



October 24, 2017

City of Detroit Department of Public Works  
City Engineering & Street Maintenance Divisions  
Coleman A. Young Municipal Center  
2 Woodward Avenue, Suite 611  
Detroit, Michigan 48226

Re: Notice of Migration of Contamination  
From 1415 Springwells Court, Detroit, MI, Tax ID 18000044.003 (MDOT Parcel 5002)  
And/or portion of 1400 Springwells Court, Detroit, MI, Tax ID 18000044.012 (MDOT Acquisition Parcel 5004)  
Potentially toward Springwells Court right-of-way and/or Aggregate Drive  
Notification No. 5002.5004-ROW

Dear City Engineering & Street Maintenance Divisions:

The Mannik Smith Group, Inc. ("MSG"), on behalf of the Michigan Department of Transportation ("MDOT"), has directed or conducted underground environmental testing at 1415 and 1400 Springwells Court, Detroit, Michigan ("the Site") in relation to the Gordie Howe International Bridge project underway in the vicinity of the right-of-ways referenced above ("the subject property").

The Michigan Department of Environmental Quality ("MDEQ") requires distribution of the enclosed a Notice of Migration of Contamination form when there is evidence that environmental contamination at one property has or may have affected nearby properties. Hazardous substance(s) were identified in soil and/or groundwater sample(s) collected at the Site at concentration(s) that exceed Generic Residential Cleanup Criteria and Screening Levels established by the MDEQ.

At this time, it is not known if the subject property has been affected by the environmental contamination at the Site. Also, the identification of hazardous substance(s) at the Site does not necessarily mean a hazardous situation or immediate danger currently exists. MSG, on behalf of the MDOT, is providing this notice to you as a precautionary measure and for your general awareness of environmental conditions at the Site.

Please review the enclosed document and if you have any questions regarding the Notice of Migration of Contamination please contact Karen Williams of the MDEQ at 586-753-3884. If you have general questions regarding the contents of this letter please contact Walter Bolt of MSG at 734-397-3100, extension 6025 or Jim Woodruff of the MDOT at 517-241-9115.

Sincerely,

Walter J. Bolt, CPG  
Project Manager  
Environmental Owners Representative Consultant  
Gordie Howe International Bridge Project

CC: Jim Woodruff – MDOT  
Karen Williams – MDEQ RRD Project Manager  
Paul Max – General Manager, Environmental Affairs, City of Detroit BSEED  
Anita Harrington – Environmental Specialist II, City of Detroit BSEED

RECEIVED OCT 30 2017

TECHNICAL SKILL.  
CREATIVE SPIRIT.

5002.5004.Notice Cover Letter.DetroitDPW.docx

For DEQ Use Only
ITS # _____
Site ID # _____
Category Code: _____

**NOTICE OF MIGRATION OF CONTAMINATION (FORM EQP4482 REV. 4/16)**

*(Under the authority of Part 201, Natural Resources and Environmental Protection Act, 1994 Act 451, as amended, (NREPA) and the Rules promulgated thereunder)*

An owner or operator of property that is a facility, and/or who is subject to MCL324.20107a, and who has reason to believe that a hazardous substance is emanating from, has emanated from, or is likely to be emanating from the property and migrating beyond the boundaries of the property that he or she owns or operates is required under R 299.51017(1) and MCL 324.20114(1)(b)(ii) & (iii) to notify the Michigan Department of Environmental Quality (DEQ) and affected property owners. Submission of this notice does not fulfill the notification requirements of MCL 324.21309a.

The notice must be provided within 45 days (MCL 324.20107a) or within 30 days (MCL 324.20114) after the owner or operator has reason to believe that hazardous substances have migrated, or are likely to have migrated, to or beyond the boundary of his or her property (see R 299.51017 for exceptions that apply to parties subject to MCL 324.20107a).

Use of this form is mandatory for the notice required by R 299.51017(1) and may also be used by parties subject to MCL 324.20114(1)(b)(ii) & (iii). This form may also be used to provide notice to affected property owners as required by those rules.

If a person holds a permit for an oil and gas well under Part 615, Supervisor of Wells, of the NREPA and there is a release from the oil and gas exploration or production activities, that person shall give notice to the DEQ and to the owner of the surface rights of the property.

If a person holds an easement and there is a release from the easement holder's activities, that person shall provide notice to the DEQ and to the grantor of the easement, or the grantor's successor in interest, if any.

Completing this notice in no way relieves a person who is subject to MCL 324.20114 from the responsibility to undertake required response activities.

This notice must be sent to the DEQ office that serves the county in which the property is located. A list of DEQ offices is available at [www.michigan.gov/deqducare](http://www.michigan.gov/deqducare), or by calling the Remediation and Redevelopment Division's Lansing office at 517-284-5187. The DEQ will not prepare acknowledgement of receipt of these notices. The sender is responsible for sending the report using a method that provides proof of delivery if such proof is desired. Please label the outside of the envelope "Migration Notice." Additional guidelines for the compliance with the requirements of R 299.51017(1) or MCL 324.20114(1)(b)(ii) & (iii) are available at [www.michigan.gov/deqducare](http://www.michigan.gov/deqducare).

