

HIGHWAY AUTHORITY AGREEMENT MEMORANDUM OF AGREEMENT

This Memorandum of Agreement is entered by and between the Illinois Environmental Protection Agency (“Agency”) and Village of Homewood (“Highway Authority”), collectively known as the “Parties”.

WHEREAS, the Highway Authority is the owner or operator of one or more leaking underground storage tanks presently or formerly located at 2124 W. 183rd Street, Homewood, Cook County, Illinois;

WHEREAS, the Highway Authority is the owner of the property located at 2124 W. 183rd Street, Homewood, Cook County, Illinois;

WHEREAS, as a result of one or more releases of contaminations from the above referenced underground storage tanks (“the Release(s)”), soil and/or groundwater contamination at the Site exceeds the Tier 1 residential remediation objectives of 35 Ill. Adm. Code 742;

WHEREAS, the soil and/or groundwater contamination exceeding Tier 1 residential remediation objectives extends or may extend into the Highway Authority’s right-of-way adjacent to the Site;

WHEREAS, the Highway Authority is conducting corrective action in response to the Release(s);

WHEREAS, the Parties desire to prevent groundwater beneath the Highway Authority’s right-of-way that exceeds Tier 1 residential remediation objectives from use as a supply of potable or domestic water and to limit access to soil within the right-of-way that exceeds Tier 1 residential remediation objectives so that human health and the environment are protected during and after any access;

NOW, THEREFORE, the Parties agree as follows:

1. The recitals set forth above are incorporated by reference as if fully set forth herein.
2. The Illinois Emergency Management Agency has assigned incident number(s) 891643, 20091164, 20120840, 20120842, and 20171030 to the Release(s).
3. Attached as Exhibit A are scaled maps prepared by the Highway Authority that shows the Site and surrounding area and delineates the current and estimated future extent of soil and groundwater contamination above the applicable Tier 1 residential remediation objectives as a result of the Release(s).
4. Attached as Exhibit B are tables prepared by the Highway Authority that lists each contaminant of concern that exceeds its Tier 1 residential remediation objective, its Tier 1 residential remediation objective and its concentrations within the zone where Tier 1 residential remediation objectives are exceeded. The locations of the concentrations listed in Exhibit B are identified on the map(s) in Exhibit A.

5. Attached as Exhibit C is a scaled map prepared by the Highway Authority showing the area of the Highway Authority's right-of-way that is governed by this agreement ("Right-of-Way"). Because Exhibit C is not a surveyed plat, the Right-of-Way boundary may be an approximation of the actual Right-of-Way lines.
6. The Highway Authority stipulates that it has jurisdiction over the Right-of-Way that gives it sole control over the use of the groundwater and access to the soil located within or beneath the Right-of-Way.
7. The Highway Authority agrees to prohibit within the Right-of-Way all potable and domestic uses of groundwater exceeding Tier 1 residential remediation objectives.
8. The Highway Authority further agrees to limit access by itself and others to soil within the Right-of-Way exceeding Tier 1 residential remediation objectives. Access shall be allowed only if human health (including worker safety) and the environment are protected during and after any access. The Highway Authority may construct, reconstruct, improve, repair, maintain and operate a highway upon the Right-of-Way, or allow others to do the same by permit. In addition, the Highway Authority and others using or working in the Right-of-Way under permit have the right to remove soil or groundwater from the Right-of-Way and dispose of the same in accordance with applicable environmental laws and regulations. The Highway Authority agrees to issue all permits for work in the Right-of-Way, and make all existing permits for work in the Right-of-Way, subject to the following or a substantially similar condition:

As a condition of this permit the permittee shall request the office issuing this permit to identify sites in the Right-of-Way where a Highway Authority Memorandum of Agreement governs access to soil that exceeds the Tier 1 residential remediation objectives of 35 Ill. Adm. Code 742. The permittee shall take all measures necessary to protect human health (including worker safety) and the environment during and after any access to such soil.

9. This agreement shall be referenced in the Agency's no further remediation determination issued for the Release(s).
10. The Agency shall be notified of any transfer of jurisdiction over the Right-of-Way at least 30 days prior to the date the transfer takes effect. This agreement shall be null and void upon the transfer unless the transferee agrees to be bound by this agreement as if the transferee were an original party to this agreement. The transferee's agreement to be bound by the terms of this agreement shall be memorialized at the time of transfer in a writing ("Rider") that references this Highway Authority Memorandum of Agreement and is signed by the Highway Authority, or subsequent transferor, and the transferee.
11. This agreement shall become effective on the date the Agency issues a no further remediation determination for the Release(s). It shall remain effective until the Right-of-Way is demonstrated to be suitable for unrestricted use and the Agency

issues a new no further remediation determination to reflect there is no longer a need for this agreement, or until the agreement is otherwise terminated or voided.

12. In addition to any other remedies that may be available, the Agency may bring suit to enforce the terms of this agreement or may, in its sole discretion, declare this agreement null and void if the Highway Authority or a transferee violates any term of this agreement. The Highway Authority or transferee shall be notified in writing of any such declaration.
13. This agreement shall be null and void if a court of competent jurisdiction strikes down any part or provision of the agreement.
14. This agreement supersedes any prior written or oral agreements or understandings between the Parties on the subject matter addressed herein. It may be altered, modified or amended only upon the written consent and agreement of the Parties.
15. Any notices or other correspondence regarding this agreement shall be sent to the Parties at following addresses:

Manager, Division of Remediation Management
Bureau of Land
Illinois Environmental Protection Agency
P.O. Box 19276
Springfield, Illinois 62794-9276

Mr. Joshua Buman, Director of Public Works
Village of Homewood
2020 Chestnut Road
Homewood, IL 60430

IN WITNESS WHEREOF, the Parties have caused this agreement to be signed by their duly authorized representatives.

