From: Beggs, Tauren R - DNR
To: James, Andrew G - DNR
Cc: Danelski, Denise D - DNR
Subject: RE: Pennsylvania Ave Bridge and Approaches
Date: Monday, December 17, 2018 12:46:58 PM

Hey Andy,

Based on our discussion earlier this morning, I concur this is a NAR. Please work with Denise to create a NAR. The site file PDFs should be put in the e-file for Denise to combine and upload for the NAR. The report and this concurrence email should also be uploaded to the Sheboygan River & Harbor (SF NPL) site, BRRTS # 02-60-529589.

Thanks,

Tauren R. Beggs
Phone: (920) 662-5178
Tauren.Beggs@wisconsin.gov

From: James, Andrew G - DNR
Sent: Monday, December 17, 2018 10:12 AM
To: Beggs, Tauren R - DNR <Tauren.Beggs@wisconsin.gov>
Subject: Pennsylvania Ave Bridge and Approaches

Hey Tauren,
I received this report asking for concurrence. Could you review and let me know your opinion?

I received a Phase 2.5 Investigation Report for the Pennsylvania Avenue Bridge and Approaches-Sheboygan, WI – WisDOT ID 4996-25-00. The Hazardous Materials assessment lists 3 sites that could be potentially impacting this project: Sheboygan river - Superfund for PCBs, 505 S. Commerce st - prior filling station, auto repair, painting, wood yard and tannery, and 927 Pennsylvania ave. - Former filling station and auto repair.

- Two hand auger soil samples (HA-1 and HA-2) were collected for PCBs on the east and west abutment slopes below the bridge adjacent to the Sheboygan River.
    - PCBs were detected above the Groundwater Pathway RCLs in both samples; however, the PCBs are associated with the Sheboygan River & Harbor (SF NPL) site, BRRTS # 02-60-529589.
- Two soil borings (SB-1 and SB-2) were installed in the Pennsylvania Ave right-of-way on the east and west sides of the bridge. Three soil samples were collected at each location for PVOCs & naphthalene, and lead.
    - Trimethylbenzenes were the only PVOC detected, but were below soil standards. No naphthalene detected.

Lead was detected at concentrations below the background threshold value (BTV).

Since the PCBs are associated with the Superfund site and no other contaminants analyzed were detected above soil standards and/or BTV, this should be a NAR.

Thanks

Andy

We are committed to service excellence.
Visit our survey at http://dnr.wi.gov/customersurvey to evaluate how I did.

Andrew James
Hydrogeologist –Remediation & Redevelopment Program
Wisconsin Department of Natural Resources
2984 Shawano Avenue
Green Bay, WI 54313
Phone: 920-662-5149
Andrew.James@wisconsin.gov

dnr.wi.gov

TRANSMITTAL

TO:	Mr. Colin Schmenk WDNR 2984 Shawano Ave. Green Bay, WI 54313	**DATE:**	October 9, 2018
		JOB NO.:	69862
		RE:	WisDOT ID 4996-25-00 Phase 2.5 Investigation Report

If material received is not as listed, please notify us at once.

Quantity	Title
1 copy w/ CD	WisDOT – Phase 2.5 Investigation Report – Pennsylvania Avenue Bridge and Approaches – Sheboygan, WI – WisDOT ID 4996-25-00

REMARKS:

Colin,

Attached please find O'Brien & Gere Engineers, Inc.'s (OBG's) Phase 2.5 Report for the Pennsylvania Avenue Bridge and Approaches project in Sheboygan, WI – the WisDOT is planning to replace the bridge deck, roadway pavement, sidewalk, curb and gutter, and storm sewer inlets and laterals. There are three sites identified in the project's Phase 1 Hazardous Materials Assessment as potentially impacting the project. Attached is one hard copy of OBG's Phase 2.5 Report that contains a CD of the complete report.

The WisDOT and OBG request the WDNR's concurrence with the soil management plan detailed in the draft HazMat Special Provisions attached to the Report, if possible by October 31, 2018.

Thank you,
Mark

October 9, 2018

Ms. Kathie VanPrice
Wisconsin Department of Transportation
944 Van Der Perren Way
Green Bay, WI 54304

Subject: Phase 2.5 Investigation Report
Pennsylvania Avenue Bridge and Approaches, Sheboygan, WI
WisDOT Project ID 4996-25-00
OBG Project No. 69862

Dear Kathie:

O'Brien & Gere Engineering, Inc. (OBG) has prepared this report to document the findings from the Phase 2.5 investigation conducted at the above-referenced corridor. Polychlorinated biphenyl (PCB)- and petroleum-contaminated soil was identified by the Phase 2.5 investigation, and draft hazardous materials special provisions are attached to this report. The plans, specifications, and estimates for this project are due (PS&E date) on November 1, 2018.

BACKGROUND AND SCOPE

The Wisconsin Department of Transportation (WisDOT) is planning to replace the deck and approaches of the bridge that carries Pennsylvania Avenue over the Sheboygan River in Sheboygan, Sheboygan County, Wisconsin (WisDOT ID 4996-25-00). Figure 1 shows the project location and limits. The project is proposing replacement of the bridge deck, roadway pavement, sidewalk, curb and gutter, and storm sewer inlets and laterals. Additionally, lighting and lighting bases may be replaced. Excavation depths required to facilitate paving, sidewalk, and curb and gutter replacement are planned to be less than two feet below ground surface (bgs). Excavation depths required for storm sewer and lighting replacement may extend to seven feet bgs and 10 feet bgs, respectively. The documented groundwater table in the area is generally beneath the excavation depths planned for construction. As such, excavation dewatering for the Pennsylvania Avenue Bridge project will likely either not be required or will be minimal.

Kapur & Associates, Inc. (Kapur) completed a Phase 1 Hazardous Materials Assessment (HMA) for the project corridor and documented its findings in a report dated March 7, 2018. The WisDOT reviewed the report and agreed with Kapur's recommendation that additional subsurface investigation was required. The WisDOT requested that OBG complete a Phase 2.5 investigation to determine if contaminant impacts are present within the limits of the Pennsylvania Avenue project. Subsequent review of existing contaminant data and preliminary project plans by OBG and the WisDOT determined that the Phase 2.5 investigation would be focused on the following potential sources of contamination adjacent to project limits:

- Sheboygan River and Harbor – Sheboygan River and Harbor sediments, first sampled for analysis of chemical contaminants in the late 1970s based on the Phase 1 HMA, contained moderate to high levels of arsenic, chromium, lead, zinc, and PCBs. Investigation and remediation has continued from the late 1970s to present. Kapur contacted Mr. Thomas Wentland, Wisconsin Department of Natural Resources (WDNR) project manager for the Sheboygan River and Harbor site (WDNR Bureau for Remediation and Redevelopment Tracking System [BRRTS] Open Environmental Repair Case No. 02-60-529589). Mr.

Wentland recommended sampling the east bank of the Sheboygan River beneath the Pennsylvania Avenue bridge for PCBs prior to excavation for slope paving.

- 505 South Commerce Street – This site appears in the National Pollutant Discharge Elimination System (NPDES) and Recovered Government Archive (RGA) Leaking Underground Storage Tank (LUST) databases. The site is currently occupied by Travel Leaders travel agency, which includes 1045 Pennsylvania Avenue. This site is shown with a building that is south and west of the bridge that is noted with a Gasoline HO (house) on the 1903 Sanborn Fire Insurance Map (Sanborn) and a filling station/auto repair facility on the 1949, 1955, and 1967 Sanborn maps. These maps show two gasoline tanks to the northwest of the onsite automobile repair building, underneath the current onsite building.
- 927 Pennsylvania Avenue – The 1949 and 1955 Sanborn maps show a filling station/auto repair facility on this site. These maps show three gasoline tanks southwest of the intersection of Pennsylvania Avenue and South Water Street.

Summary background environmental information for these sites is included in Attachment 1.

SAMPLING ACTIVITIES

On July 19, 2018, OBG directed and documented the installation of two proposed soil probes (SB-01 and SB-02). Soil probe SB-01 was advanced on the southeastern portion of the intersection of Pennsylvania Avenue and Commerce Street, and soil probe SB-02 was advanced on the southwestern portion of the intersection of Pennsylvania Avenue and Water Street. These soil probes were advanced to depths of 12 feet bgs, by Probe Technologies, Inc. of West Bend, Wisconsin, due to planned excavation of up to 10 feet bgs in these locations. Additionally, OBG advanced two shallow hand auger borings to approximately two feet bgs on the eastern (HA-1 on May 14, 2018) and western (HA-2 on July 19, 2018) abutment slopes beneath the bridge deck to obtain representative samples of soil that may be excavated for slope paving during bridge replacement. Phase 2.5 soil boring locations are shown on Figure 2.

Soils encountered during the Phase 2.5 investigation generally consisted of up to three feet of gravel fill underlain by clay, silty clay and/or sand. All photoionization detector (PID) readings for soil sample intervals were 0.0 parts per million (ppm). Evidence of contamination was not observed at any soil probe locations during soil logging. See the boring logs in Attachment 2 for more details, including the interval-specific PID readings and soil descriptions.

Three discrete samples were collected from each soil probe boring and one discrete sample was collected from each hand auger boring for laboratory analysis as planned. The six discrete soil samples collected from SB-01 and SB-02 were submitted for laboratory analysis of petroleum volatile organic compounds (PVOCs), naphthalene, and lead at TestAmerica in University Park, IL (WDNR Certification No. 999580010). The two discrete soil samples collected from HA-1 and HA-2 were submitted to TestAmerica for PCB analysis. Waste characterization samples were also prepared by compositing soil from all intervals of SB-01 (Composite 1) and SB-02 (Composite 2) and submitted to TestAmerica for analysis of gasoline range organics (GRO) and diesel range organics (DRO)

Upon completion, all soil probe borings were abandoned with bentonite the same day the boring was advanced, and like pavement was used to patch where borings were advanced through pavement. Abandonment forms for soil probe borings are provided in Attachment 2.

Photographs taken during the Phase 2.5 investigation are included as Attachment 3.

SAMPLING RESULTS AND EVALUATION

SOIL

The Phase 2.5 soil sampling results are summarized in Table 1. The concentrations of the following parameters exceeded NR 720, Wisconsin Administrative Code (WAC) Residual Contaminant Levels (RCLs) and statewide background threshold values (BTVs), if applicable.

- Total PCBs at HA-01 and HA-02 (0'-2' bgs)

Trimethylbenzenes were also detected, below RCLs, at SB-01 (2'-4' bgs) and SB-02 (6'-8' bgs). The detection of trimethylbenzenes in sample SB-01 (2'-4' bgs) is above the laboratory's Method Detection Limit (MDL), but less than the laboratory's Reporting Limit (RL). As such, soils in the area of SB-01 meet the clean soil criteria provided in WDNR's April 20, 2018 Clean Soil Management Guidance Document RR-103. The detection of trimethylbenzenes in sample SB-02 (6'-8' bgs) is above the laboratory's RL, which excludes soil from this interval from meeting clean soil criteria. Lead concentrations in soil samples collected for the Phase 2.5 investigation are all less than BTVs and do not require any soils to be excavated to be specially managed for lead contamination.

The composite soil sampling results are summarized in Table 2, along with the typical landfill acceptance criteria. The sampling indicates that the PCB- and petroleum-contaminated soil to be excavated should be acceptable for disposal at a WDNR-licensed solid waste landfill and/or bioremediation facility, of which there are several in southeastern Wisconsin. The laboratory analytical report for soil and waste characterization composite samples are included in Attachment 4.

GROUNDWATER

The groundwater table was not encountered during OBG's Phase 2.5 investigation and dewatering is expected to be minimal or not required to facilitate construction.

INVESTIGATIVE WASTE MANAGEMENT

OBG submitted WisDOT Form DT1229 to Veolia, the State's contractor, requesting that Veolia pick-up, transport, and manage the investigative wastes from the Phase 2.5 investigation activities. A copy of the Form is included in Attachment 5.

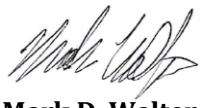
FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

The Phase 2.5 investigation found PCB- petroleum-contaminated soil within the planned project limits that must be managed once excavated by the project. The contaminated soil has been characterized and, once excavated, should be acceptable for bioremediation and/or direct landfill at a WDNR-licensed solid waste landfill, several of which are in southeastern Wisconsin.

Draft hazardous materials special provisions for the management of PCB-contaminated soil and petroleum-contaminated soil during construction are included as Attachments 6 and 7, respectively. OBG will submit a copy of this Phase 2.5 Investigation Report to the WisDOT's WDNR Remediation and Redevelopment (RR) Program Liaison for review and request concurrence with the hazardous materials special provisions. WisDOT's environmental consultant should be present during excavations near the known contaminated soil areas to document the proper management of contaminated soil and to ensure that clean soil adjacent to these areas is not inadvertently taken to a landfill as contaminated soil.

OBG appreciates the opportunity to be of service to the WisDOT on this project. If you have any questions regarding this project or report, please contact Mark Walter at 414-837-3563.

Sincerely,
O'BRIEN & GERE ENGINEERS, INC.



Mark D. Walter, PE
Project Manager

Attachments:

Table 1	Phase 2.5 Soil Sampling Results Summary
Table 2	Phase 2.5 Waste Characterization Composite Sample Results Summary
Figure 1	Project Location and Limits
Figure 2	Phase 2.5 Soil Boring Locations
Attachment 1	Summary Background Environmental Information
Attachment 2	Phase 2.5 Soil Boring Logs and Borehole Abandonment Forms
Attachment 3	Photographs
Attachment 4	Laboratory Analytical Results
Attachment 5	Investigative Waste Disposal Request
Attachment 6	Draft Special Provisions for the Management of PCB-Contaminated Soil
Attachment 7	Draft Special Provisions for the Management of Petroleum-Contaminated Soil

cc: Colin Schmenk – WisDOT's WDNR NER RR Program Liaison (hard copy and CD)
Shar TeBeest – WisDOT (electronic copy)

Tables

Table 1. Phase 2 Soil Sampling Results Summary

Pennsylvania Ave.- Phase 2.5 Investigation
Sheboygan, WI
WisDOT Project ID: 4996-25-00
May 14 and July 19, 2018

			Summary of Detected Analytes				
			PCBs (µg/kg)	Volatile Organic Compounds (VOCs) (µg/kg)			Metals (mg/kg)
Sample Location	Sample ID	Sample Date	Polychlorinated biphenyls (PCBs), Total	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Trimethylbenzenes, Total [2]	Lead, Total
		Groundwater Pathways RCL [1]:	*9.4*	*NS*	*NS*	*1,378.7*	*27*
		Non-Industrial Direct Contact RCL:	234	89,800	182,000	NS	400
		Industrial Direct Contact RCL:	**967**	**219,000**	**182,000**	**NS**	**800**
		Background Threshold Values:	NS	NS	NS	NS	52
HA-01 (0'-2')	051418001	5/14/2018	*38*	--	--	--	--
SB-01 (2'-4')	071918001	7/19/2018	--	33 J	<26	33 J	41
SB-01 (4'-6')	071918002	7/19/2018	--	<29	<29	<58	11
SB-01 (8'-10')	071918003	7/19/2018	--	<27	<27	<54	4.5
SB-02 (2'-4')	071918004	7/19/2018	--	<27	<27	<54	5.5
SB-02 (6'-8')	071918005	7/19/2018	--	61	<24	61	6.4
SB-02 (10'-12')	071918006	7/19/2018	--	<24	<24	<48	4.4
HA-02 (0'-2')	071918007	7/19/2018	*35*	--	--	--	--

Notes
Italicized results exceed the NR 720 Groundwater Pathways RCL
Shaded results exceed the NR 720 Non-Industrial Direct Contact RCL
Underlined results exceed statewide Background Threshold Values
< = Concentration is less than the Method Detection Limit
J = Result is less than the Reporting Limit but greater than or equal to the Method Detection Limit and the concentration is an estimated value
mg/kg = milligrams per kilogram
µg/kg = micrograms per kilogram
NS = No Standard
RCL = NR720 Soil Residual Contaminant Level (WDNR) (June 2016)
1. Groundwater Pathways RCL used a dilution attenuation factor of 2
2. Total Trimethylbenzenes calculated by NRT from the sum of the detected 1,2,4-TMB and 1,3,5-TMB results reported by the laboratory as follows:
    a. Where no detections were observed, the sum of the reporting limits is presented as a non-detect.
    b. Where detections were observed, the detected results were added together for the total summation.

Table 2. Waste Characterization Soil Sampling Results Summary

Pennsylvania Ave.- Phase 2.5 Investigation
Sheboygan, WI
WisDOT Project ID: 4996-25-00
May 14 and July 19, 2018

			Petroleum Hydrocarbons (mg/kg)		Total PCBs (mg/kg)
Sample Location	Sample ID	Sample Date	Diesel Range Organics	Gasoline Range Organics	Polychlorinated Biphenyls (PCBs), Total
Typical Landfill Acceptance Criteria:			**NS**	**NS**	**50**
HA-01 (0'-2')	051418001	5/14/2018	--	--	0.038
HA-02 (0'-2')	071918007	7/19/2018	--	--	0.035
Composite 1 (SB-01, 0'-12')	071918008	7/19/2018	2.2 J	<0.830	--
Composite 2 (SB-02, 0'-12')	071918009	7/19/2018	3.0 J	<0.930	--

Notes

-- = sample was not analyzed for constituent

J = Result is less than the Reporting Limit but greater than or equal to the Method Detection Limit and the concentration is an estimated value.

NS = No Standard

Typical Landfill Acceptance Criteria based on Emerald Park Landfill acceptance limits in Muskego, WI.

Figures

8/10/2018 2:55:50 PM

PROJECT ID: 4996-25-71
WITH: N/A

COUNTY: SHEBOYGAN

ORDER OF SHEETS

Section No.	1	Title
Section No.	2	Typical Sections and Details
Section No.	3	Estimate of Quantities
Section No.	3	Miscellaneous Quantities
Section No.	4	Right of Way Plat
Section No.	5	Plan and Profile
Section No.	6	Standard Detail Drawings
Section No.	7	Sign Plates
Section No.	8	Structure Plans
Section No.	9	Computer Earthwork Data
Section No.	9	Cross Sections

TOTAL SHEETS =

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

C SHEBOYGAN, PENNSYLVANIA AVE

SHEBOYGAN RIVER BRIDGE

LOC STR

SHEBOYGAN COUNTY

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
4996-25-71		

STATE PROJECT NUMBER
4996-25-71

60% PLAN SUBMITTAL FOR REVIEW ONLY MARCH 16, 2018

DESIGN DESIGNATION

A.A.D.T.	2019	=	7800
A.A.D.T.	2039	=	8500
D.H.V.	2039	=	910
D.D.		=	59/41
T.		=	3.7%
DESIGN SPEED		=	30 MPH
ESALS		=	950,000

BEGIN PROJECT 4996-25-71
STA 101+22.91
X=217476.739
Y=176153.870

B-59-64

N

T-15-N

END PROJECT 4996-25-71
STA 108+50.00

R-23-E

LAYOUT
SCALE 0 .2 MI.

TOTAL NET LENGTH OF CENTERLINE = 0.138 MI.

ACCEPTED FOR
CITY OF SHEBOYGAN

(Date) CITY ENGINEER

ORIGINAL PLANS PREPARED BY
KAPUR & ASSOCIATES, INC.
CONSULTING ENGINEERS
MILWAUKEE, WISCONSIN
414.751.7200

(Date) (Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY
Surveyor: Kapur & Associates, Inc
Designer: Kapur & Associates, Inc
Management Consultant: JT Engineering, Inc.

APPROVED FOR THE DEPARTMENT
DATE: (Management Consultant Signature)

PRE_1

CONVENTIONAL SYMBOLS

PLAN		PROFILE	
CORPORATE LIMITS		GRADE LINE	
PROPERTY LINE	PL + 58.1	ORIGINAL GROUND	
LOT LINE		MARSH OR ROCK PROFILE (To be noted as such)	ROCK
LIMITED HIGHWAY EASEMENT		SPECIAL DITCH	LABEL
EXISTING RIGHT OF WAY		GRADE ELEVATION	95.36
PROPOSED OR NEW R/W LINE		CULVERT (Profile View)	
SLOPE INTERCEPT		UTILITIES	
REFERENCE LINE		ELECTRIC	E
EXISTING CULVERT		FIBER OPTIC	FO
PROPOSED CULVERT (Box or Pipe)		GAS	G
COMBUSTIBLE FLUIDS	CAUTION	SANITARY SEWER	SAN
		STORM SEWER	SS
		TELEPHONE	T
MARSH AREA		WATER	W
		UTILITY PEDESTAL	
		POWER POLE	
WOODED OR SHRUB AREA		TELEPHONE POLE	

COORDINATES ON THE PLAN ARE REFERENCED TO SHEBOYGAN COUNTY COORDINATES NAD 1983 (2011).

ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO THE NATIONAL GEODETIC VERTICAL DATUM (NGVD29).

E

WISDOT/CADDS SHEET 15

FILE NAME : S:\DOT\DOT_NE\170125 -ID 4996-25-00 Penn Ave Bridge\DGNS\Planesheets\010101_TI.dgn | PLOT DATE : 3/15/2018 | PLOT BY : wwolak | PLOT NAME : | PLOT SCALE : 1:2112

WISDOT
PENNSYLVANIA AVENUE
SHEBOYGAN, WISCONSIN

0 25 50 100
Feet

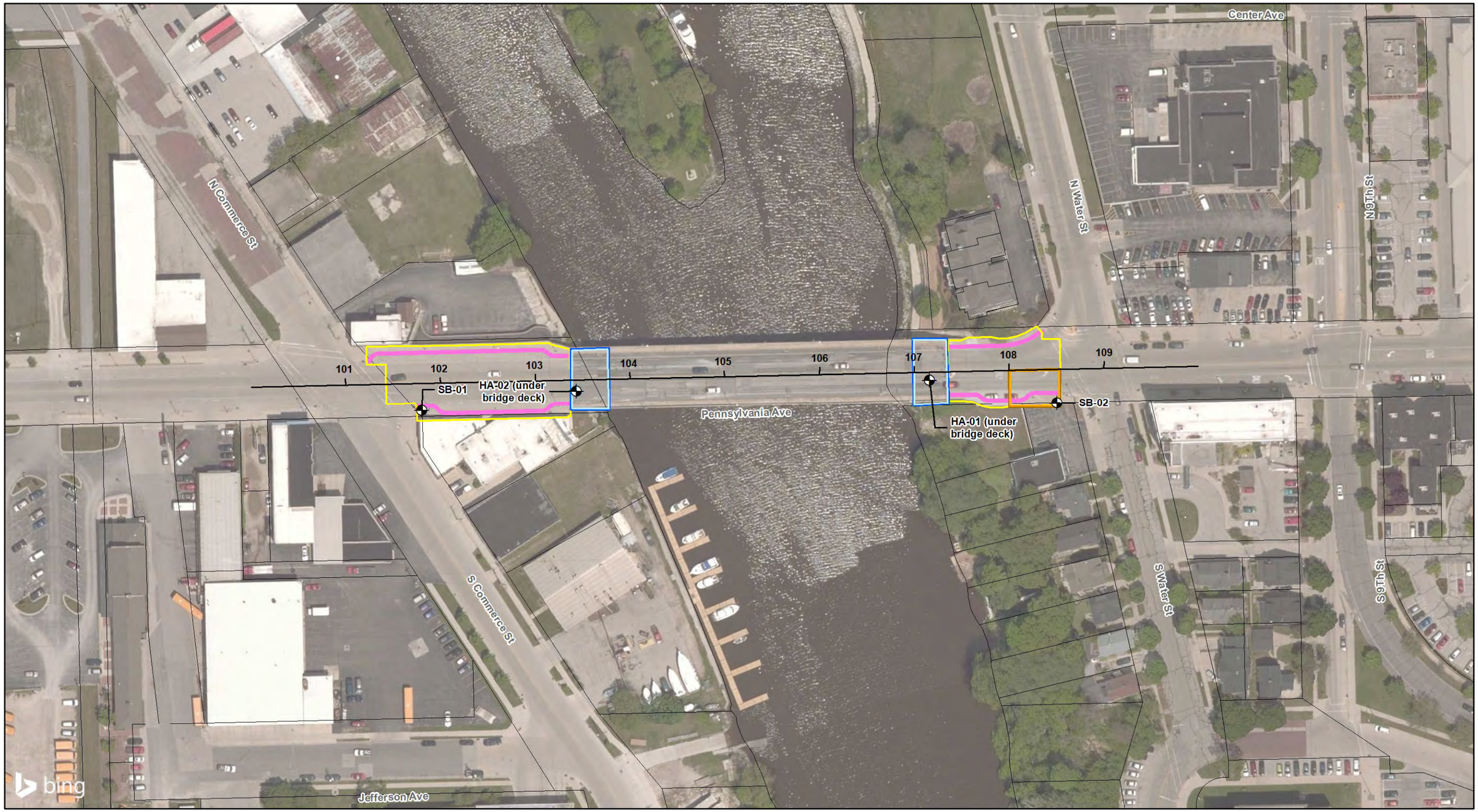
N

PROJECT LOCATION FIGURE

FILE_NO. 69862
DATE 8/10/2018

O'BRIEN & GERE ENGINEERS, INC.

