



September 17, 2021

City of Manitowoc  
Attn: Adam Tegen  
Community Development Director  
900 Quay Street  
Manitowoc, WI 54220

SUBJECT: Review of the Site Investigation Report – Site Investigation Incomplete  
Riverpoint District - LGU, North 10<sup>th</sup> Street and Buffalo Street, Manitowoc, WI 54220  
BRRTS #: 02-36-585491

Dear Mr. Tegen:

On August 9, 2021, the Wisconsin Department of Natural Resources (DNR) received the *NR 716 Site Investigation Report* prepared on your behalf by Stantec Consulting Services, Inc. (Stantec). The Report was submitted with a fee for DNR review and response. The submittal of a Site Investigation Report (SIR) is required per Wis. Admin. Code § NR 716.15. Subsequent documentation for PFAS (*Summary of Prior Site Operations* and *PFAS Scoping Statement and Fire Department Response During Explosive Demolition of a Former Grain Elevator*) was requested and received on September 3, 2021 and September 7, 2021, respectively. The three documents will herein collectively be referred to as the Report. The Report was reviewed for compliance with Wis. Admin. Code ch. NR 716.

## Background

A Phase II Environmental Site Assessment (ESA) was submitted to DNR on March 23, 2020, for approximately 21 acres of the land located west of North 11<sup>th</sup> Street, Chicago Street, Buffalo Street, and North 10<sup>th</sup> Street, which is referred to as the Riverpoint District. Refer to *Figure 2, Project Area and Property Identification Numbers*, dated April 21, 2021, for a visual depiction of the Riverpoint District. A Bureau for Remediation & Redevelopment Tracking System (BRRTS) case was opened for the contamination identified in the Phase II ESA; however, the City of Manitowoc Community Development Authority (CDA) has the local government unit (LGU) liability exemption under Wis. Stat. § 292.11(9)(e), so no responsible party letter was issued. The City of Manitowoc has focused on the investigation of the Phase 1 development area of the Riverpoint District to prepare for redevelopment by the CDA and/or private parties. Therefore, the site investigation pertains to the Phase 1 area, which is approximately 7.7 acres of land that is located on the south/southeastern portion of the larger 21 acres of the Riverpoint District, as identified in the attached *Figure 3, Phase 1 River Point Development Certified Survey Map*, dated January 22, 2021. New BRRTS cases may be opened as additional developments occur within this area for land that the CDA does not plan to retain long-term ownership of.

## Review

After reviewing the Report and all case file information submitted to date, the DNR has determined that additional work is necessary to complete the site investigation. The degree and extent of contamination at the site has not been adequately defined and documented with respect to Wis. Admin. Code ch. NR 716. The findings and interpretations by the DNR regarding the incomplete site investigation are summarized below:

### Degree and Extent of Contamination in Soil and Groundwater

The degree and extent of contamination in soil and groundwater is not complete in accordance with Wis. Admin. Code § NR 716.11. The following information are comments from DNR categorized by contaminants in soil and groundwater for the investigation (Refer to *Figure 8, Soil and Groundwater Sample Locations*, dated April 19, 2021, for specific sampling locations):