VILLAGE OF HOMEWOOD

Date: _____

By: _____

Its: _____

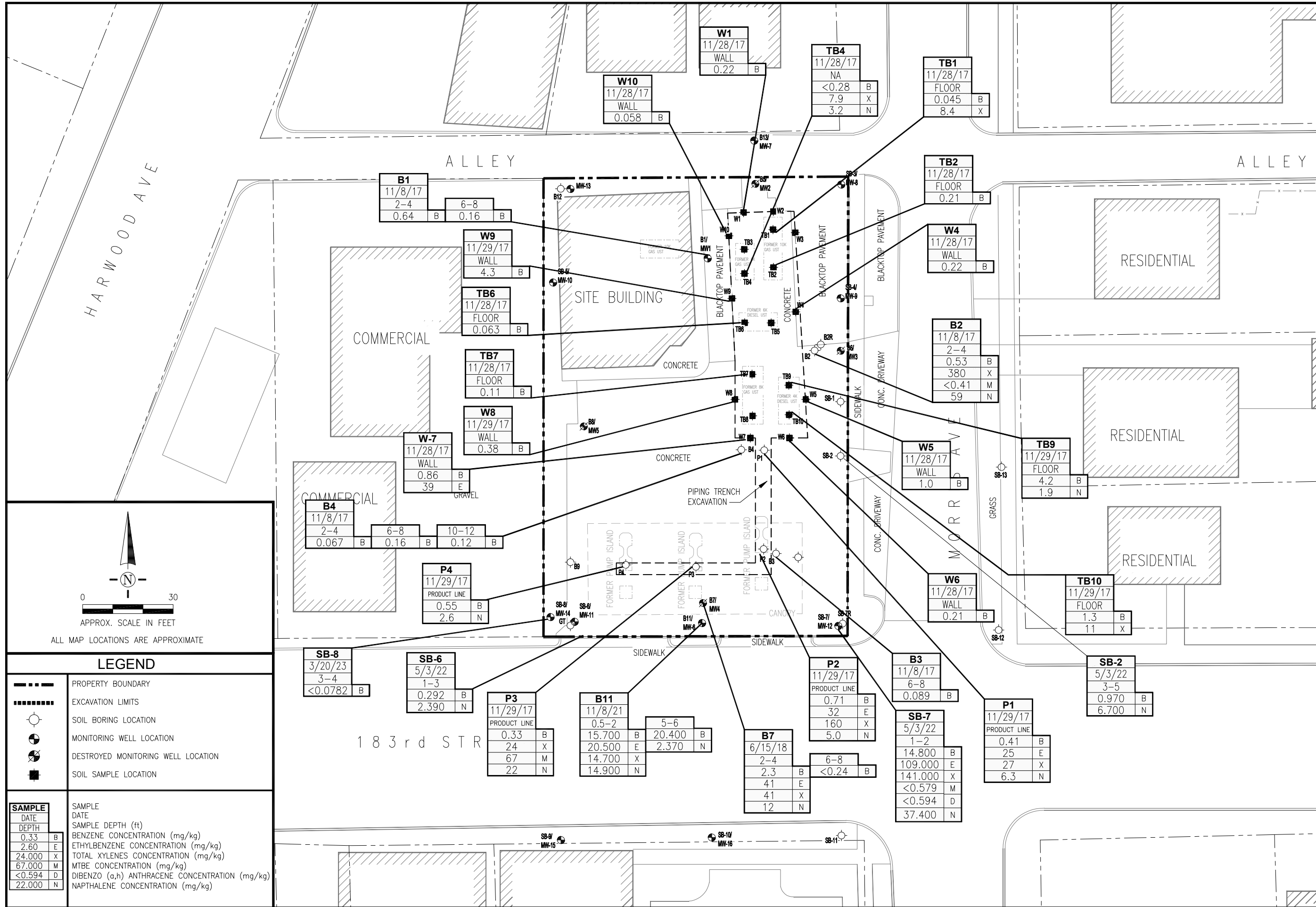
ILLINOIS ENVIRONMENTAL
PROTECTION AGENCY

Date: _____

By: _____

Director

EXHIBIT A



HARWOOD AVE

ALLEY

ALLEY

COMMERCIAL

SITE BUILDING

RESIDENTIAL

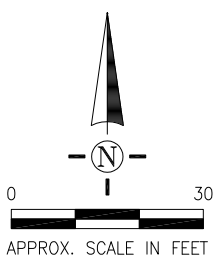
COMMERCIAL

RESIDENTIAL

RESIDENTIAL

183rd STR

MORRIS AVE

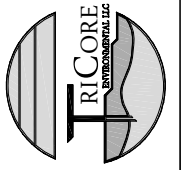


LEGEND

- PROPERTY BOUNDARY
- EXCAVATION LIMITS
- SOIL BORING LOCATION
- MONITORING WELL LOCATION
- DESTROYED MONITORING WELL LOCATION
- SOIL SAMPLE LOCATION

SAMPLE	DATE	DEPTH	CONCENTRATION
0.33	B	BENZENE CONCENTRATION (mg/kg)	
2.60	E	ETHYLBENZENE CONCENTRATION (mg/kg)	
24.000	X	TOTAL XYLENES CONCENTRATION (mg/kg)	
67.000	M	MTBE CONCENTRATION (mg/kg)	
<0.594	D	DIBENZO (a,h) ANTHRACENE CONCENTRATION (mg/kg)	
22.000	N	NAPHTHALENE CONCENTRATION (mg/kg)	

TriCore Environmental, LLC
 2368 Corporate Lane, Suite 116
 Naperville, IL 60563
 (630) 520-9973

