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April 23, 2020

Ms. Terese Van Donsel
United States Environmental Protection Agency (USEPA)
Region 5
Mail Code: SR-6J
77 West Jackson Boulevard
Chicago, Illinois 60604-3507

Via Email: vandonsel.terese@epa.gov

RE: SME Serial Letter #62
Sheboygan River and Harbor Superfund Site
Tecumseh Products Company Site, Sheboygan Falls, WI
SME Project No. 069638.00.051

Dear Ms. Van Donsel:

Pursuant to your request, SME has reviewed readily available historical information and historical assessment reports for the former Tecumseh Products Company Site (Site, Figure 1). The objective of our review was to evaluate the completeness of the historical investigations in assessing soil on the Site with a primary focus on the presence of polychlorinated biphenyls (PCBs). Your request was initiated by SME's discovery of PCB-impacted soil located north, east and northeast of the foundation slab of the former manufacturing building.

HISTORICAL INFORMATION REVIEW

We reviewed historical information from the following readily available historical information sources:

- Previous Site Assessment Reports
- Aerial Photographs
- Historical Fire Insurance Maps

HISTORICAL BACKGROUND INFORMATION FROM HISTORICAL SITE ASSESSMENT REPORTS

The original manufacturing facility on the Site was constructed by the Diecast Corporation in 1957. A fire in the plant in 1959 destroyed portions of the building. The fire in the building was caused due to the use of non-fire retardant hydraulic oil in foundry equipment. In 1960, hydraulic oil in equipment on the Site was replaced with PCB-containing, fire-retardant hydraulic oil. Early in the facility operations, spent oil absorbent materials were reportedly incinerated in a burn pit on the Site and later disposed on the Site. Absorbent materials stored in on-site pits were also removed and disposed at the Sheboygan Falls demolition fill landfill (located in the area of the east-adjoining Rochester Park). During plant expansion, some contaminated soil was moved to fill low spots on the Site and used for flood control along the Sheboygan River. Portions of the plant expansion were also reportedly constructed on areas of contaminated soil.

Diecast Corporation owned and operated the manufacturing facility until 1966, when the Tecumseh Products Company acquired the facility and continued die casting operations. In 1972, hydraulic oil in equipment on the Site was replaced with non-PCB-containing, water-based hydraulic oil.

AERIAL PHOTOGRAPHS

We reviewed aerial photographs, obtained from Historical Information Gathers (HIG), dated 1941, 1950, 1952, 1962, 1967, 1973, 1978, 1981, 1992, 2005, 2008, 2013 and 2018. The aerial photographs are included in the Attachments. A summary of our review is provided below.

AERIAL PHOTOGRAPH SUMMARY	
YEAR(S)	**COMMENTS**
1941, 1950, 1952	**Site:** The Site was undeveloped grass-covered and wooded land. **Off-site:** The area to the east of the Site was developed with a wastewater treatment plant (WWTP) prior to 1941. By 1950, garden plots were present in the area east of the Site and south of the WWTP. By 1950, ground disturbances indicative of potential landfilling activities were present to the east and northeast of the Site and north of the WWTP. This area is consistent with the Sheboygan Falls demolition landfill noted in other historical sources.
1962	**Site:** The central and northern portion of the Site was developed with a manufacturing facility. The western portion of the site was a parking area. The eastern portion was a roadway to the east-adjoining WWTP and garden plots on the east-adjoining site extended onto the Site. Wooded area areas are present along the Sheboygan River along the southern and western portions of the Site. **Off-site:** The WWTP remained present and the garden plots were present in the area east of the Site and south of the WWTP. Ground disturbances indicative of potential landfilling activities were present to the east of the Site and north and east of the WWTP. This area is consistent with the Sheboygan Falls demolition landfill noted in other historical sources.
1967	**Site:** The central and northern portions of the Site were developed with the manufacturing facility. The western portion of the Site was a parking area. The manufacturing facility had been expanded on the southern and northwestern sides. The eastern portion of the Site was cleared and may have been regraded. Wooded areas are present along the Sheboygan River which borders the southern and western portions of the Site. **Off-site:** The WWTP remained present and the garden plots were present in the area east of the Site and south of the WWTP. Ground disturbances indicative of potential landfilling activities were present to the east of the Site and north and east of the WWTP. This area is consistent with the Sheboygan Falls demolition landfill noted in other historical sources.

AERIAL PHOTOGRAPH SUMMARY	
YEAR(S)	**COMMENTS**
1973, 1978, 1981	**Site:** The central and northern portions of the Site were developed with the manufacturing facility. The western portion of the Site was a parking area. The eastern portion of the Site was cleared and appeared to be used for storage. Wooded area areas are present along the Sheboygan River which borders the southern and western portions of the Site. **Off-site:** In 1973, the WWTP remained present and the garden plots were present in the area east of the Site and south of the WWTP. The WWTP, the garden plot area and the Sheboygan Falls demolition landfill were no longer present by 1978. The former WWTP and garden plot areas appeared to be in the process of being regraded. The area of the former demolition landfill was replaced with a tennis court and athletic field (now the location of Rochester Park).
1992	**Site:** The central and northern portions of the Site were developed with the manufacturing facility. The western portion of the Site was a parking area. The manufacturing facility was expanded and covered the majority of the eastern portion of the Site. The remaining area of the eastern portion of the Site appeared to be used for loading/unloading and storage. A Sediment Management Facility (SMF) was present in the western portion of the Site and the Confined Treatment Facility (CFT) was present in the southwestern portion of the Site. Wooded area areas are present along the Sheboygan River which borders the southern and western portions of the Site. **Off-site:** The park area was expanded south and covered the area east of the Site.
2005	**Site:** The manufacturing building was no longer present on the Site. The building was removed; however, the building floor slabs and the paved parking areas remained. The SMF in the western portion was no longer present but the CTF remained present. Wooded areas are present along the Sheboygan River which borders southern and western portions of the Site. **Off-site:** The athletic fields and park covered the area east of the Site.
2008, 2013, 2018	**Site:** The central portion of the former building floor slab was repaved by 2008 and was used for sediment remedial activities being conducted on the Sheboygan River. The paved parking area in the western portion of the Site and the CTF remained present. **Off-site:** The athletic fields and park covered the area east of the Site.

FIRE INSURANCE MAPS

We reviewed fire insurance maps for the area of the Site. Fire insurance maps were available for the Sheboygan Falls area for the years 1884, 1887, 1891, 1903, 1910, 1918, 1921, 1922, 1938, 1940, 1941, 1943, and 1955. However, no fire insurance map coverage was available for the Site which is typical for areas without structures and consistent with the historical aerials and the reported construction of the facility in 1957.

SUMMARY OF HISTORICAL INFORMATION

The original manufacturing facility on the Site was constructed in 1957 and was located on the central portion of the Site with parking areas west of the building. In 1960, hydraulic oil in equipment on the Site was replaced with PCB-containing, fire-retardant hydraulic oil. In 1972, hydraulic oil in equipment on the

Site was replaced with non-PCB-containing, water-based hydraulic oil. The facility was expanded to the south and east sometime between 1962 and 1967 and again sometime between 1987 and 1992. The SMF and CTF were present on the Site by 1992. The SMF was removed by 2005 and the CTF remains on the Site. In 2003, the facility closed and by 2005 the above grade structure of the building was removed but the floor slabs remained. The central portion of the building floor slab was used during the sediment dewatering operations associated with the Sheboygan River cleanup. The central area was paved with asphalt and an asphalt dike was constructed around the paved area for containment of water prior to treatment and discharge to the river.

HISTORICAL SITE ASSESSMENTS REVIEW

Assessments were completed on the Site from 1978 through 1999. The emphasis of these investigations was to identify the "preferential pathways" for PCBs to enter the Sheboygan River. Only the 1999 investigation included samples outside of the areas adjoining the river. Remedial excavations were conducted in 1978 and 2004. Assessment and remedial excavations were primarily focused in the southern portion of the Site and two areas in the eastern portion of the Site. Brief summaries of the assessments and remedial excavations are discussed in the following sections.

1978 ASSESSMENT SUMMARY

Soil sampling was completed in 1978 on the southern portion of the Site and between the former building and the Sheboygan River. In September 1978, forty-eight soil samples (discrete and composite) were collected from the upper 3 feet of soil from the flood control berm located along the Sheboygan River. Some sampling locations were collected and analyzed as discrete samples from one sampling location; however, many of the samples were collected individually but then composited with the sample from the opposite side of the flood control berm and analyzed as a composite sample. The soil samples were analyzed for PCBs. PCB concentrations ranged from 0.44 ppm to 32,011 ppm.

Also in September 1978, eighty soil samples (discrete and composite) were collected from a grid pattern across the southern portion of the southern portion of the Site and between the former building and the flood control berm. Some sampling locations were analyzed as discrete samples from one sampling location; however, many of the samples were collected individually but then composited in grid pairs and analyzed as a composite sample. Soil sample names were a combination of the row number and column number based on the established grid pattern. The soil samples were analyzed for PCBs. PCB concentrations ranged from 1.1 ppm to 10,928 ppm.

In December 1978, forty-two soil samples were collected from select locations within the previous grid pattern at 0.5-foot intervals within the upper 3.5 feet of soil with the majority of the samples being collected from the 1-foot to 1.5-foot interval. Each soil sample was a collected and analyzed as a discrete sample. Soil sample names were a combination of the row number and column number based on the established grid pattern. The soil samples were analyzed for PCBs. PCB concentrations ranged from non-detect (less than 1 part per million (ppm)) to 10,263 ppm.

PCB-impacted soil was identified on the south portion of the Site between the building and the Sheboygan River including the flood control berm. Four monitoring wells were installed on the Site and PCBs were also identified in groundwater samples collected from these monitoring wells.

Two soil samples were collected from the ground surface of the southeast adjoining portion of Rochester Park. PCBs were measured at concentrations of 4 and 8 ppm in the soil samples. Four fruit and vegetable samples were also collected from the community garden. PCBs were measured at concentrations from non-detect to 0.123 ppm in the fruit and vegetable samples. The locations of these off-site samples were not documented.

Results of the 1978 soil sampling activities are shown on Figure 2A (September 1978) and Figure 2B (December 1978). The 1978 assessment data is tabulated in Table 1. Excerpts of the historical reports are also included in the Attachments.

1978/1979 REMEDIAL SOIL EXCAVATION SUMMARY

Limited remedial excavation activities were conducted on the Site in July 1978. Approximately 74 cubic yards of PCB-contaminated soil was removed from the southern portion of the Site. Expanded remedial excavation activities were conducted on the Site in October and November of 1979 and approximately 6,681 cubic yards of PCB-contaminated soil was removed from the southern portion of the Site and in the flood control dike with a cleanup goal of 50 ppm. The areas of impacted soil removal with varying excavation depths were depicted on the historical figures included in Attachment B. The areas of the 1979 remedial excavations are shown on Figure 8A.

1999 ASSESSMENT SUMMARY

Blasland, Bouck & Lee, Inc. (BB&L) conducted an assessment in 1999 which was documented in a November 1999 External Source Assessment Technical Memorandum. The assessment included evaluation of potential preferential pathways on the Site; soil sampling activities; and groundwater monitoring well installation and sampling. Eleven hand auger borings and eighteen soil borings were completed on the Site. Three existing monitoring wells on the Site were abandoned and replaced, four new monitoring wells were installed on the Site and one new monitoring well was installed on the north side of Cleveland Street. Sixty-six soil borings were also completed in a grid pattern on the southern portion of the Site. The soil samples were collected at two foot intervals from the borings and the samples were composited such that sets of two to four grid locations with the same sample depths were composited into a single composite sample.

Soil samples were collected from each hand auger boring, each soil boring and each new monitoring well borehole. Groundwater samples were collected from the ten (existing, replaced and new) monitoring wells. Soil and groundwater samples were analyzed for PCBs.

PCB-impacted soil was identified below the building floor; in the area east of the building; in the area southwest of the building; and in the area south of the building up to the Sheboygan River including on the flood control berm. PCBs were not detected in the groundwater samples. Soil sample locations from soil boring and monitoring well installation activities on the Site in 1999 are shown on Figure 3A. Riverbank sample locations are shown on Figure 3A. Composite sample locations from 1999 are shown on Figure 3B.

Assessment activities included sampling of the Sheboygan riverbank along the Site and along the riverbank downstream of the Site. The assessment also included limited sampling (3 surficial soil samples) on the east-adjoining site, near the Site boundary, and several samples at the location of the east-adjoining wastewater treatment plant discharge to the Sheboygan River. Soil samples were analyzed for PCBs. The samples collected on the riverbank and on the east-adjoining site detected low levels (less than 4 ppm) of PCBs. Soil sample locations on the east-adjoining site in 1999 are shown on Figure 6. The 1999 assessment data is tabulated in Table 1.

Excerpts of the 1999 Technical Memorandum are included in the Attachments.

2004 REMEDIAL SOIL EXCAVATION ACTIVITIES

In accordance with the Upper River Phase I and II Remedial Action Work Plan, excavation activities were conducted at the Site in September and October 2004 by PRS. Approximately 5,440 tons of PCB-impacted soil was removed from the following preferential pathway areas:

- the “source area” noted south and east of the former building;
- the former flood control berm and riverbank;
- a preferential pathway located south of the former building;
- a preferential pathway located southwest of the former building; and
- a trench associated with installation of a groundwater monitoring/ interceptor trench (GMIT).

Confirmatory soil samples were collected from each of the excavated areas with the exception of two areas excavated within the eastern portion of the former building. These two areas were reportedly excavated to the depth of encountered groundwater.

The plant source (PS) areas were excavated to a depth of 1 foot bgs. Twenty-seven confirmatory soil samples were collected from the PS area as discrete samples (14 sidewall and floor samples primarily in the western portion of the Site) or composite samples (13 floor samples) and were analyzed for PCBs. The former flood control berm and riverbank (RB) area was excavated to a depth of 1 foot bgs. Thirty-five discrete confirmatory soil samples were collected from the RB area and were analyzed for PCBs.

The preferential pathway located southwest of the former building (PP1) was excavated to a depth of 1 foot bgs. The preferential pathway located south of the former building (PP2) was excavated to the depth of the water table, which ranged in depth from 1 foot to 7 feet bgs. Fifteen discrete confirmatory soil samples were collected from the PP1 area and five discrete confirmatory soil samples were collected from the PP2 area and were analyzed for PCBs.

Excavation target areas (PS/RB and PS/RB/PP1) overlapped and had the same excavation target depth of 1 foot bgs. The overlapped areas were excavated to a depth of 1 foot; however, confirmatory soil sampling was conducted as separate areas. Excavation target areas (PS/RB/PP2) overlapped but had different excavation target depths (PS/RB target of 1 foot bgs and PP2 target of the depth of the water table). The overlapped area was excavated to the depth of the encountered water table, which ranged in depth from 1 foot to 7 feet bgs. Confirmatory soil sampling was conducted as separate areas.

PCBs measured in each of the confirmatory samples were less than 20 ppm and with an average of 2.1 ppm. Soil sample locations from the 2004 confirmatory sampling activities are shown on Figures 4A, 4B, and 4C. The areas of the 2004 remedial excavations are shown on Figure 8B. The 2004 assessment data is tabulated in Table 1. Excerpts of the historical reports are included in the Attachments.

2016/2018 PHASE II ESA SUMMARY

SME completed Phase II Environmental Site Assessments on the Site in 2016 and 2018 to determine if the river sediment dewatering operations on the Site resulted in exacerbation of PCB impact. During dewatering, there were releases of dredging water/slurry from the containment area onto the adjacent land. SME performed the investigations in the areas where the dredging water/slurry was released.

SME completed 138 soil borings on the Site. The soil borings were completed in the area of the former confined treatment facility; in the area of the former sediment management facility; in the area along the west side of the former building (area of a former preferential pathway); and along the northern, eastern and southeastern sides of the former dewatering pad. The 2016 soil samples were analyzed for PCBs, polycyclic aromatic hydrocarbons (PAHs), and/or select metals (cadmium, total chromium, copper, lead, mercury, nickel, silver, and zinc). Soil samples identified with indications of potential volatile organic compounds (VOCs) from field screening were also analyzed for VOCs.

Based on soil sample results having PCBs and PAHs at concentrations above the screening levels established in the USEPA-approved SAP, SME completed step-out borings in 2018 in an attempt to delineate the horizontal and vertical extent of PCB- and PAH-impacted soil on the Site. Step out borings were analyzed for PCBs or PAHs, depending on the location of the step-out boring. Results of the 2016 initial and step out borings identified previously unidentified PCB-impacted soil on the eastern and

northern portions of the site. PCB-impacted soil was also identified in an area west of the former dewatering pad. The PCB-impacted soil in this area was vertically and horizontally delineated with the 2016 borings. The results of the 2016 initial and step out borings on the western and southern portions of the Site also identified previously unidentified PAH-impacted soil. PAH-impacted soil was limited in extent and was vertically and horizontally delineated. VOCs were not detected above the laboratory reporting limits in the analyzed samples. Selected metals were detected above the laboratory reporting limits but less than the Regional Screening Levels (RSLs).

In 2018, additional soil borings were completed on the northern and eastern portions of the Site in an attempt to delineate the previously unidentified PCB-impacted soil. Based on the results, PCB-impacted soil was identified in a limited area on the north side of the former dewatering pad at concentrations up to 1,570 ppm. PCB-impacted soil was identified covering much of the east portion of the Site and the impact extended to the eastern Site boundary. PCBs were measured at concentrations up to 15,200 ppm. Soil sample locations from the 2016 and 2018 soil sampling activities are shown on Figure 5 and the associated data is tabulated in Table 1 (PCBs) and Table 2 (PAHs).

Soil borings were also completed on the east adjoining Rochester Park in an attempt to determine if rainfall to exposed soil on the Site caused PCB-impacted soil to runoff the Site and onto the adjoining park. Ten soil borings were completed at the Rochester Park including two borings on the east side of Hickory Street; four borings in the area southeast of the Site near the roadway to the Pump House building on the Park property; two borings located between the Pump House and the Sheboygan River; and two borings along the Rochester Park soccer field. Soil samples were collected from each boring at depths between 0 and 0.5 feet bgs. Based on results, PCBs were measured in each of the samples at concentrations less than 7 ppm with an average concentration of 2.07 ppm. Soil sample locations from the 2016 and 2018 soil sampling activities on the adjoining site are shown on Figure 6 and the associated data is tabulated in Table 1.

CUMULATIVE SUMMARY OF PREVIOUS ASSESSMENTS AND DATA GAPS

The area to the south of the former building was evaluated during multiple assessments completed in 1978 and 1999 and PCB-impacted soil was removed from this area during remedial excavations in 1978/1979 and 2004. The eastern portion of the former building; the eastern portion of the Site; the area north of the former building; the area along the west side of the building; the area of the former sediment management facility; and the area of the former confined treatment facility were evaluated during previous assessments. The cumulative sample locations from all historical assessments off-site are shown on Figure 7. The cumulative areas that were historically remediated are shown on Figures 8A and 8B. The cumulative soil sample results are tabulated in Table 1 (PCBs) and Table 2 (PAHs).

Based on review of the cumulative assessment information, we identified six Data Gaps. A Data Gap was defined as an area (either on the Site, or off-site) with limited information or areas that were not historically evaluated. These data gap areas are shown on Figure 9 and summarized below.

DATA GAP #1

Evaluation of the area of the former and current parking lot located on the western portion of the Site was not completed as part of previous assessment activities. The absence of assessment of this area of the Site represents a gap in available data. Since previously unidentified impacts were found during the 2016/2018 Phase II ESAs in areas with no previous assessment activities, this data gap area should be evaluated to ensure no additional previously unidentified impacts are present at the Site.

DATA GAP #2

Evaluation of the potential for PCBs to extend off-site and into the Cleveland Street right of way (ROW) located north and/or the Hickory Street ROW located to the east was not completed as part of previous

assessment activities. Impacted soil was identified up to the Site boundary on the north and east sides of the Site in 2016/2018. The absence of assessment along the Cleveland Street and Hickory Street ROWs represents a gap in available data. This data gap area should be evaluated to identify the limits of PCB-impacted soil along the northern and eastern Site boundaries and to ascertain if impact extends into parkways and under the street pavements Cleveland Street and Hickory Street.

DATA GAP #3

Limited information was available regarding soil conditions below the former building slab used for the dewatering operations. In the several borings completed in this area, PCB-impacted soil was identified at multiple depth intervals; however, the PCB-impacted soil was not at concentrations above the USEPA Principal Threat Waste (PTW) criteria. While information is limited, PCB-impacted soil is assumed to be present beneath this area of the Site. Asphalt pavement was placed on a portion of the former building slab to facilitate the dewatering containment area used during the river dredging operations. The former building slab and dewatering pad pavements are currently acting as an engineering control to prevent direct contact and infiltration as described in the Institutional Control, Implementation, and Management Plan. At the time of the 2018 assessment activities, the former building slab and dewatering pad pavements appeared to be in good condition; however, a pavement condition assessment has not been conducted. The thickness of the former building slab is unknown and the integrity of the former floor slab and pavement system has not been evaluated. The current condition and integrity of the former building slab and dewatering pad pavements represents a data gap. This data gap should be evaluated with a condition assessment of the former floor slab and pavement system.

DATA GAP #4

Extensive sampling was conducted in the eastern portion of the Site and identified PCB-impacted soil across most of this area. In 2016 and 2018, the PCB results were compared to the Wisconsin Department of Natural Resources (WDNR) industrial clean-up level of 8.66 mg/kg, which was used to determine if the Site was impacted at concentrations that would require additional remedial activities. The PCB-impacted soil on the Site was determined to be contaminated to levels that would require remediation. SME evaluated the remedial needs in their 2018 Remedial Action Plan (RAP) assessing either soil removal or capping. Based on those remedies, the impact was sufficiently delineated. However, the USEPA has indicated after review of the RAP that a combination of targeted soil removal on the Site and construction of an engineering control on the Site will be the likely remedy.

For this data gap analysis, PCB results were compared to the PTW criteria of 100 ppm for residential uses and 500 ppm for industrial uses. The future use of the Site may include recreational uses; therefore, the residential PTW criteria was selected as the target criteria for targeted soil removal activities at the Site. The area of PCB-impacted soil above the PTW located north of the former dewatering containment area and at the southeast corner of the former dewatering containment area were delineated. The area of PCB-impacted soil above the PTW criteria on the eastern portion of the Site was partially delineated; however, gaps in the available data in this area limit the ability to effectively determine limits of PCB-impacted soil above the PTW criteria for targeted remedial efforts. This data gap should be evaluated to determine the limits of PCB-impacted soil above the PTW criteria to optimally remediate the Site.

DATA GAPS #5 AND #6

Limited assessment has been completed on the east-adjoining Rochester Park. Limited soil sampling was conducted in 1978, 1999 and 2016/2018. PCBs were detected at concentrations above the laboratory reporting limits in each of the soil samples collected from Rochester Park at concentrations ranging from 0.246 ppm to 8 ppm. Historical sampling was conducted for screening purposes regarding run-off of PCB-impacted soil. The northern portion of Rochester Park was also historically a landfill where waste from the Site was reportedly disposed. No evaluation has been conducted on this portion of the park. The limited sampling on Rochester Park represents a gap in available data. The park areas were divided into two

units; the northern portion of the park where the landfill was historically located, which is identified as Data Gap #5 and the southern portion of the park, which is identified as Data Gap #6. These data gaps should be evaluated to ensure no additional areas of impacted soil from historical disposal in the landfill or surficial deposition are present on Rochester Park.

CONCLUSIONS AND RECOMMENDATIONS

We conclude that the previous investigations of the Property were not sufficient to characterize the Site and were focused on identifying the preferential pathways to the river. The post-remedial investigations in 2016 and 2018 demonstrate there is still PCB-impacted soil at the Site that poses a risk to receptors. SME recommends that a Sampling and Analysis Plan (SAP) be prepared to assess the data gaps. To that end, we have begun the SAP.

Please feel free to contact Keith Egan with any questions regarding this analysis at (513) 898-9430.

Respectfully,

SME

Aaron J. Lammers, EIT
Senior Staff Engineer

Keith Egan, OEPA CP#259
Chief Consultant

Attachments: Figures
Tables
Attachment A – Aerial Photographs
Attachment B – Historical Report Excerpts

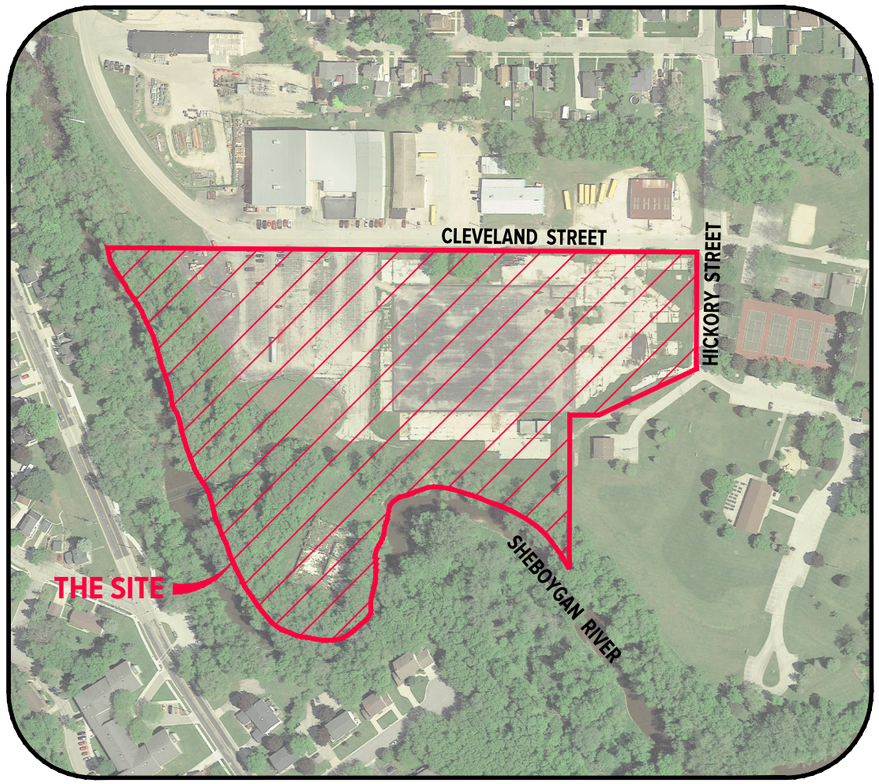
Distribution: Mr. Jason Smith, Tecumseh Products Company via email (Jason.smith@tecumseh.com)
Ms. Debbie McMillan, PRS via email (dmcmillan@grhdevelopment.com)
Mr. Tom Wentland, Wisconsin Department of Natural Resources via email (Thomas.wentland@wisconsin.gov)
Mr. Peter Johnson, Johnson-Wright via email (pjohnson@johnsonwright.net)

FIGURES

SHEBOYGAN RIVER SUPERFUND SITE

FORMER TECUMSEH SITE

SHEBOYGAN FALLS, WISCONSIN



LOCATION MAP

SCALE: 1" = 300'

COUNTY MAP

NOT TO SCALE

LIST OF DRAWINGS

Know what's **below.** **Call** before you dig.

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Project
SHEBOYGAN RIVER SUPERFUND SITE

Project Location
FORMER TECUMSEH SITE SHEBOYGAN FALLS, WISCONSIN

Sheet Name
COVER SHEET

No.	Revision Date

Date 4-16-2020
CADD JAB
Designer KE/AJL
Scale AS NOTED
Project 069638.00.051
Figure No. 1

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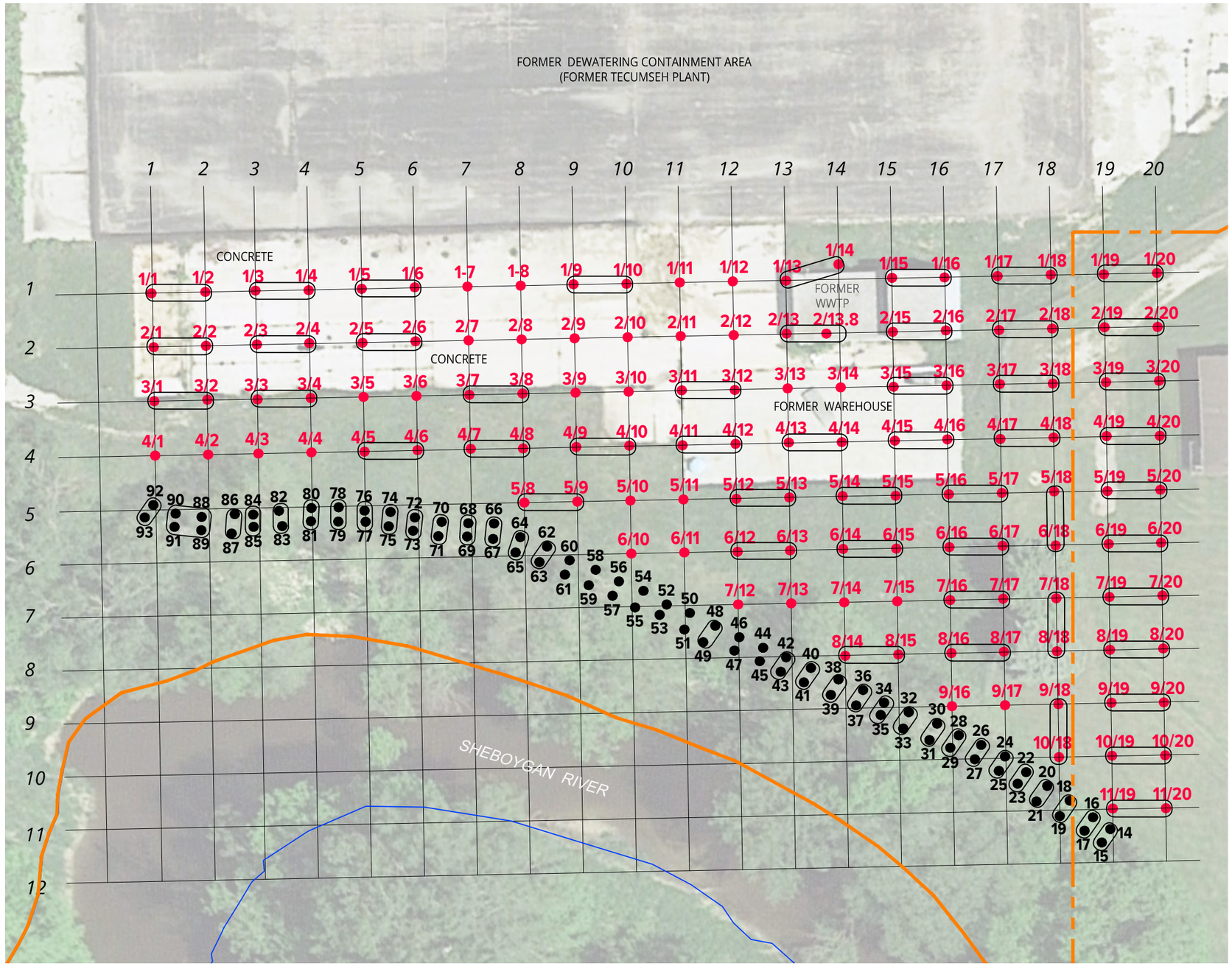

GRAPHIC SCALE: 1" = 40'

LEGEND

- APPROXIMATE SITE BOUNDARY
- DISCREET SOIL SAMPLE LOCATION (9-1978)
- COMPOSITE SOIL SAMPLE LOCATION (9-1978)
- 1/1 = ROW/COLUMN
- FLOOD CONTROL BERM DISCREET SOIL SAMPLE LOCATION (9-1978)

NOTE:
BASE DRAWING INFORMATION TAKEN FROM GOOGLE EARTH PRO WITH IMAGE DATE 6-1-2015.

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Project
SHEBOYGAN RIVER SUPERFUND SITE

Project Location
FORMER TECUMSEH SITE SHEBOYGAN FALLS, WISCONSIN

Sheet Name
SEPTEMBER 1978 ASSESSMENT SAMPLE LOCATIONS

No.	Revision Date

Date 4-16-2020
CADD JAB
Designer KE/AJL
Scale AS NOTED
Project 069638.00.051
Figure No. 2A

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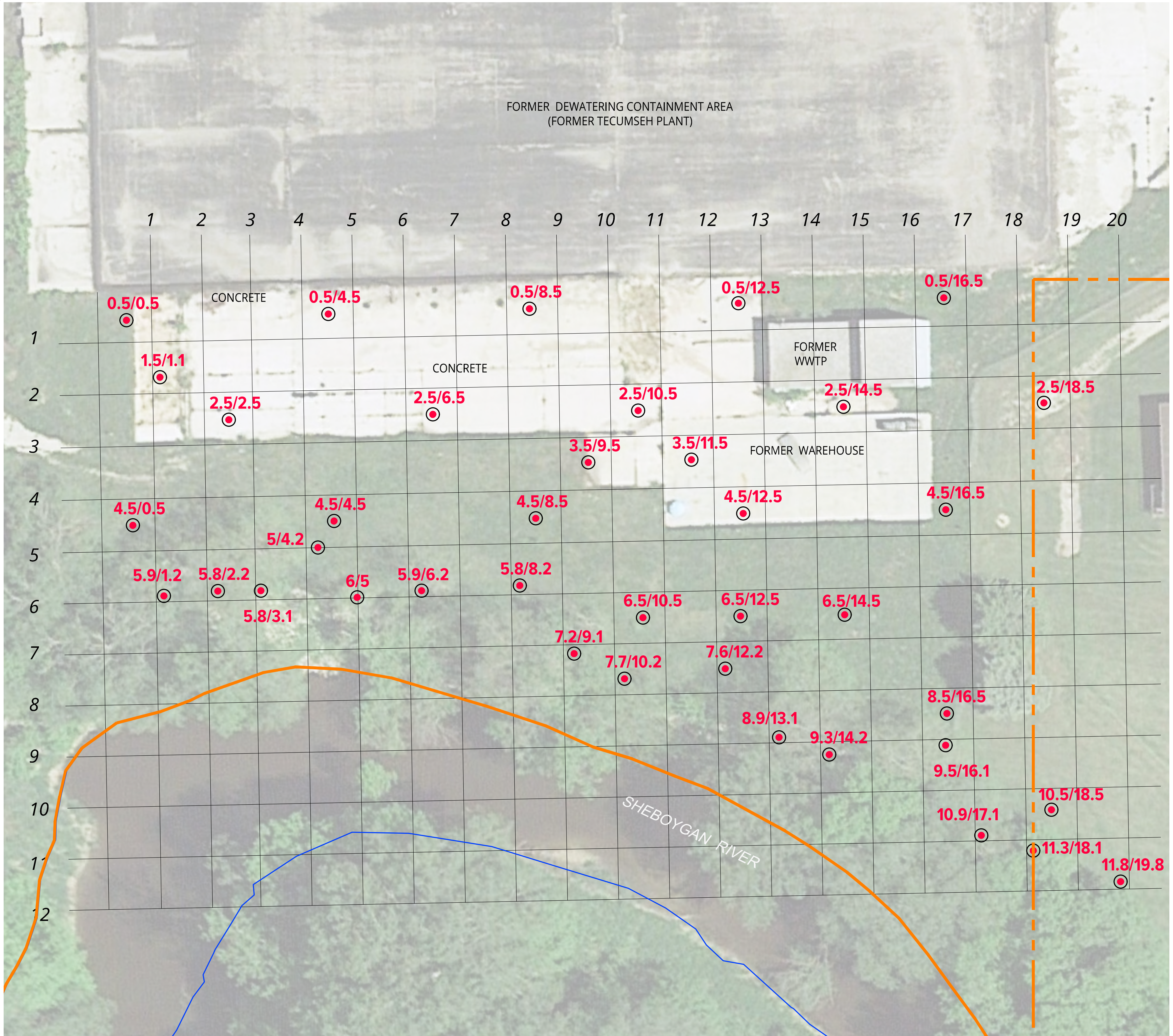

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GRAPHIC SCALE: 1" = 40'
0' 40' 80'

LEGEND

APPROXIMATE SITE BOUNDARY

DISCREET SOIL SAMPLE LOCATION (12-1978)

0.5/0.5 = ROW/COLUMN

NOTE:
BASE DRAWING INFORMATION TAKEN FROM GOOGLE EARTH PRO WITH IMAGE DATE 6-1-2015.

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Project
SHEBOYGAN RIVER SUPERFUND SITE

Project Location
FORMER TECUMSEH SITE SHEBOYGAN FALLS, WISCONSIN

Sheet Name
DECEMBER 1978 ASSESSMENT SAMPLE LOCATIONS

No.	Revision Date

Date: 4-16-2020
CADD: JAB
Designer: KE/AJL
Scale: AS NOTED
Project: 069638.00.051
Figure No.: 2B

DRAWING NOTE: SCALE DEPICTED IS MEANT FOR 11" X 17" AND WILL SCALE INCORRECTLY IF PRINTED ON ANY OTHER SIZE MEDIA

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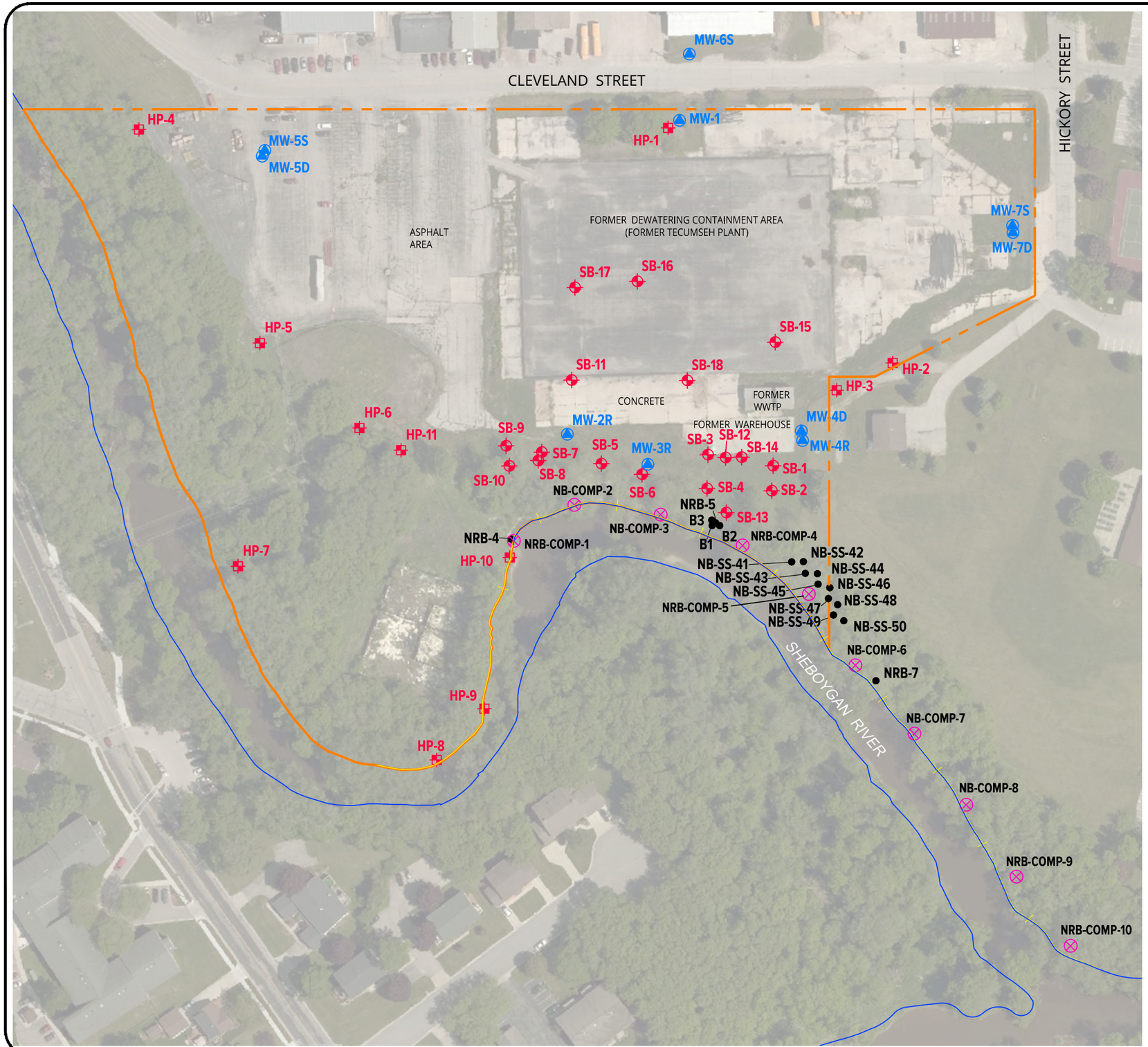

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0' 120' 240'

GRAPHIC SCALE: 1" = 120'

LEGEND

- APPROXIMATE SITE BOUNDARY
- SOIL BORING LOCATION
- MONITORING WELL LOCATION
- HAND PROBE LOCATION
- SOIL SAMPLE LOCATION
- NB-COMPOSITE SAMPLE LOCATION

NOTE:
BASE DRAWING INFORMATION TAKEN FROM GOOGLE EARTH PRO WITH IMAGE DATE 6-1-2015.

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Project
SHEBOYGAN RIVER SUPERFUND SITE

Project Location
FORMER TECUMSEH SITE SHEBOYGAN FALLS, WISCONSIN

Sheet Name
1999 SITE AND RIVERBANK ASSESSMENT SAMPLE LOCATIONS

No.	Revision Date

Date 4-16-2020
CADD JAB
Designer KE/AJL
Scale AS NOTED
Project 069638.00.051
Figure No. 3A

PLOT DATE: Apr 21, 2020 - 2:56pm - jblake
\\sme-inc\pz\WIP\069638.00\CAD\069638.00.051\rev1\069638.00-SB_1999.dwg

N
W E
S

0' 50' 100'

GRAPHIC SCALE: 1" = 50'

LEGEND

- APPROXIMATE SITE BOUNDARY
- 1999 COMPOSITE SOIL SAMPLE
- 1 — 1999 SOIL SAMPLE COMPOSITE LOCATION WITH SAMPLES

NOTE:
BASE DRAWING INFORMATION TAKEN FROM GOOGLE EARTH PRO WITH IMAGE DATE 6-1-2015.

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SHEBOYGAN RIVER SUPERFUND SITE

Project Location
FORMER TECUMSEH SITE SHEBOYGAN FALLS, WISCONSIN

Sheet Name
1999 SITE COMPOSITE ASSESSMENT SAMPLE LOCATIONS

No.	Revision Date

Date 4-16-2020
CADD JAB
Designer KE/AJL
Scale AS NOTED
Project 069638.00.051
Figure No. 3B

PLOT DATE: Apr 21, 2020 - 2:58pm - jblake
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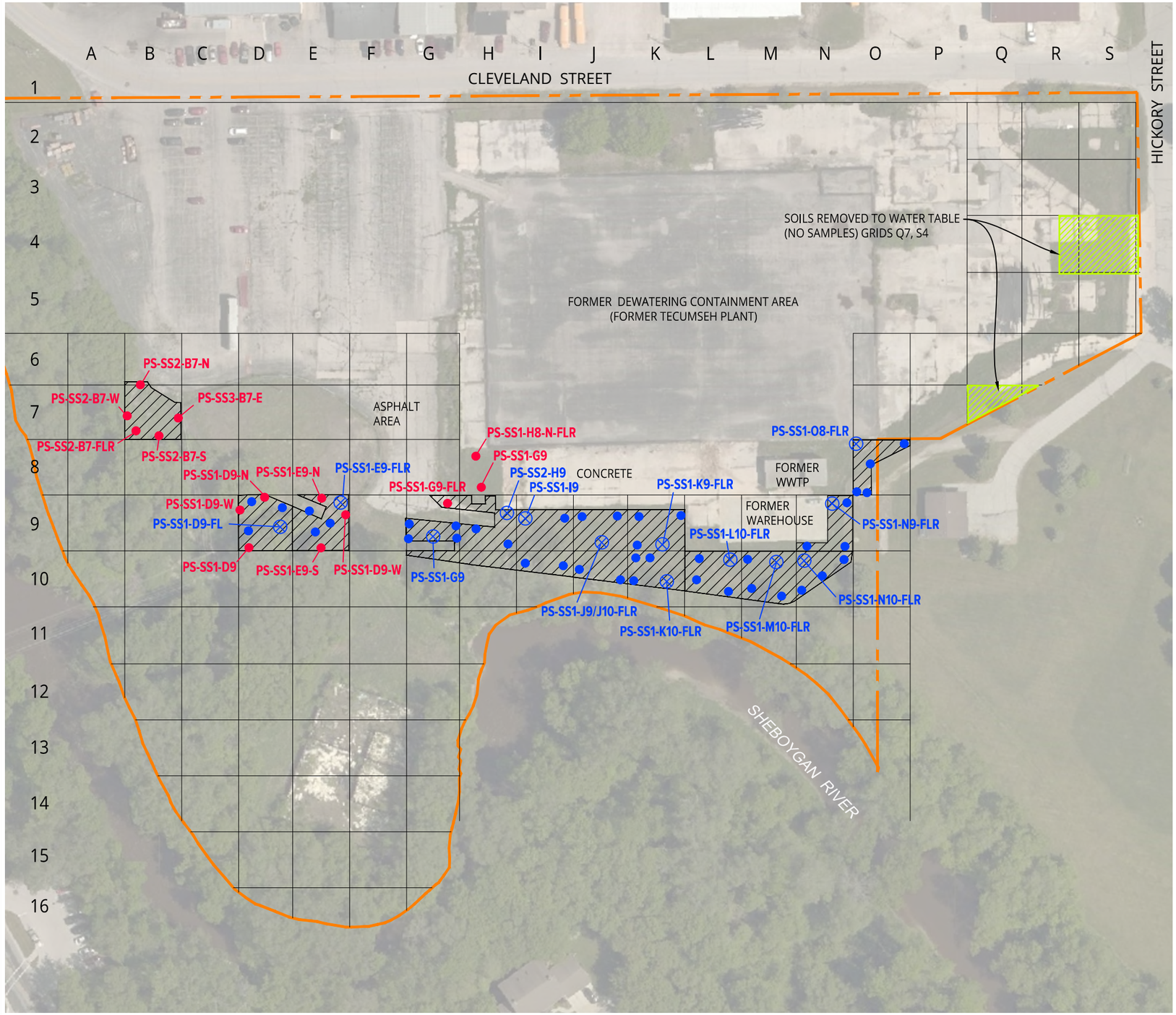

N
W E
S

0' 100' 200'

GRAPHIC SCALE: 1" = 100'

LEGEND

- APPROXIMATE SITE BOUNDARY
- VSR SAMPLE LOCATION
- COMPOSITE SAMPLE LOCATION
- COMPOSITE SAMPLE WITHIN GRID COMBINED WITH OTHERS IN GRID
- PLANT SOURCE (PS) EXCAVATION AREA (0 - 1 FOOT)
- PLANT SOURCE (PS) EXCAVATION AREA TO DEPTH OF WATER TABLE (APPROXIMATELY 6 FEET)

NOTES:

1. BASE DRAWING INFORMATION TAKEN FROM GOOGLE EARTH PRO WITH IMAGE DATE 6-1-2015.
2. EXCAVATION LIMITS AND SAMPLE LOCATIONS FROM PRS FIGURE AB-4 TITLED "SOURCE SOILS AND EXCAVATION AND CONFIRMATION SAMPLES" DATED NOVEMBER 2004.