THIS NOTICE IS PROVIDED PURSUANT TO:      R 299.51017          MCL 324.20114(1)      
*(check both, if applicable)*

Please provide the following information as completely as possible.

1. Name and location of the property that hazardous substances are emanating from:      2. Status relative to the property:  
(Check one or both, as applicable.)

Name: MI Dept. of Transportation (MDOT) Parcel 5002 & Acquisition Parcel 5004      Owner   
Address: 1415 & portion of 1400 Springwells Court      Operator   
Location: Michigan      City/County: Detroit/Wayne  
Property Tax Identification Number, or if applicable, the ward and item number:  
18000044.003 & portion of 18000044.012

Parcel 5002: Latitude (decimal degrees): 42.290325 °N      Longitude (decimal degrees): -83.102952 °W  
Acq. Parcel 5004: Latitude (decimal degrees): 42.292064 °N      Longitude (decimal degrees): -83.104541 °W

Reference Point for Latitude and Longitude:  
Centers of Sites:       Main/front door:       Front gate/main entrance:       Other:   
Collection Method:      Survey:       Interpolation:       GPS:



2. Provide any additional ID numbers associated with the property (e.g., EPA ID No., BEA No., Part 213 facility ID No., etc.):

GHIB MDOT Parcels 5002 & 5004; BEA 201707555LV; AOC-ERD-99-005; CNTS-ERD-99-01; Part 201 Site ID 82001593; Part 213 Facility ID 00014312; EPA ID MID099114704; MERA Site ID 82002800; CNTS-RRD-16-001

3. Name, address, and telephone number of the property owner, operator, or other party submitting the notice:

Name: MDOT Bureau of Development, Environmental Services Section  
Address: 425 W. Ottawa Street, P.O. Box 30050  
City/State: Lansing, MI, 48909  
Telephone Number: 517-241-9115

4. Name, address and telephone number of a contact person familiar with the content of the notice:

Name: Walter Bolt of The Mannik & Smith Group, Inc. Environmental Owner's Rep Consultant to MDOT  
Address: 2365 Haggerty Road South  
City/State: Canton, MI 48188  
Telephone Number: 734-397-3100 x. 6025

5. If this Notice is provided pursuant to R 299.51017, provide the address and other location information for the adjacent property(s) onto which contamination is migrating, has migrated, or is likely to migrate.

If this Notice is provided pursuant to MCL Section 324.20114(1), provide the address and other location information for each property onto which contamination has migrated. Notice should be sent to the property owner of record. If the impacted property is owned by the State of Michigan, notice should be sent to the department managing the property (e.g., a prison, state park, etc.). Notices to the Michigan Department of Transportation (MDOT) for state owned roadways should be sent to Contaminated Site Specialist, Environmental Services Section, MDOT-Bureau of Development, 425 W. Ottawa Street, P.O. Box 30050, Lansing, MI 48909. If the impacted property is owned by the State of Michigan, notice should be sent to the department managing the property (i.e. a prison, state park, etc.).

Address: 1301 Springwells Court  
City/State: Detroit, MI  
Property Tax ID number: 18000044.002  
Other: Lafarge Holcim / Lafarge Midwest, Inc.  
(adjacent property owner, easement holder)      Notified? No  Yes       Date: October 24, 2017

Address: 1441 Springwells Court  
City/State: Detroit, MI  
Property Tax ID number: 18000044.004  
Other: McCoig Concrete Company, LLC  
(adjacent property owner, potential easement holder)      Notified? No  Yes       Date: October 24, 2017

Address: remainder of 1400 Springwells Court  
City/State: Detroit, MI  
Property Tax ID number: remainder of 18000044.012  
Other: City of Detroit Planning and Development Dept.  
(potential adjacent property owner)      Notified? No  Yes       Date: October 24, 2017

Address: remainder of 1400 Springwells Court  
City/State: Detroit, MI  
Property Tax ID number: remainder of 18000044.012  
Other: City of Detroit Economic Development Corp.  
(potential adjacent property owner)      Notified? No  Yes       Date: October 24, 2017



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
REMEDIATION AND REDEVELOPMENT DIVISION

Address: 1600 Springwells Court  
City/State: Detroit, MI  
Property Tax ID number: 18000044.010  
Other: City of Detroit Economic Development Corp.  
(adjacent property owner)  
Notified? No  Yes  Date: October 24, 2017

Address: 7701 West Jefferson Avenue  
City/State: Detroit, MI  
Property Tax ID number: 18000043  
Other: Riverview Trenton Railroad Company &  
Central Transport, LLC (adjacent property owner)  
Notified? No  Yes  Date: October 24, 2017

