



September 15, 2025

Sky Property Group Inc.
1 Steeles Avenue East
Toronto, ON M2M 3Y2

Re: GTR-23012833-B1 Phase One and Two Environmental Site Assessment Update
Neyagawa Boulevard, Oakville, Ontario

Dear Mr. Marc J. Pourvahidi,

EXP Services Inc. (EXP) was retained by Sky Property Group Inc. to complete a Phase One and Two Environmental Site Assessment (ESA) Update at the above noted property in support of a Site Plan Approval from the Town of Oakville. For the purposes of this report, the terms “site” and “Phase One property” refer to the property on the northeast side of Neyagawa Boulevard, between Burnhamthorpe Road West and Highway 407, in Oakville Ontario. The property has no municipal address.

Phase One and Two ESAs were completed by EXP in compliance with Ontario Regulation (O.Reg.) 153/04. The objective of this Phase One ESA Update is to assess if there have been any material changes to the site or the Phase One Study Area since the previous Phase One ESA by EXP and dated November 13, 2023 in order to support the Site Plan Application and Zoning requirements with the Town of Oakville (the ‘Town’).

The scope of work for the Phase One ESA Update included the following:

- Site Visit.

As the municipal directories, fire insurance plans, and most other records predate 2023 and are not subject to change, they were not provided in this update but were used to determine areas of potential environmental concern (APECs) at the site based on conclusions in the 2023 Phase One ESA. Our Limitations and Use of Report are attached as Appendix A.

1. Site Description

The Site is situated at the northern corner of the intersection of Neyagawa Boulevard and Burnhamthorpe Road West, as shown on Figure 1. The Site measures approximately 2.4050 hectares (5.943 acres) in area. The Site has never been developed, and has historically been vacant since prior to 1954. The Property Survey Plan showing the Site boundary is presented in Appendix B.

Municipal Address	None
Current Land Use	Agricultural
Proposed Land Use	Residential
Legal Description	Part of Lot 20, Concession 2, Traf NDS, Parts 1&2 20R16345, Except Part 4 20R19373, Part 2 HR1788345
Property Identification Number (PIN)	24929-6891 (LT)

Approximate Universal Transverse Mercator (UTM) coordinates	NAD83 17T- 4815149 m N 600070 m E
Accuracy Estimate of UTM	10-15 m
Site Area	2.4050 hectares (5.943 acres)
Property Owners, Owner Contact and Address	Mr. Marc J. Pourvahidi Sky Property Group Inc. 1 Steeles Avenue East Toronto, ON M2M 3Y2

2. Site Conditions

The Site and surrounding areas are generally located within the South Slope. The geology of the Site and surrounding area is comprised of till moraines and till plains, which comprises of silty to clayey deposits. The bedrock in the general area consists of shale, limestone, dolostone, and siltstone belonging to the Queenston Formation, Georgian Bay, Blue Mountain and Billings Formations and Collingwood and Eastview Members. Based on the Phase Two ESA (EXP, 2023b), shale bedrock was encountered below the silt till at BH1D to BH3D at depths ranging from approximately 8.7 and 15.3 metres below ground surface (mbgs). Based on the topographic map, the Site slopes gently towards the south in the southern portion and north in the northern portion of the Site. East Sixteen Mile Creek is located approximately 385 m north of the Site. Groundwater flow within the Phase One Study Area is anticipated to be towards the north to northwest. Based on the groundwater contour map for the Site (EXP, 2023b) the groundwater is anticipated to be multi-directional and flows in a northwesterly direction at the northern portion of the Site and a southerly direction at the southern portion of the Site.

Based on the review of available resources from the Ministry of Natural Resources and Forestry website on September 12, 2025 no areas of natural significance were identified at the Site or within 30 m of the Site. A natural heritage system is located on the northwest side of Highway 407, approximately 125 metres to the northwest.

3. Site Reconnaissance

3.1 Specific Observations at the Phase One Property

The updated site reconnaissance was conducted on September 12, 2025, between 11:45 am and 1:30 pm by Mr. Michael Holmes under the supervision of Mr. Samuel Lee, a qualified person as defined by O. Reg. 153/04. On the day of the site reconnaissance the weather was sunny, with a temperature of 22°C.