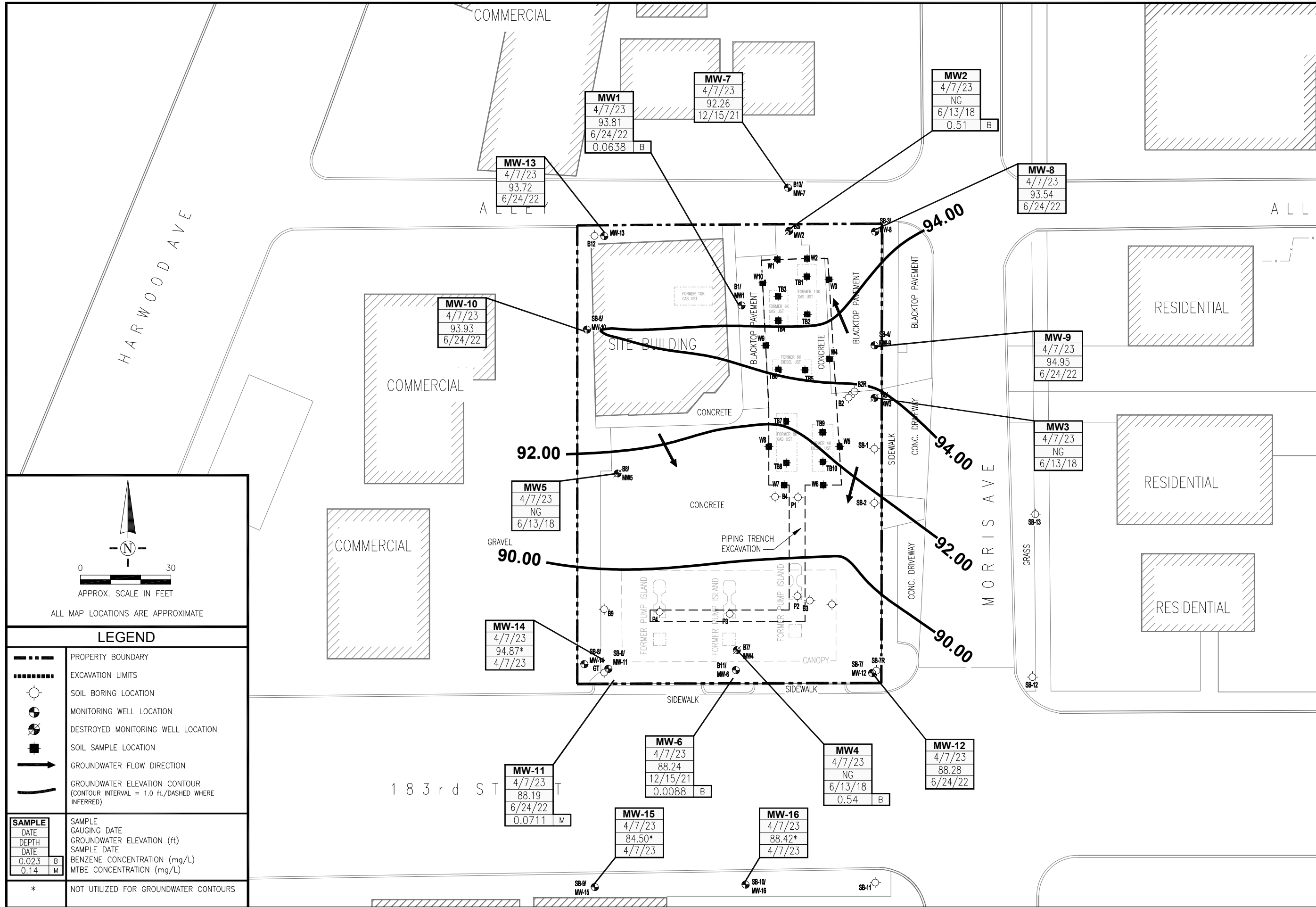


Village of Homewood
 2020 Chestnut
 Homewood, IL 60430

SOIL ANALYTICAL RESULTS
 GUPTA, RAMESH
 2124 W. 183rd STREET
 HOMEWOOD, IL 60430

DRAWN BY: IOG
 APPROVED BY: KTM
 SCALE: 1" = 30'
 DATE: 11/30/2023
 DRAWING FILE: MD21-156

EXHIBIT
A-1



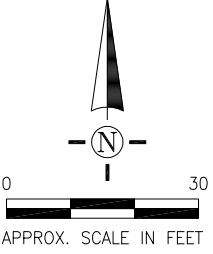
TriCore Environmental, LLC
 2368 Corporate Lane, Suite 116
 Naperville, IL 60563
 (630) 520-9973

Village of Homewood
 2020 Chestnut
 Homewood, IL 60430

GROUNDWATER ELEVATIONS AND ANALYTICAL RESULTS
 GUPTA, RAMESH
 2124 W. 1183rd STREET
 HOMEWOOD, IL 60430

DRAWN BY: IOG
 APPROVED BY: KTM
 SCALE: 1" = 30'
 DATE: 11/30/2023
 DRAWING FILE: MD21-156

EXHIBIT A-2



ALL MAP LOCATIONS ARE APPROXIMATE

LEGEND

- PROPERTY BOUNDARY
- EXCAVATION LIMITS
- SOIL BORING LOCATION
- MONITORING WELL LOCATION
- DESTROYED MONITORING WELL LOCATION
- SOIL SAMPLE LOCATION
- GROUNDWATER FLOW DIRECTION
- GROUNDWATER ELEVATION CONTOUR (CONTOUR INTERVAL = 1.0 ft./DASHED WHERE INFERRED)

SAMPLE	
DATE	SAMPLE DATE
DEPTH	GROUNDWATER ELEVATION (ft)
DATE	SAMPLE DATE
0.023 B	BENZENE CONCENTRATION (mg/L)
0.14 M	MTBE CONCENTRATION (mg/L)

