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SITE INVESTIGATION WORK PLAN

Waukau Lot Site

359 West Waukau Avenue

Oshkosh, Wisconsin

BRRTS No. 02-71-587405

June 17, 2021

File No. 20.0157080.00

PREPARED FOR:

Oshkosh Defense, LLC
c/o Godfrey & Kahn, S.C.

GZA GeoEnvironmental, Inc.

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June 17, 2021
File No. 20.0157080.00

Mr. Kevin McKnight, Hydrogeologist
Wisconsin Department of Natural Resources
625 East County Road Y, Suite 700
Oshkosh, Wisconsin 54901-9731

Subject: Site Investigation Work Plan
Waukau Lot Site
359 West Waukau Avenue
Oshkosh, Wisconsin
BRRTS No. 02-71-587405


Dear Mr. McKnight:

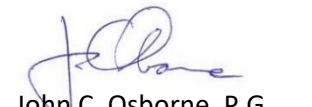
GZA GeoEnvironmental, Inc. (GZA), on behalf of Oshkosh Defense, LLC (Oshkosh/"Client") and its outside legal counsel, Godfrey & Kahn, S.C., has prepared this Site Investigation Work Plan ("Work Plan") for the Oshkosh Defense property at 359 West Waukau Avenue in Oshkosh, Wisconsin, referred to as the Waukau Lot ("Site"). The scope of work is based on the findings of the Site investigation activities conducted on November 6, 2020 and the comments provided in your email on April 19, 2021.

The Site investigation activities proposed by GZA are intended to satisfy the relevant sections of Wisconsin Administrative Code (Wis. Adm. Code) NR 716. Please feel free to contact us with any questions or comments.

Very truly yours,

GZA GeoEnvironmental, Inc.


Kevin M. Hedinger
Senior Hydrogeologist


John C. Osborne, P.G.
Principal Hydrogeologist

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Attachments

cc: Mr. Edward B. Witte, Godfrey & Kahn, S.C.
Mr. Kevin Tubbs, Oshkosh Corporation



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APPENDIX A	LIMITATIONS
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1.0 GENERAL INFORMATION

GZA GeoEnvironmental, Inc. (GZA), on behalf of Godfrey & Kahn, S.C., outside legal counsel for Oshkosh Defense, LLC (Oshkosh/"Client"), has prepared this Site Investigation Work Plan ("Work Plan") for the property located at 359 West Waukau Avenue in Oshkosh, Wisconsin, referred to as the Waukau Lot ("Site"). This Work Plan summarizes the previous investigation activities and results and presents a scope of work to further evaluate the presence of per- and polyfluoroalkyl substances (PFAS) in soil and groundwater at the Site.

The Responsible Party for the Site is as follows:

Oshkosh Defense, LLC
Mr. Kevin Tubbs
1917 Four Wheel Drive
Oshkosh, Wisconsin 54902
ktubbs@oshkoshcorp.com
920-502-3043

The environmental consultant for this project is:

GZA GeoEnvironmental, Inc.
Mr. Kevin Hedinger
17975 West Sarah Lane, Suite 100
Brookfield, Wisconsin 53045
kevin.hedinger@gza.com
262-754-2578

The Site name and address are:

Oshkosh Defense, LLC Waukau Lot
359 West Waukau Avenue
Oshkosh, Wisconsin 54902

The Site covers an area of approximately 19 acres and is identified by Parcel ID No. 1413610000 in the City of Oshkosh Parcel Viewer. The Site is located in a mixed commercial and industrial use area within the northeast ¼ of the northeast ¼ of Section 2, Township 17 North, Range 16 East, Winnebago County, Wisconsin, as shown on Figure 1. The WTM91 coordinates for the approximate center of the Site are as follows X: 636656.52473, Y: 390517.95297.

The Site parcel is currently an asphalt-covered lot that is divided by a fence between an area of 5.4 acres for employee parking along the northern portion of the lot and a lot that is approximately 13.6 acres for the storage of decommissioned military vehicles returned to Oshkosh for refurbishing. The northern employee parking lot is accessible by driveways on the north side of the Site along West Waukau Avenue. The southern portion of this lot is accessible through a guarded gate in the center of the north fence. Currently, the Site is not developed with buildings, except for the small guard building located adjacent to the gate. The southern lot area is considered the "Site" for this report and is relatively flat with only slight topographic relief from the north/northwest toward the south/southeast.

Surface water from the Site flows to the southeast corner of the lot and discharges through a drainage ditch that leads to two ponds located near the southeast corner, which treat and discharge stormwater. The runoff in the drainage ditch flows into a natural pond that is further connected to an engineered pond used to contain spills or discharges that emanate



from the Site. The engineered pond is constructed to retain light non-aqueous phase liquid (LNAPL) and allow discharge of the water to an unnamed, intermittent creek located east of the Site. An approximately 4- to 6-foot-high berm separates the drainage ditch from the unnamed creek. The unnamed creek begins approximately 1 mile south of the Site and drains surface water from agricultural fields and the southern portion of Wittman Regional Airport, and commercial and industrial properties, before reaching the Site. Downstream of the Site, the unnamed creek drains surface water from industrial, commercial, and residential properties before discharging into Lake Winnebago, located approximately 0.8-mile northeast of the Site.

Based on previous use of the Site for testing firefighting vehicles, on behalf of Oshkosh, GZA conducted an investigation on November 6, 2020, to determine if a release to the environment occurred. This Work Plan is also subject to the Limitations provided in Appendix A.

2.0 BACKGROUND AND SITE HISTORY

A review of publicly historic aerial photographs dating from 1951 through 2020 indicate that the Waukau Lot property was agricultural land until approximately 1994. The 1994 aerial photograph shows the central portion of the southern asphalt area appears to be asphalt-covered and used for vehicle storage; however, the northern asphalt lot, the western portion of the southern asphalt area, and the northeast corner of the southern asphalt lot are not covered by asphalt. The western portion of the southern lot appears to be used for vehicle storage, but it does not appear to be asphalt-covered. The discharge location in the southeast corner is asphalt covered and the drainage ditch from the southeast corner of the asphalt area is present, as well as the natural pond and the engineered pond. From 1994 through approximately 2003, the lot remained similar in extent, but was not in the current configuration.

