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July 20, 2021

AECOM Project No.
60662292

WDNR BRRTS No.
02-38-587281

Mr. David Neste
Wisconsin Department of Natural Resources
Oshkosh Service Center
625 East Cty Y, Suite 700
Oshkosh, WI 54901

**Site Investigation Work Plan
Fincantieri Marinette Marine Facility
Marinette, Wisconsin**

Dear Mr. Neste,

On behalf of Fincantieri Marinette Marine, LLC (FMM), AECOM Technical Services, Inc. (AECOM) is providing the Wisconsin Department of Natural Resources (WDNR) this work plan for phased environmental site investigation (SI) activities at FMM located at 1600 Ely Street in Marinette, Marinette County Wisconsin (Subject Property).

This work plan is provided in response to the WDNR's "Responsible Party" letter dated March 9, 2021, and in general accordance with Wisconsin Administrative Code (WAC) Chapter NR 716.09 Site Investigation Work Plan requirements.

Involved Parties

Owner:

Fincantieri Marinette Marine, LLC (FMM)
1600 Ely Street
Marinette, WI 54143
Mr. Thomas Carow, Environmental Safety and Health
Director
(920) 883-1322

Consultant:

AECOM Technical Services, Inc. (AECOM)
558 N. Main Street
Oshkosh, WI 54901
Mr. Andrew Mott, Senior Project Manager
(920) 236-6713

Drilling Subcontractor:

On-site Environmental Services, Inc. (On-site)
P.O Box 280
Sun Prairie, Wisconsin, 53590
(608) 837-8992

Laboratories:

Vista Analytical Laboratory (Vista)
1104 Windfield Way
El Dorado Hills, California 95762
(916) 673-1520
WDNR Lab Certification 998036160

Pace Analytical (Pace)
1241 Bellevue Street #9
Green Bay, Wisconsin
(920) 469-2436
WDNR Lab Certification 405132750

Site Description

The Subject Property is in the NE 1/4 of the SE 1/4 of Section 06 in Township 30 North, Range 24 East. The Wisconsin Transverse Mercator (WTM) central location point is 707228.73726°, 516493.37992°. The parcel consists of approximately 51.73 acres of improved land zoned for heavy manufacturing and operated as a shipyard. The parcel numbers for the property are # 251-04269.000, # 251-00935.001, # 251-00933.001, # 251-00933.003, # 251-00933.004, and # 251-00933.006. See the attached **Figure 1-Site Location Map**.

For the purpose of AECOM's proposed phased approach to the SI activities, the property is being considered as follows:

- Northern Area. This includes approximately 30 acres along the Menominee River, north of Mann Street and the railroad right-of-way (ROW). This is a security controlled industrial area that is paved and/or covered with buildings. Site investigation activities for the Northern Area will be considered in future phases, as necessary.
- Southern Area. This area, approximately 22 acres, is bounded by the railroad ROW to the north, Ely Street to the west, Lundington Street to the south, and Stanton Street to the east. The area includes the Technical Center, the Panel Facility building, the new construction for Buildings 34/35, and employee parking lots. The Southern Area is the focus of this initial phase of the site investigation activities. The general layout of the Subject Property is illustrated on the attached **Figure 2-Site Detail Map of Southern Area**.

Site History

AECOM's preliminary historical research indicates that the Subject Property development began in the 1880's. A review of the Sanborn™ maps provided on the Library of Congress digital database indicate that in 1886 the Subject Property was an island occupied by Hamilton & Merriman Company Sawmill and Shingles Mill and the N. Lodington Company Shingles Mill with a bridge connecting what is now Ely Street to near the intersection of Main Street and Church Street. The water way between the mainland and the island was labeled as a "log run". The island is mostly vacated by the 1935 Sanborn™ map and by the publication of the 1948 map, the former log run waterway was infilled, and the island became a part of the mainland.

Beginning in the 1880's through the mid-1900's some of the riverfront areas were used as dump sites for sawmill and municipal waste. Based on a Foth Infrastructure & Environment LLC (Foth) environmental investigation report¹, a former municipal dump may have existed in the southwestern corner of the employee parking area, to the west of the building #34 footprint. The exact location of the former dump is not known. This information coincides with the approximate location of the former log run waterway identified on the 1886 to 1935 Sanborn Maps. Review of the U.S.G.S. 1963 (photo revised 1976) Marinette East and Marinette West, Wisconsin Quadrangle indicated sewage disposal on the south to southwest section of the site. The 1963, revised 1976 quadrangle may be referring to the City of Marinette Waste Water Treatment Plant (WWTP) located west of the subject property.

AECOM searched the WDNR Bureau for Remediation and Redevelopment Tracking System (BRRTS) for documentation regarding the site. Based on results of the search, two closed and two open BRRTS sites were identified as being located at the Subject Property.