- Polychlorinated Biphenyls (PCBs) (within the former junkyard area):
  - The investigation for PCBs is not complete. Additional investigation is needed off-site along the northern and eastern property lines to determine if PCBs are impacting off-site properties. The highest concentration of PCBs found on-site is near the property line at SB-89. Deeper samples collected in native soil are below soil residual contaminant levels (RCLs) and groundwater sampling to date has not been confirmed to be impacted.
  - Groundwater needs to be sampled at the existing monitoring well MW-89 to determine if PCBs are impacting groundwater since this location has the highest concentrations of PCBs.
  - Exceedances and delineation for Groundwater Pathway RCLs has not been provided in the report. Exceedances need to be identified on the soil tables (RCL = 9.4 ug/kg) and delineation needs to be added to the soil figure. Delineation needs to include any impacts on off-site properties after additional investigation.
- Polycyclic Aromatic Hydrocarbons (PAHs):
  - Investigation for PAHs is complete. PAHs are found in shallow soil fill across the entire site above Groundwater Pathway and/or Direct Contact RCLs. Deeper samples in native soil are below RCLs and groundwater has not been confirmed to be impacted above enforcement standards (ES). It appears there may be a point source in the SB-80 and SB-122 area within the former junkyard area based on data collected, but it does appear to be contained within the soil fill because the deeper native soil samples are below RCLs.
  - Identify on the soil figure that PAHs are above the Groundwater Pathway, Non-Industrial, and/or Industrial Direct Contact RCLs across the entire site in shallow soil fill. A separate delineation is needed for the SB-80 and SB-122 area since it appears there may be a point source at this location.
- Resource Conservation and Recovery Act (RCRA) Metals:
  - Investigation for metals is not complete. Metals appear to be primarily associated with the shallow soil fill, but there are elevated concentrations of metals (primarily lead and arsenic) along the property lines within the former junkyard area. Additional investigation is needed off-site along the northern and eastern property lines to determine if metals are impacting off-site properties. Deeper samples in native soil are below RCLs.
  - MW-92 has ES exceedances for arsenic (12 & 13 ug/L above ES of 10 ug/L). MW-92 needs to be resampled to ensure concentrations remain stable.
  - Identify on the soil figure that metals are above Groundwater Pathway and/or Direct Contact RCLs across the entire site in shallow soil fill. A separate delineation is needed for metals found in the former junkyard area, including any impacts on off-site properties after additional investigation.

- Volatile Organic Compounds (VOCs):
  - Benzene has been found sporadically at low concentrations above Groundwater Pathway RCLs in the shallow soil fill and does not appear to be impacting groundwater.
  - Further sampling for delineation is needed around SB-112. Groundwater sampling may be needed if deeper sampling is above RCLs.
  - Soil needs to be resampled at SB-77 to determine if trichloroethylene (TCE) can be confirmed. If confirmed, groundwater sampling and off-site sampling may be needed.
  - MW-55, TW-62/MW-62, MW-89, MW-91, MW-122: These monitoring wells had tetrachloroethylene (PCE) or TCE detected above a Preventive Action Limit (PAL) in their initial rounds. Groundwater needs to be resampled to ensure PCE and TCE continues to not be detected in subsequent rounds. MW-62 has benzene above the ES, so resampling at this location is also needed for petroleum VOCs to ensure concentrations remain stable.
  - Sample VOCs at the same proposed off-site sample locations as the metals and PCBs for the additional investigation needed beyond the northern and eastern property lines to determine if VOCs are impacting off-site properties.
  - Delineate areas on the soil figure with more elevated VOCs above Groundwater Pathway and/or Direct Contact RCLs (SB-49 area, SB-80 area, SB-53/54/61/TP-5/TP-7 area, and SB-112 area). Delineation needs to include any impacts on off-site properties after additional investigation.
- Per- and Polyfluoroalkyl Substances (PFAS):
  - Based on the past land uses and PFAS scoping evaluation documentation provided, no source of PFAS has been identified on-site at this time; therefore, the PFAS found in groundwater is from a currently unidentified source.
    - A work plan should be submitted to propose sample locations for an off-site investigation based on existing groundwater conditions and evaluation.
    - An off-site liability exemption for PFAS was requested in the site investigation report. Based on the data collected for the site investigation, evidence is insufficient at this time to indicate there is an off-site source without further sampling. The request for an off-site liability exemption has to be submitted as a stand-alone request with a \$700 review fee using the Off-Site Liability Exemption and Liability Clarification Application (Form 4400-201).
  - In the future, if you plan to manage material from the site, it has to be properly characterized and managed in accordance with Wis. Admin. Code ch. NR 718 with prior DNR approval.

#### Environmental Media Evaluation

In accordance with Wis. Admin. Code § NR 716.07(4) environmental media that could be affected or potentially affected by the contamination needs to be evaluated as part of the site investigation scoping. Based on the scoping evaluation, an investigation in accordance with Wis. Admin. Code § NR 716.11 would need to be conducted. The following information are comments from DNR categorized by media:

- Sediment and Surface Water:
  - PFAS were the only contaminants evaluated in the scoping of the site investigation report. The evaluation should be expanded to include all contaminants of concern based on the data collected for the site. The evaluation should include information on historic discharge pipes, drainageways, and other various potential sources to the waterway based on past land uses. Based on data collected from the site investigation, it is unlikely that sampling for PAHs in sediment could be ruled out.
- Vapor:
  - After additional VOC sampling is completed in soil and groundwater, a vapor intrusion

screening per the criteria for petroleum and chlorinated VOCs in DNR Guidance Document RR-800 needs to be completed to determine if vapor sampling is warranted in off-site buildings.

