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February 17, 2025
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: Supplemental Site Investigation Work Plan
Oshkosh Defense Waukau Lot
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"), prepared this Supplemental Site Investigation Work Plan ("Work Plan") for the property at 359 West Waukau Avenue in Oshkosh, Wisconsin (referred to as "Waukau Lot"). This Work Plan is being submitted in response to comments from the Wisconsin Department of Natural Resources (WDNR) based on a review of the Supplemental Site Investigation Report, dated August 6, 2024.[1] GZA and Oshkosh representatives met with the WDNR on November 6, 2024, prior to receiving the written correspondence, to discuss the review comments. Based on our discussion and the review comments received by Oshkosh in a November 6, 2024 letter, the WDNR PFAS Review Committee is requiring additional site investigation activities be completed in accordance with Chapter NR 716, Wisconsin Administrative Code (Wis. Adm. Code). Specifically, the comments provided by the WDNR are as follows:

- A groundwater monitoring well is needed downgradient, east/northeast, of MW-1; and
- Evaluation of the stormwater pond as a source of residual surface/groundwater contamination.

The Work Plan presented herein incorporates information gained from our discussion and is intended to be responsive to WDNR comments while satisfying the requirements of Chapter NR 716.

INVESTIGATION APPROACH AND RATIONALE

Based on the WDNR comments, the following additional investigation activities are proposed:

- Installation of one Chapter NR 141-compliant groundwater monitoring well east/northeast of existing monitoring well MW-1, as shown on **Figure 1**. This well is proposed to be installed approximately 150 feet to the east, just beyond Gallups/Merritts Creek. Based on variations in groundwater and surface water elevations, it appears that groundwater discharge to the creek is seasonal, and underflow predominates.

During soil boring advancement, soil samples will be collected continuously throughout the depths of the boring for visual observation and soil classification.

[1] *Supplemental Site Investigation Report, Waukau Lot, 359 West Waukau Avenue, Oshkosh, Wisconsin, BRRTS No. 02-71-587405*, dated August 6, 2024, GZA File No. 20.0157080.00.

- The monitoring well will be completed with 2-inch-diameter, flush-threaded, polyvinyl chloride (PVC) riser and well screen. The well screen will be placed straddling the anticipated static water level and consist of 10 feet of 0.010-inch, factory-slotted, PVC screen with PVC riser pipe. The annular space surrounding the well screen will be filled with sand filter pack material from the bottom of the borehole to a depth approximately 2 feet above the top of the screen. The annular space above the sand filter pack will be filled with ⅜-inch bentonite pellets to create a seal to prevent surface water migration along the well casing. The surface of the well will be completed as an above-grade completion with a steel protective cover with locking lid. A vented PVC cap will be placed on the top of the well.
- The well will be developed in general accordance with the WDNR Groundwater Sampling Field Manual procedures. As described therein, the monitoring well will be developed by surging water in the well screen and sand filter pack to mobilize sediment into the well and water will be removed using a disposable bailer or submersible pump. The purge water will be placed in a 55-gallon drum and labeled until proper disposal can be arranged.
- The top of casing and ground surface elevation of the well will be surveyed relative to the on-site datum.
- Groundwater samples will be collected from the newly installed monitoring well and the four existing monitoring wells (MW-1 through MW-4) using low-flow sampling techniques. During purging, field parameters (temperature, pH, dissolved oxygen, specific conductance, oxidation-reduction potential, and turbidity) will be monitored using a flow-through cell until the parameters stabilize. The groundwater sampling activities and measurements will be recorded on a groundwater sampling form. The groundwater samples will be collected directly from the pump tubing into laboratory-supplied sample containers. The samples will be shipped under chain-of-custody control to Pace® Analytical of West Columbia, South Carolina for analyses of the Wisconsin List of 33 PFAS.
- A comparison of the groundwater elevations collected from monitoring well MW-4 and the unlined pond indicate that the water in the pond is groundwater. Groundwater samples collected from monitoring well MW-4 indicate that there are regional PFAS concentrations migrating onto the Oshkosh property. To assist in understanding surface/groundwater interaction at the Site, a staff gauge will be installed in the natural pond to allow for measurement of the surface water elevation. The staff gauge will be installed near monitoring well MW-4, as shown on **Figure 1**.

  The high-water elevation of the natural pond is controlled by a discharge pipe into the lined pond. Therefore, the invert elevation of the pipe draining into the lined pond will be surveyed relative to the on-site datum. These elevations will be evaluated relative to the groundwater elevations measured in the monitoring wells to understand the connection between surface water and groundwater in the pond area.
- During the site investigation the creek elevation was surveyed and compared to the groundwater elevation measured in monitoring well MW-3. Based on these elevations, groundwater discharge to the creek appears to be seasonal at times of high groundwater elevation. Two staff gauges will also be installed in Gallups/Merritts Creek to measure the water elevation in the creek. One staff gauge will be installed east of monitoring well MW-3 and a second staff gauge will be installed between monitoring wells MW-1 and the proposed downgradient well, MW-5. The proposed staff gauge locations are shown on **Figure 1**. During installation and surveying of each staff gauge, measurements will be collected from a transect perpendicular to water flow to establish an elevation profile for the bottom of the creek. These elevations will be evaluated relative to the groundwater elevations measured in the monitoring wells to determine if and over what period the creek is acting as a discharge point for groundwater.
- Upon collection of water levels, the receipt of the soil and groundwater laboratory results, and an interpretation of the data, the methods, observations and findings will be summarized in a letter and presented to the WDNR.