Y:\Mapping\Projects\69862\MXD\Figure 1_Location.mxd



LEGEND

- MAY AND JULY 2018 PH 2.5 SOIL BORING LOCATION
- NEW ROAD CURB
- SLOPE INTERCEPT
- PCB-CONTAMINATED SOIL (0' TO AT LEAST 2' BGS) IN WISDOT PROJECT LIMITS
- PETROLEUM-CONTAMINATED SOIL (4' TO 10' BGS) IN WISDOT PROJECT LIMITS
- PARCEL BOUNDARY

WISDOT
PENNSYLVANIA AVENUE
SHEBOYGAN, WISCONSIN

0 25 50 100
Feet

N

BORING LOCATION FIGURE

FILE_NO. 69862
DATE 8/10/2018

O'BRIEN & GERE ENGINEERS, INC.

Attachment 1 – Summary Background Environmental Information

WisDOT Phase 1 Hazardous Materials Assessment Site Summary

WisDOT Project ID: 4996-25-00
Highway/Street: Pennsylvania Avenue Bridge
Termini/Limits: Commerce Street and Water Street
County: Sheboygan County

Property Information:
Site Name(s): Sheboygan Harbor and River
DOT parcel number (if known):
Property Address: NA
Owner's Name: NA
Owner's Address: NA
Owner's Phone:
Current Land Use: River
Past Land Use: River

Real Estate Requirements: Not Finalized
☒None ☐Total take ☐Strip acquisition of feet
☐Temporary Limited Easement (TLE)
☐Permanent Limited Easement (PLE)
☐ Other (describe)

Construction Requirements: Not Finalized
☐None ☐ Excavation within current right of way to feet
☐ Excavation within proposed right of way to feet
☐ Excavation within easement to feet
☐ Public or private utility or sanitary or storm sewer installation or excavation to feet
☒ Other (describe) slope paving on east bank under bridge with excavation to 2'

Information from database searches and interviews:
Department of Agriculture, Trade, and Consumer Protection (DATCP)
- ☐ site has registered tanks ☐ASTs ☐USTs
- ☐ tanks are currently in use
- ☐ tanks are abandoned date:
- Tank contents:
  - ☐ Leaded gasoline ☐ Unleaded gasoline ☐ Fuel Oil ☐ Diesel
  - ☐ Kerosene ☐ Unknown ☐ Other (describe)

Department of Safety and Professional Services (DSPS)
Note: As of July 2, 2013, all DSPS LUST activities were transferred to the WDNR for oversight.
- ☐ site is a DSPS administered LUST site; DSPS ID number:
- ☐ site is a closed DSPS LUST site; closure date:

Department of Natural Resources (DNR)
- ☐ site is a DNR administered LUST site; BRRTS number:
- ☐ site is a DNR administered ERP site; BRRTS number:
- ☐ site is a closed ☐LUST ☐ERP site; closure date:
- ☐ site is a landfill
- ☐ site is an abandoned waste disposal site
- ☐ site is a hazardous waste generator
- ☒ Other (please describe) ECHO, FINDS, ICIS, NPL, PRP, ROD, SEMS, US ENG CONTROLS, and US INST CONTROL

Sanborn Maps: site is a on map dated . Comments:
WisDOT historic plan sets: site is a on project dated . Comments:
Business directories: site is a on project dated . Comments:

Aerial photos: site is a on photo dated . Comments:
☐ Contamination discovered at feet during utility or other excavation in the area. Indicate location on site map.
Interview Information or other comments: The Sheboygan River and Harbor is listed on ECHO, FINDS, ICIS, NPL (Superfund), PRP, ROD, and SEMS for Polychlorinated Biphenyls (PCBs) contamination. The Pennsylvania Bridge over the Sheboygan River is the dividing line between the Lower River and the Inner Harbor sections of the Superfund site.

Kapur contacted Mr. Thomas Wentland, WDNR project manager for the Sheboygan Harbor and River Site. Mr. Wentland recommended sampling of the area on the east bank for PCBs prior to excavation for slope paving. The recommendation was made based upon the fact that historic flooding may have overtopped the existing retaining wall and PCBs may be located within the area of excavation.

Visual Evidence of Potential Contamination: (include additional information in space provided)
☒ No evidence of tanks
☐ USTs ☐ASTs Location, number and condition of tanks, contents, comments:
Location in relationship to current right of way: ☐ map attached
Location in relationship to proposed right of way: ☐ map attached
☐ Drums ☐Stained soils ☐Odor ☐Sheen on surface water ☐Areas of excavation
☐ Areas of fill ☐Stressed vegetation ☐ Pond(s) ☐ Basins/sumps ☐ Monitoring wells
☐ Soil borings
Comments:

Potential for Contaminant Migration: (attach supporting documentation such as plume maps, summaries of site investigation or closure reports).
☒ Property is a potential source of contamination
☐ Adjacent property is a potential source of contamination. Include site name or BRRTS number if known, describe location, include contaminant type and any additional information.
☐ Contaminated soil known to be within proposed right of way from feet to feet below ground surface
☐ Contaminated groundwater known to be within proposed right of way at feet below ground surface.
☒ Contaminated soil or groundwater within existing right of way. Attach copy of most recent investigation and plume maps.

Attachments – required
☒ Site photographs and a site map showing areas of concern
☐ Plat map showing parcel and any proposed areas of acquisition or easement
☐ Historic aerial photos of site - clearly outline site
☐ Historic WisDOT or other as-builts and plat maps - clearly outline site
☐ Plume maps for known contamination. Indicate existing or proposed right of way where applicable.

Recommendations

☐ No additional hazardous materials investigation is required.

☐ If construction or real estate requirements change, evaluation of need for further investigation will be necessary.

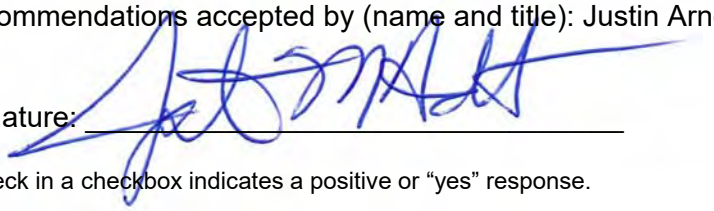
☐ Information is sufficient to use Standard Special Provisions. Copy of completed Standard Special Provision is attached.

☒ Conduct additional investigation

- ☐ Phase 2 (determine if contamination is present)
- ☒ Phase 2.5 (determine extent of contamination within existing R/W only)
- ☐ Phase 3 (determine full extent of contamination prior to acquisition)
- ☐ Phase 4 (remediate site)
- ☐ Other (describe)

Prepared by: Patricia Hermann on 02/26/2018

Recommendations accepted by (name and title): Justin Arndt, P.E. on 02/26/2018.

Signature: 

A check in a checkbox indicates a positive or “yes” response.

Site Number: **1**
Site Address: **SHEBOYGAN HARBOR AND RIVER**

Real Estate Requirements: NONE
Construction Requirements: Replacement of Bridge Deck, Slope Paving on East Bank to 2', No Work in River

This site appears in the ECHO, FINDS, ICIS, NPL, PRP, ROD, SEMS, US ENG CONTROLS, and US INST CONTROL databases.

This site is part of the Sheboygan River.

The Sheboygan River and Harbor is listed on ECHO, FINDS, ICIS, NPL (Superfund), PRP, ROD, and SEMS for Polychlorinated Biphenyls (PCBs) contamination. The Pennsylvania Bridge over the Sheboygan River is the dividing line between the Lower River and the Inner Harbor sections of the Superfund site.

The following is an EPA summary of the site and actions that have taken place.

"The Sheboygan River and Harbor Site is located on the western shore of Lake Michigan approximately 55 miles north of Milwaukee, Wisconsin, in Sheboygan County. The Sheboygan River and Harbor site includes the lower 14 miles of the river from the Sheboygan Falls Dam downstream to, and including, the Inner Harbor. This segment of the river flows through Sheboygan Falls, Kohler, and Sheboygan before entering Lake Michigan. The Sheboygan River runs from west to east through east central Wisconsin, emptying into Lake Michigan. U.S. EPA divided the river into three sections, during the remedial investigations (RI), based on physical characteristics such as average depth, width, and level of polychlorinated biphenyl (PCB) sediment contamination. The Upper River extends from the Sheboygan Falls Dam downstream 4 miles to the Waelderhaus Dam in Kohler. The Middle River extends 7 miles from the Waelderhaus Dam to the former Chicago & Northwestern (C&NW) railroad bridge. The Lower River extends 3 miles from the C&NW railroad bridge to the Pennsylvania Avenue bridge in downtown Sheboygan. The Inner Harbor includes the Sheboygan River from the Pennsylvania Avenue Bridge to the river's outlet to the Outer Harbor. The Outer Harbor is defined as the area formed by the two breakwalls.

In addition to PCB-contaminated sediment in the river and harbor, some floodplain soils are contaminated with PCBs. Lastly, there remain questions concerning possible ground-water contamination and additional PCB sources associated with the Tecumseh Products Company (Tecumseh) Plant, one of the three identified potentially responsible parties (PRPs) for this site. Kohler Company and Thomas Industries are the other two PRPs for the site. Tecumseh Products Company performed the early removal actions and the remedial investigation / feasibility study (RI/FS). U.S. EPA anticipates that one or more of the PRPs will implement the remedy. In addition to polychlorinated biphenyl (PCB)-contaminated sediment in the river and harbor, some floodplain soils are contaminated with PCBs, and groundwater and additional PCB sources

associated with the former Tecumseh Products Company (Tecumseh) Plant are also part of the Site.

Site risks include risks to humans and ecological receptors via consumption of PCB-contaminated fish, and fish and waterfowl consumption advisories have been in effect since 1987. Land use along the Upper River is industrial, residential and recreational in Sheboygan Falls. The Kohler Company owns land adjacent to the Middle River in the Village of Kohler. Land use in the Middle River consists of a horse farm, tree nursery, the company's historic River Bend property and the Black Wolf Run golf course. The 800- acre, Kohler Company-owned River Wildlife Area is on the south side of the river adjacent to the Upper and Middle River. The wildlife area is used as a private hunting and fishing club. Land use adjacent to the Lower River and Inner Harbor is recreational, commercial and industrial with some residential areas. The City of Sheboygan's central business district is on the north bank of the river in the harbor area. The City has revitalized the harbor area. Offices, restaurants, marinas, parks and a boardwalk are located within this area. There are no public beaches along the river or harbor. The Lower River and Harbor are navigable, but the Upper and Middle River traffic is typically restricted to smaller craft (such as canoes and kayaks) which can be portaged around the dams in the Village of Kohler and Sheboygan Falls, as well as shallow areas. Public and recreational boat access is available at a number of locations within the city of Sheboygan in the Lower River and Harbor. There is considerable seasonal fishing in the Middle River, Lower River and Inner Harbor. Fishing is more limited in the Upper River. According to Wisconsin Department of Natural Resources (WDNR) surveys, most fishing occurs during spring and fall salmon and trout runs. Fish consumption advisory is in effect for Sheboygan River and Lake Michigan fish. The Sheboygan River is not used as a public water supply, but it drains into Lake Michigan which is used as a drinking water source by Sheboygan, Sheboygan Falls, and Kohler. The three cities regularly test the public water and it is safe to drink. Contaminated groundwater near the Tecumseh Sheboygan Falls Plant is not used as a drinking water source.

The Sheboygan Harbor was constructed at the mouth of the Sheboygan River in the early 1920s. In 1954, the lower Sheboygan River, namely the channel upstream of the Eighth Street Bridge, was added as a portion of the Sheboygan Harbor for U.S. Army Corps of Engineers (USACE) maintenance dredging. Between 1956 and 1969, a total of 404,000 cubic yards of sediment were dredged downstream of the Eighth Street Bridge. The channel above Eighth Street has not been dredged since it was first dredged in 1956. Prior to 1969, the USACE disposed of the dredged material from the harbor in an authorized deep water disposal area in Lake Michigan. However, there has been no dredging within the Sheboygan Harbor since EPA and WDNR determined that the sediment was unsuitable for open-water disposal. Sediment sampling done by the USACE in 1979 indicated moderate to high levels of lead, zinc, PCBs, and chromium and moderate levels of arsenic present in sediment at all locations sampled. The USACE routinely removed lake sand from a sandbar that forms at the outer entrance of the harbor. The USACE last dredged the harbor mouth in the fall of 1991. In June 1979, the USACE collected 11 sediment cores from the harbor area ranging in depth from 1.5 to 9 feet. The USACE analyzed samples for lead, zinc, copper, chromium, and PCBs. The study revealed greater PCB and metal levels in the sediment of the Inner Harbor than in sediment from the Outer Harbor. In October 1979, the USACE collected a

second round of samples consisting of 21 sediment cores. The USACE's analysis of these cores generally indicated an increase in PCB concentrations with the distance upstream from the harbor and with the depth of the sediment. The Sheboygan River and Harbor are both located within the Sheboygan River Area of Concern, so designated by the International Joint Commission on the Great Lakes due to impairment of the beneficial uses of the waterway. Examination of 98 sediment profile samples collected by the USACE from the Sheboygan Harbor in December 1982 indicated the presence of PCBs in the surface sediment of the harbor.

Tecumseh, a manufacturer of refrigeration and air conditioning compressors and gasoline engines, was located adjacent to the Sheboygan River in Sheboygan Falls. PCBs were found in sewer lines that lead to the river from the former Tecumseh facility and in hydraulic fluids used in Tecumseh's Die Cast Division manufacturing processes. The contamination level was high in the sediments immediately surrounding the former Tecumseh Plant, but decreased in concentration downstream. Tecumseh, prior to the issuance of regulations governing PCBs, used PCB-contaminated soils to construct a dike located along the river downstream of the Sheboygan Falls Dam. Tecumseh voluntarily excavated and replaced the dike following EPA's issuance of regulations governing PCBs in the late 1970s. Tecumseh undertook cleanup actions, but not before PCBs were released into the Sheboygan River.

In 1978, WDNR conducted a survey that found numerous industries that discharge contaminants to the Sheboygan River. A handful had some level of PCB discharge to the river. A number of industries had heavy metals in their discharge. While heavy metals were an environmental concern, PCBs were a more significant problem and any PCB driven cleanup would likely also address the heavy metals in the river.

PCB-Contaminated Sediment Upper River *PCB sampling results from the Upper River in 1989 and 1990 showed concentrations ranging from 1.4 to 4,500 parts per million (ppm). Tecumseh removed PCB-contaminated sediment near its facility in 1990 and 1991. PCB sampling conducted in December 1997 from the same soft sediment areas sampled in 1989 and 1990 showed concentrations ranging from nondetect to 170 ppm. Soft sediment sampling in 1999 near Tecumseh's Sheboygan Falls Plant revealed PCB concentrations as high as 840 ppm. River bank sampling in 1999 near Tecumseh's Sheboygan Falls Plant revealed PCB concentrations as high as 1,100 ppm. PCB-contaminated sediment in this segment of the river migrates downstream due to the dynamic nature of this river reach.*

Middle River *Information obtained from the Middle River during the Remedial Investigation (RI) showed PCB concentrations ranging from non-detect to 8.8 ppm. WDNR sediment trap data showed PCB concentrations ranging from 1.4 to 3.0 ppm. WDNR obtained sediment trap data between 1990 and 1996. Samples obtained in 1997 by WDNR show PCB concentrations ranging from 0.6 ppm to 37 ppm. Like the Upper River, sediment in the Middle River is likely to be disturbed due to the dynamic nature of this river reach.*

Lower River *During the original site investigations, sampling in the Lower River showed PCB concentrations as high at 67 ppm in the Camp Marina area just a couple of feet below the sediment*

surface. Contaminated sediments within the top two feet may be disturbed by high flow events and/or boating. WDNR sediment trap data collected from 1994 to 1996 showed PCB concentrations ranging from 1.9 to 4.2 ppm in the Lower River.

***Inner Harbor RI** sampling detected PCB concentrations as high as 220 ppm in the Inner Harbor, however these levels were detected in 1979 and remain many feet below the surface. PCB surface sampling results (from the top 6 inches of sediment) in 1987 ranged from 0.17 to 5.8 ppm. PCB surface sampling results in 1999 ranged from 0.38 to 5.3 ppm.*

***Soil** Tecumseh collected soil samples from within the 10-year floodplain of the Sheboygan River during the investigation phase of the project. Floodplain samples collected in 1990 showed PCB concentrations ranging from non-detect to 71 ppm. In 1990 and 1992, Tecumseh took additional rounds of samples as part of the Alternative Specific Remedial Investigation (ASRI). PCB concentrations exceeded 50 ppm in two samples and 10 ppm in six samples.*

Sampling in Floodplain Area 11 showed a concentration of 220 ppm. Floodplain Area 11 was re-sampled in 1992 and showed PCB concentrations of 330 and 320 ppm. Due to disturbances of the floodplain caused by golf course construction by the land owner, PCB concentrations have decreased in Floodplain Area 11 since the ASRI sampling.

***Surface Water** PCBs were detected in surface water prior to, during, and after implementation of the PCB removal action in 1989 and 1990.*

***Groundwater** PCB contamination was also present in groundwater at the former Tecumseh plant. Groundwater sampling conducted in September 1992 and May 1993 by Tecumseh indicated that PCBs were locally present in the groundwater at Tecumseh's former Sheboygan Falls Plant in concentrations that ranged from 0.10 micrograms per liter (ug/L) to 7.4 ug/L in unfiltered samples, and from below the detection limit (0.05 ug/L) to 0.98 ug/L in filtered samples. These concentrations are above the 0.03 ug/L WDNR enforcement standard (ES) for groundwater.*

EPA issued a Record of Decision for the Site on May 12, 2000. The remedy outlined specific actions to address PCB-contaminated sediment, PCB-contaminated floodplain soil, and groundwater contamination. The Upper River portion of the remedy, as well as the mitigation of potential groundwater contamination and source control at the former Tecumseh Plant in Sheboygan Falls, was completed under a 2004 consent decree with Pollution Risk Services. The work was implemented in two phases from September 2004 to October 2007. The final site inspection of the Upper River Phase II remedial action was conducted on November 7, 2007. The floodplain soil removal work which also was required under the Upper River consent decree is not yet completed; EPA is in the process of negotiating with the adjacent property owner for access to the floodplains for remediation. An Explanation of Significant Differences addressing the Operable Unit 01 sediments at the Sheboygan Harbor and River site was completed in December 2010."

The Sheboygan River and harbor is listed in the US ENG CONTROL database for Non-fundamental change (ESD) for sediment, hydraulic control for groundwater, natural attenuation for groundwater, disposal of sediment, excavation of sediment, disposal of soil, and excavation of soil.

The Sheboygan River and Harbor is listed in the US INST CONTROL database for administrative controls.

Kapur contacted Mr. Thomas Wentland, WDNR project manager for the Sheboygan Harbor and River Site. Mr. Wentland recommended sampling of the area on the east bank for PCBs prior to excavation for slope paving. The recommendation was made based upon the fact that historic flooding may have overtopped the existing retaining wall and PCBs may be located within the area of excavation.

Based on conversations with Mr. Wentland, WDNR, and the slope paving construction requirement on the east bank, a Phase 2.5 Subsurface Investigation is recommended. Mr. Wentland should be contacted prior to any subsurface sampling.

WisDOT Phase 1 Hazardous Materials Assessment Site Summary

WisDOT Project ID: 4996-25-00
Highway/Street: Pennsylvania Avenue Bridge
Termini/Limits: Commerce Street and Water Street
County: Sheboygan County

Property Information:
Site Name(s): 505 South Commerce Street
DOT parcel number (if known):
Property Address: 505 South Commerce Street, Sheboygan, WI 53081
Owner's Name: Prigge's Chartered Buses, Inc.
Owner's Address: 1045 Pennsylvania Avenue, Sheboygan, WI 53081
Owner's Phone:
Current Land Use: Commercial – Travel Leaders (Travel Agency)
Past Land Use: Filling Station, Auto Repair, Painting, wood yard/office, tannery

Real Estate Requirements: Not Finalized
☒None ☐Total take ☐Strip acquisition of feet
☐Temporary Limited Easement (TLE)
☐Permanent Limited Easement (PLE)
☐ Other (describe)

Construction Requirements: Not Finalized
☐None ☒ Excavation within current right of way to 2 feet
☐ Excavation within proposed right of way to feet
☐ Excavation within easement to feet
☒ Public or private utility or sanitary or storm sewer installation or excavation to 7-10 feet

Information from database searches and interviews:
Department of Agriculture, Trade, and Consumer Protection (DATCP)
- ☐ site has registered tanks ☐ASTs ☐USTs
- ☐ tanks are currently in use
- ☐ tanks are abandoned date:
- Tank contents:
  - ☐ Leaded gasoline ☐ Unleaded gasoline ☐ Fuel Oil ☐ Diesel
  - ☐ Kerosene ☐ Unknown ☐ Other (describe)

Department of Safety and Professional Services (DSPS)
Note: As of July 2, 2013, all DSPS LUST activities were transferred to the WDNR for oversight.
- ☐ site is a DSPS administered LUST site; DSPS ID number:
- ☐ site is a closed DSPS LUST site; closure date:

Department of Natural Resources (DNR)
- ☐ site is a DNR administered LUST site; BRRTS number:
- ☐ site is a DNR administered ERP site; BRRTS number:
- ☐ site is a closed ☐LUST ☐ERP site; closure date:
- ☐ site is a landfill
- ☐ site is an abandoned waste disposal site
- ☐ site is a hazardous waste generator
- ☒ Other (please describe) NPDES, RGA LUST

Sanborn Maps: site is a Tannery on map dated 1884-1891, Wood Yard 1903, Auto Repair and Filling Station 1949-1967 Comments: Two (2) gasoline tanks shown (1949, 1955, & 1967 maps) to the northwest of the onsite automobile repair building and underneath the current onsite building. Gasoline HO on 1903 map near bridge.
WisDOT historic plan sets: site is a on project dated . Comments:
Business directories: site is a on project dated . Comments:

Aerial photos: site is a on photo dated . Comments:
☐ Contamination discovered at feet during utility or other excavation in the area. Indicate location on site map.
Interview Information or other comments: A database search of this site revealed no known LUST at this location. There is a Prigges Bus Service LUST at 520 S Commerce Street.

Visual Evidence of Potential Contamination: (include additional information in space provided)
☒ No evidence of tanks
☐ USTs ☐ASTs Location, number and condition of tanks, contents, comments:
Location in relationship to current right of way: ☐ map attached
Location in relationship to proposed right of way: ☐ map attached
☐ Drums ☐Stained soils ☐Odor ☐Sheen on surface water ☐Areas of excavation
☐ Areas of fill ☐Stressed vegetation ☐ Pond(s) ☐ Basins/sumps ☐ Monitoring wells
☐ Soil borings
Comments:

Potential for Contaminant Migration: (attach supporting documentation such as plume maps, summaries of site investigation or closure reports).
☒ Property is a potential source of contamination
☐ Adjacent property is a potential source of contamination. Include site name or BRRTS number if known, describe location, include contaminant type and any additional information.
☐ Contaminated soil known to be within proposed right of way from feet to feet below ground surface
☐ Contaminated groundwater known to be within proposed right of way at feet below ground surface.
☐ Contaminated soil or groundwater within existing right of way. Attach copy of most recent investigation and plume maps.

Attachments – required
☒ Site photographs and a site map showing areas of concern
☐ Plat map showing parcel and any proposed areas of acquisition or easement
☐ Historic aerial photos of site - clearly outline site
☐ Historic WisDOT or other as-builts and plat maps - clearly outline site
☐ Plume maps for known contamination. Indicate existing or proposed right of way where applicable.

Recommendations
☐ No additional hazardous materials investigation is required.
☐ If construction or real estate requirements change, evaluation of need for further investigation will be necessary.
☐ Information is sufficient to use Standard Special Provisions. Copy of completed Standard Special Provision is attached.
☒ Conduct additional investigation
- ☒ Phase 2 (determine if contamination is present)
- ☐ Phase 2.5 (determine extent of contamination within existing R/W only)
- ☐ Phase 3 (determine full extent of contamination prior to acquisition)
- ☐ Phase 4 (remediate site)
- ☐ Other (describe)

Prepared by: Patricia Hermann on 02/26/2018
Recommendations accepted by (name and title): Justin Arndt, P.E. on 02/26/2018.

Signature: _____

A check in a checkbox indicates a positive or “yes” response.

