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May 3, 2017

**Mr. John Feeney, Hydrogeologist**  
**Wisconsin Department of Natural Resources**  
1155 Pilgrim Road  
Plymouth, WI 53073

Subject: Supplemental Vapor Intrusion Assessment  
*Former Peters=Johnson Property (a.k.a. Gaslight Square and Corcoran Lofts Apartments) –  
A Portion of the Former Third Ward MGP*  
*425 East Menomonee Street and 444 East Corcoran Avenue, Milwaukee, Wisconsin*  
*BRRTS # 02-41-000320*  
NRT Project No. 2357

Dear Mr. Feeney:

On behalf of WEC Energy Group – Business Services (WEC), Natural Resource Technology, Inc. (NRT, an OBG Company) is pleased to provide this Supplemental Vapor Intrusion (VI) Assessment letter report for the Former Peters=Johnson property (Property) located at 425 East Menomonee Street (Gaslight Square Apartments) and 444 East Corcoran Avenue (Corcoran Lofts Apartments) in the City of Milwaukee, Wisconsin. The Property is a portion of the former We Energies Third Ward MGP Site. The general property layout is depicted in Figure 1.

## EXECUTIVE SUMMARY

In March 2017, an evaluation of the VI pathway was completed at the Property per the January 27, 2017 *Soil Vapor Investigation Work Plan* prepared by NRT. The assessment included exterior soil gas screening, interior building and parking garage ambient air screening as well as review of building construction details, previous soil remediation activities and recent groundwater data. The results of the exterior soil gas screening assessment indicate that sufficient clean, unsaturated, and aerated soil exists horizontally and vertically between the residual petroleum contamination and the Property buildings. In addition, the interior building and parking garage ambient air screening assessment did not identify any preferential VI pathways within the buildings. None of the building foundations or elevator pits are in contact with groundwater. Based on the results of these assessments coupled with the building construction and operating ventilation system, there is low probability for VI potential to the Gaslight Square and Corcoran Lofts buildings; therefore, VI can be ruled out as a complete exposure pathway at the Property.

## PROPERTY AND BUILDING CONSTRUCTION INFORMATION

### GASLIGHT SQUARE

The Gaslight Square apartment complex, which was completed in 2004, is comprised of three buildings surrounding an open central courtyard which is elevated above the street elevation. The Gaslight Square building foundations are constructed of 18-inch thick post-tension concrete. A review of the construction drawings prepared by Eppstein Uhen indicates that the elevators on the ground floor of each of the three Gaslight Square buildings are located approximately four feet above ground surface and the floors and walls of the pits are constructed of 12-inch thick concrete and externally lined with a moisture barrier. The elevator pits are four feet deep which makes the bottom of the elevator pits at approximately ground surface. Beneath the



234 W. Florida Street, Fifth Floor  
Milwaukee, WI 53204



p 414-837-3607  
f 414-837-3608



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central courtyard of the Gaslight Square buildings is a ground-level parking garage that is accessible by an overhead door located along East Menomonee Street. The parking garage is equipped with a carbon monoxide detection system and a ventilation system. Based on information provided by maintenance personnel, the ventilation system operates daily during peak traffic hours and additionally as needed in conformance with City and national building codes, based on the carbon monoxide concentrations within the parking garage (a minimum 5 out of 24 hours per day with 4-6 air exchanges per hour per code requirement). Commercial units are located in the northern most building adjoining East Menomonee Street and are directly accessible to the parking garage. There are limited ground-level residential units which are not open to or directly accessible from the parking garage.

### **CORCORAN LOFTS**

The Corcoran Lofts building was constructed in 2010. The building foundation is constructed of 18-inch thick post-tension concrete. Review of the construction drawings prepared by Engberg Anderson indicates that the two elevator pits in the Corcoran Lofts building are approximately four feet below ground surface and the floors and walls of the pits are constructed of 12-inch thick concrete and externally lined with a moisture barrier. There is a two-level parking garage associated with the Corcoran Lofts which is accessible from East Corcoran Avenue. The parking garage is equipped with a carbon monoxide detection system and a ventilation system. Based on information provided by maintenance personnel, the ventilation system operates daily during peak traffic hours and additionally as needed in conformance with City and national building codes. There are no residential units located on the ground floor of the Corcoran Lofts property, and the limited commercial units located on the ground floor are not directly accessible from the garage.

### **PRIOR REMEDIAL ACTIVITIES**

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A summary of the remedial activities that have taken place was previously provided in the January 27, 2017 *Soil Vapor Investigation Work Plan* that was prepared by NRT. In general:

- Soil remedial activities for the Property were completed in August 1999.
- Impacted material was excavated to a minimum depth of seven feet below ground surface across the Property and the soil was thermally treated and used to backfill the open excavation.
- In their January 2015 Case Closure Request, ARCADIS indicates that groundwater is in an anaerobic state. Specifically, measured groundwater parameters indicate that anaerobic biological activity is occurring and that activity will continue to decrease contaminant concentrations in the groundwater. Recently measured methane concentrations in August 2016 by NRT support the occurrence of anaerobic biodegradation at well nest W-22S/I just south of the Property in the E. Corcoran Avenue right-of-way (methane ranging from 1,520 to 9,860 ug/L).
- Dense non-aqueous phase liquid (DNAPL) has historically been observed at well W-53D, which was constructed as a product recovery well and is located in the southern portion of the Gaslight Square parking garage, at a depth of typically greater than 30 feet below ground surface. DNAPL was pumped from the well on an approximate monthly basis from May 2004 to June 2008. Also, DNAPL was pumped from the well on March 6, 2017 just prior to the interior ambient air screening described below.

### **VAPOR INTRUSION BACKGROUND**

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The VI pathway at the Property is associated with potential exposure resulting from petroleum volatile organic compounds (PVOCs) emanating from subsurface sources and migrating through the soil column to potentially enter buildings through sumps, foundation walls, floor cracks, concrete expansion joints, etc. and being present

in human breathing space within structures. Regulatory guidance (WDNR, Publication RR-800 “Addressing Vapor Intrusion at Remediation & Redevelopment Sites in Wisconsin” and Interstate Technology & Regulatory Council (ITRC), October 2014 “Petroleum Vapor Intrusion Fundamentals of Screening, Investigation, and Management”), indicates that VI by PVOCs can be ruled out based on the presence of 5 feet of clean, unsaturated soil with an oxygen content of >5% and a methane content of <1% between the residual petroleum contamination and the building slab. However, further assessment of the VI pathway investigation should be undertaken if clean, aerated soils are not present or when any of the following conditions exist:

- Free-phase product that has the potential for off-gassing vapors underlies a building or is within 15 feet vertically or 30 feet horizontally of a building foundation.
- Petroleum contaminated soils with the potential for off-gassing vapors are within 5 feet or less of a building foundation.
- Benzene concentration in groundwater underlying a building is >1,000 ppb and there is less than 20 feet of unsaturated soil between the groundwater and the building foundation.
- Groundwater contaminated with petroleum product above Wisconsin’s groundwater preventive action limit (PAL) is entering a building or in contact with the building’s foundation, or is in water intercepted by the building’s foundation drain system, including sumps.
- Petroleum vapors are present that may migrate from the petroleum source and move through preferential pathways (sewer lines, fractured bedrock, etc.) into a building.