Address: 1475 Springwells Court  
City/State: Detroit, MI  
Property Tax ID number: 18000044.005  
Other: Detroit Windsor Truck Ferry / Barge Transport,  
Inc. (adjacent property owner, potential interest holder)  
Notified? No  Yes  Date: October 24, 2017

Address: 7601 Aggregate Drive  
City/State: Detroit, MI  
Property Tax ID number: 18000044.011  
Other: Honeywell International Inc.  
(adjacent property owner)  
Notified? No  Yes  Date: October 24, 2017

Address: 1400 Springwells Court  
City/State: Detroit, MI  
Property Tax ID number: 18000044.012  
Other: Honeywell International Inc. (easement holder)  
Notified? No  Yes  Date: October 24, 2017

Address: 1415 & 1400 Springwells Court  
City/State: Detroit, MI  
Property Tax ID number: 18000044.003 &  
18000044.012  
Other: Minergy LLC / Minergy Detroit LLC  
(potential interest holder)  
Notified? No  Yes  Date: October 24, 2017

Address: 1415 & 1400 Springwells Court  
City/State: Detroit, MI  
Property Tax ID number: 18000044.003 &  
18000044.012  
Other: Delray Connecting Railroad Company  
(potential interest holder)  
Notified? No  Yes  Date: October 24, 2017

Address: 1415 & 1400 Springwells Court  
City/State: Detroit, MI  
Property Tax ID number: 18000044.003 &  
18000044.012  
Other: United States Steel Corporation  
(potential interest holder)  
Notified? No  Yes  Date: October 24, 2017



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
REMEDIATION AND REDEVELOPMENT DIVISION

Address: 2 Woodward Avenue, Ste. 611  
City/State: Detroit, MI, 48226  
Property Tax ID number: NA  
Other: City of Detroit (Springwells Court & Aggregate  
Drive adjacent to 1415 & 1400 Springwells Court /  
18000044.003 & 18000044.012)

Notified? No  Yes  Date: October 24, 2017

Address: 735 Randolph  
City/State: Detroit, MI, 48226  
Property Tax ID number: NA  
Other: Detroit Water & Sewerage Department  
(utility holder)

Notified? No  Yes  Date: October 24, 2017

Address: One Energy Plaza, Ste. 1935  
City/State: Detroit, MI, 48226  
Property Tax ID number: NA  
Other: Detroit Edison, DTE (utility holder,  
potential easement holder)

Notified? No  Yes  Date: October 24, 2017

Address: 27175 Energy Way  
City/State: Novi, MI, 48377  
Property Tax ID number: NA  
Other: International Transmission Company (ITC)  
(utility holder)

Notified? No  Yes  Date: October 24, 2017

Address: 735 Randolph Street, Ste. 1900  
City/State: Detroit, MI, 48226  
Property Tax ID number: NA  
Other: Great Lakes Water Authority (utility holder)

Notified? No  Yes  Date: October 24, 2017

Address: 12775 Lydon Street  
City/State: Detroit, MI, 48227  
Property Tax ID number: NA  
Other: Comcast/Xfinity (utility holder)

