



GILES

ENGINEERING ASSOCIATES, INC.

GEOTECHNICAL, ENVIRONMENTAL & CONSTRUCTION MATERIALS CONSULTANTS

- Atlanta, GA
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- Milwaukee, WI

April 19, 2021
Revised May 17, 2021

Wisconsin Department of Natural Resources
Southeast Region Headquarters
2300 N. Martin Luther King, Jr. Drive
Milwaukee, WI 53212

Attention: Mr. James Delwiche c/o Mr. Mark Peters
Waste Management Engineer-Adv

Subject: Request for Low Hazard Waste Grant of Exemption – Addendum 04
The Couture Development
909 East Michigan Street
Milwaukee, Wisconsin
Project No. 1E-1704010
WDNR BRRTS No. 02-41-579105
WDNR FID No. 341286220

Dear Mr. Delwiche:

Giles Engineering Associates, Inc. (Giles) has prepared this Low Hazardous Waste Grant of Exemption request (LHE) under Section 289.83(8)§ on behalf of The Couture LLC. The Couture LLC is the property owner and “Responsible Party” (RP) for *The Couture Development* (“Site”) located at 909 East Michigan Street in the City of Milwaukee, Milwaukee County, Wisconsin (Figure 1).

The presence of impacted fill material at the Site was documented in the Giles report titled: *Site Investigation Report & Remedial Action Plan (SIR & RAP)*, dated October 11, 2017. The SIR & RAP is enclosed with this document for reference (Attachment A). In the SIR & RAP, Giles presents the history of the Site, investigation activities performed, and results. This report should be read in conjunction with this document. Giles has prepared this LHE requesting approval to dispose of the fill material to be generated during development of the Couture property at the City of Milwaukee’s *South College Avenue Landfill* located at 1701 East College Avenue Milwaukee, Wisconsin. This document is an amendment to the previously submitted LHE document *Grant of LHE Petition - Addendum 02*, dated September 6, 2017 and revised February 12, 2018.

GENERATING SITE

The following information pertains to The Couture Development site located at 909 East Michigan Street Milwaukee, Wisconsin.

Proposed Development

The Couture Development is located on a 1.59-acre portion of the property located at 909 East Michigan Street. The planned 44-story skyscraper will include condominiums with commercial space on the lower levels. The building will also be constructed with two levels of sub-grade parking. To accommodate the parking structure, the Site will be excavated to approximately 25 feet below ground surface (bgs).

Site Figure

A topographic map of the Site showing the property's general location and a detailed Site map with the location of sample points are included as Figures 1 and 2, respectively. A fill distribution map showing the thickness of fill material across the Site is attached as Figure 3.

Analytical Soil Data

The environmental investigation of the property was performed in 2016 through 2017 and included the collection of soil samples for analysis from 60 borings completed throughout the property (Figure 2). Samples were collected from varying intervals in each boring based on the thickness and type of fill encountered. The samples were submitted to a Wisconsin-certified analytical laboratory for analysis of volatile organic compounds (VOCs), polynuclear aromatic hydrocarbons (PAHs), and select metals (arsenic, lead, selenium, and mercury).

Based on the soil samples collected from soil borings completed at the Site, it was determined that there are three distinguishable materials encountered in the soil profile from 0 to 25 feet: soil fill (clay, sand, and sand & gravel); foundry sand and cinder (incinerated) waste fill; and native soil (sand and clay). Based on the analytical laboratory results collected by Giles, and data available for surrounding properties, it was apparent that the fill condition is an historic area-wide condition that extends along the Lake Michigan shoreline.

VOCs, including benzene and trichloroethene, were detected above their respective NR 720 RCLs in several shallow samples from fill material. Through the collection of additional samples, the vertical and lateral extents of these VOC “hot spots” were defined. Additionally, PAHs and metals above their respective NR 720 RCLs were detected in samples of fill material collected from borings throughout the Site. Though present in the fill material, VOCs, PAHs, and metals were not detected in the underlying native soil above their respective NR 720 RCLs and/or Background Threshold Value (BTV). The analytical results are summarized in Tables 1 through 6 within the SI & Rap (Attachment A).

Based on the soil analytical results, Giles developed a management plan for the proper handling of the soil generated during construction activities¹. The VOC “hot spots” and native soil will be excavated and taken to a State Licensed Landfill for disposal/management. The soil fill will be taken to a WDNR-approved alternative facility for disposal. The off-Site disposal of the foundry sand and cinder waste fill at a WDNR-approved alternative facility is subject of this LHE request.

Total Fill Material Volume

As discussed, a below-grade parking structure will be constructed as part of The Couture Development. Driven-interlocking steel sheeting will be installed around the perimeter of the property to stabilize sidewalls during construction of the subsurface parking structure. Giles anticipates that the entire 1.59-acre sheetpile wall area will be excavated to 25 feet during the construction, and a total of approximately 64,300 to 65,640 cubic yards (cy) of material will be generated. Giles estimates that of the material generated, approximately 2,950 *in-situ* cy of VOC-impacted soil will be excavated and transported to a licensed landfill for disposal; approximately 26 to 28,000 *in-situ* cy of PAH and metals-impacted fill material will be generated and disposed of at WDNR-approved alternative facilities; and an estimated volume of 33,355 to 34,690 cy of native soil will be managed at a licensed landfill.

The City of Milwaukee Department of Public Works (DPW) has agreed to accept up to 26,000 cy of the foundry and cinder fill at their *South College Avenue Landfill* located at 1701 East College Avenue Milwaukee, Wisconsin. Giles is therefore requesting that the *South College Avenue Landfill* be approved as a WDNR-approved alternative facility for the foundry and cinder fill material.

Sampling Frequency

Giles calculates that approximately 26,000 to 28,000 *in-situ* cy of PAH and RCRA metals-impacted fill material will be generated during the excavation of the parking structure. Based on the soil sampling performed for both the Limited Phase II ESA and the SI, a total of 107 samples were analyzed for PAHs and 57 were analyzed for select RCRA metals. This sampling frequency equates to one sample per 262 yd³ and meets the sampling requirements set forth in WAC §718.12(1)(e).

RECEIVING SITE

The following information pertains to the City of Milwaukee DPW's *South College Avenue Landfill* site located at 1701 East College Avenue Milwaukee, Wisconsin. The location of the landfill is shown on the attached Figure 4. The DPW has agreed to accept a maximum of up to 10,000 cy of fill material containing cinders and foundry material from the Couture Site for disposal at the South College Avenue Landfill. The agreement letter with the City of Milwaukee is included as Attachment B.

¹ CH NR 718.12 Soil Management Plan, dated February 8, 2018, revised April 26, 2018, final revised May 7, 2018 and its Addendums 01 & 02

Site Description

The *South College Avenue Landfill* is a 22-acre parcel with fill material covering approximately 18 acres. A map of the landfill is shown on Figure 5. Giles reviewed the WDNR’s Surface Water Data Viewer to evaluate the receiving site regarding material placement locational criteria as outlined in NR 718.12 (l)(c). Giles has made the following determinations regarding the landfill:

- The landfill is not within a floodplain.
- Wetland areas are present on the south end of the landfill property. However, the wetland location is not within the active landfill portion of the property. Wetlands are also present off-site along portions of the east and west property lines. The railroad that adjoins the landfill to the east transects the wetlands on the eastern property. Wetland areas are shown on Figure 6. Erosion control measures, such as silt fencing and vegetation on slopes, have been established around the landfill mass to prevent damage to the wetlands. An exemption from NR 718.12 (l)(c)2, which pertains to the setback distance of placed material to wetlands, will be required.
- The Mitchell Field Drainage Ditch (Unnamed Tributary to Oak Creek, Water Body Identification Code 14800) runs along the west property boundary and is considered a navigable stream (Figure 6). There are no other navigable streams, rivers, lakes, ponds, or flowages near the landfill. An exemption from NR 718.12 (l)(c)3, which pertains to the setback distance of placed material from streams, will be required.
- There are no on-site water supply wells.
- There are no off-site water supply wells within 300 feet of the property.
- The high groundwater level was measured at approximately 4.5 feet below top of casing in groundwater monitoring wells installed around the base of the landfill mass. New material for disposal at the landfill will be placed atop the existing landfill mass at an elevation of approximately 20 to 30 feet above street level².

Historic Use of the Property

The property was purchased by the City of Milwaukee (the “City”) for use as a landfill in 1953. The site was used as an unlicensed solid waste disposal facility for the disposal of soil with low-level contamination and some waste. Soil borings completed throughout the property in 1996 determined that approximately 1% of the fill material on the property consisted of garbage, 10% was ash and cinders, and the remaining 89% was clean fill composed of soil, concrete, and asphalt. The details of the 1996 evaluation are included in a letter from Hydro-Search, Inc. to the WDNR dated July 10, 1996 (Attachment C).

²Height of landfill mass is based on a landfill mass survey performed by R.A. Smith, Inc. in September 2020 and presented in the *Annual Report for 2020 Monitoring Identification No. 4131*, dated February 23, 2021 by GZA GeoEnvironmental, Inc.

The landfill was opened several times to accept material under low-hazard waste exemptions for specific street and utility earthwork projects completed by the City. Including in 2014 for disposal of material generated during repairs to the City's water distribution system, in 2016 for material generated from the Marquette Interchange project³, and in 2019 for the Street Car project.

Current Use of the Property

Since 2014, the property has operated as a landfill for the DPW. The landfill takes in clean fill generated from water main breaks, street lighting repairs, and other DPW-approved clean fill projects. According to GZA GeoEnvironmental, Inc.'s (GZA, Inc.) 2020 Annual Report⁴ for the landfill (Attachment D), placement of the fill material on the site is performed in accordance with the General Permit for Storm Water Discharges Associated with Land Disturbing Construction Activities and stormwater management best practices. In 2020, approximately 28,171 cubic yards (cy) of fill material was placed on the site, with a total of approximately 305,255 cubic yards of material placed at the landfill since 2014. According to GZA, Inc.'s estimates, the landfill can accept another 154,415 cy of material (uncompacted) under the current WDNR-approved capacity limit.

Materials Management Practices

Upon receipt of WDNR approval, the Couture LHE material transported and placed at the South College Avenue Landfill during the spring through late summer of 2021. The placement schedule coincides with middle to southern area of the landfill that is requiring fill to meet final grading (less the 2 feet of capping material). The Couture LHE material will be capped and seeded in August/September 2021.

The procedures presented in the approved Closure Plan (October 31, 2014), the Closure Plan Modification (January 1, 2019), and the May 2021 Grading Plan developed by GZA, Inc. will be implemented to ensure proper grading, capping, and stabilization/seedling so that the nearby surface water bodies and wetlands are protected. These measures include utilizing a 4:1 slope when placing the Couture LHE material in the central portion of the landfill no closer than 30 feet horizontally from the side slopes, as noted in the GZA, Inc. 2021 Grading Plan. The Couture LHE material will be covered with a 2-foot cap of non-foundry fill placed as a cap and seeded to stabilize the area. Silt fencing has been placed around the perimeter of the landfill and will be inspected, repaired, and maintained by the DPW throughout the fill acceptance operation. Tracking pads will also be maintained at the landfill to minimize runoff and prevent material from impacting the nearby stream and wetlands. In addition, a 100 by 300-foot dewatering containment area was constructed at the north end of the landfill where saturated material is dried prior to placement on the landfill mass.

³Closure Plan Modification and Conditional Low Hazard Grant of Exemption, dated April 11, 2016, drafted by Cynthia Moore of the WDNR Waste and Materials Management Program

⁴Annual Report for 2020 Monitoring Identification No. 4131, dated February 23, 2021 by GZA GeoEnvironmental, Inc.

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The Couture Development
Milwaukee, Wisconsin
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BRRTS No. 02-41-579105
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Regulatory Inspection

According to the Annual Report for 2020, the landfill is inspected annually by the WDNR, DPW, and GZA, Inc. for compliance with NR 500 requirements. Additionally, the four-well groundwater monitoring well network at the landfill is sampled semiannually by GZA, Inc. to evaluate whether the landfill is negatively impacting groundwater. During the semiannual groundwater sampling event, groundwater quality parameters are measured in the field and groundwater samples are collected from each well for laboratory analysis of a variety of organic and inorganic analytes.

CLOSING

Thank you for your assistance with this project. Please contact us should you have any questions regarding this proposal.

Respectfully submitted,

GILES ENGINEERING ASSOCIATES, INC.



Kelly M. Hayden
Environmental Scientist II



Kevin T. Bugel, P.G., C.P.G.
Environmental Division Manager

Distribution:

Wisconsin Department of Natural Resources

Attn: Mr. James Delwiche c/o Mr. Mark Peters (1 via email: Mark.Peters@wisconsin.gov)

City of Milwaukee Department of Public Works

Attn: Mr. Jerrel Kruschke (1 via email: jkrusc@milwaukee.gov)

Enclosures:

- WDNR LHE Review Fee (to be mailed separately)
- Attachment A *Site Investigation Report & Remedial Action Plan*, dated October 11, 2017
- Attachment B City of Milwaukee Material Acceptance Letter, dated March 9, 2021
- Attachment C Hydro-Search, Inc. Letter dated July 10, 1996
- Attachment D *Annual Report for 2020*, dated February 23, 2021 by GZA, Inc.
- Figure 1 Site Location Map
- Figure 2 Detailed Site Map
- Figure 3 Fill Material Distribution Map
- Figure 4 Receiving Site Location Map
- Figure 5 South College Avenue Landfill Map
- Figure 6 Wetland and Surface Water Map

ATTACHMENT A

***Site Investigation Report & Remedial
Action Plan, dated October 11, 2017***



Site Investigation Report & Remedial Action Plan

The Couture
909 East Michigan Street
Milwaukee, Wisconsin

Prepared for:

The Couture LLC
Milwaukee, Wisconsin

October 11, 2017
Project No. 1E-1704005

WDNR BRRTS No. 02-41-579105
DNR FID No. 341286220



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GEOTECHNICAL, ENVIRONMENTAL & CONSTRUCTION MATERIALS CONSULTANTS

- Atlanta, GA
- Baltimore, MD
- Dallas, TX
- Los Angeles, CA
- Manassas, VA
- Milwaukee, WI

October 11, 2017

Wisconsin Department of Natural Resources
300 North Martin Luther King Jr. Drive
Milwaukee, WI 53212

Attention: Ms. Nancy Ryan
Hydrogeologist

Subject: Site Investigation Report & Remedial Action Plan
The *Couture* Development
909 East Michigan Street
Milwaukee, Wisconsin
Project No. 1E-1704005
WDNR BRRTS No. 02-41-579105
WDNR FID No. 341286220

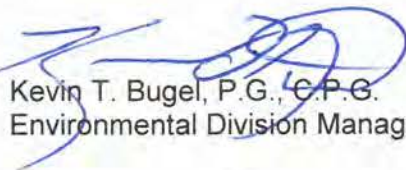
Dear Ms. Ryan:

In accordance with Wis. Adm. Codes NR 716 and NR 724, Giles Engineering Associates, Inc. (Giles) has completed a Site Investigation Report & Remedial Action Plan for The *Couture* Development located at 909 East Michigan Street in the City of Milwaukee, Milwaukee County, Wisconsin ("Site").

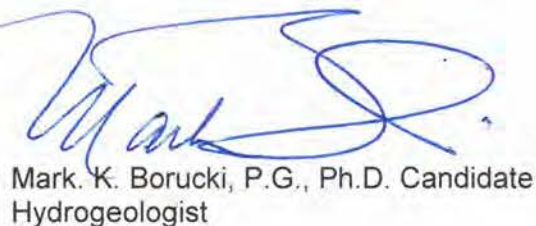
Please contact the undersigned should you have any question about the attached document or the Site in general.

Very truly yours,

GILES ENGINEERING ASSOCIATES, INC.



Kevin T. Bugel, P.G., C.P.G.
Environmental Division Manager



Mark K. Borucki, P.G., Ph.D. Candidate
Hydrogeologist

Distribution: The Wisconsin Department of Natural Resources
Attn: Nancy Ryan (1 via USPS, 1 via email: Ryan.Nancy@wisconsin.gov)
Barrett Lo Visionary Development LLC
Attn: Mr. Joel Aizen (1 via email: jaizen@barrettlo.com)

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 THE COUTURE DEVELOPMENT
 909 EAST MICHIGAN STREET
 MILWAUKEE, WISCONSIN
 PROJECT NO. 1E-1704005

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Appendix B	Well/Drillhole/Borehole Abandonment Forms (Form 3300-5)
Appendix C	Monitoring Well Construction and Development Forms (Form 4400-113A-B)
Appendix D	Soil Analytical Reports & Chain-of-Custody Documentation
Appendix E	Inferred Extent of Soil Petroleum VOC & Chlorinated VOC Impact

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SITE INVESTIGATION REPORT & REMEDIAL ACTION PLAN
THE COUTURE DEVELOPMENT
909 EAST MICHIGAN STREET
MILWAUKEE, WISCONSIN
PROJECT NO. 1E-1704005

EXECUTIVE SUMMARY

Giles Engineering Associates, Inc. (Giles), as a representative of The Couture, LLC, (The Couture) has completed a Site Investigation (SI) in general accordance with Wisconsin Administrative Code (WAC), Chapter Natural Resources 716 (Ch. NR 716) for the property ("Site") located at 909 East Michigan Avenue, Milwaukee County, Milwaukee, Wisconsin. Preliminary due diligence activities associated with the purchase and redevelopment of the Site were performed by Giles during November and December 2016 and documented in the report *Limited Phase II Environmental Site Assessment* (Project Number 1E-1704004) dated January 13, 2017. Giles performed a Limited Phase II Environmental Site Assessment (ESA) and Geotechnical Exploration and analysis for the Site which identified that it was underlain by 4 to 18 feet of contaminated fill material.

The Wisconsin Department of Natural Resources (WDNR) was provided notification of the contaminated fill condition on March 7, 2017. In response, the WDNR issued a letter to The Couture identifying the entity as the "Responsible Party" (RP) for the contamination identified at the Site.

Giles has prepared this report to document the SI activities performed during the period of June through August 2017 and to present the conceptual Site remedial action plan. The SI field work was conducted in accordance with the Giles Site Investigation Work Plan (SIWP) dated May 15, 2017. The SIWP received verbal concurrence on May 24, 2017, and written approval from the WDNR on July 18, 2017.

Giles utilized direct-push soil sampling techniques during the SI to obtain soil samples and evaluate the extent and magnitude of impacted fill material identified in the SI. A total of 60 additional soil borings were completed during the SI conducted during the period of June through August 2017. The Site is underlain by urban fill consisting of brown fine to medium silty sand with varying amounts of clay and gravel and trace wood fragments with isolated areas of foundry material and/or incinerated waste consisting of black fine to medium sand and cinders. The fill materials ranged from approximately 4 to 18 feet below ground surface (bgs) that generally increased in thickness from west to east.

Review of the SI soil laboratory data has shown that volatile organic compounds (VOCs), polynuclear aromatic hydrocarbons (PAHs), and the metals arsenic, lead, selenium, and mercury are present in the fill materials at concentrations which exceed the WDNRs residual contaminant levels (RCLs) for direct contact and/or for groundwater protection. The VOC data collected during the investigation has shown one inferred petroleum-impacted spill area in the soil in the northwest portion of the Site and three smaller "hotspot" areas associated with petroleum-impacted soil elsewhere on Site. An area of soil impacted with trichloroethylene (TCE) is present in the east-central region of the Site with an isolated TCE hotspot in the west-central region of the Site.



EXECUTIVE SUMMARY (continued)

PAH compounds and metals in the soil appear to be an area-wide condition. The PAHs and select RCRA metals are present in the fill overlying the native material of the Site and do not appear to be the result of a single spill event filling with impacted soils. Prior studies have demonstrated that the PAH and metals-impacted material are not readily leachable and therefore, do not likely pose a threat to groundwater.

No VOC or PAH compounds were detected in the native soil underlying the fill body at concentrations exceeding their respective residual contaminant levels (RCLs) for direct contact or groundwater protection. In review of the analytical results for RCRA metals, arsenic was reported to exceed its RCL for groundwater protection because of the depths that the samples were collected (greater than 4 feet). However, none of the detected arsenic concentrations from the native soil were reported to exceed the background threshold value for arsenic. Lead, mercury and/or selenium were detected but at levels below their respective RCLs for direct contact and groundwater protection.

The groundwater measurements collected from the eight Ch. NR 141 variance wells installed during the Limited Phase II ESA (November 2016) indicated the depth to groundwater ranged from 10.3 to 15.6 feet below the existing grade. The groundwater sample data collected during the Limited Phase II ESA indicated that the groundwater has shown relatively low level VOCs, PAHs, and select metals were present in the groundwater beneath the Site. The reported concentrations of select constituents were generally between the WAC, Ch. NR 140 enforcement standards (ES) and preventive action limits (PALs), or beneath their PALs. In their letter dated, July 18, 2017, the WDNR waived the requirement to perform additional groundwater investigative activities based on the lack of significant impacts to groundwater collected during the Phase II investigation, and the proposed extensive removal of soil/fill above and below the water table.



1. INTRODUCTION

Giles Engineering Associates, Inc. (Giles) has completed a Site Investigation (SI) on behalf of The Couture LLC, and Barrett Lo Visionary Development, the developer for the property (“Site”) located at 909 East Michigan Street, in the City of Milwaukee, Milwaukee County, Wisconsin (Figure 1). In October 2016, the Site property was purchased by The Couture LLC for the planned redevelopment by Barrett Lo Visionary Development as “The Couture”, a 44-story hi-rise luxury apartment building.

The notification of a release was reported to the Wisconsin Department of Natural Resources (WDNR) on March 7, 2017, subsequent to the completion of Phase I and Phase II Environmental Site Assessment (ESA) activities in November through December 2016. Subsequently, the WDNR issued a “responsible party” (“RP”) letter to The Couture on March 20, 2017.

The SI tasks were performed to supplement earlier investigative tasks outlined in the document: *Limited Phase II Environmental Site Assessment* (Project Number 1E-1704004) dated January 13, 2017. The SI was performed in general accordance with Giles Site Investigation Work Plan (SIWP) submitted on May 24, 2017, and in general accordance the requirements of Wisconsin Administrative Code (WAC), Chapter Natural Resources (NR) 716. The WDNR provided verbal concurrence for the SIWP scope on May 24, 2017, and written concurrence on July 18, 2017. Giles field personnel conducted the SI subsurface exploration activities and sampling from June through August, 2017.

2. CONTACT INFORMATION

2.1. Responsible Party Information

The Couture LLC c/o
Barrett Lo Visionary Development
260 East Highland Ave, Suite 401
Milwaukee, WI 53233
Attention: Mr. Joel Aizen (Chief Financial Officer)
(414) 324-4115

2.2. Consultant Information

Giles Engineering Associates, Inc.
N8 W22350 Johnson Road, Suite A-1
Waukesha, WI 53186
Attn: Kevin Bugel, P.G., C.P.G.
(262) 544-0118



3. SCOPE OF SERVICES

The following SI scope of services was performed including:

- Prepared a SI work plan to evaluate the extent of soil and groundwater impact at the Site in general accordance with NR 716.
- Coordinated the Site field activities including client communication, and utility location calls.
- Observed and documented the completion of 60 soil borings using direct-push soil sampling techniques.
- Performed in-field screening of the soil samples collected for the presence of organic vapor utilizing a photoionization detector (PID) equipped with a 10.6 electron-volt (eV) lamp calibrated to a benzene-equivalent isobutylene standard gas.
- Provided soil classifications for each 2-foot interval collected during sampling activities.
- Collected soil samples for laboratory analysis. 173 select soil samples from the direct-push borings of the Limited Phase II ESA and SI to an analytical laboratory for the chemical analysis of volatile organic compounds (VOCs) by EPA Method 8260B. Of the 173 samples collected and analyzed for VOCs, 107 of the samples were analyzed for polynuclear aromatic hydrocarbons (PAHs) by EPA Method 8270, and 60 were analyzed for the select RCRA metals (arsenic, lead, selenium, and mercury) by U.S. EPA methods 6010 and 7471.
- Evaluated the soil chemical analysis, and the subsurface conditions encountered.
- Prepared Site Investigation Report (SIR) and Remedial Action Plan in general accordance with WAC Ch. NR 716 which includes, boring logs, well development forms, well construction forms, the soil, data collected and analyses performed, and Giles conclusions and recommendations.

4. SITE DESCRIPTION

4.1. Location and Setting

The Site is located in the NE $\frac{1}{4}$, of the SE $\frac{1}{4}$, of Section 28, Township 6 North, Range 21 East in reference to the U.S. Public Land Survey, City of Milwaukee (Incorporated). The Site is located at the (former) address of 909 East Michigan Street in the City of Milwaukee, Milwaukee County, Wisconsin. The general location of the Site is illustrated on Figure 1.



The Site is located in an area of mixed commercial and residential use with East Michigan Street abutting to the north, Lake Drive abutting to the east, and East Clybourn Street abutting to the south. Based on the review of an ALTA Survey prepared for the property dated August 10, 2016, the Site appears to grade downward to the south, with an elevation change of approximately 5 feet across the Site.

4.2. Current Property Use and History

The Site consists of approximately 2.12-acres of land and is currently undeveloped and vacant. The Site was formerly occupied by the Milwaukee County Transit Center (MCTC) and bus marshalling garage structure from 1990 through December 2016. The Transit Center and garage structure were razed during the period of November 2016 through January 2017 in preparation for the *Couture* Development; however, the concrete slab from the former transit center structure and bus marshalling garage remains intact.

The Site was originally developed in the 1870's by the Chicago and Northwestern (C&NW) Railroad as a freight house adjacent to the C&NW Lakefront Depot (Depot). Several rail-lines extended to the north and south from the C&NW depot that supported passenger and freight transport since the mid-1800s. The Depot was used through May 1966. That same year, the Depot and the freight house structures were razed and the lakefront railroad tracks in the area were removed.

The Site was utilized for paved parking from the mid to late-1960s. Milwaukee County began construction for the MCTC on the Site in 1989, and operated as a government transit center and bus marshalling garage until November 2016.

5. PREVIOUS STUDIES

Due diligence activities associated with the purchase and redevelopment of the Site were performed during November and December 2016. The activities included a Phase I environmental site assessment (ESA), a limited Phase II ESA, and a geotechnical investigation, analysis, and engineering study.

Through performance of the geotechnical investigation and limited Phase II ESA, it was discovered that the Site was covered by 8.5 to 9 inches of concrete underlain by a granular sub-slab fill of variable thickness (0-3 inches). The pavement and granular fill, is underlain by urban fill consisting of brown fine to medium sand with varying amounts of clay and gravel and trace wood fragments with isolated areas of suspected foundry material and/or incinerated waste consisting of black fine to medium sand and cinders. The fill materials ranged from approximately 4 to 18 feet below ground surface (bgs) that generally increased in thickness from west to east and is believed to be contiguous across the Site.



Volatile organic compounds (VOCs), polycyclic aromatic hydrocarbon (PAH) compounds, and Resource Conservation and Recovery Act (RCRA) metals were identified in the fill material underlying the Site. Some of the shallow fill soil (0 to 4 feet bgs) was found to have contaminant concentrations that exceeded their respective WDNR Ch. NR 720 residual contaminant levels (RCLs) for direct contact and/or groundwater contamination risk.

The contaminants detected in the groundwater during the Limited Phase II ESA included low-level VOCs, PAH compounds, and RCRA metals. The *de minimis* groundwater impact was identified generally at concentrations below Wisconsin Ch. NR 140 preventative action limits.

6. METHODS AND PROCEDURES

The SI tasks were performed to gather data to supplement the data set reported in Giles' Limited Phase II ESA. Specifically, the SI is designed to achieve three objectives:

1. To define the limits of soil contamination laterally and vertically;
2. To define the known VOC-impacted fill which will require disposal at a licensed special waste landfill; and,
3. To collect samples throughout the Site to provide a sufficient sample set to petition the WDNR for off-Site disposal of the non-VOC-impacted soil at an alternative fill site (other than a landfill) in the accordance with the requirements of Ch. NR 718, and the requirements for a Low Hazard Exemption (LHE).

To accomplish the aforementioned objectives, a total of 60 additional borings were completed to complement the original 16 borings advanced during the Limited Phase II ESA. Thirty-five (35) soil borings designated with an A, B, and C suffix were placed around existing borings which displayed contamination above the RCL for groundwater protection. Twenty-five additional borings were advanced to generate data necessary to delimit the extent of detected contamination during the SI.

Eight Ch. NR 141 variance wells were installed during the Limited Phase II ESA (November 2016). Copies of the Monitoring Well Construction and Development Forms (Form 4400-113A-B) are included in Appendix C.

The groundwater sample data collected from the eight Ch. NR 141-variance wells installed during the Limited Phase II ESA (November 2016) has shown relatively low-level VOCs, PAHs, and select metals were present in the groundwater beneath the Site. The reported concentrations of select constituents were generally between the WAC, Ch. NR 140 enforcement standards (ES) and preventive action limits (PALs), or beneath their PALs. In their letter dated, July 18, 2017, the WDNR, based on the lack of significant impacts to



groundwater collected during the Phase II investigation, and the proposed extensive removal of soil/fill above and below the water table, would not require additional groundwater monitoring. The WDNR also indicated that the wells could be abandoned at that time. Therefore, copies of the Well/Borehole Abandonment Forms (Form 3300-05) are included in Appendix B.

6.1. Soil Investigation Methods

Direct-push soil sampling techniques were used to obtain soil samples which were then submitted for laboratory analysis to evaluate the extent and magnitude of impacted soil at the Site. Soil samples were obtained continuously for each boring using a 1.25-inch inside-diameter (ID), 4-foot long macro-core sampling barrel. Soil samples were collected from each 2-foot interval for classification and field screening. The soil boring locations are illustrated on Figure 2.

Soil sampling equipment decontamination procedures were performed between sampling intervals and between each boring to limit cross-contamination. Soil samples were classified in the field in general accordance with the Unified Soil Classification System (USCS) *ASTM D-2488-75*. The soil classifications for each boring were documented on the WDNR soil boring log Form 4400-122 and are included in Appendix A. The boring elevations provided on the attached Form 4400-122 for the Ch. NR 141 variance wells were determined using conventional surveying techniques and reference to a temporary benchmark referencing the City of Milwaukee elevation.

Upon completion of soil sample collection activities each open borehole was abandoned with bentonite chips in accordance with NR 112 and NR 141. Copies of the WDNR Well/Drillhole/Borehole Abandonment Forms (WDNR Form 3300-5) are included in Appendix B.

6.2. Groundwater Investigation Methods

Eight Ch. NR 141 variance wells installed during the Limited Phase II ESA (November 2016). Copies of the Monitoring Well Construction and development Forms (Form 4400-113A-B) are included in Appendix C for review and filing as they were not provided with the Limited Phase II ESA.

In their SIWP approval letter dated July 18, 2017, the WDNR waived the requirement to perform additional groundwater investigative activities based on the lack of significant impacts to groundwater collected during the Phase II investigation, and the proposed extensive removal of soil/fill above and below the water table. The WDNR also indicated that the Wells maybe abandoned at this Time. Therefore, copies of the Well/Borehole Abandonment Forms (Form 3300-05) are included in Appendix B.



6.3. Soil Vapor Investigation Methods

The Couture development will also incorporate a parking structure that will extend two stories below the existing grade over the entire footprint of the Site. Interlocking driven sheeting will be installed as a first step to cut-off lateral groundwater infiltration and potential off-site vapors. The construction of the sub-surface parking structure will result in the removal of approximately 25 feet of material across the Site, including the entire extent of contaminated fill material. Therefore, the planned removal of all of the fill material on Site spurred a discussion between the WDNR and Giles on May 24, 2017, to determine whether a soil vapor intrusion investigation was necessary. The WDNR concluded that in the planned construction activities resulted in the removal of potential soil vapor intrusion sources/contaminated fill, the soil vapor intrusion requirements could be waived and omitted from the SIWP.

6.4. Soil Field Screening and Soil Sample Collection

Soil headspace field screening was performed on soil samples collected from each boring to provide an in-field assessment of the potential presence of volatile organic vapors at discrete depth intervals. When organic vapors are detected, this information may be used to make adjustments in the field pertinent to vertical or horizontal vapor profiling. In addition, this information may be used to assist in the selection of appropriate samples for laboratory analysis.

Soil samples collected from each two-foot interval were split into two replicate sample portions placed into containers; one sample portion was field screened, and the second portion was placed in a cooler. Headspace field screening was completed using a PID equipped with a 10.6 electron volt (eV) bulb, and calibrated with a benzene-equivalent, isobutylene standard gas. The field screening sample containers were partially filled with soil, agitated, and allowed to warm to approximately 70°F prior to the headspace field screening. The PID tip was inserted into the headspace of the container and the maximum reading was recorded.

