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ENVIRONMENT

Michael Schmoller
Wisconsin Department of Natural Resources
South Central Region
3911 Fish Hatchery Road
Fitchburg, WI 53711

Subject:
Polynuclear Aromatic Hydrocarbons (PAHs) Background Study, Madison-Kipp Corporation, 201 Waubesa Street, Madison, Wisconsin. Facility ID No. 113125320, BRRTS No. 02-13-001569

Date:
February 7, 2014

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Our ref:
WI001368.0013

Dear Mr. Schmoller:

A *Polynuclear Aromatic Hydrocarbons Evaluation* report (2013 Report) for the Madison-Kipp facility located at 201 Waubesa Street (Site), dated January 21, 2013, was submitted to the Wisconsin Department of Natural Resources (WDNR). This report included an evaluation of the on-site and off-site polynuclear aromatic hydrocarbon (PAH) data collected from surface soil located on and within the immediate vicinity of the Madison Kipp facility. The purpose of the 2013 Report was to determine whether the facility was the source of PAHs in soils that exceeded WDNR's non-industrial direct contact residual contaminant level (RCL).

Evaluation of the off-site data presented in the 2013 Report concluded that PAHs in off-site soils were representative of urban background conditions and consisted of higher molecular weight PAHs attributed to coal fines, cinder materials, urban dust and asphalt. PAHs present in on-site soils had a distinctly different chemical profile that included lower molecular weight PAHs found in petroleum hydrocarbons such as cutting oil, waste oil, and diesel.

WDNR requested additional off-site background PAH sampling at locations further away from the Madison Kipp facility as documented in its *Review of March 2013 Madison Kipp Site Investigation and Interim Actions Report, February 2012 – January 2013* letter dated June 20, 2013. On behalf of Madison Kipp Corporation, a *Polynuclear Aromatic Hydrocarbon (PAH) Work Plan* (Work Plan) was submitted to the WDNR on August 1, 2013. This letter documents the activities completed in accordance with the Work Plan.

Sampling Activities

As requested by WDNR in the June 20, 2013 letter, soil borings were advanced off site of the Madison-Kipp property at locations that included those recommended by

the WDNR and consistent with modifications provided by the City of Madison. The approximate soil boring locations are shown on Figure 1.

The following presents a description of the completed activities:

- Secured access for the proposed soil boring/sample locations from the City of Madison.

- Located and cleared utilities, including contacting Digger's hotline prior to collecting the soil samples.

- Advanced 23 soil borings off site as shown on Figure 1 and Figures 2-19. The soil borings were advanced on City of Madison right-of-way and on Lowell Elementary School property.

- The soil borings were collected utilizing hand auger techniques. Soil samples were collected from each soil boring at depths of 0 to 1 foot below ground surface. Samples were collected in clean, laboratory-supplied sample containers, and placed in a cooler filled with ice. Each sample was submitted for laboratory analysis of PAHs by United States Environmental Protection Agency (U.S. EPA) SW-846 Method 8270C for the same parameter list as the previous PAH sampling and analysis work described in the 2013 Report. The samples were submitted using appropriate chain-of-custody procedures. Soil boring logs are provided in Attachment A.

Soil Sampling Results

Each of the soil samples contained one or more PAH above the WDNR's non-industrial direct contact RCL. Nine of the 24 samples (23, plus one duplicate) contained one or more PAH above the WDNR's industrial direct contact RCL. Table 1 provides a summary of the analytical results.

Data Evaluation

The overall objective of the PAH background sampling was to collect background data to confirm or refute the previous conclusions provided in the 2013 Report, that the residential PAH concentrations were background and typical of Madison, Wisconsin.

A forensic evaluation was completed to compare the background sample results reported in this letter to the data from the off-site residential samples previously

summarized in the 2013 Report. Specifically, the evaluation consisted of (i) determining the concentration distributions for the two data sets, (ii) statistically testing the means, and (iii) determining if there is a spatial relationship between total PAH concentrations and the distance from the Madison Kipp site.

Below is a description of the data evaluated, methodology and findings and conclusions of this sampling and results comparison with those contained in the 2013 Report.

1) Data

a. The data set consisted of 24 samples collected during 2013 (23 locations and one duplicate). These samples were collected at distances ranging from approximately 435 to 9,500 feet from the approximate center of the Madison-Kipp site, with an average distance of 2,100 feet. The 2013 background samples (BG, n=24 samples, 0 to 1 foot below grade) were evaluated for internal consistency and PAH profiles from the samples were compared with previous PAH profiles to determine consistency or inconsistency with the assessment provided in the 2013 Report.

b. A subset of the larger data set from the 2013 Report, designated as the RES data set, consisted of 60 samples that were not on the Madison-Kipp site and were collected from the upper two feet of soil. These samples were collected from approximately 120 to 500 feet away from the approximate center of the Madison-Kipp site, with an average distance of 290 feet. The total PAH concentrations of off-site residential samples (RES, n=60 samples, 0 to 2 feet below grade) presented in the 2013 Report were evaluated to determine if they were consistent with the background data set (BG, n=24 samples, 0 to 1 foot below grade) collected as part of this background study.

c. The 2013 Report data set included samples that were collected both on the Madison-Kipp site as well as samples collected from off-site locations. PAH profiles were calculated for samples having 10 or more PAHs detected in each sample, as described in the 2013 Report. Mean PAH profiles were determined for six different groups that had fairly unique patterns, Groups 1 through 6, as previously described in the 2013 Report. Group 1 included 86% of the samples collected (having 10 or more PAHs). A large percent (98%) of the residential samples collected from 0 to 2 feet, having 10 or more PAHs were also classified as Group 1. Group 1 showed the strongest correlation with coal fines and cinder materials, with urban dust and asphalt

also showing strong correlations. Group 1 did not show *any* correlation with cutting oil, waste oil, or diesel contaminated soil.

2) Methodology

a. All samples included in the current evaluation (BG and RES) were rank ordered by total PAH concentration and were also segregated into BG and RES groups for calculating distribution statistics.

b. Each group was evaluated using ProUCL (U.S. EPA Version 4.00.02) to determine if they met the goodness-of-fit criteria for normal, gamma, or Ln-normal distributions in order to conduct subsequent statistical hypothesis testing. The Ln-normal distribution was determined to be the most appropriate fit for the data based on the goodness-of-fit parameters.

c. The total PAH data for the BG and RES samples were Ln-normal transformed and statistical tests (i.e. t-tests) were performed on the two transformed data sets.

d. Location data was obtained for all samples. The approximate center of the Madison-Kipp site was established from State Plane coordinates, and the radial distance for each sample from this location was determined. A log-log linear regression was performed to test the null hypothesis that "there is no linear relationship between the log-total PAH concentration and log-distance from the Madison-Kipp site" using regression statistics.

3) Findings and Conclusions

a. The PAH profiles for the BG data set are internally consistent with little variability. The mean PAH profile for the BG data set is shown on Figure 20. The internal variability of this PAH profile is illustrated on Figure 21, where the bars are used to illustrate +/- one standard deviation of the mean proportion for each PAH.

b. PAH profiles for the BG data set (Figure 20) are consistent with the Mean PAH profile for Group 1 samples from the 2013 Report, which is shown on Figure 22. A statistical evaluation of the relative PAH proportions in the mean BG profile and the Group 1 profile reveals that they are statistically similar, indicating that the residential PAHs (RES) were derived from a similar source as the background samples (BG). This is illustrated on Figure 23. Each data point on this figure represents the proportion of each PAH

pair from the Group 1 PAH profile from the 2013 Report (x-axis) and the BG profile (y-axis). The regression line has a slope of nearly 1, and the Coefficient of Determination (R^2) is 0.97, indicating that there is a nearly perfect correlation between the BG and RES data sets.

c. PAH profiles for the BG, RES, and the Group 1 data set are consistent with coal or cinder sources (coal combustion) based on the relative proportions of the various discrete PAH compounds analyzed. These PAH profiles are *not* consistent with cutting oil, coal tar or diesel sources, as discussed in the 2013 Report.

d. Standard t-tests were conducted assuming both equal variance and unequal variance between the two data sets (unequal variance is the most appropriate choice). Both tests indicated that there is no statistically significant difference between the RES and BG distribution; the data distributions are the same.

e. The geometric mean for the total PAH concentration for the BG and RES data sets are 1.61 and 1.39 milligrams per kilogram (mg/kg), respectively. The arithmetic means for the BG and RES data sets are 3.49 mg/kg and 1.88 mg/kg, respectively. Although the RES sample means are somewhat lower than the BG sample means, the overall distributions are very similar.

f. It is reasonable to conclude that the samples in the RES data set were drawn from the same population represented by the BG data set, and that there is no significant difference between the two. Figure 24 shows the total PAH concentrations (y-axis) vs. the rank-ordered sequence of all 84 data points. This shows that there is a good overlap between the two data sets, without significant skewing of one data set toward the high or low end of the concentration spectrum.

g. There is no trend (visual or statistical) regarding total PAH concentration versus distance from the Madison-Kipp site (i.e. concentrations do not increase or decrease in a statistically significant or mathematically predictable manner as samples are collected farther from the site).

   The Log-Log linear relationship was tested (to minimize high influence for physically distant or high concentration data points). A regression line was generated for each of the data sets (BG and RES). The Coefficient of Determination (R^2) was calculated for each regression line, and neither was close to being statistically significant. Hence, it is concluded that there is no

relationship between distance and total PAH concentration. This conclusion is illustrated on Figure 25.

Closing

Based on the results and evaluation of the off-site PAH background sampling reported herein, the conclusions presented in the 2013 Report have been confirmed. The residential PAH concentrations from samples collected from properties adjacent to the Madison-Kipp property are background and typical of Madison, Wisconsin. Therefore, no additional investigation or remediation with respect to these results is necessary on behalf of Madison-Kipp.

We trust that this information meets your needs. Should you require additional information, please contact one of the undersigned.

ARCADIS U.S., Inc.

Eric M. Cherry
Principal Scientist

Jennine Trask, PE
Project Manager

Copies (electronic):
David Crass - Michael, Best, & Friedrich LLP
Mark Meunier - Madison-Kipp Corporation
John Hausbeck – City of Madison
Brian Magee – ARCADIS

Attachments:
Table
Figures
Soil Boring Logs

Table

Table 1. Summary of Off-Site PAH Background Sampling Results, Madison-Kipp Corporation, Madison, Wisconsin.

Sample Name	Non-Industrial	Industrial	HA-1	HA-2	HA-3	HA-5	HA-6	HA-7	HA-8
Sample Date	Direct	Direct	12/16/2013	12/16/2013	12/16/2013	12/16/2013	12/16/2013	12/16/2013	12/16/2013
Sample Depth	Contact RCL	Contact RCL	0-1'	0-1'	0-1'	0-1'	0-1'	0-1'	0-1'
1-Methylnaphthalene	--	--	<0.098	<0.044	<0.0094	<0.01	0.04 J	0.039 J	0.053
2-Methylnaphthalene	229	368	<0.074	<0.033	<0.0071	<0.0075	0.038 J	0.044	0.064
Acenaphthene	3,440	33,000	<0.072	<0.033	<0.0069	<0.0074	0.073	0.02 J	<0.0075
Acenaphthylene	487	487	<0.053	<0.024	<0.0051	0.0076 J	0.019 J	0.083	0.02 J
Anthracene	17,200	100,000	0.23 J	0.063 J	<0.0064	0.015 J	0.37	0.14	0.053
Benzo_a_anthracene	0.148	2.11	***0.57***	***0.29***	0.013 J	0.056	***0.56***	***0.54***	0.14
Benzo_a_pyrene	0.0148	0.211	***0.82***	***0.31***	***0.027 J***	***0.07***	***0.53***	***0.34***	***0.14***
Benzo_b_fluoranthene	0.148	2.11	***0.98***	***0.4***	0.026 J	0.054	***0.65***	***0.42***	0.11
Benzo_g,h,i_perylene	--	--	0.57	0.28	0.016 J	0.045	0.35	0.42	0.18
Benzo_k_fluoranthene	1.48	21.1	0.53	0.21	0.027 J	0.074	0.33	0.4	0.15
Chrysene	14.8	211	0.91	0.3	0.024 J	0.073	0.63	0.6	0.18
Dibenz(a,h)anthracene	0.0148	0.211	***0.26 J***	***0.1 J***	<0.0074	***0.021 J***	***0.15***	***0.18***	***0.062***
Fluoranthene	2,290	22,000	1.6	0.62	0.044	0.13	1.7	0.92	0.27
Fluorene	2,290	22,000	<0.057	<0.026	<0.0054	<0.0058	0.16	0.022 J	0.012 J
Indeno_1,2,3-cd_pyrene	0.148	2.11	***0.44***	***0.2***	0.018 J	0.038 J	***0.33***	***0.28***	0.12
Naphthalene	5.15	26	<0.062	<0.028	<0.0059	<0.0063	0.041 J	0.043	0.03 J
Phenanthrene	115	115	0.65	0.2	0.016 J	0.053	1.3	0.39	0.19
Pyrene	1,720	16,500	1.2	0.47	0.036 J	0.11	1.2	1.2	0.25

Only detected constituents are noted. Constituent concentrations are reported as milligrams per kilogram (mg/kg).

100	Exceeds the WDNR's non-industrial direct contact residual contaminant level (RCL).
100	Exceeds the WDNR's industrial direct contact residual contaminant level.
<	Constituent not detected above noted laboratory detection limit.
--	Criteria not established.
J	Consituent concentration is an estimated value.
PAHs	Polynuclear aromatic hydrocarbons.
WDNR	Wisconsin Department of Natural Resources.

Table 1. Summary of Off-Site PAH Background Sampling Results, Madison-Kipp Corporation, Madison, Wisconsin.

Sample Name	HA-9	HA-10	HA-11	HA-12	HA-13	HA-14	HA-15	HA-16	HA-17
Sample Date	12/16/2013	12/16/2013	12/16/2013	12/16/2013	12/16/2013	12/16/2013	12/16/2013	12/16/2013	12/16/2013
Sample Depth	0-1'	0-1'	0-1'	0-1'	0-1'	0-1'	0-1'	0-1'	0-1'
1-Methylnaphthalene	0.045	0.044	0.05	<0.0092	<0.0092	<0.0096	<0.0094	<0.01	<0.0091
2-Methylnaphthalene	0.073	0.061	0.08	<0.007	<0.007	<0.0072	<0.0071	<0.0076	<0.0069
Acenaphthene	0.015 J	0.011 J	0.033 J	<0.0068	<0.0068	0.011 J	<0.0069	0.0081 J	<0.0067
Acenaphthylene	0.013 J	0.014 J	0.039	<0.005	<0.005	0.018 J	0.013 J	0.011 J	<0.0049
Anthracene	0.099	0.094	0.15	0.0065 J	<0.0063	0.059	0.029 J	0.035 J	0.011 J
Benzo_a_anthracene	***0.2***	***0.43***	***0.84***	0.024 J	0.021 J	***0.25***	0.1	***0.15***	0.029 J
Benzo_a_pyrene	***0.19***	***0.4***	***0.87***	***0.04***	***0.031 J***	***0.25***	***0.11***	***0.19***	***0.041***
Benzo_b_fluoranthene	***0.19***	***0.39***	***0.83***	0.031 J	0.022 J	***0.25***	0.14	***0.27***	0.046
Benzo_g,h,i_perylene	0.22	0.19	0.59	0.029 J	0.026 J	0.16	0.092	0.1	0.024 J
Benzo_k_fluoranthene	0.2	0.48	1.2	0.043	0.035 J	0.18	0.051	0.059	0.041
Chrysene	0.24	0.58	1.2	0.034 J	0.031 J	0.25	0.11	0.2	0.047
Dibenz(a,h)anthracene	***0.082***	***0.17***	***0.27***	<0.0073	***0.015 J***	***0.062***	***0.036 J***	***0.043***	<0.0072
Fluoranthene	0.45	0.93	2.1	0.064	0.052	0.47	0.2	0.35	0.096
Fluorene	0.027 J	0.018 J	0.042	<0.0053	<0.0053	0.013 J	<0.0054	0.0082 J	<0.0052
Indeno_1,2,3-cd_pyrene	0.14	***0.28***	***0.52***	0.026 J	0.022 J	***0.15***	0.076	0.08	0.021 J
Naphthalene	0.052	0.028 J	0.039	<0.0058	<0.0058	<0.006	<0.0059	<0.0064	<0.0057
Phenanthrene	0.44	0.53	1.2	0.024 J	0.018 J	0.22	0.086	0.15	0.054
Pyrene	0.42	1	1.7	0.056	0.035 J	0.4	0.15	0.28	0.073

Only detected constituents are noted. Constituent concentrations are reported as milligrams per kilogram (mg/kg).

100	Exceeds the WDNR's non-industrial direct contact residual contaminant level (RCL).
100	Exceeds the WDNR's industrial direct contact residual contaminant level.
<	Constituent not detected above noted laboratory detection limit.
--	Criteria not established.
J	Consituent concentration is an estimated value.
PAHs	Polynuclear aromatic hydrocarbons.
WDNR	Wisconsin Department of Natural Resources.

Table 1. Summary of Off-Site PAH Background Sampling Results, Madison-Kipp Corporation, Madison, Wisconsin.