The potential for petroleum impacted soils within 5 feet of the foundation (i.e., residual MGP-impacted soils located in the public right-of-way) and elevated benzene concentration in the groundwater, which may be within 20 feet of the foundation, exist at the Property. However, as agreed upon at the January 26, 2016 meeting with the WDNR, VI can be ruled out as a complete exposure pathway at the Property provided that clean (i.e., thermally treated), and sufficiently aerated soils are present beneath the building slab. In addition, the potential for VI is further mitigated due to the building construction methods (post-tension slab) and ongoing operation of the parking garage ventilation system. Therefore, the VI pathway was assessed by installing and screening exterior soil gas probes to evaluate whether there is a sufficient layer of clean, biologically active soil to degrade vapor-phase petroleum compounds prior to entering the building. Additionally, an interior ambient air and VI screening assessment was also completed.

## SUBSURFACE CONDITIONS ASSESSMENT

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### EXTERIOR SOIL GAS SCREENING PROCEDURES

Prior to mobilization for the exterior gas intrusion assessment, permit applications to work in the city right-of-way were completed and approved by the City of Milwaukee and Wisconsin Diggers Hotline was contacted to mark public utilities. On March 7, 2017, ten temporary soil gas probes were installed in the public right-of-way around the Property to determine if 5 feet of clean unsaturated/aerated soil is present per the WDNR vapor guidance. The probes were installed at least 5 feet horizontally from the buildings as well. The soil gas probe locations around the Property are depicted on Figure 1 and include:

- Two soil gas probes were installed in the southern right-of-way of East Menomonee Avenue.
- Two soil gas probes were installed in the western right-of-way of North Jefferson Street.
- Two soil gas probes were installed in the northern right-of-way of East Corcoran Avenue (south of the Corcoran Lofts building).

- Two soil gas probes were installed in the eastern right-of-way of North Milwaukee Street.
- In addition, two soil gas probes were also installed along the eastern property line of the Patsy & Paul building in the western right-of-way of North Milwaukee Street.

A track mounted Geoprobe™, which is a hydraulic soil probe system, was used to install borings and collect continuous soil samples from each soil boring from the ground surface to a depth of approximately 5 feet below ground surface. Soil samples were collected at one-foot intervals, logged for soil type and visual description, and field screened using a photoionization detector (PID). The soil encountered during the installation consisted of fill material comprised of sand, silt, clay, gravel, bricks, and thermally treated soil. Visual observations of the soil samples did not indicate visible hydrocarbon impacts at any of the locations and no discernable hydrocarbon odors were noted. Groundwater was not encountered at the boring locations.

Soil gas probes were constructed in each borehole using of ¼-inch solid Teflon tubing cut to length and connected to a six-inch long stainless steel sampling screen. Filter pack sand was placed in the borehole to approximately three inches above the sampling screen and wetted granular bentonite was used to fill and seal the remainder of the borehole. The tubing associated with the soil gas probes was fitted with a valve for purging and sampling. The soil gas probes were allowed to stabilize at least 24 hours prior to sampling. Boring logs for the soil vapor sampling points are included in Appendix A.

On March 8, 2017, NRT returned to the Property to purge and screen the ten soil gas probes. Prior to screening, a leak test was performed for each soil gas location to ensure that the probe assembly was properly set and not leaking. The leak test entailed placing a plastic shroud filled with helium tracer gas over the soil gas probe while collecting one liter of purged soil gas in a Tedlar™ bag. The shroud atmosphere was continuously monitored for the presence of helium using a Dielectric MGD 2002 Helium Detector and the final helium concentration inside the shroud was multiplied by 10 percent (0.1) to determine the allowable concentration of helium in the Tedlar™ bag sample. According to NRT's Standard Operating Procedure (SOP), if the helium within the Tedlar bag exceeded the allowable concentration, corrective actions including checking and tightening all connections and otherwise enhancing the seal should be performed in the field to reduce infiltration of ambient air. Once the leak test was performed, a liter of soil gas was purged from each location and screened for oxygen (O<sub>2</sub>), carbon dioxide (CO<sub>2</sub>), and methane (CH<sub>4</sub>) with a Landtec GEM 2000 Landfill Gas Meter. Field screening results were recorded on the appropriate field form and the probes were properly abandoned following collection of representative samples for screening measurements.

## EXTERIOR SOIL GAS SCREENING RESULTS

The results of the soil gas screening are as follows:

- Approximately 2 liters of soil gas was purged from each location.
- Helium tracer gas was not detected in any of the purged samples which indicates that the soil gas samples were representative of sub-surface soil gas.
- Oxygen was detected at concentrations that ranged from 18.6% to 21.7%.
- Carbon dioxide was detected at concentrations that ranged from 0.3% to 2.3%.
- Methane was not detected in any soil gas sample.

The soil gas screening results are summarized on Table 1.

## INTERIOR POTENTIAL PREFERENTIAL VI PATHWAYS ASSESSMENT

### INTERIOR AMBIENT AIR SCREENING PROCEDURES

On March 7 and 8, 2017, NRT completed an interior building and parking garage screening survey at both the Gaslight Square and Corcoran Lofts apartment buildings in order to assess the potential preferential VI pathways for these buildings. As part of the screening survey, the ambient air was screened with a 10.6 eV MiniRAE 3000 photo-ionization detector. The weather conditions during the survey included partly cloudy skies, around 45 degrees Fahrenheit, and very windy conditions with wind gusts of up to 50 miles per hour. The survey took place during early afternoon hours while traffic entered and exited the garages.

The ambient air readings for first floor building common spaces (including vestibules, lobbies, hallways, elevators, and stairwells) and parking garages (including storage rooms, trash rooms, and utility rooms) for both buildings were recorded. In addition, readily accessible surface penetrations such as floor drains, cracks in the floor, and pipe penetrations for both buildings were identified, documented, and screened. Pipe penetrations were observed in both parking garages near the exterior walls and adjacent to several interior concrete support columns. In addition, several floor drains and storm drains were observed in both garages. Outdoor ambient air readings were also recorded adjacent to the entrances to each lobby. The different common spaces and the PID results are indicated on Figure 2. A smoke pen was used to assess air flow directions between the first floor common spaces and the parking garages for both buildings.

### INTERIOR AMBIENT AIR SCREENING RESULTS

During the building survey, no interior sources of volatile organic compounds, with the exception of well W-53D (product recovery well), were noted. However, interior storage areas were locked and so the contents of these areas were not assessed. The ambient air readings recorded for the interior common spaces are summarized on Table 2. Due to the size of the parking garages and the number of readings recorded, the Gaslight Square parking garage was divided into four quadrants (northwest, northeast, southwest, and southeast quadrants) and the Corcoran Lofts parking garage was divided into two quadrants (east and west quadrants). The ambient air readings recorded for parking garages are summarized on Table 3. The ambient air PID screening results of the interior building screening are as follows:

- Gaslight Square common areas (lobbies, vestibules, elevators, etc.): 0.0 ppm
- Gaslight Square hallways and stairways: 0.0 ppm
- Gaslight Square parking garage: 0.0-0.8 ppm
- Gaslight Square recovery well (W-53D) just above the flushmount cover: 18.0 ppm
- Gaslight Square trash, utility, and storage rooms: 0.1-0.3
- Corcoran Lofts common areas (lobbies, vestibules, elevators, etc.): 0.0 ppm
- Corcoran Lofts hallways and stairways: 0.0 ppm
- Corcoran Lofts parking garage: 0.0 ppm
- Corcoran Lofts trash, utility, and storage rooms: 0.0 ppm

The interior building and parking garage ambient air screening assessment did not identify preferential VI pathways such as cracks or drains within the buildings that had elevated PID screening results. In general, slightly lower ambient air readings were recorded in the northern portion of the Gaslight Square parking garage

which is likely due to dilution of the garage air when the overhead doors are opened for automobile traffic. No significant readings were recorded during the assessment of the Corcoran Lofts parking garage.