Site Number: **3**
Site Address: **505 SOUTH COMMERCE STREET**

Real Estate Requirements: NONE
Construction Requirements: Replacement of pavement, sidewalk, curb & gutter to 2'; replacement of storm sewer to 7'; Replacement of light poles to 10'

This site appears in the NPDES and RGA LUST databases.

The site is currently Travel Leaders. The site includes 1045 Pennsylvania Avenue. The site is shown with a building south and west of the bridge that is noted with Gasoline HO on the 1903 Sanborn map and a filling station/auto repair facility is located at the site on the 1949, 1955, and 1967 Sanborn maps. Two (2) gasoline tanks shown to the northwest of the onsite automobile repair building and underneath the current onsite building.

Prigges Chartered Busses, Inc. at 505 S Commerce Street is listed on the NPDES for a Storm Water Industrial Tier 2 Permit.

The EDR RGA LUST database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Prigge's Bus at 505 South Commerce Street is listed in the database in 1992. A database search of this site revealed no known LUST at this location. There is a Prigges Bus Service LUST at 520 S Commerce Street.

Based on the former use of the site as a filling station and a wood yard with gasoline storage near the bridge location and the construction requirements in the direct vicinity of the former tanks, a Phase 2.5 Subsurface Investigation is recommended within the existing ROW immediately adjacent to the property in the area of the proposed storm sewer laterals and light pole locations only.

PHOTOGRAPHIC LOG

Photo #	Date
1	02/26/18

Description
Site 3
(facing E)

Photo #	Date
2	02/26/18

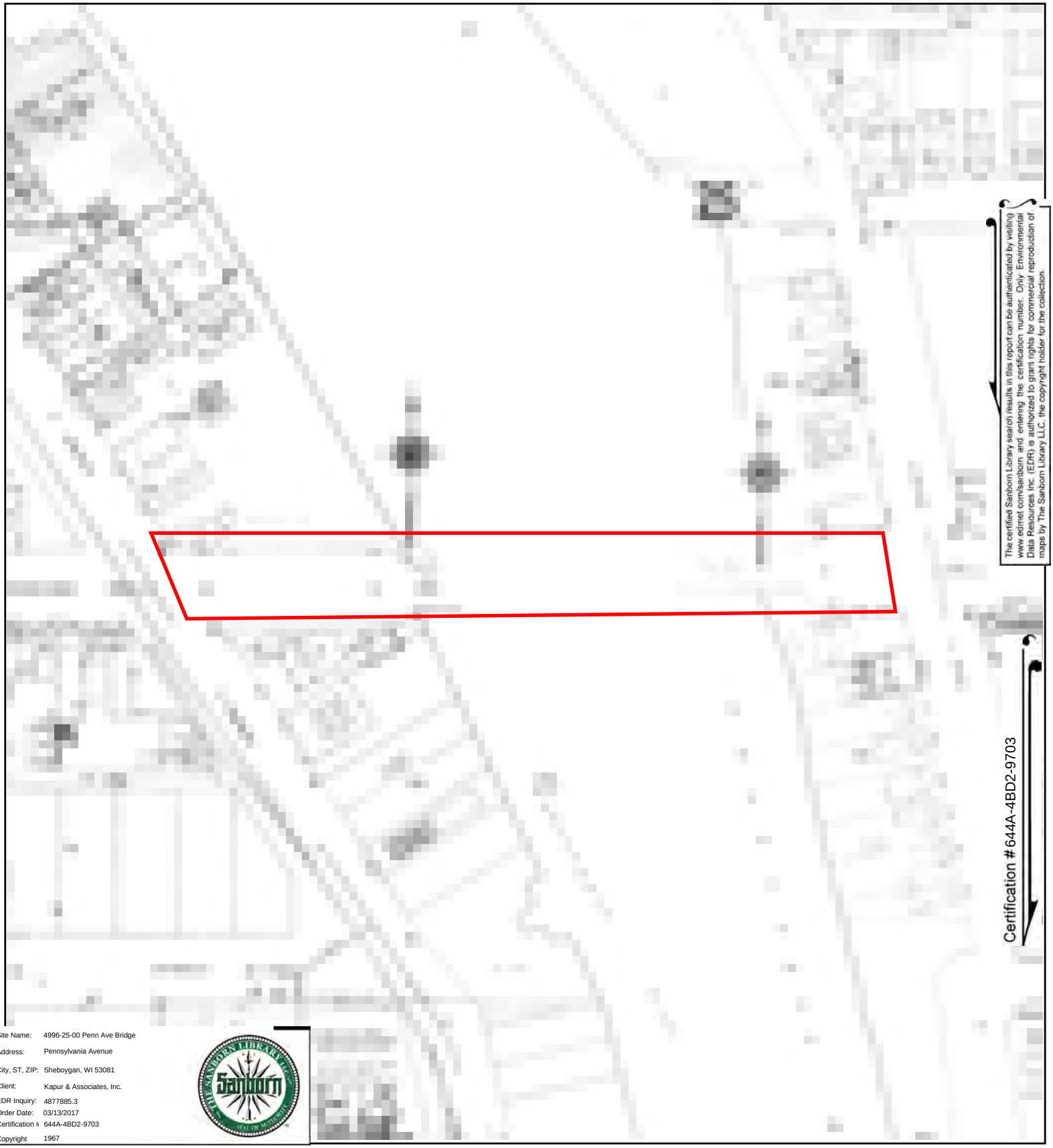
Description
Site 3
(facing NE)

PHOTOGRAPHIC LOG

Photo #	Date
3	02/26/18

Description

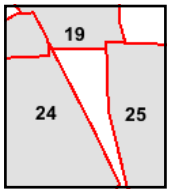
Site 3
(facing SE)



Certification #644A-4BD2-9703

Site Name: 4996-25-00 Penn Ave Bridge
Address: Pennsylvania Avenue
City, ST, ZIP: Sheboygan, WI 53081
Client: Kapur & Associates, Inc.
EDR Inquiry: 4877885.3
Order Date: 03/13/2017
Certification #: 644A-4BD2-9703
Copyright: 1967

This Certified Sanborn Map combines the following sheets.
Outlined areas indicate map sheets within the collection.



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Volume 1, Sheet 24
Volume 1, Sheet 19

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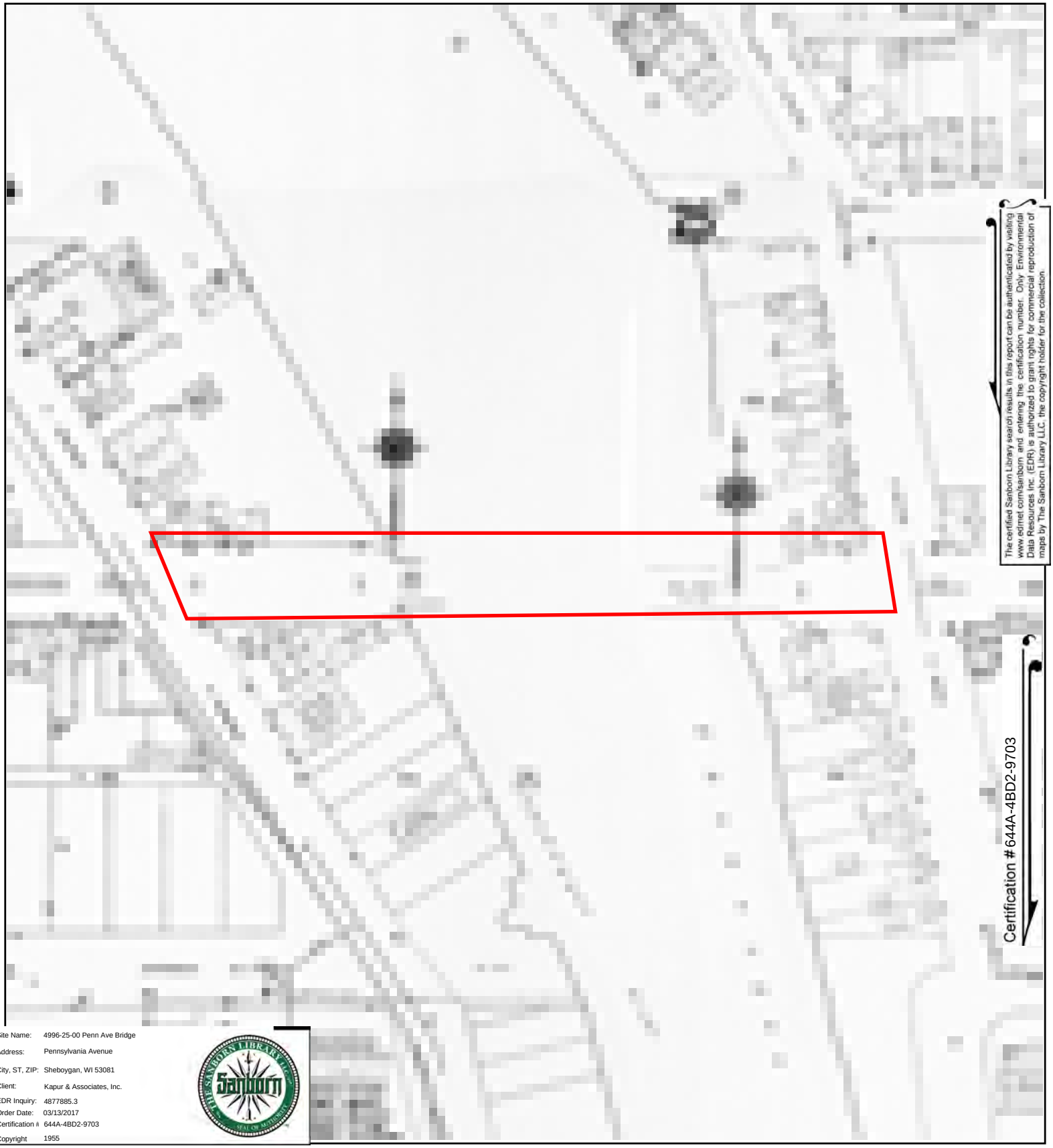

Certification #644A-4BD2-9703

Site Name: 4996-25-00 Penn Ave Bridge
Address: Pennsylvania Avenue
City, ST, ZIP: Sheboygan, WI 53081
Client: Kapur & Associates, Inc.
EDR Inquiry: 4877885.3
Order Date: 03/13/2017
Certification #: 644A-4BD2-9703
Copyright: 1955

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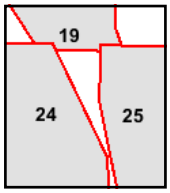

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Volume 1, Sheet 24
Volume 1, Sheet 19

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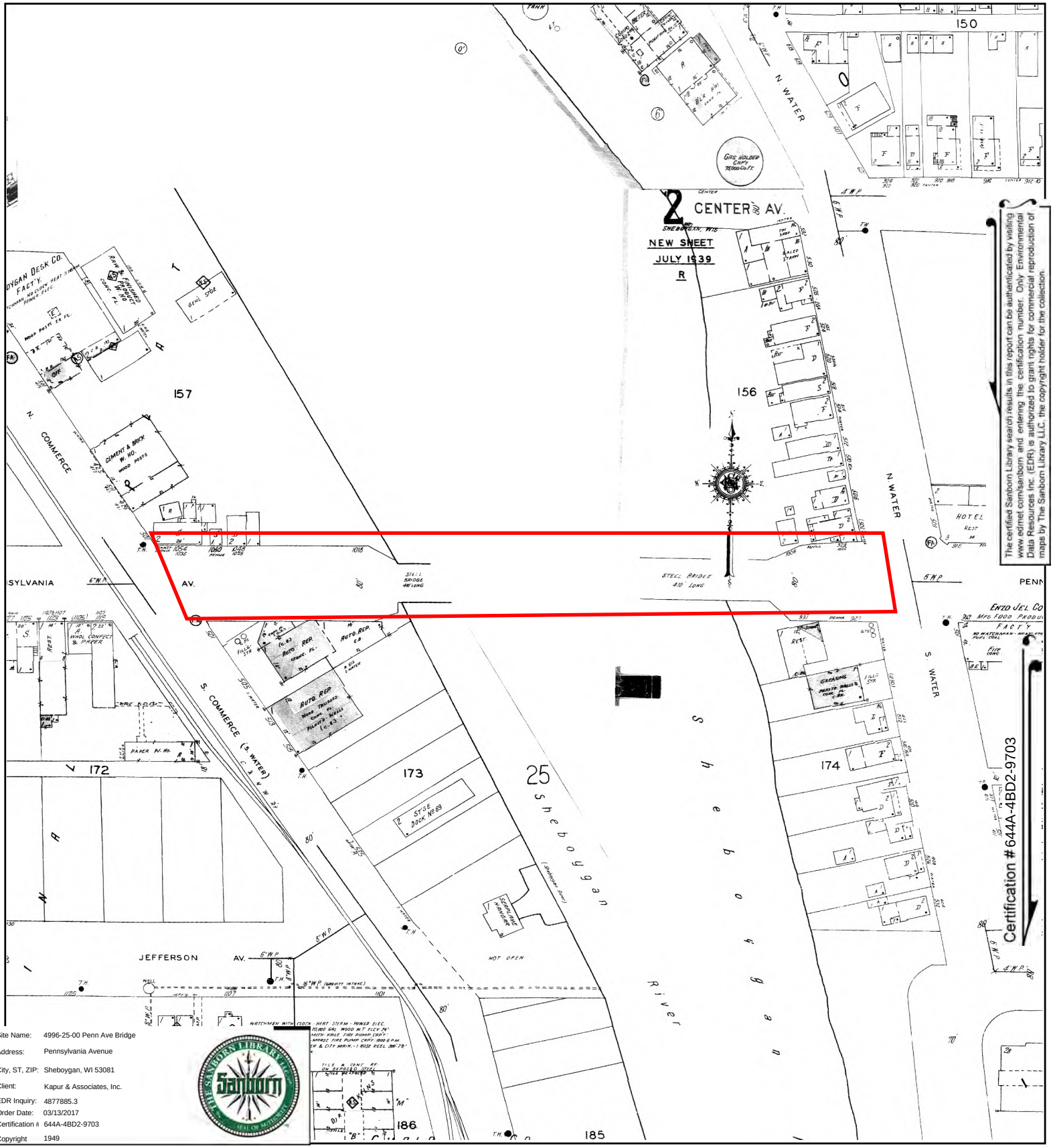

Site Name:	4996-25-00 Penn Ave Bridge
Address:	Pennsylvania Avenue
City, ST, ZIP:	Sheboygan, WI 53081
Client:	Kapur & Associates, Inc.
EDR Inquiry:	4877885.3
Order Date:	03/13/2017
Certification #:	644A-4BD2-9703
Copyright	1949

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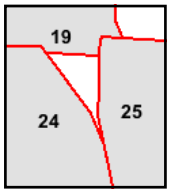

Volume 1, Sheet 25
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Volume 1, Sheet 19

0 Feet 150 300 600

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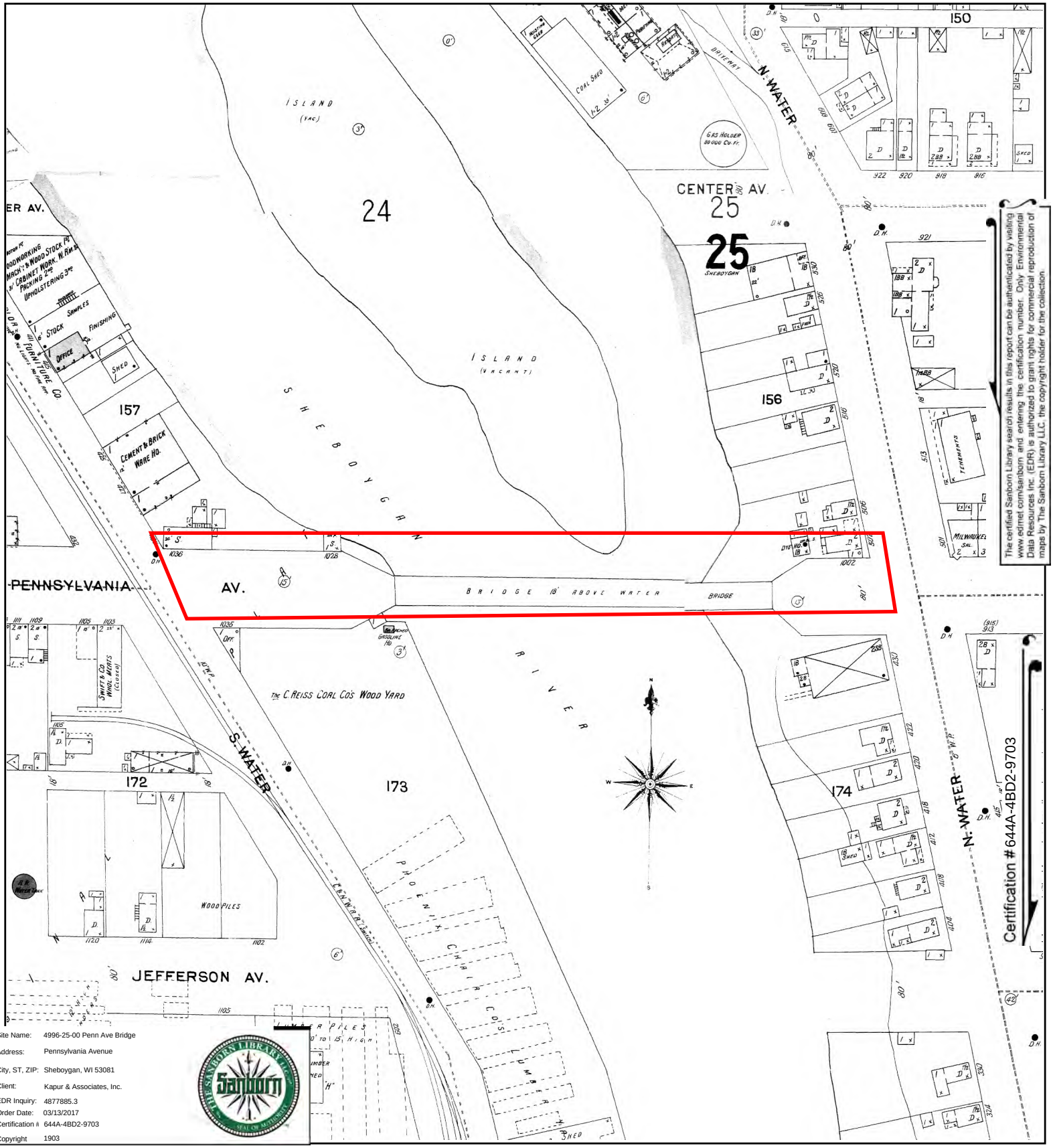

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Address:	Pennsylvania Avenue
City, ST, ZIP:	Sheboygan, WI 53081
Client:	Kapur & Associates, Inc.
EDR Inquiry:	4877885.3
Order Date:	03/13/2017
Certification #:	644A-4BD2-9703
Copyright	1903

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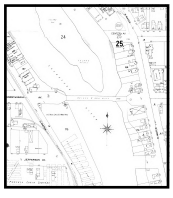

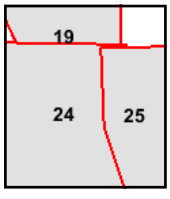

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Volume 1, Sheet 24
Volume 1, Sheet 19

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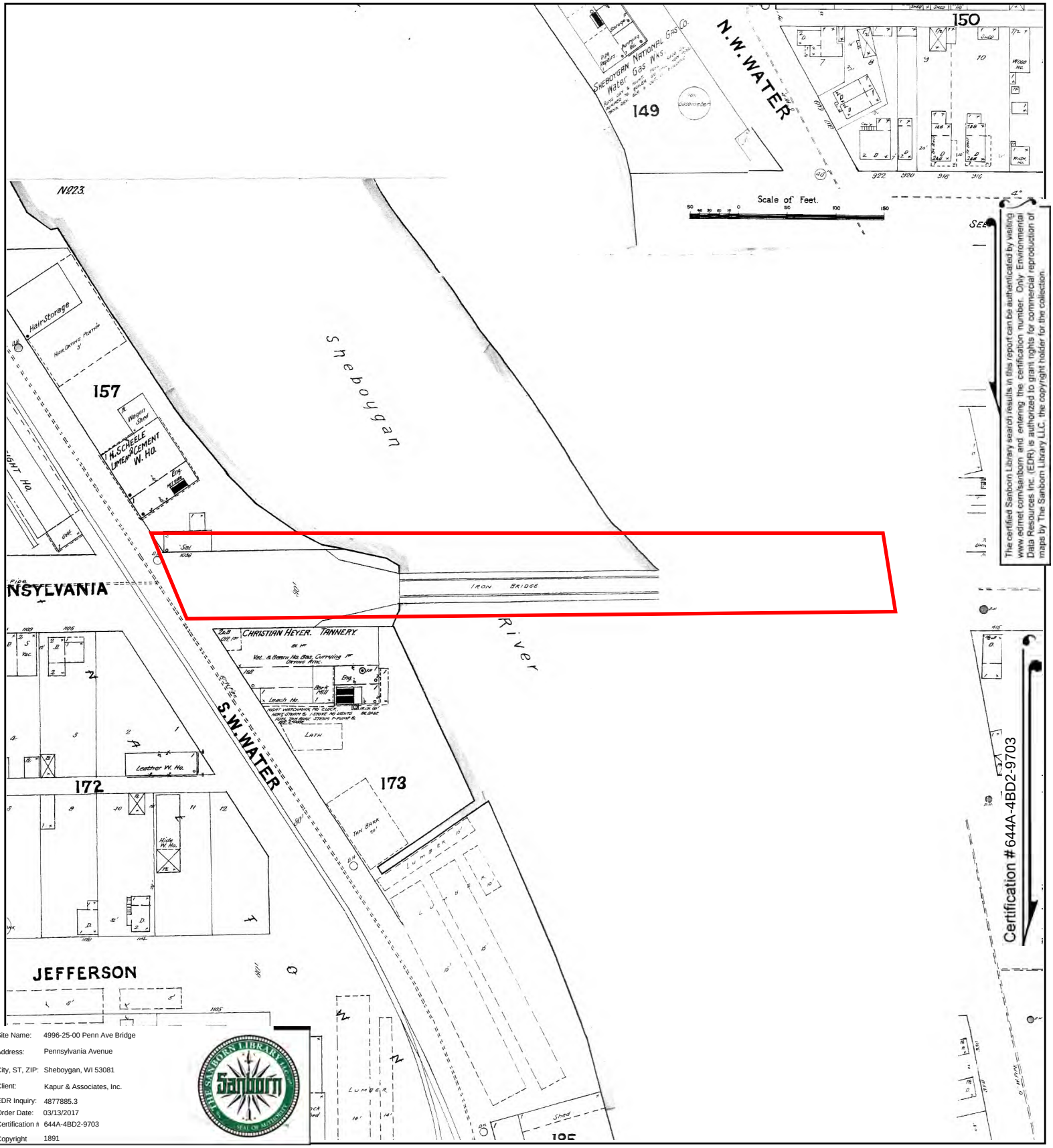

Site Name:	4996-25-00 Penn Ave Bridge
Address:	Pennsylvania Avenue
City, ST, ZIP:	Sheboygan, WI 53081
Client:	Kapur & Associates, Inc.
EDR Inquiry:	4877885.3
Order Date:	03/13/2017
Certification #:	644A-4BD2-9703
Copyright	1891

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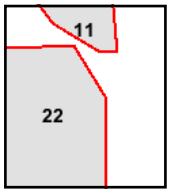

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Volume 1, Sheet 11

0 Feet 150 300 600

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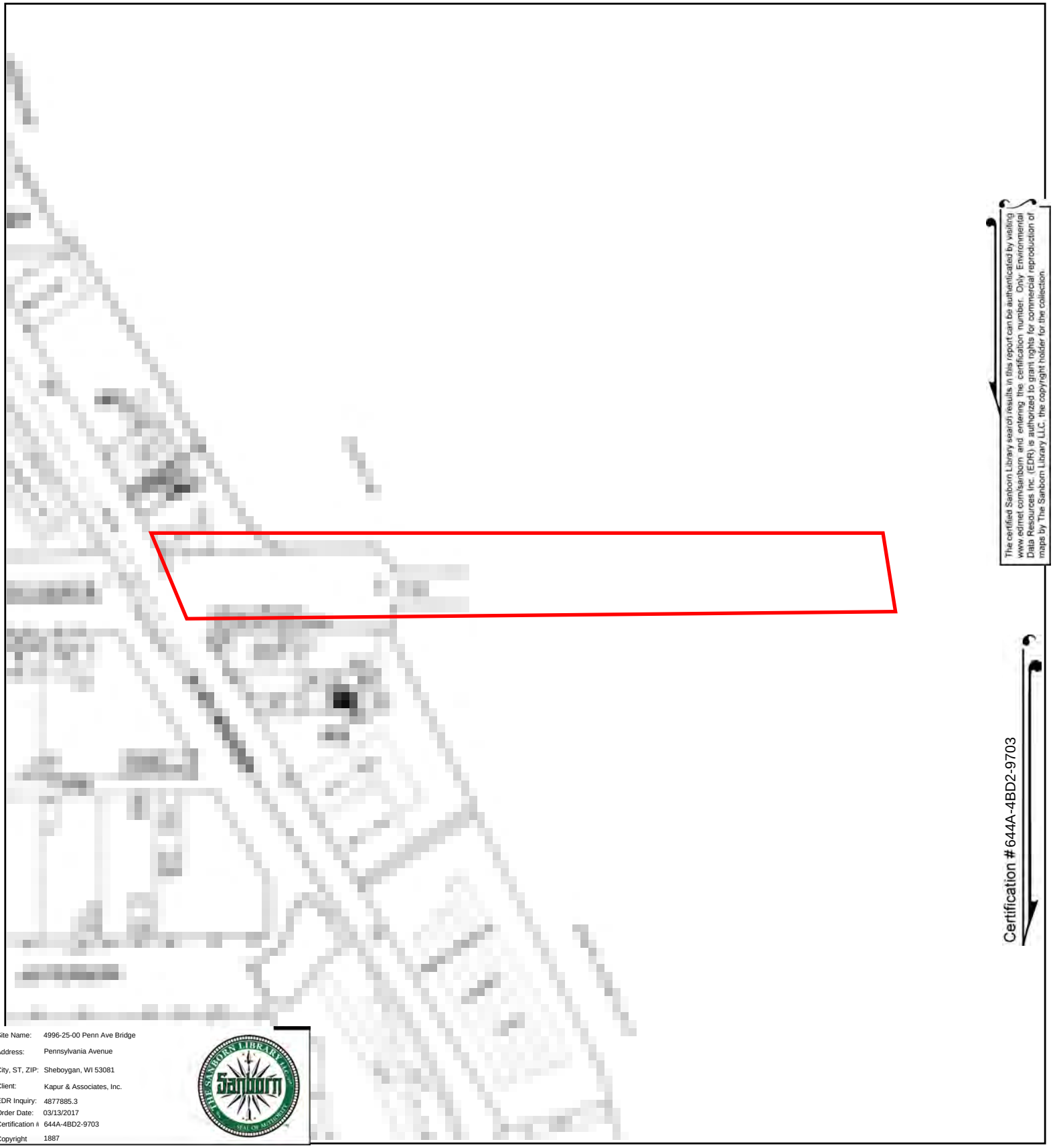

Certification #644A-4BD2-9703

Site Name: 4996-25-00 Penn Ave Bridge
Address: Pennsylvania Avenue
City, ST, ZIP: Sheboygan, WI 53081
Client: Kapur & Associates, Inc.
EDR Inquiry: 4877885.3
Order Date: 03/13/2017
Certification #: 644A-4BD2-9703
Copyright: 1887

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Outlined areas indicate map sheets within the collection.