The Site is located at the north side of Neyagawa Boulevard, between Burnhamthorpe Road West and Highway 407, in Oakville Ontario. The Site is irregular in shape and is currently vacant with no structures. A chain link fence was observed along the majority of the western property boundary and eight (8) monument wells from the previous combined geotechnical/hydrogeological/environmental investigation completed in 2023 were observed to be in good condition. During the investigation soybean crops were observed across the majority of the Site. This was identified during the previous report (EXP, 2023a) as a PCA [PCA 5 (PCA ID #40 - Pesticides (including Herbicides, Fungicides and Anti-Fouling Agents))] and was investigated during the previous Phase Two ESA (EXP, 2023b).

Photographs documenting the site reconnaissance are included in Appendix C.

3.2 Adjacent Surrounding Properties

A visual inspection of the adjacent properties and properties within 250 metres of the site was conducted from publicly accessible areas to identify the occupants and document the uses and sources of potential environmental concerns that may impact the site.

The table below indicates the land usage immediately surrounding the Site:

Cardinal Direction	Address	Neighbouring Land Use	Identified PCAs
North	Highway 407, 4278 Fourth Line, Oakville	Community Use (highway 407 on ramp, east and westbound roadways) Parkland Use (Glenorchy Conservation Area)	The highway 407 and associated ramps likely undergo salting and de-icing activities for the purposes of keeping vehicular traffic and pedestrians safe. This is identified as a PCA 2 (#N/A – Salting and De- icing).
West	Neyagawa Boulevard and northwest corner of Burnhamthorpe Road West and Neyagawa Boulevard	Community Use (Neyagawa Boulevard) Agricultural and/or Other Use (vacant land)	Neyagawa Boulevard likely undergoes salting and de-icing activities for the purposes of keeping vehicular traffic and pedestrians safe. This is identified as a PCA 1 (#N/A – Salting and De- icing).
East	322 to 340 Burnhamthorpe Rd West	Agricultural and/or other use (vacant land) and Community Use (Burnhamthorpe Road West)	Burnhamthorpe Road West likely undergoes salting and de-icing activities for the purposes of keeping vehicular traffic and pedestrians safe. This is identified as a PCA 3 (#N/A – Salting and De- icing).
South	528 Burnhamthorpe Road West, Settlers Road West, Terrace Way, Stream Crescent	Community Use (Intersection of Neyagawa Blvd and Burnhamthorpe Road West), Institutional Use (secondary school), Residential Use (large subdivision being built south of Burnhamthorpe Road West)	None

Based on the visual reconnaissance of adjacent and surrounding properties within the Phase One Study Area, the following PCAs at neighbouring properties were identified:

- The Site is located adjacent to Highway 407, Neyagawa Boulevard, and Burnhamthorpe Road West, all of which likely undergo salting and de-icing activities for the purposes of keeping vehicular traffic and pedestrians safe. This is identified as a PCA 1, 2, and 3 (#N/A – Salting and De-icing).

However, based on the recent Phase Two ESA by EXP dated December 7, 2023, no contaminants in exceedance of the relevant Site Condition Standards (SCS) were identified at these APECs.

4. Review and Evaluation of Information

4.1 Current and Past Uses

The Site has never been developed and has historically been vacant since prior to 1954. Although the Site appears to grow soybeans, the property does not appear to be associated with any farmland. The current and past uses of the site, determined based on the chain of title search conducted by EXP, historical aerial photographs of the area, and the site inspection are summarized in Appendix D.

4.2 Potentially Contaminating Activities and Areas of Potential Environmental Concern

PCAs were identified on-site and within the Phase One Study Area, as per Schedule D of O. Reg 153/04, the description of the PCAs within the Phase One Study Area were presented in the Phase One Conceptual Site Model, Appendix E.

No new PCAs were identified since the previous Phase One ESA (EXP, 2023a).

A description of the APECs within the Phase One Study Area associated with the above noted PCAs is provided in in the Phase One Conceptual Site Model, Appendix E.

No new APECs were identified since the previous Phase One ESA (EXP, 2023a).

5. Phase Two Environmental Site Assessment

Based on the findings of the Phase One ESA Update, no new PCA or APEC was identified at the Site since 2023. Due to short period of time between the original Phase Two ESA in 2023 and this ESA Update, it is our opinion that the soil and groundwater sampling and testing program in the original Phase Two ESA in 2023 is still valid. The Updated Phase Two Conceptual Site Model is presented in Appendix F.