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Project
SHEBOYGAN RIVER SUPERFUND SITE

Project Location
FORMER TECUMSEH SITE SHEBOYGAN FALLS, WISCONSIN

Sheet Name
2004 PLANT SOURCE (PS) CONFIRMATORY SAMPLE LOCATIONS WITH 2004 REMEDIATION AREA BOUNDARIES

No.	Revision Date

Date 4-16-2020
CADD JAB
Designer KE/AJL
Scale AS NOTED
Project 069638.00.051
Figure No. 4A

PLOT DATE: Apr 21, 2020 - 4:01pm - jblake
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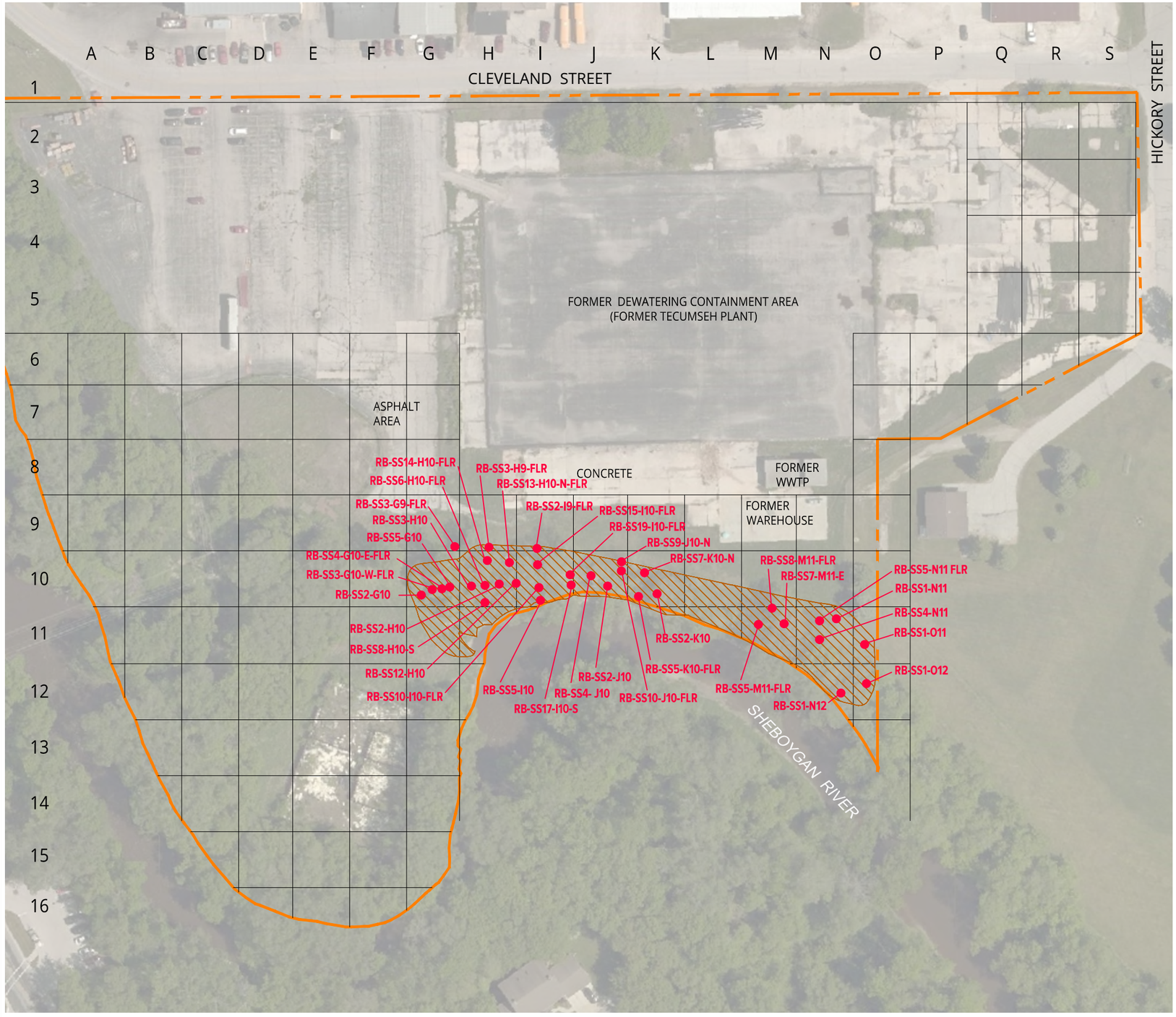

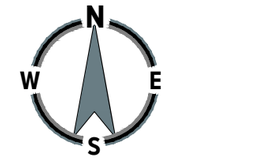

GRAPHIC SCALE: 1" = 100'

LEGEND

- APPROXIMATE SITE BOUNDARY
- VSR SAMPLE LOCATION
- RIVERBANK (RB) EXCAVATION AREA (0 TO 1 FOOT)

NOTES:

1. BASE DRAWING INFORMATION TAKEN FROM GOOGLE EARTH PRO WITH IMAGE DATE 6-1-2015.
2. EXCAVATION LIMITS AND SAMPLE LOCATIONS FROM PRS FIGURE AB-4 TITLED "SOURCE SOILS AND EXCAVATION AND CONFIRMATION SAMPLES" DATED NOVEMBER 2004.

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Project
SHEBOYGAN RIVER SUPERFUND SITE

Project Location
FORMER TECUMSEH SITE SHEBOYGAN FALLS, WISCONSIN

Sheet Name
2004 RIVERBANK (RB) CONFIRMATORY SAMPLE LOCATIONS WITH 2004 REMEDIATION AREA BOUNDARIES

No.	Revision Date

Date 4-16-2020
CADD JAB
Designer KE/AJL
Scale AS NOTED
Project 069638.00.051
Figure No. 4B

PLOT DATE: Apr 21, 2020 - 3:11pm - jblake
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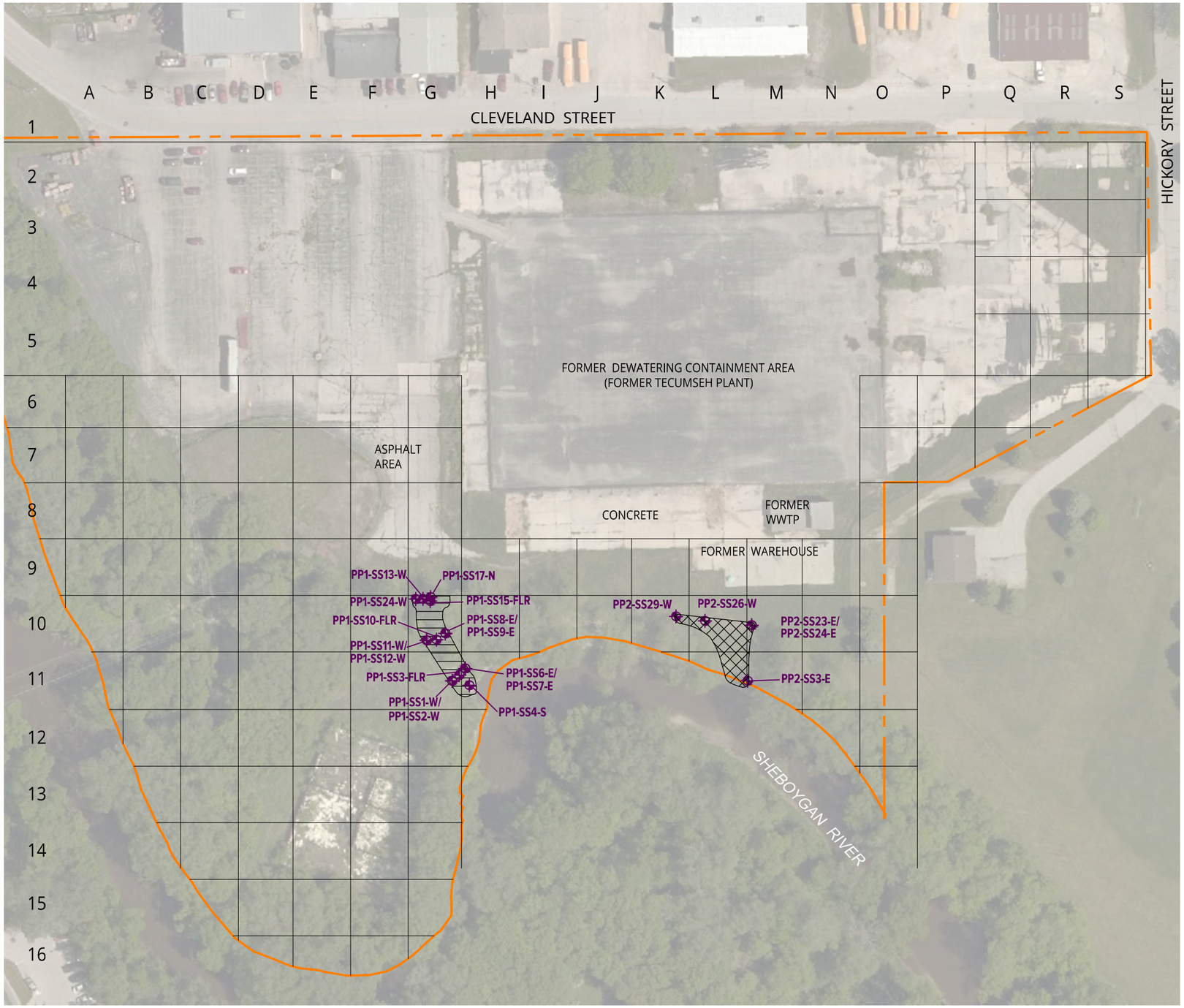

N

W E

S

0' 100' 200'

GRAPHIC SCALE: 1" = 100'

LEGEND

- APPROXIMATE SITE BOUNDARY
- CONFIRMATION SAMPLE LOCATION
- PREFERENTIAL PATHWAY 1 (PP1) EXCAVATION AREA (0 - 1 FOOT)
- PREFERENTIAL PATHWAY 2 (PP2) EXCAVATION AREA TO DEPTH OF WATER TABLE (DEPTHS 1 - 7 FEET)

NOTES:

1. BASE DRAWING INFORMATION TAKEN FROM GOOGLE EARTH PRO WITH IMAGE DATE 6-1-2015.
2. EXCAVATION LIMITS AND SAMPLE LOCATIONS FROM PRS FIGURE AB-4 TITLED "SOURCE SOILS AND EXCAVATION AND CONFIRMATION SAMPLES" DATED NOVEMBER 2004.

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Project
SHEBOYGAN RIVER SUPERFUND SITE

Project Location
FORMER TECUMSEH SITE SHEBOYGAN FALLS, WISCONSIN

Sheet Name
2004 PREFERENTIAL PATHWAY (PP) CONFIRMATORY SAMPLE LOCATIONS WITH 2004 REMEDIATION AREA BOUNDARIES

No.	Revision Date

Date 4-16-2020
CADD JAB
Designer KE/AJL
Scale AS NOTED
Project 069638.00.051
Figure No. 4C

PLOT DATE: Apr 21, 2020 - 3:16pm - jblake
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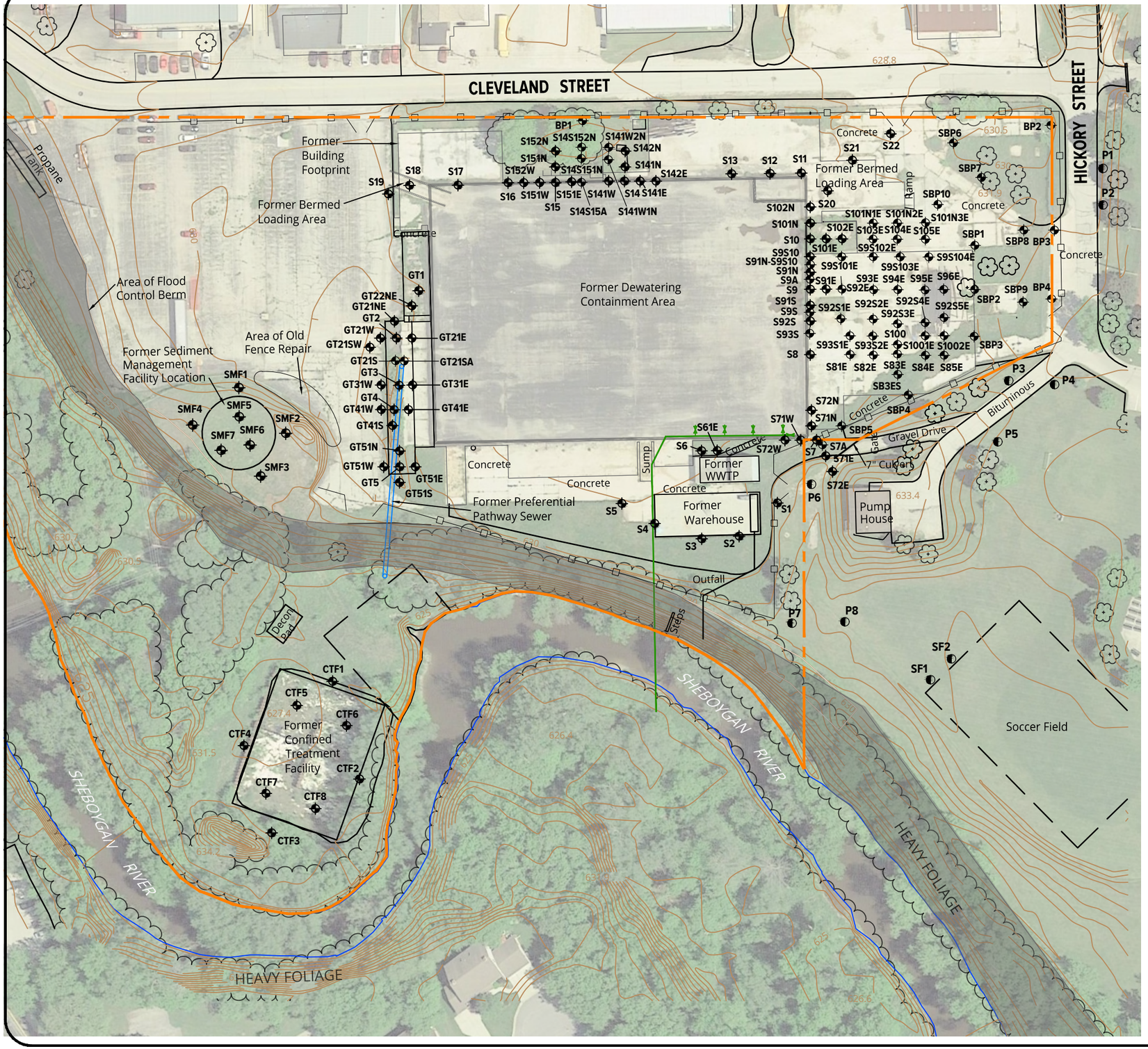

N

W E

S

0' 100' 200'

GRAPHIC SCALE: 1" = 100'

LEGEND

- APPROXIMATE SITE BOUNDARY
- EXISTING FENCE
- EXISTING TREE AND/OR BRUSH
- SITE CONTOURS
- FLOOD CONTROL BERM
- DEWATERING PAD
- FORMER DREDGE SLURRY PIPE
- SOIL SAMPLE LOCATION
- RUN-OFF SAMPLE LOCATION

NOTES:

1. BASE DRAWING INFORMATION TAKEN FROM GOOGLE EARTH PRO WITH IMAGE DATE 6-1-2015 AND STORMWATER POLLUTION PREVENTION PLAN, BY PETRO ENVIRONMENTAL, LLC, DATED SEPTEMBER 2004.
2. INCLUDED IN THE REMEDIAL ACTION WORK PLAN, UPPER RIVER - PHASE 1, DATED SEPTEMBER 2004.

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Project
SHEBOYGAN RIVER SUPERFUND SITE

Project Location
FORMER TECUMSEH SITE SHEBOYGAN FALLS, WISCONSIN

Sheet Name
2016 / 2018 ASSESSMENT SAMPLE LOCATIONS

No.	Revision Date

Date: 4-16-2020
CADD: JAB
Designer: KE/AJL
Scale: AS NOTED
Project: 069638.00.051
Figure No.: 5

PLOT DATE: Apr 21, 2020 - 4:33pm - jblake
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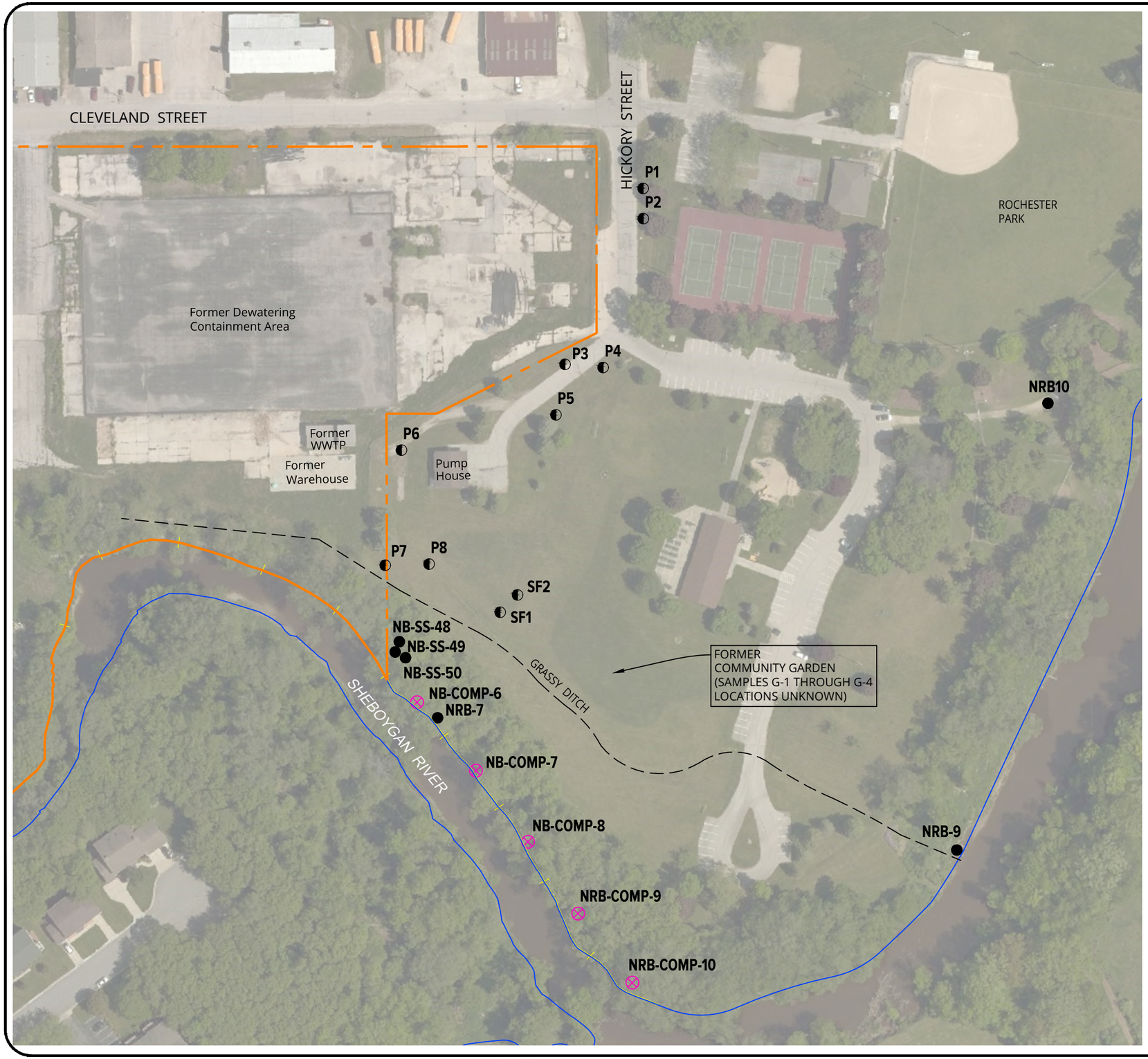

N
W E
S

0' 120' 240'

GRAPHIC SCALE: 1" = 120'

LEGEND

- APPROXIMATE SITE BOUNDARY
- SOIL SAMPLE LOCATION (1999)
- NB-COMPOSITE SAMPLE LOCATION (1999)
- RUN-OFF SAMPLE LOCATION (2018)

NOTE:
BASE DRAWING INFORMATION TAKEN FROM GOOGLE EARTH PRO WITH IMAGE DATE 6-1-2015.

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Project
SHEBOYGAN RIVER SUPERFUND SITE

Project Location
FORMER TECUMSEH SITE SHEBOYGAN FALLS, WISCONSIN

Sheet Name
SUMMARY OF HISTORICAL OFF-SITE ASSESSMENT SAMPLE LOCATIONS

No.	Revision Date

Date: 4-16-2020
CADD: JAB
Designer: KE/AJL
Scale: AS NOTED
Project: 069638.00.051
Figure No.: 6

PLOT DATE: Apr 21, 2020 - 3:35pm - jblake
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LEGEND

- APPROXIMATE PROPERTY BOUNDARY
- EXISTING EDGE OF WATER
- EXISTING FENCE
- EXISTING TREE AND/OR BRUSH
- SITE CONTOURS
- FLOOD CONTROL BERM
- DEWATERING PAD
- SOIL SAMPLE LOCATION (2016/2018)
- RUN-OFF SAMPLE LOCATION (2016/2018)
- DISCREET SOIL SAMPLE LOCATION (9-1978)
- COMPOSITE SOIL SAMPLE LOCATION (9-1978)
- FLOOD CONTROL BERM DISCREET SOIL SAMPLE LOCATION (10-1978)
- DISCREET SOIL SAMPLE LOCATION (12-1978)
- NB-COMPOSITE SAMPLE LOCATION (1999)
- COMPOSITE SOIL SAMPLE LOCATION (1999)
- SOIL SAMPLE COMPOSITE LOCATION WITH SAMPLES (1999)
- SOIL SAMPLE LOCATION (1999)
- SOIL BORING LOCATION (1999)
- MONITORING WELL LOCATION (1999)
- HAND PROBE LOCATION (1999)

NOTES:

1. BASE DRAWING INFORMATION TAKEN FROM GOOGLE EARTH PRO WITH IMAGE DATE 6-1-2015 AND STORMWATER POLLUTION PREVENTION PLAN, BY PETRO ENVIRONMENTAL, LLC, DATED SEPTEMBER 2004.
2. INCLUDED IN THE REMEDIAL ACTION WORK PLAN, UPPER RIVER - PHASE 1, DATED SEPTEMBER 2004.

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Orientation: N, W, E, S

Scale: 0' 50' 100'
GRAPHIC SCALE: 1" = 50'

Project
SHEBOYGAN RIVER SUPERFUND SITE

Project Location
FORMER TECUMSEH SITE
SHEBOYGAN FALLS, WISCONSIN

Sheet Name
SUMMARY OF SITE AND NEAR SITE ASSESSMENT SAMPLE LOCATIONS

Engineer's Seal

Revisions

REV	ISSUED FOR	DATE	BY

Date
6-10-2020

SME Project No.
069638.00.051

Project Manager:
KE

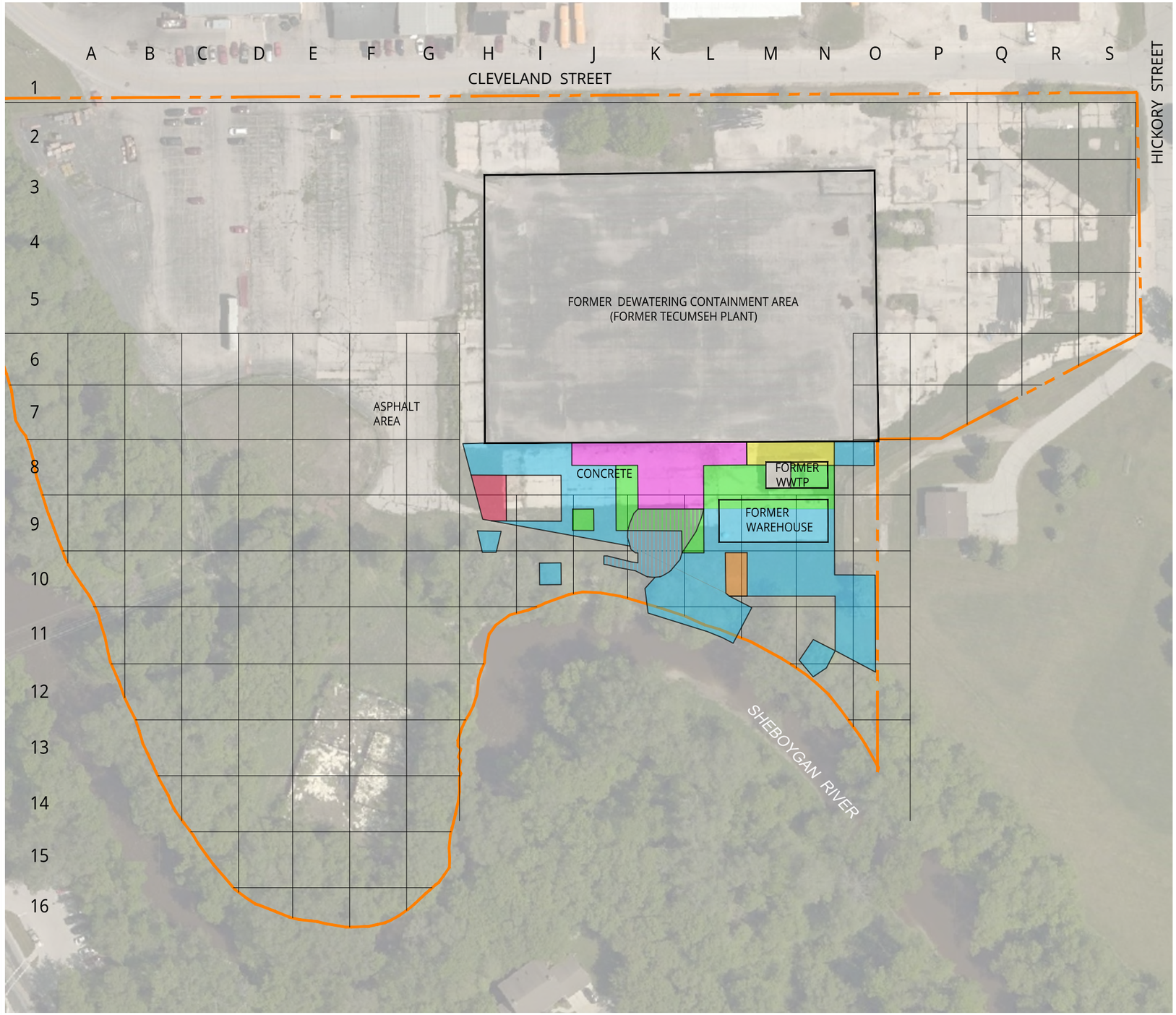
Designer:
KE/AJL

CADD:
JAB

Checked By:
KE

Figure No.
7

PLOT DATE: Apr 21, 2020 - 3:32pm - jblake
FILE LOCATION: \\sme-lincpt\WP\069638.00\CAD\069638.00.051\rev1\069638.00-SB_24x36.dwg



N
W E
S

0' 100' 200'

GRAPHIC SCALE: 1" = 100'

LEGEND

- APPROXIMATE SITE BOUNDARY
- APPROXIMATE LIMITS OF OIL SLICK EXCAVATION
- EXCAVATION TO 0.5 FEET
- EXCAVATION TO 1 FOOT
- EXCAVATION TO 2 FEET
- EXCAVATION TO 3 FEET
- EXCAVATION TO 4 FEET
- EXCAVATION TO 7 FEET

NOTES:
1. BASE DRAWING INFORMATION TAKEN FROM GOOGLE EARTH PRO WITH IMAGE DATE 6-1-2015.
2. EXCAVATION LIMITS PROVIDED BY PDF TITLED 1979 BACK-YARD EXCAVATION MAP, FIGURE C, BY BLASLAND, BOUCK & LEE, INC. WITH A DATE ON THE DRAWING OF 11/10/99.

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Project
SHEBOYGAN RIVER SUPERFUND SITE

Project Location
FORMER TECUMSEH SITE SHEBOYGAN FALLS, WISCONSIN

Sheet Name
AREAS OF 1979 REMEDIATION ACTIVITIES

No.	Revision Date

Date 4-16-2020
CADD JAB
Designer KE/AJL
Scale AS NOTED
Project 069638.00.051
Figure No. 8A

PLOT DATE: Apr 21, 2020 - 3:38pm - jblake
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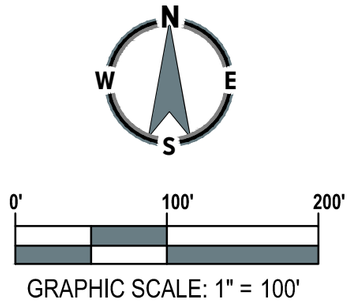

LEGEND

- APPROXIMATE SITE BOUNDARY
- PLANT SOURCE (PS) EXCAVATION AREA (0 - 1 FOOT)
- PLANT SOURCE (PS) EXCAVATION AREA TO DEPTH OF WATER TABLE (APPROXIMATELY 6 FEET)
- RIVERBANK (RB) EXCAVATION AREA (0 TO 1 FOOT)
- PREFERENTIAL PATHWAY 1 (PP1) EXCAVATION AREA (0 - 1 FOOT)
- PREFERENTIAL PATHWAY 2 (PP2) EXCAVATION AREA TO DEPTH OF WATER TABLE (DEPTHS 1 - 7 FEET)

NOTES:

1. BASE DRAWING INFORMATION TAKEN FROM GOOGLE EARTH PRO WITH IMAGE DATE 6-1-2015.
2. EXCAVATION LIMITS PROVIDED FROM PRS FIGURES AB-4, AB-5, AND AB-6. DATED NOVEMBER 2004.
3. OVERLAPPING EXCAVATION AREAS WITH THE SAME EXCAVATION DEPTHS (PS, RB, AND PP1) WERE REMOVED TO A DEPTH OF 1 FOOT; HOWEVER, SAMPLING WAS CONDUCTED AS SEPARATE AREAS.
4. OVERLAPPING EXCAVATION AREAS WITH DIFFERENT EXCAVATION DEPTHS (PS, RB, AND PP1) WERE REMOVED TO THE DEPTH OF THE WATER TABLE; HOWEVER, SAMPLING WAS CONDUCTED AS SEPARATE AREAS.

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Project
SHEBOYGAN RIVER SUPERFUND SITE

Project Location
FORMER TECUMSEH SITE SHEBOYGAN FALLS, WISCONSIN

Sheet Name
AREAS OF 2004 REMEDIATION ACTIVITIES

No.	Revision Date

Date 4-16-2020
CADD JAB
Designer KE/AJL
Scale AS NOTED
Project 069638.00.051
Figure No. 8B

PLOT DATE: Apr 21, 2020 - 4:00pm - jblake
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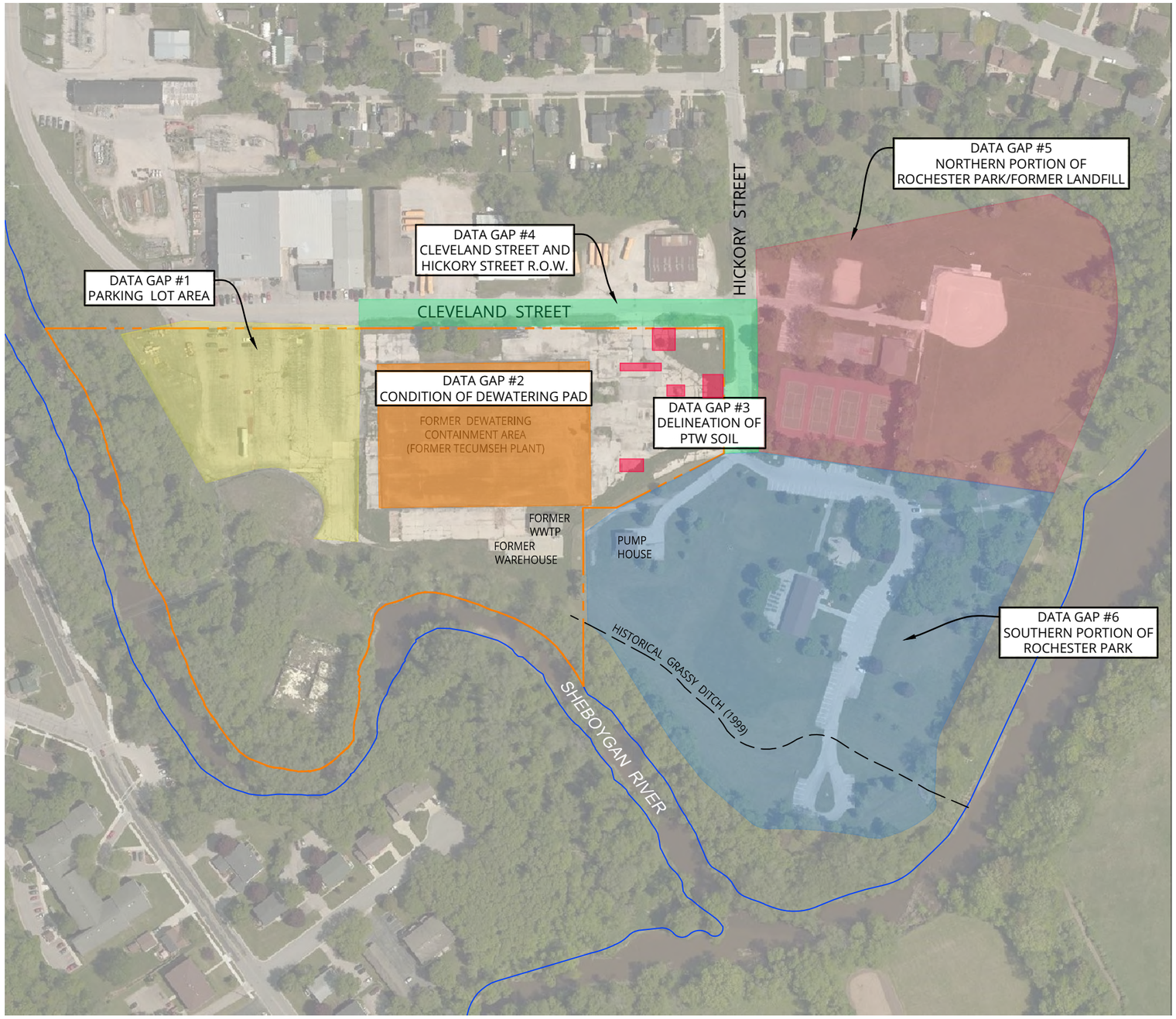

N
W E
S

0' 200' 400'

GRAPHIC SCALE: 1" = 200'

LEGEND

APPROXIMATE SITE BOUNDARY

NOTE:
BASE DRAWING INFORMATION TAKEN FROM GOOGLE EARTH PRO WITH IMAGE DATE 6-1-2015.

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Project
SHEBOYGAN RIVER SUPERFUND SITE

Project Location
FORMER TECUMSEH SITE SHEBOYGAN FALLS, WISCONSIN

Sheet Name
DATA GAP AREAS

No.	Revision Date

Date 4-16-2020
CADD JAB
Designer KE/AJL
Scale AS NOTED
Project 069638.00.051
Figure No. 9

PLOT DATE: Apr 21, 2020 - 3:53pm - jblake
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TABLES

TABLE 1
SUMMARY OF PCB ANALYSIS RESULTS - SOIL
TECUMSEH SITE
SHEBOYGAN FALLS, WI
069638.00.051

ANALYTE	Chemical Abstract Service Number	PRINCIPAL THREAT WASTE THRESHOLD (mg/kg)		SAMPLE INFORMATION	CHEMICAL ANALYSES RESULTS (mg/kg)													
		RESIDENTIAL	INDUSTRIAL	SAMPLE LOCATION	C14/15	C16/17	C18/19	C20/21	C22/23	C24/25	C26/27	C28/29	C30/31	C32/33	C34/35	C36/37	C38/39	C40/41
				SAMPLE DEPTH (FEET BGS)	0 - 3	0 - 3	0 - 3	0 - 3	0 - 3	0 - 3	0 - 3	0 - 3	0 - 3	0 - 3	0 - 3	0 - 3	0 - 3	0 - 3
				SAMPLE DATE	9/14/1978	9/14/1978	9/14/1978	9/14/1978	9/14/1978	9/15/1978	9/15/1978	9/15/1978	9/15/1978	9/15/1978	9/15/1978	9/15/1978	9/15/1978	9/15/1978
PCBs																		
PCB, Total	1336-36-3	100	500		297	140	183	1,487	187	360	441	742	NE	410	NE	126	451	50

ANALYTE	Chemical Abstract Service Number	PRINCIPAL THREAT WASTE THRESHOLD (mg/kg)		SAMPLE INFORMATION	CHEMICAL ANALYSES RESULTS (mg/kg)													
		RESIDENTIAL	INDUSTRIAL	SAMPLE LOCATION	C42/43	C44	C45	C46	C47	C48/49	C50	C51	C52	C53	C54	C55	C56	C57
				SAMPLE DEPTH (FEET BGS)	0 - 3	0 - 3	0 - 3	0 - 3	0 - 3	0 - 3	0 - 3	0 - 3	0 - 3	0 - 3	0 - 3	0 - 3	0 - 3	0 - 3
				SAMPLE DATE	9/15/1978	9/15/1978	9/15/1978	9/15/1978	9/15/1978	9/15/1978	9/19/1978	9/19/1978	9/19/1978	9/19/1978	9/19/1978	9/19/1978	9/19/1978	9/19/1978
PCBs																		
PCB, Total	1336-36-3	100	500		11.7	3,240	6,024	674	32,011	5,994	380	14,793	793	1,633	479	2,617	NE	15,140

ANALYTE	Chemical Abstract Service Number	PRINCIPAL THREAT WASTE THRESHOLD (mg/kg)		SAMPLE INFORMATION	CHEMICAL ANALYSES RESULTS (mg/kg)													
		RESIDENTIAL	INDUSTRIAL	SAMPLE LOCATION	C58/59	C60	C61	C62/63	C64/65	C66/67	C68/69	C70/71	C72/73	C74/75	C76/77	C78/79	C80/81	C82/83
				SAMPLE DEPTH (FEET BGS)	0 - 3	0 - 3	0 - 3	0 - 3	0 - 3	0 - 3	0 - 3	0 - 3	0 - 3	0 - 3	0 - 3	0 - 3	0 - 3	0 - 3
				SAMPLE DATE	9/19/1978	9/19/1978	9/19/1978	9/19/1978	9/19/1978	9/19/1978	9/19/1978	9/19/1978	9/20/1978	9/20/1978	9/20/1978	9/20/1978	9/20/1978	9/20/1978
PCBs																		
PCB, Total	1336-36-3	100	500		12.7	60.6	1,672	1,454	14.8	1.87	2.4	20,253	516	8.87	4,622	2.4	0.44	1,945

ANALYTE	Chemical Abstract Service Number	PRINCIPAL THREAT WASTE THRESHOLD (mg/kg)		SAMPLE INFORMATION	CHEMICAL ANALYSES RESULTS (mg/kg)											
		RESIDENTIAL	INDUSTRIAL	SAMPLE LOCATION	C84/85	C86/87	C88	C89/90	C91	C92/93	M-1	CO-1	GB-1	CA-1	G-1	G-2
				SAMPLE DEPTH (FEET BGS)	0 - 3	0 - 3	0 - 3	0 - 3	0 - 3	0 - 3	Honeydew Melon	Corn	Green Bean	Carrot	1 - 1 .5	Ground Surface
				SAMPLE DATE	9/20/1978	9/20/1978	9/20/1978	9/20/1978	9/20/1978	9/20/1978	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown
PCBs																
PCB, Total	1336-36-3	100	500		4.7	5,134	60	1,686	ND	8.5	0.052	ND	0.020	0.123	4.0	8.0

PCBs - Polychlorinated Biphenyls.
Results above RL are shown in **bold**. Results exceeding one or more criteria are shaded, as are the criteria which were exceeded.
Refer to the analytical report for the full list of PCB analytes.

TABLE 1
SUMMARY OF PCB ANALYSIS RESULTS - SOIL
TECUMSEH SITE
SHEBOYGAN FALLS, WI
069638.00.051

ANALYTE	Chemical Abstract Service Number	PRINCIPAL THREAT WASTE THRESHOLD (mg/kg)		SAMPLE INFORMATION	CHEMICAL ANALYSES RESULTS (mg/kg)													
		RESIDENTIAL	INDUSTRIAL	SAMPLE LOCATION	1-1/2	1-3/4	1-5/6	1-7	1-8	1-9/10	1-11	1-12	1-13/14	1-15/16	1-17/18	1-19/20	2-1/2	2-3/4
				SAMPLE DEPTH (FEET BGS)	0 - 1	0 - 1	0 - 1	0 - 1	0 - 1	0 - 1	0 - 1	0 - 1	0 - 1	0 - 1	0 - 1	0 - 1	0 - 1	0 - 1
				SAMPLE DATE	9/1978	9/1978	9/1978	9/1978	9/1978	9/1978	9/1978	9/1978	9/1978	9/1978	9/1978	9/1978	9/1978	9/1978
PCBs																		
PCB, Total	1336-36-3	100	500		257	93	192	2,338	89.4	2,233	766	113	190	459	41.9	118	3.7	8.7

ANALYTE	Chemical Abstract Service Number	PRINCIPAL THREAT WASTE THRESHOLD (mg/kg)		SAMPLE INFORMATION	CHEMICAL ANALYSES RESULTS (mg/kg)													
		RESIDENTIAL	INDUSTRIAL	SAMPLE LOCATION	2-5/6	2-7	2-8	2-9	2-10	2-11	2-12	2-13/14	2-15/16	2-17/18	2-19/20	3-1/2	3-3/4	3-5
				SAMPLE DEPTH (FEET BGS)	0 - 1	0 - 1	0 - 1	0 - 1	0 - 1	0 - 1	0 - 1	0 - 1	0 - 1	0 - 1	0 - 1	0 - 1	0 - 1	0 - 1
				SAMPLE DATE	9/1978	9/1978	9/1978	9/1978	9/1978	9/1978	9/1978	9/1978	9/1978	9/1978	9/1978	9/1978	9/1978	9/1978
PCBs																		
PCB, Total	1336-36-3	100	500		265	2,864	1,945	9,671	4,622	2,360	266	56	NE	24.5	7.60	48.8	6.25	526.0

ANALYTE	Chemical Abstract Service Number	PRINCIPAL THREAT WASTE THRESHOLD (mg/kg)		SAMPLE INFORMATION	CHEMICAL ANALYSES RESULTS (mg/kg)													
		RESIDENTIAL	INDUSTRIAL	SAMPLE LOCATION	3-6	3-7/8	3-9	3-10	3-11/12	3-13	3-14	3-15/16	3-17/18	3-19/20	4-1	4-2	4-3	4-4
				SAMPLE DEPTH (FEET BGS)	0 - 1	0 - 1	0 - 1	0 - 1	0 - 1	0 - 1	0 - 1	0 - 1	0 - 1	0 - 1	0 - 1	0 - 1	0 - 1	0 - 1
				SAMPLE DATE	9/1978	9/1978	9/1978	9/1978	9/1978	9/1978	9/1978	9/1978	9/1978	9/1978	9/1978	9/1978	9/1978	9/1978
PCBs																		
PCB, Total	1336-36-3	100	500		10,928	28.4	7,516	6,667	NE	12.8	464	121	34	2.23	1,303	4,538	1,242	8,406

ANALYTE	Chemical Abstract Service Number	PRINCIPAL THREAT WASTE THRESHOLD (mg/kg)		SAMPLE INFORMATION	CHEMICAL ANALYSES RESULTS (mg/kg)													
		RESIDENTIAL	INDUSTRIAL	SAMPLE LOCATION	4-5/6	4-7/8	4-9/10	4-11/12	4-13/14	4-15/16	4-17/18	4-19/20	5-8/9	5-10	5-11	5-12/13	5-14/15	5-16/17
				SAMPLE DEPTH (FEET BGS)	0 - 1	0 - 1	0 - 1	0 - 1	0 - 1	0 - 1	0 - 1	0 - 1	0 - 1	0 - 1	0 - 1	0 - 1	0 - 1	0 - 1
				SAMPLE DATE	9/1978	9/1978	9/1978	9/1978	9/1978	9/1978	9/1978	9/1978	9/1978	9/1978	9/1978	9/1978	9/1978	9/1978
PCBs																		
PCB, Total	1336-36-3	100	500		122	100	722	483	221	191	10.4	2.2	120	1.12	180	231	61	5.5

PCBs - Polychlorinated Biphenyls.
Results above RL are shown in **bold**. Results exceeding one or more criteria are shaded, as are the criteria which were exceeded.
Refer to the analytical report for the full list of PCB analytes.