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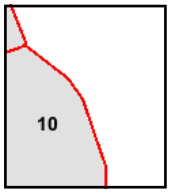

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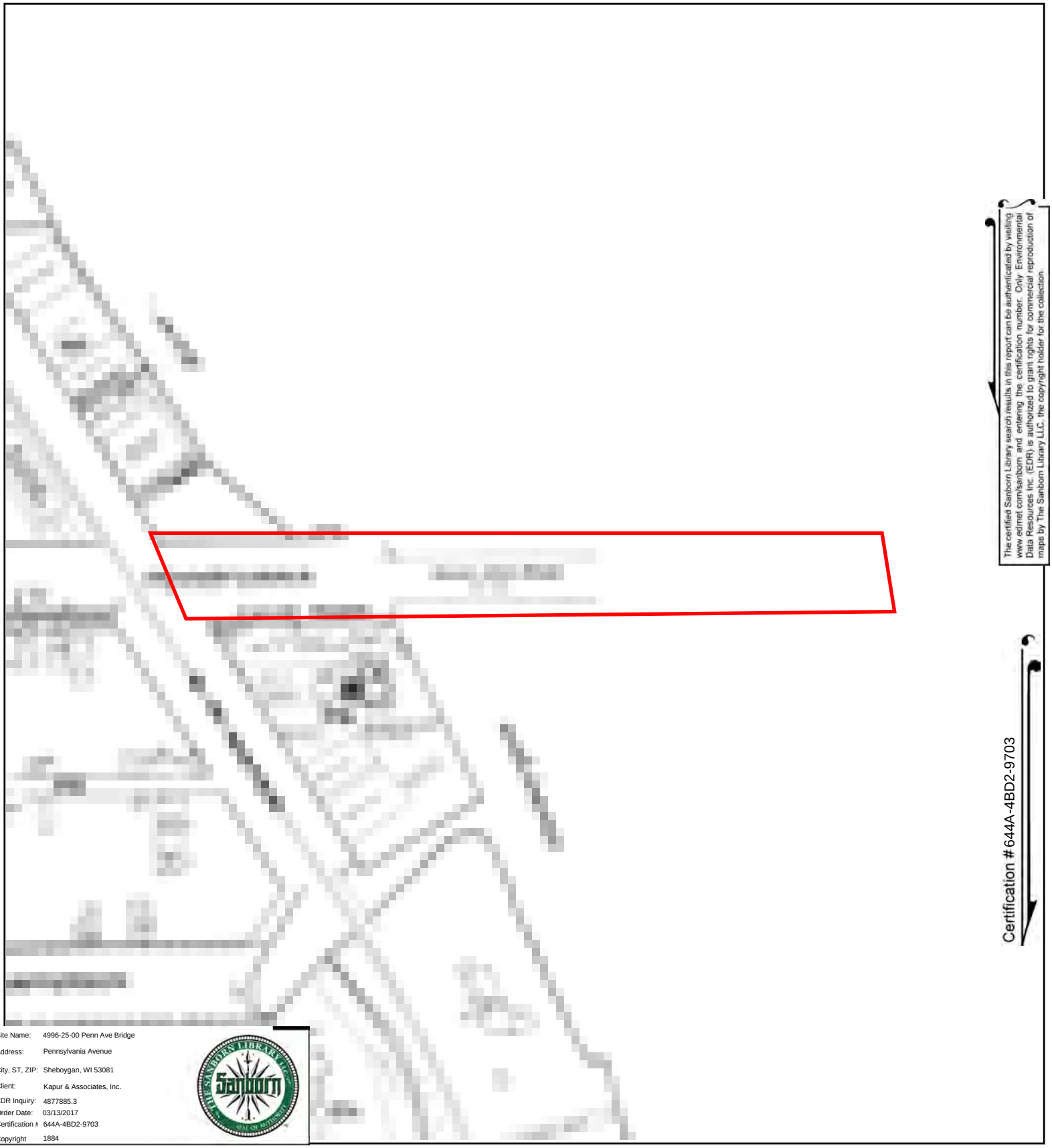

Certification #644A-4BD2-9703

Site Name: 4996-25-00 Penn Ave Bridge
Address: Pennsylvania Avenue
City, ST, ZIP: Sheboygan, WI 53081
Client: Kapur & Associates, Inc.
EDR Inquiry: 4877885.3
Order Date: 03/13/2017
Certification #: 644A-4BD2-9703
Copyright: 1884

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Outlined areas indicate map sheets within the collection.

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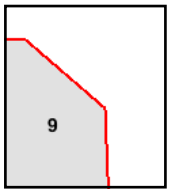


N

WisDOT Phase 1 Hazardous Materials Assessment Site Summary

WisDOT Project ID: 4996-25-00
Highway/Street: Pennsylvania Avenue Bridge
Termini/Limits: Commerce Street and Water Street
County: Sheboygan County

Property Information:
Site Name(s): 927 Pennsylvania Avenue
DOT parcel number (if known):
Property Address: 927 Pennsylvania Avenue, Sheboygan, WI 53081
Owner's Name: Sierra General Properties, LLC
Owner's Address: 1234 New York Avenue, Sheboygan, WI 53081-3903
Owner's Phone:
Current Land Use: Commercial
Past Land Use: Filling Station, Auto Repair

Real Estate Requirements: Not Finalized
☒None ☐Total take ☐Strip acquisition of feet
☐Temporary Limited Easement (TLE)
☐Permanent Limited Easement (PLE)
☐ Other (describe)

Construction Requirements: Not Finalized
☐None ☒ Excavation within current right of way to 2 feet
☐ Excavation within proposed right of way to feet
☐ Excavation within easement to feet
☒ Public or private utility or sanitary or storm sewer installation or excavation to 7-10 feet

Information from database searches and interviews:
Department of Agriculture, Trade, and Consumer Protection (DATCP)
- ☐ site has registered tanks ☐ASTs ☐USTs
- ☐ tanks are currently in use
- ☐ tanks are abandoned date:
- Tank contents:
  - ☐ Leaded gasoline ☐ Unleaded gasoline ☐ Fuel Oil ☐ Diesel
  - ☐ Kerosene ☐ Unknown ☐ Other (describe)

Department of Safety and Professional Services (DSPS)
Note: As of July 2, 2013, all DSPS LUST activities were transferred to the WDNR for oversight.
- ☐ site is a DSPS administered LUST site; DSPS ID number:
- ☐ site is a closed DSPS LUST site; closure date:

Department of Natural Resources (DNR)
- ☐ site is a DNR administered LUST site; BRRTS number:
- ☐ site is a DNR administered ERP site; BRRTS number:
- ☐ site is a closed ☐LUST ☐ERP site; closure date:
- ☐ site is a landfill
- ☐ site is an abandoned waste disposal site
- ☐ site is a hazardous waste generator
- ☐ Other (please describe)

Sanborn Maps: site is a Filling Station/Auto Repair Facility on map dated 1949-1955. Comments: Three (3) gasoline tanks are located southwest of the intersection of Pennsylvania Avenue and South Water Street.
WisDOT historic plan sets: site is a on project dated . Comments:
Business directories: site is a on project dated . Comments:
A check in a checkbox indicates a positive or "yes" response.

Aerial photos: site is a on photo dated . Comments:
☐ Contamination discovered at feet during utility or other excavation in the area. Indicate location on site map.
Interview Information or other comments:

Visual Evidence of Potential Contamination: (include additional information in space provided)
☒ No evidence of tanks
☐ USTs ☐ASTs Location, number and condition of tanks, contents, comments:
Location in relationship to current right of way: ☐ map attached
Location in relationship to proposed right of way: ☐ map attached
☐ Drums ☐Stained soils ☐Odor ☐Sheen on surface water ☐Areas of excavation
☐ Areas of fill ☐Stressed vegetation ☐ Pond(s) ☐ Basins/sumps ☐ Monitoring wells
☐ Soil borings
Comments:

Potential for Contaminant Migration: (attach supporting documentation such as plume maps, summaries of site investigation or closure reports).
☒ Property is a potential source of contamination
☐ Adjacent property is a potential source of contamination. Include site name or BRRTS number if known, describe location, include contaminant type and any additional information.
☐ Contaminated soil known to be within proposed right of way from feet to feet below ground surface
☐ Contaminated groundwater known to be within proposed right of way at feet below ground surface.
☐ Contaminated soil or groundwater within existing right of way. Attach copy of most recent investigation and plume maps.

Attachments – required
☒ Site photographs and a site map showing areas of concern
☐ Plat map showing parcel and any proposed areas of acquisition or easement
☐ Historic aerial photos of site - clearly outline site
☐ Historic WisDOT or other as-builts and plat maps - clearly outline site
☐ Plume maps for known contamination. Indicate existing or proposed right of way where applicable.

Recommendations
☐ No additional hazardous materials investigation is required.
☐ If construction or real estate requirements change, evaluation of need for further investigation will be necessary.
☐ Information is sufficient to use Standard Special Provisions. Copy of completed Standard Special Provision is attached.
☒ Conduct additional investigation
- ☐ Phase 2 (determine if contamination is present)
- ☒ Phase 2.5 (determine extent of contamination within existing R/W only)
- ☐ Phase 3 (determine full extent of contamination prior to acquisition)
- ☐ Phase 4 (remediate site)
- ☐ Other (describe)

Prepared by: Patricia Hermann on 02/26/2018
Recommendations accepted by (name and title): Justin Arndt, P.E. on 02/26/2018.

Signature: _____

A check in a checkbox indicates a positive or “yes” response.

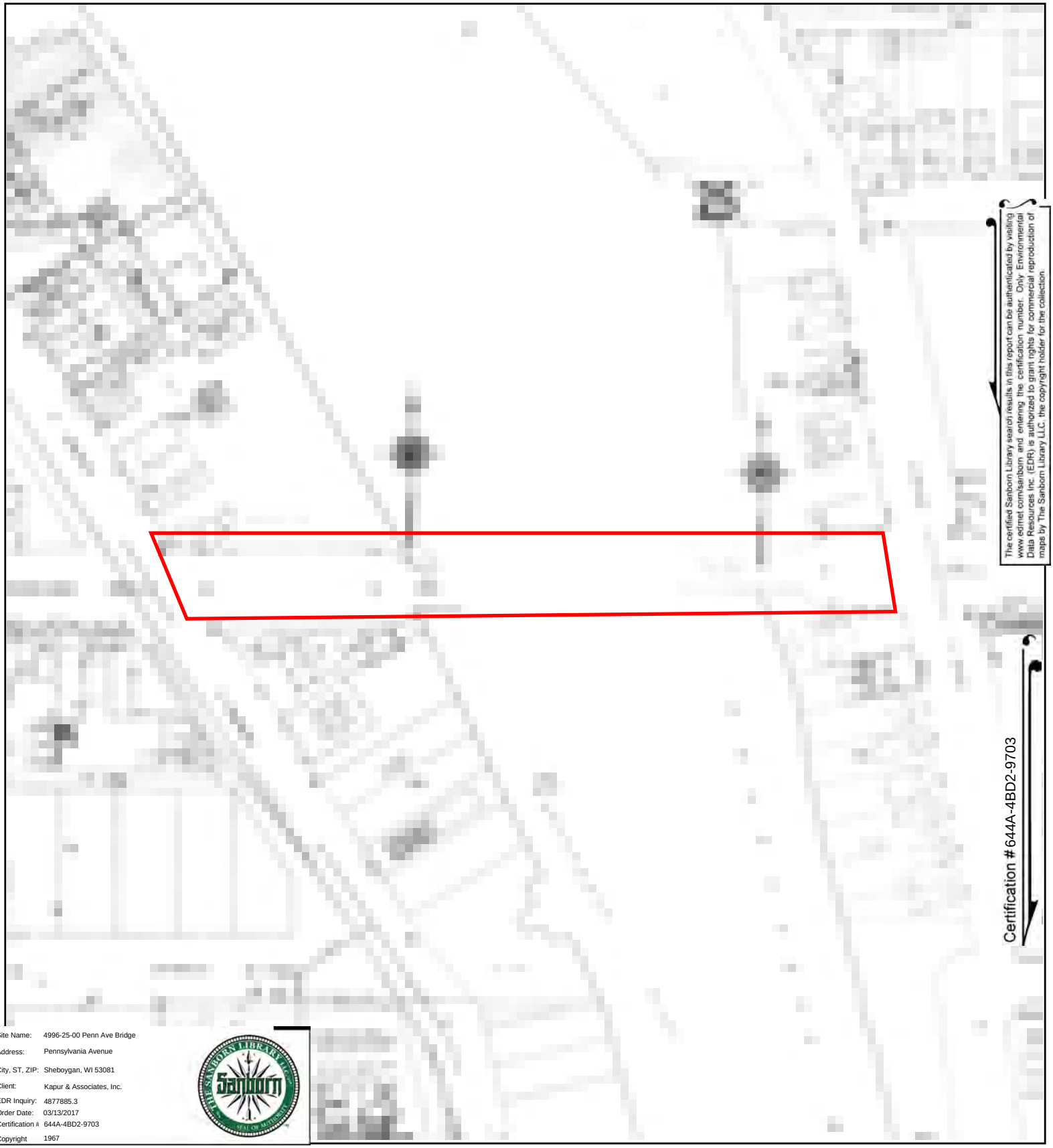
Site Number: **SAN-1**
Site Address: **927 PENNSYLVANIA AVENUE**

Real Estate Requirements: NONE
Construction Requirements: Replacement of pavement, sidewalk, curb & gutter to 2'; replacement of storm sewer to 7'; Replacement of light poles to 10'

This site does not appear in any database.

This site is shown as a filling station/auto repair facility on the 1949 and 1955 Sanborn maps. Three (3) gasoline tanks are located southwest of the intersection of Pennsylvania Avenue and South Water Street.

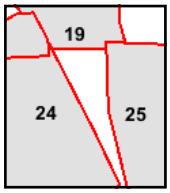
Based upon the former use of the property as a filling station and the construction requirements in the direct vicinity of the former tanks a Phase 2.5 Subsurface Investigation is recommended within the existing ROW immediately adjacent to the property in the area of the proposed storm sewer laterals and light pole locations only.



Certification #644A-4BD2-9703

Site Name: 4996-25-00 Penn Ave Bridge
Address: Pennsylvania Avenue
City, ST, ZIP: Sheboygan, WI 53081
Client: Kapur & Associates, Inc.
EDR Inquiry: 4877885.3
Order Date: 03/13/2017
Certification #: 644A-4BD2-9703
Copyright: 1967

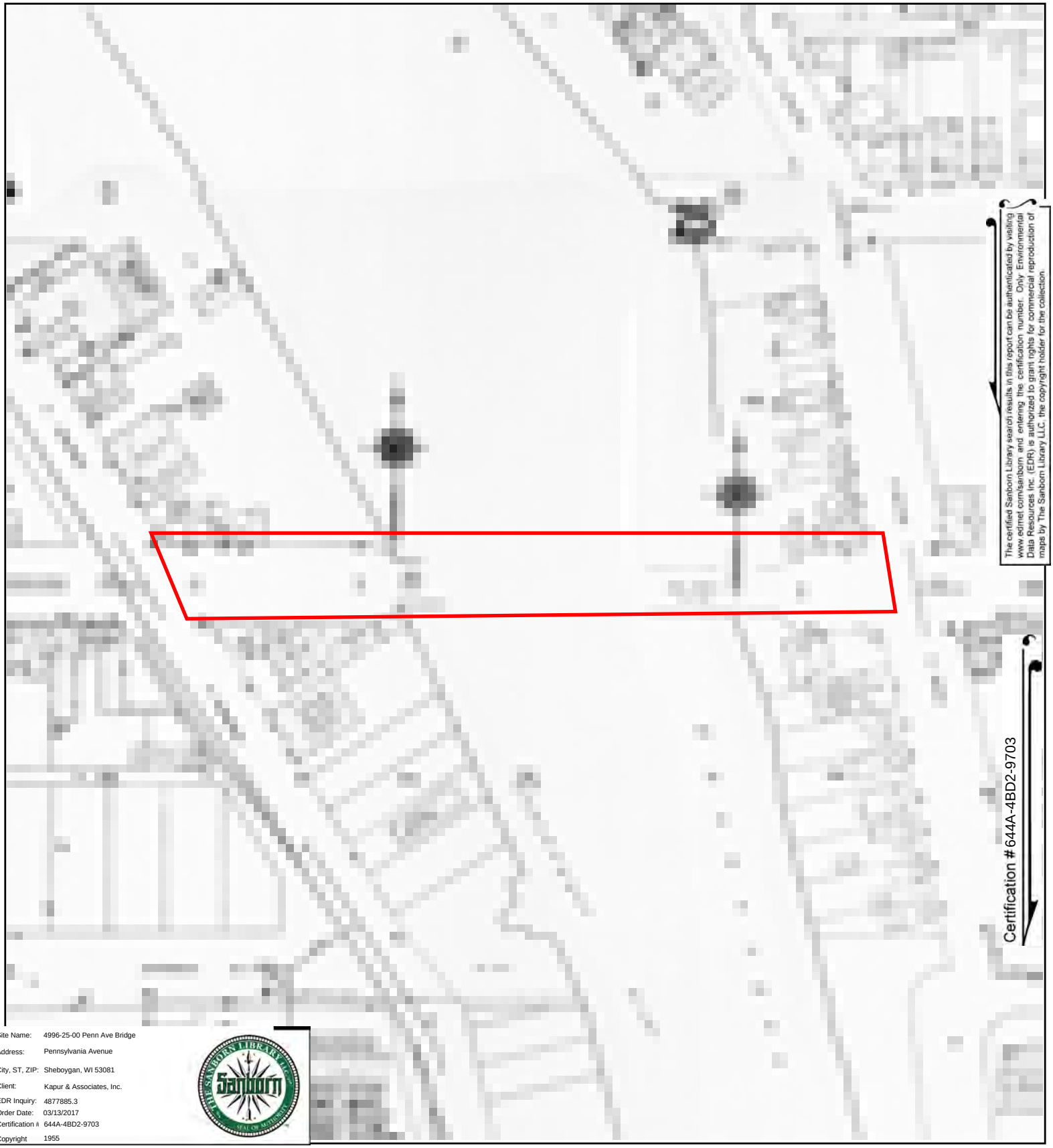
This Certified Sanborn Map combines the following sheets.
Outlined areas indicate map sheets within the collection.



Volume 1, Sheet 25
Volume 1, Sheet 24
Volume 1, Sheet 19

0 Feet 150 300 600

N

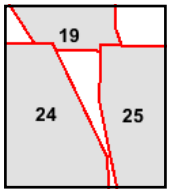


Certification #644A-4BD2-9703

Site Name: 4996-25-00 Penn Ave Bridge
Address: Pennsylvania Avenue
City, ST, ZIP: Sheboygan, WI 53081
Client: Kapur & Associates, Inc.
EDR Inquiry: 4877885.3
Order Date: 03/13/2017
Certification #: 644A-4BD2-9703
Copyright: 1955

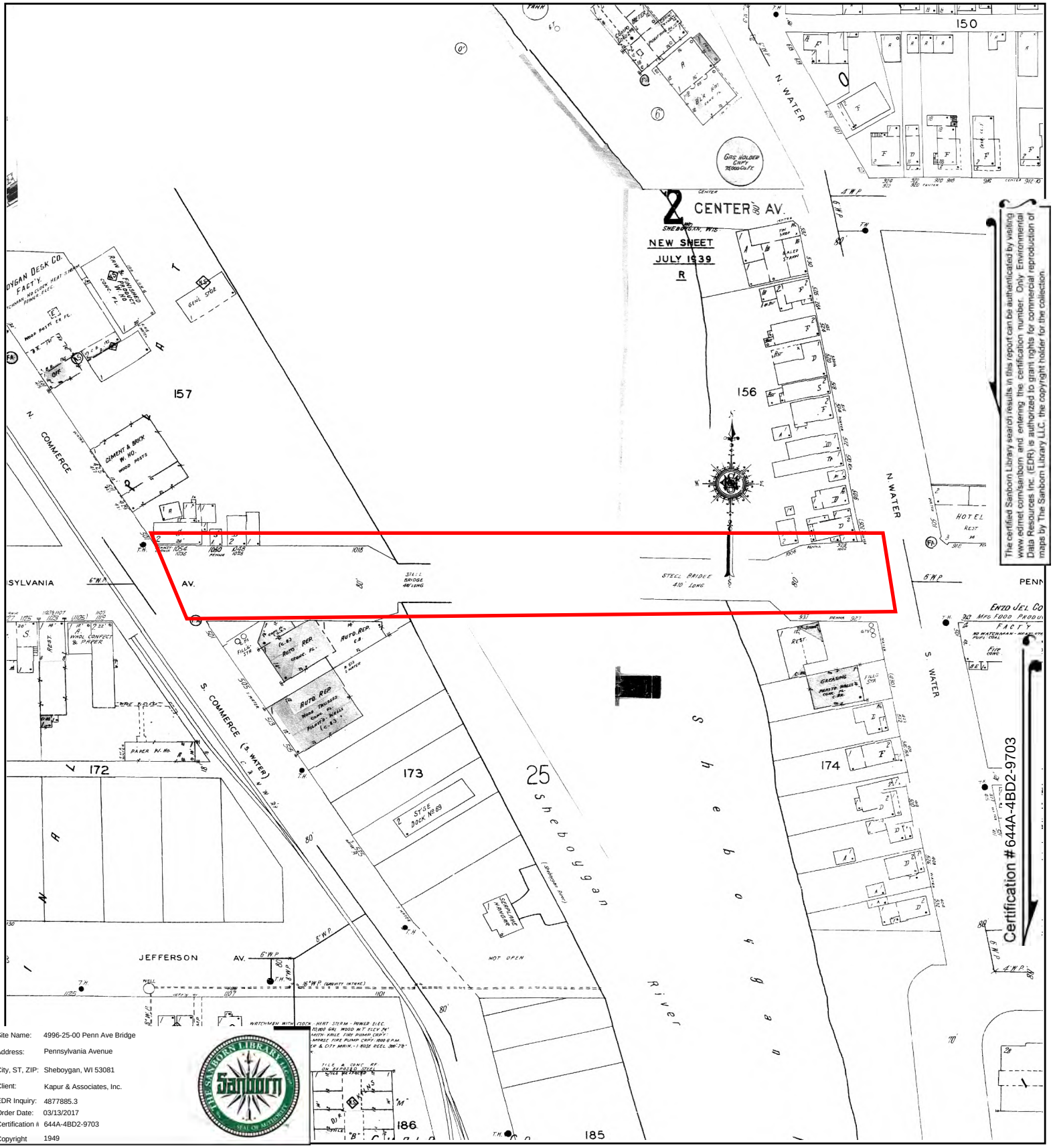
This Certified Sanborn Map combines the following sheets.
Outlined areas indicate map sheets within the collection.