Sample Name	HA-18	HA-19	HA-20	HA-21	HA-22	HA-23	HA-24
Sample Date	12/16/2013	12/16/2013	12/16/2013	12/16/2013	12/17/2013	12/17/2013	12/17/2013
Sample Depth	0-1'	0-1'	0-1'	0-1'	0-1'	0-1'	0-1'
1-Methylnaphthalene	<0.0092	<0.0099	<0.01	<0.047	<0.0096	<0.01	<0.047
2-Methylnaphthalene	<0.0069	<0.0075	<0.0076	0.049 J	<0.0072	<0.0076	<0.036
Acenaphthene	<0.0068	<0.0073	<0.0074	0.051 J	<0.0071	<0.0074	0.037 J
Acenaphthylene	<0.005	<0.0054	<0.0054	0.12 J	<0.0052	0.019 J	0.1 J
Anthracene	0.018 J	0.0075 J	0.013 J	0.22	<0.0066	0.029 J	0.25
Benzo_a_anthracene	0.053	0.027 J	0.042	***0.57***	0.024 J	***0.18***	***1.2***
Benzo_a_pyrene	***0.072***	***0.036 J***	***0.059***	***0.65***	***0.027 J***	***0.19***	***1.3***
Benzo_b_fluoranthene	0.053	0.039 J	0.055	***0.52***	0.039	***0.17***	***1.1***
Benzo_g,h,i_perylene	0.051	<0.013	0.047	0.46	0.014 J	0.12	0.66
Benzo_k_fluoranthene	0.074	0.032 J	0.036 J	0.55	0.023 J	0.18	***1.5***
Chrysene	0.084	0.035 J	0.054	0.64	0.028 J	0.18	1.5
Dibenz(a,h)anthracene	<0.0073	<0.0079	<0.0079	***0.15 J***	<0.0076	***0.057***	<0.037
Fluoranthene	0.14	0.068	0.095	1.3	0.052	0.31	2.6
Fluorene	<0.0053	<0.0057	<0.0058	0.078 J	<0.0055	0.0074 J	0.071 J
Indeno_1,2,3-cd_pyrene	0.049	0.02 J	0.037 J	***0.37***	0.022 J	0.11	***0.72***
Naphthalene	<0.0058	<0.0063	<0.0063	0.06 J	<0.0061	<0.0064	<0.03
Phenanthrene	0.064	0.029 J	0.028 J	0.69	0.017 J	0.1	1
Pyrene	0.12	0.059	0.092	0.99	0.044	0.27	2.3

Only detected constituents are noted. Constituent concentrations are reported as milligrams per kilogram (mg/kg).

100	Exceeds the WDNR's non-industrial direct contact residual contaminant level (RCL).
100	Exceeds the WDNR's industrial direct contact residual contaminant level.
<	Constituent not detected above noted laboratory detection limit.
--	Criteria not established.
J	Consituent concentration is an estimated value.
PAHs	Polynuclear aromatic hydrocarbons.
WDNR	Wisconsin Department of Natural Resources.

Figures

LEGEND

- APPROXIMATE POLYNUCLEAR AROMATIC HYDROCARBON (PAH) SAMPLE LOCATIONS
- SITE BOUNDARY

SERVICE LAYER CREDITS: SOURCE: ESRI, DIGITALGLOBE, GEOEYE, I-CUBED, USDA, USGS, AEX, GETMAPPING, AEROGRID, IGN, IGP, SWISSTOPO, AND THE GIS USER COMMUNITY

MADISON-KIPP CORPORATION
201 WAUBESA STREET
MADISON, WISCONSIN

PAH SOIL SAMPLE LOCATIONS

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FIGURE
1

CITY: MPLS DIV/GROUP: IM/DV DB: MG LD: CK MADISON-KIPP
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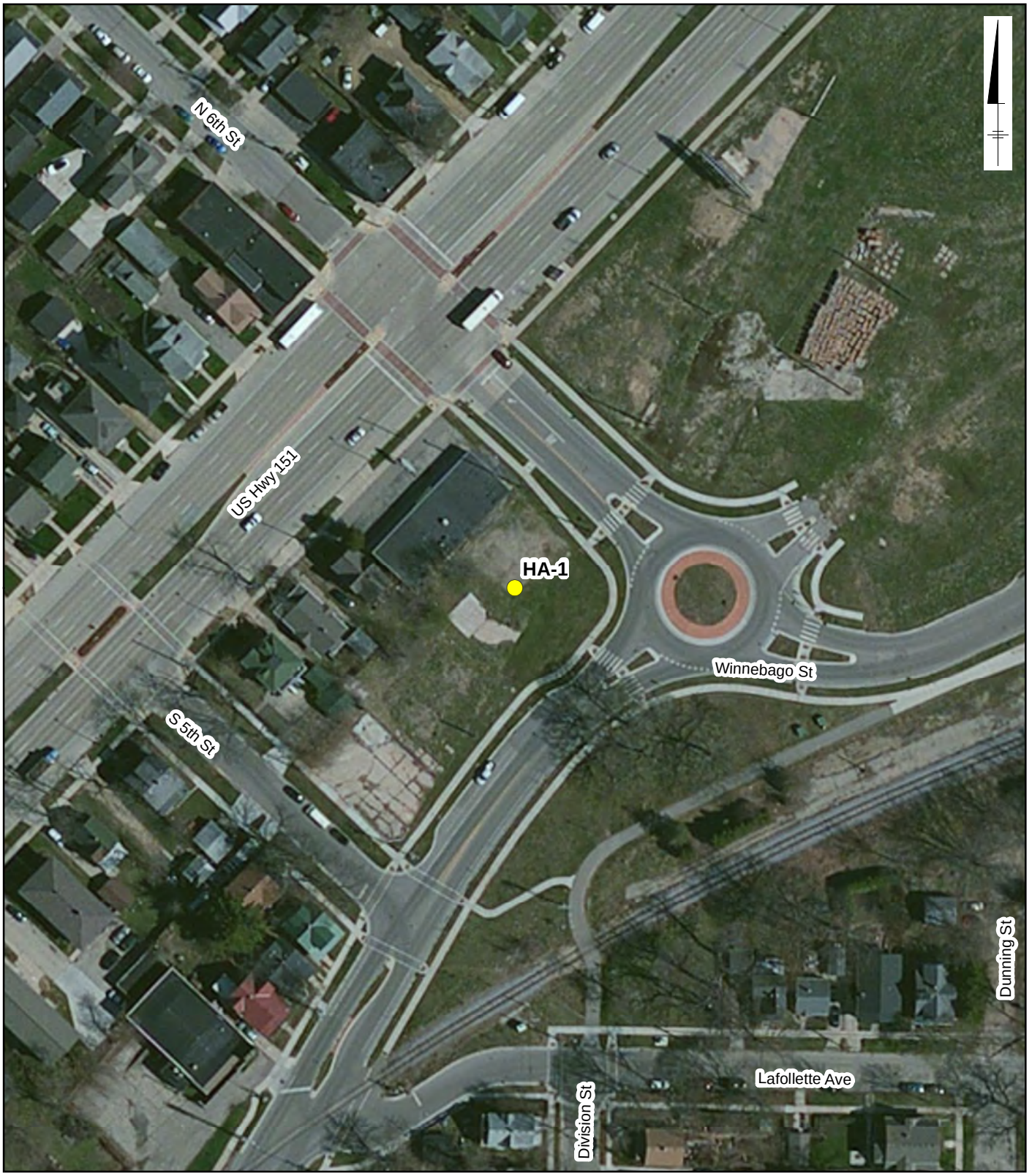

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APPROXIMATE POLYNUCLEAR AROMATIC HYDROCARBON (PAH) SAMPLE LOCATIONS

SERVICE LAYER CREDITS: SOURCE: ESRI, DIGITALGLOBE, GEOEYE, I-CUBED, USDA, USGS, AEX, GETMAPPING, AEROGRID, IGN, IGP, SWISSTOPO, AND THE GIS USER COMMUNITY

MADISON-KIPP CORPORATION
201 WAUBESA STREET
MADISON, WISCONSIN

PAH SOIL SAMPLE LOCATIONS

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FIGURE
2

CITY: MPLS DIV/GROUP: IM/DV DB: MG LD: CK MADISON-KIPP
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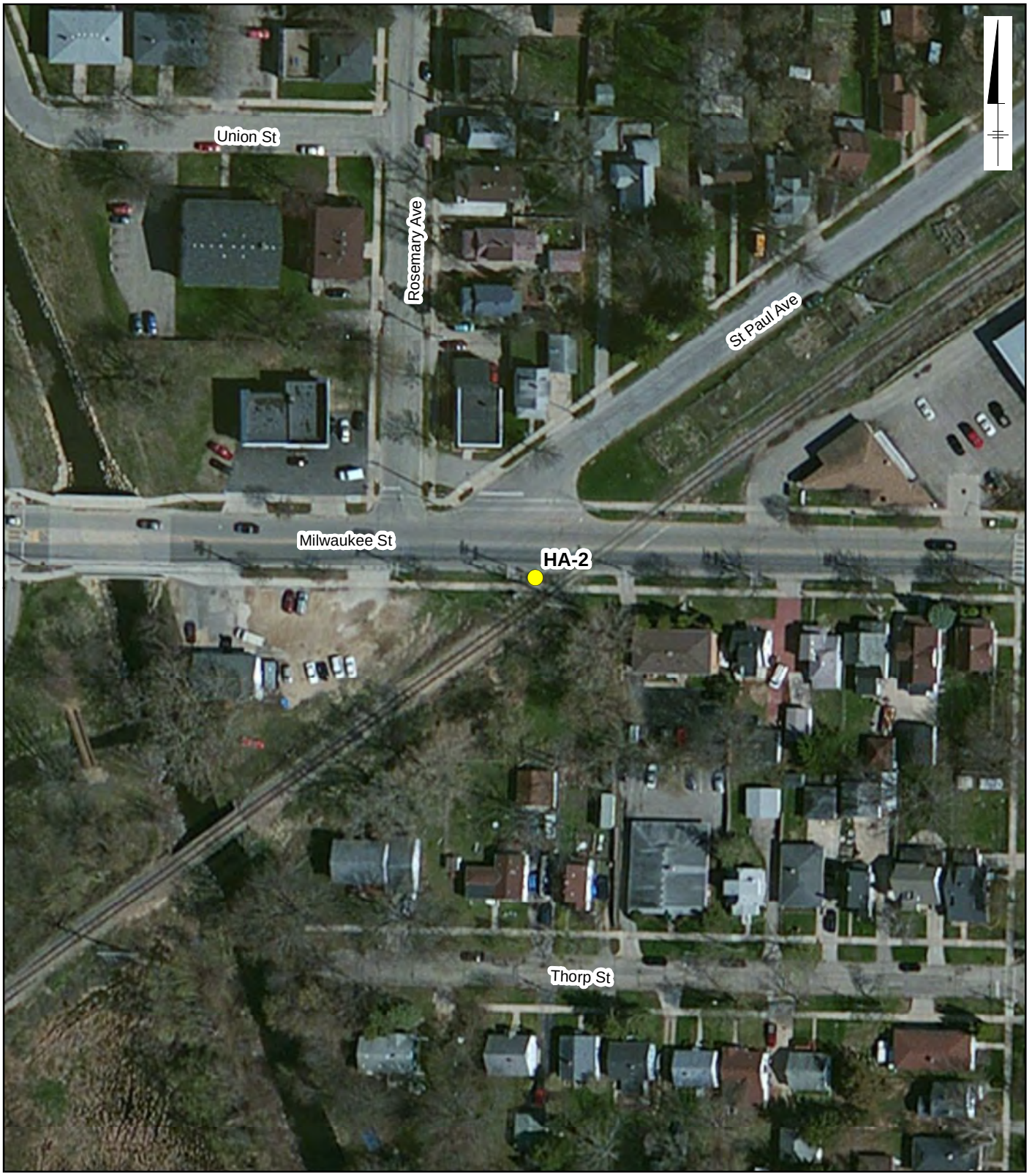

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APPROXIMATE POLYNUCLEAR AROMATIC HYDROCARBON (PAH) SAMPLE LOCATIONS

SERVICE LAYER CREDITS: SOURCE: ESRI, DIGITALGLOBE, GEOEYE, I-CUBED, USDA, USGS, AEX, GETMAPPING, AEROGRID, IGN, IGP, SWISSTOPO, AND THE GIS USER COMMUNITY

MADISON-KIPP CORPORATION
201 WAUBESA STREET
MADISON, WISCONSIN

PAH SOIL SAMPLE LOCATIONS

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FIGURE
3

CITY: MPLS DIV/GROUP: IM/DV DB: MG LD: CK MADISON-KIPP
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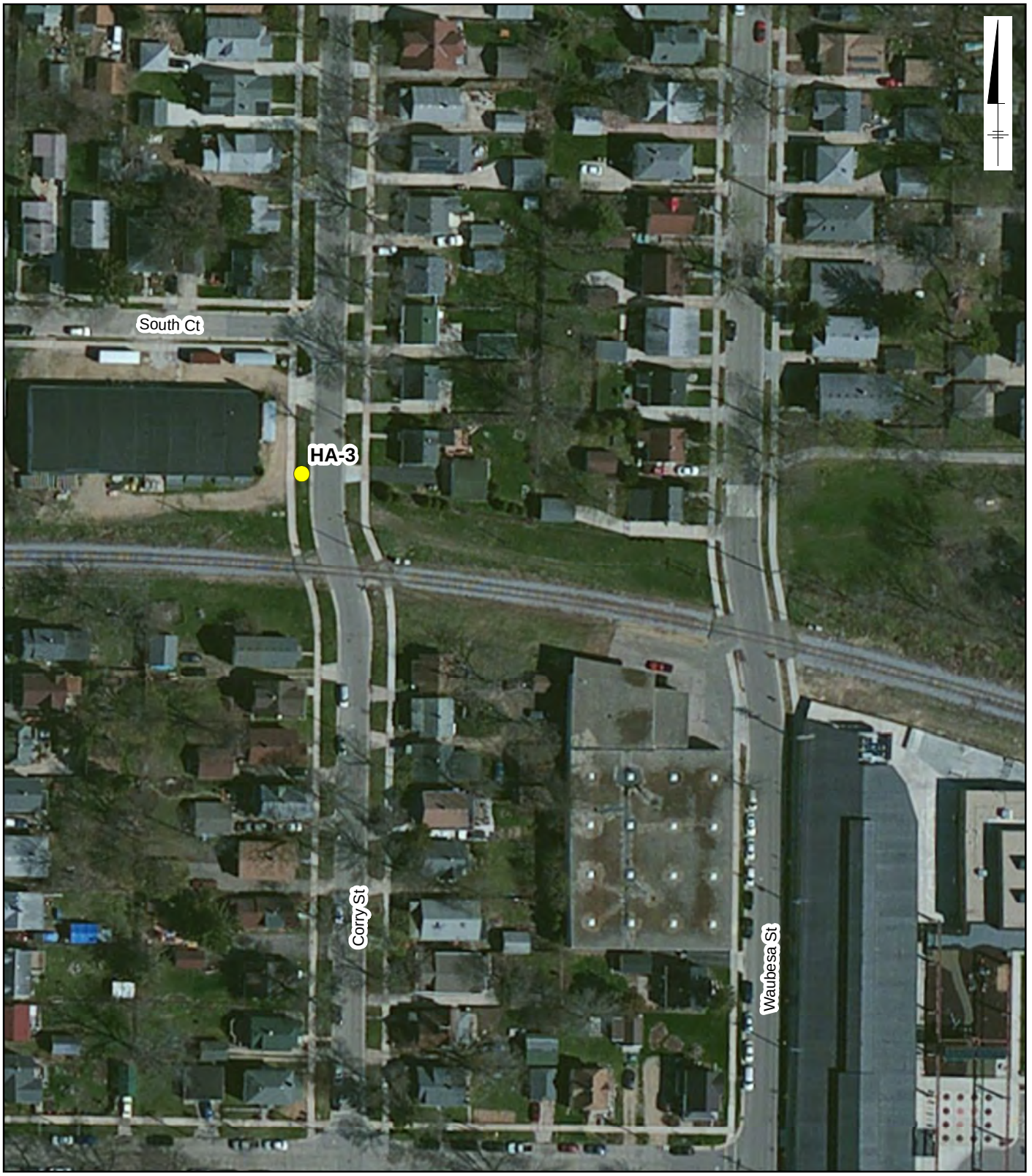

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APPROXIMATE POLYNUCLEAR AROMATIC HYDROCARBON (PAH) SAMPLE LOCATIONS

SERVICE LAYER CREDITS: SOURCE: ESRI, DIGITALGLOBE, GEOEYE, I-CUBED, USDA, USGS, AEX, GETMAPPING, AEROGRID, IGN, IGP, SWISSTOPO, AND THE GIS USER COMMUNITY

MADISON-KIPP CORPORATION
201 WAUBESA STREET
MADISON, WISCONSIN

PAH SOIL SAMPLE LOCATIONS

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FIGURE
4

CITY: MPLS DIV/GROUP: IM/DV DB: MG LD: CK MADISON-KIPP
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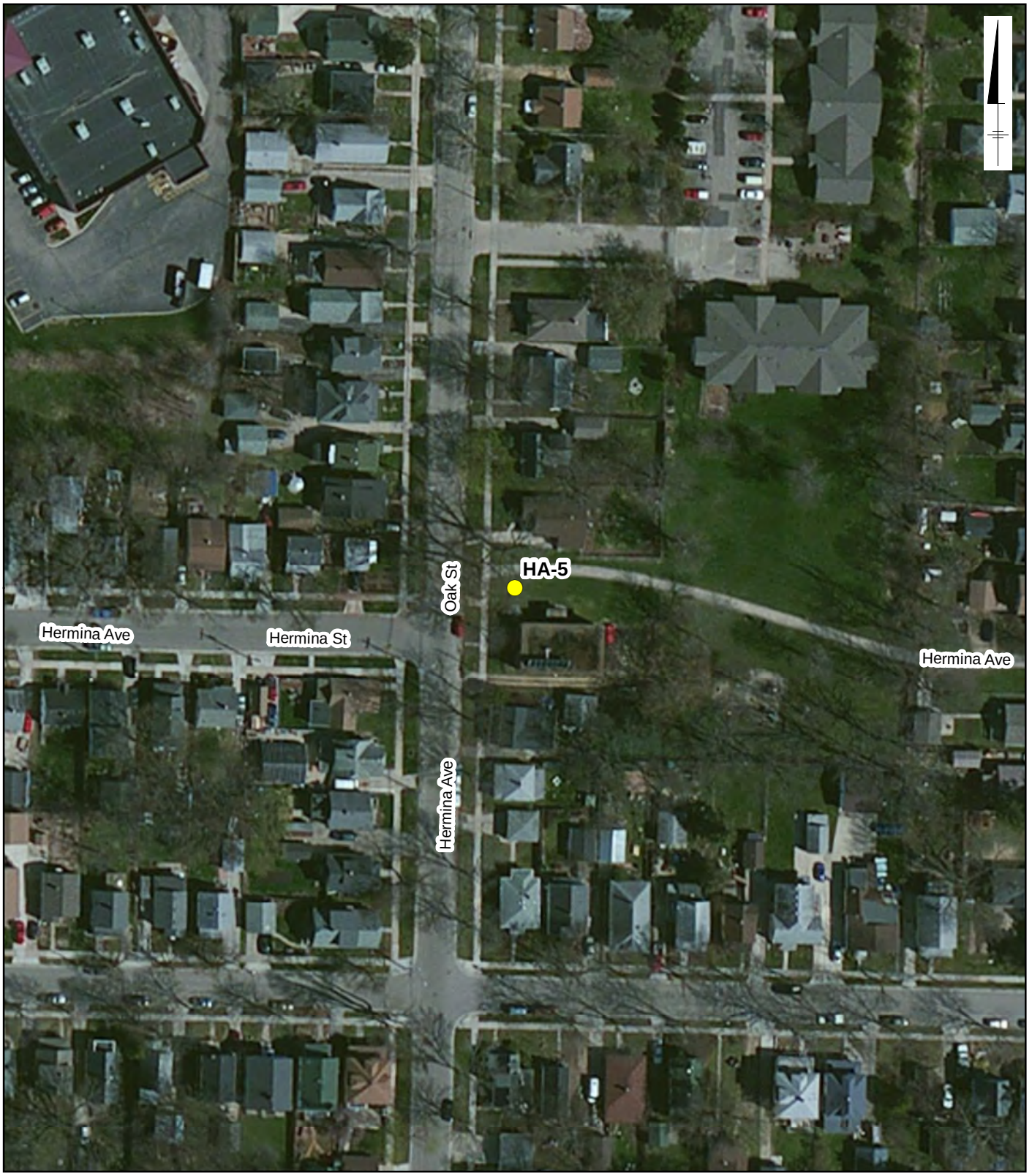