TABLE 1
SUMMARY OF PCB ANALYSIS RESULTS - SOIL
TECUMSEH SITE
SHEBOYGAN FALLS, WI
069638.00.051

ANALYTE	Chemical Abstract Service Number	PRINCIPAL THREAT WASTE THRESHOLD (mg/kg)		SAMPLE INFORMATION	CHEMICAL ANALYSES RESULTS (mg/kg)													
		RESIDENTIAL	INDUSTRIAL	SAMPLE LOCATION	5-18 & 6-18	5-19/20	6-10	6-11	6-12/13	6-14/15	6-16/17	6-19/20	7-12	7-13	7-14	7-15	7-16/17	7-18 & 8-18
				SAMPLE DEPTH (FEET BGS)	0 - 1	0 - 1	0 - 1	0 - 1	0 - 1	0 - 1	0 - 1	0 - 1	0 - 1	0 - 1	0 - 1	0 - 1	0 - 1	0 - 1
				SAMPLE DATE	9/1978	9/1978	9/1978	9/1978	9/1978	9/1978	9/1978	9/1978	9/1978	9/1978	9/1978	9/1978	9/1978	9/1978
PCBs																		
PCB, Total	1336-36-3	100	500		**6.35**	**2.99**	**516**	**3,321**	NE	**3.38**	**137**	**7.06**	**990**	**165**	**41.6**	**24.9**	**25.3**	**43.2**

ANALYTE	Chemical Abstract Service Number	PRINCIPAL THREAT WASTE THRESHOLD (mg/kg)		SAMPLE INFORMATION	CHEMICAL ANALYSES RESULTS (mg/kg)									
		RESIDENTIAL	INDUSTRIAL	SAMPLE LOCATION	7-19/20	8-14/15	8-16/17	8-19/20	9-16	9-17	9-18 & 10-18	9-19/20	10-19/20	11-19/20
				SAMPLE DEPTH (FEET BGS)	0 - 1	0 - 1	0 - 1	0 - 1	0 - 1	0 - 1	0 - 1	0 - 1	0 - 1	0 - 1
				SAMPLE DATE	9/1978	9/1978	9/1978	9/1978	9/1978	9/1978	9/1978	9/1978	9/1978	9/1978
PCBs														
PCB, Total	1336-36-3	100	500		**40**	**4.26**	**2.2**	**78.2**	**2.61**	**1.7**	**307**	**14.5**	**2.85**	**13.9**

PCBs - Polychlorinated Biphenyls.
Results above RL are shown in **bold**. Results exceeding one or more criteria are shaded, as are the criteria which were exceeded.
Refer to the analytical report for the full list of PCB analytes.

TABLE 1
SUMMARY OF PCB ANALYSIS RESULTS - SOIL
TECUMSEH SITE
SHEBOYGAN FALLS, WI
069638.00.051

ANALYTE	Chemical Abstract Service Number	PRINCIPAL THREAT WASTE THRESHOLD (mg/kg)		SAMPLE INFORMATION	CHEMICAL ANALYSES RESULTS (mg/kg)													
		RESIDENTIAL	INDUSTRIAL	SAMPLE LOCATION	GRID - 0.5/0.5	GRID - 0.5/4.5	GRID - 0.5/8.5	GRID - 0.5/8.5	GRID - 0.5/8.5	GRID - 0.5/12.5	GRID - 0.5/16.5	GRID - 2.5/2.5	GRID - 2.5/6.5	GRID - 2.5/10.5	GRID - 2.5/14.5	GRID - 2.5/18.5	GRID - 3.5/9.5	GRID - 3.5/11.5
				SAMPLE DEPTH (FEET BGS)	1 - 1 .5	1 - 1 .5	1 - 1 .5	2 - 2.5	3 - 3.5	1 - 1 .5	1 - 1 .5	1 - 1 .5	1 - 1 .5	1 - 1 .5	1 - 1 .5	1 - 1 .5	1 - 1 .5	1 - 1 .5
				SAMPLE DATE	12/28/1978	12/28/1978	12/28/1978	12/28/1978	12/28/1978	12/28/1978	12/28/1978	12/28/1978	12/28/1978	12/28/1978	12/28/1978	12/28/1978	12/28/1978	12/28/1978
PCBs																		
PCB, Total	1336-36-3	100	500		ND	**13.7**	**17.3**	**598**	ND	**1,166**	**1,265**	ND	ND	**10,263**	**95.2**	ND	**1.0**	ND

ANALYTE	Chemical Abstract Service Number	PRINCIPAL THREAT WASTE THRESHOLD (mg/kg)		SAMPLE INFORMATION	CHEMICAL ANALYSES RESULTS (mg/kg)													
		RESIDENTIAL	INDUSTRIAL	SAMPLE LOCATION	GRID - 4.5/0.5	GRID - 4.5/4.5	GRID - 4.5/8.5	GRID - 4.5/12.5	GRID - 4.5/16.5	GRID - 5.0/4.2	GRID - 5.0/4.2	GRID - 5.8/3.1	GRID - 5.8/2.2	GRID - 5.9/6.2	GRID - 5.9/1.2	GRID - 6.0/5.0	GRID - 6.5/10.5	GRID - 6.5/12.5
				SAMPLE DEPTH (FEET BGS)	1 - 1 .5	1 - 1 .5	1 - 1 .5	1 - 1 .5	1 - 1 .5	1 - 1 .5	2 - 2.5	1 - 1 .5	1 - 1 .5	1 - 1 .5	0.5 - 1	0.5 - 1	1 - 1 .5	1 - 1 .5
				SAMPLE DATE	12/28/1978	12/28/1978	12/28/1978	12/28/1978	12/28/1978	12/28/1978	12/28/1978	12/28/1978	12/28/1978	12/28/1978	12/28/1978	12/28/1978	12/28/1978	12/28/1978
PCBs																		
PCB, Total	1336-36-3	100	500		ND	ND	ND	ND	**23.8**	ND	ND	**2.9**	**7.8**	ND	ND	**1.2**	ND	ND

ANALYTE	Chemical Abstract Service Number	PRINCIPAL THREAT WASTE THRESHOLD (mg/kg)		SAMPLE INFORMATION	CHEMICAL ANALYSES RESULTS (mg/kg)													
		RESIDENTIAL	INDUSTRIAL	SAMPLE LOCATION	GRID - 6.5/12.5	GRID - 6.5/14.5	GRID - 7.2/9.1	GRID - 7.7/10.2	GRID - 7.6/12.2	GRID - 7.6/12.2	GRID - 8.5/16.5	GRID - 8.9/13.1	GRID - 9.3/14.2	GRID - 9.5/16.1	GRID - 10.5/18.5	GRID - 10.9/17.1	GRID - 11.2/18.1	GRID - 11.8/19.8
				SAMPLE DEPTH (FEET BGS)	1 - 1 .5	1 - 1 .5	0.5 - 1	1 - 1 .5	1 - 1 .5	2 - 2.5	1 - 1 .5	0.5 - 1	1 - 1 .5	1 - 1 .5	1 - 1 .5	0.5 - 1	1 - 1 .5	1 - 1 .5
				SAMPLE DATE	12/28/1978	12/28/1978	12/28/1978	12/28/1978	12/28/1978	12/28/1978	12/28/1978	12/28/1978	12/28/1978	12/28/1978	12/28/1978	12/28/1978	12/28/1978	12/28/1978
PCBs																		
PCB, Total	1336-36-3	100	500		**55.2**	**9.6**	**3,779**	**5.1**	**1,926**	ND	ND	**20.5**	**1.13**	ND	ND	ND	ND	ND

PCBs - Polychlorinated Biphenyls.
Results above RL are shown in **bold**. Results exceeding one or more criteria are shaded, as are the criteria which were exceeded.
Refer to the analytical report for the full list of PCB analytes.

TABLE 1
SUMMARY OF PCB ANALYSIS RESULTS - SOIL
TECUMSEH SITE
SHEBOYGAN FALLS, WI
069638.00.051

ANALYTE	Chemical Abstract Service Number	PRINCIPAL THREAT WASTE THRESHOLD (mg/kg)		SAMPLE INFORMATION	CHEMICAL ANALYSES RESULTS (mg/kg)													
		RESIDENTIAL	INDUSTRIAL	SAMPLE LOCATION	HP-1	HP-1	HP-2	HP-2	HP-3	HP-3	HP-4	HP-4	HP-5	HP-5	HP-6	HP-6	HP-7	HP-7
				SAMPLE DEPTH (FEET BGS)	0 - 0.5	0.5 - 1	0 - 0.5	0.5 - 1	0 - 0.5	0.5 - 1	0 - 0.5	0.5 - 1	0 - 0.5	0.5 - 1	0 - 0.5	0.5 - 1	0 - 0.5	0.5 - 1
				SAMPLE DATE	5/1/1999	5/1/1999	5/1/1999	5/1/1999	5/1/1999	5/1/1999	5/1/1999	5/1/1999	5/1/1999	5/1/1999	5/1/1999	5/1/1999	5/1/1999	5/1/1999
PCBs																		
PCB, Total	1336-36-3	100	500		**3.5**	**0.175**	**11**	**48**	**38**	**63**	**0.057**	ND	**0.89**	**1.8**	**3.3**	**0.53**	ND	ND

ANALYTE	Chemical Abstract Service Number	PRINCIPAL THREAT WASTE THRESHOLD (mg/kg)		SAMPLE INFORMATION	CHEMICAL ANALYSES RESULTS (mg/kg)													
		RESIDENTIAL	INDUSTRIAL	SAMPLE LOCATION	HP-8	HP-8	HP-9	HP-9	HP10	HP10	HP-11	HP-11	HP-12	HP-12	HP-13	HP-13	HP-14	HP-14
				SAMPLE DEPTH (FEET BGS)	0 - 0.5	0.5 - 1	0 - 0.5	0.5 - 1	0 - 0.5	0.5 - 1	0 - 0.5	0.5 - 1	0 - 0.5	0.5 - 1	0 - 0.5	0.5 - 1	0 - 0.5	0.5 - 1
				SAMPLE DATE	5/1/1999	5/1/1999	5/1/1999	5/1/1999	5/1/1999	5/1/1999	5/1/1999	5/1/1999	5/1/1999	5/1/1999	5/1/1999	5/1/1999	5/1/1999	5/1/1999
PCBs																		
PCB, Total	1336-36-3	100	500		ND	ND	ND	ND	**0.264**	**2.9**	**52**	**160**	**8.9**	**1.4**	**14.5**	**11.8**	**8.9**	**3.4**

ANALYTE	Chemical Abstract Service Number	PRINCIPAL THREAT WASTE THRESHOLD (mg/kg)		SAMPLE INFORMATION	CHEMICAL ANALYSES RESULTS (mg/kg)													
		RESIDENTIAL	INDUSTRIAL	SAMPLE LOCATION	SB-1	SB-1	SB-1	SB-2	SB-2	SB-2	SB-2	SB-2	SB-2	SB-2	SB-2	SB-2	SB-3	SB-3
				SAMPLE DEPTH (FEET BGS)	0 - 2	2 - 4	6 - 8	0 - 2	2 - 4	4 - 6	6 - 8	8 - 10	10 - 12	12 - 14	14 - 16	16 - 18	0 - 2	2 - 4
				SAMPLE DATE	7/20/1999	7/20/1999	7/20/1999	7/20/1999	7/20/1999	7/20/1999	7/20/1999	7/20/1999	7/20/1999	7/20/1999	7/20/1999	7/20/1999	7/20/1999	7/20/1999
PCBs																		
PCB, Total	1336-36-3	100	500		**15.5**	**0.90**	**19**	**22.7**	**99**	**5.6**	**26.3**	ND	ND	**0.75**	**3.6**	**9.3**	**58**	**3.9**

ANALYTE	Chemical Abstract Service Number	PRINCIPAL THREAT WASTE THRESHOLD (mg/kg)		SAMPLE INFORMATION	CHEMICAL ANALYSES RESULTS (mg/kg)													
		RESIDENTIAL	INDUSTRIAL	SAMPLE LOCATION	SB-3	SB-3	SB-4	SB-4	SB-4	SB-4	SB-5	SB-5	SB-5	SB-5	SB-5	SB-6	SB-6	SB-6
				SAMPLE DEPTH (FEET BGS)	4 - 6	6 - 8	0 - 2	2 - 4	4 - 6	6 - 8	0 - 2	2 - 4	4 - 6	6 - 8	8 - 10	0 - 2	2 - 4	4 - 6
				SAMPLE DATE	7/20/1999	7/20/1999	7/20/1999	7/20/1999	7/20/1999	7/20/1999	7/20/1999	7/20/1999	7/20/1999	7/20/1999	7/20/1999	7/20/1999	7/20/1999	7/20/1999
PCBs																		
PCB, Total	1336-36-3	100	500		**7.2**	ND	**0.24**	**1.5**	**0.79**	**0.50**	ND	**0.64**	NE	**20.6**	**38**	**0.10**	**0.91**	**0.77**

PCBs - Polychlorinated Biphenyls.
Results above RL are shown in **bold**. Results exceeding one or more criteria are shaded, as are the criteria which were exceeded.
Refer to the analytical report for the full list of PCB analytes.

TABLE 1
SUMMARY OF PCB ANALYSIS RESULTS - SOIL
TECUMSEH SITE
SHEBOYGAN FALLS, WI
069638.00.051

ANALYTE	Chemical Abstract Service Number	PRINCIPAL THREAT WASTE THRESHOLD (mg/kg)		SAMPLE INFORMATION	CHEMICAL ANALYSES RESULTS (mg/kg)													
		RESIDENTIAL	INDUSTRIAL	SAMPLE LOCATION	SB-6	SB-6	SB-7	SB-7	SB-7	SB-7	SB-7	SB-7	SB-7	SB-8	SB-8	SB-8	SB-8	SB-8
				SAMPLE DEPTH (FEET BGS)	6 - 8	8 - 10	0 - 2	2 -4	4 - 6	6 - 8	8 - 10	10 - 12	12 - 14	0 - 2	2 - 4	4 - 6	6 - 8	8 - 10
				SAMPLE DATE	7/20/1999	7/20/1999	7/20/1999	7/20/1999	7/20/1999	7/20/1999	7/20/1999	7/20/1999	7/20/1999	7/20/1999	7/20/1999	7/20/1999	7/20/1999	7/20/1999
PCBs																		
PCB, Total	1336-36-3	100	500		ND	0.19	1.7	2.22	0.67	23	1.62	0.17	3.9	0.092	0.41	60	6.7	6.2

ANALYTE	Chemical Abstract Service Number	PRINCIPAL THREAT WASTE THRESHOLD (mg/kg)		SAMPLE INFORMATION	CHEMICAL ANALYSES RESULTS (mg/kg)													
		RESIDENTIAL	INDUSTRIAL	SAMPLE LOCATION	SB-8	SB-9	SB-9	SB-9	SB-9	SB-9	SB-10	SB-10	SB-10	SB-10	SB-10	SB-11	SB-11	SB-11
				SAMPLE DEPTH (FEET BGS)	10 - 12	0 - 2	2 - 4	4 - 6	6 - 8	8 - 10	0 - 2	2 -4	4 - 6	6 - 8	8 - 10	0 - 2	2 - 4	4- 6
				SAMPLE DATE	7/20/1999	7/21/1999	7/21/1999	7/21/1999	7/21/1999	7/21/1999	7/21/1999	7/21/1999	7/21/1999	7/21/1999	7/21/1999	7/21/1999	7/21/1999	7/21/1999
PCBs																		
PCB, Total	1336-36-3	100	500		33	19.6	NE	11.7	1.8	7.1	7.4	51	4.5	6.7	0.35	5.1	14.2	0.52

ANALYTE	Chemical Abstract Service Number	PRINCIPAL THREAT WASTE THRESHOLD (mg/kg)		SAMPLE INFORMATION	CHEMICAL ANALYSES RESULTS (mg/kg)													
		RESIDENTIAL	INDUSTRIAL	SAMPLE LOCATION	SB-11	SB-11	SB-11	SB-12	SB-12	SB-12	SB-12	SB-13	SB-13	SB-13	SB-13	SB-13	SB-14	SB-14
				SAMPLE DEPTH (FEET BGS)	6 - 8	8 -10	10 - 12	0 - 2	2 - 4	4 - 6	6 - 8	0 - 2	2 - 4	4 - 6	6 - 8	8 - 10	0 - 2	2 - 4
				SAMPLE DATE	7/21/1999	7/21/1999	7/21/1999	7/21/1999	7/21/1999	7/21/1999	7/21/1999	7/21/1999	7/21/1999	7/21/1999	7/21/1999	7/21/1999	7/29/1999	7/29/1999
PCBs																		
PCB, Total	1336-36-3	100	500		0.207	1.06	0.58	106	0.60	23.3	3.32	ND	ND	ND	NR	0.073	47.2	13.1

ANALYTE	Chemical Abstract Service Number	PRINCIPAL THREAT WASTE THRESHOLD (mg/kg)		SAMPLE INFORMATION	CHEMICAL ANALYSES RESULTS (mg/kg)													
		RESIDENTIAL	INDUSTRIAL	SAMPLE LOCATION	SB-14	SB-14	SB-15	SB-15	SB-15	SB-16	SB-16	SB-16	SB-16	SB-17	SB-17	SB-17	SB-17	SB-18
				SAMPLE DEPTH (FEET BGS)	4 - 6	6 - 8	1 - 3	3 - 5	5 - 7	1 - 3	3 - 5	5 - 7	7 - 9	1 -3	3 - 5	5 - 7	7 - 9	1 - 3
				SAMPLE DATE	7/29/1999	7/29/1999	7/29/1999	7/29/1999	7/29/1999	7/29/1999	7/29/1999	7/29/1999	7/29/1999	7/29/1999	7/29/1999	7/29/1999	7/29/1999	7/29/1999
PCBs																		
PCB, Total	1336-36-3	100	500		31.5	ND	1.12	1.0	5.1	18	72	ND	0.26	42	14	0.413	0.094	28.6

PCBs - Polychlorinated Biphenyls.
Results above RL are shown in **bold**. Results exceeding one or more criteria are shaded, as are the criteria which were exceeded.
Refer to the analytical report for the full list of PCB analytes.

TABLE 1
SUMMARY OF PCB ANALYSIS RESULTS - SOIL
TECUMSEH SITE
SHEBOYGAN FALLS, WI
069638.00.051

ANALYTE	Chemical Abstract Service Number	PRINCIPAL THREAT WASTE THRESHOLD (mg/kg)		SAMPLE INFORMATION	CHEMICAL ANALYSES RESULTS (mg/kg)													
		RESIDENTIAL	INDUSTRIAL	SAMPLE LOCATION	SB-18	SB-18	SB-18	SB-18	MW-4D	MW-4D	MW-4D	MW-4D	MW-4D	MW-4D	MW-4D	MW-4D	MW-4D	MW-4D
				SAMPLE DEPTH (FEET BGS)	3 - 5	5 - 7	7 - 9	9 - 11	0 - 2	2 - 4	4 - 6	6 - 8	8 - 10	10 - 12	12 - 14	14 - 16	16 - 18	18 - 20
				SAMPLE DATE	7/29/1999	7/29/1999	7/29/1999	7/29/1999	3/29/1999	3/29/1999	3/29/1999	3/29/1999	3/29/1999	3/29/1999	3/29/1999	3/29/1999	3/29/1999	3/29/1999
PCBs																		
PCB, Total	1336-36-3	100	500		**44.6**	**42**	**62**	**166**	**8.7**	**3.09**	ND	**2.68**	NA	**1.49**	**0.30**	NA	ND	ND

ANALYTE	Chemical Abstract Service Number	PRINCIPAL THREAT WASTE THRESHOLD (mg/kg)		SAMPLE INFORMATION	CHEMICAL ANALYSES RESULTS (mg/kg)													
		RESIDENTIAL	INDUSTRIAL	SAMPLE LOCATION	MW-4D	MW-4D	MW-4D	MW-4D	MW-4D	MW-4D	MW-4D	MW-4D	MW-4D	MW-4D	MW-5D	MW-5D	MW-5D	MW-5D
				SAMPLE DEPTH (FEET BGS)	20 - 22	22 - 24	24 - 26	26 - 28	28 - 30	30 - 32	32 - 34	34 - 36	36 - 38	38 - 40	1 - 3	3 - 5	5 - 7	7 - 9
				SAMPLE DATE	3/29/1999	3/29/1999	3/29/1999	3/29/1999	3/29/1999	3/29/1999	3/29/1999	3/29/1999	3/29/1999	3/29/1999	3/30/1999	3/30/1999	3/30/1999	3/30/1999
PCBs																		
PCB, Total	1336-36-3	100	500		NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NE	ND	ND

ANALYTE	Chemical Abstract Service Number	PRINCIPAL THREAT WASTE THRESHOLD (mg/kg)		SAMPLE INFORMATION	CHEMICAL ANALYSES RESULTS (mg/kg)													
		RESIDENTIAL	INDUSTRIAL	SAMPLE LOCATION	MW-5D	MW-5D	MW-5D	MW-5D	MW-5D	MW-5D	MW-5D	MW-5D	MW-5D	MW-5D	MW-5D	MW-5D	MW-5D	MW-5D
				SAMPLE DEPTH (FEET BGS)	9 - 11	12 - 14	14 - 16	16 - 18	18 - 20	20 - 22	22 - 24	24 - 26	26 - 28	28 - 30	30 - 32	32 - 34	34 - 36	36 - 38
				SAMPLE DATE	3/30/1999	3/30/1999	3/30/1999	3/30/1999	3/30/1999	3/30/1999	3/30/1999	3/30/1999	3/30/1999	3/30/1999	3/30/1999	3/30/1999	3/30/1999	3/30/1999
PCBs																		
PCB, Total	1336-36-3	100	500		ND	NE	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ANALYTE	Chemical Abstract Service Number	PRINCIPAL THREAT WASTE THRESHOLD (mg/kg)		SAMPLE INFORMATION	CHEMICAL ANALYSES RESULTS (mg/kg)													
		RESIDENTIAL	INDUSTRIAL	SAMPLE LOCATION	MW-7D	MW-7D	MW-7D	MW-7D	MW-7D	MW-7D	MW-7D	MW-7D	MW-7D	MW-7D	MW-7D	MW-7D	MW-7D	MW-7D
				SAMPLE DEPTH (FEET BGS)	0 - 2	2 - 4	4 - 6	6 - 8	8 - 10	10 - 12	12 - 14	14 - 16	16 - 18	18 - 20	20 - 22	22 - 24	24 - 26	26 - 28
				SAMPLE DATE	3/31/1999	3/31/1999	3/31/1999	3/31/1999	3/31/1999	3/31/1999	3/31/1999	3/31/1999	3/31/1999	3/31/1999	3/31/1999	3/31/1999	3/31/1999	3/31/1999
PCBs																		
PCB, Total	1336-36-3	100	500		**29**	**11.4**	**23.2**	**0.14**	**0.076**	ND	ND	**3.7**	NE	**0.158**	ND	ND	ND	ND

PCBs - Polychlorinated Biphenyls.
Results above RL are shown in **bold**. Results exceeding one or more criteria are shaded, as are the criteria which were exceeded.
Refer to the analytical report for the full list of PCB analytes.

TABLE 1
SUMMARY OF PCB ANALYSIS RESULTS - SOIL
TECUMSEH SITE
SHEBOYGAN FALLS, WI
069638.00.051

ANALYTE	Chemical Abstract Service Number	PRINCIPAL THREAT WASTE THRESHOLD (mg/kg)		SAMPLE INFORMATION	CHEMICAL ANALYSES RESULTS (mg/kg)													
		RESIDENTIAL	INDUSTRIAL	SAMPLE LOCATION	MW-7D	MW-7D	MW-7D	MW-7D	MW-7D	MW-7D	COMP-1	COMP-1	COMP-1	COMP-1	COMP-1	COMP-2	COMP-2	COMP-2
				SAMPLE DEPTH (FEET BGS)	28 - 30	30 - 32	32 - 34	34 - 36	36 - 38	38 - 40	0 - 2	2 - 4	4 - 6	6 - 8	8 - 10	0 - 2	2 - 4	4 - 6
				SAMPLE DATE	3/31/1999	3/31/1999	3/31/1999	3/31/1999	3/31/1999	3/31/1999	8/10/1999	8/10/1999	8/10/1999	8/10/1999	8/10/1999	8/10/1999	8/10/1999	8/10/1999
PCBs																		
PCB, Total	1336-36-3	100	500		ND	ND	ND	**0.15**	NA	ND	**5.4**	**3.4**	**3.2**	**0.1**	ND	**ND**	**14.9**	**0.192**

ANALYTE	Chemical Abstract Service Number	PRINCIPAL THREAT WASTE THRESHOLD (mg/kg)		SAMPLE INFORMATION	CHEMICAL ANALYSES RESULTS (mg/kg)													
		RESIDENTIAL	INDUSTRIAL	SAMPLE LOCATION	COMP-2	COMP-2	COMP-3	COMP-3	COMP-3	COMP-3	COMP-3	COMP-4	COMP-4	COMP-4	COMP-5	COMP-5	COMP-5	COMP-6
				SAMPLE DEPTH (FEET BGS)	6 -8	8 - 10	0 - 2	2 - 4	4 - 6	6 - 8	8 - 10	0 - 2	2 - 4	4 - 6	0 - 2	2 - 4	4 - 6	0-2
				SAMPLE DATE	8/10/1999	8/10/1999	8/10/1999	8/10/1999	8/10/1999	8/10/1999	8/10/1999	8/10/1999	8/10/1999	8/10/1999	8/10/1999	8/10/1999	8/10/1999	8/10/1999
PCBs																		
PCB, Total	1336-36-3	100	500		**0.80**	**0.51**	**0.60**	**0.29**	ND	**0.44**	ND	**1.51**	**1.08**	**1.37**	**0.90**	**7.70**	**0.35**	ND

ANALYTE	Chemical Abstract Service Number	PRINCIPAL THREAT WASTE THRESHOLD (mg/kg)		SAMPLE INFORMATION	CHEMICAL ANALYSES RESULTS (mg/kg)													
		RESIDENTIAL	INDUSTRIAL	SAMPLE LOCATION	COMP-6	COMP-6	COMP-6	COMP-6	COMP-7	COMP-7	COMP-7	COMP-7	COMP-7	COMP-8	COMP-8	COMP-8	COMP-9	COMP-9
				SAMPLE DEPTH (FEET BGS)	2 - 4	4 - 6	6 - 8	8 - 10	0 - 2	2 - 4	4 - 6	6 - 8	8 - 10	0 - 2	2 - 4	4 - 6	0 - 2	2 - 4
				SAMPLE DATE	8/10/1999	8/10/1999	8/10/1999	8/10/1999	8/10/1999	8/10/1999	8/10/1999	8/10/1999	8/10/1999	8/10/1999	8/10/1999	8/10/1999	8/10/1999	8/10/1999
PCBs																		
PCB, Total	1336-36-3	100	500		**0.23**	**3.13**	**2.46**	**0.015**	**1.28**	**0.57**	**3.50**	ND	**0.61**	**55**	**11.1**	**102**	**2.20**	**2.72**

ANALYTE	Chemical Abstract Service Number	PRINCIPAL THREAT WASTE THRESHOLD (mg/kg)		SAMPLE INFORMATION	CHEMICAL ANALYSES RESULTS (mg/kg)													
		RESIDENTIAL	INDUSTRIAL	SAMPLE LOCATION	COMP-9	COMP-10	COMP-10	COMP-10	COMP-11	COMP-11	COMP-11	COMP-11	COMP-12	COMP-12	COMP-12	COMP-12	COMP-13	COMP-13
				SAMPLE DEPTH (FEET BGS)	4 - 6	0 - 2	2 - 4	4 - 6	0 - 2	2 - 4	4 - 6	6 - 8	0 - 2	2 - 4	4 - 6	6 - 8	0 - 2	2 - 4
				SAMPLE DATE	8/10/1999	8/10/1999	8/10/1999	8/10/1999	8/10/1999	8/10/1999	8/10/1999	8/10/1999	8/10/1999	8/10/1999	8/10/1999	8/10/1999	8/10/1999	8/10/1999
PCBs																		
PCB, Total	1336-36-3	100	500		**0.58**	**4.3**	**4.0**	**50**	**55.4**	**18.5**	**31**	**0.57**	**70**	**54**	**14**	**9.9**	**61**	ND

PCBs - Polychlorinated Biphenyls.
Results above RL are shown in **bold**. Results exceeding one or more criteria are shaded, as are the criteria which were exceeded.
Refer to the analytical report for the full list of PCB analytes.

TABLE 1
SUMMARY OF PCB ANALYSIS RESULTS - SOIL
TECUMSEH SITE
SHEBOYGAN FALLS, WI
069638.00.051

ANALYTE	Chemical Abstract Service Number	PRINCIPAL THREAT WASTE THRESHOLD (mg/kg)		SAMPLE INFORMATION	CHEMICAL ANALYSES RESULTS (mg/kg)													
		RESIDENTIAL	INDUSTRIAL	SAMPLE LOCATION	COMP-13	COMP-13	COMP-14	COMP-14	COMP-14	COMP-14	COMP-14	COMP-15	COMP-15	COMP-15	COMP-15	COMP-16	COMP-16	COMP-16
				SAMPLE DEPTH (FEET BGS)	4 - 6	6 - 8	0 - 2	2 - 4	4 - 6	6 - 8	8 -10	0 - 2	2 - 4	4 - 6	6 - 8	0 - 2	2 -4	4 - 6
				SAMPLE DATE	8/10/1999	8/10/1999	8/10/1999	8/10/1999	8/10/1999	8/10/1999	8/10/1999	8/10/1999	8/10/1999	8/10/1999	8/10/1999	8/10/1999	8/10/1999	8/10/1999
PCBs																		
PCB, Total	1336-36-3	100	500		85	34.3	18.8	19.8	26.4	17	1,800	4.2	10.9	21.4	3.8	3.0	3.8	23

ANALYTE	Chemical Abstract Service Number	PRINCIPAL THREAT WASTE THRESHOLD (mg/kg)		SAMPLE INFORMATION	CHEMICAL ANALYSES RESULTS (mg/kg)								
		RESIDENTIAL	INDUSTRIAL	SAMPLE LOCATION	COMP-16	COMP-17	COMP-17	COMP-17	COMP-18	COMP-18	COMP-18	COMP-18	COMP-18
				SAMPLE DEPTH (FEET BGS)	6 - 8	0 - 2	2 -4	4 - 6	0 - 2	2 - 4	4 - 6	6 - 8	8 - 10
				SAMPLE DATE	8/10/1999	8/10/1999	8/10/1999	8/10/1999	8/10/1999	8/10/1999	8/10/1999	8/10/1999	8/10/1999
PCBs													
PCB, Total	1336-36-3	100	500		13.5	0.94	2.6	2.0	28.0	450	16.0	ND	ND

ANALYTE	Chemical Abstract Service Number	PRINCIPAL THREAT WASTE THRESHOLD (mg/kg)		SAMPLE INFORMATION	CHEMICAL ANALYSES RESULTS (mg/kg)													
		RESIDENTIAL	INDUSTRIAL	SAMPLE LOCATION	NRB-4	NRB-5	NRB-7	NRB-9	NRB-10	B1	B2	B2	B3	B3	B3	B3	B3	B3
				SAMPLE DEPTH (FEET BGS)	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	6-8	0-0.5	0.5-1	1-1.5	1.5-2	2-2.5	2.5-3
				SAMPLE DATE	4/1/1999	4/1/1999	4/1/1999	4/1/1999	4/1/1999	5/1/1999	5/1/1999	5/1/1999	5/1/1999	5/1/1999	5/1/1999	5/1/1999	5/1/1999	5/1/1999
PCBs																		
PCB, Total	1336-36-3	100	500		0.56	2,700	ND	0.73	0.12	1,100	380	100	0.36	0.42	NA	690	38	33

ANALYTE	Chemical Abstract Service Number	PRINCIPAL THREAT WASTE THRESHOLD (mg/kg)		SAMPLE INFORMATION	CHEMICAL ANALYSES RESULTS (mg/kg)													
		RESIDENTIAL	INDUSTRIAL	SAMPLE LOCATION	NB-COMP-1	NB-COMP-2	NB-COMP-3	NB-COMP-4	NB-COMP-5	NB-COMP-6	NB-COMP-7	NB-COMP-8	NB-COMP-9	NB-COMP-10	NB-SS-41	NB-SS-42	NB-SS-43	NB-SS-44
				SAMPLE DEPTH (FEET BGS)	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5
				SAMPLE DATE	5/1/1999	5/1/1999	5/1/1999	5/1/1999	5/1/1999	5/1/1999	5/1/1999	5/1/1999	5/1/1999	5/1/1999	5/1/1999	5/1/1999	5/1/1999	5/1/1999
PCBs																		
PCB, Total	1336-36-3	100	500		2.3	0.77	0.64	2.1	39	2.6	2.8	3.5	1.6	1.9	7.2	7.3	13	31

PCBs - Polychlorinated Biphenyls.
Results above RL are shown in **bold**. Results exceeding one or more criteria are shaded, as are the criteria which were exceeded.
Refer to the analytical report for the full list of PCB analytes.

TABLE 1
SUMMARY OF PCB ANALYSIS RESULTS - SOIL
TECUMSEH SITE
SHEBOYGAN FALLS, WI
069638.00.051

ANALYTE	Chemical Abstract Service Number	PRINCIPAL THREAT WASTE THRESHOLD (mg/kg)		SAMPLE INFORMATION	CHEMICAL ANALYSES RESULTS (mg/kg)					
		RESIDENTIAL	INDUSTRIAL	SAMPLE LOCATION	NB-SS-45	NB-SS-46	NB-SS-47	NB-SS-48	NB-SS-49	NB-SS-50
				SAMPLE DEPTH (FEET BGS)	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5
				SAMPLE DATE	5/1/1999	5/1/1999	5/1/1999	5/1/1999	5/1/1999	5/1/1999
PCBs										
PCB, Total	1336-36-3	100	500		**12**	**17**	**5.8**	**3.3**	**0.25**	**83**

PCBs - Polychlorinated Biphenyls.
Results above RL are shown in **bold**. Results exceeding one or more criteria are shaded, as are the criteria which were exceeded.
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TABLE 1
SUMMARY OF PCB ANALYSIS RESULTS - SOIL
TECUMSEH SITE
SHEBOYGAN FALLS, WI
069638.00.051

ANALYTE	Chemical Abstract Service Number	PRINCIPAL THREAT WASTE THRESHOLD (mg/kg)		SAMPLE INFORMATION	CHEMICAL ANALYSES RESULTS (mg/kg)													
		RESIDENTIAL	INDUSTRIAL	SAMPLE LOCATION	RB-SS2, G10, 0 - 1	RB-SS3, G10, W Floor	RB-SS4, G10, E Floor	RB-SS5, G10, 0 - 1	RB-SS3, G9, Floor	RB-SS4, H9, Floor	RB-SS3, H10, 0 - 1	RB-SS6, H10, Floor	RB-SS12, H10, 0 - 1	RB-SS8, H10, 0 - 1	RB-SS2, H10, 0 - 1	RB-SS13, H10, N Floor	RB-SS14, H10, Floor	RB-SS5, I10, 0 - 1
				SAMPLE DEPTH (FEET BGS)	0 - 1	1	1	0 - 1	1	1	0 - 1	1	0 - 1	0 - 1	0 - 1	1	1	0 - 1
				SAMPLE DATE	10/6/2004	10/6/2004	10/6/2004	10/6/2004	10/12/2004	10/12/2004	10/8/2004	10/8/2004	10/12/2004	10/7/2004	10/8/2004	10/12/2004	10/12/2004	10/7/2004
PCBs																		
PCB, Total	1336-36-3	100	500		**0.12**	**0.228**	**0.79**	**0.057**	**1.9**	**0.70**	**0.65**	**7.7**	**0.84**	ND	**0.53**	**1.5**	**5.1**	**0.22**

ANALYTE	Chemical Abstract Service Number	PRINCIPAL THREAT WASTE THRESHOLD (mg/kg)		SAMPLE INFORMATION	CHEMICAL ANALYSES RESULTS (mg/kg)													
		RESIDENTIAL	INDUSTRIAL	SAMPLE LOCATION	RB-SS10, I10, Floor	RB-SS15, I10, Floor	RB-SS17, I10, S(0 - 1)	RB-SS19, I10, Floor	RB-SS2, I9, Floor	RB-SS2, J10, 0 - 1	RB-SS4, J10, 0 - 1	RB-SS9, J10, N(0 - 1)	RB-SS10, J10, Floor	RB-SS2, K10, 0 - 1	RB-SS5, K10, Floor	RB-SS7, K10, 0 - 1 North	RB-SS5, M11, Floor	RB-SS7, M11, E(0 - 1)
				SAMPLE DEPTH (FEET BGS)	1	1	0 - 1	1	1	0 - 1	0 - 1	0 - 1	1	0 - 1	1	0 - 1	1	0 - 1
				SAMPLE DATE	10/8/2004	10/8/2004	10/12/2004	10/12/2004	10/12/2004	10/7/2004	10/7/2004	10/12/2004	10/12/2004	10/7/2004	10/8/2004	10/8/2004	10/12/2004	10/12/2004
PCBs																		
PCB, Total	1336-36-3	100	500		**3.3**	ND	**0.67**	**2.0**	**0.021**	**0.21**	**0.18**	**0.80**	ND	**0.18**	**0.84**	**0.044**	**1.1**	**0.16**

ANALYTE	Chemical Abstract Service Number	PRINCIPAL THREAT WASTE THRESHOLD (mg/kg)		SAMPLE INFORMATION	CHEMICAL ANALYSES RESULTS (mg/kg)						
		RESIDENTIAL	INDUSTRIAL	SAMPLE LOCATION	RB-SS8, M11, Floor	RB-SS1, N11, 0 - 1	RB-SS5, N11, Floor	RB-SS4, N11, 0 - 1	RB-SS1, O11, 0 - 1	RB-SS1, O12, 0 - 1	RB-SS1, N12, 0 - 1
				SAMPLE DEPTH (FEET BGS)	1	0 - 1	1	0 - 1	0 - 1	0 - 1	0 - 1
				SAMPLE DATE	10/12/2004	10/7/2004	10/8/2004	10/7/2004	10/22/2004	10/22/2004	10/22/2004
PCBs											
PCB, Total	1336-36-3	100	500		**2.3**	**0.05**	**0.44**	ND	**0.31**	ND	**0.27**

PCBs - Polychlorinated Biphenyls.
Results above RL are shown in **bold**. Results exceeding one or more criteria are shaded, as are the criteria which were exceeded.
Refer to the analytical report for the full list of PCB analytes.

TABLE 1
SUMMARY OF PCB ANALYSIS RESULTS - SOIL
TECUMSEH SITE
SHEBOYGAN FALLS, WI
069638.00.051

ANALYTE	Chemical Abstract Service Number	PRINCIPAL THREAT WASTE THRESHOLD (mg/kg)		SAMPLE INFORMATION	CHEMICAL ANALYSES RESULTS (mg/kg)													
		RESIDENTIAL	INDUSTRIAL	SAMPLE LOCATION	PS-SS2, B7, Floor	PS-SS2, B7, N(0 - 1)	PS-SS2, B7, S(0 - 1)	PS-SS2, B7, W(0 - 1)	PS-SS3, B7, E(0 - 1)	PS-SS1, D9, Floor	PS-SS1, D9, N(0 - 1)	PS-SS1, D9, W(0 - 1)	PS-SS1, E9, E(0 - 1)	PS-SS1, E9, N(0 - 1)	PS-SS1, E9, Floor	PS-SS3, D9, (0 - 1)	PS-SS2, E9, S(0 - 1)	PS-SS1, G9
				SAMPLE DEPTH (FEET BGS)	1	0 - 1	0 - 1	0 - 1	0 - 1	1	0 - 1	0 - 1	0 - 1	0 - 1	1	0 - 1	0 - 1	0 - 1
				SAMPLE DATE	10/21/2004	10/21/2004	10/21/2004	10/21/2004	10/22/2004	10/20/2004	10/20/2004	10/20/2004	10/20/2004	10/20/2004	10/20/2004	10/22/2004	10/21/2004	10/12/2004
PCBs																		
PCB, Total	1336-36-3	100	500		**0.89**	**0.69**	**0.32**	ND	**0.082**	**0.82**	ND	**0.45**	ND	**0.05**	**0.82**	ND	ND	**1.4**

ANALYTE	Chemical Abstract Service Number	PRINCIPAL THREAT WASTE THRESHOLD (mg/kg)		SAMPLE INFORMATION	CHEMICAL ANALYSES RESULTS (mg/kg)												
		RESIDENTIAL	INDUSTRIAL	SAMPLE LOCATION	PS-SS1, G9, Floor	PS-SS1, H8, N Floor	PS-SS2, H8, S Floor	PS-SS2, H9	PS-SS1, I9	PS-SS1, J9/J10, Floor	PS-SS1, K9, Floor	PS-SS1, K10, Floor	PS-SS1, L10, Floor	PS-SS1, M10, Floor	PS-SS1, N10, Floor	PS-SS1, N9, Floor	PS-SS1, O8, Floor
				SAMPLE DEPTH (FEET BGS)	1	1	1	1	1	1	1	1	1	1	1	1	1
				SAMPLE DATE	10/12/2004	10/12/2004	10/12/2004	10/20/2004	10/20/2004	10/20/2004	10/18/2004	10/18/2004	10/18/2004	10/18/2004	10/18/2004	10/18/2004	10/20/2004
PCBs																	
PCB, Total	1336-36-3	100	500		**2.6**	**2.3**	**4.7**	**18**	**2.9**	**3.3**	**0.94**	**1.9**	**2.6**	**1.2**	**5.6**	**1.6**	**2.9**

PCBs - Polychlorinated Biphenyls.
Results above RL are shown in **bold**. Results exceeding one or more criteria are shaded, as are the criteria which were exceeded.
Refer to the analytical report for the full list of PCB analytes.

TABLE 1
SUMMARY OF PCB ANALYSIS RESULTS - SOIL
TECUMSEH SITE
SHEBOYGAN FALLS, WI
069638.00.051

ANALYTE	Chemical Abstract Service Number	PRINCIPAL THREAT WASTE THRESHOLD (mg/kg)		SAMPLE INFORMATION	CHEMICAL ANALYSES RESULTS (mg/kg)													
		RESIDENTIAL	INDUSTRIAL	SAMPLE LOCATION	PPI-SS1-W (0 - 1)	PPI-SS2-W (0 - 1)	PPI-SS3-Floor	PPI-SS4-S (0 - 1)	PPI-SS6-E (0 - 1)	PPI-SS7-E (0 - 1)	PPI-SS8-E (0 - 1)	PPI-SS9-E (0 - 1)	PPI-SS10-Floor	PPI-SS11-W (0 - 1)	PPI-SS12-W (0 - 1)	PPI-SS13-W (0 - 1)	PPI-SS15-Floor	PPI-SS17-N (0 - 1)
				SAMPLE DEPTH (FEET BGS)	0 - 1	0 - 1	3	0 - 1	0 - 1	0 - 1	0 - 1	0 - 1	3	0 - 1	0 - 1	0 - 1	7	0 - 1
				SAMPLE DATE	10/6/2004	10/6/2004	10/6/2004	10/6/2004	10/6/2004	10/6/2004	10/6/2004	10/6/2004	10/6/2004	10/6/2004	10/6/2004	10/6/2004	10/6/2004	10/6/2004
PCBs																		
PCB, Total	1336-36-3	100	500		**0.58**	**0.27**	**4.3**	**3.8**	ND	ND	**3.5**	**0.32**	**0.41**	**6.9**	**1.95**	**3.1**	**0.48**	ND

ANALYTE	Chemical Abstract Service Number	PRINCIPAL THREAT WASTE THRESHOLD (mg/kg)		SAMPLE INFORMATION	CHEMICAL ANALYSES RESULTS (mg/kg)					
		RESIDENTIAL	INDUSTRIAL	SAMPLE LOCATION	PPI-SS24-W (0 - 1)	PP2-SS3-E (0 - 1)	PP2-SS23-E (0 - 1)	PP2-SS24-E (5 - 7)	PP2-SS26-W (0 - 1)	PP2-SS29-W (5 - 7)
				SAMPLE DEPTH (FEET BGS)	0 - 1	0 - 1	0 - 1	5 - 7	0 - 1	5 - 7
				SAMPLE DATE	10/8/2004	10/8/2004	10/18/2004	10/18/2004	10/18/2004	10/20/2004
PCBs										
PCB, Total	1336-36-3	100	500		ND	**0.37**	**0.17**	**0.07**	**0.028**	**27**

PCBs - Polychlorinated Biphenyls.
Results above RL are shown in **bold**. Results exceeding one or more criteria are shaded, as are the criteria which were exceeded.
Refer to the analytical report for the full list of PCB analytes.