0 Feet 150 300 600



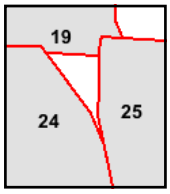
Volume 1, Sheet 25
Volume 1, Sheet 24
Volume 1, Sheet 19

N



Site Name:	4996-25-00 Penn Ave Bridge
Address:	Pennsylvania Avenue
City, ST, ZIP:	Sheboygan, WI 53081
Client:	Kapur & Associates, Inc.
EDR Inquiry:	4877885.3
Order Date:	03/13/2017
Certification #:	644A-4BD2-9703
Copyright	1949

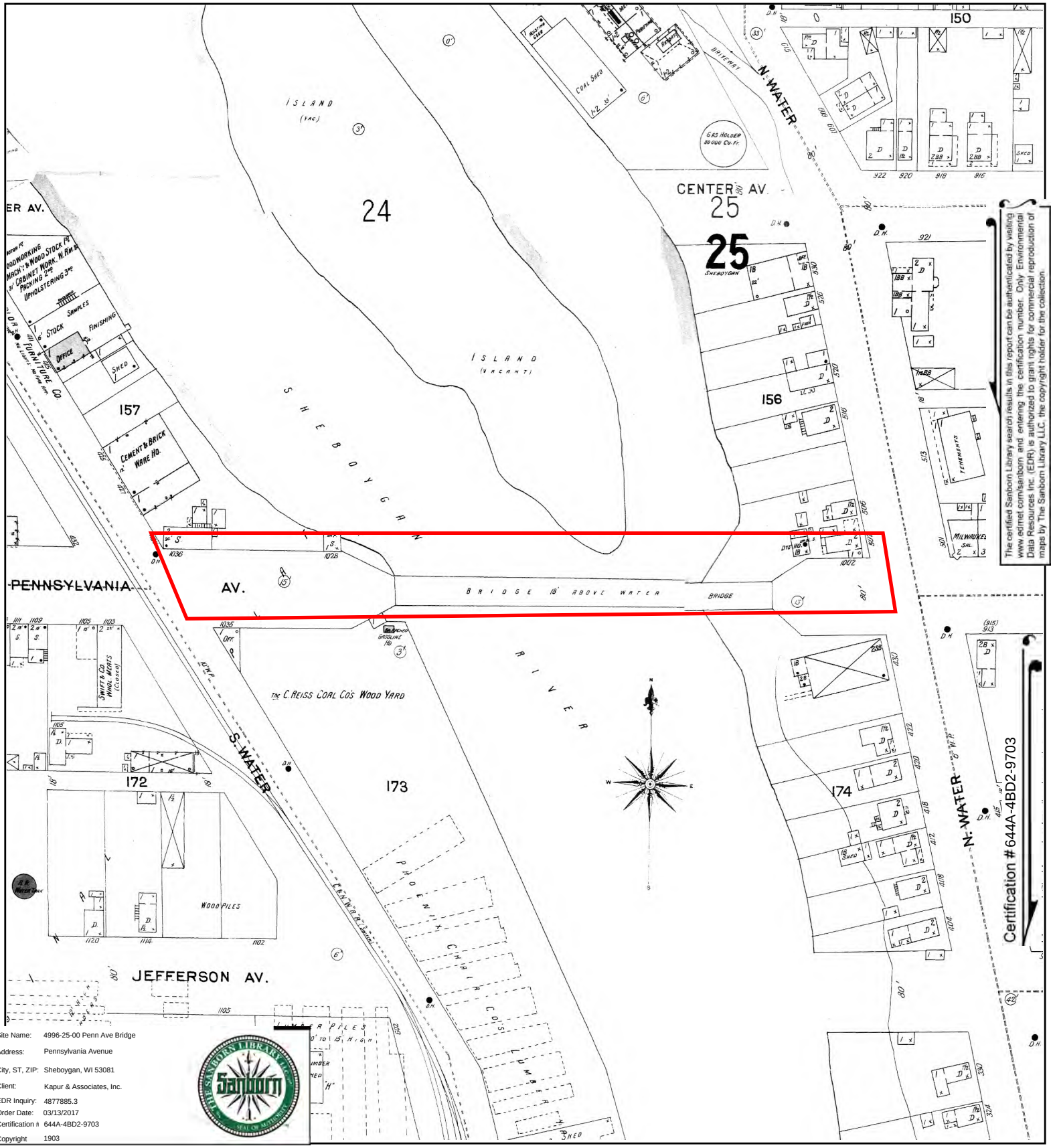
This Certified Sanborn Map combines the following sheets.
Outlined areas indicate map sheets within the collection.



Volume 1, Sheet 25
Volume 1, Sheet 24
Volume 1, Sheet 19

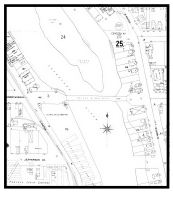
0 Feet 150 300 600

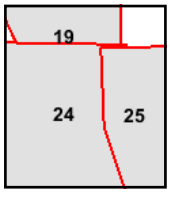
N



Site Name:	4996-25-00 Penn Ave Bridge
Address:	Pennsylvania Avenue
City, ST, ZIP:	Sheboygan, WI 53081
Client:	Kapur & Associates, Inc.
EDR Inquiry:	4877885.3
Order Date:	03/13/2017
Certification #:	644A-4BD2-9703
Copyright	1903

This Certified Sanborn Map combines the following sheets.
Outlined areas indicate map sheets within the collection.





Volume 1, Sheet 25
Volume 1, Sheet 24
Volume 1, Sheet 19

0 Feet 150 300 600

N

Attachment 2 – Phase 2.5 Soil Boring Logs and Borehole Abandonment Forms

WI Dept. of Transportation **3502 Kinsman Blvd.** **Madison, WI 53704**	WISDOT PROJECT ID: **4996-25-00** WISDOT STRUCTURE ID:		**BORING ID: SB-01** PAGE NO: **1 of 1**	
WISDOT PROJECT NAME: **Pennsylvania Ave Phase 2.5**	CONSULTANT: **O'Brien and Gere**	CONSULTANT PROJECT NO: **2259.122**	LATITUDE:	LONGITUDE:
ROADWAY NAME:	DRILLING CONTRACTOR: **Probe Technologies**	DRILLING CONTRACTOR PROJECT NO:	NORTHING: **645971.45**	EASTING: **2571334.28**
DATE STARTED: **7/19/18**	CREW CHIEF: **Dan Bendorf**	DRILL RIG: **GP**	COORDINATE SYSTEM: **WSPCS**	
DATE COMPLETED: **7/19/18**	LOGGED BY: **Dan Vachon**	HOLE SIZE: **2 in**	HORIZONTAL DATUM: **NAD 1983**	VERTICAL DATUM: **MSL**
COUNTY: **Sheboygan**	LOG QC BY:	HAMMER TYPE:	STREAMBED ELEVATION: **NA**	
STATION **Pennsylvania Ave 101+80**	OFFSET **31R**	TOWNSHIP: / RANGE: / SECTION: / 1/4 SECTION: / 1/4 1/4 SECTION:	SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	PID (ppm)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Comments
						0.3 **CONCRETE**	CONCRETE						
CS 1	25			1		**FILL**, **Gravel**	FILL	0					
				2		2.6							
				3		**FILL**, **SILTY CLAY**, dark brown, some fine gravel, few medium to coarse gravel, medium plasticity, firm, moist	FILL	0					Sample 072118001 collected 2-4'.
				4		4.2							
						4.6 **FILL**, **CLAYEY SAND**, medium brown, wet	FILL						
CS 2	36			5		**CLAY**, medium brown, low plasticity, soft, wet		0					Sample 072118002 collected 4-6'.
				6									
				7		6.6' Medium plasticity, moist		0					
				8		7.6' Light gray mottling, moist	CL						
						8.2' Some fine sand, soft, wet							
CS 3	30			9				0					Sample 072118002 collected 8-10'.
				10									
				11		11.0							
						POORLY-GRADED SAND, medium brown, fine to medium sand, wet	SP	0					
				12		12.0							

End of Boring at 12.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

▽	WATER ENCOUNTERED DURING DRILLING: NMR	CAVE - IN DEPTH AT COMPLETION: NMR		WET ☐ DRY ☐
▼	WATER LEVEL AT COMPLETION: NMR	CAVE - IN DEPTH AFTER 0 HOURS: NMR		WET ☐ DRY ☐

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

I:\WISDOT.3106\1BD\GENERAL\2259.122 PENNSYLVANIA AVE\GINT\2259.122_PENNAVE.GPJ Pennsylvania Ave Phase 2.5 8/16/18

WI Dept. of Transportation **3502 Kinsman Blvd.** **Madison, WI 53704**	WISDOT PROJECT ID: **4996-25-00** WISDOT STRUCTURE ID:		**BORING ID: SB-02** PAGE NO: **1 of 1**	
WISDOT PROJECT NAME: **Pennsylvania Ave Phase 2.5**	CONSULTANT: **O'Brien and Gere**	CONSULTANT PROJECT NO: **2259.122**	LATITUDE:	LONGITUDE:
ROADWAY NAME:	DRILLING CONTRACTOR: **Probe Technologies**	DRILLING CONTRACTOR PROJECT NO:	NORTHING: **645979.64**	EASTING: **2572003.86**
DATE STARTED: **7/19/18**	CREW CHIEF: **Dan Bendorf**	DRILL RIG: **GP**	COORDINATE SYSTEM: **WSPCS**	
DATE COMPLETED: **7/19/18**	LOGGED BY: **Dan Vachon**	HOLE SIZE: **2 in**	HORIZONTAL DATUM: **NAD 1983**	VERTICAL DATUM:
COUNTY: **Sheboygan**	LOG QC BY:	HAMMER TYPE:	STREAMBED ELEVATION: **NA**	
STATION **Pennsylvania Ave 108+48**	OFFSET **37R**	TOWNSHIP: RANGE: SECTION: 1/4 SECTION: 1/4 1/4 SECTION:	SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	PID (ppm)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Comments
						0.3 **CONCRETE**	CONCRETE						
CS 1	28			1		**FILL**, **GRAVEL**, white, fine gravel	FILL	0					
				2		2.4 **FILL**, **POORLY-GRADED SAND**, light to medium brown, fine to medium sand, some fine gravel, loose	FILL						
				3		3.2 **CLAY**, reddish brown, high plasticity, stiff, moist		0					Sample 072118004 collected 2-4'.
				4		4.4' Soft							
CS 2	39			5		5.2' Firm		0					
				6									
				7		6.6' Hard		0					Sample 072118005 collected 6-8'.
				8		8' Trace coarse sand	CL						
				9		9' Stiff		0					
CS 3	48			10									
				11				0					Sample 072118006 collected 10-12'.
				12		12.0							

End of Boring at 12.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

▽	WATER ENCOUNTERED DURING DRILLING: NMR	CAVE - IN DEPTH AT COMPLETION: NMR		WET ☐ DRY ☐
▼	WATER LEVEL AT COMPLETION: NMR	CAVE - IN DEPTH AFTER 0 HOURS: NMR		WET ☐ DRY ☐

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

I:\WISDOT.3106\1BD\GENERAL\2259.122 PENNSYLVANIA AVE\GINT\2259.122_PENNAVE.GPJ Pennsylvania Ave Phase 2.5 8/16/18

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing Report

Form 3300-005 (R 4/2015)

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and chs. NR 141 and 812, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between $10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

☐ **Verification Only of Fill and Seal**

Route to DNR Bureau:
☐ Drinking Water ☐ Watershed/Wastewater ☐ Remediation/Redevelopment
☐ Waste Management ☐ Other: _____

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Sheboygan		

Latitude / Longitude (see instructions) _____ N _____ W
Format Code: ☐ DD ☐ DDM
Method Code: ☐ GPS008 ☐ SCR002 ☐ OTH001

¼ / ¼	¼	Section	Township	Range
or Gov't Lot #			N	☐ E ☐ W

Well Street Address: Pennsylvania Ave. and S. Water St.

Well City, Village or Town	Well ZIP Code
City of Sheboygan	

Subdivision Name	Lot #

Reason for Removal from Service	WI Unique Well # of Replacement Well

2. Facility / Owner Information

Facility Name: Wis DOT Pennsylvania Ave. Bridge Project
Facility ID (FID or PWS):
License/Permit/Monitoring #:
Original Well Owner:
Present Well Owner:
Mailing Address of Present Owner:

City of Present Owner	State	ZIP Code

3. Filled & Sealed Well / Drillhole / Borehole Information

☐ Monitoring Well
☐ Water Well
☒ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy):
If a Well Construction Report is available, please attach.

Construction Type:
☐ Drilled ☐ Driven (Sandpoint) ☐ Dug
☒ Other (specify): _____

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
12	2.25

Lower Drillhole Diameter (in.)	Casing Depth (ft.)
2.25	

Was well annular space grouted? ☐ Yes ☐ No ☐ Unknown

If yes, to what depth (feet)?	Depth to Water (feet)

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☒ N/A
Liner(s) removed?	☐ Yes	☐ No	☒ N/A
Liner(s) perforated?	☐ Yes	☐ No	☒ N/A
Screen removed?	☐ Yes	☐ No	☒ N/A
Casing left in place?	☐ Yes	☐ No	☒ N/A
Was casing cut off below surface?	☐ Yes	☐ No	☒ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	☐ No	☒ N/A
If yes, was hole retopped?	☐ Yes	☐ No	☒ N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	☒ Yes	☐ No	☐ N/A

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☒ Screened & Poured (Bentonite Chips) ☐ Other (Explain): _____

Sealing Materials
☐ Neat Cement Grout ☐ Concrete
☐ Sand-Cement (Concrete) Grout ☒ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☐ Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used to Fill Well / Drillhole

	From (ft.)	To (ft.)	No. Yards, Sacks, Sealant or Volume (circle one)	Mix Ratio or Mud Weight
Bentonite Chips	Surface	12	1/2	

6. Comments

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
Probe Technologies, Inc.		07/19/2018

Street or Route	Telephone Number
7781 Pathfinder Lane	(262) 470-4768

City	State	ZIP Code	Signature of Person Doing Work	Date Signed
West Bend	WI	53090	Daniel Bendorf	8/6/18

DNR Use Only

Date Received	Noted By

Comments:

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing Report

Form 3300-005 (R 4/2015)

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and chs. NR 141 and 812, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between $10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

☐ **Verification Only of Fill and Seal**

Route to DNR Bureau:
☐ Drinking Water ☐ Watershed/Wastewater ☐ Remediation/Redevelopment
☐ Waste Management ☐ Other: _____

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Sheboygan		

Latitude / Longitude (see instructions) _____ N _____ W | Format Code: ☐ DD ☐ DDM | Method Code: ☐ GPS008 ☐ SCR002 ☐ OTH001

¼ / ¼	¼	Section	Township	Range
or Gov't Lot #			N	☐ E ☐ W

Well Street Address: Pennsylvania Ave. and S. Commerce St.

Well City, Village or Town: City of Sheboygan | Well ZIP Code:

Subdivision Name: | Lot #:

Reason for Removal from Service: | WI Unique Well # of Replacement Well:

2. Facility / Owner Information

Facility Name: Wis DOT Pennsylvania Ave. Bridge Project

Facility ID (FID or PWS):

License/Permit/Monitoring #:

Original Well Owner:

Present Well Owner:

Mailing Address of Present Owner:

City of Present Owner: | State: | ZIP Code:

3. Filled & Sealed Well / Drillhole / Borehole Information

☐ Monitoring Well
☐ Water Well
☒ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy):

If a Well Construction Report is available, please attach.

Construction Type:
☐ Drilled ☐ Driven (Sandpoint) ☐ Dug
☒ Other (specify): _____

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
12	2.25
Lower Drillhole Diameter (in.)	**Casing Depth (ft.)**
2.25	

Was well annular space grouted? ☐ Yes ☐ No ☐ Unknown

If yes, to what depth (feet)? | Depth to Water (feet):

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☒ N/A
Liner(s) removed?	☐ Yes	☐ No	☒ N/A
Liner(s) perforated?	☐ Yes	☐ No	☒ N/A
Screen removed?	☐ Yes	☐ No	☒ N/A
Casing left in place?	☐ Yes	☐ No	☒ N/A
Was casing cut off below surface?	☐ Yes	☐ No	☒ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	☐ No	☒ N/A
If yes, was hole retopped?	☐ Yes	☐ No	☒ N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	☒ Yes	☐ No	☐ N/A

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☒ Screened & Poured (Bentonite Chips) ☐ Other (Explain): _____

Sealing Materials
☐ Neat Cement Grout ☐ Concrete
☐ Sand-Cement (Concrete) Grout ☒ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☐ Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used to Fill Well / Drillhole

	From (ft.)	To (ft.)	No. Yards, Sacks, Sealant or Volume (circle one)	Mix Ratio or Mud Weight
Bentonite Chips	Surface	12	1/2	

6. Comments

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
Probe Technologies, Inc.		07/19/2018

Street or Route	Telephone Number
7781 Pathfinder Lane	(262) 470-4768

City	State	ZIP Code
West Bend	WI	53090

Signature of Person Doing Work: Daniel Bendorf | Date Signed: 8/6/18

DNR Use Only

Date Received	Noted By

Comments:

Attachment 3 – Photographs

Client:	Project Location:	Project Number	WisDOT ID
WisDOT	Pennsylvania Ave. Bridge and Approaches Phase 2.5 – Sheboygan, WI	69862	4996-25-00

Photo #: 1

Date: 06/4/2018

Description:
From north of the northwestern portion of the Pennsylvania Avenue bridge facing southeast.

Photo #: 2

Date: 06/4/2018

Description:
Beneath the west side of the Pennsylvania Avenue bridge, facing south.

Client:	Project Location:	Project Number	WisDOT ID
WisDOT	Pennsylvania Ave. Bridge and Approaches Phase 2.5 – Sheboygan, WI	69862	4996-25-00

Photo #: 3

Date: 07/19/2018

Description: Hand auger boring location HA-02, beneath the west side of the Pennsylvania Avenue bridge (facing north).

Photo #: 4

Date: 05/14/2018

Description: Beneath the east side of the Pennsylvania Avenue bridge, facing south.

Client:	Project Location:	Project Number	WisDOT ID
WisDOT	Pennsylvania Ave. Bridge and Approaches Phase 2.5 – Sheboygan, WI	69862	4996-25-00

Photo #: 5

Date: 05/14/2018

Description:
Hand auger boring location HA-01, beneath the east side of the Pennsylvania Avenue bridge (facing east).

Photo #: 6

Date: 07/19/2018

Description:
Soil boring SB-02 was advanced on the south side of Pennsylvania Avenue, west of Water Street (facing northwest).

Attachment 4 – Laboratory Analytical Results

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

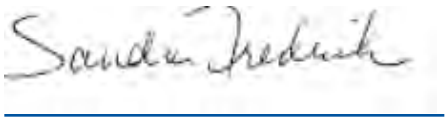
ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

TestAmerica Job ID: 500-145772-1
Client Project/Site: WisDOT - Penn Ave/Sheboygan River 69862

For:
O'Brien & Gere Engineers, Inc.
234 West Florida Street, Fifth Floor
Milwaukee, Wisconsin 53204

Attn: Mark Walter



Authorized for release by:
6/4/2018 11:08:22 AM

Sandie Fredrick, Project Manager II
(920)261-1660
sandie.fredrick@testamericainc.com

Table of Contents

Case Narrative

Client: O'Brien & Gere Engineers, Inc.
Project/Site: WisDOT - Penn Ave/Sheboygan River 69862

TestAmerica Job ID: 500-145772-1

Job ID: 500-145772-1

Laboratory: TestAmerica Chicago

Narrative

Job Narrative
500-145772-1

Comments
No additional comments.

Receipt
The sample was received on 5/22/2018 9:20 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.0º C.

GC Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: O'Brien & Gere Engineers, Inc.
Project/Site: WisDOT - Penn Ave/Sheboygan River 69862

TestAmerica Job ID: 500-145772-1

Client Sample ID: 051418001 **Lab Sample ID: 500-145772-1**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1254	38		18	3.9	ug/Kg	1	☼	8082A	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

Client: O'Brien & Gere Engineers, Inc.
Project/Site: WisDOT - Penn Ave/Sheboygan River 69862

TestAmerica Job ID: 500-145772-1

Method	Method Description	Protocol	Laboratory
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL CHI
Moisture	Percent Moisture	EPA	TAL CHI
3541	Automated Soxhlet Extraction	SW846	TAL CHI

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Sample Summary

Client: O'Brien & Gere Engineers, Inc.
Project/Site: WisDOT - Penn Ave/Sheboygan River 69862

TestAmerica Job ID: 500-145772-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-145772-1	051418001	Solid	05/14/18 15:20	05/22/18 09:20

Client Sample Results

Client: O'Brien & Gere Engineers, Inc.
Project/Site: WisDOT - Penn Ave/Sheboygan River 69862

TestAmerica Job ID: 500-145772-1

Client Sample ID: 051418001
Date Collected: 05/14/18 15:20
Date Received: 05/22/18 09:20

Lab Sample ID: 500-145772-1
Matrix: Solid
Percent Solids: 90.7

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<6.4		18	6.4	ug/Kg	☼	05/24/18 16:23	06/01/18 17:11	1
PCB-1221	<8.0		18	8.0	ug/Kg	☼	05/24/18 16:23	06/01/18 17:11	1
PCB-1232	<7.9		18	7.9	ug/Kg	☼	05/24/18 16:23	06/01/18 17:11	1
PCB-1242	<6.0		18	6.0	ug/Kg	☼	05/24/18 16:23	06/01/18 17:11	1
PCB-1248	<7.1		18	7.1	ug/Kg	☼	05/24/18 16:23	06/01/18 17:11	1
PCB-1254	**38**		18	3.9	ug/Kg	☼	05/24/18 16:23	06/01/18 17:11	1
PCB-1260	<8.9		18	8.9	ug/Kg	☼	05/24/18 16:23	06/01/18 17:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*70*		*49 - 129*	*05/24/18 16:23*	*06/01/18 17:11*	*1*
DCB Decachlorobiphenyl	*81*		*37 - 121*	*05/24/18 16:23*	*06/01/18 17:11*	*1*

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

QC Association Summary

Client: O'Brien & Gere Engineers, Inc.
Project/Site: WisDOT - Penn Ave/Sheboygan River 69862

TestAmerica Job ID: 500-145772-1

GC Semi VOA

Prep Batch: 433891

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-145772-1	051418001	Total/NA	Solid	3541	
MB 500-433891/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-433891/3-A	Lab Control Sample	Total/NA	Solid	3541	

Analysis Batch: 434737

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-433891/1-A	Method Blank	Total/NA	Solid	8082A	433891
LCS 500-433891/3-A	Lab Control Sample	Total/NA	Solid	8082A	433891

Analysis Batch: 434905

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-145772-1	051418001	Total/NA	Solid	8082A	433891

General Chemistry

Analysis Batch: 433472

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-145772-1	051418001	Total/NA	Solid	Moisture	

Surrogate Summary

Client: O'Brien & Gere Engineers, Inc.
Project/Site: WisDOT - Penn Ave/Sheboygan River 69862

TestAmerica Job ID: 500-145772-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)									
		TCX2	DCBP2								
Lab Sample ID	Client Sample ID	(49-129)	(37-121)								
500-145772-1	051418001	70	81								
LCS 500-433891/3-A	Lab Control Sample	88	89								
MB 500-433891/1-A	Method Blank	86	83								

Surrogate Legend

TCX = Tetrachloro-m-xylene
DCBP = DCB Decachlorobiphenyl

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 500-433891/1-A
Matrix: Solid
Analysis Batch: 434737