On the 2003 aerial photograph, the western portion of the southern asphalt area appears to be asphalt-covered but the northeast corner of the southern asphalt area and the northern lot do not appear to be asphalt-covered. The drainage ditch and ponds appear to be in similar condition as the previous aerial photographs.

On the 2005 aerial photograph, the northern asphalt lot area and the northeast corner of the southern asphalt lot appear to be used as vehicle storage, but these areas do not appear to be asphalt-covered. On the 2008 aerial photograph, the northern asphalt area appears to be grass-covered with no vehicle storage, but the northeast corner of the southern asphalt areas still appears to be used for truck storage and is unpaved. On the 2010 through 2020 aerial photographs, the Waukau Lot appears paved and substantially developed and used as it is today.

The southeastern portion of the Waukau Lot was used for periodically testing mobile aircraft rescue and firefighting (ARFF) vehicles, manufactured by Oshkosh and equipped with aqueous film forming foam (AFFF) and other fire suppressants. The testing was performed under a controlled testing procedure, overseen by Oshkosh personnel, on the southeastern portion of the Site from October 2013 through October 2019. During this period, the testing was performed seven times, as follows:

Date	Products
October 2013	AFFF Ansulite 3%
May 2016	AFFF Ansulite 3%
August 2017	Solberg Rehealing, fluorine free 3%
August 2018	AFFF Buckeye 3%
May 2019	Solberg Rehealing, fluorine free 3%
October 2019	AFFF Mil Spec 3%



The testing was performed on and contained within the asphalt lot in an area that sloped to a central point that facilitated containment and collection of the AFFF and fire suppressant materials following discharge. An approximately 10- to 15-foot-long dam of absorbent materials was constructed across the lowest discharge point from the asphalt lot to prevent direct drainage into the downgradient ditch and to allow for the efficient collection of liquids. The collected materials were removed using a vacuum truck that stored and subsequently transported the liquids off-Site for disposal. Figure 2 shows the general location of the testing within the Waukau Lot, the surface slope of the asphalt lot, and the location of the absorbent dam that was constructed for collection of the discharged material.

PFAS are a complex class of fluorinated compounds developed in the 1950s, and used in manufacturing processes and commercially available products, including AFFF. Until approximately 2000, the PFAS compounds, most commonly perfluorooctanesulfonic acid (PFOS) and perfluorooctanoic acid (PFOA), were manufactured to contain carbon chain lengths with eight completely fluorinated carbons that are considered long-chain PFAS. The strength of the carbon-fluorine bond enables PFOS, PFOA, and other PFAS to persist in the environment, and the bioaccumulating nature of these compounds within humans and other organisms enhance the toxicity.

Between 2000 and 2006, PFAS manufacturing companies committed to reducing the manufacturing of long-chain PFAS, such as PFOS and PFOA. The United States Environmental Protection Agency (USEPA) indicates that by 2010, 95% of long-chain PFAS was eliminated and by 2015, the elimination of long-chain PFAS manufacturing was reportedly complete.¹

The testing performed at the Waukau Lot is fairly well documented and began in October 2013, during the transition period in which long-chain PFAS compounds were replaced with shorter chain PFAS compounds. Therefore, Oshkosh believes, and the laboratory analytical results confirm, that the AFFF used during the testing activities at this Site likely did not contain long-chain PFAS due to the timing of when manufacturers had already converted the AFFF products to next-generation short-chain PFAS.

3.0 GEOLOGIC AND HYDROGEOLOGIC SETTING

The Site is located within a region of Winnebago County characterized by glacially derived, unconsolidated deposits of the Kewaunee Formation ranging from lake sediments associated with glacial Lake Oshkosh to various glacial till units primarily associated with the Kirby Lake Member of the Kewaunee Formation.² The till deposits are described as red, clayey silt that contains some coarser-grained deposits and are generally at least 3 meters thick and tend to have low relief, flat-lying topography. In the area of the Site, the Kirby lake member is reported to include thin (less than 6 feet) patches of lake sediment. Other characteristics of these units include:

- A higher percentage of fine-grained sediment with sand, silt, and clay grain-size distributions averaging 24%, 42%, and 34%, respectively; and
- Measured hydraulic conductivity values in field tests averaging 7.19×10^{-5} centimeters per second (cm/sec) while laboratory testing indicated averages of 9.46×10^{-8} cm/sec.

¹ Interstate Technology & Regulatory Council, History and Use of Per-and Polyfluoroalkyl Substances (PFAS), April 2020.

² Hooyer, T.S., Mode, W.N., 2008, Quaternary Geology of Winnebago County, Wisconsin, Wisconsin Geological and Natural History Survey, Bulletin 105, James M. Robertson, Director, 33 pp.



The upper bedrock unit in eastern Winnebago County underlying the Site is dolomite of the Ordovician Sinnipee Group. The bedrock is generally encountered less than 40 feet below ground surface (bgs) in this portion of the County.³

While groundwater occurs in both the unconsolidated glacial units and bedrock formations, the glacial deposits are generally not considered part of the regional aquifer system. These fine-grained glacial deposits that cover most of the broad lowlands in the eastern portion of the County are believed to hydraulically confine the underlying bedrock aquifers and tend to restrict groundwater recharge and discharge to shallow and deeper regional groundwater systems. Based on general topography and the location of recharge areas and shallow groundwater discharge zones, the groundwater flow direction in the area of the Site is expected to be predominantly eastward toward Lake Winnebago.