* NOT UTILIZED FOR GROUNDWATER CONTOURS

MW1
4/7/23
93.81
6/24/22
0.0638 B

MW-7
4/7/23
92.26
12/15/21

MW2
4/7/23
NG
6/13/18
0.51 B

MW-13
4/7/23
93.72
6/24/22

MW-8
4/7/23
93.54
6/24/22

MW-10
4/7/23
93.93
6/24/22

MW-9
4/7/23
94.95
6/24/22

MW5
4/7/23
NG
6/13/18

MW3
4/7/23
NG
6/13/18

MW-14
4/7/23
94.87*
4/7/23

MW-11
4/7/23
88.19
6/24/22
0.0711 M

MW-6
4/7/23
88.24
12/15/21
0.0088 B

MW4
4/7/23
NG
6/13/18
0.54 B

MW-12
4/7/23
88.28
6/24/22

MW-15
4/7/23
84.50*
4/7/23

MW-16
4/7/23
88.42*
4/7/23

EXHIBIT B

Exhibit B-1

Soil Analytical Results - BTEX and MTBE

Gupta, Ramesh
2124 W. 183rd Street
Homewood, Cook County, Illinois

Tier 1 Exposure Routes				Indicator Contaminants and Tier 1 SROs				
				Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	MTBE (mg/kg)
Soil Ingestion - Residential				12	16,000	7,800	16,000	780
Soil Ingestion - Industrial/Commercial				100	410,000	200,000	410,000	20,000
Soil Ingestion - Construction Worker				2,300	410,000	20,000	41,000	2,000
Inhalation - Residential				0.8	650	400	320	8,800
Inhalation - Industrial/Commercial				1.6	650	400	320	8,800
Inhalation - Construction Worker				2.2	42	58	5.6	140
SCGIER - Class I Groundwater				0.03	12	13	150	0.32
SCGIER - Class II Groundwater				0.17	29	19	150	0.32
Soil Saturation Limit - Outdoor Inhalation				800	580	350	280	8,400
Soil Saturation Limit - SCGIER				580	290	150	110	11,000
Sample Location	Sample Date	Sample Depth (feet bls)	PID Reading (ppm)	Analytical Results				
B1	11/8/17	2-4	56.5	0.64	<0.0051	3.4	0.055	<0.0051
B1	11/8/17	6-8	35.2	0.16	0.0061	0.014	0.028	<0.0046
B1	11/8/17	10-12	12.0	0.0059	<0.0045	0.092	0.077	<0.0045
B2	11/8/17	2-4	62.0	0.53	<0.41	3.8	380	<0.41
B3	11/8/17	2-4	10.0	<0.0046	<0.0046	<0.0046	<0.014	<0.0046
B3	11/8/17	6-8	35.0	0.089	0.0084	0.013	0.044	<0.0054
B4	11/8/17	2-4	27.0	0.067	0.0079	0.012	0.051	<0.0045
B4	11/8/17	6-8	63.0	0.16	0.0081	0.026	0.019	<0.0049
B4	11/8/17	10-12	32.0	0.12	0.0086	0.0099	0.029	<0.0045
TB1	11/28/17	Floor		0.045	0.0083	9.5	8.4	<0.0049
TB2	11/28/17	Floor		0.21	<0.0049	0.0099	<0.015	<0.0049
TB3	11/28/17	Floor		<0.0049	<0.0049	<0.0049	<0.015	<0.0049
TB4	11/28/17	Floor		<0.28	<0.28	9.5	7.9	<0.28
TB5	11/28/17	Floor		0.0062	<0.0047	0.011	<0.014	0.019
TB6	11/28/17	Floor		0.063	<0.0051	0.032	0.020	<0.0051
TB7	11/28/17	Floor		0.11	0.0092	0.025	0.034	<0.0051
TB8	11/28/17	Wall		0.0054	<0.0050	0.018	<0.015	0.024
W1	11/28/17	Wall		0.22	0.0060	0.031	0.018	<0.0058
W2	11/28/17	Wall		0.020	<0.0051	0.20	0.040	<0.0051
W3	11/28/17	Wall		<0.0046	<0.0046	0.0059	<0.014	<0.0046
W4	11/28/17	Wall		0.22	0.0052	0.013	0.016	<0.0049
W5	11/28/17	Wall		1.0	0.012	3.2	0.033	<0.0044
W6	11/28/17	Wall		0.21	0.0084	0.081	0.045	<0.0048
W7	11/28/17	Wall		0.86	<0.24	39	<0.73	<0.24
W10	11/28/17	Wall		0.058	<0.0049	0.033	0.015	<0.0049
TB9	11/29/17	Floor		4.2	<0.25	1.8	1.2	<0.25
TB10	11/29/17	Floor		1.3	<0.22	13	11	<0.22
W8	11/29/17	Wall		0.38	<0.26	4.0	4.2	<0.26
W9	11/29/17	Wall		4.3	<0.22	2.1	2.2	<0.22
P1	11/29/17	Product Line		0.41	0.30	25	27	<0.27
P2	11/29/17	Product Line		0.71	1.2	32	160	<0.24
P3	11/29/17	Product Line		0.33	0.31	24	67	<0.27
P4	11/29/17	Product Line		0.55	<0.23	12	4.0	<0.23
BF1	11/29/17	Backfill		0.065	0.020	0.50	2.2	<0.0048
BF2	11/29/17	Backfill		0.19	0.015	0.51	0.34	<0.0051
BF3	11/29/17	Backfill		0.028	0.0059	0.088	0.22	<0.0050
BF4	11/29/17	Backfill		0.18	<0.26	1.1	2.6	<0.26
B5	6/5/18	2-4	0.0	<0.0049	<0.0049	<0.0049	<0.015	<0.0049
B5	6/5/18	6-8	16.0	<0.0042	<0.0042	<0.0042	<0.013	<0.0042
B5	6/5/18	10-12	0.0	0.0090	<0.0046	<0.046	<0.014	0.010
B6	6/5/18	2-4	0.0	0.022	<0.0048	<0.0048	<0.014	<0.0048
B6	6/5/18	6-8	0.0	<0.0042	<0.0042	<0.0042	<0.013	<0.0042
B6	6/5/18	10-12	0.0	<0.0045	<0.0045	<0.0045	<0.013	<0.0045
B7	6/5/18	2-4	321.0	2.3	0.58	41	41	<0.24
B7	6/5/18	6-8	75.0	<0.24	<0.24	<0.24	<0.72	<0.24
B7	6/5/18	10-12	0.0	<0.0042	<0.0042	<0.0042	<0.013	<0.0042
B8	6/5/18	2-4	0.0	<0.0046	<0.0046	0.0046	<0.014	<0.0046
B8	6/5/18	6-8	0.0	<0.0045	<0.0045	<0.0045	<0.014	<0.0045
B8	6/5/18	10-12	0.0	<0.0059	<0.0059	<0.0059	<0.018	<0.0059
B9	6/7/18	2-4	0.0	<0.0045	<0.0045	<0.0045	<0.013	<0.0045
B9	6/7/18	6-8	0.0	<0.0043	<0.0043	<0.0043	<0.013	<0.0043
B9	6/7/18	10-12	0.0	<0.0049	<0.0049	<0.0049	<0.015	<0.0049
B10	6/7/18	2-4	0.0	<0.0046	<0.0046	<0.0046	<0.014	<0.0046