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APPROXIMATE POLYNUCLEAR AROMATIC HYDROCARBON (PAH) SAMPLE LOCATIONS

SERVICE LAYER CREDITS: SOURCE: ESRI, DIGITALGLOBE, GEOEYE, I-CUBED, USDA, USGS, AEX, GETMAPPING, AEROGRID, IGN, IGP, SWISSTOPO, AND THE GIS USER COMMUNITY

MADISON-KIPP CORPORATION
201 WAUBESA STREET
MADISON, WISCONSIN

PAH SOIL SAMPLE LOCATIONS

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FIGURE
5

CITY: MPLS DIV/GROUP: IM/DV DB: MG LD: CK MADISON-KIPP
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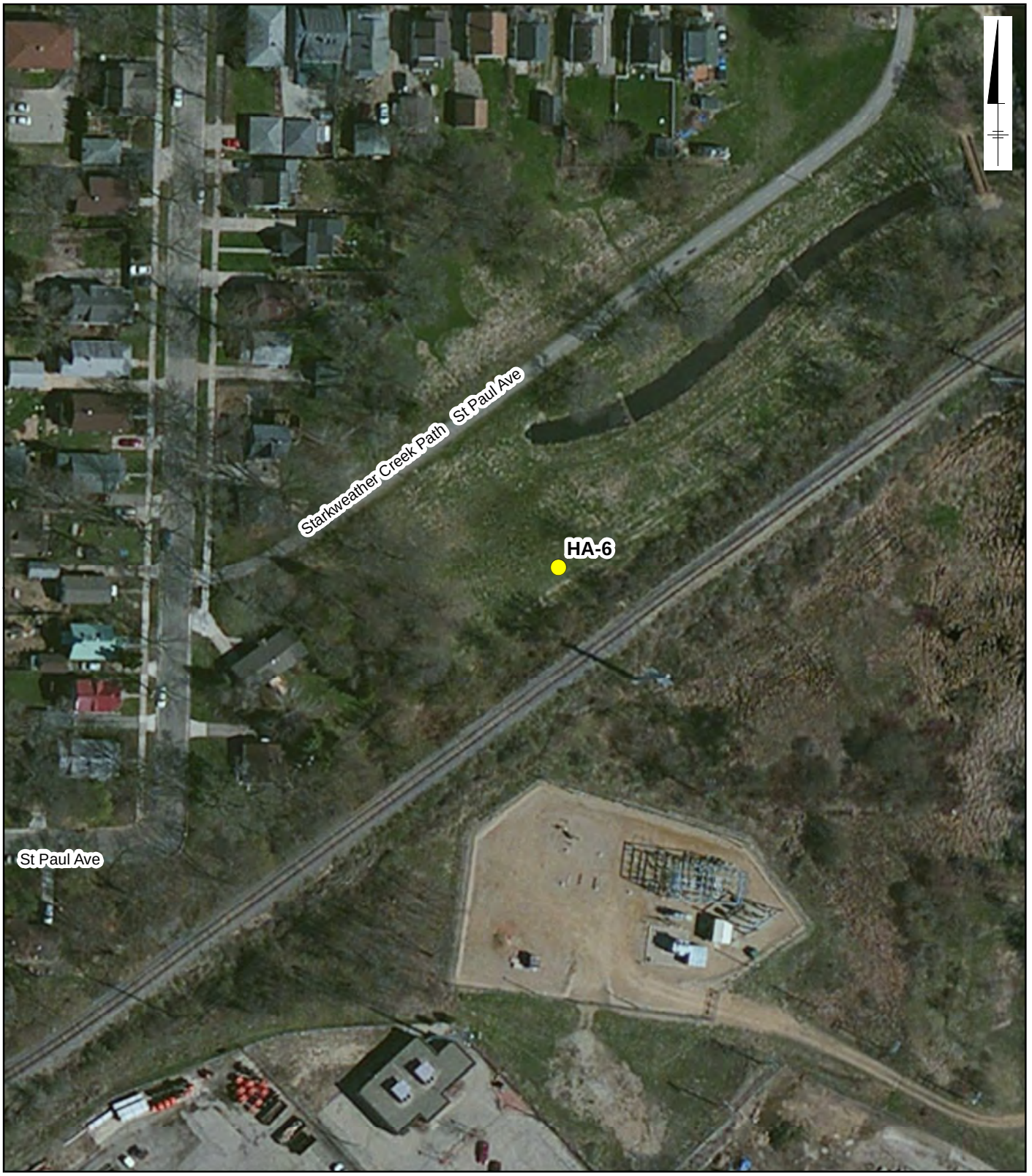

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Feet

LEGEND

APPROXIMATE POLYNUCLEAR AROMATIC HYDROCARBON (PAH) SAMPLE LOCATIONS

SERVICE LAYER CREDITS: SOURCE: ESRI, DIGITALGLOBE, GEOEYE, I-CUBED, USDA, USGS, AEX, GETMAPPING, AEROGRID, IGN, IGP, SWISSTOPO, AND THE GIS USER COMMUNITY

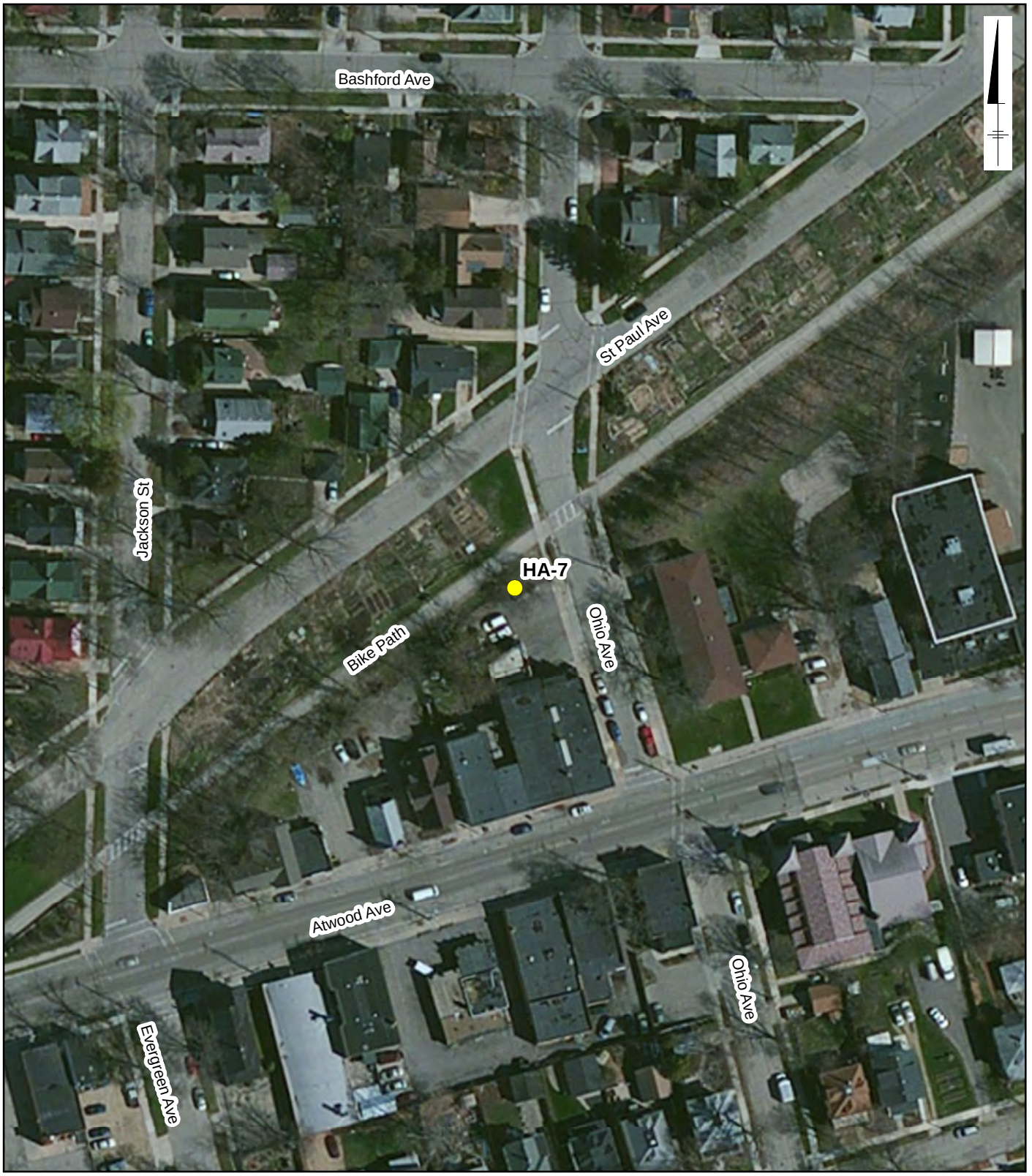
MADISON-KIPP CORPORATION
201 WAUBESA STREET
MADISON, WISCONSIN

PAH SOIL SAMPLE LOCATIONS

ARCADIS

FIGURE
6

CITY: MPLS DIV/GROUP: IM/DV DB: MG LD: CK MADISON-KIPP
G:\GIS\Projects\MadisonKipp\ArcMap\2014-01\PAH_Details_20140123.mxd



0 50 100
Feet

LEGEND

APPROXIMATE POLYNUCLEAR AROMATIC HYDROCARBON (PAH) SAMPLE LOCATIONS

SERVICE LAYER CREDITS: SOURCE: ESRI, DIGITALGLOBE, GEOEYE, I-CUBED, USDA, USGS, AEX, GETMAPPING, AEROGRID, IGN, IGP, SWISSTOPO, AND THE GIS USER COMMUNITY

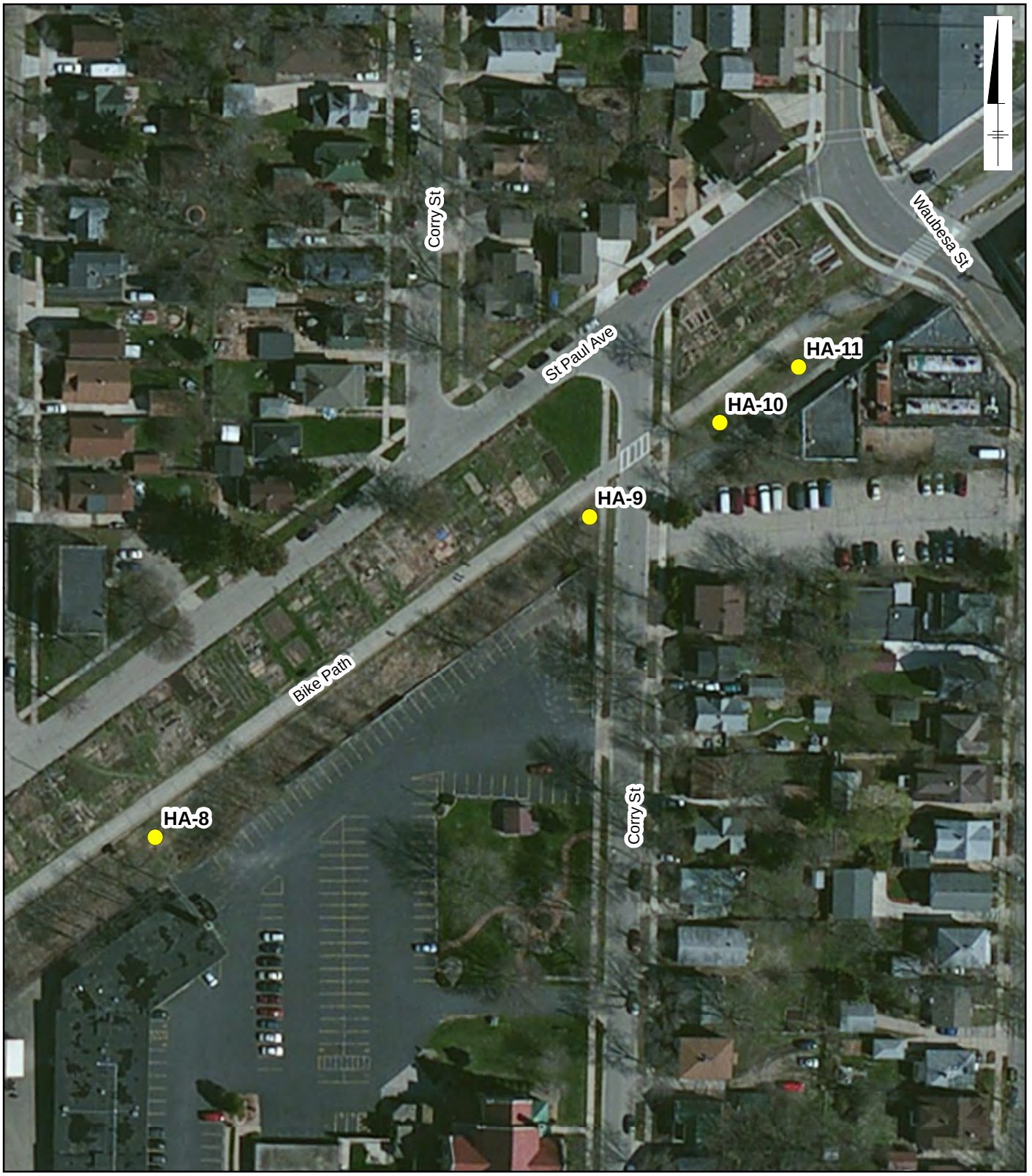
MADISON-KIPP CORPORATION
201 WAUBESA STREET
MADISON, WISCONSIN

PAH SOIL SAMPLE LOCATIONS

ARCADIS

FIGURE
7

CITY: MPLS DIV/GROUP: IM/DV DB: MG LD: CK MADISON-KIPP
G:\GIS\Projects\MadisonKipp\ArcMap\2014-01\PAH_Details_20140123.mxd



0 50 100
Feet

LEGEND

APPROXIMATE POLYNUCLEAR AROMATIC HYDROCARBON (PAH) SAMPLE LOCATIONS

SERVICE LAYER CREDITS: SOURCE: ESRI, DIGITALGLOBE, GEOEYE, I-CUBED, USDA, USGS, AEX, GETMAPPING, AEROGRID, IGN, IGP, SWISSTOPO, AND THE GIS USER COMMUNITY