Notified? No  Yes  Date: October 24, 2017

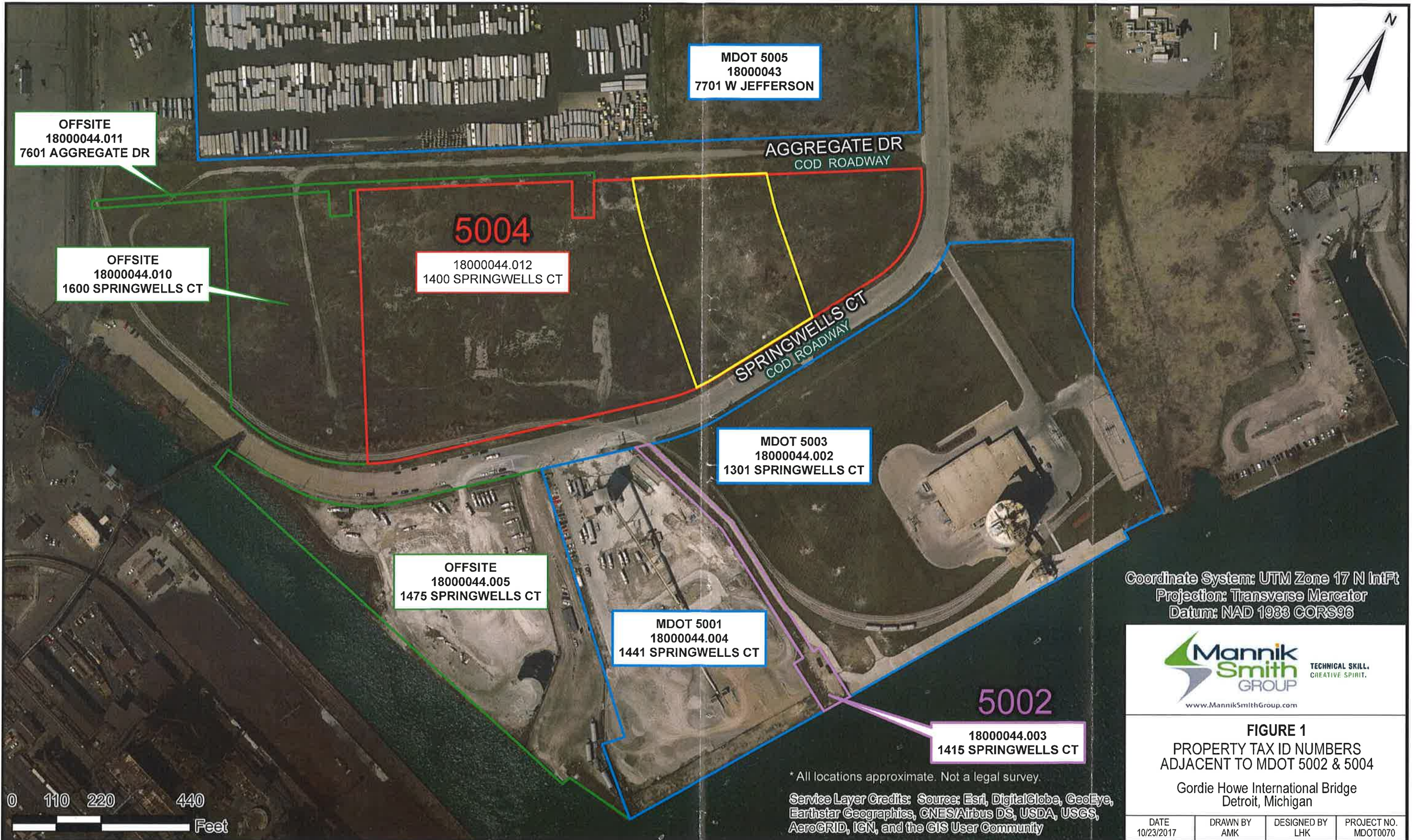
Address: 208 S. Akard Street  
City/State: Dallas, TX, 75202  
Property Tax ID number: NA  
Other: AT&T Headquarters (utility holder)

Notified? No  Yes  Date: October 24, 2017

(Attach additional pages as needed) PLEASE SEE ATTACHED MAP OF PROPERTY TAX ID NUMBERS.



# MAP OF PROPERTY TAX ID NUMBERS



Date Saved: 10/23/2017 5:36:16 PM  
Path: S:\Projects\Project K-OMDOT0070\ENGAPPS\GIS\Map\_Files\Notification Maps\5002\_5004\_TaxID\_Landscape.mxd

- 5002
- 5004
- 5004 ACQUISITION PARCEL
- ADJACENT MDOT PARCELS
- OFFSITE PARCELS





6. Complete the Table on Page 7 of this Form for each hazardous substance which has migrated, or is likely to have migrated, beyond the property boundary at a concentration that exceeds a Generic Residential Cleanup Criterion developed by the DEQ pursuant to MCL 324.20120a(1). Complete and attach additional copies of Page 7, if necessary, to list all hazardous substances that must be reported. Include a scaled map or drawing that shows the location of sampling points identified on the Table on Page 7, the property boundaries, and the adjacent property owners if providing notice pursuant to R 299.1017(1) or all impacted property owners if providing notice pursuant to MCL 324.20114(1).
7. Provide a summary of the information which shows that contamination is emanating from, or has emanated from, and is present beyond the boundary of the source property at a concentration which exceeds the generic residential criteria developed by the DEQ pursuant to MCL 324.20120a(1)(a). This summary shall identify the environmental media affected, specific hazardous substances, and the concentrations of those hazardous substances in all affected environmental media at the property boundary and in any sample locations beyond the property boundary. The summary shall also describe the basis for the conclusion that the contamination is emanating, has emanated, or is present beyond the boundary of the source property, including whether the conclusion is based on groundwater analytical data or fate and transport modeling, both, or neither.
8. If the person making this notice has reason to believe that a migrating hazardous substance has affected, or is likely to affect, a private or public water supply, then that water supply must be identified here:

NA

- |   | YES                                 | NO                                  |
|---|-------------------------------------|-------------------------------------|
| 9. Is this notice being submitted within the timeframes established under R 299.51017 and/or MCL 324.20114(1), as applicable? | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 10. Is this notice in addition to a notice that was submitted prior to <i>December 21, 2002</i> ? (R 299.51017(4)(c))         | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 11. Is this notice related to an oil and gas well permit (R 299.51017(2))?<br>Permit #:                                       | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 12. Is this notice related to an easement (R 299.51017(3))?<br>(NOTE: All easement grantors <i>must</i> receive this notice.) | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 13. Has surface water been affected (R 299.51017(1))?<br>(If yes, please identify the affected surface water body.)           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

**CERTIFICATION:**

With my signature below, I certify that I am the owner of the facility or that I am legally authorized to execute this notice on behalf of the owner or operator named on this form, and that to the best of my knowledge and belief the above representations are complete and accurate. I understand that intentionally submitting false information to the DEQ is a felony and may result in fines up to \$25,000 for each violation.