For the VOC soil sample analysis, approximately 10 grams of soil and 10 milliliters (mL) of methanol preservative were placed into a laboratory-provided 40 mL sampling container and sealed with a Teflon™-lined lid. For PAH and metals analysis, a laboratory-supplied 4-ounce glass container was filled with soil and sealed with a Teflon™-lined lid.

A total of 173 soil samples were submitted for VOC analysis in accordance with U.S. Environmental Protection Agency (EPA) Method 8260B, 107 soil samples were submitted for laboratory analysis PAH analysis utilizing U.S. EPA Method 8270, and a total of 60 soil samples were analyzed for the select RCRA metals including arsenic, lead, and selenium utilizing U.S. EPA Methods 6010 and mercury utilizing U.S. EPA Method 7471. A synopsis of sample location, sample depth, and analyte suite is provided in Appendix D.



Soil samples were stored and preserved for transport in a cooler with ice. The sample collection, preservation, storage, and transportation were performed in general accordance with the WDNR, and ASTM requirements. Soil samples were submitted under chain-of-custody protocol to Pace Laboratory Corporation, Inc. (PACE) located in Green Bay, Wisconsin (WDNR Certification No. 405132750) for the analysis of VOCs, PAH compounds, and certain RCRA metals.

7. INVESTIGATIVE WASTE MANAGEMENT

Investigative waste generated in conjunction with the June through August direct-push sampling events resulted in approximately one-half of a 55-gallon drum of excess soil cuttings. The drummed soil cuttings are being retained on Site and will be combined with the planned excavation soil and later removed from the Site and disposed of under a landfill profile for the VOC impacted fill soil in late October/early November 2017.

8. SITE INVESTIGATION RESULTS

8.1. Regional Geology

A generalized stratigraphic section of the Milwaukee area includes unconsolidated Pleistocene-age glacial deposits and Holocene lacustrine, fluvial and paludal sediments overlying Silurian-age Niagaran dolomite of the Racine Formation and Devonian-age shale of the Antrim Formation and argillaceous dolomite of the Milwaukee Formation.¹ During Pleistocene glaciation, ice flowed westward from the Lake Michigan basin across southeastern Wisconsin. The glacial advances deposited generally clay-rich, ground moraine separated between north-trending recessional moraines. With the waxing and waning of glaciers, meltwater flowed from the glacier thus depositing glaciofluvial and glaciolacustrine sediments in topographic lows across the general area. Therefore, the glacial and post-glacial sequence is often variable due to the complexity of the depositional environments. In some areas the glacial deposits were mantled with younger, post-glacial fluvial, lacustrine, and paludal sediments.

Changes in the elevation of lakes within the Lake Michigan basin resulted in significant changes in base level with lacustrine deposits being deposited when lakes had a surface elevation greater (Glenwood State 640 feet current msl) than the present Lake Michigan (580 feet msl) and erosional down-cutting when the surface elevation was lower (Chippewa Phase 295 feet current msl). Thus, lacustrine and paludal deposits may be present proximal

¹ University of Wisconsin-Extension, 2004, Preliminary bedrock geologic map of Milwaukee County, Wisconsin, Wisconsin Geological and Natural History Survey Open-File Report 2004-14A.



to Lake Michigan at and below the 640-foot elevation. The presence of the Menomonee River Valley located to the south of the Site represents a cut and fill history. In addition, the presence of the bluffs along the Lake Michigan shoreline formed as wave activity eroded the glacial deposits westward as lake stages fluctuated.

Anthropogenic change to the surface of southeastern Wisconsin has resulted in numerous fill areas along waterbodies and over wetlands. The current Lake Michigan shoreline, including the Site property, is marked by areas of filling which occurred during the late 1800s through the mid-1900s.

8.2. Site Geology and Hydrogeology

Based on borings advanced as deep as 200 feet below the present ground surface², the Site is underlain by fill material ranging in thickness from 4 to 18 feet overlying a complex sequence of approximately 180 feet of glacial deposits overlain by fluvial and lacustrine sand and silt. The unconsolidated deposits overlie dolomite bedrock present at a depth of approximately 200 feet bgs. The fill material that mantles the Site consists of varying thicknesses of fill soil ranging in texture from clay to sand with some roots and minor wood debris, foundry materials, and incineration ash and sand. The fill material is present in a general wedge-shaped body thickening from approximately 4 feet on the west side of the Site to approximately 18 feet on the eastern property boundary.

The focus of the Ch. NR 716 SI sampling was to evaluate the vertical extent of impacted soil/fill material and distinguish the fill variation to assess if there is any correlation between the fill types and the types of contamination encountered. Geologic cross-sections of the Site were created using the boring logs from the Limited Phase II ESA and this SI. A plan including the cross-sectional transects index map is included as Figure 3 and geologic cross-sections are provided as Figures 4A through 4F.

Groundwater was encountered at depths ranging from 10.6 to 15.4 feet bgs at the Site during the Limited Phase II ESA. Groundwater flow beneath the Site is inferred to be eastward toward Lake Michigan; however, the presence of buried utilities may alter groundwater flow vectors. Based on testing performed on parcels in the same general Site area, the hydraulic conductivity (K) of the native sands and silts that underlie the Site probably range from 10^{-3} to 10^{-4} cm/sec while more clay-rich deposits probably display a K of from 10^{-5} to 10^{-6} cm/sec.

² Giles Engineering Associates, Inc., 2016, Geotechnical Engineering Exploration and Analysis, The Couture, 909 East Michigan Street, Milwaukee, Wisconsin, Project No. 1G-1610001.



8.3. Soil Field Screening and Laboratory Analytical Results

8.3.1. Soil Field Screening

In-field PID headspace screening results were recorded on the soil boring logs (WDNR Form 4400-122) for each representative interval collected. Organic vapors were detected in soil samples ranging generally ranging from 0 to 30 instrument units with the highest detections in shallow soil profile (0 to 4 feet) in B-6, B-12, and B-13. The PID readings are shown within the on the soil boring logs and provided in Appendix A.

8.3.2. Soil VOC Laboratory Results

Petroleum VOCs (PVOCs) and select chlorinated VOCs (CVOCs) and were detected in soil samples collected from the contaminated fill in several of the soil borings completed at the Site. The characterization of the PVOCs has shown a PVOC impacted “spill area” in the fill soil in the northwest portion of the Site and three smaller “hotspot” areas with petroleum-impacted soil elsewhere on Site. The extent of the PVOC spill area and hotspots are illustrated on Figure 5.

An area of soil impacted with the CVOC trichloroethylene (TCE) occurs in the east-central region of the Site with an isolated J-flagged TCE hotspot in the west-central region of the Site. The inferred TCE impacted soil area and hotspot areas are depicted on Figure 6.

A Petition for a Low Hazard Exemption was submitted to the WDNR under separate cover on September 6, 2017 which described the types and extent(s) of soil contamination that exists on the Site. Based on the areal extent of each area of PVOC and CVOC impacted soil on Figure 5 and Figure 6, an estimated 2,365 cubic yards (cy) of petroleum-impacted soil and 585 cy of TCE-impacted soil exceeding their respective RCLs for groundwater protection will be excavated and disposed of at a special waste landfill facility. The total estimated volume of PVOC and CVOC-impacted soil to be excavated and disposed of at a landfill facility is 2,950 cy.

8.3.3. Soil PAH and Metals Laboratory Results

Review of the PAHs and select RCRA metals soil sample data indicates that PAH compounds and metals are an area-wide condition extending along the Lake Michigan shoreline, beyond the Site boundaries. The PAHs and select RCRA metals were present in the fill overlying the native material of the Site and do not appear to be the result of a single spill event, unlike the documented PVOCs and CVOCs. In addition, neither the PAH and select RCRA metals-impacted fill, or the VOCs-impacted fill appear to correlate with a specific fill type (e.g. cinders, foundry sand, or granular fill).



8.3.4. Soil Freshwater Leaching Procedure Laboratory Results

A fresh water leaching procedure (WM-538 ASTM E3987) was performed on select soil samples that displayed known contamination. The leachate from soil borings B-11, B-14A, B-30, and B-32 was run at the Laboratory for analysis of VOCs utilizing EPA Method 8260B. The premise for these analyses was to confirm the assumption that minor “J” flagged benzene detections in soil samples from B-11 and B-14, and the slightly elevated concentrations in soil samples from soil borings B-30 and B-32 do not pose a significant risk to groundwater. The VOC analytical results of the leached soils samples confirmed that VOCs in the leachate were present at concentrations less than their respective Chapter NR 140 groundwater quality standards.

A fresh water leaching procedure was performed on select soil samples from borings B-30 and B-32 for PAH compounds, and from borings B-30, B-32, B-15A, B-34, and B-34C arsenic. In similar fashion to the VOCs, the leachate from the submitted PAH and metals impacted soil samples at concentrations above their respective Chapter NR 140 groundwater quality standards.

The VOC, PAH, and arsenic freshwater leach soil analytical results are summarized in Tables 4, 5, and 6, respectively. Copies of the freshwater leach laboratory analytical reports and the Chain-of-Custody documentation are included in Appendix D.

9. CONCEPTUAL REMEDIAL ACTION PLAN

Fill soil impacts exceeding the WAC Ch. NR 720 direct contact and/or soil to groundwater pathway risk-based RCLs are known to be present on the Site.-These risk pathways are believed to pose the greatest risk to human receptors at the Site. Therefore, mitigation is necessary to eliminate risk to Site residents and visitors.

The risk associated with direct contact with the impacted soil will be greatest during construction activities. In addition, during construction contamination may migrate from the Site as sediment present any uncontrolled runoff or as fugitive airborne dust could thus impacting off-Site receptors

To mitigate risks during construction, contractors will be informed of proper soil handling protocols to minimize the potential for direct contact, ingestion, or inhalation of the VOC, PAH and metals impacted soil. Contractors will also employ sediment control capture systems and dust control measures to minimize the potential for off-Site sediment and fugitive soil/dust emissions from the Site.

The planned Site redevelopment will include the construction of a below-grade parking structure. To construct the parking structure, driven-interlocking steel sheeting will be



installed around the perimeter of the property to stabilize sidewalls during construction of the subsurface parking structure.

It is anticipated that the entire 2.12 acre lot will be excavated to a depth of 25 feet bgs during the construction of the parking structure. This excavation task will result in the generation of approximately 85,500 *in situ* cy of material. Therefore, as all known impact at the Site soil is present above a depth of 25 feet, the controlled and managed excavation of the subsurface parking structure is, in essence, the remedial action for the Site. Also, the WDNR has indicated in their July 18, 2017 correspondence that depending on the extent of soil removal performed at the Site in association with the parking structure, a Soil GIS Registry may not be required for the Site.

Based on the depth to the fill material/native soil interface determined during the SI (see provided geologic cross-sections (Figures 4A to 4F), Giles estimates that approximately 39,000 to 45,000 *in-situ* cy of the Site fill materials will be generated during the excavation for the parking structure. The balance of the excavation will include native soil estimated to range in volume from 40,500 to 46,500 *in situ* cy.

Based on the relatively confined extent of petroleum VOCs in the Site soil, it is inferred that a historical petroleum release occurred in the northwest portion of the Site and in three smaller "hotspot" areas elsewhere on Site (Figure 5). An area of soil impacted with the chlorinated VOC TCE with concentrations exceeding its WAC Ch. NR 720 RCL is present in the east-central region of the Site. A smaller TCE hotspot which displays impact at laboratory-estimated "J-flagged"³ concentrations exists in the west-central region of the Site (Figure 6). These areas of petroleum and TCE contaminated soil shall be excavated and properly disposed of at a Wisconsin-licensed special-waste disposal facility.

Based on the areal extent of each planned contaminant excavation area (Appendix E and Figures 5 and 6), an estimated 2,365 cy of petroleum-impacted soil and 585 cy of TCE impacted soil (2,950 cy total) displaying impact greater than their respective WAC Ch. NR 720 RCLs will be generated.

The presence of fill soil is ubiquitous in the general Milwaukee area and stems from the uncontrolled filling of wetlands and the Lake Michigan shoreline during the period of the mid-1800s to the mid-1900s. As discovered during this investigation, the Site is mantled with up to 14 feet of fill soil which thickens eastward toward the Lake Michigan shoreline. Much of the fill used in urban Milwaukee included industrial and atmospheric waste that included PAH compounds and select species of RCRA metals. As no indication of a spill/release was identified with respect to the PAH compounds and RCRA metals identified in the Site soil, their presence is attributed to historic uncontrolled filling activities. In addition, neither the

³ A "J-flagged" concentration is a laboratory estimated concentration between the laboratory limit of detection and limit of quantification.



presence of PAH compounds and select RCRA metals-impacted fill, nor the VOCs-impacted fill appear to correlate with a Site-specific fill type (e.g. cinders, foundry sand, or granular fill).

Prior studies have demonstrated that the PAH compounds and metals do not readily leach from the soil under freshwater conditions. Therefore, Giles infers that these non-VOC-impacted soils do not likely pose a threat to groundwater. It is estimated that from 36,000 cy to 42,000 cy of PAH compound and select RCRA metal-impacted fill soil will be removed from the Site. Giles, on behalf of the Couture LLC, is requesting the WDNR's concurrence that the PAH and RCRA metals-impacted soil be removed under a low-hazard waste grant exemption under s. 289.43(8), Stats, to the R&R Excavation Quarry (R&R) located in Cedarburg, Wisconsin.

Giles collected and analyzed 22 samples from the native soil collected beneath the fill soil interval including:

B-1	12-14'	B-13	14-16'
B-2	10-12'	B-15	16-18'
B-3	10-12'	B-15A	14-16'
B-4	14-16'	B-15B	14-16'
B-5	14-16'	B-15C	14-16'
B-6	14-16'	B-17	6-8'
B-7	16-18'	B-19	8-10'
B-8	12-14'	B-21	8-10'
B-9	10-12'	B-23	12-14'
B-10	14-16'	B-25	18-20'
B-11	12-14'	B-34	18-20'

As documented earlier in this report, no PAH compounds and, with the exception of arsenic, no tested RCRA metals were found to exceed their respective WAC Ch. NR 720 RCLs for the direct contact or soil to groundwater risk pathways. Arsenic was reported to exceed its RCL for the soil to groundwater pathway because of the depths from which the samples were collected (greater than 4 feet). However, none of the detected arsenic concentrations from the native soil were reported to exceed the Ch. NR 720.07(3) background threshold value for arsenic. Lead, mercury and/or selenium were detected but at levels below their respective RCLs for direct contact and groundwater protection.

Based on the results of the native soil sampling, Giles, on behalf of the Couture LLC is requesting the WDNR's concurrence for the unrestricted reuse of the native material as clean fill. The excavation contractor will provide the location of the clean fill site for future closure documentation once the material is placed.



10. CONCLUSIONS

- The PVOC and CVOC soil impacts are adequately defined. It appears that the majority of soil impact is currently confined to the unconsolidated soil section with relatively low impact to groundwater; the PVOC highest contaminant concentrations are evident near the northwestern region of the Site, and CVOCs concentrations were defined near the east central region of the Site. Giles infers that these areas are indicative of spills and do not appear to be associated with the placement of the fill in the late 1800s.
- The PVOC and CVOC soil will be profiled at a special waste landfill during the initial excavation of the subgrade parking structure as part of the soil management plan. An estimated 2,950 cy of soil will be removed.
- The PAH compound and metals-impacted soil fill is has been submitted for review by the WDNR's Waste Materials Management (WMM) Section for consideration of a LHE. Upon receipt of concurrence from the WDNR WMM, the PAH and metals-impacted soil fill material will be excavated, transported, and disposed of as fill at the R&R Excavation, Inc. quarry reclamation site, located I Cedarburg, WI.

11. RECOMMENDATIONS

The remedial action activities which include the installation of driven perimeter sheeting and parking structure excavation activities are scheduled to commence in December 2017/January 2018. During the period from October 2017 to December 2017, it is recommended that the surface pavement remain in place to prevent direct contact and surface water infiltration.

Upon the completion of the removal of the fill material of the excavation of the parking structure, Giles will petition the WDNR for closure under Ch. NR. 726, with consideration for a preventative action limit exemption for the reported ground water exceedances. Also, Giles will petition the WDNR to omit the requirement of a Soil GIS recording if no fill soil remains.



12. SUBMITTAL CERTIFICATION

I, Kevin T. Bugel hereby certify that I am a registered professional geologist 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 of the information contained in this document is correct and the document was prepared in compliance with all applicable requirements in Ch.s NR 700 to 726, Wis. Adm. Code.


Signature and Title
*Environmental
Districtal Mgr.*



13. GENERAL COMMENTS

This SIR and RAP has been prepared to aid in the evaluation of the Site located at 909 East Michigan Street, in the City of Milwaukee, Milwaukee County, Wisconsin, with regard to the known release of a hazardous substance. The conclusions presented in this report were based on available information pertaining to various points in time. We do not warrant the accuracy of information supplied by others.

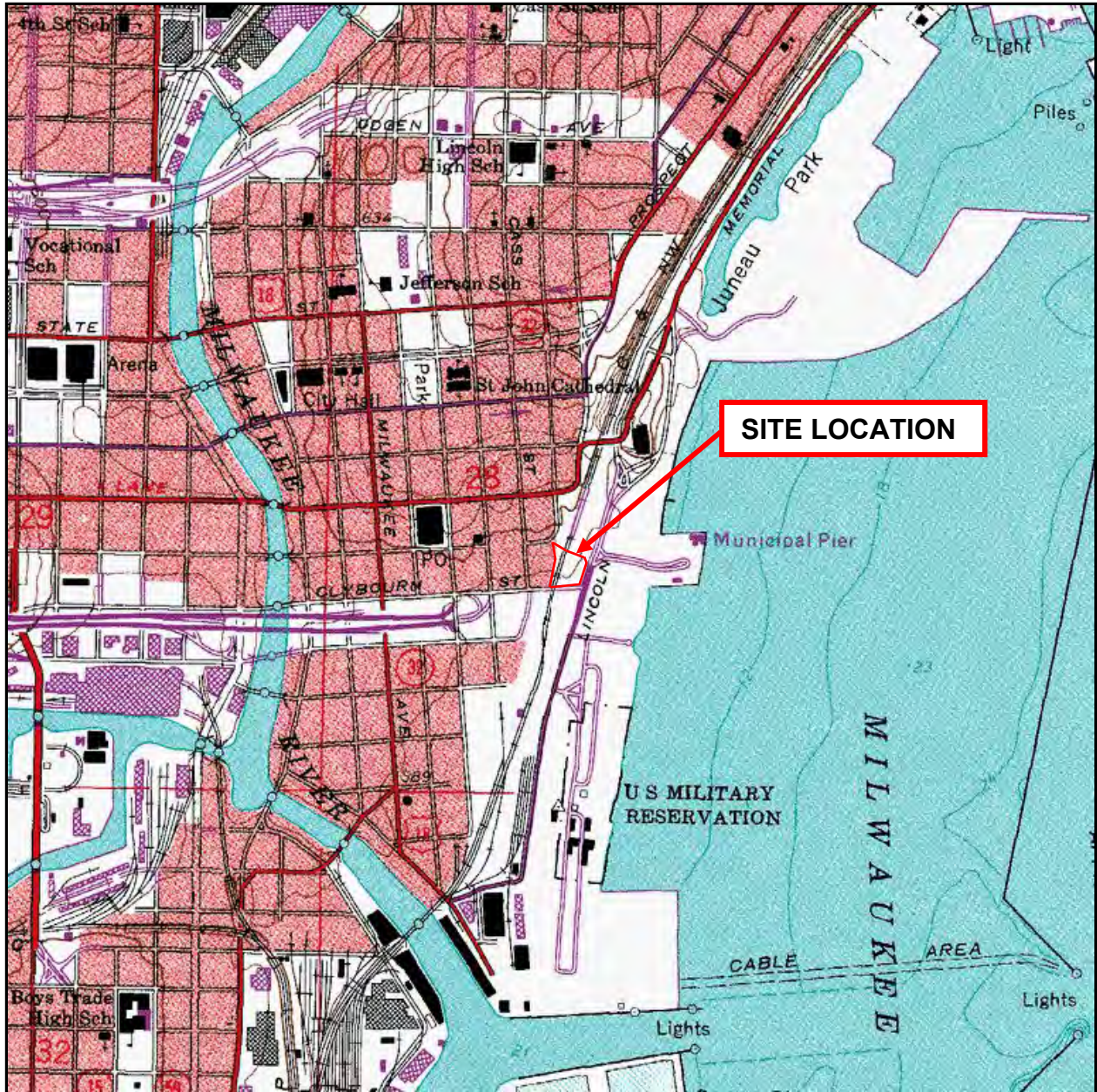
The boring logs and related information enclosed within the Appendices depict subsurface conditions only at specific locations drilled and at the particular times designated on the logs. Soil conditions at other locations may differ from conditions occurring at these boring locations. Also, the passage of time may result in a change of soil conditions at the boring locations drilled.

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1E-1704005 SIR KTB MKB Draft 10-4-2017 MKB MKB Comments/17Env02/ktb/glg



FIGURES



Source: USGS Milwaukee, Wisconsin 7.5-Minute Series (topographic) Quadrangle Map (1958; photorevised in 1971)

Scale: 1:24,000
 Contour Interval: 10 Feet

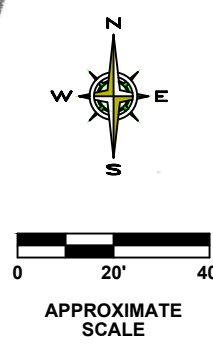
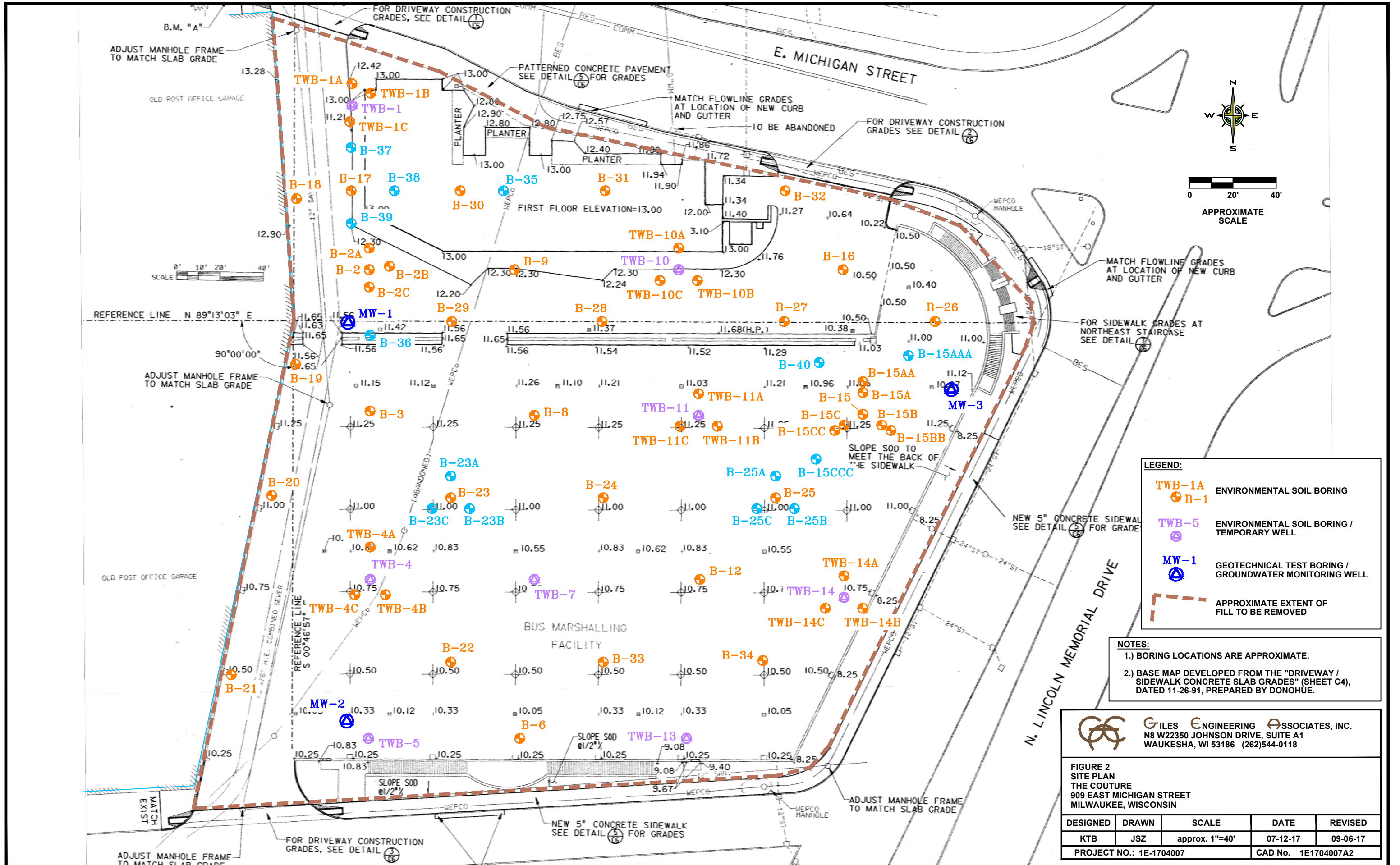


FIGURE 1
SITE LOCATION MAP

The Couture Development
909 East Michigan Street
Milwaukee, Wisconsin
Project No. 1E-1704007



GILES
 ENGINEERING ASSOCIATES, INC.



LEGEND:

- TWB-1A ENVIRONMENTAL SOIL BORING
- B-1
- TWB-5 ENVIRONMENTAL SOIL BORING / TEMPORARY WELL
- MW-1 GEOTECHNICAL TEST BORING / GROUNDWATER MONITORING WELL
- APPROXIMATE EXTENT OF FILL TO BE REMOVED

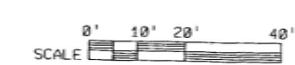
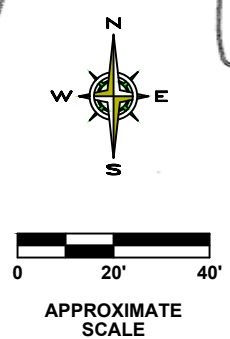
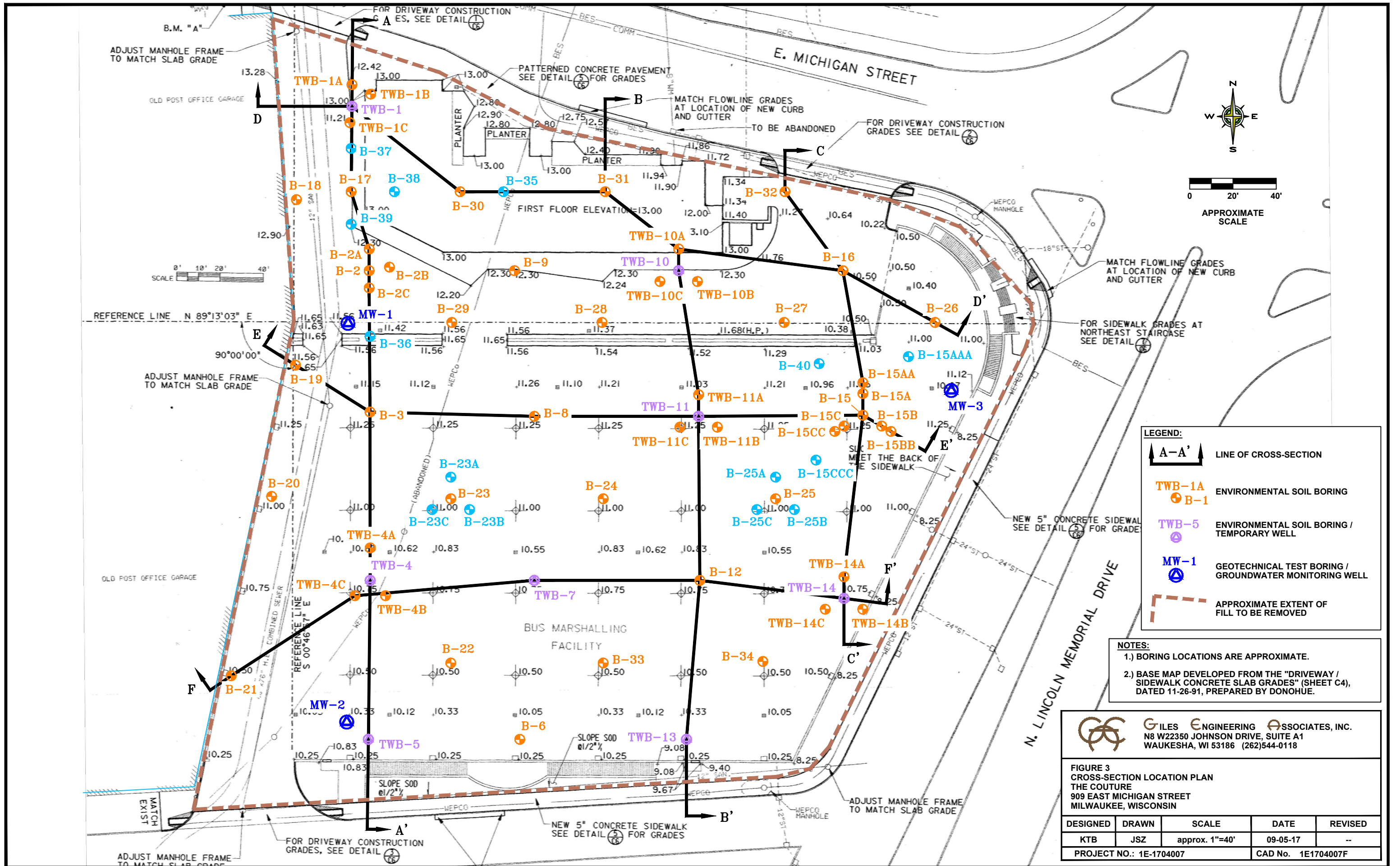
NOTES:

- 1.) BORING LOCATIONS ARE APPROXIMATE.
- 2.) BASE MAP DEVELOPED FROM THE "DRIVEWAY / SIDEWALK CONCRETE SLAB GRADES" (SHEET C4), DATED 11-26-91, PREPARED BY DONOHUE.

GILES ENGINEERING ASSOCIATES, INC.
 N8 W22350 JOHNSON DRIVE, SUITE A1
 WAUKESHA, WI 53186 (262)544-0118

**FIGURE 2
 SITE PLAN
 THE COUTURE
 909 EAST MICHIGAN STREET
 MILWAUKEE, WISCONSIN**

DESIGNED	DRAWN	SCALE	DATE	REVISED
KTB	JSZ	approx. 1"=40'	07-12-17	09-06-17
PROJECT NO.: 1E-1704007			CAD No. 1E1704007A2	



LEGEND:

- A-A' LINE OF CROSS-SECTION
- TWB-1A ENVIRONMENTAL SOIL BORING
- B-1 ENVIRONMENTAL SOIL BORING
- TWB-5 ENVIRONMENTAL SOIL BORING / TEMPORARY WELL
- MW-1 GEOTECHNICAL TEST BORING / GROUNDWATER MONITORING WELL
- APPROXIMATE EXTENT OF FILL TO BE REMOVED

NOTES:

- BORING LOCATIONS ARE APPROXIMATE.
- BASE MAP DEVELOPED FROM THE "DRIVEWAY / SIDEWALK CONCRETE SLAB GRADES" (SHEET C4), DATED 11-26-91, PREPARED BY DONOHUE.

