



ENVIRONMENTAL CONSULTATION & REMEDIATION

KPRG and Associates, Inc.

REVISED ADDITIONAL SITE INVESTIGATION WORK PLAN

May 3, 2019

Mr. Mark Drews, P.G.
Wisconsin Department of Natural Resources
141 NW Barstow Street, Room 180
Waukesha, WI 53188

Via E-Mail and FedEx

KPRG Project No. 11717

Re: Revised Additional Site Investigation Work Plan
Former Navistar/RMG Foundry - 1401 Perkins Avenue, Waukesha, WI
BRRTS # 02-68-098404

Dear Mr. Drews:

On February 20, 2019, KPRG and Associates, Inc. (KPRG), on behalf of Navistar, Inc. (Navistar) submitted and Additional Site Investigation Work Plan in response to Wisconsin Department of Natural Resources (WDNR) letter dated January 29, 2019. Based on a subsequent meeting held on April 11, 2019 between Navistar, KPRG, WDNR and U.S. Environmental Protection Agency (EPA), Navistar has agreed to implement an expanded scope of site investigation work prepared by EPA for the above referenced site (see Attachment 1). The revised scope of work includes the following tasks:

- Task 1 – Additional Groundwater Investigation
- Task 2 – Sewer Line Investigation
- Task 3 – Additional Soil Sampling
- Task 4 – Expanded Soil Vapor Intrusion Investigation
- Task 5 – Continue Immediate Actions and Evaluate Additional On-site Investigation (Source Removal)

This Revised Additional Site Investigation Work Plan replaces the initial February 20, 2019 submittal. The scope of each task is discussed separately below followed by a revised project schedule.

As a note, we believe that some of these investigation steps are likely beyond the area that would be expected to have been impacted by the foundry and may well have been impacted by other regional sources. Nonetheless, Navistar has agreed to submit the workplan based on the request of both agencies to conduct a wholistic look at the area. Navistar's agreement to undertake these

actions is in the spirit of cooperation with the agencies, but we must reserve all our rights as to the specific sources of any contamination that may be identified and Navistar's agreement to undertake these steps should not be considered an admission of responsibility or liability.

1.0 Task 1 – Additional Groundwater Investigation

A total of 11 additional monitoring wells will be installed at approximate locations shown on Figure 1. Descriptive locations and rationale are summarized in Table 1. Ten of these monitoring wells (MW-46 through MW-55) will be located off-site to assist in defining the horizontal extent of groundwater impacts in the area. These wells will be located on City of Waukesha right-of-ways which will require obtaining access permits from the City prior to installation. These wells are anticipated to be 15 to 30 feet deep and the screens will straddle the water table. The last well (MW-9D2) will be an approximate 100-foot deep well that will be located adjacent to existing on-site monitoring well MW-9D to assist in defining the vertical extent of groundwater impacts in this area.

The monitoring wells will be drilled using sonic drilling and resulting core samples will be visually logged and field screened for total organic vapors using a photoionization detector (PID). Well construction will be completed in accordance with the existing approved Work Plan. The wells will be developed and the locations and top of casing elevations surveyed by a Wisconsin licensed surveyor. All cuttings and well development water will be containerized for subsequent proper off-site disposal.

The new monitoring wells will be added to the existing quarterly groundwater sampling program. Groundwater samples will be collected using low-flow sampling and analyzed for chlorinated volatile organic compounds (CVOCs). In addition, samples will be analyzed for natural attenuation parameters semi-annually. All sample handling and preservation will be completed in accordance with the approved Work Plan.

2.0 Task 2 – Sewer Line Investigations

The following three components of sewer line investigation will be completed:

- Task 2.1 – On-site Storm Sewer Camera Study
- Task 2.2 – Storm Sewer Water Sampling
- Task 2.3 – Sanitary Sewer Study

The scope of each subtask is discussed below. It is noted that the storm sewer and sanitary sewer sampling programs within the public roadways will need to be approved by and coordinated with the City of Waukesha.

Task 2.1 – On-site Storm Sewer Camera Study

Figures 2 and 3 provide maps with an overlay of the storm sewer and sanitary sewer lines, respectively, beneath and around the Navistar facility. Gaining a better understanding of the current condition of the sewer lines will help evaluate the potential distribution of impacts and provide the necessary information to support the evaluation of remedial options.

Relative to the on-site storm sewer lines, there are two main storm sewers that traverse the foundry property from east to west, one along the northern third (72-inch diameter) and one along the southern third (48-inch diameter) of the site as shown on Figure 2. The storm sewers tie together at the west side of the property and eventually discharge/daylight as the creek in Frame Park. It is proposed to engage a sewer specialty contractor, Visu-Sewer, to run an automated camera through each line to allow for visual inspection on the condition of each storm sewer line. Visu-Sewer will provide a video of the work along with an interpretive report highlighting any notable observations such as cracks or unknown tie-ins. It is noted that during this work, some cleaning/removal of accumulated sediment may need to occur to facilitate camera passage. Any removed sediment will be temporarily stockpiled on visqueen within the outside storage area on the northwest side of the foundry property (fenced and access controlled area). Any staged sediment will be sampled and profiled for proper subsequent off-site disposal. This data will also be useful in evaluating potential impacts within the storm sewer system. The stockpile will also be covered with visqueen until proper disposal is arranged.

Once the Visu-Sewer camera study is completed and evaluated, this information will be used in determining whether any repairs, re-linings or other modifications may be necessary as part of overall site remedy.