- As indicated in the site investigation report, there are currently no structures on-site, but any development plan with future buildings will include conservative measures to assess vapor intrusion and implement vapor mitigation into new building construction that can be converted to an active system, if warranted, based on post-construction sub-slab vapor sampling.

## Schedule

The CDA has completed the site investigation work and requested a review of the site investigation report. Since the CDA currently has the local government unit (LGU) liability exemption, the CDA is not required to investigate the site or meet the scheduling deadlines outlined in the Wis. Admin. Code NR 700 rule series. If the land is transferred to anyone other than another exempt LGU, the new owner would have liability as a possessor of the property under Wis. Stat. § 292.11(3) to complete the remaining investigation.

The DNR appreciates your efforts to investigate this site. If you have any questions regarding this letter, please contact me at 920-510-3472 or at [Tauren.Beggs@wisconsin.gov](mailto:Tauren.Beggs@wisconsin.gov).

Sincerely,



Tauren R. Beggs  
Project Manager  
Remediation & Redevelopment Program

## Attachments:

- Figure 2, Project Area and Property Identification Numbers, dated April 21, 2021
- Figure 3, Phase 1 River Point Development Certified Survey Map, dated January 22, 2021
- Figure 8, Soil and Groundwater Sample Locations, dated April 19, 2021

cc: Harris Byers, Stantec Consulting Services, Inc ([Harris.Byers@stantec.com](mailto:Harris.Byers@stantec.com))





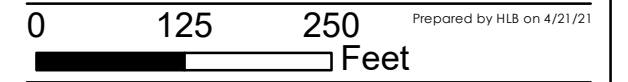
Figure No.

2

Title

**Project Area and Property Identification Numbers**

Client/Project  
 Site Investigation Project Area  
 River Point District  
 City of Manitowoc