In addition, a smoke pen was used to assess the air flow movement between indoor spaces. In general, the air flow direction was observed to flow from the parking garages into the lobbies and elevator shafts in both buildings. The exterior air flowed from outside the building into the indoor common spaces such as the vestibules and hallways and into the building lobbies. The air flow direction was identified as moving from the parking garage into both tenant spaces in the Gaslight Square building. Windy conditions observed during the assessment may have had an impact on air flow direction; however, the overall observations made during the assessment indicate positive pressure in the parking garages for both buildings. The air flow direction for both buildings is summarized in Table 4.

## FINDINGS AND CONCLUSIONS

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### FINDINGS

#### Building Construction:

- The Gaslight Square and Corcoran Lofts building foundations were constructed of approximately 18-inch thick post-tension concrete.
- The Gaslight Square and Corcoran Lofts buildings are constructed above approximately seven feet of the previously remediated (via thermal desorption) soil that was reused as backfill material.
- The elevator pits at the Gaslight Square buildings are constructed of 12-inch thick concrete and externally lined with a moisture barrier. The bottoms of the elevator pits are at approximately ground surface and are not in contact with groundwater.
- The Corcoran Lofts building elevator pits are approximately 4 feet below ground surface and the floors and walls of the pits are constructed of 12-inch thick concrete and externally lined with a moisture barrier. Recent February 2017 groundwater elevation measurements collected in the vicinity of the buildings indicate that groundwater levels in the area of the Property are between 6 and 9 feet below ground surface. The bottoms of the elevator pits are therefore approximately 2 to 3 feet above the groundwater table and are not in contact with groundwater.

#### Exterior Soil Gas Screening Assessment Results:

- Fill material consisting of sand, silt, clay, gravel, bricks, and thermally treated soil to a depth of 5 feet below ground surface was observed around the Property.
- Visual observations of the soil samples did not indicate visible hydrocarbon impacts at any of the locations and no discernable hydrocarbon odors were noted.
- Soil gas screening results identified the presence of oxygen at concentrations between 18.6% to 21.7% and carbon dioxide concentrations that ranged from 0.3% to 2.3%.
- Methane was not detected in any soil gas sample.
- The conditions for aerobic biodegradation of petroleum compounds exists to 5 feet below ground surface around the building foundations.



### Interior Ambient Air Screening Assessment Results:

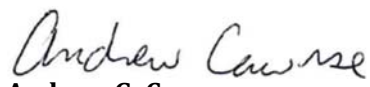
- No interior sources of volatile organic compounds, with the exception of well W-53D, were noted. DNAPL was pumped from the well on March 6, 2017 (one day prior to the interior ambient air screening), which likely accounts for the slightly higher PID reading just above the well cover.
- No preferential VI pathways (floor drains, cracks in the floor, or pipe penetrations) were identified within the buildings as having elevated PID screening results.
- No elevated PID readings were recorded in the interior building common spaces (including vestibules, lobbies, hallways, elevators, and stairwells) or the parking garages (including storage rooms, trash rooms, and utility rooms) in either building with the exception of well W-53D (18.0 ppm).
- In general, slightly lower ambient air readings were recorded in the northern portion of the Gaslight Square parking garage in the vicinity of the overhead doors.
- Air flow observations indicated positive pressure in the parking garages and interior building areas.


### CONCLUSIONS


The Gaslight Square and Corcoran Lofts building foundations consist of approximately 18-inch thick post-tension concrete and the buildings are constructed above approximately seven feet of the previously remediated soil. None of the building foundations or elevator pits are in contact with groundwater. The results of the exterior soil gas screening assessment indicate that sufficient clean, unsaturated, and aerated soil with an oxygen content of >5% and a methane content of <1% exists horizontally and vertically between the residual petroleum contamination and the Property buildings. In addition, the interior building and parking garage ambient air screening assessment did not identify any preferential VI pathways within the buildings. Since the building foundations and elevator pits are not in contact with groundwater and based on the results of the assessments, there is low probability for VI potential to the Gaslight Square and Corcoran Lofts buildings; therefore, VI can be ruled out as a complete exposure pathway at the Property.

Sincerely,

**NRT | An OBG Company**

  
**Andrew G. Cawrse**  
Environmental Scientist

  
**Jay F. Karls, PhD, PE**  
Principal Engineer

  
**Julie A. Zimdars, PE**  
Principal Engineer

cc: Mr. Frank Dombrowski, WEC Energy Group



**ATTACHMENTS:**

**Tables**

Table 1	Soil Gas Probe Screening Results
Table 2	Interior Building Ambient Air Screening
Table 3	Parking Garage Ambient Air Screening
Table 4	Indoor Air Flow Direction

**Figures**

Figure 1	Soil Gas Probe Locations
Figure 2	Interior Ambient Air Screening Results

**Appendices**

Appendix A	Boring Logs
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## Tables

**Table 1. Soil Gas Probe Screening Results**

**WBS/We Energies - Peters=Johnson**  
**Gaslight Square and Corcoran Lofts**  
**425 East Menomonee Street and 444 East Corcoran Avenue, Milwaukee, WI**  
**BRRTS 02-41-000320**

Soil Gas Probe	Installation Date	Sample Date	Probe Depth (ft bgs)	Purge Volume (Liters)	Helium (He) (%)	Oxygen (O <sub>2</sub> ) (%)	Carbon Dioxide (CO <sub>2</sub> ) (%)	Methane (CH <sub>4</sub> ) (%)
SV01	3/7/2017	3/8/2017	4.5-5.0	2.0	0.0	20.9	0.3	0.0
SV02	3/7/2017	3/8/2017	4.5-5.0	2.0	0.0	20.7	0.7	0.0
SV03	3/7/2017	3/8/2017	4.5-5.0	2.0	0.0	21.1	0.4	0.0
SV04	3/7/2017	3/8/2017	4.5-5.0	2.0	0.0	18.6	2.3	0.0
SV05	3/7/2017	3/8/2017	4.5-5.0	2.0	0.0	19.1	1.8	0.0
SV06	3/7/2017	3/8/2017	4.5-5.0	2.0	0.0	21.1	0.3	0.0
SV07	3/7/2017	3/8/2017	4.5-5.0	2.0	0.0	21.7	0.5	0.0
SV08	3/7/2017	3/8/2017	4.5-5.0	2.0	0.0	20.9	0.5	0.0
SV09	3/7/2017	3/8/2017	4.5-5.0	2.0	0.0	20.5	0.8	0.0
SV10	3/7/2017	3/8/2017	4.5-5.0	2.0	0.0	20.6	0.5	0.0

(O:AGC 4/7/17, C:JFK 4/18/17)