SCHEDULE

The monitoring well installation will require access through an agricultural field that is relatively flat, causing soft soils during wet periods. To understand the hydraulic connection between surface water and groundwater, multiple seasonal

measurement events are planned. Therefore, it is anticipated that the proposed site investigation activities described above will be implemented in Spring 2025, weather permitting. Groundwater analytical results will be provided to the WDNR in a timely manner upon receipt, with a report summarizing the activities and results likely being submitted in Summer to Fall 2025.

If you have questions regarding this Work Plan, please feel free to contact Mr. Kevin Hedinger at 262-754-2578 or via email at kevin.hedinger@gza.com, or Mr. John Osborne at 262-754-2590 or via email at john.osborne@gza.com.

Sincerely,

GZA GeoEnvironmental, Inc.

Kevin M. Hedinger
Senior Hydrogeologist

John C. Osborne, P.G.
Principal Hydrogeologist

J:\157000to157099\157080 Oshkosh\Report\Supplemental Site Investigation Work Plan- Waukau Lot- 2-2025\FINAL 20.0157080.00 Supplemental SI Work Plan_Waukau Lot 2-17-25.docx

Attachment: Figure 1 - Proposed Monitoring Well Location

c. Mr. Kevin Tubbs, Oshkosh Corporation
Ms. Suzanne Murawski, Oshkosh Defense
Mr. Scott Obremski, Oshkosh Corporation
Mr. William Nelson, Godfrey & Kahn

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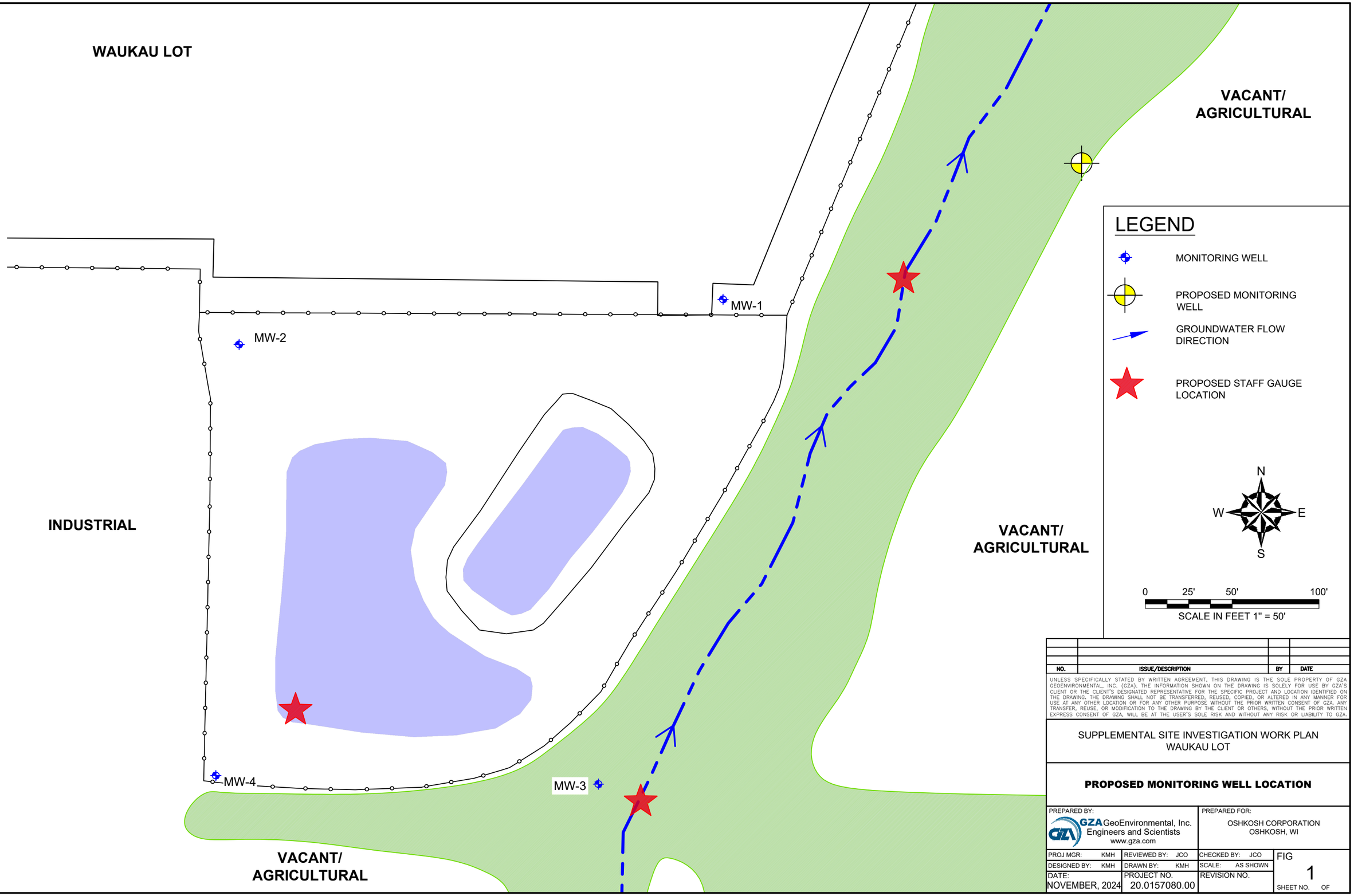

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SUPPLEMENTAL SITE INVESTIGATION WORK PLAN
WAUKAU LOT

PROPOSED MONITORING WELL LOCATION

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

PREPARED FOR:
OSHKOSH CORPORATION
OSHKOSH, WI

PROJ MGR: KMH	REVIEWED BY: JCO	CHECKED BY: JCO	FIG
DESIGNED BY: KMH	DRAWN BY: KMH	SCALE: AS SHOWN	1
DATE: NOVEMBER, 2024	PROJECT NO. 20.0157080.00	REVISION NO.	SHEET NO. OF