Site investigation activities conducted by GZA in November 2020, found subsurface conditions to fit within the regional geological context described above. Underlying 3 to 4 inches of asphalt and up to 6 inches of base course gravel, soil lithology encountered at the Site generally consisted of red/brown clay to a depth of 7 to 9 feet bgs underlain by brown, fine to medium sand to a depth of 8 to 10 feet bgs. In boring B-6, which was advanced to 15 feet, the sand is underlain by 2 to 3 feet of silt over red/brown clay.

Although groundwater was not the focus of initial investigation activities at the Site, it is anticipated to be encountered at a depth of 4 to 6 feet bgs. The groundwater flow direction is anticipated to generally be eastward toward Lake Winnebago, although, local and seasonal discharge may occur to the intermittent, unnamed stream abutting the Site to the east. During soil sampling, thin, apparently discontinuous sand seams were encountered within silty clay and the sand seams. Based on the general composition of low permeability, glacially-derived clay deposits and intermittent sand lenses, the groundwater flow velocity and migration rates are expected to be limited.

Based on a review of the water wells records on the Wisconsin Department of Natural Resources (WDNR) water well database, there were numerous domestic water supply wells historically installed in the area surrounding the Site. These domestic water supply well records indicate that most of the wells were installed prior to the 1990s and are completed in the Niagaran dolomite. Based on the age of the well records and a municipal water system available, the vast majority of the wells may no longer be in use.

4.0 SITE INVESTIGATION ACTIVITIES

Based on the potential release of PFAS during testing at the Site, GZA performed Site drilling and sampling activities to evaluate soil conditions and identify the presence and distribution of PFAS in unsaturated soils in the area most likely to be affected. On November 6, 2020, GZA provided oversight of its subcontractor, On-Site Environmental, Inc. (OSE), during the advancement of eight Geoprobe® borings (WL-B1 through WL-B6, WL-B8, and WL-B10) and two hand auger borings (WL-B7 and WL-B9) on the Site at the locations identified on Figure 3. Borings WL-B1 through WL-B4 and WL-B8 were advanced to a depth of 10 feet bgs, WL-B6 and WL-B10 were advanced to depths of 15 and 14 feet bgs, respectively, and WL-B5 was advanced to 5 feet bgs using the Geoprobe®. Hand auger borings (WL-B7 and WL-B9) were completed to depths of 3 feet bgs in areas where armored vehicles were parked, as there was no access for the Geoprobe® rig.

Groundwater was visually observed to be present in the sand layer; however, the clay layers, while appearing moist, did not show evidence of complete saturation. Based on field observations, the groundwater in the sand was noted to be under a slight pressure head, causing the groundwater to rise 2 to 3 feet above the clay/sand interface, depending on the

³ Olcott, P.G., 1966, Geology and Water Resources of Winnebago County, Wisconsin, Geological Water Supply Paper 1814, prepared in cooperation with the University of Wisconsin Geological and Natural History Survey, 61 pp.



boring, once the boring encountered the sand layer. Therefore, the lower portion of the upper clay unit is also likely saturated. The estimated water table depth, 6 to 7 feet bgs, closely coincides to the approximate elevation of the intermittent creek east of the Site, likely accounting for seasonal groundwater discharge to the creek depending on groundwater elevation. The sand layer appeared to be laterally continuous across the area in which borings were advanced. Bedrock was not encountered in any of the soil borings advanced during the investigation and the soil observations did not appear to indicate the presence of weathered bedrock in the borings. Based on the clayey soils encountered at the Site, the hydraulic connection of groundwater to the adjacent creek may be impeded by the low hydraulic conductivity of the clay.

A total of 15 soil samples were analyzed for the Wisconsin list of 36 PFAS compounds. The only PFAS compounds with proposed residual contaminant levels (RCLs) are PFOS and PFOA for industrial and non-industrial direct contact exposure. The soil sample analytical results for the Site, however, indicated that the only constituents detected above the method detection limit included 1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS), Perfluorohexanoic acid (PFHxA), and Perfluoropentanoic acid (PFPeA). Presently, 6:2 FTS and PFPeA do not have soil or groundwater standards for comparison purposes due to limited health information and PFHxA has proposed groundwater quality standards in WDNR Cycle 11 rulemaking, but there are currently no soil standards for comparison. The concentrations detected in the soil samples are notably close to the method detection limits. Also note that because of the limited detections of PFAS in the shallower soil samples analyzed, the deeper samples retained during field sampling, as shown on the chain-of-custody form, did not require analysis.

The highest PFAS concentration detected at the Site was of 6:2 FTS, a short-chain fluorotelomer with eight carbon atoms, which, unlike PFOS and PFOA, contains only six completely fluorinated carbon atoms. The structure of this fluorotelomer allows for it to be partially degraded under aerobic groundwater conditions. The biodegradation of 6:2 FTS results in the generation of PFHxA and PFPeA due to the loss of carbon from the chemical structure during the degradation process. 6:2 FTS and its breakdown products are generally believed to be of lower toxicity than PFOS and PFOA due to the shorter carbon chain length, lack of bioaccumulation, and shorter half-lives.⁴ The PFAS detected in the soil samples at the Waukau Lot were also compounds in the formulation of the AFFF products in the PFAS phase-out period during which the testing events occurred.

In summary, the conclusions formed on the basis of the investigation included the following:

1. The presence of 6:2 FTS and lack of PFOS/PFOA detection confirmed that the AFFF substances that were used during the testing performed at the Waukau Lot likely did not contain the long-chain PFAS compounds;
2. The periodic nature of the discharge did not appear to result impairment of the environment; and
3. The management practices employed to contain the AFFF appeared to effectively reduce the potential for migration of the AFFF constituents off of the asphalt lot area.

The results of the investigation summarized above were presented to the WDNR in a Site Investigation Report, dated March 29, 2021. The WDNR provided comments in an email dated April 19, 2021, regarding the investigation results and requested additional investigation activities be considered at this Site, although there were no PFAS detected that exceeded State or federal regulatory standards.

