



Interim Measures Work Plan for PCB-Impacted Soil Removal

Former Nodular Industrial Land
Saginaw, Michigan

Revitalizing Auto Communities
Environmental Response Trust

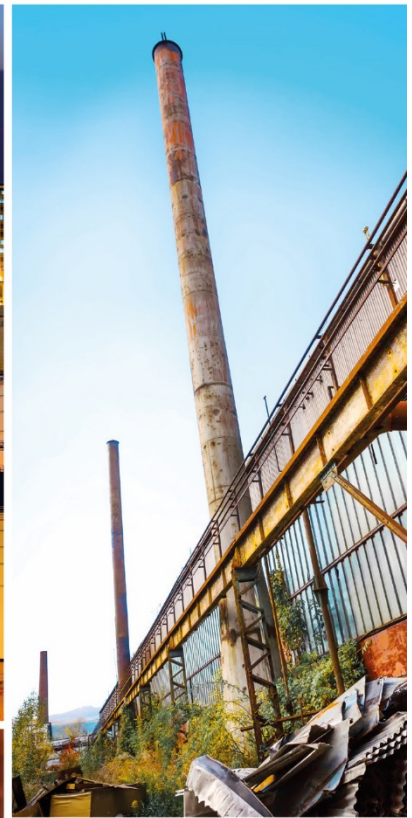




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1. Introduction

This report presents the proposed interim measure work plan (Work Plan) to remove PCB-impacted soils from within a wetland area in Investigative Unit G (IU G) at Revitalizing Auto Communities Environmental Response Trust's (RACER) Former Nodular Industrial Lands (Site) in Saginaw, Michigan. The Site location is presented on Figure 1.1 and the Site Plan is presented on Figure 1.2. The Site is undergoing Resource Conservation and Recovery Act (RCRA) Corrective Action under Administrative Order on Consent RCRA-05-2011-0023.

This Work Plan was prepared in accordance with Title 40 of the Code of Federal Regulations, Part 761 (40 CFR 761) as a notification to EPA of RACER's intent to implement a cleanup of the Site related PCB contamination under the risk based option set forth under 40 CFR 761.61(c).

The remainder of the Work Plan provides the following information:

- Nature of contamination including kinds of materials contaminated
- Procedures used to sample contaminated and adjacent areas and a site map showing PCB concentrations measured in all pre-cleanup characterization samples
- Location and extent of the PCB-impacted area
- Remedial plan for PCB impacts at the site including approach, schedule, and disposal facilities
- Written Certification as required by 40 CFR 761.61(a)(3)(E)

It is RACER's intent that this interim measure be the final active remediation activity for the area and future activities related to this area be limited to deed restrictions to provide for proper institutional controls.

1.1 Background

IU G was formerly the location of the Nodular Iron Plant, but in the early 2000s, the plant was demolished. As part of the General Motors Corporation (GMC) bankruptcy, a portion of IU G (southern half) became the responsibility of RACER. RACER's portion of IU G is approximately 1,300 ft by 1,800 ft, for a total area of approximately 54 acres.

The Description of Current Conditions Report (EMCON, 1995), identified seven areas of interest (AOI) in the vicinity of the proposed excavation area. Two of the AOI's specifically identified the storage of PCBs (AOI-G.8 Former Virgin Oils Storage Pad and AOI-G.1 Former Nodular Iron Plant Oil House RCRA Hazardous Waste Drum Storage Area). These storage areas operated [between](#) 1965 to 1989 and 1966 to 1987, respectively. There is no recorded release of PCBs, however, we expect that the source of PCBs in soil is related to these areas.

More recently, sumps that dewatered the area were turned off in 2012 and as a result surface water drainage has tended to collect in this low lying area and in nearby low lying areas at the southern end of IU G. Over the last decade or so, this ponded water has produced hydric soils and promoted dominance by wetland vegetation. In 2015, a wetland survey of the area, as required by MDEQ to support a proposed development, determined that several small isolated wetlands had formed (Niswander 2015). The wetland survey delineated five isolated wetlands with areas of 0.23, 0.84,



1.08, 3.93, and 7.23 acres for a total of approximately 13.31 acres of wetland. These wetlands are isolated from each other due to access roads and driveways, which apparently preclude hydrologic connections among them. The wetlands may contain a foot or more of water during wetter seasons but tend to dry up completely during dry seasons.