Task 2.2 – Storm Sewer Water Sampling

Based on information obtained from the City of Waukesha, the storm sewer system in the general area within and around the RMG Foundry is shown on Figure 2. It is noted that storm sewer water from the neighborhood to the south flows north towards the main sewer within Perkins Avenue. Based on an evaluation of the storm sewer information, the following is an inventory of manholes and catch basins that will be addressed in this study:

- Perkins Avenue – 4 manholes, 9 catch basins
- Niagara Street – 1 manhole, 13 catch basins
- White Rock Avenue – 11 manholes, 8 catch basins
- Phoenix Drive – 4 manholes, 1 catch basin
- Lombardi Way – 1 manhole, 4 catch basins
- RMG Foundry – 18 manholes, 4 catch basins

Discussions with the City of Waukesha indicate that this work will require access/street opening permits and traffic control plans. These are expected to require up to 30-days to

complete and coordinate access. As possible, each manhole and catch basin will be accessed and any water noted will be sampled for CVOC analysis. Depth to water within the manhole/catch basin will be measured. The water samples will be obtained using either a disposable dip sampler or a disposable bailer. Samples will be transferred directly into laboratory prepared containers and stored on ice prior to shipping to the analytical laboratory. Assuming water is found within each sampling point, a total of 78 water samples will be collected plus a duplicate per each 20 samples. Although some previous water sampling was performed within the storm sewer system on RMG Foundry property, including the on-site storm sewers system within this sampling effort will provide a complete “snap-shot” in time of existing conditions.

Since the storm sewers are open to the atmosphere, it is not appropriate to collect gas/vapor samples from these locations.

Task 2.3 Sanitary Sewer Study

Based on information obtained from the City of Waukesha, the sanitary sewer system in the general area within and around the RMG Foundry is shown on Figure 3. It is noted that sanitary sewer water from the neighborhood to the south flows generally flows north and/or west towards the main sanitary sewers within Perkins Avenue and White Rock Avenue. Based on an evaluation of the sanitary sewer information, the following is an inventory of manholes that will be addressed in this study:

- Perkins Avenue – 10 manholes
- Niagara Street – 3 manholes
- White Rock Avenue – 10 manholes
- Phoenix Drive – 5 manholes
- Lombardi Way – 6 manholes
- RMG Foundry – 5 manholes

Discussions with the City of Waukesha indicate that this work will require access/street opening permits and traffic control plans. These are expected to require up to 30-days to complete and coordinate access. Since the sanitary manholes are solid, both sewer gas/vapor and water samples will be collected. The following sewer vapor sampling procedure will be used:

- If the manhole cover has a vent hole, sampling will be completed through that opening. If no vent hole is present, the manhole cover will be moved enough to allow for the passage of a water level meter probe and the vapor sampling tube.
- Measure the depth to water with an electronic water level meter.
- Attach a sufficient length of sample tubing with an air tight three-way valve to a 1-liter laboratory cleaned Summa canister with no flow regulator. Perform a Shut-in test to verify air tight connections.

- Lower the sample tubing to within approximately 0.3 meters (1 foot) of the measured water level or the base of the sewer if no water is present. Purge out at least three sample tube volumes of air from the line using either a syringe or PID meter pump.
- Once the sample tubing has been purged, open the valve to the Summa canister and then open the canister intake port to collect a grab sample of the sewer vapor.
- Use new tubing for each sample location.
- All vapor samples will be analyzed for CVOCs using Method TO15.

This sampling procedure was obtained from Thomas McHugh, Lila Beckley, et.al., Evidence of a Sewer Vapor Transport Pathway at the USEPA Vapor Intrusion Research Duplex, Science of the Total Environment 598, pages 772-779 (2017).

Once a sewer vapor grab sample is obtained, the manhole cover will be removed and, if possible, a water sample will be obtained for CVOC analysis using either a disposable dip sampler or a disposable bailer. Samples will be transferred directly into laboratory prepared containers and stored on ice prior to shipping to the analytical laboratory. Assuming water is found within each sampling point, a total of 39 water samples will be collected plus a duplicate per each 20 samples.

3.0 Task 3 – Additional Soil Sampling

A total of 11 additional soil borings will be completed and sampled. To complete definition of the trichloroethene (TCE) impacts beneath the southwest parking lot located on the north side of Perkins Avenue, five additional soil borings will be drilled. Two of the soil borings (GP-62 and GP-63; see Figure 1) will be drilled to the north and west of geoprobe location GP-55, respectively. Three additional soil borings (GP-64 through GP-66) will be drilled within the right-of-way on the south side of Perkins Avenue.

There are two asphalt paved parking lots used by RMG Foundry located on the south side of Perkins Avenue (see Figure 1). Based on historical aerial photograph information, the eastern most parking lot has been used for parking since at least 1941 (unpaved). The eastern half of the west parking lot was used for parking since sometime between 1941 and 1950 with prior land use being vacant/undeveloped. Paving of these two areas occurred sometime between 1963 and 1970. The western half of the western parking lot was residential until sometime between 1970 and 1980 during which time the residence was razed and the west parking lot extended (and paved) to its current size. There is no record of any materials storage in these areas. To further address these two areas, it is proposed to drill three borings per parking lot (borings GP-67 through GP-72) at approximate locations shown on Figure 1.

In accordance with the existing approved Work Plan, all borings will extend to approximately eight feet below ground surface (bgs) and soil samples will be collected at two-foot intervals, if possible, for analysis of volatile organic compounds (VOCs). This will yield a total of up to 44 soil samples plus a duplicate per 20 samples. Drilling, sampling and handling procedures will be followed in accordance with the existing approved Work Plans dated May 2017 and October 2018.