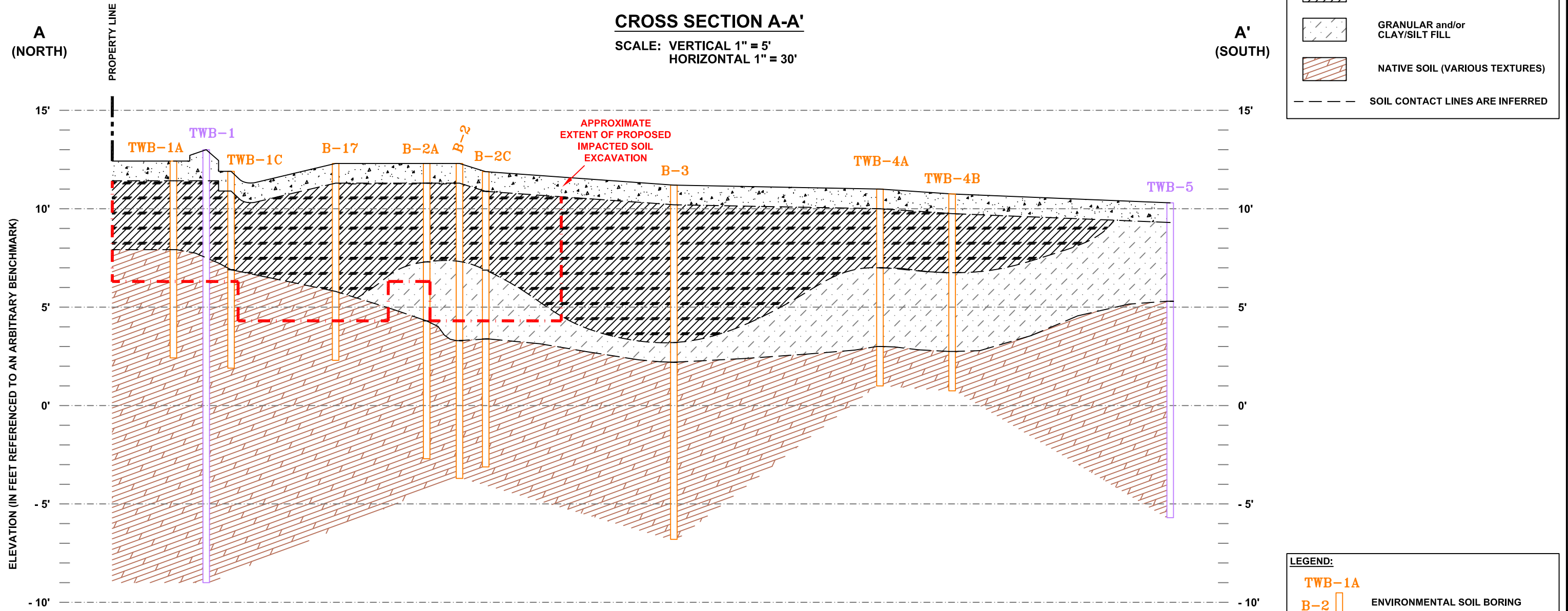
GILES ENGINEERING ASSOCIATES, INC.
 N8 W22350 JOHNSON DRIVE, SUITE A1
 WAUKESHA, WI 53186 (262)544-0118

**FIGURE 3
 CROSS-SECTION LOCATION PLAN
 THE COUTURE
 909 EAST MICHIGAN STREET
 MILWAUKEE, WISCONSIN**






DESIGNED	DRAWN	SCALE	DATE	REVISED
KTB	JSZ	approx. 1"=40'	09-05-17	--
PROJECT NO.: 1E-1704007			CAD No. 1E1704007F	

CROSS SECTION A-A'




SCALE: VERTICAL 1" = 5'
HORIZONTAL 1" = 30'



SOIL KEY:

-  CONCRETE SLAB WITH 1" TO 3" OF SAND & GRAVEL GRANULAR FILL BELOW
-  FOUNDRY WASTE and/or CINDER
-  GRANULAR and/or CLAY/SILT FILL
-  NATIVE SOIL (VARIOUS TEXTURES)
-  SOIL CONTACT LINES ARE INFERRED

LEGEND:

-  TWB-1A
-  B-2 ENVIRONMENTAL SOIL BORING
-  TWB-1 ENVIRONMENTAL SOIL BORING / TEMPORARY WELL

 GILES ENGINEERING ASSOCIATES, INC.
N8 W22350 JOHNSON DRIVE, SUITE A1
WAUKESHA, WI 53186 (262)544-0118

FIGURE 4A
CROSS-SECTION A - A'
THE COUTURE
909 EAST MICHIGAN STREET
MILWAUKEE, WISCONSIN

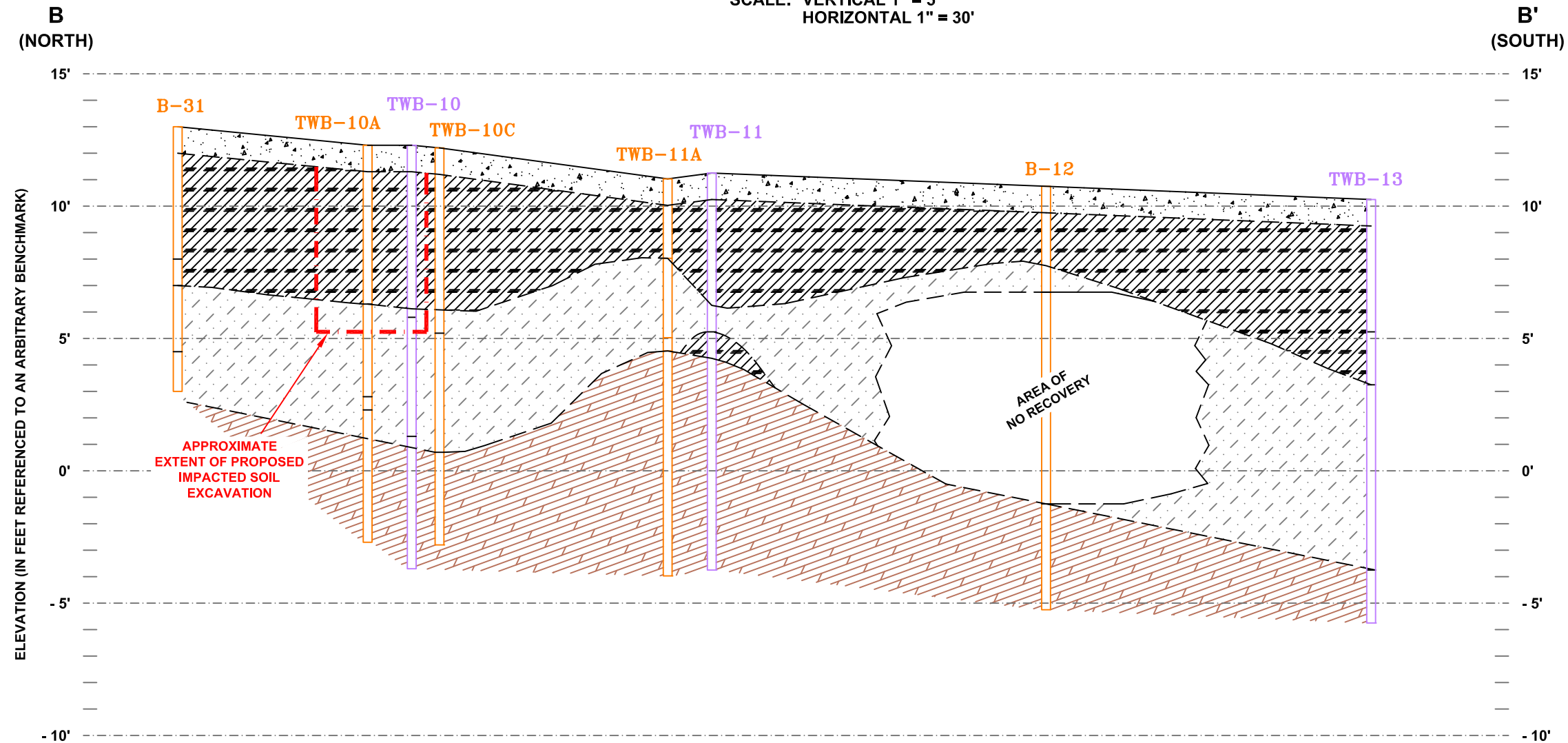
DESIGNED	DRAWN	SCALE	DATE	REVISED
KTB	JSZ	SEE TITLE	09-06-17	--
PROJECT NO.: 1E-1704007			CAD No. 1E1704007G	

CROSS SECTION B-B'

SCALE: VERTICAL 1" = 5'
HORIZONTAL 1" = 30'

SOIL KEY:

	CONCRETE SLAB WITH 1" TO 3" OF SAND & GRAVEL GRANULAR FILL BELOW
	FOUNDRY WASTE and/or CINDER
	GRANULAR and/or CLAY/SILT FILL
	NATIVE SOIL (VARIOUS TEXTURES)
	SOIL CONTACT LINES ARE INFERRED



LEGEND:

	TWB-10A	ENVIRONMENTAL SOIL BORING
	TWB-10	ENVIRONMENTAL SOIL BORING / TEMPORARY WELL

GILES ENGINEERING ASSOCIATES, INC.
N8 W22350 JOHNSON DRIVE, SUITE A1
WAUKESHA, WI 53186 (262)544-0118

FIGURE 4B
CROSS-SECTION B - B'
THE COUTURE
909 EAST MICHIGAN STREET
MILWAUKEE, WISCONSIN

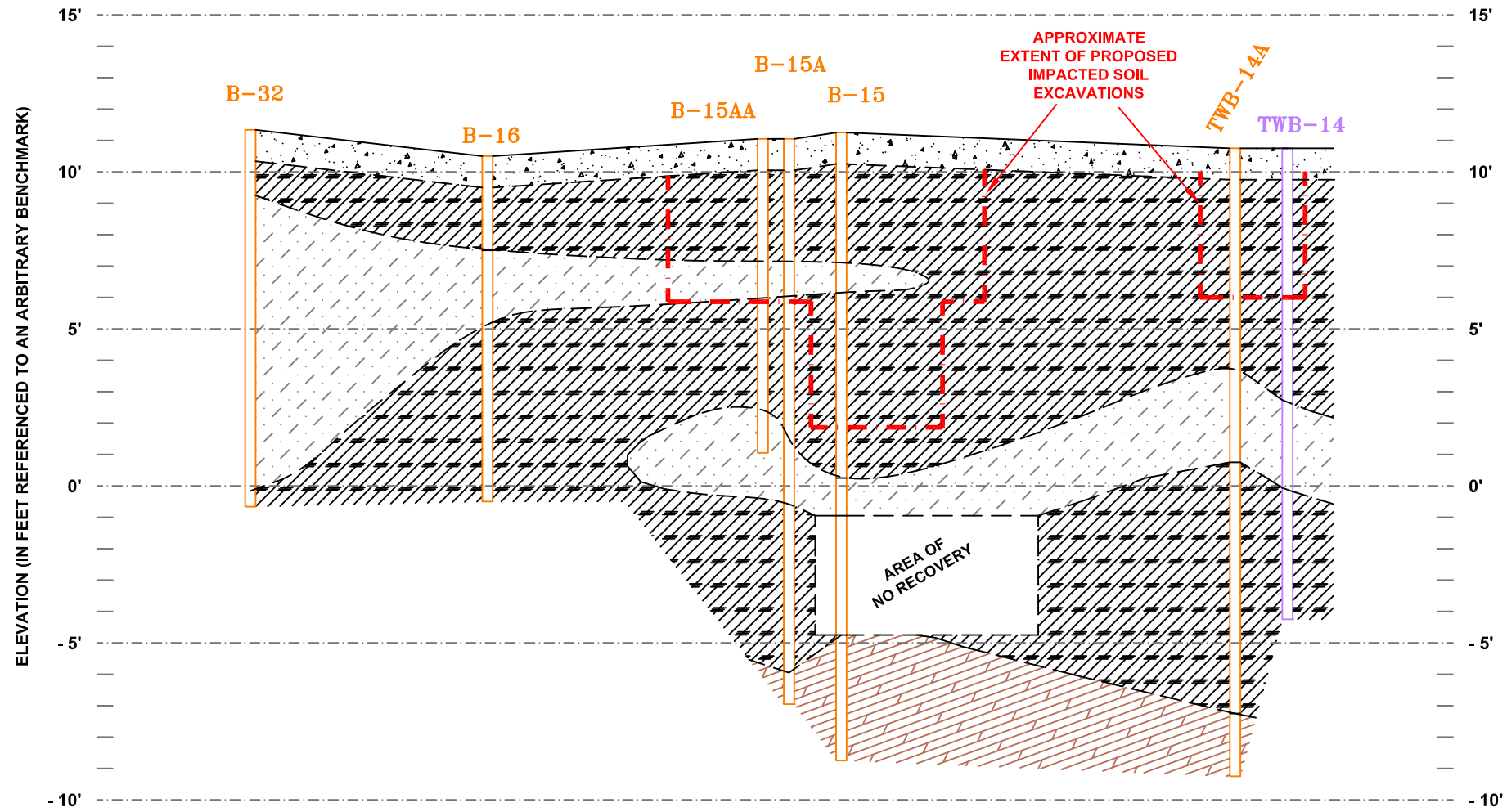
DESIGNED	DRAWN	SCALE	DATE	REVISED
KTB	JSZ	SEE TITLE	09-06-17	--
PROJECT NO.: 1E-1704007			CAD No. 1E1704007H	

C
(NORTH)

CROSS SECTION C-C'

SCALE: VERTICAL 1" = 5'
HORIZONTAL 1" = 30'

C'
(SOUTH)



SOIL KEY:

	CONCRETE SLAB WITH 1" TO 3" OF SAND & GRAVEL GRANULAR FILL BELOW
	FOUNDRY WASTE and/or CINDER
	GRANULAR and/or CLAY/SILT FILL
	NATIVE SOIL (VARIOUS TEXTURES)
	SOIL CONTACT LINES ARE INFERRED

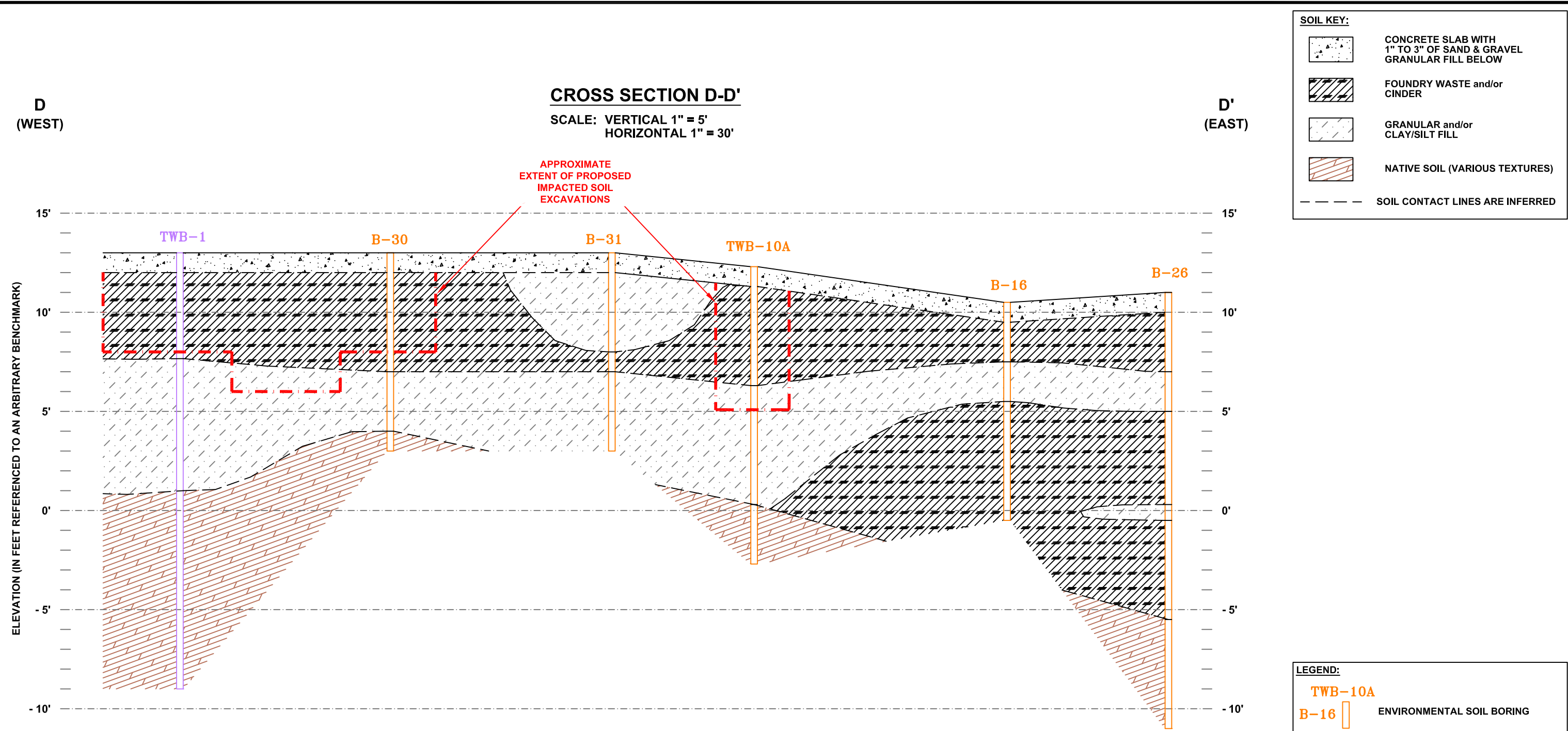
LEGEND:

	TWB-14A
	B-15 ENVIRONMENTAL SOIL BORING
	TWB-14 ENVIRONMENTAL SOIL BORING / TEMPORARY WELL

GILES ENGINEERING ASSOCIATES, INC.
N8 W22350 JOHNSON DRIVE, SUITE A1
WAUKESHA, WI 53186 (262)544-0118

FIGURE 4C
CROSS-SECTION C - C'
THE COUTURE
909 EAST MICHIGAN STREET
MILWAUKEE, WISCONSIN

DESIGNED	DRAWN	SCALE	DATE	REVISED
KTB	JSZ	SEE TITLE	09-06-17	--
PROJECT NO.: 1E-1704007			CAD No. 1E1704007I	



SOIL KEY:

- CONCRETE SLAB WITH 1" TO 3" OF SAND & GRAVEL GRANULAR FILL BELOW
- FOUNDRY WASTE and/or CINDER
- GRANULAR and/or CLAY/SILT FILL
- NATIVE SOIL (VARIOUS TEXTURES)
- SOIL CONTACT LINES ARE INFERRED

LEGEND:

- TWB-10A ENVIRONMENTAL SOIL BORING
- B-16 ENVIRONMENTAL SOIL BORING
- TWB-1 ENVIRONMENTAL SOIL BORING / TEMPORARY WELL

GILES ENGINEERING ASSOCIATES, INC.
N8 W22350 JOHNSON DRIVE, SUITE A1
WAUKESHA, WI 53186 (262)544-0118

**FIGURE 4D
CROSS-SECTION D - D'
THE COUTURE
909 EAST MICHIGAN STREET
MILWAUKEE, WISCONSIN**

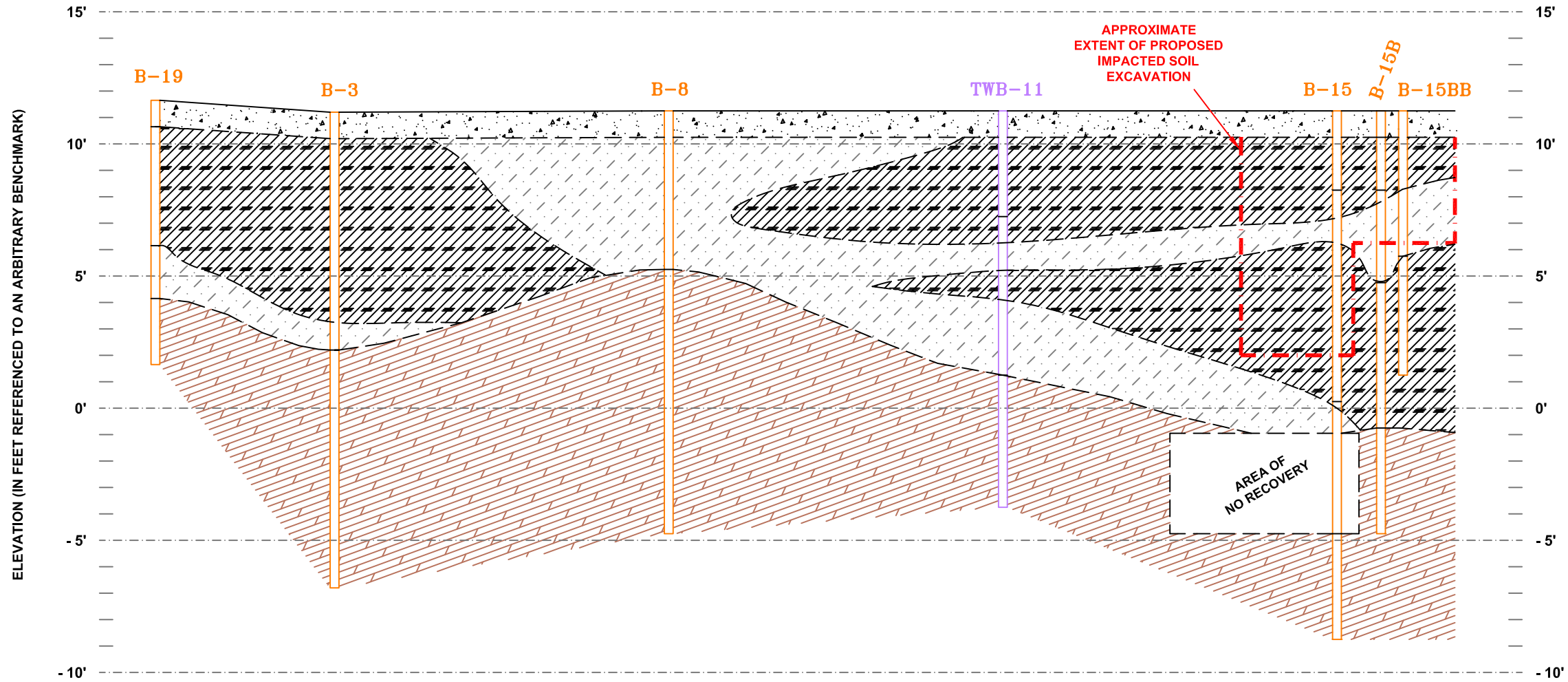
DESIGNED	DRAWN	SCALE	DATE	REVISED
KTB	JSZ	SEE TITLE	09-06-17	--
PROJECT NO.: 1E-1704007			CAD No. 1E1704007J	

CROSS SECTION E-E'





SCALE: VERTICAL 1" = 5'
HORIZONTAL 1" = 30'

E
(WEST)




E'
(EAST)



SOIL KEY:

-  CONCRETE SLAB WITH 1" TO 3" OF SAND & GRAVEL GRANULAR FILL BELOW
-  FOUNDRY WASTE and/or CINDER
-  GRANULAR and/or CLAY/SILT FILL
-  NATIVE SOIL (VARIOUS TEXTURES)
- SOIL CONTACT LINES ARE INFERRED

LEGEND:

-  TWB-15B ENVIRONMENTAL SOIL BORING
-  B-3 ENVIRONMENTAL SOIL BORING
-  TWB-11 ENVIRONMENTAL SOIL BORING / TEMPORARY WELL


 GILES ENGINEERING ASSOCIATES, INC.
N8 W22350 JOHNSON DRIVE, SUITE A1
WAUKESHA, WI 53186 (262)544-0118

FIGURE 4E
CROSS-SECTION E - E'
THE COUTURE
909 EAST MICHIGAN STREET
MILWAUKEE, WISCONSIN

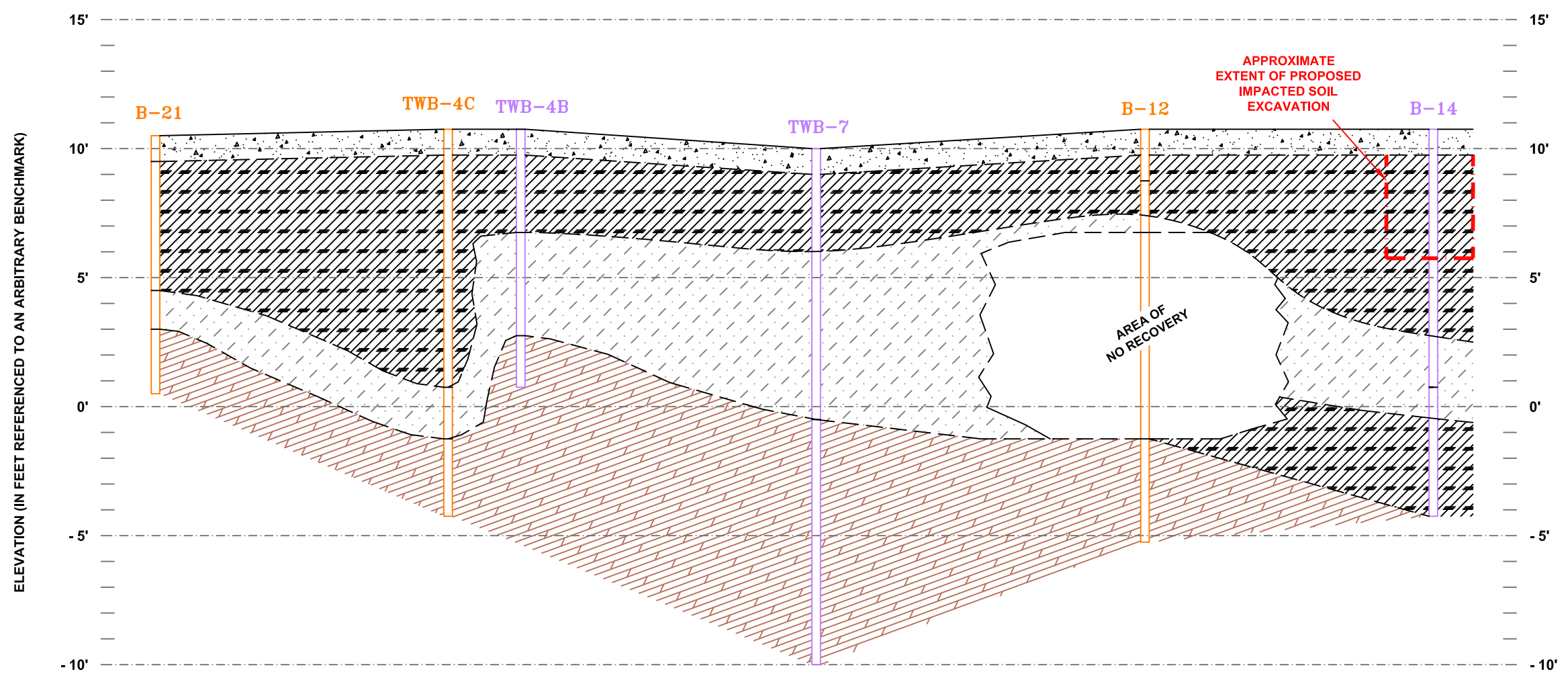
DESIGNED	DRAWN	SCALE	DATE	REVISED
KTB	JSZ	SEE TITLE	09-06-17	--
PROJECT NO.: 1E-1704007			CAD No. 1E1704007K	

F
(WEST)

CROSS SECTION F-F'

SCALE: VERTICAL 1" = 5'
HORIZONTAL 1" = 30'

F'
(EAST)



SOIL KEY:

- CONCRETE SLAB WITH 1" TO 3" OF SAND & GRAVEL GRANULAR FILL BELOW
- FOUNDRY WASTE and/or CINDER
- GRANULAR and/or CLAY/SILT FILL
- NATIVE SOIL (VARIOUS TEXTURES)
- SOIL CONTACT LINES ARE INFERRED

ELEVATION (IN FEET REFERENCED TO AN ARBITRARY BENCHMARK)

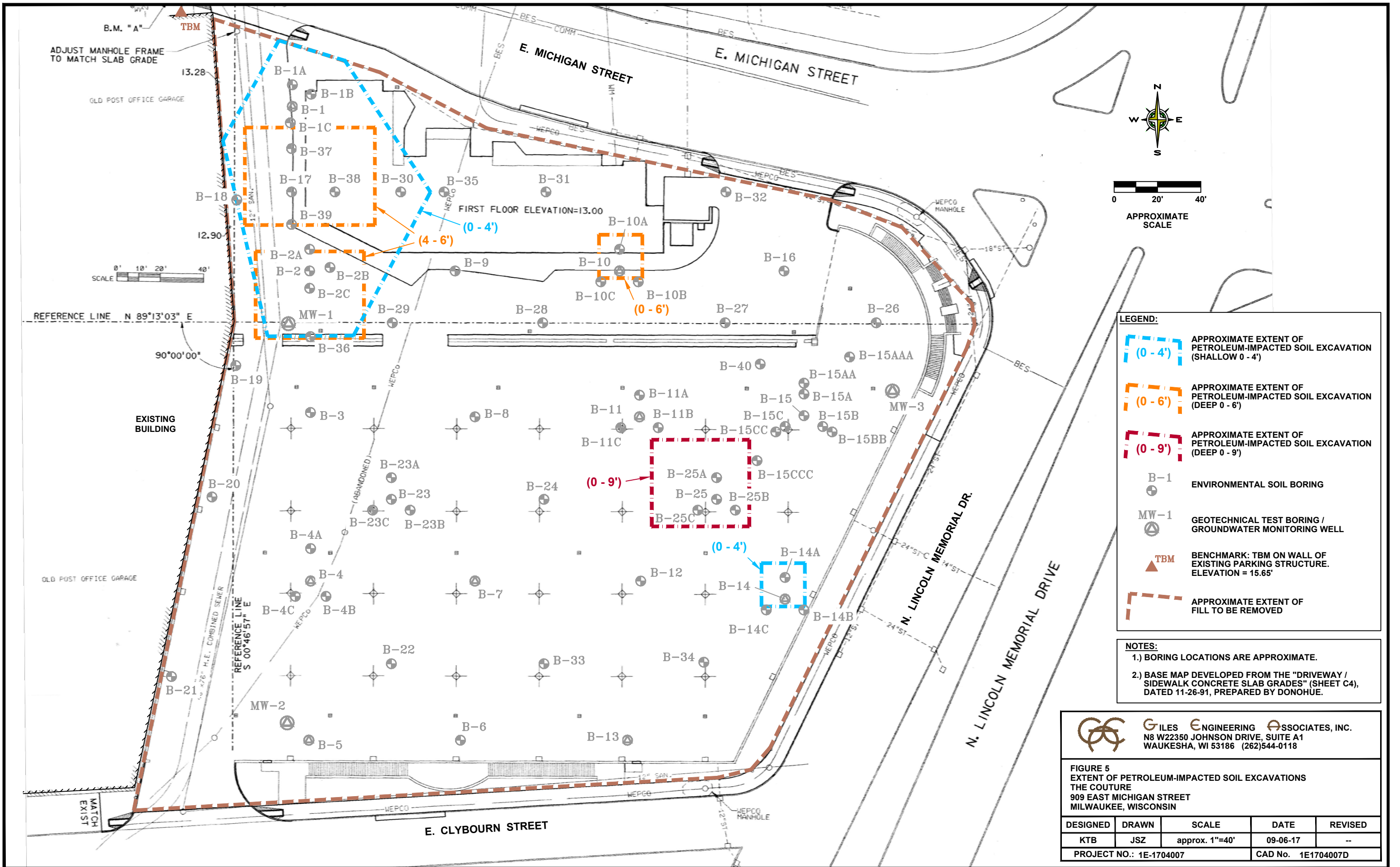
LEGEND:

- TWB-4C ENVIRONMENTAL SOIL BORING
- B-12 ENVIRONMENTAL SOIL BORING
- TWB-4B ENVIRONMENTAL SOIL BORING / TEMPORARY WELL

GILES ENGINEERING ASSOCIATES, INC.
N8 W22350 JOHNSON DRIVE, SUITE A1
WAUKESHA, WI 53186 (262)544-0118

FIGURE 4F
CROSS-SECTION F - F'
THE COUTURE
909 EAST MICHIGAN STREET
MILWAUKEE, WISCONSIN

DESIGNED	DRAWN	SCALE	DATE	REVISED
KTB	JSZ	SEE TITLE	09-06-17	--
PROJECT NO.: 1E-1704007			CAD No. 1E1704007L	



LEGEND:

- (0 - 4') APPROXIMATE EXTENT OF PETROLEUM-IMPACTED SOIL EXCAVATION (SHALLOW 0 - 4')
- (0 - 6') APPROXIMATE EXTENT OF PETROLEUM-IMPACTED SOIL EXCAVATION (DEEP 0 - 6')
- (0 - 9') APPROXIMATE EXTENT OF PETROLEUM-IMPACTED SOIL EXCAVATION (DEEP 0 - 9')
- B-1 ENVIRONMENTAL SOIL BORING
- MW-1 GEOTECHNICAL TEST BORING / GROUNDWATER MONITORING WELL
- TBM BENCHMARK: TBM ON WALL OF EXISTING PARKING STRUCTURE. ELEVATION = 15.65'
- APPROXIMATE EXTENT OF FILL TO BE REMOVED

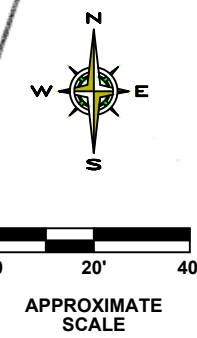
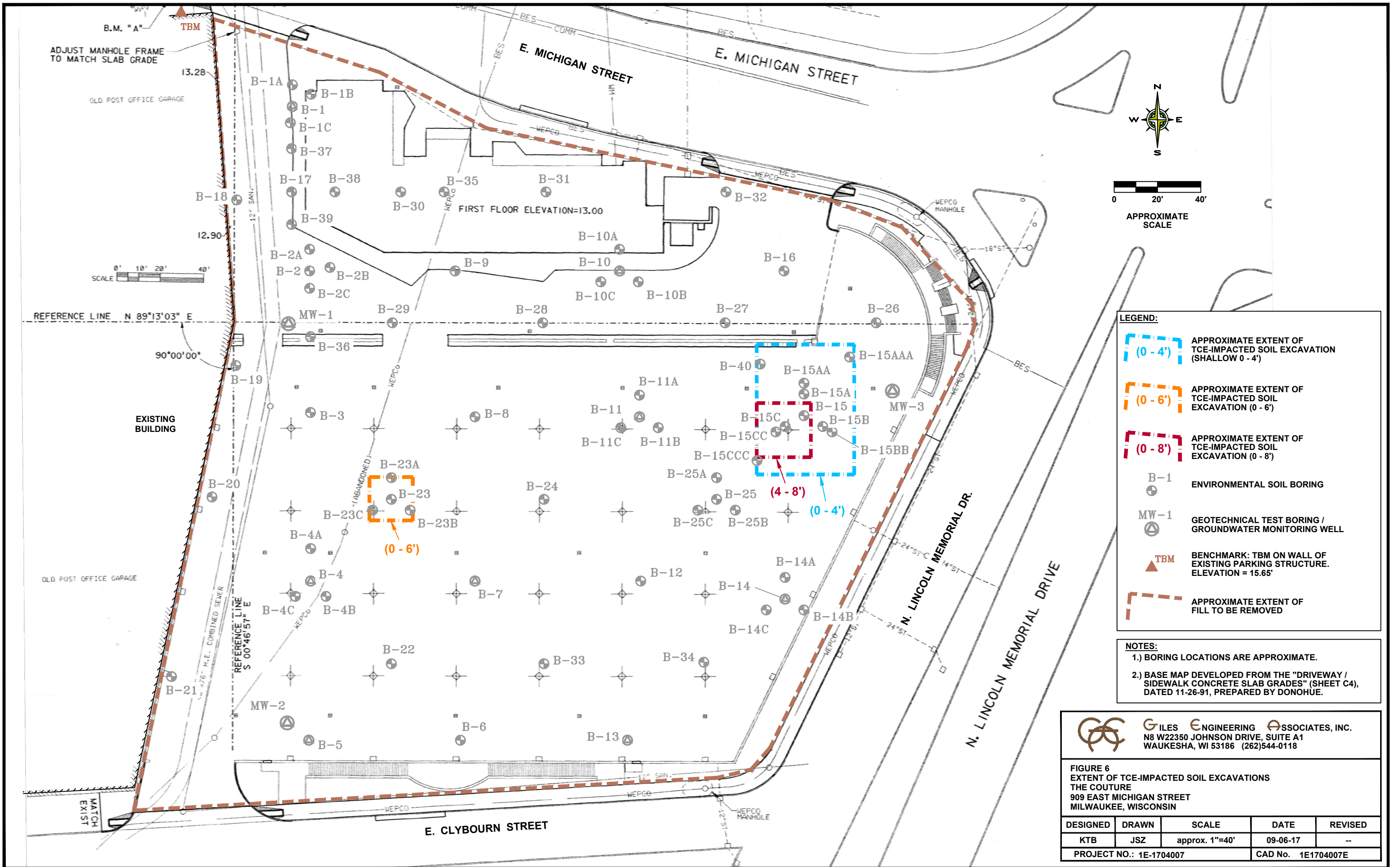
NOTES:

- 1.) BORING LOCATIONS ARE APPROXIMATE.
- 2.) BASE MAP DEVELOPED FROM THE "DRIVEWAY / SIDEWALK CONCRETE SLAB GRADES" (SHEET C4), DATED 11-26-91, PREPARED BY DONOHUE.