Exhibit B-1

Soil Analytical Results - BTEX and MTBE

Gupta, Ramesh
2124 W. 183rd Street
Homewood, Cook County, Illinois

Tier 1 Exposure Routes				Indicator Contaminants and Tier 1 SROs				
				Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	MTBE (mg/kg)
Soil Ingestion - Residential				12	16,000	7,800	16,000	780
Soil Ingestion - Industrial/Commercial				100	410,000	200,000	410,000	20,000
Soil Ingestion - Construction Worker				2,300	410,000	20,000	41,000	2,000
Inhalation - Residential				0.8	650	400	320	8,800
Inhalation - Industrial/Commercial				1.6	650	400	320	8,800
Inhalation - Construction Worker				2.2	42	58	5.6	140
SCGIER - Class I Groundwater				0.03	12	13	150	0.32
SCGIER - Class II Groundwater				0.17	29	19	150	0.32
Soil Saturation Limit - Outdoor Inhalation				800	580	350	280	8,400
Soil Saturation Limit - SCGIER				580	290	150	110	11,000
Sample Location	Sample Date	Sample Depth (feet bls)	PID Reading (ppm)	Analytical Results				
B10	6/7/18	6-8	0.0	<0.0047	<0.0047	<0.0047	<0.014	<0.0047
B10	6/7/18	10-12	0.0	<0.0046	<0.0046	<0.0046	<0.014	<0.0046
B11	11/8/21	0.5-2	1498.0	15.700	0.425J	20.500	14.700	<0.167
B11	11/8/21	5-6	681.6	20.400	0.580	2.090	2.730	<0.0404
B11	11/8/21	10-11.5	3.4	<0.0159	<0.0169	<0.0159	<0.0484	0.220
B12	11/8/21	3.5-5	1.8	<0.0169	<0.0179	<0.0169	<0.0512	<0.0209
B12	11/8/21	6-7	2.0	<0.0168	<0.0178	<0.0168	<0.0510	<0.0208
SB-1	5/3/22	2-3.5	2.7	<0.0168	<0.0178	<0.0168	<0.0510	<0.0208
SB-2	5/3/22	3-5	197.3	0.970	<0.0358	0.393	0.156J	<0.0418
SB-3	5/3/22	5-6	3.1	<0.0165	<0.0175	<0.0165	<0.0501	<0.0204
SB-4	5/3/22	1-2	21.5	<0.0181	<0.0191	<0.0181	<0.548	<0.0223
SB-5	5/3/22	6.5-8	0.6	<0.0163	<0.0173	<0.0163	<0.0496	<0.0202
SB-6	5/3/22	1-3	502.3	0.292	<0.147	10.600	0.633J	<0.172
SB-7	5/3/22	1-2	1229	14.800	1.360J	109.000	141.000	<0.579
SB-8	3/20/23	3-4	23.7	<0.0782	<0.0828	<0.0782	<0.237	<0.0967
SB-9	3/20/23	14-15	1.3	<0.0161	<0.0171	<0.0161	<0.0490	<0.0199
SB-10	3/20/23	1.5-3	1.0	<0.0177	<0.0188	<0.0177	<0.0538	<0.0219
SB-11	3/20/23	8.5-10	1.3	<0.0163	<0.0173	<0.0163	<0.0496	<0.0202
SB-12	3/20/23	4-5	2.3	<0.0193	<0.0204	<0.0193	<0.0585	<0.0238
SB-13	3/20/23	5-6.5	1.6	<0.0158	<0.0167	<0.0158	<0.0479	<0.0195
B2R	10/18/23	5-6	6.5	<0.0171	<0.0181	<0.0171	<0.0517	<0.0211
B2R	10/18/23	10-11	0.4	<0.0165	<0.0175	<0.0165	<0.0500	0.0398J
SB-7R	10/18/23	5-6	47.2	0.761	0.133	0.0486J	0.795	<0.0227
SB-7R	10/18/23	13-14	1.6	<0.0167	<0.0177	<0.0167	<0.0506	1.530

Notes:

- 1) **Bold** = detected concentration, laboratory reporting limit, or method detection limit exceeds a Tier 1 SRO listed in 35 IAC Part 742
- 2) <0.0122 = concentration less than the laboratory reporting limit or method detection limit
- 3) J = estimated concentration above the adjusted method detection limit and below the adjusted reporting limit
- 4) Shaded cell = not available

Exhibit B-2

Soil Analytical Results - PAHs

Gupta, Ramesh
2124 W. 183rd Street
Homewood, Cook County, Illinois

Tier 1 Exposure Routes				Indicator Contaminants and SROs															
				Acenaphthene (mg/kg)	Acenaphthylene (mg/kg)	Anthracene (mg/kg)	Benzo (a) anthracene (mg/kg)	Benzo (a) pyrene (mg/kg)	Benzo (b) fluoranthene (mg/kg)	Benzo (g,h,i) perylene (mg/kg)	Benzo (k) fluoranthene (mg/kg)	Chrysene (mg/kg)	Dibenzo (a,h) anthracene (mg/kg)	Fluoranthene (mg/kg)	Fluorene (mg/kg)	Indeno (1,2,3-c,d) pyrene (mg/kg)	Naphthalene (mg/kg)	Phenanthrene (mg/kg)	Pyrene (mg/kg)
Soil Ingestion - Residential				4,700	2,300	23,000	1.8 ⁶⁾	2.1 ⁶⁾	2.1 ⁶⁾	2,300	9	88	0.42 ⁶⁾	3,100	3,100	1.6 ⁶⁾	1,600	2,300	2,300
Soil Ingestion - Industrial/Commercial				120,000	61,000	610,000	8	2.1 ⁶⁾	8	61,000	78	780	0.8	82,000	82,000	8	41,000	61,000	61,000
Soil Ingestion - Construction Worker				120,000	61,000	610,000	170	17	170	61,000	1,700	17,000	17	82,000	82,000	170	4,100	61,000	61,000
Inhalation - Residential				---	---	---	---	---	---	---	---	---	---	---	---	170	---	---	
Inhalation - Industrial/Commercial				---	---	---	---	---	---	---	---	---	---	---	---	270	---	---	
Inhalation - Construction Worker				---	---	---	---	---	---	---	---	---	---	---	---	1.8	---	---	
SCGIER - Class I Groundwater				570	85	12,000	2	8	5	27,000	49	160	2	4,300	560	14	12	210	4,200
SCGIER - Class II Groundwater				2,900	420	59,000	8	82	25	130,000	250	800	7.6	21,000	2,800	69	18	1,100	21,000
Sample Location	Sample Date	Sample Depth (feet bls)	PID Reading (ppm)	Analytical Results															
SB-9	3/20/23	14-15	1.3	<0.0026	<0.0025	<0.0024	0.0026J	0.0023J	0.0043J	0.0136J	<0.0025	0.0058J	<0.0027	0.0037J	0.0035J	<0.0041	0.0044J	0.0171J	0.0063J
SB-10	3/20/23	1.5-3	1.0	<0.0027	<0.0026	<0.0026	<0.0027	<0.0024	<0.0029	<0.0037	<0.0027	<0.0039	<0.0029	<0.0025	<0.0025	<0.0043	0.0106J	0.0053J	<0.0031
SB-11	3/20/23	8.5-10	1.3	<0.0026	<0.0025	<0.0025	0.0027J	<0.0023	0.0060J	0.0147J	<0.0025	0.0099J	<0.0027	0.0052J	<0.0024	<0.0041	<0.0019	0.0085J	0.0074J
SB-12	3/20/23	4-5	2.3	<0.0028	<0.0028	<0.0027	<0.0028	<0.0025	<0.0030	<0.0038	<0.0028	<0.0041	<0.0030	<0.0026	<0.0026	<0.0046	<0.0021	<0.0025	<0.0032
SB-13	3/20/23	5-6.5	1.6	<0.0025	<0.0025	<0.0024	<0.0025	<0.0022	0.0041J	0.0065J	<0.0025	0.0043J	<0.0027	<0.0023	<0.0023	<0.0041	<0.0019	<0.0022	<0.0029