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 433891

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<5.9		17	5.9	ug/Kg		05/24/18 16:23	05/31/18 18:32	1
PCB-1221	<7.3		17	7.3	ug/Kg		05/24/18 16:23	05/31/18 18:32	1
PCB-1232	<7.3		17	7.3	ug/Kg		05/24/18 16:23	05/31/18 18:32	1
PCB-1242	<5.5		17	5.5	ug/Kg		05/24/18 16:23	05/31/18 18:32	1
PCB-1248	<6.6		17	6.6	ug/Kg		05/24/18 16:23	05/31/18 18:32	1
PCB-1254	<3.6		17	3.6	ug/Kg		05/24/18 16:23	05/31/18 18:32	1
PCB-1260	<8.2		17	8.2	ug/Kg		05/24/18 16:23	05/31/18 18:32	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*86*		*49 - 129*	*05/24/18 16:23*	*05/31/18 18:32*	*1*
DCB Decachlorobiphenyl	*83*		*37 - 121*	*05/24/18 16:23*	*05/31/18 18:32*	*1*

Lab Sample ID: LCS 500-433891/3-A
Matrix: Solid
Analysis Batch: 434737

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 433891

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016			167	153		ug/Kg		92	57 - 120		
PCB-1260			167	160		ug/Kg		96	61 - 125		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*88*		*49 - 129*
DCB Decachlorobiphenyl	*89*		*37 - 121*

Lab Chronicle

Client: O'Brien & Gere Engineers, Inc.
Project/Site: WisDOT - Penn Ave/Sheboygan River 69862

TestAmerica Job ID: 500-145772-1

Client Sample ID: 051418001
Date Collected: 05/14/18 15:20
Date Received: 05/22/18 09:20

Lab Sample ID: 500-145772-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	433472	05/22/18 15:39	LWN	TAL CHI

Client Sample ID: 051418001
Date Collected: 05/14/18 15:20
Date Received: 05/22/18 09:20

Lab Sample ID: 500-145772-1
Matrix: Solid
Percent Solids: 90.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			433891	05/24/18 16:23	NRJ	TAL CHI
Total/NA	Analysis	8082A		1	434905	06/01/18 17:11	BJH	TAL CHI

Laboratory References:

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Accreditation/Certification Summary

Client: O'Brien & Gere Engineers, Inc.
Project/Site: WisDOT - Penn Ave/Sheboygan River 69862

TestAmerica Job ID: 500-145772-1

Laboratory: TestAmerica Chicago

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Wisconsin	State Program	5	999580010	08-31-18

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484
Phone: 708.534.5200 Fax: 708.534.5211

Chain of Custody Record

Lab Job #: 500-145772

Chain of Custody Number:

Page 1 of 1

Temperature °C of Cooler: 5.0

(optional) Report To	(optional) Bill To
Contact: MARK WALTER	Contact:
Company: OBG	Company:
Address: 231 W. FLORIDA ST, 5TH FL	Address:
Address: MILWAUKEE, WI 53204	Address:
Phone:	Phone:
Fax:	Fax:
E-Mail: MARK.WALTER@OBG.COM	PO#/Reference#

Client	Client Project #	Preservative
OBG	69862	8
Project Name		**Parameter**
WisDOT Penn Ave / Sheboygan River		
Project Location/State	**Lab Project #**	
Sheboygan, WI		
Sampler	**Lab PM**	
DAN VACHON		

Preservative Key
1. HCL, Cool to 4°
2. H2SO4, Cool to 4°
3. HNO3, Cool to 4°
4. NaOH, Cool to 4°
5. NaOH/Zn, Cool to 4°
6. NaHSO4
7. Cool to 4°
8. None
9. Other

Lab ID	MS/MSD	Sample ID	Sampling Date	Sampling Time	# of Containers	Matrix	PCBs	Comments
1		057418001	5/14/18	1520	1	S	X	

500-145772 COC

Turnaround Time Required (Business Days)
___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days ___ 10 Days ___ 15 Days ___ Other
Requested Due Date

Sample Disposal
☐ Return to Client ☒ Disposal by Lab ☐ Archive for ____ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
	OBG	5/21/18	1347		TA	5-21-18	1347
	TA	5-21-18	1700		TALLE	05/22/18	0770

Lab Courier
Shipped FX Priority
Hand Delivered

Matrix Key
WW – Wastewater
W – Water
S – Soil
SL – Sludge
MS – Miscellaneous
OL – Oil
A – Air
SE – Sediment
SO – Soil
L – Leachate
WI – Wipe
DW – Drinking Water
O – Other

Client Comments
STANDARD TAT

Lab Comments:

TAL-4124-500 (1209)

6/4/2018

Login Sample Receipt Checklist

Client: O'Brien & Gere Engineers, Inc.

Job Number: 500-145772-1

Login Number: 145772
List Number: 1
Creator: Sanchez, Ariel M

List Source: TestAmerica Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	5.0
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

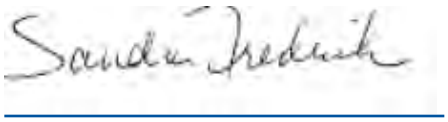
ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

TestAmerica Job ID: 500-148728-1
Client Project/Site: WisDOT Pennsylvania Ave 69862

For:
O'Brien & Gere Engineers, Inc.
234 West Florida Street, Fifth Floor
Milwaukee, Wisconsin 53204

Attn: Mark Walter



Authorized for release by:
7/31/2018 4:11:23 PM

Sandie Fredrick, Project Manager II
(920)261-1660
sandie.fredrick@testamericainc.com

Table of Contents

Case Narrative

Client: O'Brien & Gere Engineers, Inc.
Project/Site: WisDOT Pennsylvania Ave 69862

TestAmerica Job ID: 500-148728-1

Job ID: 500-148728-1

Laboratory: TestAmerica Chicago

Narrative

Job Narrative
500-148728-1

Comments
No additional comments.

Receipt
The samples were received on 7/20/2018 9:05 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.8º C.

GC VOA
Method(s) WI-GRO: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 490-530846 and analytical batch 490-532293.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA
Method(s) WI-DRO: The closing continuing calibration verification (CCV) standard associated with batch 500-442166 failed to meet acceptance limits. The associated samples were re-analyzed following a successful CCV and produced similar results, indicating that the sample matrix is adversely affecting the instrument and causing the failures.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep
Method(s) WI GRO: The sample's mass was under 8 grams. 071918001 (500-148728-1), 071918002 (500-148728-2), 071918003 (500-148728-3), 071918004 (500-148728-4), 071918005 (500-148728-5) and 071918006 (500-148728-6)

Method(s) WI GRO: SHAKE:10:00-10:02,SONIC:10:04-10:26. 071918001 (500-148728-1), 071918002 (500-148728-2), 071918003 (500-148728-3), 071918004 (500-148728-4), 071918005 (500-148728-5), 071918006 (500-148728-6) and 071918010 (500-148728-11)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: O'Brien & Gere Engineers, Inc.
Project/Site: WisDOT Pennsylvania Ave 69862

TestAmerica Job ID: 500-148728-1

Client Sample ID: 071918001 — Lab Sample ID: 500-148728-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	33	J	43	26	ug/Kg	1	☼	WDNR	Total/NA
Lead	41		0.54	0.25	mg/Kg	1	☼	6010B	Total/NA

Client Sample ID: 071918002 — Lab Sample ID: 500-148728-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	11		0.62	0.28	mg/Kg	1	☼	6010B	Total/NA

Client Sample ID: 071918003 — Lab Sample ID: 500-148728-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	4.5		0.51	0.24	mg/Kg	1	☼	6010B	Total/NA

Client Sample ID: 071918004 — Lab Sample ID: 500-148728-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	5.5		0.55	0.25	mg/Kg	1	☼	6010B	Total/NA

Client Sample ID: 071918005 — Lab Sample ID: 500-148728-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	61		41	24	ug/Kg	1	☼	WDNR	Total/NA
Lead	6.4		0.56	0.26	mg/Kg	1	☼	6010B	Total/NA

Client Sample ID: 071918006 — Lab Sample ID: 500-148728-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	4.4		0.56	0.26	mg/Kg	1	☼	6010B	Total/NA

Client Sample ID: 071918007 — Lab Sample ID: 500-148728-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1254	35		17	3.6	ug/Kg	1	☼	8082A	Total/NA
Polychlorinated biphenyls, Total	35		17	3.2	ug/Kg	1	☼	8082A	Total/NA

Client Sample ID: 071918008 — Lab Sample ID: 500-148728-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
WI Diesel Range Organics (C10-C28)	2.2	J	3.3	1.3	mg/Kg	1	☼	WI-DRO	Total/NA

Client Sample ID: 071918009 — Lab Sample ID: 500-148728-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
WI Diesel Range Organics (C10-C28)	3.0	J	3.3	1.3	mg/Kg	1	☼	WI-DRO	Total/NA

Client Sample ID: 071918010 — Lab Sample ID: 500-148728-11

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Method Summary

Client: O'Brien & Gere Engineers, Inc.
Project/Site: WisDOT Pennsylvania Ave 69862

TestAmerica Job ID: 500-148728-1

Method	Method Description	Protocol	Laboratory
WDNR	Wisconsin - Gasoline Range Organics (GC)	WI-GRO	TAL NSH
WI-GRO	Wisconsin - Gasoline Range Organics (GC)	WI-GRO	TAL CHI
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL CHI
WI-DRO	Wisconsin - Diesel Range Organics (GC)	WI-DRO	TAL CHI
6010B	Metals (ICP)	SW846	TAL CHI
Moisture	Percent Moisture	EPA	TAL CHI
3050B	Preparation, Metals	SW846	TAL CHI
3541	Automated Soxhlet Extraction	SW846	TAL CHI
WI DRO PREP	Wisconsin Extraction (Diesel Range Organics)	WI-DRO	TAL CHI
WI GRO	Closed System Purge and Trap	WI-GRO	TAL CHI
WI GRO	Closed System Purge and Trap	WI-GRO	TAL NSH

Protocol References:

EPA = US Environmental Protection Agency
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.
WI-DRO = "Modified DRO: Method For Determining Diesel Range Organics", Wisconsin DNR, Publ-SW-141, September, 1995.
WI-GRO = "Modified GRO: Method For Determining Gasoline Range Organics", Wisconsin DNR, Publ-SW-140, September, 1995.

Laboratory References:

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200
TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Sample Summary

Client: O'Brien & Gere Engineers, Inc.
Project/Site: WisDOT Pennsylvania Ave 69862

TestAmerica Job ID: 500-148728-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-148728-1	071918001	Solid	07/19/18 08:35	07/20/18 09:05
500-148728-2	071918002	Solid	07/19/18 08:45	07/20/18 09:05
500-148728-3	071918003	Solid	07/19/18 08:50	07/20/18 09:05
500-148728-4	071918004	Solid	07/19/18 09:50	07/20/18 09:05
500-148728-5	071918005	Solid	07/19/18 09:50	07/20/18 09:05
500-148728-6	071918006	Solid	07/19/18 09:50	07/20/18 09:05
500-148728-7	071918007	Solid	07/19/18 11:45	07/20/18 09:05
500-148728-8	071918008	Solid	07/19/18 13:40	07/20/18 09:05
500-148728-9	071918009	Solid	07/19/18 13:45	07/20/18 09:05
500-148728-11	071918010	Solid	07/19/18 00:00	07/20/18 09:05

Client Sample ID: 071918001

Lab Sample ID: 500-148728-1
Date Collected: 07/19/18 08:35
Matrix: Solid
Date Received: 07/20/18 09:05
Percent Solids: 87.1

Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	**33**	**J**	43	26	ug/Kg	☼	07/23/18 13:35	07/29/18 17:08	1
1,3,5-Trimethylbenzene	<26		43	26	ug/Kg	☼	07/23/18 13:35	07/29/18 17:08	1
Benzene	<31		43	31	ug/Kg	☼	07/23/18 13:35	07/29/18 17:08	1
Ethylbenzene	<32		43	32	ug/Kg	☼	07/23/18 13:35	07/29/18 17:08	1
Methyl tert-butyl ether	<20		43	20	ug/Kg	☼	07/23/18 13:35	07/29/18 17:08	1
Naphthalene	<200		430	200	ug/Kg	☼	07/23/18 13:35	07/29/18 17:08	1
Toluene	<29		43	29	ug/Kg	☼	07/23/18 13:35	07/29/18 17:08	1
Xylenes, Total	<51		130	51	ug/Kg	☼	07/23/18 13:35	07/29/18 17:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*105*		*80 - 120*	*07/23/18 13:35*	*07/29/18 17:08*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**41**		0.54	0.25	mg/Kg	☼	07/20/18 15:50	07/23/18 12:44	1

Client Sample ID: 071918002

Lab Sample ID: 500-148728-2
Date Collected: 07/19/18 08:45
Matrix: Solid
Date Received: 07/20/18 09:05
Percent Solids: 79.1

Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<29		48	29	ug/Kg	☼	07/23/18 13:35	07/29/18 16:37	1
1,3,5-Trimethylbenzene	<29		48	29	ug/Kg	☼	07/23/18 13:35	07/29/18 16:37	1
Benzene	<34		48	34	ug/Kg	☼	07/23/18 13:35	07/29/18 16:37	1
Ethylbenzene	<36		48	36	ug/Kg	☼	07/23/18 13:35	07/29/18 16:37	1
Methyl tert-butyl ether	<23		48	23	ug/Kg	☼	07/23/18 13:35	07/29/18 16:37	1
Naphthalene	<230		480	230	ug/Kg	☼	07/23/18 13:35	07/29/18 16:37	1
Toluene	<32		48	32	ug/Kg	☼	07/23/18 13:35	07/29/18 16:37	1
Xylenes, Total	<57		140	57	ug/Kg	☼	07/23/18 13:35	07/29/18 16:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*103*		*80 - 120*	*07/23/18 13:35*	*07/29/18 16:37*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**11**		0.62	0.28	mg/Kg	☼	07/20/18 15:50	07/23/18 12:48	1

Client Sample ID: 071918003

Lab Sample ID: 500-148728-3
Date Collected: 07/19/18 08:50
Matrix: Solid
Date Received: 07/20/18 09:05
Percent Solids: 84.7

Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<27		44	27	ug/Kg	☼	07/23/18 13:35	07/29/18 16:06	1
1,3,5-Trimethylbenzene	<27		44	27	ug/Kg	☼	07/23/18 13:35	07/29/18 16:06	1
Benzene	<32		44	32	ug/Kg	☼	07/23/18 13:35	07/29/18 16:06	1
Ethylbenzene	<34		44	34	ug/Kg	☼	07/23/18 13:35	07/29/18 16:06	1
Methyl tert-butyl ether	<21		44	21	ug/Kg	☼	07/23/18 13:35	07/29/18 16:06	1
Naphthalene	<210		440	210	ug/Kg	☼	07/23/18 13:35	07/29/18 16:06	1
Toluene	<30		44	30	ug/Kg	☼	07/23/18 13:35	07/29/18 16:06	1

Client Sample ID: 071918003

Date Collected: 07/19/18 08:50
Date Received: 07/20/18 09:05

Lab Sample ID: 500-148728-3

Matrix: Solid
Percent Solids: 84.7

Method: WDNR - Wisconsin - Gasoline Range Organics (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	<53		130	53	ug/Kg	☼	07/23/18 13:35	07/29/18 16:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*103*		*80 - 120*	*07/23/18 13:35*	*07/29/18 16:06*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**4.5**		0.51	0.24	mg/Kg	☼	07/20/18 15:50	07/23/18 12:52	1

Client Sample ID: 071918004

Date Collected: 07/19/18 09:50
Date Received: 07/20/18 09:05

Lab Sample ID: 500-148728-4

Matrix: Solid
Percent Solids: 87.4

Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<27		44	27	ug/Kg	☼	07/23/18 13:35	07/29/18 15:36	1
1,3,5-Trimethylbenzene	<27		44	27	ug/Kg	☼	07/23/18 13:35	07/29/18 15:36	1
Benzene	<32		44	32	ug/Kg	☼	07/23/18 13:35	07/29/18 15:36	1
Ethylbenzene	<34		44	34	ug/Kg	☼	07/23/18 13:35	07/29/18 15:36	1
Methyl tert-butyl ether	<21		44	21	ug/Kg	☼	07/23/18 13:35	07/29/18 15:36	1
Naphthalene	<210		440	210	ug/Kg	☼	07/23/18 13:35	07/29/18 15:36	1
Toluene	<30		44	30	ug/Kg	☼	07/23/18 13:35	07/29/18 15:36	1
Xylenes, Total	<53		130	53	ug/Kg	☼	07/23/18 13:35	07/29/18 15:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*102*		*80 - 120*	*07/23/18 13:35*	*07/29/18 15:36*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**5.5**		0.55	0.25	mg/Kg	☼	07/20/18 15:50	07/23/18 12:56	1

Client Sample ID: 071918005

Date Collected: 07/19/18 09:50
Date Received: 07/20/18 09:05

Lab Sample ID: 500-148728-5

Matrix: Solid
Percent Solids: 85.6

Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	**61**		41	24	ug/Kg	☼	07/23/18 13:35	07/29/18 15:05	1
1,3,5-Trimethylbenzene	<24		41	24	ug/Kg	☼	07/23/18 13:35	07/29/18 15:05	1
Benzene	<29		41	29	ug/Kg	☼	07/23/18 13:35	07/29/18 15:05	1
Ethylbenzene	<31		41	31	ug/Kg	☼	07/23/18 13:35	07/29/18 15:05	1
Methyl tert-butyl ether	<20		41	20	ug/Kg	☼	07/23/18 13:35	07/29/18 15:05	1
Naphthalene	<200		410	200	ug/Kg	☼	07/23/18 13:35	07/29/18 15:05	1
Toluene	<28		41	28	ug/Kg	☼	07/23/18 13:35	07/29/18 15:05	1
Xylenes, Total	<49		120	49	ug/Kg	☼	07/23/18 13:35	07/29/18 15:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*104*		*80 - 120*	*07/23/18 13:35*	*07/29/18 15:05*	*1*

Client Sample ID: 071918005

Lab Sample ID: 500-148728-5
Date Collected: 07/19/18 09:50
Matrix: Solid
Date Received: 07/20/18 09:05
Percent Solids: 85.6

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**6.4**		0.56	0.26	mg/Kg	☼	07/20/18 15:50	07/23/18 13:00	1

Client Sample ID: 071918006

Lab Sample ID: 500-148728-6
Date Collected: 07/19/18 09:50
Matrix: Solid
Date Received: 07/20/18 09:05
Percent Solids: 85.9

Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<24		40	24	ug/Kg	☼	07/23/18 13:35	07/29/18 14:34	1
1,3,5-Trimethylbenzene	<24		40	24	ug/Kg	☼	07/23/18 13:35	07/29/18 14:34	1
Benzene	<29		40	29	ug/Kg	☼	07/23/18 13:35	07/29/18 14:34	1
Ethylbenzene	<31		40	31	ug/Kg	☼	07/23/18 13:35	07/29/18 14:34	1
Methyl tert-butyl ether	<19		40	19	ug/Kg	☼	07/23/18 13:35	07/29/18 14:34	1
Naphthalene	<190		400	190	ug/Kg	☼	07/23/18 13:35	07/29/18 14:34	1
Toluene	<27		40	27	ug/Kg	☼	07/23/18 13:35	07/29/18 14:34	1
Xylenes, Total	<48		120	48	ug/Kg	☼	07/23/18 13:35	07/29/18 14:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*101*		*80 - 120*	*07/23/18 13:35*	*07/29/18 14:34*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**4.4**		0.56	0.26	mg/Kg	☼	07/20/18 15:50	07/23/18 13:04	1

Client Sample ID: 071918007

Lab Sample ID: 500-148728-7
Date Collected: 07/19/18 11:45
Matrix: Solid
Date Received: 07/20/18 09:05
Percent Solids: 95.0

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<5.9		17	5.9	ug/Kg	☼	07/30/18 07:43	07/30/18 23:23	1
PCB-1221	<7.3		17	7.3	ug/Kg	☼	07/30/18 07:43	07/30/18 23:23	1
PCB-1232	<7.3		17	7.3	ug/Kg	☼	07/30/18 07:43	07/30/18 23:23	1
PCB-1242	<5.5		17	5.5	ug/Kg	☼	07/30/18 07:43	07/30/18 23:23	1
PCB-1248	<6.6		17	6.6	ug/Kg	☼	07/30/18 07:43	07/30/18 23:23	1
PCB-1254	**35**		17	3.6	ug/Kg	☼	07/30/18 07:43	07/30/18 23:23	1
PCB-1260	<8.2		17	8.2	ug/Kg	☼	07/30/18 07:43	07/30/18 23:23	1
Polychlorinated biphenyls, Total	**35**		17	3.2	ug/Kg	☼	07/30/18 07:43	07/30/18 23:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*86*		*49 - 129*	*07/30/18 07:43*	*07/30/18 23:23*	*1*
DCB Decachlorobiphenyl	*55*		*37 - 121*	*07/30/18 07:43*	*07/30/18 23:23*	*1*

Client Sample ID: 071918008

Lab Sample ID: 500-148728-8
Date Collected: 07/19/18 13:40
Matrix: Solid
Date Received: 07/20/18 09:05
Percent Solids: 86.3

Method: WI-GRO - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
WI Gasoline Range Organics (C5-C10)	<830		2500	830	ug/Kg	☼	07/19/18 13:40	07/25/18 04:44	50

Client Sample ID: 071918008

Lab Sample ID: 500-148728-8

Date Collected: 07/19/18 13:40
Matrix: Solid
Date Received: 07/20/18 09:05
Percent Solids: 86.3

Method: WI-DRO - Wisconsin - Diesel Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
WI Diesel Range Organics (C10-C28)	2.2	J	3.3	1.3	mg/Kg	☼	07/23/18 07:28	07/24/18 16:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Nonane	*88*		*44 - 148*	*07/23/18 07:28*	*07/24/18 16:44*	*1*

Client Sample ID: 071918009

Lab Sample ID: 500-148728-9

Date Collected: 07/19/18 13:45
Matrix: Solid
Date Received: 07/20/18 09:05
Percent Solids: 86.3

Method: WI-GRO - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
WI Gasoline Range Organics (C5-C10)	<930		2800	930	ug/Kg	☼	07/19/18 13:45	07/25/18 05:19	50

Method: WI-DRO - Wisconsin - Diesel Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
WI Diesel Range Organics (C10-C28)	3.0	J	3.3	1.3	mg/Kg	☼	07/23/18 07:28	07/24/18 17:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Nonane	*88*		*44 - 148*	*07/23/18 07:28*	*07/24/18 17:19*	*1*

Client Sample ID: 071918010

Lab Sample ID: 500-148728-11

Date Collected: 07/19/18 00:00
Matrix: Solid
Date Received: 07/20/18 09:05

Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<15		25	15	ug/Kg		07/23/18 13:35	07/29/18 14:04	1
1,3,5-Trimethylbenzene	<15		25	15	ug/Kg		07/23/18 13:35	07/29/18 14:04	1
Benzene	<18		25	18	ug/Kg		07/23/18 13:35	07/29/18 14:04	1
Ethylbenzene	<19		25	19	ug/Kg		07/23/18 13:35	07/29/18 14:04	1
Methyl tert-butyl ether	<12		25	12	ug/Kg		07/23/18 13:35	07/29/18 14:04	1
Naphthalene	<120		250	120	ug/Kg		07/23/18 13:35	07/29/18 14:04	1
Toluene	<17		25	17	ug/Kg		07/23/18 13:35	07/29/18 14:04	1
Xylenes, Total	<30		75	30	ug/Kg		07/23/18 13:35	07/29/18 14:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*103*		*80 - 120*	*07/23/18 13:35*	*07/29/18 14:04*	*1*
a,a,a-Trifluorotoluene	*97*		*80 - 120*	*07/23/18 13:35*	*07/31/18 13:13*	*1*

Client: O'Brien & Gere Engineers, Inc.
Project/Site: WisDOT Pennsylvania Ave 69862

TestAmerica Job ID: 500-148728-1

Qualifiers

GC VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

GC VOA

Prep Batch: 442057

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-148728-8	071918008	Total/NA	Solid	WI GRO	
500-148728-9	071918009	Total/NA	Solid	WI GRO	
LB3 500-442057/14-A	Method Blank	Total/NA	Solid	WI GRO	
LCS 500-442057/16-A	Lab Control Sample	Total/NA	Solid	WI GRO	
LCSD 500-442057/17-A	Lab Control Sample Dup	Total/NA	Solid	WI GRO	

Analysis Batch: 442239

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-148728-8	071918008	Total/NA	Solid	WI-GRO	442057
500-148728-9	071918009	Total/NA	Solid	WI-GRO	442057
LB3 500-442057/14-A	Method Blank	Total/NA	Solid	WI-GRO	442057
LCS 500-442057/16-A	Lab Control Sample	Total/NA	Solid	WI-GRO	442057
LCSD 500-442057/17-A	Lab Control Sample Dup	Total/NA	Solid	WI-GRO	442057