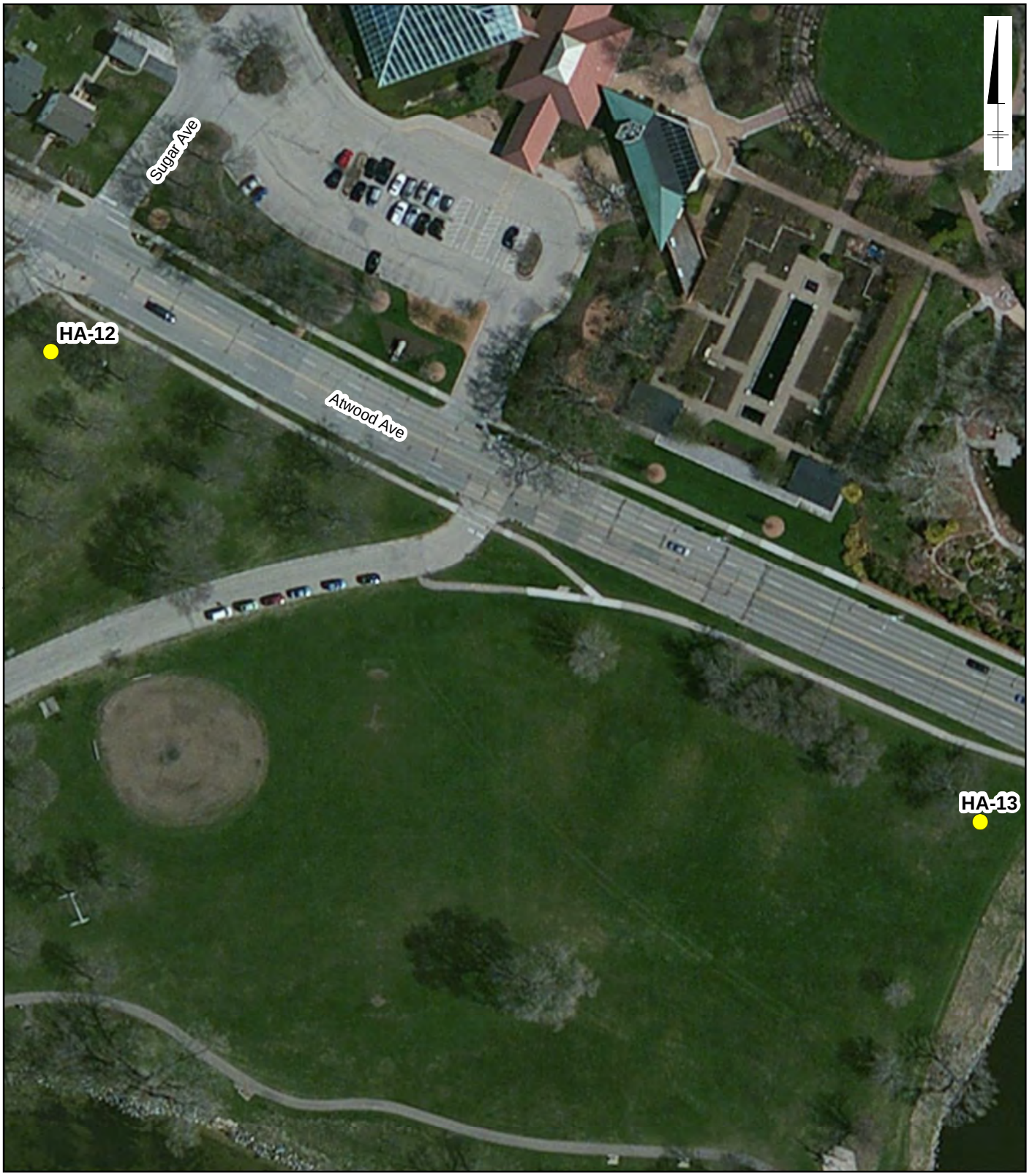
MADISON-KIPP CORPORATION
201 WAUBESA STREET
MADISON, WISCONSIN

PAH SOIL SAMPLE LOCATIONS

ARCADIS

FIGURE
8

CITY: MPLS DIV/GROUP: IM/DV DB: MG LD: CK MADISON-KIPP
G:\GIS\Projects\MadisonKipp\ArcMap\2014-01\PAH_Details_20140123.mxd



0 50 100
Feet

LEGEND

APPROXIMATE POLYNUCLEAR AROMATIC HYDROCARBON (PAH) SAMPLE LOCATIONS

SERVICE LAYER CREDITS: SOURCE: ESRI, DIGITALGLOBE, GEOEYE, I-CUBED, USDA, USGS, AEX, GETMAPPING, AEROGRID, IGN, IGP, SWISSTOPO, AND THE GIS USER COMMUNITY

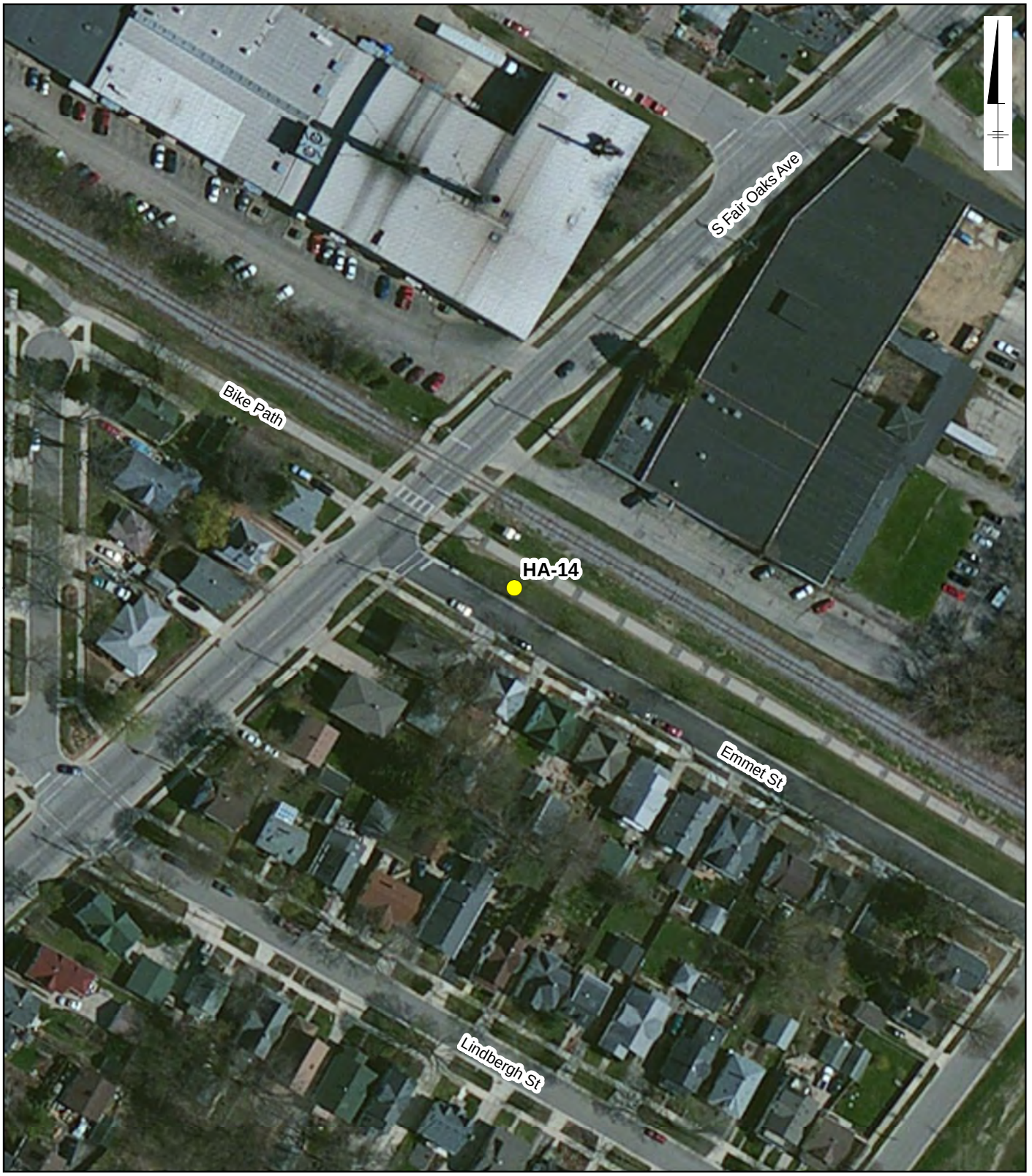
MADISON-KIPP CORPORATION
201 WAUBESA STREET
MADISON, WISCONSIN

PAH SOIL SAMPLE LOCATIONS

ARCADIS

FIGURE
9

CITY: MPLS DIV/GROUP: IM/DV DB: MG LD: CK MADISON-KIPP
G:\GIS\Projects\MadisonKipp\ArcMap\2014-01\PAH_Details_20140123.mxd



0 50 100
Feet

LEGEND

APPROXIMATE POLYNUCLEAR AROMATIC HYDROCARBON (PAH) SAMPLE LOCATIONS

SERVICE LAYER CREDITS: SOURCE: ESRI, DIGITALGLOBE, GEOEYE, I-CUBED, USDA, USGS, AEX, GETMAPPING, AEROGRID, IGN, IGP, SWISSTOPO, AND THE GIS USER COMMUNITY

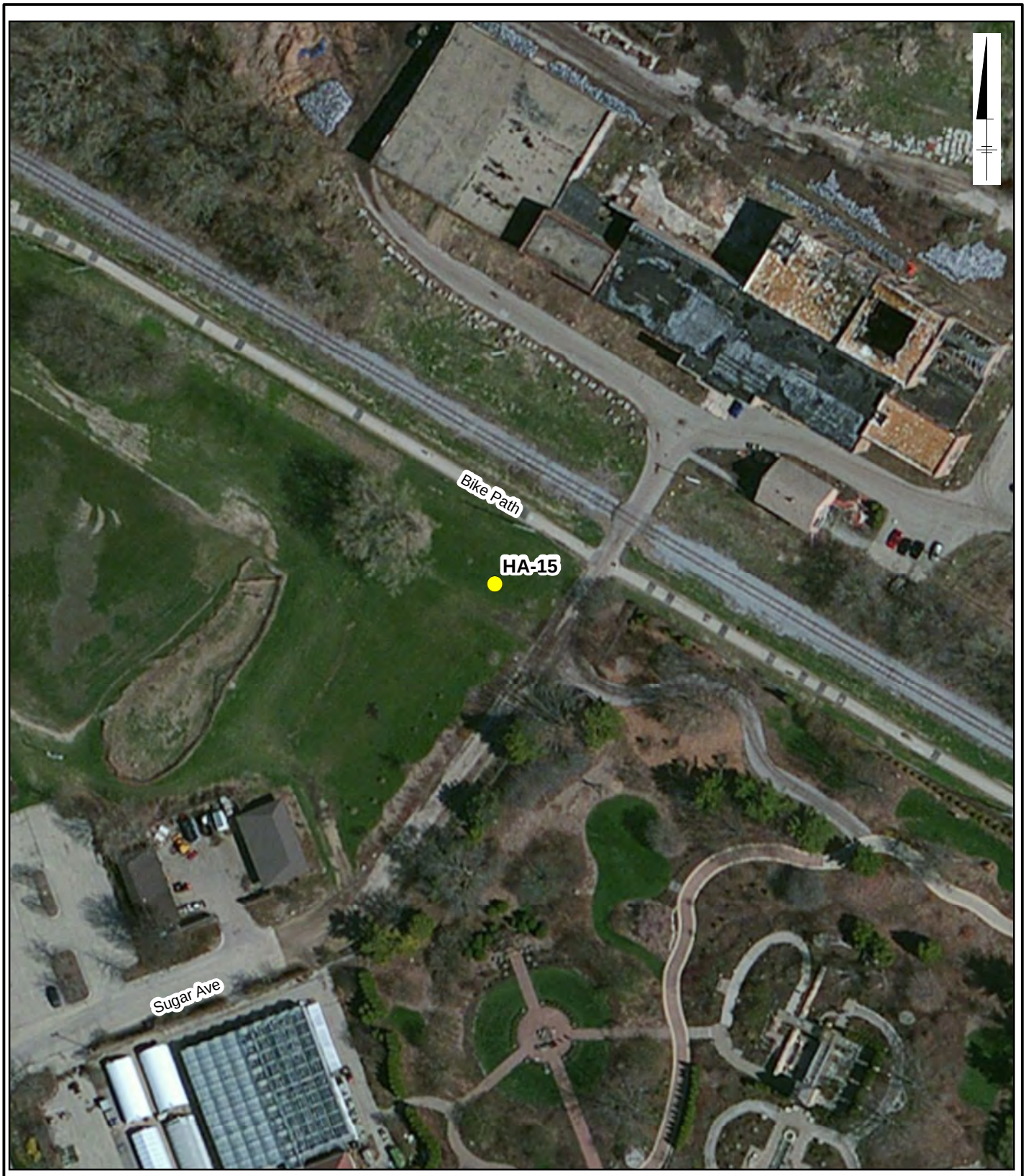
MADISON-KIPP CORPORATION
201 WAUBESA STREET
MADISON, WISCONSIN

PAH SOIL SAMPLE LOCATIONS

ARCADIS

FIGURE
10

CITY: MPLS DIV/GROUP: IM/DV DB: MG LD: CK MADISON-KIPP
G:\GIS\Projects\MadisonKipp\ArcMap\2014-01\PAH_Details_20140123.mxd



0 50 100
Feet

LEGEND

APPROXIMATE POLYNUCLEAR AROMATIC HYDROCARBON (PAH) SAMPLE LOCATIONS

SERVICE LAYER CREDITS: SOURCE: ESRI, DIGITALGLOBE, GEOEYE, I-CUBED, USDA, USGS, AEX, GETMAPPING, AEROGRID, IGN, IGP, SWISSTOPO, AND THE GIS USER COMMUNITY

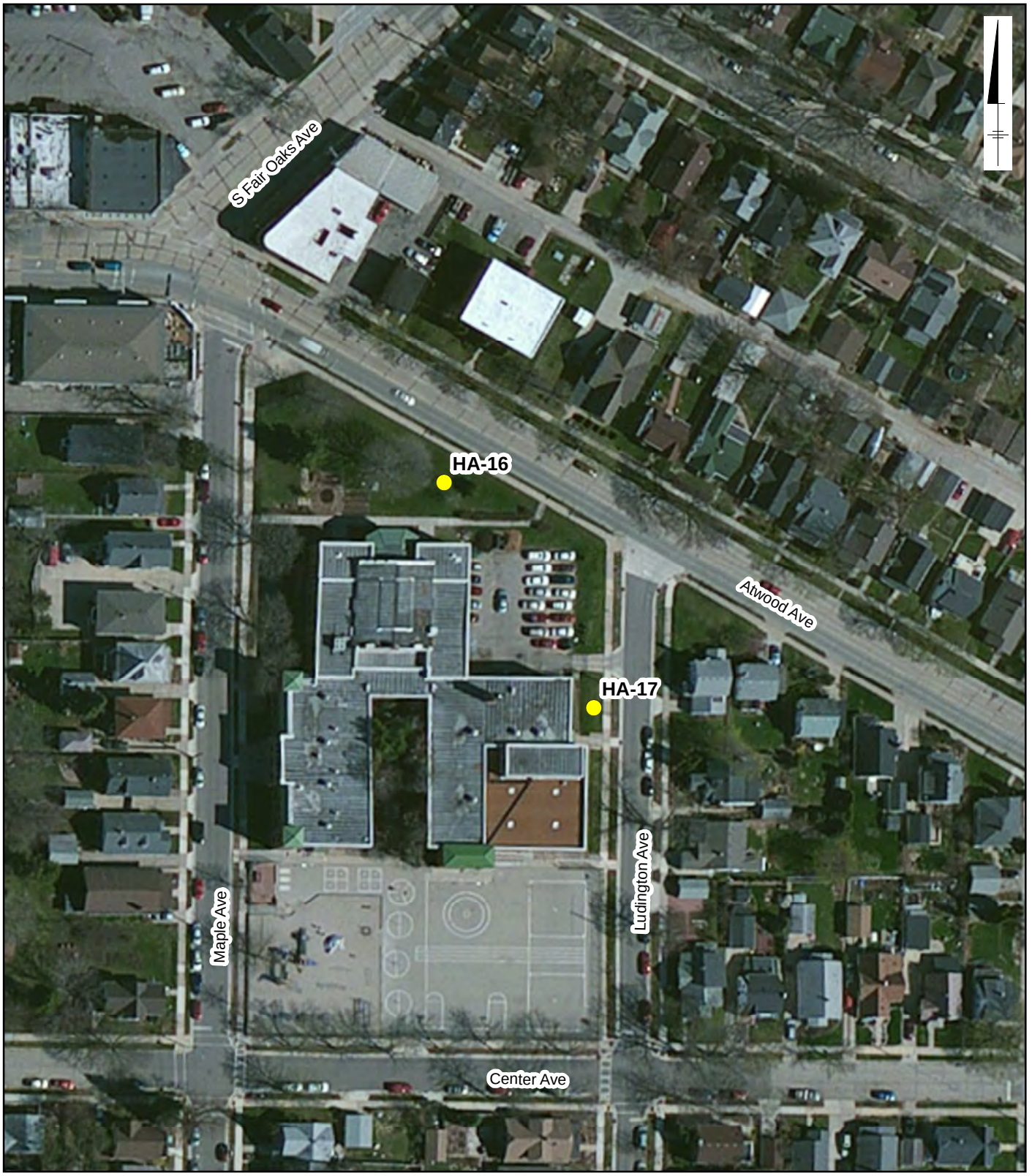
MADISON-KIPP CORPORATION
201 WAUBESA STREET
MADISON, WISCONSIN

PAH SOIL SAMPLE LOCATIONS

ARCADIS

FIGURE
11

CITY: MPLS DIV/GROUP: IM/DV DB: MG LD: CK MADISON-KIPP
G:\GIS\Projects\MadisonKipp\ArcMap\2014-01\PAH_Details_20140123.mxd



0 50 100
Feet

LEGEND

APPROXIMATE POLYNUCLEAR AROMATIC HYDROCARBON (PAH) SAMPLE LOCATIONS

SERVICE LAYER CREDITS: SOURCE: ESRI, DIGITALGLOBE, GEOEYE, I-CUBED, USDA, USGS, AEX, GETMAPPING, AEROGRID, IGN, IGP, SWISSTOPO, AND THE GIS USER COMMUNITY