The wetland which will be affected by this project is approximately 7.23 acres total, and is classified as an emergent/scrub-shrub wetland (Figure 2). The proposed excavation area is also within with the 100-year floodplain. The 100-year floodplain elevation is 589.7 feet above mean sea level (ft AMSL) (NGVD29), while the current ground surface elevation in the area of the proposed excavation is approximately 588.5 ft AMSL (NGVD29).

2. Investigation Summary

The following section presents previous investigations, sample results, and evaluations of the proposed excavation area.

2.1 RCRA Facility Investigation

As part of the RCRA Facility Investigation (RFI) conducted by GM prior to bankruptcy, four rounds of sampling were conducted in the proposed excavation area. The four rounds of sampling were conducted in September 1998, December 2001, December 2020, and March 2003. The early rounds of sampling were analyzed for a full list of parameters (SVOCs, VOCs, Metals, PCBs, and general chemistry) and later rounds only analyzed PCBs. The results of PCBs in soil ranged from non-detect to 13.4 mg/kg. The results were summarized in a Phase 1C RFI Report (CRA, March 2007) and are herein included in Figure 2.1. As part of the Phase 1C RFI Report an ecological risk assessment (ERA) was conducted by Exponent (2007) for the entire Nodular Site, including this portion of IU G. As described therein, in 2007, the vegetation in IU G was in the early stages of old field succession. In the original ERA, the biological habitat of IU G was considered too poor to warrant consideration (Exponent 2007). At that time, the very southern edge of IU G, just south of the Nodular Plant footprint, contained “a small, isolated, low-lying area that was periodically wet and supported some wetland vegetation (e.g., cattails, *Typha angustifolia*)” (Exponent 2007). However, the ERA stated that this low-lying area was nonetheless poor terrestrial habitat that did not support aquatic habitat. Thus, this area was not considered in the Exponent ERA.

2.2 2015 Additional Investigation to Support RCRA Corrective Action

In 2015, GHD conducted additional delineation of PCBs in soil to assist in developing and evaluating TSCA compliant remediation alternatives, including defining the limits of a possible PCB notice and restriction area. The work was completed in two phases. The scope of work for Phase 1 was summarized in Conestoga-Rovers & Associates Inc.’s (now GHD) February 27, 2015 letter to EPA, which was approved by email on March 2, 2015. The Phase 1 results were submitted to EPA on May 8, 2015. Based on the results of the Phase 1 work, the Phase 2 scope of work was proposed in a July 15, 2015 email to EPA which was approved by email on July 30, 2015. The Phase 2 results were submitted to EPA on February 15, 2017. With the additional investigation, PCB concentrations



in soil have been delineated to 1 mg/kg vertically and horizontally. The results are presented on Figure 2.1.

2.3 Wetland Ecological Evaluation

As noted above, the 2007 ERA did not consider potential ecological risks in this area because highly disturbed, abandoned industrial uplands have minimal ecological value. However, wetlands, even mediocre and low quality wetlands, are typically accorded more public protection than uplands. Consequently, since some of IU G has transitioned to wetlands, GHD on behalf of RACER, prepared a streamlined ERA (GHD, January 2019) to determine whether acute ecological impacts are likely.

The streamlined ERA concluded that significant ecological risks are unlikely to occur in the newly formed wetlands. In response, due to the potential for small ecological risks associated with PCBs in shallow soil, EPA requested that shallow soil be removed and disposed of off-Site.

3. Proposed PCB-Impacted Soil Removal

The proposed removal of PCB-impacted soil <50 ppm (highest PCB concentration in soil of 11.2 ppm) from a small area in IU G will consist of:

- Excavating the proposed area to a depth of 1-ft; stockpile PCB-impacted soil on a polyvinyl chloride (PVC) liner; stabilize, as necessary, to meet waste facility requirements (i.e., paint filter test); load; and transport for off-Site disposal.
- Backfill excavation with clean soil from on-Site.
- Restoration including broadcasting wetland seed over excavation area.