4.0 Task 4 – Expanded Soil Vapor Intrusion Investigation

The expanded soil vapor intrusion (SVI) investigation will include the following:

- Task 4.1 – Additional Residential/Commercial Property Sampling
- Task 4.2 – Vacant Properties Being Considered for Redevelopment

Each is discussed separately below.

Task 4.1 – Additional Residential/Commercial Property Sampling

The current residential/commercial property vapor intrusion sampling program will be expanded by approximately 59 properties within the areas shown on Figure 1. The expanded area to the south includes all properties north of 1144 Lombardi Way; 1138 Phoenix Drive/Phoenix Heights Park; 1200 The Strand; all properties north of Regent Street on the west side of Raymond Street. The expanded area to the north includes all properties west of 901 Eales Avenue. The 702 Elm Street residence is also being added to the west. Of these properties, the following three are commercial properties:

- 1242 The Strand – DC’s Tap
- 1231 The Strand – Healey Manufacturing (also includes a parking lot area on west side of The Strand)
- 1220 The Strand – JR’s tap

The largest of these commercial properties is Healey Manufacturing (1231 The Strand) which, if access is provided, will require a high volume purge sampling program. The remaining commercial property structures appear to be smaller in size and will be sampled via individual sub-slab sampling points. The appropriate method and number of sampling points will be determined once access is obtained and the buildings inspected.

One of the properties located at 1124 Raymond Street (southwest corner of Raymond Street and Regent Street) is vacant/undeveloped. The potential need for vapor probe installations on this property will be determined based on the results of the residential vapor intrusion investigations surrounding this property.

Our proposal to sample these properties in no way indicates an agreement that any contamination identified on the properties is related to the former Navistar foundry. As EPA and WDNR are aware, commercial properties in particular may well be associated

with unrelated contaminant sources. If conclusions may be made as to the contaminant sources as a result of this sampling, we may address those in our report.

Initial access request letters are being prepared for mailing to the property owners. Once access is granted for a specific property, the sampling will be completed as expeditiously as possible in accordance with the existing approved Work Plan. If a resident is non-responsive to two access requests or access is denied, the WDNR will be provided with documentation of access attempts and/or access denial along with a request for assistance to gain property access. The work will be completed in accordance with field procedures specified in the approved Work Plan dated May 2017. All vapor samples will be analyzed for CVOCs using Method TO15.

Initial sampling will include an indoor/outdoor air sample and a sub-slab vapor sample collected concurrently (sub-slab vapor upon completing of indoor air sampling). If a sump is present within the basement and water is noted within the sump, a water sample will also be collected from the sump and analyzed for CVOCs.

In accordance with WDNR guidance, if there are no exceedances of the Vapor Action Levels (VAL) in the initial indoor air sample and no exceedances of a Vapor Risk Screening Level (VRSL) in the sub-slab vapor sample, three additional quarterly rounds of sub-slab vapor samples will be collected. If any of these indicate an exceedance of a VRSL, then a follow-up indoor air sample will be collected as well.

If there is no exceedance of a VAL in the indoor air sample, but there is an exceedance of a VRSL, then subsequent follow-up rounds of quarterly vapor sampling will include both indoor/outdoor and sub-slab vapor sampling.

If there is an exceedance of a VAL in the indoor air sample, the installation of a sub-slab depressurization system (SSDS) will be completed as expeditiously as possible, depending on resident approvals and access. The SSDS installations will include an initial set of pressure field extension sampling to verify that vacuum is being drawn from the entire footprint of the basement. Within two to four weeks of SSDS installation/operation, a follow-up round of indoor air sampling will be completed within the basement of the residence. In addition, three rounds of quarterly pressure field extension testing will be completed as part of installation documentation.

All sampling data will continue to be provided to the residents as well as the WDNR within no more than 10 days of data receipt from the analytical laboratory. The Wisconsin Department of Health Services (DHS) and EPA will also be copied on the data.

Task 4.2 – Vacant Properties Being Considered for Redevelopment

During implementation of the existing SVI study work, it was brought to the attention of Navistar that the City of Waukesha has established a Tax Incremental Funding (TIF) district along White Rock Avenue with potential plans for having a portion of the area redeveloped with multi-family housing. One multi-family housing structure would be

located on the west side of White Rock, just south of Moreland Blvd., where the former bowling alley was located. This currently vacant piece of land (0.69 acres) is owned by Hansen Brothers, LLC. One to two additional structures would be located on the east side of White Rock and south of Moreland Blvd. and Eales Street. This area currently consists of three vacant lots, two owned by Hansen Brothers, LLC (0.52 acres and 0.18 acres) and one owned by Ms. Maria Sigala (0.43 acres; see Figure 1).

Based on this information, Navistar voluntarily contacted the subject property owners with access request letters sent on December 20, 2018 and again on February 1, 2019. The requests are for the installation of soil vapor probes (to approximately 8 feet in depth) for VOC sampling utilizing Summa Canisters with 60-minute regulators. All appropriate tightness testing would be performed prior to sampling. Two soil vapor probes were proposed for each of the three larger parcels and one soil vapor probe was proposed for the smaller parcel. There has been no response from the property owners to date.

