.037	0.036 ^J	0.047 ^J
Perfluorononanesulfonic acid	PFNS	--	--	--	< 0.020	< 0.021	< 0.021	< 0.020	0.068 ^J	0.025 ^J	0.039 ^J	< 0.021	< 0.022	< 0.022	< 0.020	< 0.021	< 0.020	< 0.021
Perfluorodecanoic acid	PFDA	--	--	--	< 0.022	0.035 ^J	< 0.023	0.046 ^J	0.070 ^J	< 0.022	0.057 ^J	< 0.023	0.075 ^J	0.16 ^J	0.026 ^J	< 0.023	0.054 ^J	0.052 ^J
Perfluorodecanesulfonic acid	PFDS	--	--	--	< 0.039	< 0.041	< 0.040	< 0.039	0.057 ^J	< 0.039	0.041 ^J	< 0.040	< 0.042	< 0.042	< 0.039	< 0.040	< 0.039	< 0.041
10:2 Fluorotelomer Sulfonic Acid	10:2 FTS	--	--	--	< 0.051	< 0.053	< 0.052	0.068 ^J	0.078 ^J	< 0.050	0.086 ^J	< 0.051	< 0.054	< 0.054	< 0.050	0.10 ^J	< 0.051	< 0.053
Perfluoroundecanoic acid	PFUnA	--	--	--	< 0.036	0.060 ^J	< 0.037	0.045 ^J	0.084 ^J	0.044 ^J	0.054 ^J	< 0.037	0.045 ^J	0.10 ^J	< 0.036	0.044 ^J	< 0.036	< 0.038
Perfluorododecanoic acid	PFDaA	--	--	--	< 0.068	< 0.071	< 0.069	< 0.068	< 0.069	< 0.068	< 0.069	< 0.069	< 0.072	0.17 ^J	< 0.067	< 0.069	< 0.068	< 0.071
Perfluorododecanesulfonic acid	PFDoS	--	--	--	< 0.061	< 0.063	< 0.062	< 0.061	< 0.062	< 0.061	< 0.061	< 0.062	< 0.065	< 0.065	< 0.060	< 0.062	< 0.061	< 0.064
Perfluorotridecanoic acid	PFTrDA	--	--	--	< 0.052	< 0.054	< 0.053	< 0.052	0.068 ^J	< 0.052	< 0.052	< 0.052	< 0.055	0.065 ^J	< 0.051	< 0.053	< 0.052	< 0.054
Perfluorotetradecanoic acid	PFTeDA	--	--	--	< 0.055	< 0.057	< 0.056	< 0.055	0.068 ^J	< 0.055	< 0.055	< 0.055	< 0.058	0.091 ^J	< 0.054	< 0.056	< 0.055	< 0.057
Perfluorohexadecanoic acid	PFHxDA	--	--	--	< 0.045	< 0.046	< 0.046	< 0.044	0.069 ^J	< 0.044	< 0.045	< 0.045	< 0.047	< 0.048	< 0.044	< 0.045	< 0.045	< 0.047
Perfluorooctadecanoic acid	PFODA	--	--	--	< 0.028	< 0.030	< 0.029	< 0.028	0.079 ^J	< 0.028	0.055 ^J	< 0.029	< 0.030	< 0.030	< 0.028	< 0.029	< 0.028	< 0.030
HFPO-DA	GenX	--	--	--	< 0.11	< 0.12	< 0.11	< 0.11	3.3	1.0	2.2	0.48	0.46	0.60	0.19 ^J	0.26	0.19 ^J	0.19 ^J
4,8-dioxa-3H-perfluorononanoic acid	DONA	--	--	--	< 0.018	< 0.019	< 0.019	< 0.018	0.046 ^J	< 0.018	0.026 ^J	< 0.018	< 0.019	< 0.019	< 0.018	< 0.019	< 0.018	< 0.019
NaDONA	NaDONA	--	--	--	< 0.019	< 0.020	< 0.020	< 0.019	0.049 ^J	< 0.019	0.028 ^J	< 0.019	< 0.021	< 0.021	< 0.019	< 0.020	< 0.019	< 0.020
ADONA	ADONA	--	--	--	< 0.019	< 0.020	< 0.020	< 0.019	0.048 ^J	< 0.019	0.028 ^J	< 0.019	< 0.021	< 0.021	< 0.019	< 0.020	< 0.019	< 0.020
Perfluorooctane sulfonamide	PFOSA	--	--	--	< 0.083	< 0.087	< 0.085	< 0.083	< 0.085	< 0.083	< 0.084	< 0.084	< 0.089	< 0.089	< 0.082	< 0.084	< 0.083	< 0.087
N-Ethyl perfluorooctane sulfonamide	NEtFOSA	--	--	--	< 0.024	< 0.025	< 0.025	0.056 ^J	< 0.025	< 0.024	< 0.025	< 0.025	< 0.026	< 0.026	< 0.024	< 0.025	< 0.024	< 0.025
N-Ethyl perfluorooctane sulfonamidoethanol	NEtFOSE	--	--	--	< 0.036	< 0.038	0.048 ^J	0.098 ^J	0.089 ^J	< 0.036	< 0.037	0.048 ^J	< 0.039	< 0.039	0.046 ^J	< 0.037	< 0.036	< 0.038
N-Methyl perfluorooctane sulfonamide	NMeFOSA	--	--	--	< 0.041	< 0.043	< 0.042	0.069 ^J	< 0.042	< 0.041	< 0.042	< 0.042	< 0.044	< 0.044	< 0.041	< 0.042	< 0.042	< 0.043
N-Methyl perfluorooctane sulfonamidoethanol	NMeFOSE	--	--	--	< 0.072	< 0.075	< 0.074	0.12 ^J	< 0.074	< 0.072	< 0.073	< 0.073	< 0.077	< 0.077	< 0.071	< 0.073	< 0.072	< 0.075
MeFOSAA	MeFOSAA	--	--	--	< 0.39	< 0.41	< 0.40	< 0.39	< 0.40	< 0.39	< 0.40	< 0.40	< 0.42	< 0.42	< 0.39	< 0.40	< 0.39	< 0.41
EtFOSAA	EtFOSAA	--	--	--	< 0.37	< 0.39	< 0.38	< 0.37	< 0.38	< 0.37	< 0.38	< 0.38	< 0.40	< 0.40	< 0.37	< 0.38	< 0.37	< 0.39
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic ac F-53B Major		--	--	--	< 0.027	< 0.029	< 0.028	< 0.027	0.069 ^J	< 0.027	0.038 ^J	< 0.028	< 0.029	< 0.029	< 0.027	< 0.028	< 0.027	< 0.029
11-chloroeicosafuoro-3-oxaundecane-1-sulfonic ac F-53B Minor		--	--	--	< 0.022	< 0.023	< 0.023	< 0.022	0.049 ^J	< 0.022	0.032 ^J	< 0.023	< 0.024	< 0.024	< 0.022	< 0.023	< 0.022	< 0.023
Total PFAS		--	--	--	1	0	1	2	8	8	6	1	1	2	2	10	5	39

Table A.3.
Residual Soil Results Table
ATC Blount SS-Environmental Emergency Spill Response
60611431; 722 E. Main Street Madison, WI 53703

Parameters	ABBR.	Generic RCLs			SS-45	SS-46	SS-46 DUP	SS-47	SS-48	SS-49	SS-49 DUP	SS-50	SS-51	SS-52	SS-53	SS-54	SS-55	MW-1
		Non-Industrial	Industrial	Groundwater Pathway	Surface 10/29/2019	Surface 10/29/2019	Surface 10/29/2019	Surface 10/29/2019	Surface 10/29/2019	Surface 10/29/2019	Surface 10/29/2019	Surface 10/29/2019	Surface 10/29/2019	Surface 10/29/2019	Surface 10/29/2019	Surface 10/29/2019	Surface 10/29/2019	Surface 10/29/2019
PFAS (ug/kg)																		
Perfluorobutanoic acid	PFBA	--	--	--	0.30 ^B	0.058 ^{JB}	0.056 ^{JB}	0.12 ^{JB}	0.057 ^{JB}	0.12 ^{JB}	0.13 ^{JB}	0.075 ^{JB}	0.066 ^{JB}	0.11 ^{JB}	0.067 ^{JB}	0.23 ^B	0.20 ^B	0.090 ^{JB}
Perfluorobutanesulfonic acid	PFBS	1,260,000	16,400,000	--	< 0.025	< 0.026	< 0.028	< 0.026	< 0.025	< 0.028	< 0.026	< 0.025	< 0.026	< 0.027	< 0.025	< 0.027	< 0.025	< 0.028
4:2 Fluorotelomer Sulfonic Acid	4:2 FTS	--	--	--	< 0.37	< 0.39	< 0.41	< 0.38	< 0.37	< 0.42	< 0.38	< 0.37	< 0.38	< 0.40	< 0.37	< 0.40	< 0.37	< 0.41
Perfluoropentanoic acid	PFPeA	--	--	--	0.093 ^J	0.13 ^J	0.098 ^J	0.12 ^J	< 0.077	< 0.087	< 0.080	< 0.077	< 0.080	< 0.083	< 0.077	0.43	0.40	< 0.085
Perfluoropentane Sulfonic Acid	PFPeS	--	--	--	< 0.020	< 0.021	< 0.022	< 0.021	< 0.020	< 0.023	< 0.021	< 0.020	< 0.021	< 0.022	< 0.020	< 0.022	< 0.020	< 0.022
Perfluorohexanoic acid	PFHxA	--	--	--	0.21	0.078 ^J	< 0.047	0.12 ^J	< 0.042	< 0.048	< 0.043	< 0.042	< 0.044	< 0.045	< 0.042	0.20 ^J	0.21	< 0.046
Perfluorohexanesulfonic acid	PFHxS	--	--	--	0.034 ^J	< 0.032	< 0.035	< 0.032	< 0.031	< 0.035	< 0.032	< 0.031	< 0.032	< 0.033	< 0.031	< 0.033	< 0.031	0.15 ^J
6:2 Fluorotelomer sulfonic acid	6:2 FTS	--	--	--	33	2.4	1.5 ^J	5.0	< 0.15	< 0.17	< 0.16	< 0.15	1.3 ^J	0.20 ^J	0.30 ^J	7.6	2.7	< 0.17
Perfluoroheptanoic acid	PFHpA	--	--	--	< 0.029	< 0.030	< 0.032	< 0.030	< 0.029	< 0.033	< 0.030	< 0.029	< 0.030	< 0.031	< 0.029	0.092 ^J	0.061 ^J	< 0.032
Perfluoroheptanesulfonic acid	PFHpS	--	--	--	< 0.035	< 0.037	< 0.039	< 0.036	< 0.035	< 0.040	< 0.036	< 0.035	< 0.036	< 0.038	< 0.035	< 0.038	< 0.035	< 0.039
Perfluorooctanoic acid	PFOA	1,260	16,400	--	< 0.087	< 0.090	< 0.096	< 0.089	< 0.086	< 0.098	< 0.089	< 0.087	< 0.089	< 0.093	< 0.086	< 0.093	< 0.087	0.11 ^J
Ammonium Perfluorooctanoate	APFO	--	--	--	< 0.090	< 0.093	< 0.10	< 0.092	< 0.090	< 0.10	< 0.092	< 0.090	< 0.092	< 0.096	< 0.089	< 0.096	< 0.090	0.12 ^J
Perfluorooctanesulfonic acid	PFOS	1,260	16,400	--	< 0.20	< 0.21	< 0.22	< 0.20 ^H	< 0.20	< 0.23	< 0.21	0.20 ^{JB*}	< 0.21	< 0.22	< 0.20	0.47 ^{JB*}	< 0.20	2.4 ^B
8:2 Fluorotelomer sulfonic acid	8:2 FTS	--	--	--	0.36 ^J	< 0.26	< 0.28	< 0.26	< 0.25	< 0.28	< 0.26	< 0.25	< 0.26	< 0.27	< 0.25	< 0.27	< 0.25	< 0.28
Perfluorononanoic acid	PFNA	--	--	--	< 0.036	< 0.038	< 0.040	< 0.037	< 0.036	0.047 ^J	0.067 ^J	< 0.036	< 0.037	< 0.039	< 0.036	< 0.039	< 0.036	0.063 ^J
Perfluorononanesulfonic acid	PFNS	--	--	--	< 0.020	< 0.021	< 0.022	< 0.021	< 0.020	< 0.023	< 0.021	< 0.020	< 0.021	< 0.022	< 0.020	< 0.022	< 0.020	< 0.022
Perfluorodecanoic acid	PFDA	--	--	--	< 0.022	< 0.023	< 0.025	< 0.023	< 0.022	< 0.025	0.087 ^J	0.043 ^J	0.079 ^J	0.065 ^J	< 0.022	0.043 ^J	< 0.022	0.33
Perfluorodecanesulfonic acid	PFDS	--	--	--	< 0.039	< 0.041	< 0.044	< 0.040	< 0.039	< 0.044	< 0.040	< 0.039	< 0.040	< 0.042	< 0.039	< 0.042	< 0.039	0.47
10:2 Fluorotelomer Sulfonic Acid	10:2 FTS	--	--	--	0.20	< 0.052	< 0.056	< 0.052	< 0.050	< 0.057	< 0.052	< 0.050	< 0.052	< 0.054	< 0.050	0.055 ^J	< 0.051	< 0.055
Perfluoroundecanoic acid	PFUnA	--	--	--	< 0.036	< 0.038	< 0.040	< 0.037	< 0.036	< 0.041	< 0.037	0.037 ^J	< 0.037	0.064 ^J	< 0.036	0.051 ^J	< 0.036	0.069 ^J
Perfluorododecanoic acid	PFDaA	--	--	--	< 0.068	< 0.070	< 0.075	< 0.069	< 0.067	< 0.076	< 0.069	< 0.067	< 0.069	< 0.072	< 0.067	< 0.072	< 0.068	0.18 ^J
Perfluorododecanesulfonic acid	PFDoS	--	--	--	< 0.061	< 0.063	< 0.067	< 0.062	< 0.060	< 0.068	< 0.062	< 0.060	< 0.062	< 0.065	< 0.060	< 0.065	< 0.061	< 0.066
Perfluorotridecanoic acid	PFTrDA	--	--	--	< 0.052	< 0.053	< 0.057	< 0.053	< 0.051	< 0.058	< 0.053	< 0.051	< 0.053	< 0.055	< 0.051	< 0.055	< 0.052	< 0.056
Perfluorotetradecanoic acid	PFTeDA	--	--	--	< 0.055	< 0.057	< 0.060	< 0.056	< 0.054	< 0.061	< 0.056	< 0.054	< 0.056	< 0.058	< 0.054	< 0.058	< 0.055	0.067 ^J
Perfluorohexadecanoic acid	PFHxDA	--	--	--	< 0.045	< 0.046	< 0.049	< 0.045	< 0.044	< 0.050	< 0.046	< 0.044	< 0.046	< 0.047	< 0.044	< 0.047	< 0.045	< 0.049
Perfluorooctadecanoic acid	PFODA	--	--	--	< 0.028	< 0.029	< 0.031	< 0.029	< 0.028	< 0.032	< 0.029	< 0.028	< 0.029	< 0.030	< 0.028	< 0.030	< 0.028	< 0.031
HFPO-DA	GenX	--	--	--	0.19 ^J	< 0.12	< 0.12	< 0.11	< 0.11	< 0.12	< 0.11	< 0.11	< 0.11	< 0.12	< 0.11	< 0.12	< 0.11	< 0.12
4,8-dioxa-3H-perfluorononanoic acid	DONA	--	--	--	< 0.018	< 0.019	< 0.020	< 0.019	< 0.018	< 0.020	< 0.019	< 0.018	< 0.019	< 0.019	< 0.018	< 0.019	< 0.018	< 0.020
NaDONA	NaDONA	--	--	--	< 0.019	< 0.020	< 0.021	< 0.020	< 0.019	< 0.022	< 0.020	< 0.019	< 0.020	< 0.020	< 0.019	< 0.020	< 0.019	< 0.021
ADONA	ADONA	--	--	--	< 0.019	< 0.020	< 0.021	< 0.020	< 0.019	< 0.022	< 0.020	< 0.019	< 0.020	< 0.020	< 0.019	< 0.020	< 0.019	< 0.021
Perfluorooctane sulfonamide	PFOSA	--	--	--	< 0.083	< 0.086	< 0.092	< 0.085	< 0.082	< 0.093	< 0.085	< 0.083	< 0.085	< 0.088	< 0.082	< 0.088	< 0.083	< 0.091
N-Ethyl perfluorooctane sulfonamide	NEtFOSA	--	--	--	< 0.024	< 0.025	< 0.027	< 0.025	< 0.024	< 0.027	< 0.025	< 0.024	< 0.025	< 0.026	< 0.024	< 0.026	< 0.024	< 0.027
N-Ethyl perfluorooctane sulfonamidoethanol	NEtFOSE	--	--	--	< 0.036	< 0.038	< 0.040	0.051 ^{JH}	< 0.036	< 0.041	< 0.037	0.078 ^{JB}	< 0.037	< 0.039	< 0.036	< 0.039	< 0.036	0.36
N-Methyl perfluorooctane sulfonamide	NMeFOSA	--	--	--	< 0.041	< 0.043	< 0.046	< 0.042	< 0.041	< 0.046	< 0.042	< 0.041	< 0.042	< 0.044	< 0.041	< 0.044	< 0.041	< 0.045
N-Methyl perfluorooctane sulfonamidoethanol	NMeFOSE	--	--	--	< 0.072	< 0.074	< 0.079	< 0.072 ^{HF2}	< 0.071	< 0.081	< 0.073	0.076 ^J	< 0.074	< 0.077	< 0.071	0.10 ^J	< 0.072	0.81
MeFOSAA	MeFOSAA	--	--	--	< 0.39	< 0.41	< 0.44	< 0.40	< 0.39	< 0.44	< 0.40	< 0.39	< 0.40	< 0.42	< 0.39	< 0.42	< 0.39	< 0.43
EtFOSAA	EtFOSAA	--	--	--	< 0.37	< 0.39	< 0.41	< 0.38	< 0.37	< 0.42	< 0.38	< 0.37	< 0.38	< 0.40	< 0.37	< 0.40	< 0.37	< 0.41
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic ac F-53B Major		--	--	--	< 0.027	< 0.028	< 0.030	< 0.028	< 0.027	< 0.031	< 0.028	< 0.027	< 0.028	< 0.029	< 0.027	< 0.029	< 0.027	< 0.030
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic ac F-53B Minor		--	--	--	< 0.022	< 0.023	< 0.025	< 0.023	< 0.022	< 0.025	< 0.023	< 0.022	< 0.023	< 0.024	< 0.022	< 0.024	< 0.022	< 0.024
Total PFAS		--	--	--	34	3	2	5	0	0	0	1	1	0	0	9	4	5.2

Table A.3.
Residual Soil Results Table
ATC Blount SS-Environmental Emergency Spill Response
60611431; 722 E. Main Street Madison, WI 53703

Parameters	ABBR.	Generic RCLs			SS-56	SS-57	SS-58	SS-59	SS-60	SS-61	SS-62	SS-63	SS-64	SS-65	SS-66	SS-67	SS-68	SS-69
		Non-Industrial	Industrial	Groundwater Pathway	Surface 4/7/2020	Surface 4/7/2020	Surface 4/7/2020	Surface 4/7/2020	Surface 4/7/2020	Surface 4/7/2020	Surface 4/7/2020	Surface 4/7/2020	Surface 4/7/2020	Surface 4/7/2020	Surface 4/7/2020	Surface 4/7/2020	Surface 4/7/2020	Surface 4/7/2020
PFAS (ug/kg)																		
Perfluorobutanoic acid	PFBA	--	--	--	< 0.028	0.11 ^{JB}	< 0.028	0.081 ^{JB}	0.15 ^{JB}	0.20 ^{JB}	0.11 ^{JB}	0.073 ^{JB}	0.098 ^{JB}	0.11 ^{JB}	0.18 ^{JB}	0.16 ^{JB}	0.092 ^{JB}	0.11 ^{JB}
Perfluorobutanesulfonic acid	PFBS	1,260,000	16,400,000	--	< 0.025	< 0.026	< 0.025	< 0.024	< 0.026	< 0.026	0.035 ^J	< 0.030	< 0.028	0.044 ^J	0.047 ^J	0.056 ^J	0.043 ^J	0.028 ^J
4:2 Fluorotelomer Sulfonic Acid	4:2 FTS	--	--	--	< 0.36	< 0.38	< 0.38	< 0.35	< 0.39	< 0.38	< 0.41	< 0.44	< 0.41	< 0.43	< 0.42	< 0.41	< 0.44	< 0.42
Perfluoropentanoic acid	PFPeA	--	--	--	< 0.076	0.15 ^J	0.094 ^J	0.076 ^J	< 0.080	< 0.080	0.24	< 0.092	< 0.086	0.12 ^J	0.10 ^J	0.23	0.13 ^J	0.39
Perfluoropentane Sulfonic Acid	PFPeS	--	--	--	< 0.020	< 0.020	< 0.020	< 0.019	< 0.021	< 0.021	< 0.022	< 0.024	< 0.022	< 0.024	< 0.022	< 0.022	< 0.024	< 0.023
Perfluorohexanoic acid	PFHxA	--	--	--	< 0.041	0.080 ^J	0.058 ^J	< 0.040	< 0.044	< 0.043	0.11 ^J	< 0.050	< 0.047	0.054 ^J	0.11 ^J	0.23	< 0.050	0.51
Perfluorohexanesulfonic acid	PFHxS	--	--	--	< 0.030	< 0.032	< 0.032	0.032 ^J	< 0.032	< 0.032	0.30	0.33	0.17 ^J	< 0.036	0.057 ^J	0.085 ^J	0.038 ^J	0.37
6:2 Fluorotelomer sulfonic acid	6:2 FTS	--	--	--	< 0.15	1.2 ^J	< 0.15	< 0.14	< 0.16	< 0.16	< 0.17	< 0.18	< 0.17	< 0.18	< 0.17	< 0.17	< 0.18	1.3 ^J
Perfluoroheptanoic acid	PFHpA	--	--	--	< 0.029	< 0.030	< 0.029	< 0.028	< 0.030	< 0.030	0.053 ^J	0.035 ^J	0.049 ^J	0.040 ^J	0.082 ^J	0.15 ^J	0.055 ^J	0.21 ^J
Perfluoroheptanesulfonic acid	PFHpS	--	--	--	< 0.034	< 0.036	< 0.036	< 0.034	< 0.036	< 0.036	< 0.039	< 0.042	< 0.039	< 0.041	< 0.039	< 0.039	< 0.042	< 0.039
Perfluorooctanoic acid	PFOA	1,260	16,400	--	< 0.085	< 0.088	< 0.087	< 0.082	< 0.090	< 0.089	0.19 ^J	0.24	0.23	< 0.10	0.24	0.56	0.11 ^J	0.15 ^J
Ammonium Perfluorooctanoate	APFO	--	--	--	< 0.088	< 0.091	< 0.090	< 0.085	< 0.093	< 0.092	0.20 ^J	0.25	0.24	0.10 ^J	0.25	0.58	0.11 ^J	0.15 ^J
Perfluorooctanesulfonic acid	PFOS	1,260	16,400	--	< 0.20	0.21 ^{JB}	< 0.20	0.28 ^{JB}	0.22 ^{JB}	< 0.21	5.8 ^B	6.4 ^B	4.5 ^B	0.71 ^B	1.3 ^B	2.6 ^B	0.87 ^B	5.9 ^B
8:2 Fluorotelomer sulfonic acid	8:2 FTS	--	--	--	< 0.25	< 0.26	< 0.25	< 0.24	< 0.26	< 0.26	< 0.28	< 0.30	< 0.28	< 0.29	< 0.28	< 0.28	< 0.30	< 0.28
Perfluorononanoic acid	PFNA	--	--	--	< 0.035	< 0.037	< 0.037	< 0.034	< 0.037	< 0.037	0.14 ^J	0.14 ^J	0.13 ^J	0.051 ^J	0.095 ^J	0.20 ^J	0.057 ^J	0.11 ^J
Perfluorononanesulfonic acid	PFNS	--	--	--	< 0.020	< 0.020	< 0.020	< 0.019	< 0.021	< 0.021	< 0.022	< 0.024	< 0.022	< 0.024	< 0.022	< 0.022	< 0.024	< 0.023
Perfluorodecanoic acid	PFDA	--	--	--	< 0.022	0.032 ^J	0.031 ^J	< 0.021	0.040 ^J	< 0.023	0.70	0.67	0.59	0.093 ^J	0.31	0.57	0.093 ^J	0.81
Perfluorodecanesulfonic acid	PFDS	--	--	--	< 0.038	< 0.040	< 0.040	< 0.037	< 0.041	< 0.040	0.86	0.82	0.41	< 0.046	0.058 ^J	0.060 ^J	0.047 ^J	1.0
10:2 Fluorotelomer Sulfonic Acid	10:2 FTS	--	--	--	< 0.049	0.080 ^J	< 0.051	< 0.048	< 0.052	< 0.052	< 0.055	< 0.060	< 0.056	< 0.059	< 0.056	< 0.056	< 0.060	< 0.056
Perfluoroundecanoic acid	PFUnA	--	--	--	< 0.035	< 0.037	< 0.037	< 0.034	< 0.037	< 0.037	0.12 ^J	0.14 ^J	0.091 ^J	< 0.042	0.070 ^J	0.11 ^J	0.071 ^J	0.21 ^J
Perfluorododecanoic acid	PFDaA	--	--	--	< 0.066	< 0.069	< 0.068	< 0.064	< 0.070	< 0.069	0.31	0.34	0.19 ^J	< 0.079	0.16 ^J	0.27	< 0.080	0.47
Perfluorododecanesulfonic acid	PFDaS	--	--	--	< 0.059	< 0.061	< 0.061	< 0.057	< 0.062	< 0.062	< 0.066	< 0.072	< 0.067	< 0.071	< 0.067	< 0.067	< 0.072	< 0.068
Perfluorotridecanoic acid	PFTrDA	--	--	--	< 0.050	< 0.052	< 0.052	< 0.049	< 0.053	< 0.053	< 0.056	< 0.061	< 0.057	< 0.060	< 0.057	< 0.057	< 0.061	< 0.057
Perfluorotetradecanoic acid	PFTeDA	--	--	--	< 0.053	< 0.055	< 0.055	< 0.052	< 0.056	< 0.056	0.10 ^J	0.13 ^J	0.061 ^J	< 0.063	0.078 ^J	0.093 ^J	< 0.065	0.13 ^J
Perfluorohexadecanoic acid	PFHxDA	--	--	--	< 0.043	< 0.045	< 0.045	< 0.042	< 0.046	< 0.046	< 0.049	< 0.053	< 0.049	< 0.052	< 0.049	< 0.049	< 0.053	< 0.050
Perfluorooctadecanoic acid	PFODA	--	--	--	< 0.028	< 0.029	< 0.028	< 0.027	< 0.029	< 0.029	< 0.031	< 0.033	< 0.031	< 0.033	< 0.031	< 0.031	< 0.034	< 0.032
HFPO-DA	GenX	--	--	--	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	0.16 ^J	< 0.13	< 0.12	< 0.13	< 0.12	< 0.12	< 0.13	< 0.12
4,8-dioxa-3H-perfluorononanoic acid	DONA	--	--	--	< 0.018	< 0.018	< 0.018	< 0.017	< 0.019	< 0.019	< 0.020	< 0.022	< 0.020	< 0.021	< 0.020	< 0.020	< 0.022	< 0.020
NaDONA	NaDONA	--	--	--	< 0.019	< 0.019	< 0.019	< 0.018	< 0.020	< 0.020	< 0.021	< 0.023	< 0.021	< 0.022	< 0.021	< 0.021	< 0.023	< 0.021
ADONA	ADONA	--	--	--	< 0.019	< 0.019	< 0.019	< 0.018	< 0.020	< 0.020	< 0.021	< 0.023	< 0.021	< 0.022	< 0.021	< 0.021	< 0.023	< 0.021
Perfluorooctane sulfonamide	PFOSA	--	--	--	< 0.081	< 0.084	< 0.083	< 0.079	< 0.085	< 0.085	< 0.091	< 0.098	< 0.091	< 0.096	< 0.092	< 0.092	< 0.098	< 0.092
N-Ethyl perfluorooctane sulfonamide	NEtFOSA	--	--	--	< 0.024	< 0.025	< 0.024	< 0.023	< 0.025	< 0.025	< 0.027	< 0.029	< 0.027	< 0.028	< 0.027	< 0.027	< 0.029	< 0.027
N-Ethyl perfluorooctane sulfonamidoethanol	NEtFOSE	--	--	--	0.057 ^J	0.18 ^J	< 0.037	< 0.034	0.15 ^J	< 0.037	1.2	1.3	0.64	0.083 ^J	0.32	0.35	0.23 ^J	1.2
N-Methyl perfluorooctane sulfonamide	NMeFOSA	--	--	--	< 0.040	< 0.042	< 0.042	< 0.039	< 0.043	< 0.042	< 0.045	< 0.049	< 0.046	< 0.048	< 0.046	< 0.046	< 0.049	< 0.046
N-Methyl perfluorooctane sulfonamidoethanol	NMeFOSE	--	--	--	< 0.070	< 0.073	< 0.072	< 0.068	< 0.074	< 0.073	1.6	1.8	0.79	< 0.083	< 0.080	< 0.080	< 0.085	2.0
MeFOSAA	MeFOSAA	--	--	--	< 0.38	< 0.40	< 0.40	< 0.37	< 0.41	< 0.40	< 0.43	< 0.47	< 0.44	< 0.46	< 0.44	< 0.44	< 0.47	0.50 ^J
EtFOSAA	EtFOSAA	--	--	--	< 0.36	< 0.38	< 0.38	< 0.35	< 0.39	< 0.38	< 0.41	< 0.44	< 0.41	< 0.43	< 0.42	< 0.41	< 0.44	< 0.42
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic ac F-53B Major		--	--	--	< 0.027	< 0.028	< 0.027	< 0.026	< 0.028	< 0.028	< 0.030	< 0.032	< 0.030	< 0.032	< 0.030	< 0.030	< 0.032	< 0.030
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic ac F-53B Minor		--	--	--	< 0.022	< 0.023	< 0.022	< 0.021	< 0.023	< 0.023	< 0.024	< 0.026	< 0.025	< 0.026	< 0.025	< 0.025	< 0.026	< 0.025
Total PFAS		--	--	--	0	2	0	0	1	0	12	13	8	1	4	6	2	16