- BRRTS # 03-38-257089, a closed site, is for a diesel fuel leaking underground storage tank (LUST). The notification of hazardous substance discharge was issued in July 2000, and closure with no further action was granted November 2000.
- BRRTS # 02-38-260867, a closed site, is for an environmental repair program (ERP) site with metals and chlorinated solvent volatile organic chemicals (CVOCs) as the contaminants of concern. A Phase II ESA was completed for the site in October 2000 and a notification of hazardous substance discharge was issued in November 2000. Site closure with continuing obligations was applied for and approved in March 2019.

The open sites listed includes:

- BRRTS # 02-38-555082 is for an ERP site with Polynuclear Aromatic Hydrocarbons (PAH), and metals Arsenic and Lead as the contaminants of concern. A notification of hazardous substance discharge was issued in March 2010 as part of the #10 Building expansion construction activities.
- BRRTS # 02-38-587281 is for an ERP site with VOCs, PAHs, Arsenic Metals, and Per – Polyfluoroalkyl Substance (PFAS) as contaminants of concern. A Phase II ESA was completed at this site in November 2020 and a notification of hazardous substance discharge was issued in December 2020 as part of the Buildings 34/35 construction activities.

¹ Investigation to Facilitate Soil and Groundwater Management during the Construction of the Proposed Fincantieri Marinette Marine Hull Erection Building (B34/B35), Foth Infrastructure & Environment LLC., November 25, 2020.

AECOM suggests that the activities associated with this work plan be associated with BRRTs # 02-38-587281.

No other open or closed cases for investigations, cleanups, spills, superfund site status, or WDNR funding assistance were identified on the BRRTS database. The Subject Property is not identified on the WDNR Solid Waste – Landfills and Historic Waste Site Extents database.

Surrounding Properties

North of the Subject Property, across the Menominee River, is a predominately industrial section of the city of Menominee, Michigan. To the south is a mix of commercial and residential properties in Marinette, Wisconsin. To the west is a mix of municipal and commercial properties including the City of Marinette WWTP. East of the Subject Property are the Johnson Controls Inc. (JCI) (aka Tyco Fire Products, LP) and Chemdesign Products, Inc. (Chemdesign) facilities.

There are five (5) open BRRTs Site associated with the surrounding parcels as follows.

To the west of the FMM property:

- BRRTs # 02-38-000047, WPSC Marinette MGP (ALT SF) is a former manufactured gas plant site. The MGP site extends from Boom Landing on the north along FMM property line to the south long Ely Street to the intersection of Ely and Ludington Street. The following remedial activities for the site have been completed, which includes sediment removal by Boom Landing, placement of a Reactive Core Mat (RCM), and 10-inch sand cap in areas where impacted sediment could not be removed from bedrock in the riverbed. Groundwater is currently monitored on a semi-annual basis. Upland remediation of the site is currently being developed by WPSC, WDNR, and EPA. Per a February 21, 2020, EPA Principal Threat Waste Clarification letter the primary contaminates of concern is non-aqueous phase liquid (NAPL) and PAHs at the site. It should be noted that PFAS has not been sampled in association with the case.

To the east of the FMM property:

- BRRTs # 02-38-559214, JCI /Tyco site is an ERP site with petroleum and VOCs as the contaminates of concern. A notification of hazardous substance discharge was issued in June 2012.
- BRRTs # 02-38-000011, JCI / Tyco site is an ERP site with Arsenic as the contaminate of concern. A notification of hazardous substance discharge was issued in December 1978.
- BRRTs # 02-38-583852, Chemdesign site is an ERP site with PFAS as the contaminate of concern. A notification of hazardous substance discharge was issued in June 2019.
- BRRTs # 02-38-583856, JCI / Tyco site is an ERP site with PFAS as the contaminate of concern. A notification of hazardous substance discharge was issued in June 2019.
- BRRTs # 0238581955, JCI / Tyco site is an ERP site with PFAS as the contaminate of concern. A notification of hazardous substance discharge was issued in June 2019.

Activities associated with this work plan will be confined to property owned by FMM. Access agreements from adjacent property owners will not be requested at this time.

Environmental and Ecological Setting

Topography

According to the United States Geological Survey (USGS) topographic map of the Subject Property and a review of the Google Earth application, the elevation of the Subject Property is approximately 583 feet above mean sea level (msl). Based on a review of these technical resources and AECOM's site visit, the Subject Property appears to be generally flat with slight downward slope toward the Menominee River to the North.

Soil / Geology

According to the USDA Web Soil Survey database the Subject Property is in the northern Lakes and Forest - Wisconsin/Michigan Pine and Oak Barrens Ecoregion. The property is predominantly underlain with Udorthents silty clay loam, a material typically located adjacent to major drainageways. The Udorthents loam are described as fine grained, with slow infiltration rates, and are somewhat poorly drained. These soils are classified as hydric (potential to support wetlands).

Based on the Foth SI and Coleman Engineering Company (Coleman) geotechnical investigation², soils encountered throughout the site consist of fill material from ground surface to depths starting at 1.0-foot and extending down to 8.0-foot below ground surface (bgs). The fill soils were varied, mostly consisting of sand, fine to coarse grained, and poorly sorted with trace gravel with trace urban fill (wood chips, plastic, bricks, and cinders). Trace of amounts of municipal waste such as plastic, metal, and glass was encountered in GP-1, GP-11, and GP-13.