5.0 Task 5 – Continue Immediate Actions and Evaluate Additional On-site Investigation (Source Removal)

The WDNR/EPA requested several additional SSDS installations be completed as soon as possible. The status on those installations is as follows:

- 1242 Lombardi Way – This resident does not speak English. KPRG met with translator and resident on April 16, 2019. This is part of a duplex with the sump (noted to be dry) located within the adjacent residence with address of 1240 Lombardi Way. KPRG will install venting systems within both residences since they are sharing a common sump. Installation of the SSDS for both sides of the duplex will be installed on May 4, 2019 which was the earliest date the residents could accommodate.
- 1229/1231 Lombardi Way – This is a duplex under one ownership. Individual sumps, both of which were noted to be dry. SSDSs were installed on both sides on April 23, 2019.
- 1231 Phoenix Drive – Single family residence. Sump was noted to be dry and SSDS was installed on April 24, 2019.
- 1412 White Rock Avenue – KPRG has been trying to schedule this installation since mid-December 2018. After leaving additional messages, the call was returned April 19, 2019 by Simon Monreal, Jr. The house is currently vacant (son moved his elderly parents to his own house). They are intending to sell the house as part of the proposed multi-family redevelopment in the area. However, if that process is protracted, he may consider renting the house temporarily. SSDS installation is set for May 17, 2019, the earliest available date he could accommodate.

Post-installation follow-up indoor air sampling will be scheduled for these residents.

Navistar will continue to implement immediate actions in the form of SSDS installations at residences or commercial properties depending on the results of ongoing SVI sampling as discussed under Task 4.1. Navistar is also contemplating the design and construction of a soil vapor extraction line(s) along the southern border of and within the southwest parking lot area where the presence of elevated TCE concentrations have been documented in unsaturated zone soils allegedly associated with historical materials handling. The intent of the vapor extraction system would be to address the source zone soils and preclude potential VOC vapor migration from this area to the south. A pilot test will be completed to assist with full scale system design. This interim action would be intended to be incorporated into the eventual overall site remedy to be developed as part of engineering evaluations upon completion of the site investigation. Any required operational permits will be obtained as necessary.

As part of additional on-site investigation, the EPA/WDNR scope of work included the installation of a deeper well in the vicinity of existing well MW-9D which showed detections of TCE above the enforcement standard during the last three rounds of groundwater sampling. The installation of a deeper monitoring well (MW-9D2) next to well MW-9D was included in Task 1 work discussed above.

Also relative to additional on-site investigation/source removal, it is noted that the results of the on-site storm sewer camera study discussed in Section 2.1 will be used to evaluate remedial alternatives to address potential contaminant migration via this pathway. This may include relining all or portions of the storm sewers or the abandonment of the old 48-inch storm sewer (culvertized creek) on the southern third of the property and re-routing all storm water through the newer 72-inch storm sewer on the northern third of the property.

Navistar is also initiating the evaluation of potential interim remedial actions to address the groundwater impacts on the northern portion of the property originating from beneath the core room area. This will include an injection pilot test which will include additional pre- and post-test soil sampling from beneath and around the core room area.

Please note that the actions proposed do not constitute or reflect a conclusion that the issues addressed are necessarily related to the former Navistar foundry or constituents migrating from the foundry property. Navistar reserves all of its rights related to the actions and related costs.

6.0 Revised Project Schedule

A revised project schedule based on the additional proposed site investigation work is provided on Figure 4. Some pertinent milestones include the following:

- Additional soil borings are scheduled for May 16 and 17, 2019. A data summary transmittal with updated extent of soil impacts map within 10 days of receipt of analytical data.
- Additional monitoring well installations and development are scheduled to start on June 3, 2019 through June 12, 2019. These wells will be included in the next quarterly sampling

scheduled for June 17 through 24, 2019 with an updated Interim Groundwater/Surface Water Data Summary Report to be submitted by no later than July 24, 2019.

- Initial access request letters will be sent to all property owners for the expanded vapor intrusion study May 6 through 10, 2019 with follow-up letters one month later for any residents that have not responded to the initial letter. For any approved access agreements, the owners will be contacted with 24 hours of receipt of the signed agreement to schedule the initial sampling event. Sampling data and owner transmittals will continue to be provided to WDNR within 10 days of receipt of analytical data. In addition, WDNR will be provided a monthly progress update for the SVI study work which will be submitted at the end of each month through completion of the program.
- The storm water and sanitary manhole sampling permitting with the City of Waukesha is estimated to require 3 weeks with an estimated completion of this process by May 31, 2019. At this time the sanitary sewer sampling program (pending City of Waukesha approval) is scheduled for June 3 through 7, 2019 followed by the storm sewer water sampling from June 10 through June 14, 2019. A summary report of findings for the sanitary sewer investigation will be provided by no later than July 12, 2019 and for the storm sewer sampling program by no later than July 26, 2019.
- The planned interim action for the southwest parking lot area on the property includes a soil vapor extraction pilot test to be completed the week of June 24, 2019 followed by full scale design (assuming positive pilot test results) and construction with a construction summary report to be submitted by October 30, 2019.
- The planned interim action for the on-site groundwater impacts associated with the core room on the west side of the RMG facility includes an injection pilot test tentatively scheduled for the week of July 8, 2019 followed by full scale design (assuming positive pilot test results) with an initial injection construction summary report by November 29, 2019.

If there are any questions, or if this letter does not capture the agreed upon additional scope of work at this time, please contact Ferdinand Alido of Navistar at 331-332-6364 or Richard Gnat of KPRG at 262-781-0475.

Sincerely,
KPRG and Associates, Inc.