Notes:

- 1) **Bold** = detected concentration or method detection limit exceeds a SRO listed in 35 IAC Part 742 or in the Non-TACO Objectives tables
- 2) <0.0122 = concentration less than the laboratory reporting limit or method detection limit
- 3) J = estimated concentration above the adjusted method detection limit and below the adjusted reporting limit
- 4) Shaded cell = not available
- 5) --- = no toxicity criteria available for the route of exposure
- 6) Pursuant to 35 IAC Section 742, Appendix B, Tables A and B, the SRO listed in 35 IAC Section 742, Appendix A, Table H was utilized.

Exhibit B-3

Groundwater Elevations and Analytical Results - BTEX and MTBE

Gupta, Ramesh
2124 W. 183rd Street
Homewood, Cook County, Illinois

Tier 1 Exposure Routes						Indicator Contaminants and Tier 1 GROs				
						Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	MTBE (mg/L)
GCGIER - Class I Groundwater						0.005	1	0.7	10	0.07
GCGIER - Class II Groundwater						0.025	2.5	1	10	0.07
Indoor Inhalation - Diffusion Only - Residential						0.41	530	1.3	96	30,000
Indoor Inhalation - Diffusion Only - Industrial/Commercial						2.6	530	8.1	110	51,000
Indoor Inhalation - Diffusion and Advection - Residential						0.11	530	0.37	30	1,900
Indoor Inhalation - Diffusion and Advection - Industrial/Commercial						0.41	530	1.4	93	6,800
Sample Location	Date	TOC Elevation (feet)	Ground Elevation (feet)	Depth to Water (feet below TOC)	Groundwater Elevation (feet)	Analytical Results				
MW1	11/8/17					0.023	<0.0050	0.1	0.7	0.14
MW1	6/13/18	99.61	100.00	8.49	91.12					
MW1	11/22/21	100.42	100.71	7.24	93.18					
MW1	12/15/21	100.42	100.71	6.73	93.69					
MW1	6/24/22	100.42	100.71	7.32	93.10	0.0638	0.0012	0.0323	0.0041	<0.0011
MW1	4/7/23	100.42	100.71	6.61	93.81					
MW2	6/13/18	99.78	100.29	8.82	90.96	0.51	<0.0050	<0.0050	0.38	0.0053
MW3	6/13/18	99.67	100.11	8.64	91.03	<0.0050	<0.0050	<0.0050	<0.015	<0.0050
MW4	6/13/18	99.28	99.89	7.91	91.37	0.54	0.0071	<0.0050	0.045	0.0056
MW5	6/13/18	99.21	99.79	7.99	91.22	<0.0050	<0.0050	<0.0050	<0.015	<0.0050
MW-6	11/22/21	98.22	98.55	10.21	88.01					
MW-6	12/15/21	98.22	98.55	10.53	87.69	0.0088	0.0016	0.00056J	0.0026J	0.0481
MW-6	6/24/22	98.22	98.55	9.95	88.27					
MW-6	4/7/23	98.22	98.55	9.98	88.24					
MW-7	11/22/21	100.44	100.93	9.60	90.84					
MW-7	12/15/21	100.44	100.93	9.59	90.85	<0.0015	<0.0014	0.0917	0.0795	<0.0056
MW-7	6/24/22	100.44	100.93	9.69	90.75					
MW-7	4/7/23	100.44	100.93	8.18	92.26					
MW-8	5/17/22	100.60	100.94	13.04	87.56					
MW-8	6/24/22	100.60	100.94	8.32	92.28	<0.00030	<0.00029	<0.00033	<0.0010	0.0019J
MW-8	4/7/23	100.60	100.94	7.06	93.54					
MW-9	5/17/22	100.02	100.42	dry						
MW-9	6/24/22	100.02	100.42	8.94	91.08	<0.00030	<0.00029	<0.00033	<0.0010	0.0034J
MW-9	4/7/23	100.02	100.42	5.07	94.95					
MW-10	5/17/22	99.40	99.89	14.13	85.27					
MW-10	6/24/22	99.40	99.89	10.31	89.09	<0.00030	<0.00029	<0.00033	<0.0010	<0.0011
MW-10	4/7/23	99.40	99.89	5.47	93.93					
MW-11	5/17/22	98.15	98.54	9.27	88.88					
MW-11	6/24/22	98.15	98.54	10.56	87.59	<0.00030	<0.00029	0.00044J	<0.0010	0.0711
MW-11	4/7/23	98.15	98.54	9.96	88.19					
MW-12	5/17/22	98.40	99.29	9.54	88.86					
MW-12	6/24/22	98.40	99.29	10.07	88.33	0.0017	<0.00029	0.00094J	<0.0010	0.0304
MW-12	4/7/23	98.40	99.29	10.12	88.28					
MW-13	5/17/22	100.48	100.95	dry						
MW-13	6/24/22	100.48	100.95	10.40	90.08	<0.00030	<0.00029	<0.00033	<0.0010	<0.0011
MW-13	4/7/23	100.48	100.95	6.76	93.72					
MW-14	3/28/23			4.25						
MW-14	4/7/23	99.42	99.62	4.55	94.87	<0.00030	<0.00029	<0.00033	<0.0010	<0.0011
MW-15	3/28/23			dry						
MW-15	4/7/23	98.50	98.88	14.00	84.50	<0.00030	<0.00029	<0.00033	<0.0010	<0.0011
MW-16	3/28/23			10.26						
MW-16	4/7/23	98.54	98.91	10.12	88.42	<0.00030	<0.00029	<0.00033	<0.0010	<0.0011