3.1 Scope of Work and Schedule

The following sections describe the interim measure activities related to on-Site work to be conducted under this Work Plan.

3.1.1 Preparation of Health and Safety Plan

To ensure that all on-Site work is completed safely, a Site-specific Health and Safety Plan (HASP) has already been prepared for the Site by GHD for GHD's personnel. The selected contractor(s) will prepare a HASP, including identifying a Site health and safety officer and job safety analysis (JSA) for its personnel for the soil removal activities. The hazard analysis will identify the potential hazards, evaluate the level of personal protective equipment that will be used during the cleanup activities, and describe the personnel decontamination procedures required to control any potential personal exposures during implementation of this Work Plan.

The contractor's HASP will be prepared and implemented consistent with Occupational Safety and Health Administration (OSHA) 29 CFR 1910.120.



3.1.2 Contractor Procurement

One or more qualified, OSHA 29 CFR 1910.120 trained contractors will be procured for removal, stockpiling, loading, transportation, and disposal of the soil. The division of responsibilities, if any, will be determined through a competitive bidding process.

3.1.3 Permitting

All applicable permits will be obtained before conducting the work. An EGLE Water Resources Division Permit (Part 303, Wetland Protection and Part 31, Water Resources Protection) has been obtained and a City of Saginaw Floodplain permit is in the process of being obtained.

3.1.4 Mobilization/Site Preparation

Upon mobilization of the contractor to the Site, the contractor will establish security controls and designate work zones (exclusion zone, contamination reduction zone, and support zone) to minimize tracking impacted soils. The contractor will install a temporary orange safety fence or caution tape, with warning signs, as necessary to define the work zones.

3.1.5 Soil Removal and Stockpiling Activities

Removal of the PCB-impacted soil <50 ppm (highest PCB concentration in soil of 11.2 ppm) will be completed as follows:

- Construct a competent working surface to access the excavation area (i.e., track mats, etc.).
- Install silt fencing around the proposed excavation area to minimize erosion potential.
- Removal of the PCB-impacted soil. The proposed excavation area (60 ft x 20 ft) will be marked out by a surveyor prior to initiating removal of PCB-impacted soils. The excavation will be to a depth of 1-ft.
- PCB-impacted soils removed may be stockpiled on a 15 millimeter (mm) PVC liner to allow the soils to be stabilized sufficiently to pass the paint filter test. Once the soil is sufficiently stabilized it will be loaded and transported to the disposal facility.

3.1.6 Proposed Sampling

3.1.6.1 Soil Characterization

One sample from the proposed excavation area will be collected via hand auger and analyzed for TCLP VOCs, TCLP SVOCs, TCLP RCRA Metals, and other parameters if required by the disposal facility to complete the waste profile.

3.1.6.2 Soil Verification Sampling

No soil verification sampling is proposed since ecological risks to benthic invertebrates are limited to the top 6-inches of soil and existing results adequately delineate the area.



3.1.7 Soil Transportation and off-Site Disposal

Once stabilized the soil impacted with PCBs < 50 ppm are proposed to be disposed at one of the following Subtitle D disposal facility:

Peoples Landfill – Birch Run (Waste Management)
4143 Rathburn Road, Birch Run, MI 48415
License No. 9480

Brent Run Landfill
8335 Vienna Road, Montrose, MI 48457
License No. 9508

Whitefeather Landfill (Republic Services)
2401 E Whitefeather Road, Pinconning, MI 48650
License No. 9578

If a disposal facility is proposed other than the facility listed above, details for the disposal facility will be provided to EPA for review and approval.

Prior to leaving the Site, the haul trucks and/or roll off boxes will be secured with tarps, and will be cleaned to avoid tracking material off-Site. Manifests will be prepared and will accompany the loads in accordance with 40 CFR 761 Subpart K PCB Waste Disposal Records and Reports.

3.1.8 Decontamination

Decontamination will be required for equipment that potentially comes in contact with PCB-impacted soil. This will include the excavator and may include roll-off boxes, haul truck beds, and small equipment.

Decontamination will be conducted in accordance with 40 CFR 761.79(c)(2) by swabbing surfaces that have contacted PCBs with a solvent or completing a double wash/rinse. Decontamination materials will be solidified and disposed of at Peoples Landfill.