Prep Batch: 530846

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-148728-1	071918001	Total/NA	Solid	WI GRO	
500-148728-2	071918002	Total/NA	Solid	WI GRO	
500-148728-3	071918003	Total/NA	Solid	WI GRO	
500-148728-4	071918004	Total/NA	Solid	WI GRO	
500-148728-5	071918005	Total/NA	Solid	WI GRO	
500-148728-6	071918006	Total/NA	Solid	WI GRO	
500-148728-11	071918010	Total/NA	Solid	WI GRO	
MB 490-530846/1-A	Method Blank	Total/NA	Solid	WI GRO	
LCS 490-530846/2-A	Lab Control Sample	Total/NA	Solid	WI GRO	
LCSD 490-530846/3-A	Lab Control Sample Dup	Total/NA	Solid	WI GRO	

Analysis Batch: 532293

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-148728-1	071918001	Total/NA	Solid	WDNR	530846
500-148728-2	071918002	Total/NA	Solid	WDNR	530846
500-148728-3	071918003	Total/NA	Solid	WDNR	530846
500-148728-4	071918004	Total/NA	Solid	WDNR	530846
500-148728-5	071918005	Total/NA	Solid	WDNR	530846
500-148728-6	071918006	Total/NA	Solid	WDNR	530846
500-148728-11	071918010	Total/NA	Solid	WDNR	530846
500-148728-11	071918010	Total/NA	Solid	WDNR	530846
MB 490-530846/1-A	Method Blank	Total/NA	Solid	WDNR	530846
MB 490-530846/1-A	Method Blank	Total/NA	Solid	WDNR	530846
LCS 490-530846/2-A	Lab Control Sample	Total/NA	Solid	WDNR	530846
LCS 490-530846/2-A	Lab Control Sample	Total/NA	Solid	WDNR	530846
LCSD 490-530846/3-A	Lab Control Sample Dup	Total/NA	Solid	WDNR	530846
LCSD 490-530846/3-A	Lab Control Sample Dup	Total/NA	Solid	WDNR	530846

GC Semi VOA

Prep Batch: 441966

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-148728-8	071918008	Total/NA	Solid	WI DRO PREP	
500-148728-9	071918009	Total/NA	Solid	WI DRO PREP	

GC Semi VOA (Continued)

Prep Batch: 441966 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-441966/1-A	Method Blank	Total/NA	Solid	WI DRO PREP	
LCS 500-441966/2-A	Lab Control Sample	Total/NA	Solid	WI DRO PREP	
LCSD 500-441966/3-A	Lab Control Sample Dup	Total/NA	Solid	WI DRO PREP	

Analysis Batch: 442166

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-148728-8	071918008	Total/NA	Solid	WI-DRO	441966
500-148728-9	071918009	Total/NA	Solid	WI-DRO	441966
MB 500-441966/1-A	Method Blank	Total/NA	Solid	WI-DRO	441966
LCS 500-441966/2-A	Lab Control Sample	Total/NA	Solid	WI-DRO	441966
LCSD 500-441966/3-A	Lab Control Sample Dup	Total/NA	Solid	WI-DRO	441966

Prep Batch: 443025

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-148728-7	071918007	Total/NA	Solid	3541	
MB 500-443025/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-443025/2-A	Lab Control Sample	Total/NA	Solid	3541	

Analysis Batch: 443093

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-148728-7	071918007	Total/NA	Solid	8082A	443025
MB 500-443025/1-A	Method Blank	Total/NA	Solid	8082A	443025
LCS 500-443025/2-A	Lab Control Sample	Total/NA	Solid	8082A	443025

Metals

Prep Batch: 441843

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-148728-1	071918001	Total/NA	Solid	3050B	
500-148728-2	071918002	Total/NA	Solid	3050B	
500-148728-3	071918003	Total/NA	Solid	3050B	
500-148728-4	071918004	Total/NA	Solid	3050B	
500-148728-5	071918005	Total/NA	Solid	3050B	
500-148728-6	071918006	Total/NA	Solid	3050B	
MB 500-441843/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 500-441843/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Analysis Batch: 442194

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-148728-1	071918001	Total/NA	Solid	6010B	441843
500-148728-2	071918002	Total/NA	Solid	6010B	441843
500-148728-3	071918003	Total/NA	Solid	6010B	441843
500-148728-4	071918004	Total/NA	Solid	6010B	441843
500-148728-5	071918005	Total/NA	Solid	6010B	441843
500-148728-6	071918006	Total/NA	Solid	6010B	441843
MB 500-441843/1-A	Method Blank	Total/NA	Solid	6010B	441843
LCS 500-441843/2-A	Lab Control Sample	Total/NA	Solid	6010B	441843

QC Association Summary

Client: O'Brien & Gere Engineers, Inc.
Project/Site: WisDOT Pennsylvania Ave 69862

TestAmerica Job ID: 500-148728-1

General Chemistry

Analysis Batch: 442000

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-148728-1	071918001	Total/NA	Solid	Moisture	
500-148728-2	071918002	Total/NA	Solid	Moisture	
500-148728-3	071918003	Total/NA	Solid	Moisture	
500-148728-4	071918004	Total/NA	Solid	Moisture	
500-148728-5	071918005	Total/NA	Solid	Moisture	
500-148728-6	071918006	Total/NA	Solid	Moisture	
500-148728-7	071918007	Total/NA	Solid	Moisture	
500-148728-8	071918008	Total/NA	Solid	Moisture	
500-148728-9	071918009	Total/NA	Solid	Moisture	

Surrogate Summary

Client: O'Brien & Gere Engineers, Inc.
Project/Site: WisDOT Pennsylvania Ave 69862

TestAmerica Job ID: 500-148728-1

Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		TFT
Lab Sample ID	Client Sample ID	(80-120)
500-148728-1	071918001	105
500-148728-2	071918002	103
500-148728-3	071918003	103
500-148728-4	071918004	102
500-148728-5	071918005	104
500-148728-6	071918006	101
500-148728-11	071918010	97
500-148728-11	071918010	103
LCS 490-530846/2-A	Lab Control Sample	105
LCS 490-530846/2-A	Lab Control Sample	106
LCSD 490-530846/3-A	Lab Control Sample Dup	108
LCSD 490-530846/3-A	Lab Control Sample Dup	104
MB 490-530846/1-A	Method Blank	95
MB 490-530846/1-A	Method Blank	98

Surrogate Legend

TFT = a,a,a-Trifluorotoluene

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		TCX1	DCBP1
Lab Sample ID	Client Sample ID	(49-129)	(37-121)
500-148728-7	071918007	86	55
LCS 500-443025/2-A	Lab Control Sample	88	96
MB 500-443025/1-A	Method Blank	83	92

Surrogate Legend

TCX = Tetrachloro-m-xylene

DCBP = DCB Decachlorobiphenyl

Method: WI-DRO - Wisconsin - Diesel Range Organics (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		C9
Lab Sample ID	Client Sample ID	(44-148)
500-148728-8	071918008	88
500-148728-9	071918009	88
LCS 500-441966/2-A	Lab Control Sample	91
LCSD 500-441966/3-A	Lab Control Sample Dup	90
MB 500-441966/1-A	Method Blank	90

Surrogate Legend

C9 = n-Nonane

Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Lab Sample ID: MB 490-530846/1-A
Matrix: Solid
Analysis Batch: 532293

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 530846

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<15		25	15	ug/Kg		07/23/18 13:35	07/29/18 13:33	1
1,3,5-Trimethylbenzene	<15		25	15	ug/Kg		07/23/18 13:35	07/29/18 13:33	1
Benzene	<18		25	18	ug/Kg		07/23/18 13:35	07/29/18 13:33	1
Ethylbenzene	<19		25	19	ug/Kg		07/23/18 13:35	07/29/18 13:33	1
Methyl tert-butyl ether	<12		25	12	ug/Kg		07/23/18 13:35	07/29/18 13:33	1
Naphthalene	<120		250	120	ug/Kg		07/23/18 13:35	07/29/18 13:33	1
Toluene	<17		25	17	ug/Kg		07/23/18 13:35	07/29/18 13:33	1
Xylenes, Total	<30		75	30	ug/Kg		07/23/18 13:35	07/29/18 13:33	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*98*		*80 - 120*	*07/23/18 13:35*	*07/29/18 13:33*	*1*

Lab Sample ID: MB 490-530846/1-A
Matrix: Solid
Analysis Batch: 532293

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 530846

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<15		25	15	ug/Kg		07/23/18 13:35	07/31/18 12:42	1
1,3,5-Trimethylbenzene	<15		25	15	ug/Kg		07/23/18 13:35	07/31/18 12:42	1
Benzene	<18		25	18	ug/Kg		07/23/18 13:35	07/31/18 12:42	1
Ethylbenzene	<19		25	19	ug/Kg		07/23/18 13:35	07/31/18 12:42	1
Methyl tert-butyl ether	<12		25	12	ug/Kg		07/23/18 13:35	07/31/18 12:42	1
Naphthalene	<120		250	120	ug/Kg		07/23/18 13:35	07/31/18 12:42	1
Toluene	<17		25	17	ug/Kg		07/23/18 13:35	07/31/18 12:42	1
Xylenes, Total	<30		75	30	ug/Kg		07/23/18 13:35	07/31/18 12:42	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*95*		*80 - 120*	*07/23/18 13:35*	*07/31/18 12:42*	*1*

Lab Sample ID: LCS 490-530846/2-A
Matrix: Solid
Analysis Batch: 532293

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 530846

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trimethylbenzene	2500	2770		ug/Kg		111	60 - 140
1,3,5-Trimethylbenzene	2500	2750		ug/Kg		110	74 - 133
Benzene	2500	2760		ug/Kg		110	76 - 120
Ethylbenzene	2500	2750		ug/Kg		110	77 - 120
Methyl tert-butyl ether	2500	2520		ug/Kg		101	73 - 120
Naphthalene	2500	2530		ug/Kg		101	74 - 127
Toluene	2500	2750		ug/Kg		110	79 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*106*		*80 - 120*

Method: WDNR - Wisconsin - Gasoline Range Organics (GC) (Continued)

Lab Sample ID: LCS 490-530846/2-A
Matrix: Solid
Analysis Batch: 532293

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 530846

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,2,4-Trimethylbenzene			2500	2610		ug/Kg		104	60 - 140		
1,3,5-Trimethylbenzene			2500	2580		ug/Kg		103	74 - 133		
Benzene			2500	2500		ug/Kg		100	76 - 120		
Ethylbenzene			2500	2570		ug/Kg		103	77 - 120		
Methyl tert-butyl ether			2500	2330		ug/Kg		93	73 - 120		
Naphthalene			2500	2230		ug/Kg		89	74 - 127		
Toluene			2500	2480		ug/Kg		99	79 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*105*		*80 - 120*

Lab Sample ID: LCSD 490-530846/3-A
Matrix: Solid
Analysis Batch: 532293

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 530846

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,4-Trimethylbenzene			2500	2730		ug/Kg		109	60 - 140	1	50
1,3,5-Trimethylbenzene			2500	2710		ug/Kg		108	74 - 133	2	42
Benzene			2500	2760		ug/Kg		110	76 - 120	0	27
Ethylbenzene			2500	2720		ug/Kg		109	77 - 120	1	49
Methyl tert-butyl ether			2500	2600		ug/Kg		104	73 - 120	3	31
Naphthalene			2500	2650		ug/Kg		106	74 - 127	5	50
Toluene			2500	2700		ug/Kg		108	79 - 120	2	37

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*108*		*80 - 120*

Lab Sample ID: LCSD 490-530846/3-A
Matrix: Solid
Analysis Batch: 532293

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 530846

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,4-Trimethylbenzene			2500	2650		ug/Kg		106	60 - 140	2	50
1,3,5-Trimethylbenzene			2500	2630		ug/Kg		105	74 - 133	2	42
Benzene			2500	2550		ug/Kg		102	76 - 120	2	27
Ethylbenzene			2500	2610		ug/Kg		105	77 - 120	2	49
Methyl tert-butyl ether			2500	2370		ug/Kg		95	73 - 120	1	31
Naphthalene			2500	2190		ug/Kg		88	74 - 127	2	50
Toluene			2500	2540		ug/Kg		101	79 - 120	2	37

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*104*		*80 - 120*

Method: WI-GRO - Wisconsin - Gasoline Range Organics (GC)

Lab Sample ID: LB3 500-442057/14-A
Matrix: Solid
Analysis Batch: 442239

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 442057

Analyte	LB3 Result	LB3 Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
WI Gasoline Range Organics (C5-C10)	<500		1500	500	ug/Kg		07/23/18 12:41	07/25/18 01:16	50

Lab Sample ID: LCS 500-442057/16-A
Matrix: Solid
Analysis Batch: 442239

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 442057

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
WI Gasoline Range Organics (C5-C10)	20000	20400		ug/Kg		102	80 - 120

Lab Sample ID: LCSD 500-442057/17-A
Matrix: Solid
Analysis Batch: 442239

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 442057

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
WI Gasoline Range Organics (C5-C10)	20000	21100		ug/Kg		105	80 - 120	3	20

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 500-443025/1-A
Matrix: Solid
Analysis Batch: 443093

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 443025

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<5.9		17	5.9	ug/Kg		07/30/18 07:43	07/30/18 19:48	1
PCB-1221	<7.3		17	7.3	ug/Kg		07/30/18 07:43	07/30/18 19:48	1
PCB-1232	<7.3		17	7.3	ug/Kg		07/30/18 07:43	07/30/18 19:48	1
PCB-1242	<5.5		17	5.5	ug/Kg		07/30/18 07:43	07/30/18 19:48	1
PCB-1248	<6.6		17	6.6	ug/Kg		07/30/18 07:43	07/30/18 19:48	1
PCB-1254	<3.6		17	3.6	ug/Kg		07/30/18 07:43	07/30/18 19:48	1
PCB-1260	<8.2		17	8.2	ug/Kg		07/30/18 07:43	07/30/18 19:48	1
Polychlorinated biphenyls, Total	<3.2		17	3.2	ug/Kg		07/30/18 07:43	07/30/18 19:48	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*83*		*49 - 129*	*07/30/18 07:43*	*07/30/18 19:48*	*1*
DCB Decachlorobiphenyl	*92*		*37 - 121*	*07/30/18 07:43*	*07/30/18 19:48*	*1*

Lab Sample ID: LCS 500-443025/2-A
Matrix: Solid
Analysis Batch: 443093

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 443025

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	167	144		ug/Kg		87	57 - 120
PCB-1260	167	155		ug/Kg		93	61 - 125

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: LCS 500-443025/2-A
Matrix: Solid
Analysis Batch: 443093

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 443025

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*88*		*49 - 129*
DCB Decachlorobiphenyl	*96*		*37 - 121*

Method: WI-DRO - Wisconsin - Diesel Range Organics (GC)

Lab Sample ID: MB 500-441966/1-A
Matrix: Solid
Analysis Batch: 442166

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 441966

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
WI Diesel Range Organics (C10-C28)	<1.6		4.0	1.6	mg/Kg		07/23/18 07:28	07/24/18 14:22	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Nonane	*90*		*44 - 148*	*07/23/18 07:28*	*07/24/18 14:22*	*1*

Lab Sample ID: LCS 500-441966/2-A
Matrix: Solid
Analysis Batch: 442166

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 441966

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
WI Diesel Range Organics (C10-C28)			20.0	23.5		mg/Kg		118	70 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
n-Nonane	*91*		*44 - 148*

Lab Sample ID: LCSD 500-441966/3-A
Matrix: Solid
Analysis Batch: 442166

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 441966

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
WI Diesel Range Organics (C10-C28)			20.0	23.1		mg/Kg		116	70 - 120	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
n-Nonane	*90*		*44 - 148*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 500-441843/1-A
Matrix: Solid
Analysis Batch: 442194

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 441843

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.23		0.50	0.23	mg/Kg		07/20/18 15:50	07/23/18 12:09	1

Client: O'Brien & Gere Engineers, Inc.
Project/Site: WisDOT Pennsylvania Ave 69862

TestAmerica Job ID: 500-148728-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 500-441843/2-A
Matrix: Solid
Analysis Batch: 442194

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 441843

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	10.0	9.04		mg/Kg		90	80 - 120

Lab Chronicle

Client: O'Brien & Gere Engineers, Inc.
Project/Site: WisDOT Pennsylvania Ave 69862

TestAmerica Job ID: 500-148728-1

Client Sample ID: 071918001 — **Lab Sample ID: 500-148728-1**
Date Collected: 07/19/18 08:35 — **Matrix: Solid**
Date Received: 07/20/18 09:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	442000	07/23/18 09:04	LWN	TAL CHI

Client Sample ID: 071918001 — **Lab Sample ID: 500-148728-1**
Date Collected: 07/19/18 08:35 — **Matrix: Solid**
Date Received: 07/20/18 09:05 — **Percent Solids: 87.1**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			530846	07/23/18 13:35	DHC	TAL NSH
Total/NA	Analysis	WDNR		1	532293	07/29/18 17:08	S1S	TAL NSH
Total/NA	Prep	3050B			441843	07/20/18 15:50	BDE	TAL CHI
Total/NA	Analysis	6010B		1	442194	07/23/18 12:44	JEF	TAL CHI

Client Sample ID: 071918002 — **Lab Sample ID: 500-148728-2**
Date Collected: 07/19/18 08:45 — **Matrix: Solid**
Date Received: 07/20/18 09:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	442000	07/23/18 09:04	LWN	TAL CHI

Client Sample ID: 071918002 — **Lab Sample ID: 500-148728-2**
Date Collected: 07/19/18 08:45 — **Matrix: Solid**
Date Received: 07/20/18 09:05 — **Percent Solids: 79.1**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			530846	07/23/18 13:35	DHC	TAL NSH
Total/NA	Analysis	WDNR		1	532293	07/29/18 16:37	S1S	TAL NSH
Total/NA	Prep	3050B			441843	07/20/18 15:50	BDE	TAL CHI
Total/NA	Analysis	6010B		1	442194	07/23/18 12:48	JEF	TAL CHI

Client Sample ID: 071918003 — **Lab Sample ID: 500-148728-3**
Date Collected: 07/19/18 08:50 — **Matrix: Solid**
Date Received: 07/20/18 09:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	442000	07/23/18 09:04	LWN	TAL CHI

Client Sample ID: 071918003 — **Lab Sample ID: 500-148728-3**
Date Collected: 07/19/18 08:50 — **Matrix: Solid**
Date Received: 07/20/18 09:05 — **Percent Solids: 84.7**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			530846	07/23/18 13:35	DHC	TAL NSH

Lab Chronicle

Client: O'Brien & Gere Engineers, Inc.
Project/Site: WisDOT Pennsylvania Ave 69862

TestAmerica Job ID: 500-148728-1

Client Sample ID: 071918003
Date Collected: 07/19/18 08:50
Date Received: 07/20/18 09:05

Lab Sample ID: 500-148728-3
Matrix: Solid
Percent Solids: 84.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	WDNR		1	532293	07/29/18 16:06	S1S	TAL NSH
Total/NA	Prep	3050B			441843	07/20/18 15:50	BDE	TAL CHI
Total/NA	Analysis	6010B		1	442194	07/23/18 12:52	JEF	TAL CHI

Client Sample ID: 071918004
Date Collected: 07/19/18 09:50
Date Received: 07/20/18 09:05

Lab Sample ID: 500-148728-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	442000	07/23/18 09:04	LWN	TAL CHI

Client Sample ID: 071918004
Date Collected: 07/19/18 09:50
Date Received: 07/20/18 09:05

Lab Sample ID: 500-148728-4
Matrix: Solid
Percent Solids: 87.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			530846	07/23/18 13:35	DHC	TAL NSH
Total/NA	Analysis	WDNR		1	532293	07/29/18 15:36	S1S	TAL NSH
Total/NA	Prep	3050B			441843	07/20/18 15:50	BDE	TAL CHI
Total/NA	Analysis	6010B		1	442194	07/23/18 12:56	JEF	TAL CHI

Client Sample ID: 071918005
Date Collected: 07/19/18 09:50
Date Received: 07/20/18 09:05

Lab Sample ID: 500-148728-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	442000	07/23/18 09:04	LWN	TAL CHI

Client Sample ID: 071918005
Date Collected: 07/19/18 09:50
Date Received: 07/20/18 09:05

Lab Sample ID: 500-148728-5
Matrix: Solid
Percent Solids: 85.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			530846	07/23/18 13:35	DHC	TAL NSH
Total/NA	Analysis	WDNR		1	532293	07/29/18 15:05	S1S	TAL NSH
Total/NA	Prep	3050B			441843	07/20/18 15:50	BDE	TAL CHI
Total/NA	Analysis	6010B		1	442194	07/23/18 13:00	JEF	TAL CHI

Lab Chronicle

Client: O'Brien & Gere Engineers, Inc.
Project/Site: WisDOT Pennsylvania Ave 69862

TestAmerica Job ID: 500-148728-1

Client Sample ID: 071918006
Date Collected: 07/19/18 09:50
Date Received: 07/20/18 09:05

Lab Sample ID: 500-148728-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	442000	07/23/18 09:04	LWN	TAL CHI

Client Sample ID: 071918006
Date Collected: 07/19/18 09:50
Date Received: 07/20/18 09:05

Lab Sample ID: 500-148728-6
Matrix: Solid
Percent Solids: 85.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			530846	07/23/18 13:35	DHC	TAL NSH
Total/NA	Analysis	WDNR		1	532293	07/29/18 14:34	S1S	TAL NSH
Total/NA	Prep	3050B			441843	07/20/18 15:50	BDE	TAL CHI
Total/NA	Analysis	6010B		1	442194	07/23/18 13:04	JEF	TAL CHI

Client Sample ID: 071918007
Date Collected: 07/19/18 11:45
Date Received: 07/20/18 09:05

Lab Sample ID: 500-148728-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	442000	07/23/18 09:04	LWN	TAL CHI

Client Sample ID: 071918007
Date Collected: 07/19/18 11:45
Date Received: 07/20/18 09:05

Lab Sample ID: 500-148728-7
Matrix: Solid
Percent Solids: 95.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			443025	07/30/18 07:43	STW	TAL CHI
Total/NA	Analysis	8082A		1	443093	07/30/18 23:23	BJH	TAL CHI

Client Sample ID: 071918008
Date Collected: 07/19/18 13:40
Date Received: 07/20/18 09:05

Lab Sample ID: 500-148728-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	442000	07/23/18 09:04	LWN	TAL CHI

Client Sample ID: 071918008
Date Collected: 07/19/18 13:40
Date Received: 07/20/18 09:05

Lab Sample ID: 500-148728-8
Matrix: Solid
Percent Solids: 86.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			442057	07/19/18 13:40	EMA	TAL CHI
Total/NA	Analysis	WI-GRO		50	442239	07/25/18 04:44	EMA	TAL CHI
Total/NA	Prep	WI DRO PREP			441966	07/23/18 07:28	BSO	TAL CHI

Lab Chronicle

Client: O'Brien & Gere Engineers, Inc.
Project/Site: WisDOT Pennsylvania Ave 69862

TestAmerica Job ID: 500-148728-1

Client Sample ID: 071918008
Date Collected: 07/19/18 13:40
Date Received: 07/20/18 09:05

Lab Sample ID: 500-148728-8
Matrix: Solid
Percent Solids: 86.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	WI-DRO		1	442166	07/24/18 16:44	JBJ	TAL CHI

Client Sample ID: 071918009
Date Collected: 07/19/18 13:45
Date Received: 07/20/18 09:05

Lab Sample ID: 500-148728-9
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	442000	07/23/18 09:04	LWN	TAL CHI

Client Sample ID: 071918009
Date Collected: 07/19/18 13:45
Date Received: 07/20/18 09:05

Lab Sample ID: 500-148728-9
Matrix: Solid
Percent Solids: 86.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			442057	07/19/18 13:45	EMA	TAL CHI
Total/NA	Analysis	WI-GRO		50	442239	07/25/18 05:19	EMA	TAL CHI
Total/NA	Prep	WI DRO PREP			441966	07/23/18 07:28	BSO	TAL CHI
Total/NA	Analysis	WI-DRO		1	442166	07/24/18 17:19	JBJ	TAL CHI

Client Sample ID: 071918010
Date Collected: 07/19/18 00:00
Date Received: 07/20/18 09:05

Lab Sample ID: 500-148728-11
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			530846	07/23/18 13:35	DHC	TAL NSH
Total/NA	Analysis	WDNR		1	532293	07/29/18 14:04	S1S	TAL NSH
Total/NA	Prep	WI GRO			530846	07/23/18 13:35	DHC	TAL NSH
Total/NA	Analysis	WDNR		1	532293	07/31/18 13:13	S1S	TAL NSH

Laboratory References:

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Accreditation/Certification Summary

Client: O'Brien & Gere Engineers, Inc.
Project/Site: WisDOT Pennsylvania Ave 69862

TestAmerica Job ID: 500-148728-1

Laboratory: TestAmerica Chicago

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Wisconsin	State Program	5	999580010	08-31-18 *