A review of the bedrock geology³ indicated that the bedrock beneath the Subject Property consists of the Ordovician aged Sinnipee Group. The Sinnipee Group consist of mostly carbonate dolostone with minor mudstone and shale components.

Groundwater / Hydrology

During the Foth SI groundwater was observed in the monitoring wells at depths ranging from approximately 3.65-feet to 5.88-feet bgs. Groundwater elevations indicated that groundwater elevations range from 581.91 feet above sea level (ASL) at GP-4, to 585.02 feet ASL at GP-1, indicating a generally south to north movement of groundwater, towards the Menominee River. It should be noted the measurements are based on one sampling event and in 2-inch temporary wells.

Archeological

Due to the historical development of the site, i.e. filled/made land, there appears to be no archeological concerns for the property.

Sensitive Species, Habitats, and Ecosystems

A review of the U.S. Fish and Wildlife Service Information for Planning and Consultation (IPaC) database⁴ was conducted for the Subject Property. Three (3) species that are listed under the Endangered Species Act (1973) could potentially be affected at this location. The species that were listed are the threatened Northern Long-eared Bat (*Myotis septentrionalis*), the threatened Canada Lynx (*Lynx canadensis*), and the endangered Grey Wolf (*Canis lupus*). Fifteen (15) species that are listed under the Migratory Bird Treaty Act (1918) and the Bald and Golden Eagle Protection Act (1940) could potentially be affected at this location. The species that were listed are the American Bittern (*Botaurus lentiginosus*), Bald Eagle (*Haliaeetus leucocephalus*), Black-billed Cuckoo (*Coccyzus erythrophthalmus*), Canada Warbler (*Cardellina canadensis*), Cape May Warbler (*Setophaga tigrine*), Dunlin (*Calidris alpina arctica*), Evening Grosbeak (*Coccothraustes vespertinus*), Golden-winged Warbler (*Vermivora chrysoptera*), Lesser Yellowlegs (*Tringa flavipes*), Olive-sided Flycatcher (*Contopus cooperi*), Red-headed Woodpecker (*Melanerpes erythrocephalus*), Ruddy Turnstone (*Arenaria interpres morinella*), Rusty Blackbird (*Euphagus carolinus*), Semipalmated Sandpiper (*Calidris pusilla*) and the Wood Thrush (*Hylocichla mustelina*).

Several factors indicate that it is unlikely that any of the listed species will be encountered during site activity. Due to the historical development of the site, it is listed as a non-critical habitat for the noted species.

² Sampling and Analysis Plan for Fincantieri Marinette Marine Building 34-35 Environmental Testing, Coleman Engineering Company, February 10 2021.

³ Bedrock Geology of Wisconsin Northeast Sheet, Wisconsin Geological and Natural History Survey (Greenberg, JK and Brown, BA; 1984)

⁴ Information for Planning and Consultation (IPaC), U.S. Fish and Wildlife Service, Environmental Conservation Online System, July 9, 2021

Potential Receptors

The Subject Property is located on the Menominee River, which is an EPA defined Sensitive Receptor. No other sensitive receptors (i.e. day care centers, schools, hospitals) are located adjacent to the Subject Property.

Due to the developed nature of the property, no wetlands may be present.

Drinking water for the City of Marinette (City) is obtained from an intake located in Green Bay/Lake Michigan. Due to the area wide PFAS issue the City has a comprehensive drinking water PFAS monitoring plan.

Utilizing the data provided by the WDNR Well Construction Information System database, AECOM determined that there is one potable water supply well located within a 1,200-foot radius of the Subject Property. Per the Well Construction Report, the private potable well (WI Unique Well No 8MK357), is located via QQ section centroid and the street address is Shore Drive in the Bayshore Subdivision approximately 1.3 miles south east of the Subject Property. Due to its location, this well is not considered a receptor for the site.

The Subject Property has water, sanitary, and storm sewer utilities that service the site. Storm sewers connect either to public storm sewer at Ludington and Ely Street or, north of the facility, directly to the Menominee River. The sanitary and water connect to public utilities along Ely Street on the west side of the property.

Potential Contaminants of Concern

Per the RP letter (i.e. BRRTs # 02-38-587281) VOCs, PAHs, metals (arsenic, lead, cadmium, chromium, cooper and selenium), and PFAS are the contaminants of concern (COC). Based on the Foth and Coleman site investigation work the following summarizes the identified COCs:

1. Arsenic in the soil and groundwater maybe the result of one or more sources. Sources may include area-wide arsenic issue and associated with urban fill soils. Other detected metals (lead, cadmium, chromium, cooper and selenium) maybe result of the composition of the urban fills soil.
2. The VOC benzene was detected in a soil sample collected from Soil Borings GP-3 above its Soil to Groundwater Pathway RCL. Elevated PID readings were also noted in GP-3. Benzene was detected above its respective NR 140 Preventative action limit (PAL) in GP-1W and GP-3W. The benzene impacts appear localized in the southeast area of the site.
3. PAHs concentrations exceed one or more Soil to Groundwater Pathway RCLs at nine of the thirteen locations. The PAHs appear to be associated with the urban fill soils.
4. Soil samples for PFAS were not collected during the Foth investigation, but samples collected during construction of the building on April 1, 2021, identified as Sample #1 Below, indicated PFOS concentrations of 1.1 milligrams per kilogram (mg/kg) and PFOA was detected between 0.64 mg/kg. The groundwater samples indicated PFOA concentrations ranging from 100 ng/L to 500 ng/L. PFOS was detected at concentrations of 54 ng/L to 390 ng/L. These detected concentrations are above the proposed WDNR NR 140 Enforcement Standard (ES) of combined 20 ng/L.
5. Polychlorinated biphenyls (PCBs) were not noted in the RP letter as a COC. However, low concentrations of PCBs (i.e. less than 1.0 mg/kg or PPM) were detected at levels exceeding the NR 720 Soil to Groundwater pathway RCL (i.e. 9.4 ug/kg or PPB for total PCBs) in all of the Foth soil borings. Groundwater samples collected as part of the Foth investigation indicated no detection of PCBs.

Proposed Phased Site Investigation Activities

Pre-Field Investigation Source Review

AECOM will perform additional historical research beyond what has been completed to this point (Sanborn™ maps and aerial photo review). This includes reviewing documents at the Marinette Library, Menominee County Historical Society, and the Michael J. Anuta Research Center in Menominee, Michigan.

AECOM will utilize the collected historic information along with the Sanborn™ maps and aerial photos to develop a “historical site map”. The map will depict:

- Historic buildings,
- Historic filled water areas/shoreline/log run and possible depth of fill, and
- Review existing soil boring logs and depict on the historical map to show types of fill around the site.

Additional local research may also identify other areas of interest. The historic site map will assist with further defining source investigation activities.

AECOM will perform a review of the Historical and current site manufacturing practices that may have contributed to impacts on the site including FMM provided Safety Data Sheets for use of fluorinated compound.

Field Investigation and Sampling Plan

AECOM proposes a phased approach to the SI activities. Initial work will be conducted on the Southern Area of the property as associated with BRRs # 02-38-587281. The first phase of soil borings and monitoring well installations will focus on vadose zone soil sampling and groundwater table monitoring wells. No piezometers are proposed for monitoring deeper groundwater during this phase. AECOM anticipates that future phases will include the installation of piezometers. The location of the piezometers will be based on the initial groundwater table results, a review of regional groundwater flow, and regional contaminant plume delineation data.

Due to the construction activities for Buildings 34/35, a large portion of the Southern Area is currently inaccessible. AECOM understands that Building 34/35 construction activities will be completed during the spring of 2022. Therefore, AECOM proposes to conduct SI activities out-side the construction zone in the fall of 2021 and finish the balance of the SI activities in the spring of 2022, when the Building 34/35 construction is complete.

AECOM anticipates the following site investigation field activities:

- Subsurface investigation by means of a truck-mounted drill rig will be conducted. The sub-contracted drilling company will be responsible for scheduling the public utility clearance activity. AECOM will assist FMM personnel for marking and clearing the area for known private utilities.
- Sixteen soil borings will be advanced to a depth of 12.0 to 20.0-feet below ground surface (bgs) then converted to NR 141 compliant monitoring wells. Approximate boring locations are illustrated on **Figure 2-Site Detail Map of Southern Area**. Boring locations are approximate and subject to change due to underground utility locations and other property related obstructions. Equipment will be decontaminated between borings using PFAS free water and Alconox by the subcontractor per the subcontractor’s “PFAS Sampling Procedure” protocol.
 - Proposed soil boring/monitoring well location rationale:
 - MW-4, MW-8, MW-12, and MW-16 – Eastern perimeter wells to gauge offsite impacts for PFAS and arsenic, verify site wide fill impacts (PAHs, and Metals) and possible side gradient wells from former landfill areas.
 - MW-2, MW-3, MW-6, MW-7, MW-10, MW-11, MW-14, and MW-15 – Central portion and south property line of the Subject Property, delineation of benzene impacts and evaluation of possible landfill areas as source for PFAS.
 - MW-1, MW-5, MW-9, and MW-13 – Western perimeter wells to gauge offsite impacts for PFAS, verify site wide fill impacts (PAHs and Metals), and possible side gradient wells from former landfill areas.

The following soil borings/wells, MW-2, MW-3, MW-6, MW-7, MW-11, and MW-15 are within the Building 34/35 construction zone. AECOM anticipates completion of these soil borings/wells in spring 2022.

- Documentation (bore-hole log, photographs, and field notes) of observations including soil/fill type, refuse present, and visual and olfactory observations of the subsurface materials.