Notes:

- 1) **Bold** = detected concentration exceeds a Tier 1 GRO listed in 35 IAC Part 742
- 2) <0.0122 = concentration less than the laboratory reporting limit or method detection limit
- 3) J = estimated concentration above the adjusted method detection limit and below the adjusted reporting limit
- 4) Shaded cells = not available or not analyzed

Exhibit B-4

Groundwater Analytical Results - PAHs

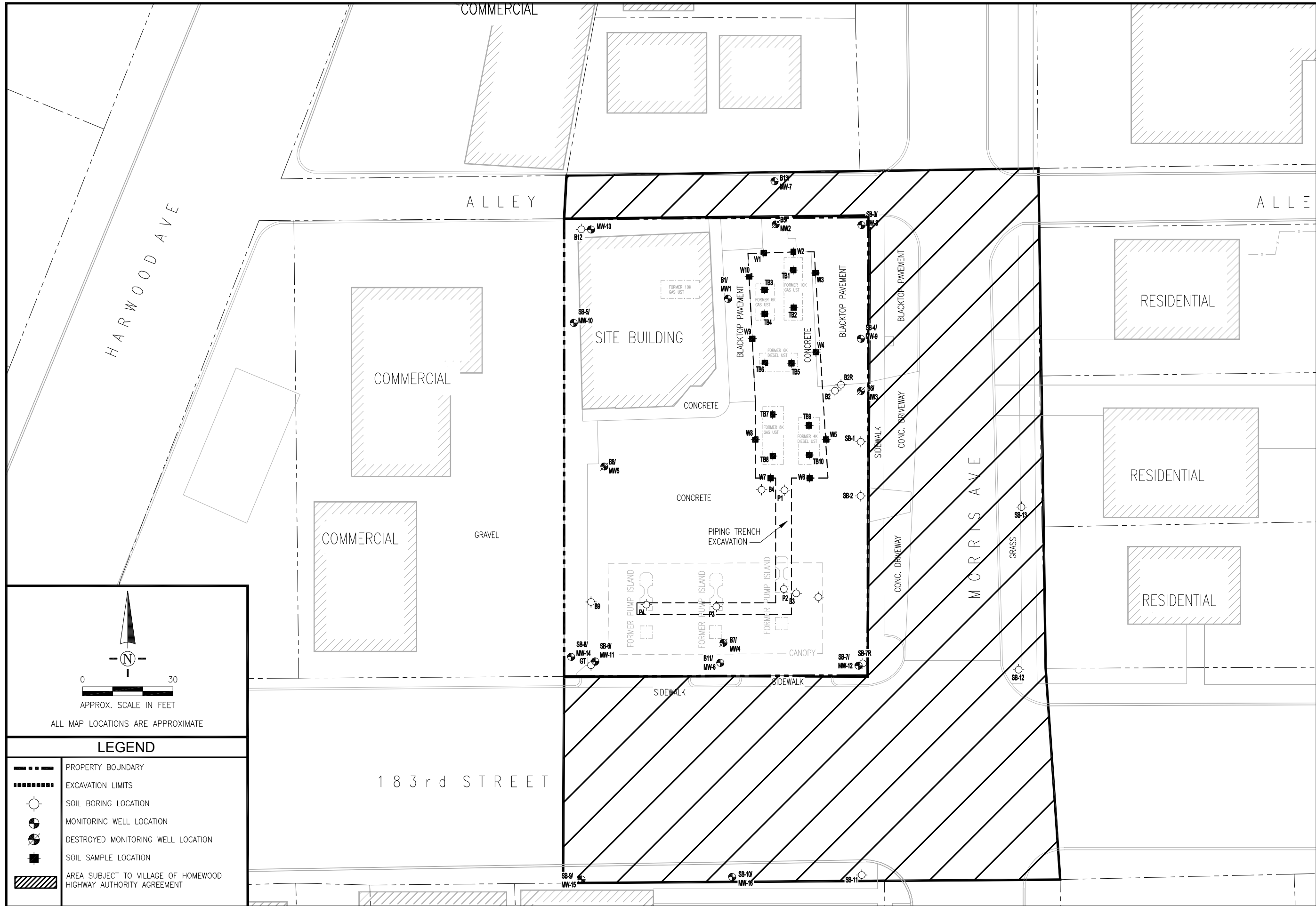
Gupta, Ramesh
2124 W. 183rd Street
Homewood, Cook County, Illinois