Table A.3.
Residual Soil Results Table
ATC Blount SS-Environmental Emergency Spill Response
60611431; 722 E. Main Street Madison, WI 53703

Parameters	ABBR.	Generic RCLs			SS-70	SS-71	SS-72	SS-73	SS-74	SS-75	SS-76	SS-77	SS-78	SS-79	SS-80	SS-81	SS-82
		Non-Industrial	Industrial	Groundwater Pathway	Surface 4/7/2020	Surface 4/7/2020	Surface 4/7/2020	Surface 4/7/2020	Surface 4/7/2020	Surface 4/7/2020	Surface 4/7/2020	Surface 4/7/2020	Surface 4/7/2020	Surface 7/9/2020	Surface 7/9/2020	Surface 7/9/2020	Surface 7/10/2020
Perfluorobutanoic acid	PFBA	--	--	--	0.19 ^{JB}	0.069 ^{JB}	0.076 ^{JB}	0.051 ^{JB}	< 0.36	0.28 ^B	0.12 ^{JB}	< 0.034	< 0.034	0.67 ^B	0.21 ^B	0.27 ^B	0.27 ^B
Perfluorobutanesulfonic acid	PFBS	1,260,000	16,400,000	--	0.035 ^J	0.029 ^J	0.035 ^J	< 0.028	< 0.32	0.075 ^J	0.21 ^J	< 0.031	0.038 ^J	< 0.026	< 0.025	< 0.025	< 0.027
4:2 Fluorotelomer Sulfonic Acid	4:2 FTS	--	--	--	< 0.42	< 0.42	< 0.41	< 0.42	< 4.8	< 0.46	< 0.49	< 0.45	< 0.46	< 0.39	< 0.38	< 0.37	< 0.40
Perfluoropentanoic acid	PFPeA	--	--	--	< 0.088	0.12 ^J	0.16 ^J	< 0.087	< 0.99	0.30	0.14 ^J	< 0.094	< 0.095	1.5	0.090 ^J	0.37	< 0.084
Perfluoropentane Sulfonic Acid	PFPeS	--	--	--	< 0.023	< 0.023	< 0.022	< 0.023	< 0.26	< 0.025	< 0.026	< 0.024	< 0.025	< 0.021	< 0.020	< 0.020	< 0.022
Perfluorohexanoic acid	PFHxA	--	--	--	0.11 ^J	0.069 ^J	0.13 ^J	< 0.047	< 0.54	0.29	0.17 ^J	0.067 ^J	0.056 ^J	0.61	0.046 ^J	0.17 ^J	< 0.046
Perfluorohexanesulfonic acid	PFHxS	--	--	--	0.067 ^J	0.23	0.41	0.24	< 0.40	0.053 ^J	0.060 ^J	0.051 ^J	0.054 ^J	< 0.032	< 0.032	< 0.031	< 0.034
6:2 Fluorotelomer sulfonic acid	6:2 FTS	--	--	--	< 0.17	< 0.17	< 0.17	< 0.17	< 1.9	< 0.19	< 0.20	< 0.18	< 0.18	13	< 0.15	1.3 ^J	3.6
Perfluoroheptanoic acid	PFHpA	--	--	--	0.15 ^J	0.075 ^J	0.32	< 0.033	< 0.37	0.18 ^J	0.076 ^J	0.050 ^J	< 0.036	0.26	< 0.030	0.039 ^J	< 0.032
Perfluoroheptanesulfonic acid	PFHpS	--	--	--	< 0.040	< 0.040	< 0.039	< 0.039	< 0.45	< 0.044	< 0.046	< 0.043	< 0.043	< 0.037	< 0.036	< 0.035	< 0.038
Perfluorooctanoic acid	PFOA	1,260	16,400	--	0.32	0.17 ^J	0.39	< 0.097	< 1.1	0.52	0.19 ^J	0.18 ^J	0.11 ^J	< 0.090	< 0.088	< 0.086	< 0.094
Ammonium Perfluorooctanoate	APFO	--	--	--	0.33	0.18 ^J	0.41	< 0.10	< 1.1	0.54	0.20 ^J	0.19 ^J	0.11 ^J	< 0.093	< 0.091	< 0.089	< 0.097
Perfluorooctanesulfonic acid	PFOS	1,260	16,400	--	1.7 ^B	6.1 ^B	7.8 ^B	4.5 ^B	4.0 ^{JB}	1.2	1.1	0.82	0.89	0.30 ^{JB}	< 0.20	< 0.20	< 0.22
8:2 Fluorotelomer sulfonic acid	8:2 FTS	--	--	--	< 0.28	< 0.28	< 0.28	< 0.28	< 3.2	< 0.31	< 0.33	< 0.31	< 0.31	< 0.26	< 0.25	< 0.25	< 0.27
Perfluorononanoic acid	PFNA	--	--	--	0.15 ^J	0.19 ^J	0.22	0.081 ^J	< 0.46	0.23 ^J	0.090 ^J	0.098 ^J	0.057 ^J	< 0.038	< 0.037	< 0.036	< 0.039
Perfluorononanesulfonic acid	PFNS	--	--	--	< 0.023	< 0.023	< 0.022	< 0.023	< 0.26	< 0.025	< 0.026	< 0.024	< 0.025	< 0.021	< 0.020	< 0.020	< 0.022
Perfluorodecanoic acid	PFDA	--	--	--	0.93	0.93	1.0	0.84	1.3 ^J	0.72	0.18 ^J	0.20 ^J	0.15 ^J	< 0.023	< 0.022	< 0.022	< 0.024
Perfluorodecanesulfonic acid	PFDS	--	--	--	0.17 ^J	0.88	1.1	0.78	< 0.50	0.13 ^J	< 0.051	< 0.048	< 0.048	< 0.041	< 0.040	< 0.039	< 0.043
10:2 Fluorotelomer Sulfonic Acid	10:2 FTS	--	--	--	< 0.057	< 0.057	< 0.056	< 0.056	< 0.64	< 0.063	< 0.066	< 0.061	< 0.062 ^{F1}	< 0.052	< 0.051	< 0.050	< 0.055
Perfluoroundecanoic acid	PFUnA	--	--	--	0.28	0.16 ^J	0.18 ^J	0.15 ^J	< 0.46	0.27	< 0.047	< 0.044	< 0.044	< 0.038	< 0.037	< 0.036	< 0.039
Perfluorododecanoic acid	PFDaA	--	--	--	0.75	0.40	0.42	0.33	< 0.86	0.47	< 0.088	< 0.082	< 0.083	< 0.070	< 0.068	< 0.067	< 0.073
Perfluorododecanesulfonic acid	PFDoS	--	--	--	< 0.068	< 0.068	< 0.067	< 0.068	< 0.77	< 0.075	< 0.079	< 0.073	< 0.074 ^{F1}	< 0.063	< 0.061	< 0.060	< 0.066
Perfluorotridecanoic acid	PFTTrDA	--	--	--	0.058 ^J	< 0.058	0.063 ^J	< 0.057	< 0.66	0.070 ^J	< 0.067	< 0.062	< 0.063	< 0.053	< 0.052	< 0.051	< 0.056
Perfluorotetradecanoic acid	PFTeDA	--	--	--	0.20 ^J	0.13 ^J	0.13 ^J	0.097 ^J	< 0.70	0.19 ^J	< 0.071	< 0.066	< 0.067	< 0.056	< 0.055	< 0.054	< 0.059
Perfluorohexadecanoic acid	PFHxDA	--	--	--	0.071 ^J	< 0.050	< 0.049	< 0.050	< 0.57	0.060 ^J	< 0.058	< 0.054	< 0.054	< 0.046	< 0.045	< 0.044	< 0.048
Perfluorooctadecanoic acid	PFODA	--	--	--	< 0.032	< 0.032	< 0.031	< 0.032	< 0.36	< 0.035	< 0.037	< 0.034	< 0.034	< 0.029	< 0.029	< 0.028	< 0.031
HFPO-DA	GenX	--	--	--	< 0.13	< 0.12	< 0.12	< 0.12	< 1.4	< 0.14	< 0.14	< 0.13	< 0.14	< 0.11	< 0.11	< 0.11	< 0.12
4,8-dioxa-3H-perfluorononanoic acid	DONA	--	--	--	< 0.021	< 0.020	< 0.020	< 0.020	< 0.23	< 0.023	< 0.024	< 0.022	< 0.022 ^{F1}	< 0.019	< 0.018	< 0.018	< 0.020
NaDONA	NaDONA	--	--	--	< 0.022	< 0.022	< 0.021	< 0.021	< 0.24	< 0.024	< 0.025	< 0.023	< 0.023 ^{F1}	< 0.020	< 0.019	< 0.019	< 0.021
ADONA	ADONA	--	--	--	< 0.022	< 0.022	< 0.021	< 0.021	< 0.24	< 0.024	< 0.025	< 0.023	< 0.023 ^{F1}	< 0.020	< 0.019	< 0.019	< 0.021
Perfluorooctane sulfonamide	PFOSA	--	--	--	< 0.093	< 0.093	< 0.091	< 0.092	< 1.1	< 0.10	< 0.11	< 0.10	< 0.10	< 0.086	< 0.084	< 0.082	< 0.090
N-Ethyl perfluorooctane sulfonamide	NEtFOSA	--	--	--	< 0.027	< 0.027	< 0.027	< 0.027	< 0.31	< 0.030	< 0.032	< 0.029	< 0.030	< 0.025	< 0.024	< 0.024	< 0.026
N-Ethyl perfluorooctane sulfonamidoethanol	NEtFOSE	--	--	--	0.57	1.1	1.2	0.92	0.95 ^J	0.34	0.15 ^J	< 0.044	0.20 ^J	0.048 ^J	< 0.037	< 0.036	< 0.039
N-Methyl perfluorooctane sulfonamide	NMeFOSA	--	--	--	< 0.047	< 0.046	< 0.046	< 0.046	< 0.53	< 0.051	< 0.054	< 0.050	< 0.050	< 0.043	< 0.042	< 0.041	< 0.045
N-Methyl perfluorooctane sulfonamidoethanol	NMeFOSE	--	--	--	0.19 ^J	1.4	1.4	1.4	< 0.91	< 0.089	< 0.093	< 0.087	< 0.087	< 0.074	< 0.072	< 0.071	< 0.078
MeFOSAA	MeFOSAA	--	--	--	< 0.44	< 0.44	0.44 ^J	< 0.44	< 5.0	< 0.49	< 0.51	< 0.48	< 0.48	< 0.41	< 0.40	< 0.39	< 0.43
EtFOSAA	EtFOSAA	--	--	--	< 0.42	< 0.42	< 0.41	< 0.42	< 4.8	< 0.46	< 0.49	< 0.45	< 0.46	< 0.39	< 0.38	< 0.37	< 0.40
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic ac F-53B Major		--	--	--	< 0.031	< 0.031	< 0.030	< 0.030	< 0.35	< 0.034	< 0.035	< 0.033	< 0.033 ^{F1}	< 0.028	< 0.028	< 0.027	< 0.029
11-chloroeicosafuoro-3-oxaundecane-1-sulfonic ac F-53B Minor		--	--	--	< 0.025	< 0.025	< 0.024	< 0.025	< 0.28	< 0.028	< 0.029	< 0.027	< 0.027	< 0.023	< 0.022	< 0.022	< 0.024
Total PFAS		--	--	--	6	12	16	9	6	6	3	2	2	16	0	2	4

Table A.3.
Residual Soil Results Table
ATC Blount SS-Environmental Emergency Spill Response
60611431; 722 E. Main Street Madison, WI 53703

Notes:

^J Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

^B Compound was found in the blank and sample

[.] Isotope dilution and/or LCS/LCSD is outside acceptance limits

^{F1} MS and/or MSD Recovery is outside acceptance limits

-- No Generic RCL established.

Generic RCLs from WDNR RR-890: WDNR RCL Calculator December 2017

PFAS = Per-Fluorinated Alkyl Substances

NA = Not analyzed

mg/kg = milligrams per kilogram

ug/kg = micrograms per kilogram

Table A.6.
Groundwater Measurements and Elevations
ATC Blount SS-Environmental Emergency Spill Response
60611431; 722 E. Main Street Madison, WI 53703

Well Number	WCB Sump		Trans Sump			MW-1		ETW-1	
	Depth to GW from TOC (ft)	Groundwater Elevation (ft bgs)	Depth to GW from TOC (ft)	Aprox. Mineral Oil (Inches)	Groundwater Elevation (ft bgs)	Depth to GW from TOC (ft)	Groundwater Elevation (ft bgs)	Depth to GW from TOC (ft)	Groundwater Elevation (ft bgs)
PVC Casing stickup (ft)	1.65		1.40			-0.50		1.52	
PVC Inner diameter (inches)	5.875		11.875			2		1.00	
TOC to Bottom of Well (ft) ^A	9.69		9.40			13.47		14.90	
Date	Depth to GW from TOC (ft)	Groundwater Elevation (ft bgs)	Depth to GW from TOC (ft)	Aprox. Mineral Oil (Inches)	Groundwater Elevation (ft bgs)	Depth to GW from TOC (ft)	Groundwater Elevation (ft bgs)	Depth to GW from TOC (ft)	Groundwater Elevation (ft bgs)
10/29/2019	5.02	-3.37	5.96	5.5	-4.56	NI	-	4.79	-3.27
5/21/2020	5.31	-3.66	5.74	1.44	-4.34	2.91	-3.41	Abandoned	
8/20/2020	5.49	-3.84	-	-	-	3.31	-3.81	-	-
10/2/2020	-	-	6.73	2.0	-5.33	-	-	-	-

Notes:

ft = feet

^A = as measured inside well

NI = Not Installed

-- no elevation

Case Closure – GIS Registry
ATC Transformer Fire – MG&E Blount Substation
722 East Main Street
BRRTS #02-013-584085 FID #113435520

ATTACHMENT B – MAPS AND FIGURES

B.1.a Location Map

B.1.b.1 Detailed Site Map

B.1.c RR Site Map

B.2 Soil Figures

B.2.a Soil Contamination

B.2.b Residual Soil Contamination

B.3 Groundwater Figures

B.3.a.1 Cross-Section

B.3.b Groundwater Isoconcentration – No attachment. Groundwater monitoring data is shown on Table A.1.

B.3.c Groundwater Flow Direction

B.3.d Monitoring Wells

B.4 Vapor Maps and Other Media

B.4.a Vapor Intrusion Map – Not applicable. Vapor intrusion pathway was screened out due to limited subsurface migration potential of PFAS compounds. Vapor intrusion is considered unlikely and no further assessment is deemed necessary.

B.4.b Other media of concern – Not applicable. No attachment because there are no other media of concern.

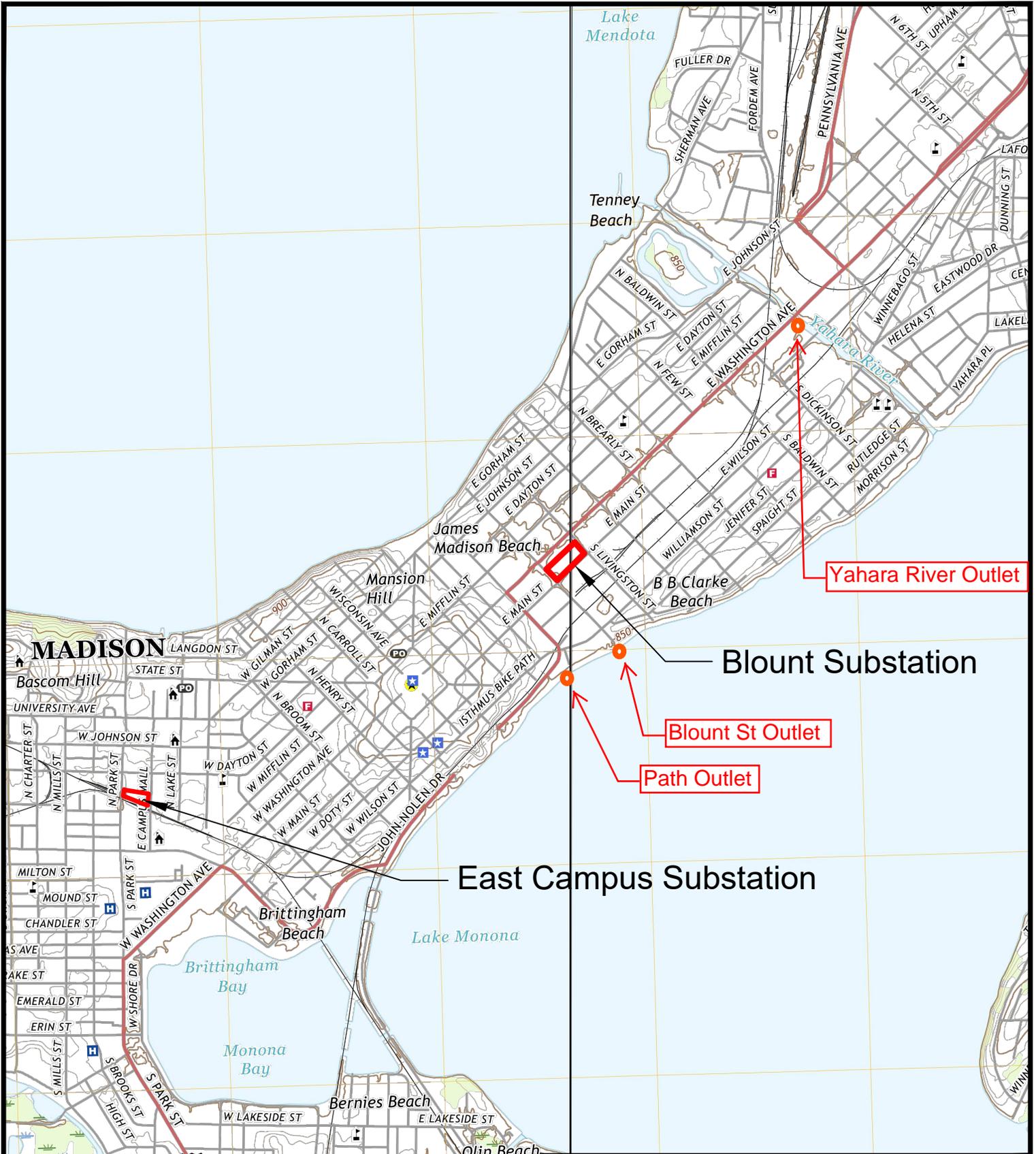
B.4.c Other – None

B.3 Structural Impediments

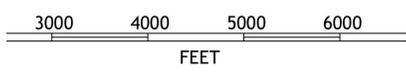
B.5.1 Structural Impediments Map - Underground Lines

B.5.2 Structural Impediment Photos

ATTACHMENT B.1.a - Location Map



File: \\USJMWK\F5001\Prod\Drawings\Projects\60611431\900_CAD_GIS\Sample Locations CAD.dwg; USER: MACKINNEY, JOEL; PLOTTED: August 30, 2019 - 11:56 AM



Notes:
 1. TOPO maps from <http://store.usgs.gov> Madison East and West quadrangles, dated: 2018

QUADRANGLE LOCATION

AECOM
 Milwaukee Office
 1555 RiverCenter Dr
 Milwaukee, WI
 414.944.6080

ATC Blount Transmission Substation
 722 East Main St.
 Madison, WI

SITE LOCATION

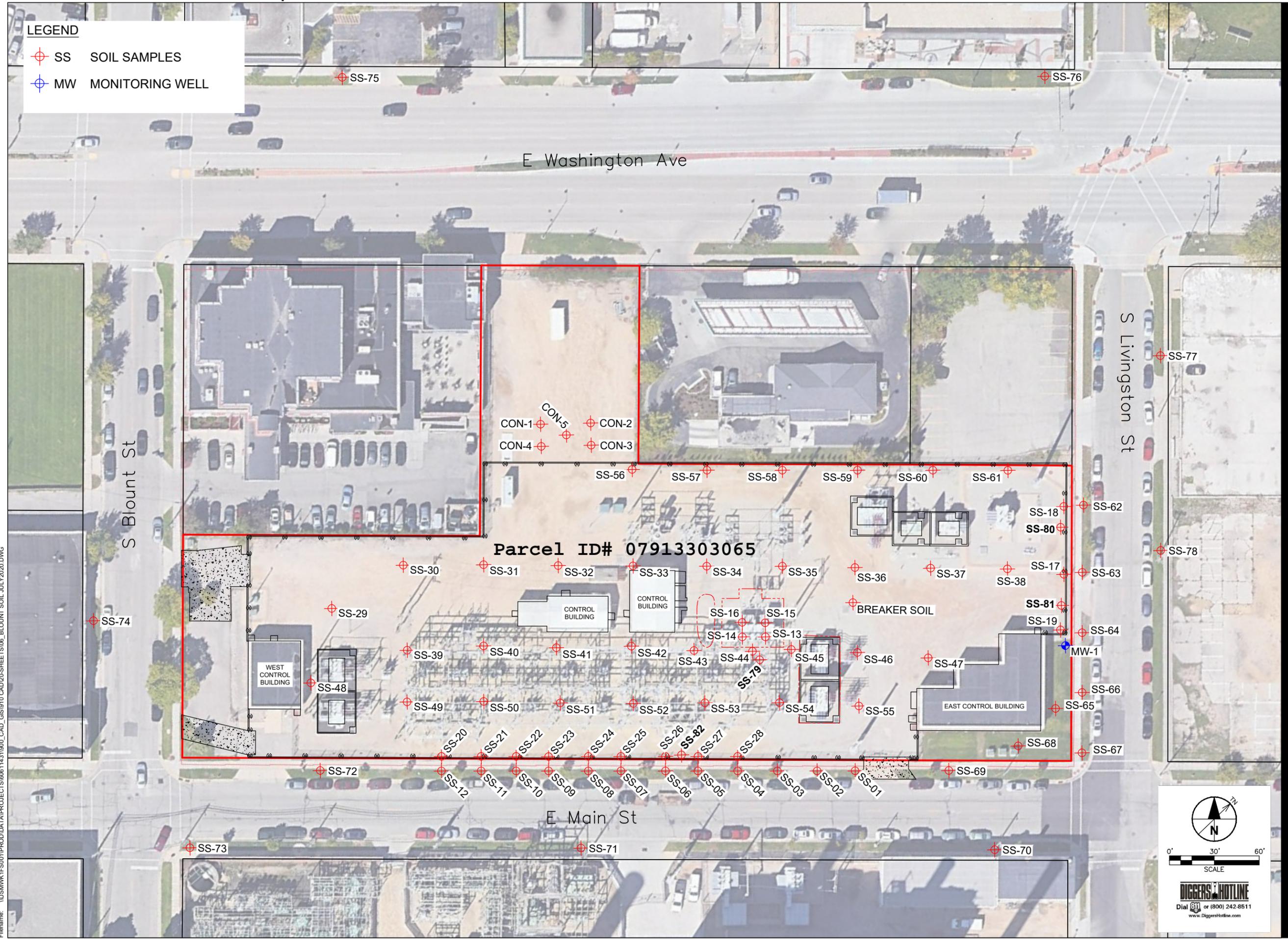


Project Number: 60611431	Drawn By: EMS/JSM	Date: 8/30/2019	Figure No. 1
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ATTACHMENT B.1.b - Detailed Site Map

LEGEND

-  SS SOIL SAMPLES
-  MW MONITORING WELL



Parcel ID# 07913303065



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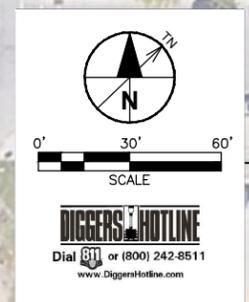
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SOIL SAMPLE LOCATIONS

DRAWING NUMBER

SHEET NUMBER

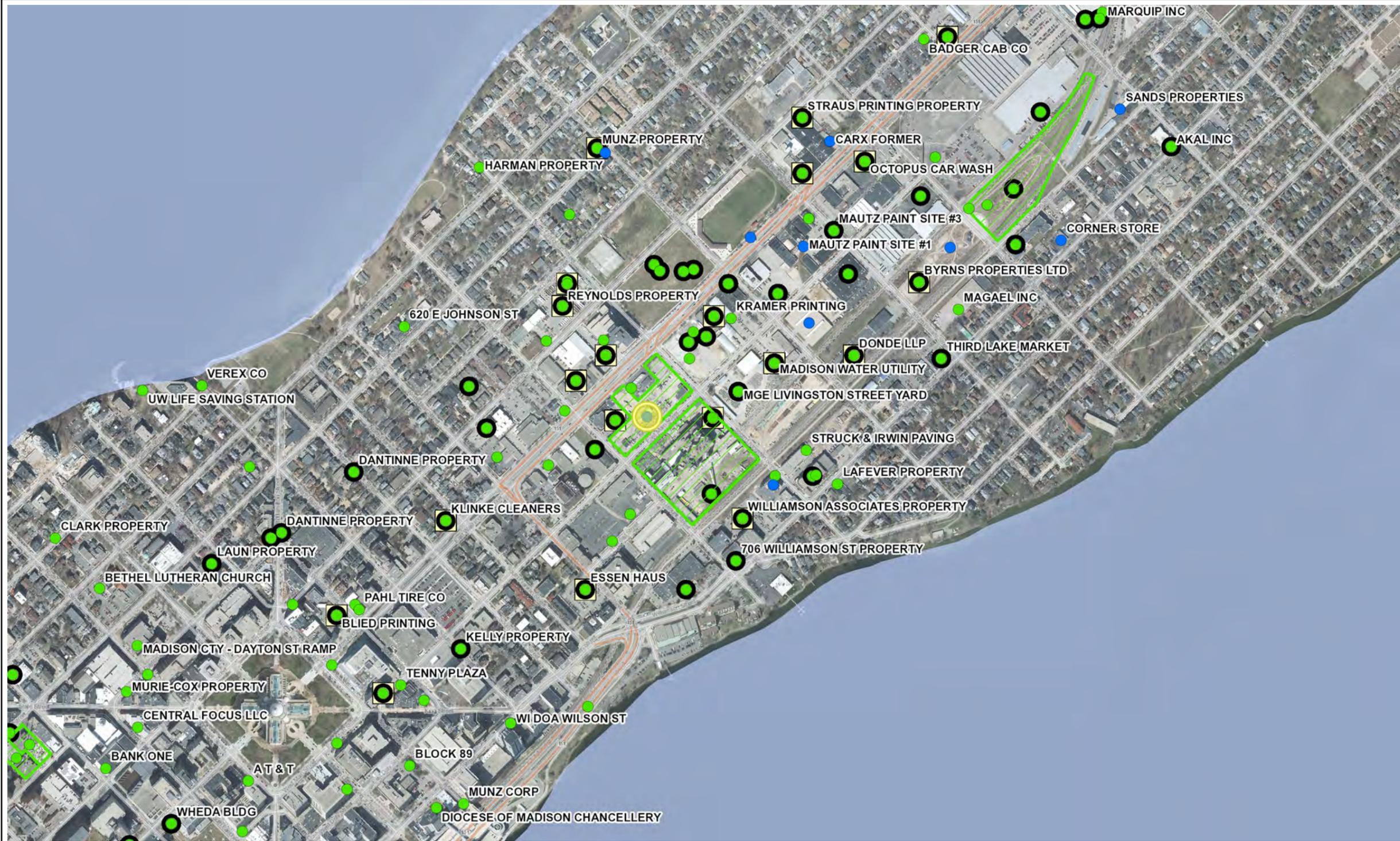
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B.1.c.1 RR Sites Map - Overview Map



Legend

- Open Site
- Open Site Boundary
- Closed Site
- Closed Site Boundary
- Continuing Obligations Apply
- Impacted Another Property(ies) or Right-
- Facility-wide Site
- Facility-wide Site Boundary

0.3 0 0.13 0.3 Miles

NAD_1983_HARN_Wisconsin_TM

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1: 7,920



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Note: Not all sites are mapped.

Notes

02-13-584085 ATC Transformer Fire - MG&E Blount Substation



B.1.c.2 RR Sites Map - Detail Map



Legend

- Open Site
- Open Site Boundary
- Closed Site
- Closed Site Boundary
- Continuing Obligations Apply
- Impacted Another Property(ies) or Right-
- Facility-wide Site
- Facility-wide Site Boundary

0.1 0 0.06 0.1 Miles

NAD_1983_HARN_Wisconsin_TM

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1: 3,960



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Note: Not all sites are mapped.