GILES ENGINEERING ASSOCIATES, INC.
 N8 W22350 JOHNSON DRIVE, SUITE A1
 WAUKESHA, WI 53186 (262)544-0118

FIGURE 5
 EXTENT OF PETROLEUM-IMPACTED SOIL EXCAVATIONS
 THE COUTURE
 909 EAST MICHIGAN STREET
 MILWAUKEE, WISCONSIN

DESIGNED	DRAWN	SCALE	DATE	REVISED
KTB	JSZ	approx. 1"=40'	09-06-17	--
PROJECT NO.: 1E-1704007			CAD No. 1E1704007D	



LEGEND:

- (0 - 4') APPROXIMATE EXTENT OF TCE-IMPACTED SOIL EXCAVATION (SHALLOW 0 - 4')
- (0 - 6') APPROXIMATE EXTENT OF TCE-IMPACTED SOIL EXCAVATION (0 - 6')
- (0 - 8') APPROXIMATE EXTENT OF TCE-IMPACTED SOIL EXCAVATION (0 - 8')
- B-1 ENVIRONMENTAL SOIL BORING
- MW-1 GEOTECHNICAL TEST BORING / GROUNDWATER MONITORING WELL
- TBM BENCHMARK: TBM ON WALL OF EXISTING PARKING STRUCTURE. ELEVATION = 15.65'
- APPROXIMATE EXTENT OF FILL TO BE REMOVED

NOTES:

- 1.) BORING LOCATIONS ARE APPROXIMATE.
- 2.) BASE MAP DEVELOPED FROM THE "DRIVEWAY / SIDEWALK CONCRETE SLAB GRADES" (SHEET C4), DATED 11-26-91, PREPARED BY DONOHUE.

GILES ENGINEERING ASSOCIATES, INC.
 N8 W22350 JOHNSON DRIVE, SUITE A1
 WAUKESHA, WI 53186 (262)544-0118

FIGURE 6
 EXTENT OF TCE-IMPACTED SOIL EXCAVATIONS
 THE COUTURE
 909 EAST MICHIGAN STREET
 MILWAUKEE, WISCONSIN

DESIGNED	DRAWN	SCALE	DATE	REVISED
KTB	JSZ	approx. 1"=40'	09-06-17	--
PROJECT NO.: 1E-1704007			CAD No. 1E1704007E	

TABLES

TABLE 1
SOIL ANALYTICAL RESULTS SUMMARY-DETECTED VOCS
THE COUTURE
909 EAST MICHIGAN STREET
MILWAUKEE, WISCONSIN
PROJECT NO. 1E-1704005

Analyte	Sample Location																								NR 720 RCL ¹ (µg/kg)		
	B-1		B-1A			B-1B			B-1C			B-2		B-2A			B-2B			B-2C			B-3	B-4		Soil to Groundwater Pathway	Direct-Contact Pathway (Non-Industrial)
Sample Depth (feet)	2-4	12-14	0-2	2-4	4-6	0-2	2-4	4-6	0-2	2-4	4-6	2-4	10-12	2-4	4-6	6-8	2-4	4-6	6-8	2-4	4-6	6-8	10-12	2-4	14-16		
Sample Collection Date	10/20/16	10/20/16	6/22/17	6/22/17	6/22/17	6/22/17	6/22/17	6/22/17	6/22/17	6/22/17	6/22/17	10/20/16	10/21/16	6/21/17	6/21/17	6/21/17	6/21/17	6/22/17	6/21/17	6/21/17	6/21/17	6/21/17	10/20/16	10/20/16	10/21/16		
PID (instrument units)	20	<5	2.7	7.4	5.4	3.7	6.7	6.8	6.4	4.6	4.9	15	25	1.2	1.5	1.2	7.6	6.9	7.5	8.4	4.3	5.7	21	18	<5		
Detected VOCs (µg/kg)																											
Benzene	<u>376</u>	<25.0	<u>55.6 J</u>	<u>79.5</u>	<25.0	<u>109</u>	<u>76.4</u>	<25.0	<u>184</u>	<u>290</u>	<u>53.4 J</u>	<u>120</u>	<25.0	<u>335</u>	<u>33.3 J</u>	<25.0	<25.0	<25.0	<25.0	<u>295</u>	<u>417</u>	<25.0	<25.0	<u>31.5 J</u>	<25.0	<u>5.1</u>	<u>1,600</u>
n-Butylbenzene	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	39.1 J	38.7 J	<25.0	<25.0	<25.0	<25.0	<u>NS</u>	<u>108,000</u>
sec-Butylbenzene	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<u>NS</u>	<u>145,000</u>
Chloromethane	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<u>15.5</u>	<u>171,000</u>
Ethylbenzene	32.2 J	<25.0	<25.0	50.5 J	<25.0	<25.0	<25.0	<25.0	36.3 J	58.3 J	<25.0	38.0 J	<25.0	73.4	<25.0	<25.0	<25.0	<25.0	<25.0	86.0	76.3	<25.0	<25.0	<25.0	<25.0	<u>1,570</u>	<u>8,020</u>
Isopropylbenzene	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<u>NS</u>	<u>268,000</u>
p-Isopropyltoluene	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<u>NS</u>	<u>162,000</u>
Methylene Chloride	<25.0	<25.0	<u>66.3 J</u>	<25.0	<25.0	<25.0	<25.0	<25.0	<u>56.7 J</u>	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<u>2.6</u>	<u>61,800</u>
Naphthalene	65.4 J	<40.0	<40.0	<40.0	<40.0	<40.0	<40.0	<40.0	48.1 J	<40.0	<40.0	74.7 J	<40.0	66.7 J	<40.0	<40.0	<40.0	<40.0	<40.0	422	179 J	<40.0	65.0 J	71.7 J	<40.0	<u>658</u>	<u>5,520</u>
n-Propylbenzene	<25.0	<25.0	<25.0	<25.0	<25.0	38.2 J	<25.0	<25.0	28.5 J	<25.0	<25.0	<25.0	<25.0	51.7 J	<25.0	<25.0	<25.0	<25.0	<25.0	59.4 J	69.9	<25.0	<25.0	<25.0	<25.0	<u>NS</u>	<u>264,000</u>
Toluene	<25.0	<25.0	<25.0	65.8	<25.0	27.4 J	<25.0	<25.0	<25.0	84	<25.0	29.6 J	<25.0	77.7	<25.0	<25.0	<25.0	<25.0	<25.0	86.6	51.5 J	<25.0	<25.0	40.4 J	<25.0	<u>1,107</u>	<u>818,000</u>
1,1,1-Trichloroethane	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<u>140</u>	<u>640,000</u>
Trichloroethene	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<u>3.6</u>	<u>1,300</u>
Trichlorofluoromethane	<25.0	<25.0	92.3	139	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<u>NS</u>	<u>1,230,000</u>
1,2,4-TMB	38.4 J	<25.0	<25.0	81.1	<25.0	73.3	<25.0	<25.0	50.5 J	54.9 J	<25.0	31.1 J	<25.0	96.8	<25.0	<25.0	<25.0	<25.0	<25.0	99.1	109	<25.0	<25.0	<25.0	<25.0	<u>1,382</u>	<u>219,000</u>
1,3,5-TMB	<25.0	<25.0	<25.0	<25.0	<25.0	29.3 J	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	37.1 J	32.4 J	<25.0	<25.0	<25.0	<25.0		<u>182,000</u>
Xylenes, Total	<75.0	<75.0	<75.0	230	<75.0	113 J	<75.0	<75.0	<75.0	195	<75.0	<75.0	<75.0	211	<75.0	<75.0	<75.0	<75.0	<75.0	228	194	<75.0	<75.0	<75.0	<75.0	<u>3,960</u>	<u>260,000</u>

Notes:

(1) Wisconsin Administrative Code Natural Resources Chapter (NR) 720 Residual Contaminant Levels from WDNR RCL Spreadsheet updated March 2017

RCLs: Residual Contaminant Levels

PID: Photoionization Detector

VOCS: Volatile Organic Compounds

µg/kg: Micrograms per kilogram; equivalent to parts per billion (ppb)

J: Concentration reported between the laboratory method detection limit and the reporting limit.

NA: Not Analyzed

NS: No Standard

Result shown "underlined / red" exceeds the calculated RCL for the soil to groundwater pathway.

TABLE 1 (Continued)
 SOIL ANALYTICAL RESULTS SUMMARY-DETECTED VOCS
 THE COUTURE
 909 EAST MICHIGAN STREET
 MILWAUKEE, WISCONSIN
 PROJECT NO. 1E-1704005

Analyte	Sample Location																								NR 720 RCL ¹ (µg/kg)				
	B-4A		B-4B		B-4C		B-5		B-6	B-7		B-8		B-9		B-10		B-10A			B-10B			B-10C			Soil to Groundwater Pathway	Direct-Contact Pathway (Non-Industrial)	
Sample Depth (feet)	2-4	6-8	2-4	6-8	2-4	6-8	2-4	14-16	2-4	2-4	16-18	2-4	12-14 [^]	2-4	10-12 [^]	2-4	14-16	2-4	6-8	8-10	2-4	6-8	8-10	2-4	6-8	8-10			
Sample Collection Date	6/23/17	6/23/17	6/23/17	6/23/17	6/23/17	6/23/17	10/20/16	10/25/16	10/20/16	10/20/16	10/31/16	10/20/16	10/21/16	10/20/16	10/21/16	10/20/16	10/21/16	6/21/17	6/21/17	6/21/17	6/21/17	6/21/17	6/21/17	6/21/17	6/21/17	6/21/17			
PID (instrument units)	1.5	6.9	3.1	5.3	2.8	1.8	25	21	20	25	<5	<5	<5	25	25	10	<5	5.3	1.2	0.9	3.1	7.8	8.5	9.6	6.3	11.4			
Detected VOCs (µg/kg)																													
Benzene	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	120	<25.0	<25.0	50.2 J	42.5 J	30.2 J	<25.0	<25.0	<25.0	<25.0	<25.0	5.1	1,600
n-Butylbenzene	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	NS	108,000
sec-Butylbenzene	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	NS	145,000
Chloromethane	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	15.5	159,000
Ethylbenzene	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	1,570	8,020
Isopropylbenzene	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	NS	268,000
p-Isopropyltoluene	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	73.7	<25.0	<25.0	NS	162,000
Methylene Chloride	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	2.6	61,800
Naphthalene	<40.0	<40.0	<40.0	<40.0	48.0 J	<40.0	134 J	<40.0	68.0 J	52.8 J	<40.0	50.5 J	<40.0	48.9 J	<40.0	125 J	<40.0	<40.0	<40.0	<40.0	64.0 J	<40.0	<40.0	<40.0	<40.0	<40.0	<40.0	658	5,520
n-Propylbenzene	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	NS	264,000
Toluene	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	33.0 J	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	49.2 J	<25.0	<25.0	<25.0	<25.0	30.5 J	55.0 J	<25.0	<25.0	51.5 J	<25.0	<25.0	1,107	818,000
1,1,1-Trichloroethane	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	140	640,000
Trichloroethene	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	3.6	1,300
Trichlorofluoromethane	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	NS	1,230,000
1,2,4-TMB	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	37.7 J	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	41.8 J	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	31.5 J	<25.0	<25.0	1,382	219,000
1,3,5-TMB	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0		182,000
Xylenes, Total	<75.0	<75.0	<75.0	<75.0	<75.0	<75.0	85.3 J	<75.0	<75.0	<75.0	<75.0	<75.0	<75.0	<75.0	<75.0	103 J	<75.0	<75.0	<75.0	<75.0	<75.0	<75.0	<75.0	<75.0	<75.0	<75.0	<75.0	3,960	260,000

Notes:
 (1) Wisconsin Administrative Code Natural Resources Chapter (NR) 720 Residual Contaminant Levels from WDNR RCL Spreadsheet updated March 2017
RCLs: Residual Contaminant Levels
PID: Photoionization Detector
VOCS: Volatile Organic Compounds
µg/kg: Micrograms per kilogram; equivalent to parts per billion (ppb)
J: Concentration reported between the laboratory method detection limit and the reporting limit.
NA: Not Analyzed
NS: No Standard
Result shown "underlined / red" exceeds the calculated RCL for the soil to groundwater pathway.

TABLE 1 (Continued)
 SOIL ANALYTICAL RESULTS SUMMARY-DETECTED VOCs
 THE COUTURE
 909 EAST MICHIGAN STREET
 MILWAUKEE, WISCONSIN
 PROJECT NO. 1E-1704005

Analyte	Sample Location																								NR 720 RCL ¹ (µg/kg)			
	B-11		B-11A			B-11B			B-11C			B-12		B-13		B-14			B-14A				B-14B				Soil to Groundwater Pathway	Direct-Contact Pathway (Non-Industrial)
Sample Depth (feet)	2-4	12-14	0-2	2-4	4-6	0-2	2-4	4-6	2-4	4-6	6-8	2-4	14-16 [^]	2-4	14-16	2-4	14-15	14-16	2-4	4-6	10-12	14-16	2-4	8-10	12-14	14-16		
Sample Collection Date	10/20/16	10/31/16	6/22/17	6/22/17	6/22/17	6/22/17	6/22/17	6/22/17	6/22/17	6/22/17	6/22/17	10/20/16	10/21/16	10/20/16	10/25/16	10/20/16	10/31/16	8/7/17	7/3/17	7/3/17	7/3/17	7/3/17	7/3/17	7/3/17	7/3/17	7/3/17		
PID (instrument units)	28	<5	4.3	9.6	7.6	0	3.6	8.9	4.9	7.4	3.1	30	<5	20	14	20	<5	<5	4.7	7.5	8.5	5.2	0	3.1	0	0		
Detected VOCs (µg/kg)																												
Benzene	<u>56.8 J</u>	<25.0	<29.2	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<u>65.3</u>	<u>92.1</u>	<25.0	<u>51.1 J</u>	<28.1	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<u>5.1</u>	<u>1,600</u>
n-Butylbenzene	<25.0	<25.0	<29.2	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	NA	50.4 J	42.6 J	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<u>NS</u>	<u>108,000</u>
sec-Butylbenzene	<25.0	<25.0	<29.2	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	NA	53.2 J	34.4 J	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<u>NS</u>	<u>145,000</u>
Chloromethane	<25.0	<25.0	<29.2	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	NA	<27.2	<28.1	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<u>15.5</u>	<u>159,000</u>
Ethylbenzene	31.4 J	<25.0	<29.2	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	29.0 J	<25.0	<25.0	48.9 J	<28.1	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<u>1,570</u>	<u>8,020</u>
Isopropylbenzene	<25.0	<25.0	<29.2	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	NA	52.6 J	<28.1	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<u>NS</u>	<u>268,000</u>
p-Isopropyltoluene	<25.0	<25.0	<29.2	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	86.2	<25.0	<25.0	<25.0	<25.0	<25.0	NA	<27.2	<28.1	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<u>NS</u>	<u>162,000</u>
Methylene Chloride	<25.0	<25.0	<29.2	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	NA	<27.2	<28.1	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<u>2.6</u>	<u>61,800</u>
Naphthalene	175 J	<40.0	99.8 J	89.7 J	<40.0	77.8 J	102 J	<40.0	177 J	178 J	137 J	53.0 J	<40.0	47.6 J	<40.0	119 J	155 J	NA	56.8 J	119 J	<40.0	<40.0	<40.0	<40.0	158 J	57.0 J	<u>658</u>	<u>5,520</u>
n-Propylbenzene	<25.0	<25.0	<29.2	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	NA	<27.2	<28.1	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<u>NS</u>	<u>264,000</u>
Toluene	144	<25.0	<29.2	27.4 J	<25.0	36.8 J	64.8 J	<25.0	<25.0	<25.0	<25.0	<25.0	101	<25.0	<25.0	57.1 J	33.1 J	<25.0	230	<28.1	<25.0	<25.0	<25.0	56.4 J	<25.0	33.3 J	<u>1,107</u>	<u>818,000</u>
1,1,1-Trichloroethane	<25.0	<25.0	<29.2	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	NA	<27.2	<28.1	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<u>140</u>	<u>640,000</u>
Trichloroethene	<25.0	<25.0	<29.2	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	NA	<27.2	<28.1	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<u>3.6</u>	<u>1,300</u>
Trichlorofluoromethane	<25.0	<25.0	<29.2	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	NA	<27.2	<28.1	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<u>NS</u>	<u>1,230,000</u>
1,2,4-TMB	59.8 J	<25.0	43.0 J	84.6	<25.0	39.0 J	56.0 J	<25.0	<25.0	<25.0	41.9 J	<25.0	<25.0	<25.0	<25.0	45.4 J	<25.0	<25.0	138	60.8 J	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<u>1,382</u>	<u>219,000</u>
1,3,5-TMB	<25.0	<25.0	<29.2	34.0 J	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	71.7 J	43.1 J	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<u>182,000</u>	
Xylenes, Total	161 J	<75.0	112 J	<75.0	<75.0	<75.0	144 J	<75.0	<75.0	<75.0	<75.0	<75.0	<75.0	<75.0	<75.0	127 J	<75.0	<75.0	316	134 J	<75.0	<75.0	<75.0	<75.0	<75.0	<75.0	<u>3,960</u>	<u>260,000</u>

Notes:

(1) Wisconsin Administrative Code Natural Resources Chapter (NR) 720 Residual Contaminant Levels from WDNR RCL Spreadsheet updated March 2017

RCLs: Residual Contaminant Levels

PID: Photoionization Detector

VOCs: Volatile Organic Compounds

µg/kg: Micrograms per kilogram; equivalent to parts per billion (ppb)

J: Concentration reported between the laboratory method detection limit and the reporting limit.

NA: Not Analyzed

NS: No Standard

Result shown "underlined / red" exceeds the calculated RCL for the soil to groundwater pathway.

TABLE 1 (Continued)
 SOIL ANALYTICAL RESULTS SUMMARY-DETECTED VOCS
 THE COUTURE
 909 EAST MICHIGAN STREET
 MILWAUKEE, WISCONSIN
 PROJECT NO. 1E-1704005

Analyte	Sample Location																					NR 720 RCL ¹ (µg/kg)				
	B-14C				B-15		B-15A				B-15-AA			B-15AAA			B-15B			B-15BB			Soil to Groundwater Pathway	Direct-Contact Pathway (Non-Industrial)		
Sample Depth (feet)	2-4	6-8	10-12	14-16	2-4	16-18	2-4	6-8	10-12	14-16	2-4	4-6	6-8	2-4	4-6	6-8	2-4	6-8	10-12	2-4	4-6	6-8				
Sample Collection Date	6/23/17	6/23/17	6/23/17	6/23/17	10/20/16	10/21/16	6/23/17	6/23/17	6/23/17	6/23/17	7/7/17	7/7/17	7/7/17	7/27/17	7/27/17	7/27/17	6/23/17	6/23/17	6/23/17	7/7/17	7/7/17	7/7/17				
PID (instrument units)	3	11	14	2.5	20	<5	5	2	5	5	8.6	14.2	13.6	1.1	8.1	2.4	5	2	5	13.8	4.0	4.7				
Detected VOCs (µg/kg)																										
Benzene	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<u>37.1 J</u>	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<29.8	<33.3	5.1	1,600
n-Butylbenzene	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	69.7 J	71.6	<25.0	<25.0	80.2	<25.0	<25.0	<25.0	<25.0	<25.0	35.8 J	<25.0	<25.0	<25.0	<25.0	<25.0	<29.8	<33.3	NS	108,000
sec-Butylbenzene	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	48.1 J	<25.0	<25.0	<25.0	52.8 J	<25.0	<25.0	<25.0	<25.0	<25.0	32.3 J	<25.0	<25.0	<25.0	<25.0	<25.0	<29.8	<33.3	NS	145,000
Chloromethane	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<27.8	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<29.8	<33.3	15.5	159,000
Ethylbenzene	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	115	64.8 J	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<29.8	<33.3	1,570	8,020
Isopropylbenzene	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	88.3	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<29.8	<33.3	NS	268,000
p-Isopropyltoluene	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	38.4 J	<25.0	<25.0	<25.0	36.9 J	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<29.8	<33.3	NS	162,000
Methylene Chloride	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<27.8	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	27.0 J	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<29.8	<33.3	2.6	61,800
Naphthalene	47.0 J	<40.0	<40.0	<40.0	66.2 J	<40.0	512	125 J	<40.0	<40.0	180 J	<40.0	70.6 J	67.1 J	51.9 J	<40.0	85.4 J	<40.0	<40.0	<40.0	<47.7	138 J	658	138 J	658	5,520
n-Propylbenzene	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	107	72.2	<25.0	<25.0	41.9 J	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<29.8	<33.3	NS	264,000
Toluene	26.9 J	<25.0	<25.0	<25.0	<25.0	<25.0	270	86.0	<25.0	<25.0	81.9	<25.0	41.6 J	28.8 J	<25.0	<25.0	46.5 J	<25.0	<25.0	39.8 J	<29.8	<33.3	1,107	<33.3	1,107	818,000
1,1,1-Trichloroethane	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	64.8J	<25.0	<25.0	<25.0	<u>266</u>	<25.0	<25.0	<25.0	<25.0	<25.0	<u>191</u>	<25.0	<25.0	<25.0	<29.8	<33.3	140	<33.3	140	640,000
Trichloroethene	<25.0	<25.0	<25.0	<25.0	<u>46.7 J</u>	<25.0	<u>473</u>	<25.0	<25.0	<25.0	<u>455</u>	<25.0	<25.0	<25.0	<25.0	<25.0	<u>1220</u>	<25.0	<25.0	<25.0	<29.8	<33.3	3.6	<33.3	3.6	1,300
Trichlorofluoromethane	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<27.8	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<29.8	<33.3	NS	<33.3	NS	1,230,000
1,2,4-TMB	27.0 J	<25.0	<25.0	<25.0	<25.0	<25.0	327	63.3 J	<25.0	<25.0	142	<25.0	<25.0	28.1 J	<25.0	<25.0	45.3 J	<25.0	<25.0	<25.0	<29.8	<33.3	1,382	<33.3	1,382	219,000
1,3,5-TMB	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	88.1	<25.0	<25.0	<25.0	80.1	<25.0	<25.0	<25.0	<25.0	<25.0	30.9 J	<25.0	<25.0	<25.0	<29.8	<33.3		<33.3		182,000
Xylenes, Total	<75.0	<75.0	<75.0	<75.0	<75.0	<75.0	703	147 J	<75.0	<75.0	293	<75.0	<75.0	<75.0	<75.0	<75.0	<75.0	<75.0	<75.0	<75.0	<89.3	<100	3,960	<100	3,960	260,000

Notes:

(1) Wisconsin Administrative Code Natural Resources Chapter (NR) 720 Residual Contaminant Levels from WDNR RCL Spreadsheet updated March 2017

RCLs: Residual Contaminant Levels

PID: Photoionization Detector

VOCS: Volatile Organic Compounds

µg/kg: Micrograms per kilogram; equivalent to parts per billion (ppb)

J: Concentration reported between the laboratory method detection limit and the reporting limit.

NA: Not Analyzed

NS: No Standard

Result shown "underlined / red" exceeds the calculated RCL for the soil to groundwater pathway.

TABLE 1 (Continued)
 SOIL ANALYTICAL RESULTS SUMMARY-DETECTED VOCS
 THE COUTURE
 909 EAST MICHIGAN STREET
 MILWAUKEE, WISCONSIN
 PROJECT NO. 1E-1704005

Analyte	Sample Location																								NR 720 RCL ¹ (µg/kg)				
	B-15C			B-15CC			B-15CCC			B-16	B-17			B-18			B-19			B-20			B-21			B-22		Soil to Groundwater Pathway	Direct-Contact Pathway (Non-Industrial)
Sample Depth (feet)	2-4	6-8	10-12	2-4	4-6	6-8	2-4	4-6	6-8	2-4	2-4	4-6	6-8	2-4	4-6	6-8	2-4	4-6	8-10	2-4	6-8	8-10	2-4	6-8	8-10	2-4	6-8		
Sample Collection Date	6/23/17	6/23/17	6/23/17	7/7/17	7/7/17	7/7/17	7/27/17	7/27/17	7/27/17	10/20/16	7/3/17	7/3/17	7/3/17	7/3/17	7/3/17	7/3/17	7/3/17	7/3/17	7/3/17	7/3/17	7/3/17	7/3/17	7/5/17	7/5/17	7/5/17	7/5/17	7/5/17		
PID (instrument units)	2	5	3	3.0	0.0	3.7	2.0	2.4	1.4	5	9.1	3.4	3.2	7.3	6.2	7.9	7.3	6.7	5.0	0.2	8.6	4.1	6.1	9.7	6.6	11.9	7.6		
Detected VOCs (µg/kg)																													
Benzene	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<26.6	<25.5	<33.8	<25.0	1240	110	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	5.1	1,600
n-Butylbenzene	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<26.6	<25.5	<33.8	<25.0	29.9 J	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	NS	108,000
sec-Butylbenzene	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<26.6	<25.5	<33.8	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	NS	145,000
Chloromethane	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<26.6	<25.5	78.6 J	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	15.5	159,000
Ethylbenzene	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<26.6	<25.5	<33.8	<25.0	63.3 J	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	1,570	8,020
Isopropylbenzene	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<26.6	<25.5	<33.8	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	NS	268,000
p-Isopropyltoluene	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<26.6	<25.5	<33.8	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	NS	162,000
Methylene Chloride	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<26.6	29.9 J	<33.8	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	2.6	61,800
Naphthalene	47.2 J	139 J	<40.0	51.6 J	<40.0	<40.0	68.1 J	<40.9	122 J	65.8 J	109 J	<40.0	<40.0	<40.0	<40.0	<40.0	<40.0	<40.0	51.7 J	68.7 J	<40.0	<40.0	<40.0	<40.0	<40.0	<40.0	<40.0	658	5,520
n-Propylbenzene	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<26.6	<25.5	<33.8	<25.0	62.1 J	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	NS	264,000
Toluene	<25.0	75.0	<25.0	<25.0	39.1	<25.0	57.4 J	<25.5	<33.8	43.5 J	73.3	28.1 J	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	32.9 J	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	1,107	818,000
1,1,1-Trichloroethane	<25.0	38.1 J	<25.0	<25.0	43.6 J	<25.0	<26.6	<25.5	<33.8	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	140	640,000
Trichloroethene	108	70.9	<25.0	81.2	127	<25.0	<26.6	<25.5	<33.8	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	3.6	1,300
Trichlorofluoromethane	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<26.6	<25.5	<33.8	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	NS	1,230,000
1,2,4-TMB	<25.0	46.4 J	<25.0	<25.0	<25.0	<25.0	33.2 J	<25.5	<33.8	<25.0	133	44.3 J	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	1,382	219,000
1,3,5-TMB	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<26.6	<25.5	<33.8	<25.0	50.6 J	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0		182,000
Xylenes, Total	<75.0	132 J	<75.0	<75.0	<75.0	<75.0	<79.8	<76.5	<101	<75.0	195 J	<75.0	<75.0	<75.0	<75.0	<75.0	<75.0	<75.0	<75.0	<75.0	<75.0	<75.0	<75.0	<75.0	<75.0	<75.0	<75.0	3,960	260,000

Notes:
 (1) Wisconsin Administrative Code Natural Resources Chapter (NR) 720 Residual Contaminant Levels from WDNR RCL Spreadsheet updated March 2017
RCLs: Residual Contaminant Levels
PID: Photoionization Detector
VOCs: Volatile Organic Compounds
µg/kg: Micrograms per kilogram; equivalent to parts per billion (ppb)
J: Concentration reported between the laboratory method detection limit and the reporting limit.
NA: Not Analyzed
NS: No Standard
Result shown "underlined / red" exceeds the calculated RCL for the soil to groundwater pathway.