**WDNR/ITRC Screening Criteria**

Oxygen content > 5%

Methane content < 1%

**Notes:**

He screened with Dielectric MGD 2002 Helium Detector

O<sub>2</sub>, CO<sub>2</sub>, CH<sub>4</sub> screened with Landtec GEM 2000 Landfill Gas Meter

ft = feet

bgs = below ground surface

**Table 2. Interior Building Ambient Air Screening**

**WBS/We Energies - Peters=Johnson**  
**Gaslight Square and Corcoran Lofts**  
**425 East Menomonee Street and 444 East Corcoran Avenue, Milwaukee, WI**  
**BRRTS 02-41-000320**

Gaslight Square		PID Screening Results (ppm)					
Interior Building Location	Screening Date	Outdoor Ambient Air	Vestibule	Lobby	Clubroom	Elevator Pit	Parking Garage
North Lobby	3/7/2017	0.0	0.0	0.0	0.0	0.0	0.2
East Lobby	3/7/2017	0.0	0.0	0.0	NA	0.0	0.2
West Lobby	3/7/2017	0.0	0.0	0.0	NA	0.0	0.2

Corcoran Lofts		PID Screening Results (ppm)				
Interior Building Location	Screening Date	Outdoor Ambient Air	Vestibule	Lobby	Elevator Pit	Parking Garage
South Lobby - 1st Floor	3/7/2017	0.0	0.0	0.0	0.0	0.0
South Lobby - 2nd Floor	3/7/2017	0.0	0.0	0.0	0.0	0.0

(O:AGC 4/7/17, C:JFK 4/18/17)

**Notes:**

Screening completed with 10.6 eV MiniRAE 3000 photo-ionization detector  
 Parking garage readings recorded immediately outside the lobby doors in the parking garages  
 ppm = Parts per million  
 NA = Not applicable

**Table 3. Parking Garage Ambient Air Screening**

WBS/We Energies - Peters=Johnson

Gaslight Square and Corcoran Lofts

425 East Menomonee Street and 444 East Corcoran Avenue, Milwaukee, WI

BRRTS 02-41-000320

Gaslight Square		Range of PID Screening Results (ppm)					
Interior Building Location	Screening Date	Garage Ambient Air	Storm/Floor Drains	Surface Penetrations	Trash Rooms	Utility Rooms	Monitoring Well (W-53D)
Northwest Quadrant	3/7/2017	0.0-0.2	0.0-0.2	0.0-0.2	0.2	0.1	NA
Northeast Quadrant	3/7/2017	0.1-0.8	0.0-0.3	0.1-0.2	0.1	0.1	NA
Southeast Quadrant	3/7/2017	0.2	0.0-0.3	0.1-0.3	0.2	0.2-0.3	18.0
Southwest Quadrant	3/7/2017	0.2	0.1-0.2	0.1-0.2	0.1	0.2-0.3	NA

Corcoran Lofts		Range of PID Screening Results (ppm)				
Interior Building Location	Screening Date	Garage Ambient Air	Storm/Floor Drains	Surface Penetrations	Trash Rooms	Utility Rooms
East Quadrant - 1st Floor	3/7/2017	0.0	0.0	0.0	0.0	0.0
West Quadrant - 1st Floor	3/7/2017	0.0	0.0	0.0	0.0	0.0
East Quadrant - 2nd Floor	3/7/2017	0.0	0.0	0.0	0.0	0.0
West Quadrant - 2nd Floor	3/7/2017	0.0	0.0	0.0	0.0	0.0

(O:AGC 4/7/17, C:JFK 4/18/17)

**Notes:**

Screening completed with 10.6 eV MiniRAE 3000 photo-ionization detector

ppm = Parts per million

NA = Not applicable

**Table 4. Indoor Air Flow Direction**

**WBS/We Energies - Peters=Johnson**

**Gaslight Square and Corcoran Lofts**

**425 East Menomonee Street and 444 East Corcoran Avenue, Milwaukee, WI**

**BRRTS 02-41-000320**

<b>Gaslight Square</b>		
<b>North Office/Lobby</b>	<b>East Lobby</b>	<b>West Lobby</b>
Parking Garage → Lobby	Parking Garage → Lobby	Parking Garage → Lobby
Vestibule → Lobby	Vestibule → Lobby	Vestibule → Lobby
Outdoor Air → Vestibule	Outdoor Air → Vestibule	Outdoor Air → Vestibule
Lobby → Elevator	Lobby → Elevator	Lobby → Elevator
Outdoor Air → Clubroom		
<b>North Stairwell</b>	<b>East Stairwell</b>	<b>West Stairwell</b>
Parking Garage → Stairwell	Parking Garage → Stairwell	Parking Garage → Stairwell
Outdoor Air → Stairwell	Outdoor Air → Stairwell	Outdoor Air → Stairwell
<b>North Auto Exit</b>	<b>411 E. Menomonee Ave.</b>	<b>415 E. Menomonee Ave.</b>
Parking Garage → Outdoor Air	Parking Garage → Tenant Space	Parking Garage → Tenant Space

<b>Corcoran Lofts</b>	
<b>North Lobby</b>	<b>2nd Floor Lobby</b>
Parking Garage → Lobby	Parking Garage → Lobby
Vestibule → Lobby	Lobby → Elevators
Outdoor Air → Vestibule	
Lobby → Elevators	
<b>East Stairwell</b>	<b>West Stairwell</b>
Outdoor Air → Hallway	Outdoor Air → Hallway
Tenant Space → Hallway	Tenant Space → Hallway
Hallway → Stairwell	Hallway → Stairwell
Parking Garage → Stairwell	Parking Garage → Stairwell

(O:AGC 4/7/17, C:JFK 4/18/17)