Notes

02-13-584085 ATC Transformer Fire - MG&E Blount Substation

ATTACHMENT B.2.a - Soil Contamination

LEGEND

- SS SOIL SAMPLES
- MW MONITORING WELL
- PFOA and PFOS Detected
- PFOA Detected
- PFOS Detected
- PFOA/PFOS Not Detected



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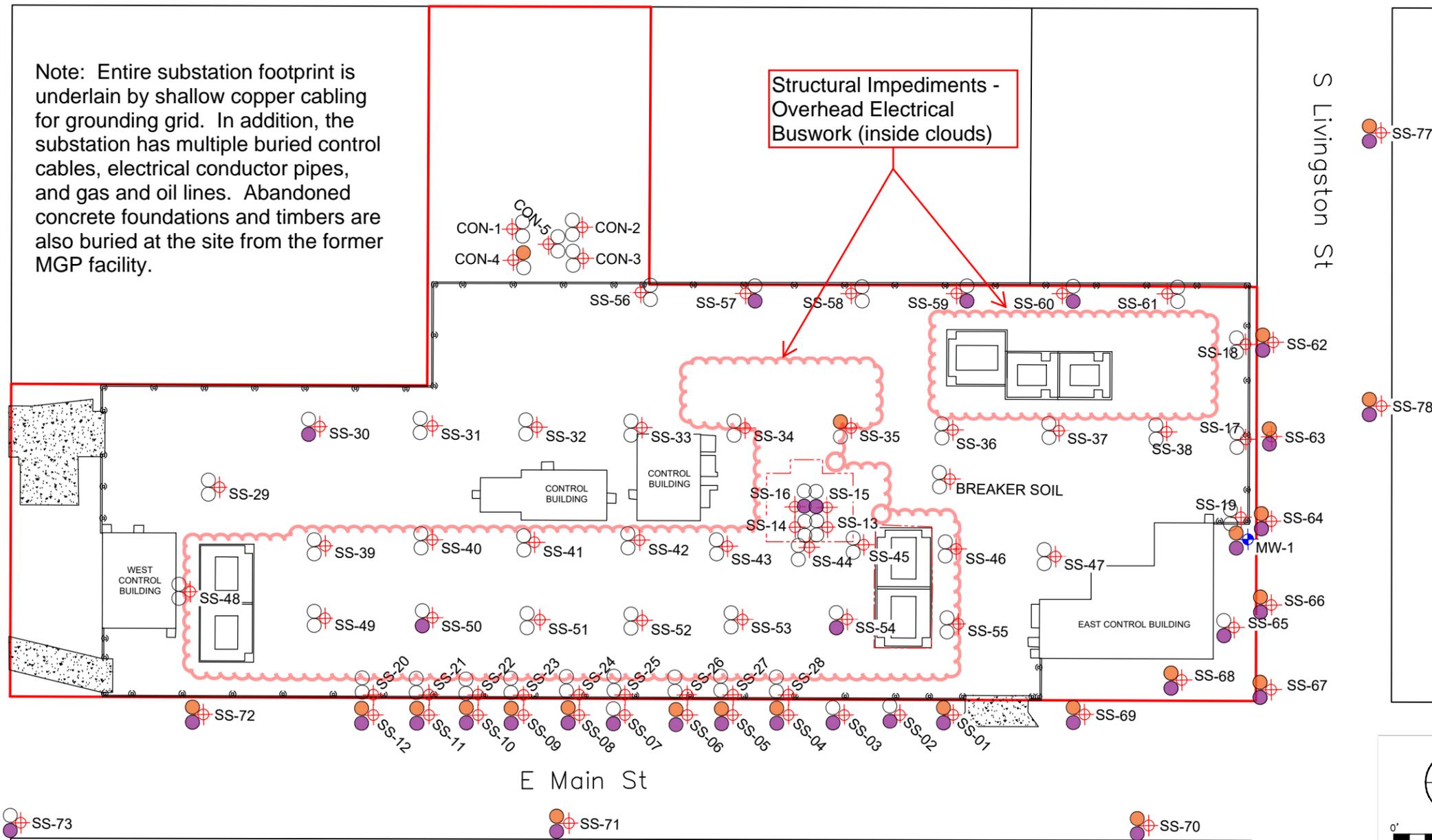
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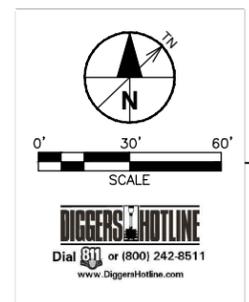
PFOA AND PFOS DETECTIONS
 IN SOIL SAMPLES

DRAWING NUMBER

Figure 3



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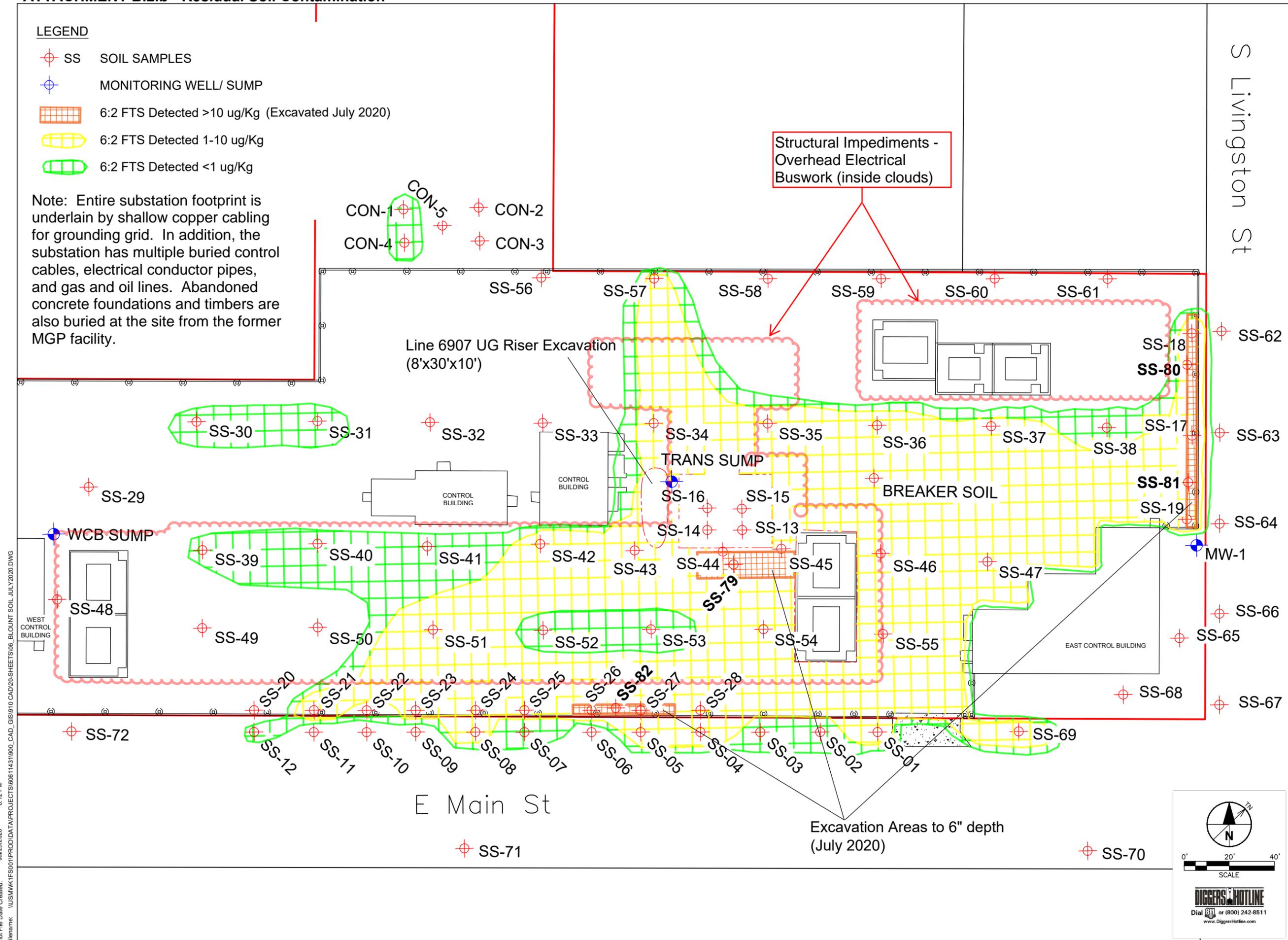


ATTACHMENT B.2.b - Residual Soil Contamination

LEGEND

-  SS SOIL SAMPLES
-  MONITORING WELL/ SUMP
-  6:2 FTS Detected >10 ug/Kg (Excavated July 2020)
-  6:2 FTS Detected 1-10 ug/Kg
-  6:2 FTS Detected <1 ug/Kg

Note: Entire substation footprint is underlain by shallow copper cabling for grounding grid. In addition, the substation has multiple buried control cables, electrical conductor pipes, and gas and oil lines. Abandoned concrete foundations and timbers are also buried at the site from the former MGP facility.



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PFAS SOIL REMOVAL AREAS

DRAWING NUMBER

Figure 3

SHEET NUMBER

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B.3.a.1 Cross-section Location Map for Former MGP Site Gas Holders

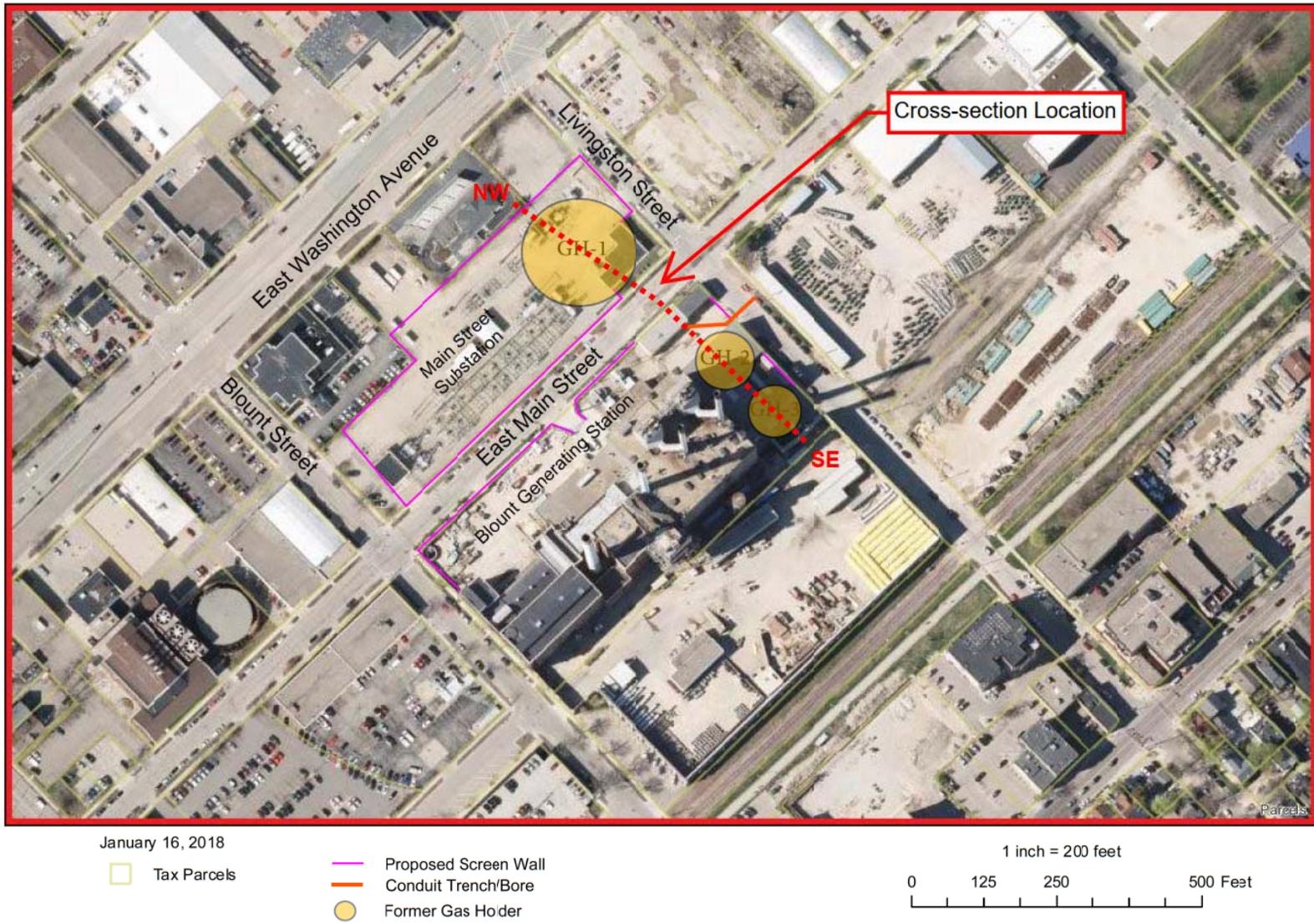
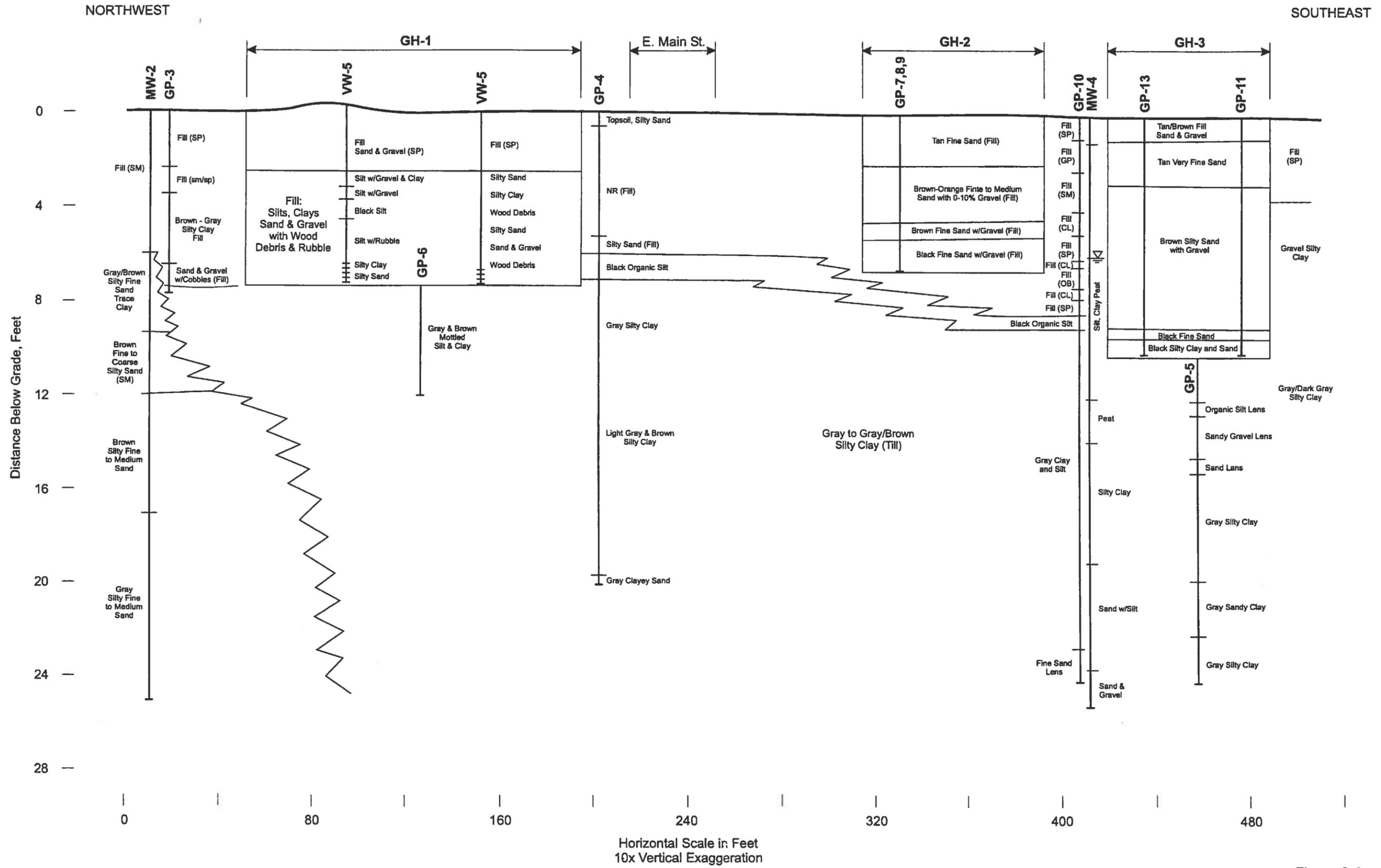


Figure 1 - Site Location and Proposed Improvements MGE Main Street Substation and Blount Generating Station

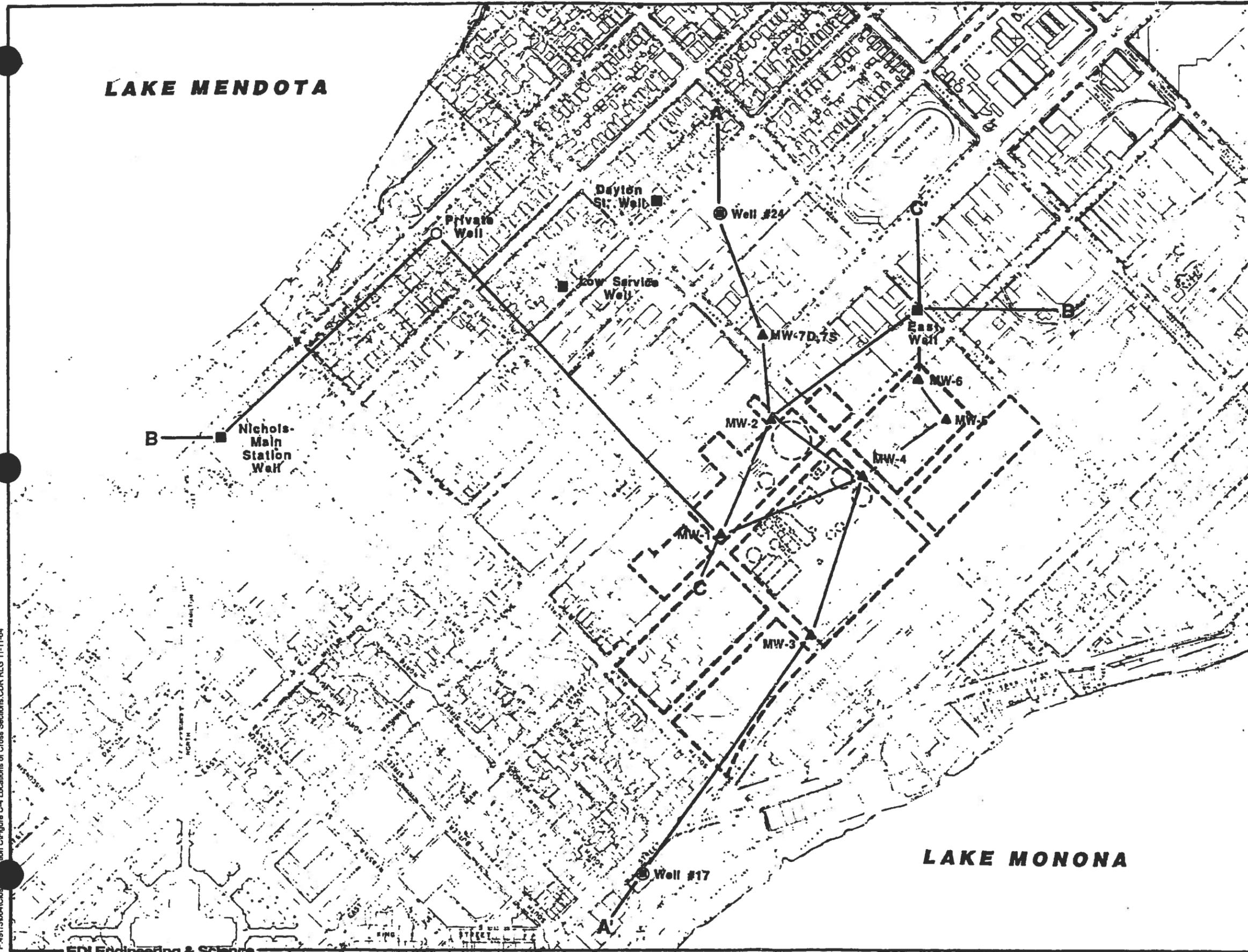
ATTACHMENT B.3.a.2 - Geologic Cross-Section for Former MGP Site Gas Holders



—▽— Approximate Water Table (2/99)

Figure C-3
GASHOLDER CROSS SECTIONS
Blount Station MGP

ATTACHMENT B.3.a.3 - Cross-Section Location Map for Blount SS Area



LEGEND

- Previous Tank Location
- Previous Building Location
- ▭ Madison Gas & Electric Property Boundaries
- ▲ Monitoring Well
- City of Madison Water Supply Well
- City of Madison Water Supply Well (Abandoned)
- Private Well

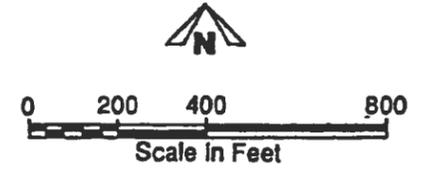


Figure C-4
Locations of Cross-Sections

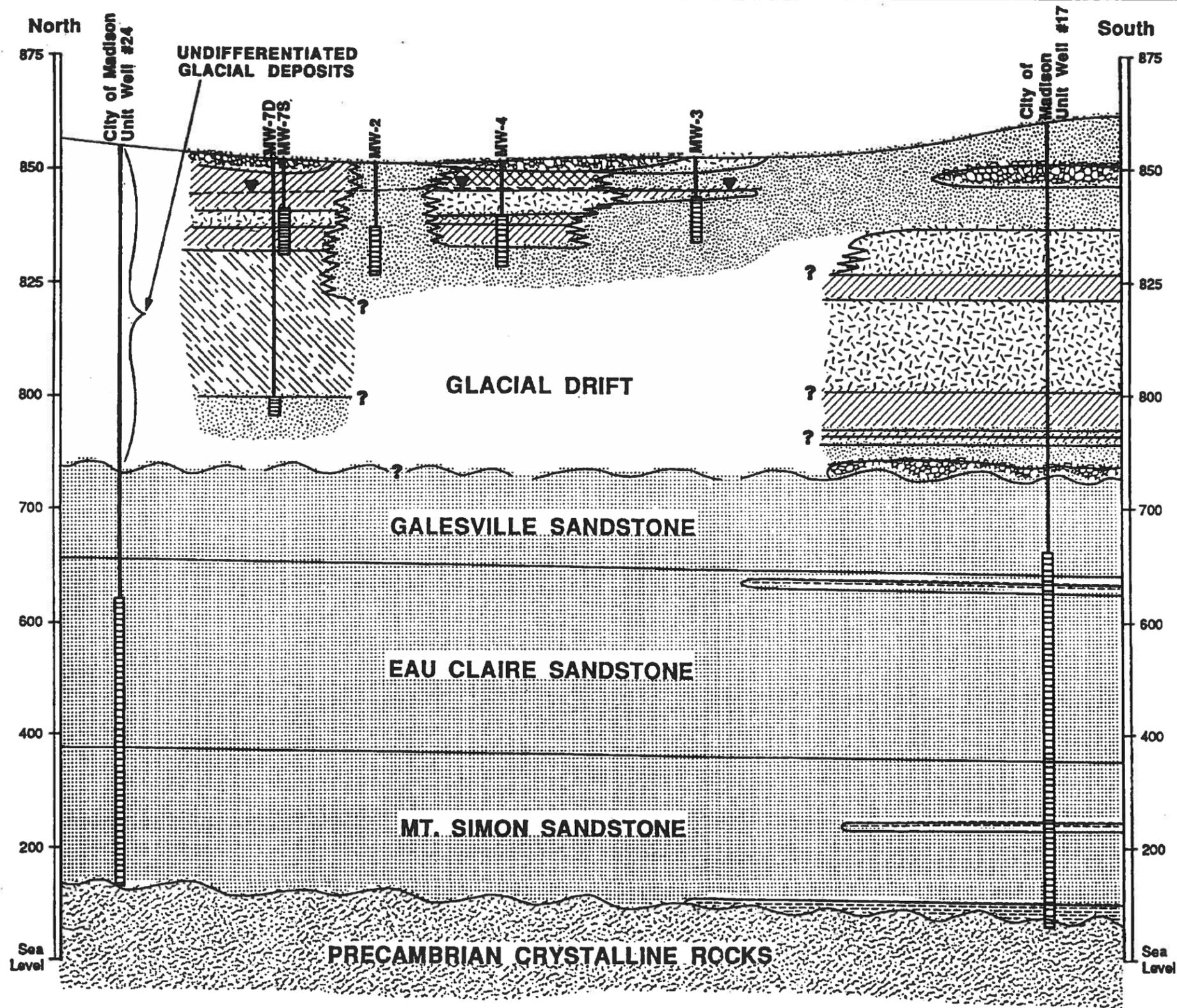
Madison Gas and Electric Co.
Madison, Wisconsin

January, 1989

20850

P:49130041C06... Figure C-4 Locations of Cross Sections.CDR RLG 11-11-04

ATTACHMENT B.3.a.4 - Geologic Cross-Section A-A'



LEGEND

- Clay
- Silt
- Sand
- Gravel
- Glacial Till
- Peat, Clayey to Silty
- Sandstone
- Shale
- Crystalline Rocks
- Unconformity
- Screened Interval or Open Hole
- Water level

Vertical Scale: Variable (Indicated Below)
 875' to 800' Elev.: 1" = 25'
 800' to 600' Elev.: 1" = 100'
 600' to Sea Level Elev.: 1" = 200'



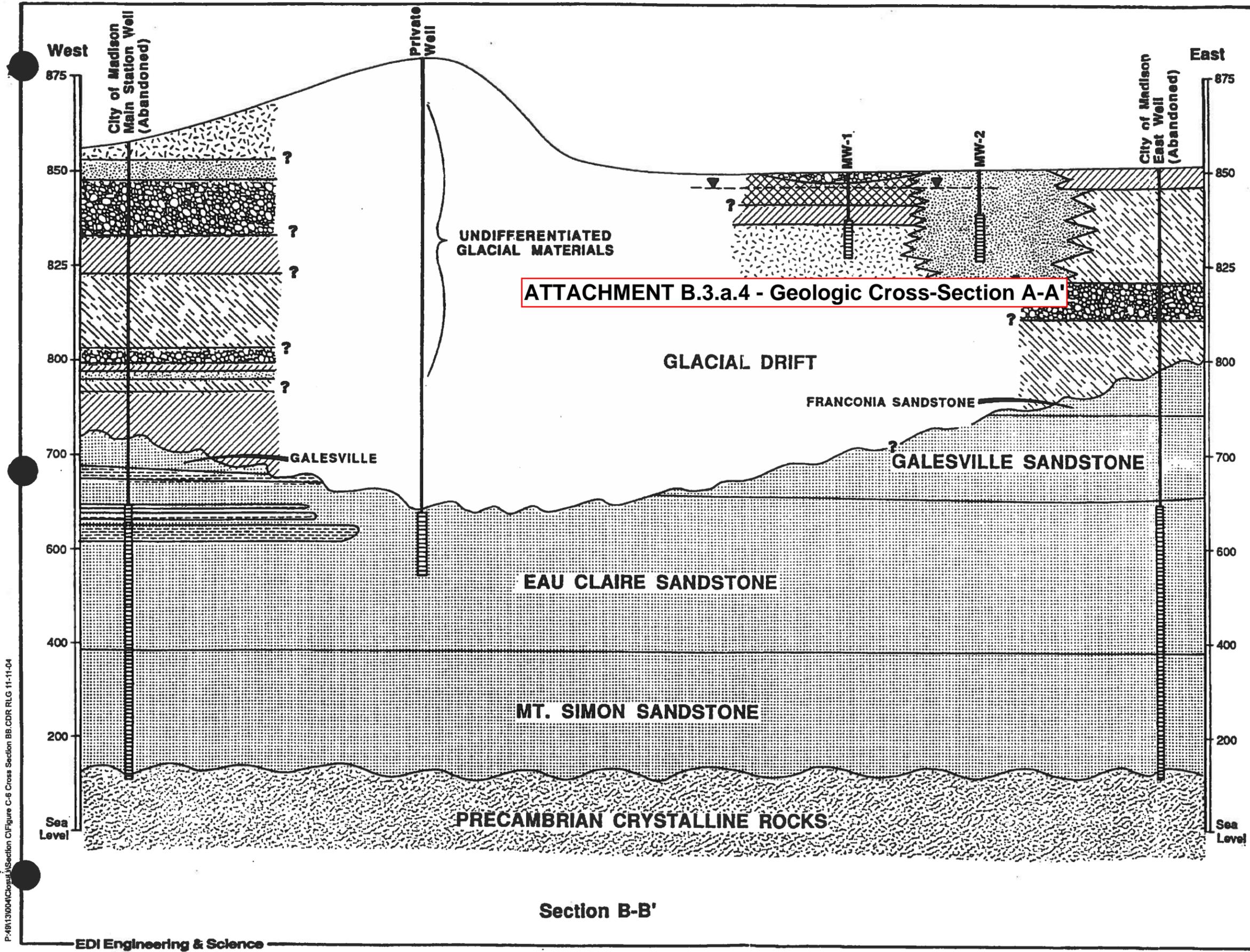
Figure C-5

Cross-Section A-A'

Madison Gas and Electric Co.
 Madison, Wisconsin

P:491130041C... Section C:5 Cross Section AA.CDR RLG 11-11-04

ATTACHMENT B.3.a.5 - Geologic Cross-Section B-B'



LEGEND

- Clay
- Silt
- Sand
- Gravel
- Glacial Till
- Peat, Clayey to Silty
- Sandstone
- Shale
- Crystalline Rocks
- Unconformity
- Screened Interval or Open Hole
- Water level

Vertical Scale: Variable (Indicated Below)
 875' to 800' Elev.: 1" = 25'
 800' to 600' Elev.: 1" = 100'
 600' to Sea Level Elev.: 1" = 200'



Figure C-6

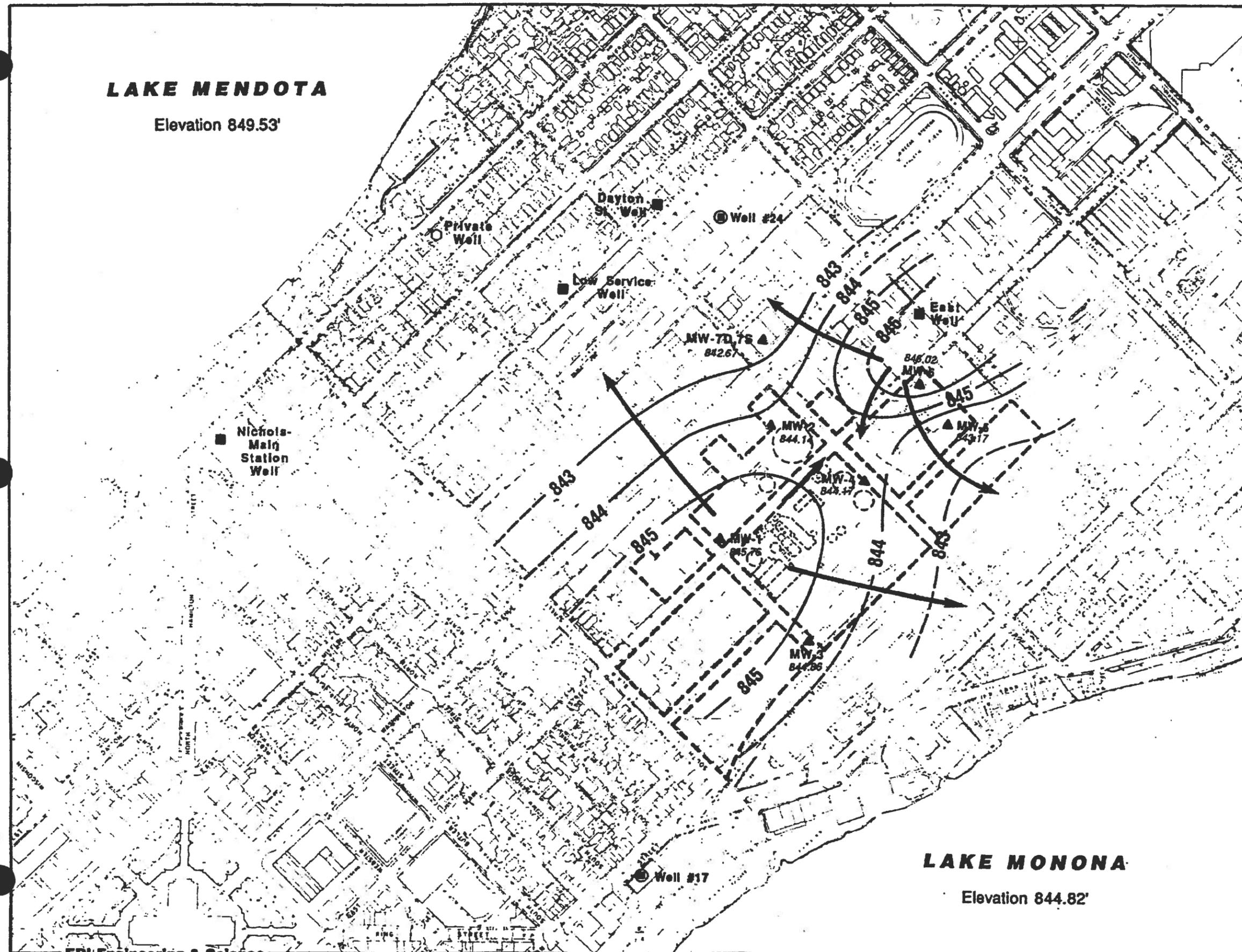
Cross-Section B-B'

Madison Gas and Electric Co.
 Madison, Wisconsin

January, 1989

20850

P:\4913\004\Class\1\Section C-6 Cross Section BB.CDR RLG 11-11-04



LEGEND

- Previous Tank Location
- Previous Building Location
- Madison Gas & Electric Property Boundaries
- Monitoring Well
- City of Madison Water Supply Well
- City of Madison Water Supply Well (Abandoned)
- Private Well
- 846.02 Water Table Elevation
- Direction of Ground Water Flow

NOTE:
 Water levels for the monitoring wells, Lake Mendota, and Lake Monona were taken on 11/10/88.