⁴ National Association for Surface Finishing, 6:2 Fluorotelomer Sulfonate (6:2 FTS), Toxicology at a Glance, March 2019.



5.0 SCOPE OF WORK AND RATIONALE

The scope of work presented below considers the body of information developed on the Waukau Lot, our initial investigation observations and findings, as well as the WDNR's comments and requested supplemental investigation activities. Each item requested by the WDNR is provided below with our proposed work plan activities:

1. Deeper soil sampling near WL-B-1:

To conduct additional investigation in the drainage ditch area, one soil boring will be advanced adjacent to WL-B-1. WL-B-1 was installed in the drainage ditch approximately 10 to 15 feet south of the asphalt and in which PFAS was detected in the soil sample collected at 1 to 2 feet bgs. Therefore, GZA proposes to advance one soil boring adjacent to WL-B-1 to a depth of 15 feet bgs or to refusal if bedrock is encountered within 15 feet of the ground surface. The boring will be advanced to observe and evaluate deeper soil conditions in this area and to collect at least one soil sample to further delineate the vertical extent of PFAS previously detected in the soil at this location. The approximate location of this soil boring is shown on Figure 3. Additional sampling details include:

- Geoprobe® soil samples will be collected continuously from the ground surface to the terminus of the borings using 2-inch diameter by 5-foot long, stainless-steel sampling tubes lined with disposable acetate liners. The soil samples will be visually observed and classified in accordance with the Unified Soil Classification System (USCS) and then divided into 1-foot intervals for placement into sealable plastic bags. During soil classification and soil handling, activities will be completed by personnel wearing clean, disposable, latex gloves. The core sampler will be decontaminated between each sample using a distilled water and non-phosphate detergent with a distilled water rinse.
- At least one soil sample will be submitted for analytical testing. The sample interval selected for laboratory analysis will be based on the depth to groundwater encountered within the soil boring, as determined from field observations such as soil color and degree of moisture saturation. In accordance with WDNR guidance, the soil sample will be collected from an interval above the groundwater interface to identify potential impacts to the soil. Groundwater was previously observed at 6 to 7 feet bgs during the Site investigation activities. The sample will be submitted for laboratory analysis of 6:2 FTS, PFPeA, and PFHxA, which were previously detected in soil samples during the previous Site investigation activities, and PFOS and PFOA. The sample will be placed in laboratory-supplied sample containers, placed on ice that is double-bagged in Ziplock® plastic bags, and shipped under chain-of-custody control via overnight carrier to Pace Analytical® (Pace) in West Columbia, South Carolina.

2. Installation of one groundwater monitoring well at the location adjacent to soil boring WL-B-3:

PFAS was detected in the soil sample from 6 to 7 feet bgs in WL-B-3, therefore, GZA proposes to advance one soil boring to be converted to a Chapter NR-141 (Wisconsin Administrative Code [Wis. Admin. Code]) monitoring well adjacent to soil boring WL-B-3, to investigate the potential for PFAS detected in soil to partition into groundwater at the Site. The monitoring well will be installed using hollow-stem auger drilling techniques. The approximate location of the monitoring well to be installed is shown on Figure 3. Further details include:

- GZA will oversee the construction of the monitoring well by the subcontractor following the advancement of the soil boring and continuous sampling to determine the depth to groundwater. The well will be constructed of 2-inch, Schedule 40, polyvinyl chloride (PVC), 0.01-inch, 10-foot long well screen and riser pipe. The estimated depth of the well will be 15 feet bgs. The annular space surrounding the screen will be filled with a sand filter pack from the bottom of the boring to a depth approximately 0.5 to 1 foot above the top of the well screen. The annular space from the top of the sand filter pack to the surface will be filled with bentonite chips or pellets. The well will



be constructed as a flush-mount completion with the protective cover surrounded by a concrete apron so that it will not interfere with operations at the Site and prohibit water or liquids from entering the well.

- Following well installation, the well will be allowed to equilibrate to a static condition before it is developed to remove sediment and improve hydraulic connection with the native formation. The soils at the Site consist of relatively low permeability clay with thin sand seams that reduces the groundwater recovery rate and limits the volume of groundwater that can be removed during development. The well will be developed by surging the water in the well using a disposable, polyethylene bailer and purging the water from the well using the bailer. The volume of water removed from the well will be dependent on the groundwater recharge rate and, if possible, up to 10 well volumes will be removed in accordance with the WDNR groundwater sampling guidance manual. If the well purges dry prior to 10 well volumes, the well will be allowed to recover three times and purged until the water is evacuated from the well. It is anticipated that the well will be allowed to equilibrate for 7 to 10 days before it is developed, and that development may require multiple events.
- Soil will be generated during the boring activities. This soil will be placed in a 55-gallon drum until proper disposal arrangements can be determined following the receipt of laboratory analysis.
- Field equipment used in the sampling and development activities will comply with GZA's Standard Operating Procedures for PFAS sites, which specifies PFAS-free componentry and field protocols for sampling teams to reduce the potential for sample bias or cross contamination.
- Once the well development is complete, the groundwater will be allowed to reach equilibrium prior to measuring the depth to water from the top of the well casing and collecting a groundwater sample using low-flow sampling techniques. The equipment placed in the well will be dedicated to the well and will not be reused. A polyethylene tube will be placed in the well and connected to a peristaltic pump to remove water. A multimeter will be connected on the discharge side of the pump to monitor the field parameters (dissolved oxygen [DO], oxidation-reduction potential [ORP], temperature, pH, conductivity, and turbidity) during purging. The well will be purged until the field parameters stabilize within a range acceptable for this method of sampling. The water will be collected in a 5-gallon bucket and will be placed in a 55-gallon drum for storage until proper disposal can be arranged. During purging, personnel will use a new pair of disposable gloves between setup, purging, and sample collection to reduce the potential for cross-contamination. The reusable equipment that is placed in the well will be decontaminated with a non-phosphate detergent and PFAS-free distilled water wash and a distilled water rinse between each well.
- Upon completion of purging, the multimeter will be disconnected from the peristaltic pump and the groundwater sample will be collected directly from the discharge tubing. The sample will be collected in a laboratory-supplied, PFAS-free container. In addition to the groundwater sample, a quality assurance/quality control (QA/QC) equipment blank will be collected from the water level indicator to evaluate the decontamination procedure and potential for cross- contamination.
- For laboratory analysis, the samples will be submitted for the analysis of 16 PFAS with proposed enforcement standards (perfluorooctane sulfonamide [FOSA], Hexafluoropropylene oxide dimer acid [HPFO-DA], perfluorobutanoic acid [PFBA], perfluorobutanesulfonic acid [PFBS], perfluorododecanoic acid [PFDoA], perfluorohexanoic acid [PFHxA], perfluorotetradecanoic acid [PFTeA], perfluoroundecanoic acid [PFUnA], 4,8-Dioxa-3H-perfluoronanoic acid [DONA], perfluorooctadecanoic acid [PFODA], perfluorohexasulfonic acid [PFHxS], perfluorononanoic acid [PFNA], perfluorodecanoic acid [PFDA], N-ethyl perfluorooctane sulfonamidoacetic acid [NEtFOSAA], PFOS, and PFOA). The sample will be placed in laboratory-supplied sample containers, placed on ice