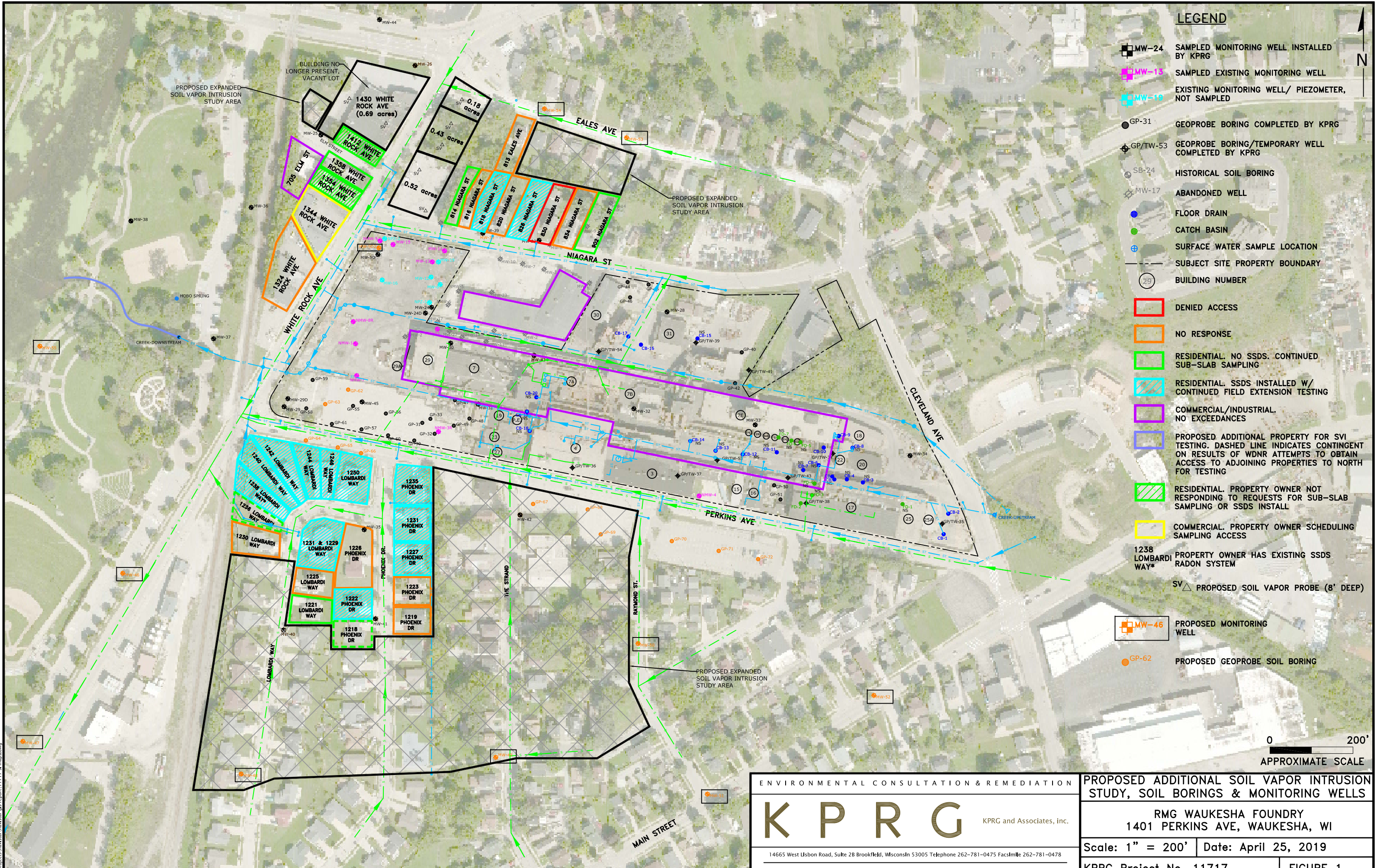
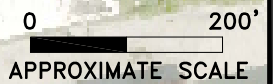
Richard R. Gnat, P.G.
Principal

cc: Ferdinand Alido, Navistar, Inc.
Timothy Stohner, P.E., KPRG
James Walden, WDNR
Kevin Turner, EPA

FIGURES

LEGEND

- MW-24 SAMPLED MONITORING WELL INSTALLED BY KPRG
- MW-13 SAMPLED EXISTING MONITORING WELL
- MW-19 EXISTING MONITORING WELL/ PIEZOMETER, NOT SAMPLED
- GP-31 GEOPROBE BORING COMPLETED BY KPRG
- GP/TW-53 GEOPROBE BORING/TEMPORARY WELL COMPLETED BY KPRG
- SB-24 HISTORICAL SOIL BORING
- MW-17 ABANDONED WELL
- FLOOR DRAIN
- CATCH BASIN
- SURFACE WATER SAMPLE LOCATION
- SUBJECT SITE PROPERTY BOUNDARY
- BUILDING NUMBER
- DENIED ACCESS
- NO RESPONSE
- RESIDENTIAL. NO SSDS. CONTINUED SUB-SLAB SAMPLING
- RESIDENTIAL. SSDS INSTALLED W/ CONTINUED FIELD EXTENSION TESTING
- COMMERCIAL/INDUSTRIAL. NO EXCEEDANCES
- PROPOSED ADDITIONAL PROPERTY FOR SVI TESTING. DASHED LINE INDICATES CONTINGENT ON RESULTS OF WDNR ATTEMPTS TO OBTAIN ACCESS TO ADJOINING PROPERTIES TO NORTH FOR TESTING
- RESIDENTIAL. PROPERTY OWNER NOT RESPONDING TO REQUESTS FOR SUB-SLAB SAMPLING OR SSDS INSTALL
- COMMERCIAL. PROPERTY OWNER SCHEDULING SAMPLING ACCESS
- 1238 LOMBARDI WAY* PROPERTY OWNER HAS EXISTING SSDS RADON SYSTEM
- SV △ PROPOSED SOIL VAPOR PROBE (8' DEEP)
- MW-46 PROPOSED MONITORING WELL
- GP-62 PROPOSED GEOPROBE SOIL BORING



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K P R G

KPRG and Associates, Inc.