**Notes:**

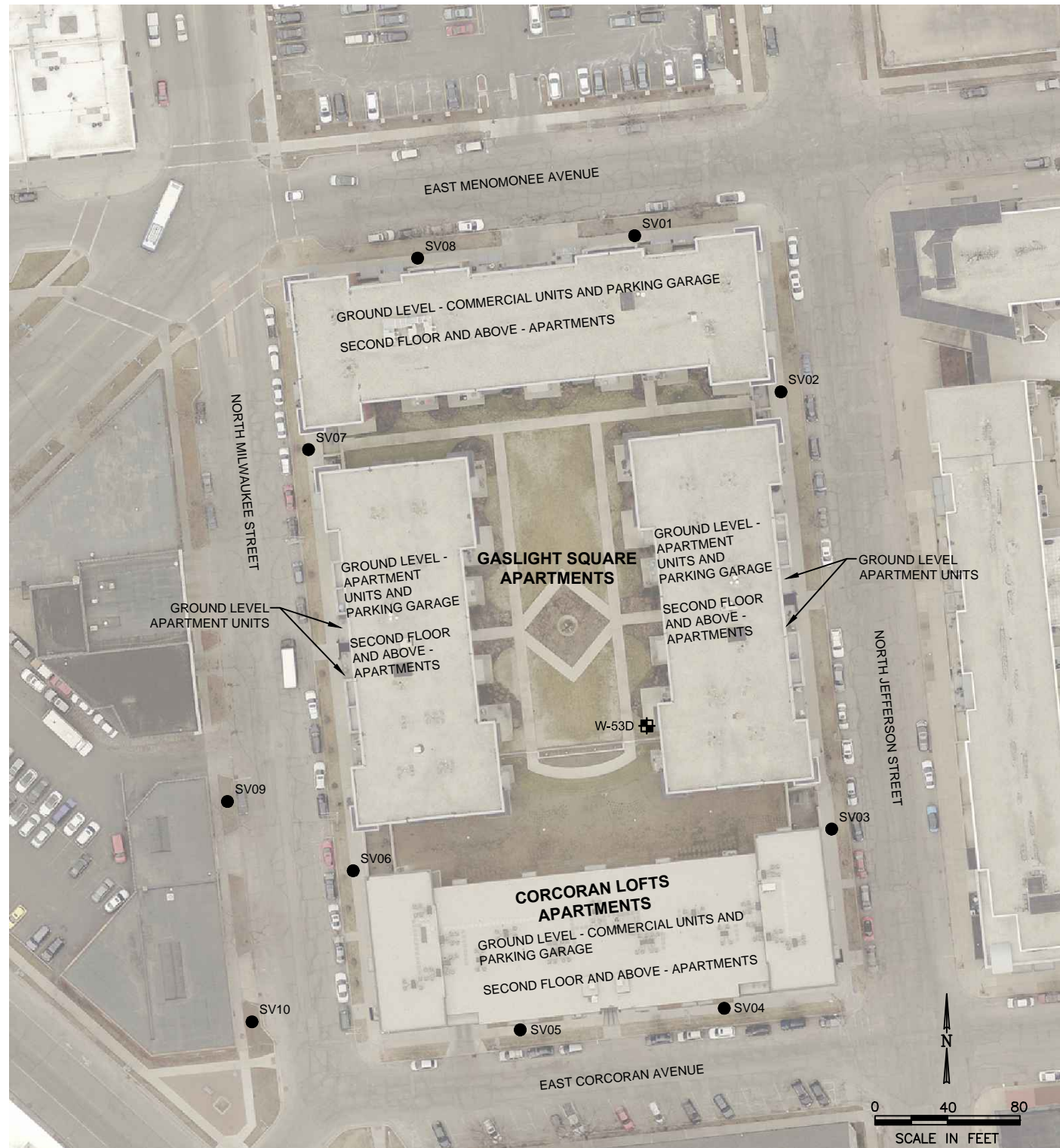
Air flow movement was assessed using a smoke pen

→ = Air flow direction



## Figures

May 02, 2017 4:39pm PLOTTED BY: CawrseAG SAVED BY: CawrseAG  
 Y: \Mapping\Projects\23\2357\CAD\4--0\Figure 1\_Soil Gas Probe Locations.dwg Layout1  
 IMAGES: Y: \Mapping\Projects\23\2357\CAD\4--0\Images\Aerial.tiff; Y: \Mapping\Projects\23\2357\CAD\4--0\Reference\NRT..JPG;  
 XREFS:



●	SOIL GAS PROBE LOCATION
⊕	MONITORING WELL LOCATION

# SOIL GAS PROBE LOCATIONS

FORMER PETERS=JOHNSON  
 SUPPLEMENTAL VAPOR INTRUSION ASSESSMENT  
 425 E. MENOMONEE ST. AND 444 E. CORCORAN AVE.  
 MILWAUKEE, WISCONSIN

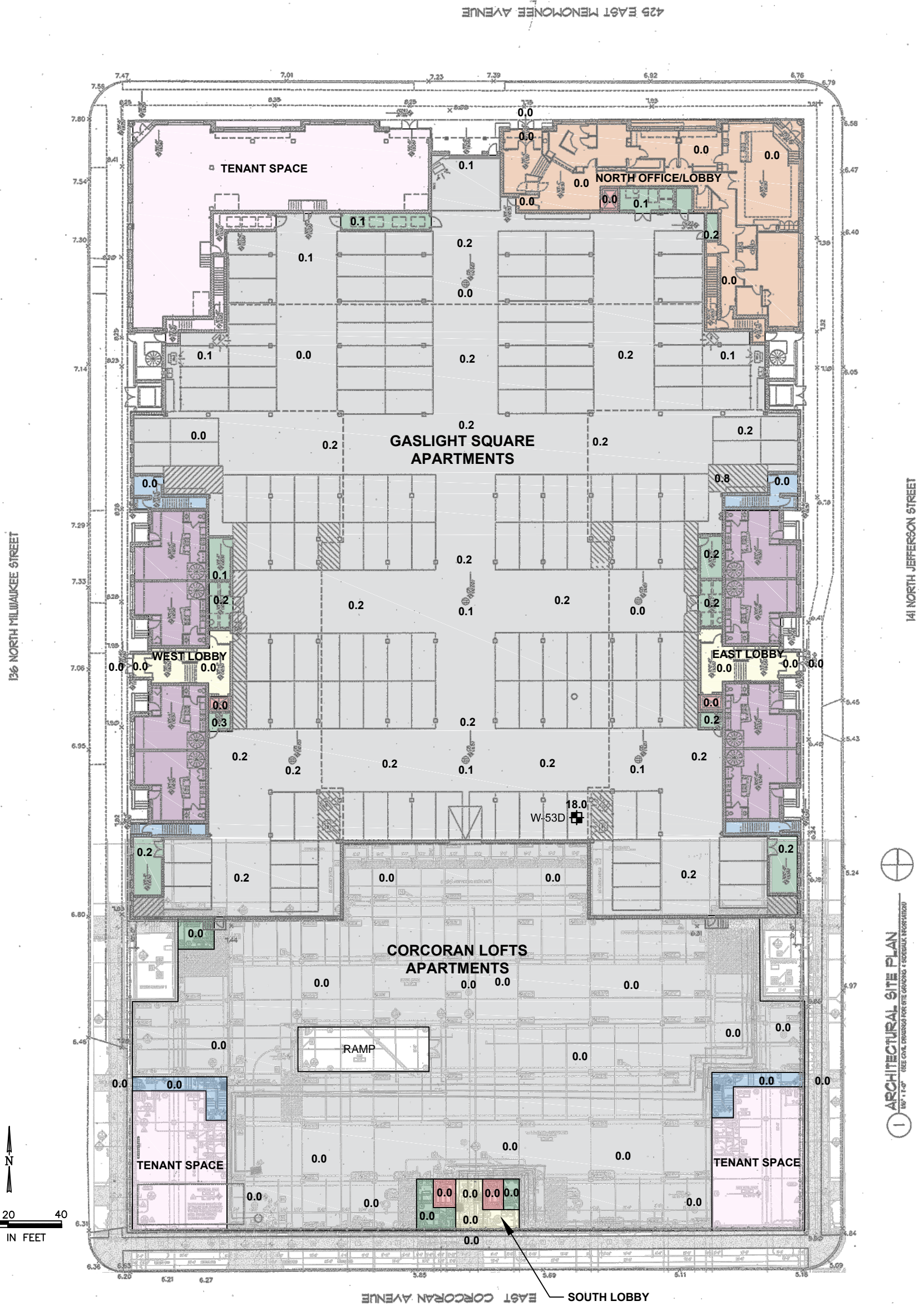
PROJECT NO.  
2357

FIGURE NO.  
1

DRAWN: AGC DATE: 03/27/17 CHK'D: JFK DATE: 04/18/17 APP'D: JAZ DATE: 04/23/17









ARCHITECTURAL SITE PLAN  
 1/4" = 1'-0" (SEE CIVIL DRAWINGS FOR SITE GRADING & SEWER/RAINFALL INFORMATION)