Based on the results of the soil and groundwater analysis completed during the previous Phase Two ESA (EXP, 2023b) and the results of the current investigation (no new PCAs or APECs have been identified), no further environmental investigation is recommended at this time.

6. Closure

We trust this report is satisfactory for your purposes. Should you have any questions, please do not hesitate to contact this office.

Yours very truly,

EXP Services Inc.



Kate Miles, P.Eng.
Senior Environmental Scientist
Environmental Services



Samuel Lee, P.Geo., QP_{ESA}
Senior Project Manager
Environmental Services

Attachments

Figures

Appendix A: Limitations and Use of Report

Appendix B: Property Survey Plan

Appendix C: Site Photographs

Appendix D: Table of Current and Past Uses

Appendix E: Phase One Conceptual Site Model

Appendix F: Phase Two Conceptual Site Model

References

- Environmental Protection Act, R. S. O. 1990, c. E. 19 – O. Reg. 153/04: Records of Site Condition – Part XV.1 of the Act.
- Occupational Health and Safety Act - Ministry of Labour (MOL)
- "Toporama"; Natural Resources Canada. Map 040P08 - CAMBRIDGE. Scale 1:15,700. 2008.
- "Quaternary Geology, Seamless coverage of the Province of Ontario"; Data Set 14 - Revised, Scale 1: 1,000,000 Issued 2000.
- "Bedrock Geology of Ontario, Southern Sheet," Ontario Geological Survey, MDR126-REV1. Scale 1:250,000. Issued 2011.
- Inventory of Coal Gasification Plant Waste Sites in Ontario. Ontario Ministry of the Environment, April 1987.
- Inventory of Industrial Sites Producing or Using Coal Tar and Related Tars in Ontario. Ontario Ministry of the Environment, November 1988.
- Waste Disposal Site Inventory. Waste Management Branch Ontario Ministry of the Environment, June 1991.
- Ontario Inventory of PCB Storage Sites. Ontario Ministry of the Environment, 1993- 2003-2004.
- Ontario Ministry of the Environment, Brownfields Registry website (www.ene.gov.on.ca/environet/BESR/index.htm)
- Ontario Ministry of the Environment, Environmental Registry website (www.ene.gov.on.ca/envision/env_reg/abr/english/index.htm)
- Ontario Ministry of Natural Resources, Natural Heritage website (www.mnr.gov.on.ca/MNR/nhic/areas.cfm)
- Oil, Gas & Salt Resources Library website (www.ogsrlibrary.com)
- Technical Standards and Safety Authority, Environmental Management Protocol for Fuel Handling Sites in Ontario, May 2007.
- EXP Services Inc., Phase One Environmental Site Assessment, Neyagawa Boulevard, Oakville, Ontario, dated November 13, 2023a.
- EXP Services Inc., Phase Two Environmental Site Assessment, Neyagawa Boulevard, Oakville, Ontario, dated December 7, 2023b.