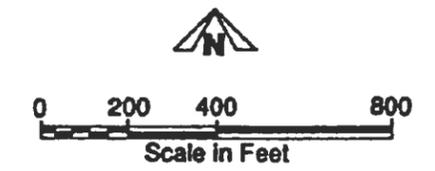
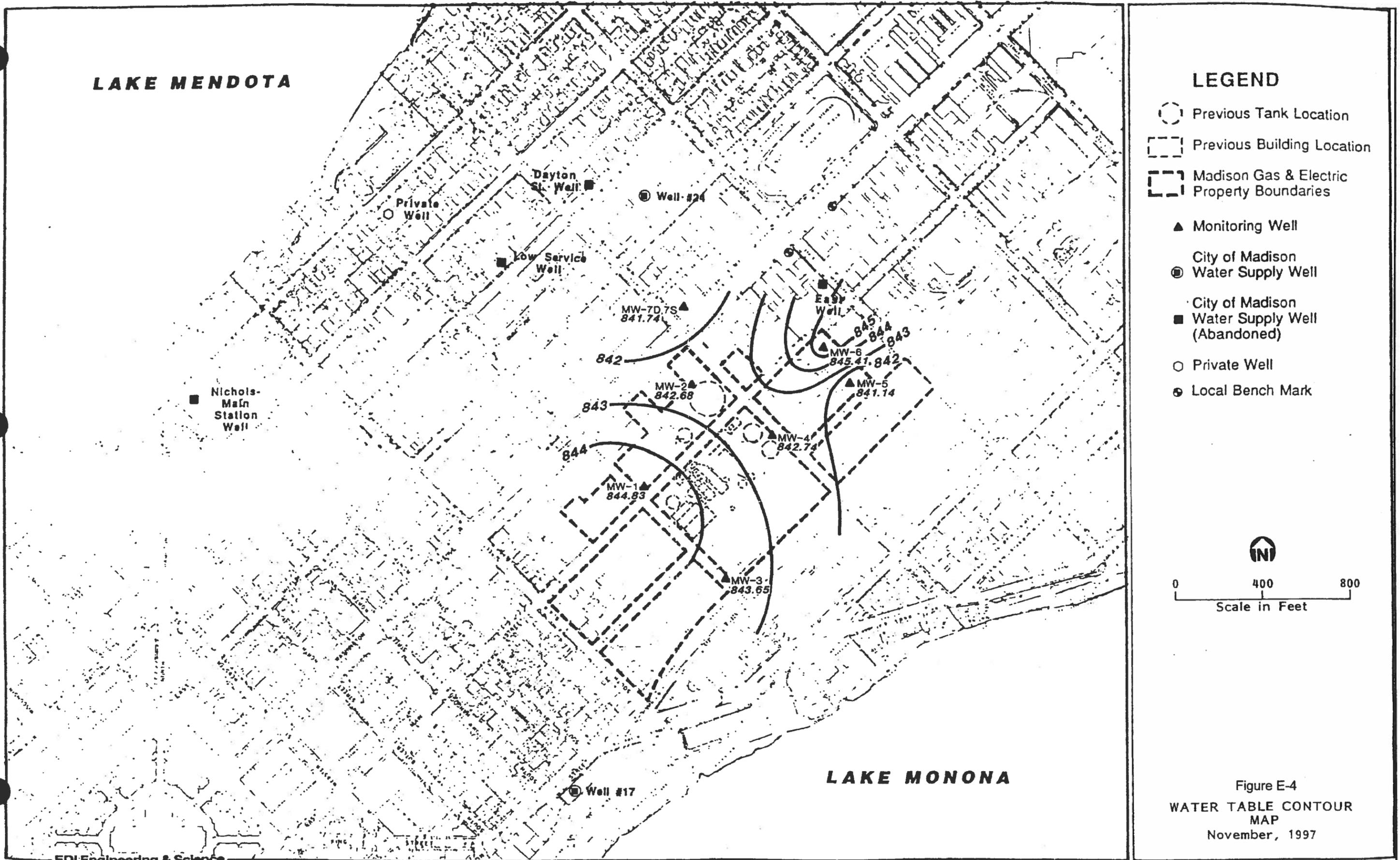


Figure E-3
Water Table Contour Map

Madison Gas and Electric Co.
 Madison, Wisconsin
 January, 1989

P:49130041Close on A:Figure E-3 Water Table Contour Map.CDR RLG 11-16-04

ATTACHMENT B.3.c.2 - Groundwater Flow Direction (1997)

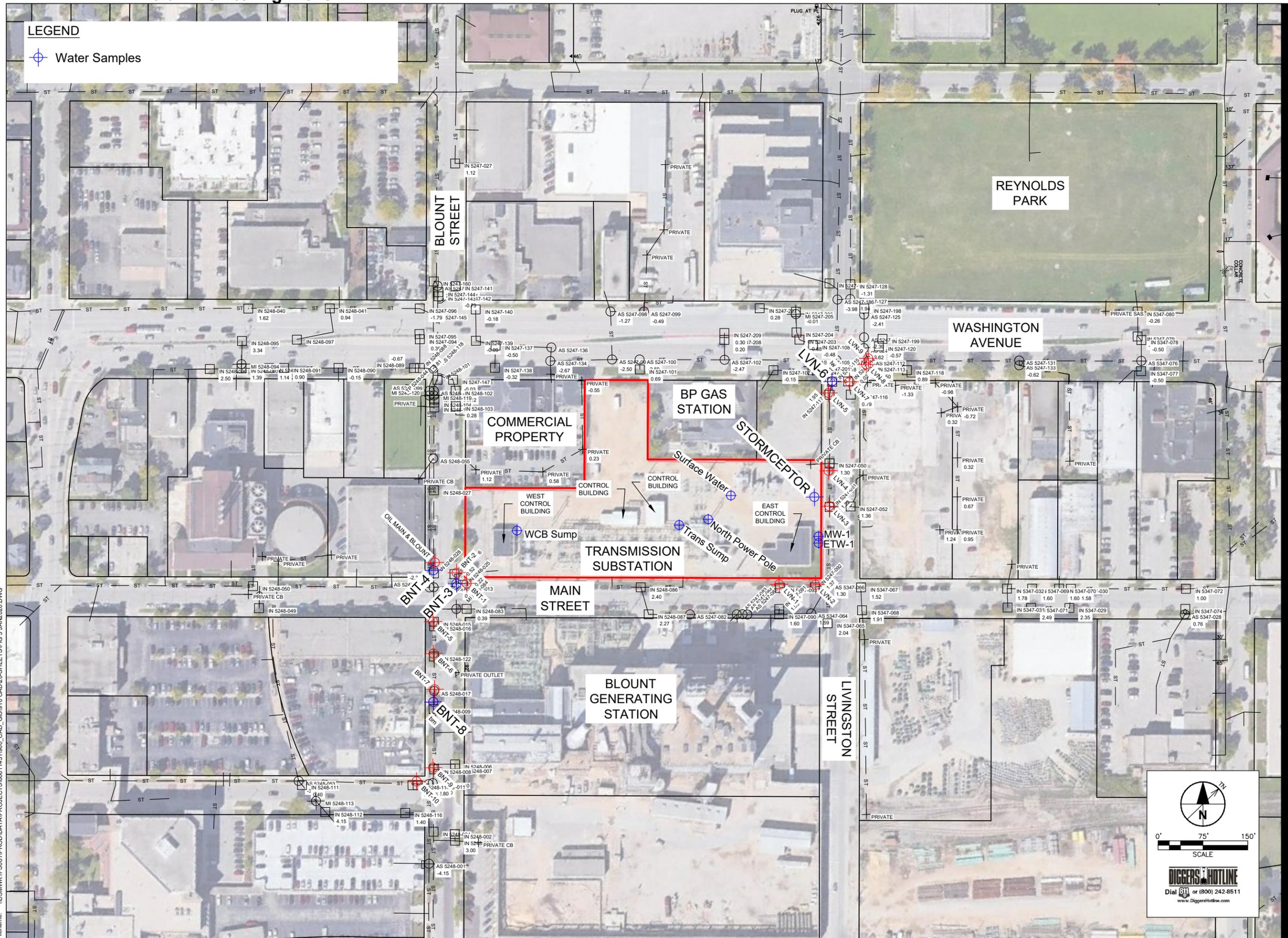


P:\813\004\Closure\Map\Figure E-4 Water Table Contour Map Nov 1997.CDR RLG 11-16-04

ATTACHMENT B.3.d - Monitoring Wells

LEGEND

 Water Samples



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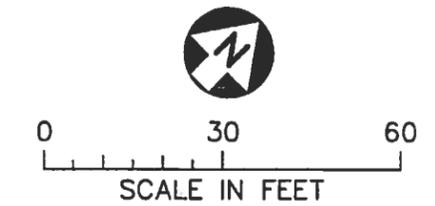
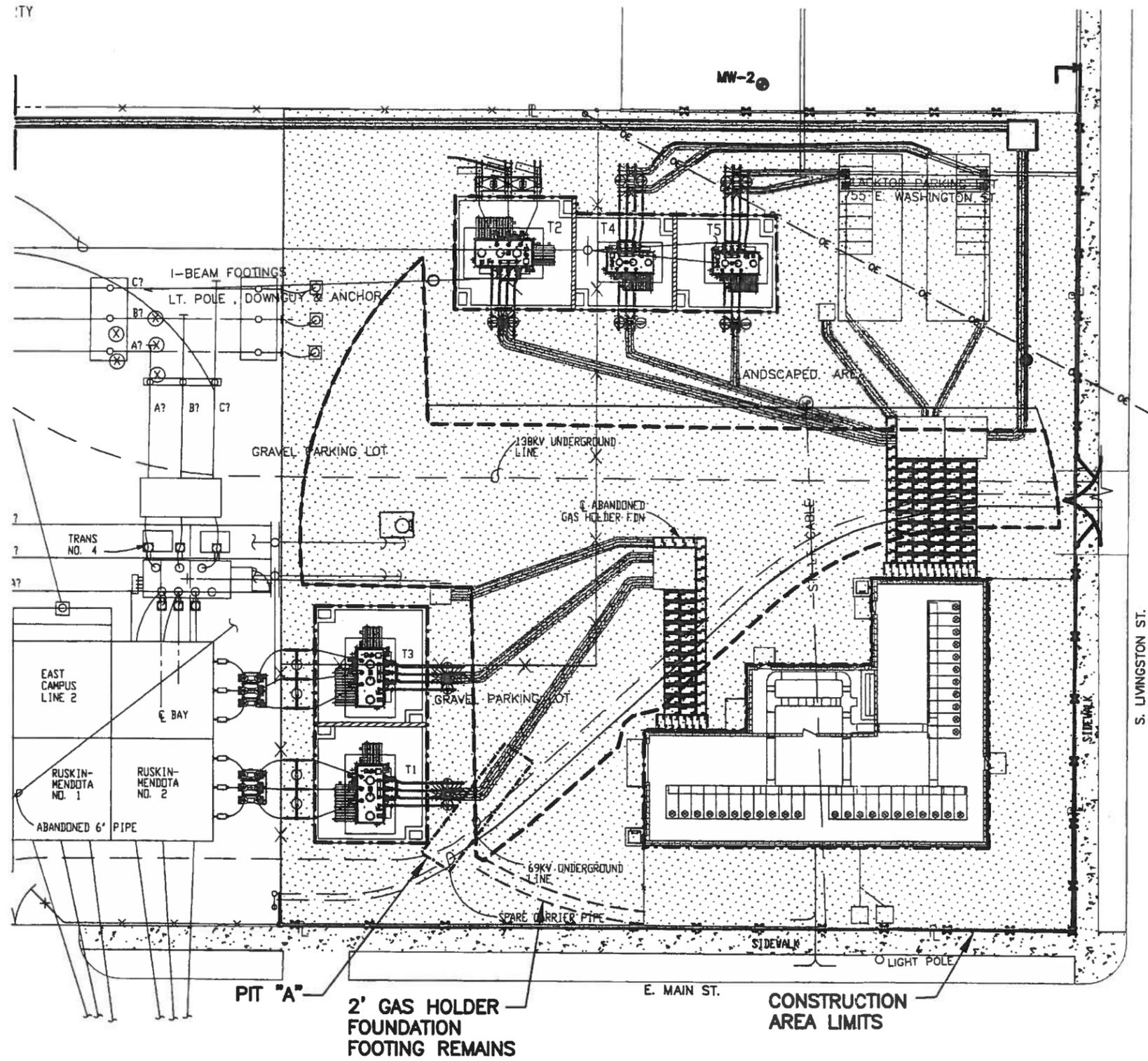
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 WATER SAMPLE
 LOCATIONS

DRAWING NUMBER SHEET NUMBER
 FIGURE 4

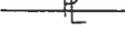
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ATTACHMENT B.5 - Structural Impediments Map



LEGEND

-  Monitoring Well
-  Sanitary Sewer Connection
-  Fence Line
-  Buried Electrical Lines
-  Property Line
-  Concrete Area
-  New Structure Foundation Limit
-  Remaining Gas Holder Foundation Limits
-  Remaining Pipe Pit Limits
-  2-Foot Clean Soil (Gravel) Cover Limits, Approximate

in_Drawing - M:\cod\4913004\18831_1.dwg M:\cod\4913004\19130_1.dwg
 M:\CAD\4913004\20922_1.DWG Plot at 12/16/2004 11:44:29

Figure G-1
 EXISTING CAP AREA
 GAS HOLDER 1
 Blount Station MGP

PHOTOGRAPHIC LOG

Client Name: American Transmission Company		Project Name: Blount SS Fire Remediation	Project No.: 60611431
Photo No.: 1	Date: July 29, 2019		
Photo Location and View: Inside substation walls, central area, viewing to west			
Description: The photograph shows structural impediments to investigation and remediation. Above ground electrical bus work and underground control cables, electric, and oil lines are present throughout.			

Photo No.: 2	Date: July 10, 2020		
Photo Location and View: Inside substation along the south perimeter wall, south central area, viewing to east			
Description: The photograph shows structural impediments to investigation and remediation. Above ground electrical bus work and underground control cables, electric, and oil lines are present throughout.			

PHOTOGRAPHIC LOG

Client Name: American Transmission Company		Project Name: Blount SS Fire Remediation	Project No.: 60611431
Photo No.: 3	Date: July 6, 2020		
Photo Location and View: Inside substation walls, east central area, viewing to west			
<p>Description: The photograph shows structural impediments to investigation and remediation. Above ground electrical bus work and underground control cables, electric, and oil lines are present throughout.</p> <p>In addition, abandoned concrete foundations from the former manufactured gas plant (MGP) are buried in this part of the substation.</p>			

Photo No.: 4	Date: May 26, 2020		
Photo Location and View: Inside substation walls, central area, viewing to south			
<p>Description: The photograph shows structural impediments to investigation and remediation. Above ground electrical bus work and underground control cables, electric, and oil lines are present throughout.</p> <p>Central control house building is visible to the left of photograph.</p>			

Case Closure – GIS Registry
ATC Transformer Fire – MG&E Blount Substation
722 East Main Street
BRRTS #02-013-584085 FID #113435520

ATTACHMENT C – DOCUMENTATION OF REMEDIAL ACTION

C.1 Site investigation documentation – No attachments included as all documents were previously submitted to the Department (see Section 3.A.i for a list of submittals).

C.2 Investigative waste disposal documentation – No attachments included as all documents were previously submitted to the Department.

C.3 RCL Methodology

C.4 Construction documentation – No attachment is included as no remedy was constructed and documentation for soil removal and water treatment were previously submitted to the Department.

C.5 Decommissioning of Remedial Systems – No attachment is included. Water treatment system was removed from the site upon completion of the treatment activities.

C.6 Other – None

Linnemanstons, Leo

From: Linnemanstons, Leo
Sent: Monday, March 16, 2020 4:58 PM
To: Schmoller, Michael R - DNR
Cc: 'Biemann, Erika (ebiemann@atcllc.com)'
Subject: ATC Blount SS - Site Investigation and GW RCL Update
Attachments: Soil_to_Groundwater_chem_14FEB2020_prg2143.pdf; Table 2 - Soil Analytical GW-RCLs - ATC Blount (DRAFT).pdf; ATC Blount Proposed Sample Spring 2020 R1.pdf

Hi, Mike.

As you requested in your email below and our subsequent discussions, we calculated generic Groundwater Protection (GW) Residual Contaminant Levels (RCLs) for the two PFAS compounds (PFOA and PFOS) that the State of Wisconsin has proposed Chapter NR 140 groundwater standards. We followed the WDNR Guidance (RR-890) for Soil RCL Determinations Using the USEPA Regional Screening Level Web Calculator, and we have attached a PDF copy of the web calculator output showing the inputs and resulting calculated values. The two calculated Groundwater Protection RCLs are as follows:

Compound	EPA Risk-Based Screening Level (ug/kg)	WDNR Proposed Enforcement Standard (ug/L)	Dilution Factor	Calculated GW RCL (ug/kg)	Limit Of Detection (ug/kg)
PFOS	0.378	0.020	2.0	0.038	<0.210
PFOA	0.172	0.020	2.0	0.017	<0.090

Based on these assumptions, both of the calculated GW RCLs have values that are less than the current laboratory limit of detection (LOD) for PFOA and PFOS. Nonetheless, we have attached a revised DRAFT PFAS soil results table to now included comparison to the calculated GW RCLs. As shown in the DRAFT PFAS soil results table, the site has several sample locations that would exceed the calculated GW RCLs. Upon review of the PFAS soil results with respect to the calculated GW RCLs, we had the following observations:

- Most of the locations (SS01 to SS12) are from the sidewalk terrace along Main Street outside the substation wall and were collected after removing mineral oil stained soil found at the ground surface. In addition, these locations do not have concentrations of 6:2 FTS (AFFF source PFAS) greater than 1 ug/kg.
- The adjacent samples (SS20 to SS28, except for SS25) collected from inside the substation wall do not have similar GW RCL exceedances for PFOA and PFOS, and the concentration of 6:2 FTS ranges from 1 to 13 ug/kg.
- Locations near the transformer have concentrations of 6:2 FTS that range from 120 to 310 ug/kg, but only two locations (SS15 and SS16) have detections (GW RCL exceedances) for PFOS and PFOA.

These observations suggest the possibility that the PFOA and PFOS exceedances of the GW RCL may not be related to the fire suppression activities that occurred in the substation on July 19, 2019. To further evaluate the nature of the PFAS impacts around the Blount SS, we are proposing to collect the following additional surface soil samples as recommended in the Interim PFAS Results Technical Memorandum and subsequent discussion with ATC and WDNR (see attached PDF for sample locations):

- SS-56 to SS-61: delineate impacts on north side within substation;
- SS-62 to SS-64: assess potential terrace impacts by original foam/water flow;
- SS-65 and SS-68: assess potential impacts adjacent to MGE control building;
- SS-66, SS-67, SS-69: delineate edge of impacts / background;
- SS-70 to SS-73: delineate south edge of impact / background;
- SS-74: west background sample;
- SS-75 and SS-76: delineate north edge of impacts / background;
- SS-77 and SS-78: delineate east edge of impacts;
- MW-1 collect soil sample at surface prior to well installation.

An approximate total of 24 soil samples will be collected following the same procedures described in the Site Investigation Work Plan, dated October 15, 2019. We are planning to conduct the additional soil sampling and also the installation of the recommended replacement monitoring well in late April. Investigative wastes generated will be disposed offsite at US Ecology's Wayne Disposal Facility in Belleville, Michigan.

Please let us know if you have any questions or comments regarding the calculated GW RCLs or the additional soil sampling. We appreciate your input in completing the site investigation and advancing this case to closure. Thanks!

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From: Schmoller, Michael R - DNR <Michael.Schmoller@wisconsin.gov>
Sent: Wednesday, February 12, 2020 1:18 PM
To: 'Biemann, Erika (ebiemann@atcllc.com)' <ebiemann@atcllc.com>
Cc: Linnemanstons, Leo <Leo.Linnemanstons@aecom.com>
Subject: ATC Blount Transmission Substation

Erika

I have read the February 4, 2020 tech memo concerning the PFAS investigation and soil removal work completed at the ATC site. The report provides a good summary of post remedial soil conditions. The department agrees with implementing the four recommended actions discussed at the end of the memo. Please keep up me to date on the timeline for these activities.

Further the report includes direct contact soil criteria for some of the detected PFAS compounds. This allows the Department to address the direct contact concerns regarding the residual soil concentrations. In addition to the work described above, I would like AECOM to calculate several draft soil to groundwater soil contaminant concentrations. There are state proposed groundwater standards for two parameters and several other states have draft or promulgated groundwater standards to work from. I want to begin at least looking at the soil to groundwater pathway for PFAS.

Mike

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dnr.wi.gov



Site-specific Equation Inputs for Soil to Groundwater

* Inputted values different from defaults are highlighted.

Variable	Default Value	Form-input Value
DAF (dilution attenuation factor) unitless	1	1
DAF (dilution attenuation factor) unitless	1	1
BW _{n-3} (mutagenic body weight) kg	15	15
BW ₃₋₆ (mutagenic body weight) kg	15	15
BW ₆₋₁₆ (mutagenic body weight) kg	80	80
BW ₁₆₋₂₆ (mutagenic body weight) kg	80	80
BW _{rec-a} (body weight - adult) kg	80	80
BW _{rec-r} (body weight - child) kg	15	15
DFW _{rec-adj} (age-adjusted dermal factor) cm ² -event/kg	2610650	2610650
DFWM _{rec-adj} (mutagenic age-adjusted dermal factor) cm ² -event/kg	8191633	8191633
ED _{rec} (exposure duration - resident) years	26	26
ED _{n-3} (mutagenic exposure duration first phase) years	2	2
ED ₃₋₆ (mutagenic exposure duration second phase) years	4	4
ED ₆₋₁₆ (mutagenic exposure duration third phase) years	10	10
ED ₁₆₋₂₆ (mutagenic exposure duration fourth phase) years	10	10
ED _{rec-a} (exposure duration - adult) years	20	20
ED _{rec-r} (exposure duration - child) years	6	6
EF _{rec} (exposure frequency) days/year	350	350
EF _{n-3} (mutagenic exposure frequency first phase) days/year	350	350
EF ₃₋₆ (mutagenic exposure frequency second phase) days/year	350	350
EF ₆₋₁₆ (mutagenic exposure frequency third phase) days/year	350	350
EF ₁₆₋₂₆ (mutagenic exposure frequency fourth phase) days/year	350	350
EF _{rec-a} (exposure frequency - adult) days/year	350	350
EF _{rec-r} (exposure frequency - child) days/year	350	350
ET _{rec} (exposure time) hours/day	24	24
ET _{event,rec-adj} (age-adjusted exposure time) hours/event	0.67077	0.67077
ET _{event,rec-madj} (mutagenic age-adjusted exposure time) hours/event	0.67077	0.67077
ET _{n-3} (mutagenic dermal exposure time first phase) hours/event	0.54	0.54
ET ₃₋₆ (mutagenic dermal exposure time second phase) hours/event	0.54	0.54
ET ₆₋₁₆ (mutagenic dermal exposure time third phase) hours/event	0.71	0.71
ET ₁₆₋₂₆ (mutagenic dermal exposure time fourth phase) hours/event	0.71	0.71

Site-specific Equation Inputs for Soil to Groundwater

* Inputted values different from defaults are highlighted.

Variable	Default Value	Form-input Value
ET _{rec-a} (dermal exposure time - adult) hours/event	0.71	0.71
ET _{rec-r} (dermal exposure time - child) hours/event	0.54	0.54
ET _{n-1} (mutagenic inhalation exposure time first phase) hours/day	24	24
ET ₂₋₆ (mutagenic inhalation exposure time second phase) hours/day	24	24
ET ₆₋₁₆ (mutagenic inhalation exposure time third phase) hours/day	24	24
ET ₁₆₋₂₆ (mutagenic inhalation exposure time fourth phase) hours/day	24	24
ET _{rec-a} (inhalation exposure time - adult) hours/day	24	24
ET _{rec-r} (inhalation exposure time - child) hours/day	24	24
EV _{n-1} (mutagenic events) per day	1	1
EV ₂₋₆ (mutagenic events) per day	1	1
EV ₆₋₁₆ (mutagenic events) per day	1	1
EV ₁₆₋₂₆ (mutagenic events) per day	1	1
EV _{rec-a} (events - adult) per day	1	1
EV _{rec-r} (events - child) per day	1	1
THQ (target hazard quotient) unitless	0.1	1
IFW _{rec-a} (adjusted intake factor) L/kg	327.95	327.95
IFW _{rec-r} (mutagenic adjusted intake factor) L/kg	1019.9	1019.9
IRW _{n-1} (mutagenic water intake rate) L/day	0.78	0.78
IRW ₂₋₆ (mutagenic water intake rate) L/day	0.78	0.78
IRW ₆₋₁₆ (mutagenic water intake rate) L/day	2.5	2.5
IRW ₁₆₋₂₆ (mutagenic water intake rate) L/day	2.5	2.5
IRW _{rec-a} (water intake rate - adult) L/day	2.5	2.5
IRW _{rec-r} (water intake rate - child) L/day	0.78	0.78
K (volatilization factor of Andelman) L/m ³	0.5	0.5
LT (lifetime) years	70	70
SA _{n-1} (mutagenic skin surface area) cm ²	6365	6365
SA ₂₋₆ (mutagenic skin surface area) cm ²	6365	6365
SA ₆₋₁₆ (mutagenic skin surface area) cm ²	19652	19652
SA ₁₆₋₂₆ (mutagenic skin surface area) cm ²	19652	19652
SA _{rec-a} (skin surface area - adult) cm ²	19652	19652
SA _{rec-r} (skin surface area - child) cm ²	6365	6365

Site-specific Equation Inputs for Soil to Groundwater

* Inputted values different from defaults are highlighted.

Variable	Default Value	Form-input Value
l_{sc} (apparent thickness of stratum corneum) cm	0.001	0.001
TR (target risk) unitless	1.0E-06	1.0E-06

Site-specific

Regional Screening Levels (RSL) for Soil to Groundwater

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = PPRTV Screening Level; H = HEAST; D = DWSHA; W = TEF applied; E = RPF applied; G = see user's guide; U = user provided; ca = cancer; nc = noncancer; * = where: nc SL < 100X ca SL; ** = where nc SL < 10X ca SL; SSL values are based on DAF=1; max = ceiling limit exceeded; sat = Csat exceeded.