3.1.9 Site Restoration

Once the horizontal and vertical limits of the excavation have been confirmed, the excavation will be backfilled with clean material from on-Site. Wetland seed will be broadcast over the disturbed area of the excavation. Other areas of the Site where soils were exposed will also be seeded to minimize erosion.

3.1.10 Demobilization

Once the work is completed, the contractor will remove any temporary fencing, temporary structures, equipment, and other materials and supplies brought onto the Site for the interim measure activities. Any materials coming in contact with PCB impacted soil will either be decontaminated in accordance with Section 3.1.8 or disposed of at People's Landfill.



4. Deed Restrictions

With the extent of PCBs above 1 mg/kg and below 10 mg/kg defined, RACER proposes to place a notice on the property's deed identifying the presence of PCB remediation waste in this area pursuant to Part 761.61(a)(8)(i)(A) of Title 40 of the Code of Federal Regulations (40 CFR 761.61(a)(8)(i)(A)) and place a deed restriction limiting use of this area to low occupancy as defined pursuant to 40 CFR Part 761.3. See Appendix A for an exhibit that has been drafted for the restrictive covenant which shows the PCB remediation waste and low occupancy area.

5. Reporting/Document Preparation

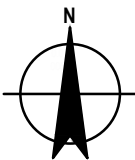
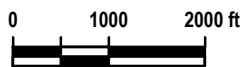
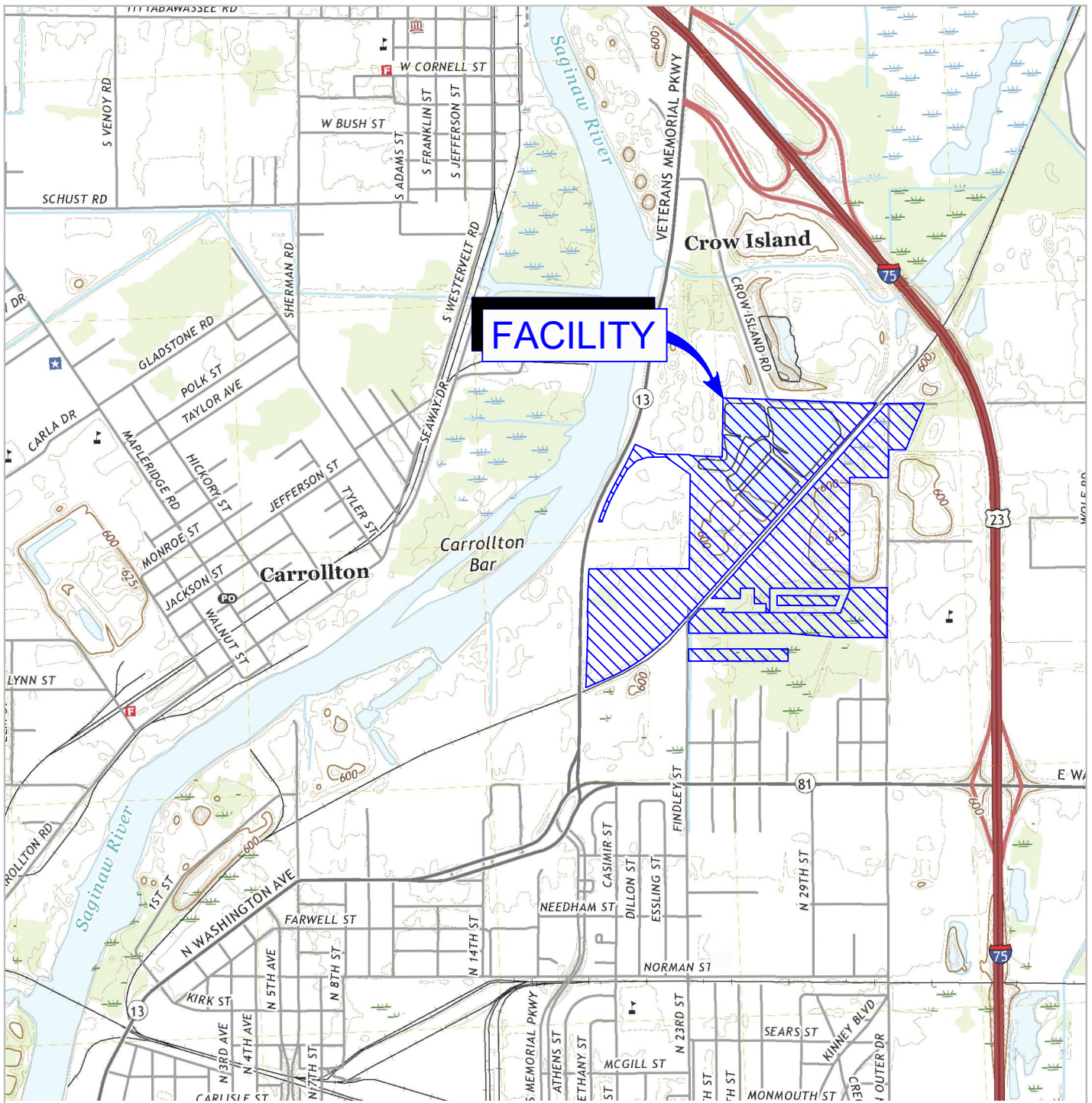
Upon the completion of this Work Plan, a completion report will be prepared to present a summary of the interim measure removal. The report will include a summary of the work completed, a summary of field observations, quantities of materials removed, and certificates of disposal.