14665 West Usbon Road, Suite 28 Brookfield, Wisconsin 53005 Telephone 262-781-0475 Facsimile 262-781-0478
414 Plaza Drive, Suite 106 Westmont, Illinois 60559 Telephone 630-325-1300 Facsimile 630-325-1593

PROPOSED ADDITIONAL SOIL VAPOR INTRUSION STUDY, SOIL BORINGS & MONITORING WELLS

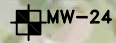
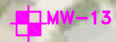

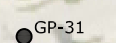


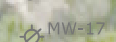


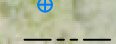
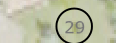
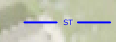


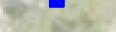

RMG WAUKESHA FOUNDRY
1401 PERKINS AVE, WAUKESHA, WI

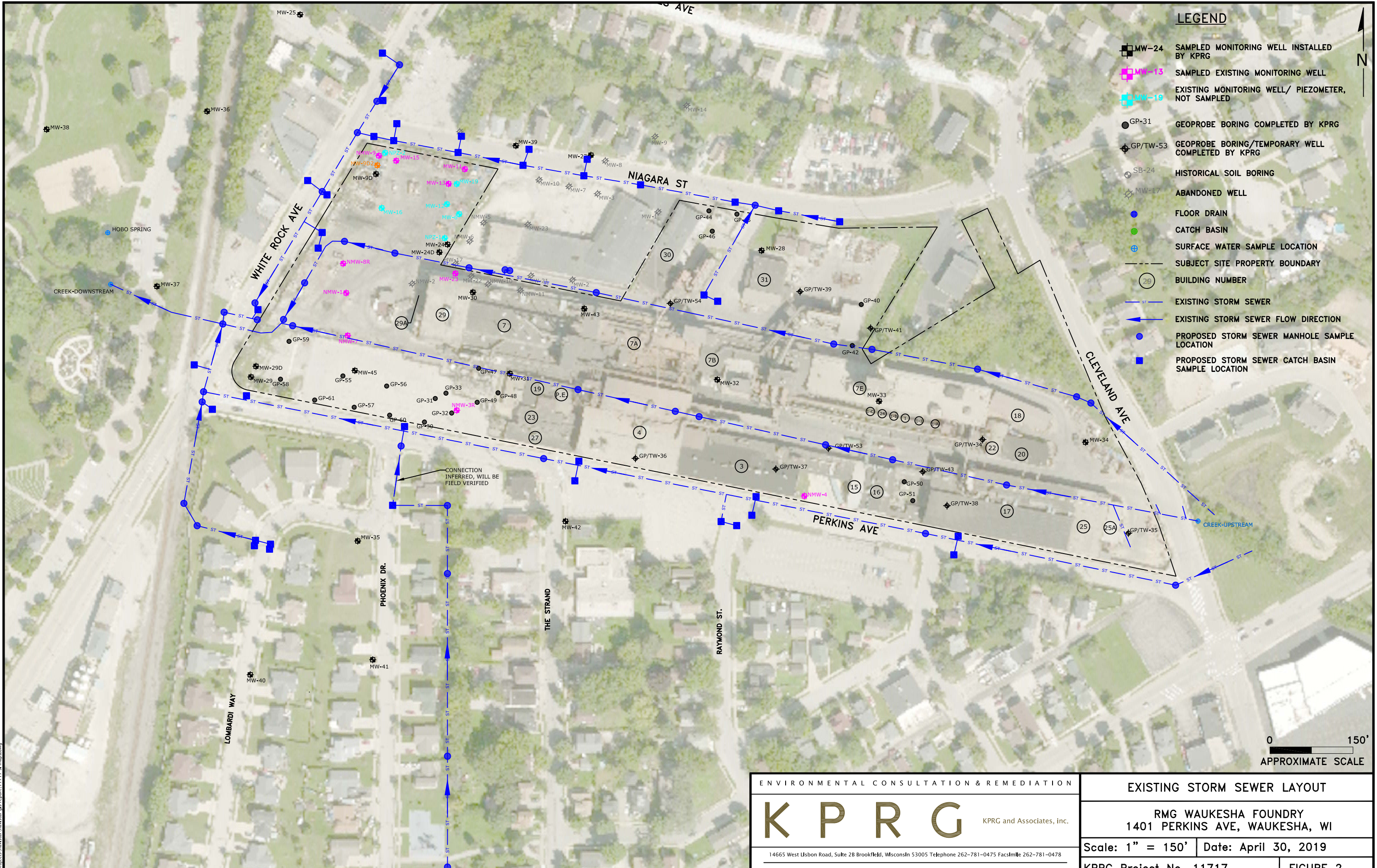
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KPRG Project No. 11717 **FIGURE 1**

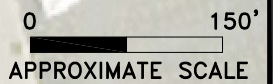
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LEGEND

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-  SUBJECT SITE PROPERTY BOUNDARY
-  BUILDING NUMBER
-  EXISTING STORM SEWER
-  EXISTING STORM SEWER FLOW DIRECTION
-  PROPOSED STORM SEWER MANHOLE SAMPLE LOCATION
-  PROPOSED STORM SEWER CATCH BASIN SAMPLE LOCATION



CONNECTION INFERRED, WILL BE FIELD VERIFIED



ENVIRONMENTAL CONSULTATION & REMEDIATION

K P R G

KPRG and Associates, inc.