Chemical	CAS Number	Mutagen?	Volatile?	Chemical Type	SF _o (mg/kg-day) ⁻¹	SF _o Ref	IUR (ug/m ³) ⁻¹	IUR Ref	RfD (mg/kg-day)	RfD Ref	RfC (mg/m ³)	RfC Ref	GIABS	ABS (mg/L)	S	K _d (cm ³ /g)
Perfluorobutane sulfonic acid (PFBS)	375-73-5	No	No	Organics	-		-		2.00E-02	P	-		1	0.1	56600	1.23E-01
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	No	No	Organics	-		-		2.00E-05	D	-		1	0.1	680	7.43E-01
Perfluorooctanoic acid (PFOA)	335-67-1	No	No	Organics	7.00E-02	D	-		2.00E-05	D	-		1	0.1	9500	2.30E-01

K _{oc} (cm ³ /g)	Dilution Attenuation Factor (DAF) (unitless)	HLC (atm-m ³ /mole)	Henry's Law Constant (unitless)	H ^o and HLC Ref	Normal Boiling Point BP (K)	BP Ref	Critical Temperature TC (K)	TC Ref	Noncarcinogenic SL Adult THI=1 (ug/L)	Noncarcinogenic SL Child THI=1 (ug/L)	Carcinogenic SL TR=1E-06 (ug/L)
6.17E+01	1	-	-		484.15	PHYSPROP	-		6.67E+02	4.01E+02	-
3.72E+02	1	-	-		532.15	PHYSPROP	-		6.67E-01	4.01E-01	-
1.15E+02	1	4E-6	1.64E-04	ATSDR Draft Profile	465.55	PHYSPROP	-		6.67E-01	4.01E-01	1.11E+00

Water Concentration (Adult) (mg/L)	Water Concentration (Child) (mg/L)	Water Concentration (Cancer) (mg/L)	Maximum Contaminant Level (MCL) (ug/L)	Water Concentration (MCL) (mg/L)	MCL-based SL (mg/kg)	Noncarcinogenic Adult SL THI=1 (mg/kg)	Noncarcinogenic Child SL THI=1 (mg/kg)	Carcinogenic SL (mg/kg)	Risk-Based SL (mg/kg)
6.67E-01	4.01E-01	-	-	-	-	2.16E-01	1.30E-01	-	1.30E-01
6.67E-04	4.01E-04	-	-	-	-	6.29E-04	3.78E-04	-	3.78E-04
6.67E-04	4.01E-04	1.11E-03	-	-	-	2.87E-04	1.72E-04	4.78E-04	1.72E-04

Table 2
Soil Sample Laboratory Analytical Results
ATC Blount SS-Environmental Emergency Spill Response
60611431; 722 E. Main Street Madison, WI 53703

Parameters	Generic RCLs			BREAKER SOIL	CON-1	CON-2	CON-3	CON-4	CON-5	RES-SS-01	RES-SS-08	RES-SS-12	SS-01	SS-02	
	Non-Industrial	Industrial	Groundwater Pathway	Surface 7/19/2019	2 " 8/28/2019	2 " 8/28/2019	2 " 8/28/2019	2 " 8/28/2019	2 " 8/28/2019	12 " 8/8/2019	12 " 8/8/2019	12 " 8/8/2019	8 " 7/24/2019	9 " 7/24/2019	
PFAS (ug/kg)															
ABBR.															
Perfluorobutanoic acid	PFBA	--	--	--	0.16 ^{JB}	0.11 ^J	< 0.028	0.032 ^J	0.11 ^J	0.084 ^J	0.22 ^J	0.15 ^J	0.27 ^J	0.37 ^B	0.17 ^{JB}
Perfluorobutanesulfonic acid	PFBS	1,260,000	16,400,000	--	< 0.026	0.066 ^{JB}	0.066 ^{JB}	< 0.025	0.077 ^J	< 0.026	< 0.031	< 0.031	< 0.037	< 0.027	< 0.026
4:2 Fluorotelomer Sulfonic Acid	4:2 FTS	--	--	--	< 0.39	< 0.37	< 0.37	< 0.37	< 0.40	< 0.38	< 0.46	< 0.46	< 0.55	< 0.40	< 0.38
Perfluoropentanoic acid	PFPeA	--	--	--	< 0.080	0.084 ^J	< 0.077	< 0.077	0.12 ^J	< 0.080	2.7	0.63	0.44	1.3	0.56
Perfluoropentane Sulfonic Acid	PFPeS	--	--	--	< 0.021	< 0.020	< 0.020	< 0.020	0.035 ^J	< 0.021	< 0.025	< 0.025	< 0.030	< 0.022	< 0.021
Perfluorohexanoic acid	PFHxA	--	--	--	< 0.044	0.071 ^J	< 0.042	< 0.042	0.13 ^J	< 0.044	1.2	0.28	0.15 ^J	0.56	0.17 ^J
Perfluorohexanesulfonic acid	PFHxS	--	--	--	< 0.032	< 0.031	< 0.031	< 0.031	0.049 ^J	< 0.032	0.18 ^J	< 0.039	0.14 ^J	0.055 ^J	0.047 ^J
6:2 Fluorotelomer sulfonic acid	6:2 FTS	--	--	--	7.7 ^{F1}	0.44 ^J	< 0.15	< 0.15	0.17 ^J	< 0.16	1.9 ^J	0.87 ^J	0.36 ^J	0.74 ^J	0.16 ^J
Perfluoroheptanoic acid	PFHpA	--	--	--	< 0.030	< 0.029	< 0.029	< 0.029	0.08 ^J	< 0.030	0.37	0.16 ^J	0.1 ^J	0.29	0.11 ^J
Perfluoroheptanesulfonic acid	PFHpS	--	--	--	< 0.037	< 0.035	< 0.035	< 0.035	0.042 ^J	< 0.036	< 0.044	< 0.044	< 0.052	< 0.038	< 0.036
Perfluorooctanoic acid	PFOA	1,260	16,400	0.017	< 0.09	< 0.087	< 0.086	< 0.086	0.1 ^J	< 0.089	0.27	< 0.11	0.36	0.11 ^J	< 0.088
Ammonium Perfluorooctanoate	APFO	--	--	--	< 0.093	< 0.090	< 0.089	< 0.089	0.11 ^J	< 0.092	0.29	< 0.11	0.37	0.12 ^J	< 0.091
Perfluorooctanesulfonic acid	PFOS	1,260	16,400	0.038	< 0.21	< 0.20	< 0.20	< 0.20	< 0.22	< 0.21	4.7	< 0.25	2.9	0.91	0.4 ^J
8:2 Fluorotelomer sulfonic acid	8:2 FTS	--	--	--	< 0.26	< 0.25	< 0.25	< 0.25	< 0.27	< 0.26	< 0.31	< 0.31	< 0.37	< 0.27	< 0.26
Perfluorononanoic acid	PFNA	--	--	--	< 0.038	< 0.036	< 0.036	< 0.036	0.043 ^J	< 0.037	0.16 ^J	< 0.045	0.13 ^J	0.061 ^J	< 0.037
Perfluorononanesulfonic Acid	PFNS	--	--	--	< 0.021	< 0.020	< 0.020	< 0.020	0.039 ^J	< 0.021	< 0.025	< 0.025	< 0.030	< 0.022	< 0.021
Perfluorodecanoic acid	PFDA	--	--	--	< 0.023	< 0.022	< 0.022	< 0.022	0.045 ^J	< 0.023	0.6	0.081 ^J	0.41	0.19 ^J	0.26
Perfluorodecanesulfonic acid	PFDS	--	--	--	< 0.041	< 0.040	< 0.039	< 0.039	< 0.042	< 0.040	0.72	< 0.049	0.29 ^J	< 0.042	0.053 ^J
10:2 Fluorotelomer Sulfonic Acid	10:2 FTS	--	--	--	< 0.052 ^{F1}	< 0.051	< 0.050	< 0.050	< 0.054	< 0.052	< 0.063	< 0.063	< 0.074	< 0.054	< 0.051
Perfluoroundecanoic acid	PFUnA	--	--	--	< 0.038	< 0.036	< 0.036	< 0.036	0.046 ^J	< 0.037	0.14 ^J	< 0.045	0.1 ^J	0.051 ^J	0.11 ^J
Perfluorododecanoic acid	PFDoA	--	--	--	< 0.07	< 0.068	< 0.067	< 0.067	< 0.072	< 0.069	0.25	< 0.084	0.17 ^J	0.073 ^J	0.16 ^J
Perfluorododecanesulfonic acid	PFDoS	--	--	--	< 0.063	< 0.061	< 0.060	< 0.060	< 0.065	< 0.062	< 0.075	< 0.075	< 0.089	< 0.065	< 0.062
Perfluorotridecanoic acid	PFTTrDA	--	--	--	< 0.053	< 0.052	< 0.051	< 0.051	< 0.055	< 0.053	< 0.064	< 0.064	< 0.075	< 0.055	< 0.052
Perfluorotetradecanoic acid	PFTeDA	--	--	--	< 0.056	< 0.055	< 0.054	< 0.054	< 0.058	< 0.056	< 0.068	< 0.068	< 0.080	< 0.058	0.06 ^J
Perfluorohexadecanoic acid	PFHxDA	--	--	--	< 0.046 ^{F1}	< 0.045	< 0.044	< 0.044	< 0.047	< 0.046 ^{F1}	< 0.055	< 0.055	< 0.065	< 0.047 ^{F1}	< 0.045
Perfluorooctadecanoic acid	PFODA	--	--	--	< 0.029 ^{F1}	< 0.028	< 0.028	< 0.028	0.035 ^J	< 0.029 ^{F1}	< 0.035	< 0.035	< 0.041	< 0.030 ^{F1}	< 0.029
HFPO-DA	GenX	--	--	--	< 0.11	< 0.11	< 0.11	< 0.11	< 0.12	< 0.11	< 0.14	< 0.14	< 0.16	< 0.12	< 0.11
4,8-dioxa-3H-perfluorononanoic acid	DONA	--	--	--	< 0.019	< 0.018	< 0.018	< 0.018	0.031 ^J	< 0.019	< 0.023	< 0.023	< 0.027	< 0.019	< 0.019
NaDONA	NaDONA	--	--	--	< 0.02	< 0.019	< 0.019	< 0.019	0.033 ^J	< 0.020	< 0.024	< 0.024	< 0.028	< 0.020	< 0.020
ADONA	ADONA	--	--	--	< 0.02	< 0.019	< 0.019	< 0.019	0.033 ^J	< 0.020	< 0.024	< 0.024	< 0.028	< 0.020	< 0.020
Perfluorooctane sulfonamide	PFOSA	--	--	--	< 0.086	< 0.083	< 0.082	< 0.082	< 0.088	< 0.085	< 0.10	< 0.10	< 0.12	< 0.088	< 0.084
N-Ethyl perfluorooctane sulfonamide	NEtFOSA	--	--	--	NA	< 0.024	< 0.024	< 0.024	< 0.026	< 0.025	NA	NA	NA	NA	NA
N-Ethyl perfluorooctane sulfonamidoethanol	NEtFOSE	--	--	--	NA	< 0.036	< 0.036	< 0.036	< 0.039	< 0.037	NA	NA	NA	NA	NA
N-Methyl perfluorooctane sulfonamide	NMeFOSA	--	--	--	NA	< 0.042	< 0.041	< 0.041	< 0.044	< 0.042	NA	NA	NA	NA	NA
N-Methyl perfluorooctane sulfonamidoethanol	NMeFOSE	--	--	--	NA	< 0.072	< 0.071	< 0.071	< 0.077	< 0.074	NA	NA	NA	NA	NA
N-methylperfluorooctanesulfonamidoacetic acid	MeFOSAA	--	--	--	< 0.41	< 0.40	< 0.39	< 0.39	< 0.42	< 0.40	< 0.49	< 0.49	< 0.58	< 0.42	< 0.40
N-ethylperfluorooctanesulfonamidoacetic acid	EtFOSAA	--	--	--	< 0.39	< 0.37	< 0.37	< 0.37	< 0.40	< 0.38	< 0.46	< 0.46	< 0.55	< 0.40	< 0.38
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic F-53B Major		--	--	--	< 0.028	< 0.027	< 0.027	< 0.027	0.041 ^J	< 0.028	< 0.034	< 0.034	< 0.040	< 0.029	< 0.028
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic F-53B Minor		--	--	--	< 0.023	< 0.022	< 0.022	< 0.022	0.028 ^J	< 0.023	< 0.028	< 0.028	< 0.033	< 0.024	< 0.023
Total PFAS		--	--	--	8	1	0	0	1	0	14	2	6	5	2

Table 2
Soil Sample Laboratory Analytical Results
ATC Blount SS-Environmental Emergency Spill Response
60611431; 722 E. Main Street Madison, WI 53703

Parameters	Generic RCLs			SS-03	SS-04	SS-05	SS-05 FD	SS-06	SS-07	SS-08	SS-09	SS-10	SS-11	SS-12	
	Non-Industrial	Industrial	Groundwater Pathway	10 " 7/24/2019	8 " 7/24/2019	7 " 7/24/2019	7 " 7/24/2019	9 " 7/24/2019	9 " 7/24/2019	10 " 7/24/2019	8 " 7/24/2019	9 " 7/24/2019	8 " 7/24/2019	9 " 7/24/2019	
PFAS (ug/kg)															
ABBR.															
Perfluorobutanoic acid	PFBA	--	--	--	0.13 ^{JB}	0.44 ^B	0.15 ^{JB}	0.16 ^{JB}	0.39 ^B	0.15 ^{JB}	0.099 ^{JB}	0.13 ^{JB}	0.13 ^{JB}	0.2 ^{JB}	< 0.034
Perfluorobutanesulfonic acid	PFBS	1,260,000	16,400,000	--	< 0.027	< 0.031	0.045 ^J	0.047 ^J	< 0.031	< 0.026	< 0.028	0.048 ^J	< 0.026	0.061 ^J	0.065 ^J
4:2 Fluorotelomer Sulfonic Acid	4:2 FTS	--	--	--	< 0.39	< 0.46	< 0.44	< 0.44	< 0.45	< 0.39	< 0.42	< 0.46	< 0.38	< 0.45	< 0.46
Perfluoropentanoic acid	PFPeA	--	--	--	0.33	2.6	< 0.092	0.17 ^J	0.67	0.29	0.42	0.18 ^J	0.17 ^J	0.36	< 0.095
Perfluoropentane Sulfonic Acid	PFPeS	--	--	--	< 0.021	< 0.025	< 0.024	< 0.024	< 0.024	< 0.021	< 0.022	< 0.025	< 0.021	< 0.024	< 0.025
Perfluorohexanoic acid	PFHxA	--	--	--	0.18 ^J	0.95	0.13 ^J	0.13 ^J	0.41	0.15 ^J	0.17 ^J	0.17 ^J	0.073 ^J	0.28	0.058 ^J
Perfluorohexanesulfonic acid	PFHxS	--	--	--	0.078 ^J	0.066 ^J	0.053 ^J	0.069 ^J	0.093 ^J	< 0.033	0.035 ^J	0.096 ^J	0.042 ^J	0.058 ^J	0.17 ^J
6:2 Fluorotelomer sulfonic acid	6:2 FTS	--	--	--	0.17 ^J	1.1 ^J	1.1 ^J	< 0.18	< 0.18	0.29 ^J	1.3 ^J	< 0.19	< 0.16	< 0.18	< 0.18
Perfluoroheptanoic acid	PFHpA	--	--	--	0.093 ^J	0.37	0.073 ^J	0.067 ^J	0.2 ^J	0.062 ^J	0.13 ^J	0.12 ^J	0.062 ^J	0.27	0.11 ^J
Perfluoroheptanesulfonic acid	PFHpS	--	--	--	< 0.037	< 0.044	< 0.042	< 0.042	< 0.043	< 0.037	< 0.039	< 0.043	< 0.036	< 0.043	< 0.043
Perfluorooctanoic acid	PFOA	1,260	16,400	0.017	< 0.091	0.27	0.25	0.3	0.44	< 0.091	0.16 ^J	0.39	0.2 ^J	0.85	0.71
Ammonium Perfluorooctanoate	APFO	--	--	--	< 0.095	0.28	0.26	0.31	0.46	< 0.094	0.17 ^J	0.41	0.21 ^J	0.88	0.73
Perfluorooctanesulfonic acid	PFOS	1,260	16,400	0.038	0.39 ^J	1.2	1.5	1.8	1.2	0.22 ^J	0.58	1.6	0.5 ^J	1.6	2.7
8:2 Fluorotelomer sulfonic acid	8:2 FTS	--	--	--	< 0.27	< 0.31	< 0.30	< 0.30	< 0.31	< 0.26	< 0.28	< 0.31	< 0.26	< 0.30	< 0.31
Perfluorononanoic acid	PFNA	--	--	--	< 0.038	0.1 ^J	0.13 ^J	0.14 ^J	0.16 ^J	< 0.038	0.1 ^J	0.12 ^J	0.065 ^J	0.29	0.3
Perfluorononanesulfonic Acid	PFNS	--	--	--	< 0.021	< 0.025	< 0.024	< 0.024	< 0.024	< 0.021	< 0.022	< 0.025	< 0.021	< 0.024	< 0.025
Perfluorodecanoic acid	PFDA	--	--	--	0.12 ^J	0.54	0.34	0.34	0.93	0.17 ^J	0.21 ^J	0.38	0.31	0.76	0.3
Perfluorodecanesulfonic acid	PFDS	--	--	--	< 0.041	0.13 ^J	0.05 ^J	0.084 ^J	0.21 ^J	< 0.041	0.057 ^J	0.12 ^J	0.045 ^J	0.06 ^J	< 0.048
10:2 Fluorotelomer Sulfonic Acid	10:2 FTS	--	--	--	< 0.053	< 0.062	< 0.060	< 0.059	< 0.061	< 0.053	< 0.056	< 0.062	< 0.052	< 0.061	< 0.061
Perfluoroundecanoic acid	PFUnA	--	--	--	0.043 ^J	0.17 ^J	0.062 ^J	0.067 ^J	0.39	0.11 ^J	0.095 ^J	0.11 ^J	0.088 ^J	0.089 ^J	0.048 ^J
Perfluorododecanoic acid	PFDoA	--	--	--	0.21	0.43	0.092 ^J	0.082 ^J	1	0.24	0.17 ^J	0.17 ^J	0.19 ^J	0.15 ^J	0.096 ^J
Perfluorododecanesulfonic acid	PFDoS	--	--	--	< 0.064	< 0.075	< 0.072	< 0.071	< 0.073	< 0.063	< 0.067	< 0.074	< 0.062	< 0.073	< 0.074
Perfluorotridecanoic acid	PFTTrDA	--	--	--	0.094 ^J	0.08 ^J	< 0.061	< 0.061	0.22 ^J	< 0.054	< 0.057	< 0.063	< 0.053	< 0.062	< 0.063
Perfluorotetradecanoic acid	PFTeDA	--	--	--	0.26	0.23 ^J	< 0.065	< 0.064	0.56	0.068 ^J	0.076 ^J	0.074 ^J	0.091 ^J	0.091 ^J	< 0.066
Perfluorohexadecanoic acid	PFHxDA	--	--	--	0.054 ^J	0.075 ^J	< 0.053	< 0.052	0.15 ^J	< 0.047	< 0.049	< 0.054	< 0.045	< 0.054	< 0.054
Perfluorooctadecanoic acid	PFODA	--	--	--	< 0.030	< 0.035	< 0.033	< 0.033	0.035 ^J	< 0.030	< 0.031	< 0.035	< 0.029	< 0.034	< 0.034
HFPO-DA	GenX	--	--	--	< 0.12	< 0.14	< 0.13	< 0.13	< 0.13	< 0.12	< 0.12	< 0.14	< 0.11	< 0.13	< 0.14
4,8-dioxa-3H-perfluorononanoic acid	DONA	--	--	--	< 0.019	< 0.022	< 0.022	< 0.021	< 0.022	< 0.019	< 0.020	< 0.022	< 0.019	< 0.022	< 0.022
NaDONA	NaDONA	--	--	--	< 0.020	< 0.024	< 0.023	< 0.023	< 0.023	< 0.020	< 0.021	< 0.023	< 0.020	< 0.023	< 0.023
ADONA	ADONA	--	--	--	< 0.020	< 0.024	< 0.023	< 0.023	< 0.023	< 0.020	< 0.021	< 0.023	< 0.020	< 0.023	< 0.023
Perfluorooctane sulfonamide	PFOSA	--	--	--	< 0.087	< 0.10	< 0.098	< 0.097	< 0.10	< 0.087	< 0.092	< 0.10	< 0.085	< 0.10	< 0.10
N-Ethyl perfluorooctane sulfonamide	NEtFOSA	--	--	--	NA	NA	NA	NA	NA						
N-Ethyl perfluorooctane sulfonamidoethanol	NEtFOSE	--	--	--	NA	NA	NA	NA	NA						
N-Methyl perfluorooctane sulfonamide	NMeFOSA	--	--	--	NA	NA	NA	NA	NA						
N-Methyl perfluorooctane sulfonamidoethanol	NMeFOSE	--	--	--	NA	NA	NA	NA	NA						
N-methylperfluorooctanesulfonamidoacetic acid	MeFOSAA	--	--	--	< 0.41	< 0.49	< 0.47	< 0.46	< 0.48	< 0.41	< 0.44	< 0.48	< 0.40	< 0.47	< 0.48
N-ethylperfluorooctanesulfonamidoacetic acid	EtFOSAA	--	--	--	< 0.39	< 0.46	< 0.44	< 0.44	< 0.45	< 0.39	< 0.42	< 0.46	< 0.38	< 0.45	< 0.46
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic F-53B Major		--	--	--	< 0.029	< 0.034	< 0.032	< 0.032	< 0.033	< 0.029	< 0.030	< 0.033	< 0.028	< 0.033	< 0.033
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic F-53B Minor		--	--	--	< 0.023	< 0.027	< 0.026	< 0.026	< 0.027	< 0.023	< 0.025	< 0.027	< 0.023	< 0.027	< 0.027
Total PFAS		--	--	--	2	9	4	4	8	2	4	4	2	6	5

Table 2
Soil Sample Laboratory Analytical Results
ATC Blount SS-Environmental Emergency Spill Response
60611431; 722 E. Main Street Madison, WI 53703

Parameters	Generic RCLs			SS-13	SS-14	SS-15	SS-16	SS-17	SS-17 FD	SS-18	SS-19	SS-20	SS-21	SS-22	SS-23	
	Non-Industrial	Industrial	Groundwater Pathway	Surface 7/24/2019	Surface 7/24/2019	Surface 7/24/2019	Surface 7/24/2019	Surface 7/24/2019	Surface 7/24/2019	Surface 7/26/2019	Surface 7/26/2019	Surface 7/26/2019	Surface 7/26/2019	Surface 7/26/2019	Surface 7/26/2019	
PFAS (ug/kg)																
ABBR.																
Perfluorobutanoic acid	PFBA	--	--	--	1.3 ^B	4.4 ^B	1.6 ^B	2 ^B	0.58 ^B	0.22 ^B	0.59 ^B	3.4 ^B	0.14 ^{JB}	0.17 ^{JB}	0.12 ^{JB}	0.24 ^B
Perfluorobutanesulfonic acid	PFBS	1,260,000	16,400,000	--	< 0.027	< 0.026	< 0.025	< 0.028	< 0.027	< 0.027	< 0.025	< 0.028	< 0.026	< 0.027	< 0.028	< 0.026
4:2 Fluorotelomer Sulfonic Acid	4:2 FTS	--	--	--	< 0.40	< 0.38	< 0.38	< 0.42	< 0.40	< 0.40	< 0.38	< 0.41	< 0.38	< 0.39	< 0.41	< 0.39
Perfluoropentanoic acid	PFPeA	--	--	--	0.3	0.56	0.25	0.4	0.59	0.43	0.22	0.38	< 0.080	< 0.082	< 0.085	< 0.080
Perfluoropentane Sulfonic Acid	PFPeS	--	--	--	< 0.022	< 0.021	< 0.020	< 0.022	< 0.022	< 0.022	< 0.020	< 0.022	< 0.021	< 0.021	< 0.022	< 0.021
Perfluorohexanoic acid	PFHxA	--	--	--	1.7	3.7	2	2.4	0.43	0.26	0.26	1	< 0.044	< 0.045	< 0.047	0.05 ^J
Perfluorohexanesulfonic acid	PFHxS	--	--	--	< 0.034	< 0.032	< 0.032	< 0.035	< 0.033	< 0.034	< 0.032	< 0.034	< 0.032	< 0.033	< 0.034	< 0.032
6:2 Fluorotelomer sulfonic acid	6:2 FTS	--	--	--	120	310	140	140	15	6.6	11	130	< 0.16	1.5 ^J	0.44 ^J	2 ^J
Perfluoroheptanoic acid	PFHpA	--	--	--	0.075 ^J	0.16 ^J	0.04 ^J	0.075 ^J	0.087 ^J	0.067 ^J	0.031 ^J	0.18 ^J	< 0.030	< 0.031	< 0.032	< 0.030
Perfluoroheptanesulfonic acid	PFHpS	--	--	--	< 0.038	< 0.036	< 0.036	< 0.039	< 0.038	< 0.038	< 0.036	< 0.039	< 0.036	< 0.037	< 0.039	< 0.037
Perfluorooctanoic acid	PFOA	1,260	16,400	0.017	< 0.093	< 0.089	< 0.087	< 0.097	< 0.093	< 0.094	< 0.088	< 0.095	< 0.089	< 0.091	< 0.095	< 0.090
Ammonium Perfluorooctanoate	APFO	--	--	--	< 0.096	< 0.092	< 0.090	< 0.10	< 0.096	< 0.097	< 0.091	< 0.098	< 0.092	< 0.094	< 0.099	< 0.093
Perfluorooctanesulfonic acid	PFOS	1,260	16,400	0.038	< 0.22	< 0.21	0.26 ^J	0.32 ^J	< 0.22	< 0.22	< 0.20	< 0.22	< 0.21	< 0.21	< 0.22	< 0.21
8:2 Fluorotelomer sulfonic acid	8:2 FTS	--	--	--	< 0.27	1.4 ^J	< 2.5	< 0.28	0.3 ^J	< 0.27	0.62 ^J	< 2.8	< 0.26	< 0.27	< 0.28	< 0.26
Perfluorononanoic acid	PFNA	--	--	--	< 0.039	< 0.037	< 0.037	< 0.040	< 0.039	< 0.039	< 0.037	< 0.040	< 0.037	< 0.038	< 0.040	< 0.038
Perfluorononanesulfonic Acid	PFNS	--	--	--	< 0.022	< 0.021	< 0.020	< 0.022	< 0.022	< 0.022	< 0.020	< 0.022	< 0.021	< 0.021	< 0.022	< 0.021
Perfluorodecanoic acid	PFDA	--	--	--	< 0.024	< 0.023	< 0.022	< 0.025	< 0.024	< 0.024	< 0.022	0.03 ^J	< 0.023	< 0.023	< 0.024	< 0.023
Perfluorodecanesulfonic acid	PFDS	--	--	--	< 0.042	< 0.040	< 0.040	< 0.044	< 0.042	< 0.043	< 0.040	< 0.043	< 0.040	< 0.041	< 0.043	< 0.041
10:2 Fluorotelomer Sulfonic Acid	10:2 FTS	--	--	--	< 0.054	0.64	< 0.051	< 0.056	0.14 ^J	< 0.055	0.2	0.44	< 0.052	< 0.053	< 0.055	< 0.052
Perfluoroundecanoic acid	PFUnA	--	--	--	0.043 ^J	< 0.037	< 0.037	0.049 ^J	< 0.039	< 0.039	< 0.037	< 0.040	< 0.037	< 0.038	< 0.040	< 0.038
Perfluorododecanoic acid	PFDoA	--	--	--	< 0.072	< 0.069	< 0.068	< 0.075	< 0.072	< 0.073	< 0.068	< 0.074	< 0.070	< 0.071	< 0.074	< 0.070
Perfluorododecanesulfonic acid	PFDoS	--	--	--	< 0.065	< 0.062	< 0.061	< 0.067	< 0.065	< 0.066	< 0.061	< 0.066	< 0.062	< 0.064	< 0.066	< 0.063
Perfluorotridecanoic acid	PFTTrDA	--	--	--	< 0.055	< 0.053	< 0.052	0.087 ^J	< 0.055	< 0.056	< 0.052	< 0.056	< 0.053	< 0.054	< 0.057	< 0.053
Perfluorotetradecanoic acid	PFTeDA	--	--	--	< 0.058	< 0.056	< 0.055	0.064 ^J	< 0.058	< 0.059	< 0.055	< 0.059	< 0.056	< 0.057	< 0.060	< 0.056
Perfluorohexadecanoic acid	PFHxDA	--	--	--	< 0.048	< 0.045	< 0.045	< 0.049	< 0.047	< 0.048	< 0.045	< 0.048	< 0.046	< 0.047	< 0.049	< 0.046
Perfluorooctadecanoic acid	PFODA	--	--	--	< 0.030	< 0.029	< 0.028	< 0.031	< 0.030	< 0.031	< 0.028	< 0.031	< 0.029	< 0.030	< 0.031	< 0.029
HFPO-DA	GenX	--	--	--	< 0.12	< 0.11	< 0.11	< 0.12	< 0.12	< 0.12	< 0.11	< 0.12	< 0.11	< 0.12	< 0.12	< 0.11
4,8-dioxa-3H-perfluorononanoic acid	DONA	--	--	--	< 0.019	< 0.019	< 0.018	< 0.020	< 0.019	< 0.020	< 0.018	< 0.020	< 0.019	< 0.019	< 0.020	< 0.019
NaDONA	NaDONA	--	--	--	< 0.021	< 0.020	< 0.019	< 0.021	< 0.020	< 0.021	< 0.019	< 0.021	< 0.020	< 0.020	< 0.021	< 0.020
ADONA	ADONA	--	--	--	< 0.021	< 0.020	< 0.019	< 0.021	< 0.020	< 0.021	< 0.019	< 0.021	< 0.020	< 0.020	< 0.021	< 0.020
Perfluorooctane sulfonamide	PFOSA	--	--	--	< 0.089	< 0.085	< 0.083	< 0.092	< 0.088	< 0.090	< 0.083	< 0.090	< 0.085	< 0.087	< 0.091	< 0.086
N-Ethyl perfluorooctane sulfonamide	NEtFOSA	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Ethyl perfluorooctane sulfonamidoethanol	NEtFOSE	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Methyl perfluorooctane sulfonamide	NMeFOSA	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Methyl perfluorooctane sulfonamidoethanol	NMeFOSE	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-methylperfluorooctanesulfonamidoacetic acid	MeFOSAA	--	--	--	< 0.42	< 0.40	< 0.40	< 0.44	< 0.42	< 0.43	< 0.40	< 0.43	< 0.40	< 0.41	< 0.43	< 0.41
N-ethylperfluorooctanesulfonamidoacetic acid	EtFOSAA	--	--	--	< 0.40	< 0.38	< 3.8	< 0.42	< 0.40	< 0.40	< 0.38	< 0.41	< 0.38	< 0.39	< 0.41	< 0.39
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic F-53B Major		--	--	--	< 0.029	< 0.028	< 0.027	< 0.030	< 0.029	< 0.029	< 0.027	< 0.030	< 0.028	< 0.029	< 0.030	< 0.028
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic F-53B Minor		--	--	--	< 0.024	< 0.023	< 0.022	< 0.025	< 0.024	< 0.024	< 0.022	< 0.024	< 0.023	< 0.023	< 0.024	< 0.023
Total PFAS		--	--	--	120	320	140	150	17	8	13	140	0	2	1	2