that is double-bagged in Ziplock® plastic bags, and shipped under chain-of-custody control via overnight carrier to Pace in West Columbia, South Carolina.

3. The drainage ditch leading from the asphalt area contains sediment that could potentially contain PFAS from surface water runoff from the testing area:

To address this concern, GZA proposed to collect sediment samples from the drainage ditch before entry into the engineered pond and natural pond. The drainage ditch receives stormwater runoff from the Waukau Lot and is located along the eastern portion of the Site discharging at the southeast corner into a natural pond and further into a lined and engineered pond. The sediment samples collected will be taken from the drainage ditch south of the asphalt parking area, before it enters the engineered pond shown on Figure 3. The sediment sampling will include the following:

- Approximately three sediment samples will be collected from the surface to a depth to 0.5-foot from the bottom of the drainage ditch using a clean, stainless steel hand trowel. The hand trowel will be decontaminated between each sample using a distilled water and non-phosphate detergent with a distilled water rinse. During sediment sampling, field personnel will use a new pair of disposable gloves between sample retrieval and sample collection for each interval to reduce the potential for cross-contamination.
 - The sediment samples will be submitted for laboratory analysis of 6:2 FTS, PFPeA, and PFHxA, which were previously detected in soils at the Site, and PFOS and PFOA. In addition to the sediment samples, a QA/QC equipment rinsate sample will be collected from the hand trowel to evaluate the decontamination procedure and potential for cross-contamination. The sediment samples and QA/QC samples will be placed in laboratory-supplied sample containers, placed on ice that is double-bagged in Ziplock® plastic bags, and shipped under chain-of-custody control via overnight carrier to Pace in West Columbia, South Carolina.
4. GZA will conduct a field topographic elevation survey to determine the elevation of distinctive Site features such as asphalt pavement, berms, drainage ditch, berm around the engineered pond, water levels in the natural pond and the engineered pond, bottom of the intermittent creek east of the Site, the top of monitoring well casing, etc. These elevations will provide details to assist in interpreting and presenting the Site data and for determining the hydraulic connection between Site features.
 5. Upon receipt of the laboratory analytical results, GZA will prepare data tables and figures for review and discussion. Depending on the findings and the next steps in the project, GZA will prepare a report documenting the field observations, analytical results, data interpretations, and provide its conclusions and recommendations.

6.0 SCHEDULE

Following WDNR's approval of this work plan, GZA anticipates that the field activities will take approximately three to four weeks to complete, including the scheduling and coordination with the drilling subcontractor followed by a normal laboratory analytical turnaround of approximately 10 business days. Overall, the investigation process will likely require four to six weeks to receive the results followed by approximately two weeks for interpretation, documentation, and internal discussion prior to presenting the findings to the WDNR.



7.0 CERTIFICATIONS

"I, Kevin M. Hedinger, hereby certify that I am a hydrogeologist as that term is defined in s NR 712.03 (1), 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 chs. NR 700 to 726, Wis. Adm. Code."