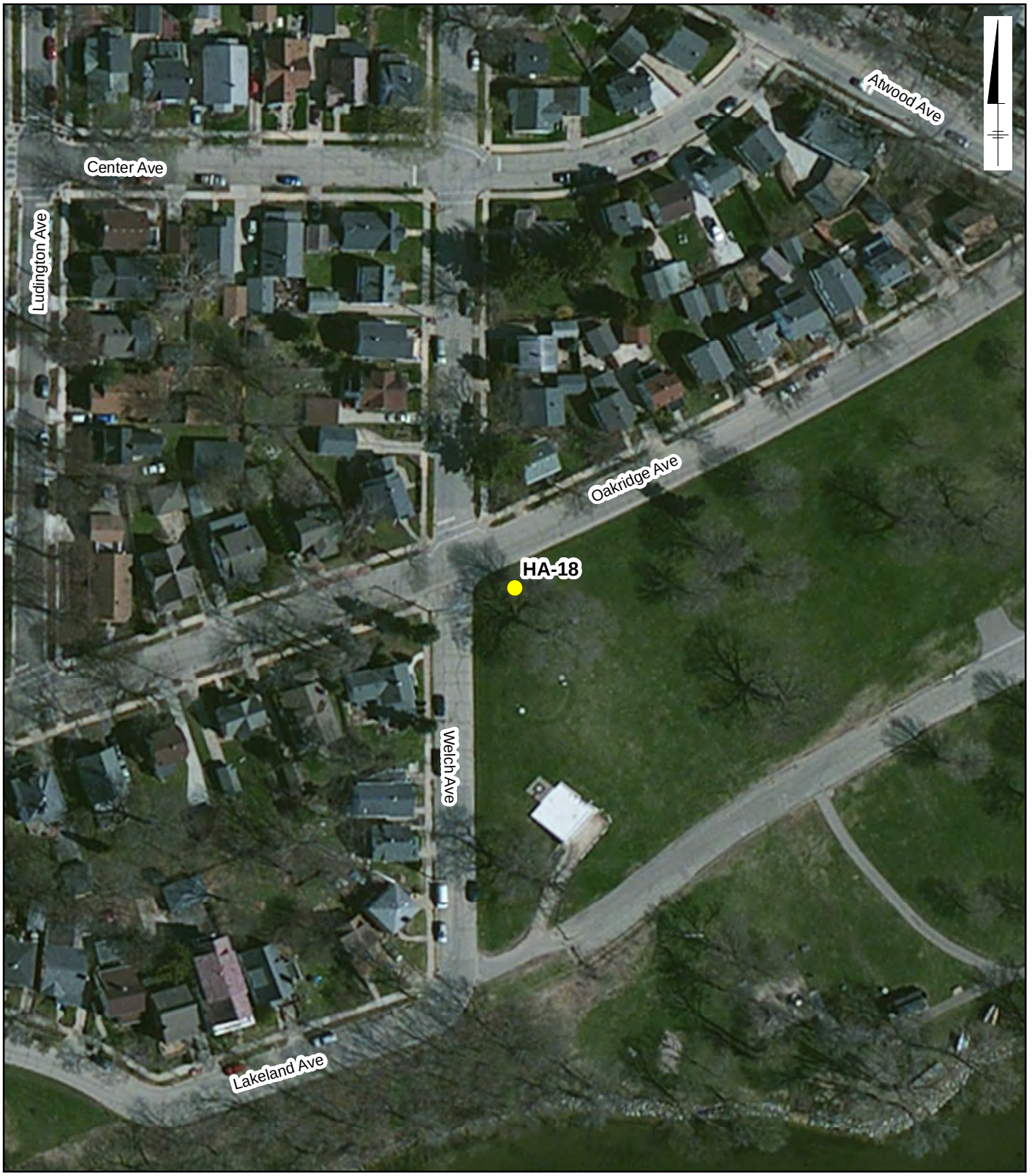
MADISON-KIPP CORPORATION
201 WAUBESA STREET
MADISON, WISCONSIN

PAH SOIL SAMPLE LOCATIONS

ARCADIS

FIGURE
12

CITY: MPLS DIV/GROUP: IM/DV DB: MG LD: CK MADISON-KIPP
G:\GIS\Projects\MadisonKipp\ArcMap\2014-01\PAH_Details_20140123.mxd



0 50 100
Feet

LEGEND

APPROXIMATE POLYNUCLEAR AROMATIC HYDROCARBON (PAH) SAMPLE LOCATIONS

SERVICE LAYER CREDITS: SOURCE: ESRI, DIGITALGLOBE, GEOEYE, I-CUBED, USDA, USGS, AEX, GETMAPPING, AEROGRID, IGN, IGP, SWISSTOPO, AND THE GIS USER COMMUNITY

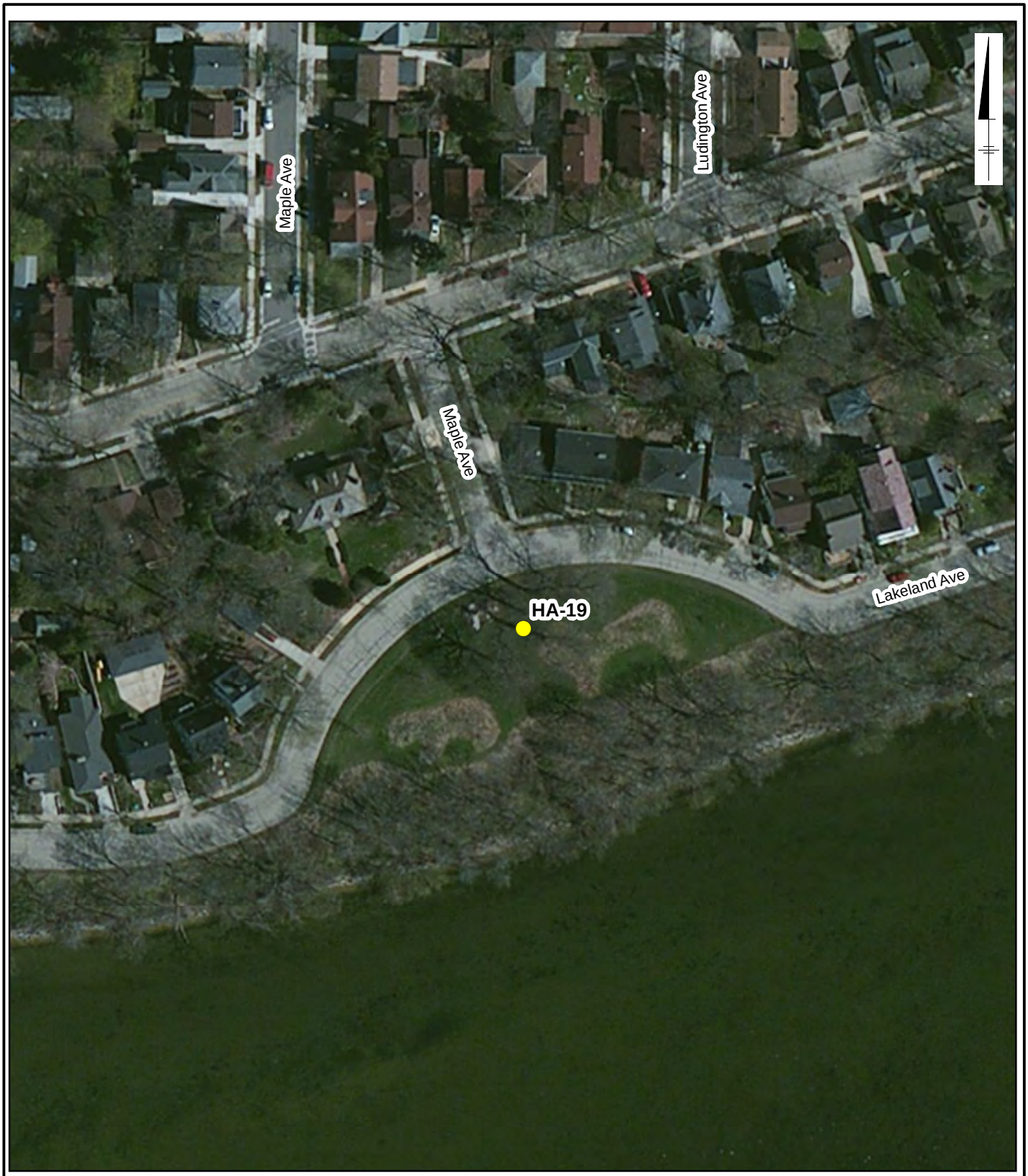
MADISON-KIPP CORPORATION
201 WAUBESA STREET
MADISON, WISCONSIN

PAH SOIL SAMPLE LOCATIONS

ARCADIS

FIGURE
13

CITY: MPLS DIV/GROUP: IM/DV DB: MG LD: CK MADISON-KIPP
G:\GIS\Projects\MadisonKipp\ArcMap\2014-01\PAH_Details_20140123.mxd



0 50 100
Feet

LEGEND

APPROXIMATE POLYNUCLEAR AROMATIC HYDROCARBON (PAH) SAMPLE LOCATIONS

SERVICE LAYER CREDITS: SOURCE: ESRI, DIGITALGLOBE, GEOEYE, I-CUBED, USDA, USGS, AEX, GETMAPPING, AEROGRID, IGN, IGP, SWISSTOPO, AND THE GIS USER COMMUNITY

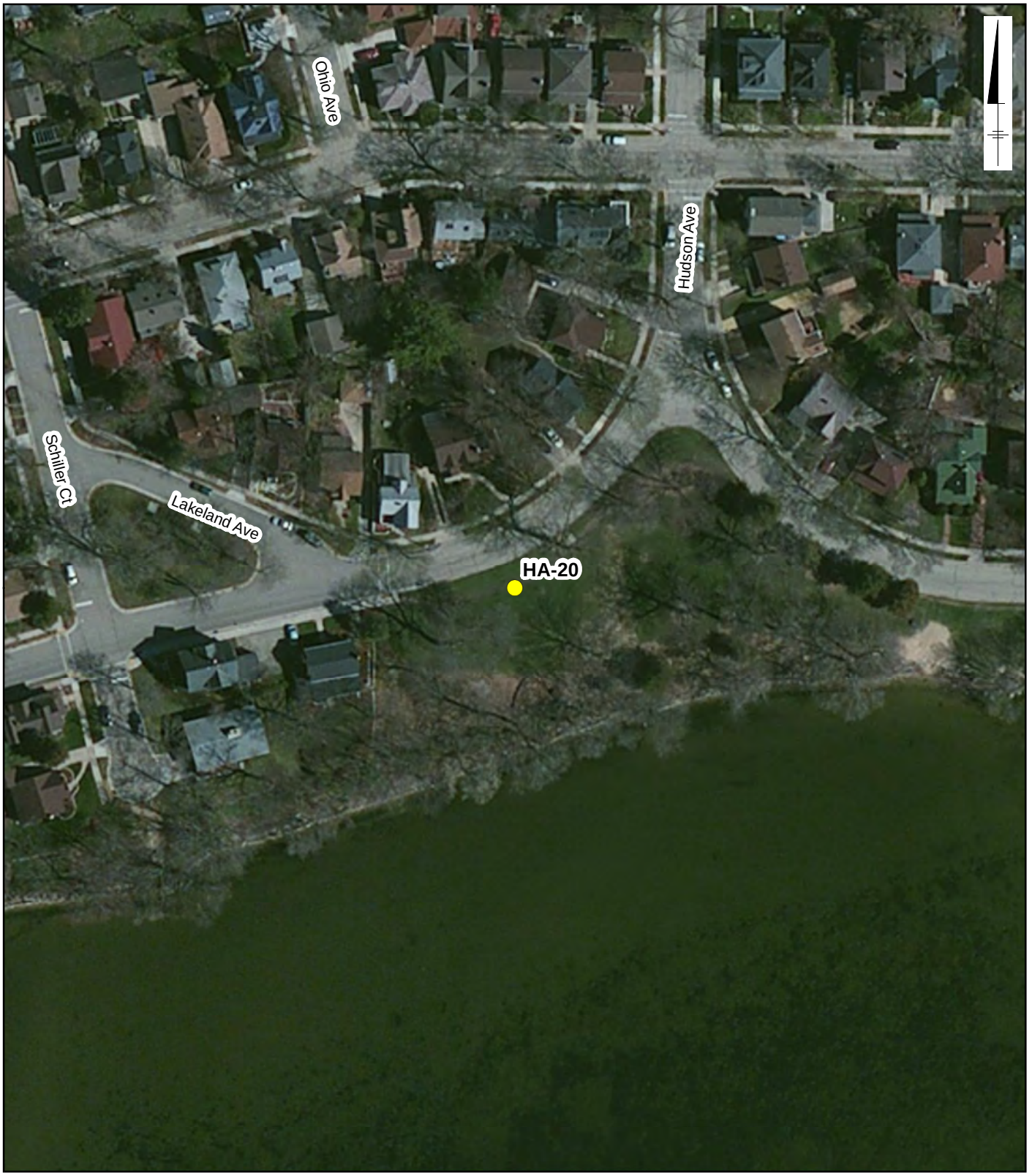
MADISON-KIPP CORPORATION
201 WAUBESA STREET
MADISON, WISCONSIN

PAH SOIL SAMPLE LOCATIONS

ARCADIS

FIGURE
14

CITY: MPLS DIV/GROUP: IM/DV DB: MG LD: CK MADISON-KIPP
G:\GIS\Projects\MadisonKipp\ArcMap\2014-01\PAH_Details_20140123.mxd



0 50 100
Feet

LEGEND

APPROXIMATE POLYNUCLEAR AROMATIC HYDROCARBON (PAH) SAMPLE LOCATIONS

SERVICE LAYER CREDITS: SOURCE: ESRI, DIGITALGLOBE, GEOEYE, I-CUBED, USDA, USGS, AEX, GETMAPPING, AEROGRID, IGN, IGP, SWISSTOPO, AND THE GIS USER COMMUNITY

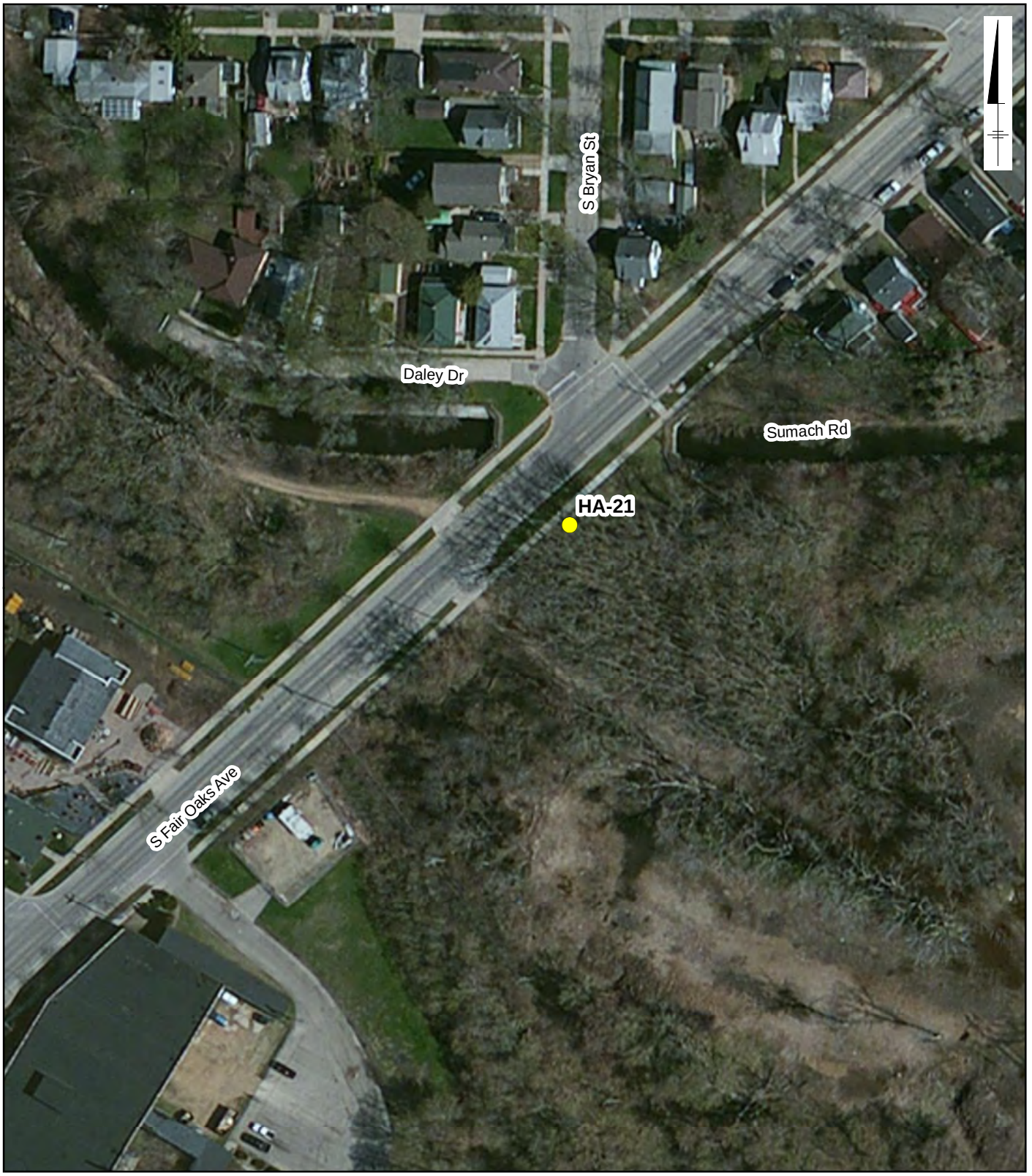
MADISON-KIPP CORPORATION
201 WAUBESA STREET
MADISON, WISCONSIN

PAH SOIL SAMPLE LOCATIONS

ARCADIS

FIGURE
15

CITY: MPLS DIV/GROUP: IM/DV DB: MG LD: CK MADISON-KIPP
G:\GIS\Projects\MadisonKipp\ArcMap\2014-01\PAH_Details_20140123.mxd



0 50 100
Feet

LEGEND

APPROXIMATE POLYNUCLEAR AROMATIC HYDROCARBON (PAH) SAMPLE LOCATIONS

SERVICE LAYER CREDITS: SOURCE: ESRI, DIGITALGLOBE, GEOEYE, I-CUBED, USDA, USGS, AEX, GETMAPPING, AEROGRID, IGN, IGP, SWISSTOPO, AND THE GIS USER COMMUNITY