14665 West Lisbon Road, Suite 28 Brookfield, Wisconsin 53005 Telephone 262-781-0475 Facsimile 262-781-0478

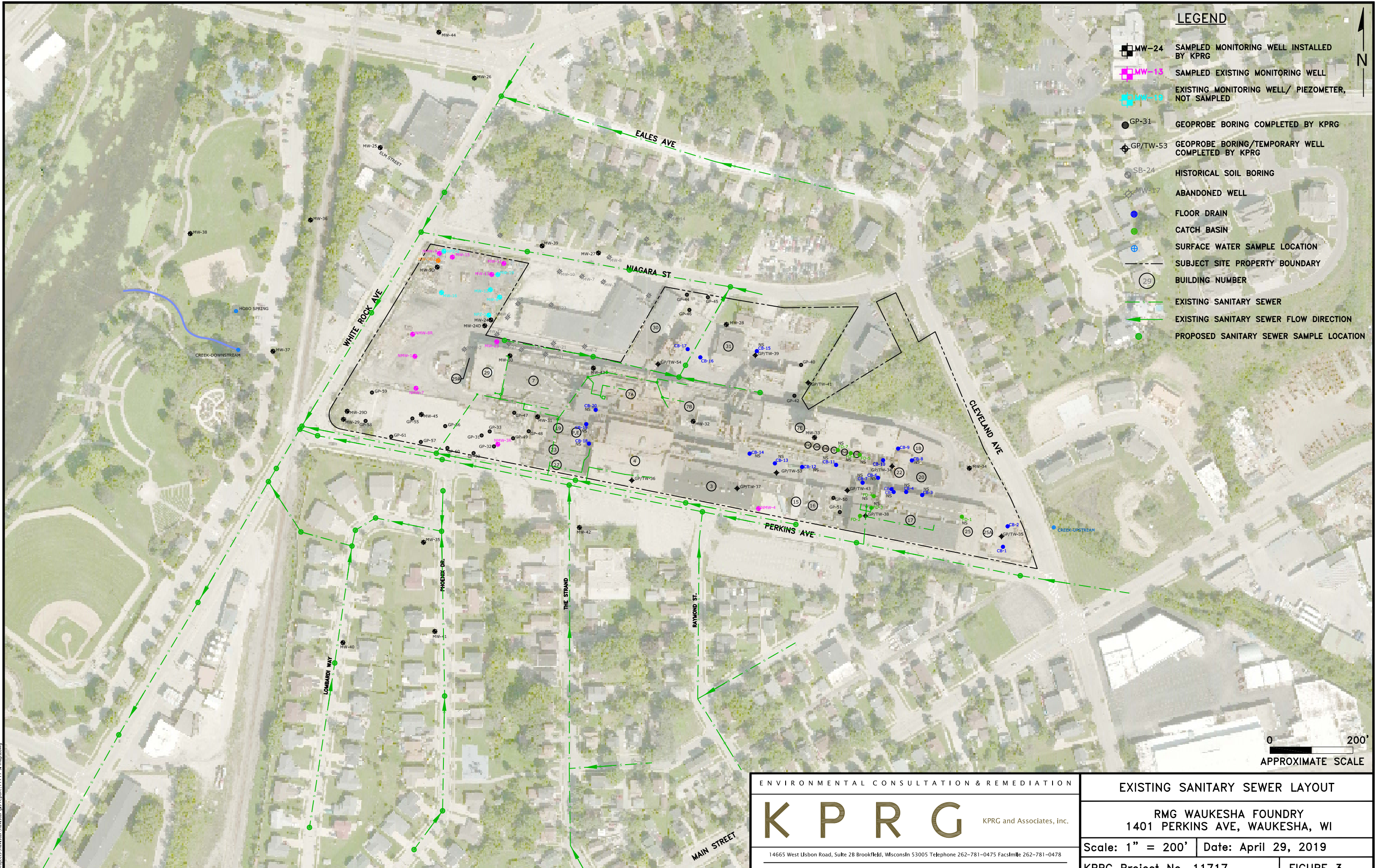
414 Plaza Drive, Suite 106 Westmont, Illinois 60559 Telephone 630-325-1300 Facsimile 630-325-1593

EXISTING STORM SEWER LAYOUT	
RMG WAUKESHA FOUNDRY 1401 PERKINS AVE, WAUKESHA, WI	
Scale: 1" = 150'	Date: April 30, 2019
KPRG Project No. 11717	FIGURE 2

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- GP-31 GEOPROBE BORING COMPLETED BY KPRG
- GP/TW-53 GEOPROBE BORING/TEMPORARY WELL COMPLETED BY KPRG
- SB-24 HISTORICAL SOIL BORING
- MW-17 ABANDONED WELL
- FLOOR DRAIN
- CATCH BASIN
- SURFACE WATER SAMPLE LOCATION
- SUBJECT SITE PROPERTY BOUNDARY
- BUILDING NUMBER
- EXISTING SANITARY SEWER
- EXISTING SANITARY SEWER FLOW DIRECTION
- PROPOSED SANITARY SEWER SAMPLE LOCATION



0 200'
APPROXIMATE SCALE

ENVIRONMENTAL CONSULTATION & REMEDIATION

K P R G

KPRG and Associates, Inc.