- 0.1 PID READING
- PARKING GARAGE
- OFFICE/LOBBY
- LOBBY
- ELEVATOR
- STAIRWAY
- TRASH/UTILITY/STORAGE ROOMS
- COMMERCIAL SPACE
- RESIDENTIAL

PROJECT NO. 2357		<h2>INTERIOR AMBIENT AIR SCREENING RESULTS</h2> <p>FORMER PETERS=JOHNSON                  SUPPLEMENTAL VAPOR INTRUSION ASSESSMENT                  425 E. MEMOMONEE ST. AND 444 E. CORCORAN AVE.                  MILWAUKEE, WISCONSIN</p>	DRAWN BY: AGC	DATE: 03/27/17
			CHECKED BY: JFK	DATE: 04/18/17
FIGURE NO. Figure 2			APPROVED BY: JAZ	DATE: 04/23/17
			DRAWING NO: Figure 2 _Interior Ambient Air Screening Results	
			REFERENCE: .	



## Appendix A Boring Logs

Route To: Watershed/Wastewater  Waste Management   
Remediation/Redevelopment  Other

Facility/Project Name <b>Former Third Ward MGP - Former Peters=Johnson</b>		License/Permit/Monitoring Number		Boring Number <b>SV01</b>	
Boring Drilled By: Name of crew chief (first, last) and Firm <b>Mitch Panfil Gestra Engineering, Inc.</b>		Date Drilling Started <b>3/7/2017</b>		Date Drilling Completed <b>3/7/2017</b>	
WI Unique Well No.		DNR Well ID No.		Common Well Name	
Final Static Water Level <b>Feet MCD</b>		Surface Elevation <b>Feet MCD</b>		Borehole Diameter <b>1.5 inches</b>	
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/> ) or Boring Location <input checked="" type="checkbox"/>		State Plane <b>N, E <input checked="" type="checkbox"/> C/N</b>		Local Grid Location <input type="checkbox"/> N <input type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W	
1/4 of		1/4 of Section , T N, R		Lat _____ ' _____" Long _____ ' _____"	
Facility ID <b>241496530</b>		County <b>Milwaukee</b>		County Code <b>41</b>	
				Civil Town/City/ or Village <b>Milwaukee</b>	

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID 10.6 eV Lamp	Soil Properties					RQD/ Comments
									Compressive Strength (tsf)	Moisture Content	Liquid Limit	Plasticity Index	P 200	
1 CS	24 16		1	0 - 1' <b>FILL, WEATHERED CONCRETE:</b> (FILL), Sidewalk.	(FILL)									
			2	1 - 2' <b>FILL, SILTY SAND:</b> SM, Black.	SM			0						
2 CS	24 18		3	2 - 5' <b>FILL, SANDY LEAN CLAY WITH GRAVEL:</b> s(CL)g, brown, trace yellow brick.	s(CL)g			0						
			4	4.9' dark brown. 5' End of Boring.				0						

I hereby certify that the information on this form is true and correct to the best of my knowledge.

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Route To: Watershed/Wastewater  Waste Management   
Remediation/Redevelopment  Other

Facility/Project Name <b>Former Third Ward MGP - Former Peters=Johnson</b>		License/Permit/Monitoring Number		Boring Number <b>SV02</b>	
Boring Drilled By: Name of crew chief (first, last) and Firm <b>Mitch Panfil Gestra Engineering, Inc.</b>		Date Drilling Started <b>3/7/2017</b>		Date Drilling Completed <b>3/7/2017</b>	
WI Unique Well No.		DNR Well ID No.		Common Well Name	
Final Static Water Level <b>Feet MCD</b>		Surface Elevation <b>Feet MCD</b>		Borehole Diameter <b>1.5 inches</b>	
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/> ) or Boring Location <input checked="" type="checkbox"/>		State Plane <b>N, E <input checked="" type="checkbox"/> C/N</b>		Local Grid Location <input type="checkbox"/> N <input type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W	
1/4 of Section , T N, R		Lat _____ ' _____ "		Long _____ ' _____ "	
Facility ID <b>241496530</b>		County <b>Milwaukee</b>		County Code <b>41</b>	
		Civil Town/City/ or Village <b>Milwaukee</b>			

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID 10.6 eV Lamp	Soil Properties						RQD/ Comments
									Compressive Strength (tsf)	Moisture Content	Liquid Limit	Plasticity Index	P 200		
1 CS	24 8		1	0 - 0.7' FILL, WEATHERED CONCRETE: (FILL).	(FILL)										
2 CS	24 12		3	0.7 - 4.5' FILL, SILTY SAND WITH GRAVEL: (SM)g, brown.	(SM)g										
3 CS	4 2		5	4.3' yellow brick for 3". 4.5 - 5' FILL, SANDY LEAN CLAY: s(CL), dark brown, trace gravel and bricks, moist. 5' End of Boring.	s(CL)										

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Route To: Watershed/Wastewater  Waste Management   
Remediation/Redevelopment  Other

Facility/Project Name <b>Former Third Ward MGP - Former Peters=Johnson</b>		License/Permit/Monitoring Number		Boring Number <b>SV03</b>	
Boring Drilled By: Name of crew chief (first, last) and Firm <b>Mitch Panfil Gestra Engineering, Inc.</b>		Date Drilling Started <b>3/7/2017</b>		Date Drilling Completed <b>3/7/2017</b>	
WI Unique Well No.		DNR Well ID No.		Common Well Name	
Final Static Water Level <b>Feet MCD</b>		Surface Elevation <b>Feet MCD</b>		Borehole Diameter <b>1.5 inches</b>	
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/> ) or Boring Location <input checked="" type="checkbox"/>		State Plane <b>N, E <input checked="" type="checkbox"/> C/N</b>		Local Grid Location <input type="checkbox"/> N <input type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W	
1/4 of		1/4 of Section , T N, R		Lat _____ ' _____" Long _____ ' _____"	
Facility ID <b>241496530</b>		County <b>Milwaukee</b>		County Code <b>41</b>	
				Civil Town/City/ or Village <b>Milwaukee</b>	

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID 10.6 eV Lamp	Soil Properties						RQD/ Comments
									Compressive Strength (tsf)	Moisture Content	Liquid Limit	Plasticity Index	P 200		
1 CS	24 18		1	0 - 0.5' <b>FILL, WEATHERED CONCRETE:</b> (FILL).	(FILL)			0							
				0.5 - 1' <b>FILL, SILTY CLAY</b> CL/ML, dark brown to black, some gravel.	CL/ML										
				1 - 2' <b>FILL, SILTY CLAY</b> CL/ML, light brown.	CL/ML										
2 CS	24 22		3	2 - 4' <b>FILL, SILTY SAND:</b> SM, black, trace gravel and cinders.	SM			0							
				4 - 4.5' <b>FILL, SILTY CLAY</b> CL/ML, light brown.	CL/ML										
3 CS	6 3		5	4.5 - 5' <b>FILL, SILTY SAND:</b> SM, dark brown to black, trace clay.	SM			0							
				5' End of Boring.											