Signature Walter J. Bolt  
(Owner or person legally authorized to bind the person making this report)

Date 10/24/2017

Name (Typed or Printed) Walter J. Bolt

Title (Typed or Printed) Project Manager, Environmental Owners Representative Consultant, Gordie Howe International Bridge Project



See Item 6 on Page 6 of this Form for instructions to be used in completing this table. Attach additional pages if necessary. The information to be included in each column of the table is:

- Column A Name of hazardous substance.
- Column B Chemical Abstract Service (CAS) Number for the hazardous substance.
- Column C Maximum hazardous substance concentration measured on the property, expressed in parts per billion (e.g., ug/L or ug/Kg). Report maximum concentration separately for each environmental medium.
- Column D Sample location for Column C (relate to label on map).
- Column E Environmental medium in which concentration reported in Column C was measured (e.g., soil or groundwater).
- Column F Distance from point of maximum measured concentration (Column D) to property boundary, in direction of contaminant migration, if direction is known or can reasonably be inferred. If direction is unknown, list distance to nearest property boundary.
- Column G Direction of contaminant migration, if known.
- Column H Concentration closest to property boundary, if known. If a concentration lower than the maximum concentration reported in Column C has been measured at a point closer to the property boundary in the direction of contaminant migration, use Column I to list the concentration that was measured closest to the property boundary in the direction of contaminant migration.
- Column I Sample location for Column H (relate to label on map).
- Column J Environmental medium for measurement reported in Column H, if applicable.

**PLEASE SEE ATTACHED TABLE 1**

A Hazardous Substance	B CAS Number	C Maximum Concentration	D Sample Location for "C"	E Environmental Medium for "C"	F Distance to Property Boundary	G Direction of Migration	H Boundary Concentration	I Sample Location for "H"	J Environmental Medium for "H"

Total Number Samples Collected: \_\_\_\_\_ Total Number of Samples Exceeding Criteria: \_\_\_\_\_

**A scaled map or drawing showing these locations and the property boundaries must be submitted with this Notice**  
**PLEASE SEE ATTACHED FIGURES 2 & 3**