TABLE 1
SUMMARY OF PCB ANALYSIS RESULTS - SOIL
TECUMSEH SITE
SHEBOYGAN FALLS, WI
069638.00.051

ANALYTE	Chemical Abstract Service Number	PRINCIPAL THREAT WASTE THRESHOLD (mg/kg)		SAMPLE INFORMATION	CHEMICAL ANALYSES RESULTS (mg/kg)													
		RESIDENTIAL	INDUSTRIAL	SAMPLE LOCATION	S1	S2	S3	S4	S5	S6	S6	S6	S6-1E	S7	S7	S7	S7-1N	S7-2N
				SAMPLE DEPTH (FEET BGS)	0 - 0.5'	0 - 0.5'	0 - 0.5'	0 - 0.5'	0 - 0.5'	0 - 0.5'	0.5' - 1.5'	1.5' - 3.5'	0 - 0.5'	0 - 0.5'	0.5' - 1.5'	1.5' - 3.5'	0 - 0.5'	0 - 0.5'
				SAMPLE DATE	9/28/2016	9/28/2016	9/28/2016	9/28/2016	9/28/2016	9/28/2016	9/28/2016	9/28/2016	11/10/2016	9/28/2016	9/28/2016	9/28/2016	11/10/2016	11/10/2016
PCBs																		
PCB, Total	1336-36-3	100	500		**4.75**	**0.75**	**0.826**	**0.489**	**0.176**	**6.73**	NA	NA	NA	**18.2**	**426**	**55.2**	NA	**4.5**

ANALYTE	Chemical Abstract Service Number	PRINCIPAL THREAT WASTE THRESHOLD (mg/kg)		SAMPLE INFORMATION	CHEMICAL ANALYSES RESULTS (mg/kg)													
		RESIDENTIAL	INDUSTRIAL	SAMPLE LOCATION	S7-2W	S7-2SE	S8	S9	S9	S9	S9-1N	S9-1N	S9-1N	S9-1E	S9-1E	S9-1E	S9-2E	S9-2E
				SAMPLE DEPTH (FEET BGS)	0 - 0.5'	0 - 0.5'	0 - 0.5'	0 - 0.5'	0.5' - 1.5'	1.5' - 3.5'	0 - 0.5'	0.5' - 1.5'	1.5' - 3.5'	0 - 0.5'	0.5' - 1.5'	1.5' - 3.5'	0 - 0.5'	0.5' - 1.5'
				SAMPLE DATE	11/10/2016	11/10/2016	9/28/2016	9/28/2016	9/28/2016	9/28/2016	11/10/2016	11/10/2016	11/10/2016	11/10/2016	11/10/2016	11/10/2016	11/10/2016	11/10/2016
PCBs																		
PCB, Total	1336-36-3	100	500		**5.61**	**0.686**	**2.72**	**9,060**	**5,430**	**513**	**525**	**2,090**	**661**	**15,200**	**5,360**	**1,570**	**7,180**	**3,720**

ANALYTE	Chemical Abstract Service Number	PRINCIPAL THREAT WASTE THRESHOLD (mg/kg)		SAMPLE INFORMATION	CHEMICAL ANALYSES RESULTS (mg/kg)													
		RESIDENTIAL	INDUSTRIAL	SAMPLE LOCATION	S9-2E	S9-1S	S9-1S	S9-1S	S9-2S	S9-2S	S9-2S	S9-S10	S9-S10	S9-S10	S10	S10	S10	S10-1N
				SAMPLE DEPTH (FEET BGS)	1.5' - 3.5'	0 - 0.5'	0.5' - 1.5'	1.5' - 3.5'	0 - 0.5'	0.5' - 1.5'	1.5' - 3.5'	0 - 0.5'	0.5'-1.5	1.5' - 3.5'	0 - 0.5'	0.5' - 1.5'	1.5' - 3.5'	0 - 0.5'
				SAMPLE DATE	11/10/2016	11/10/2016	11/10/2016	11/10/2016	11/10/2016	11/10/2016	11/10/2016	11/10/2016	11/10/2016	11/10/2016	9/28/2016	9/28/2016	9/28/2016	11/10/2016
PCBs																		
PCB, Total	1336-36-3	100	500		**9.59**	**223**	**2,030**	**470**	**102**	**1,200**	**90.4**	**6,270**	**6,640**	**6,840**	**24.8**	**11.2**	**7.28**	**8.48**

ANALYTE	Chemical Abstract Service Number	PRINCIPAL THREAT WASTE THRESHOLD (mg/kg)		SAMPLE INFORMATION	CHEMICAL ANALYSES RESULTS (mg/kg)													
		RESIDENTIAL	INDUSTRIAL	SAMPLE LOCATION	S10-2N	S10-1E	S10-2E	S11	S12	S13	S14	S14	S14	S14-1N	S14-2N	S14-1E	S14-1E	S14-1E
				SAMPLE DEPTH (FEET BGS)	0 - 0.5'	0 - 0.5'	0 - 0.5'	0 - 0.5'	0 - 0.5'	0 - 0.5'	0 - 0.5'	0.5' - 1.5'	1.5' - 3.5'	0 - 0.5'	0 - 0.5'	0 - 0.5'	0.5' - 1.5'	1.5' - 3.5'
				SAMPLE DATE	11/10/2016	11/10/2016	11/10/2016	9/28/2016	9/28/2016	9/28/2016	9/28/2016	9/28/2016	9/28/2016	11/10/2016	11/10/2016	11/10/2016	11/10/2016	11/10/2016
PCBs																		
PCB, Total	1336-36-3	100	500		**3.1**	**0.985**	**0.325**	**0.581**	**5.79**	**5.98**	**99.6**	**0.185**	**0.063**	**1.57**	**2.33**	**24.2**	**15.6**	**0.555**

PCBs - Polychlorinated Biphenyls.
Results above RL are shown in **bold**. Results exceeding one or more criteria are shaded, as are the criteria which were exceeded.
Refer to the analytical report for the full list of PCB analytes.

TABLE 1
SUMMARY OF PCB ANALYSIS RESULTS - SOIL
TECUMSEH SITE
SHEBOYGAN FALLS, WI
069638.00.051

ANALYTE	Chemical Abstract Service Number	PRINCIPAL THREAT WASTE THRESHOLD (mg/kg)		SAMPLE INFORMATION	CHEMICAL ANALYSES RESULTS (mg/kg)													
		RESIDENTIAL	INDUSTRIAL	SAMPLE LOCATION	S14-2E	S14-2E	S14-2E	S14-1W	S14-1W	S14-1W	S14-S15	S14-S15	S14-S15	S15	S15	S15	S15-1N	S15-2N
				SAMPLE DEPTH (FEET BGS)	0 - 0.5'	0.5' - 1.5'	1.5' - 3.5'	0 - 0.5'	0.5' - 1.5'	1.5' - 3.5'	0 - 0.5'	0.5' - 1.5'	1.5' - 3.5'	0 - 0.5'	0.5' - 1.5'	1.5' - 3.5'	0 - 0.5'	0 - 0.5'
				SAMPLE DATE	11/10/2016	11/10/2016	11/10/2016	11/10/2016	11/10/2016	11/10/2016	11/10/2016	11/10/2016	11/10/2016	9/28/2016	9/28/2016	9/28/2016	11/10/2016	11/10/2016
PCBs																		
PCB, Total	1336-36-3	100	500		19	12.2	0.0349	151	22	0.716	878	616	791	423	56.1	0.0907	8.56	3.89

ANALYTE	Chemical Abstract Service Number	PRINCIPAL THREAT WASTE THRESHOLD (mg/kg)		SAMPLE INFORMATION	CHEMICAL ANALYSES RESULTS (mg/kg)												
		RESIDENTIAL	INDUSTRIAL	SAMPLE LOCATION	S15-1E	S15-1E	S15-1E	S15-1W	S15-1W	S15-1W	S15-2W	S15-2W	S15-2W	S16	S17	S18	S19	S20
				SAMPLE DEPTH (FEET BGS)	0 - 0.5'	0.5' - 1.5'	1.5' - 3.5'	0 - 0.5'	0.5' - 1.5'	1.5' - 3.5'	0 - 0.5'	0.5' - 1.5'	1.5' - 3.5'	0 - 0.5'	0 - 0.5'	0 - 0.5'	0 - 0.5'	0 - 0.5'
				SAMPLE DATE	11/10/2016	11/10/2016	11/10/2016	11/10/2016	11/10/2016	11/10/2016	11/10/2016	11/10/2016	11/10/2016	9/28/2016	9/28/2016	9/28/2016	9/28/2016	9/28/2016
PCBs																		
PCB, Total	1336-36-3	100	500		1,570	468	2.41	1,030	22.1	0.938	136	19.5	1.05	0.0801	0.83	0.0829	2.82	0.0263

ANALYTE	Chemical Abstract Service Number	PRINCIPAL THREAT WASTE THRESHOLD (mg/kg)		SAMPLE INFORMATION	CHEMICAL ANALYSES RESULTS (mg/kg)												
		RESIDENTIAL	INDUSTRIAL	SAMPLE LOCATION	S21	S22	GT1	GT2	GT3	GT4	GT4	GT4	GT4-1E	GT4-1S	GT4-1W	GT5	SMF1	SMF2
				SAMPLE DEPTH (FEET BGS)	0 - 0.5'	0 - 0.5'	0 - 0.5'	0 - 0.5'	0 - 0.5'	0 - 0.5'	0.5' - 1.5'	1.5' - 3.5'	0 - 0.5'	0 - 0.5'	0 - 0.5'	0 - 0.5'	0 - 0.5'	0 - 0.5'
				SAMPLE DATE	9/28/2016	9/28/2016	9/28/2016	9/28/2016	9/28/2016	9/28/2016	9/28/2016	9/28/2016	11/10/2016	11/10/2016	11/10/2016	9/28/2016	9/28/2016	9/28/2016
PCBs																		
PCB, Total	1336-36-3	100	500		3.73	4.79	0.6	1.28	3.2	9.33	59.6	1.44	0.758	3.12	3.2	0.531	0.188	<0.0273

ANALYTE	Chemical Abstract Service Number	PRINCIPAL THREAT WASTE THRESHOLD (mg/kg)		SAMPLE INFORMATION	CHEMICAL ANALYSES RESULTS (mg/kg)												
		RESIDENTIAL	INDUSTRIAL	SAMPLE LOCATION	SMF3	SMF4	SMF5	SMF6	SMF7	CTF1	CTF2	CTF3	CTF4	CTF5	CTF6	CTF7	CTF8
				SAMPLE DEPTH (FEET BGS)	0 - 0.5'	0 - 0.5'	0 - 0.5'	0 - 0.5'	0 - 0.5'	0 - 0.5'	0 - 0.5'	0 - 0.5'	0 - 0.5'	0 - 0.5'	0 - 0.5'	0 - 0.5'	0 - 0.5'
				SAMPLE DATE	9/28/2016	9/28/2016	9/28/2016	9/28/2016	9/28/2016	9/28/2016	9/29/2016	9/29/2016	9/28/2016	9/29/2016	9/29/2016	9/29/2016	9/29/2016
PCBs																	
PCB, Total	1336-36-3	100	500		<0.0292	<0.0331	<0.0327	<0.0310	<0.0310	0.0676	0.76	0.131	<0.0298	0.0329	<0.0295	0.0341	<0.0295

PCBs - Polychlorinated Biphenyls.
Results above RL are shown in **bold**. Results exceeding one or more criteria are shaded, as are the criteria which were exceeded.
Refer to the analytical report for the full list of PCB analytes.

TABLE 1
SUMMARY OF PCB ANALYSIS RESULTS - SOIL
TECUMSEH SITE
SHEBOYGAN FALLS, WI
069638.00.051

ANALYTE	Chemical Abstract Service Number	PRINCIPAL THREAT WASTE THRESHOLD (mg/kg)		SAMPLE INFORMATION	CHEMICAL ANALYSES RESULTS (mg/kg)						
		RESIDENTIAL	INDUSTRIAL	SAMPLE LOCATION	DUP-SOIL 1	DUP-SOIL 4	DUP-SOIL 5	DUP-SOIL 6	DUP-SOIL 1A	DUP-SOIL 2A	DUP SOIL 3A
				SAMPLE DEPTH (FEET BGS)	GT4 (0 - 0.5')	S9 (0-0.05)	S9 (0.5' - 1.5')	S9 (1.5' - 3.5')	S6-1E (0 - 0.5")	S71-SE (0 - 0.5")	GT4-1S (0 - 0.5")
				SAMPLE DATE	9/28/2016	9/28/2016	9/28/2016	9/28/2016	11/10/2016	11/10/2016	11/10/2016
PCBs											
PCB, Total	1336-36-3	100	500		**3.9**	**11,200**	**5,820**	**1,050**	NA	**1.62**	**6.77**

PCBs - Polychlorinated Biphenyls.
Results above RL are shown in **bold**. Results exceeding one or more criteria are shaded, as are the criteria which were exceeded.
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TABLE 1
SUMMARY OF PCB ANALYSIS RESULTS - SOIL
TECUMSEH SITE
SHEBOYGAN FALLS, WI
069638.00.051

ANALYTE	Chemical Abstract Service Number	PRINCIPAL THREAT WASTE THRESHOLD (mg/kg)		SAMPLE INFORMATION	CHEMICAL ANALYSES RESULTS (mg/kg)													
		RESIDENTIAL	INDUSTRIAL	SAMPLE LOCATION	S7A	S7A	S9A	S9A	S9-2EA	S9-2EA	Duplicate Soil - 3	S9-1N-S9S10	S9-1N-S9S10	Duplicate Soil - 4	S9-1N-S9S10	S9-1S-S9-2S	S9-1S-S9-2S	S9-1S-S9-2S
				SAMPLE DEPTH (FEET BGS)	4 - 6	6 - 7	4 - 6	6 - 8	4 - 6	6 - 8	S9-2EA (6-8)	4 - 6	6 - 8	S9-1N-S9S10 (6-8)	8 - 10	4 - 6	6 - 8	8 - 10
				SAMPLE DATE	5/9/2018	5/9/2018	5/8/2018	5/8/2018	5/8/2018	5/8/2018	5/8/2018	5/8/2018	5/8/2018	5/8/2018	5/8/2018	5/9/2018	5/9/2018	5/9/2018
PCBs																		
PCB, Total	1336-36-3	100	500		**0.067**	<0.030	**2.26**	**2.39**	**266**	**18.9**	**3.64**	**8,690**	**7,580**	**11,600**	**6,430**	**12.6**	**12.3**	**0.783**

ANALYTE	Chemical Abstract Service Number	PRINCIPAL THREAT WASTE THRESHOLD (mg/kg)		SAMPLE INFORMATION	CHEMICAL ANALYSES RESULTS (mg/kg)													
		RESIDENTIAL	INDUSTRIAL	SAMPLE LOCATION	Duplicate Soil- 2	S9-1S-S9-2S	S9-2S-1E	S9-2S-1E	S9-2S-1E	S9-2S-1E	S9-2S-1E	S9-2S-1E	S9-2S-1E	S9-2S-2E	S9-2S-2E	S9-2S-2E	S9-2S-2E	S9-2S-2E
				SAMPLE DEPTH (FEET BGS)	S9-1S-S9-2S (8 - 10)	10.0 - 10.5	0 - 0.5	0.5 - 2.0	2 - 4	4 - 6	6 - 8	8 - 10	10.0 - 11.5	0 - 0.5	0.5 - 2.0	2 - 4	4 - 6	6 - 8
				SAMPLE DATE	5/9/2018	5/9/2018	5/9/2018	5/8/2018	5/8/2018	5/8/2018	5/8/2018	5/8/2018	5/8/2018	5/8/2018	5/8/2018	5/8/2018	5/8/2018	5/8/2018
PCBs																		
PCB, Total	1336-36-3	100	500		**0.484**	<0.043	**14.2**	**1,050**	**7.88**	**64.7**	**9.08**	**0.298**	**0.082**	**16.3**	**3.81**	**1.21**	**2,400**	**184**

ANALYTE	Chemical Abstract Service Number	PRINCIPAL THREAT WASTE THRESHOLD (mg/kg)		SAMPLE INFORMATION	CHEMICAL ANALYSES RESULTS (mg/kg)													
		RESIDENTIAL	INDUSTRIAL	SAMPLE LOCATION	S9-2S-2E	S9-2S-2E	S9-2S-3E	S9-2S-3E	S9-2S-3E	S9-2S-3E	S9-2S-4E	S9-2S-4E	S9-2S-4E	S9-2S-4E	Duplicate Soil - 6	S9-3S	S9-3S	S9-3S
				SAMPLE DEPTH (FEET BGS)	8 - 10	10.0 - 10.5	0 - 2	2 - 4	4 - 6	6 - 8	0 - 2	2 - 4	4 - 6	6 - 8	S9-2S-4E (6 - 8)	0 - 0.5	0.5 - 2.0	2 - 4
				SAMPLE DATE	5/8/2018	5/8/2018	5/9/2018	5/9/2018	5/9/2018	5/9/2018	5/9/2018	5/9/2018	5/9/2018	5/9/2018	5/9/2018	5/9/2018	5/9/2018	5/9/2018
PCBs																		
PCB, Total	1336-36-3	100	500		**0.557**	<0.0404	**6.97**	**0.216**	**199**	**5.86**	**35.1**	**0.207**	**14.3**	**204**	**155**	**5.23**	**9.89**	**155**

ANALYTE	Chemical Abstract Service Number	PRINCIPAL THREAT WASTE THRESHOLD (mg/kg)		SAMPLE INFORMATION	CHEMICAL ANALYSES RESULTS (mg/kg)													
		RESIDENTIAL	INDUSTRIAL	SAMPLE LOCATION	S9-3S	S9-3S	S9-3E	S9-3E	S9-3E	S9-3E	S9-3E	S9-4E	S9-4E	S9-4E	S9-4E	S9-4E	S9-5E	S9-5E
				SAMPLE DEPTH (FEET BGS)	4 - 6	6 - 7	0 - 0.5	0.5 - 2.0	2 - 4	4 - 6	6 - 8	0 - 0.5	0.5 - 2.0	2 - 4	4 - 6	6 - 8	0 - 0.5	0.5 - 2.0
				SAMPLE DATE	5/9/2018	5/9/2018	5/8/2018	5/8/2018	5/8/2018	5/8/2018	5/8/2018	5/8/2018	5/8/2018	5/8/2018	5/8/2018	5/8/2018	5/8/2018	5/8/2018
PCBs																		
PCB, Total	1336-36-3	100	500		**396**	**28.6**	**6.82**	**3.22**	**49.7**	**0.043**	**96.4**	**0.53**	**1.66**	**6,450**	**1.29**	**0.123**	**3.03**	**3.69**

PCBs - Polychlorinated Biphenyls.
Results above RL are shown in **bold**. Results exceeding one or more criteria are shaded, as are the criteria which were exceeded.
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TABLE 1
SUMMARY OF PCB ANALYSIS RESULTS - SOIL
TECUMSEH SITE
SHEBOYGAN FALLS, WI
069638.00.051

ANALYTE	Chemical Abstract Service Number	PRINCIPAL THREAT WASTE THRESHOLD (mg/kg)		SAMPLE INFORMATION	CHEMICAL ANALYSES RESULTS (mg/kg)													
		RESIDENTIAL	INDUSTRIAL	SAMPLE LOCATION	S9-5E	S9-5E	S9-5E	S9-6E	S9-6E	S9-6E	S9-S10-1E	S9-S10-1E	S9-S10-1E	S9-S10-1E	S9-S10-1E	S9-S10-1E	S9-S10-2E	S9-S10-2E
				SAMPLE DEPTH (FEET BGS)	2 - 3.75	4 - 6	6 - 8	0 - 2	4 - 6	6 - 8	0 - 0.5	0.5 - 2.0	2 - 4	4 - 6	6 - 8	8 - 9	0 - 0.5	0.5 - 2.0
				SAMPLE DATE	5/8/2018	5/8/2018	5/8/2018	5/9/2018	5/9/2018	5/9/2018	5/8/2018	5/8/2018	5/8/2018	5/8/2018	5/8/2018	5/8/2018	5/8/2018	5/8/2018
PCBs																		
PCB, Total	1336-36-3	100	500		256	8,740	18.1	0.136	1.39	0.335	44.2	348	1.52	0.127	0.04	172	7.31	205

ANALYTE	Chemical Abstract Service Number	PRINCIPAL THREAT WASTE THRESHOLD (mg/kg)		SAMPLE INFORMATION	CHEMICAL ANALYSES RESULTS (mg/kg)													
		RESIDENTIAL	INDUSTRIAL	SAMPLE LOCATION	S9-S10-2E	S9-S10-2E	S9-S10-2E	S9-S10-3E	S9-S10-3E	S9-S10-3E	S9-S10-3E	S9-S10-4E	S9-S10-4E	S9-S10-4E	S14-S15A	S14-S15A	S14-S15A	S14-S15A-1N
				SAMPLE DEPTH (FEET BGS)	2 - 4	4 - 6	6 - 8	0 - 2	2 - 4	4 - 6	6 - 8	0 - 2	4 - 6	6 - 8	4 - 6	6 - 8	8 - 10	0 - 2
				SAMPLE DATE	5/8/2018	5/8/2018	5/8/2018	5/9/2018	5/9/2018	5/9/2018	5/9/2018	5/9/2018	5/9/2018	5/9/2018	5/7/2018	5/7/2018	5/7/2018	5/9/2018
PCBs																		
PCB, Total	1336-36-3	100	500		8.98	0.11	0.127	4.24	117	9.08	0.175	1.96	1.83	0.102	0.935	61.8	185	392

ANALYTE	Chemical Abstract Service Number	PRINCIPAL THREAT WASTE THRESHOLD (mg/kg)		SAMPLE INFORMATION	CHEMICAL ANALYSES RESULTS (mg/kg)													
		RESIDENTIAL	INDUSTRIAL	SAMPLE LOCATION	S14-S15A-1N	S14-S15A-1N	S100	S100	Duplicate Soil - 7	S100	SF1	SF2	P1	P2	P3	P4	P5	P6
				SAMPLE DEPTH (FEET BGS)	4 - 6	6 - 8	0 - 2	4 - 6	S100 (4 - 6)	6 - 8	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.25
				SAMPLE DATE	5/9/2018	5/9/2018	5/9/2018	5/9/2018	5/9/2018	5/9/2018	5/9/2018	5/9/2018	5/9/2018	5/9/2018	5/9/2018	5/9/2018	5/9/2018	5/9/2018
PCBs																		
PCB, Total	1336-36-3	100	500		7.26	7.55	534	67.8	105	0.309	0.385	6.11	2.87	6.89	0.246	0.372	0.407	0.834

ANALYTE	Chemical Abstract Service Number	PRINCIPAL THREAT WASTE THRESHOLD (mg/kg)		SAMPLE INFORMATION	CHEMICAL ANALYSES RESULTS (mg/kg)													
		RESIDENTIAL	INDUSTRIAL	SAMPLE LOCATION	P7	Duplicate Soil - 5	P8	BP1	BP1	DUP-SOIL #7	BP1	BP1	BP2	BP2	BP2	BP3	BP3	BP3
				SAMPLE DEPTH (FEET BGS)	0 - 0.5	P7 (0 - 0.5)	0 - 0.5	0 - 0.5	0.5 - 2	BP1 (0.5-2)	2 - 4	4 - 6	0 - 0.5	0.5 - 2	2 - 3.75	0 - 0.5	0.5 - 2	2 - 4
				SAMPLE DATE	5/9/2018	5/9/2018	5/9/2018	08/02/2018	08/02/2018	08/02/2018	08/02/2018	08/02/2018	08/02/2018	08/02/2018	08/02/2018	08/02/2018	08/02/2018	08/02/2018
PCBs																		
PCB, Total	1336-36-3	100	500		0.856	1.68	1.84	1.12	18.5	21.3	1.55	30.4	12.3	13.0	0.0526	0.080	0.451	175

PCBs - Polychlorinated Biphenyls.
Results above RL are shown in **bold**. Results exceeding one or more criteria are shaded, as are the criteria which were exceeded.
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TABLE 1
SUMMARY OF PCB ANALYSIS RESULTS - SOIL
TECUMSEH SITE
SHEBOYGAN FALLS, WI
069638.00.051

ANALYTE	Chemical Abstract Service Number	PRINCIPAL THREAT WASTE THRESHOLD (mg/kg)		SAMPLE INFORMATION	CHEMICAL ANALYSES RESULTS (mg/kg)													
		RESIDENTIAL	INDUSTRIAL	SAMPLE LOCATION	BP3	BP4	BP4	DUP-SOIL #8	BP4	S1001E	S1001E	S1001E	S1001E	S1002E	S1002E	S1002E	S1002E	S1002E
				SAMPLE DEPTH (FEET BGS)	4 - 5	0 - 0.5	0.5 - 2	BP4 (0.5-2)	2 - 4	0.66 - 1.75	2.5 - 4	4 - 6	6 - 7.5	0 - 0.5	0.5 - 2	2 - 4	4 - 5	6 - 8
				SAMPLE DATE	08/02/2018	08/02/2018	08/02/2018	08/02/2018	08/02/2018	08/01/2018	08/01/2018	08/01/2018	08/01/2018	08/01/2018	08/01/2018	08/01/2018	08/01/2018	08/01/2018
PCBs																		
PCB, Total	1336-36-3	100	500		83.0	2.15	1.57	1.47	1.06	501	0.305	146	15.1	1.19	887	64.9	6.62	63.3

ANALYTE	Chemical Abstract Service Number	PRINCIPAL THREAT WASTE THRESHOLD (mg/kg)		SAMPLE INFORMATION	CHEMICAL ANALYSES RESULTS (mg/kg)													
		RESIDENTIAL	INDUSTRIAL	SAMPLE LOCATION	DUP-SOIL #2	S101N1E	S101N1E	S101N1E	S101N1E	S101N2E	S101N2E	S101N2E	S101N2E	S101N3E	S101N3E	S101N3E	DUP-SOIL #3	S101N3E
				SAMPLE DEPTH (FEET BGS)	S1002E (6-8)	0.75 - 2	2 - 4	4 - 6	6 - 8	0.75 - 2	2 - 4	4 - 6	6 - 7.5	0.75 - 2	2 - 4	4 - 6	S101N3E (4-6)	6 - 7
				SAMPLE DATE	08/01/2018	08/01/2018	08/01/2018	08/01/2018	08/01/2018	08/01/2018	08/01/2018	08/01/2018	08/01/2018	08/01/2018	08/01/2018	08/01/2018	08/01/2018	08/01/2018
PCBs																		
PCB, Total	1336-36-3	100	500		17.5	489	42.7	0.819	1.53	31.2	78.2	0.046	<0.0289	203	3.21	5.33	121	0.386

ANALYTE	Chemical Abstract Service Number	PRINCIPAL THREAT WASTE THRESHOLD (mg/kg)		SAMPLE INFORMATION	CHEMICAL ANALYSES RESULTS (mg/kg)													
		RESIDENTIAL	INDUSTRIAL	SAMPLE LOCATION	S103E	S103E	S103E	S103E	S104E	S104E	S104E	S104E	S105E	S105E	S105E	S105E	S141W1N	S141W1N
				SAMPLE DEPTH (FEET BGS)	0.75 - 2	2 - 4	4 - 6	6 - 7	0.75 - 2	2 - 4	4 - 6	6 - 7	0.75 - 2	2 - 4	4 - 6	6 - 7	0 - 0.5	0.5 - 2
				SAMPLE DATE	08/01/2018	08/01/2018	08/01/2018	08/01/2018	08/01/2018	08/01/2018	08/01/2018	08/01/2018	08/01/2018	08/01/2018	08/01/2018	08/01/2018	8/2/2018	8/2/2018
PCBs																		
PCB, Total	1336-36-3	100	500		0.664	7.34	14.2	0.356	11,600	2,280	2.65	1.99	213	0.788	0.344	1.87	6.65	0.0725

ANALYTE	Chemical Abstract Service Number	PRINCIPAL THREAT WASTE THRESHOLD (mg/kg)		SAMPLE INFORMATION	CHEMICAL ANALYSES RESULTS (mg/kg)												
		RESIDENTIAL	INDUSTRIAL	SAMPLE LOCATION	S141W1N	S141W1N	S141W2N	S141W2N	S141W2N	S141W2N	S14S152N	S14S152N	S14S152N	S14S152N	S81E	S81E	S81E	S82E
				SAMPLE DEPTH (FEET BGS)	2 - 4	4 - 6	0 - 0.5	0.5 - 2	2 - 4	4 - 6	0 - 0.5	0.5 - 2	2 - 4	4 - 6	0.66 - 2	2 - 4	4 - 6	0.66 - 2
				SAMPLE DATE	8/2/2018	8/2/2018	8/2/2018	8/2/2018	8/2/2018	8/2/2018	8/2/2018	8/2/2018	8/2/2018	8/2/2018	07/31/2018	07/31/2018	07/31/2018	07/31/2018
PCBs																		
PCB, Total	1336-36-3	100	500		<0.0282	0.123	9.68	5.20	0.277	0.081	6.18	11,600	112	5.57	1.70	1.40	<0.0283	486

PCBs - Polychlorinated Biphenyls.
Results above RL are shown in **bold**. Results exceeding one or more criteria are shaded, as are the criteria which were exceeded.
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TABLE 1
SUMMARY OF PCB ANALYSIS RESULTS - SOIL
TECUMSEH SITE
SHEBOYGAN FALLS, WI
069638.00.051

ANALYTE	Chemical Abstract Service Number	PRINCIPAL THREAT WASTE THRESHOLD (mg/kg)		SAMPLE INFORMATION	CHEMICAL ANALYSES RESULTS (mg/kg)													
		RESIDENTIAL	INDUSTRIAL	SAMPLE LOCATION	S82E	S82E	S82E	S83E	S83E	S83E	S83ES	S83ES	DUP SOIL #1	S83ES	S83ES	S83ES	S84E	S84E
				SAMPLE DEPTH (FEET BGS)	2 - 4	4 - 6	6 - 7	0.66 - 2	2 - 4	4 - 6	0 - 0.5	0.5 - 2	S83ES (0.5-2)	2 - 4	4 - 6	6 - 7.5	0 - 0.5	0.5 - 2
				SAMPLE DATE	07/31/2018	07/31/2018	07/31/2018	07/31/2018	07/31/2018	07/31/2018	07/31/2018	07/31/2018	07/31/2018	07/31/2018	07/31/2018	07/31/2018	08/01/2018	08/01/2018
PCBs																		
PCB, Total	1336-36-3	100	500		**13.2**	**4.40**	**0.484**	**32.2**	**0.0367**	**3.99**	**0.869**	**0.0342**	**0.0661**	**8.83**	**3.75**	**4.79**	**2.48**	**8.66**

ANALYTE	Chemical Abstract Service Number	PRINCIPAL THREAT WASTE THRESHOLD (mg/kg)		SAMPLE INFORMATION	CHEMICAL ANALYSES RESULTS (mg/kg)													
		RESIDENTIAL	INDUSTRIAL	SAMPLE LOCATION	S84E	S84E	S84E	S85E	S85E	S85E	S85E	S92S5E	S92S5E	S92S5E	S92S5E	S93S1E	S93S1E	S93S1E
				SAMPLE DEPTH (FEET BGS)	2 - 4	4 - 6	6 - 7.5	0 - 0.5	0.5 - 2	2 - 4	4 - 6	0.66 - 2	2 - 4	4 - 6	6 - 7	0.66 - 2	2 - 4	4 - 6
				SAMPLE DATE	08/01/2018	08/01/2018	08/01/2018	08/01/2018	08/01/2018	08/01/2018	08/01/2018	08/01/2018	08/01/2018	08/01/2018	08/01/2018	07/31/2018	07/31/2018	07/31/2018
PCBs																		
PCB, Total	1336-36-3	100	500		**7.04**	**0.856**	**0.509**	**1.30**	**0.553**	**0.620**	**28.2**	**72.3**	**0.454**	**27.2**	**14.5**	**437**	**113**	**1.99**

ANALYTE	Chemical Abstract Service Number	PRINCIPAL THREAT WASTE THRESHOLD (mg/kg)		SAMPLE INFORMATION	CHEMICAL ANALYSES RESULTS (mg/kg)													
		RESIDENTIAL	INDUSTRIAL	SAMPLE LOCATION	S93S2E	S93S2E	S93S2E	SBP1	SBP1	SBP1	SBP2	SBP2	SBP2	SBP3	SBP3	SBP3	SBP3	SBP3
				SAMPLE DEPTH (FEET BGS)	0.5 - 2	2 - 4	4 - 6	1 - 2	2 - 4	4 - 6	1 - 2	2 - 4	4 - 6	0 - 0.5	0.5 - 2	2 - 4	4 - 6	6 - 7.5
				SAMPLE DATE	07/31/2018	07/31/2018	07/31/2018	8/1/2018	8/1/2018	8/1/2018	8/1/2018	8/1/2018	8/1/2018	8/1/2018	8/1/2018	8/1/2018	8/1/2018	8/1/2018
PCBs																		
PCB, Total	1336-36-3	100	500		**697**	**90.8**	**511**	**0.828**	**1.86**	**33.5**	**3.88**	**0.183**	**1.50**	**0.613**	**0.034**	**16.9**	**18.1**	**4.56**

ANALYTE	Chemical Abstract Service Number	PRINCIPAL THREAT WASTE THRESHOLD (mg/kg)		SAMPLE INFORMATION	CHEMICAL ANALYSES RESULTS (mg/kg)													
		RESIDENTIAL	INDUSTRIAL	SAMPLE LOCATION	SBP4	SBP4	SBP4	SBP4	SBP5	SBP5	SBP5	SBP5	SBP6	SBP6	SBP6	DUP-SOIL #4	SBP6	SBP6
				SAMPLE DEPTH (FEET BGS)	0 - 0.5	0.5 - 2	2 - 4	4 - 6	0 - 0.5	0.5 - 2	2 - 4	4 - 6	0 - 0.5	0.5 - 2	2 - 4	SBP6 (2-4)	4 - 6	6 - 7
				SAMPLE DATE	8/1/2018	8/1/2018	8/1/2018	8/1/2018	8/1/2018	8/1/2018	8/1/2018	8/1/2018	08/01/2018	08/01/2018	08/01/2018	08/01/2018	08/01/2018	08/01/2018
PCBs																		
PCB, Total	1336-36-3	100	500		**0.336**	**10.2**	**0.332**	**2.26**	**0.131**	**0.418**	**0.733**	**0.855**	**28**	**161**	**14.8**	**10.2**	**0.281**	**0.394**

PCBs - Polychlorinated Biphenyls.
Results above RL are shown in **bold**. Results exceeding one or more criteria are shaded, as are the criteria which were exceeded.
Refer to the analytical report for the full list of PCB analytes.

TABLE 1
SUMMARY OF PCB ANALYSIS RESULTS - SOIL
TECUMSEH SITE
SHEBOYGAN FALLS, WI
069638.00.051

ANALYTE	Chemical Abstract Service Number	PRINCIPAL THREAT WASTE THRESHOLD (mg/kg)		SAMPLE INFORMATION	CHEMICAL ANALYSES RESULTS (mg/kg)													
		RESIDENTIAL	INDUSTRIAL	SAMPLE LOCATION	SBP7	SBP7	SBP7	SBP7	SBP8	SBP8	DUP-SOIL #5	SBP8	SBP8	SBP9	SBP9	SBP9	SBP10	SBP10
				SAMPLE DEPTH (FEET BGS)	0 - 0.5	0.5 - 2	2 - 4	4 - 6	0 - 0.5	0.5 - 2	SBP8 (0.5-2)	2 - 4	4 - 6	0 - 0.5	0.5 - 2	2 - 4	0.75 - 2	2 - 4
				SAMPLE DATE	08/01/2018	08/01/2018	08/01/2018	08/01/2018	08/01/2018	08/01/2018	08/01/2018	08/01/2018	08/01/2018	08/01/2018	08/01/2018	08/01/2018	08/01/2018	08/01/2018
PCBs																		
PCB, Total	1336-36-3	100	500		**1.77**	**11.8**	**0.244**	**0.379**	**2.16**	**70.6**	**60.1**	**4.97**	**14.6**	**26.8**	**11.8**	**1.55**	**0.139**	**14.8**

ANALYTE	Chemical Abstract Service Number	PRINCIPAL THREAT WASTE THRESHOLD (mg/kg)		SAMPLE INFORMATION	CHEMICAL ANALYSES RESULTS (mg/kg)	
		RESIDENTIAL	INDUSTRIAL	SAMPLE LOCATION	SBP10	SBP10
				SAMPLE DEPTH (FEET BGS)	4 - 6	6 - 7
				SAMPLE DATE	08/01/2018	6/7/2018
PCBs						
PCB, Total	1336-36-3	100	500		**49.2**	**0.39**

PCBs - Polychlorinated Biphenyls.
Results above RL are shown in **bold**. Results exceeding one or more criteria are shaded, as are the criteria which were exceeded.
Refer to the analytical report for the full list of PCB analytes.

TABLE 2
SUMMARY OF PAH ANALYSIS RESULTS - SOIL (2016/2018)
TECUMSEH SITE
SHEBOYGAN FALLS, WI
069638.00.051

ANALYTE	Chemical Abstract Service Number	SAMPLE INFORMATION	CHEMICAL ANALYSES RESULTS (mg/kg)													
		SAMPLE LOCATION	S1	S2	S3	S4	S5	S6	S6	S6	S6-1E	S7	S7-1N	S7-1W	S7-1W	S7-1W
		SAMPLE DEPTH (FEET BGS)	0 - 0.5'	0 - 0.5'	0 - 0.5'	0 - 0.5'	0 - 0.5'	0 - 0.5'	0.5' - 1.5'	1.5' - 3.5'	0 - 0.5'	0 - 0.5'	0 - 0.5'	0 - 0.5'	0.5' - 1.5'	1.5' - 3.5'
		SAMPLE DATE	9/28/2016	9/28/2016	9/28/2016	9/28/2016	9/28/2016	9/28/2016	9/28/2016	9/28/2016	11/10/2016	9/28/2016	11/10/2016	11/10/2016	11/10/2016	11/10/2016
PAHs																
1-Methylnaphthalene	90-12-0		<0.0049	**0.0085**	<0.0048	<0.0043	<0.0044	<0.393	<0.0047	<0.0046	NA	<0.0880	NA	NA	NA	NA
2-Methylnaphthalene	91-57-6		<0.0061	**0.0126**	<0.0060	<0.0054	<0.0055	<0.489	<0.0058	<0.0057	NA	<0.109	NA	NA	NA	NA
Acenaphthene	83-32-9		<0.0048	<0.0045	<0.0046	<0.0042	**0.0061**	**0.561**	<0.0045	<0.0044	<0.0910	**0.113**	<0.0041	**0.225**	<0.0043	<0.0044
Acenaphthylene	208-96-8		<0.0040	<0.0038	<0.0039	<0.0036	**0.0062**	<0.322	<0.0038	<0.0037	<0.0773	<0.0721	<0.0035	<0.0726	<0.0037	<0.0037
Anthracene	120-12-7		<0.0070	**0.0079**	**0.0166**	<0.0062	**0.0306**	**2.64**	**0.0154**	<0.0065	**0.188**	**0.375**	<0.0060	**0.734**	<0.0063	<0.0064
Benzo(a)anthracene	56-55-3		**0.0265**	**0.0617**	**0.147**	<0.0034	**0.241**	**8.81**	**0.0854**	**0.0086**	**1.43**	**1.73**	<0.0033	**4.41**	**0.0136**	<0.0036
Benzo(a)pyrene	50-32-8		**0.0454**	**0.0924**	**0.237**	<0.0027	**0.452**	**10.4**	**0.123**	**0.009**	**1.81**	**2.22**	<0.0026	**5.59**	**0.0195**	<0.0028
Benzo(b)fluoranthene	205-99-2		**0.0627**	**0.135**	**0.361**	<0.0031	**0.795**	**17.9**	**0.177**	**0.0133**	**2.84**	**3.18**	<0.0030	**10.1**	**0.0612**	**0.0033**
Benzo(g,h,i)perylene	191-24-2		**0.0372**	**0.0752**	**0.149**	<0.0022	**0.414**	**3.09**	**0.103**	**0.0141**	**1.85**	**1.71**	<0.0021	**2.58**	**0.0348**	<0.0023
Benzo(k)fluoranthene	207-08-9		**0.0294**	**0.0607**	**0.146**	<0.0027	**0.273**	**8.13**	**0.0708**	**0.0063**	**1.15**	**1.48**	<0.0026	**2.92**	**0.0241**	<0.0028
Chrysene	218-01-9		**0.0485**	**0.107**	**0.193**	<0.0036	**0.483**	**12.5**	**0.135**	**0.0146**	**1.97**	**2.93**	<0.0035	**5.31**	**0.0402**	<0.0038
Dibenz(a,h)anthracene	53-70-3		**0.0063**	**0.0145**	**0.035**	<0.0024	**0.081**	**0.748**	**0.0225**	<0.0025	**0.28**	**0.375**	<0.0023	**0.75**	**0.0069**	<0.0025
Fluoranthene	206-44-0		**0.0817**	**0.176**	**0.331**	<0.0056	**0.793**	**26.9**	**0.228**	**0.0148**	**3.97**	**6.32**	<0.0055	**13.3**	**0.0703**	<0.0059
Fluorene	86-73-7		<0.0051	<0.0047	<0.0050	<0.0045	**0.0083**	**0.74**	<0.0048	<0.0047	<0.0970	**0.149**	<0.0043	**0.277**	<0.0046	<0.0047
Indeno(1,2,3-cd)pyrene	193-39-5		**0.0308**	**0.0601**	**0.139**	<0.0024	**0.359**	**3.11**	**0.083**	**0.0061**	**1.51**	**1.4**	<0.0023	**2.43**	**0.0263**	<0.0025
Naphthalene	91-20-3		<0.0103	**0.0108**	<0.0101	<0.0091	<0.0093	<0.824	<0.0098	<0.0096	<0.197	<0.184	<0.0088	<0.186	<0.0093	<0.0095
Phenanthrene	85-01-8		**0.0277**	**0.0715**	**0.102**	<0.0126	**0.247**	**14.3**	**0.0798**	<0.0132	**1.46**	**3.21**	<0.0122	**5.94**	**0.0155**	<0.0131
Pyrene	129-00-0		**0.0622**	**0.137**	**0.273**	<0.0049	**0.6**	**25**	**0.175**	**0.0131**	**2.74**	**4.77**	<0.0047	**9.11**	**0.0332**	<0.0051

Only analytes measured at concentrations above their respective Laboratory Reporting Limit in at least one sample are listed.
Results above RL are shown in **bold**. Results exceeding one or more criteria are shaded, as are the criteria which were exceeded.
PAHs - Polynuclear Aromatic Hydrocarbons

TABLE 2
SUMMARY OF PAH ANALYSIS RESULTS - SOIL (2016/2018)
TECUMSEH SITE
SHEBOYGAN FALLS, WI
069638.00.051

ANALYTE	Chemical Abstract Service Number	SAMPLE INFORMATION	CHEMICAL ANALYSES RESULTS (mg/kg)													
		SAMPLE LOCATION	S7-1SE	S7-1SE	S8	S9	S10	S11	S12	S13	S14	S16	S17	S18	S19	S20
		SAMPLE DEPTH (FEET BGS)	0 - 0.5'	1.5' - 3.5'	0 - 0.5'	0 - 0.5'	0 - 0.5'	0 - 0.5'	0 - 0.5'	0 - 0.5'	0 - 0.5'	0 - 0.5'	0 - 0.5'	0 - 0.5'	0 - 0.5'	0 - 0.5'
		SAMPLE DATE	11/10/2016	11/10/2016	9/28/2016	9/28/2016	9/28/2016	9/28/2016	9/28/2016	9/28/2016	9/28/2016	9/28/2016	9/28/2016	9/28/2016	9/28/2016	9/28/2016
PAHs																
1-Methylnaphthalene	90-12-0		NA	NA	<0.0043	<0.0444	<0.0360	<0.0044	<0.0043	<0.0046	<0.0102	<0.0044	<0.0043	<0.0042	<0.0041	<0.0042
2-Methylnaphthalene	91-57-6		NA	NA	<0.0053	<0.0553	<0.0447	<0.0055	<0.0054	<0.0057	<0.0126	<0.0055	<0.0054	<0.0053	**0.0055**	<0.0052
Acenaphthene	83-32-9		**0.165**	<0.0043	<0.0041	<0.0429	**0.042**	<0.0043	<0.0042	<0.0044	**0.0113**	<0.0043	<0.0042	<0.0041	<0.0040	<0.0041
Acenaphthylene	208-96-8		<0.0737	<0.0037	<0.0035	<0.0364	<0.0295	<0.0036	<0.0035	<0.0038	<0.0083	<0.0036	<0.0036	<0.0035	<0.0034	<0.0035
Anthracene	120-12-7		**0.743**	**0.0068**	<0.0061	<0.0631	**0.179**	<0.0063	<0.0061	<0.0065	**0.052**	<0.0063	<0.0062	<0.0060	<0.0059	<0.0060
Benzo(a)anthracene	56-55-3		**3.02**	**0.0314**	<0.0034	<0.0350	**0.783**	<0.0035	<0.0034	<0.0036	**0.271**	**0.0038**	<0.0034	<0.0033	**0.0057**	<0.0033
Benzo(a)pyrene	50-32-8		**3.51**	**0.039**	<0.0027	<0.0277	**0.965**	<0.0028	<0.0027	<0.0029	**0.377**	<0.0028	<0.0027	**0.0033**	**0.0038**	<0.0026
Benzo(b)fluoranthene	205-99-2		**5.78**	**0.0843**	<0.0030	<0.0312	**1.39**	<0.0031	<0.0030	<0.0032	**0.702**	<0.0031	<0.0030	**0.0031**	**0.0068**	<0.0030
Benzo(g,h,i)perylene	191-24-2		**1.73**	**0.0442**	<0.0022	<0.0224	**0.725**	<0.0022	<0.0022	<0.0023	**0.115**	**0.003**	<0.0022	**0.0024**	**0.0041**	<0.0021
Benzo(k)fluoranthene	207-08-9		**1.91**	**0.0374**	<0.0027	<0.0277	**0.563**	<0.0027	<0.0027	<0.0029	**0.285**	<0.0028	<0.0027	**0.0029**	<0.0026	<0.0026
Chrysene	218-01-9		**3.18**	**0.0713**	<0.0036	<0.0372	**1.15**	<0.0037	<0.0036	<0.0039	**0.407**	<0.0037	<0.0036	**0.0038**	**0.01**	<0.0035
Dibenz(a,h)anthracene	53-70-3		**0.456**	**0.0101**	<0.0024	<0.0247	**0.147**	<0.0025	<0.0024	<0.0026	**0.0286**	<0.0025	<0.0024	<0.0023	<0.0023	<0.0023
Fluoranthene	206-44-0		**7.87**	**0.118**	<0.0055	<0.0575	**2.27**	<0.0057	<0.0056	<0.0060	**0.746**	<0.0057	<0.0056	**0.0072**	**0.0222**	<0.0055
Fluorene	86-73-7		**0.196**	<0.0046	<0.0044	<0.0457	**0.047**	<0.0045	<0.0044	<0.0047	**0.0131**	<0.0045	<0.0045	<0.0043	<0.0043	<0.0043
Indeno(1,2,3-cd)pyrene	193-39-5		**1.51**	**0.0385**	<0.0023	<0.0243	**0.614**	<0.0024	<0.0024	<0.0025	**0.115**	<0.0024	<0.0024	<0.0023	<0.0023	<0.0023
Naphthalene	91-20-3		<0.188	<0.0094	<0.0089	<0.0930	<0.0753	<0.0092	<0.0090	<0.0097	<0.0213	<0.0092	<0.0091	<0.0088	<0.0087	<0.0088
Phenanthrene	85-01-8		**3.65**	**0.0496**	<0.0124	<0.129	**0.953**	<0.0128	<0.0125	<0.0134	**0.308**	<0.0128	<0.0126	<0.0122	**0.0259**	<0.0122
Pyrene	129-00-0		**5.8**	**0.0835**	<0.0048	<0.0498	**1.75**	<0.0049	<0.0048	<0.0052	**0.699**	<0.0049	<0.0049	**0.0059**	**0.0135**	<0.0047

Only analytes measured at concentrations above their respective Laboratory Reporting Limit in at least one sample are listed.
Results above RL are shown in **bold**. Results exceeding one or more criteria are shaded, as are the criteria which were exceeded.
PAHs - Polynuclear Aromatic Hydrocarbons