Table 2
Soil Sample Laboratory Analytical Results
ATC Blount SS-Environmental Emergency Spill Response
60611431; 722 E. Main Street Madison, WI 53703

Parameters	Generic RCLs			SS-24	SS-25	SS-26	SS-27	SS-28	SS-29	SS-30	SS-31	SS-32	SS-33	SS-34	SS-34 DUP	
	Non-Industrial	Industrial	Groundwater Pathway	Surface 7/26/2019	Surface 7/26/2019	Surface 7/26/2019	Surface 7/26/2019	Surface 7/26/2019	Surface 10/29/2019	Surface 10/29/2019	Surface 10/29/2019	Surface 10/29/2019	Surface 10/29/2019	Surface 10/29/2019	Surface 10/29/2019	
PFAS (ug/kg)																
ABBR.																
Perfluorobutanoic acid	PFBA	--	--	--	0.21 ^B	0.31 ^B	0.86 ^B	0.58 ^B	< 0.030	0.37 ^B	0.085 ^{JB}	0.13 ^{JB}	0.09 ^{JB}	0.082 ^{JB}	0.12 ^{JB}	0.11 ^{JB}
Perfluorobutanesulfonic acid	PFBS	1,260,000	16,400,000	--	< 0.025	< 0.027	< 0.027	< 0.026	< 0.027	< 0.026	< 0.026	< 0.025	< 0.025	< 0.026	< 0.026	< 0.025
4:2 Fluorotelomer Sulfonic Acid	4:2 FTS	--	--	--	< 0.38	< 0.39	< 0.39	< 0.39	< 0.39	< 0.39	< 0.39	< 0.38	< 0.37	< 0.39	< 0.38	< 0.37
Perfluoropentanoic acid	PFPeA	--	--	--	0.17 ^J	0.11 ^J	0.31	0.42	< 0.082	0.12 ^J	0.11 ^J	0.59	0.3	0.17 ^J	0.15 ^J	0.2
Perfluoropentane Sulfonic Acid	PFPeS	--	--	--	< 0.020	< 0.021	< 0.021	< 0.021	< 0.021	< 0.021	< 0.021	< 0.020	< 0.020	< 0.021	< 0.021	< 0.020
Perfluorohexanoic acid	PFHxA	--	--	--	0.083 ^J	0.088 ^J	0.28	0.5	< 0.045	0.05 ^J	< 0.044	0.26	0.17 ^J	0.056 ^J	0.17 ^J	0.17 ^J
Perfluorohexanesulfonic acid	PFHxS	--	--	--	< 0.031	< 0.033	< 0.033	0.038 ^J	0.035 ^J	0.04 ^J	< 0.032	< 0.032	< 0.031	< 0.033	< 0.032	0.031 ^J
6:2 Fluorotelomer sulfonic acid	6:2 FTS	--	--	--	3.8	1.2 ^J	9.8	13	1.6 ^J	< 0.16	0.16 ^J	0.66 ^J	< 0.15	< 0.16	0.83 ^J	1.2 ^J
Perfluoroheptanoic acid	PFHpA	--	--	--	0.032 ^J	< 0.031	0.07 ^J	0.056 ^J	< 0.031	0.043 ^J	< 0.030	0.068 ^J	0.03 ^J	< 0.031	0.057 ^J	0.068 ^J
Perfluoroheptanesulfonic acid	PFHpS	--	--	--	< 0.035	< 0.037	< 0.037	< 0.037	< 0.037	< 0.037	< 0.036	< 0.036	< 0.035	< 0.037	< 0.036	< 0.035
Perfluorooctanoic acid	PFOA	1,260	16,400	0.017	< 0.087	< 0.092	< 0.092	< 0.091	< 0.091	< 0.090	< 0.090	< 0.087	< 0.087	< 0.091	< 0.089	< 0.087
Ammonium Perfluorooctanoate	APFO	--	--	--	< 0.090	< 0.095	< 0.095	< 0.094	< 0.095	< 0.093	< 0.093	< 0.090	< 0.090	< 0.094	< 0.092	< 0.090
Perfluorooctanesulfonic acid	PFOS	1,260	16,400	0.038	< 0.20	0.24 ^J	< 0.21	< 0.21	< 0.21	< 0.21	0.21 ^J	< 0.20	< 0.20	< 0.21	< 0.21	< 0.20
8:2 Fluorotelomer sulfonic acid	8:2 FTS	--	--	--	< 0.25	< 0.27	< 0.27	< 0.26	< 0.27	< 0.26	< 0.26	< 0.25	< 0.25	< 0.26	< 0.26	< 0.25
Perfluorononanoic acid	PFNA	--	--	--	< 0.036	< 0.038	< 0.038	< 0.038	< 0.038	< 0.038	< 0.037	< 0.037	< 0.036	< 0.038	< 0.037	0.039 ^J
Perfluorononanesulfonic Acid	PFNS	--	--	--	< 0.020	< 0.021	< 0.021	< 0.021	< 0.021	< 0.021	< 0.021	< 0.020	< 0.020	< 0.021	< 0.021	< 0.020
Perfluorodecanoic acid	PFDA	--	--	--	< 0.022	0.058 ^J	0.042 ^J	< 0.023	< 0.023	0.024 ^J	< 0.023	< 0.022	< 0.022	0.035 ^J	< 0.023	0.046 ^J
Perfluorodecanesulfonic acid	PFDS	--	--	--	< 0.040	< 0.042	< 0.042	< 0.041	< 0.041	< 0.041	< 0.041	< 0.040	< 0.039	< 0.041	< 0.040	< 0.039
10:2 Fluorotelomer Sulfonic Acid	10:2 FTS	--	--	--	< 0.051	< 0.053	0.11 ^J	0.11 ^J	< 0.053	< 0.052	< 0.052	< 0.051	< 0.051	< 0.053	< 0.052	0.068 ^J
Perfluoroundecanoic acid	PFUnA	--	--	--	< 0.036	0.043 ^J	0.065 ^J	< 0.038	< 0.038	< 0.038	< 0.037	< 0.037	< 0.036	0.06 ^J	< 0.037	0.045 ^J
Perfluorododecanoic acid	PFDoA	--	--	--	< 0.068	< 0.071	< 0.071	< 0.071	< 0.071	< 0.070	< 0.070	< 0.068	< 0.068	< 0.071	< 0.069	< 0.068
Perfluorododecanesulfonic acid	PFDoS	--	--	--	< 0.061	< 0.064	< 0.064	< 0.063	< 0.064	< 0.063	< 0.062	< 0.061	< 0.061	< 0.063	< 0.062	< 0.061
Perfluorotridecanoic acid	PFTTrDA	--	--	--	< 0.052	< 0.054	< 0.054	< 0.054	< 0.054	< 0.053	< 0.053	< 0.052	< 0.052	< 0.054	< 0.053	< 0.052
Perfluorotetradecanoic acid	PFTeDA	--	--	--	< 0.055	< 0.057	< 0.058	< 0.057	< 0.057	< 0.057	< 0.056	< 0.055	< 0.055	< 0.057	< 0.056	< 0.055
Perfluorohexadecanoic acid	PFHxDA	--	--	--	< 0.045	< 0.047	< 0.047	< 0.046	< 0.047	< 0.046	< 0.046	< 0.045	< 0.045	< 0.046	< 0.046	< 0.044
Perfluorooctadecanoic acid	PFODA	--	--	--	< 0.028	< 0.030	< 0.030	< 0.029	< 0.030	< 0.029	< 0.029	< 0.028	< 0.028	< 0.030	< 0.029	< 0.028
HFPO-DA	GenX	--	--	--	< 0.11	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.11	< 0.11	< 0.11	< 0.12	< 0.11	< 0.11
4,8-dioxa-3H-perfluorononanoic acid	DONA	--	--	--	< 0.018	< 0.019	< 0.019	< 0.019	< 0.019	< 0.019	< 0.019	< 0.018	< 0.018	< 0.019	< 0.019	< 0.018
NaDONA	NaDONA	--	--	--	< 0.019	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.019	< 0.019	< 0.020	< 0.020	< 0.019
ADONA	ADONA	--	--	--	< 0.019	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.019	< 0.019	< 0.020	< 0.020	< 0.019
Perfluorooctane sulfonamide	PFOSA	--	--	--	< 0.083	< 0.087	< 0.087	< 0.086	< 0.087	< 0.086	< 0.085	< 0.083	< 0.083	< 0.087	< 0.085	< 0.083
N-Ethyl perfluorooctane sulfonamide	NEtFOSA	--	--	--	NA	NA	NA	NA	NA	NA	< 0.025	< 0.025	< 0.024	< 0.024	< 0.025	0.056 ^J
N-Ethyl perfluorooctane sulfonamidoethanol	NEtFOSE	--	--	--	NA	NA	NA	NA	NA	NA	< 0.038	< 0.037	< 0.037	< 0.036	< 0.038	0.098 ^J
N-Methyl perfluorooctane sulfonamide	NMeFOSA	--	--	--	NA	NA	NA	NA	NA	NA	< 0.043	< 0.043	< 0.042	< 0.041	< 0.043	0.069 ^J
N-Methyl perfluorooctane sulfonamidoethanol	NMeFOSE	--	--	--	NA	NA	NA	NA	NA	NA	< 0.074	< 0.074	< 0.072	< 0.072	< 0.075	0.12 ^J
N-methylperfluorooctanesulfonamidoacetic acid	MeFOSAA	--	--	--	< 0.40	< 0.42	< 0.42	< 0.41	< 0.41	< 0.41	< 0.41	< 0.40	< 0.39	< 0.41	< 0.40	< 0.39
N-ethylperfluorooctanesulfonamidoacetic acid	EtFOSAA	--	--	--	< 0.38	< 0.39	< 0.39	< 0.39	< 0.39	< 0.39	< 0.39	< 0.38	< 0.37	< 0.39	< 0.38	< 0.37
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic F-53B Major		--	--	--	< 0.027	< 0.029	< 0.029	< 0.028	< 0.029	< 0.028 ^{F1}	< 0.028	< 0.027	< 0.027	< 0.029	< 0.028	< 0.027
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic F-53B Minor		--	--	--	< 0.022	< 0.023	< 0.023	< 0.023	< 0.023	< 0.023	< 0.023	< 0.022	< 0.022	< 0.023	< 0.023	< 0.022
Total PFAS		--	--	--	4	2	12	15	2	1	1	2	1	0	1	2

Table 2
Soil Sample Laboratory Analytical Results
ATC Blount SS-Environmental Emergency Spill Response
60611431; 722 E. Main Street Madison, WI 53703

Parameters	Generic RCLs			SS-35	SS-36	SS-37	SS-38	SS-39	SS-40	SS-41	SS-42	SS-43	SS-44	SS-45	SS-46	
	Non-Industrial	Industrial	Groundwater Pathway	Surface 10/29/2019												
PFAS (ug/kg)																
ABBR.																
Perfluorobutanoic acid	PFBA	--	--	--	0.21 ^B	0.63 ^B	0.1 ^{JB}	0.081 ^{JB}	0.063 ^{JB}	0.092 ^{JB}	0.14 ^{JB}	0.093 ^{JB}	0.07 ^{JB}	0.79 ^B	0.3 ^B	0.058 ^{JB}
Perfluorobutanesulfonic acid	PFBS	1,260,000	16,400,000	--	0.17 ^J	0.071 ^J	0.11 ^J	0.052 ^J	< 0.027	0.041 ^J	< 0.025	< 0.026	< 0.025	0.034 ^J	< 0.025	< 0.026
4:2 Fluorotelomer Sulfonic Acid	4:2 FTS	--	--	--	< 0.38	< 0.37	< 0.38	< 0.38	< 0.40	< 0.40	< 0.37	< 0.38	< 0.37	< 0.39	< 0.37	< 0.39
Perfluoropentanoic acid	PFPeA	--	--	--	0.58	2.4	0.086 ^J	0.09 ^J	< 0.083	< 0.083	0.49	0.15 ^J	< 0.078	1.3	0.093 ^J	0.13 ^J
Perfluoropentane Sulfonic Acid	PFPeS	--	--	--	0.051 ^J	< 0.020	0.045 ^J	< 0.021	< 0.022	< 0.022	< 0.020	< 0.021	< 0.020	< 0.021	< 0.020	< 0.021
Perfluorohexanoic acid	PFHxA	--	--	--	0.28	1.6	0.077 ^J	0.065 ^J	< 0.045	0.046 ^J	0.14 ^J	0.15 ^J	0.077 ^J	0.7	0.21	0.078 ^J
Perfluorohexanesulfonic acid	PFHxS	--	--	--	0.1 ^J	0.035 ^J	0.063 ^J	< 0.032	< 0.033	0.036 ^J	< 0.031	< 0.032	0.034 ^J	0.04 ^J	0.034 ^J	< 0.032
6:2 Fluorotelomer sulfonic acid	6:2 FTS	--	--	--	1.7 ^J	2.4	1.9 ^J	0.32 ^J	0.29 ^J	0.48 ^J	0.71 ^J	8.9	4.4	36	33	2.4
Perfluoroheptanoic acid	PFHpA	--	--	--	0.14 ^J	0.13 ^J	0.043 ^J	0.031 ^J	< 0.031	< 0.031	0.1 ^J	< 0.030	< 0.029	0.27	< 0.029	< 0.030
Perfluoroheptanesulfonic acid	PFHpS	--	--	--	0.057 ^J	< 0.035	0.043 ^J	< 0.036	< 0.038	< 0.038	< 0.035	< 0.036	< 0.035	< 0.037	< 0.035	< 0.037
Perfluorooctanoic acid	PFOA	1,260	16,400	0.017	0.095 ^J	< 0.087	< 0.088	< 0.088	< 0.093	< 0.093	< 0.086	< 0.089	< 0.087	< 0.091	< 0.087	< 0.090
Ammonium Perfluorooctanoate	APFO	--	--	--	0.099 ^J	< 0.090	< 0.091	< 0.091	< 0.096	< 0.096	< 0.089	< 0.092	< 0.090	< 0.094	< 0.090	< 0.093
Perfluorooctanesulfonic acid	PFOS	1,260	16,400	0.038	< 0.21	< 0.20	< 0.20	< 0.21	< 0.22	< 0.22	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21
8:2 Fluorotelomer sulfonic acid	8:2 FTS	--	--	--	0.29 ^J	< 0.25	0.48 ^J	< 0.26	< 0.27	< 0.27	< 0.25	0.35 ^J	< 0.25	< 0.26	0.36 ^J	< 0.26
Perfluorononanoic acid	PFNA	--	--	--	0.089 ^J	0.043 ^J	0.043 ^J	< 0.037	0.04 ^J	< 0.039	0.077 ^J	< 0.037	0.036 ^J	0.047 ^J	< 0.036	< 0.038
Perfluorononanesulfonic Acid	PFNS	--	--	--	0.068 ^J	0.025 ^J	0.039 ^J	< 0.021	< 0.022	< 0.022	< 0.020	< 0.021	< 0.020	< 0.021	< 0.020	< 0.021
Perfluorodecanoic acid	PFDA	--	--	--	0.07 ^J	< 0.022	0.057 ^J	< 0.023	0.075 ^J	0.16 ^J	0.026 ^J	< 0.023	0.054 ^J	0.052 ^J	< 0.022	< 0.023
Perfluorodecanesulfonic acid	PFDS	--	--	--	0.057 ^J	< 0.039	0.041 ^J	< 0.040	< 0.042	< 0.042	< 0.039	< 0.040	< 0.039	< 0.041	< 0.039	< 0.041
10:2 Fluorotelomer Sulfonic Acid	10:2 FTS	--	--	--	0.078 ^J	< 0.050	0.086 ^J	< 0.051	< 0.054	< 0.054	< 0.050	0.1 ^J	< 0.051	< 0.053	0.2	< 0.052
Perfluoroundecanoic acid	PFUnA	--	--	--	0.084 ^J	0.044 ^J	0.054 ^J	< 0.037	0.045 ^J	0.1 ^J	< 0.036	0.044 ^J	< 0.036	< 0.038	< 0.036	< 0.038
Perfluorododecanoic acid	PFDoA	--	--	--	< 0.069	< 0.068	< 0.069	< 0.069	< 0.072	0.17 ^J	< 0.067	< 0.069	< 0.068	< 0.071	< 0.068	< 0.070
Perfluorododecanesulfonic acid	PFDoS	--	--	--	< 0.062	< 0.061	< 0.061	< 0.062	< 0.065	< 0.065	< 0.060	< 0.062	< 0.061	< 0.064	< 0.061	< 0.063
Perfluorotridecanoic acid	PFTTrDA	--	--	--	0.068 ^J	< 0.052	< 0.052	< 0.052	< 0.055	0.065 ^J	< 0.051	< 0.053	< 0.052	< 0.054	< 0.052	< 0.053
Perfluorotetradecanoic acid	PFTeDA	--	--	--	0.068 ^J	< 0.055	< 0.055	< 0.055	< 0.058	0.091 ^J	< 0.054	< 0.056	< 0.055	< 0.057	< 0.055	< 0.057
Perfluorohexadecanoic acid	PFHxDA	--	--	--	0.069 ^J	< 0.044	< 0.045	< 0.045	< 0.047	< 0.048	< 0.044	< 0.045	< 0.045	< 0.047	< 0.045	< 0.046
Perfluorooctadecanoic acid	PFODA	--	--	--	0.079 ^J	< 0.028	0.055 ^J	< 0.029	< 0.030	< 0.030	< 0.028	< 0.029	< 0.028	< 0.030	< 0.028	< 0.029
HFPO-DA	GenX	--	--	--	3.3	1	2.2	0.48	0.46	0.6	0.19 ^J	0.26	0.19 ^J	0.19 ^J	0.19 ^J	< 0.12
4,8-dioxa-3H-perfluorononanoic acid	DONA	--	--	--	0.046 ^J	< 0.018	0.026 ^J	< 0.018	< 0.019	< 0.019	< 0.018	< 0.019	< 0.018	< 0.019	< 0.018	< 0.019
NaDONA	NaDONA	--	--	--	0.049 ^J	< 0.019	0.028 ^J	< 0.019	< 0.021	< 0.021	< 0.019	< 0.020	< 0.019	< 0.020	< 0.019	< 0.020
ADONA	ADONA	--	--	--	0.048 ^J	< 0.019	0.028 ^J	< 0.019	< 0.021	< 0.021	< 0.019	< 0.020	< 0.019	< 0.020	< 0.019	< 0.020
Perfluorooctane sulfonamide	PFOSA	--	--	--	< 0.085	< 0.083	< 0.084	< 0.084	< 0.089	< 0.089	< 0.082	< 0.084	< 0.083	< 0.087	< 0.083	< 0.086
N-Ethyl perfluorooctane sulfonamide	NEtFOSA	--	--	--	< 0.025	< 0.024	< 0.025	< 0.025	< 0.026	< 0.026	< 0.024	< 0.025	< 0.024	< 0.025	< 0.024	< 0.025
N-Ethyl perfluorooctane sulfonamidoethanol	NEtFOSE	--	--	--	0.089 ^J	< 0.036	< 0.037	0.048 ^J	< 0.039	< 0.039	0.046 ^J	< 0.037	< 0.036	< 0.038	< 0.036	< 0.038
N-Methyl perfluorooctane sulfonamide	NMeFOSA	--	--	--	< 0.042	< 0.041	< 0.042	< 0.042	< 0.044	< 0.044	< 0.041	< 0.042	< 0.042	< 0.043	< 0.041	< 0.043
N-Methyl perfluorooctane sulfonamidoethanol	NMeFOSE	--	--	--	< 0.074	< 0.072	< 0.073	< 0.073	< 0.077	< 0.077	< 0.071	< 0.073	< 0.072	< 0.075	< 0.072	< 0.074
N-methylperfluorooctanesulfonamidoacetic acid	MeFOSAA	--	--	--	< 0.40	< 0.39	< 0.40	< 0.40	< 0.42	< 0.42	< 0.39	< 0.40	< 0.39	< 0.41	< 0.39	< 0.41
N-ethylperfluorooctanesulfonamidoacetic acid	EtFOSAA	--	--	--	< 0.38	< 0.37	< 0.38	< 0.38	< 0.40	< 0.40	< 0.37	< 0.38	< 0.37	< 0.39	< 0.37	< 0.39
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic F-53B Major		--	--	--	0.069 ^J	< 0.027	0.038 ^J	< 0.028	< 0.029	< 0.029	< 0.027	< 0.028	< 0.027	< 0.029	< 0.027	< 0.028
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic F-53B Minor		--	--	--	0.049 ^J	< 0.022	0.032 ^J	< 0.023	< 0.024	< 0.024	< 0.022	< 0.023	< 0.022	< 0.023	< 0.022	< 0.023
Total PFAS		--	--	--	8	8	6	1	1	2	2	10	5	39	34	3

Table 2
Soil Sample Laboratory Analytical Results
ATC Blount SS-Environmental Emergency Spill Response
60611431; 722 E. Main Street Madison, WI 53703

Parameters	Generic RCLs			SS-46 DUP	SS-47	SS-48	SS-49	SS-49 DUP	SS-50	SS-51	SS-52	SS-53	SS-54	SS-55	
	Non-Industrial	Industrial	Groundwater Pathway	Surface 10/29/2019	Surface 10/29/2019	Surface 10/29/2019	Surface 10/29/2019	Surface 10/29/2019	Surface 10/29/2019	Surface 10/29/2019	Surface 10/29/2019	Surface 10/29/2019	Surface 10/29/2019	Surface 10/29/2019	
PFAS (ug/kg)															
ABBR.															
Perfluorobutanoic acid	PFBA	--	--	--	0.056 ^{JB}	0.12 ^{JB}	0.057 ^{JB}	0.12 ^{JB}	0.13 ^{JB}	0.075 ^{JB}	0.066 ^{JB}	0.11 ^{JB}	0.067 ^{JB}	0.23 ^B	0.2 ^B
Perfluorobutanesulfonic acid	PFBS	1,260,000	16,400,000	--	< 0.028	< 0.026	< 0.025	< 0.028	< 0.026	< 0.025	< 0.026	< 0.027	< 0.025	< 0.027	< 0.025
4:2 Fluorotelomer Sulfonic Acid	4:2 FTS	--	--	--	< 0.41	< 0.38	< 0.37	< 0.42	< 0.38	< 0.37	< 0.38	< 0.40	< 0.37	< 0.40	< 0.37
Perfluoropentanoic acid	PFPeA	--	--	--	0.098 ^J	0.12 ^J	< 0.077	< 0.087	< 0.080	< 0.077	< 0.080	< 0.083	< 0.077	0.43	0.4
Perfluoropentane Sulfonic Acid	PFPeS	--	--	--	< 0.022	< 0.021	< 0.020	< 0.023	< 0.021	< 0.020	< 0.021	< 0.022	< 0.020	< 0.022	< 0.020
Perfluorohexanoic acid	PFHxA	--	--	--	< 0.047	0.12 ^J	< 0.042	< 0.048	< 0.043	< 0.042	< 0.044	< 0.045	< 0.042	0.2 ^J	0.21
Perfluorohexanesulfonic acid	PFHxS	--	--	--	< 0.035	< 0.032	< 0.031	< 0.035	< 0.032	< 0.031	< 0.032	< 0.033	< 0.031	< 0.033	< 0.031
6:2 Fluorotelomer sulfonic acid	6:2 FTS	--	--	--	1.5 ^J	5	< 0.15	< 0.17	< 0.16	< 0.15	1.3 ^J	0.2 ^J	0.3 ^J	7.6	2.7
Perfluoroheptanoic acid	PFHpA	--	--	--	< 0.032	< 0.030	< 0.029	< 0.033	< 0.030	< 0.029	< 0.030	< 0.031	< 0.029	0.092 ^J	0.061 ^J
Perfluoroheptanesulfonic acid	PFHpS	--	--	--	< 0.039	< 0.036	< 0.035	< 0.040	< 0.036	< 0.035	< 0.036	< 0.038	< 0.035	< 0.038	< 0.035
Perfluorooctanoic acid	PFOA	1,260	16,400	0.017	< 0.096	< 0.089	< 0.086	< 0.098	< 0.089	< 0.087	< 0.089	< 0.093	< 0.086	< 0.093	< 0.087
Ammonium Perfluorooctanoate	APFO	--	--	--	< 0.10	< 0.092	< 0.090	< 0.10	< 0.092	< 0.090	< 0.092	< 0.096	< 0.089	< 0.096	< 0.090
Perfluorooctanesulfonic acid	PFOS	1,260	16,400	0.038	< 0.22	< 0.20 ^H	< 0.20	< 0.23	< 0.21	0.2 ^{JB*}	< 0.21	< 0.22	< 0.20	0.47 ^{JB*}	< 0.20
8:2 Fluorotelomer sulfonic acid	8:2 FTS	--	--	--	< 0.28	< 0.26	< 0.25	< 0.28	< 0.26	< 0.25	< 0.26	< 0.27	< 0.25	< 0.27	< 0.25
Perfluorononanoic acid	PFNA	--	--	--	< 0.040	< 0.037	< 0.036	0.047 ^J	0.067 ^J	< 0.036	< 0.037	< 0.039	< 0.036	< 0.039	< 0.036
Perfluorononanesulfonic Acid	PFNS	--	--	--	< 0.022	< 0.021	< 0.020	< 0.023	< 0.021	< 0.020	< 0.021	< 0.022	< 0.020	< 0.022	< 0.020
Perfluorodecanoic acid	PFDA	--	--	--	< 0.025	< 0.023	< 0.022	< 0.025	0.087 ^J	0.043 ^{J1}	0.079 ^J	0.065 ^J	< 0.022	0.043 ^J	< 0.022
Perfluorodecanesulfonic acid	PFDS	--	--	--	< 0.044	< 0.040	< 0.039	< 0.044	< 0.040	< 0.039	< 0.040	< 0.042	< 0.039	< 0.042	< 0.039
10:2 Fluorotelomer Sulfonic Acid	10:2 FTS	--	--	--	< 0.056	< 0.052	< 0.050	< 0.057	< 0.052	< 0.050	< 0.052	< 0.054	< 0.050	0.055 ^J	< 0.051
Perfluoroundecanoic acid	PFUnA	--	--	--	< 0.040	< 0.037	< 0.036	< 0.041	< 0.037	0.037 ^J	< 0.037	0.064 ^J	< 0.036	0.051 ^{J1}	< 0.036
Perfluorododecanoic acid	PFDaA	--	--	--	< 0.075	< 0.069	< 0.067	< 0.076	< 0.069	< 0.067	< 0.069	< 0.072	< 0.067	< 0.072	< 0.068
Perfluorododecanesulfonic acid	PFDaS	--	--	--	< 0.067	< 0.062	< 0.060	< 0.068	< 0.062	< 0.060	< 0.062	< 0.065	< 0.060	< 0.065	< 0.061
Perfluorotridecanoic acid	PFTrDA	--	--	--	< 0.057	< 0.053	< 0.051	< 0.058	< 0.053	< 0.051	< 0.053	< 0.055	< 0.051	< 0.055	< 0.052
Perfluorotetradecanoic acid	PFTeDA	--	--	--	< 0.060	< 0.056	< 0.054	< 0.061	< 0.056	< 0.054	< 0.056	< 0.058	< 0.054	< 0.058	< 0.055
Perfluorohexadecanoic acid	PFHxDA	--	--	--	< 0.049	< 0.045	< 0.044	< 0.050	< 0.046	< 0.044	< 0.046	< 0.047	< 0.044	< 0.047	< 0.045
Perfluorooctadecanoic acid	PFODA	--	--	--	< 0.031	< 0.029	< 0.028	< 0.032	< 0.029	< 0.028	< 0.029	< 0.030	< 0.028	< 0.030	< 0.028
HFPO-DA	GenX	--	--	--	< 0.12	< 0.11	< 0.11	< 0.12	< 0.11	< 0.11	< 0.11	< 0.12	< 0.11	< 0.12	< 0.11
4,8-dioxa-3H-perfluorononanoic acid	DONA	--	--	--	< 0.020	< 0.019	< 0.018	< 0.020	< 0.019	< 0.018	< 0.019	< 0.019	< 0.018	< 0.019	< 0.018
NaDONA	NaDONA	--	--	--	< 0.021	< 0.020	< 0.019	< 0.022	< 0.020	< 0.019	< 0.020	< 0.020	< 0.019	< 0.020	< 0.019
ADONA	ADONA	--	--	--	< 0.021	< 0.020	< 0.019	< 0.022	< 0.020	< 0.019	< 0.020	< 0.020	< 0.019	< 0.020	< 0.019
Perfluorooctane sulfonamide	PFOSA	--	--	--	< 0.092	< 0.085	< 0.082	< 0.093	< 0.085	< 0.083	< 0.085	< 0.088	< 0.082	< 0.088	< 0.083
N-Ethyl perfluorooctane sulfonamide	NEtFOSA	--	--	--	< 0.027	< 0.025	< 0.024	< 0.027	< 0.025	< 0.024	< 0.025	< 0.026	< 0.024	< 0.026	< 0.024
N-Ethyl perfluorooctane sulfonamidoethanol	NEtFOSE	--	--	--	< 0.040	0.051 ^{JH}	< 0.036	< 0.041	< 0.037	0.078 ^{JB}	< 0.037	< 0.039	< 0.036	< 0.039	< 0.036
N-Methyl perfluorooctane sulfonamide	NMeFOSA	--	--	--	< 0.046	< 0.042	< 0.041	< 0.046	< 0.042	< 0.041	< 0.042	< 0.044	< 0.041	< 0.044	< 0.041
N-Methyl perfluorooctane sulfonamidoethanol	NMeFOSE	--	--	--	< 0.079	< 0.072 ^{HF2}	< 0.071	< 0.081	< 0.073	0.076 ^J	< 0.074	< 0.077	< 0.071	0.1 ^J	< 0.072
N-methylperfluorooctanesulfonamidoacetic acid	MeFOSAA	--	--	--	< 0.44	< 0.40	< 0.39	< 0.44	< 0.40	< 0.39	< 0.40	< 0.42	< 0.39	< 0.42	< 0.39
N-ethylperfluorooctanesulfonamidoacetic acid	EtFOSAA	--	--	--	< 0.41	< 0.38	< 0.37	< 0.42	< 0.38	< 0.37	< 0.38	< 0.40	< 0.37	< 0.40	< 0.37
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic F-53B Major		--	--	--	< 0.030	< 0.028	< 0.027	< 0.031	< 0.028	< 0.027	< 0.028	< 0.029	< 0.027	< 0.029	< 0.027
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic F-53B Minor		--	--	--	< 0.025	< 0.023	< 0.022	< 0.025	< 0.023	< 0.022	< 0.023	< 0.024	< 0.022	< 0.024	< 0.022
Total PFAS		--	--	--	2	5	0	0	0	1	1	0	0	9	4