TABLE 1  
DEQ NOTICE OF MIGRATION ATTACHMENT

A	B	C	D	E	F	G	H	I	J
Hazardous Substance	CAS Number	Maximum Concentration	Sample Location for "C"	Environmental Medium for "C"	Distance to Property Boundary	Direction of Migration	Boundary Concentration	Sample Location for "H"	Environmental Medium for "H"
Benzene	71-43-2	620,000	5004_SB-02_4-6_S_SUP_20170621	Soil	60 feet	Unknown	-	-	-
Ethylbenzene	100-41-4	260,000	5004_SB-02_4-6_S_SUP_20170621	Soil	60 feet	Unknown	-	-	-
Isopropylbenzene	98-82-8	15,000	5004_SB-02_4-6_S_SUP_20170621	Soil	60 feet	Unknown	-	-	-
Styrene	100-42-5	42,000	5004_SB-01_12-14_S_SUP_20170620	Soil	60 feet	Unknown	-	-	-
Toluene	108-88-3	430,000	5004_SB-02_12-14_S_SUP_20170621	Soil	60 feet	Unknown	-	-	-
1,2,4-Trimethylbenzene	95-63-6	200,000	5004_SB-02_4-6_S_SUP_20170621	Soil	60 feet	Unknown	-	-	-
1,3,5-Trimethylbenzene	108-67-8	110,000	5004_SB-02_4-6_S_SUP_20170621	Soil	60 feet	Unknown	-	-	-
Xylenes (Total)	1330-20-7	960,000	5004_SB-02_4-6_S_SUP_20170621	Soil	60 feet	Unknown	-	-	-
Acenaphthene	83-32-9	1,300,000	5004_SB-01_4-6_S_SUP_20170621	Soil	60 feet	Unknown	-	-	-
Acenaphthylene	208-96-8	3,800,000	5004_SB-01_4-6_S_SUP_20170620	Soil	60 feet	Unknown	-	-	-
Anthracene	120-12-7	3,700,000	5004_SB-01_4-6_S_SUP_20170620	Soil	60 feet	Unknown	-	-	-
Aniline	62-53-3	18,000	5004_SB-01_4-6_S_SUP_20170620	Soil	60 feet	Unknown	-	-	-
Benzo(a)anthracene	56-55-3	3,600,000	5004_SB-01_4-6_S_SUP_20170620	Soil	60 feet	Unknown	-	-	-
Benzo(b)fluoranthene	205-99-2	3,700,000	5004_SB-01_4-6_S_SUP_20170620	Soil	60 feet	Unknown	-	-	-
Benzo(k)fluoranthene	207-08-9	780,000	5004_SB-01_4-6_S_SUP_20170620	Soil	60 feet	Unknown	-	-	-
Benzo(a)pyrene	50-32-8	2,800,000	5004_SB-01_4-6_S_SUP_20170620	Soil	60 feet	Unknown	-	-	-
Carbazole	86-74-8	1,700,000	5004_SB-01_4-6_S_SUP_20170620	Soil	60 feet	Unknown	-	-	-
Chrysene	218-01-9	2,900,000	5004_SB-01_4-6_S_SUP_20170620	Soil	60 feet	Unknown	-	-	-
Dibenz(a,h)anthracene	53-70-3	420,000	5004_SB-01_4-6_S_SUP_20170620	Soil	60 feet	Unknown	-	-	-
Dibenzofuran	132-64-9	3,500,000	5004_SB-01_4-6_S_SUP_20170620	Soil	60 feet	Unknown	-	-	-
2,4-Dimethylphenol	105-67-9	180,000	5004_SB-01_4-6_S_SUP_20170620	Soil	60 feet	Unknown	-	-	-
Fluoranthene	206-44-0	8,500,000	5004_SB-01_4-6_S_SUP_20170620	Soil	60 feet	Unknown	-	-	-
Fluorene	86-73-7	5,500,000	5004_SB-01_4-6_S_SUP_20170620	Soil	60 feet	Unknown	-	-	-
Indeno(1,2,3-cd)pyrene	193-39-5	2,100,000	5004_SB-01_4-6_S_SUP_20170620	Soil	60 feet	Unknown	-	-	-
2-Methylnaphthalene	91-57-6	4,300,000	5004_SB-01_4-6_S_SUP_20170620	Soil	60 feet	Unknown	-	-	-
Total Methylphenols	1319-77-3	730,000	5004_SB-01_8-10_S_SUP_20170620	Soil	60 feet	Unknown	-	-	-
Naphthalene	91-20-3	28,000,000	5004_SB-01_8-10_S_SUP_20170620	Soil	60 feet	Unknown	-	-	-
Phenanthrene	85-01-3	15,000,000	5004_SB-01_4-6_S_SUP_20170620	Soil	60 feet	Unknown	-	-	-
Phenol	108-95-2	380,000	5004_SB-01_4-6_S_SUP_20170620	Soil	60 feet	Unknown	-	-	-
Pyrene	129-00-0	9,200,000	5004_SB-01_4-6_S_SUP_20170620	Soil	60 feet	Unknown	-	-	-
Antimony	7440-36-0	8,000	5004_SB-02_4-6_S_SUP_20170621	Soil	60 feet	Unknown	-	-	-
Arsenic	7440-38-2	61,000	5002_SB-02_8-10_S_SUP_20170620	Soil	10 feet	Unknown	-	-	-
Chromium (Total)	7440-47-3	93,000	5002_SB-02_0-2_S_SUP_20170620	Soil	10 feet	Unknown	-	-	-
Cobalt	7440-48-4	11,000	5002_SB-02_8-10_S_SUP_20170620	Soil	10 feet	Unknown	-	-	-
Copper	7440-50-8	170,000	5004_SB-08_4-6_S_SUP_20170621	Soil	45 feet	Unknown	-	-	-
Iron	7439-89-6	120,000,000	5002_SB-02_0-2_S_SUP_20170620	Soil	10 feet	Unknown	-	-	-
Lead	7439-92-1	2,100,000	5004_SB-05_3-4_S_SUP_20170621	Soil	60 feet	Unknown	-	-	-
Magnesium	7439-95-4	49,000,000	5002_SS-01_0-5_S_SUP_20170620	Soil	5 feet	Unknown	-	-	-
Mercury	7439-97-6	25,000	5004_SB-01_8-10_S_SUP_20170620	Soil	60 feet	Unknown	-	-	-
Nickel	7440-02-0	79,000	5004_SB-08_4-6_S_SUP_20170621	Soil	45 feet	Unknown	-	-	-
Selenium	7782-49-2	9,800	5004_SB-01_8-10_S_SUP_20170620	Soil	45 feet	Unknown	-	-	-
Zinc	7440-66-6	480,000	5004_SB-08_4-6_S_SUP_20170621	Soil	45 feet	Unknown	-	-	-
Cyanide	57-12-5	360,000	5004_SB-03_11-13_S_SUP_20170621	Soil	150 feet	Unknown	-	-	-
Chloride	16887-00-6	670,000	5004_SB-01_12-14_S_SUP_20170620	Soil	60 feet	Unknown	-	-	-
Ammonia (as Nitrogen)	7664-41-7	600,000	5004_SB-01_12-14_S_SUP_20170620	Soil	60 feet	Unknown	-	-	-
Asbestos	1332-21-4	14,000,000	5004_SB-06_5-7_S_SUP_20170621	Soil	45 feet	Unknown	-	-	-
Benzene	71-43-2	3,500	5004_SB-01_10-15_W_SUP_20170622	Groundwater	60 feet	Unknown	-	-	-