TABLE 1 (Continued)
 SOIL ANALYTICAL RESULTS SUMMARY-DETECTED VOCS
 THE COUTURE
 909 EAST MICHIGAN STREET
 MILWAUKEE, WISCONSIN
 PROJECT NO. 1E-1704005

Analyte	Sample Location																								NR 720 RCL ¹ (µg/kg)				
	B-23				B-23A			B-23B			B-23C			B-24			B-25						B-25A			Soil to Groundwater Pathway	Direct-Contact Pathway (Non-Industrial)		
Sample Depth (feet)	2-4	4-6	6-8	12-14	2-4	4-6	6-8	2-4	4-6	6-8	2-4	4-6	6-8	2-4	4-6	8-10	2-4	4-6	6-8	6-8	8-10	10-12	16-18	18-20	2-4			4-6	6-8
Sample Collection Date	7/3/17	7/27/17	7/3/17	7/3/17	7/27/17	7/27/17	7/27/17	7/27/17	7/27/17	7/27/17	7/27/17	7/27/17	7/27/17	7/3/17	7/3/17	7/3/17	7/27/17	7/27/17	7/5/17	7/27/17	7/27/17	7/5/17	7/5/17	7/5/17	7/27/17	7/27/17	7/27/17		
PID (instrument units)	10.9	11.7	13	15	6.5	4.5	3.5	5.3	7.6	4.0	4.0	3.0	7.0	11.3	3.2	8.2	4.1	2.4	3.3	3.3	1.3	3.1	22	22.3	7.1	2.9	5.5		
Detected VOCs (µg/kg)																													
Benzene	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.5	<u>33.2 J</u>	<u>77.6</u>	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<u>706</u>	<25.0	<u>5.1</u>	<u>1,600</u>
n-Butylbenzene	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.5	<27.8	<25.0	<25.0	<25.0	56.0 J	<25.0	<25.0	<25.0	<49.3	<25.0	<u>NS</u>	<u>108,000</u>
sec-Butylbenzene	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.5	<27.8	<25.0	<25.0	<25.0	34.2 J	<25.0	<25.0	<25.0	<49.3	<25.0	<u>NS</u>	<u>145,000</u>
Chloromethane	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.5	<27.8	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<49.3	<25.0	<u>15.5</u>	<u>171,000</u>	
Ethylbenzene	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.5	44.0 J	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	239	<25.0	<u>1,570</u>	<u>8,020</u>	
Isopropylbenzene	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.5	<27.8	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<49.3	<25.0	<u>NS</u>	<u>268,000</u>	
p-Isopropyltoluene	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.5	<27.8	<25.0	<25.0	<25.0	48.2 J	<25.0	<25.0	<25.0	<49.3	<25.0	<u>NS</u>	<u>162,000</u>
Methylene Chloride	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<u>28.6 J</u>	<25.0	<25.0	<25.0	<u>34.7 J</u>	<u>33.5 J</u>	<u>32.0 J</u>	<25.0	<25.0	<25.0	<u>27.8 J</u>	<u>33.0 J</u>	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<u>29.9 J</u>	<49.3	<25.0	<u>2.6</u>	<u>61,800</u>
Naphthalene	<40.0	<40.0	<40.0	<40.0	<40.0	<40.0	<40.0	73.8 J	<40.0	<40.0	<40.0	<40.0	<40.0	<40.0	<40.0	<40.0	48.5 J	238 J	92.2 J	91.1 J	<u>952</u>	73.8 J	172 J	<40.0	102 J	244 J	132 J	<u>658</u>	<u>5,520</u>
n-Propylbenzene	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.5	36.8 J	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	87.7 J	<25.0	<u>NS</u>	<u>264,000</u>	
Toluene	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.5	222	44.2 J	<25.0	<25.0	<25.0	123	<25.0	29.5 J	<u>1720</u>	42.1 J	<u>1,107</u>	<u>818,000</u>
1,1,1-Trichloroethane	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.5	<27.8	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<49.3	<25.0	<u>140</u>	<u>640,000</u>	
Trichloroethene	<u>51.7 J</u>	<u>34.1 J</u>	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.5	<27.8	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<49.3	<25.0	<u>3.6</u>	<u>1,300</u>	
Trichlorofluoromethane	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.5	<27.8	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<49.3	<25.0	<u>NS</u>	<u>1,230,000</u>	
1,2,4-TMB	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.5	137	37.5 J	<25.0	36.9 J	<25.0	<25.0	29.3 J	204	57.9 J	<u>1,382</u>	<u>219,000</u>	
1,3,5-TMB	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.5	45.3 J	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<49.3	<25.0		<u>182,000</u>	
Xylenes, Total	<75.0	<75.0	<75.0	<75.0	<75.0	<75.0	<75.0	<75.0	<75.0	<75.0	<75.0	<75.0	<75.0	<75.0	<75.0	<75.0	<76.5	413	94.7 J	<75.0	<75.0	<75.0	<75.0	<75.0	848	142 J	<u>3,960</u>	<u>260,000</u>	

Notes:
 (1) Wisconsin Administrative Code Natural Resources Chapter (NR) 720 Residual Contaminant Levels from WDNR RCL Spreadsheet updated March 2017
RCLs: Residual Contaminant Levels
PID: Photoionization Detector
VOCs: Volatile Organic Compounds
µg/kg: Micrograms per kilogram; equivalent to parts per billion (ppb)
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Result shown "underlined / red" exceeds the calculated RCL for the soil to groundwater pathway.

TABLE 1 (Continued)
 SOIL ANALYTICAL RESULTS SUMMARY-DETECTED VOCS
 THE COUTURE
 909 EAST MICHIGAN STREET
 MILWAUKEE, WISCONSIN
 PROJECT NO. 1E-1704005

Analyte	Sample Location																						NR 720 RCL ¹ (µg/kg)					
	B-25B			B-25C			B-26				B-26 (Duplicate)		B-27				B-28			B-29			B-30		Soil to Groundwater Pathway	Direct-Contact Pathway (Non-Industrial)		
Sample Depth (feet)	2-4	4-6	6-8	2-4	4-6	6-8	2-4	6-8	10-12	14-16	2-4	14-16	2-4	6-8	10-12	14-16	2-4	6-8	8-10	2-4	6-8	8-10	2-4	6-8				
Sample Collection Date	7/27/17	7/27/17	7/27/17	7/27/17	7/27/17	7/27/17	7/5/17	7/5/17	7/5/17	7/5/17	7/27/17	7/27/17	7/7/17	7/7/17	7/7/17	7/7/17	7/7/17	7/7/17	7/7/17	7/7/17	7/7/17	7/7/17	6/21/17	6/21/17				
PID (instrument units)	3.9	5.0	7.6	2.7	6.5	4.0	6.9	9.9	11.6	11.8	6.9	11.8	1	20	0.1	1.1	5.4	2.5	2.0	0	0	0	2.9	3.1				
Detected VOCs (µg/kg)																												
Benzene	<32.9	<54.4	<25.0	<25.0	<25.0	<u>133</u>	<25.0	<25.0	<25.0	<u>50.7 J</u>	<25.0	<25.0	<25.0	<50.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<u>97.3</u>	<25.0	5.1	1,600		
n-Butylbenzene	110	<54.4	<25.0	<25.0	<25.0	<32.5	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	68.1	<25.0	NS	108,000		
sec-Butylbenzene	82.7 J	<54.4	<25.0	<25.0	<25.0	<32.5	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	NS	145,000		
Chloromethane	<32.9	<54.4	<25.0	<25.0	<25.0	<32.5	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	15.5	159,000		
Ethylbenzene	44.2 J	<54.4	<25.0	<25.0	<25.0	86.0 J	<25.0	<25.0	<25.0	62.9 J	<25.0	<25.0	<25.0	<50.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	94.7	<25.0	1,570	8,020		
Isopropylbenzene	42.9 J	<54.4	<25.0	<25.0	<25.0	44.9 J	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	NS	268,000		
p-Isopropyltoluene	59.9 J	<54.4	<25.0	<25.0	<25.0	<32.5	<25.0	<25.0	<25.0	37.8 J	<25.0	<25.0	<25.0	12300	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	NS	162,000		
Methylene Chloride	<32.9	<54.4	<25.0	<25.0	<u>30.5 J</u>	<u>41.8 J</u>	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<u>53.7 J</u>	<25.0	2.6	61,800		
Naphthalene	261 J	310 J	<40.0	<40.0	126 J	404	78.4 J	<40.0	<40.0	<u>1350</u>	<40.0	55.7 J	<40.0	<80.1	<40.0	<40.0	<40.0	<40.0	<40.0	<40.0	<40.0	<40.0	184 J	<40.0	658	5,520		
n-Propylbenzene	81.7 J	<54.4	<25.0	<25.0	<25.0	50.8 J	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	169	<25.0	NS	264,000		
Toluene	111	81.6 J	<25.0	<25.0	87.8	487	<25.0	<25.0	<25.0	149	<25.0	<25.0	<25.0	<50.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	51.6 J	<25.0	<25.0	1,107	818,000
1,1,1-Trichloroethane	<32.9	<54.4	<25.0	<25.0	<25.0	<32.5	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	140	640,000		
Trichloroethene	<32.9	<54.4	<25.0	<25.0	<25.0	<32.5	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	3.6	1,300		
Trichlorofluoromethane	<32.9	<54.4	<25.0	<25.0	<25.0	<32.5	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	NS	1,230,000		
1,2,4-TMB	257	90.2 J	29.3 J	<25.0	64.5 J	253	<25.0	<25.0	<25.0	76.8 J	<25.0	<25.0	<25.0	<50.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	211	<25.0	1,382	219,000		
1,3,5-TMB	153	70.8 J	<25.0	<25.0	<25.0	74.4 J	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	132	<25.0		182,000		
Xylenes, Total	249 J	192 J	<75.0	<75.0	178 J	791	<75.0	<75.0	<75.0	168 J	<75.0	<75.0	<75.0	<150	<75.0	<75.0	<75.0	<75.0	<75.0	<75.0	<75.0	<75.0	234	<75.0	3,960	260,000		

Notes:
 (1) Wisconsin Administrative Code Natural Resources Chapter (NR) 720 Residual Contaminant Levels from WDNR RCL Spreadsheet updated March 2017
RCLs: Residual Contaminant Levels
PID: Photoionization Detector
VOCs: Volatile Organic Compounds
µg/kg: Micrograms per kilogram; equivalent to parts per billion (ppb)
J: Concentration reported between the laboratory method detection limit and the reporting limit.
NA: Not Analyzed
NS: No Standard
Result shown "underlined / red" exceeds the calculated RCL for the soil to groundwater pathway.

TABLE 1 (Continued)
 SOIL ANALYTICAL RESULTS SUMMARY-DETECTED VOCs
 THE COUTURE
 909 EAST MICHIGAN STREET
 MILWAUKEE, WISCONSIN
 PROJECT NO. 1E-1704005

Analyte	Sample Location																		NR 720 RCL ¹ (µg/kg)		
	B-31			B-32			B-33		B-34					B-35			B-36			Soil to Groundwater Pathway	Direct-Contact Pathway (Non-Industrial)
Sample Depth (feet)	2-4	6-8	8-10	0-2	8-10	10-12	2-4	4-6	2-4	4-6	10-12	14-16	18-20	2-4	4-6	6-8	2-4	4-6	6-8		
Sample Collection Date	6/21/17	6/21/17	6/21/17	6/21/17	6/21/17	6/21/17	7/5/17	7/5/17	7/5/17	7/5/17	7/5/17	7/5/17	7/5/17	7/12/17	7/12/17	7/12/17	7/12/17	7/12/17	7/12/17		
PID (instrument units)	5.4	3.7	3.6	2.6	5.5	6.0	11.9	8.8	11.4	16	17.5	25.1	25.9	1.0	1.7	1.0	13.9	1.7	16.1		
Detected VOCs (µg/kg)																					
Benzene	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<u>28.5 J</u>	<u>57.0 J</u>	<25.0	5.1	1,600
n-Butylbenzene	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	NS	108,000
sec-Butylbenzene	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	NS	145,000
Chloromethane	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	15.5	159,000
Ethylbenzene	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	1,570	8,020
Isopropylbenzene	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	NS	268,000
p-Isopropyltoluene	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	NS	162,000
Methylene Chloride	<25.0	<25.0	<25.0	<u>29.9 J</u>	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<u>32.6 J</u>	<25.0	<u>37.8 J</u>	<25.0	<u>30.0 J</u>	<u>30.0 J</u>	2.6	61,800
Naphthalene	<40.0	<40.0	<40.0	86.6 J	<40.0	<40.0	<40.0	<40.0	<40.0	<40.0	150 J	282 J	<40.0	<40.0	<40.0	<40.0	<40.0	<40.0	<40.0	658	5,520
n-Propylbenzene	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	NS	264,000
Toluene	<25.0	<25.0	<25.0	73.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	53.8 J	<25.0	<25.0	<25.0	<25.0	<25.0	29.5 J	<25.0	1,107	818,000
1,1,1-Trichloroethane	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	140	640,000
Trichloroethene	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	3.6	1,300
Trichlorofluoromethane	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	64.3 J	31.3 J	<25.0	<25.0	<25.0	NS	1,230,000
1,2,4-TMB	<25.0	<25.0	<25.0	46.2 J	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	1,382	219,000
1,3,5-TMB	<25.0	<25.0	<25.0	30.7 J	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0		182,000
Xylenes, Total	<75.0	<75.0	<75.0	158 J	<75.0	<75.0	<75.0	<75.0	<75.0	<75.0	<75.0	<75.0	<75.0	<75.0	<75.0	<75.0	<75.0	<75.0	<75.0	3,960	260,000

Notes:

(1) Wisconsin Administrative Code Natural Resources Chapter (NR) 720 Residual Contaminant Levels from WDNR RCL Spreadsheet updated March 2017

RCLs: Residual Contaminant Levels

PID: Photoionization Detector

VOCs: Volatile Organic Compounds

µg/kg: Micrograms per kilogram; equivalent to parts per billion (ppb)

J: Concentration reported between the laboratory method detection limit and the reporting limit.

NA: Not Analyzed

NS: No Standard

Result shown "underlined / red" exceeds the calculated RCL for the soil to groundwater pathway.

TABLE 1 (Continued)
 SOIL ANALYTICAL RESULTS SUMMARY-DETECTED VOCs
 THE COUTURE
 909 EAST MICHIGAN STREET
 MILWAUKEE, WISCONSIN
 PROJECT NO. 1E-1704005

Analyte	Sample Location											NR 720 RCL ¹ (µg/kg)	
	B-37		B-38			B-39			B-40			Soil to Groundwater Pathway	Direct-Contact Pathway (Non-Industrial)
Sample Depth (feet)	2-4	4-6	2-4	4-6	6-8	2-4	4-6	6-8	2-4	4-6	8-10		
Sample Collection Date	7/12/17	7/12/17	7/12/17	7/12/17	7/12/17	7/12/17	7/12/17	7/12/17	7/27/17	7/27/17	7/27/17		
PID (instrument units)	5.0	13.2	1.6	2.0	0.7	6.8	8.9	10.0	3.1	8.5	1.3		
Detected VOCs (µg/kg)													
Benzene	<u>344</u>	<u>177</u>	<u>312</u>	<u>199</u>	<25.0	<u>256</u>	<25.0	<25.0	<32.9	<26.3	<25.0	5.1	1,600
n-Butylbenzene	<25.0	<25.0	<25.0	<26.3	<25.0	<25.0	<25.0	<25.0	51.9 J	<26.3	<25.0	NS	108,000
sec-Butylbenzene	<25.0	<25.0	<25.0	<26.3	<25.0	<25.0	<25.0	<25.0	42.0 J	<26.3	<25.0	NS	145,000
Chloromethane	<25.0	<25.0	<25.0	<26.3	<25.0	<25.0	<25.0	<25.0	<32.9	<26.3	<25.0	15.5	159,000
Ethylbenzene	35.4 J	<25.0	54.3 J	53.6 J	<25.0	52.5 J	<25.0	<25.0	<32.9	<26.3	<25.0	1,570	8,020
Isopropylbenzene	<25.0	<25.0	<25.0	<26.3	<25.0	<25.0	<25.0	<25.0	<32.9	<26.3	<25.0	NS	268,000
p-Isopropyltoluene	<25.0	<25.0	<25.0	<26.3	452	<25.0	<25.0	<25.0	<32.9	<26.3	<25.0	NS	162,000
Methylene Chloride	<u>29.0 J</u>	<25.0	<u>33.2 J</u>	<u>31.0 J</u>	<u>29.7 J</u>	<25.0	39.5 J	<25.0	<u>39.6 J</u>	<u>36.2 J</u>	<u>33.9 J</u>	2.6	61,800
Naphthalene	45.0 J	<40.0	<40.0	81.2 J	<40.0	72.7 J	<40.0	94.7 J	146 J	54.0 J	55.0 J	658	5,520
n-Propylbenzene	27.3 J	<25.0	28.4 J	<26.3	<25.0	42.4 J	<25.0	<25.0	37.1 J	<26.3	<25.0	NS	264,000
Toluene	53.2 J	<25.0	184	204	<25.0	70.2 J	<25.0	<25.0	90.7	<26.3	<25.0	1,107	818,000
1,1,1-Trichloroethane	<25.0	<25.0	<25.0	<26.3	<25.0	<25.0	<25.0	<25.0	<32.9	<26.3	<25.0	140	640,000
Trichloroethene	<25.0	<25.0	<25.0	<26.3	<25.0	<25.0	<25.0	<25.0	<32.9	<26.3	<25.0	3.6	1,300
Trichlorofluoromethane	<25.0	<25.0	<25.0	<26.3	<25.0	<25.0	<25.0	<25.0	<32.9	<26.3	<25.0	NS	1,230,000
1,2,4-TMB	55.9 J	31.1 J	77.8	68.4 J	<25.0	79.4	<25.0	<25.0	80.4 J	<26.3	<25.0	1,382	219,000
1,3,5-TMB	<25.0	<25.0	32.9 J	<26.3	<25.0	<25.0	<25.0	<25.0	<32.9	<26.3	<25.0		182,000
Xylenes, Total	112 J	<75.0	219	212	<75.0	166 J	<75.0	<75.0	246 J	<78.9	<75.0	3,960	260,000

Notes:

(1) Wisconsin Administrative Code Natural Resources Chapter (NR) 720 Residual Contaminant Levels from WDNR RCL Spreadsheet updated March 2017

RCLs: Residual Contaminant Levels

PID: Photoionization Detector

VOCs: Volatile Organic Compounds

µg/kg: Micrograms per kilogram; equivalent to parts per billion (ppb)

J: Concentration reported between the laboratory method detection limit and the reporting limit.

NA: Not Analyzed

NS: No Standard

Result shown "underlined / red" exceeds the calculated RCL for the soil to groundwater pathway.

TABLE 2
SOIL ANALYTICAL RESULTS SUMMARY - DETECTED PAHS
THE COUTURE
909 EAST MICHIGAN STREET
MILWAUKEE, WISCONSIN
PROJECT NO. 1E-1704005

Analyte	Sample Location																							NR 720 RCL ¹ (µg/kg)		
	B-1		B-1A		B-1B		B-1C		B-2		B-2A		B-2B		B-2C		B-3		Soil to Groundwater Pathway	Direct-Contact Pathway (Non-Industrial)						
Sample Depth (feet)	2-4	12-14	0-2	2-4	4-6	0-2	2-4	4-6	0-2	2-4	4-6	2-4	10-12	2-4	4-6	6-8	2-4	4-6			6-8	2-4	4-6	8-10	2-4	14-18*
Sample Date	10/20/16	10/20/16	6/22/17	6/22/17	6/22/17	6/22/17	6/22/17	6/22/17	6/22/17	6/22/17	6/22/17	10/20/16	10/21/16	6/21/17	6/21/17	6/21/17	6/21/17	6/21/17	6/21/17	6/21/17	6/21/17	6/21/17	10/20/16	10/25/16		
PID (instrument units)	20	<5	3	7	5	3.7	6.7	6.8	6.4	4.6	4.9	15	15	1.2	1.4	1.2	7.6	0.2	7.5	8.4	4.6	4.6	25	25		
Detected PAHs (µg/kg)																										
Acenaphthene	27.8 J	<4.7	32.2	14.9	19.7	14.7 J	23.5 J	8.7 J	54.0	21.0	22.6	50.9 J	<4.7	51.2	8.4	<4.5	92.6	<4.3	<4.3	375	729	109	18.3 J	<4.7	NS	3,590,000
Acenaphthylene	10.3 J	<4.0	<7.4	10.9 J	4.7 J	11.6 J	14.8 J	5.0 J	14.6 J	12.2	15.7	<14.3	<4.0	23.6	4.4	<3.8	54.9	<3.7	<3.7	45.3	252	28.8	27.7	<4.0	NS	NS
Anthracene	123	15.2 J	103	71.9	64.7	57.8	82.9	33.2	111	65.9	90.3	191	<7.0	160	30.4	<6.7	235	<6.4	<6.3	221	1,670	187	92.2	<6.8	196,949	17,900,000
Benzo (a) anthracene	65.4 J	43.0	313	252	198	237	263	115	304	231	261	74.7 J	<3.9	445	86.9	4.0	473	18.3	6.8	559	2,130	409	65.0 J	<3.8	NS	1,140
Benzo (a) pyrene	(308)	(44.6)	(322)	(285)	235	(259)	(282)	126	(312)	(241)	263	(400)	<3.1	477	96.5	<2.9	(416)	19.1	5.4	700	1,710	395	(364)	<3.0	470	115
Benzo (b) fluoranthene	390	58.4	461	449	402	376	427	185	469	358	389	487	<3.4	616	124.0	4.4	578	23.4	8.8	863	1,940	485	503	<3.4	479	1,150
Benzo (g,h,i) perylene	182	32.0	107	84.3	184	102	99.3	46.0	101	78.9	81.3	235	3.4 J	360	79.8	<2.4	128	5.4	3.0	447	514	316	224	<2.4	NS	NS
Benzo (k) fluoranthene	164	25.2	194	139	117	142	150	63.2	163	127	154	216	<3.1	243	51.5	<2.9	238	11.1	3.5	376	927	222	207	<3.0	NS	11,500
Chrysene	338	52.6	297	250	258	232	268	111	276	209	248	447	7.6 J	471	91.9	5.2	476	17.1	9.3	602	2,020	395	407	<4.0	145	115,000
Dibenz (a,h) anthracene	46.9	8.5 J	34.3	30.1	50.9	32.0	31.5	13.1	32.5	25.8	25.9	58.0	<2.7	89	18.8	<2.6	50.3	<2.5	<2.5	113	225	72.1	64.5	<2.7	NS	115
Fluoranthene	705	89.3	786	506	412	488	566	252	662	485	589	948	<6.3	1,050	190.0	6.6	922	11.5	8.5	1,380	4,180	920	576	<6.2	88,878	2,390,000
Fluorene	36.5	<5.1	23.3 J	16.1	21.3	14.4 J	20.9 J	9.4 J	41.2	24.8	20.1	43.4 J	<5.0	52.3	8.9	<4.8	112	<4.6	<4.6	121	936	79	19.1 J	<5.0	14,830	2,390,000
Indeno (1,2,3-cd) pyrene	159	25.8	111	86.6	168	99.8	101	44.7	105	79.6	79.7	214	<2.7	299	63.4	<2.6	134	6.4	2.5	400	570	248	201	<2.6	NS	1,150
1-Methylnaphthalene	46.2	<4.9	<9.0	33.3	10.3 J	23.5 J	32.1	10.2 J	61.5	45.4	19.3	64.5	<4.9	68.8	15.5	<4.7	42.4	<4.5	<4.5	296	382	87	45.6	<4.8	NS	17,600
2-Methylnaphthalene	60.1	<6.1	19.4 J	45.2	12.3 J	38.6	42.8	17.7 J	78.9	65.5	29.2	107	<6.1	91.1	21.3	<5.8	45.5	<5.6	<5.6	387	468	114	58.8	<6.0	NS	239,000
Naphthalene	38.1 J	<10.3	19.5 J	38.8	12.7 J	35.0 J	44.4 J	15.2 J	112	61.9	36.9	93.6 J	<10.2	85.7	22.7	<9.8	64.2	<9.4	<9.4	672	660	210	54.7 J	<10.1	658	5,520
Phenanthrene	340	46.3 J	274	185	248	186	237	106	312	211	252	485	<14.2	478	90.4	<13.6	879	<13.	<12.9	633	5,050	654	308	<14.0	NS	NS
Pyrene	563	83.5	527	374	303	400	470	213	553	414	467	770	<5.5	770	147.0	6.0	791	11.4	7.2	1,090	3,830	770	523	<5.4	54,546	1,790,000

Notes:

(1) Wisconsin Administrative Code Natural Resources Chapter (NR) 720 Residual Contaminant Levels from WDNR RCL Spreadsheet updated March 2017.

RCLs: Residual Contaminant Levels

PID: Photoionization Detector

PAHs: Polynuclear Aromatic Hydrocarbons

µg/kg: Micrograms per kilogram; equivalent to parts per billion (ppb)

J: Estimated concentration at or above the laboratory limit of detection and below the limit of quantitation.

* Laboratory analysis for the deep soil samples collected from B-3 and B-6 was conducted outside of the recognized method holding time.

NS: No Standard

Result shown "underlined / red" exceeds the calculated RCL for the soil to groundwater pathway.

Result shown "(parenthesis / green)" exceeds the calculated RCL for the non-industrial land use direct-contact pathway.

TABLE 2 (Continued)
 SOIL ANALYTICAL RESULTS SUMMARY - DETECTED PAHS
 THE COUTURE
 909 EAST MICHIGAN STREET
 MILWAUKEE, WISCONSIN
 PROJECT NO. 1E-1704005

Analyte	Sample Location																								NR 720 RCL ¹ (µg/kg)			
	B-4		B-4A		B-4B		B-4C		B-5		B-6		B-7		B-8		B-9		B-10		B-10A		B-10B		Soil to Groundwater Pathway	Direct-Contact Pathway (Non-Industrial)		
Sample Depth (feet)	2-4	14-16	2-4	6-8	2-4	6-8	2-4	6-8	2-4	14-16	2-4	14-16*	2-4	16-18	2-4	12-14	2-4	10-12	2-4	14-16	2-4	6-8	8-10	2-4			6-8	8-10
Sample Date	10/20/16	10/21/16	6/23/17	6/23/17	6/23/17	6/23/17	6/23/17	6/23/17	10/20/16	10/25/16	10/20/16	10/25/16	10/20/16	10/31/16	10/20/16	10/21/16	10/20/16	10/21/16	10/20/16	10/21/16	6/21/17	6/21/17	6/21/17	6/21/17	6/21/17	6/21/17		
PID (instrument units)	18	<5	1.5	6.9	3.1	5.3	2.8	1.8	25	21	20	16	25	<5	<5	<5	25	25	10	<5	5.3	1.2	0.9	3.1	7.8	8.5		
Detected PAHs (µg/kg)																												
Acenaphthene	77.2	<4.7	7.4 J	7.6 J	10.1 J	<4.5	<21.2	65.1	14.5 J	<4.2	7.4 J	<4.6	14.7	<4.3	4.3 J	<4.3	20.2	<4.0	33.8	6.5 J	39.4	97.0	21.4	420	<4.5	<4.2	NS	3,590,000
Acenaphthylene	21.9 J	<4.0	15.5	<3.8	5.1 J	<3.8	<18.0	9.4 J	39.0	<3.6	17.5	<3.9	32.5	<3.6	6.0 J	<3.6	3.7 J	<3.4	18.6 J	5.0 J	59.4	33.6	18.5	316	<3.8	<3.6	NS	NS
Anthracene	257	<7.0	36.1	10.9 J	26.3	<6.6	35.3 J	169	129	<6.2	48.8	<6.7	86.4	<6.3	21.1	8.3 J	64.4	<5.9	124	22.6 J	136	236	79.4	1,160	<6.6	<6.2	196,949	17,900,000
Benzo (a) anthracene	71.7 J	<3.9	105	24.9	69.9	<3.6	401	357	134 J	<3.4	68.0 J	<3.7	52.8 J	<3.5	50.5 J	9.0 J	48.9 J	<3.3	125 J	45.0	497	628	218	(1,220)	4.4 J	<3.4	NS	1,140
Benzo (a) pyrene	831	<3.1	(118)	24.0	62.2	<2.9	603	326	(236)	<2.7	(153)	<3.0	(217)	<2.8	55.5	7.1 J	(137)	<2.6	(438)	43.5	494	614	245	1,010	<2.9	<2.7	470	115
Benzo (b) fluoranthene	(1,170)	<3.4	166	30.0	89.5	<3.2	999	454	378	<3.1	226	<3.3	299	<3.1	77.4	9.5 J	179	<2.9	665	49.8	749	828	306	(1,200)	<3.3	<3.0	479	1,150
Benzo (g,h,i) perylene	681	<2.5	95.7	15.7	28.0	<2.3	688	124	118	<2.2	55.2	<2.4	80.3	<2.2	34.3	4.7 J	46.7	<2.1	222	21.2	263	247	211	662	<2.3	<2.2	NS	NS
Benzo (k) fluoranthene	496	<3.1	70.3	12.5	33.8	<2.9	404	189	137	<2.7	83.5	<3.0	129	<2.8	32.4	4.8 J	77.6	<2.6	255	23.6	264	330	128	543	3.1 J	<2.7	NS	11,500
Chrysene	849	4.8 J	118	30.4	74.3	<3.9	577	378	343	<3.7	179	<4.0	267	<3.7	67.6	11.4 J	142	3.7 J	490	50.4	586	627	218	1,170	<3.9	<3.6	145	115,000
Dibenz (a,h) anthracene	(173)	<2.7	21.3	4.2 J	9.4	<2.6	(161)	44.8	32.9	<2.4	21.9	<2.6	30.0	<2.5	9.2	<2.5	15.1	<2.3	72.9	6.0 J	93.3	85.1	45.8	(162)	<2.6	<2.4	NS	115
Fluoranthene	1,310	<6.4	186	62.9	135	<6.0	453	783	483	<5.7	256	<6.1	455	<5.8	96.3	21.0	319	<5.3	772	94.2	1,020	1,320	490	2,990	<6.0	<5.6	88,878	2,390,000
Fluorene	68.8	<5.0	6.5 J	7.6 J	9.5 J	<4.8	<22.6	61.2	14.7 J	<4.5	6.0 J	<4.9	15.8	<4.6	<4.4	<4.6	19.3	<4.2	30.4	5.5 J	47.4	77.6	21.9	751	<4.8	<4.5	14,830	2,390,000
Indeno (1,2,3-cd) pyrene	559	<2.7	71.0	13.0	27.6	<2.5	505	124	97.5	<2.4	59.6	<2.6	83.3	<2.4	28.5	3.8 J	49.2	<2.3	212	19.5	260	257	166	506	<2.5	<2.4	NS	1,150
1-Methylnaphthalene	69.7	<4.9	28.0	6.8 J	11.9 J	<4.6	27.8 J	31.0 J	79.4	<4.4	63.9	<4.7	45.0	<4.4	24.1	5.5 J	6.8 J	<4.1	124	<4.9	104	49.6	17.1	393	<4.6	<4.3	NS	17,600
2-Methylnaphthalene	77.4	<6.1	33.6	7.7 J	14.0 J	<5.7	34.7 J	35.2 J	126	<5.4	81.5	<5.9	63.8	<5.5	32.0	8.2 J	8.1 J	<5.1	199	<6.1	123	59.7	22.3	448	6.3 J	<5.4	NS	239,000
Naphthalene	59.8 J	<10.3	26.0 J	<9.6	11.9 J	<9.7	<46.0	45.4 J	85.4	<9.2	63.4	<9.9	62.1	<9.3	20.6 J	<9.3	9.1 J	<8.6	107	<10.3	111	72.3	17.9	779	<9.7	<9.1	658	5,520
Phenanthrene	801	<14.2	119	85.3	111	<13.4	168 J	646	360	<12.7	186	<13.7	325	<12.9	85.6	24.0 J	215	<12.0	530	44.4 J	720	896	233	3,400	<13.4	<12.6	NS	NS
Pyrene	1,130	<5.5	153	51.2	123	<5.2	444	671	475	<4.9	224	<5.3	386	<5.0	93.5	17.2	253	<4.6	638	80.3	777	1,080	365	2,190	<5.2	<4.9	54,546	1,790,000

Notes:

(1) Wisconsin Administrative Code Natural Resources Chapter (NR) 720 Residual Contaminant Levels from WDNR RCL Spreadsheet updated March 2017.

RCLs: Residual Contaminant Levels

PID: Photoionization Detector

PAHs: Polynuclear Aromatic Hydrocarbons

µg/kg: Micrograms per kilogram; equivalent to parts per billion (ppb)

J: Estimated concentration at or above the laboratory limit of detection and below the limit of quantitation.

* Laboratory analysis for the deep soil samples collected from B-3 and B-6 was conducted outside of the recognized method holding time.

NS: No Standard

Result shown "underlined / red" exceeds the calculated RCL for the soil to groundwater pathway.

Result shown "(parenthesis / green)" exceeds the calculated RCL for the non-industrial land use direct-contact pathway.