**Legend**

Cap Maintenance Area

**Site Definitions**

Site 1 - 200 North 10th Street

Site 2 - 1101 Buffalo Street

Site 3 - 1110 Buffalo Street

Site 4 - 1103 Chicago Street

Site 5 - 1200 Buffalo Street

Site Investigation Project Area

River Point District

Parcel Identification Numbers

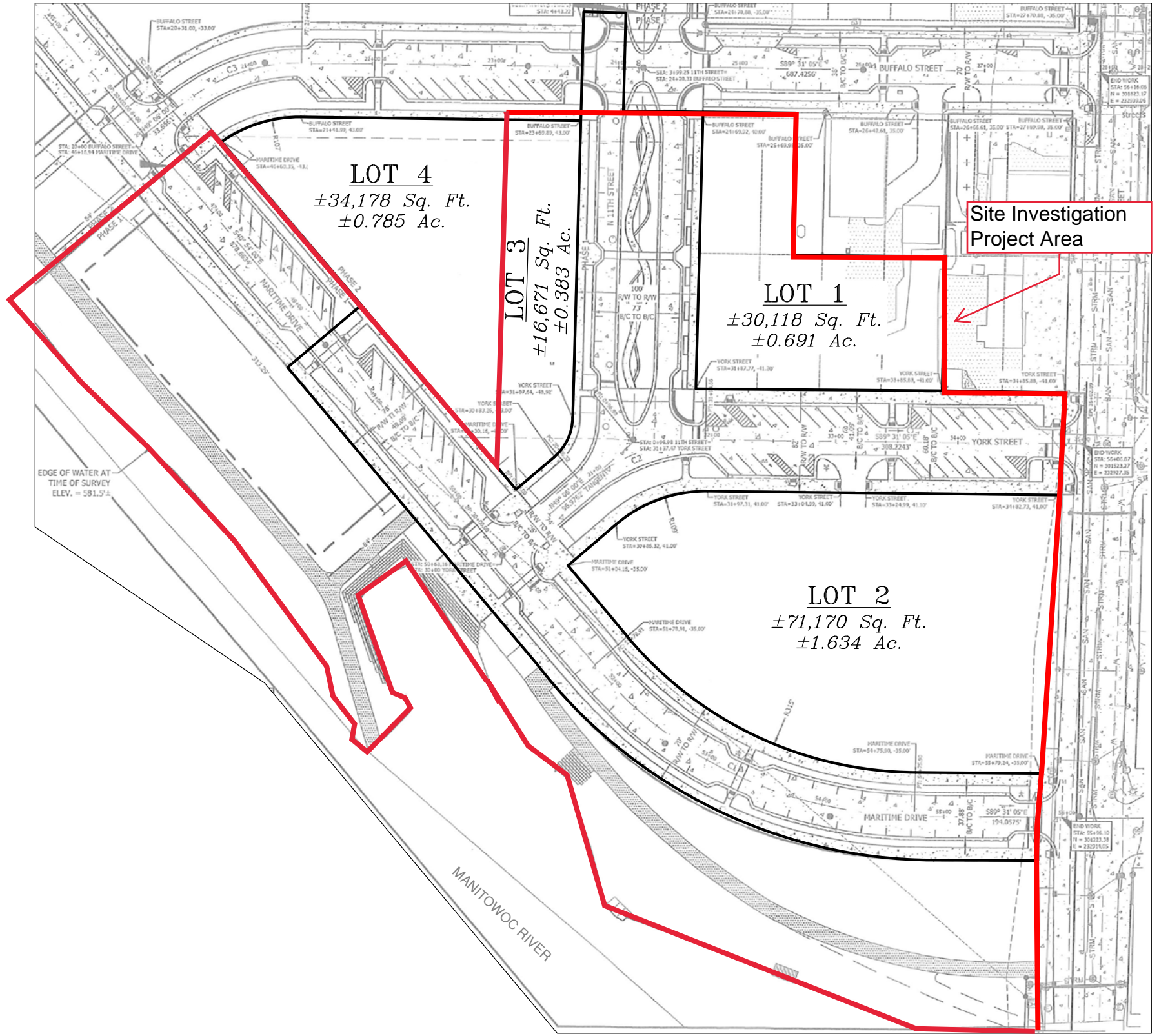


NOTE:  
 1. Coordinate System: NAD 1983 StatePlane Wisconsin South FIPS 4803 Feet  
 2. Orthophotograph: Manitowoc County, 2017





Figure 3 - Phase 1 River Point Development  
Certified Survey Map



NORTH IS REFERENCED TO THE  
MANITOWOC COUNTY COORDINATE  
SYSTEM. (PER THE COUNTY PUBLISHED  
SECTION SUMMARY)

0 25 50 100  
SCALE 1" = 100'

PHASE 1 CERTIFIED SURVEY MAP LAYOUT  
FOR  
RIVER POINT DEVELOPMENT  
LOCATED IN THE CITY OF MANITOWOC, MANITOWOC COUNTY, WISCONSIN



Stantec  
Jacob Woelmer, PE  
11153 Aurora Avenue  
Des Moines, IA 50322-7904

FIELD WORK COMPLETION DATE:	1/22/2021
DRAWN BY:	JAD
JOB NO.:	S356021
CAD FILE:	DWG\
SCALE:	1" = 100'