Laboratory: TestAmerica Nashville

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
A2LA	ISO/IEC 17025		0453.07	12-31-19
Alaska (UST)	State Program	10	UST-087	06-30-18 *
Arizona	State Program	9	AZ0473	05-05-19
Arkansas DEQ	State Program	6	88-0737	04-25-19
California	State Program	9	2938	10-31-18
Connecticut	State Program	1	PH-0220	12-31-19
Florida	NELAP	4	E87358	06-30-19
Georgia	State Program	4	NA: NELAP & A2LA	12-31-19
Illinois	NELAP	5	200010	12-09-18
Iowa	State Program	7	131	04-01-20
Kansas	NELAP	7	E-10229	10-31-18
Kentucky (UST)	State Program	4	19	06-30-19
Kentucky (WW)	State Program	4	90038	12-31-18
Louisiana	NELAP	6	30613	06-30-18 *
Maine	State Program	1	TN00032	11-03-19
Maryland	State Program	3	316	03-31-19
Massachusetts	State Program	1	M-TN032	06-30-19
Minnesota	NELAP	5	047-999-345	12-31-18
Mississippi	State Program	4	N/A	06-30-19
Montana (UST)	State Program	8	NA	02-24-20
Nevada	State Program	9	TN00032	07-31-19
New Hampshire	NELAP	1	2963	10-09-18
New Jersey	NELAP	2	TN965	06-30-19
New York	NELAP	2	11342	03-31-19
North Carolina (WW/SW)	State Program	4	387	12-31-18
North Dakota	State Program	8	R-146	06-30-18 *
Ohio VAP	State Program	5	CL0033	07-06-19
Oklahoma	State Program	6	9412	08-31-18
Oregon	NELAP	10	TN200001	04-26-19
Pennsylvania	NELAP	3	68-00585	06-30-18 *
Rhode Island	State Program	1	LAO00268	12-30-18
South Carolina	State Program	4	84009 (001)	02-28-19
Tennessee	State Program	4	2008	02-23-20
Texas	NELAP	6	T104704077	08-31-18
USDA	Federal		P330-13-00306	12-01-19
Utah	NELAP	8	TN00032	07-31-18
Virginia	NELAP	3	460152	06-14-19
West Virginia DEP	State Program	3	219	02-28-19
Wisconsin	State Program	5	998020430	08-31-18
Wyoming (UST)	A2LA	8	453.07	12-31-19

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484
Phone: 708.534.5200 Fax: 708.534.5211

Chain of Custody Record

Lab Job #: 500-148728

Chain of Custody Number:

Page ____ of ____

Temperature °C of Cooler: 0.3 / 1.8

(optional)		(optional)	
Report To	MARK WALTER	Bill To	
Contact:	MARK WALTER	Contact:	
Company:	OBG	Company:	
Address:	234 W. FLORIDA ST 5TH FL	Address:	
Address:	MILWAUKEE, WI 53204	Address:	
Phone:	414-837-3563	Phone:	
Fax:		Fax:	
E-Mail:	MARK.WALTER@OBG.COM	PO#/Reference#	

Client	Client Project #	Preservative
WisDOT		
Project Name		Parameter
PENNSYLVANIA AVENUE		
Project Location/State	Lab Project #	
SHEBOYGAN, WI		
Sampler	Lab PM	

Preservative Key
1. HCL, Cool to 4°
2. H2SO4, Cool to 4°
3. HNO3, Cool to 4°
4. NaOH, Cool to 4°
5. NaOH/Zn, Cool to 4°
6. NaHSO4
7. Cool to 4°
8. None
9. Other

Lab ID	MS/MSD	Sample ID	Sampling Date	Sampling Time	# of Containers	Matrix	PNOCs	NAPTHALENE	LEAD	PCB	GRO	DRO	Comments
1		072118001	7/19/18	0835	3	S	X	X	X				
2		072118002	7/19/18	0845	3	S	X	X	X				
3		072118003	7/19/18	0850	3	S	X	X	X				
4		072118004	7/19/18	0850	3	S	X	X	X				
5		072118005	7/19/18	0950	3	S	X	X	X				
6		072118006	7/19/18	0950	3	S	X	X	X				
7		072118007	7/19/18	1145	1	S				X			
8		072118008	7/19/18	1340	2	S					X	X	
9		072118009	7/19/18	1345	2	S					X	X	
10		072118010	—	—	1	W	X						TRIP BLANK

500-148728 COC

Turnaround Time Required (Business Days)

___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days ___ 10 Days ___ 15 Days _____ Other

Requested Due Date: _____

Sample Disposal

☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
	OBG	7/19/18	1400		TA	7-19-18	1900
Relinquished By	Company	Date	Time	Received By	Company	Date	Time
	TA	7-19-18	1700		TAALS	07/20/18	0905
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

Lab Courier

Shipped FX Priority

Hand Delivered

Matrix Key

WW – Wastewater	SE – Sediment
W – Water	SO – Soil
S – Soil	L – Leachate
SL – Sludge	WI – Wipe
MS – Miscellaneous	DW – Drinking Water
OL – Oil	O – Other
A – Air	

Client Comments

Lab Comments:

ORIGIN ID:RRLA (262) 202-5955
SHIPPING
TESTAMERICA
4125 N 124TH ST

BROOKFIELD, WI 53005
UNITED STATES US

SHIP DATE: 20JUL18
ACTWGT: 55.85 LB
CAD: 535[illegible]/CAFE3210

BILL RECIPIENT

TO SAMPLE RECEIPT
TESTAMERICA LABS
2417 BOND STREET

UNIVERSITY PARK IL 60484
(708) 634-6200 REF:
INV:
PO: DEPT:

FedEx Express

FRI - 20 JUL 10:30A
PRIORITY OVERNIGHT

TRK# 0201 7125 4938 4351

79 JOTA

60484
US ORD

500-148728 Waybill

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

500-148728 Chain of Custody

COOLER RECEIPT FORM

500504

Cooler Received/Opened On 7/20/2018 @ 0935 1657

Time Samples Removed From Cooler 1654 Time Samples Placed In Storage _____ (2 Hour Window)

1. Tracking # 4277 (last 4 digits, FedEx) Courier: FedEx

IR Gun ID 160656838 pH Strip Lot NA Chlorine Strip Lot NA

2. Temperature of rep. sample or temp blank when opened: 2.3 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: 1 Front

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) _____

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

● ⬅ Larger than this.

GH 7-20-18

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # _____

I certify that I unloaded the cooler and answered questions 7-14 (intial) GH

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) GH

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) GH

I certify that I attached a label with the unique LIMS number to each container (intial) GH

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...#_____

BIS = Broken in shipment

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484
Phone: 708.534.5200 Fax: 708.534.5211

(optional)
Report To
Contact:
Company:
Address:
Address:
Phone:
Fax:
E-Mail:

(optional)
Bill To
Contact:
Company:
Address:
Address:
Phone:
Fax:
PO#/Reference#

Chain of Custody Record

Lab Job #:

Chain of Custody Number:

Page _____ of _____

Temperature °C of Cooler:

Client | Client Project # | Preservative

Project Name | Parameter

Project Location/State | Lab Project #

Sampler | Lab PM

Preservative Key
1. HCL, Cool to 4°
2. H2SO4, Cool to 4°
3. HNO3, Cool to 4°
4. NaOH, Cool to 4°
5. NaOH/Zn, Cool to 4°
6. NaHSO4
7. Cool to 4°
8. None
9. Other

Lab ID	MS/MSD	Sample ID	Sampling Date	Sampling Time	# of Containers	Matrix										Comments

Loc: 500
148728

Turnaround Time Required (Business Days)
___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days ___ 10 Days ___ 15 Days _____ Other
Requested Due Date _____

Sample Disposal
☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
[signature]	TA	7-19-18	1700	[signature]	TA-NAS	7-20-18	0935
							2.3°C

Lab Courier
Shipped
Hand Delivered

Matrix Key

WW – Wastewater	SE – Sediment
W – Water	SO – Soil
S – Soil	L – Leachate
SL – Sludge	WI – Wipe
MS – Miscellaneous	DW – Drinking Water
OL – Oil	O – Other
A – Air	

Client Comments

Lab Comments:

TAL-4124-500 (1209)

7/31/2018

Login Sample Receipt Checklist

Client: O'Brien & Gere Engineers, Inc.

Job Number: 500-148728-1

Login Number: 148728
List Number: 1
Creator: Scott, Sherri L

List Source: TestAmerica Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Attachment 5 – Investigative Waste Disposal Request

NON-HAZARDOUS WASTE INVENTORY RECORD

Wisconsin Department of Transportation
DT1229 6/2016 (For use with DT1208)

DTSD Region and Office Northeast - Green Bay		
WisDOT Project ID 4996-25-00	County Sheboygan	Highway and Termini Pennsylvania Avenue
Site Name Pennsylvania Avenue Bridge and Approaches		Phase of Investigation 2.5
Consultant Company O'Brien & Gere Engineers, Inc. (OBG)		
Consultant Contact Mark Walter		
Contact (Area Code) Telephone Number 414-837-3563		
Contact Email Address Mark.Walter@obg.com		
Consultant ID for this Site 69862 (2259.122)		
Generation Date (m/d/yyyy) 7/19/2018		
Comments, special instructions for pickup or site access OBG requests Veolia to pick up, transport, and properly manage the investigative wastes listed below from OBG's Warehouse that is located where indicated on the attached map.		

Waste Description – describe containers of similar size and contents in one row. Insert additional rows as needed.
Number and Label Each Container.

Container ID Number	**Container Size and Type**	**Estimated Volume of Waste**	**Source: Tank, Well, Boring**	**Contents: Soil, Water, Other (Describe)**
Example: 1, 4, 5, 6, 7, 18, 22, 23	Example: 30 gallon metal drum	Example: 8 drums x 30 gal = 240 gallons	Example: monitoring wells # MW3, MW4, and MW7	Example: wash water, alconox
1	5 gallon bucket	1 buckets x 5 gal = 5 gallons	Phase 2.5 soil borings	Soil

Total Number of Containers to be picked up: 1

Container Location: Attach map or site sketch to Email

Analytical Results: Attach analytical results to Email

Email one copy of this form to each of the following:

- DOT Hazardous Materials Specialist
- Regional Environmental or Hazardous Materials Coordinator
- Hazardous Waste Contractor

Include a copy of this form as the final appendix in the report for this site.

Attachment 6 – Draft Special Provisions for the Management of PCB-Contaminated Soil

Excavation, Hauling, and Disposal of Polychlorinated Biphenyls (PCB) Contaminated Soil, Item SPV.XXXX.XX.

A Description

A.1 General

This special provision describes excavating, loading, hauling, and disposing of PCB contaminated soil at a WDNR-licensed landfill facility. The closest WDNR-licensed landfill facilities are:

Advanced Disposal Services Hickory Meadows
W3105 Schneider Road
Hilbert, WI 54129
(920) 853-8553

Waste Management Ridgeview Security Landfill
6207 Hempton Lake Road
Whitelaw, WI 54247
(866) 909-4458

Perform this work in accordance to standard spec 205 and with pertinent parts of Chapters NR 700-754 of the Wisconsin Administrative Code, as supplemented herein. Per NR 718.07, a solid waste collection and transportation service-operating license is required under NR 502.06 for each vehicle used to transport contaminated soil.

A.2 Notice to the Contractor – Contaminated Soil Location

The department and others completed testing for soil contamination for locations within this project where excavation is required. Testing indicated that soil contaminated with PCB is present at the following location where excavation is required, as shown on the plans:

1. Pennsylvania Avenue from STA 103+35 to 103+75, from project limits left to project limits right, from 0’ to 2’ bgs. Soil contains PCB and must be managed. Approximately 94 cubic yards (approximately 160 tons at an estimated 1.7 tons per cubic yard) of soil will be excavated from this location.
2. Pennsylvania Avenue from STA 107+00 to 107+35, from project limits left to project limits right, from 0’ to 2’ bgs. Soil contains PCB and must be managed. Approximately 45 cubic yards (approximately 77 tons at an estimated 1.7 tons per cubic yard) of soil will be excavated from this location.

Directly load soil excavated by the project at the above location into trucks that will transport the soil to a WDNR-licensed landfill facility for disposal.

If contaminated soils are encountered elsewhere on the project, terminate excavation activities in the area and notify the engineer. If dewatering is required at the above locations, conduct the dewatering in accordance with Section C below.

The excavation management plan for this project has been designed to minimize the offsite treatment or disposal of contaminated material. The excavation management plan, including these special provisions, has been developed in cooperation with the WDNR. The WDNR concurrence letter is on file at the Wisconsin Department of Transportation. For further information regarding previous investigation and remediation activities near this project contact:

Name:	Ms. Kathie VanPrice WisDOT Northeast Region Hazardous Materials Coordinator
Address:	944 Vanderperren Way, Green Bay, WI 54324
Phone:	920-492-7175
Fax:	920-366-5674
E-mail:	Kathie.VanPrice@dot.wi.gov

A.3 Coordination

Coordinate work under this contract with the environment consultant:

Consultant:	O'Brien & Gere Engineers, Inc. (OBG)
Address:	234 W. Florida Street, Fifth Floor, Milwaukee, WI 53204
Contact:	Mr. Mark Walter, PE
Phone:	414-837-3563
Fax:	414-837-3608
E-mail:	Mark.Walter@obg.com

The role of the environmental consultant will be limited to:

1. Determining the location and limits of contaminated soil to be excavated based on soil analytical results from previous investigations, visual observations, and field screening of soil that is excavated;
2. Identifying contaminated soils to be hauled to the landfill facility;
3. Documenting that activities associated with management of contaminated soil are in conformance with the contaminated soil management methods for this project as specified herein; and
4. Obtaining the necessary approvals for disposal of contaminated soil from the landfill facility.

Provide at least a 14-calendar day notice of the preconstruction conference date to the environmental consultant. At the preconstruction conference, provide a schedule for all excavation activities in the areas of contamination to the environmental consultant. Also notify the environmental consultant at least three (3) calendar days prior to commencement of excavation activities in the contaminated areas.

Coordinate with the environmental consultant to ensure that the environmental consultant is present during excavation activities in the contaminated areas. Perform excavation work in each of the contaminated areas on a continuous basis until excavation work is completed.

Identify the WDNR-licensed landfill facility that will be used for disposal of contaminated soils, and provide this information to the environmental consultant no later than 30 calendar

days prior to commencement of excavation activities in the contaminated areas or at the preconstruction conference, whichever comes first. The environmental consultant will be responsible for obtaining the necessary approvals for disposal of contaminated soils from the landfill facility. Do not transport contaminated soil offsite without prior approval from the environmental consultant.

A.4 Health and Safety Requirements
Supplement standard spec 107.1 with the following:

During excavation and dewatering activities, expect to encounter soil contaminated with PCBs. Site workers taking part in activities that will result in the reasonable probability of exposure to safety and health hazards associated with hazardous materials shall have completed health and safety training that meets the Occupational Safety and Health Administration (OSHA) requirements for Hazardous Waste Operations and Emergency Response (HAZWOPER), as provided in 29 CFR 1910.120.

Prepare a site-specific Health and Safety Plan, and develop, delineate and enforce the health and safety exclusion zones for each contaminated site location as required by 29 CFR 1910.120. Submit the site-specific health and safety plan and written documentation of up-to-date OSHA training to the engineer prior to the start of work.

B (Vacant)

C Construction
Supplement standard spec 205.3 with the following:

Control operations in the contaminated areas to minimize the quantity of contaminated soil excavated.

The environmental consultant will periodically monitor soil excavated from the contaminated areas. The environmental consultant will evaluate excavated soil based on field screening results, visual observations, and analytical results from previous environmental investigations. Assist the environmental consultant in collecting soil samples for evaluation using excavation equipment. The soil sampling frequency shall be a maximum of one sample for every 15 cubic yards excavated.

Directly load and haul soils designated by the environmental consultant for offsite disposal to the WDNR-licensed landfill facility. Use loading and hauling practices that are appropriate to prevent any spills or releases of PCB-contaminated soils or residues. Prior to transport, sufficiently dewater soils designated for off-site disposal so as not to contain free liquids.

If dewatering is required in areas of known contamination, water generated from dewatering activities will likely contain PCB. Such water may, with approval of the local wastewater treatment utility, be discharged to the sanitary sewer or at the treatment facility directly as follows:

Meet all applicable requirements, including the control of suspended solids. Perform all necessary monitoring to document compliance with requirements. Furnish, install, operate, maintain, disassemble, and remove treatment equipment necessary to comply with requirements.

Ensure continuous dewatering and excavation safety at all times. Provide, operate, and maintain adequate pumping equipment and drainage and disposal facilities.

Notify the engineer of any dewatering activities, and obtain any permits necessary to discharge water. Provide copies of such permits to the engineer. Meet any requirements and pay any costs for obtaining and complying with such permit use. Follow all applicable legislative statutes, judiciary decisions, and regulations of the State of Wisconsin.

Costs associated with excavation dewatering in the contaminated areas are considered incidental to this pay item. The Wisconsin Department of Transportation will be the generator of regulated solid waste from this construction project.

D Measurement

The department will measure Excavation, Hauling, and Disposal of PCB Contaminated Soil in tons of contaminated soil accepted by the WDNR-licensed landfill facility as documented by weight tickets generated by the landfill facility.

E Payment

The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.XXXX.XX	Excavation, Hauling, and Disposal of PCB Contaminated Soil	Ton

Payment is full compensation for excavating, segregating, loading, hauling, and disposal of contaminated soil; obtaining solid waste collection and transportation service operating licenses; assisting in the collection of soil samples for field evaluation; and dewatering of soils prior to transport, if necessary. Management and disposal of contaminated water is considered incidental to other bid items in the contract. The department will not pay directly for management and disposal/treatment of contaminated water.

Attachment 7 – Draft Special Provisions for the Management of Petroleum-Contaminated Soil

1. Excavation, Hauling, and Disposal of Petroleum Contaminated Soil, Item 205.0501.S.

A Description

A.1 General

This special provision describes excavating, loading, hauling, and disposing of petroleum contaminated soil at a WDNR-licensed landfill facility. The closest WDNR-licensed landfill facilities are:

Advanced Disposal Services Hickory Meadows
W3105 Schneider Road
Hilbert, WI 54129
(920) 853-8553

Waste Management Ridgeview Security Landfill
6207 Hempton Lake Road
Whitelaw, WI 54247
(866) 909-4458

Perform this work in accordance to standard spec 205 and with pertinent parts of Chapters NR 700-754 of the Wisconsin Administrative Code, as supplemented herein. Per NR 718.07, a solid waste collection and transportation service-operating license is required under NR 502.06 for each vehicle used to transport contaminated soil.

A.2 Notice to the Contractor – Contaminated Soil Location(s)

The department and others completed testing for soil and groundwater contamination for locations within this project where excavation is required. Testing indicated that soil contaminated with petroleum volatile organic compounds (PVOCs) is present at the following locations where excavation is required, as shown on the plans:

1. Pennsylvania Avenue from STA 108+00 to 108+50, from reference line to project limits right, from 4’ to 10’ bgs. Soil contains PVOCs and must be managed. Approximately 1 cubic yard (approximately 1.7 tons at an estimated 1.7 tons per cubic yard) of soil will be excavated from this location.

Directly load soil excavated by the project at the above location into trucks that will transport the soil to a WDNR-licensed landfill facility for disposal.

If contaminated soils are encountered elsewhere on the project, terminate excavation activities in the area and notify the engineer. If dewatering is required at the above locations, conduct the dewatering in accordance with Section C below.

The excavation management plan for this project has been designed to minimize the offsite treatment or disposal of contaminated material. The excavation management plan, including these special provisions, has been developed in cooperation with the WDNR. The WDNR concurrence letter is on file at the Wisconsin Department of Transportation. For further

information regarding previous investigation and remediation activities near this project contact:

Name:	Ms. Kathie VanPrice WisDOT Northeast Region Hazardous Materials Coordinator
Address:	944 Vanderperren Way, Green Bay, WI 54324
Phone:	920-492-7175
Fax:	920-366-5674
E-mail:	Kathie.VanPrice@dot.wi.gov

A.3 Coordination

Coordinate work under this contract with the environment consultant:

Consultant:	O'Brien & Gere Engineers, Inc. (OBG)
Address:	234 W. Florida Street, Fifth Floor, Milwaukee, WI 53204
Contact:	Mr. Mark Walter, PE
Phone:	414-837-3563
Fax:	414-837-3608
E-mail:	Mark.Walter@obg.com

The role of the environmental consultant will be limited to:

1. Determining the location and limits of contaminated soil to be excavated based on soil analytical results from previous investigations, visual observations, and field screening of soil that is excavated;
2. Identifying contaminated soils to be hauled to the landfill facility;
3. Documenting that activities associated with management of contaminated soil are in conformance with the contaminated soil management methods for this project as specified herein; and
4. Obtaining the necessary approvals for disposal of contaminated soil from the landfill facility.

Provide at least a 14-calendar day notice of the preconstruction conference date to the environmental consultant. At the preconstruction conference, provide a schedule for all excavation activities in the areas of contamination to the environmental consultant. Also notify the environmental consultant at least three (3) calendar days prior to commencement of excavation activities in the contaminated areas.

Coordinate with the environmental consultant to ensure that the environmental consultant is present during excavation activities in the contaminated areas. Perform excavation work in each of the contaminated areas on a continuous basis until excavation work is completed.

Identify the WDNR-licensed landfill facility that will be used for bioremediation and/or disposal of contaminated soils, and provide this information to the environmental consultant no later than 30 calendar days prior to commencement of excavation activities in the contaminated areas or at the preconstruction conference, whichever comes first. The environmental consultant will be responsible for obtaining the necessary approvals for

disposal of contaminated soils from the landfill facility. Do not transport contaminated soil offsite without prior approval from the environmental consultant.

A.4 Health and Safety Requirements
Add the following to standard spec 107.1:

During excavation activities, expect to encounter soil contaminated with PVOCs and arsenic. Site workers taking part in activities that will result in the reasonable probability of exposure to safety and health hazards associated with hazardous materials shall have completed health and safety training that meets the Occupational Safety and Health Administration (OSHA) requirements for Hazardous Waste Operations and Emergency Response (HAZWOPER), as provided in 29 CFR 1910.120.

Prepare a site-specific Health and Safety Plan, and develop, delineate and enforce the health and safety exclusion zones for each contaminated site location as required by 29 CFR 1910.120. Submit the site-specific health and safety plan and written documentation of up-to-date OSHA training to the engineer prior to the start of work.

B (Vacant)

C Construction
Add the following to standard spec 205.3:

Control operations in the contaminated areas to minimize the quantity of contaminated soil excavated.

The environmental consultant will periodically evaluate soil excavated from the contaminated areas to determine if the soil will require offsite bioremediation and/or disposal. The environmental consultant will evaluate excavated soil based on field screening results, visual observations, and soil analytical results from previous environmental investigations. Assist the environmental consultant in collecting soil samples for evaluation using excavation equipment. The sampling frequency shall be a maximum of one sample for every 15 cubic yards excavated.

Directly load and haul soils designated by the environmental consultant for offsite bioremediation and/or disposal to the WDNR-licensed landfill facility. Use loading and hauling practices that are appropriate to prevent any spills or releases of petroleum-contaminated soils or residues. Prior to transport, sufficiently dewater soils designated for off-site disposal so as not to contain free liquids.

If dewatering is required in areas of known contamination, water generated from dewatering activities will likely contain PVOCs. Such water may, with approval of the local wastewater treatment utility, be discharged to the sanitary sewer or at the treatment facility directly as follows:

Meet all applicable requirements, including the control of suspended solids. Perform all necessary monitoring to document compliance with requirements. Furnish, install, operate,

maintain, disassemble, and remove treatment equipment necessary to comply with requirements.

Ensure continuous dewatering and excavation safety at all times. Provide, operate, and maintain adequate pumping equipment and drainage and disposal facilities.

Notify the engineer of any dewatering activities, and obtain any permits necessary to discharge water. Provide copies of such permits to the engineer. Meet any requirements and pay any costs for obtaining and complying with such permit use. Follow all applicable legislative statutes, judiciary decisions, and regulations of the State of Wisconsin.

Costs associated with excavation dewatering in the contaminated areas are considered incidental to this pay item. The Wisconsin Department of Transportation will be the generator of regulated solid waste from this construction project.

D Measurement

The department will measure Excavation, Hauling, and Disposal of Petroleum Contaminated Soil in tons of contaminated soil, accepted by the WDNR-licensed landfill facility as documented by weight tickets generated by the landfill facility.

E Payment

The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
205.0501.S	Excavation, Hauling, and Disposal of Petroleum Contaminated Soil	Ton

Payment is full compensation for excavating, segregating, loading, hauling, and treatment and/or disposal of contaminated soil; obtaining solid waste collection and transportation service operating licenses; assisting in the collection soil samples for field evaluation; and dewatering of soils prior to transport, if necessary. Management and disposal of contaminated water is considered incidental to other bid items in the contract. The department will not pay directly for management and disposal/treatment of contaminated water.

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