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Route To: Watershed/Wastewater  Waste Management   
Remediation/Redevelopment  Other

Facility/Project Name <b>Former Third Ward MGP - Former Peters=Johnson</b>		License/Permit/Monitoring Number		Boring Number <b>SV04</b>	
Boring Drilled By: Name of crew chief (first, last) and Firm <b>Mitch Panfil Gestra Engineering, Inc.</b>			Date Drilling Started <b>3/7/2017</b>	Date Drilling Completed <b>3/7/2017</b>	Drilling Method <b>GeoProbe</b>
WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level <b>Feet MCD</b>	Surface Elevation <b>Feet MCD</b>	Borehole Diameter <b>1.5 inches</b>
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/> ) or Boring Location <input checked="" type="checkbox"/> State Plane <b>N, E <input checked="" type="checkbox"/> C/N</b>			Local Grid Location <input type="checkbox"/> N <input type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W		
1/4 of Section <b>T N, R</b>		Lat _____ ' _____ "		Long _____ ' _____ "	
Facility ID <b>241496530</b>	County <b>Milwaukee</b>	County Code <b>41</b>	Civil Town/City/ or Village <b>Milwaukee</b>		

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID 10.6 eV Lamp	Soil Properties					RQD/ Comments
									Compressive Strength (tsf)	Moisture Content	Liquid Limit	Plasticity Index	P 200	
1 CS	24 20		1	0 - 0.5' <b>FILL, WEATHERED CONCRETE:</b> (FILL).	(FILL)									
				0.5 - 0.8' <b>FILL, POORLY-GRADED GRAVEL WITH SAND:</b> (GP)s, white.	(GP)s			0						
2 CS	24 22		2	0.8 - 3' <b>FILL, SILTY SAND WITH GRAVEL:</b> (SM)g, black.	(SM)g			0						
				3 - 5' <b>FILL, SILTY CLAY</b> CL/ML, brown, trace gravel.	CL/ML			0						
3 CS	6 4		5	4.8' moist. 5' End of Boring.										

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Route To: Watershed/Wastewater  Waste Management   
Remediation/Redevelopment  Other

Facility/Project Name <b>Former Third Ward MGP - Former Peters=Johnson</b>		License/Permit/Monitoring Number		Boring Number <b>SV05</b>	
Boring Drilled By: Name of crew chief (first, last) and Firm <b>Mitch Panfil Gestra Engineering, Inc.</b>			Date Drilling Started <b>3/7/2017</b>	Date Drilling Completed <b>3/7/2017</b>	Drilling Method <b>GeoProbe</b>
WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level <b>Feet MCD</b>	Surface Elevation <b>Feet MCD</b>	Borehole Diameter <b>1.5 inches</b>
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/> ) or Boring Location <input checked="" type="checkbox"/> State Plane <b>N, E <input checked="" type="checkbox"/> C/N</b>			Local Grid Location Lat _____ " <input type="checkbox"/> N <input type="checkbox"/> E Long _____ " <input type="checkbox"/> S <input type="checkbox"/> W		
1/4 of _____		1/4 of Section _____, T _____ N, R _____		Feet _____ Feet _____	
Facility ID <b>241496530</b>		County <b>Milwaukee</b>	County Code <b>41</b>	Civil Town/City/ or Village <b>Milwaukee</b>	

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID 10.6 eV Lamp	Soil Properties					RQD/ Comments
									Compressive Strength (tsf)	Moisture Content	Liquid Limit	Plasticity Index	P 200	
1 CS	24 20		0 - 0.5'	<b>FILL, WEATHERED CONCRETE: (FILL).</b>	(FILL)									
			0.5 - 0.8'	<b>FILL, POORLY-GRADED GRAVEL WITH SAND: (GP)s, white.</b>	(GP)s									
2 CS	24 12		0.8 - 1'	<b>FILL, SILTY SAND WITH GRAVEL: (SM)g, black.</b>	(SM)g			0						
			1 - 4'	<b>FILL, SILTY CLAY CL/ML, reddish brown, trace gravel. 2.3' organics for for 2".</b>	CL/ML			0						
3 CS	6 3		4 - 5'	<b>FILL, SILTY CLAY CL/ML, brown.</b>	CL/ML			0						
			4.7' moist.											
			5'	End of Boring.										

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Route To: Watershed/Wastewater  Waste Management   
Remediation/Redevelopment  Other

Facility/Project Name <b>Former Third Ward MGP - Former Peters=Johnson</b>		License/Permit/Monitoring Number		Boring Number <b>SV06</b>	
Boring Drilled By: Name of crew chief (first, last) and Firm <b>Mitch Panfil Gestra Engineering, Inc.</b>		Date Drilling Started <b>3/7/2017</b>		Date Drilling Completed <b>3/7/2017</b>	
WI Unique Well No.		DNR Well ID No.		Common Well Name	
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/> ) or Boring Location <input checked="" type="checkbox"/>		Final Static Water Level <b>Feet MCD</b>		Surface Elevation <b>Feet MCD</b>	
State Plane <b>N, E <input checked="" type="checkbox"/> C/N</b>		Lat _____ "		Local Grid Location <input type="checkbox"/> N <input type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W	
1/4 of _____		1/4 of Section _____, T _____ N, R _____		Long _____ "	
Facility ID <b>241496530</b>		County <b>Milwaukee</b>		County Code <b>41</b>	
				Civil Town/City/ or Village <b>Milwaukee</b>	

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID 10.6 eV Lamp	Soil Properties					RQD/ Comments
									Compressive Strength (tsf)	Moisture Content	Liquid Limit	Plasticity Index	P 200	
1 CS	24 20		0 - 0.5'	<b>FILL, WEATHERED CONCRETE: (FILL).</b>	(FILL)									
			0.5 - 0.8'	<b>FILL, POORLY-GRADED GRAVEL WITH SAND: (GP)s, white.</b>	(GP)s									
2 CS	24 16		0.8 - 2'	<b>FILL, SILTY SAND: SM, brown, trace gravel.</b>	SM			0						
			2 - 3'	<b>FILL, SILTY CLAY CL/ML, brown, trace gravel.</b>	CL/ML			0						
			3 - 4'	<b>FILL, POORLY-GRADED SAND: SP, light brown, trace silt.</b>	SP			0						
3 CS	6 2		4 - 5'	<b>FILL, SILTY CLAY to POORLY-GRADED GRAVEL: CL/ML, gray.</b>	CL/ML			0						
			4.8'	cinders.										
			5'	End of Boring.										