TABLE 2
SUMMARY OF PAH ANALYSIS RESULTS - SOIL (2016/2018)
TECUMSEH SITE
SHEBOYGAN FALLS, WI
069638.00.051

ANALYTE	Chemical Abstract Service Number	SAMPLE INFORMATION	CHEMICAL ANALYSES RESULTS (mg/kg)													
		SAMPLE LOCATION	S21	S22	GT1	GT2	GT2	GT2	GT2-1N	GT2-1NE	GT2-1E	GT2-1E	GT2-1E	GT2-1S	GT2-1S	GT2-1S
		SAMPLE DEPTH (FEET BGS)	0 - 0.5'	0 - 0.5'	0 - 0.5'	0 - 0.5'	0.5' - 1.5'	1.5' - 3.5'	0 - 0.5'	0 - 0.5'	0 - 0.5'	0.5' - 1.5'	1.5' - 3.5'	0 - 0.5'	0.5' - 1.5'	1.5' - 3.5'
		SAMPLE DATE	9/28/2016	9/28/2016	9/28/2016	9/28/2016	9/28/2016	9/28/2016	11/10/2016	11/10/2016	11/10/2016	11/10/2016	11/10/2016	11/10/2016	11/10/2016	11/10/2016
PAHs																
1-Methylnaphthalene	90-12-0		<0.0043	<0.0042	<0.0086	<0.478	<0.0192	<0.0048	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene	91-57-6		<0.0053	<0.0052	<0.0107	<0.594	<0.0238	<0.0059	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthene	83-32-9		<0.0041	<0.0040	**0.0361**	**0.896**	<0.0185	<0.0046	**0.0795**	**0.0161**	**0.991**	**0.0084**	<0.0046	**2.27**	**0.6**	**0.56**
Acenaphthylene	208-96-8		<0.0035	<0.0034	<0.0070	<0.391	<0.0157	<0.0039	<0.0138	<0.0035	<0.382	<0.0039	<0.0039	<0.868	<0.379	<0.417
Anthracene	120-12-7		<0.0061	<0.0060	**0.0696**	**3.25**	**0.0551**	<0.0068	**0.149**	**0.0302**	**2.86**	**0.0301**	<0.0068	**8.01**	**2.86**	<0.723
Benzo(a)anthracene	56-55-3		<0.0034	<0.0033	**0.236**	**21.8**	**0.511**	<0.0038	**0.0688**	**0.0155**	**13.5**	**0.164**	**0.0094**	**65.1**	**20.7**	**14**
Benzo(a)pyrene	50-32-8		<0.0027	<0.0026	**0.264**	**30.2**	**0.761**	<0.0030	**0.0443**	**0.0217**	**15.4**	**0.192**	**0.0083**	**82.6**	**29.7**	**17.6**
Benzo(b)fluoranthene	205-99-2		<0.0030	**0.0029**	**0.42**	**47.4**	**1.06**	<0.0033	**0.0865**	**0.0411**	**27.9**	**0.328**	**0.0203**	**160**	**51.7**	**29.2**
Benzo(g,h,i)perylene	191-24-2		<0.0022	**0.0029**	**0.16**	**16.4**	**0.432**	**0.0027**	**0.033**	**0.02**	**8.96**	**0.176**	**0.0112**	**47.6**	**27.6**	**14.6**
Benzo(k)fluoranthene	207-08-9		<0.0027	<0.0026	**0.175**	**18.5**	**0.454**	<0.0030	**0.0224**	**0.0086**	**9.17**	**0.124**	**0.0102**	**49.5**	**17.6**	**11.7**
Chrysene	218-01-9		<0.0036	<0.0035	**0.35**	**31.7**	**0.75**	<0.0040	**0.205**	**0.0735**	**17**	**0.245**	**0.0171**	**80.9**	**34.5**	**22**
Dibenz(a,h)anthracene	53-70-3		<0.0024	<0.0023	**0.0464**	**4.92**	**0.122**	<0.0026	**0.0097**	**0.0066**	**2.53**	**0.0433**	**0.0027**	**14.8**	**5.64**	**3.82**
Fluoranthene	206-44-0		<0.0056	<0.0054	**0.701**	**61.2**	**1.02**	<0.0062	**0.284**	**0.0482**	**44.8**	**0.462**	**0.0228**	**186**	**66**	**44.4**
Fluorene	86-73-7		<0.0044	<0.0043	**0.0235**	**1.22**	<0.0197	<0.0049	**0.0943**	**0.0221**	**1.38**	**0.0116**	<0.0049	**2.91**	**0.81**	**0.76**
Indeno(1,2,3-cd)pyrene	193-39-5		<0.0023	<0.0023	**0.149**	**16.3**	**0.417**	<0.0026	<0.0092	**0.0035**	**8.02**	**0.153**	**0.0094**	**47.7**	**22.2**	**12.7**
Naphthalene	91-20-3		<0.0090	<0.0088	<0.0179	<1.00	<0.0401	<0.0100	**0.0786**	**0.0197**	<0.977	<0.0100	<0.0100	<2.22	<0.969	<1.07
Phenanthrene	85-01-8		<0.0124	<0.0121	**0.406**	**25.2**	**0.21**	<0.0138	**0.784**	**0.15**	**24.8**	**0.222**	<0.0138	**72.8**	**22.9**	**18.6**
Pyrene	129-00-0		<0.0048	<0.0047	**0.585**	**46.6**	**0.813**	<0.0053	**0.156**	**0.0334**	**31.4**	**0.317**	**0.0166**	**123**	**43.5**	**31.1**

Only analytes measured at concentrations above their respective Laboratory Reporting Limit in at least one sample are listed.
Results above RL are shown in **bold**. Results exceeding one or more criteria are shaded, as are the criteria which were exceeded.
PAHs - Polynuclear Aromatic Hydrocarbons

TABLE 2
SUMMARY OF PAH ANALYSIS RESULTS - SOIL (2016/2018)
TECUMSEH SITE
SHEBOYGAN FALLS, WI
069638.00.051

ANALYTE	Chemical Abstract Service Number	SAMPLE INFORMATION	CHEMICAL ANALYSES RESULTS (mg/kg)													
		SAMPLE LOCATION	GT21SA	GT21SA	GT21SA	GT2-1SW	GT2-1W	GT3	GT3	GT3	GT3-1E	GT3-1E	GT3-1E	GT3-1W	GT4	GT4
		SAMPLE DEPTH (FEET BGS)	4 - 6	6 - 8	8 - 10	0 - 0.5'	0 - 0.5'	0 - 0.5'	0.5' - 1.5'	1.5' - 3.5'	0 - 0.5'	0.5' - 1.5'	1.5' - 3.5'	0 - 0.5'	0 - 0.5'	0.5' - 1.5'
		SAMPLE DATE	5/7/2018	5/7/2018	5/7/2018	11/10/2016	11/10/2016	9/28/2016	9/28/2016	9/28/2016	11/10/2016	11/10/2016	11/10/2016	11/10/2016	9/28/2016	9/28/2016
PAHs																
1-Methylnaphthalene	90-12-0		<0.0053	<0.0053	**0.0057**	NA	NA	<0.431	<0.0058	<0.0050	NA	NA	NA	NA	<0.387	<0.0047
2-Methylnaphthalene	91-57-6		<0.0066	<0.0066	<0.0061	NA	NA	<0.536	<0.0073	<0.0062	NA	NA	NA	NA	<0.482	<0.0059
Acenaphthene	83-32-9		<0.0051	<0.0051	<0.0047	<0.0042	<0.0041	<0.416	<0.0056	<0.0048	<0.0046	<0.0045	<0.0046	**0.025**	<0.374	<0.0046
Acenaphthylene	208-96-8		<0.0043	<0.0043	<0.0040	<0.0036	<0.0035	<0.353	<0.0048	**0.0119**	<0.0039	<0.0038	<0.0039	<0.0137	<0.317	**0.0042**
Anthracene	120-12-7		<0.0075	<0.0075	<0.0070	<0.0062	<0.0060	**1.57**	<0.0083	**0.0091**	<0.0068	<0.0066	<0.0068	**0.0432**	**1.2**	**0.0078**
Benzo(a)anthracene	56-55-3		**0.0492**	<0.0042	<0.0039	**0.011**	**0.025**	**11.7**	**0.0215**	**0.0242**	**0.0152**	**0.0269**	**0.0152**	**0.0945**	**8.98**	**0.044**
Benzo(a)pyrene	50-32-8		**0.0708**	<0.0033	<0.0031	**0.0177**	**0.0365**	**14.6**	**0.0271**	**0.0326**	**0.0138**	**0.0297**	**0.0138**	**0.1**	**11.2**	**0.0664**
Benzo(b)fluoranthene	205-99-2		**0.119**	<0.0037	<0.0034	**0.032**	**0.0632**	**18.9**	**0.0385**	**0.0494**	**0.0364**	**0.0801**	**0.0364**	**0.18**	**13.9**	**0.101**
Benzo(g,h,i)perylene	191-24-2		**0.0653**	<0.0027	**0.0032**	**0.0359**	**0.028**	**11**	**0.0188**	**0.0231**	**0.0207**	**0.0419**	**0.0207**	**0.0494**	**8.22**	**0.0448**
Benzo(k)fluoranthene	207-08-9		**0.0427**	<0.0033	<0.0031	**0.0142**	**0.0246**	**14.3**	**0.0197**	**0.0257**	**0.0146**	**0.0267**	**0.0146**	**0.0583**	**10.8**	**0.0437**
Chrysene	218-01-9		**0.0798**	<0.0044	<0.0041	**0.019**	**0.0366**	**17.4**	**0.0328**	**0.0411**	**0.0316**	**0.0566**	**0.0316**	**0.128**	**13.4**	**0.0819**
Dibenz(a,h)anthracene	53-70-3		**0.0139**	<0.0029	<0.0027	**0.0039**	**0.0049**	**3.84**	**0.0046**	**0.0057**	**0.0039**	**0.0089**	**0.0039**	**0.0138**	**2.89**	**0.0108**
Fluoranthene	206-44-0		**0.135**	<0.0068	<0.0064	**0.0188**	**0.0414**	**32.8**	**0.0473**	**0.0659**	**0.0382**	**0.0814**	**0.0382**	**0.276**	**26.1**	**0.103**
Fluorene	86-73-7		<0.0054	<0.0054	<0.0050	<0.0045	<0.0044	**0.507**	<0.0060	<0.0051	<0.0049	<0.0048	<0.0049	<0.0172	**0.495**	<0.0049
Indeno(1,2,3-cd)pyrene	193-39-5		**0.052**	<0.0029	<0.0027	**0.0247**	**0.0209**	**10.4**	**0.015**	**0.0196**	**0.0152**	**0.0337**	**0.0152**	**0.0412**	**7.73**	**0.0376**
Naphthalene	91-20-3		<0.0110	<0.1110	<0.0103	<0.0092	<0.0089	<0.902	<0.0122	<0.0104	<0.0100	<0.0098	<0.0100	<0.0350	<0.811	<0.0099
Phenanthrene	85-01-8		**0.0412**	<0.0153	<0.0142	<0.0127	**0.0159**	**13.5**	<0.0169	**0.0279**	**0.0192**	**0.0311**	**0.0192**	**0.228**	**11.8**	**0.0386**
Pyrene	129-00-0		**0.0943**	<0.0059	<0.0055	**0.0131**	**0.0404**	**22.6**	**0.0379**	**0.0456**	**0.0289**	**0.0585**	**0.0289**	**0.203**	**17.8**	**0.0865**

Only analytes measured at concentrations above their respective Laboratory Reporting Limit in at least one sample are listed.
Results above RL are shown in **bold**. Results exceeding one or more criteria are shaded, as are the criteria which were exceeded.
PAHs - Polynuclear Aromatic Hydrocarbons

TABLE 2
SUMMARY OF PAH ANALYSIS RESULTS - SOIL (2016/2018)
TECUMSEH SITE
SHEBOYGAN FALLS, WI
069638.00.051

ANALYTE	Chemical Abstract Service Number	SAMPLE INFORMATION	CHEMICAL ANALYSES RESULTS (mg/kg)													
		SAMPLE LOCATION	GT4	GT4-1E	GT4-1S	GT4-1S	GT4-1S	GT4-1W	GT5	GT5	GT5	GT5-1N	GT5-1E	GT5-1S	GT5-1W	SMF1
		SAMPLE DEPTH (FEET BGS)	1.5' - 3.5'	0 - 0.5'	0 - 0.5'	0.5' - 1.5'	1.5' - 3.5'	0 - 0.5'	0 - 0.5'	0.5' - 1.5'	1.5' - 3.5'	0 - 0.5'	0 - 0.5'	0 - 0.5'	0 - 0.5'	0 - 0.5'
		SAMPLE DATE	9/28/2016	11/10/2016	11/10/2016	11/10/2016	11/10/2016	11/10/2016	9/28/2016	9/28/2016	9/28/2016	11/10/2016	11/10/2016	11/10/2016	11/10/2016	9/28/2016
PAHs																
1-Methylnaphthalene	90-12-0		<0.0390	NA	NA	NA	NA	NA	<0.0918	<0.0093	<0.0049	NA	NA	NA	NA	<0.0047
2-Methylnaphthalene	91-57-6		<0.0485	NA	NA	NA	NA	NA	<0.114	<0.0116	<0.0061	NA	NA	NA	NA	<0.0059
Acenaphthene	83-32-9		<0.0376	<0.0231	**0.724**	<0.0046	<0.0046	**0.0115**	**0.142**	<0.0090	<0.0047	<0.0897	<0.0177	**0.0126**	<0.0044	**0.0049**
Acenaphthylene	208-96-8		<0.0320	<0.0196	<0.307	<0.0039	<0.0039	<0.0035	**0.0895**	<0.0076	<0.0040	<0.0762	<0.0150	<0.0035	<0.0037	<0.0039
Anthracene	120-12-7		**0.0918**	**0.101**	**2.57**	**0.0087**	<0.0068	**0.016**	**0.652**	**0.0466**	**0.009**	**0.22**	**0.0563**	**0.0207**	<0.0064	**0.0093**
Benzo(a)anthracene	56-55-3		**0.63**	**0.746**	**18.4**	**0.0466**	**0.012**	**0.0531**	**5.41**	**0.35**	**0.0272**	**1.27**	**0.388**	**0.0264**	**0.0188**	**0.0137**
Benzo(a)pyrene	50-32-8		**0.948**	**1.06**	**23.3**	**0.0623**	**0.0167**	**0.0826**	**8.5**	**0.584**	**0.0322**	**1.96**	**0.594**	**0.0252**	**0.0209**	**0.0105**
Benzo(b)fluoranthene	205-99-2		**1.43**	**1.87**	**45.3**	**0.102**	**0.0314**	**0.14**	**9.48**	**0.849**	**0.0427**	**4.28**	**1.11**	**0.043**	**0.0426**	**0.0155**
Benzo(g,h,i)perylene	191-24-2		**0.654**	**0.512**	**11.4**	**0.0361**	**0.0141**	**0.036**	**7.52**	**0.519**	**0.0226**	**1.32**	**0.326**	**0.0132**	**0.0126**	**0.0091**
Benzo(k)fluoranthene	207-08-9		**0.585**	**0.621**	**14.7**	**0.0481**	**0.0135**	**0.0446**	**8.26**	**0.377**	**0.0177**	**1.54**	**0.38**	**0.0146**	**0.0172**	**0.0055**
Chrysene	218-01-9		**1.02**	**0.964**	**22.6**	**0.0846**	**0.0252**	**0.0855**	**8.58**	**0.608**	**0.0413**	**2.15**	**0.517**	**0.0402**	**0.0262**	**0.0189**
Dibenz(a,h)anthracene	53-70-3		**0.161**	**0.151**	**3.49**	**0.01**	**0.0031**	**0.0108**	**2.84**	**0.12**	**0.0055**	**0.315**	**0.0919**	**0.0036**	**0.0035**	<0.0026
Fluoranthene	206-44-0		**1.76**	**1.78**	**51.9**	**0.14**	**0.0316**	**0.104**	**13.3**	**0.96**	**0.0524**	**3.8**	**1.0**	**0.0699**	**0.0463**	**0.05**
Fluorene	86-73-7		<0.0401	<0.0246	**0.906**	<0.0049	<0.0049	**0.0083**	**0.205**	**0.0107**	<0.0051	<0.0957	<0.0189	**0.0075**	<0.0047	**0.0052**
Indeno(1,2,3-cd)pyrene	193-39-5		**0.604**	**0.501**	**10.8**	**0.0299**	**0.0099**	**0.0297**	**6.65**	**0.446**	**0.0178**	**1.16**	**0.301**	**0.0084**	**0.0102**	**0.0061**
Naphthalene	91-20-3		<0.0817	<0.0501	<0.784	<0.0100	<0.0100	**0.0097**	<0.192	<0.0195	<0.0103	<0.195	<0.0384	<0.0089	<0.0095	<0.0099
Phenanthrene	85-01-8		**0.629**	**0.55**	**21.7**	**0.0595**	**0.0141**	**0.0992**	**4.78**	**0.285**	**0.027**	**1.36**	**0.37**	**0.109**	<0.0131	**0.0689**
Pyrene	129-00-0		**1.32**	**1.32**	**35.9**	**0.0906**	**0.0226**	**0.0819**	**10**	**0.699**	**0.0496**	**2.85**	**0.721**	**0.0511**	**0.0375**	**0.0341**

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PAHs - Polynuclear Aromatic Hydrocarbons

TABLE 2
SUMMARY OF PAH ANALYSIS RESULTS - SOIL (2016/2018)
TECUMSEH SITE
SHEBOYGAN FALLS, WI
069638.00.051

ANALYTE	Chemical Abstract Service Number	SAMPLE INFORMATION	CHEMICAL ANALYSES RESULTS (mg/kg)													
		SAMPLE LOCATION	SMF2	SMF3	SMF4	SMF5	SMF6	SMF7	CTF1	CTF2	CTF3	CTF4	CTF5	CTF6	CTF7	CTF8
		SAMPLE DEPTH (FEET BGS)	0 - 0.5'	0 - 0.5'	0 - 0.5'	0 - 0.5'	0 - 0.5'	0 - 0.5'	0 - 0.5'	0 - 0.5'	0 - 0.5'	0 - 0.5'	0 - 0.5'	0 - 0.5'	0 - 0.5'	0 - 0.5'
		SAMPLE DATE	9/28/2016	9/28/2016	9/28/2016	9/28/2016	9/28/2016	9/28/2016	9/28/2016	9/29/2016	9/29/2016	9/28/2016	9/29/2016	9/29/2016	9/29/2016	9/29/2016
PAHs																
1-Methylnaphthalene	90-12-0		<0.0044	<0.0047	<0.0053	<0.0053	<0.0050	<0.0050	<0.0043	<0.0048	<0.0064	<0.0048	<0.0049	<0.0047	<0.0049	<0.0048
2-Methylnaphthalene	91-57-6		<0.0055	<0.0058	<0.0066	<0.0065	<0.0062	<0.0062	<0.0053	<0.0060	<0.0080	<0.0060	<0.0061	<0.0059	<0.0060	<0.0059
Acenaphthene	83-32-9		<0.0042	<0.0045	<0.0051	<0.0051	<0.0048	<0.0048	<0.0041	<0.0046	<0.0062	<0.0046	<0.0047	<0.0046	<0.0047	<0.0046
Acenaphthylene	208-96-8		<0.0036	<0.0038	<0.0044	<0.0043	<0.0041	<0.0041	<0.0035	<0.0039	<0.0053	<0.0039	<0.0040	<0.0039	<0.0040	<0.0039
Anthracene	120-12-7		<0.0062	<0.0067	<0.0076	<0.0075	<0.0071	<0.0071	<0.0060	<0.0068	<0.0092	<0.0068	<0.0070	<0.0067	<0.0069	<0.0067
Benzo(a)anthracene	56-55-3		**0.047**	**0.039**	**0.0112**	**0.0268**	**0.0332**	**0.0182**	**0.0049**	**0.0116**	**0.0103**	**0.0113**	<0.0039	<0.0037	<0.0038	<0.0037
Benzo(a)pyrene	50-32-8		**0.073**	**0.0693**	**0.016**	**0.0388**	**0.0558**	**0.0297**	**0.006**	**0.0176**	**0.0143**	**0.0144**	**0.0045**	<0.0030	<0.0030	**0.0032**
Benzo(b)fluoranthene	205-99-2		**0.0904**	**0.0868**	**0.0163**	**0.0393**	**0.0682**	**0.0329**	**0.0051**	**0.0225**	**0.016**	**0.0167**	**0.0061**	<0.0033	<0.0034	**0.0047**
Benzo(g,h,i)perylene	191-24-2		**0.06**	**0.0583**	**0.0125**	**0.0311**	**0.0479**	**0.0253**	**0.0044**	**0.0147**	**0.0105**	**0.0121**	**0.0041**	<0.0024	<0.0025	**0.0032**
Benzo(k)fluoranthene	207-08-9		**0.0688**	**0.0606**	**0.0185**	**0.0452**	**0.0542**	**0.0365**	**0.0069**	**0.0177**	**0.0126**	**0.0134**	**0.005**	<0.0030	<0.0030	**0.0043**
Chrysene	218-01-9		**0.0771**	**0.0687**	**0.0203**	**0.0449**	**0.0605**	**0.0363**	**0.007**	**0.0207**	**0.0158**	**0.0167**	**0.0053**	<0.0040	<0.0041	<0.0040
Dibenz(a,h)anthracene	53-70-3		**0.0192**	**0.0177**	**0.0039**	**0.0098**	**0.0135**	**0.008**	<0.0024	**0.0046**	<0.0036	**0.0039**	<0.0027	<0.0026	<0.0027	<0.0026
Fluoranthene	206-44-0		**0.128**	**0.108**	**0.0347**	**0.0773**	**0.1**	**0.0608**	**0.0079**	**0.0338**	**0.0249**	**0.0259**	**0.0064**	<0.0061	<0.0063	<0.0062
Fluorene	86-73-7		<0.0045	<0.0048	<0.0055	<0.0054	<0.0051	<0.0051	<0.0044	<0.0049	<0.0066	<0.0049	<0.0050	<0.0049	<0.0050	<0.0049
Indeno(1,2,3-cd)pyrene	193-39-5		**0.0536**	**0.051**	**0.0114**	**0.0278**	**0.0414**	**0.0219**	**0.0038**	**0.0123**	**0.0094**	**0.0094**	**0.0035**	<0.0026	<0.0027	**0.0029**
Naphthalene	91-20-3		<0.0092	<0.0098	<0.0112	<0.0110	<0.0104	<0.0104	<0.0089	<0.0100	<0.0135	<0.0100	<0.0103	<0.0099	<0.0102	<0.0100
Phenanthrene	85-01-8		**0.0356**	**0.0347**	<0.0154	**0.0266**	**0.03**	**0.0217**	<0.0123	<0.0139	<0.0187	<0.0139	<0.0142	<0.0137	<0.0141	<0.0138
Pyrene	129-00-0		**0.0897**	**0.0791**	**0.0257**	**0.0549**	**0.0724**	**0.0423**	**0.0069**	**0.0241**	**0.019**	**0.0193**	<0.0055	<0.0053	<0.0055	<0.0053

Only analytes measured at concentrations above their respective Laboratory Reporting Limit in at least one sample are listed.
Results above RL are shown in **bold**. Results exceeding one or more criteria are shaded, as are the criteria which were exceeded.
PAHs - Polynuclear Aromatic Hydrocarbons

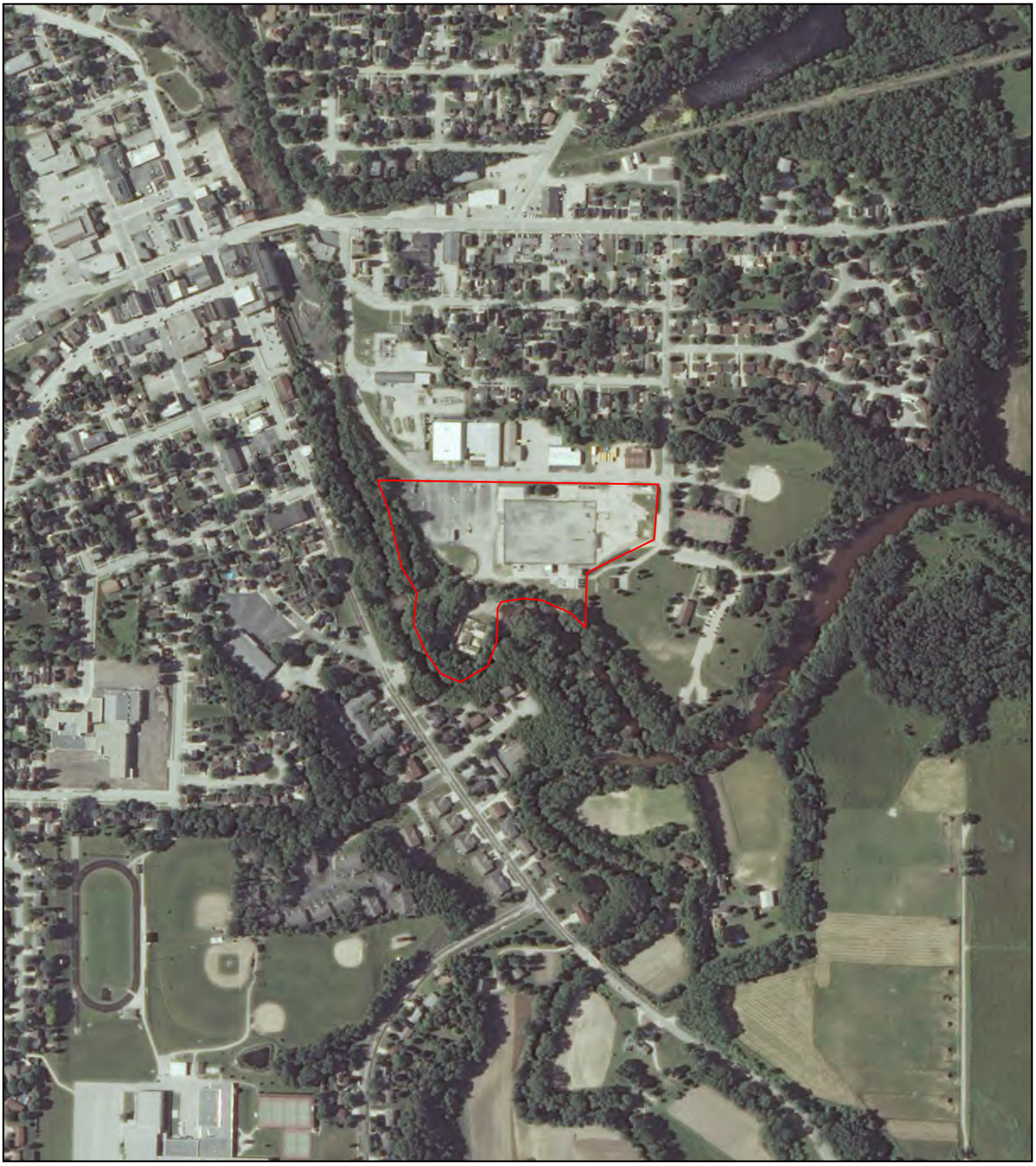
ATTACHMENT A
AERIAL PHOTOGRAPHS

Site boundaries shown in red are approximate

Former Tecumseh Products 415 Cleveland Street Sheboygan Falls, WI	N	**2018** HIG Project # 2033878 Client Project # 069638.00.051 Approximate Scale 1: 6,000 (1"=500') www.historicalinfo.com	HIG

Site boundaries shown in red are approximate

Former Tecumseh Products 415 Cleveland Street Sheboygan Falls, WI	N	**2013** HIG Project # 2033878 Client Project # 069638.00.051 Approximate Scale 1: 6,000 (1"=500') www.historicalinfo.com	HIG



Site boundaries shown in red are approximate

Former Tecumseh Products 415 Cleveland Street Sheboygan Falls, WI	N	**2008** HIG Project # 2033878 Client Project # 069638.00.051 Approximate Scale 1: 6,000 (1"=500') www.historicalinfo.com	HIG

Site boundaries shown in red are approximate

Former Tecumseh Products 415 Cleveland Street Sheboygan Falls, WI	N	**2005** HIG Project # 2033878 Client Project # 069638.00.051 Approximate Scale 1: 6,000 (1"=500') www.historicalinfo.com	HIG

Site boundaries shown in red are approximate

Former Tecumseh Products 415 Cleveland Street Sheboygan Falls, WI	N	**1992** HIG Project # 2033878 Client Project # 069638.00.051 Approximate Scale 1: 6,000 (1"=500') www.historicalinfo.com	HIG

Site boundaries shown in red are approximate

Former Tecumseh Products 415 Cleveland Street Sheboygan Falls, WI	N	**1981** HIG Project # 2033878 Client Project # 069638.00.051 Approximate Scale 1: 6,000 (1"=500') www.historicalinfo.com	HIG

Site boundaries shown in red are approximate

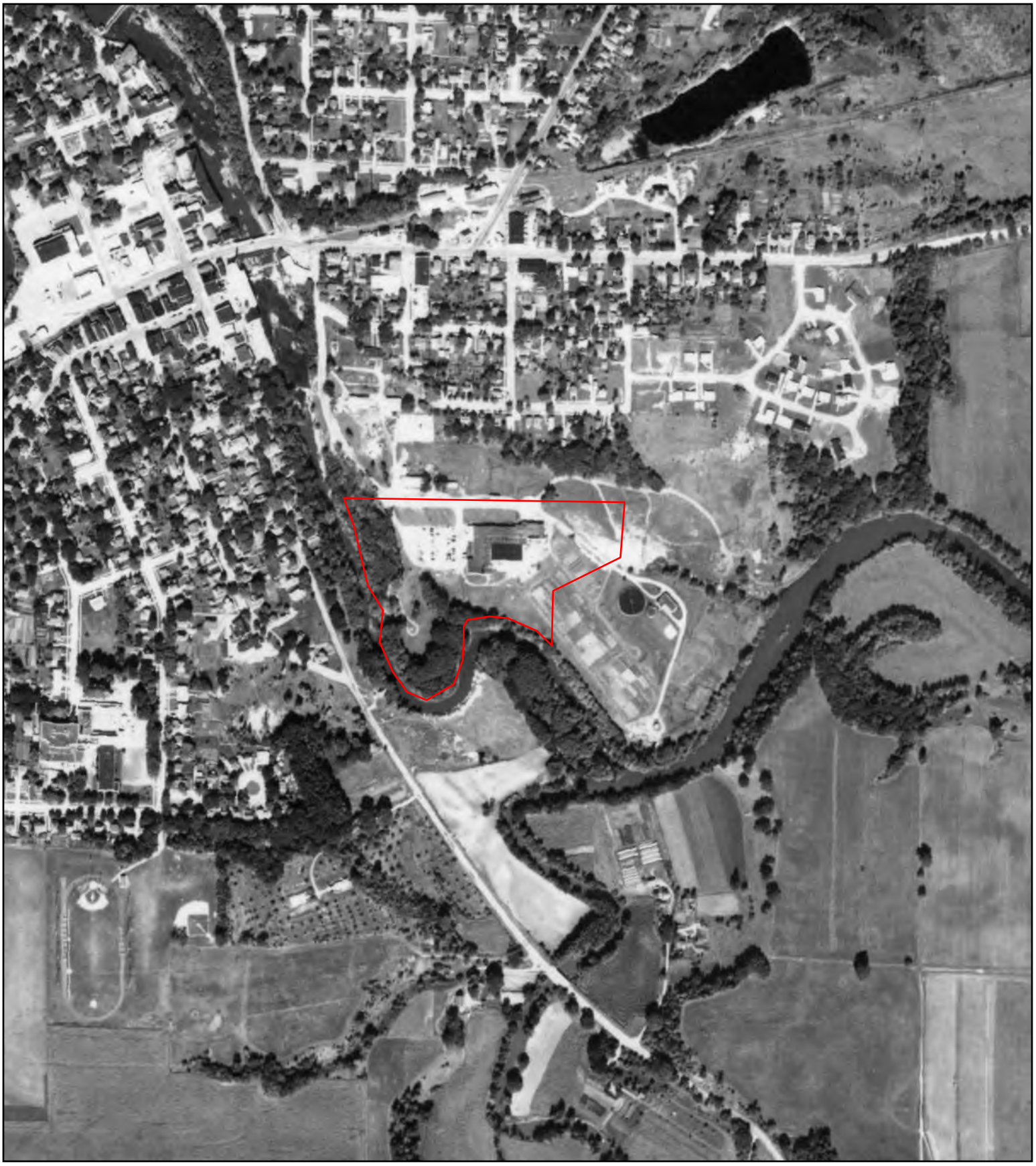
Former Tecumseh Products 415 Cleveland Street Sheboygan Falls, WI	N	**1978** HIG Project # 2033878 Client Project # 069638.00.051 Approximate Scale 1: 6,000 (1"=500') www.historicalinfo.com	HIG

Site boundaries shown in red are approximate

Former Tecumseh Products 415 Cleveland Street Sheboygan Falls, WI	N	**1973** HIG Project # 2033878 Client Project # 069638.00.051 Approximate Scale 1: 6,000 (1"=500') www.historicalinfo.com	HIG

Site boundaries shown in red are approximate

Former Tecumseh Products 415 Cleveland Street Sheboygan Falls, WI	N	**1967** HIG Project # 2033878 Client Project # 069638.00.051 Approximate Scale 1: 6,000 (1"=500') www.historicalinfo.com	HIG



Site boundaries shown in red are approximate

Former Tecumseh Products 415 Cleveland Street Sheboygan Falls, WI	N	**1962** HIG Project # 2033878 Client Project # 069638.00.051 Approximate Scale 1: 6,000 (1"=500') www.historicalinfo.com	HIG

Site boundaries shown in red are approximate

Former Tecumseh Products 415 Cleveland Street Sheboygan Falls, WI	N	**1952** HIG Project # 2033878 Client Project # 069638.00.051 Approximate Scale 1: 6,000 (1"=500') www.historicalinfo.com	HIG

Site boundaries shown in red are approximate

Former Tecumseh Products 415 Cleveland Street Sheboygan Falls, WI	N	**1950** HIG Project # 2033878 Client Project # 069638.00.051 Approximate Scale 1: 6,000 (1"=500') www.historicalinfo.com	HIG

Site boundaries shown in red are approximate

Former Tecumseh Products 415 Cleveland Street Sheboygan Falls, WI	N	**1941** HIG Project # 2033878 Client Project # 069638.00.051 Approximate Scale 1: 6,000 (1"=500') www.historicalinfo.com	HIG

ATTACHMENT B
HISTORICAL REPORT EXCEPTS

donohue & associates inc.
CONSULTING ENGINEERS

January 15, 1979

Mr. Renato C. Millan, P.E.
Solid Waste Management Section
Department of Natural Resources
P.O. Box 7921
Madison, WI 53707

Re: Progress Report Through January 15, 1979
Donohue Project 4909

Dear Mr. Millan:

This progress report presents a summary of the work completed through January 15, 1979, on the polychlorinated biphenyl (PCB) investigations at the Diecast Plant.

Preliminary engineering plans have been submitted to the Department of Natural Resources (DNR) for dike stabilization. The DNR has indicated to me that they will have completed a preliminary review of these plans by January 17, 1979.

The field work for the sampling program to determine the vertical extent of PCB contamination at the Diecast Plant was completed December 28, 1978. The first set of results of laboratory analyses for PCB's have been received by us and are attached to this letter. The locations of the samples can be found on the attached map in our letter of December 18, 1978, by reading the row number, column number, then the depth of the sample which was analyzed (i.e. 2.5/6.5 12-18, indicates row 2.5, column 6.5, 12-18, inch sample analyzed for PCB's). We have prepared 36 additional samples to be analyzed for PCB's. A list of these samples is also attached to this letter.

We are continuing to evaluate the data as it is received to determine the extent of PCB contamination on the Diecast property. Should you require any additional information or have any questions, please feel free to contact our office.

Very truly yours,

DONOHUE & ASSOCIATES, INC.

Patrick Ries

Patrick Ries
Project Engineer

PR/gd

cc: Ken Miller, Diecast Division
Ken Wachal Tecumseh Products
Sandy Williams, Foley & Lardner

enc: Polychlorinated Biphenyl (PCB) Results
Additional Samples to be Analyzed

4738 N. 40TH ST. SHEBOYGAN, WI 53081 TEL. (414) 458-8711

December 1978 Assessment

POLYCHLORINATED BIPHENYL (PCB) RESULTS
(Preliminary)

Sample		Aroclor	Concentration (PPM)
0.5/0.5	12-18	1254	<1.0
0.5/4.5	12-18	1248	13.7
0.5/8.5	12-18	1248	17.3
0.5/8.5	24-30	1242	598
0.5/8.5	36-42	1254	<1.0
0.5/12.5	12-18	1242	1,166
0.5/16.5	12-18	1248	1,265
2.5/2.5	12-18	1254	<1.0
2.5/6.5	12-18	1254	<1.0
2.5/10.5	12-18	1242	10,263
2.5/14.5	12-18	1248	95.2
2.5/18.5	12-18	1254	<1.0
3.5/9.5	12-18	1254	1.0
3.5/11.5	12-18	1254	<1.0
4.5/0.5	12-18	1254	<1.0
4.5/4.5	12-18	1254	<1.0
4.5/8.5	12-18	1254	<1.0
4.5/12.5	12-18	1254	<1.0
4.5/16.5	12-18	1254	23.8
6.5/10.5	12-18	1254	<1.0
6.5/12.5	12-18	1254	<1.0
6.5/12.5	24-30	1248	55.2
6.5/14.5	12-18	1248	9.58
8.5/16.5	12-18	1254	<1.0
10.5/18.5	12-18	1254	<1.0
5.8/2.2	12-18	1254	7.81
5.0/4.2	12-18	1254	<1.0
5.0/4.2	24-30	1254	<1.0
5.9/6.2	12-18	1254	<1.0
5.8/8.1	12-18	1248	2.87
7.7/10.2	12-18	1248	5.13
7.6/12.2	12-18	1248	1,926
7.6/12.2	24-30	1254	<1.0
9.3/14.2	12-18	1248	1.13
9.5/16.1	12-18	1254	<1.0
11.2/18.1	12-18	1254	<1.0
11.8/19.8	12-18	1254	<1.0
5.9/1.2	6-12	1254	<1.0
6.0/5.0	6-12	1254	1.2
7.2/9.1	6-12	1248	3,779
8.9/13.1	6-12	1248	20.5
10.9/17.1	6-12	1254	<1.0

donohue & associates inc.
CONSULTING ENGINEERS

December 18, 1978

Mr. Renato C. Millan, P.E.
Solid Waste Management Section
Department of Natural Resources
P. O. Box 7921
Madison, WI 53707

Re: Proposed Sampling Program
Diecast Division - Engineering Services
Donohue Project 4909

Dear Mr. Millan:

Attached to this letter is an outline of our proposed sampling program to determine the vertical extent of PCB contamination at the Diecast plant. The sampling program as outlined in the attachment is intended to provide the necessary information to determine the vertical extent of PCB contamination.

We intend to initiate this sampling program on December 20, 1978. We estimate that the field work will take 5-7 days; therefore, completing the sampling program on December 29, 1978. Samples will be analyzed for PCB's by Raltech Scientific Services, Inc. The results for all samples will be received by us within 10-14 days, enabling analyses of all results to be completed by January 19, 1979. If further analyses become necessary, samples will be analyzed as required.

Please let us know your comments on this program prior to December 20, 1978; otherwise we are presuming you find this program acceptable.

If there are any questions concerning this sampling program, please feel free to contact us.

Very truly yours,

DONOHUE & ASSOCIATES, INC.

Patrick Ries
Project Engineer

PR/gh

cc: Mr. Ken Miller, Diecast Division
Mr. Ken Wachal, Tecumseh Products
Mr. Sandy Williams, Foley & Lardner
Mr. L. D. Bakke, Tecumseh Products

4738 N. 40TH ST. SHEBOYGAN, WI 53081 TEL. (414) 458-8711

SAMPLING PROGRAM
TO DETERMINE VERTICAL CONTAMINATION
DIECAST DIVISION - TECUMSEH PRODUCTS
DONOHUE PROJECT 4909

The field investigations as outlined below are intended to provide the necessary information requested by the Department of Natural Resources (DNR) to determine the vertical extent of polychlorinated biphenyl (PCB) contamination on Diecast property. Attached to this sampling program is a map showing the approximate locations for all the soil borings.

1. Soil Sampling Between Building and Dike.

   Soil borings will be conducted at 40 foot intervals in an area defined as being between the building and the dike, resulting in approximately 41 boring locations. The locations of these soil borings are shown on the attached map. Soil samples from the borings will be collected at the surface, 1 foot, 2 foot, 3 foot, 4 foot, and 5 foot depths. Samples will be obtained by using a split spoon sampler. Initially, all 1 foot samples from the boring locations which are circled will be analyzed for PCB's. Upon review of the results of the analyses, additional analyses may be performed on a portion or all of the remaining samples to define the vertical extent of contamination.

2. Soil Sampling on Dike.

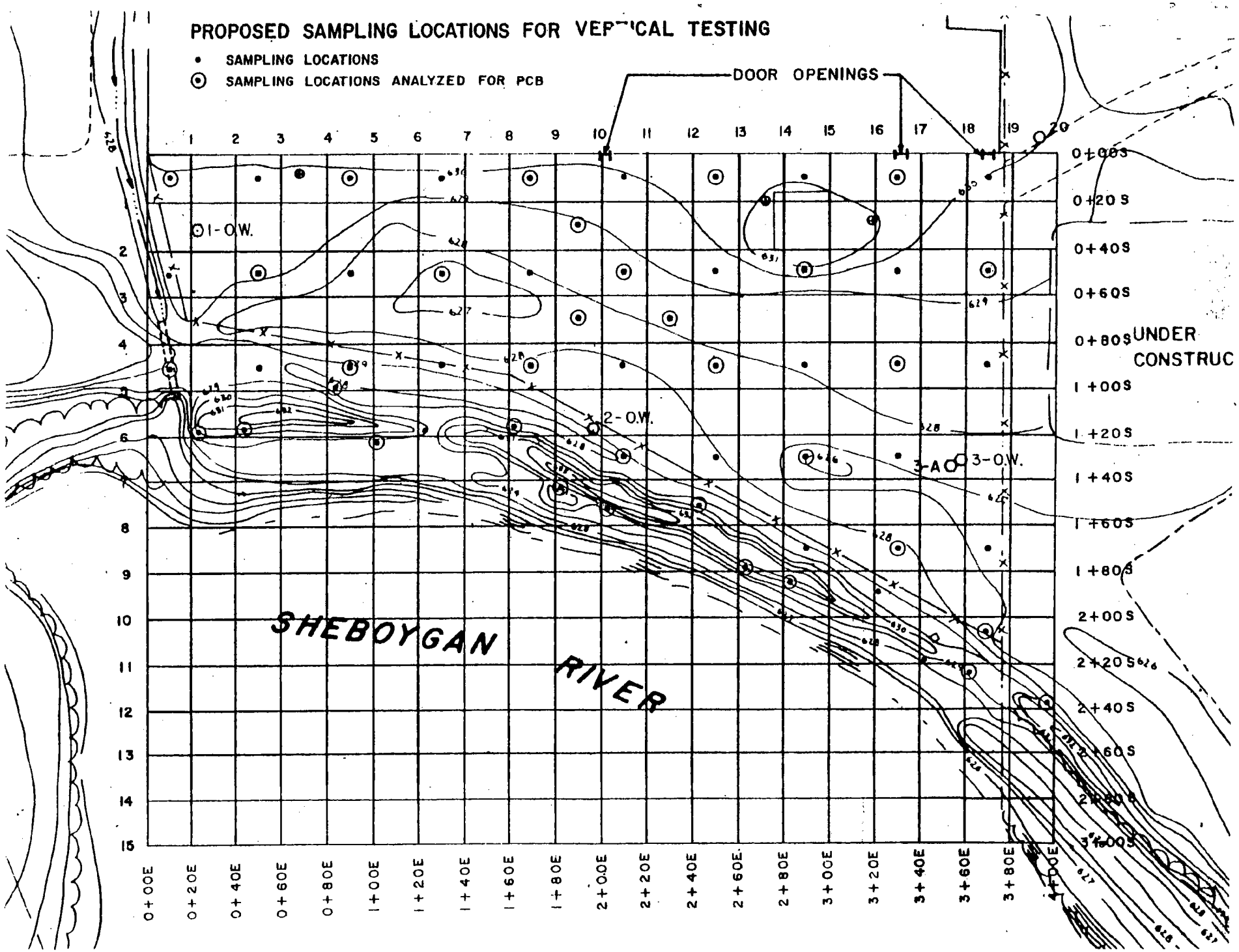
   Soil borings will be conducted at 40 foot intervals along the toe of the dike, resulting in approximately 10 boring locations. The soil borings will alternate on each side of the dike. The locations of these borings are shown on the attached map. Soil samples from the borings will be collected at the surface, 1 foot, and 2 foot depths. Samples will be obtained by using a split spoon sampler. Initially, all 1 foot samples from the boring locations which are circled will be analyzed for PCB's. Upon review of the results of the analyses, additional analyses may be performed on a portion or all of the remaining samples to define the vertical extent of contamination.

3. Soil Sampling Between Dike and River.

   Soil borings will be conducted at 80 foot intervals between the dike and the river, resulting in approximately 5 boring locations. The locations of these borings are shown on the attached map. Soil samples from the borings will be collected at the surface, 6 inch, 1 foot, and 2 foot depths. Samples will be obtained by using a split spoon sampler. Initially, all 6 inch samples from the boring locations will be analyzed for PCB's. Upon review of the results of the analyses, additional analyses may be performed on a portion or all of the remaining samples to define the vertical extent of contamination.

For all sampling locations described above, samples will be obtained continuously for the first 1 foot. When the hole is augered out at the 1 foot level, a 6 inch sample will be obtained for PCB analysis at the 1 foot level. The hole will then be augered to 2 feet and again a 6 inch sample will be obtained at the 2 foot level for PCB analyses. This procedure will continue to a depth of 5 feet. All soil samples will be visually classified, and those not analyzed for PCB will be preserved for future reference or laboratory testing.

PR/jl



B and D (M) 10008028 Front

TECUMSEH PRODUCTS COMPANY
DIECAST DIVISION. SHEBOYGAN FALLS, WISCONSIN 53085

October 4, 1978

The Honorable Gladys Morken
375 Buffalo Street
Sheboygan Falls, WI 53085

Dear Mayor Morken:

As you know, the DNR has requested that Tecumseh, Diecast Division and the City carry out various tests to determine whether, and where, PCB traces might be found in the soil in and around the City's sewage treatment plant and the Diecast premises.