REGISTRATION

ISSUE/REVISION

NO.	DATE	DESCRIPTION

KEY PLAN

PROJECT NUMBER

60611431

DRAWING TITLE

PROPOSED ADDITIONAL
 SAMPLE LOCATIONS

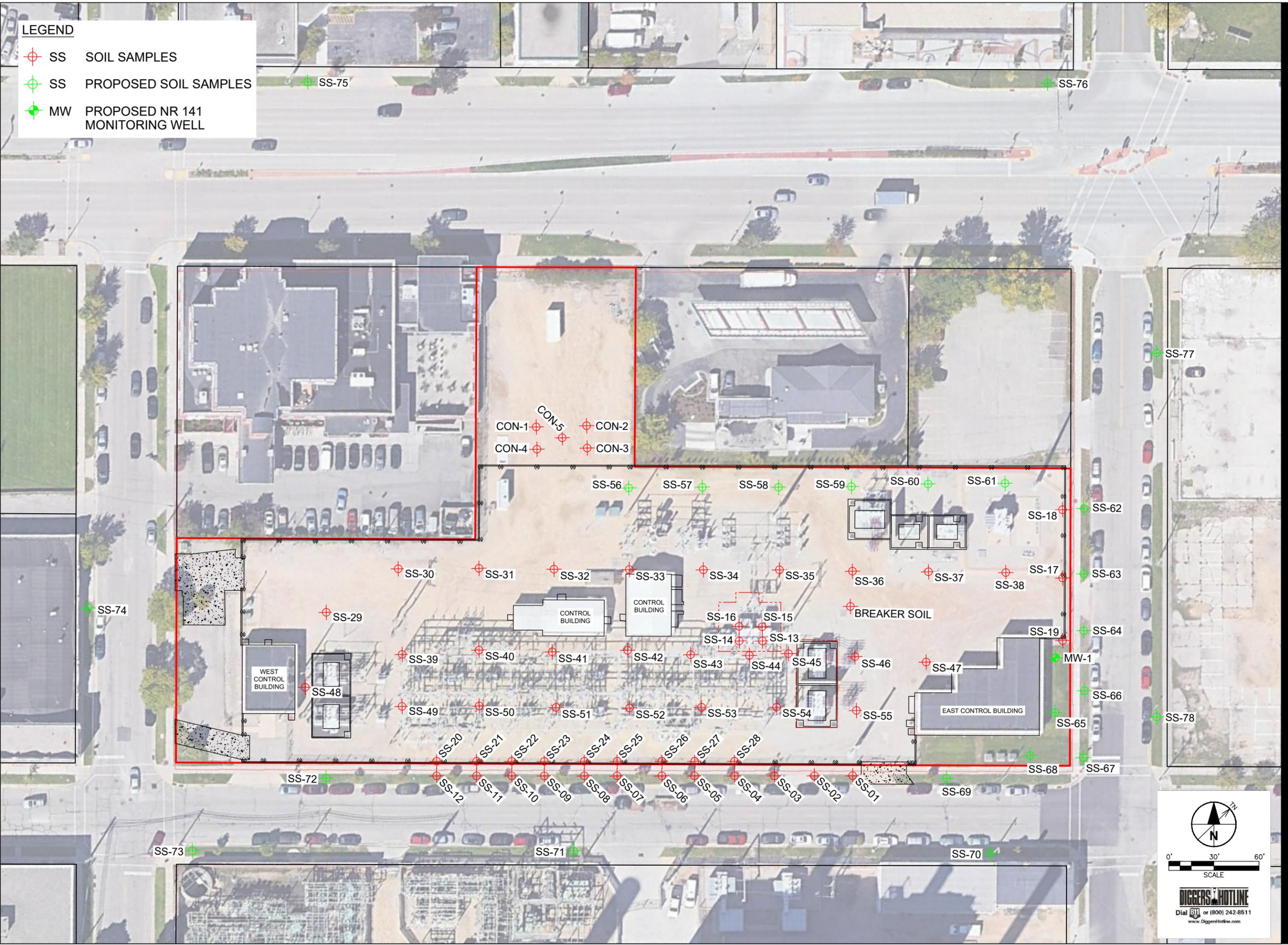
DRAWING NUMBER

SHEET NUMBER

Figure 4

LEGEND

- SS SOIL SAMPLES
- SS PROPOSED SOIL SAMPLES
- MW PROPOSED NR 141 MONITORING WELL



Plotted By: joel.mackinney
 Plot File Date Created: Mar/09/2020 2:15 PM
 Filename: \\USM\W\K\F5001\PROJ\DATA\PROJECTS\60611431\800_CAD_GIS\910_CAD\20-SHEETS\06_BLOUNT_SOIL_CONTAMINATION_MAP_DEC2019.DWG

Case Closure – GIS Registry
ATC Transformer Fire – MG&E Blount Substation
722 East Main Street
BRRTS #02-013-584085 FID #113435520

ATTACHMENT D – MAINTENANCE PLANS AND PHOTOGRAPHS

D.1 Descriptions of Maintenance Actions – Not applicable. The site will be closed with administrative control (GIS Registry) for residual soil. The site currently is managed with institutional controls under a Deed Restriction with the BRRTS case # 02-13-001567.

D.2 Location Map – Not applicable. Site cover to be maintained following controls noted in D.1 above.

D.3 Photographs– Not applicable. No maintenance actions are proposed.

D.4 Inspection Log– Not applicable. No maintenance actions are proposed.

Case Closure – GIS Registry
ATC Transformer Fire – MG&E Blount Substation
722 East Main Street
BRRTS #02-013-584085 FID #113435520

ATTACHMENT E – MONITORING WELL INFORMATION

No attachments – All monitoring wells can be located and will be properly abandoned upon the DNR closure approval.

Case Closure – GIS Registry
ATC Transformer Fire – MG&E Blount Substation
722 East Main Street
BRRTS #02-013-584085 FID #113435520

ATTACHMENT F – SOURCE LEGAL DOCUMENTS

F.1 Property Deed

F.2 Plat Map

F.3 Verification of Zoning

F.4 Signed Statement Legal Description Accuracy

THIS INDENTURE, Made this 30th day of January in the year of our Lord, one thousand nine hundred and seventeen BETWEEN McClellan Dodge and Lizzie O. Dodge, his wife, of Madison, Dane County, Wisconsin, Hiram E. Dodge and Florence E. Dodge, his wife, of Wagoner, Oklahoma, Anna A. Buck of Spokane, State of Washington, and Florence A. Tenney, sometimes known as Nettie F. Tenney, of South Madison, Dane County, Wisconsin, parties of the first part, and Madison Gas & Electric Company, a corporation, of Madison, Wisconsin, party of the second part

WITNESSETH, That the said parties of the first part, for and in consideration of the sum of One Dollar and other valuable consideration to them in hand paid, by the said party of the second part, the receipt whereof is hereby acknowledged and confessed, have given, granted, bargained, sold, remised, released, aliened, conveyed and confirmed, and by these presents do give, grant, bargain, sell, remise, release, alien, convey and confirm unto the said party of the second part, its successors and assigns forever, the following described real estate, situated in the County of Dane and State of Wisconsin, to wit: Lots numbered Ten (10) and Eleven (11), of Block One Hundred and Thirty-two (132), City of Madison, according to the recorded plat thereof.

TOGETHER with all and singular the hereditaments and appurtenances thereunto belonging, or in anywise appertaining; and all the estate, right, title, interest, claim or demand whatsoever of the said parties of the first part, either in law or equity, either in possession or expectancy of, in and to the above bargained premises and their hereditaments and appurtenances, TO HAVE AND TO HOLD the said premises as above described, with the hereditaments and appurtenances, unto the said party of the second part and to its successors and assigns forever.

AND THE SAID McClellan Dodge, Hiram E. Dodge, Anna A. Buck and Florence A. Tenney, for themselves, their respective heirs,

executors and administrators, do covenant, grant, bargain and agree, to and with the said party of the second part, its successors and assigns, that at the time of the sealing and delivery of these presents they are well seized of the premises above described as of a good, sure, perfect, absolute and indefeasible estate of inheritance in the law, in fee simple, and that the same are free and clear of all encumbrances whatever, except street improvement taxes and general taxes for the year 1916, which said party of the second part hereby assumes, and that the above bargained premises, in the quiet and peaceable possession of the said party of the second part, its successors and assigns, against all and every person or persons lawfully claiming the whole or any part thereof, they will forever WARRANT AND DEFEND.

IN WITNESS WHEREOF, the said parties of the first part have hereunto set their hands and seals the day and year first above written.

In presence of,

<u>Hattie Carr</u>	<u>McClellan Dodge</u> (Seal)
<u>Mrs. James Lewis</u>	<u>Lizzie C. Dodge</u> (Seal)
As to McClellan Dodge and Lizzie C. Dodge, his wife.	
<u>E. J. Parinson</u>	<u>Thomas E. Dodge</u> (Seal)
<u>Edith E. Dodge</u>	<u>Thomas E. Dodge</u> (Seal)
As to E. J. Dodge and Florence E. Dodge, his wife.	
	<u>Thomas A. Tenney</u> (Seal)
As to Anna A. Buck,	
<u>John Salisbury</u>	<u>Anna A. Buck</u> (Seal)
<u>Grace M. Brown</u>	
As to Florence A. Tenney.	

William D. Kelley
Frank B. Myer

State of Wisconsin, }
Dane County. } ss

Personally came before me this 22 day of
February, 1917, the above named McClellan Dodge and
Lizzie O. Dodge, his wife, to me known to be the persons who
executed the foregoing instrument and acknowledged the same.

Hallie Perry

Notary Public, Dane County, Wis.

My Commission expires October 17, 1920

State of Oklahoma, }
County of Wagoner. } ss

Personally came before me this 5 day of
February, 1917, the above named Hiram E. Dodge and
Florence E. Dodge, his wife, to me known to be the persons who
executed the foregoing instrument and acknowledged the same.

H. W. Wagoner

Notary Public, Wagoner County, Oklahoma.

My Commission expires July 14 - 1920

State of Washington, }
County of Spokane. } ss

Personally came before me this 19th day of
February, 1917, the above named Anns A. Back, to me known
to be the person who executed the foregoing instrument and acknowl-
edged the same.

John Salislevy

Notary Public, Spokane County, Washington.

My Commission expires May 9th 1917

State of Wisconsin, }
Dane County. } ss

Personally came before me this 17th day of
February, 1917, the above named Florence A. Tenney, to

me known to be the person who executed the foregoing instrument and acknowledged the same.

William J. Kalsberg

Notary Public, Dane County, Wis.

My Commission expires NOTARY PUBLIC, DANE COUNTY, WISCONSIN
My Commission Expires July 21, 1918

BLOUNT GENERATING PLANT PARCEL

A parcel of land being Lots 8, 9, 10 and 11, Block 131, Original Town of Madison Plat, lying in part of the NW1/4 of the SE1/4 and part of the NE1/4 of the SW1/4 of Section 13, T7N-R9E, City of Madison, Dane County, Wisconsin.

Tax I.D. No.: 251-0709-133-0401-3

BLOUNT SUBSTATION PARCEL

A parcel of land being Lots 10 and 11, Block 132, Original Town of Madison Plat, lying in part of the NW1/4 of the SE1/4 and part of the NE1/4 of the SW1/4 of Section 13, T7N-R9E, City of Madison, Dane County, Wisconsin.

Tax I.D. No.: 251-0709-133-0307-3

State of Wisconsin,

Dane County.

ss.

Personally came before me, this 13th day of September, A. D., 1923, the above named McClellan Dodge, Florence A. Tenney and Anna A. Buck,

to me known to be the persons who executed the foregoing instrument, and acknowledged the same.

[Signature]

Notary Public Dane County, Wis.

My commission expires March 13 A. D., 1927

STATE OF OKLAHOMA,

WAGONER County

ss.

Personally came before me, this 14th day of September, A. D., 1923, the above named Florence P. Dodge and Florence D. Story

to me known to be the persons who executed the foregoing instrument, and acknowledged the same.

[Signature]
Notary Public, Wagoner County, Oklahoma,

My commission expires SEPTEMBER 25 1925 A. D., 1925

State of Wisconsin S. S.
County of Dane,

Personally came before me this 10th day of September, 1923 the above named Florence A. Tenney to me known to be one of the persons who executed the foregoing instrument, and acknowledged the same.

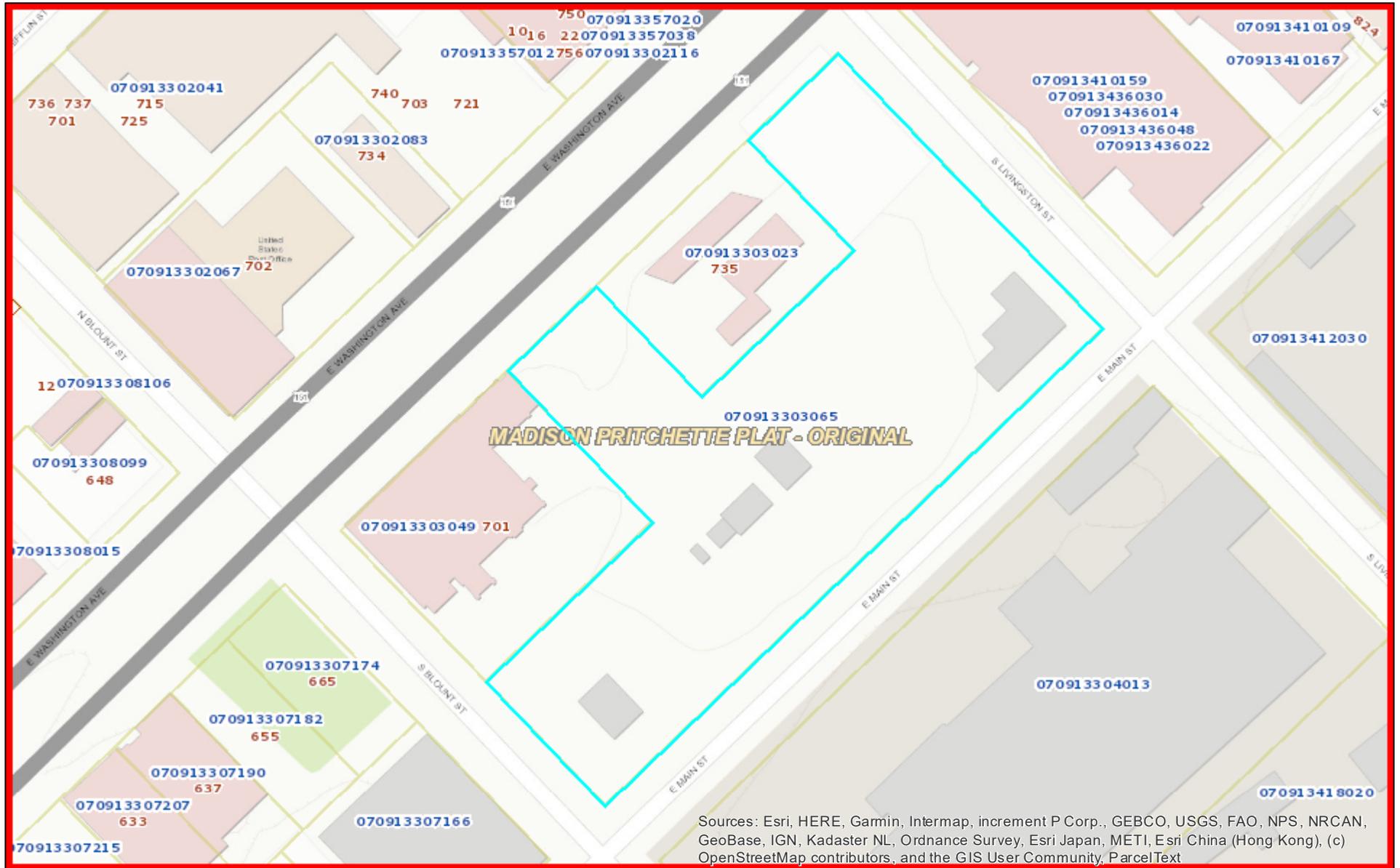
[Signature]

Notary Public, Dane County, Wisconsin.

My commission expires September 7 1925

No. <u>111</u>	McClellan Dodge	at al	To	Madison Gas & Electric Co.	<u>Lot 8</u> <u>Block 132</u>
Warranty Deed.					
REGISTERS OFFICE. State of Wisconsin, <u>Dane</u> County.					
Received for Record this <u>7</u> day of <u>Nov</u> A. D., 19 <u>23</u> at <u>10</u> o'clock <u>A. M.</u> , and recorded in Vol. <u>20</u> of Deeds, page <u>912</u> <u>C. G. Lewis</u> Register of Deeds.					
Deputy.					

[Signature] 158

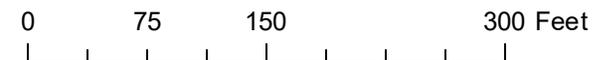


January 12, 2021

Dane County Mask

- Dane County Mask
- Parcel Number

- House Number
- CSM Text
- Plat Labels
- Plat Names
- Parcels



Parcel Number - 251/0709-133-0306-5

Current

Parcel Details

Municipality Name	CITY OF MADISON
State Municipality Code	251
Parcel Description	<p>LOTS 7, 9, 10, 11, 12, 13, 14, 15 & PARTS OF LOTS 5, 6, 7, 8, 16 & 18, BLK 132, PLAT OF THE TOWN OF MADISON ON THE FOUR LAKES, RECORDED IN VOL A OF PLATS, PAGE 1, DANE COUNTY REGISTRY, LOCTED IN THE NE 1/4, SW 1/4 & NW 1/4, SE 1/4 OF SEC 13, T7N R9E, CITY OF MADISON DESC AS FOLS: BEG AT A FOUND 1''' PIPE AT THE MOST NLY COR OF SD BLK 132; TH S 45 DEG 01 MIN 53 SEC E, ALG SWLY EDGE OF S LIVINGSTON ST, 330.56 FT TO THE E COR OF SD BLK 132; TH S 45 DEG 04 MIN 46 SEC W, ALG NW EDGE OF E MAIN ST, 593.38 FT TO S COR OF BLK 132; TH N 45 DEG 08 MIN 20 SEC W, ALG THE NE EDGE OF S BLOUNT ST, 148.27 FT TO A FOUND #6 REBAR; TH N 45 DEG 00 MIN 35 SEC E, 197.89 FT; TH N 45 DEG 06 MIN 11 SEC W, 181.51 FT TO THE W COR OF LOT 4 OF THE SD BLK 132; TH N 45 DEG E, ALG SE EDGE OF E WASHINGTON AVE, 106.06 FT TO A FOUND 1''' PIP; TH S 44 DEG 59 MIN 12 SEC E, 131.82 FT; TH N 44 DEG 52 MIN 42 SEC E, 181.78 FT TO A 1''' PIPE; TH N 44 DEG 56 MIN 03 SEC W, 131.43 FT TO THE SE EDGE OF E WASHINGTON AVE; TH N 45 DEG E, 108.04 FT TO POB. EXCEPT ALL OF LOT 9 EXCLUDING THE SELY 16.5 FT.</p> <p>This property description is for tax purposes. It may be abbreviated. For the complete legal description please refer to the deed.</p>
Current Owner	
Primary Address	722 E MAIN ST
Billing Address	TIM BLIEFERNICHT PO BOX 1231 MADISON WI 53701

Parcel Map



Current Year Taxes (2020)

Current year tax information not yet available.

Districts

Type	State Code	Description
REGULAR SCHOOL	3269	MADISON METRO SCHOOL DIST
TECHNICAL COLLEGE	0400	MADISON TECH COLLEGE

Recorded Documents

No recorded documents found.

Current Year Assessment

Assessment Year	2020
Valuation Classification	G2
Assessment Acres	0.000
Land Value	\$0.00
Improved Value	\$0.00
Total Value	\$0.00

Assessment Contacts

Assessment Contact Information	
For questions or to schedule an appointment contact:	
Assessor	MICHELLE DREA
Phone	608-266-4531
Email	ASSESSOR@CITYOFMADISON.COM
Clerk	MARIBETH WITZEL-BEHL
Phone	608-266-4601
Email	CLERK@CITYOFMADISON.COM

Open Book/Board Of Review Dates

Zoning Information

Contact your local city, village or town office for municipal zoning information.

ATTACHMENT F.3 - Verification of Zoning

City of Madison Property Information

Property Address: 722 E Main St

Parcel Number: 070913303065

Information current as of: 1/12/21 12:00AM

OWNER(S)

MADISON GAS & ELECTRIC
ATTN TIM BLIEFERNICHT

PO BOX 1231
MADISON, WI 53701-1231

REFUSE COLLECTION

District: 07B

SCHOOLS

District: Madison

- Lapham-Marquette
- O'Keeffe
- East

CITY HALL

Aldermanic District: 6
Alder Marsha Rummel

PROPERTY VALUE

Assessment Year	Land	Improvements	Total
2019	\$0	\$0	\$0
2020	\$0	\$0	\$0

TAX INFORMATION

Net Taxes:	\$0.00
Special Assessment:	\$0.00
Other:	\$0.00
Total:	\$0.00

PROPERTY INFORMATION

Property Type:	Commercial exempt	Property Class:	Commercial
Zoning:	TE, WP-24	Lot Size:	136,149 sq ft
Frontage:	593 - E Main St	Water Frontage:	NO
TIF District:	36	Assessment Area:	9934

COMMERCIAL BUILDING INFORMATION

[Commercial Property Record](#)

SALE/CONVEYANCE DETAILS (includes sales and other forms of conveyances)

Information current as of: 1/12/21 12:00AM

No conveyance information is available online. Please contact the Assessor's Office for additional information or questions.

LEGAL DESCRIPTION

Information current as of: 1/12/21 12:00AM

Notice: This description may be abbreviated and is for assessment purposes only. It should not be used to transfer property

Lot Number: 0

Block: 0

LOTS 7, 9, 10, 11, 12, 13, 14, 15 & PARTS OF LOTS 5, 6, 7, 8, 16 & 18, BLK 132, PLAT OF THE TOWN OF MADISON ON THE FOUR LAKES, RECORDED IN VOL A OF PLATS, PAGE 1, DANE COUNTY REGISTRY, LOCTED IN THE NE 1/4, SW 1/4 & NW 1/4, SE 1/4 OF SEC 13, T7N R9E, CITY OF MADISON DESC AS FOLS: BEG AT A FOUND 1" PIPE AT THE MOST NLY COR OF SD BLK 132; TH S 45 DEG 01 MIN 53 SEC E, ALG SWLY EDGE OF S LIVINGSTON ST, 330.56 FT TO THE E COR OF SD BLK 132; TH S 45 DEG 04 MIN 46 SEC W, ALG NW EDGE OF E MAIN ST, 593.38 FT TO S COR OF BLK 132; TH N 45 DEG 08 MIN 20 SEC W, ALG THE NE EDGE OF S BLOUNT ST, 148.27 FT TO A FOUND #6 REBAR; TH N 45 DEG 00 MIN 35 SEC E, 197.89 FT; TH N 45 DEG 06 MIN 11 SEC W, 181.51 FT TO THE W COR OF LOT 4 OF THE SD BLK 132; TH N 45 DEG E, ALG SE EDGE OF E WASHINGTON AVE, 106.06 FT TO A FOUND 1" PIP; TH S 44 DEG 59 MIN 12 SEC E, 131.82 FT; TH N 44 DEG 52 MIN 42 SEC E, 181.78 FT TO A 1" PIPE; TH N 44 DEG 56 MIN 03 SEC W, 131.43 FT TO THE SE EDGE OF E WASHINGTON AVE; TH N 45 DEG E, 108.04 FT TO POB. EXCEPT ALL OF LOT 9 EXCLUDING THE SELY 16.5 FT.

Property Information Questions?

Assessor's Office

210 Martin Luther King, Jr. Boulevard, Room 101
Madison, Wisconsin 53703-3342
Phone: (608) 266-4531
Email: assessor@cityofmadison.com

REAL PROPERTY TAX INFORMATION

Information current as of: 1/11/21 07:00PM

No tax information exists for this parcel. Please contact the Treasurer's Office for additional information.

Tax Information Questions?

Treasurer's Office

210 Martin Luther King, Jr. Boulevard, Room 107
Madison, Wisconsin 53703-3342
Phone: (608) 266-4771
Email: treasurer@cityofmadison.com

Disclaimer: The City of Madison collects and displays tax payments only for the current tax season of December through July 31st. If you have questions regarding property taxes for prior tax years, please contact the Dane County Treasurer's Office at (608) 266-4151 or for tax payment history, go to Dane County's [Access Dane](#).

REAL PROPERTY TAX REFERENDA INFORMATION

Information current as of: 1/11/21 07:00PM

Not applicable for this tax year.

For informational purposes only - Wisconsin law requires information to be displayed for any temporary property tax increases approved through a referendum or resolution by a county, municipality, school district, or technical college. If you would like more information, contact the taxing jurisdiction directly.

Tax Referenda Information Questions?

Treasurer's Office

210 Martin Luther King, Jr. Boulevard, Room 107
Madison, Wisconsin 53703-3342
Phone: (608) 266-4771
Email: treasurer@cityofmadison.com

SPECIAL ASSESSMENTS

Information current as of: 1/11/21 10:00PM

No Special Assessments exist for Parcel Number 070913303065.
Please contact the Finance Office for additional information.

Special Assessment Questions?

Finance Office

210 Martin Luther King, Jr. Boulevard, Room 406

Madison, Wisconsin 53703-3345

Phone: 266-4671

Email: finance@cityofmadison.com

ZONING DISTRICTS

Who to contact:

Zoning, (608) 266-4551

Residential Districts*

SR-C1 Suburban Residential - Consistent District 1
SR-C2 Suburban Residential - Consistent District 2
SR-C3 Suburban Residential - Consistent District 3
SR-V1 Suburban Residential - Varied District 1
SR-V2 Suburban Residential - Varied District 2
TR-C1 Traditional Residential - Consistent District 1
TR-C2 Traditional Residential - Consistent District 2
TR-C3 Traditional Residential - Consistent District 3
TR-C4 Traditional Residential - Consistent District 4
TR-V1 Traditional Residential - Varied District 1
TR-V2 Traditional Residential - Varied District 2
TR-U1 Traditional Residential - Urban District 1
TR-U2 Traditional Residential - Urban District 2
TR-R Traditional Residential - Rustic District
TR-P Traditional Residential - Planned District

* When other Chapters of the Madison General Ordinances refer to residential districts, the Downtown Residential Districts, DR1 and DR2, shall be included.