6. Certification

The certification statement required under 40 CFR 761.61(a)(3)(E) is provided in Appendix B.

7. Schedule

A contractor is being procured to complete the work and applicable permits are being obtained. The work will be initiated as soon as practicable but during a time of the year with suitable, dry weather conditions.

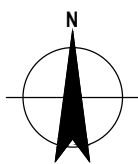
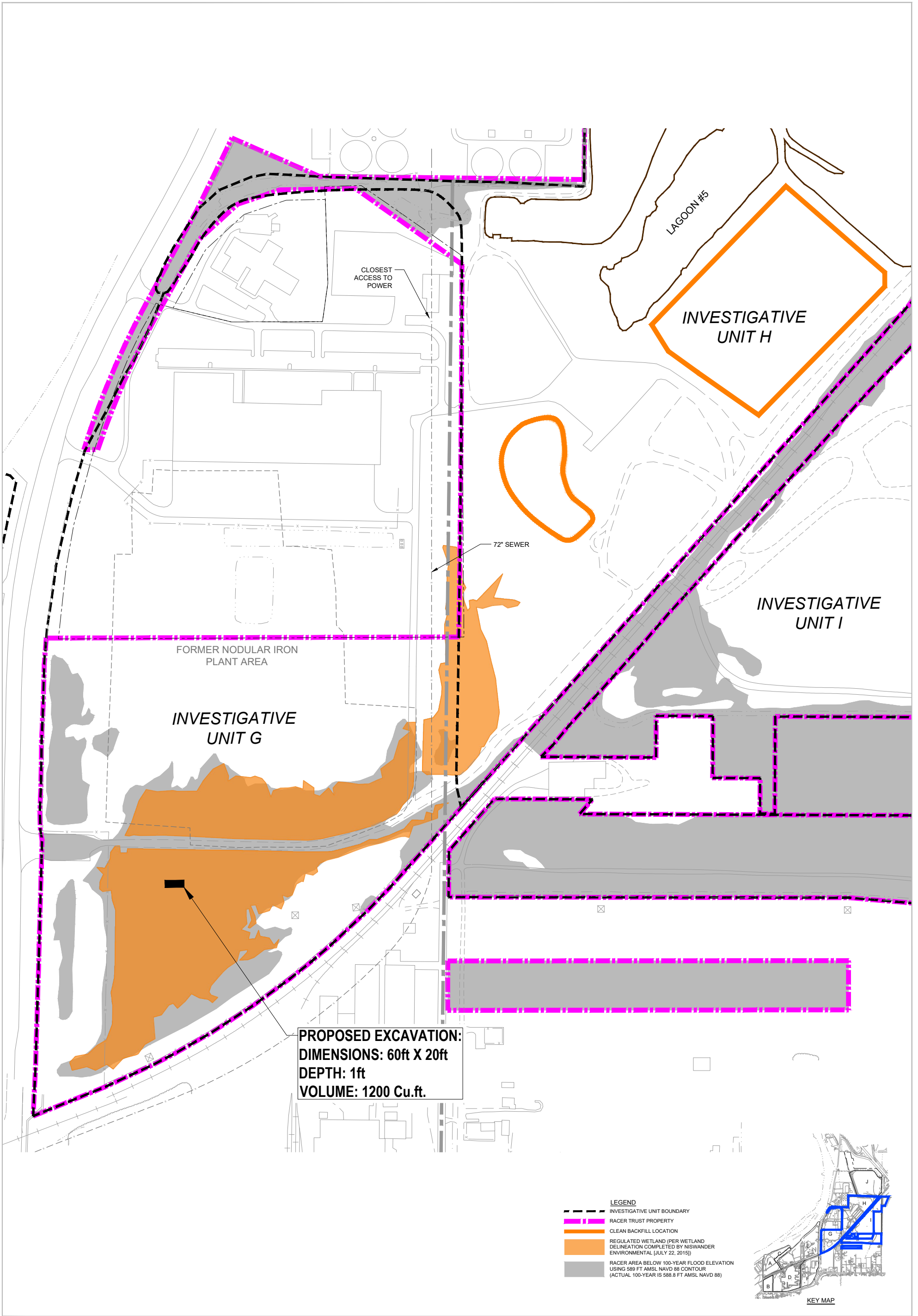