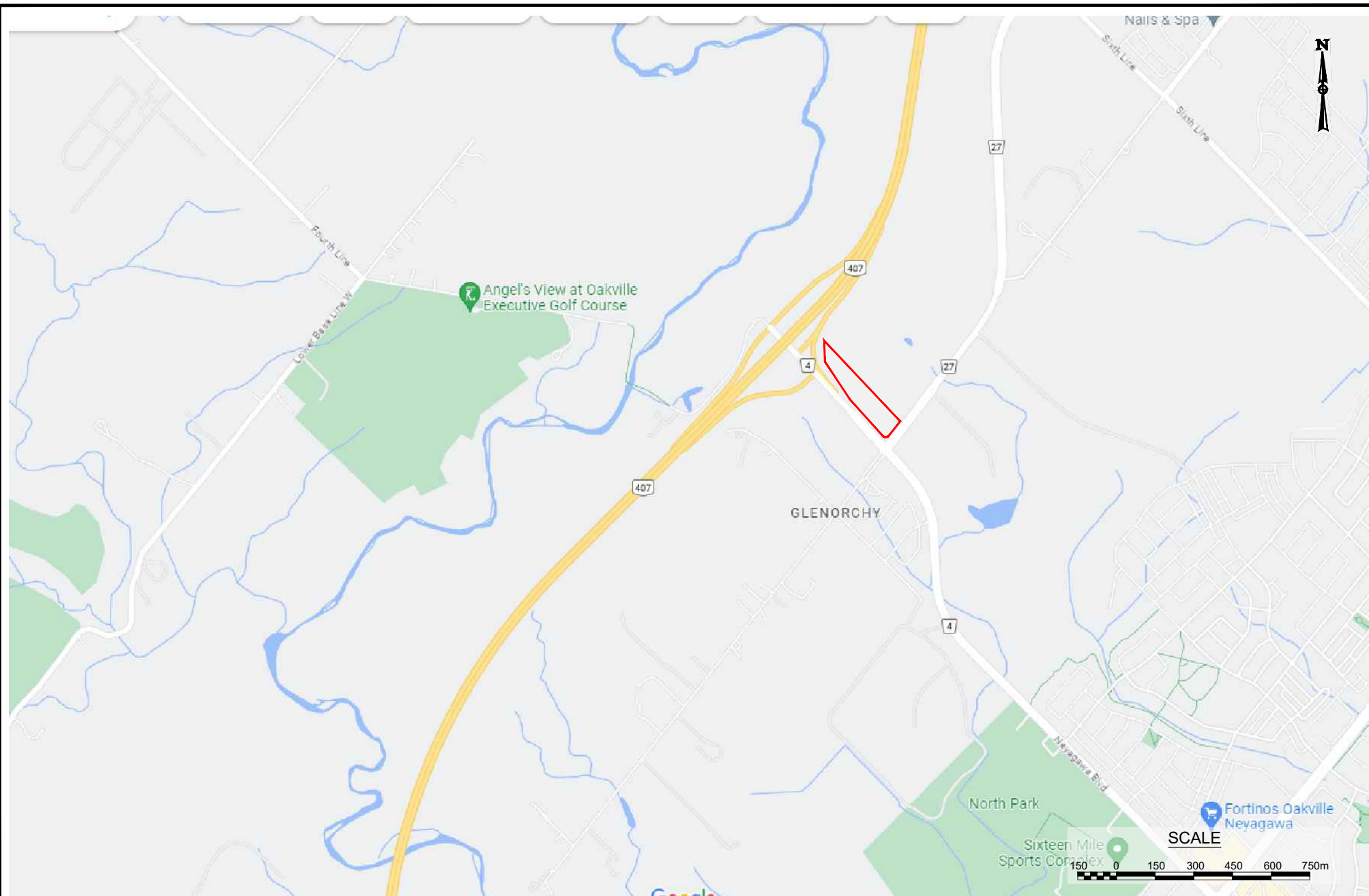
EXP Services Inc.

Site Location: Neyagawa Boulevard, Oakville, Ontario

Project Number: GTR-23012833-B1

Date: September 12, 2025

Figures



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LEGEND:

APPROXIMATE SITE BOUNDARY

SCALE

500

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50

100

150 m

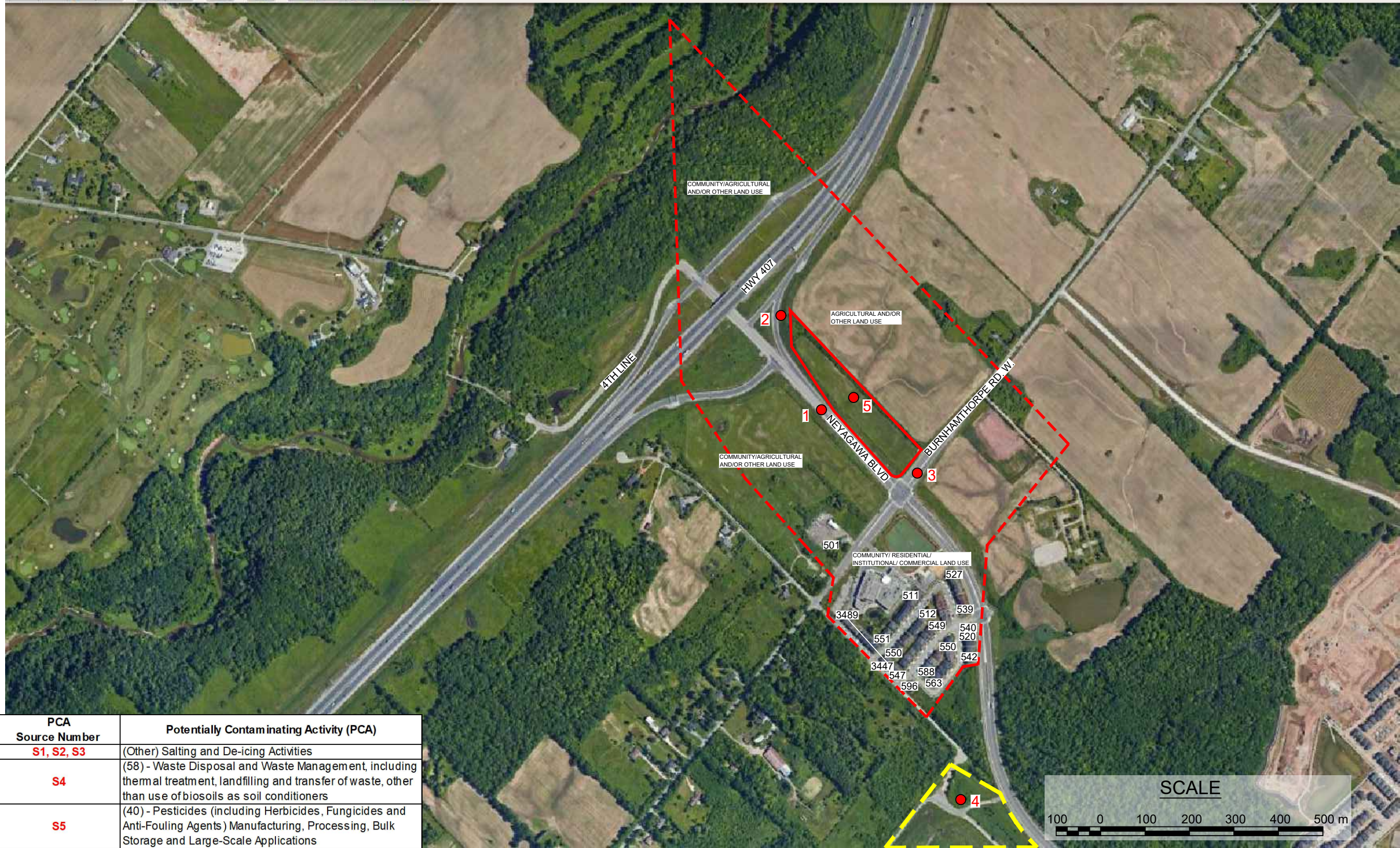
TITLE AND LOCATION:

SITE LOCATION PLAN

NEYAGAWA BOULEVARD,

OAKVILLE, ONTARIO

PROJECT NO.:	DWN.:
GTR-23012833-A0	K.G.
SCALE:	CK:
AS NOTED	A.C.
DATE:	FIG. NO.:
NOVEMBER 2023	1



PCA Source Number	Potentially Contaminating Activity (PCA)
S1, S2, S3	(Other) Salting and De-icing Activities
S4	(58) - Waste Disposal and Waste Management, including thermal treatment, landfilling and transfer of waste, other than use of biosoils as soil conditioners
S5	(40) - Pesticides (including Herbicides, Fungicides and Anti-Fouling Agents) Manufacturing, Processing, Bulk Storage and Large-Scale Applications

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 APPROXIMATE SITE BOUNDARY

 PHASE ONE STUDY AREA

 PCA CONTRIBUTING TO APEC

 PCA OF *DE MINIMIS* CONCERN

APEC - AREAS OF POTENTIAL ENVIRONMENTAL CONCERN

PCA - POTENTIALLY CONTAMINATING ACTIVITY

(28) - INDICATES ITEM NUMBER OF O. REG. 153/04 SCHEDULE D, TABLE 2

 LOCATIONS OUTSIDE 250M INCLUDED IN PHASE ONE STUDY AREA

TITLE AND LOCATION:

PHASE ONE STUDY AREA, SURROUNDING LAND USE AND POTENTIALLY CONTAMINATING ACTIVITIES

NEYAGAWA BOULEVARD, OAKVILLE, ONTARIO

JOB NO.:

GTR-22017294-B0

DRAWN BY:

K.G.