TABLE 2 (Continued)
 SOIL ANALYTICAL RESULTS SUMMARY - DETECTED PAHS
 THE COUTURE
 909 EAST MICHIGAN STREET
 MILWAUKEE, WISCONSIN
 PROJECT NO. 1E-1704005

Analyte	Sample Location																								NR 720 RCL ¹ (µg/kg)				
	B-10C			B-11		B-11A		B-11B			B-11C		B-12		B-13		B-14		B-14A			B-14B				Soil to Groundwater Pathway	Direct-Contact Pathway (Non-Industrial)		
Sample Depth (feet)	2-4	6-8	8-10	2-4	12-14	0-2	2-4	4-6	0-2	2-4	4-6	0-2	2-4	4-6	0-2	2-4	14-16	2-4	14-16	2-4	14-15	2-4	4-6	10-12	2-4			8-10	12-14
Sample Date	10/21/16	6/21/17	6/21/17	10/20/16	10/31/16	6/22/17	6/22/17	6/22/17	6/22/17	6/22/17	6/22/17	6/22/17	6/22/17	6/22/17	10/20/16	10/21/16	10/20/16	10/20/16	10/25/16	10/20/16	10/31/16	7/13/17	7/13/17	7/13/17	7/13/17	7/13/17	7/13/17	7/13/17	
PID (instrument units)	9.6	6.3	8.3	28	<5	4.3	9.6	7.6	0	3.6	8.9	5.7	4.9	7.4	30	<5	20	14	20	<5	4.7	7.5	8.5	0	3.1	0	0		
Detected PAHs (µg/kg)																													
Acenaphthene	45.7	<4.5	<4.4	40.9	<4.6	51.4	41.4 J	<4.1	23.3 J	15.1	<4.4	190 J	80.4	<34.9	4.7 J	112	19.6	13.3 J	65.7	189	12.2 J	52.9 J	24.5 J	223	7.0 J	10.9 J	63.1	NS	3,590,000
Acenaphthylene	53.8	<3.8	<3.8	54.5	<3.9	51.0	42.6 J	<3.5	34.9 J	40.4	<3.7	417	64.9	<29.7	14.3	232	10.1 J	<4.0	15.3 J	26.8 J	16.8 J	65.7 J	<8.8	43.8 J	11.7 J	182	8.4 J	NS	NS
Anthracene	126	<6.6	<6.5	155	<6.8	167	69.4 J	<6.1	96.4	85.0	<6.4	1,290	353	82.9 J	32.2	395	72.6	15.8 J	241	347	45.1	166	71.3	528	30.9	274	153	196,949	17,900,000
Benzo (a) anthracene	292	<3.7	<3.6	175 J	<3.8	355	49.0 J	<3.4	399	255	<3.6	(1,760)	301	142	53.0 J	1,010	47.6 J	25.2	119 J	486	93.8	331	487	502	103	972	182	NS	1,140
Benzo (a) pyrene	(238)	<2.9	<2.9	(351)	<3.0	(320)	<21.6	<2.7	(414)	(262)	<2.8	1,020	(321)	149	63.5	1,300	(139)	24.3	650	490	107	331	625	(381)	113	1,210	188	470	115
Benzo (b) fluoranthene	683	<3.3	<3.2	537	<3.4	552	164	3.6 J	565	396	<3.2	(1,900)	424	251	88.8	1,190	176	26.0	818	526	126	317	605	276	132	928	160	479	1,150
Benzo (g,h,i) perylene	18.0	<2.3	<2.3	112	<2.4	179	<17.5	<2.2	156	104	<2.3	325	77.1	89.2	40.4	691	45.7	14.3	228	244	109	272	496	195	94.1	833	124	NS	NS
Benzo (k) fluoranthene	668	<2.9	<2.9	189	<3.0	129	115	<2.7	221	127	<2.8	725	184	70.7 J	41.8	496	83.1	15.7	385	245	102	304	588	372	120	1,080	138	NS	11,500
Chrysene	307	<3.9	<3.8	470	<4.0	376	294	9.0 J	416	272	<3.8	1,550	341	245	88.0	1,060	162	33.7	654	547	128	411	719	515	140	1,030	208	145	115,000
Dibenz (a,h) anthracene	<2.6	<2.6	<2.5	44.5	<2.7	54.1	<19.3	<2.4	53.3	34.8	<2.5	(146 J)	27.4	<20.1	11.5	169	15.9	<2.7	79.7	72.4	33.7	95.3	167	87.8	34.0	305	41.9	NS	115
Fluoranthene	559	<6.	<5.9	730	<6.2	668	401	<5.5	743	415	<5.9	3,990	668	353	121	1,480	363	59.1	1,380	1,200	149	653	845	1,270	186	1,310	497	88,878	2,390,000
Fluorene	29.7	<4.8	<4.7	49.0	<5.0	69.3	68.2 J	<4.4	21.9 J	12.6 J	<4.7	215 J	107	<37.2	<4.6	115	26.5	<5.0	71.3	156	10.9 J	89.2	11.7 J	242	8.7 J	90.9	72.2	14,830	2,390,000
Indeno (1,2,3-cd) pyrene	27.7	<2.5	<2.5	119	<2.6	159	<18.9	<2.3	162	101	<2.5	323	74.8	57.8 J	33.9	562	46.5	11.7	244	224	82.1	222	411	195	82.0	752	107	NS	1,150
1-Methylnaphthalene	239	<4.6	<4.6	258	<4.8	238	288	<4.3	102	156	<4.5	239 J	118	201	29.9	83.0 J	11.0 J	<4.9	32.0 J	77.8 J	199	1,370	19.3 J	132	111	49.7	32.5	NS	17,600
2-Methylnaphthalene	241	<5.8	<5.7	323	<6.0	305	339	<5.3	116	190	<5.6	414	218	308	36.4	131	10.9 J	<6.1	42.9 J	77.0 J	241	1,690	25.0 J	164	140	90.9	39.3	NS	239,000
Naphthalene	211	<9.7	<9.6	242	<10.1	201	120 J	<9.0	116 J	173	<9.5	573 J	505	417	25.9 J	438	14.2 J	<10.3	36.1 J	364	185	1,260	34.8 J	149 J	104	622	73.1	658	5,520
Phenanthrene	687	<13.4	<13.3	849	<13.9	569	115 J	<12.4	481	385	<13.1	6,650	564	299 J	105	851	291	36.8 J	667	1,150	287	1,200	407	1,840	196	809	521	NS	NS
Pyrene	502	<5.2	<5.1	659	<5.4	598	741	9.8 J	633	351	<5.1	3,170	518	935	109	1,750	301	69.5	1,100	1,050	148	600	698	1,010	175	981	443	54,546	1,790,000

Notes:
 (1) Wisconsin Administrative Code Natural Resources Chapter (NR) 720 Residual Contaminant Levels from WDNR RCL Spreadsheet updated March 2017.
 RCLs: Residual Contaminant Levels
 PID: Photoionization Detector
 PAHs: Polynuclear Aromatic Hydrocarbons
 µg/kg: Micrograms per kilogram; equivalent to parts per billion (ppb)
 J: Estimated concentration at or above the laboratory limit of detection and below the limit of quantitation.
 * Laboratory analysis for the deep soil samples collected from B-3 and B-6 was conducted outside of the recognized method holding time.
 NS: No Standard
 Result shown "underlined / red" exceeds the calculated RCL for the soil to groundwater pathway.
 Result shown "(parenthesis / green)" exceeds the calculated RCL for the non-industrial land use direct-contact pathway.

TABLE 2 (Continued)
 SOIL ANALYTICAL RESULTS SUMMARY - DETECTED PAHS
 THE COUTURE
 909 EAST MICHIGAN STREET
 MILWAUKEE, WISCONSIN
 PROJECT NO. 1E-1704005

Analyte	Sample Location																					NR 720 RCL ¹ (µg/kg)			
	B-14C				B-15		B-15A				B-15B			B-15C			B-16	B-17			B-18			Soil to Groundwater Pathway	Direct-Contact Pathway (Non-Industrial)
Sample Depth (feet)	2-4	6-8	10-12	14-16	2-4	16-18	2-4	6-8	10-12	14-16	2-4	6-8	10-12	2-4	6-8	10-12	2-4	2-4	4-6	6-8	2-4	4-6	6-8		
Sample Date	6/23/17	6/23/17	6/23/17	6/23/17	10/20/16	10/21/16	6/23/17	6/23/17	6/23/17	6/23/17	6/23/17	6/23/17	6/23/17	6/23/17	6/23/17	6/23/17	10/20/16	7/3/17	7/3/17	7/3/17	7/3/17	7/3/17	7/3/17		
PID (instrument units)	2	11	14	2.5	20	<5	4.5	1.5	4.5	5.1	4.5	1.5	4.5	1.5	5.3	3.0	5	9.1	3.2	3.4	7.3	7.9	6.2		
Detected PAHs (µg/kg)																									
Acenaphthene	14.4	<4.6	7.3 J	<4.7	5.1 J	<4.7	45.6	<350	<4.5	<4.8	40.0 J	5.6 J	<5.9	10.2 J	136 J	<4.5	5.9 J	124	15.3	<4.6	24.3 J	34.7	11.8 J	NS	3,590,000
Acenaphthylene	20.5	<3.9	<4.1	<4.0	14.3	<4.0	47.2	<297	<3.8	<4.1	67.8	<3.9	<5.0	18.9	<96.1	<3.8	6.3 J	22.5 J	13.1	<3.9	17.0 J	18.9 J	9.4 J	NS	NS
Anthracene	61.4	<6.7	20.3 J	<7.0	25.2	10.4 J	130	655 J	7.7 J	<7.1	134	13.1 J	<8.7	32.5	391 J	<6.5	30.8	261	49.0	<6.8	76.1	119	36.1	196,949	17,900,000
Benzo (a) anthracene	168	<3.7	85.8	15.8	66.2 J	79.6	284	14,500	31.7	12.5 J	368	39.2	9.8 J	168	6,340	5.0 J	65.8 J	450	167	<3.8	265	305	136	NS	1,140
Benzo (a) pyrene	(175)	<3.0	97.8	13.5	101	117	(211)	18,600	29.4	11.8	(287)	39.6	6.4 J	(161)	6,500	3.6 J	74.7	481	234	3.4 J	(371)	373	172	470	115
Benzo (b) fluoranthene	258	<3.3	163	16.4	135	213	321	36,300	53.6	14.9	463	56.0	14.9	255	13,500	7.1 J	106	358	244	3.5 J	352	416	171	479	1,150
Benzo (g,h,i) perylene	107	2.8 J	111	8.0 J	64.7	82.5	53.5	15,800	25.5	8.5	90.2	32.3	5.7 J	60.1	3,150	3.6 J	47.8	348	221	4.0 J	348	315	156	NS	NS
Benzo (k) fluoranthene	78.7	<3.0	53.5	6.4 J	57.7	72.2	115	10,500	20.2	5.9 J	145	20.3	4.7 J	87.3	4,100	<2.9	42.4	467	223	3.3 J	419	394	189	NS	11,500
Chrysene	187	<4.0	131	15.9	119	144	288	23,800	46.0	12.4 J	394	52.3	9.1 J	198	9,450	5.0 J	109	496	232	5.6 J	366	407	184	145	115,000
Dibenz (a,h) anthracene	29.8	<2.6	30.0	<2.7	19.3	27.6	23.1	4,960	7.9 J	<2.8	37.6	8.4 J	<3.4	24.4	1,250	<2.6	13.8	111	69.2	<2.7	113	115	51.9	NS	115
Fluoranthene	324	<6.1	123	33.3	176	113	501	24,800	51.2	22.2	508	74.8	<8.0	284	8,540	<6.0	155	1,060	292	<6.2	487	532	254	88,878	2,390,000
Fluorene	11.4 J	<4.9	7.2 J	<5.1	4.4 J	<5.0	40.1	<373	<4.8	<5.1	25.9 J	<4.9	<6.3	8.8 J	<121	<4.7	7.5 J	170	15.4	<4.9	24.2 J	39.9	11.1 J	14,830	2,390,000
Indeno (1,2,3-cd) pyrene	90.9	<2.6	83.4	6.4 J	55.1	70.6	59.3	14,600	20.8	6.6 J	91.6	25.0	5.0 J	63.7	3,370	2.7 J	39.5	306	181	<2.6	291	275	133	NS	1,150
1-Methylnaphthalene	72.5	4.8 J	62.3	<4.9	29.1	<4.9	522	<362	20.4	<5.0	418	54.3	<6.1	113	201 J	5.0 J	156	159	57.0	<4.8	40.0	61.0	25.2	NS	17,600
2-Methylnaphthalene	89.2	<5.9	77.5	<6.1	36.4	<6.1	633	<451	26.9	<6.2	420	60.3	<7.6	104	211 J	8.7 J	211	250	80.8	<6.0	49.4	75.2	31.0	NS	239,000
Naphthalene	126	<9.9	55.4	<10.3	38.0	<10.2	540	<759	22.6 J	11.5 J	403	44.0	<12.9	73.3	<245	<9.7	181	647	56.5	<10.1	49.0 J	68.7	26.9 J	658	5,520
Phenanthrene	317	<13.8	104	28.0 J	127	55.8	977	4,650	38.3 J	20.2 J	1,250	97.3	<17.8	271	2,440	<13.4	207	898	194	<13.9	324	439	156	NS	NS
Pyrene	258	<5.3	106	30.0	164	91.5	453	18,000	42.3	20.0	505	72.0	<6.9	256	7,000	<5.2	140	951	269	<5.4	435	482	221	54,546	1,790,000

Notes:
 (1) Wisconsin Administrative Code Natural Resources Chapter (NR) 720 Residual Contaminant Levels from WDNR RCL Spreadsheet updated March 2017.
RCLs: Residual Contaminant Levels
PID: Photoionization Detector
PAHs: Polynuclear Aromatic Hydrocarbons
µg/kg: Micrograms per kilogram; equivalent to parts per billion (ppb)
 J: Estimated concentration at or above the laboratory limit of detection and below the limit of quantitation.
 * Laboratory analysis for the deep soil samples collected from B-3 and B-6 was conducted outside of the recognized method holding time.
NS: No Standard
Result shown "underlined / red" exceeds the calculated RCL for the soil to groundwater pathway.
Result shown "(parenthesis / green)" exceeds the calculated RCL for the non-industrial land use direct-contact pathway.

TABLE 2 (Continued)
 SOIL ANALYTICAL RESULTS SUMMARY - DETECTED PAHS
 THE COUTURE
 909 EAST MICHIGAN STREET
 MILWAUKEE, WISCONSIN
 PROJECT NO. 1E-1704005

Analyte	Sample Location																								NR 720 RCL ¹ (µg/kg)		
	B-19			B-20			B-21			B-22		B-23			B-24			B-25				B-26				Soil to Groundwater Pathway	Direct-Contact Pathway (Non-Industrial)
Sample Depth (feet)	2-4	4-6	8-10	2-4	8-10	8-10	2-4	6-8	8-10	2-4	6-8	2-4	6-8	12-14	2-4	6-8	8-10	6-8	10-12	16-18	18-20	2-4	6-8	10-12	14-16		
Sample Date	7/3/17	7/3/17	7/3/17	7/3/17	7/3/17	7/3/17	7/5/17	7/5/17	7/5/17	7/5/17	7/5/17	7/3/17	7/3/17	7/3/17	7/3/17	7/3/17	7/3/17	7/5/17	7/5/17	7/5/17	7/5/17	7/5/17	7/5/17	7/5/17	7/5/17		
PID (instrument units)	7.3	5.0	5.0	0.2	4.1	4.1	6.1	6.6	6.6	11.9	7.6	10.9	13	14	11.3	3	8.2	3.3	3.1	23.0	22.3	6.9	9.9	11.6	11.8		
Detected PAHs (µg/kg)																											
Acenaphthene	55.0 J	18.4	<4.7	56.4 J	171 J	26.3 J	11.7 J	<4.8	<4.6	31.2 J	74.0	109 J	<4.1	<4.7	<4.2	73.8	<4.8	46.6 J	40.0	498	35.1	42.7 J	117 J	<5.1	280 J	NS	3,590,000
Acenaphthylene	46.4 J	8.0 J	<4.0	28.3 J	<75.0	13.0 J	6.3 J	<4.1	<3.9	<18.2	25.3	74.9 J	<3.5	<4.0	5.0 J	10.0 J	<4.0	42.7 J	41.0	140 J	<3.8	27.6 J	303	<4.3	172 J	NS	NS
Anthracene	197	51.8	<6.9	180	478	91.8	29.0	<7.0	<6.8	171	187	304	<6.1	<7.0	11.5 J	154	<7.0	188	159	1,110	16.0 J	142	441 J	<7.5	1,980	196,949	17,900,000
Benzo (a) anthracene	803	248	<3.8	429	887	211	192	<3.9	<3.8	469	321	671	5.4 J	<3.9	30.6	220	<3.9	534	283	1,670	18.8	418	1,290	6.6 J	1,870	NS	1,140
Benzo (a) pyrene	<u>1,200</u>	411	<3.0	<u>495</u>	1,020	227	<u>(328)</u>	5.3 J	<3.0	<u>503</u>	337	<u>728</u>	4.2 J	<3.1	31.1	192	<3.1	<u>537</u>	<u>277</u>	<u>1,820</u>	18.2	<u>(413)</u>	<u>1,840</u>	6.3 J	<u>1,430</u>	<u>470</u>	<u>115</u>
Benzo (b) fluoranthene	<u>(1,380)</u>	<u>550</u>	<3.4	<u>483</u>	<u>906</u>	177	358	6.0 J	<3.4	408	302	<u>691</u>	3.6 J	<3.4	25.6	143	<3.5	417	<u>233</u>	<u>1,350</u>	13.0	310	<u>1,450</u>	5.8 J	<u>1,280</u>	<u>479</u>	<u>1,150</u>
Benzo (g,h,i) perylene	1,060	450	<2.5	378	875	157	269	6.3 J	<2.4	271	174	474	2.3 J	<2.5	17.8	88.0	<2.5	394	132	1,340	12.2	275	1,320	4.5 J	890	NS	NS
Benzo (k) fluoranthene	1,040	327	<3.0	431	865	231	319	5.1 J	<3.0	370	266	613	3.7 J	<3.1	29.7	205	<3.1	502	246	1,630	14.9	423	1,760	5.6 J	1,460	NS	11,500
Chrysene	<u>1,090</u>	388	<4.1	<u>493</u>	<u>1,050</u>	<u>242</u>	<u>282</u>	5.0 J	<4.0	<u>545</u>	<u>368</u>	<u>773</u>	6.0 J	<4.1	35.7	<u>237</u>	<4.1	<u>578</u>	<u>308</u>	<u>1,810</u>	19.7	<u>467</u>	<u>2,000</u>	7.5 J	<u>1,850</u>	<u>145</u>	<u>115,000</u>
Dibenz (a,h) anthracene	<u>(345)</u>	135	<2.7	<u>(129)</u>	259	54.1	94.5	<2.8	<2.7	98.3	67.9	<u>(170)</u>	<2.4	<2.7	6.8 J	38.2	<2.7	138	57.4	497	3.6 J	102	398	<2.9	323	NS	115
Fluoranthene	1,230	407	<6.3	962	2,060	495	255	<6.4	<6.2	822	707	1,440	7.7 J	<6.4	49.0	540	<6.4	1,080	551	3,760	45.7	894	4,480	14.1 J	5,340	88,878	2,390,000
Fluorene	53.9 J	19.2	<5.0	64.8 J	275 J	28.9 J	9.4 J	<5.1	<4.9	31.0 J	64.0	119 J	<4.4	<5.0	<4.4	87.3	<5.1	51.5 J	48.4	508	7.5 J	40.1 J	186 J	<5.4	1,210	14,830	2,390,000
Indeno (1,2,3-cd) pyrene	909	358	<2.7	331	696	142	233	4.4 J	<2.6	242	164	433	<2.3	<2.7	16.1	90.4	<2.7	335	130	1,180	10.3	252	1,200	3.8 J	901	NS	1,150
1-Methylnaphthalene	43.4 J	20.2	<4.9	77.0	119 J	12.8 J	26.4	<5.0	<4.8	<22.2	45.4	65.8 J	<4.3	<4.9	5.8 J	36.5	<4.9	<35.4	36.5	280 J	<4.6	205	209 J	<5.3	349 J	NS	17,600
2-Methylnaphthalene	50.8 J	24.5	<6.0	76.4 J	134 J	14.5 J	33.8	<6.2	<6.0	27.9 J	53.3	74.4 J	<5.3	<6.1	7.7 J	48.7	<6.1	<44.0	48.8	270 J	<5.8	290	265 J	<6.6	164 J	NS	239,000
Naphthalene	<72.3	28.5 J	<10.2	62.8 J	<192	23.3 J	25.1 J	<10.4	<10.1	<46.5	48.1 J	117 J	<9.0	<10.3	<9.0	80.5	<10.3	<74.1	62.3 J	568 J	<9.7	187	333 J	<11.1	362 J	658	5,520
Phenanthrene	679	272	<14.1	654	2,180	349	116	<14.4	<13.9	634	718	1,130	<12.4	<14.2	34.7 J	533	<14.3	626	535	3,640	46.5	632	3,650	15.5 J	6,460	NS	NS
Pyrene	1,230	386	<5.5	853	1,880	457	255	<5.6	<5.4	1,090	735	1,330	6.4 J	<5.5	50.7	473	<5.5	953	491	3,170	40.7	769	3,510	11.5 J	3,790	54,546	1,790,000

Notes:
 (1) Wisconsin Administrative Code Natural Resources Chapter (NR) 720 Residual Contaminant Levels from WDNR RCL Spreadsheet updated March 2017.
RCLs: Residual Contaminant Levels
PID: Photoionization Detector
PAHs: Polynuclear Aromatic Hydrocarbons
µg/kg: Micrograms per kilogram; equivalent to parts per billion (ppb)
J: Estimated concentration at or above the laboratory limit of detection and below the limit of quantitation.
 * Laboratory analysis for the deep soil samples collected from B-3 and B-6 was conducted outside of the recognized method holding time.
NS: No Standard
Result shown "underlined / red" exceeds the calculated RCL for the soil to groundwater pathway.
Result shown "(parenthesis / green)" exceeds the calculated RCL for the non-industrial land use direct-contact pathway.

TABLE 2 (Continued)
 SOIL ANALYTICAL RESULTS SUMMARY - DETECTED PAHS
 THE COUTURE
 909 EAST MICHIGAN STREET
 MILWAUKEE, WISCONSIN
 PROJECT NO. 1E-1704005

Analyte	Sample Location																									NR 720 RCL ¹ (µg/kg)		
	B-27				B-28			B-29			B-30			B-31			B-32			B-33		B-34					Soil to Groundwater Pathway	Direct-Contact Pathway (Non-Industrial)
Sample Depth (feet)	2-4	6-8	10-12	14-16	2-4	6-8	8-10	2-4	6-8	8-10	2-4	6-8	8-10	2-4	6-8	8-10	0-2	8-10	10-12	2-4	4-6	2-4	4-6	10-12	14-16	18-20		
Sample Date	7/7/17	7/7/17	7/7/17	7/7/17	7/7/17	7/7/17	7/7/17	7/7/17	7/7/17	7/7/17	6/21/17	6/21/17	6/21/17	6/21/17	6/21/17	6/21/17	6/21/17	6/21/17	6/21/17	7/5/17	7/5/17	7/5/17	7/5/17	7/5/17	7/5/17	7/5/17		
PID (instrument units)	1	20	0	1.1	5.4	2.5	2.0	0	0	0	2.9	3.1	3.1	5.4	3.7	3.6	2.6	6.2	6.0	11.9	10.6	12.4	16	18	25.1	25.9		
Detected PAHs (µg/kg)																												
Acenaphthene	51.9 J	94.7	<4.8	95.1 J	44.7	18.9 J	<22.8	35.2 J	23.1 J	<18.2	33.4	<4.4	<4.6	278	37.7	<4.7	27.9	<4.7	<4.7	<4.3	<17.7	28.1 J	7.4 J	205 J	277 J	7.3 J	NS	3,590,000
Acenaphthylene	59.4 J	125	<5.9	94.9 J	58.1	25.6 J	29.7 J	42.1 J	29.6 J	<22.7	23.1	<3.8	<3.9	<35.3	27.2	<4.0	45.3	<4.0	<4.0	<3.7	128	11.4 J	7.5 J	139 J	112 J	<4.3	NS	NS
Anthracene	63.3 J	85.5	<4.6	738	20.6 J	14.2 J	77.8	92.3	36.2	25.1 J	122	<6.5	<6.7	707	112	<6.8	258	<6.9	<6.9	6.6 J	173	73.4	26.0	1,000	799	<7.4	196,949	17,900,000
Benzo (a) anthracene	24.7 J	51.2 J	<3.9	<38.6	9.2 J	11.5 J	<18.7	22.5 J	26.4	63.6	374	11.3 J	<3.7	885	324	<3.8	268	<3.8	<3.8	17.8	395	201	67.4	1,380	1,170	10.5 J	NS	1,140
Benzo (a) pyrene	(208)	295	<6.8	1,420	(47.8)	53.6	168	(266)	106	135	(392)	11.7	<3.0	813	355	3.6 J	(343)	<3.0	<3.0	19.7	427	(217)	68.3	1,230	1,190	12.6	470	115
Benzo (b) fluoranthene	777	632	5.4 J	1,150	273	180	434	605	235	339	662	18.6	<3.3	1,050	656	3.8 J	704	<3.4	<3.4	17.5	298	229	54.8	927	892	8.0 J	479	1,150
Benzo (g,h,i) perylene	1,040	665	7.4 J	1,080	435	249	520	790	279	349	72.3	3.9 J	<2.4	539	55.9	<2.4	65.2	<2.4	<2.4	19.9	228	148	41.2	766	733	8.4 J	NS	NS
Benzo (k) fluoranthene	1,160	510	8.2 J	893	598	255	489	739	280	281	178	6.4 J	<3.0	416	198	3.1 J	212	<3.0	<3.0	17.0	439	189	60.6	1,290	966	9.1 J	NS	11,500
Chrysene	1,080	514	9.4	698	327	202	408	810	210	205	349	10.1 J	5.1 J	926	325	4.3 J	443	<4.1	<4.1	24.4	441	259	82.5	1,560	1,270	15.2	145	115,000
Dibenz (a,h) anthracene	911	652	7.6 J	908	(340)	228	523	(792)	244	297	31.6	<2.6	<2.6	(124)	26.2	<2.7	24.9	<2.7	<2.7	5.0 J	92.5	53.6	14.2	288	243	<2.9	NS	115
Fluoranthene	1,040	691	10.2 J	1,200	405	238	554	770	279	365	808	19.8 J	<6.2	2,640	609	7.4 J	705	<6.3	<6.3	34.8	590	423	126	2,970	2,540	19.2 J	88,878	2,390,000
Fluorene	332	168	<2.6	219	123	73.6	146	247	72.6	85.9	40.1	<4.7	<4.9	233	33.8	<5.0	28.0	<5.0	<5.0	<4.6	25.5 J	33.2	5.1 J	380	318 J	<5.4	14,830	2,390,000
Indeno (1,2,3-cd) pyrene	(1,380)	1,410	8.7 J	4,090	381	329	933	(1,390)	487	697	86.0	3.1 J	<2.6	456	70.1	<2.6	63.5	<2.7	<2.7	13.6	227	134	35.8	678	632	6.6 J	NS	1,150
1-Methylnaphthalene	58.3 J	112	<4.9	580	14.0 J	14.4 J	65.7 J	71.6 J	41.0	28.2 J	38.2	<4.6	<4.8	73.0 J	57.9	<4.8	288	<4.8	<4.8	15.3	169	53.3	31.9	132 J	101 J	<5.2	NS	17,600
2-Methylnaphthalene	850	446	6.4 J	644	296	180	352	640	190	194	52.4 B	<5.7	<5.9	80.9 JB	67.6	<6.0	350	<6.0	<6.0	17.4 J	198	61.9	40.9	166 J	121 J	<6.5	NS	239,000
Naphthalene	61.8 J	152 J	<10.0	<98.7	68.0	21.1 J	<47.8	<46.4	37.0 J	44.0 J	51.1	<9.6	<9.9	<90.2	65.3	<10.1	314	<10.2	<10.2	10.8 J	148	41.5 J	28.6 J	<229	330 J	<10.9	658	5,520
Phenanthrene	741	1,120	<13.8	4,270	179	185	678	801	389	394	436	<13.3	<13.8	2,160	486	<14.0	693	<14.0	<14.0	46.4	551	412	132	3,130	2,500	17.0 J	NS	NS
Pyrene	1,210	1,160	8.0 J	3,090	354	286	756	1,100	400	594	609	17.2	<5.3	1,860	520	6.6 J	578	<5.4	<5.4	35.9	594	406	152	2,270	2,140	19.6	54,546	1,790,000

Notes:
 (1) Wisconsin Administrative Code Natural Resources Chapter (NR) 720 Residual Contaminant Levels from WDNR RCL Spreadsheet updated March 2017.
 RCLs: Residual Contaminant Levels
 PID: Photoionization Detector
 PAHs: Polynuclear Aromatic Hydrocarbons
 µg/kg: Micrograms per kilogram; equivalent to parts per billion (ppb)
 J: Estimated concentration at or above the laboratory limit of detection and below the limit of quantitation.
 * Laboratory analysis for the deep soil samples collected from B-3 and B-6 was conducted outside of the recognized method holding time.
 NS: No Standard
 Result shown "underlined / red" exceeds the calculated RCL for the soil to groundwater pathway.
 Result shown "(parenthesis / green)" exceeds the calculated RCL for the non-industrial land use direct-contact pathway.

TABLE 3
 SOIL ANALYTICAL RESULTS SUMMARY-DETECTED RCRA METALS
 THE COUTURE
 909 EAST MICHIGAN STREET
 MILWAUKEE, WISCONSIN
 PROJECT NO. 1E-1704005

Analyte	Sample Location																								NR 720 RCL ¹ (mg/kg)		
	B-1		B-1C		B-2		B-2C			B-3		B-4		B-4C		B-5		B-6		B-7		B-8		Soil to Groundwater Pathway	Direct-Contact Pathway (Non-Industrial)	Background Threshold Value	
Sample Depth (feet)	2-4	12-14	0-2	2-4	4-6	2-4	10-12	2-4	4-6	6-8	2-4	14-16	2-4	14-16	2-4	14-16	2-4	14-16	2-4	14-16	2-4	16-18	2-4				12-14
Sample Date	10/20/16	10/20/16	6/22/17	6/22/17	6/22/17	10/20/16	10/21/16	6/22/17	6/22/17	6/22/17	10/20/16	10/25/16	10/20/16	10/21/16	6/23/17	6/23/17	10/20/16	10/25/16	10/20/16	10/25/16	10/20/16	10/31/16	10/20/16	10/21/16			
PID (instrument units)	20	<5	6.4	4.6	4.9	15	15	15	15	15	25	25	18	<5	2.8	11.1	25	21	20	16	25	<5	<5	<5			
Detected RCRA Metals (mg/kg)																											
Arsenic	5.5 J	<u>3.1 J</u>	7.2	6.3	<u>6.0</u>	4.9 J	<u>3.9 J</u>	5.3	<u>5.3</u>	<u>4.0 J</u>	6.5	<u>5.8</u>	4.6 J	<u>5.4 J</u>	6.7	<u>7.8</u>	5.8	<u>1.6 J</u>	5.9	<u>1.4 J</u>	3.8 J	<u>3.8 J</u>	<u>9.8</u>	<u>3.1 J</u>	<u>0.584</u>	<u>0.613</u>	<u>8.0</u>
Lead	<u>58.7</u>	20.2	51.0	<u>77.1</u>	<u>57.7</u>	<u>113</u>	17.3	35.9	<u>38.4</u>	<u>84.4</u>	<u>115</u>	7.6	25.6	8.7	<u>230</u>	<u>148</u>	<u>144</u>	2.9	<u>57.5</u>	1.8	22.7	6.3	<u>142</u>	3.5	<u>27</u>	<u>400</u>	<u>52</u>
Mercury	0.10 J	<0.045	NA	NA	NA	0.19	<0.040	NA	NA	NA	<u>0.27</u>	NA	0.047 J	<0.042	NA	NA	<u>0.69</u>	<0.040	0.11 J	NA	0.053 J	<0.038	<u>0.24</u>	<0.039	<u>0.208</u>	<u>3.13</u>	<u>NS</u>
Selenium	<u>65.4 J</u>	<1.3	<1.2	<1.1	<1.2	<u>74.7 J</u>	<1.3	<1.1	<1.0	<1.2	<u>65.0 J</u>	NA	<u>71.7 J</u>	<1.5	<1.2	<1.2	<u>134 J</u>	<1.1	<u>68.0 J</u>	NA	<u>52.8 J</u>	<1.2	<u>50.5 J</u>	<1.2	<u>0.52</u>	<u>391</u>	<u>NS</u>

Notes:

(1) Wisconsin Administrative Code Natural Resources Chapter (NR) 720 Residual Contaminant Levels from WDNR RCL Spreadsheet updated March 2017.

RCLs: Residual Contaminant Levels

PID: Photoionization Detector

RCRA: Resource Conservation and Recovery Act

mg/kg: Milligrams per kilogram; equivalent to parts per million (ppm)

J: Concentration reported between the laboratory method detection limit and the reporting limit.

NS: No Standard

Background Threshold Value (BTV) applies to industrial and non-industrial direct-contact (upper 4 feet of soil)

Result shown "underlined/red" exceeds the calculated RCL for the soil to groundwater pathway.

Result shown "parenthesis/(green)" exceeds the calculated RCL for the non-industrial land use direct-contact pathway.