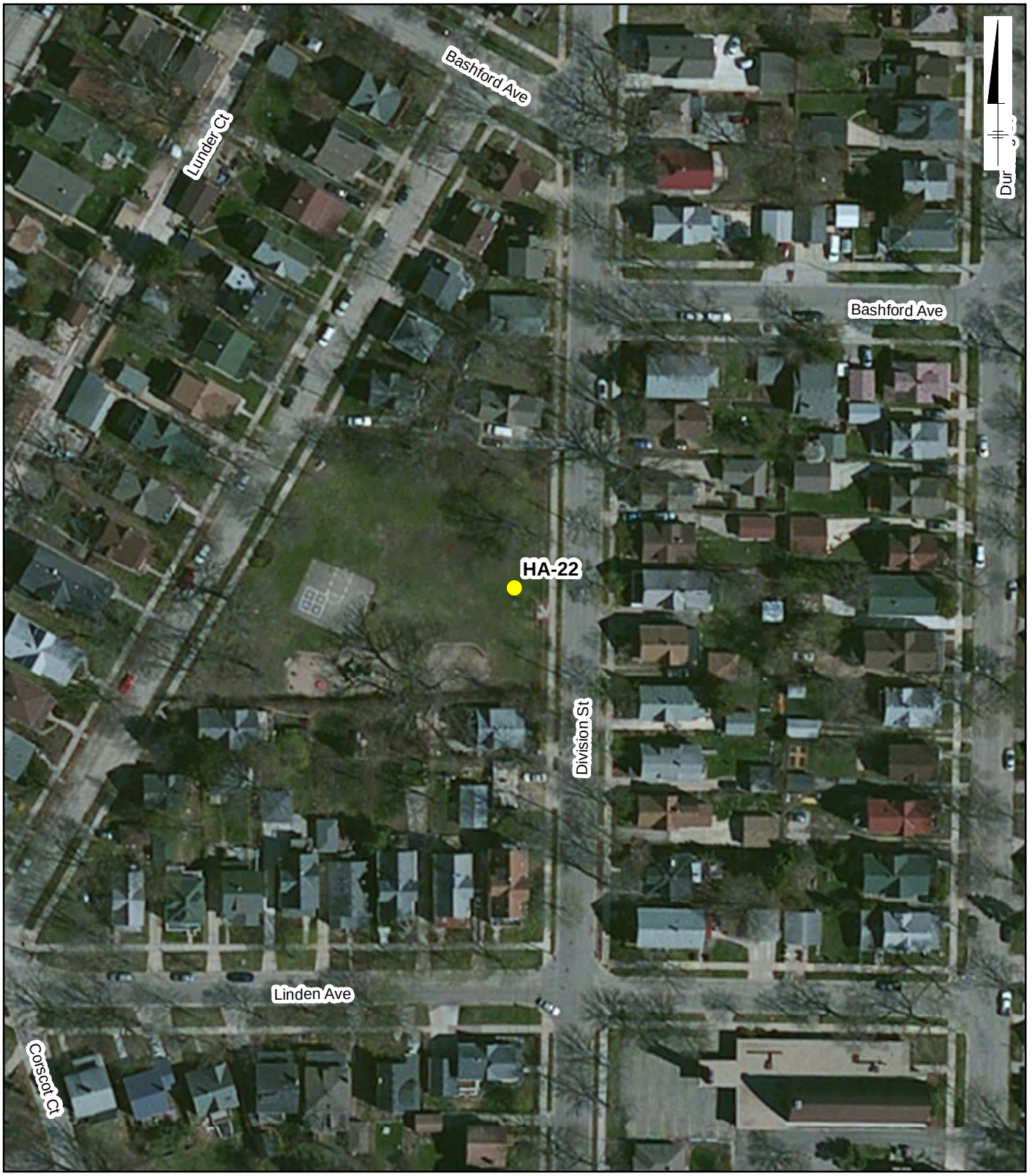
MADISON-KIPP CORPORATION
201 WAUBESA STREET
MADISON, WISCONSIN

PAH SOIL SAMPLE LOCATIONS

ARCADIS

FIGURE
16

CITY: MPLS DIV/GROUP: IM/DV DB: MG LD: CK MADISON-KIPP
G:\GIS\Projects\MadisonKipp\ArcMap\2014-01\PAH_Details_20140123.mxd



0 50 100
Feet

LEGEND

APPROXIMATE POLYNUCLEAR AROMATIC HYDROCARBON (PAH) SAMPLE LOCATIONS

SERVICE LAYER CREDITS: SOURCE: ESRI, DIGITALGLOBE, GEOEYE, I-CUBED, USDA, USGS, AEX, GETMAPPING, AEROGRID, IGN, IGP, SWISSTOPO, AND THE GIS USER COMMUNITY

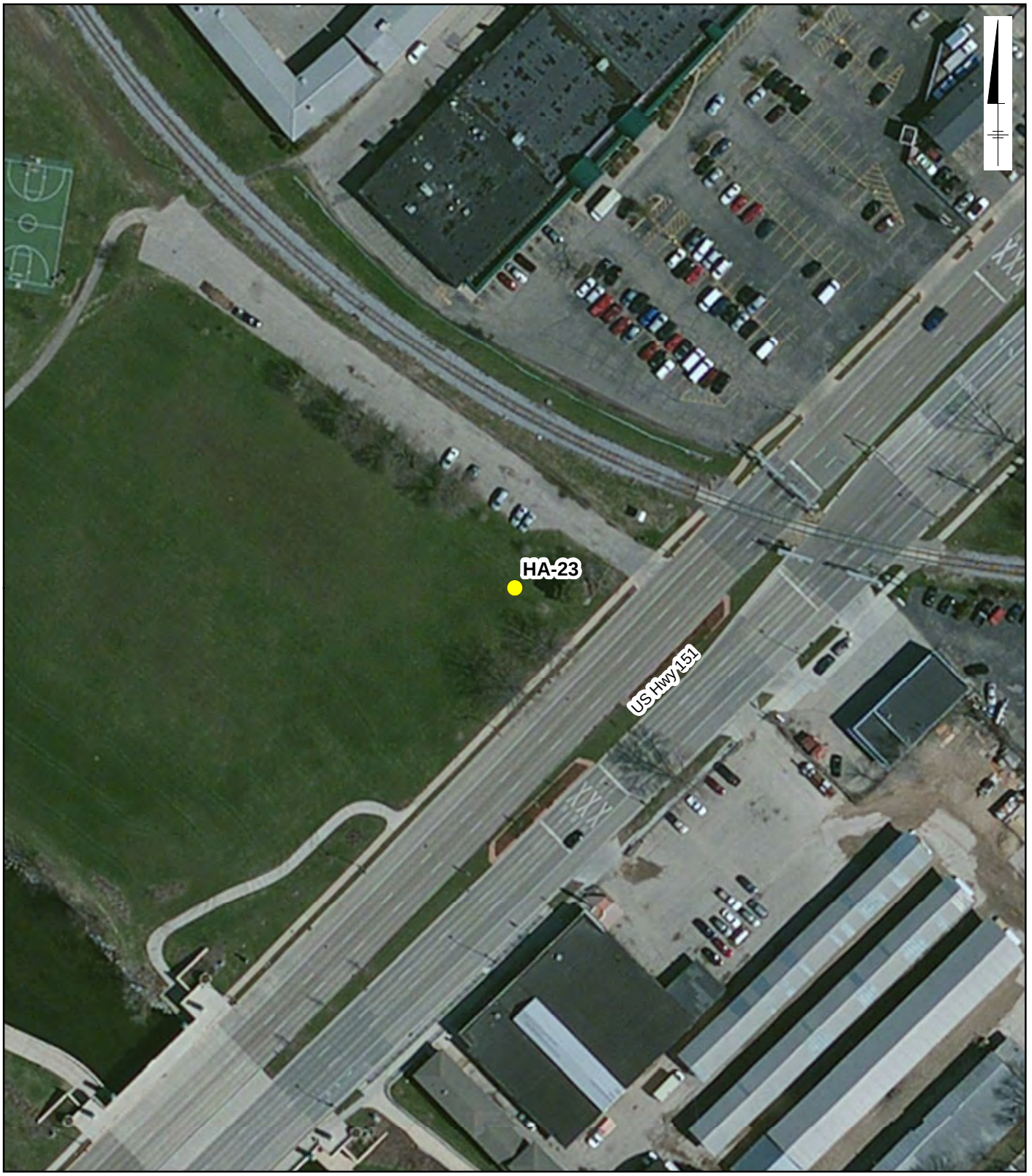
MADISON-KIPP CORPORATION
201 WAUBESA STREET
MADISON, WISCONSIN

PAH SOIL SAMPLE LOCATIONS

ARCADIS

FIGURE
17

CITY: MPLS DIV/GROUP: IM/DV DB: MG LD: CK MADISON-KIPP
G:\GIS\Projects\MadisonKipp\ArcMap\2014-01\PAH_Details_20140123.mxd



0 50 100
Feet

LEGEND

APPROXIMATE POLYNUCLEAR AROMATIC HYDROCARBON (PAH) SAMPLE LOCATIONS

SERVICE LAYER CREDITS: SOURCE: ESRI, DIGITALGLOBE, GEOEYE, I-CUBED, USDA, USGS, AEX, GETMAPPING, AEROGRID, IGN, IGP, SWISSTOPO, AND THE GIS USER COMMUNITY

MADISON-KIPP CORPORATION
201 WAUBESA STREET
MADISON, WISCONSIN

PAH SOIL SAMPLE LOCATIONS

ARCADIS

FIGURE
18

CITY: MPLS DIV/GROUP: IM/DV DB: MG LD: CK MADISON-KIPP
G:\GIS\Projects\MadisonKipp\ArcMap\2014-01\PAH_Details_20140123.mxd

0 50 100
Feet

LEGEND

APPROXIMATE POLYNUCLEAR AROMATIC HYDROCARBON (PAH) SAMPLE LOCATIONS

SERVICE LAYER CREDITS: SOURCE: ESRI, DIGITALGLOBE, GEOEYE, I-CUBED, USDA, USGS, AEX, GETMAPPING, AEROGRID, IGN, IGP, SWISSTOPO, AND THE GIS USER COMMUNITY

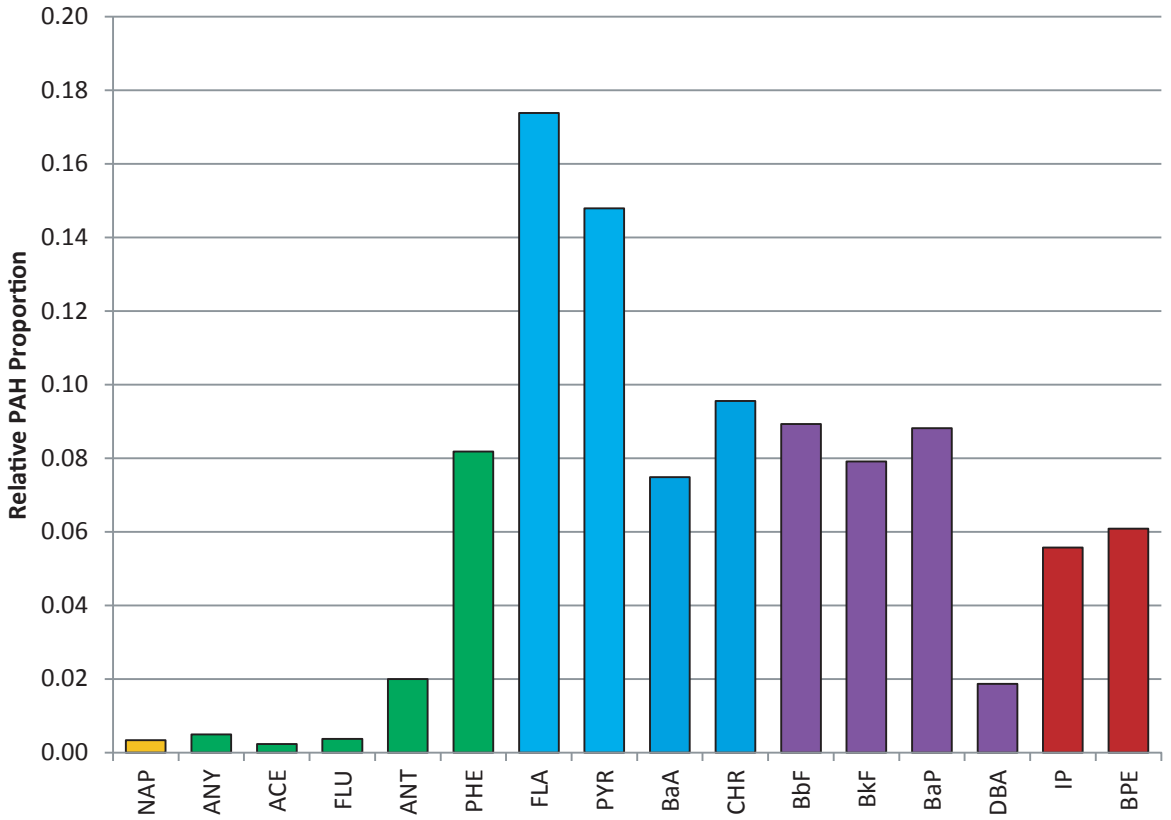
MADISON-KIPP CORPORATION
201 WAUBESA STREET
MADISON, WISCONSIN

PAH SOIL SAMPLE LOCATIONS

ARCADIS

FIGURE
19

CITY: MPLS DIV/GROUP: IM/DV DB: MG LD: CK MADISON-KIPP
G:\GIS\Projects\MadisonKipp\ArcMap\2014-01\PAH_Details_20140123.mxd



NAP	Naphthalene
ANY	Acenaphthylene
ACE	Acenaphthene
FLU	Fluorene
ANT	Anthracene
PHE	Phenanthrene
FLA	Fluoranthene
PYR	Pyrene
BaA	Benzo(a)anthracene
CHR	Chrysene
BbF	Benzo(b)fluoranthene
BkF	Benzo(k)fluoranthene
BaP	Benzo(a)pyrene
DBA	Dibenzo(a,h)anthracene
IP	Indeno(1,2,3-c,d)pyrene
BPE	Benzo(g,h,i)perylene

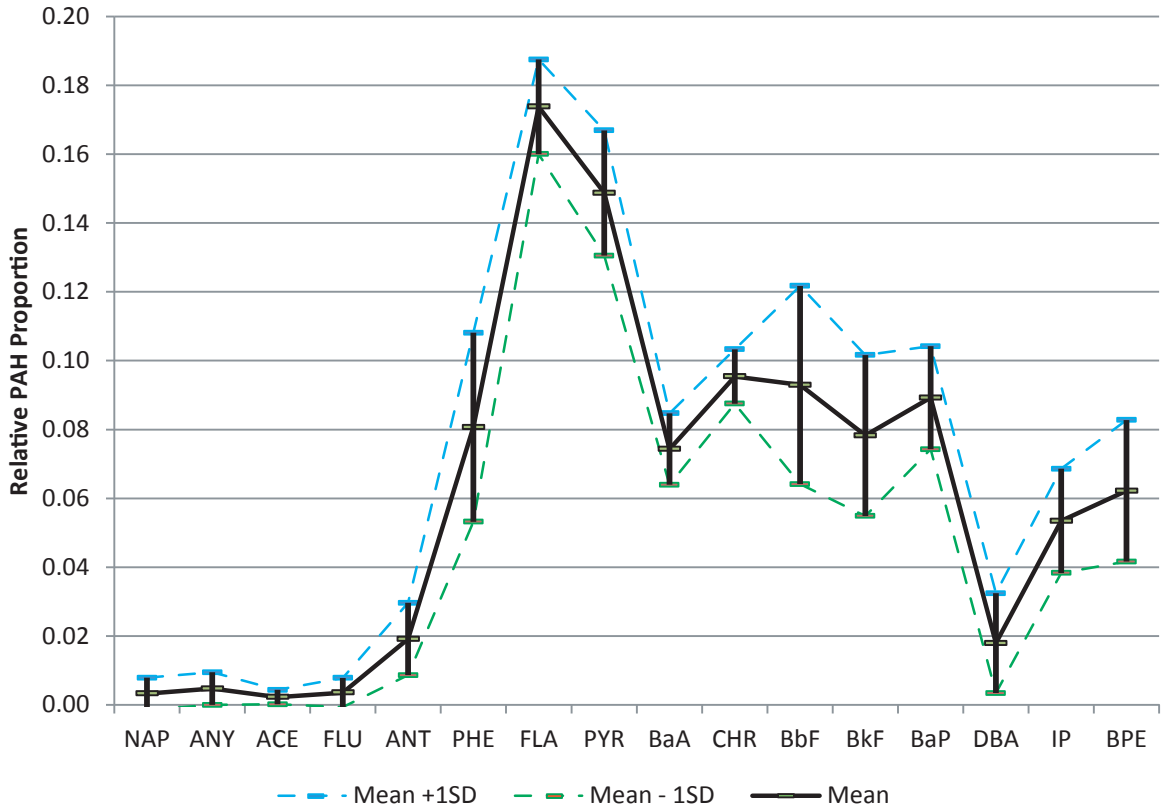
Color coding indicates the number of aromatic rings: 2-yellow, 3-green, 4-blue, 5-purple, 6-red.