Commercial and Mixed-Use Districts

LMX Limited Mixed-Use
NMX Neighborhood Mixed-Use District
TSS Traditional Shopping Street District
MXC Mixed-Use Center District
CC-T Commercial Corridor - Transitional District
CC Commercial Center District

Employment Districts

TE Traditional Employment District
SE Suburban Employment District
SEC Suburban Employment Center District
EC Employment Campus District
IL Industrial - Limited District
IG Industrial - General District

Downtown and Urban Districts

DC Downtown Core
UOR Urban Office Residential
UMX Urban Mixed-Use
DR1 Downtown Residential 1
DR2 Downtown Residential 2

Special Districts

A Agricultural District
UA Urban Agricultural District
CN Conservancy District
PR Parks and Recreation
AP Airport District
CI Campus Institutional District
PD Planned Development District
PMHP Planned Mobile Home Park District

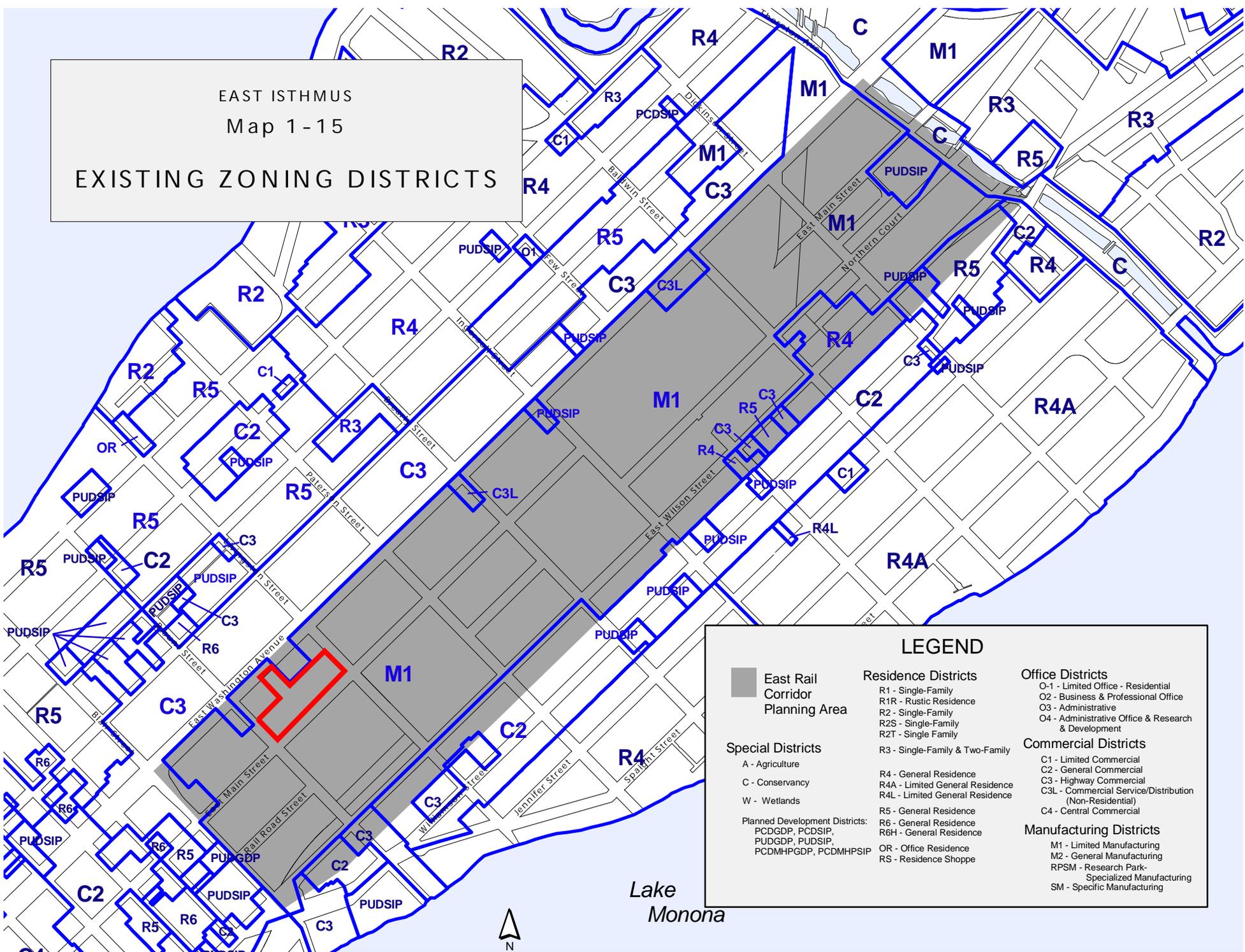
Overlay Districts

WP Wellhead Protection Overlay Districts
W Wetland Overlay District
TOD Transit Oriented Development Overlay District
NC Neighborhood Conservation Overlay Districts
F1 Floodway District
F2 Flood Fringe District
F3 General Floodplain District
F4 Flood Storage District

Historic District Suffixes

HIST-L Designated Landmark
HIST-MH Mansion Hill Historic District
HIST-TL Third Lake Ridge Historic District
HIST-UH University Heights Historic District
HIST-MB Marquette Bungalows Historic District
HIST-FS First Settlement Historic District

EAST ISTHMUS
Map 1-15
EXISTING ZONING DISTRICTS



LEGEND

- East Rail Corridor Planning Area

Residence Districts

- R1 - Single-Family
- R1R - Rustic Residence
- R2 - Single-Family
- R2S - Single-Family
- R2T - Single-Family
- R3 - Single-Family & Two-Family
- R4 - General Residence
- R4A - Limited General Residence
- R4L - Limited General Residence
- R5 - General Residence
- R6 - General Residence
- R6H - General Residence
- OR - Office Residence
- RS - Residence Shoppe

Office Districts

- O-1 - Limited Office - Residential
- O2 - Business & Professional Office
- O3 - Administrative
- O4 - Administrative Office & Research & Development

Commercial Districts

- C1 - Limited Commercial
- C2 - General Commercial
- C3 - Highway Commercial
- C3L - Commercial Service/Distribution (Non-Residential)
- C4 - Central Commercial

Manufacturing Districts

- M1 - Limited Manufacturing
- M2 - General Manufacturing
- RPSM - Research Park-Specialized Manufacturing
- SM - Specific Manufacturing

Special Districts

- A - Agriculture
- C - Conservancy
- W - Wetlands

Planned Development Districts:

- PCDGGDP, PCDSIP, PUDGDP, PUDSIP, PCDMHGDP, PCDMHSP

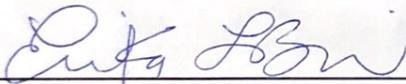
Attachment F.4: Signed Statement

Site Name: ATC Transformer Fire - MG&E Blount
Substation (BRRTS# 02-13-584085)

Site Address: 722 East Main Street
Madison, WI 53703

Responsible Party: American Transmission Company, LLC
Address: W234 N2000 Ridgeview Parkway Court
Pewaukee, WI 53188

I, Erika Biemann, certify that I am a representative of the above named responsible party, and, to the best of my knowledge, that the attached legal description is complete and accurate for all of the property within or partially within the contaminated site's boundaries, as determined under ss. NR 720.09, 720.11 and 720.19 at the time of this case closure request.



Signature

1/7/2020
Date

Case Closure – GIS Registry
ATC Transformer Fire – MG&E Blount Substation
722 East Main Street
BRRTS #02-013-584085 FID #113435520

ATTACHMENT G – NOTIFICATIONS

Blount SS – MG&E Notification Letter dated 12-21-2020.

SOURCE
PROPERTY

AFFECTED
A
PROPERTY

Notification of Continuing Obligations and Residual Contamination

The affected property is:

- the source property (the source of the hazardous substance discharge), but the property is not owned by the person who conducted the cleanup (a deeded property)
- a deeded property affected by contamination from the source property
- a right-of-way (ROW)
- a Department of Transportation (DOT) ROW

Include this completed page as an attachment with all notifications provided under sections A and B.

Contact Information

Responsible Party: The person responsible for sending this form, and for conducting the environmental investigation and cleanup is:

Responsible Party Name American Transmission Company, LLC

Contact Person Last Name Biemann	First Erika	MI	Phone Number (include area code) (262) 506-6702
Address W234 N2000 Ridgeview Parkway Court	City Pewaukee	State WI	ZIP Code 53188
E-mail ebiemann@atcllc.com			

Name of Party Receiving Notification:

Business Name, if applicable: Madison Gas & Electric Company

Title Mr.	Last Name Jaeckels	First Jeffery	MI	Phone Number (include area code) (608) 252-7060
Address 623 Railroad Street	City Madison	State WI	ZIP Code 53703	

Site Name and Source Property Information:

Site (Activity) Name Blount Substation

Address 722 East Main Street	City Madison	State WI	ZIP Code 53703
DNR ID # (BRRTS#) 02-13-584085	(DATCP) ID #		

Contacts for Questions:

If you have any questions regarding the cleanup or about this notification, please contact the Responsible Party identified above, or contact:

Environmental Consultant: AECOM Technical Services, Inc.

Contact Person Last Name Linnemanstons	First Leo	MI	Phone Number (include area code) (608) 828-8208
Address 1350 Deming Way	City Middleton	State WI	ZIP Code 53562
E-mail leo.linnemanstons@aecom.com			

Department Contact:

To review the Department's case file, or for questions on cleanups or closure requirements, contact:

Department of: Natural Resources (DNR) Office: Fitchburg

Address 3911 Fish Hatchery Road	City Fitchburg	State WI	ZIP Code 53711
Contact Person Last Name Martin	First Steven	MI	Phone Number (include area code) (608) 275-3310
E-mail (Firstname.Lastname@wisconsin.gov) stevenl.martin@wisconsin.gov			

SOURCE
PROPERTY

AFFECTED
A
PROPERTY

Notification of Continuing Obligations and Residual Contamination

Section A: Deeded Property Notification: Residual Contamination and/or Continuing Obligations

KEEP THIS DOCUMENT WITH YOUR PROPERTY RECORDS

623 Railroad Street
Madison, WI, 53703

Dear Mr. Jaeckels:

I am providing this letter to inform you of the location and extent of contamination remaining on your property, and of certain long-term responsibilities (continuing obligations) for which you may become responsible.

I have investigated a release of:

Per- and Polyfluoroalkyl Substances (PFAS)

on 722 East Main Street, Madison, WI, 53703 that has shown that contamination remains on this source property. I have responded to the release and will be requesting that the Department of Natural Resources (DNR) grant case closure. Closure means that the DNR will not be requiring any further investigation or cleanup action to be taken. However, continuing obligations may be imposed as a condition of closure approval.

You have 30 days to comment on the attached legal description of your property and on the proposed closure request:

Please review the enclosed legal description of your property, and notify Leo Linnemanstons at 1350 Deming Way, Middleton, WI, 53562 within the next 30 days if the legal description is incorrect.

The DNR will not review my closure request for at least 30 days after the date of receipt of this letter. As an affected property owner, you have a right to contact the DNR to provide any technical information that you may have that indicates that closure should not be granted for this site. If you would like to submit any information that is relevant to this closure request, or if you want to waive the 30 day comment period, you should mail that information to the DNR contact: 3911 Fish Hatchery Road, Fitchburg, WI, 53711, or at stevenl.martin@wisconsin.gov.

Your Long-Term Responsibilities as a Property Owner and Occupant:

The responses included approximately 140,000 gallons of PFAS impacted water was collected, treated, and discharged under a Wisconsin Pollution Elimination Discharge System (WPDES) permit and approximately 1,000 tons of PFAS-impacted solid waste from this site was disposed at an out-of-state hazardous waste facility.

The continuing obligations I am proposing that affect your property are listed below, under the heading **Continuing Obligations**. Under s. 292.12 (5), Wis. Stats., current and future owners and occupants of this property are responsible for complying with continuing obligations imposed as part of an approved closure.

The fact sheet "Continuing Obligations for Environmental Protection" (DNR publication RR 819) has been included with this letter, to help explain the responsibilities you may have for maintenance of a certain continuing obligation, the limits of any liability for investigation and cleanup of contamination, and how these differ. If the fact sheet is lost, you may obtain copies at <http://dnr.wi.gov/files/PDF/pubs/rr/RR819.pdf>.

Contract for responsibility for continuing obligation:

Before I request closure, I will need to inform the DNR as to whom will be responsible for the continuing obligation/s on your property.

Continuing obligations will be the responsibility of the property owner.

Under s. 292.12, Wis. Stats., the responsibility for maintaining all necessary continuing obligations for your property will fall on you or any subsequent property owner, unless another person has a legally enforceable responsibility to comply with the requirements of the final closure letter. If you need more time to finalize an agreement on the responsibility for the continuing obligations on your Property, you may request additional time from the DNR contact identified in **Contact Information**.

(Note: Future property owners would need to negotiate a new agreement.)

Remaining Contamination:**a. Soil Contamination:**

Soil contamination remains at :
shallow soil (less than 1 ft below ground surface) across a portion of the substation as shown on the attached isoconcentration map.

The remaining contaminants include:
PFOA and PFOS

at levels which exceed the soil standards found in ch. NR 720, Wis. Adm. Code. The following steps have been taken to address any exposure to the remaining soil contamination.
Soil with PFAS concentrations exceeding the generic nonindustrial direct contact residual contaminant limit were removed. However, soils with PFAS concentrations that exceed the generic groundwater protection residual contaminant limit remain at the site.

Continuing Obligations on Your Property: As part of the cleanup, I am proposing that the following continuing obligations be used at your property, to address future exposure to residual contamination. If my closure request is approved, you will be responsible for the following continuing obligations.

To construct a new well or to reconstruct an existing well, the property owner at the time of construction or reconstruction will need to obtain prior approval from the DNR. See **Well Construction Requirements**. Typically, this results in casing off a portion of the aquifer during drilling, when needed, to protect the water supply.

a. Residual Soil Contamination:

If soil is excavated from the areas with residual contamination, the property owner at the time of excavation will be responsible for the following:

- determine if contamination is present
- determine whether the material would be considered solid or hazardous waste
- ensure that any storage, treatment or disposal is in compliance with applicable statutes and rules.

Contaminated soil may be managed in-place, in accordance with ch. NR 718, Wis. Adm. Code, with prior DNR approval. In addition, all current and future property owners and occupants of the property and right-of-way holders need to be aware that excavation of the contaminated soil may pose an inhalation or other direct contact hazard and as a result special precautions may need to be taken during excavation activities to prevent a health threat to humans.

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

Maintenance and Audits of Continuing Obligations:

If compliance with a maintenance plan is required as part of a continuing obligation, an inspection log will need to be filled out periodically, and kept available for inspection by the DNR. Submittal of the inspection log may also be required. You will also need to notify any future owners or occupants of this property of the need to maintain the continuing obligation and to document that maintenance in the inspection log. Periodic audits of these continuing obligations may be conducted by the DNR, to ensure that potential exposure to residual contamination is being addressed. The DNR provides notification before conducting site visits as part of the audit.

Well Construction Requirements:

If this site is closed, all properties within the site boundaries where contamination remains, or where a continuing obligation is applied, will be listed on the Bureau for Remediation and Redevelopment Tracking System (BRRTS) on the Web, at <https://dnr.wi.gov/topic/Brownfields/WRRD.html>. Inclusion on this database provides public notice of remaining contamination and of any continuing obligations. Documents can be viewed on this database, and include final closure letters, site maps and any applicable maintenance plans. The location of the site may also be viewed on the Remediation and Redevelopment Sites Map (RR Sites Map), at the same internet address listed above.

DNR approval prior to well construction or reconstruction is required in accordance with s. NR 812.09 (4) (w), Wis. Adm. Code. This requirement applies to private drinking water wells and high capacity wells. Special well construction standards may be necessary to protect the well from the remaining contamination. The property owner needs to first obtain approval from a regional water supply specialist in DNR's Drinking Water and Groundwater Program. A well driller can help complete this form. The well construction application, form 3300-254, is on the internet at <https://dnr.wi.gov/files/PDF/forms/3300/3300-254.pdf>.

Site Closure:

If the DNR grants closure, you will receive a letter which defines the specific continuing obligations on your property. The status of the site (open or closed) may also be checked by searching BRRTS on the Web. You may view or download a copy of the closure letter (sent to the responsible party) from BRRTS on the Web. You may also request a copy of the closure letter from the **responsible party** or by writing to the DNR contact, at Steven Martin, stevenl.martin@wisconsin.gov, (608) 275-3310. The final closure letter will contain a description of the continuing obligation, any prohibitions on activities and will include any applicable maintenance plan.

If you have any questions regarding this notification, I can be reached at: (608) 828-8208
Leo.Linnemanstons@acem.com



Date Signed 12/21/2020

Signature of responsible party/environmental consultant for the responsible party

Attachments**Contact Information****Legal Description for each Parcel:****Maps:****Factsheets:**

RR 819, Continuing Obligations for Environmental Protection

SOURCE
PROPERTY

AFFECTED
A
PROPERTY

Blount Substation Parcel

Parcel Number: 070913303065

722 E MAIN ST

City of Madison, Dane County, Wisconsin

Approx. Square Ft: 135,979 sq ft

Legal Description

LOTS 7, 9, 10, 11, 12, 13, 14, 15 & PARTS OF LOTS 5, 6, 7, 8, 16 & 18, BLK 132, PLAT OF THE TOWN OF MADISON ON THE FOUR LAKES, RECORDED IN VOL A OF PLATS, PAGE 1, DANE COUNTY REGISTRY, LOCATED IN THE NE 1/4, SW 1/4 & NW 1/4, SE 1/4 OF SEC 13, T7N R9E, CITY OF MADISON DESCRIBED AS FOLLOWS: BEG AT A FOUND 1" PIPE AT THE MOST NLY COR OF SD BLK 132; TH S 45 DEG 01 MIN 53 SEC E, ALG SWLY EDGE OF S LIVINGSTON ST, 330.56 FT TO THE E COR OF SD BLK 132; TH S 45 DEG 04 MIN 46 SEC W, ALG NW EDGE OF E MAIN ST, 593.38 FT TO S COR OF BLK 132; TH N 45 DEG 08 MIN 20 SEC W, ALG THE NE EDGE OF S BLOUNT ST, 148.27 FT TO A FOUND #6 REBAR; TH N 45 DEG 00 MIN 35 SEC E, 197.89 FT; TH N 45 DEG 06 MIN 11 SEC W, 181.51 FT TO THE W COR OF LOT 4 OF THE SD BLK 132; TH N 45 DEG E, ALG SE EDGE OF E WASHINGTON AVE, 106.06 FT TO A FOUND 1" PIPE; TH S 44 DEG 59 MIN 12 SEC E, 131.82 FT; TH N 44 DEG 52 MIN 42 SEC E, 181.78 FT TO A 1" PIPE; TH N 44 DEG 56 MIN 03 SEC W, 131.43 FT TO THE SE EDGE OF E WASHINGTON AVE; TH N 45 DEG E, 108.04 FT TO POB. EXCEPT ALL OF LOT 9 EXCLUDING THE SELY 16.5 FT.

Source: City of Madison Assessor's Office

SOURCE PROPERTY

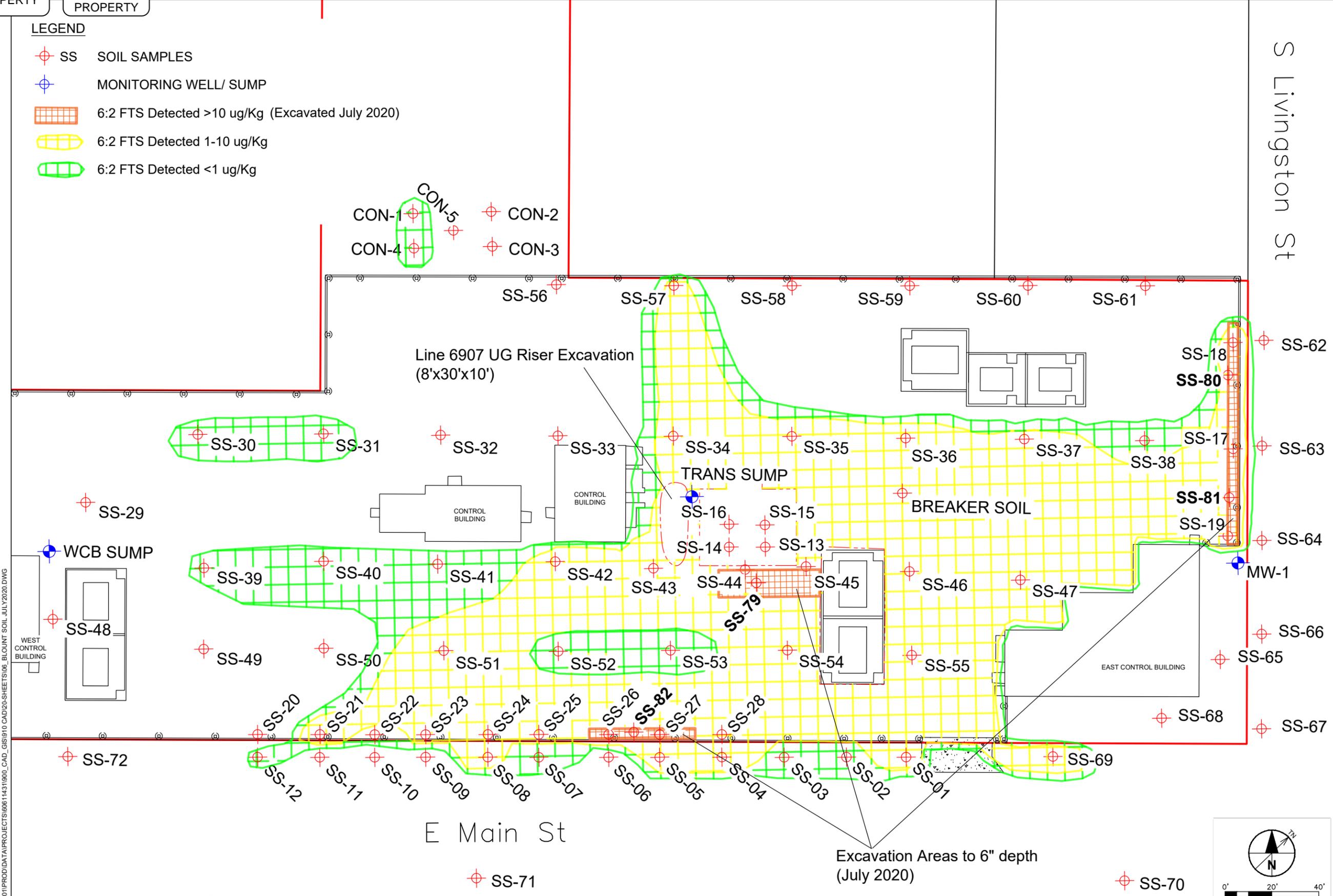
AFFECTED A PROPERTY

LEGEND

- SS SOIL SAMPLES
- MONITORING WELL/ SUMP
- 6:2 FTS Detected >10 ug/Kg (Excavated July 2020)
- 6:2 FTS Detected 1-10 ug/Kg
- 6:2 FTS Detected <1 ug/Kg

CON-1 CON-5
 CON-4 CON-3
 CON-2

S Livingston St



Excavation Areas to 6" depth (July 2020)

North arrow pointing up.

Scale: 0' 20' 40'

DIGGERS HOTLINE
 Dial 800 or (800) 242-8511
 www.DiggersHotline.com



PROJECT
 ATC BLOUNT
 SUBSTATION
 RESPONSE AND
 CLEANUP
 MADISON, WISCONSIN

CLIENT
 AMERICAN
 TRANSMISSION CO.

2 FEN OAK CT.
 MADISON, WI 53718
 (866) 899-3204 tel
 www.atcllc.com

CONSULTANT
 AECOM
 1555 N RIVERCENTER DR.
 MILWAUKEE, WI 53212
 (414) 944-6080 tel
 www.aecom.com

REGISTRATION

ISSUE/REVISION

I/R	DATE	DESCRIPTION

KEY PLAN

PROJECT NUMBER
 60611431

DRAWING TITLE
 PFAS SOIL REMOVAL AREAS

DRAWING NUMBER SHEET NUMBER
 Figure 3

Plotted By: joel.mackinney
 Plot File Date Created: Jul/23/2020 6:12 PM
 Filename: \\USM\WK1\FS001\IPROD\DATA\PROJECTS\60611431\800_CAD_GIS\910_CAD\20-SHEETS\06_BLOUNT SOIL JULY 2020.DWG

SOURCE
PROPERTY

AFFECTED
A
PROPERTY



DOWNTOWN OSHKOSH
130 STATE ST
OSHKOSH, WI 54901-9998
(800)275-8777

01/12/2021 09:04 AM

Product	Qty	Unit Price	Price
First-Class Mail® Large Envelope	1		\$1.40
Madison, WI 53703 Weight: 0 lb 2.50 oz Estimated Delivery Date Fri 01/15/2021			
Certified Mail®			\$3.55
Tracking #:	70102780000265254018		
Return Receipt			\$2.85
Total			\$7.80

Grand Total: \$7.80

Credit Card Remitted \$7.80
 Card Name: VISA
 Account #: XXXXXXXXXX3177
 Approval #: 080077
 Transaction #: 467
 AID: A000000031010 Chip
 AL: VISA CREDIT
 PIN: Not Required

 USPS is experiencing unprecedented volume increases and limited employee availability due to the impacts of COVID-19. We appreciate your patience.

Text your tracking number to 28777 (2USPS) to get the latest status. Standard Message and Data rates may apply. You may also visit www.usps.com USPS Tracking or call 1-800-222-1811.

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Tell us about your experience. Go to: <https://postalexperience.com/Pos> or scan this code with your mobile device.



or call 1-800-410-7420.

UFN: 566280-0281
 Receipt #: 840-55300566-2-3597177-2
 Clerk: 11

7010 2780 0002 6525 4018

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 (Domestic Mail Only; No Insurance Coverage Provided)

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Madison WI 53703

OFFICIAL USE

Postage	\$3.55
Certified Fee	\$2.85
Return Receipt Fee (Endorsement Required)	\$0.00
Restricted Delivery Fee (Endorsement Required)	\$0.00
Total Postage & Fees	\$1.40
	\$7.80

Stamp: OSHKOSH WI 54901-9998, Jan 12 2021, USPS, 01/12/2021

Sent To: MGE 90 Jeffrey Jackles
 Street, Apt. No.; or PO Box No: 123 Railroad St
 City, State, ZIP+4: Madison, WI 53703

PS Form 3800, August 2006 See Reverse for Instructions

USPS Tracking®

[FAQs >](#)

SOURCE
PROPERTY

AFFECTED
A
PROPERTY

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(<https://reg.usps.com/xsell?app=UspsTools&ref=homepageBanner&appURL=https%3A%2F%2Finformeddelivery.usps.com/box/pages/intro/start.action>)

Tracking Number: 70102780000265254018

[Remove X](#)

Your item has been delivered to an agent for final delivery in MADISON, WI 53703 on
January 19, 2021 at 12:01 pm.

Feedback

Delivered to Agent

January 19, 2021 at 12:01 pm
Delivered to Agent for Final Delivery
MADISON, WI 53703

Get Updates 

Text & Email Updates



Tracking History



January 19, 2021, 12:01 pm

Delivered to Agent for Final Delivery
MADISON, WI 53703

Your item has been delivered to an agent for final delivery in MADISON, WI 53703 on
January 19, 2021 at 12:01 pm.

January 16, 2021, 7:54 am

Delivery Attempted - No Access to Delivery Location
53703

SOURCE
PROPERTY

January 16, 2021, 6:10 am

Available for Pickup

MADISON, WI 53703

AFFECTED
A
PROPERTY

January 16, 2021, 5:22 am

Arrived at Post Office

MADISON, WI 53703

January 15, 2021, 7:57 pm

Departed USPS Regional Facility

MADISON WI DISTRIBUTION CENTER

January 15, 2021, 7:03 pm

Arrived at USPS Regional Facility

MADISON WI DISTRIBUTION CENTER

January 15, 2021

In Transit to Next Facility

January 13, 2021, 11:43 pm

Departed USPS Regional Facility

MILWAUKEE WI PROCESSING CENTER

January 13, 2021, 1:10 pm

Arrived at USPS Regional Facility

MILWAUKEE WI PROCESSING CENTER

January 12, 2021, 5:02 pm

Departed Post Office

OSHKOSH, WI 54901

January 12, 2021, 9:01 am

USPS in possession of item

OSHKOSH, WI 54901

Feedback

Product Information



SOURCE
PROPERTY

AFFECTED
A
PROPERTY

Postal Product:
First-Class Mail®

Features:
Certified Mail™
Return Receipt

See Less ^

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FAQs

Feedback

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[FAQs >](#)

SOURCE
PROPERTY

AFFECTED
A
PROPERTY

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(<https://reg.usps.com/xsell?app=UspsTools&ref=homepageBanner&appURL=https%3A%2F%2Finformeddelivery.usps.com/box/pages/intro/start.action>)

Tracking Number: 70102780000265254018

[Remove X](#)

Your item has been delivered to an agent for final delivery in MADISON, WI 53703 on January 19, 2021 at 12:01 pm.

Feedback

Delivered to Agent

January 19, 2021 at 12:01 pm
Delivered to Agent for Final Delivery
MADISON, WI 53703

Get Updates 

Text & Email Updates 

Tracking History 

January 19, 2021, 12:01 pm

Delivered to Agent for Final Delivery
MADISON, WI 53703

Your item has been delivered to an agent for final delivery in MADISON, WI 53703 on January 19, 2021 at 12:01 pm.

January 16, 2021, 7:54 am

Delivery Attempted - No Access to Delivery Location
53703

SOURCE
PROPERTY

January 16, 2021, 6:10 am

Available for Pickup

MADISON, WI 53703

AFFECTED
A
PROPERTY

January 16, 2021, 5:22 am

Arrived at Post Office

MADISON, WI 53703

January 15, 2021, 7:57 pm

Departed USPS Regional Facility

MADISON WI DISTRIBUTION CENTER

January 15, 2021, 7:03 pm

Arrived at USPS Regional Facility

MADISON WI DISTRIBUTION CENTER

January 15, 2021

In Transit to Next Facility

January 13, 2021, 11:43 pm

Departed USPS Regional Facility

MILWAUKEE WI PROCESSING CENTER

January 13, 2021, 1:10 pm

Arrived at USPS Regional Facility

MILWAUKEE WI PROCESSING CENTER

January 12, 2021, 5:02 pm

Departed Post Office

OSHKOSH, WI 54901

January 12, 2021, 9:01 am

USPS in possession of item

OSHKOSH, WI 54901

Feedback

Product Information



SOURCE
PROPERTY

AFFECTED
A
PROPERTY

Postal Product:
First-Class Mail®

Features:
Certified Mail™
Return Receipt

See Less ^

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FAQs

Feedback