Ethylbenzene	100-41-4	210	5004_SB-01_10-15_W_SUP_20170622	Groundwater	60 feet	Unknown	-	-	-
Styrene	100-42-5	500	5004_SB-01_10-15_W_SUP_20170622	Groundwater	60 feet	Unknown	-	-	-
Toluene	108-88-3	1,800	5004_SB-01_10-15_W_SUP_20170622	Groundwater	60 feet	Unknown	-	-	-
1,2,4-Trimethylbenzene	95-63-6	390	5004_SB-01_10-15_W_SUP_20170622	Groundwater	60 feet	Unknown	-	-	-
1,3,5-Trimethylbenzene	108-67-8	250	5004_SB-01_10-15_W_SUP_20170622	Groundwater	60 feet	Unknown	-	-	-
Xylenes (Total)	1330-20-7	1,600	5004_SB-01_10-15_W_SUP_20170622	Groundwater	60 feet	Unknown	-	-	-
Acenaphthene	83-32-9	110	5004_SB-01_10-15_W_SUP_20170622	Groundwater	60 feet	Unknown	-	-	-
Acenaphthylene	208-96-8	1,200	5004_SB-01_10-15_W_SUP_20170622	Groundwater	60 feet	Unknown	-	-	-
Anthracene	120-12-7	770	5004_SB-01_10-15_W_SUP_20170622	Groundwater	60 feet	Unknown	-	-	-
Aniline	62-53-3	90	5004_SB-01_10-15_W_SUP_20170622	Groundwater	60 feet	Unknown	-	-	-
Benzo(a)anthracene	56-55-3	920	5004_SB-01_10-15_W_SUP_20170622	Groundwater	60 feet	Unknown	-	-	-
Benzo(b)fluoranthene	205-99-2	790	5004_SB-01_10-15_W_SUP_20170622	Groundwater	60 feet	Unknown	-	-	-
Benzo(k)fluoranthene	207-08-9	250	5004_SB-01_10-15_W_SUP_20170622	Groundwater	60 feet	Unknown	-	-	-
Benzo(g,h,i)perylene	191-24-2	290	5004_SB-01_10-15_W_SUP_20170622	Groundwater	60 feet	Unknown	-	-	-
Benzo(a)pyrene	50-32-8	540	5004_SB-01_10-15_W_SUP_20170622	Groundwater	60 feet	Unknown	-	-	-
1,1'-Biphenyl	92-52-4	110	5004_SB-01_10-15_W_SUP_20170622	Groundwater	60 feet	Unknown	-	-	-
Carbazole	86-74-8	440	5004_SB-01_10-15_W_SUP_20170622	Groundwater	60 feet	Unknown	-	-	-
Chrysene	218-01-9	580	5004_SB-01_10-15_W_SUP_20170622	Groundwater	60 feet	Unknown	-	-	-
Dibenz(a,h)anthracene	53-70-3	94	5004_SB-01_10-15_W_SUP_20170622	Groundwater	60 feet	Unknown	-	-	-
Dibenzofuran	132-64-9	810	5004_SB-01_10-15_W_SUP_20170622	Groundwater	60 feet	Unknown	-	-	-
2,4-Dimethylphenol	105-67-9	670	5004_SB-01_10-15_W_SUP_20170622	Groundwater	60 feet	Unknown	-	-	-
Fluoranthene	206-44-0	2,000	5004_SB-01_10-15_W_SUP_20170622	Groundwater	60 feet	Unknown	-	-	-
Fluorene	86-73-7	1,400	5004_SB-01_10-15_W_SUP_20170622	Groundwater	60 feet	Unknown	-	-	-
Indeno(1,2,3-cd)pyrene	193-39-5	350	5004_SB-01_10-15_W_SUP_20170622	Groundwater	60 feet	Unknown	-	-	-
2-Methylnaphthalene	91-57-6	1,600	5004_SB-01_10-15_W_SUP_20170622	Groundwater	60 feet	Unknown	-	-	-
Total Methylphenols	1319-77-3	2,650	5004_SB-01_10-15_W_SUP_20170622	Groundwater	60 feet	Unknown	-	-	-
Naphthalene	91-20-3	11,000	5004_SB-01_10-15_W_SUP_20170622	Groundwater	60 feet	Unknown	-	-	-
N-Nitrosodipropylamine	621-64-7	5.7	5004_SB-07_10-15_W_SUP_20170621	Groundwater	155 feet	Unknown	-	-	-
Phenanthrene	85-01-8	3,500	5004_SB-01_10-15_W_SUP_20170622	Groundwater	60 feet	Unknown	-	-	-
Phenol	108-95-2	780	5004_SB-01_10-15_W_SUP_20170622	Groundwater	60 feet	Unknown	-	-	-
Pyrene	129-00-0	1,900	5004_SB-01_10-15_W_SUP_20170622	Groundwater	60 feet	Unknown	-	-	-
Aluminum	7429-90-5	5,100	5004_SB-03_10-15_W_SUP_20170621	Groundwater	150 feet	Unknown	-	-	-
Arsenic	7440-38-2	63	5004_SB-03_10-15_W_SUP_20170622	Groundwater	60 feet	Unknown	-	-	-
Chromium (Total)	7440-47-3	15	5004_SB-03_10-15_W_SUP_20170622	Groundwater	150 feet	Unknown	-	-	-
Copper	7440-50-8	110	5004_SB-01_10-15_W_SUP_20170622	Groundwater	60 feet	Unknown	-	-	-
Iron	7439-89-6	20,000	5004_SB-07_10-15_W_SUP_20170621	Groundwater	155 feet	Unknown	-	-	-
Lead	7439-92-1	390	5004_SB-01_10-15_W_SUP_20170622	Groundwater	60 feet	Unknown	-	-	-
Manganese	7439-96-5	720	5004_SB-07_10-15_W_SUP_20170621	Groundwater	60 feet	Unknown	-	-	-
Mercury	7439-97-6	59	5004_SB-01_10-15_W_SUP_20170622	Groundwater	155 feet	Unknown	-	-	-
Sodium	17341-25-2	390,000	5004_SB-01_10-15_W_SUP_20170622	Groundwater	60 feet	Unknown	-	-	-
Vanadium	7440-62-2	41	5004_SB-01_10-15_W_SUP_20170622	Groundwater	60 feet	Unknown	-	-	-
Zinc	7440-66-6	1,100	5004_SB-01_10-15_W_SUP_20170622	Groundwater	60 feet	Unknown	-	-	-
Cyanide	57-12-5	450	5004_SB-03_10-15_W_SUP_20170621	Groundwater	150 feet	Unknown	-	-	-
Chloride	16887-00-6	730,000	5004_SB-01_10-15_W_SUP_20170622	Groundwater	60 feet	Unknown	-	-	-
Sulfate	14808-79-8	600,000	5004_SB-01_10-15_W_SUP_20170622	Groundwater	60 feet	Unknown	-	-	-
Ammonia (as Nitrogen)	7664-41-7	200,000	5004_SB-01_10-15_W_SUP_20170622	Groundwater	60 feet	Unknown	-	-	-
pH	-	12	5002_SB-01_8-13_W_SUP_20170620	Groundwater	25 feet	Unknown	-	-	-