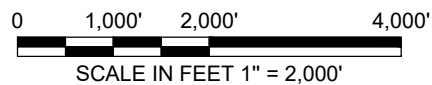
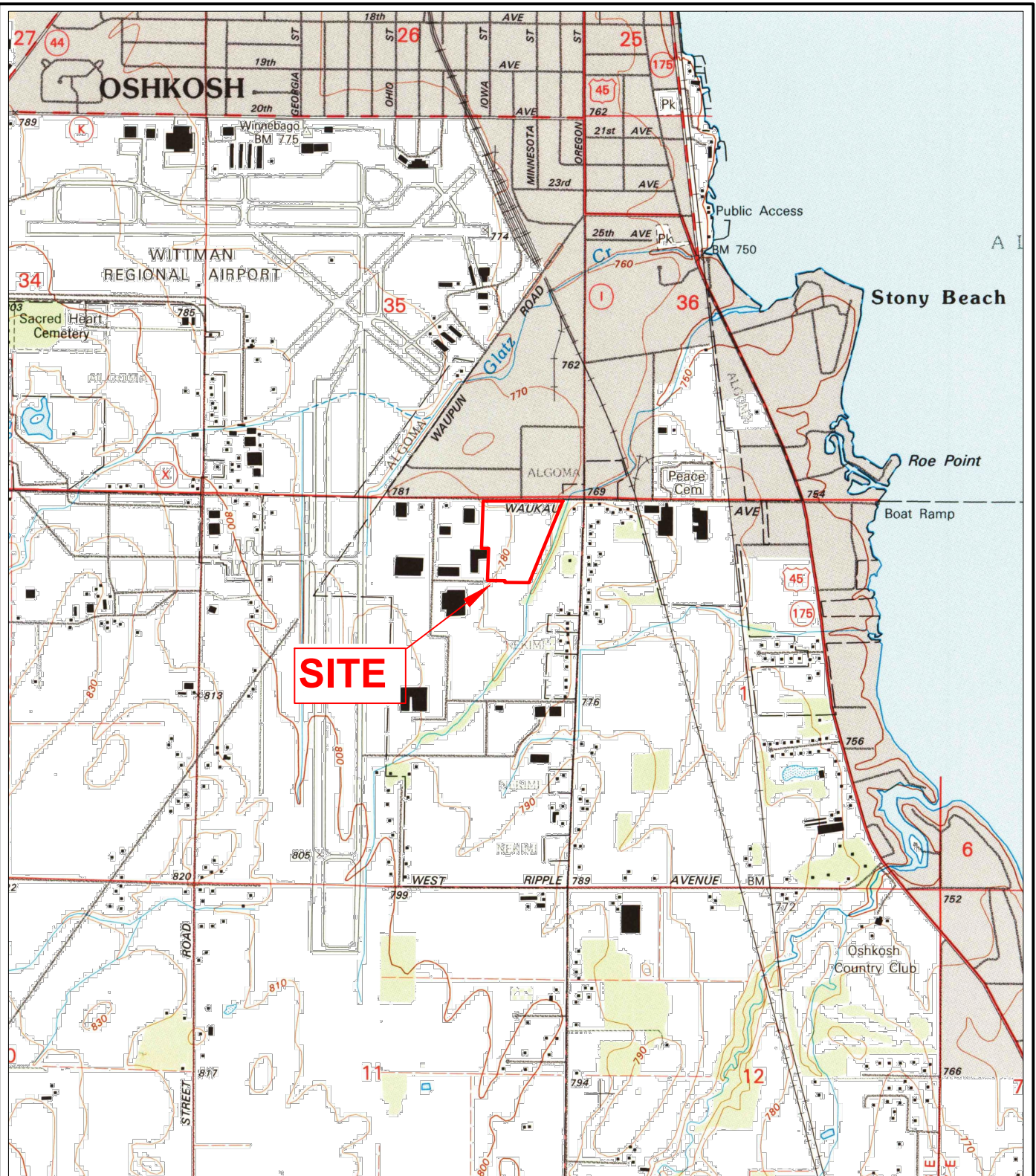
A handwritten signature in blue ink, appearing to read 'Kevin M. Hedinger', is written over a horizontal line.

Kevin M. Hedinger
Senior Project Manager / Hydrogeologist

June 17, 2021
Date



FIGURES



UNLESS SPECIFICALLY STATED BY WRITTEN AGREEMENT, THIS DRAWING IS THE SOLE PROPERTY OF GZA GEOENVIRONMENTAL, INC. (GZA). THE INFORMATION SHOWN ON THE DRAWING IS SOLELY FOR USE BY GZA'S CLIENT OR THE CLIENT'S DESIGNATED REPRESENTATIVE FOR THE SPECIFIC PROJECT AND LOCATION IDENTIFIED ON THE DRAWING. THE DRAWING SHALL NOT BE TRANSFERRED, REUSED, COPIED, OR ALTERED IN ANY MANNER FOR USE AT ANY OTHER LOCATION OR FOR ANY OTHER PURPOSE WITHOUT THE PRIOR WRITTEN CONSENT OF GZA. ANY TRANSFER, REUSE, OR MODIFICATION TO THE DRAWING BY THE CLIENT OR OTHERS, WITHOUT THE PRIOR WRITTEN EXPRESS CONSENT OF GZA, WILL BE AT THE USER'S SOLE RISK AND WITHOUT ANY RISK OR LIABILITY TO GZA.