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414 Plaza Drive, Suite 106 Westmont, Illinois 60559 Telephone 630-325-1300 Facsimile 630-325-1593

EXISTING SANITARY SEWER LAYOUT	
RMG WAUKESHA FOUNDRY 1401 PERKINS AVE, WAUKESHA, WI	
Scale: 1" = 200'	Date: April 29, 2019
KPRG Project No. 11717	FIGURE 3

T:\projects\waukesha\waukesha_rk_report\11717_8_maps.dwg

Figure 4. Modified Project Schedule
Navistar - RMG Foundry Supplemental SI

Task No.		Task		Dates		2017												2018																																																																
						August			September			October			November			December			January			February			March			April			May			June			July			August			September			October			November			December																												
						14	21	28	4	11	18	25	2	9	16	23	30	6	13	20	27	4	11	18	25	1	8	15	22	29	5	12	19	26	5	12	19	26	2	9	16	23	30	7	14	21	28	4	11	18	25	2	9	16	23	30	6	13	20	27	3	10	17	24	1	8	15	22	29	5	12	19	26	3	10	17	24	3	10	17	24	31
1	Supplemental Soil Investigation			X																																																																														
2	CVOC Plume Definition	[Yellow Bar]																																																																																
2a	Well Installations	[Yellow Bar]																																																																																
	--Mobilization*	[Green Bar]																																																																																
	--Drilling/Construction	[Green Bar]																																																																																
	--Surveying	[Green Bar]																																																																																
2b	Additional Soil Sampling	[Green Bar]																																																																																
2c	Hydraulic Conductivity Testing	[Green Bar]																																																																																
2d	Groundwater/Surface Water Sampling	[Yellow Bar]																																																																																
	--Groundwater Sampling	[Green Bar]																																																																																
	--Surface Water Sampling	[Green Bar]																																																																																
3	Investigation Derived Waste Management	[Yellow Bar]																																																																																
4	Vapor Intrusion Study	[Yellow Bar]																																																																																
4a	CRP Support	[Green Bar]																																																																																
4b	Access Agreements and Property Assessments	[Green Bar]																																																																																
4c	Large Commercial/Industrial High Purge Vapor Monitoring	[Green Bar]																																																																																
4d	Residential/Small Commercial Sampling	[Green Bar]																																																																																
5	Sewer Line Investigations	[Yellow Bar]																																																																																
6	Reporting	[Yellow Bar]																																																																																
6a	Bi-weekly Reports (Internal)	[Green Bar]																																																																																
6b	Interim Soil and Groundwater/Surface Water Data Summary	[Green Bar]																																																																																
6c	Initial Vapor Investigation Summary	[Green Bar]																																																																																
6d	Comprehensive SI Report**	[Green Bar]																																																																																
6e	Remedial Action Options Report**	[Green Bar]																																																																																

Notes:
 Time required to execute entire task
 Time required to execute individual tasks
 * - Mobilization includes obtaining City of Waukesha permits for 6 off-site locations and subcontracting/scheduling
 ** - Timing of these deliverables is dependant on results of tasks 6b and 6c
 - Project Kickoff Meeting

TABLE

Table 1 - Additional Well Locations and Rationale

WELL NO.	APPROXIMATE LOCATION	RATIONALE
MW-46	Frame Park - parking lot northeast of baseball field.	Extent of impacts definition to southwest.
MW-47	Right-of-way, northwest corner of intersection of White Rock Ave. and Baxter Str.	Extent of impacts definition to southwest.
MW-48	Right-of-way, near 1144 Lombardi Way	Extent of impacts to south.
MW-49	Right-of-way, near intersection of The Strand and Regent Str.	Extent of impacts to south.
MW-50	Right-of-way, near 1212 Raymond Str.	Extent of impacts to southeast.
MW-51	Right-of-way, near intersection of Raymond Str and Main Str.	Extent of impacts to southeast.
MW-52	Right-of-way, near intersection of Genesee Str. and Main Str.	Extent of impacts to southeast, west of Aluminum Alloy.
MW-53	Right-of-way, near 901 Eales Ave.	Extent of impacts to north.
MW-54	Right-of-way, near 818 Eales Ave.	Extent of impacts to north.
MW-55	Frame Park - near Fox River in line west of Perkins Ave.	Downgradient extent of impacts to west.
MW-9D2	Deeper well clustered next to existing wells, MW-9 and MW-9D.	Definition of vertical extent of impacts.

ATTACHMENT 1
EPA/WDNR Scope of Work

Former Navistar/RMG Foundry
Waukesha, Wisconsin
04-11-19

Required Work –

Groundwater

10 monitoring wells – 1144 Lombardi Way, intersection of The Strand/Regent, intersection of Raymond/E Main, intersection of E Main/Genesee, 1212 Raymond, White Rock/Baxter, Frame park (near Fox River – aligned west of Perkins Ave), Frame Park (parking lot northeast of baseball field), 818 Eales Ave, 901 Eales Ave

Sewer Line Investigation

Sample all manholes/sewer along Perkins Ave

Sample all manholes/sewer along Niagara St

Sample all manholes/sewer along White Rock Ave

Sample manholes/sewer along Phoenix

- Use a summa canister grab sample
- Investigate on-site sanitary and storm sewers
- Obtain from city all records for sewer system around facility

Soil Sampling

Additional soil samples south of GP 57 and GP 61 along Perkins Ave (off-site)

Additional soil samples north and west of GP 55 (on-site)

Vapor Intrusion

SSDS immediately installed – 1242 Lombardi, 1229/1231 Lombardi, 1231 Phoenix, 1222 Phoenix (*was already installed*), 1412 White Rock

Sample all sumps in all homes that have sumps

Sample sub slab and indoor air at same time

South of Perkins Avenue

All properties north of 1144 Lombardi Way/1147 Lombardi Way; 1138 Phoenix/Phoenix Heights Park; 1200 The Strand; all properties north of Regent St; all properties west side of Raymond St.

North of Niagara Street

Continue to secure access agreements

Eales Street

All properties west of 901 Eales Ave (south side)

Elm Street

702 Elm

On-site Investigation (Source Removal)

Define the extent of MW-9D – Install more monitoring wells in vicinity

Determine the source of the TCE and prepare plan for source removal/remediation