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Route To: Watershed/Wastewater  Waste Management   
Remediation/Redevelopment  Other

Facility/Project Name <b>Former Third Ward MGP - Former Peters=Johnson</b>		License/Permit/Monitoring Number		Boring Number <b>SV07</b>	
Boring Drilled By: Name of crew chief (first, last) and Firm <b>Mitch Panfil Gestra Engineering, Inc.</b>			Date Drilling Started <b>3/7/2017</b>	Date Drilling Completed <b>3/7/2017</b>	Drilling Method <b>GeoProbe</b>
WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level <b>Feet MCD</b>	Surface Elevation <b>Feet MCD</b>	Borehole Diameter <b>1.5 inches</b>
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/> ) or Boring Location <input checked="" type="checkbox"/> State Plane <b>N, E <input checked="" type="checkbox"/> C/N</b>			Local Grid Location <input type="checkbox"/> N <input type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W		
1/4 of Section <b>T N, R</b>		Lat <b>° ' "</b>		Long <b>° ' "</b>	
Facility ID <b>241496530</b>	County <b>Milwaukee</b>	County Code <b>41</b>	Civil Town/City/ or Village <b>Milwaukee</b>		

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID 10.6 eV Lamp	Soil Properties						RQD/ Comments
									Compressive Strength (tsf)	Moisture Content	Liquid Limit	Plasticity Index	P 200		
1 CS	24 18		1	0 - 0.6' <b>FILL, WEATHERED CONCRETE:</b> (FILL).	(FILL)										
			2	0.6 - 3.5' <b>FILL, SILTY CLAY</b> CL/ML, dark brown, trace sand and yellow bricks.	CL/ML			0							
2 CS	24 10		3					0							
			4	3.5 - 4.5' <b>FILL, POORLY-GRADED SAND:</b> SP, light brown, trace silt.	SP			0							
3 CS	5 2		5	4.5 - 5' <b>FILL, SILTY CLAY</b> CL/ML, brown, moist.	CL/ML										
				5' End of Boring.											

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Route To: Watershed/Wastewater  Waste Management   
Remediation/Redevelopment  Other

Facility/Project Name <b>Former Third Ward MGP - Former Peters=Johnson</b>		License/Permit/Monitoring Number		Boring Number <b>SV08</b>	
Boring Drilled By: Name of crew chief (first, last) and Firm <b>Mitch Panfil Gestra Engineering, Inc.</b>			Date Drilling Started <b>3/7/2017</b>	Date Drilling Completed <b>3/7/2017</b>	Drilling Method <b>GeoProbe</b>
WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level <b>Feet MCD</b>	Surface Elevation <b>Feet MCD</b>	Borehole Diameter <b>1.5 inches</b>
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/> ) or Boring Location <input checked="" type="checkbox"/> State Plane <b>N, E <input checked="" type="checkbox"/> C/N</b>			Local Grid Location <input type="checkbox"/> N <input type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W		
Facility ID <b>241496530</b>		County <b>Milwaukee</b>	County Code <b>41</b>	Civil Town/City/ or Village <b>Milwaukee</b>	

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID 10.6 eV Lamp	Soil Properties						RQD/ Comments
									Compressive Strength (tsf)	Moisture Content	Liquid Limit	Plasticity Index	P 200		
1 CS	24 16		0 - 0.5'	<b>FILL, WEATHERED CONCRETE: (FILL).</b>	(FILL)										
			0.5 - 0.8'	<b>FILL, POORLY-GRADED GRAVEL WITH SAND: (GP)s, white.</b>	(GP)s										
			0.8 - 2'	<b>FILL, SILTY SAND: SM, brown, trace cinders and gravel.</b>	SM			0							
2 CS	24 22		2 - 3.8'	<b>FILL, POORLY-GRADED SAND: SP, brown, trace silt.</b>	SP			0							
			3.8 - 5'	<b>FILL, SANDY LEAN CLAY: s(CL), brown.</b>	s(CL)			0							
3 CS	6 6		5'	5' End of Boring.											

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Route To: Watershed/Wastewater  Waste Management   
Remediation/Redevelopment  Other

Facility/Project Name <b>Former Third Ward MGP - Former Peters=Johnson</b>		License/Permit/Monitoring Number		Boring Number <b>SV09</b>	
Boring Drilled By: Name of crew chief (first, last) and Firm <b>Mitch Panfil Gestra Engineering, Inc.</b>		Date Drilling Started <b>3/7/2017</b>		Date Drilling Completed <b>3/7/2017</b>	
WI Unique Well No.		DNR Well ID No.		Common Well Name	
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/> ) or Boring Location <input checked="" type="checkbox"/>		Final Static Water Level <b>Feet MCD</b>		Surface Elevation <b>Feet MCD</b>	
State Plane <b>N, E S/C/N</b>		Lat _____ "		Local Grid Location <input type="checkbox"/> N <input type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W	
1/4 of _____		1/4 of Section _____, T _____ N, R _____		Long _____ "	
Facility ID <b>241496530</b>		County <b>Milwaukee</b>		County Code <b>41</b>	
				Civil Town/City/ or Village <b>Milwaukee</b>	

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID 10.6 eV Lamp	Soil Properties						RQD/ Comments
									Compressive Strength (tsf)	Moisture Content	Liquid Limit	Plasticity Index	P 200		
1 CS	24 10		0	0 - 0.4' <b>FILL, SILTY SAND:</b> SM, dark brown, organics.	SM			0							
				0.3' Root for 2".											
2 CS	24 16		1	0.4 - 3.2' <b>FILL, SILTY CLAY</b> CL/ML, dark brown, gravel.	CL/ML			0							
3 CS	12 6		3	3.2 - 3.5' <b>FILL, LEAN CLAY:</b> CL, brown, trace silt.	CL			0							
				3.5 - 5' <b>FILL, SILTY CLAY</b> CL/ML, dark brown, trace gravel.	CL/ML			0							
			5	5' End of Boring.											

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Route To: Watershed/Wastewater  Waste Management   
Remediation/Redevelopment  Other

Facility/Project Name <b>Former Third Ward MGP - Former Peters=Johnson</b>		License/Permit/Monitoring Number		Boring Number <b>SV10</b>	
Boring Drilled By: Name of crew chief (first, last) and Firm <b>Mitch Panfil Gestra Engineering, Inc.</b>			Date Drilling Started <b>3/7/2017</b>	Date Drilling Completed <b>3/7/2017</b>	Drilling Method <b>GeoProbe</b>
WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level <b>Feet MCD</b>	Surface Elevation <b>Feet MCD</b>	Borehole Diameter <b>1.5 inches</b>
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/> ) or Boring Location <input checked="" type="checkbox"/> State Plane <b>N, E <input checked="" type="checkbox"/> C/N</b>			Local Grid Location <input type="checkbox"/> N <input type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W		
Facility ID <b>241496530</b>		County <b>Milwaukee</b>	County Code <b>41</b>	Civil Town/City/ or Village <b>Milwaukee</b>	

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID 10.6 eV Lamp	Soil Properties						RQD/ Comments
									Compressive Strength (tsf)	Moisture Content	Liquid Limit	Plasticity Index	P 200		
1 CS	24 18		0 - 1'	<b>FILL, SILTY CLAY</b> CL/ML, dark brown, organics.	CL/ML			0							
			1 - 1.4'	<b>FILL, POORLY-GRADED GRAVEL WITH SAND:</b> (GP)s, dark brown.	(GP)s CL/ML			0							
2 CS	24 22		1.4 - 1.7'	<b>FILL, SILTY CLAY</b> CL/ML, dark brown.	CL			0							
			1.7 - 3.6'	<b>FILL, LEAN CLAY:</b> CL, brown, trace silt and gravel.											
3 CS	12 9		3.6 - 4.5'	<b>FILL, SILTY SAND:</b> SM, black, cinders.	SM			0							
			4.5 - 5'	<b>FILL, SILTY CLAY</b> CL/ML, light brown.	CL/ML										
			5'	End of Boring.											

I hereby certify that the information on this form is true and correct to the best of my knowledge.

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