Total Number of Samples Collected: 46 soil, 5 groundwater

Total Number of Samples Exceeding Criteria: 46 soil, 5 groundwater



Prepared By:  
 Superior Environmental Corp  
 1128 Franklin Street  
 Marne, MI 49435  
 (616) 667-4000  
[www.superiorenvironmental.com](http://www.superiorenvironmental.com)

**LEGEND**

-  Soil Boring (SB) or Surface Soil (SS) Sample Location
-  Estimated Extent of Soil Impact above Residential and Non Residential Generic Cleanup Criteria to 28+ feet bgs, and Groundwater Impact above Residential and Non-Residential Generic Cleanup criteria (8-28 feet bgs)

**SOIL & GROUNDWATER MAP OF IMPACT  
 GORDIE HOWE INTERNATIONAL BRIDGE  
 MDOT PARCEL #5001 & #5002  
 1441 & 1415 SPRINGWELLS COURT  
 DETROIT, MICHIGAN**

PROJECT NO: BC3876-SE T07 & T08	CREATED BY: D.LANCASTER	APPROVED BY: GREG HILTY
FILE: P:\BC3876.00\CAD\T07&T08\BC3876SE	DATE: 8/7/17	FIGURE: 2







Prepared By:  
 Superior Environmental Corp  
 1128 Franklin Street  
 Marne, MI 49435  
 (616) 667-4000

LEGEND

Soil Boring Location

Estimated Extent of Soil Impact above Residential and Non Residential Generic Cleanup Criteria to 24+ feet bgs, and Groundwater Impact above Residential and Non-Residential Generic Cleanup criteria (7-24 feet bgs)

SOIL AND GROUNDWATER MAP OF IMPACT  
 GORDIE HOWE INTERNATIONAL BRIDGE  
 MDOT PARCEL #5004  
 1400 SPRINGWELLS COURT  
 DETROIT, MICHIGAN

PROJECT NO: BC3876-SD T18	CREATED BY: D.LANCASTER	APPROVED BY: GREG HILTY
FILE: P:/BC3876.00/CAD/T18/BC3876SD	DATE: 8/10/17	FIGURE: 3