- AECOM will collect one soil sample from above the water table or highest PID reading for PVOCs, PAHs, RCRA Metals, and PFAS at each soil boring, plus field and equipment blanks. Only one unsaturated soil sample is proposed for each location due to the anticipated shallow depth to groundwater.
- Sixteen NR 141 compliant 2-inch groundwater monitoring wells will be installed at the soil boring locations, as illustrated on **Figure 2-Site Detail Map of Southern Area**. The wells will be constructed in general conformance of NR 141.11 and NR 141.13 with filter sand 1.0-foot above the screen and the remaining annular space sealed with bentonite to the ground surface. The wells will be developed in general conformance of NR 141.21 by 30-minutes of alternately surging and purging the well to remove turbid material from the well-screen area. Once the surge and purge process has been completed, the well will be pumped until the removal of ten well volumes or dry three times, whichever comes first, has been completed. The well will be allowed to stabilize prior to sampling.
- Groundwater will be sampled using PFAS free protocols. The wells will be purged for three well volumes and sampled via a peristaltic pump with non-Teflon lined HDPE tubing using low-flow sampling techniques. Groundwater samples will be collected from each well for laboratory analysis into laboratory-supplied 250mL HDPE plastic sample bottles.

Sampling will be conducted by AECOM-certified PFAS sampling teams. AECOM certification requires attending an AECOM internal PFAS sampling training course and reviewing the PFAS Sampling Guidance document designed to make AECOM samplers aware of the products that are known to have tested positive for PFAS compounds, as well as identifying products that are appropriate to use in the sampling environment. Care will be taken by the AECOM sample teams to use PFAS-free sampling protocols.

Groundwater will also be sampled for PVOCs (benzene), PCBs, PAHs, and RCRA Metals. Samples collected for metals will be field filtered.

- Soil cuttings and groundwater will be placed in separate drums. The drums will be stored on site until a disposal pick-up is scheduled. If the laboratory analysis indicates non-impacted media, the soils may be thin spread across the site. Groundwater will be disposed of properly depending on the results of the analysis.
- The monitoring wells will be surveyed by AECOM personnel, to a local datum.

Laboratory Analytical Methods and Quality Assurance

Samples collected as part of this investigation will be labeled, placed on ice, and transported to the analytical laboratory under standard chain of custody practices. PFAS samples will be sent to Vista Analytical Laboratory (El Dorado Hills, CA) for the analysis of PFAS by EPA Method 537.1 Modified - Isotope Dilution – State of Wisconsin 33 Compound List. Level IV quality control reporting will be provided by the lab.

All other samples will be sent to Pace Analytical (Green Bay, WI) for analysis of RCRA metals (EPA Method 6010B), PVOCs (EPA Method 8260), PAHs (EPA Method 8270/SIM), and PCBs (EPA Method 8082), as appropriate. Level II quality control reporting will be provided by the lab.

Quality assurance sampling protocols for PFAS compounds include the use of field and equipment blanks due to the possible ubiquitous nature of these compounds including the potential presence of these compounds in sampling equipment and supplies, and to assess the possibility of cross-contamination during sampling, transport and storage of samples.

Drilling Field Work: AECOM will collect one PFAS equipment blank during drilling activities. The equipment blank will be obtained by pouring laboratory certified PFAS free water over the deconned drilling equipment and collecting the water in a laboratory provided bottle.

To evaluate possible ambient background concentrations, a PFAS field blank sample is prepared by pouring laboratory-certified PFAS-free water into a laboratory-provided sampling container in the field and shipping the sample to the laboratory with the field samples. One field blank will be collected for each day of drilling field work.

Water Sampling Field Work: AECOM will collect one duplicate PFAS groundwater sample for quality control. A matrix spike/matrix spike duplicate sample is not required due to the isotope method used for determining PFAS

concentrations. One PVOC duplicate sample and one matrix spike / matrix spike duplicate (MS/MS) will be collected from the groundwater and soil samples for quality control purposes.

To evaluate possible ambient background concentrations, a PFAS field blank sample is prepared by pouring laboratory-certified PFAS-free water into a laboratory-provided sampling container in the field and shipping the sample to the laboratory with the field samples. One field blank will be collected for each day of field work during this sampling event.

Equipment blanks will also be collected to evaluate the sampling equipment by using laboratory-certified PFAS-free water, or process water, and passing the water over and through disposable or decontaminated field sampling equipment to assess the adequacy of the decontamination process and/or to evaluate potential contamination from the equipment used during sampling. The equipment blanks will be shipped to the laboratory with the field samples. One equipment blank will be collected for each day of field work during this sampling event.

Sample Notification and Site Investigation (SI) Report

AECOM will notify the WDNR within ten business days after receiving the sampling results via the WDNR Form 4400-249.

The SI report will generally follow WAC NR 716.15 requirements, which includes, site general and background information, investigation methods, sampling and analysis requirements, field and analysis results, and conclusion and recommendations. Tables summarizing laboratory results and figures that include well locations, groundwater flow, extent of contamination will be included. The required groundwater monitoring wells forms, boring forms, and well/borehole abandonment forms will be completed and attached to the report. A Remedial Action Options Report (RAOR) is not proposed at this time.