OSHKOSH CORPORATION
WAUKAU LOT
OSHKOSH, WISCONSIN

PREPARED BY:
GZA GeoEnvironmental, Inc.
Engineers and Scientists
www.gza.com

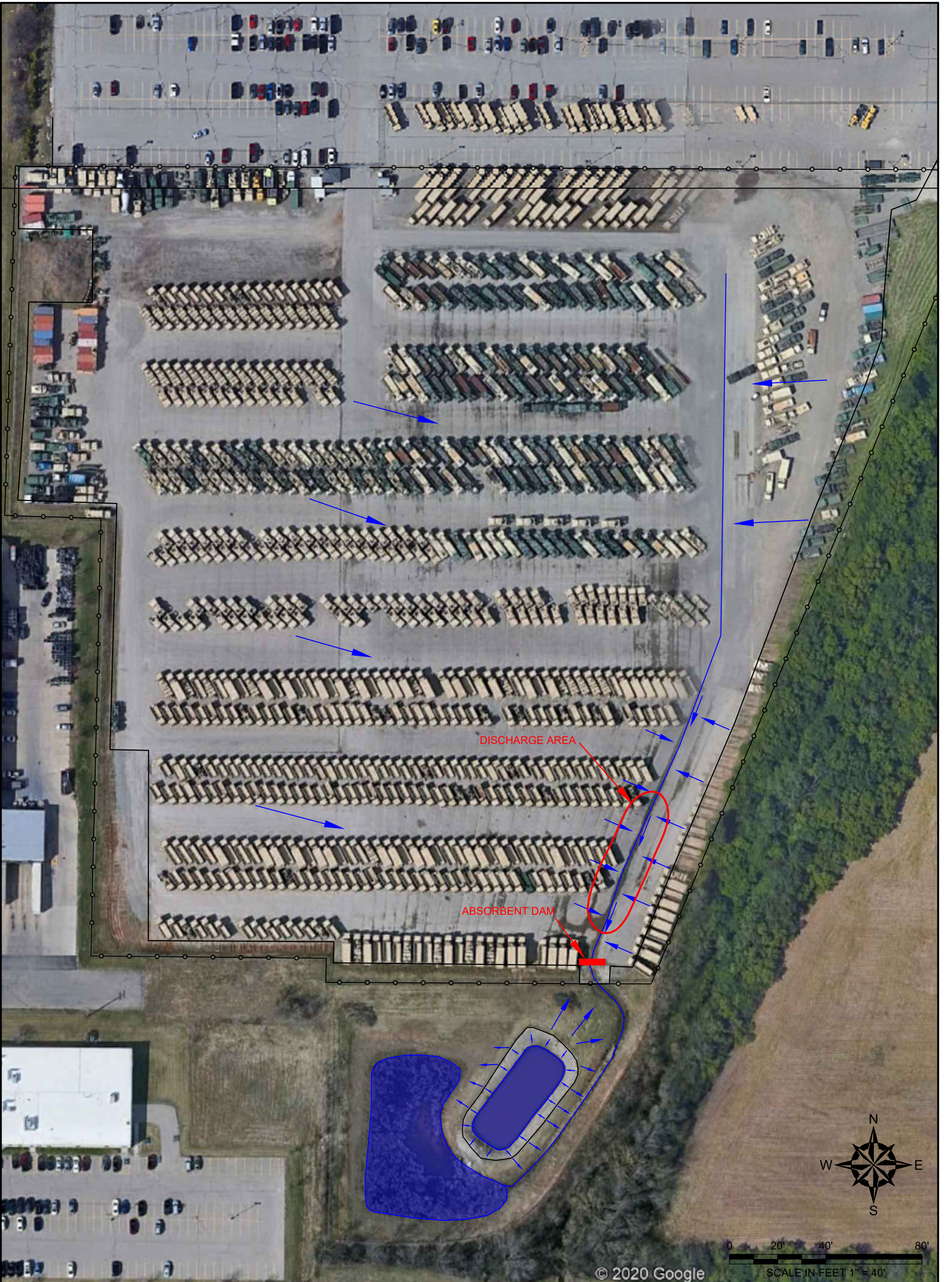
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OSHKOSH, WISCONSIN

SITE LOCATION

PROJ MGR: KMH	REVIEWED BY: JCO	CHECKED BY: JCO
DESIGNED BY: KMH	DRAWN BY: KMH	SCALE: AS SHOWN
DATE: 12/29/2020	PROJECT NO. 20.0157080.01	REVISION NO.

FIGURE 1
SHEET NO.

©2020 - GZA GeoEnvironmental, Inc. GZA-J:\157000T0157099\157080 OSHKOSH\REPORT\SITE INVESTIGATION REPORT - WAUKAU LOT\FIGURES\CAD\SITE PLAN.DWG F2--SURFACE DRAINAGE DECEMBER 29, 2020 KEVIN HEDINGER



NO.	ISSUE/DESCRIPTION	BY	DATE

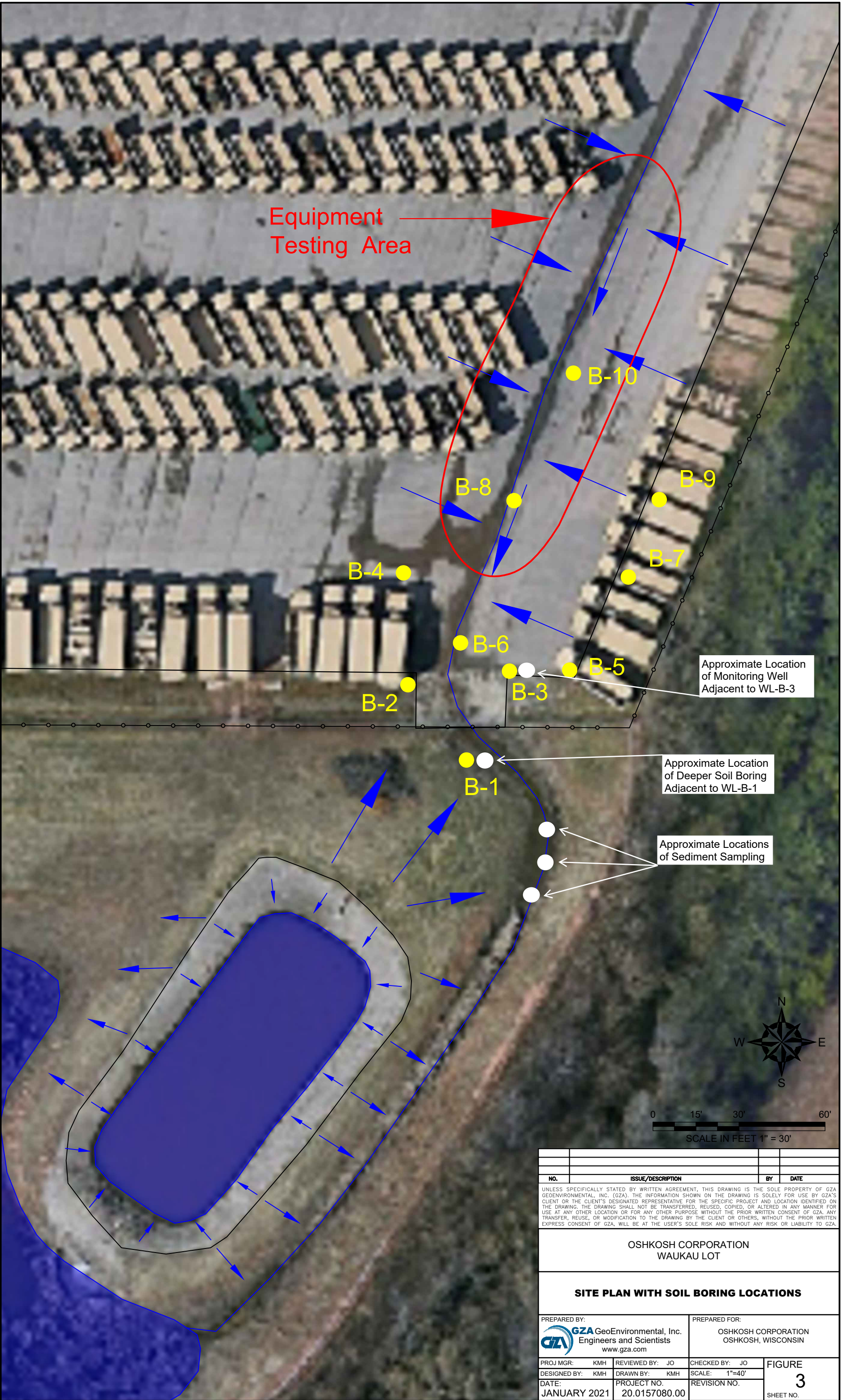
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**OSHKOSH CORPORATION
WAUKAU LOT**