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SAGINAW, MICHIGAN

Project No. 11208041
Date July 2020

SITE LOCATION MAP

FIGURE 1.1

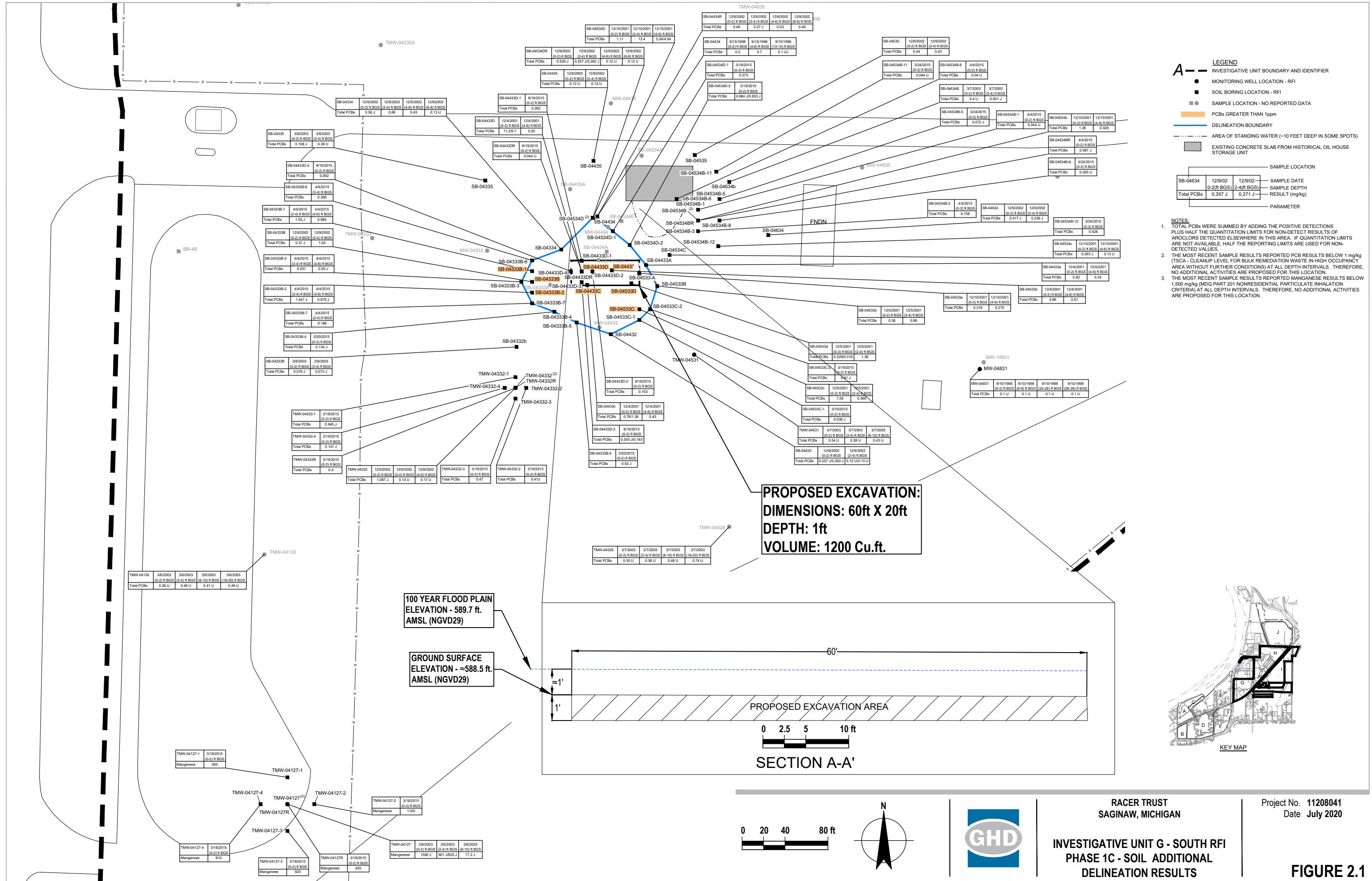


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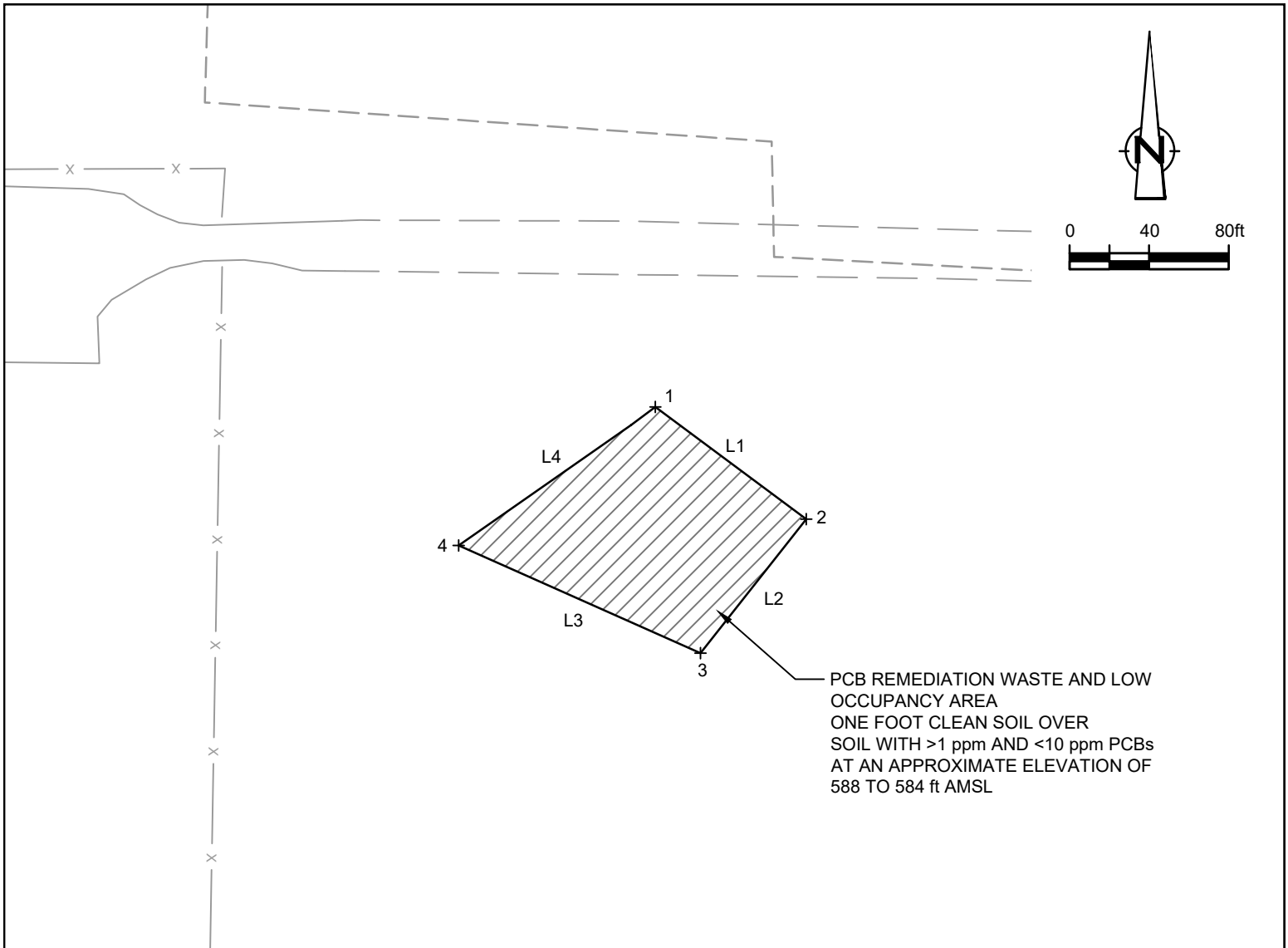
SITE PLAN