Project Schedule

Field tasks are anticipated to commence in August 2021. A Subsurface Investigation report in general conformance to NR 716 will be submitted to the WDNR within approximately 60 days of receipt of the final analytical data.

Project Phase	Date (week starting)
Responsible Party Notification Letter Received	March 9, 2021
Modified Work Plan Submitted to WNDR for Review	July 22, 2021
Fall 2021 Soil Borings, Well Installation, and Sampling	August - September 2021
Fall 2021 Analytical Receipt	September - October 2021
Spring 2022 Soil Borings, Well Installation, and Sampling	April – May 2022
Spring 2022 Analytical Receipt	May - June 2022
Site Investigation Letter Report	July 2022

A schedule adjustment may be necessary if changes to these assumptions occur. AECOM or FMM will notify the WDNR of significant changes to the site investigation schedule.

Concurrence

FMM requests that WDNR provide written comments/concurrence with the scope of work presented in this site investigation work plan update. The Work Plan review fee and Technical Assistance Form will be submitted to the WDNR.



We look forward to working with you on this project. If you have any questions regarding the information contained in this work plan, please contact us at your convenience.

Yours sincerely,

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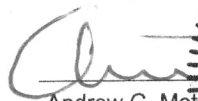
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enclosures: Figure 1 Site Location Map
Figure 2 Site Detail Map

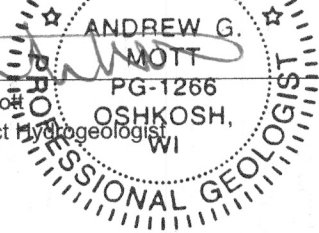
cc: Thomas Carow, Environmental Safety and Health Director, FMM
Leah Ziemba, Partner, Michael Best & Friedrich LLP

Hydrogeologist Certification

I, Andrew G. Mott, hereby certify that I am a hydrogeologist as that term is defined in s. NR 712.03 (1), Wis. Adm. Code, am registered in accordance with the requirements of ch. GHSS 3, Wis. Adm. Code, and that, to the best of my knowledge, all of the information contained in this document is correct and the document was prepared in compliance with all applicable requirements in ch. NR 700 to 726, Wis. Adm. Code.



Andrew G. Mott
Senior Project Hydrogeologist



7/20/2021
Date

References

Arcadis U.S., Inc. 2019. "Summary of Groundwater Sampling Ansul Inc. Stanton Street Facility, Marinette, Wisconsin EPA ID: WID006125215."

ChemDesign. 2019. "Request for Extension for Response to Information Request and to Submit Site Investigation Work Plan ChemDesign Products, Inc, 2 Stanton Street, Marinette, WI, DNR BRRTS Activity# 02-38-583852, DNT FID # 438008340."

Mudrey, M.G., Jr., Brown, B.A., Greenberg, J.K., *Bedrock Geology of Wisconsin*, University of Wisconsin-Extension Geological and Natural History Survey, 1982.

United States Geological Survey, 7.5-Minute Topographic Maps of the Marinette – Marinette East Quadrangle – 2018. Scale=1:24,000.

Web Soil Survey. U.S. Department of Agriculture, Natural Resources Conservation Service website - <https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>.

U.S. Fish and Wildlife Service Information for Planning and Consultation (IPaC) website - <https://ecos.fws.gov/ipac/>.

Wisconsin Remediation & Redevelopment (RR) Program Site Map website <https://dnrmaps.wi.gov/H5/?viewer=rrsites>.

WDNR – Well Construction Information System Database
<https://dnr.wi.gov/WellConstructionSearch#!/PublicSearch/Index>.

Library of Congress - Digital Collection of Sanborn Maps, Marinette County Wisconsin
<https://www.loc.gov/collections/sanborn-maps/?fa=location:wisconsin%7Clocation:marinette+county>.

WDNR Solid Waste – Landfills and Historic Waste Site Extents Map -
https://geodata.wisc.edu/catalog/WIDNR_9ba7258f7e544000b5d1be2f4239e81b_2.

City of Marinette Engineering Department Zoning Map – 10/27/2010. Developed by the Bay Lake Regional Planning. Revised 07/11/2019. <https://www.marinettecounty.com/departments/land-information/zoning/>.

Google Earth website - www.google.earth.com.