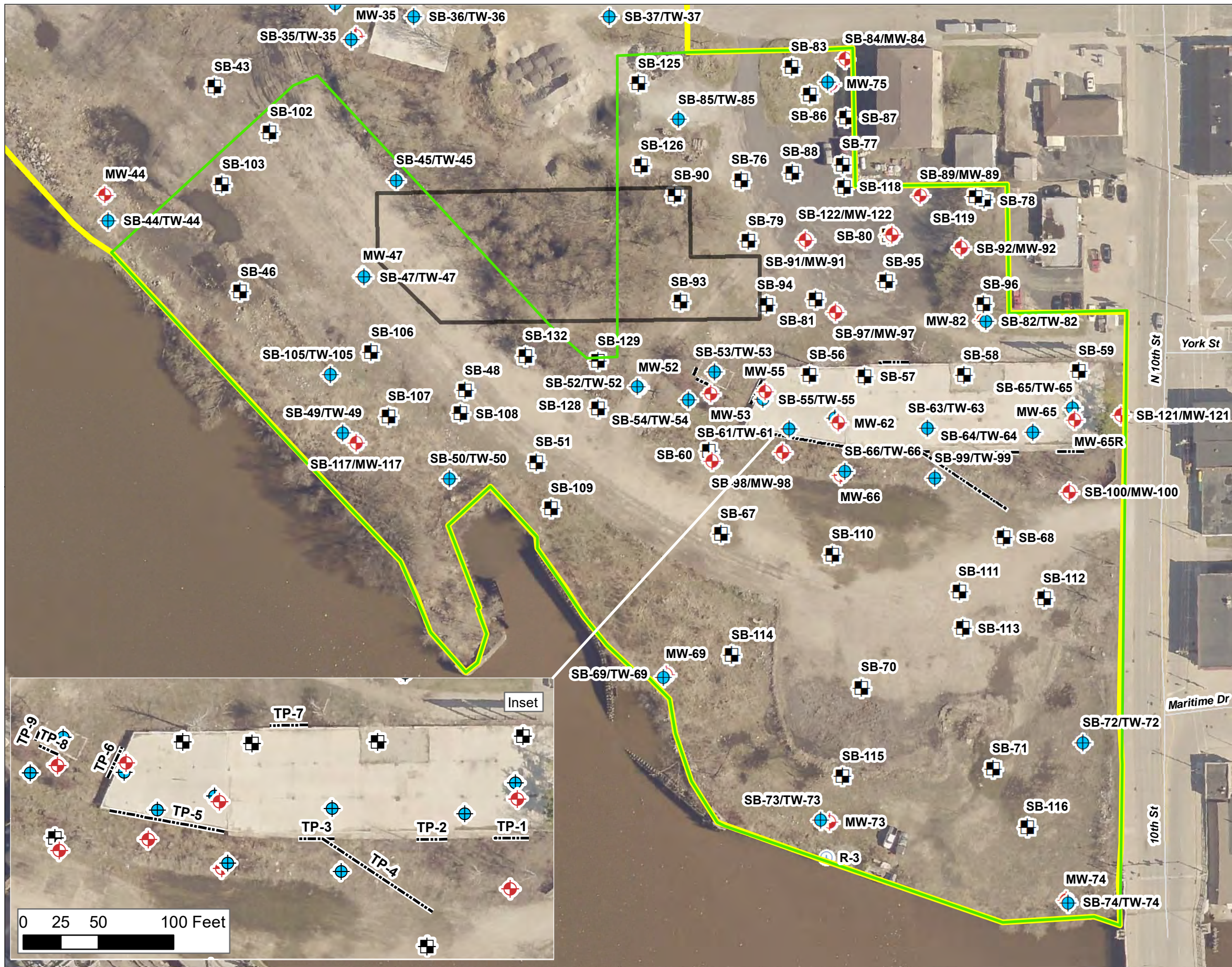
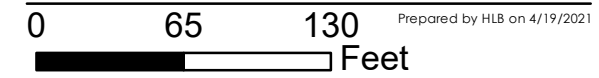


Figure No. **8**  
 Title  
**Soil and Groundwater Sample Locations**

Client/Project  
 Site Investigation Project Area  
 River Point District  
 City of Manitowoc



- Legend**
- Site Investigation Project
  - River Point District
  - Cap Maintenance
  - ◆ Monitoring Well
  - ⊕ River Staff Gauge
  - Soil Boring
  - ⊕ Soil Boring / Temp Well
- Test Pits**
- Test Pits



- Notes**
1. Coordinate System: NAD 1983 StatePlane Wisconsin South FIPS 4803 Feet
  2. Historic Site features illustrated on this figure were digitized from multiple historic maps/sources, including City Assessor files, WDNR files, and Sanborn (R) Fire Insurance Maps. These features are provided for illustration purposes only; Stantec makes no warranty as to the accuracy of these features.
  3. Orthophotograph: Manitowoc County, 2017