SURFACE DRAINAGE

PREPARED BY: GZA GeoEnvironmental, Inc. Engineers and Scientists www.gza.com		PREPARED FOR: OSHKOSH CORPORATION OSHKOSH, WISCONSIN	
PROJ MGR: KMH	REVIEWED BY: JO	CHECKED BY: JO	FIGURE 2 SHEET NO.
DESIGNED BY: KMH	DRAWN BY: KMH	SCALE: 1"=40'	
DATE: JANUARY 2021	PROJECT NO. 20.0157080.00	REVISION NO.	

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NO.	ISSUE/DESCRIPTION	BY	DATE

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OSHKOSH CORPORATION
WAUKAU LOT

SITE PLAN WITH SOIL BORING LOCATIONS

PREPARED BY: GZA GeoEnvironmental, Inc. Engineers and Scientists www.gza.com		PREPARED FOR: OSHKOSH CORPORATION OSHKOSH, WISCONSIN	
PROJ MGR: KMH	REVIEWED BY: JO	CHECKED BY: JO	FIGURE 3 SHEET NO.
DESIGNED BY: KMH	DRAWN BY: KMH	SCALE: 1"=40'	
DATE: JANUARY 2021	PROJECT NO. 20.0157080.00	REVISION NO.	



APPENDIX A

LIMITATIONS



LIMITATIONS

Standard of Care

1. GZA's findings and conclusions are based on the work conducted as part of the Scope of Services set forth in the proposal and/or report and reflect our professional judgment. These findings and conclusions must be considered not as scientific or engineering certainties, but rather as our professional opinions concerning the limited data gathered during the course of our work. Conditions other than described in this report may be found at the subject location(s).
2. GZA's services were performed using the degree of skill and care ordinarily exercised by qualified professionals performing the same type of services, at the same time, under similar conditions, at the same or a similar property. No warranty, expressed or implied, is made. Specifically, GZA does not and cannot represent that the site contains no hazardous material, oil, or other latent condition beyond that observed by GZA during its study. Additionally, GZA makes no warranty that any response action or recommended action will achieve all of its objectives or that the findings of this study will be upheld by a local, state, or federal agency.
3. In conducting our work, GZA relied upon certain information made available by public agencies, Client and/or others. GZA did not attempt to independently verify the accuracy or completeness of that information. Inconsistencies in this information which we have noted, if any, are discussed in the report.

Subsurface Conditions

4. The generalized soil profile(s) provided in our report are based on widely spaced subsurface explorations and are intended only to convey trends in subsurface conditions. The boundaries between strata are approximate and idealized and were based on our assessment of subsurface conditions. The composition of strata and the transitions between strata may be more variable and more complex than indicated. For more specific information on soil conditions at a specific location, refer to the exploration logs.
5. Water level readings have been made in test holes (as described in the report) and monitoring wells at the specified times and under the stated conditions. These data have been reviewed and interpretations have been made in this report. Fluctuations in the level of the groundwater, however, occur due to temporal or spatial variations in areal recharge rates, soil heterogeneities, the presence of subsurface utilities and/or natural or artificially induced perturbations. The observed water table may be other than indicated in the report.

Compliance with Codes and Regulations

6. GZA used reasonable care in identifying and interpreting applicable codes and regulations necessary to execute our scope of work. These codes and regulations are subject to various and possibly contradictory interpretations. Interpretations and compliance with codes and regulations by other parties are beyond our control.

Screening and Analytical Testing

7. GZA collected environmental samples at the locations identified in the report. These samples were analyzed for the specific parameters identified in the report. Additional constituents, for which analyses were not conducted, may be present in soil, groundwater, surface water, sediment and/or air. Future site activities and uses may result in a requirement for additional testing.
8. Our interpretation of field screening and laboratory data is presented in the report. Unless otherwise noted, GZA relied on the laboratory's quality assurance (QA)/quality control (QC) program to validate these data.
9. Variations in the types and concentrations of contaminants observed at a given location or time may occur due to release mechanisms, disposal practices, changes in flow paths, and/or the influence of various physical, chemical, biological or radiological processes. Subsequently observed concentrations may be other than indicated in the report.

Interpretation of Data

10. Our opinions are based on available information, as described in the report, and on our professional judgment. Additional observations made over time and/or space may not support the opinions provided in the report.



Additional Information

11. In the event that Client or others authorized to use this report obtain information on environmental or hazardous waste issues at the site not contained in this report, such information shall be brought to GZA's attention forthwith. GZA will evaluate such information and, on the basis of this evaluation, may modify the conclusions stated in this report.

Additional Services

12. GZA recommends that we be retained to provide services during any future investigations, design, implementation activities, construction and/or property development/ redevelopment at the site. This will allow us the opportunity to: i) observe conditions and compliance with our design concepts and opinions; ii) allow for changes in the event that conditions are other than anticipated; iii) provide modifications to our design; and iv) assess the consequences of changes in technologies and/or regulations.