FIGURE 1.2

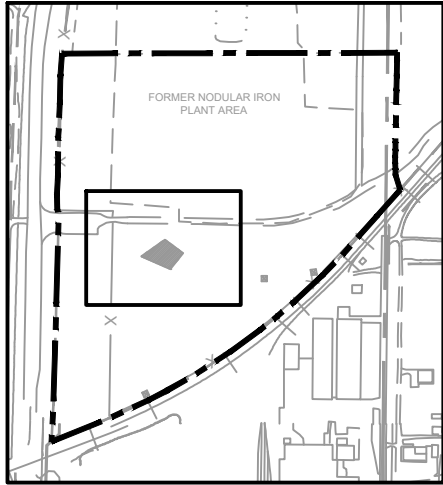


Appendices

Appendix A
Draft Exhibit for the Restrictive Covenant –
Low Level PCB Impacted Area



1	X = 13244588.2394, Y = 713414.4580
L1	S 53d22'31" E @ 94.35
2	X = 13244663.9620, Y = 713358.1708
L2	S 38d18'40" W @ 85.66
3	X = 13244610.8616, Y = 713290.9608
L3	N 66d0'7" W @ 132.78
4	X = 13244489.5565, Y = 713344.9646
L4	N 54d50'47" E @ 120.70



KEY MAP
 SCALE: 1" = 800'

- LEGEND**
- PCB REMEDIATION WASTE/LOW OCCUPANCY AREA AS DEFINED IN 40 CFR 761.61
 - APPROXIMATE PROPERTY BOUNDARY



Exhibit

NOTE:
 MICHIGAN SOUTH STATE PLANE COORDINATE SYSTEM
 NAD 83, IN U.S. INTERNATIONAL FEET.

Appendix B

Written Certification



As required by 40 CFR761.61(a)(3)(i)(E), I certify that all sampling plans, sample collection procedures, sample preparation procedures, extraction procedures, and instrumental/chemical analysis procedures used to assess or characterize the PCB contamination at the Site, are herein provided on CD for the RACER Former Nodular Industrial Land Site at 2100 Veterans Memorial Parkway, Saginaw, Michigan, for U.S. EPA inspection.

David Favre

July 10, 2020

Owner Representative

Date

The following documents are included on this CD to comply with the certification that is required by 40 CFR Part 761.61,

- RFI Work Plan – Volume I (EMCON, June 1998)
- RFI Work Plan – Volume II (EMCON, June 1998)
- RFI – Phase 1C Report – Revised (CRA, March 2007)
- Additional Delineation of PCB and Manganese Impacts - Letter (CRA, February 2015)
- Additional Delineation of PCB and Manganese Impacts – Memorandum (CRA, May 2015)
- Additional Delineation of PCB and Manganese Impacts – Memorandum (GHD, February 2017)
- Ecological Screening Assessment for Isolated Wetlands Recently Formed in IU G (GHD, January 2019)



about GHD

GHD is one of the world's leading professional services companies operating in the global markets of water, energy and resources, environment, property and buildings, and transportation. We provide engineering, environmental, and construction services to private and public sector clients.

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