TABLE 3 (Continued)
 SOIL ANALYTICAL RESULTS SUMMARY-DETECTED RCRA METALS
 THE COUTURE
 909 EAST MICHIGAN STREET
 MILWAUKEE, WISCONSIN
 PROJECT NO. 1E-1704005

Analyte	Sample Location																								NR 720 RCL ¹ (mg/kg)		
	B-9		B-10		B-10B			B-11		B-11A			B-12		B-13		B-14		B-14C				B-15		Soil to Groundwater Pathway	Direct-Contact Pathway (Non-Industrial)	Background Threshold Value
Sample Depth (feet)	2-4	10-12	2-4	14-16	2-4	6-8	8-10	2-4	12-14	0-2	2-4	4-6	2-4	14-16	2-4	14-16	2-4	14-15	2-4	6-8	10-12	14-16	2-4	16-18			
Sample Date	10/20/16	10/21/16	10/20/16	10/21/16	6/21/17	6/21/17	6/21/17	10/20/16	10/31/16	6/22/17	6/22/17	6/22/17	10/20/16	10/21/16	10/20/16	10/25/16	10/20/16	10/31/16	6/23/17	6/23/17	6/23/17	6/23/17	10/20/16	10/21/16			
PID (instrument units)	25	25	10	<5	3.1	7.8	8.5	28	<5	4.3	9.6	7.6	30	<5	20	14	20	<5	2	11	14	2.5	20	<5			
Detected RCRA Metals (mg/kg)																											
Arsenic	5.5	<u>1.9 J</u>	6.0	<u>2.2 J</u>	5.7	<u>4.7 J</u>	<u>4.1 J</u>	6.5	<u>4.3 J</u>	6.8	<u>8.4</u>	<u>4.9</u>	5.8	<u>7.9</u>	5.5	<u>2.0 J</u>	6.0	<u>5.5 J</u>	<u>56.6</u>	<u>7.0</u>	<6.4	<u>8.1</u>	4.5 J	<u>4.9 J</u>	<u>0.584</u>	<u>0.613</u>	<u>8.0</u>
Lead	51.5	2.7	<u>71.7</u>	15.8	<u>66.2</u>	7.3	7.7	<u>82.9</u>	11.6	<u>117</u>	<u>102</u>	7.5	<u>132</u>	<u>120</u>	<u>59.0</u>	14.8	<u>137</u>	<u>63.6</u>	<u>71</u>	11.1	<u>30.3</u>	<u>24.8</u>	<u>67.5</u>	11.2	<u>27</u>	<u>400</u>	<u>52</u>
Mercury	0.13	<0.035	<u>0.37</u>	0.056 J	0.087	<0.012	<0.011	<u>0.21</u>	<0.040	<u>0.24</u>	0.10	<0.010	0.13	<u>0.84</u>	0.11 J	0.059 J	<u>0.29</u>	<0.040	0.077	<0.012	0.019 J	0.039 J	0.14	<0.041	<u>0.208</u>	<u>3.13</u>	<u>NS</u>
Selenium	<u>48.9 J</u>	<1.1	<u>125 J</u>	<1.2	<1.1	<1.2	<1.1	<u>175 J</u>	<1.3	<1.2	<1.1	<1.0	<u>53.0 J</u>	<u>2.0 J</u>	<u>47.6 J</u>	<1.2	<u>119 J</u>	<1.3	<1.2	<1.3	<6.7	<1.3	<u>66.2 J</u>	<1.3	<u>0.52</u>	<u>391</u>	<u>NS</u>

Notes:

(1) Wisconsin Administrative Code Natural Resources Chapter (NR) 720 Residual Contaminant Levels from WDNR RCL Spreadsheet updated March 2017.

RCLs: Residual Contaminant Levels

PID: Photoionization Detector

RCRA: Resource Conservation and Recovery Act

mg/kg: Milligrams per kilogram; equivalent to parts per million (ppm)

J: Concentration reported between the laboratory method detection limit and the reporting limit.

NS: No Standard

Background Threshold Value (BTV) applies to industrial and non-industrial direct-contact (upper 4 feet of soil)

Result shown "underlined/red" exceeds the calculated RCL for the soil to groundwater pathway.

Result shown "parenthesis/(green)" exceeds the calculated RCL for the non-industrial land use direct-contact pathway.

TABLE 3 (Continued)
 SOIL ANALYTICAL RESULTS SUMMARY-DETECTED RCRA METALS
 THE COUTURE
 909 EAST MICHIGAN STREET
 MILWAUKEE, WISCONSIN
 PROJECT NO. 1E-1704002

Analyte	Sample Location																		NR 720 RCL ¹ (mg/kg)				
	B-15A				B-15AA			B-16	B-17			B-18			B-30			B-31			Soil to Groundwater Pathway	Direct-Contact Pathway (Non-Industrial)	Background Threshold Value
Sample Depth (feet)	2-4	6-8	10-12	14-16	2-4	4-6	6-8	2-4	2-4	4-6	6-8	2-4	4-6	6-8	2-4	6-8	8-10	2-4	6-8	8-10			
Sample Date	6/23/17	6/23/17	6/23/17	6/23/17	6/23/17	6/23/17	6/23/17	10/20/16	7/3/17	7/3/17	7/3/17	7/3/17	7/3/17	7/3/17	6/21/17	6/21/17	6/21/17	6/21/17	6/21/17	6/21/17			
PID (instrument units)	4.5	1.5	4.5	5.1	8.6	14.2	13.6	5	9.1	4.9	3.4	7.3	7.9	6.2	2.9	3.1	3.1	5.4	3.7	3.6			
Detected RCRA Metals (mg/kg)																							
Arsenic	<u>55.2</u>	<u>18.4 J</u>	<u>4.1 J</u>	<u>4.8 J</u>	<u>12.3</u>	<u>8.2</u>	<u>15.8 J</u>	<u>2.1 J</u>	7.0	<u>4.9 J</u>	<u>3.9 J</u>	5.1 J	<u>5.2 J</u>	<u>5.8</u>	5.8	<u>3.1 J</u>	<u>3.1 J</u>	4.6	<u>6.1</u>	<u>3.7 J</u>	<u>0.584</u>	<u>0.613</u>	8.0
Lead	<u>58.7</u>	22.8	8.9	11.6	<u>121</u>	<u>47.1</u>	23	18.6	46.8	<u>44.4</u>	6.7	<u>74.0</u>	<u>73.6</u>	<u>105</u>	<u>97.5</u>	<u>38.8</u>	3.0	36.0	<u>64.7</u>	17.9	<u>27</u>	<u>400</u>	52
Mercury	NA	NA	NA	NA	0.13	<u>0.22</u>	0.024 J	0.047 J	NA	NA	NA	NA	NA	NA	<u>0.64</u>	<u>0.12</u>	<0.012	<u>0.15</u>	<u>1.3</u>	0.037 J	<u>0.208</u>	<u>3.13</u>	NS
Selenium	<1.1	<11.7	<1.2	<1.3	NA	NA	NA	<u>65.8 J</u>	NA	NA	NA	NA	NA	NA	<1.2	<1.2	<1.3	<1.0	<1.2	<1.3	<u>0.52</u>	<u>391</u>	NS

Notes:

(1) Wisconsin Administrative Code Natural Resources Chapter (NR) 720 Residual Contaminant Levels from WDNR RCL Spreadsheet updated March 2017.

RCLs: Residual Contaminant Levels

PID: Photoionization Detector

RCRA: Resource Conservation and Recovery Act

mg/kg: Milligrams per kilogram; equivalent to parts per million (ppm)

J: Concentration reported between the laboratory method detection limit and the reporting limit.

NS: No Standard

Background Threshold Value (BTV) applies to industrial and non-industrial direct-contact (upper 4 feet of soil)

Result shown "underlined/red" exceeds the calculated RCL for the soil to groundwater pathway.

Result shown "parenthesis /(green)" exceeds the calculated RCL for the non-industrial land use direct-contact pathway.

TABLE 3 (Continued)
 SOIL ANALYTICAL RESULTS SUMMARY-DETECTED RCRA METALS
 THE COUTURE
 909 EAST MICHIGAN STREET
 MILWAUKEE, WISCONSIN
 PROJECT NO. 1E-1704002

Analyte	Sample Location										NR 720 RCL ¹ (mg/kg)		
	B-32			B-33		B-34					Soil to Groundwater Pathway	Direct-Contact Pathway (Non-Industrial)	Background Threshold Value
Sample Depth (feet)	0-2	8-10	10-12	2-4	4-6	2-4	4-6	10-12	14-16	18-20			
Sample Date	6/21/17	6/21/17	6/21/17	7/5/17	7/5/17	7/5/17	7/5/17	7/5/17	7/5/17	7/5/17			
PID (instrument units)	2.6	6.2	6.0	11.9	10.6	12.4	16	17.5	25.1	25.9			
Detected RCRA Metals (mg/kg)													
Arsenic	<u>15.4</u>	<u>5.6</u>	<u>5.0 J</u>	6.7	<u>5.5</u>	<u>8.3</u>	<u>10.2</u>	<u>402</u>	<u>70.9</u>	<u>2.1 J</u>	0.584	0.613	8.0
Lead	<u>333</u>	15.7	10.1	<u>59.2</u>	62.2	<u>53.8</u>	<u>70.9</u>	<u>130</u>	<u>148</u>	3.1	27	400	52
Mercury	<u>0.38</u>	0.019 J	<0.013	NA	NA	NA	NA	NA	NA	NA	0.208	3.13	NS
Selenium	<1.2	<1.1	<1.4	<1.2	<1.1	<1.1	<1.2	<1.4	<1.3	<1.3	0.52	391	NS

Notes:

(1) Wisconsin Administrative Code Natural Resources Chapter (NR) 720 Residual Contaminant Levels from WDNR RCL Spreadsheet updated March 2017.

RCLs: Residual Contaminant Levels

PID: Photoionization Detector

RCRA: Resource Conservation and Recovery Act

mg/kg: Milligrams per kilogram; equivalent to parts per million (ppm)

J: Concentration reported between the laboratory method detection limit and the reporting limit.

NS: No Standard

Background Threshold Value (BTV) applies to industrial and non-industrial direct-contact (upper 4 feet of soil)

Result shown "underlined/red" exceeds the calculated RCL for the soil to groundwater pathway.

Result shown "parenthesis /(green)" exceeds the calculated RCL for the non-industrial land use direct-contact pathway.

TABLE 4
 SOIL ANALYTICAL RESULTS SUMMARY - FRESHWATER LEACHED VOCs
 THE COUTURE
 909 EAST MICHIGAN STREET
 MILWAUKEE, WISCONSIN
 PROJECT NO. 1E-1704005

Analyte	Sample Location				NR 140 ¹ PAL (µg/L)
	B-11	B-14A	B-30	B-32	
Sample Depth (feet)	2-4	2-4	2-4	0-2	
Sample Date	8/3/17	8/3/17	8/3/17	8/3/17	
Detected Fresh Water Leached VOCs (µg/L)					
Ethylbenzene	<5.0	<5.0	12.1	<5.0	140
Methylene Chloride	3.8 J	2.8 J	3.1 J	4.3 J	0.5
Toluene	<5.0	<5.0	14.7	<5.0	160
1,2,4-Trimethylbenzene	<5.0	<5.0	6.3 J	<5.0	14.0
Xylenes, Total	<15	<15	54.0	<15	400

Notes:

(1): Wisconsin Administrative Code Natural Resources Chapter (NR) 140

PAL: Preventive Action Limit

VOCs: Volatile Organic Compounds

µg/L: Micrograms per Liter; equivalent to parts per billion (ppb)

J: Estimated Value. Concentration reported between the laboratory method detection limit and the reporting limit.

B: Analyte was detected in the associated method blank

NS: No Standard

Results indicated in blue/parenthesis exceed the WAC NR 140 Preventive Action Limit (PAL)

TABLE 5
 SOIL ANALYTICAL RESULTS SUMMARY - FRESHWATER LEACHED PAHS
 909 EAST MICHIGAN STREET
 MILWAUKEE, WISCONSIN
 PROJECT NO. 1E-1704005

Analyte	Sample Location		NR 140 ¹ PAL (µg/L)
	B-30	B-32	
Sample Depth (feet)	2-4	6-8	
Sample Date	7/28/17	7/28/17	
Detected Fresh Water Leached PAHs (µg/L)			
Acenaphthene	0.0064 J	<0.0055	NS
Pyrene	0.0073 J	0.0078 J	50

Notes:

(1): Wisconsin Administrative Code Natural Resources Chapter (NR) 140

PAL: Preventive Action Limit

PAHs: Polynuclear Aromatic Hydrocarbons/Volatile Organic Compounds

µg/L: Micrograms per Liter; equivalent to parts per billion (ppb)

J: Estimated Value. Concentration reported between the laboratory method detection limit and the reporting limit.

B: Analyte was detected in the associated method blank

NS: No Standard

Results indicated in blue/parenthesis exceed the WAC NR 140 Preventive Action Limit (PAL)

TABLE 6
 SOIL ANALYTICAL RESULTS SUMMARY - FRESHWATER LEACHED ARSENIC
 909 EAST MICHIGAN STREET
 MILWAUKEE, WISCONSIN
 PROJECT NO. 1E-1704005

Analyte	Sample Location			NR 140 ¹ PAL (µg/L)
	B-15A	B-34	B-34C	
Sample Depth (feet)	2-4	10-12	10-12	
Sample Date	9/1/17	9/1/17	9/1/17	
Detected Fresh Water Leached ArsenicPAHs (µg/L)				
Arsenic	<0.042	0.012 J	0.095	1.0

Notes:

(1): Wisconsin Administrative Code Natural Resources Chapter (NR) 140

PAL: Preventive Action Limit

µg/L: Micrograms per Liter; equivalent to parts per billion (ppb)

J: Estimated Value. Concentration reported between the laboratory method detection limit and the reporting limit.

B: Analyte was detected in the associated method blank

NS: No Standard

Results indicated in blue/parenthesis exceed the WAC NR 140 Preventive Action Limit (PAL)

APPENDIX A

Soil Boring Logs (Form 4400-122)

Available Upon Request

APPENDIX B

**Well/Drillhole/Borehole Abandonment Forms
(Form 3300-5)**

Available Upon Request

APPENDIX C

Monitoring Well Construction and Development Forms (Form 4400-113A-B)

Available Upon Request

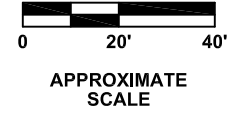
APPENDIX D

Soil Analytical Reports & Chain-of-Custody Documentation

Available Upon Request

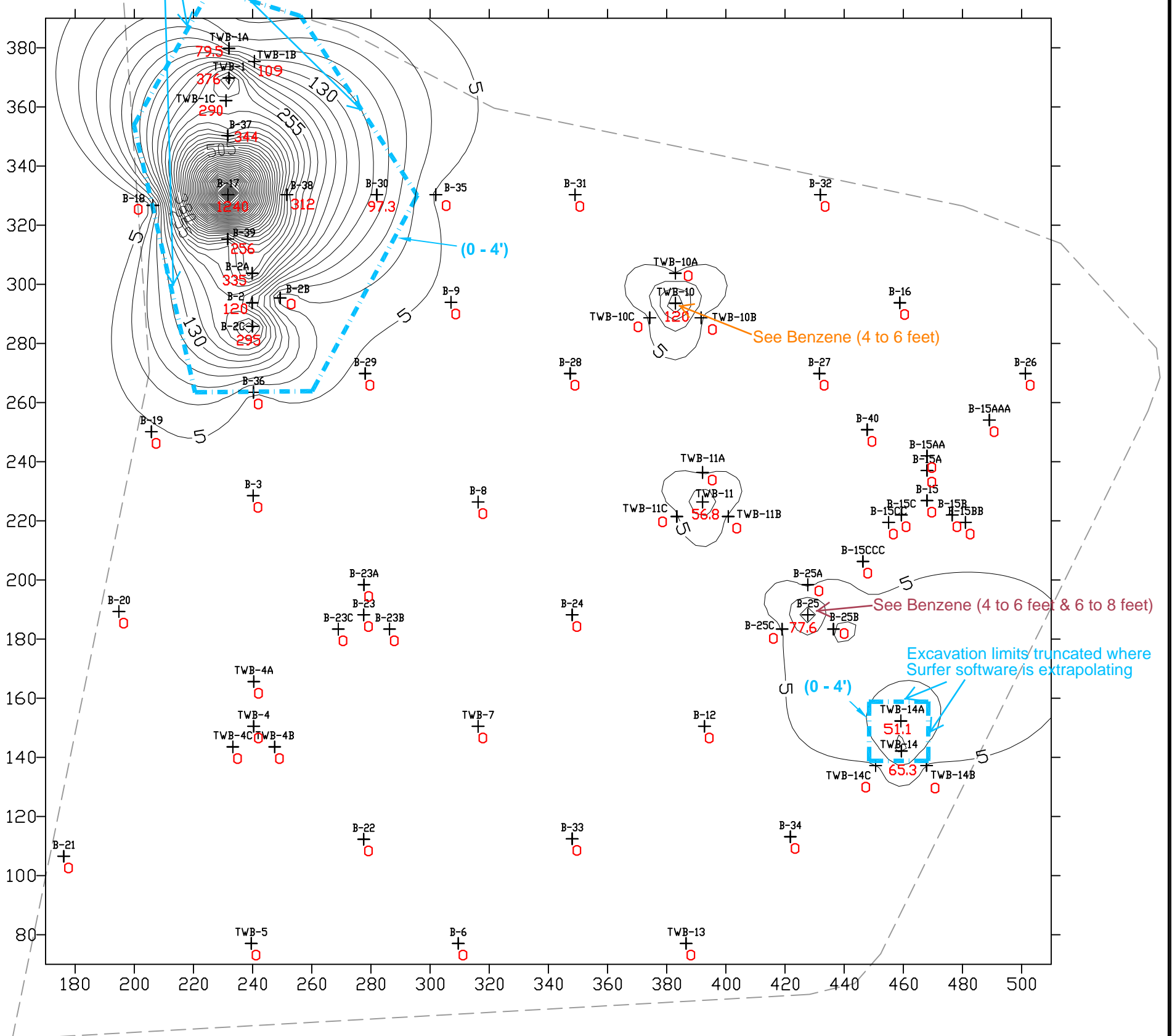
APPENDIX E

Inferred Extent of Soil Petroleum VOC & Chlorinated VOC Impact

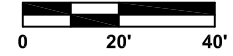


Excavation limits truncated where Surfer software is extrapolating

Benzene (0 to 4 feet)

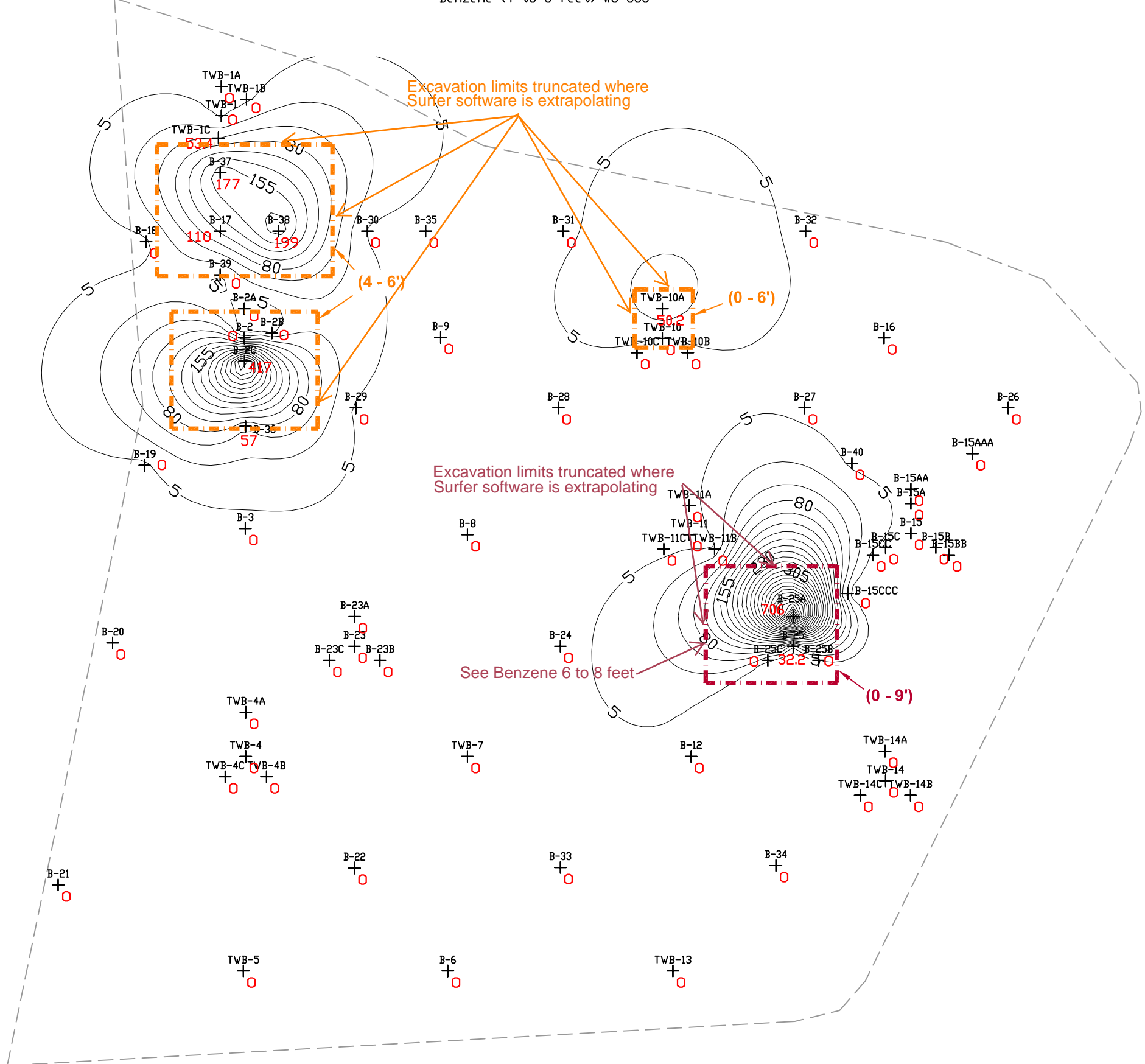


NW Large benzene-impacted soil area (8,643 sf to 4 feet) = 1,280 cy
TWB-14 benzene-impacted soil area 400 se to 4 feet = 60 cy
TOTAL cubic yards (0 to 4 feet) = 1,340 cy

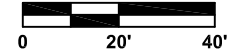


APPROXIMATE SCALE

Benzene (4 to 6 feet) wo 35J

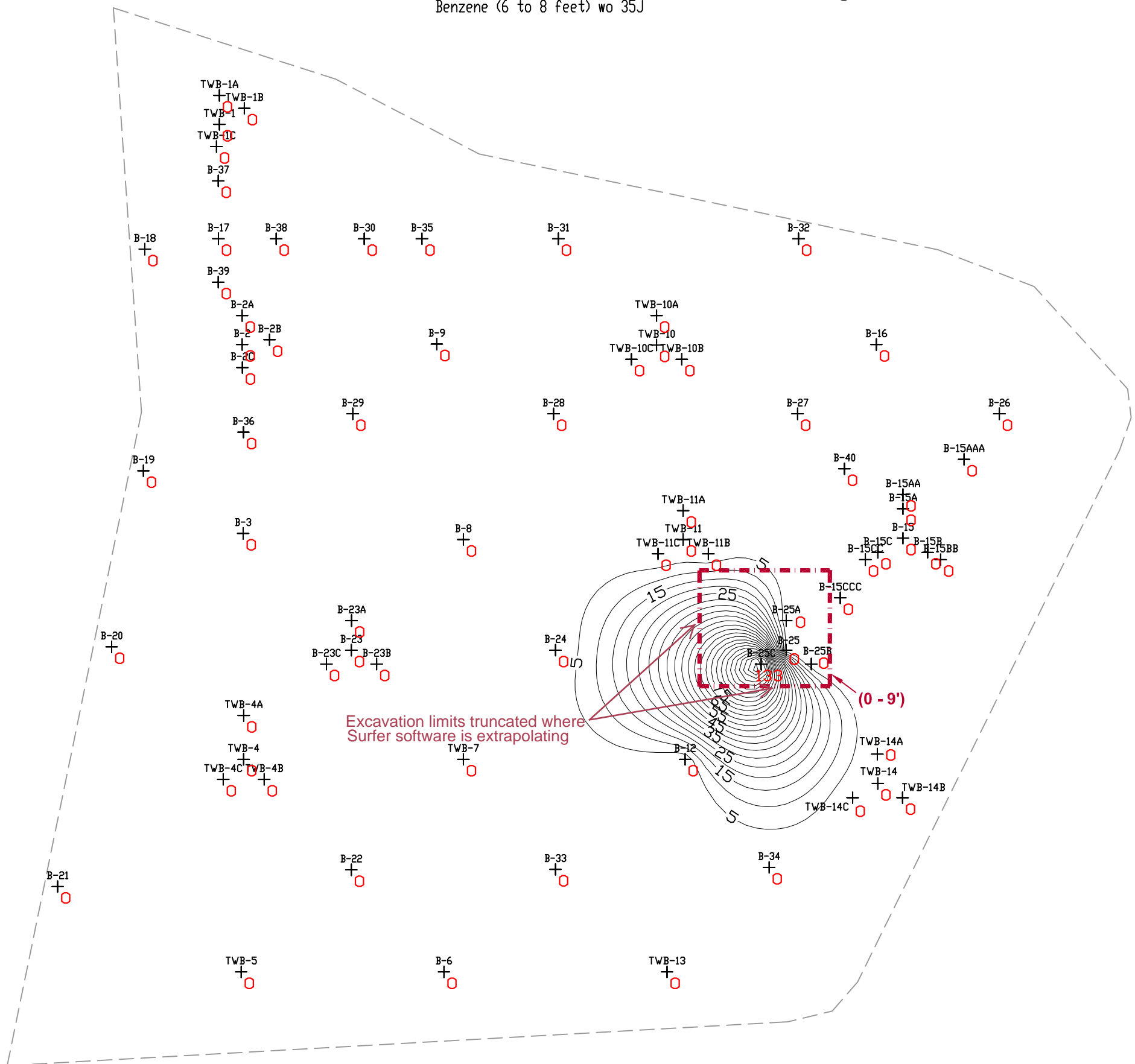


NW benzene-impacted soil area 60' X 45' (2,700 sf from 4 to 6 feet) = 200 cy
NW benzene-impacted soil area 45' X 40' (1,800 sf from 4 to 6 feet) = 135 cy
NC benzene-impacted soil area 20' X 20' (2,700 sf from 0 to 6 feet) = 90 cy
TOTAL Cubic Yards (4 to 6 and 0 to 6 feet) = 425 cy

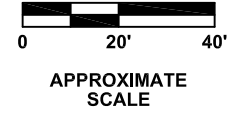


APPROXIMATE SCALE

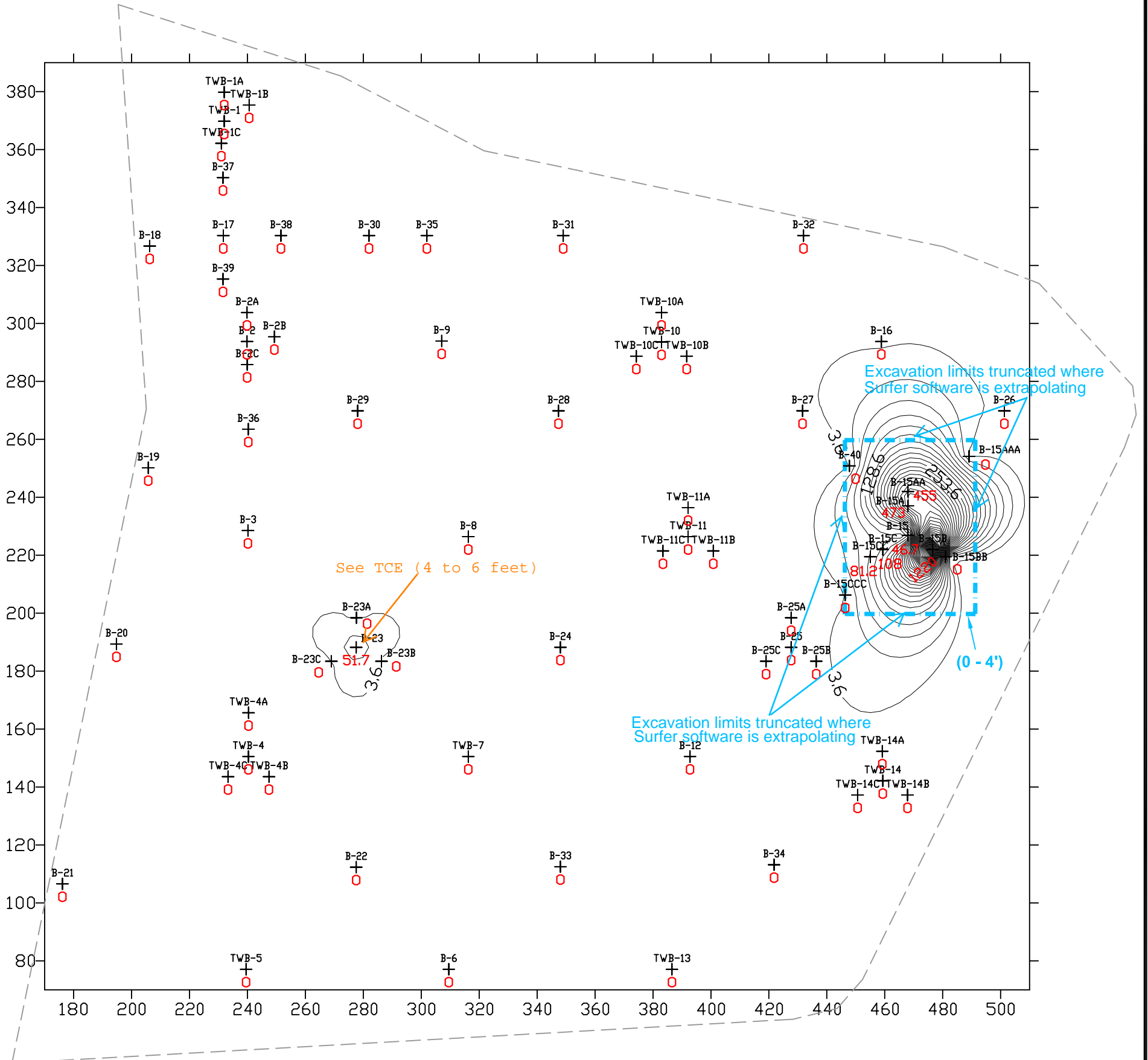
Benzene (6 to 8 feet) wo 35J



SE benzene-impacted soil area 45' X 40' (1,800 sf from 0 to 9 feet) = 600 cy
TOTAL benzene-impacted soil (0 to 9 feet) = 600 cy

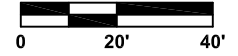


TCE w "J" Flage values (0 - 4')