MADISON KIPP CORPORATION
201 WAUBESA STREET
MADISON, WISCONSIN

BACKGROUND (BG) MEAN PAH PROFILE

ARCADIS

FIGURE
20



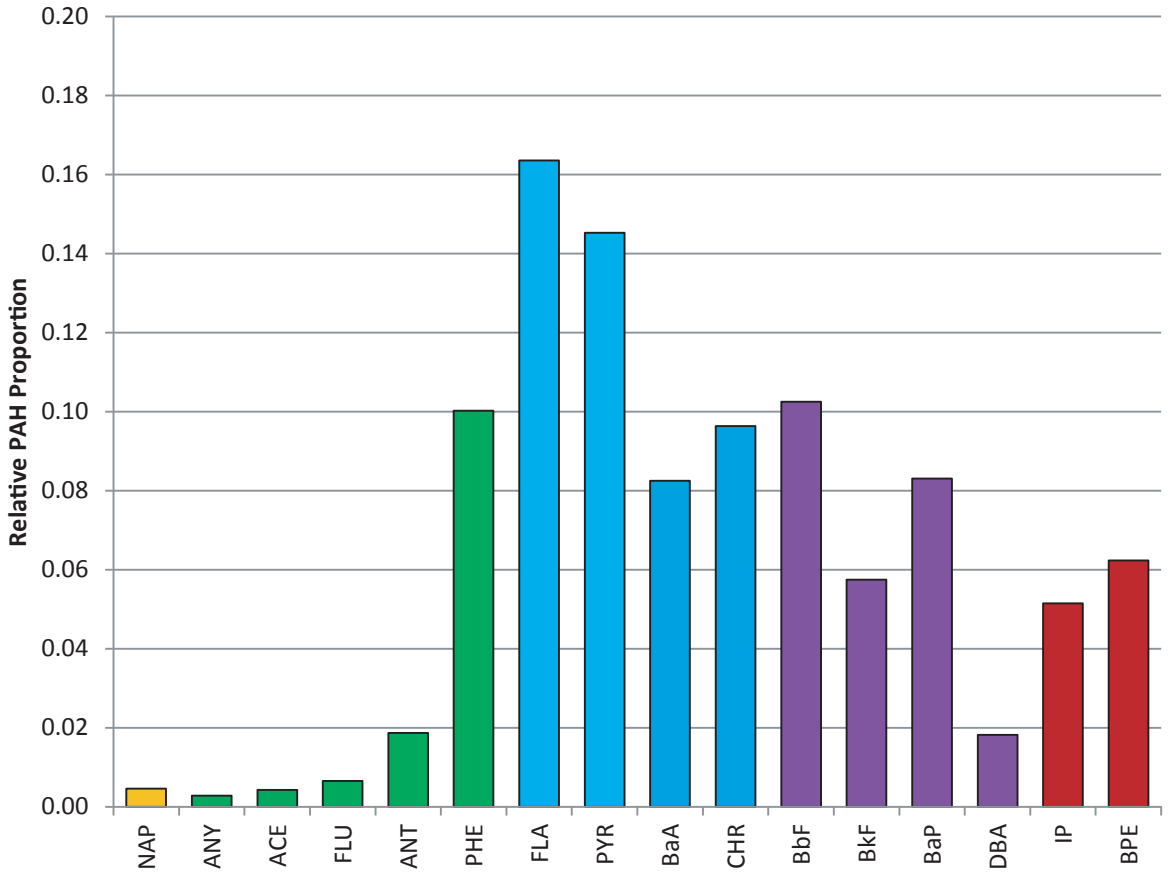
NAP	Naphthalene
ANY	Acenaphthylene
ACE	Acenaphthene
FLU	Fluorene
ANT	Anthracene
PHE	Phenanthrene
FLA	Fluoranthene
PYR	Pyrene
BaA	Benzo(a)anthracene
CHR	Chrysene
BbF	Benzo(b)fluoranthene
BkF	Benzo(k)fluoranthene
BaP	Benzo(a)pyrene
DBA	Dibenzo(a,h)anthracene
IP	Indeno(1,2,3-c,d)pyrene
BPE	Benzo(g,h,i)perylene

MADISON KIPP CORPORATION
201 WAUBESA STREET
MADISON, WISCONSIN

VARIABILITY OF PAH PROPORTIONS IN BACKGROUND DATA SET (n=24)

ARCADIS

FIGURE
21



NAP	Naphthalene
ANY	Acenaphthylene
ACE	Acenaphthene
FLU	Fluorene
ANT	Anthracene
PHE	Phenanthrene
FLA	Fluoranthene
PYR	Pyrene
BaA	Benzo(a)anthracene
CHR	Chrysene
BbF	Benzo(b)fluoranthene
BkF	Benzo(k)fluoranthene
BaP	Benzo(a)pyrene
DBA	Dibenzo(a,h)anthracene
IP	Indeno(1,2,3-c,d)pyrene
BPE	Benzo(g,h,i)perylene

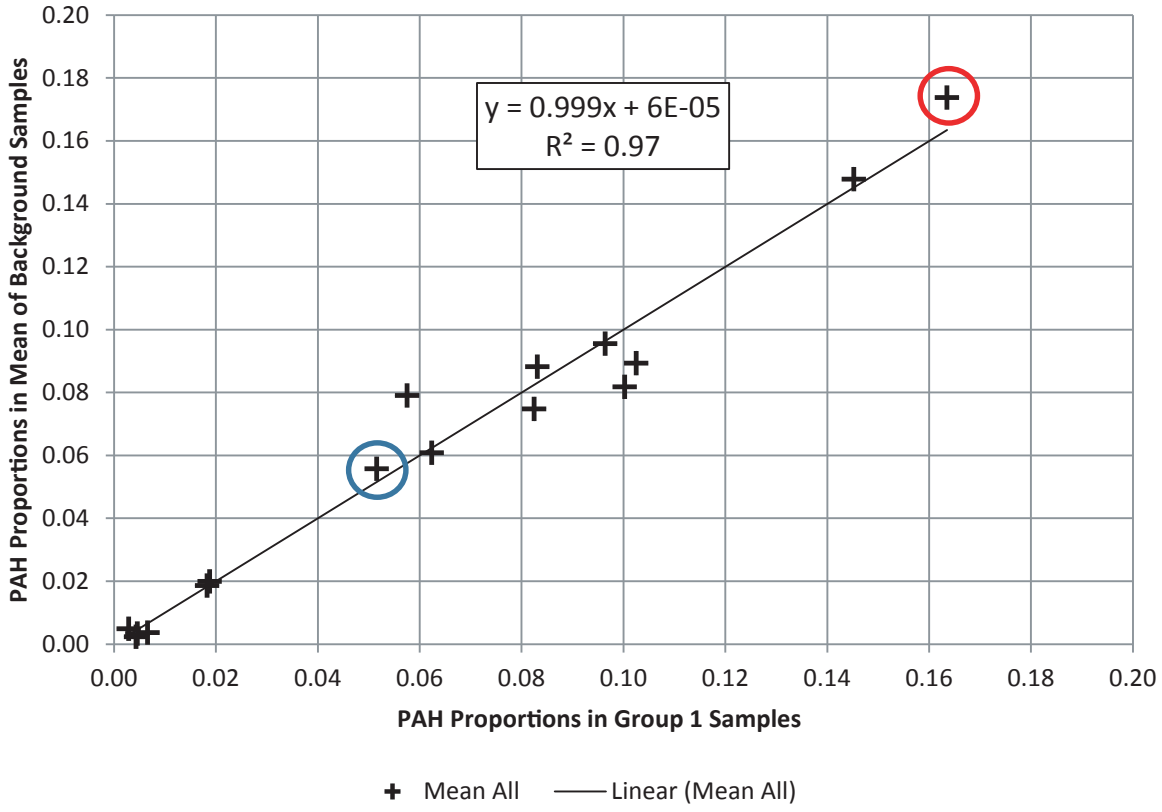
Color coding indicates the number of aromatic rings: 2-yellow, 3-green, 4-blue, 5-purple, 6-red.

MADISON KIPP CORPORATION
201 WAUBESA STREET
MADISON, WISCONSIN

2013 REPORT - GROUP 1 MEAN PAH PROFILE

ARCADIS

FIGURE
22



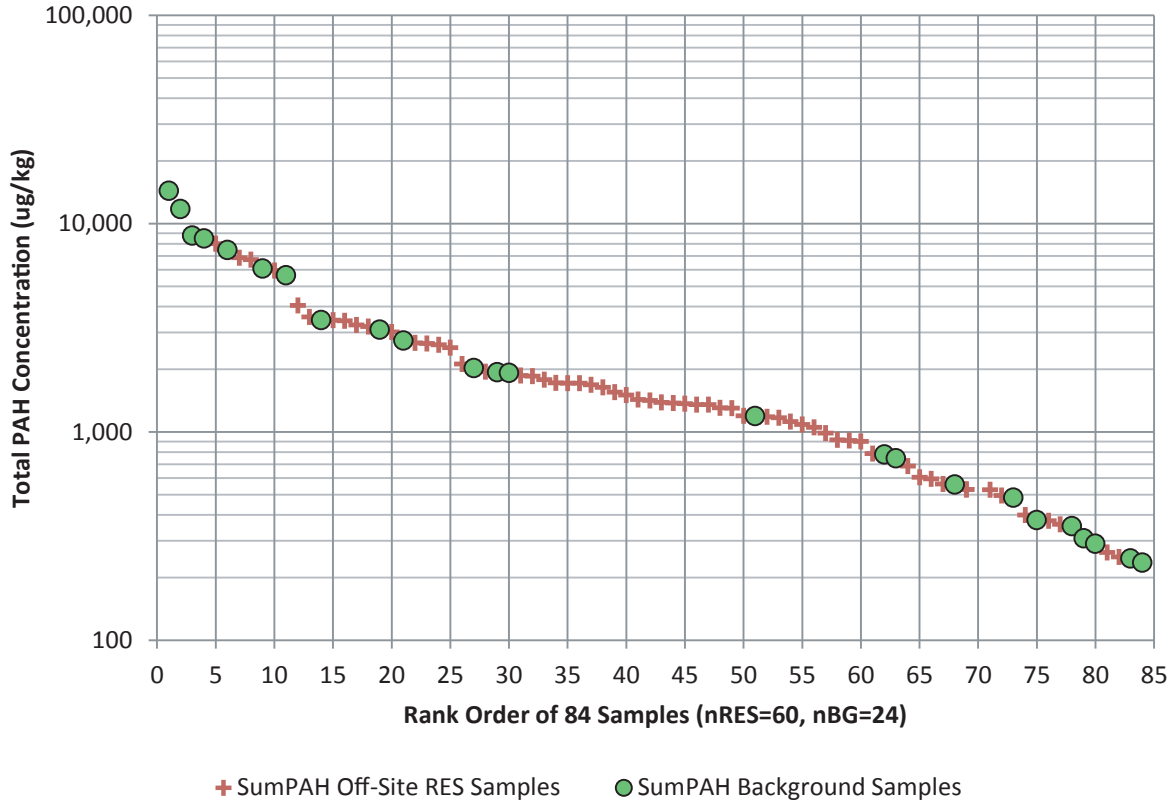
Note each data point represents the relative PAH proportion of a given PAH compound with the X-Y coordinate representing the proportion in the mean Group 1 and background (BG) data set, respectively. As such, the blue circle represents benzo(k)fluoranthene and the red circle represents fluoranthene.

MADISON KIPP CORPORATION
201 WAUBESA STREET
MADISON, WISCONSIN

COMPARISON OF PAH PROPORTIONS IN BACKGROUND SAMPLES AND GROUP 1 SAMPLES

ARCADIS

FIGURE
23



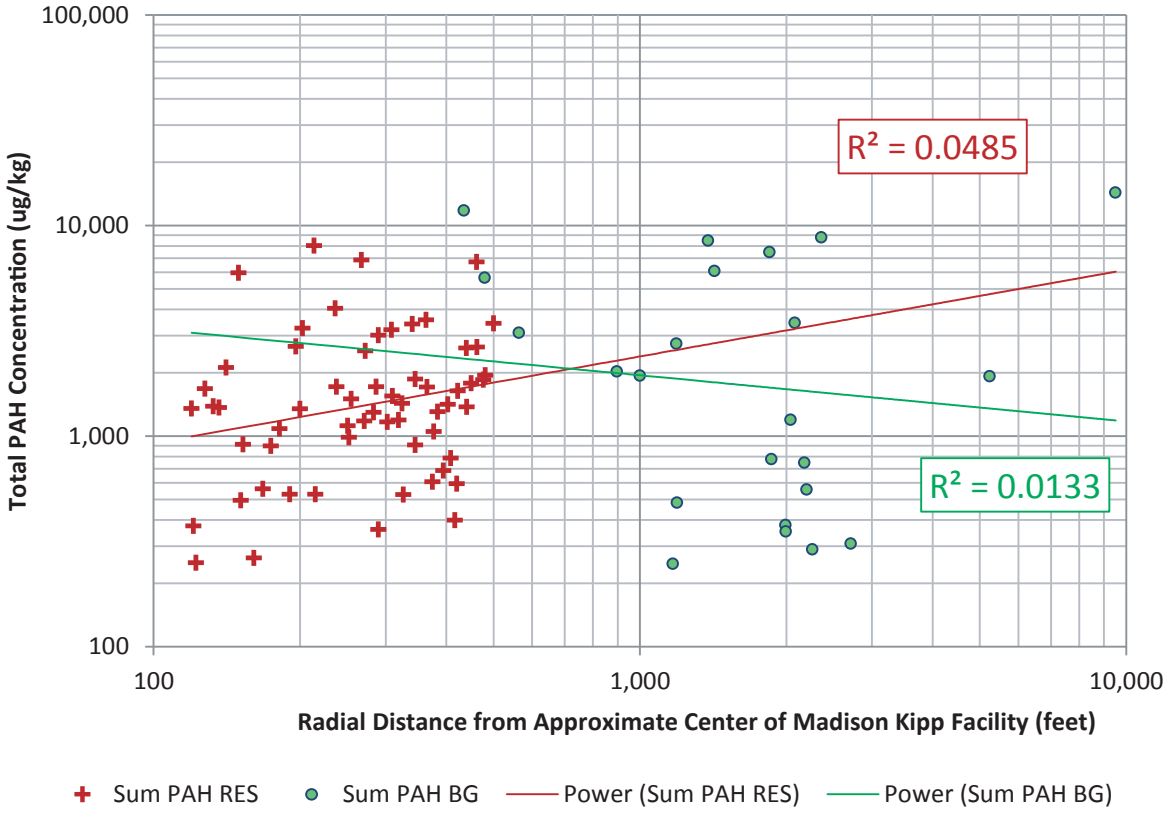
MADISON KIPP CORPORATION
201 WAUBESA STREET
MADISON, WISCONSIN

TOTAL PAH CONCENTRATION DISTRIBUTION OF 84 SAMPLES

ARCADIS

FIGURE
24

06FEB14\ENVIRONMENT\CK\LMB
MADISONKPPWI001368\GRAPHICS\TOTAL PAH CONCENTRATION DISTRIBUTION.AI



MADISON KIPP CORPORATION
201 WAUBESA STREET
MADISON, WISCONSIN

TOTAL PAH CONCENTRATION VS DISTANCE FROM MADISON KIPP FACILITY

ARCADIS

FIGURE
25

06FEB14\ENVIRONMENT\CK\LMB
MADISONKPPWI001368\GRAPHICS\TOTAL PAH CONCENTRATION VS DISTANCE.AI

ARCADIS

Soil Boring Logs

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION
Form 4400-122 Rev. 7-98

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

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Madison-Kipp Corporation		**HA-1**

Boring Drilled By:	Date Drilling Started	Date Drilling Completed	Drilling Method
Name: **Scott** Firm: **Soils and Engineering Services, Inc.**	**12/16/2013**	**12/16/2013**	**Hand Auger**

WI Unique Well No.	DNR Well ID No.	Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	**NA** Feet MSL	**2** inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane **400807.6** N **2141880.0** E Lat
of Section , T N, R Long

Local Grid Location
☐ N ☐ E
Feet ☐ S Feet ☐ W

Facility ID	County	County Code	Civil Town/City/or Village
113125320	**Dane**	**13**	**City of Madison**

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID (ppm)	Compressive Strength	Soil Properties: Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
	12		0.0 1.0	0.0 - 1.0' SILT AND SAND: fine-grained sand, trace clay, medium plasticity, very dark brown (7.5YR 2.5/3).	SM			1.1						

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

Signature
Alina Walcek

Firm ARCADIS
126 N. Jefferson St., Suite 400
Milwaukee, WI (414) 276-7742

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION
Form 4400-122 Rev. 7-98

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

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Madison-Kipp Corporation		**HA-2**

Boring Drilled By:	Date Drilling Started	Date Drilling Completed	Drilling Method
Name: **Scott** Firm: **Soils and Engineering Services, Inc.**	**12/16/2013**	**12/16/2013**	**Hand Auger**

WI Unique Well No.	DNR Well ID No.	Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	**NA** Feet MSL	**2** inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane **401532.0** N **2145512.0** E Lat
of Section , T N, R Long

Local Grid Location
☐ N ☐ E
Feet ☐ S Feet ☐ W

Facility ID	County	County Code	Civil Town/City/or Village
113125320	**Dane**	**13**	**City of Madison**

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID (ppm)	Compressive Strength	Soil Properties: Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
	12		0.0 1.0	0.0 - 1.0' SILT AND SAND: fine grained sand, compact, little organics, very dark brown (7.5YR 2.5/3).	SM			0.5						

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

Signature
Alina Walcek

Firm ARCADIS
126 N. Jefferson St., Suite 400
Milwaukee, WI (414) 276-7742

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION
Form 4400-122 Rev. 7-98

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

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Madison-Kipp Corporation		**HA-3**

Boring Drilled By:	Date Drilling Started	Date Drilling Completed	Drilling Method
Name: **Scott** Firm: **Soils and Engineering Services, Inc.**	**12/16/2013**	**12/16/2013**	**Hand Auger**

WI Unique Well No.	DNR Well ID No.	Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	**NA** Feet MSL	**2** inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane **400930.3** N **2143390.5** E Lat
of Section , T N, R Long

Local Grid Location
☐ N ☐ E
Feet ☐ S Feet ☐ W

Facility ID	County	County Code	Civil Town/City/or Village
113125320	**Dane**	**13**	**City of Madison**

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID (ppm)	Compressive Strength	Soil Properties: Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
	12		0.0 1.0	0.0 - 1.0' SILT AND SAND: fine grained sand, trace gravel up to 1 inch, subround, trace clay, organics at the surface, frozen to 6 inches, very dark brown (7.5YR 2.5/3).	SM			4.3						

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

Signature
Alina Walcek

Firm ARCADIS
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Milwaukee, WI (414) 276-7742

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION
Form 4400-122 Rev. 7-98

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

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Madison-Kipp Corporation		**HA-5**

Boring Drilled By:	Date Drilling Started	Date Drilling Completed	Drilling Method
Name: **Scott** Firm: **Soils and Engineering Services, Inc.**	**12/16/2013**	**12/16/2013**	**Hand Auger**

WI Unique Well No.	DNR Well ID No.	Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	**NA** Feet MSL	**2** inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane **402174.1** N **2143928.5** E Lat
of Section , T N, R Long

Local Grid Location
☐ N ☐ E
Feet ☐ S Feet ☐ W

Facility ID	County	County Code	Civil Town/City/or Village
113125320	**Dane**	**13**	**City of Madison**

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID (ppm)	Compressive Strength	Soil Properties: Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
	12		0.0 1.0	0.0 - 1.0' SILT AND SAND: trace clay, medium plasticity, very dark brown (7.5YR 2.5/3).	SM			1.1						

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

Signature

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SOIL BORING LOG INFORMATION
Form 4400-122 Rev. 7-98

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

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Madison-Kipp Corporation		**HA-6**

Boring Drilled By:	Date Drilling Started	Date Drilling Completed	Drilling Method
Name: **Scott** Firm: **Soils and Engineering Services, Inc.**	**12/16/2013**	**12/16/2013**	**Hand Auger**