Tier 1 Exposure Routes		Indicator Contaminants and Tier 1 GROs															
		Acenaphthene (mg/L)	Acenaphthylene (mg/L)	Anthracene (mg/L)	Benzo (a) anthracene (mg/L)	Benzo (a) pyrene (mg/L)	Benzo (b) fluoranthene (mg/L)	Benzo (g,h,i) perylene (mg/L)	Benzo (k) fluoranthene (mg/L)	Chrysene (mg/L)	Dibenzo (a,h) anthracene (mg/L)	Fluoranthene (mg/L)	Fluorene (mg/L)	Indeno (1,2,3-c,d) pyrene (mg/L)	Naphthalene (mg/L)	Phenanthrene (mg/L)	Pyrene (mg/L)
GCGIER - Class I Groundwater		0.42	0.21	2.1	0.00013	0.0002	0.00018	0.21	0.00017	0.0015	0.0003	0.28	0.28	0.00043	0.14	0.21	0.21
GCGIER - Class II Groundwater		2.1	1.05	10.5	0.00065	0.002	0.0009	1.05	0.00085	0.0075	0.0015	1.4	1.4	0.00215	0.22	1.05	1.05
Indoor Inhalation - Diffusion Only - Residential		---	---	---	---	---	---	---	---	---	---	---	---	---	1.8	---	---
Indoor Inhalation - Diffusion Only - Industrial/Commercial		---	---	---	---	---	---	---	---	---	---	---	---	---	13	---	---
Indoor Inhalation - Diffusion and Advection - Residential		---	---	---	---	---	---	---	---	---	---	---	---	---	0.075	---	---
Indoor Inhalation - Diffusion and Advection - Industrial/Commercial		---	---	---	---	---	---	---	---	---	---	---	---	---	0.32	---	---
Sample Location	Sample Date	Analytical Results															
MW1	11/8/17	<0.0010	<0.0010	<0.0010	<0.00010	<0.00010	<0.00010	<0.0010	<0.00010	<0.00010	<0.00010	<0.0010	<0.0010	<0.00010	0.082	<0.0010	<0.0010
MW1	6/24/22	0.00046	0.00013J	0.00010J	<0.000050	<0.000046	0.00014J	0.00013J	0.000098J	0.00018J	<0.000065	0.00033	0.00020	<0.000057	0.0055	0.00048	0.00044
MW2	6/13/18	<0.0010	<0.0010	<0.0010	<0.00010	<0.00010	<0.00010	<0.0010	<0.00010	<0.00010	<0.00010	<0.0010	<0.0010	<0.00010	<0.0010	<0.0010	<0.0010
MW3	6/13/18	<0.0010	<0.0010	<0.0010	<0.00010	<0.00010	<0.00010	<0.0010	<0.00010	<0.00010	<0.00010	<0.0010	<0.0010	<0.00010	<0.0010	<0.0010	<0.0010
MW4	6/13/18	<0.0010	<0.0010	<0.0010	<0.00010	<0.00010	<0.00010	<0.0010	<0.00010	<0.00010	<0.00010	<0.0010	<0.0010	<0.00010	<0.0010	<0.0010	<0.0010
MW5	6/13/18	<0.0010	<0.0010	<0.0010	<0.00010	<0.00010	<0.00010	<0.0010	<0.00010	<0.00010	<0.00010	<0.0010	<0.0010	<0.00010	<0.0010	<0.0010	<0.0010
MW-6	12/15/21	<0.000013	<0.000011	<0.000017	<0.000012	<0.000018	<0.000018	0.000024J	<0.000020	<0.000024	<0.000016	<0.000024	<0.000021	<0.000014	0.00011	0.000031J	<0.000021
MW-7	12/15/21	0.00060	0.00022J	<0.00017	<0.00012	<0.00018	<0.00018	<0.00021	<0.000020	<0.00024	<0.00016	<0.00024	<0.00022	<0.00014	0.0667	<0.00023	<0.00021
MW-8	6/24/22	<0.000013	<0.000011	<0.000017	<0.000012	<0.000012	<0.0000083	<0.000021	<0.000020	<0.000011	<0.000016	<0.000024	<0.000021	<0.000014	<0.000018	<0.000023	<0.000021
MW-9	6/24/22	<0.000012	<0.000011	<0.000016	<0.000012	<0.000011	<0.0000081	<0.000021	<0.000020	<0.000011	<0.000016	<0.000023	<0.000021	<0.000014	<0.000018	<0.000023	<0.000020
MW-10	6/24/22	<0.000012	<0.000011	<0.000017	<0.000012	<0.000011	<0.0000082	<0.000021	<0.000020	<0.000011	<0.000016	<0.000023	<0.000021	<0.000014	<0.000018	<0.000023	<0.000020
MW-11	6/24/22	<0.000013	<0.000011	<0.000017	<0.000012	<0.000011	<0.0000082	<0.000021	<0.000020	<0.000011	<0.000016	<0.000024	<0.000021	<0.000014	0.000098	<0.000023	<0.000020
MW-12	6/24/22	<0.000013	<0.000011	0.000018J	<0.000012	<0.000012	<0.0000082	<0.000021	<0.000020	0.000021J	<0.000016	<0.000024	<0.000021	<0.000014	0.00025	<0.000023	<0.000020
MW-13	6/24/22	<0.000013	<0.000012	<0.0000174	<0.000012	<0.000012	<0.0000084	<0.000021	<0.000020	<0.000012	<0.000016	<0.000024	<0.000022	<0.000014	<<0.000018	<0.000024	<0.000021
MW-14	4/7/23	<0.000014	<0.000013	<0.000019	<0.000014	<0.000013	<0.0000092	<0.000024	<0.000023	0.000017J	<0.000018	<0.000026	<0.000024	<0.000016	<0.000020	<0.000026	0.000024J
MW-15	4/7/23	<0.000013	<0.000012	0.00018	<0.000013	<0.000012	<0.0000086	<0.000022	0.000025J	0.000095	<0.000017	0.000071	<0.000022	<0.000015	<0.000019	0.000051	0.000054
MW-16	4/7/23	<0.000013	<0.000012	<0.000018	<0.000013	<0.000012	<0.0000086	0.000025J	<0.000021	0.000027J	<0.000017	<0.000025	<0.000022	<0.000015	0.000019J	0.000034J	0.000023J

Notes:

- 1) **Bold** = method detection limit exceeds a Tier 1 GRO listed in 35 IAC Part 742 or in the Non-TACO Objectives tables
- 2) <0.0122 = concentration less than the laboratory reporting limit or method detection limit
- 3) J = estimated concentration above the adjusted method detection limit and below the adjusted reporting limit
- 4) --- = no toxicity criteria available for the route of exposure

EXHIBIT C



TriCore Environmental, LLC
 2368 Corporate Lane, Suite 116
 Homewood, IL 60563
 (630) 520-9973

Village of Homewood
 2020 Chestnut
 Homewood, IL 60430

**AREA SUBJECT TO HIGHWAY
 AUTHORITY AGREEMENT**
 GUPTA, RAMESH
 2124 W. 183rd STREET
 HOMEWOOD, IL 60430

DRAWN BY: JO
 APPROVED BY: KTM
 SCALE: 1" = 30'
 DATE: 9/9/2024
 DRAWING FILE: MD21-156

EXHIBIT
C

APPROX. SCALE IN FEET
 ALL MAP LOCATIONS ARE APPROXIMATE

LEGEND	
	PROPERTY BOUNDARY
	EXCAVATION LIMITS
	SOIL BORING LOCATION
	MONITORING WELL LOCATION
	DESTROYED MONITORING WELL LOCATION
	SOIL SAMPLE LOCATION
	AREA SUBJECT TO VILLAGE OF HOMEWOOD HIGHWAY AUTHORITY AGREEMENT