You are also aware that Donohue & Associates, Inc. has been conducting soil sampling tests over the past several weeks. Results from some of these tests have now become available. Today Donohue reported to Company personnel some of these results. Although only limited tests were conducted off of the Diecast property, it does appear that at some locations, soil on the City's property east of the Division's land contains measurable levels of PCB. One of several tests taken in the area apparently leased by the City for garden plots contained 288 parts per million of PCB at the surface. The second test showed 2.29 parts per million while for two other tests, no results were received. Although 288 ppm represents a lower concentration than the Federal EPA had previously defined to be contaminated soil (500 ppm), it is higher than the 50 ppm level currently being proposed. Because of the presence of measurable PCB levels in the garden area and since without further testing the presence of PCBs in other areas of the garden cannot be determined, and further because, at this time, Tecumseh does not know whether PCB in the soil could create any potential health problem for foods grown, we are bringing this information to your immediate attention.

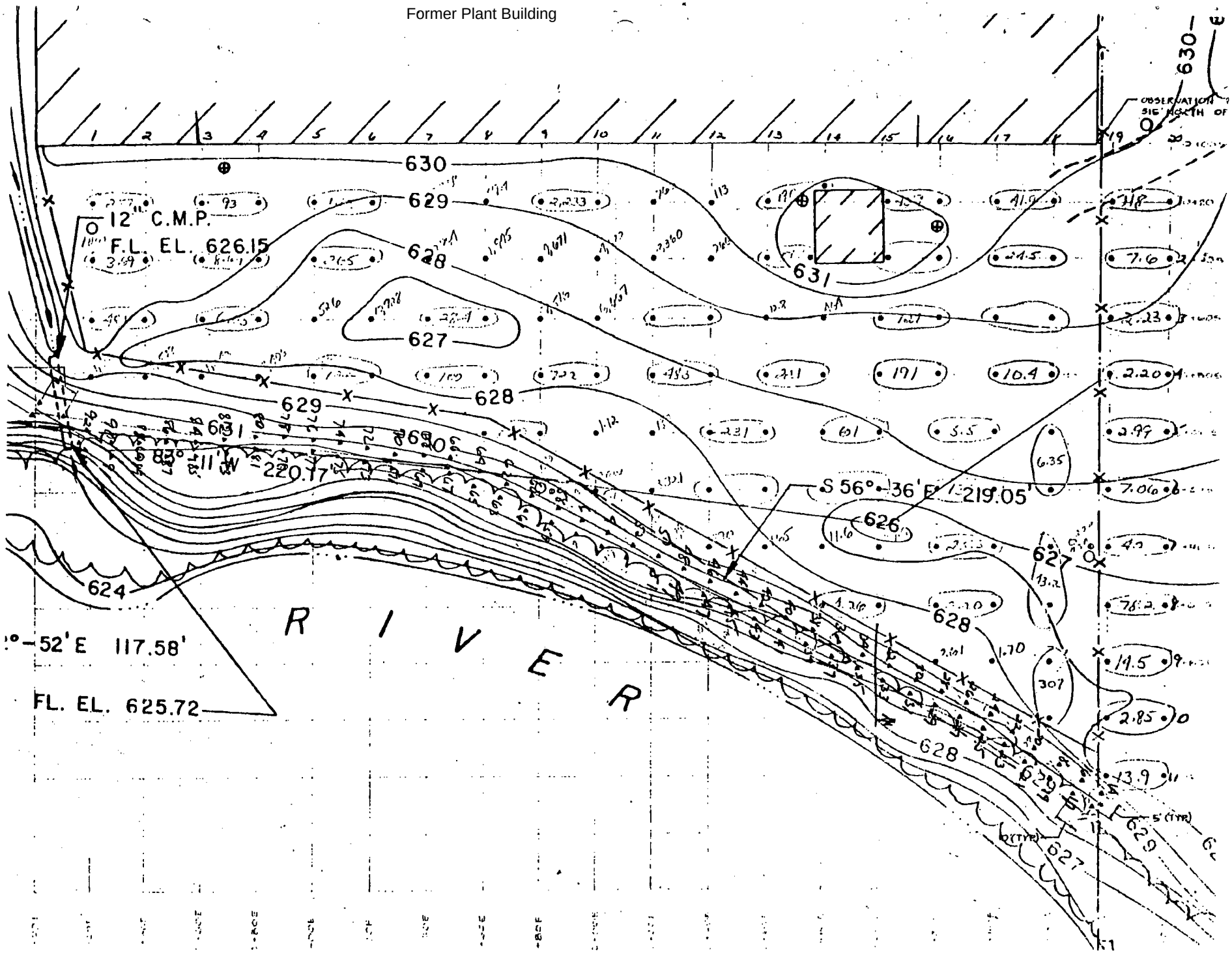
We should also emphasize that Tecumseh does not have any reason currently to believe that the produce being grown is unsafe. Several vegetables were tested, and all showed miniscule PCB levels well below the FDA standards permissible in baby food, of 0.2 ppm. However, because no firm conclusions about the area of impact of PCB can be reached without further testing, you might want to consider notifying the individuals known to be gardening, of these test results.

Very truly yours,

TECUMSEH PRODUCTS CO.
Diecast Division

Kenneth F. Miller
Assistant Works Manager

KFM:rjz



B and D (M) 10008073 Front

Project #4909
Tecumseh Diecast Division
Geochemical Soil Survey - W. Rehfeldt

Sample Number	Description of Material	Date Sampled
C-14	0-46" Reddish-brown silty clay fill 46-54" Dark brown silt loam	9-14-78
C-15	0-18" Reddish-brown silty clay fill 18-36" Mixed silty clay fill & burned refuse	"
C-16	0-36" Reddish-brown silty clay fill	"
C-17	0-15" Reddish-brown silty clay fill 15-36" Black mixed soil, ash & refuse	"
C-18	0-16" Reddish-brown silty clay fill 16-36" Black mixed soil, ash & refuse	"
C-19	0-12" Reddish-brown silty clay fill 12-36" Black mixed soil, ash & refuse	"
C-20	0-10" Reddish-brown silty clay fill 10-34" Black mixed soil, ash & refuse 34-36" Dark brown silt loam	"
C-21	0-24" Reddish-brown silty clay fill 24-32" Black mixed soil, ash & refuse 32-36" Dark brown silt loam	"
C-22	0-18" Reddish-brown silty clay fill w/concrete demolition material 18-44" Black mixed soil, ash & refuse 44-54" Dark brown silt loam	"
C-23	0-8" Brown silty, sandy clay fill 8-18" Black mixed soil, ash & refuse w/concrete demolition material	"
C-24	0-24" Reddish-brown silty clay fill w/thin layers of sand 24-36" Black mixed soil, ash & refuse	9-15-78
C-25	0-24" Reddish-brown silty clay fill 24-34" Black mixed soil, ash & refuse 34-36" Dark brown silt loam	"
C-26	0-10" Reddish-brown silty clay fill 10-36" Black mixed soil, ash & refuse	"
C-27	0-8" Reddish-brown silty clay fill 8-24" Black mixed soil, ash & refuse w/tree stumps and logs	"
C-28	0-10" Reddish-brown silty clay fill 10-26" Black mixed soil, ash & refuse 26-36" Dark brown silt loam	"
C-29	0-12" Reddish-brown silty clay fill 12-30" Black mixed soil, ash & refuse 30-36" Dark brown silt loam	"

Sample Number	Description of Material	Date Sampled
C-30	0-16" Reddish-brown silty clay fill 16-32" Black mixed soil, ash & refuse 32-36" Dark brown silt loam	9-15-78
C-31	0-12" Reddish-brown silty clay fill 12-33" Black mixed soil, ash & refuse 33-36" Dark brown silt loam	"
C-32	0-24" Reddish-brown silty clay fill 24-36" Black mixed soil, ash & refuse	"
C-33	0-12" Reddish-brown silty clay fill 12-40" Black mixed soil, ash & refuse 40-54" Dark brown silt loam	"
C-34	0-24" Reddish-brown silty clay fill 24-33" Black mixed soil, ash & refuse 33-36" Dark brown silt loam	"
C-35	0-12" Reddish-brown silty clay fill 12-22" Black mixed soil, ash & refuse 22-36" Dark brown silt loam	"
C-36	0-30" Reddish-brown silty clay fill 30-36" Dark brown silt loam	"
C-37	0-18" Reddish-brown silty clay fill 18-34" Black mixed soil, ash & refuse 34-36" Dark brown silt loam	"
C-38	0-22" Reddish-brown silty clay fill 22-33" Black mixed soil, ash & refuse 33-36" Dark brown silt loam	"
C-39	0-15" Reddish-brown silty clay fill 15-34" Black mixed soil, ash & refuse 34-36" Dark brown silt loam	"
C-40	0-45" Reddish-brown silty clay fill 45-54" Dark brown silt loam	"
C-41	0-22" Reddish-brown silty clay fill 22-36" Black mixed soil, ash & refuse	"
C-42	0-28" Reddish-brown silty clay fill 28-36" Brown silt loam	"
C-43	0-22" Reddish-brown silty clay fill 22-34" Brown sandy loam fill 34-36" Brown silt loam	"
C-44	0-22" Brown gravelly clay fill 22-61" Mixed soil, sand & "oildry" compound (contaminated soil)	"
C-45	0-14" Brown silty clay fill 14-48" Mixed soil, sand & "oildry" compound 48-54" Brown silt loam	"

Sample Number	Description of Material	Date Sampled
C-46	0-24" Brown silty gravelly fill 24-36" Dark brown silt loam	9-15-78
C-47	0-3" Reddish-brown silty clay fill 3-14" "Oildry" compound 14-18" Dark brown silt loam	"
C-48	0-14" Reddish-brown silty clay fill 14-32" Mixed soil, sand & "oildry" compound	"
C-49	0-6" Reddish-brown silty clay fill 6-30" "Oildry" compound 30-36" Brown silt loam	"
C-50	0-15" Reddish-brown silty clay fill 15-22" Mixed soil & sand fill 22-48" Mixed soil & "oildry" compound 48-54" Brown silt loam	9-19-78
C-51	0-12" Reddish-brown silty clay fill 12-34" Mixed soil & "oildry" compound 34-36" Brown silt loam	"
C-52	0-20" Reddish-brown silty clay fill 20-28" Brown silty clay fill 28-33" Mixed soil & refractory brick material 33-36" Brown silt loam	"
C-53	0-15" Reddish-brown silty clay fill 15-30" Mixed soil & "oildry" compound 30-36" Brown silt loam	"
C-54	0-3" Mixed soil & "oildry" compound 3-32" Reddish-brown silty clay fill 32-36" Brown silt loam	"
C-55	0-10" Reddish-brown silty clay fill 10-24" Mixed soil & "oildry" compound 24-36" Brown silt loam	"
C-56	0-48" Reddish-brown silty clay fill 48-54" Dark brown silt loam	"
C-57	0-12" Reddish-brown silty clay fill 12-50" Mixed soil & "oildry" compound 50-54" Dark brown silt loam	"
C-58	0-18" Reddish-brown silty clay fill 18-47" Brown sandy, gravelly fill 47-54" Brown silt loam	"
C-59	0-22" Reddish-brown silty clay fill 22-33" Mixed soil & "oildry" compound 33-36" Brown sandy silt loam	"
C-60	0-17" Reddish-brown silty clay fill 17-42" Brown sand & gravel fill 42-54" Brown silt loam	"

Sample Number	Description of Material	Date Sampled
C-61	0-6" Reddish-brown silty clay fill 6-18" Dark brown silt loam	9-19-78
C-62	0-24" Reddish-brown silty clay fill 24-50" Brown sandy & silty clay fill 50-54" Dark brown silt loam	"
C-63	0-26" Reddish-brown silty clay fill 26-34" Mixed fill & gravel 34-36" Dark brown silt loam	"
C-64	0-8" Reddish-brown silty clay fill 8-32" Mixed fill, sand & gravel 32-36" Dark brown silt loam	"
C-65	0-12" Reddish-brown silty clay fill 12-36" Mixed fill, sand & gravel	"
C-66	0-20" Reddish-brown silty clay fill 20-31" Mixed fill, sand & gravel 31-36" Dark brown silt loam	"
C-67	0-18" Reddish-brown silty clay fill 18-33" Mixed fill, sand & gravel 33-36" Dark brown silt loam	"
C-68	0-20" Reddish-brown silty clay fill 20-44" Gray-brown clayey fill w/gravel 44-54" Dark brown silt loam	"
C-69	0-22" Reddish-brown silty clay fill 22-36" Brown mixed silty clay, sand & gravel	"
C-70	0-26" Reddish-brown silty clay fill 26-36" Brown mixed fill w/gravel	"
C-71	0-22" Reddish-brown silty clay fill 22-36" Brown mixed sandy silt w/gravel	"
C-72	0-24" Reddish-brown silty clay fill 24-36" Brown mixed clay, sand & gravel	"
C-73	0-20" Reddish-brown silty clay fill 20-36" Mixed sand & gravel	"
C-74	0-26" Reddish-brown silty clay fill 26-36" Brown gravelly silt loam	9-20-78
C-75	0-24" Reddish-brown silty clay fill 24-36" Brown gravelly silt loam	"
C-76	0-36" Reddish-brown silty clay fill	"
C-77	0-33" Reddish-brown silty clay fill 33-36" Dark brown silt loam	"
C-78	0-36" Reddish-brown silty clay fill	"
C-79	0-34" Reddish-brown silty clay fill 34-36" Dark brown silt loam	"

Sample Number	Description of Material	Date Sampled
C-80	0-35" Reddish-brown silty clay fill 35-36" Dark brown silt loam	9-20-78
C-81	0-36" Reddish-brown silty clay fill	"
C-82	0-32" Reddish-brown silty clay fill 32-36" Dark brown silt loam	"
C-83	0-26" Reddish-brown silty clay fill 26-36" Dark brown silt loam	"
C-84	0-30" Reddish-brown silty clay fill 30-36" Dark brown silt loam	"
C-85	0-28" Reddish-brown silty clay fill 28-36" Dark brown silt loam	"
C-86	0-30" Reddish-brown silty clay fill mixed w/"oildry" compound 30-36" Dark brown silt loam	"
C-87	0-28" Reddish-brown silty clay fill mixed w/"oildry" compound 28-36" Dark brown silt loam	"
C-88	0-26" Reddish-brown silty clay fill mixed w/"oildry" compound 26-36" Dark brown silt loam	"
C-89	0-25" Reddish-brown silty clay fill mixed w/"oildry" compound 25-36" Dark brown silt loam	"
C-90	0-24" Reddish-brown silty clay fill Mixed w/"oildry" compound 24-36" Dark brown silt loam	"
C-91	0-26" Reddish-brown silty clay fill 26-36" Dark brown silt loam	"
C-92	0-18" Reddish-brown silty clay fill 18-36" Dark brown silt loam	"
C-93	0-24" Reddish-brown silty clay fill 24-36" Dark brown silt loam	"

Polychlorinated Biphenyl (PCB) Results

Sample	Aroclor	Concentration (ppm)
C14/15	1254	297.0
C16/17	"	140.0
C18/19	"	183.0
C20/21	"	1,487.0
C22/23	"	187.0
C24/25	"	360.0
C26/27	"	441.0
C28/29	"	792.0
C30/31	"	
C32/33	"	410.0
C34/35		
C36/37	1254	126.0
C38/39	"	461.0
C40/41	"	50.0
C42/43	1248	11.7
C44	"	3,240.0
C45	"	6,024.0
C46	"	674.0
C47	"	32,011.0
C48/49	"	5,994.0
C50	"	384 96.5 (1248)
C51	"	14,793
C52	"	793
C53	"	2,633
C54	"	479
C55	"	2,617
C56		(MISSING)
C57	1248	15,140
C58	1254*	1.27
C59	COMPOSITED W/ C58	
C60	1248	60.6
C61	"	150.0 (1,672)
C62/63	"	1,454
C64/65	"	14.8
C666/67	1254*	1.87 (1)

POLYCHLORINATED BIPHENYL (PCB) RESULTS (cont)

	Sample	Aroclor	Concentration (ppm)
	C68/69	1254*	2.41
	C70/71	1248	20,253
	C72/73	1254*	~~7,516~~ 73.6
	C74/75	"	8.78
	C76/77	1254*	~~4,622.0~~ 55.2
	C78/79	1254*	2.43
	C80/81	1254	0.44
	C82/83	1254*	~~1,945~~ 30.4
	C84/85	"	4.67
	C86/87	"	CLAY 5,134 (B.D. ~~679~~ B) TWO SAMPLES
	C88	1254*	60.0
	C89/90	1254*	CLAY 1,686 (B.D. 510) TWO SAMPLES
	C91	—	<1.0
	C92/93	1254*	8.50
	1-1/2	1248	257
=?	1-3/4	"	93.0
=?	1-5/6	"	142.0
	1-7	1254*	2,338
	1-8	1248	89.4
	1-9/10	"	2,233
	1-11	1254*	766.0
	1-12	"	113.0
=?	1-13/14	1248	190.0
=?	1-15/16	1254*	459.0
=?	1-17/18	1254*	41.9
	1-19/20	"	118.0
=?	2-1/2	1254*	3.69
=?	2-3/4	1254*	8.69
	2-5/6	1254*	265.0
	2-7	1254	2,864.0
	2-8	1254*	~~55.2~~ 1,945
	2-9	1248	9,671
	2-10	1254*	~~10,928.0~~ 4,622
	2-11	1248	2,360

Polychlorinated Biphenyl (PCB) Results (cont)

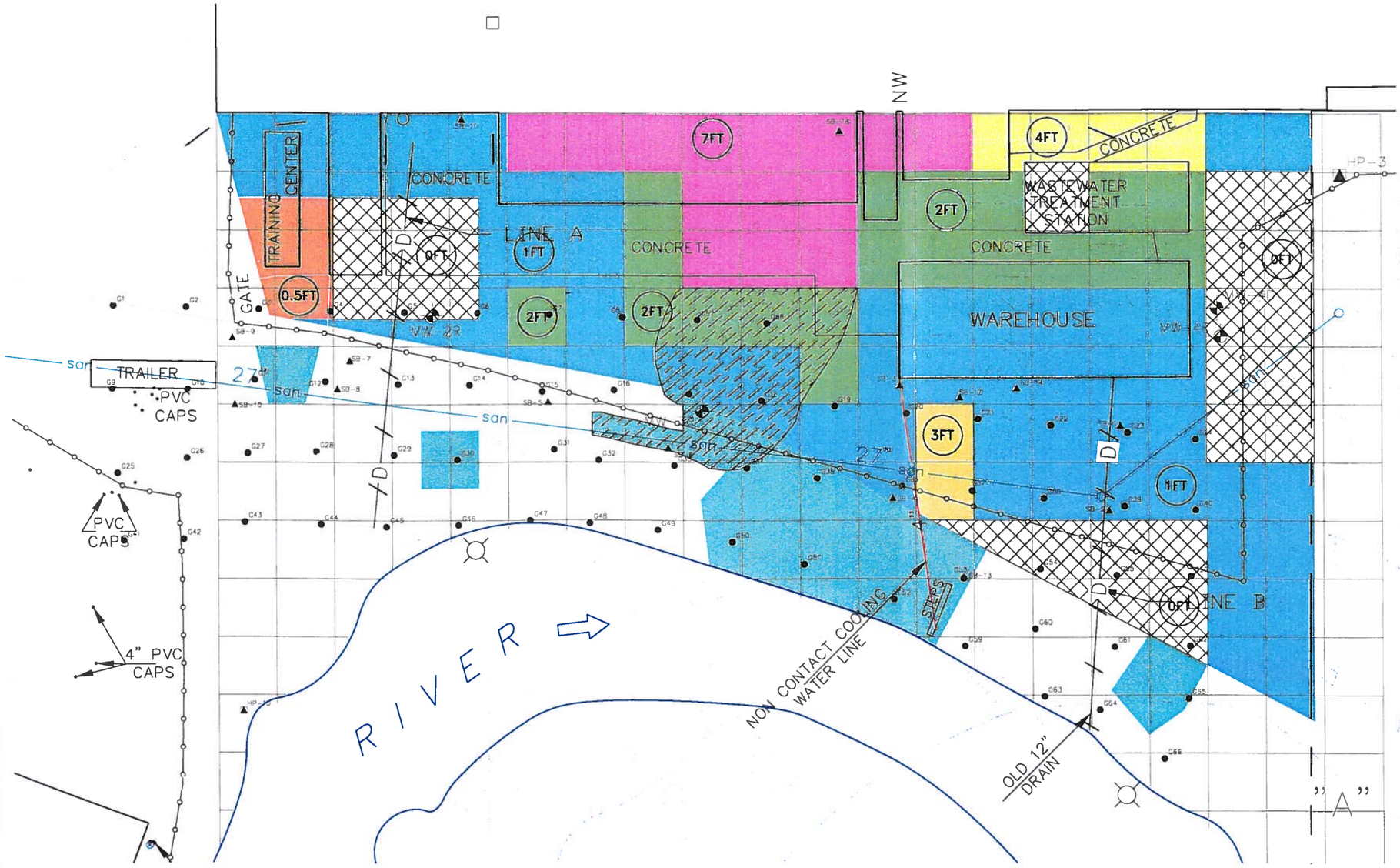
Sample	Aroclor	Concentration (ppm)
2-12	1248	266.0
=> 2-13/14	1254*	56.0
2-15/16		
2-17/18	1254*	24.5
2-19/20	1254*	7.6
=> 3-1/2	1248	48.8
3-3/4	1254*	6.25
3-5	1254*	526
3-6	1254*	~~94.0~~ 10,928
3-7/8	1254*	28.4
3-9	1254*	~~510.0~~ 7,516
3-10	1248	6,667.0
3-11/12		(MISSING
3-13	~~1248~~ 1254*	~~734.0~~ 12.8
3-14	1254*	464
3-15/16	1248	121.0
3-17/18	1248	~~34.0~~
3-19/20	1254*	2.23
4-1	1254	1,303.0
4-2	1254*	4,538.0
4-3	1254	1,242.0
4-4	1254*	8,406
=> 4-5/6	1254	122.0
4-7/8	1254*	100.0
4-9/10	1248	722.0
4-11/12	1248	983.0
4-13/14	1248	221.0
4-15/16	1254*	191.0
4-17/18	1248	10.4
4-19/20	1254*	2.20
=> 5-8/9	"	120
5-10	1254*	~~404.0~~ 1.12
5-11	1248	180.0
=> 5-12/13	1254*	231.0
5-14/15	1254*	61.0

Polychlorinated Biphenyl (PCB) Results (cont)

Sample	Aroclor	Concentration (ppm)
5-16/17	1254*	5.5
5-18 & 6-18	1254*	6.35
5-19/20	1254*	2.99
6-10	1248 1254	516.0
6-11	"	3321.0
6-12/13		(MISSING)
6-14/15	1254*	3.38
6-16/17	1254*	137.0
6-19/20	1254*	7.06
7-12	1248	990
7-13	1254*	165
7-14	1254*	41.6
7-15	1254*	24.9
7-16/17	1254*	25.3
7-18 & 8-18	"	43.2
7-19/20	1254	40.0
8-14/15	1254*	4.26
8-16/17	1254*	2.20
8-19/20	1248	78.2
9-16	1254*	2.61
9-17	1254*	~~165~~ 1.70
9-18 & 10-18	1254*	307 (Interferences Present ≈150 ppm if interferences dimin
9-19/20	1254	14.5
10-19/20	1254*	~~589.0~~ 2.85
11-19/20	"	13.9
10.w.-5	1254*	9.23
10.w.-3	1248	9.03
10.w.-5	1254	<1.0
10.w.-10		<1.0
10.w.-15	1248	202.0
20.w.-5	1248	468
20.w.-3	1254*	8.08
20.w.-5	1254*	2.26
20.w.-10		<1.0
20.w.-15		<1.0

Polychlorinated Biphenyl (PCB) Results (cont.)

Sample		Aroclor	Concentration (ppm)
Honey Dew Melon	M-1	1248	0.052
Corn	CO-1	1248	< 0.010
Green Bean	GB-1	1248	0.020
Carrot	CA-1	1248	0.123
Ground	G-1		4.0
Ground	G-2		8.0



LEGEND:

- SANITARY SEWER MANHOLE
- STORM SEWER MANHOLE
- AREA DRAIN(STORM)
- STORM CATCH BASIN-CURB TYPE
- WATER GAUGE
- SANITARY SEWER
- DRAIN LINE
- CHAIN LINK FENCE
- GRID BORING SAMPLE
- MONITORING WELL
- SOIL BORING
- HAND PROBE
- EXCAVATED 7 FEET
- EXCAVATED 4 FEET
- EXCAVATED 3 FEET
- EXCAVATED 2 FEET
- XCAVATED 0.5 FEET
- AREAS WHERE ADDITIONAL 1 FOOT WAS EXCAVATED
- APPROXIMATE LIMITS OF OIL SLICK EXCAVATION
- NOT EXCAVATED

GRAPHIC SCALE

NOTES:

1. THE BASE MAP WAS OBTAINED FROM A PLAN ENTITLED "ALTA/ACSM LAND TITLE SURVEY" (SURVEY PLAN) PREPARED BY HINZE & ASSOCIATES, DATED 7/27/99.
2. ALL EXTERIOR UNDERGROUND UTILITIES SHOWN ON THE SURVEY PLAN AND THIS MAP WERE OBTAINED FROM FIELD SURVEY AND FROM MAPS SUPPLIED BY THE CITY OF SHEBOYGAN FALLS ON OR BEFORE JUNE 15, 1999. THE LOCATIONS OF ALL UTILITIES ARE APPROXIMATE.
3. THE EXCAVATION LIMITS ARE APPROXIMATE AND WERE OBTAINED FROM A SKETCH PROVIDED IN A LETTER FROM DONOHUE AND ASSOCIATES, INC. TO WISCONSIN DEPARTMENT OF NATURAL RESOURCES DATED NOVEMBER 27, 1979.

X: 17606X01.DWG
LMAN: GRID1
P: STD-PCP/DL
11/10/99 SYR-54-GMS YCC GMS
17605004/TEC/17606B05.DWG

TECUMSEH PRODUCTS COMPANY
SHEBOYGAN FALLS, WISCONSIN

EXTERNAL SOURCE ASSESSMENT

1979 BACK-YARD EXCAVATION MAP

BBL BLASLAND, BOUCK & LEE, INC. engineers & scientists

FIGURE C

11/16/99

REPORT

Technical Memorandum

External Source Assessment

Tecumseh Products Company
Sheboygan Falls, Wisconsin

November 1999

BBL
BLASLAND, BOUCK & LEE, INC.
engineers & scientists

Tecumseh Products Company
Sheboygan Falls, Wisconsin
Sheboygan River and Harbor Site

Table 6
External Source Assessment
PCB Concentrations of Hand-Augered Probe Samples

Sample I.D.	Depth Interval (feet)	Total PCB Concentration (mg/kg dry weight)
HP-1	0.0 - 0.5	3.5
	0.5 - 1.0	0.175
HP-2	0.0 - 0.5	11
	0.5 - 1.0	48
HP-3	0.0 - 0.5	38
	0.5 - 1.0	63
HP-4	0.0 - 0.5	0.057
	0.5 - 1.0	ND (0.055)
HP-5	0.0 - 0.5	0.89
	0.5 - 1.0	1.8
HP-6	0.0 - 0.5	3.3
	0.5 - 1.0	0.53
HP-7	0.0 - 0.5	ND (0.056)
	0.5 - 1.0	ND (0.054)
HP-8	0.0 - 0.5	ND (0.055)
	0.5 - 1.0	ND (0.058)
HP-9	0.0 - 0.5	ND (0.057)
	0.5 - 1.0	ND (0.059)
HP10	0.0 - 0.5	0.264
	0.5 - 1.0	2.9
HP-11	0.0 - 0.5	52
	0.5 - 1.0	160
HP-12	0.0 - 0.5	8.9
	0.5 - 1.0	1.4
HP-13	0.0 - 0.5	14.5
	0.5 - 1.0	11.8
HP-14	0.0 - 0.5	8.9
	0.5 - 1.0	3.4
CB-1	Catch Basin Grab	0.14

Notes:
ND = Non-Detect (detection limit in parentheses)
mg/kg = Milligram per kilogram
CB-1 = Catch basin grab sample along Cleveland Street

Tecumseh Products Company
Sheboygan Falls, Wisconsin
Sheboygan River and Harbor Site

Table 7
External Source Assessment
PCB Concentrations of Soil Boring Samples

Sample I.D.	Depth Interval (feet)	Total PCB Concentration (mg/kg dry weight)
SB-1	0 - 2	15.5
	2 - 4	0.9
	4 - 6	NR
	6 - 8	19
SB-2	0 - 2	22.7
	2 - 4	99
	4 - 6	5.6
	6 - 8	26.3
	8 - 10	ND (120*)
	10 - 12	ND (120*) [ND(31*)]
	12 - 14	0.75
	14 - 16	3.6
	16 - 18	9.3
SB-3	0 - 2	58
	2 - 4	3.9
	4 - 6	7.2
	6 - 8	ND (0.061) [ND(0.059)]
SB-4	0 - 2	0.24
	2 - 4	1.5
	4 - 6	0.79
	6 - 8	0.5
SB-5	0 - 2	ND (0.058) [ND (0.056)]
	2 - 4	0.64
	4 - 6	NR
	6 - 8	20.6
	8 - 10	38
SB-6	0 - 2	0.1
	2 - 4	0.91
	4 - 6	0.77
	6 - 8	ND (0.058)
	8 - 10	0.19
SB-7	0 - 2	1.7
	2 - 4	2.22
	4 - 6	0.67
	6 - 8	23
	8 - 10	1.62
	10 - 12	0.168
	12 - 14	3.9

Tecumseh Products Company
Sheboygan Falls
Sheboygan River and Harbor Site

Table 7 (Continued)
External Source Assessment
PCB Concentrations of Soil Boring Samples

Sample I.D.	Depth Interval (feet)	Total PCB Concentration (mg/kg)
SB-8	0 - 2	0.092
	2 - 4	0.41
	4 - 6	60
	6 - 8	6.7
	8 - 10	6.2
	10 - 12	33
SB-9	0 - 2	19.6
	2 - 4	NR
	4 - 6	11.7
	6 - 8	1.8
	8 - 10	7.1
SB-10	0 - 2	7.4
	2 - 4	51
	4 - 6	4.5
	6 - 8	6.7
	8 - 10	0.35
SB-11	0 - 2	5.1
	2- 4	14.2
	4- 6	0.52
	6 - 8	0.207
	8 - 10	1.06
	10 - 12	0.58
SB-12	0 - 2	106
	2 - 4	0.6
	4 - 6	23.3
	6 - 8	3.32
SB-13	0 - 2	ND (0.056)
	2 - 4	ND (0.054)
	4 - 6	ND (0.054)
	6 - 8	NR
	8 - 10	0.073
SB-14	0 - 2	47.2
	2 - 4	13.1
	4 - 6	31.5
	6 - 8	ND (0.059)
SB-15**	1 - 3	1.12
	3 - 5	1.0
	5 - 7	5.1

Tecumseh Products Company
Sheboygan Falls
Sheboygan River and Harbor Site

Table 7 (Continued)
External Source Assessment
PCB Concentrations of Soil Boring Samples

Sample I.D.	Depth Interval (feet)	Total PCB Concentration (mg/kg)
SB-16**	1 - 3	18
	3 - 5	72
	5 - 7	ND (0.059)
	7 - 9	0.26
SB-17**	1 - 3	42
	3 - 5	14
	5 - 7	0.413
	7 - 9	0.094
SB-18**	1 - 3	28.6
	3 - 5	44.6
	5 - 7	42
	7 - 9	62
	9 - 11	166

Notes:
ND = Non-detect (detection limit in parentheses)
NR = No Recovery
mg/kg = Milligram per kilogram
[ ] = Duplicate Sample

* = Analytical Laboratory reported possible interference from other organic compounds, resulting in an elevated detection limit.
** = Sampling interval was changed due to concrete floor

Tecumseh Products Company
Sheboygan Falls, Wisconsin
Sheboygan River and Harbor Site

Table 8
External Source Assessment
PCB Concentrations of Monitoring Well Soil Samples

Sample I.D.	Depth Interval (feet)	Total PCB Concentration (mg/kg dry weight)
MW-4D	0 - 2	8.7
	2 - 4	3.09
	4 - 6	ND (0.06)
	6 - 8	2.68
	8 - 10	NA
	10 - 12	1.49
	12 - 14	0.3
	14 - 16	NA
	16 - 18	ND (0.061)
	18 - 20	ND (0.062)
	20 - 22	NA - ST
	22 - 24	ND (0.059)
	24 - 26	ND (0.062)
	26 - 28	ND (0.061)
	28-30	ND (0.061)
	30-32	ND (0.061)
	32.34	ND (0.054)
	34-36	ND (0.057)
	36 - 38	ND (0.058)
	38 - 40	ND (0.055)
MW-5D	1 - 3	ND (0.056)
	3 - 5	NA
	5 - 7	ND (0.052)
	7 - 9	ND (0.057)
	9 - 11	ND (0.060)
	12 - 14	NA
	14 - 16	NA - ST
	16 - 18	ND (0.066)
	18 - 20	ND (0.064)
	20 - 22	ND (0.056)
	22 - 24	ND (0.068)
	24 - 26	ND (0.054)
	26 - 28	ND (0.053)
	28 - 30	ND (0.053)
	30 - 32	ND (0.058)
	32 - 34	ND (0.055)
	34 - 36	ND (0.062)
	36 - 38	ND (0.059)
MW-7D	0 - 2	29
	2 - 4	11.4
	4 - 6	23.2
	6 - 8	0.14
	8 - 10	0.076
	10 - 12	ND (0.056)

Tecumseh Products Company
Sheboygan Falls
Sheboygan River and Harbor Site

Table 8 (Continued)
External Source Assessment
PCB Concentrations of Monitoring Well Soil Samples

Sample I.D.	Depth Interval (feet)	Total PCB Concentration (mg/kg)
MW-7D (Cont'd)	12 - 14	ND (0.060)
	14 - 16	3.7
	16 - 18	NA - ST
	18 - 20	0.158
	20 - 22	ND (0.065)
	22 - 24	ND (0.066)
	24 - 26	ND (0.067)
	26 - 28	ND (0.062)
	28 - 30	ND (0.063)
	30 - 32	ND (0.068)
	32 - 34	ND (0.057)
	34 - 36	0.15
	36 - 38	Not Sampled
	38 - 40	ND (0.055)
Off-Site MW-6S	0 - 2	1.4
	2 - 4	0.161
	4 - 6	0.31

Notes:
ND = Non-detect (detection limit in parentheses)
NA = Not Analyzed
ST = Shelby Tube Sample
mg/kg = Milligram per kilogram

Tecumseh Products Company
Sheboygan Falls, Wisconsin
Sheboygan River and Harbor Site

Table 9
External Source Assessment
Northern Sheboygan River Bank Evaluation Results

Location	Sample I.D.	Depth Interval (in)	Total Organic Carbon Concentration (mg/kg dry weight)	Total PCB Concentration (mg/kg dry weight)
North Bank Soil Samples from Walkover	NRB-4	0-6	16000	0.56
	NRB-5	0-6	7000	2700 [4400]
	NRB-7	0-6	2600	ND(0.062)
	NRB-9	0-6	19000	0.73
	NRB-10	0-6	5000	0.12
Soils Near Non-Contact Cooling Water Discharge Area Area	B1	0-6	--	1100
	B2	0-6	--	380 [330]
		6-8	--	100
	B3	0-6	--	0.36
		6-12	--	0.42
		12-18	--	NA
		18-24	--	690
		24-30	--	38
		30-34	--	33
North Bank Soil Composites	NB-COMP-1	0-6	32000	2.3
	NB-COMP-2	0-6	23000	0.77
	NB-COMP-3	0-6	22000	0.64
	NB-COMP-4	0-6	39000	2.12
	NB-COMP-5	0-6	19000	39
	NB-COMP-6	0-6	23000 [26000]	2.6 [2.4]
	NB-COMP-7	0-6	15000	2.8
	NB-COMP-8	0-6	18000	3.5
	NB-COMP-9	0-6	28000	1.6
	NB-COMP-10	0-6	15000	1.9
North Bank Surface Soil Samples (Section 5)	NB-SS-41	0-6	26000	7.2
	NB-SS-42	0-6	31000	7.3
	NB-SS-43	0-6	26000	13
	NB-SS-44	0-6	19000	31
	NB-SS-45	0-6	19000	12
	NB-SS-46	0-6	35000	17
	NB-SS-47	0-6	25000	5.8
	NB-SS-48	0-6	30000	3.3
	NB-SS-49	0-6	28000	0.25
	NB-SS-50	0-6	28000	83
Non-Contact Cooling Water	NCCW-1	N/A	N/A	ND(0.053) μg/l

Notes:
1. Total Organic Carbon concentration results were obtained by taking the average of all replicate samples.
2. Total PCB concentration results in mg/kg except as noted.

[ ] = Duplicate result
ND( ) = Result was non-detect, value in parenthesis is the detection limit.
in = inch
mg/kg = Milligram per kilogram
μg/L = Microgram per liter
NA = Not Analyzed
N/A = Not applicable

Tecumseh Products Company
Sheboygan Falls, Wisconsin
Sheboygan River and Harbor Site

Table 10
External Source Assessment
PCB Concentrations of Grid Boring Composite Soil Samples

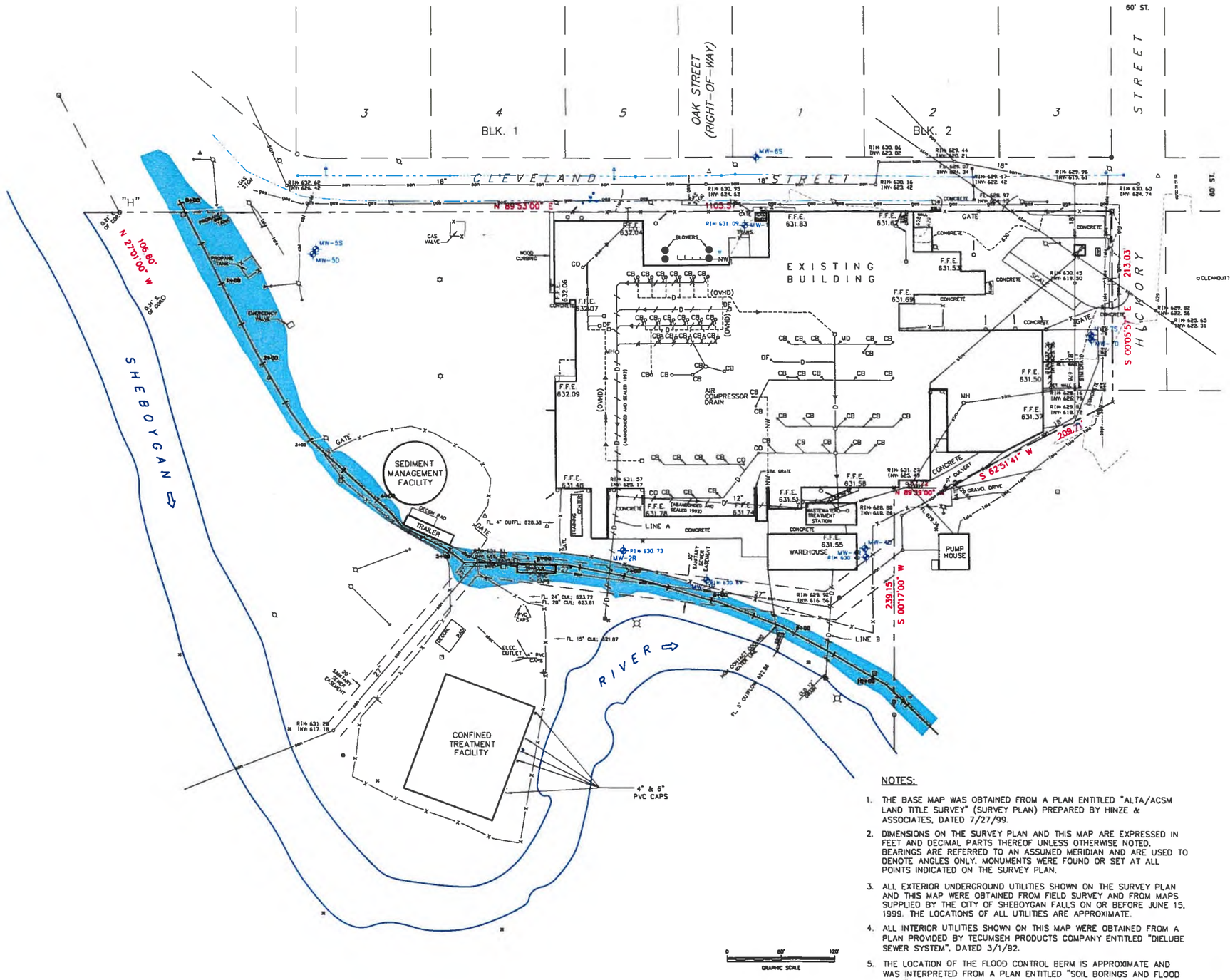
Composite Sample I.D.	Grid Borings Sampled in Depth Interval	Depth Interval (feet)	Total PCB Concentration (mg/kg dry weight)
COMP-1	G55, G56, G61, G62	0 - 2	5.4
		2 - 4	3.4
		4 - 6	3.2
	G61, G62	6 - 8	0.1
	G61	8 - 10	ND (0.06)
COMP-2	G53, G54, G59, G60	0 - 2	12
		2 - 4	14.9 [2.24]
	G54, G60	4 - 6	0.192
		6 - 8	0.8
	G60	8 - 10	0.51
COMP-3	G65, G66	0 - 2	0.6
		2 - 4	0.29
	G65	4 - 6	ND (0.055)
		6 - 8	0.44
		8 - 10	ND (0.058)
COMP-4	G63, G64	0 - 2	1.51
		2 - 4	1.08
	G63	4 - 6	1.37
COMP-5	G51, G52	0 - 2	0.9
		2 - 4	7.7
		4 - 6	0.35
COMP-6	G33, G34, G49, G50	0 - 2	2.7
		2 - 4	0.23
	G33, G34	4 - 6	3.13
		6 - 8	2.46
		8 - 10	0.015
COMP-7	G31, G32, G47, G48	0 - 2	1.28
	G31, G32	2 - 4	0.57
		4 - 6	3.5
		6 - 8	ND (0.058)
		8 - 10	0.61
COMP-8	G29, G30, G45, G46	0 - 2	55
	G29, G30, G45	2 - 4	11.1
	G29, G30	4 - 6	102
COMP-9	G27, G28, G43, G44	0 - 2	2.2
	G27, G28, G43	2 - 4	2.72 [2.39]
	G28, G43	4 - 6	0.58

Tecumseh Products Company
Sheboygan Falls, Wisconsin
Sheboygan River and Harbor Site

Table 10
External Source Assessment
PCB Concentrations of Grid Boring Composite Soil Samples

Composite Sample I.D.	Grid Borings Sampled in Depth Interval	Depth Interval (feet)	Total PCB Concentration (mg/kg dry weight)
COMP-10	G25, G26, G41, G42	0 - 2	4.3
		2 - 4	4.0
	G41	4 - 6	50
COMP-11	G23, G24, G39, G40	0 - 2	55.4
		2 - 4	18.5
		4 - 6	31
	G23, G24, G39	6 - 8	0.57
COMP-12	G21, G22, G37, G38	0 - 2	70
		2 - 4	54
		4 - 6	14
	G22, G37, G38	6 - 8	9.9
COMP-13	G19, G20, G35, G36	0 - 2	61
		2 - 4	52
		4 - 6	85
		6 - 8	34.3
COMP-14	G17, G18, G57, G58	0 - 2	18.8
		2 - 4	19.8
		4 - 6	26.4
		6 - 8	17
	G18, G58	8 - 10	1,800
COMP-15	G7, G8, G15, G16	0 - 2	4.2
		2 - 4	10.9
		4 - 6	21.4
	G8, G15, G16	6 - 8	3.8
COMP-16	G5, G6, G13, G14	0 - 2	3.0
		2 - 4	3.8
		4 - 6	23
	G13, G14	6 - 8	13.5
COMP-17	G3, G4, G11, G12	0 - 2	0.94
		2 - 4	2.6
		4 - 6	2.0 [.07]
COMP-18	G1, G2, G9, G10	0 - 2	28
		2 - 4	450
		4 - 6	16
	G9, G10	6 - 8	ND (0.059)
	G9	8 - 10	ND (0.06)

Notes:
ND = Non-detect (detection limit in parentheses)
mg/kg = Milligram per kilogram
[ ] = Duplicate Sample



LEGEND

- SANITARY SEWER MANHOLE
- STORM SEWER MANHOLE
- AREA DRAIN (STORM)
- STORM CATCH BASIN-CURB TYPE
- WATER MANHOLE
- FIRE HYDRANT
- WATER SHUT-OFF VALVE
- UTILITY POLE & GUY WIRE
- LIGHT POLE
- WATER GAUGE
- GAS SHUT-OFF VALVE
- FLAG POLE
- NW — NON-CONTACT COOLING WATER
- D — DRAIN LINE (ACTIVE)
- DRAIN LINE (ABANDONED)
- gas — UNDERGROUND GAS
- elec — UNDERGROUND ELECTRIC
- tele — UNDERGROUND TELEPHONE
- cbl — UNDERGROUND CABLE
- san — SANITARY SEWER
- stm — STORM SEWER
- WATER MAIN
- WOOD FENCE
- CHAIN LINK FENCE
- MONITORING WELL
- FLOOD CONTROL BERM

NOTES:

1. THE BASE MAP WAS OBTAINED FROM A PLAN ENTITLED "ALTA/ACSM LAND TITLE SURVEY" (SURVEY PLAN) PREPARED BY HINZE & ASSOCIATES, DATED 7/27/99.
2. DIMENSIONS ON THE SURVEY PLAN AND THIS MAP ARE EXPRESSED IN FEET AND DECIMAL PARTS THEREOF UNLESS OTHERWISE NOTED. BEARINGS ARE REFERRED TO AN ASSUMED MERIDIAN AND ARE USED TO DENOTE ANGLES ONLY. MONUMENTS WERE FOUND OR SET AT ALL POINTS INDICATED ON THE SURVEY PLAN.
3. ALL EXTERIOR UNDERGROUND UTILITIES SHOWN ON THE SURVEY PLAN AND THIS MAP WERE OBTAINED FROM FIELD SURVEY AND FROM MAPS SUPPLIED BY THE CITY OF SHEBOYGAN FALLS ON OR BEFORE JUNE 15, 1999. THE LOCATIONS OF ALL UTILITIES ARE APPROXIMATE.
4. ALL INTERIOR UTILITIES SHOWN ON THIS MAP WERE OBTAINED FROM A PLAN PROVIDED BY TECUMSEH PRODUCTS COMPANY ENTITLED "DIELUBE SEWER SYSTEM", DATED 3/1/92.
5. THE LOCATION OF THE FLOOD CONTROL BERM IS APPROXIMATE AND WAS INTERPRETED FROM A PLAN ENTITLED "SOIL BORINGS AND FLOOD BERM" PREPARED BY MILLER ENGINEERS AND SCIENTISTS, DATED 6/4/98. THE BASE DRAWING FOR THE PLAN ENTITLED "SOIL BORINGS AND FLOOD BERM" WAS OBTAINED FROM DONOHUE AND ASSOCIATES, DATED 5/10/98.