Figures

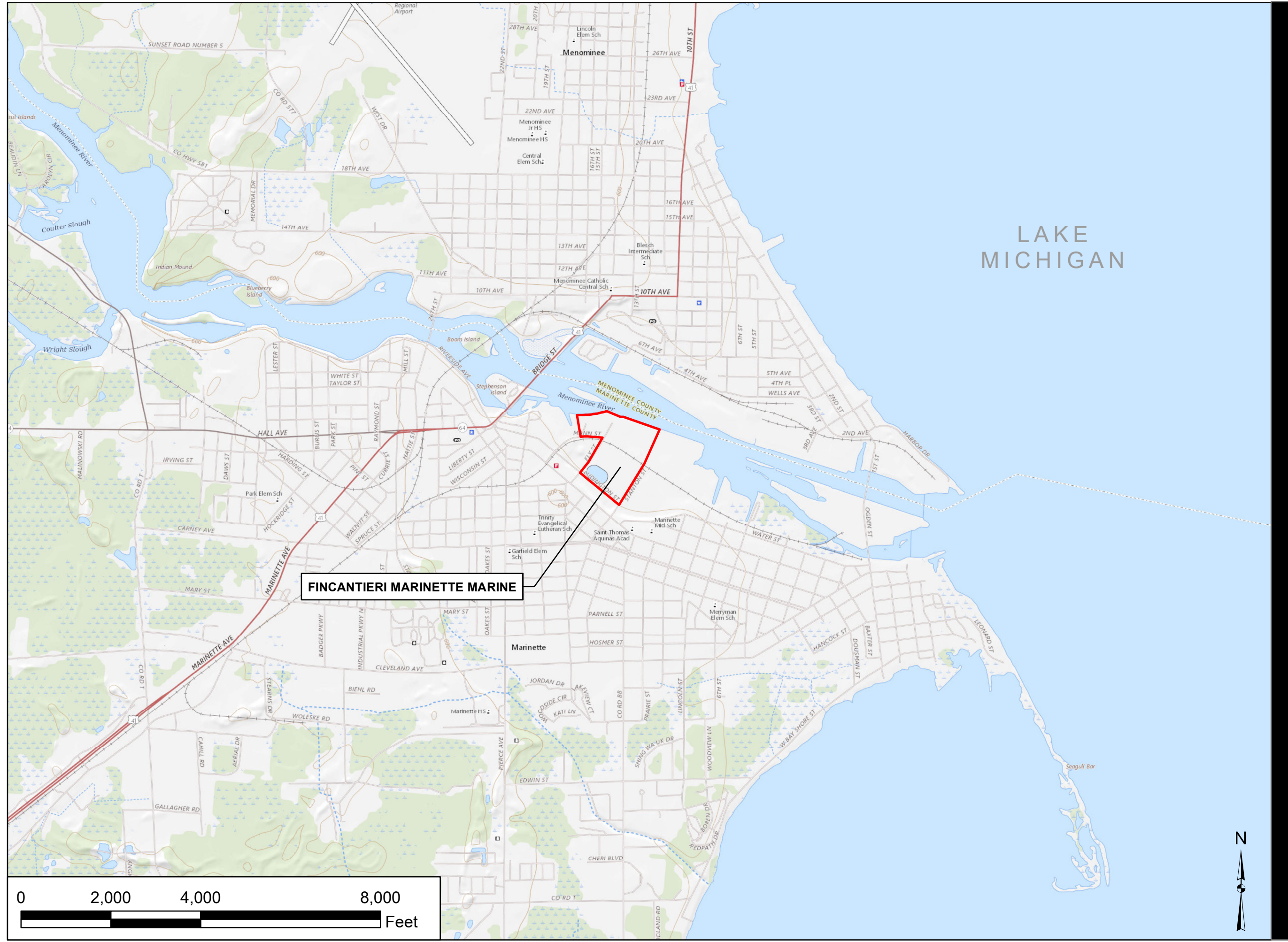


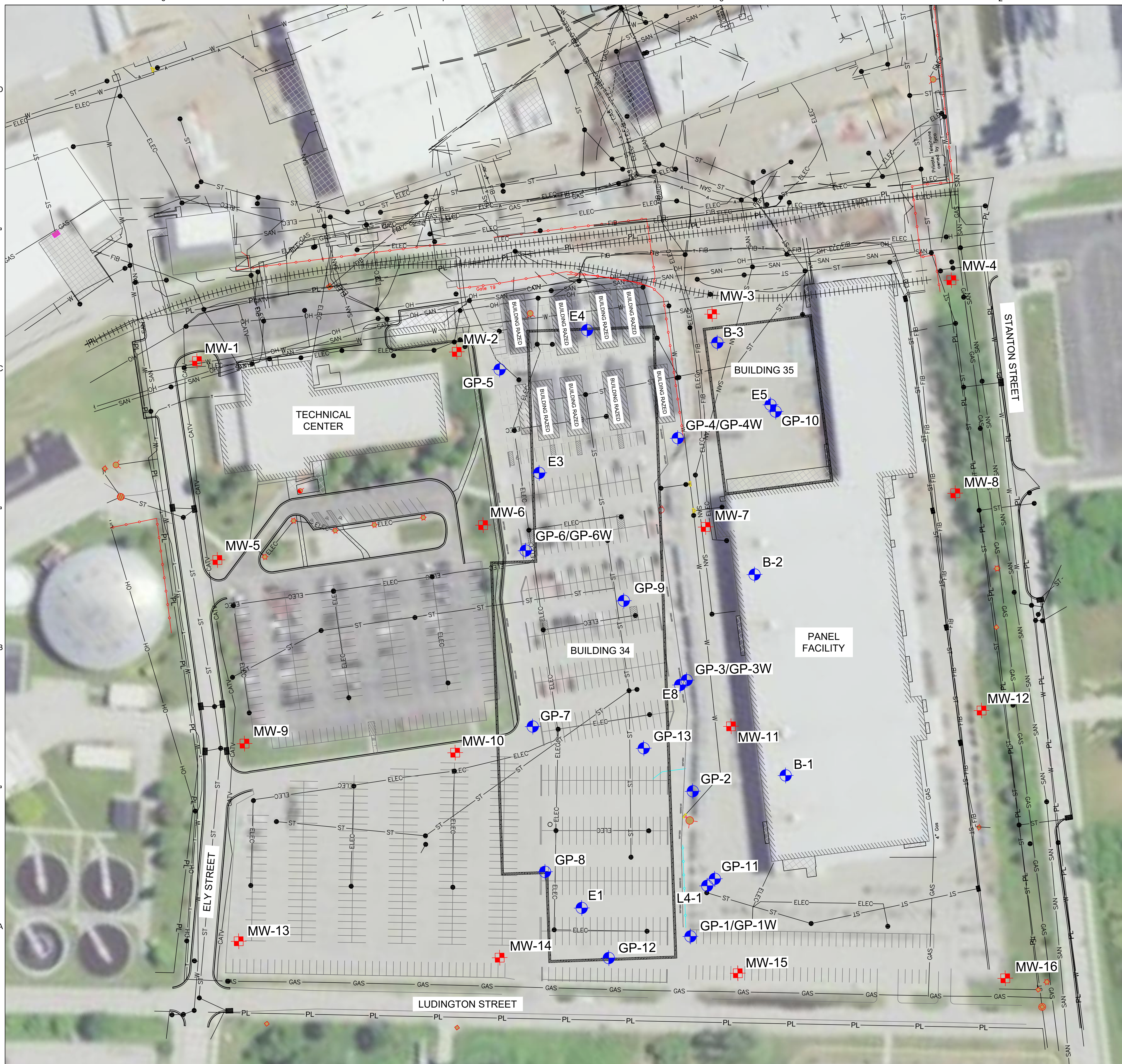
FIGURE 1 - SITE LOCATION MAP

AECOM

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AECOM PROJECT NUMBER: 60662292
JULY 2021

File name: Z:\PROJECTS\6062292\FINCANTIERI MARINETTE MARINE PFAS\900-CAD_GIS\910 CAD\20-SHEETS\F2-SITE_LAYOUT.DWG Last saved by: MIKE PAWLAK Last Plotted: 2021-07-15
 Project Management Initials: Designer: MTP Checked: AGM Approved: AGM ARCHD 24" x 36"



EXISTING CONDITIONS LEGEND

- BUILDING 34 AND 35 LAYOUT
- SANITARY SEWER
- STORM SEWER
- WATER UTILITY
- ELECTRICAL UTILITY
- GAS UTILITY
- OVERHEAD UTILITY
- COMMUNICATION UTILITY
- FIBER OPTIC UTILITY
- PROPERTY BOUNDARY
- RAILROAD TRACKS
- FIRE HYDRANT
- EXISTING SOIL BORING OR MONITORING WELLS
- PROPOSED MONITORING WELL

- GENERAL NOTES:**
1. THE SITE WAS NOT SURVEYED AND ALL BOUNDARIES ARE APPROXIMATE. HORIZONTAL COORDINATES ARE IN REFERENCE TO THE WISCONSIN COUNTY SYSTEM: MARINETTE (US FOOT). VERTICAL DATUM IN NORTH AMERICAN VERTICAL DATUM 1988 (NAVD88).