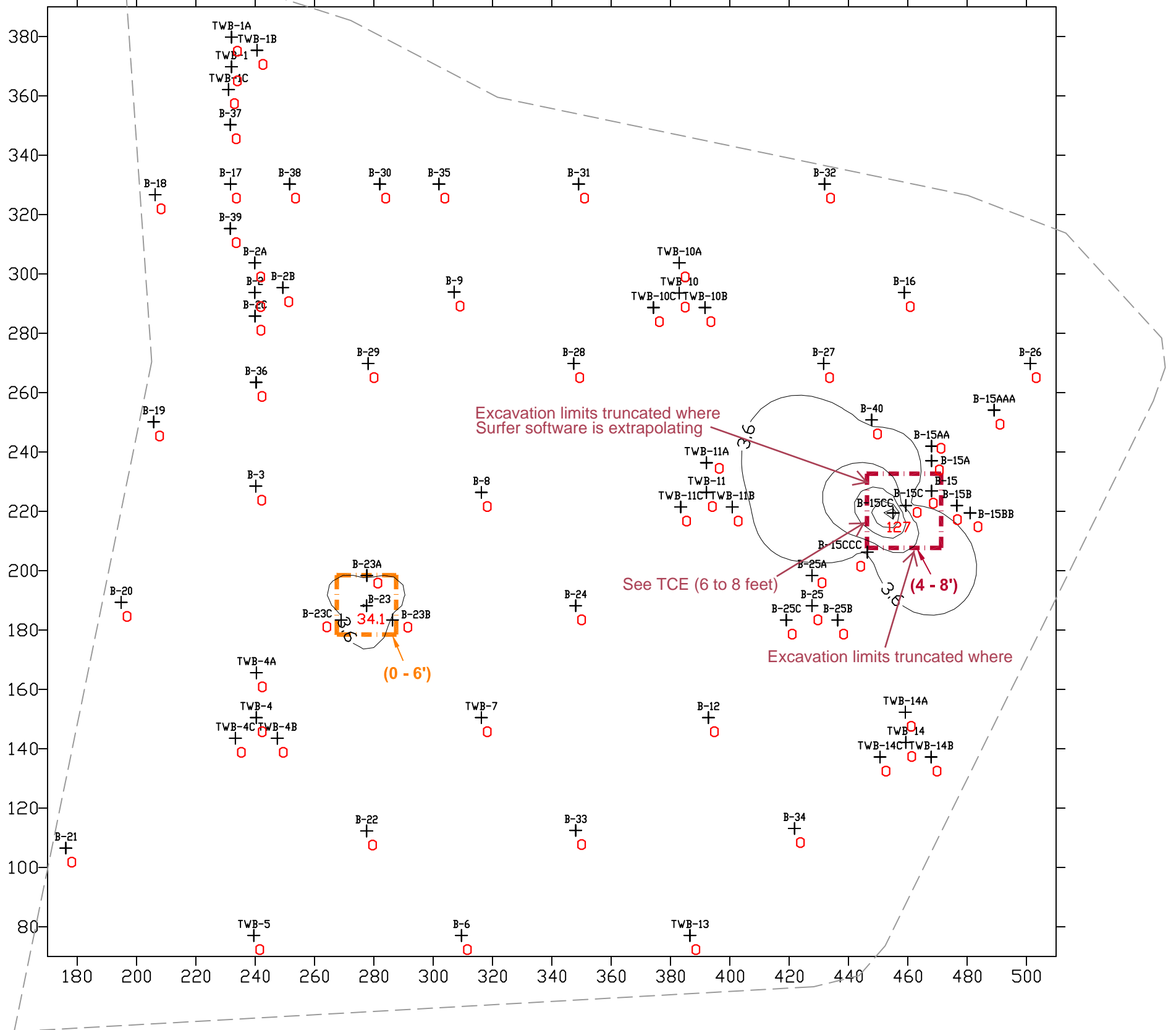


EC Large TCE-impacted soil area 45' X 60' (2,700 sf to 4 feet) = 400 cy

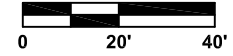
T
RCE w "J" Flage values (4 - 6')



APPROXIMATE
SCALE

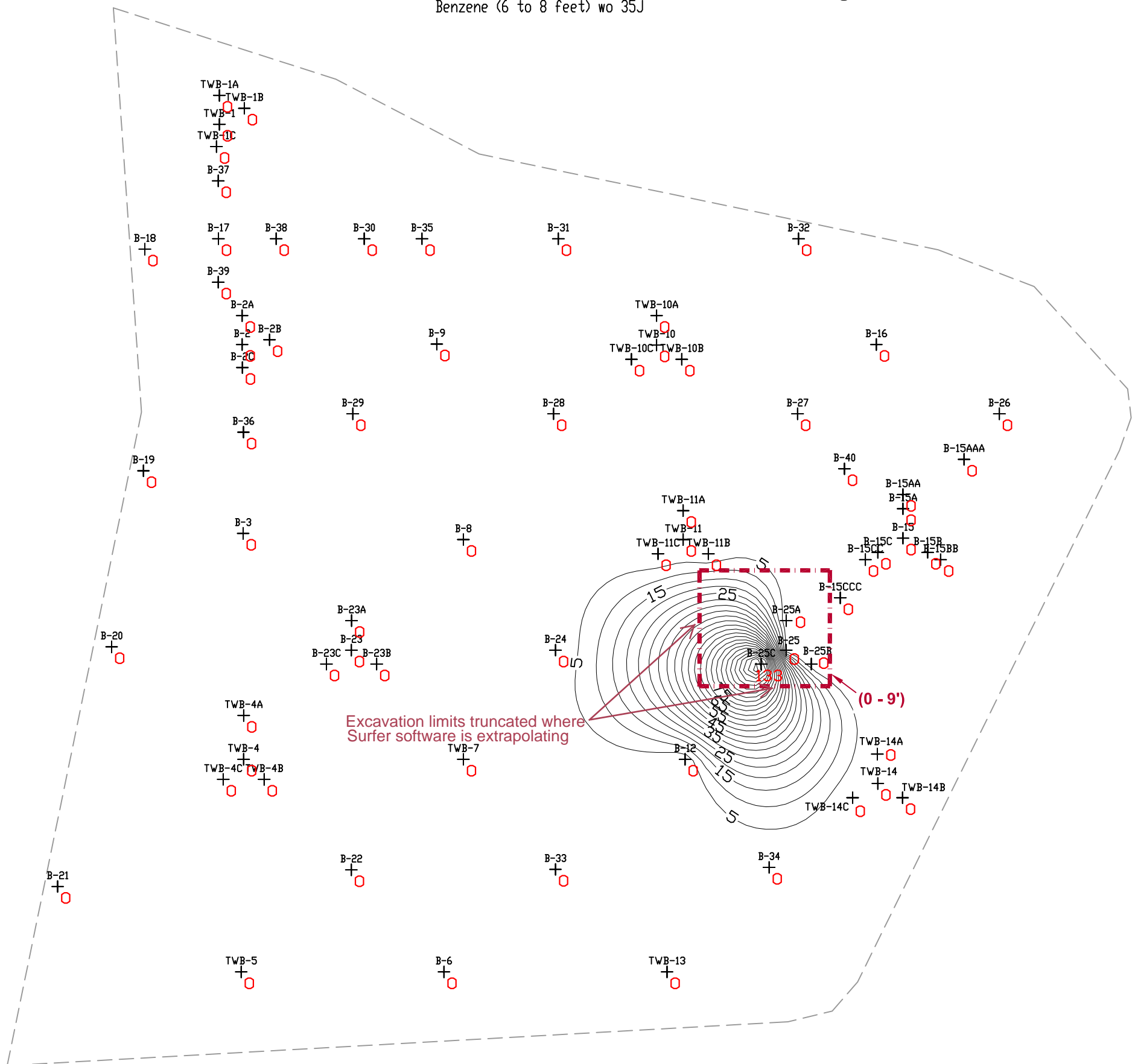


WC TCE-impacted soil area 20' X 20' (625 sf 0 to 6 feet) = 90 cy



APPROXIMATE SCALE

Benzene (6 to 8 feet) wo 35J



SE benzene-impacted soil area 45' X 40' (1,800 sf from 0 to 9 feet) = 600 cy
TOTAL benzene-impacted soil (0 to 9 feet) = 600 cy



GILES

ENGINEERING ASSOCIATES, INC.

www.gilesengr.com

ATTACHMENT B

**Hydro-Search, Inc. Letter,
Dated July 10, 1996**

HYDRO-SEARCH, INC.

A Tetra Tech Company

July 10, 1996
(306523364)

*Return to:
Rocky Marcoux
HACM*

Mr. Bizhan Sheikholeslami
Wisconsin Dept. of Natural Resources
4041 N. Richard Street
P. O. Box 12436
Milwaukee, WI 53212

RE: South College Avenue "Landfill", 1701 E. College Avenue, City of Milwaukee

Dear Mr. Sheikholeslami:

In order to determine the types of materials that were placed in the City of Milwaukee's South College Avenue fill site, soil borings were drilled into the materials in May 1996. The purpose of this letter is to provide the results of that investigation to the Wisconsin Department of Natural Resources.

Soil Borings

Eleven soil borings were drilled through the wastes. Boring locations are shown on Plate 1. Drilling was performed by Soils and Engineering Services, Inc. of Madison, Wisconsin. Drilling oversight and soil classification for logging was performed by a geologist from Kapur and Associates of Fox Point, Wisconsin. Borings were drilled on May 24 and 28, 1996. Borehole logs are provided in Attachment A, borehole abandonment logs are located in Attachment B, and field soil sample screening logs are in Attachment C. The results of the investigation are shown on the cross section presented on Plate 2.

In general, the thickness of fill material across the site ranges from approximately 9 to 18 feet (not including the windrows of composted leaves), and averages 14 feet. The extent and thickness of fill material across the site is shown in plan view on Plate 1 and in cross section on Plate 2. As suggested by the site topography, the thinnest portion of fill materials is towards the southeast.

Based on the sample descriptions provided in the logs for the boreholes, the fill materials consist predominantly of soil fill. As shown on Plate 2, it appears that about two-thirds of the materials in the landfill are known to be clean soil fill. A significant portion of the remainder is comprised of concrete, bricks, rubble, asphalt, and organic soils. Several of the soil borings indicated "unknown" materials due to lack of recovery during sampling. Poor sample recovery is typical of granular materials (sand, gravel) which lack cohesiveness to stay in the sampling tube. These "unknown" materials are likely sand or gravel.

All of the above described wastes are classified by the WDNR as "clean fill". Materials which would not be considered clean fill make up less than 10% of the fill materials encountered during the boring program. Ash cinders, and charred wood were encountered in borings 3a, 4, 7, 8, and 9. "Garbage, including plastics" was located in one 2-foot seam near the bottom of boring B-2. This is the only location where refuse was encountered during this investigation.

Fill Quantities

The site is approximately 22 acres in size, of which about 18 acres have been filled. It has an estimated fill volume of 403,000 cubic yards. Complete records on the total volume of waste disposed at the site are not available.

Compost Quantities

There are about 40 windrows and piles of composted leaves located on the northern half of the site. The estimated volume of this compost is 9,725 cubic yards. These materials are proposed to be used as a part of the topsoil layer for the cap on the North College Avenue Landfill.

Mr. Bizhan Sheikholeslami
Wisconsin Dept. of Natural Resources
Page 3

Conclusion

Only one 2-foot thick seam of garbage was encountered in one of the 11 soil borings at the site. This seam represents about 1% of the total amount of fill encountered in this investigation. Ash and cinders are also present in the fill, but only in thin layers, and they comprise less than 10% of the total volume contained in the site. The remainder is clean fill, consisting of soils, concrete, and asphalt.

Because this site was never licensed as a landfill and because its contents are almost entirely clean fill materials, the City of Milwaukee requests that the site be regulated as a clean fill site, and not as a solid waste landfill. The site would, therefore, not require a closure plan, and would not require a landfill cap. The site could also be used to receive additional clean fill.

* * * * *

After you have had time to review the attached materials, we would like to discuss any questions you may have about the site. Please feel free to contact me with any questions.

Sincerely,

HYDRO-SEARCH, INC.

Gerald L. DeMers
Gerald L. DeMers
Senior Engineer, P.E.

GLD:gf

cc: Steve Hiniker

ATTACHMENT C

**City of Milwaukee Material Acceptance Letter,
Dated March 9, 2021**



GILES

ENGINEERING ASSOCIATES, INC.

GEOTECHNICAL, ENVIRONMENTAL & CONSTRUCTION MATERIALS CONSULTANTS

- Atlanta, GA
- Dallas, TX
- Los Angeles, CA
- Manassas, VA
- Milwaukee, WI

March 9, 2021

City of Milwaukee Department of Public Works
841 N. Broadway, Room 501
Milwaukee, WI 53202

Attention: Mr. Jerrel Kruschke, P.E.
City Engineer

Subject: Acceptance of Fill Material
The Couture Development
909 East Michigan Street
Milwaukee, Wisconsin
Project No. 1E-1704010
WDNR BRRTS No. 02-41-579105
WDNR FID No. 341286220

Dear Mr. Kruschke:

Giles Engineering Associates, Inc. (Giles) has prepared this letter on behalf of The Couture LLC. The Couture LLC is the property owner and "Responsible Party" (RP) for the *Couture Development* ("Site") located at 909 East Michigan Street in the City of Milwaukee, Milwaukee County, Wisconsin (Figure 1).

The Couture development is located on a 1.59-acre portion of the property located at 909 East Michigan Street. The planned 44-story skyscraper will include condominiums with commercial space on the lower levels. The building will also be constructed with two levels of sub-grade parking. To accommodate the parking structure, the Site will be excavated to approximately 25 feet below ground surface (bgs). Giles anticipates that approximately 64,300 to 65,640 cubic yards (cy) of material will be generated during construction. Of the material generated, a calculated 28,000 *in-situ* cubic yards (cy) of fill material will be impacted with polynuclear aromatic hydrocarbons (PAHs) and metals.

The PAH and metals impacted fill material primarily consist of clay, sand, and sand & gravel fill soil. However, a portion of the fill material contains foundry sand and cinders (incinerated) waste. It is Giles' understanding that the City of Milwaukee has agreed to accept 10,000 cy of fill material containing foundry sand and cinder waste at their *South College Avenue Landfill* facility located at 1701 East College Avenue Milwaukee, Wisconsin. The material will be managed under a NR 718 Soil Management Plan¹ and a Low-Hazard Waste Grand of Exemption (LHE). The landfill facility is a 22-acre parcel is owned by the City of Milwaukee that currently receives street sweepings from the City of Milwaukee under a LHE received by the City.

¹ CH NR 718.12 Soil Management Plan, dated February 8, 2018, revised April 26, 2018, final revised May 7, 2018 and its Addendums



Acceptance of Fill Material
The Couture Development
Milwaukee, Wisconsin
Project No. 1E-1704010
BRRTS No. 02-41-579105
Page 2

CLOSING

If the City of Milwaukee Public Works Department concurs with the information contained in this letter and agrees to accept the fill material generated from the Couture property as stated above, please sign and return this document to Giles. Please contact us should you have any questions.

Respectfully submitted,

GILES ENGINEERING ASSOCIATES, INC.

Kelly M. Hayden
Environmental Scientist II

Kevin T. Bugel, P.G., C.P.G
Environmental Division Manager

DISTRIBUTION: City of Milwaukee Department of Public Works
Attn: Mr. Jerrel Kruschke (1 via email: jkrusc@milwaukee.gov)

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BY:

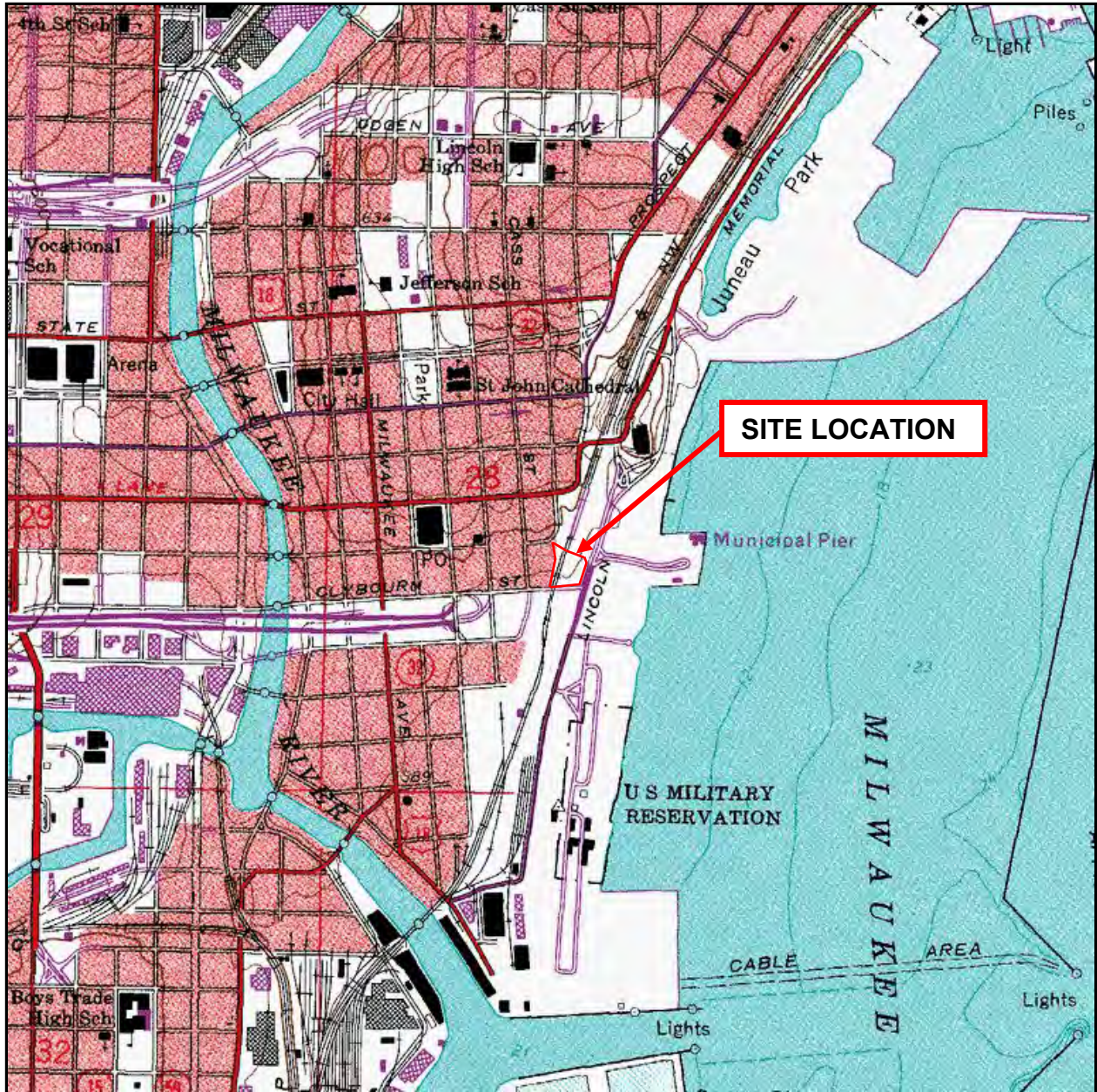
(signature)

Jerrel Kruschke
(printed name)

TITLE: City Engineer

DATE: 3/12/2021

FIGURES



Source: USGS Milwaukee, Wisconsin 7.5-Minute Series (topographic) Quadrangle Map (1958; photorevised in 1971)

Scale: 1:24,000
 Contour Interval: 10 Feet

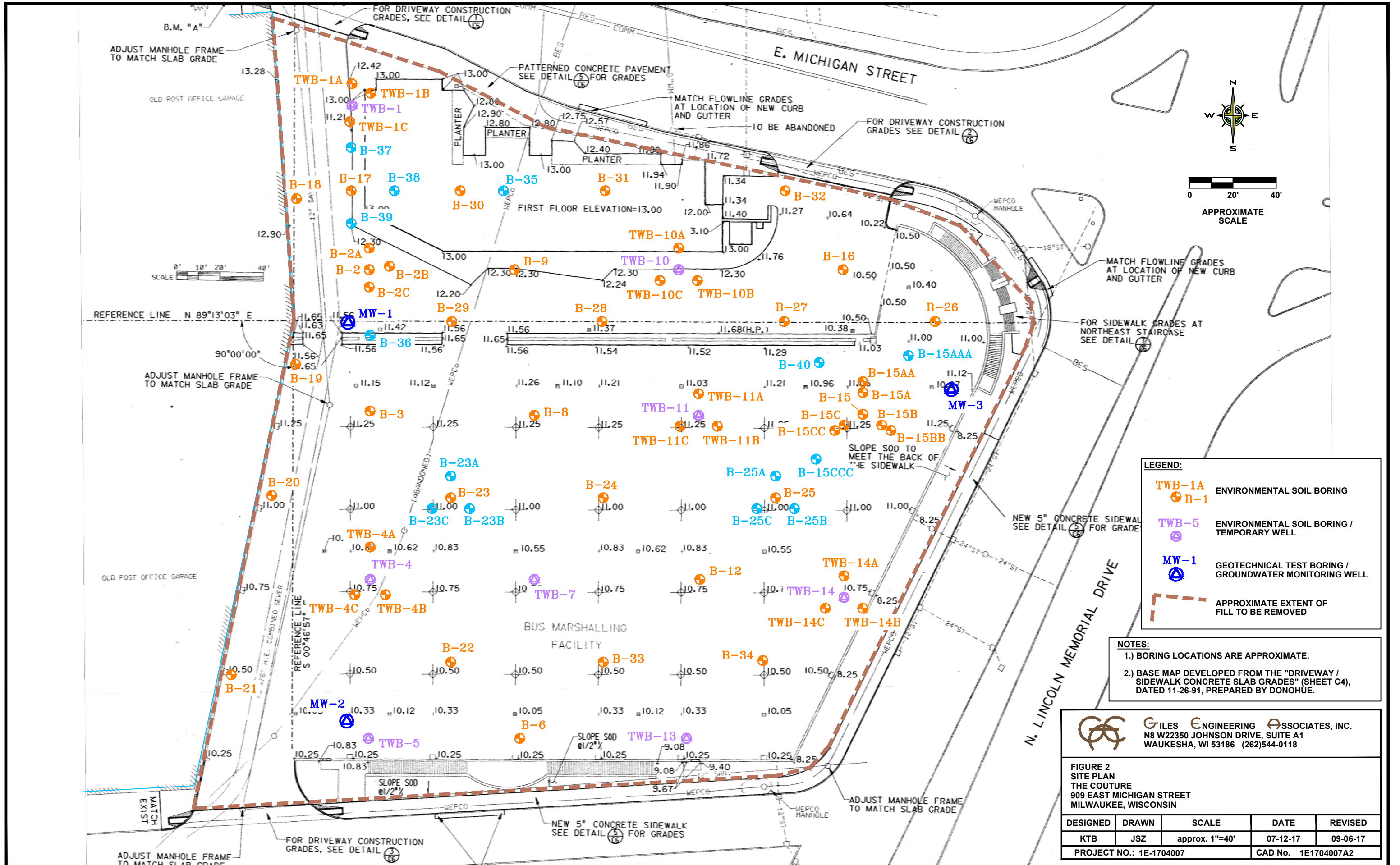


FIGURE 1
SITE LOCATION MAP

The Couture Development
909 East Michigan Street
Milwaukee, Wisconsin
Project No. 1E-1704007



GILES
 ENGINEERING ASSOCIATES, INC.



LEGEND:

- TWB-1A ENVIRONMENTAL SOIL BORING
- B-1
- TWB-5 ENVIRONMENTAL SOIL BORING / TEMPORARY WELL
- MW-1 GEOTECHNICAL TEST BORING / GROUNDWATER MONITORING WELL
- APPROXIMATE EXTENT OF FILL TO BE REMOVED

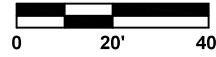
NOTES:

- 1.) BORING LOCATIONS ARE APPROXIMATE.
- 2.) BASE MAP DEVELOPED FROM THE "DRIVEWAY / SIDEWALK CONCRETE SLAB GRADES" (SHEET C4), DATED 11-26-91, PREPARED BY DONOHUE.

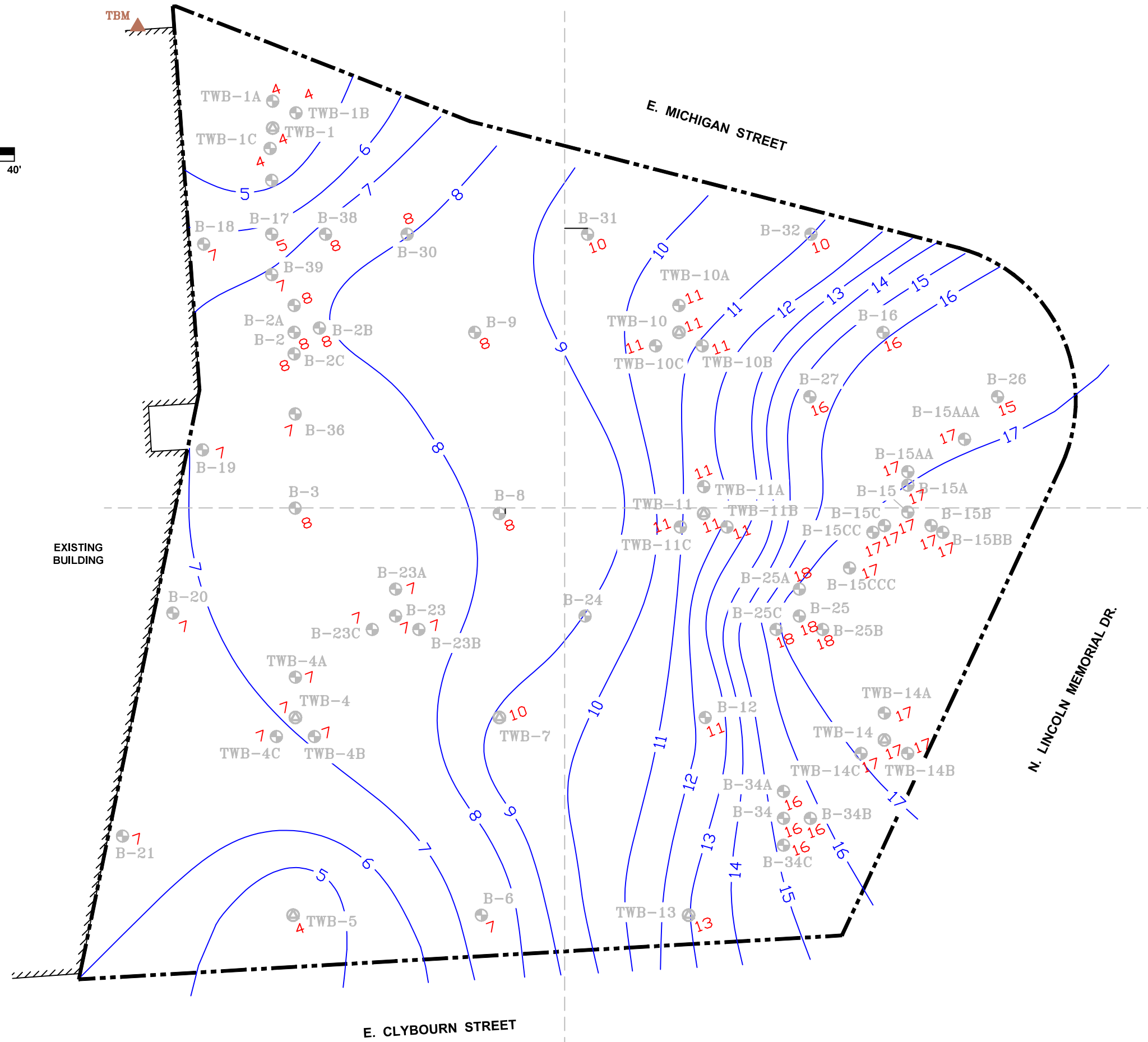
GILES ENGINEERING ASSOCIATES, INC.
 N8 W22350 JOHNSON DRIVE, SUITE A1
 WAUKESHA, WI 53186 (262)544-0118

**FIGURE 2
 SITE PLAN
 THE CATURE
 909 EAST MICHIGAN STREET
 MILWAUKEE, WISCONSIN**

DESIGNED	DRAWN	SCALE	DATE	REVISED
KTB	JSZ	approx. 1"=40'	07-12-17	09-06-17
PROJECT NO.: 1E-1704007			CAD No. 1E1704007A2	



APPROXIMATE SCALE



LEGEND:

- 14 FILL THICKNESS CONTOUR INTERVAL = 1.0'
- 15 FILL THICKNESS AT BORING (IN FEET)
- TWB-1A ENVIRONMENTAL SOIL BORING
- TWB-5 ENVIRONMENTAL SOIL BORING / TEMPORARY WELL
- TBM BENCHMARK: TBM ON WALL OF EXISTING PARKING STRUCTURE. ELEVATION = 15.65'
- PROPERTY LINE

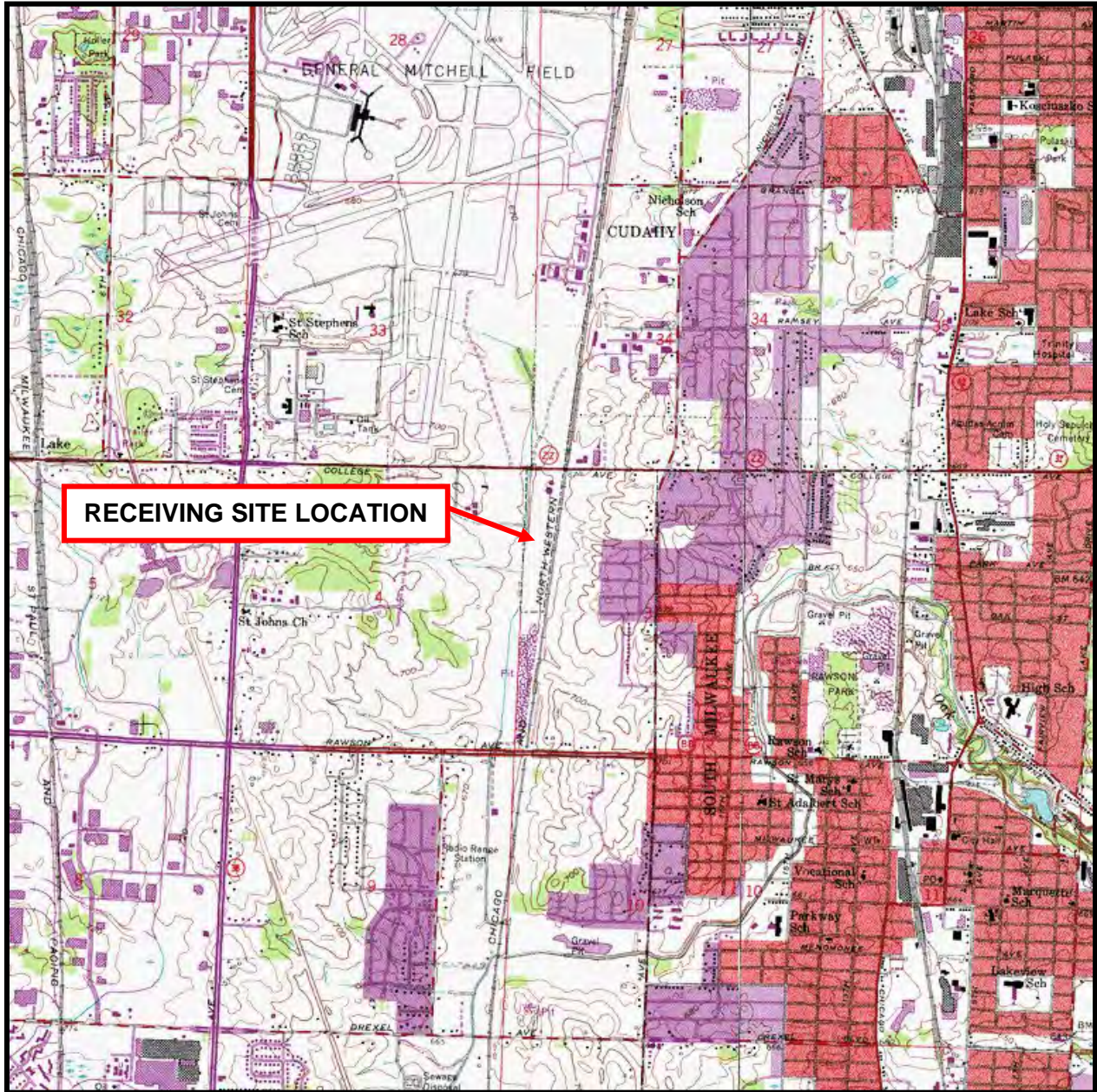
NOTES:

- 1.) BORING LOCATIONS ARE APPROXIMATE.
- 2.) BASE MAP DEVELOPED FROM THE "DRIVEWAY / SIDEWALK CONCRETE SLAB GRADES" (SHEET C4), DATED 11-26-91, PREPARED BY DONOHUE.
- 3.) PROPERTY LINES IS APPROXIMATE BASED ON THE "EXISTING CONDITIONS PLAN" (SHEET C100), DATED 1-12-18, PREPARED BY GRAEF.

GILES ENGINEERING ASSOCIATES, INC.
 N8 W22350 JOHNSON DRIVE, SUITE A1
 WAUKESHA, WI 53186 (262)544-0118

FIGURE 3
 Fill Material Distribution Map
 THE COUTURE
 909 EAST MICHIGAN STREET
 MILWAUKEE, WISCONSIN

DESIGNED	DRAWN	SCALE	DATE	REVISED
KTB	JSZ	approx. 1"=40'	02-18-20	--
PROJECT NO.: 1E-1704007			CAD No. 1E1704007R	



Receiving Site: *South College Avenue Landfill* 1701 East College Avenue Milwaukee, Wisconsin

Source: USGS Greendale, Wisconsin 7.5-Minute Series (topographic) Quadrangle Map (1958, revised 1971 and 1976)

Scale: 1:24,000

Contour Interval: 10 Feet

FIGURE 4

RECEIVING SITE LOCATION MAP



The Couture Development
909 East Michigan Street
Milwaukee, Wisconsin
Project No. 1E-1704010



GILES
 ENGINEERING ASSOCIATES, INC.



Source: Google Earth, not to scale

Receiving Site:

South College Avenue Landfill
1701 East College Avenue
City of Milwaukee, Wisconsin



**FIGURE 5
RECEIVING SITE MAP**

The Couture Development
909 East Michigan Street
Milwaukee, Wisconsin
Project No. 1E-1704010



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