X: 17606X01.DWG, 17606X03.DWG
LMAN: EXISTING
P: STD-PCP/DL
11/10/99 SYR-54-GMS CBM GMS
17606004/TEC/17606B01.DWG

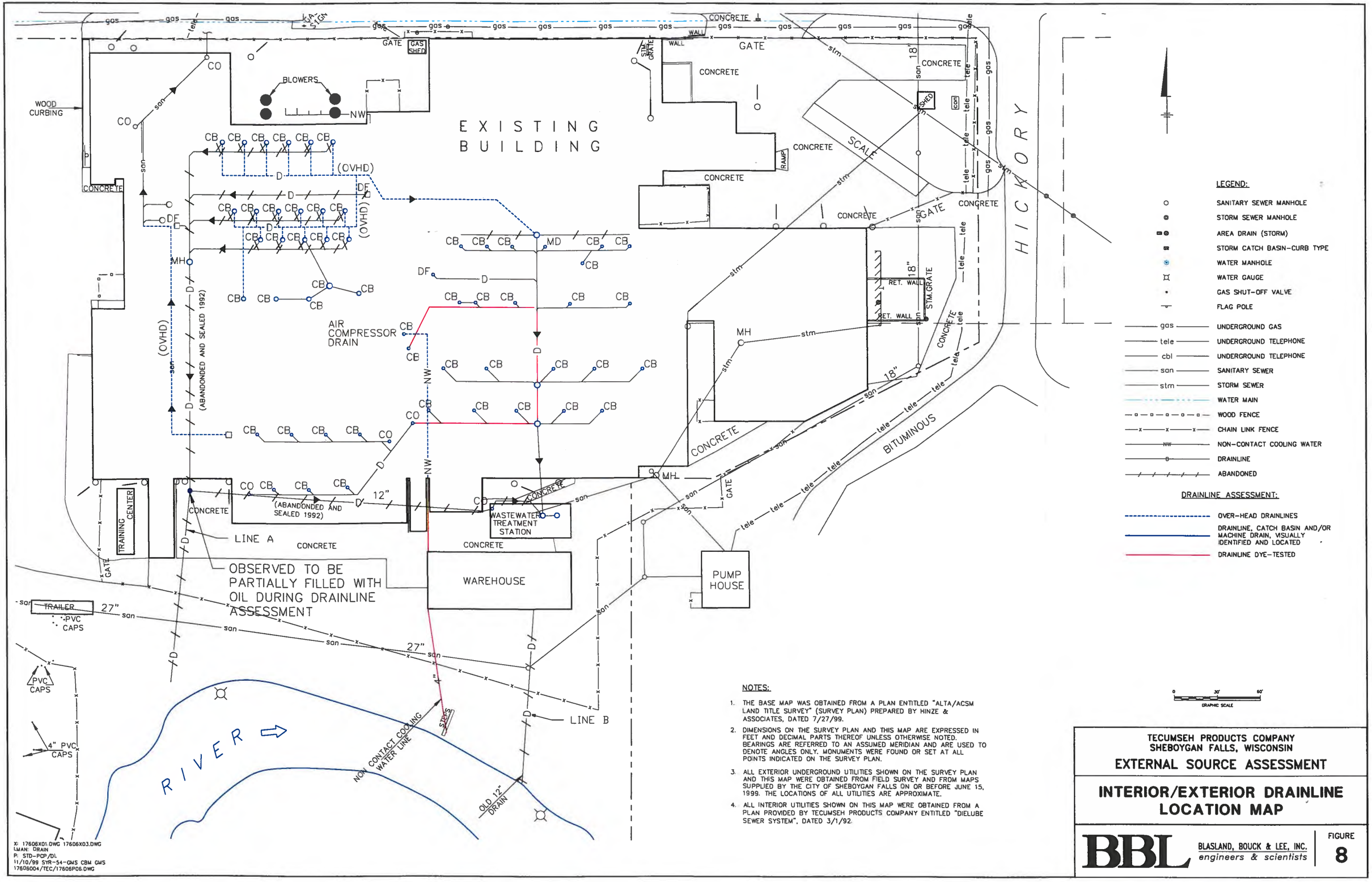
TECUMSEH PRODUCTS COMPANY
SHEBOYGAN FALLS, WISCONSIN

EXTERNAL SOURCE ASSESSMENT

FLOOD CONTROL BERM LOCATION MAP

BLASLAND, BOUCK & LEE, INC.
engineers & scientists

FIGURE 3



NOTES:

1. THE BASE MAP WAS OBTAINED FROM A PLAN ENTITLED "ALTA/ACSM LAND TITLE SURVEY" (SURVEY PLAN) PREPARED BY HINZE & ASSOCIATES, DATED 7/27/99.
2. DIMENSIONS ON THE SURVEY PLAN AND THIS MAP ARE EXPRESSED IN FEET AND DECIMAL PARTS THEREOF UNLESS OTHERWISE NOTED. BEARINGS ARE REFERRED TO AN ASSUMED MERIDIAN AND ARE USED TO DENOTE ANGLES ONLY. MONUMENTS WERE FOUND OR SET AT ALL POINTS INDICATED ON THE SURVEY PLAN.
3. ALL EXTERIOR UNDERGROUND UTILITIES SHOWN ON THE SURVEY PLAN AND THIS MAP WERE OBTAINED FROM FIELD SURVEY AND FROM MAPS SUPPLIED BY THE CITY OF SHEBOYGAN FALLS ON OR BEFORE JUNE 15, 1999. THE LOCATIONS OF ALL UTILITIES ARE APPROXIMATE.
4. ALL INTERIOR UTILITIES SHOWN ON THIS MAP WERE OBTAINED FROM A PLAN PROVIDED BY TECUMSEH PRODUCTS COMPANY ENTITLED "DIELUBE SEWER SYSTEM", DATED 3/1/92.

X: 17606X01.DWG 17606X03.DWG
LMAN: DRAIN
P: STD-PCP/DL
11/10/99 SYR-54-GMS CBM GMS
17606004/TEC/17606P06.DWG

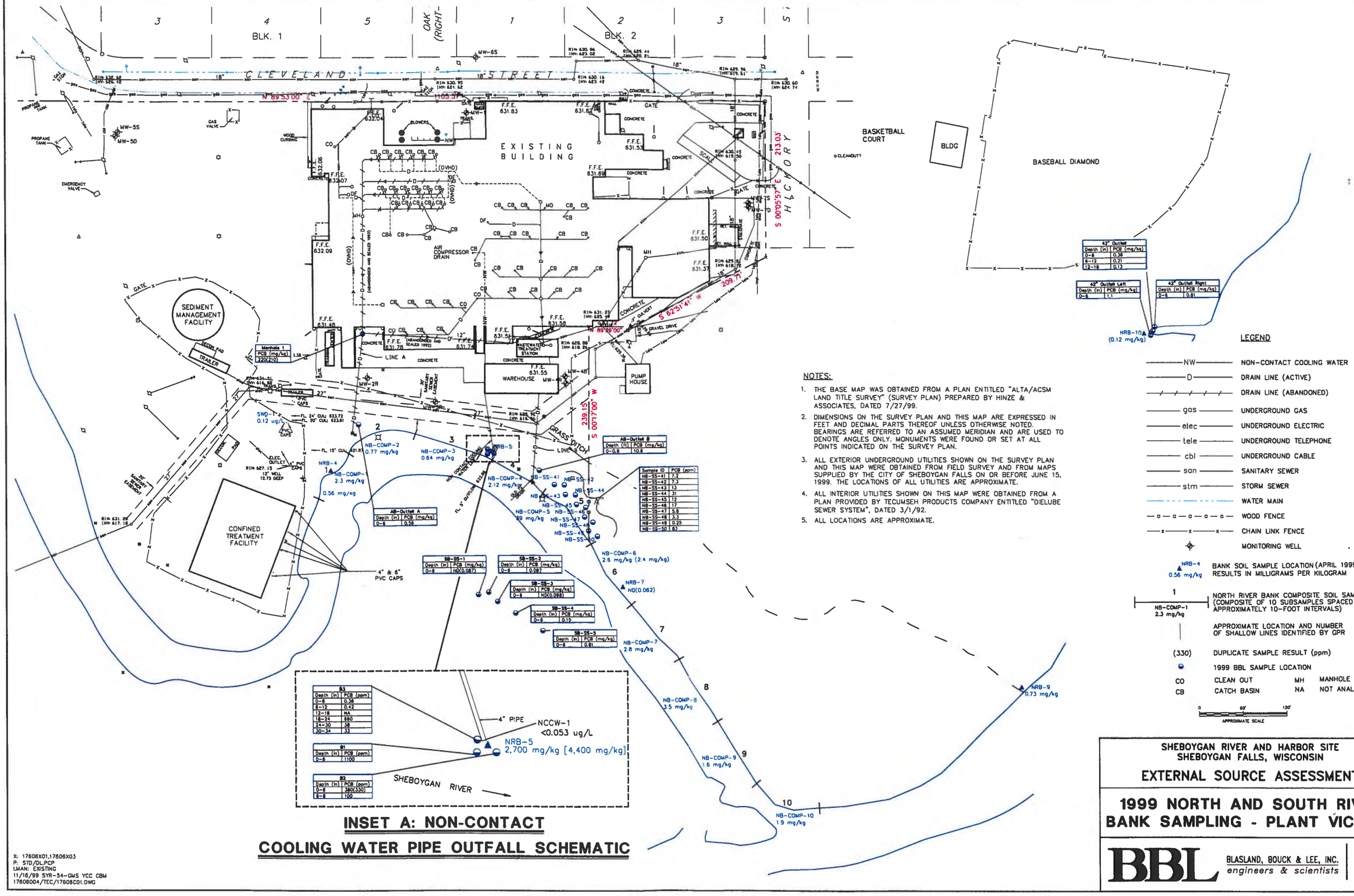
TECUMSEH PRODUCTS COMPANY
SHEBOYGAN FALLS, WISCONSIN

EXTERNAL SOURCE ASSESSMENT

INTERIOR/EXTERIOR DRAINLINE LOCATION MAP

BBL BLASLAND, BOUCK & LEE, INC. engineers & scientists

FIGURE 8



INSET A: NON-CONTACT COOLING WATER PIPE OUTFALL SCHEMATIC

NOTES:

1. THE BASE MAP WAS OBTAINED FROM A PLAN ENTITLED "ALTA/ACSM LAND TITLE SURVEY" (SURVEY PLAN) PREPARED BY HINZE & ASSOCIATES, DATED 7/27/99.
2. DIMENSIONS ON THE SURVEY PLAN AND THIS MAP ARE EXPRESSED IN FEET AND DECIMAL PARTS THEREOF UNLESS OTHERWISE NOTED. BEARINGS ARE REFERRED TO AN ASSUMED MERIDIAN AND ARE USED TO DENOTE ANGLES ONLY. MONUMENTS WERE FOUND OR SET AT ALL POINTS INDICATED ON THE SURVEY PLAN.
3. ALL EXTERIOR UNDERGROUND UTILITIES SHOWN ON THE SURVEY PLAN AND THIS MAP WERE OBTAINED FROM FIELD SURVEY AND FROM MAPS SUPPLIED BY THE CITY OF SHEBOYGAN FALLS ON OR BEFORE JUNE 15, 1999. THE LOCATIONS OF ALL UTILITIES ARE APPROXIMATE.
4. ALL INTERIOR UTILITIES SHOWN ON THIS MAP WERE OBTAINED FROM A PLAN PROVIDED BY TECUMSEH PRODUCTS COMPANY ENTITLED "DIELUBE SEWER SYSTEM", DATED 3/1/92.
5. ALL LOCATIONS ARE APPROXIMATE.

LEGEND

- NW — NON-CONTACT COOLING WATER
- D — DRAIN LINE (ACTIVE)
- DRAIN LINE (ABANDONED)
- gas — UNDERGROUND GAS
- elec — UNDERGROUND ELECTRIC
- tele — UNDERGROUND TELEPHONE
- cbl — UNDERGROUND CABLE
- son — SANITARY SEWER
- stm — STORM SEWER
- WATER MAIN
- WOOD FENCE
- CHAIN LINK FENCE
- MONITORING WELL
- NRB-4 / 0.56 mg/kg — BANK SOIL SAMPLE LOCATION (APRIL 1999) RESULTS IN MILLIGRAMS PER KILOGRAM
- 1 / NB-COMP-1 / 2.3 mg/kg — NORTH RIVER BANK COMPOSITE SOIL SAMPLES (COMPOSITE OF 10 SUBSAMPLES SPACED AT APPROXIMATELY 10-FOOT INTERVALS)
- APPROXIMATE LOCATION AND NUMBER OF SHALLOW LINES IDENTIFIED BY GPR
- (330) — DUPLICATE SAMPLE RESULT (ppm)
- 1999 BBL SAMPLE LOCATION
- CO — CLEAN OUT; MH — MANHOLE
- CB — CATCH BASIN; NA — NOT ANALYZED

0 60' 120'
APPROXIMATE SCALE

SHEBOYGAN RIVER AND HARBOR SITE
SHEBOYGAN FALLS, WISCONSIN

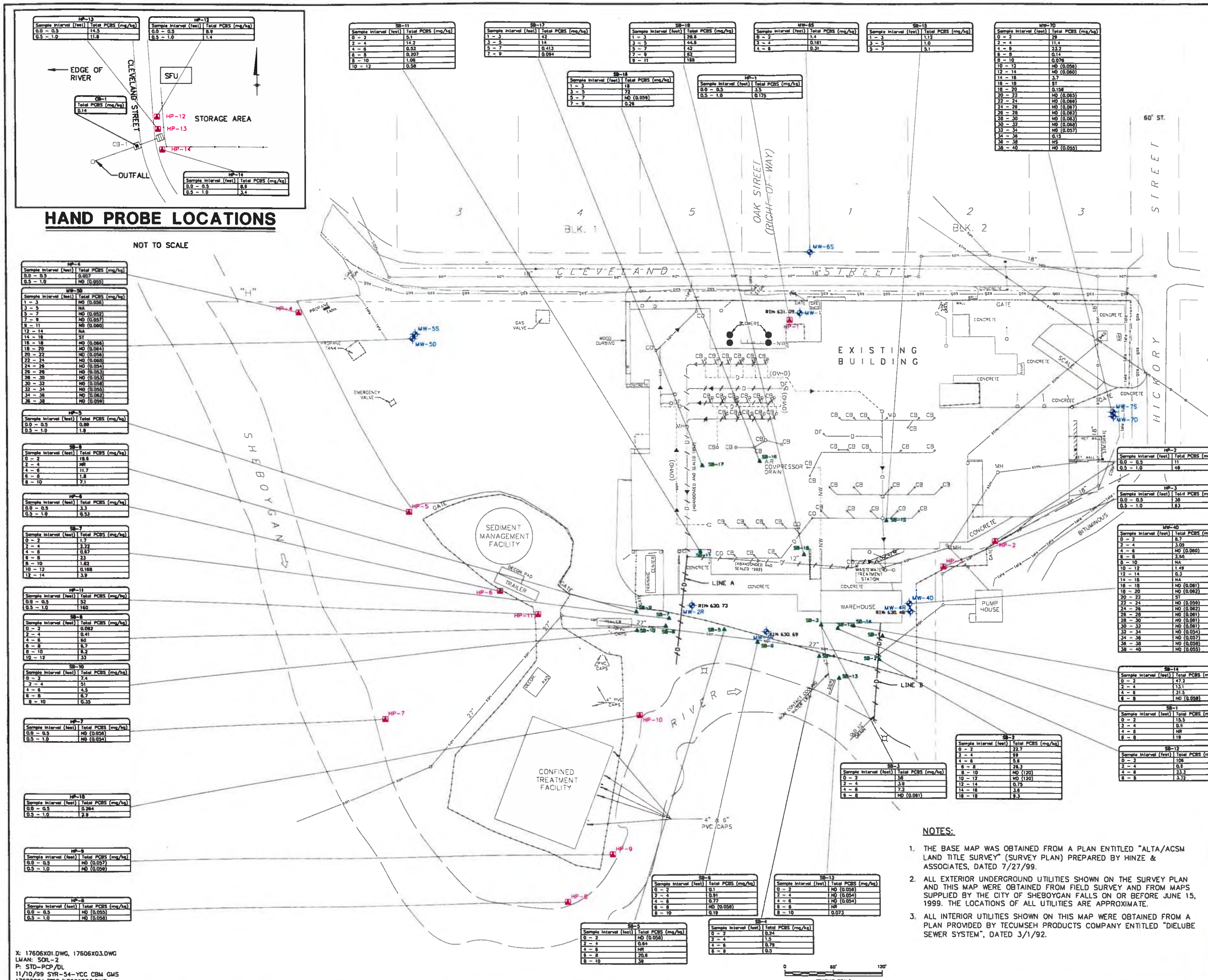
EXTERNAL SOURCE ASSESSMENT

1999 NORTH AND SOUTH RIVER BANK SAMPLING - PLANT VICINITY

BBL BLASLAND, BOUCK & LEE, INC. engineers & scientists

FIGURE 9

X: 17606X01,17606X03
P: STD/DL.PCP
LMAN: EXISTING
11/16/99 SYR-54-GMS YCC CBM
17606004/TEC/17606C01.DWG



HAND PROBE LOCATIONS

NOT TO SCALE

HP-13

Sample Interval (feet)	Total PCBS (mg/kg)
0.0 - 0.5	14.5
0.5 - 1.0	11.8

HP-12

Sample Interval (feet)	Total PCBS (mg/kg)
0.0 - 0.5	8.9
0.5 - 1.0	1.4

CB-1

Total PCBS (mg/kg)
0.14

HP-14

Sample Interval (feet)	Total PCBS (mg/kg)
0.0 - 0.5	8.9
0.5 - 1.0	3.4

SB-11

Sample Interval (feet)	Total PCBS (mg/kg)
0 - 2	5.1
2 - 4	14.2
4 - 6	0.52
6 - 8	0.207
8 - 10	1.06
10 - 12	0.58

SB-17

Sample Interval (feet)	Total PCBS (mg/kg)
1 - 3	42
3 - 5	14
5 - 7	0.413
7 - 9	0.094

SB-16

Sample Interval (feet)	Total PCBS (mg/kg)
1 - 3	18
3 - 5	72
5 - 7	ND (0.059)
7 - 9	0.26

SB-18

Sample Interval (feet)	Total PCBS (mg/kg)
1 - 3	28.6
3 - 5	44.6
5 - 7	42
7 - 9	62
9 - 11	168

HP-1

Sample Interval (feet)	Total PCBS (mg/kg)
0.0 - 0.5	3.5
0.5 - 1.0	0.175

MW-6S

Sample Interval (feet)	Total PCBS (mg/kg)
0 - 2	1.4
2 - 4	0.161
4 - 6	0.31

SB-15

Sample Interval (feet)	Total PCBS (mg/kg)
1 - 3	1.12
3 - 5	1.0
5 - 7	5.1

MW-7D

Sample Interval (feet)	Total PCBS (mg/kg)
0 - 2	29
2 - 4	11.4
4 - 6	23.2
6 - 8	0.14
8 - 10	0.076
10 - 12	ND (0.056)
12 - 14	ND (0.080)
14 - 16	3.7
16 - 18	ST
18 - 20	0.158
20 - 22	ND (0.065)
22 - 24	ND (0.066)
24 - 26	ND (0.067)
26 - 28	ND (0.062)
28 - 30	ND (0.063)
30 - 32	ND (0.068)
32 - 34	ND (0.057)
34 - 36	0.15
36 - 38	NS
38 - 40	ND (0.055)

HP-4

Sample Interval (feet)	Total PCBS (mg/kg)
0.0 - 0.5	0.057
0.5 - 1.0	ND (0.055)

MW-5D

Sample Interval (feet)	Total PCBS (mg/kg)
1 - 3	ND (0.056)
3 - 5	NA
5 - 7	ND (0.052)
7 - 9	ND (0.057)
9 - 11	ND (0.060)
12 - 14	NA
14 - 16	ST
16 - 18	ND (0.066)
18 - 20	ND (0.064)
20 - 22	ND (0.056)
22 - 24	ND (0.068)
24 - 26	ND (0.054)
26 - 28	ND (0.053)
28 - 30	ND (0.053)
30 - 32	ND (0.056)
32 - 34	ND (0.055)
34 - 36	ND (0.062)
36 - 38	ND (0.059)

HP-5

Sample Interval (feet)	Total PCBS (mg/kg)
0.0 - 0.5	0.89
0.5 - 1.0	1.8

SB-9

Sample Interval (feet)	Total PCBS (mg/kg)
0 - 2	19.6
2 - 4	NR
4 - 6	11.7
6 - 8	1.8
8 - 10	7.1

HP-6

Sample Interval (feet)	Total PCBS (mg/kg)
0.0 - 0.5	3.3
0.5 - 1.0	0.53

SB-7

Sample Interval (feet)	Total PCBS (mg/kg)
0 - 2	1.7
2 - 4	2.22
4 - 6	0.67
6 - 8	23
8 - 10	1.82
10 - 12	0.168
12 - 14	3.9

HP-11

Sample Interval (feet)	Total PCBS (mg/kg)
0.0 - 0.5	52
0.5 - 1.0	160

SB-6

Sample Interval (feet)	Total PCBS (mg/kg)
0 - 2	0.092
2 - 4	0.41
4 - 6	60
6 - 8	6.7
8 - 10	8.2
10 - 12	33

SB-10

Sample Interval (feet)	Total PCBS (mg/kg)
0 - 2	7.4
2 - 4	51
4 - 6	4.5
6 - 8	6.7
8 - 10	0.35

HP-7

Sample Interval (feet)	Total PCBS (mg/kg)
0.0 - 0.5	ND (0.056)
0.5 - 1.0	ND (0.054)

HP-10

Sample Interval (feet)	Total PCBS (mg/kg)
0.0 - 0.5	0.264
0.5 - 1.0	2.9

HP-9

Sample Interval (feet)	Total PCBS (mg/kg)
0.0 - 0.5	ND (0.057)
0.5 - 1.0	ND (0.059)

HP-8

Sample Interval (feet)	Total PCBS (mg/kg)
0.0 - 0.5	ND (0.055)
0.5 - 1.0	ND (0.058)

SB-5

Sample Interval (feet)	Total PCBS (mg/kg)
0 - 2	ND (0.058)
2 - 4	0.64
4 - 6	NR
6 - 8	20.6
8 - 10	38

SB-8

Sample Interval (feet)	Total PCBS (mg/kg)
0 - 2	0.1
2 - 4	0.91
4 - 6	0.77
6 - 8	ND (0.058)
8 - 10	0.19

SB-4

Sample Interval (feet)	Total PCBS (mg/kg)
0 - 2	0.24
2 - 4	1.5
4 - 6	0.79
6 - 8	0.5

SB-13

Sample Interval (feet)	Total PCBS (mg/kg)
0 - 2	ND (0.058)
2 - 4	ND (0.054)
4 - 6	ND (0.054)
6 - 8	NR
8 - 10	0.073

SB-3

Sample Interval (feet)	Total PCBS (mg/kg)
0 - 2	58
2 - 4	3.9
4 - 6	7.2
6 - 8	ND (0.061)

SB-2

Sample Interval (feet)	Total PCBS (mg/kg)
0 - 2	22.7
2 - 4	98
4 - 6	5.6
6 - 8	26.3
8 - 10	ND (120)
10 - 12	ND (120)
12 - 14	0.75
14 - 16	3.6
16 - 18	9.3

HP-2

Sample Interval (feet)	Total PCBS (mg/kg)
0.0 - 0.5	11
0.5 - 1.0	48

HP-3

Sample Interval (feet)	Total PCBS (mg/kg)
0.0 - 0.5	38
0.5 - 1.0	83

MW-4D

Sample Interval (feet)	Total PCBS (mg/kg)
0 - 2	8.7
2 - 4	3.09
4 - 6	ND (0.060)
6 - 8	2.56
8 - 10	NA
10 - 12	1.49
12 - 14	0.3
14 - 16	NA
16 - 18	ND (0.061)
18 - 20	ND (0.062)
20 - 22	ST
22 - 24	ND (0.059)
24 - 26	ND (0.062)
26 - 28	ND (0.061)
28 - 30	ND (0.061)
30 - 32	ND (0.061)
32 - 34	ND (0.054)
34 - 36	ND (0.057)
36 - 38	ND (0.058)
38 - 40	ND (0.055)

SB-14

Sample Interval (feet)	Total PCBS (mg/kg)
0 - 2	47.2
2 - 4	13.1
4 - 6	31.5
6 - 8	ND (0.059)

SB-1

Sample Interval (feet)	Total PCBS (mg/kg)
0 - 2	15.5
2 - 4	0.9
4 - 6	NR
6 - 8	19

SB-12

Sample Interval (feet)	Total PCBS (mg/kg)
0 - 2	106
2 - 4	0.8
4 - 6	23.3
6 - 8	3.32

LEGEND:

- SANITARY SEWER MANHOLE
- STORM SEWER MANHOLE
- AREA DRAIN(STORM)
- STORM CATCH BASIN-CURB TYPE
- WATER MANHOLE
- WATER GAUGE
- GAS SHUT-OFF VALVE
- FLAG POLE
- NW — NON-CONTACT COOLING WATER
- D — DRAIN LINE
- ABANDONED
- gas — UNDERGROUND GAS
- tele — UNDERGROUND TELEPHONE
- cbl — UNDERGROUND CABLE
- san — SANITARY SEWER
- stm — STORM SEWER
- WATER MAIN
- WOOD FENCE
- CHAIN LINK FENCE
- SOIL BORING
- HAND PROBE
- MONITORING WELL

mg/kg = MILLIGRAMS PER KILOGRAM

ND (0.061) = NOT DETECTED (DETECTION LIMIT)

NR — NO RECOVERY

ST — SHELBY TUBE SAMPLE

NA — NOT ANALYZED

NS — NOT SAMPLED

[ ] — DUPLICATE SAMPLE

NOTES:

1. THE BASE MAP WAS OBTAINED FROM A PLAN ENTITLED "ALTA/ACSM LAND TITLE SURVEY" (SURVEY PLAN) PREPARED BY HINZE & ASSOCIATES, DATED 7/27/99.
2. ALL EXTERIOR UNDERGROUND UTILITIES SHOWN ON THE SURVEY PLAN AND THIS MAP WERE OBTAINED FROM FIELD SURVEY AND FROM MAPS SUPPLIED BY THE CITY OF SHEBOYGAN FALLS ON OR BEFORE JUNE 15, 1999. THE LOCATIONS OF ALL UTILITIES ARE APPROXIMATE.
3. ALL INTERIOR UTILITIES SHOWN ON THIS MAP WERE OBTAINED FROM A PLAN PROVIDED BY TECUMSEH PRODUCTS COMPANY ENTITLED "DIELUBE SEWER SYSTEM", DATED 3/1/92.

X: 17606X01.DWG, 17606X03.DWG
LMAN: SOIL-2
P: STD-PCP/DL
11/10/99 SYR-54-YCC CBM GMS
17606004/TEC/17606P03.DWG

TECUMSEH PRODUCTS COMPANY
SHEBOYGAN FALLS, WISCONSIN

EXTERNAL SOURCE ASSESSMENT

1999 SOIL SAMPLING ANALYTICAL RESULTS

BBL BLASLAND, BOUCK & LEE, INC. *engineers & scientists*

FIGURE 10

COMP-18	
Sample Interval (feet)	Total PCBs (mg/kg)
0 – 2	28
2 – 4	450
4 – 6	16
6 – 8	ND (0.059)
8 – 10	ND (0.06)

COMP-17	
Sample Interval (feet)	Total PCBs (mg/kg)
0 – 2	0.94
2 – 4	2.6
4 – 6	2.0 [0.7]

COMP-16	
Sample Interval (feet)	Total PCBs (mg/kg)
0 – 2	3.0
2 – 4	3.8
4 – 6	2.3
6 – 8	13.5

COMP-15	
Sample Interval (feet)	Total PCBs (mg/kg)
0 – 2	4.2
2 – 4	10.9
4 – 6	21.4
6 – 8	3.8

COMP-14	
Sample Interval (feet)	Total PCBs (mg/kg)
0 – 2	18.8
2 – 4	19.8
4 – 6	26.4
6 – 8	17
8 – 10	1,800

COMP-13	
Sample Interval (feet)	Total PCBs (mg/kg)
0 – 2	61
2 – 4	52
4 – 6	85
6 – 8	34.3

COMP-12	
Sample Interval (feet)	Total PCBs (mg/kg)
0 – 2	70
2 – 4	54
4 – 6	14
6 – 8	9.9

COMP-11	
Sample Interval (feet)	Total PCBs (mg/kg)
0 – 2	55.4
2 – 4	18.5
4 – 6	31
6 – 8	0.57

COMP-1	
Sample Interval (feet)	Total PCBs (mg/kg)
0 – 2	5.4
2 – 4	3.4
4 – 6	3.2
6 – 8	0.1
8 – 10	ND (0.06)

COMP-3	
Sample Interval (feet)	Total PCBs (mg/kg)
0 – 2	0.6
2 – 4	0.29
4 – 6	ND (0.055)
6 – 8	0.44
8 – 10	ND (0.058)

COMP-9	
Sample Interval (feet)	Total PCBs (mg/kg)
0 – 2	2.2
2 – 4	2.72 [2.39]
4 – 6	0.58

COMP-10	
Sample Interval (feet)	Total PCBs (mg/kg)
0 – 2	4.3
2 – 4	4.0
4 – 6	50

COMP-8	
Sample Interval (feet)	Total PCBs (mg/kg)
0 – 2	55
2 – 4	11.1
4 – 6	102

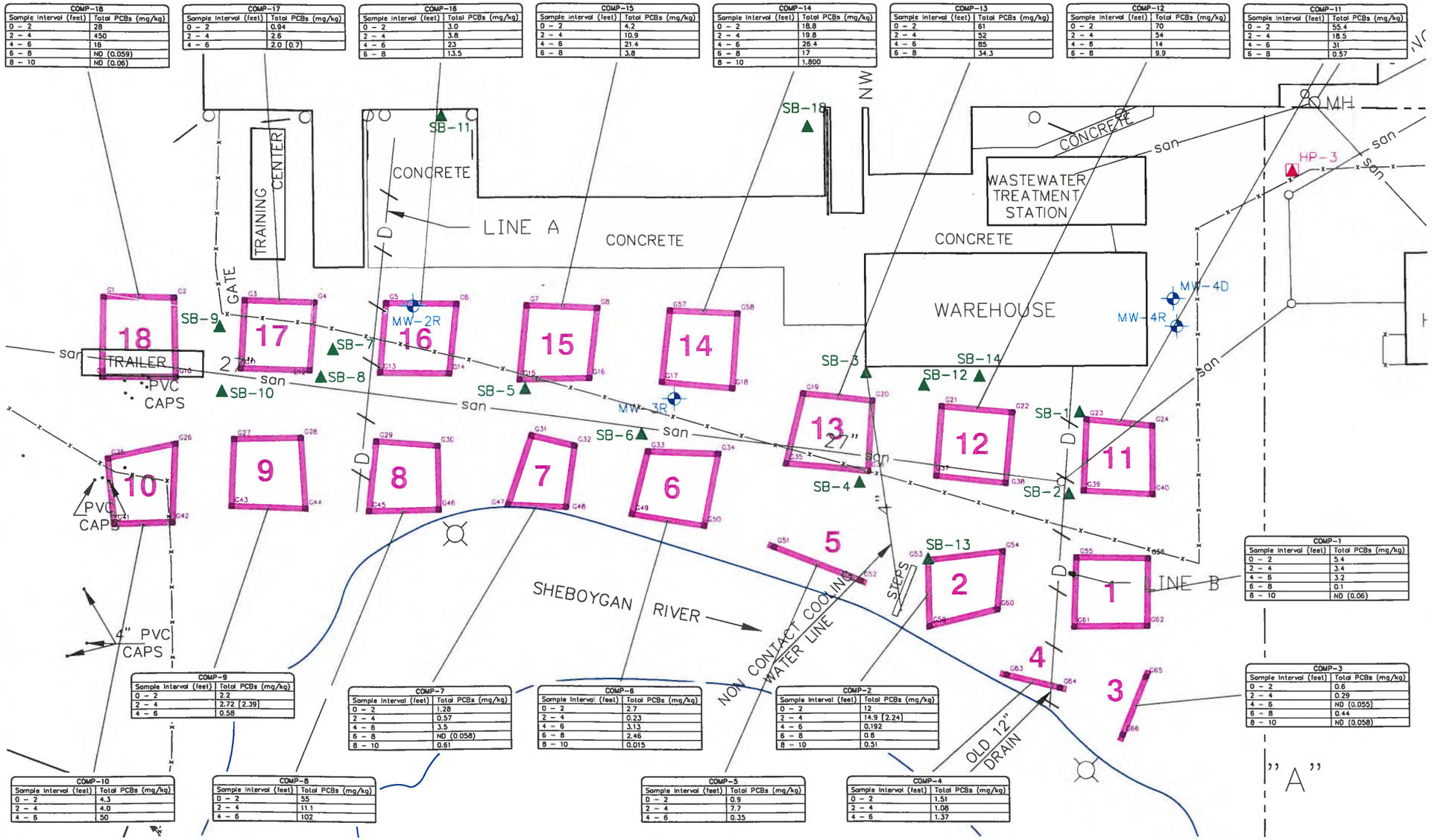
COMP-7	
Sample Interval (feet)	Total PCBs (mg/kg)
0 – 2	1.28
2 – 4	0.57
4 – 6	3.5
6 – 8	ND (0.058)
8 – 10	0.61

COMP-6	
Sample Interval (feet)	Total PCBs (mg/kg)
0 – 2	2.7
2 – 4	0.23
4 – 6	3.13
6 – 8	2.46
8 – 10	0.015

COMP-5	
Sample Interval (feet)	Total PCBs (mg/kg)
0 – 2	0.9
2 – 4	7.7
4 – 6	0.35

COMP-2	
Sample Interval (feet)	Total PCBs (mg/kg)
0 – 2	12
2 – 4	14.9 [2.24]
4 – 6	0.192
6 – 8	0.8
8 – 10	0.51

COMP-4	
Sample Interval (feet)	Total PCBs (mg/kg)
0 – 2	1.51
2 – 4	1.08
4 – 6	1.37



LEGEND:

- SANITARY SEWER MANHOLE
- STORM SEWER MANHOLE
- AREA DRAIN(STORM)
- STORM CATCH BASIN–CURB TYPE
- WATER MANHOLE
- FIRE HYDRANT
- WATER SHUT-OFF VALVE
- UTILITY POLE & GUY WIRE
- LIGHT POLE
- WATER GAUGE
- GAS SHUT-OFF VALVE
- FLAG POLE
- NW — NON-CONTACT COOLING WATER
- D — DRAIN LINE
- ABANDONED
- san — SANITARY SEWER
- stm — STORM SEWER
- WATER MAIN
- WOOD FENCE
- CHAIN LINK FENCE
- GRID BORING SAMPLE
- GRID BORING SAMPLES COMPOSITED FOR ANALYSIS
- MONITORING WELL
- SOIL BORING
- HAND PROBE
- mg/kg = MILIGRAMS PER KILOGRAM
- ND (0.06) = NOT DETECTED (DETECTION LIMIT)
- [ ] = DUPLICATE SAMPLE

0 20' 40'
GRAPHIC SCALE

NOTES:

1. THE BASE MAP WAS OBTAINED FROM A PLAN ENTITLED "ALTA/ACSM LAND TITLE SURVEY" (SURVEY PLAN) PREPARED BY HINZE & ASSOCIATES, DATED 7/27/99.
2. ALL EXTERIOR UNDERGROUND UTILITIES SHOWN ON THE SURVEY PLAN AND THIS MAP WERE OBTAINED FROM FIELD SURVEY AND FROM MAPS SUPPLIED BY THE CITY OF SHEBOYGAN FALLS ON OR BEFORE JUNE 15, 1999. THE LOCATIONS OF ALL UTILITIES ARE APPROXIMATE.

X: 17606X01.DWG, 17606X03.DWG
LMAN: GRID1
P: STD-PCP/DL
11/10/99 SYR-54-YCC CBM GMS
17605004/TEC/17606P04.DWG

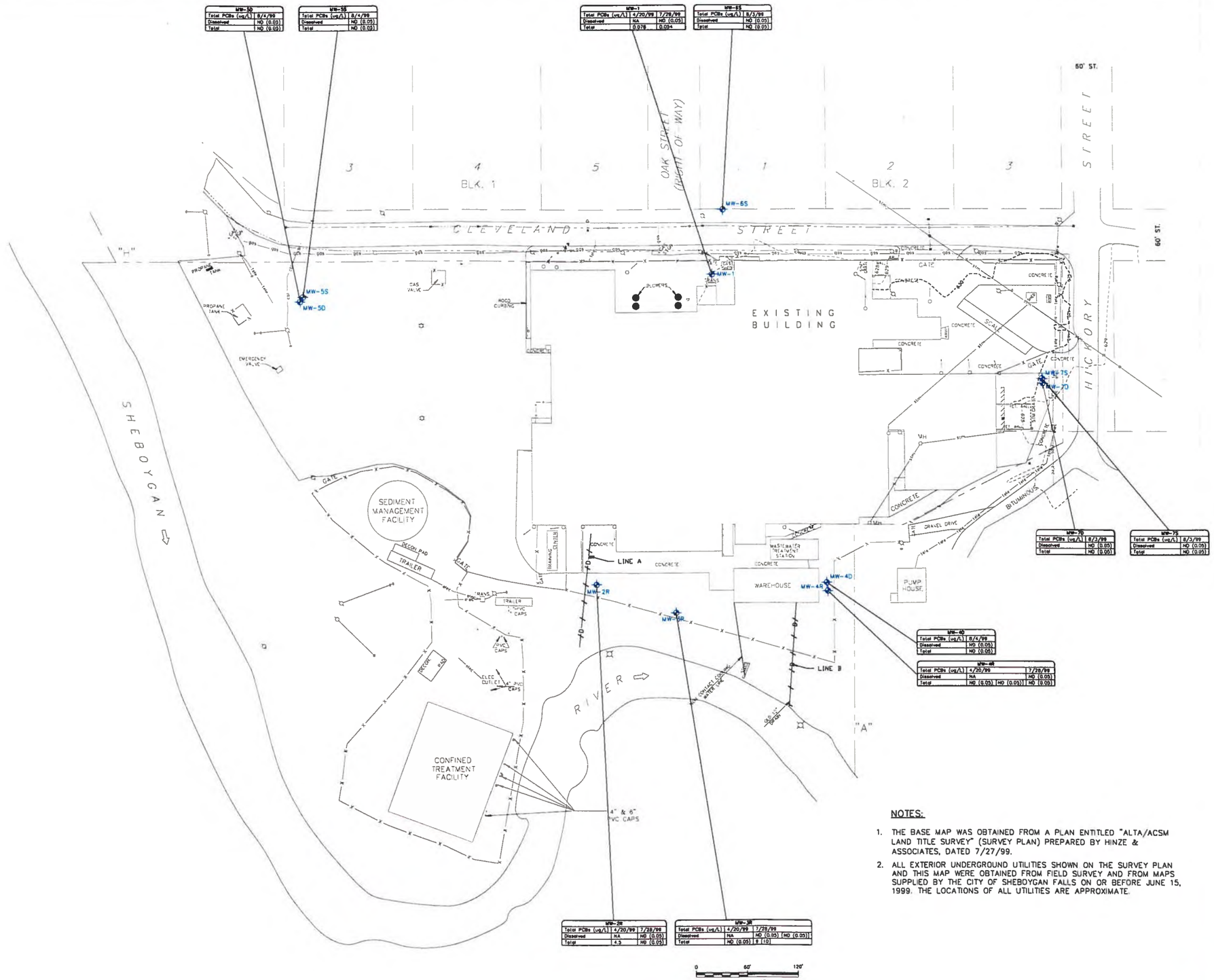
TECUMSEH PRODUCTS COMPANY
SHEBOYGAN FALLS, WISCONSIN

EXTERNAL SOURCE ASSESSMENT

1999 GRID BORING LOCATION PLAN AND COMPOSITE SAMPLE ANALYTICAL RESULTS

BBL BLASLAND, BOUCK & LEE, INC. engineers & scientists

FIGURE 16



LEGEND:

- SANITARY SEWER MANHOLE
- STORM SEWER MANHOLE
- AREA DRAIN(STORM)
- STORM CATCH BASIN-CURB TYPE
- WATER MANHOLE
- FIRE HYDRANT
- WATER SHUT-OFF VALVE
- UTILITY POLE & GUY WIRE
- LIGHT POLE
- WATER GAUGE
- GAS SHUT-OFF VALVE
- FLAG POLE
- NW — NON-CONTACT COOLING WATER
- D — DRAIN LINE
- ABANDONED
- gas — UNDERGROUND GAS
- elec — UNDERGROUND ELECTRIC
- tele — UNDERGROUND TELEPHONE
- cal — UNDERGROUND TELEPHONE
- san — SANITARY SEWER
- stm — STORM SEWER
- WATER MAIN
- WOOD FENCE
- CHAIN LINK FENCE
- MONITORING WELL
- ug/L = MICROGRAMS PER LITER
- NA = NOT ANALYZED
- ND (0.05) = NOT DETECTED (DETECTION LIMIT)
- [ ] = DUPLICATE SAMPLE

NOTES:

1. THE BASE MAP WAS OBTAINED FROM A PLAN ENTITLED "ALTA/ACSM LAND TITLE SURVEY" (SURVEY PLAN) PREPARED BY HINZE & ASSOCIATES, DATED 7/27/99.
2. ALL EXTERIOR UNDERGROUND UTILITIES SHOWN ON THE SURVEY PLAN AND THIS MAP WERE OBTAINED FROM FIELD SURVEY AND FROM MAPS SUPPLIED BY THE CITY OF SHEBOYGAN FALLS ON OR BEFORE JUNE 15, 1999. THE LOCATIONS OF ALL UTILITIES ARE APPROXIMATE.

TECUMSEH PRODUCTS COMPANY
SHEBOYGAN FALLS, WISCONSIN

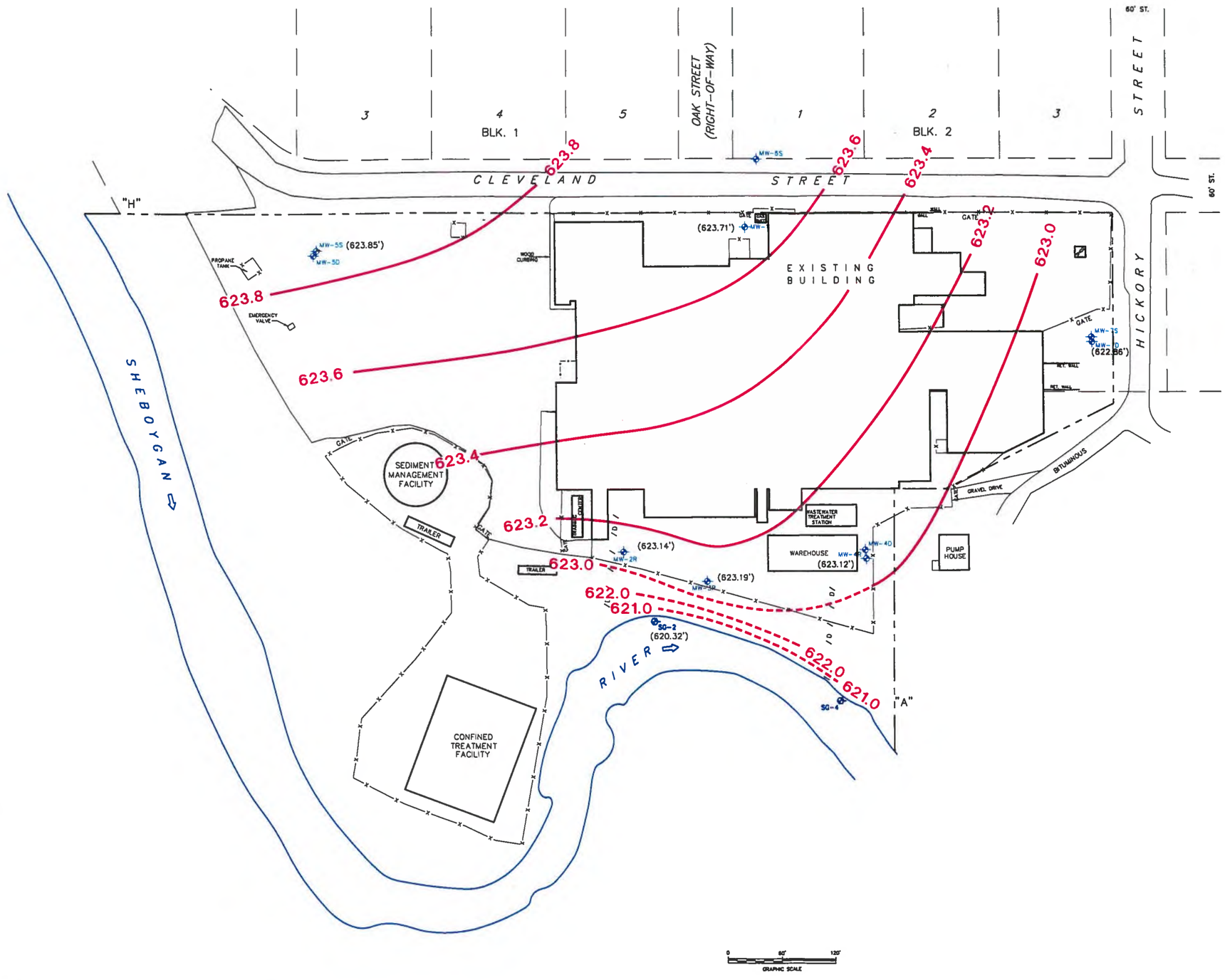
EXTERNAL SOURCE ASSESSMENT

GROUND-WATER ANALYTICAL RESULTS

BBL BLASLAND, BOUCK & LEE, INC. *engineers & scientists*

FIGURE 21

X: 17606X01.DWG, 17606X03.DWG
LMAN: ANALYTIC
P: STD-PCP/DL
10/14/99 SYR-54=YCC GMS CBM
17606004/TEC/17606P02.DWG



LEGEND:

- MONITORING WELL
- STAFF GUAGE
- (622.86') WATER-TABLE ELEVATION (FEET NVGD)
- 623.0 WATER-TABLE ELEVATION CONTOUR (FEET NVGD)

NOTES:

1. THE BASE MAP WAS OBTAINED FROM A PLAN ENTITLED "ALTA/ACSM LAND TITLE SURVEY" (SURVEY PLAN) PREPARED BY HINZE & ASSOCIATES, DATED 7/27/99.
2. STREAM GAUGE SG-4 WAS DAMAGED.