 2. EXISTING UTILITIES SHOWN ARE INDICATED IN ACCORDANCE WITH AVAILABLE RECORDS. OTHER UTILITIES MAY BE PRESENT. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING EXACT LOCATIONS AND ELEVATIONS OF ALL UTILITIES INCLUDING SEWERS AND WATER FROM THE OWNERS OF THE RESPECTIVE SERVICES.
 3. CURRENT STATUS OF EXISTING MONITORING WELLS INSTALLED BY FOTH IS UNKNOWN. MONITORING WELLS MAY HAVE BEEN DAMAGED OR REMOVED DURING CONSTRUCTION.
 4. AERIAL IMAGE OBTAINED FROM THE UNITED STATES GEOLOGICAL SURVEY (USGS); IMAGE DATE JULY 27, 2020.

AECOM

PROJECT
 FINCANTIERI MARINETTE MARINE

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REGISTRATION

ISSUE/REVISION

I/R	DATE	DESCRIPTION
0	2021.07.16	ISSUED FOR REVIEW

KEY PLAN

PROJECT NUMBER
6062292

SHEET TITLE
SITE DETAIL MAP OF SOUTHERN AREA

FIGURE NUMBER
2

TO OBTAIN LOCATIONS OF PARTICIPANTS UNDERGROUND FACILITIES BEFORE YOU DIG IN WISCONSIN

CALL DIGGERS HOTLINE
 1-800-242-8511
 TOLL FREE
 WIS STATUTE 182.0175(1974)

1" = 60'