WI Unique Well No.	DNR Well ID No.	Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	**NA** Feet MSL	**2** inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane **401130.5** N **2144892.5** E Lat
of Section , T N, R Long

Local Grid Location
☐ N ☐ E
Feet ☐ S Feet ☐ W

Facility ID	County	County Code	Civil Town/City/or Village
113125320	**Dane**	**13**	**City of Madison**

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID (ppm)	Compressive Strength	Soil Properties: Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
	12		0.0 1.0	0.0 - 1.0' SILT: some fine sand, trace clay, organics (roots in top 6 inches), piece of plastic at 3 iches, black (7.5YR 2.5/1).	ML			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	License/Permit/Monitoring Number	Boring Number
Madison-Kipp Corporation		**HA-7**

Boring Drilled By:	Date Drilling Started	Date Drilling Completed	Drilling Method
Name: **Scott** Firm: **Soils and Engineering Services, Inc.**	**12/16/2013**	**12/16/2013**	**Hand Auger**

WI Unique Well No.	DNR Well ID No.	Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	**NA** Feet MSL	**2** inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane **399466.6** N **2142779.6** E Lat
of Section , T N, R Long

Local Grid Location
☐ N ☐ E
Feet ☐ S Feet ☐ W

Facility ID	County	County Code	Civil Town/City/or Village
113125320	**Dane**	**13**	**City of Madison**

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID (ppm)	Compressive Strength	Soil Properties: Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
	12		0.0 1.0	0.0 - 1.0' SILT AND SAND: fine-grained sand, trace clay, organics at surface (roots), very dark brown (7.5YR 2.5/2).	SM			0.9						

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	License/Permit/Monitoring Number	Boring Number
Madison-Kipp Corporation		**HA-8**

Boring Drilled By:	Date Drilling Started	Date Drilling Completed	Drilling Method
Name: **Scott** Firm: **Soils and Engineering Services, Inc.**	**12/16/2013**	**12/16/2013**	**Hand Auger**

WI Unique Well No.	DNR Well ID No.	Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	**NA** Feet MSL	**2** inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane **399795.0** N **2143227.1** E Lat
of Section , T N, R Long

Local Grid Location
☐ N ☐ E
Feet ☐ S Feet ☐ W

Facility ID	County	County Code	Civil Town/City/or Village
113125320	**Dane**	**13**	**City of Madison**

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID (ppm)	Compressive Strength	Soil Properties: Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
	12		0.0 1.0	0.0 - 1.0' SILT: with fine-grained sand, trace clay at surface, medium plasticity, frost to 1 inch, strong brown (7.5 YR 4/6), color lightens with depth.	ML			0.9						

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

Signature
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Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Madison-Kipp Corporation		**HA-9**

Boring Drilled By:	Date Drilling Started	Date Drilling Completed	Drilling Method
Name: **Scott** Firm: **Soils and Engineering Services, Inc.**	**12/16/2013**	**12/16/2013**	**Hand Auger**

WI Unique Well No.	DNR Well ID No.	Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	**NA** Feet MSL	**2** inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane **400023.2** N **2143536.1** E Lat
of Section , T N, R Long

Local Grid Location
☐ N ☐ E
Feet ☐ S Feet ☐ W

Facility ID	County	County Code	Civil Town/City/or Village
113125320	**Dane**	**13**	**City of Madison**

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID (ppm)	Compressive Strength	Soil Properties: Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
	12		0.0 1.0	0.0 - 1.0' SILT AND SAND: fine-grained sand, trace clay, frost to 1 inch, medium plasticity.	SM			0.6						

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

Signature
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Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Madison-Kipp Corporation		**HA-10**

Boring Drilled By:	Date Drilling Started	Date Drilling Completed	Drilling Method
Name: **Scott** Firm: **Soils and Engineering Services, Inc.**	**12/16/2013**	**12/16/2013**	**Hand Auger**

WI Unique Well No.	DNR Well ID No.	Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	**NA** Feet MSL	**2** inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane **400090.2** N **2143628.8** E Lat
of Section , T N, R Long

Local Grid Location
☐ N ☐ E
Feet ☐ S Feet ☐ W

Facility ID	County	County Code	Civil Town/City/or Village
113125320	**Dane**	**13**	**City of Madison**

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID (ppm)	Compressive Strength	Soil Properties: Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
	12		0.0 1.0	0.0 - 1.0' SILT AND SAND: fine-grained sand, trace of sand sized light blue pieces, trace clay, frost to 6 inches, medium plasticity, very dark brown (7.5YR 2.5/2).	SM			0.7						

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	License/Permit/Monitoring Number	Boring Number
Madison-Kipp Corporation		**HA-11**

Boring Drilled By:	Date Drilling Started	Date Drilling Completed	Drilling Method
Name: **Scott** Firm: **Soils and Engineering Services, Inc.**	**12/16/2013**	**12/16/2013**	**Hand Auger**

WI Unique Well No.	DNR Well ID No.	Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	**NA** Feet MSL	**2** inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane **400129.5** N **2143684.8** E Lat
of Section , T N, R Long

Local Grid Location
☐ N ☐ E
Feet ☐ S Feet ☐ W

Facility ID	County	County Code	Civil Town/City/or Village
113125320	**Dane**	**13**	**City of Madison**

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID (ppm)	Compressive Strength	Soil Properties: Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
	12		0.0 1.0	0.0 - 1.0' SILT AND SAND: fine-grained sand, some coarse sand, trace clay, trace gravel up to 1 inch, subangular to subround, medium plasticity, very dark brown (7.5YR 2.5/2).	SM			1.2						

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

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Madison-Kipp Corporation		**HA-12**

Boring Drilled By:	Date Drilling Started	Date Drilling Completed	Drilling Method
Name: **Scott** Firm: **Soils and Engineering Services, Inc.**	**12/16/2013**	**12/16/2013**	**Hand Auger**

WI Unique Well No.	DNR Well ID No.	Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	**NA** Feet MSL	**2** inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane **398672.3** N **2145587.3** E Lat
of Section , T N, R Long

Local Grid Location
☐ N ☐ E
Feet ☐ S Feet ☐ W

Facility ID	County	County Code	Civil Town/City/or Village
113125320	**Dane**	**13**	**City of Madison**

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID (ppm)	Compressive Strength	Soil Properties: Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
	12		0.0 1.0	0.0 - 1.0' SILT AND SAND: fine-grained sand, medium plasticity, strong brown (7.5YR 5/8).	SM			0.7						

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

Signature
Alina Walcek

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Milwaukee, WI (414) 276-7742

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Department of Natural Resources

SOIL BORING LOG INFORMATION
Form 4400-122 Rev. 7-98

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

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Madison-Kipp Corporation		**HA-13**

Boring Drilled By:	Date Drilling Started	Date Drilling Completed	Drilling Method
Name: **Scott** Firm: **Soils and Engineering Services, Inc.**	**12/16/2013**	**12/16/2013**	**Hand Auger**

WI Unique Well No.	DNR Well ID No.	Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	**NA** Feet MSL	**2** inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane **398337.8** N **2146248.8** E Lat
of Section , T N, R Long

Local Grid Location
☐ N ☐ E
Feet ☐ S Feet ☐ W

Facility ID	County	County Code	Civil Town/City/or Village
113125320	**Dane**	**13**	**City of Madison**

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID (ppm)	Compressive Strength	Soil Properties: Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
	12		0.0 1.0	0.0 - 1.0' SILT AND SAND: fine-grained sand, medium plasticity, dark yellowish brown (10YR 3/4).	SM			0.8						

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

Signature
Alina Walcek

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SOIL BORING LOG INFORMATION
Form 4400-122 Rev. 7-98

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

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Madison-Kipp Corporation		**HA-14**

Boring Drilled By:	Date Drilling Started	Date Drilling Completed	Drilling Method
Name: **Scott** Firm: **Soils and Engineering Services, Inc.**	**12/16/2013**	**12/16/2013**	**Hand Auger**

WI Unique Well No.	DNR Well ID No.	Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	**NA** Feet MSL	**2** inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane **399969.3** N **2145288.4** E Lat
of Section , T N, R Long

Local Grid Location
☐ N ☐ E
Feet ☐ S Feet ☐ W

Facility ID	County	County Code	Civil Town/City/or Village
113125320	**Dane**	**13**	**City of Madison**

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID (ppm)	Compressive Strength	Soil Properties: Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
	12		0.0 1.0	0.0 - 1.0' SILT AND SAND: fine-grained sand, medium plasticity, dark yellowish brown (10YR 3/4).	SM			0.5						

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

Signature
Alina Walcek

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SOIL BORING LOG INFORMATION
Form 4400-122 Rev. 7-98

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

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Madison-Kipp Corporation		**HA-15**

Boring Drilled By:	Date Drilling Started	Date Drilling Completed	Drilling Method
Name: **Scott** Firm: **Soils and Engineering Services, Inc.**	**12/16/2013**	**12/16/2013**	**Hand Auger**

WI Unique Well No.	DNR Well ID No.	Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	**NA** Feet MSL	**2** inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane **399465.3** N **2146069.5** E Lat
of Section , T N, R Long

Local Grid Location
☐ N ☐ E
Feet ☐ S Feet ☐ W

Facility ID	County	County Code	Civil Town/City/or Village
113125320	**Dane**	**13**	**City of Madison**

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID (ppm)	Compressive Strength	Soil Properties: Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
	12		0.0 1.0	0.0 - 1.0' SILT AND SAND: fine-grained sand, medium plasticity, frost to 1 inch, very dark brown (7.5YR 2.5/3).	SM			0.5						

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

Signature
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Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Madison-Kipp Corporation		**HA-16**

Boring Drilled By:	Date Drilling Started	Date Drilling Completed	Drilling Method
Name: **Scott** Firm: **Soils and Engineering Services, Inc.**	**12/16/2013**	**12/16/2013**	**Hand Auger**

WI Unique Well No.	DNR Well ID No.	Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	**NA** Feet MSL	**2** inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane **399207.2** N **2144709.5** E Lat
of Section , T N, R Long

Local Grid Location
☐ N ☐ E
Feet ☐ S Feet ☐ W

Facility ID	County	County Code	Civil Town/City/or Village
113125320	**Dane**	**13**	**City of Madison**

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID (ppm)	Compressive Strength	Soil Properties: Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
	12		0.0 1.0	0.0 - 1.0' SILT AND SAND: fine-grained sand, trace clay, medium plasticity.	SM			1.9						

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

Signature
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Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Madison-Kipp Corporation		**HA-17**

Boring Drilled By:	Date Drilling Started	Date Drilling Completed	Drilling Method
Name: **Scott** Firm: **Soils and Engineering Services, Inc.**	**12/16/2013**	**12/16/2013**	**Hand Auger**

WI Unique Well No.	DNR Well ID No.	Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	**NA** Feet MSL	**2** inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane **399046.8** N **2144816.0** E Lat
of Section , T N, R Long

Local Grid Location
☐ N ☐ E
Feet ☐ S Feet ☐ W

Facility ID	County	County Code	Civil Town/City/or Village
113125320	**Dane**	**13**	**City of Madison**

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID (ppm)	Compressive Strength	Soil Properties: Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
	12		0.0 1.0	0.0 - 1.0' SILT AND SAND: fine-grained sand, trace clay, medium plasticity, very dark brown (7.5YR 2.5/3).	SM			0.6						

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

Signature
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Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Madison-Kipp Corporation		**HA-18**

Boring Drilled By:	Date Drilling Started	Date Drilling Completed	Drilling Method
Name: **Scott** Firm: **Soils and Engineering Services, Inc.**	**12/16/2013**	**12/16/2013**	**Hand Auger**

WI Unique Well No.	DNR Well ID No.	Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	**NA** Feet MSL	**2** inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane **398481.1** N **2145182.4** E Lat
of Section , T N, R Long

Local Grid Location
☐ N ☐ E
Feet ☐ S Feet ☐ W

Facility ID	County	County Code	Civil Town/City/or Village
113125320	**Dane**	**13**	**City of Madison**

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID (ppm)	Compressive Strength	Soil Properties: Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
	12		0.0 1.0	0.0 - 1.0' SILT: trace clay, trace fine-grained sand, trace subangular to subround gravel up to 1 inch, medium plasticity, very dark brown (7.5YR 2.5/3).	ML			0.8						

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

Signature
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Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Madison-Kipp Corporation		**HA-19**

Boring Drilled By:	Date Drilling Started	Date Drilling Completed	Drilling Method
Name: **Scott** Firm: **Soils and Engineering Services, Inc.**	**12/16/2013**	**12/16/2013**	**Hand Auger**

WI Unique Well No.	DNR Well ID No.	Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	**NA** Feet MSL	**2** inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane **398101.3** N **2144712.2** E Lat
of Section , T N, R Long

Local Grid Location
☐ N ☐ E
Feet ☐ S Feet ☐ W

Facility ID	County	County Code	Civil Town/City/or Village
113125320	**Dane**	**13**	**City of Madison**

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID (ppm)	Compressive Strength	Soil Properties: Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
	12		0.0 1.0	0.0 - 1.0' SILT AND SAND: fine-grained sand, trace coarse sand, loose, medium plasticity, brown (7.5YR 4/4) to very dark brown (7.5YR 2.5/3).	SM			1.0						

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

Signature
Alina Walcek

Firm ARCADIS
126 N. Jefferson St., Suite 400
Milwaukee, WI (414) 276-7742

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION
Form 4400-122 Rev. 7-98

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

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Madison-Kipp Corporation		**HA-20**

Boring Drilled By:	Date Drilling Started	Date Drilling Completed	Drilling Method
Name: **Scott** Firm: **Soils and Engineering Services, Inc.**	**12/16/2013**	**12/16/2013**	**Hand Auger**

WI Unique Well No.	DNR Well ID No.	Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	**NA** Feet MSL	**2** inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane **397949.6** N **2143294.2** E Lat
of Section , T N, R Long

Local Grid Location
☐ N ☐ E
Feet ☐ S Feet ☐ W

Facility ID	County	County Code	Civil Town/City/or Village
113125320	**Dane**	**13**	**City of Madison**

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID (ppm)	Compressive Strength	Soil Properties: Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
	12		0.0 1.0	0.0 - 1.0' SILT AND SAND: fine-grained sand, trace clay, trace organics (roots), medium plasticity, very dark brown (7.5YR 2.5/3).	SM			0.9						

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

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Madison-Kipp Corporation		**HA-21**

Boring Drilled By:	Date Drilling Started	Date Drilling Completed	Drilling Method
Name: **Scott** Firm: **Soils and Engineering Services, Inc.**	**12/16/2013**	**12/16/2013**	**Hand Auger**

WI Unique Well No.	DNR Well ID No.	Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	**NA** Feet MSL	**2** inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane **400570.6** N **2145858.0** E Lat
of Section , T N, R Long

Local Grid Location
☐ N ☐ E
Feet ☐ S Feet ☐ W

Facility ID	County	County Code	Civil Town/City/or Village
113125320	**Dane**	**13**	**City of Madison**

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID (ppm)	Compressive Strength	Soil Properties: Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
	12		0.0 1.0	0.0 - 1.0' SILT AND SAND: fine-grained sand, trace clay, trace subangular to subround gravel, less than 1 inch, loose, low plasticity, frost to 1 inch, very dark brown (7.5YR 2.5/2).	SM			0.9						

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

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Madison-Kipp Corporation		**HA-22**

Boring Drilled By:	Date Drilling Started	Date Drilling Completed	Drilling Method
Name: **Scott** Firm: **Soils and Engineering Services, Inc.**	**12/17/2013**	**12/17/2013**	**Hand Auger**

WI Unique Well No.	DNR Well ID No.	Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	**NA** Feet MSL	**2** inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane **399640.4** N **2141865.9** E Lat
of Section , T N, R Long

Local Grid Location
☐ N ☐ E
Feet ☐ S Feet ☐ W

Facility ID	County	County Code	Civil Town/City/or Village
113125320	**Dane**	**13**	**City of Madison**

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID (ppm)	Compressive Strength	Soil Properties: Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
	12		0.0 1.0	0.0 - 1.0' SILT AND SAND: fine-grained sand, trace clay, trace subangular to subround gravel up to 1.5 inches, frozen to 1 inch, very dark brown (7.5YR 2.5/2).	SM			814.0						

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

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Madison-Kipp Corporation		**HA-23**

Boring Drilled By:	Date Drilling Started	Date Drilling Completed	Drilling Method
Name: **Scott** Firm: **Soils and Engineering Services, Inc.**	**12/17/2013**	**12/17/2013**	**Hand Auger**

WI Unique Well No.	DNR Well ID No.	Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	**NA** Feet MSL	**2** inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane **398402.2** N **2139107.8** E Lat
of Section , T N, R Long

Local Grid Location
☐ N ☐ E
Feet ☐ S Feet ☐ W

Facility ID	County	County Code	Civil Town/City/or Village
113125320	**Dane**	**13**	**City of Madison**

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID (ppm)	Compressive Strength	Soil Properties: Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			0.0	0.0 - 0.1' SOD	OH									
	12			0.1 - 1.0' SILT AND SAND: fine-grained sand, trace clay, trace subangular to subround gravel up to 1 inch, very dark brown (7.5YR 2.5/2).	SM			260.0						
			1.0											

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

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Madison-Kipp Corporation		**HA-24**

Boring Drilled By:	Date Drilling Started	Date Drilling Completed	Drilling Method
Name: **Scott** Firm: **Soils and Engineering Services, Inc.**	**12/17/2013**	**12/17/2013**	**Hand Auger**

WI Unique Well No.	DNR Well ID No.	Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	**NA** Feet MSL	**2** inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane **393475.8** N **2137183.8** E Lat
of Section , T N, R Long

Local Grid Location
☐ N ☐ E
Feet ☐ S Feet ☐ W

Facility ID	County	County Code	Civil Town/City/or Village
113125320	**Dane**	**13**	**City of Madison**

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID (ppm)	Compressive Strength	Soil Properties: Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
	12		0.0 1.0	0.0 - 1.0' SILT AND SAND: fine-grained sand, trace clay, trace subangular to subround gravel up to 1 inch, frost to 1 inch, medium plasticity.	SM			138.0						

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