TECUMSEH PRODUCTS COMPANY
SHEBOYGAN FALLS, WISCONSIN

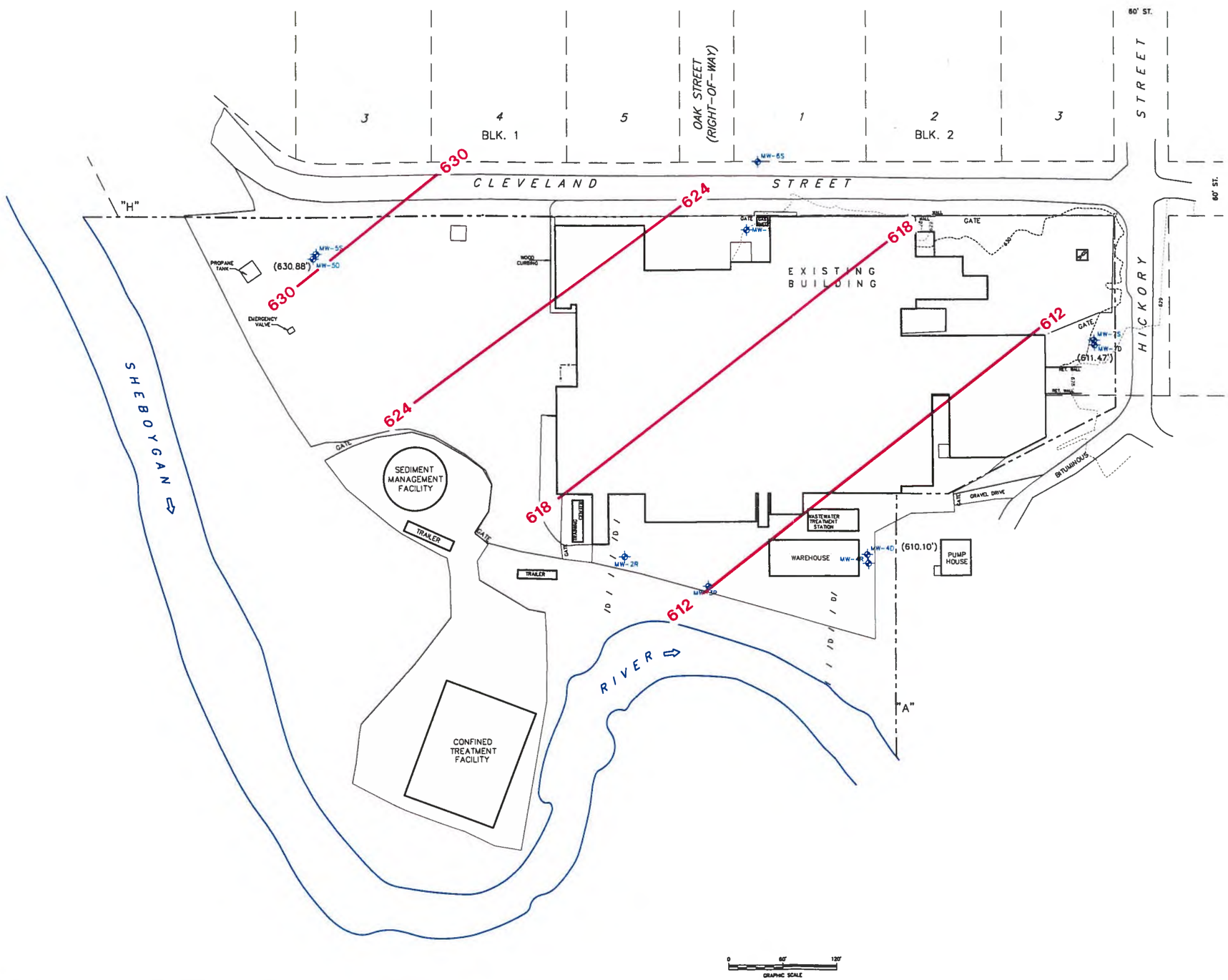
EXTERNAL SOURCE ASSESSMENT

WATER-TABLE ELEVATION CONTOUR MAP 9/20/99

BLASLAND, BOUCK & LEE, INC.
engineers & scientists

FIGURE 22

X: 17606X01.DWG, 17606X03.DWG
LMAN: WATER-T
P: STD-PCP/DL
11/12/99 SYR-54-KMD GMS CBM
17606004/TEC/17606W03.DWG



LEGEND:

- MONITORING WELL
- (630.88') POTENTIOMETRIC ELEVATION (FEET NVGD)
- POTENTIOMETRIC ELEVATION CONTOUR (FEET NVGD)

NOTES:

1. THE BASE MAP WAS OBTAINED FROM A PLAN ENTITLED "ALTA/ACSM LAND TITLE SURVEY" (SURVEY PLAN) PREPARED BY HINZE & ASSOCIATES, DATED 7/27/99.

X: 17606X01.DWG, 17606X03.DWG
LMAN: G-WATER
P: STD-PCP/DL
11/10/99 SYR-54-KMD RCA GMS
17606004/TEC/17606W04.DWG

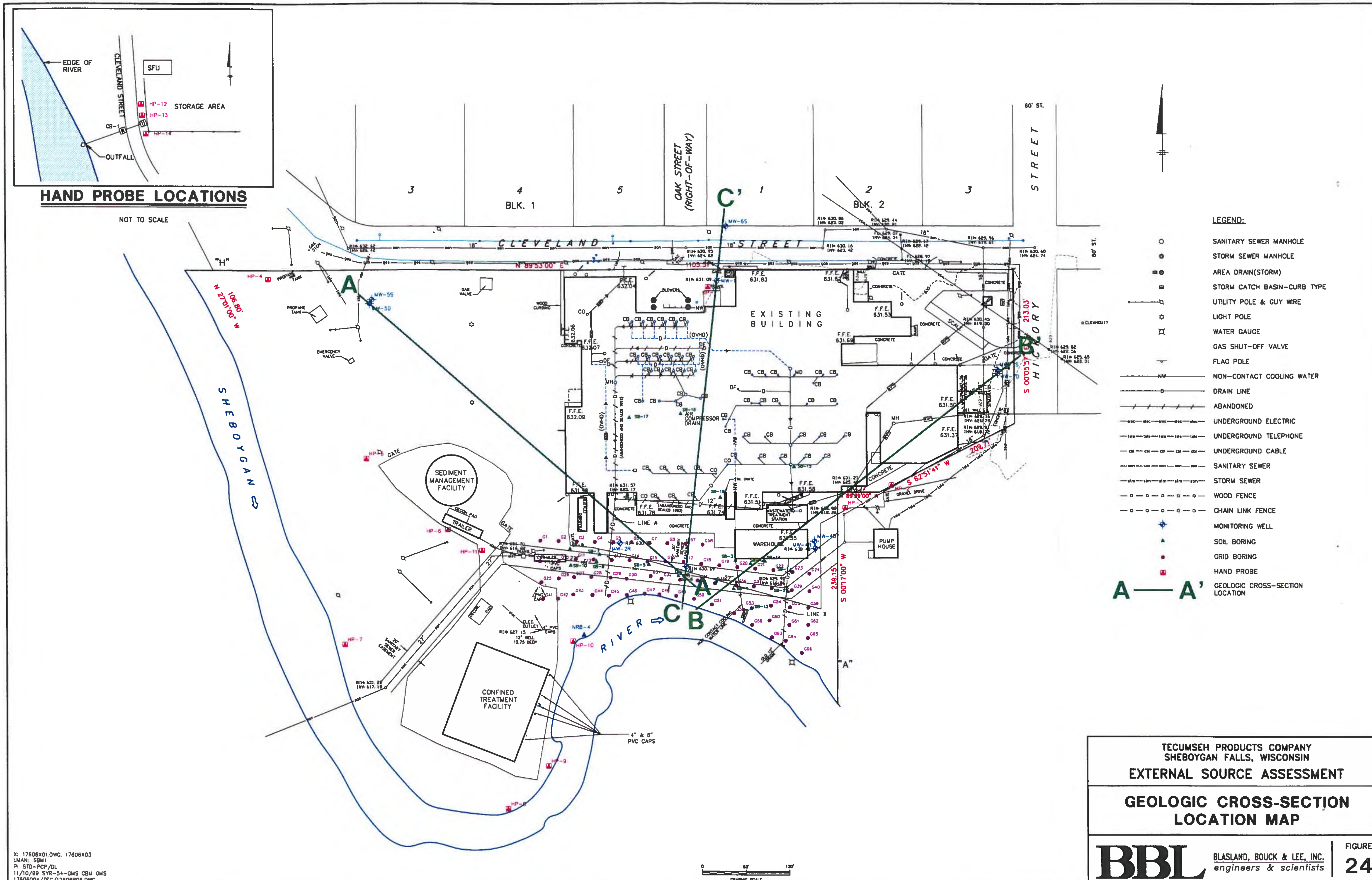
TECUMSEH PRODUCTS COMPANY
SHEBOYGAN FALLS, WISCONSIN

EXTERNAL SOURCE ASSESSMENT

GROUND-WATER POTENTIOMETRIC SURFACE FOR DEEP OVERBURDEN SEPTEMBER 1999

BBL BLASLAND, BOUCK & LEE, INC. engineers & scientists

FIGURE 23



TECUMSEH PRODUCTS COMPANY
SHEBOYGAN FALLS, WISCONSIN

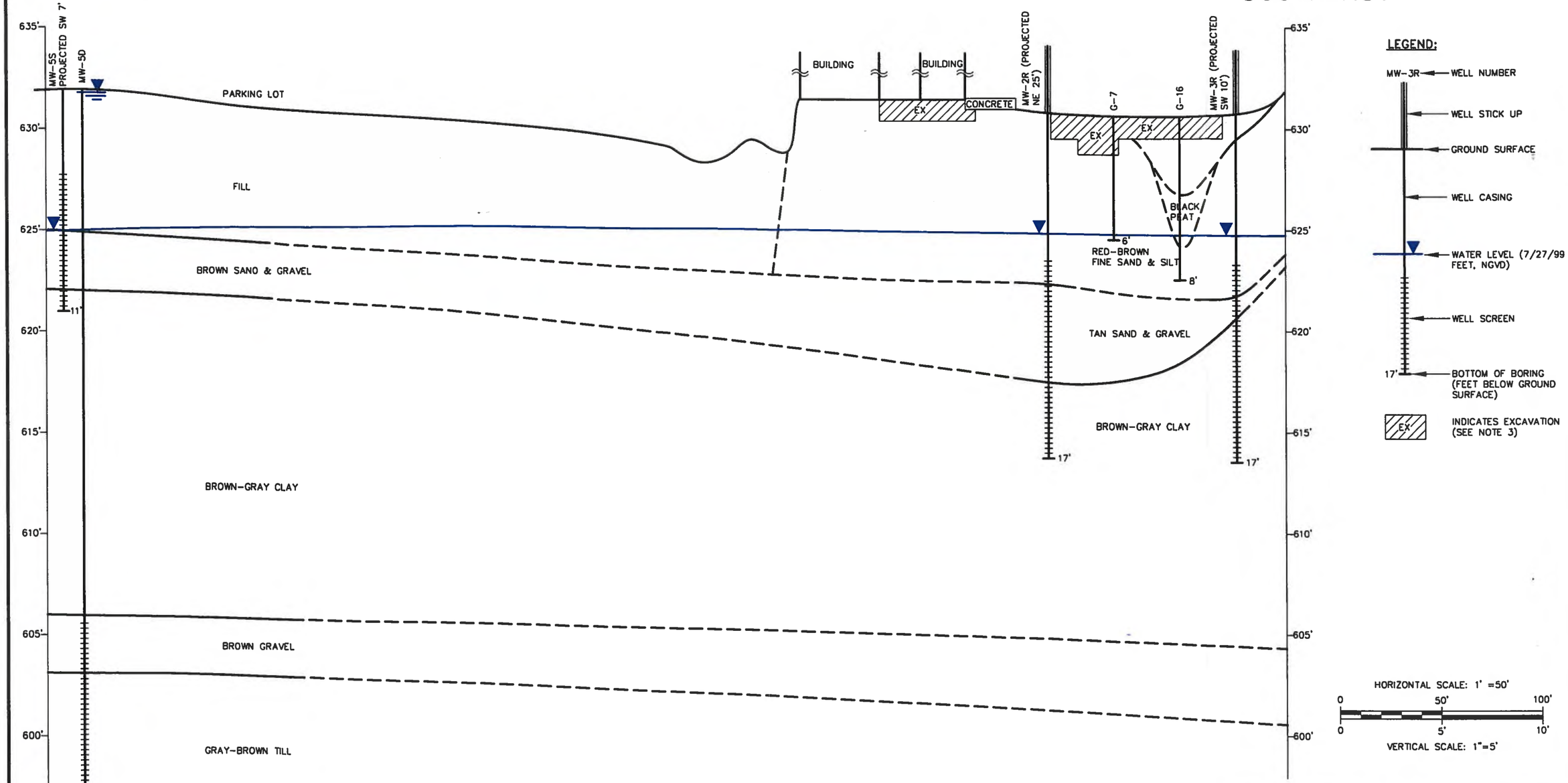
EXTERNAL SOURCE ASSESSMENT

GEOLOGIC CROSS-SECTION LOCATION MAP

BLASLAND, BOUCK & LEE, INC.
engineers & scientists

FIGURE 24

A NORTHWEST — A' SOUTHEAST



NOTES:

1. RIVER WATER LEVEL MEASURED 5/17/99.
2. GROUND-WATER LEVELS MEASURED 7/27/99.
3. THE EXCAVATION LIMITS ARE APPROXIMATE AND ARE BASED ON THE HORIZONTAL AND VERTICAL LIMITS IN A SKETCH PROVIDED IN A LETTER FROM DONOHUE AND ASSOCIATES, INC. TO WISCONSIN DEPARTMENT OF NATURAL RESOURCES DATED NOVEMBER 27, 1979.

L: ON=*, OFF=REF P: STD-PCP/BL
11/10/99 SYR-54-PGL CBM GMS
17606004/17606V03.DWG

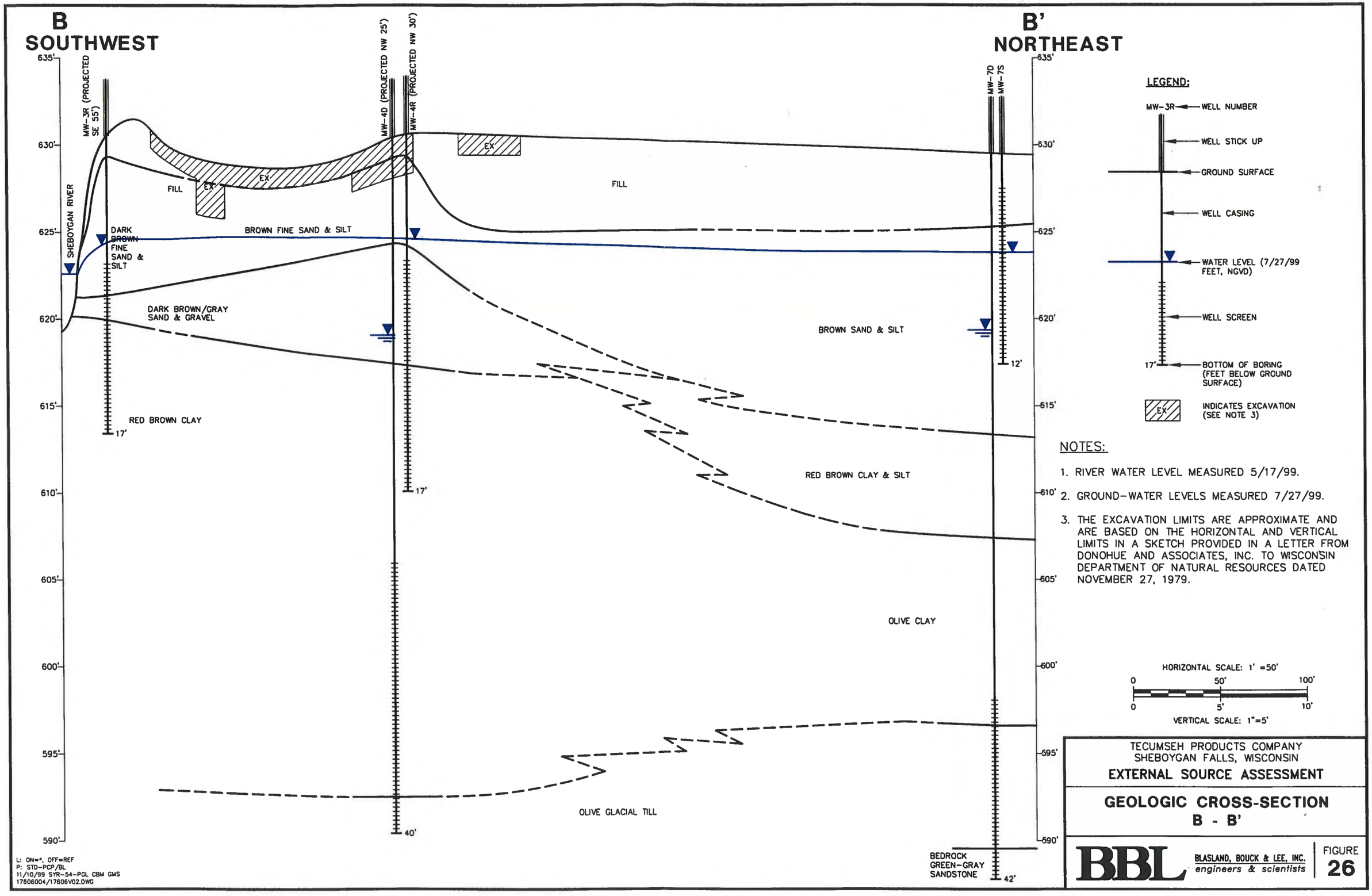
TECUMSEH PRODUCTS COMPANY
SHEBOYGAN FALLS, WISCONSIN

EXTERNAL SOURCE ASSESSMENT

GEOLOGIC CROSS-SECTION
A - A'

BBL BLASLAND, BOUCK & LEE, INC. *engineers & scientists*

FIGURE **25**



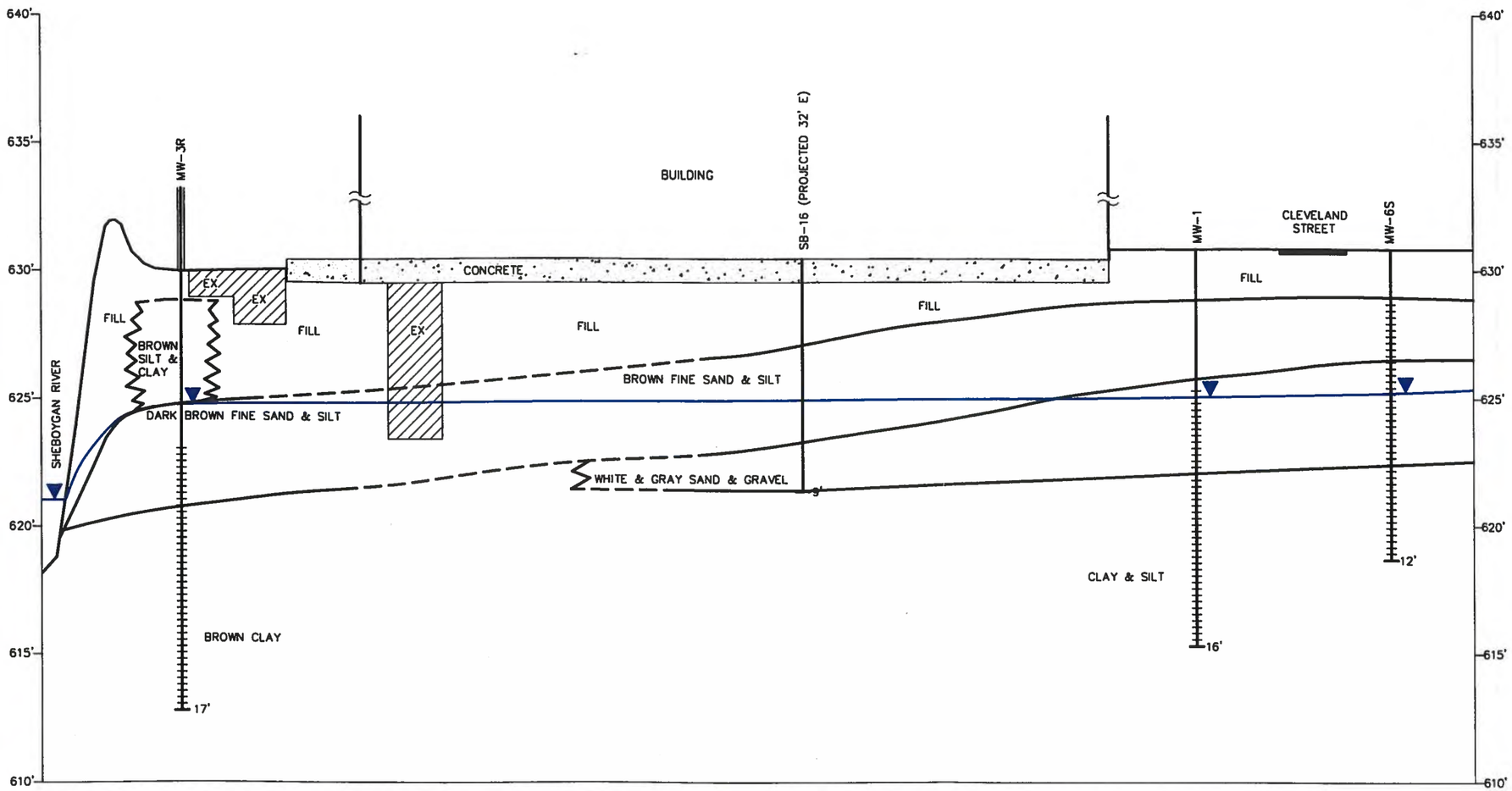
TECUMSEH PRODUCTS COMPANY
SHEBOYGAN FALLS, WISCONSIN

EXTERNAL SOURCE ASSESSMENT

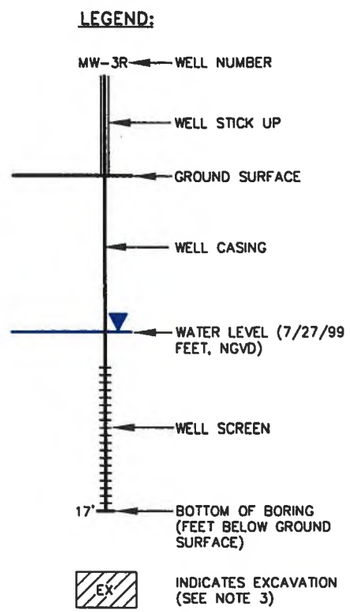
GEOLOGIC CROSS-SECTION
B - B'

BLASLAND, BOUCK & LEE, INC.
engineers & scientists

FIGURE
26



LEGEND:



NOTES:

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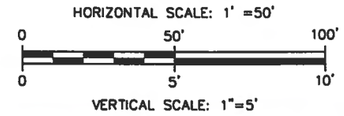
2. GROUND-WATER LEVELS MEASURED 7/27/99.
3. THE EXCAVATION LIMITS ARE APPROXIMATE AND ARE BASED ON THE HORIZONTAL AND VERTICAL LIMITS IN A SKETCH PROVIDED IN A LETTER FROM DONOHUE AND ASSOCIATES, INC. TO WISCONSIN DEPARTMENT OF NATURAL RESOURCES DATED NOVEMBER 27, 1979.



TECUMSEH PRODUCTS COMPANY
SHEBOYGAN FALLS, WISCONSIN

EXTERNAL SOURCE ASSESSMENT

GEOLOGIC CROSS-SECTION
C - C'

BBL BLASLAND, BOUCK & LEE, INC. *engineers & scientists*

FIGURE **27**

L: ON=*, OFF=REF
P: STD-PCP/BL
11/10/99 SYR-54-PGL CBM GMS
17606004/17606B01.DWG

Sheboygan River and Harbor Superfund Site

Phase I Completion Report

Prepared For
United States Environmental Protection Agency
Region 5

Prepared By
Pollution Risk Services, LLC

SEPTEMBER 2005

Table 1

PCB Impacted Soil Final Quantities

Sheboygan River and Harbor Superfund Site ~ Phase I

SOURCE AREA	NON-HAZARDOUS WASTE SHIPPED (TONS)	HAZARDOUS WASTE SHIPPED (TONS)
TRENCH EXCAVATION	2171.86	339.40
SOURCE SOILS	1221.55	303.36
RIVERBANK / PREFERENTIAL PATHWAYS	678.76	725.42
TOTALS	**4072.17**	**1368.18**

Table 2

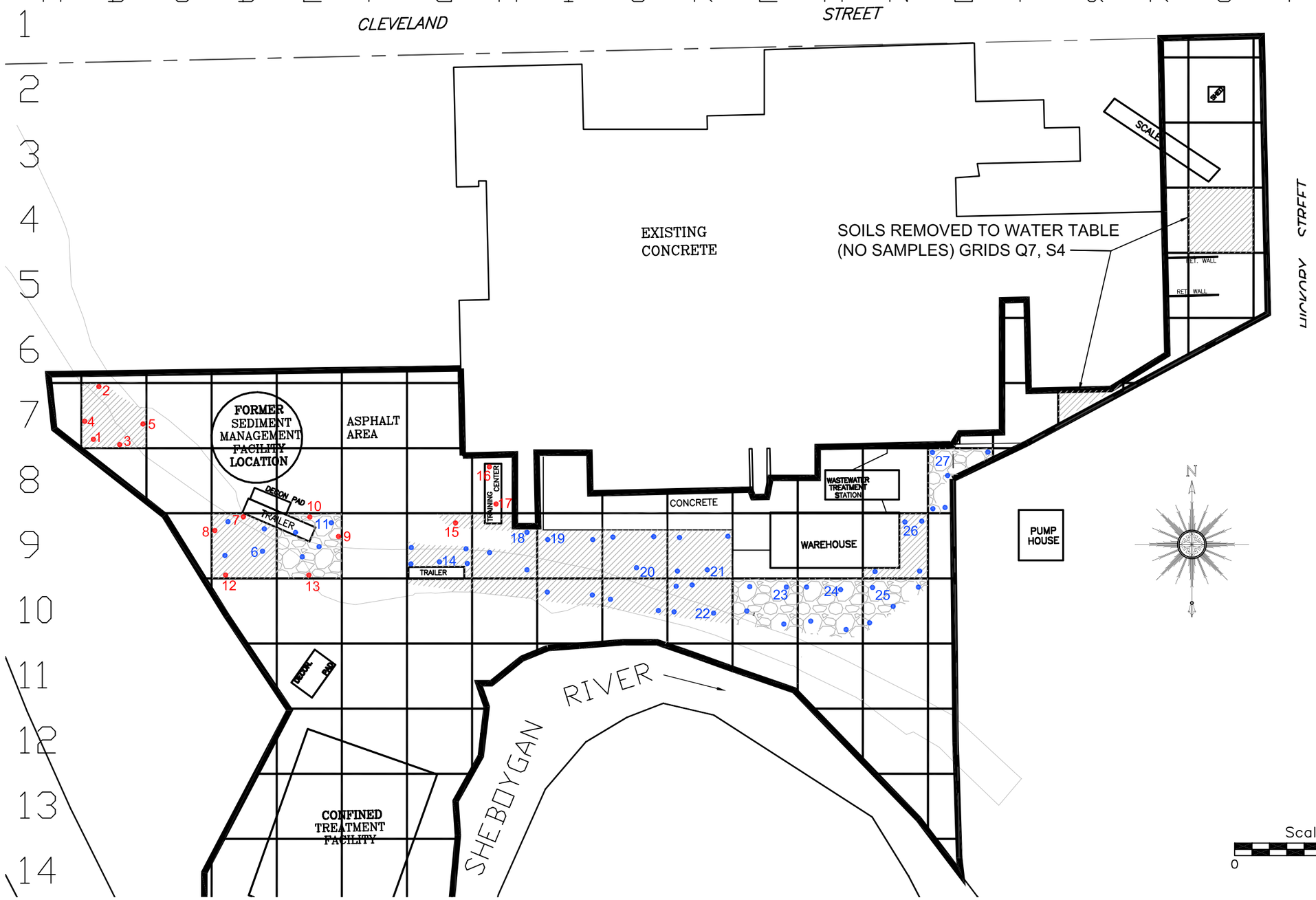
Source Soils PCB Confirmation Sample Results

Sheboygan River and Harbor Superfund SIte ~ Phase I

Sample #	Sample ID #	Sample Depth Interval (ft)	PCB Concentration (ppm)
1	PS-SS2, B7, Floor	1	0.89 (1.1)
2	PS-SS2, B7, N(0-1)	0-1	0.69
3	PS-SS2, B7, S(0-1)	0-1	0.32
4	PS-SS2, B7, W(0-1)	0-1	*0.037 J*
5	PS-SS3, B7, E(0-1)	0-1	0.082
6	PS-SS1, D9, Floor	1	0.82
7	PS-SS1, D9, N(0-1)	0-1	*0.012 J*
8	PS-SS1, D9, W(0-1)	0-1	0.45
9	PS-SS1, E9, E(0-1)	0-1	*ND*
10	PS-SS1, E9, N(0-1)	0-1	0.05
11	PS-SS1, E9, Floor	1	0.82
12	PS-SS3, D9, (0-1)	0-1	*0.12 J*
13	PS-SS2, E9, S(0-1)	0-1	*0.3 J*
14	PS-SS1, G9	0-1	1.4
15	PS-SS1, G9, Floor	1	2.6
16	PS-SS1, H8, N Floor	1	2.3
17	PS-SS2, H8, S Floor	1	4.7
18	PS-SS2, H9	1	18
19	PS-SS1, I9	1	2.9 [1]
20	PS-SS1, J9/J10, Floor	1	3.3 (2.8) [2]
21	PS-SS1, K9, Floor	1	0.94 (0.83)
22	PS-SS1, K10, Floor	1	1.9
23	PS-SS1, L10, Floor	1	2.6
24	PS-SS1, M10, Floor	1	1.2
25	PS-SS1, N10, Floor	1	5.6
26	PS-SS1, N9, Floor	1	1.6
27	PS-SS1, O8, Floor	1	2.9

NOTES

1. Composite includes I10 grid
2. Composite includes J10 grid
3. Non-detect results are presented in italics



SOURCE MATERIAL PCB CLEAN-UP LEVELS

SURFACE (0 TO 1 FOOT) < 1 PPM
SUBSURFACE < 10 PPM

NOTES

1. SAMPLES COLLECTED FROM LOCATIONS AS SHOWN ON DRAWING IN ACCORDANCE WITH APPROVED WORK PLAN DESIGN DOCUMENTS (FSP, QAPP, SOPS, ETC.).

2. BASED ON SAMPLING RESULTS, PCBs > 1PPM, 1 FOOT OF IMPACTED MATERIAL IN LOCATION EXCAVATED. PCB > 10 PPM IN THE SUBSURFACE, IMPACTED MATERIAL EXCAVATED, AND SAMPLING REPEATED.

LEGEND

- APPROXIMATE REMEDIATION AREA LIMIT
- PCB > 1 PPM PRIOR TO REMEDIATION
- PCB > 50 PPM PRIOR TO REMEDIATION
- 15 — INDIVIDUAL SAMPLE
- 14 — COMPOSITE SAMPLE WITHIN GRID COMBINED WITH OTHERS IN GRID

N

Scale: 1"=80'

0 80 160 FEET

REVISION	DESCRIPTION	DRAWN BY	CHECKED BY	DATE
	AS-BUILT	KDA	PRK	NOV 2004

AS-BUILT

ENGINEER SEAL

PRS Pollution Risk Services
100 E-Business Way, Suite 210
Cincinnati, Ohio 45241
Phone: 513-489-2793
Fax: 513-489-2794

PREPARED FOR:

SHEBOYGAN RIVER PROJECT
SHEBOYGAN FALLS, WISCONSIN

SOURCE SOILS EXCAVATION AND CONFIRMATION SAMPLES

SCALE: AS SHOWN
PROJECT NUMBER: 02-010
SHEET NO: AB-4

Table 3

Riverbank Soils PCB Confirmation Sample Results

Sheboygan River and Harbor Superfund Site ~ Phase I

Sample #	Sample ID #	Sample Depth Interval (ft)	PCB Concentration (ppm)
1	RB-SS2, G10, 0-1	0-1	0.12 (0.097) [1]
2	RB-SS3, G10, W Floor	1	0.228 [1]
3	RB-SS4, G10, E Floor	1	0.79 [1]
4	RB-SS5, G10, 0-1	0-1	0.057 [1]
5	RB-SS3, G9, Floor	1	1.9
6	RB-SS4, H9, Floor	1	0.7
7	RB-SS3, H10, 0-1	0-1	0.65
8	RB-SS6, H10, Floor	1	7.7
9	RB-SS12, H10, 0-1	0-1	0.84
10	RB-SS8, H10, 0-1 South	0-1	*0.51 J*
11	RB-SS2, H10, 0-1	0-1	0.53
12	RB-SS13, H10, N Floor	1	1.5
13	RB-SS14, H10, Floor	1	5.1
14	RB-SS5, I10, 0-1	0-1	0.22
15	RB-SS10, I10, Floor	1	3.3
16	RB-SS15, I10, Floor	1	*0.33 J*
17	RB-SS17, I10, S(0-1)	0-1	0.67
18	RB-SS19, I10, Floor	1	2
19	RB-SS2, I9, Floor	1	0.021 (0.017) J
20	RB-SS2, J10, 0-1	0-1	0.21
21	RB-SS4, J10, 0-1	0-1	0.18
22	RB-SS9, J10, N(0-1)	0-1	0.8
23	RB-SS10, J10, Floor	1	*0.0085 J*
24	RB-SS2, K10, 0-1	0-1	0.18 (0.19)
25	RB-SS5, K10, Floor	1	0.84
26	RB-SS7, K10, 0-1 North	0-1	0.044 (0.28 J)
27	RB-SS5, M11, Floor	1	1.1
28	RB-SS7, M11, E(0-1)	0-1	0.16
29	RB-SS8, M11, Floor	1	2.3 (2.5)
30	RB-SS1, N11, 0-1	0-1	0.048
31	RB-SS5, N11, Floor	1	0.44
32	RB-SS4, N11, 0-1	0-1	*0.24 J*
33	RB-SS1, O11, 0-1	0-1	0.31
34	RB-SS1, O12, 0-1	0-1	*0.018 J*
35	RB-SS1, N12, 0-1	0-1	0.27

NOTES

1. North and south boundaries defined by preferential pathway #1

2. Non-detect results are presented in italics

A B C D E F G H I J K L M N O P Q R S T

3 4 5 6 7 8 9 10 11 12 13 14 15

EXISTING CONCRETE

HICKORY STREET

SCALE

RET. WALL

RET. WALL

FORMER SEDIMENT MANAGEMENT FACILITY LOCATION

DECON PAD

TRAILER

TRAINING CENTER

WASTEWATER TREATMENT STATION

WAREHOUSE

PUMP HOUSE

TRAILER

5 6 19 13 12 16 22 2 7 8 11 9 18 21 23 26 4 15 20 1 3 10 14 17 25 24 29 27 28 31 30 33 32 34 35

DECON PAD

CONFINED TREATMENT FACILITY

SHEBOYGAN RIVER

① RIVERBANK RESTORATION DETAIL (TYPICAL)

APPROXIMATE EXCAVATION OUTLINE

FLOOD CONTROL BERM

N

RIVERBANK MATERIAL PCB CLEAN-UP LEVELS

SURFACE (0 TO 1 FOOT) < 1 PPM
SUBSURFACE < 10 PPM

NOTES

1. SAMPLES COLLECTED FROM LOCATIONS SHOWN ON DRAWINGS IN ACCORDANCE WITH APPROVED WORK PLAN DESIGN DOCUMENTS (VERIFICATION SAMPLING PLAN, FSP, QAPP, SOPS, ETC.).

2. BASED ON SAMPLING RESULTS, PCBs > 1 PPM AT SURFACE, 1 FOOT OF IMPACTED MATERIAL IN LOCATION EXCAVATED. PCB > 10 PPM IN THE RIVERBANK SUBSURFACE, IMPACTED MATERIAL EXCAVATED.

LEGEND

APPROXIMATE REMEDIATION AREA LIMIT

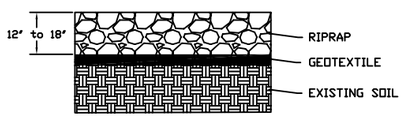
•27 SOIL SAMPLE LOCATION

AREAS CONTAINING PCB > 1 PPM REMOVED (0 TO 1 FOOT). VERIFICATION SAMPLES COLLECTED IN ACCORDANCE WITH NOTE 2 AND THE VSP.

Scale: 1"=80'

0 80 160 FEET

① TYPICAL DETAIL



REVISION	DESCRIPTION	DRAWN BY	CHECKED BY	DATE
	AS-BUILT	KDA	PRK	NOV 2004

AS-BUILT

ENGINEER SEAL

PRS Pollution Risk Services
100 E-Business Way, Suite 210
Cincinnati, Ohio 45241
Phone: 513-489-2793
Fax: 513-489-2794

PREPARED FOR:

SHEBOYGAN RIVER PROJECT

SHEBOYGAN FALLS, WISCONSIN

RIVERBANK SOILS EXCAVATION AND CONFIRMATION SAMPLES

SCALE: AS SHOWN

PROJECT NUMBER: 02-010

SHEET NO: AB-5

Table 4

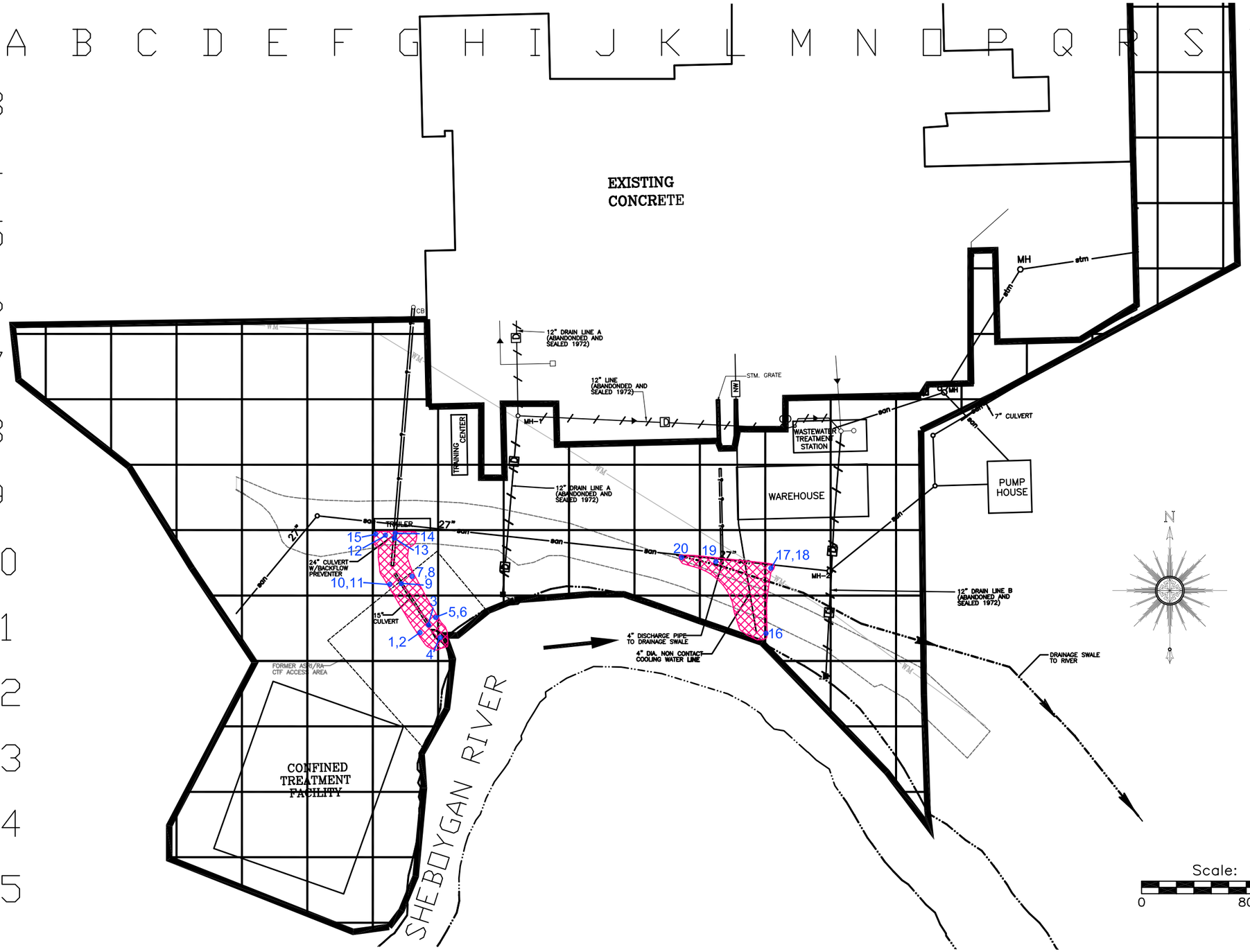
Preferential Pathways PCB Confirmation Sample Results

Sheboygan River and Harbor Superfund Site ~ Phase I

Sample #	Sample ID #	Sample Depth Interval (ft)	PCB Concentration (ppm)
1	PPI-SS1-W (1-3)	1-3	0.58
2	PPI-SS2-W (0-1)	0-1	0.27
3	PPI-SS3-Floor	3	4.3 (6.8) [1]
4	PPI-SS4-S (1-3)	1-3	3.8
5	PPI-SS6-E (1-3)	1-3	*0.53 J*
6	PPI-SS7-E (0-1)	0-1	*0.14 J*
7	PPI-SS8-E (1-3)	1-3	3.5
8	PPI-SS9-E (0-1)	0-1	0.32
9	PPI-SS10-Floor	3	0.41
10	PPI-SS11-W (1-3)	1-3	6.9 (7.2)
11	PPI-SS12-W (0-1)	0-1	1.95 [2]
12	PPI-SS13-W (1-3)	1-3	3.1
13	PPI-SS15-Floor	7	0.48
14	PPI-SS17-N (1-3)	1-3	*1.4 J*
15	PPI-SS24-W (0-1)	0-1	*0.014 J*
16	PP2-SS3-E (0-1)	0-1	0.37
17	PP2-SS23-E (0-1)	0-1	0.17
18	PP2-SS24-E (5-7)	5-7	0.072
19	PP2-SS26-W (0-1)	0-1	0.028
20	PP2-SS29-W (5-7)	5-7	27 [3]

NOTES

1. Sample at water table
2. Soils further removed by grid restoration
3. Onsite lab result = 5.8 ppm
4. Non-detect results are presented in italics



PREFERENTIAL PATHWAY PCB CLEAN-UP LEVELS

SURFACE (0 TO 1 FOOT) < 1 PPM
SUBSURFACE = RIVERBANK < 10 PPM
SOURCE AREA NOT APPLICABLE

NOTES

1. SOIL EXCAVATED 10' RADIALLY FROM THE OUTFALL OF EACH PREFERENTIAL PATHWAY.
2. SAMPLES COLLECTED FROM LOCATIONS IN ACCORDANCE WITH APPROVED WORK PLAN DECISION DOCUMENTS (FSP, QAPP, SOPS, ETC.).
3. BASED ON SAMPLING RESULTS, PCBS > 1 PPM AT SURFACE, 1 FOOT OF IMPACTED MATERIAL IN LOCATION EXCAVATED AND SAMPLING PROCEDURE REPEATED. PCB > 10 PPM IN THE SUBSURFACE, IMPACTED MATERIAL EXCAVATED AND SAMPLING PROCEDURE REPEATED.
4. SEE SHEET AB-7 FOR PROFILES.

LEGEND

- EXISTING DRAINAGE
- EXISTING STORM WATER
- EXISTING SANITARY SEWER
- EXISTING WATER MAIN LINE
- EXISTING NON-CONTACT COOLING WATER LINE
- EXISTING DRAIN LINE
- ABANDONED DRAIN LINE
- EXISTING WELL
- EXISTING CULVERT
- APPROXIMATE REMEDIATION AREA LIMIT
- 20 CONFIRMATION SAMPLE
- APPROXIMATE BOUNDARY OF EXCAVATION

N

Scale: 1"=80'

0 80 160 FEET

REVISION	DESCRIPTION	DRAWN BY	CHECKED BY	DATE
	AS-BUILT	KDA	PRK	NOV 2004

AS-BUILT

ENGINEER SEAL

PRS Pollution Risk Services
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PREPARED FOR:

SHEBOYGAN RIVER PROJECT
SHEBOYGAN FALLS, WISCONSIN

PREFERENTIAL PATHWAYS EXCAVATION AND CONFIRMATION SAMPLES

SCALE: AS SHOWN
PROJECT NUMBER: 02-010
SHEET NO: AB-6