SCALE:

AS NOTED

CHECKED BY:

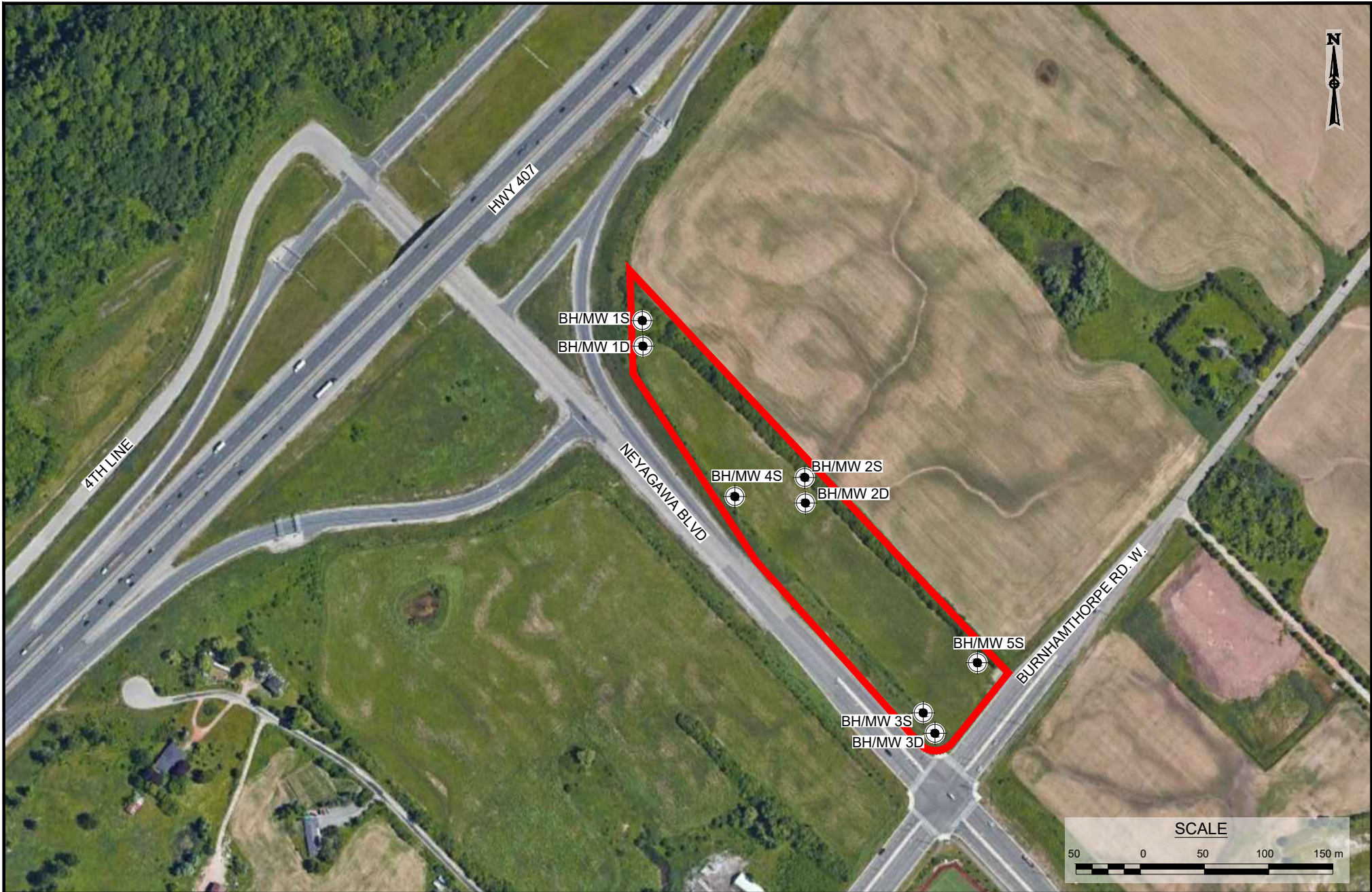
A.C.

DATE:

NOVEMBER 2023

FIG NO.:

2





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LEGEND:

 APPROXIMATE SITE BOUNDARY

 TEST HOLE WITH MONITORING WELL
(EXP, 2023)

TITLE AND LOCATION:

SITE PLAN
NEYAGAWA BOULEVARD,
OAKVILLE, ONTARIO

PROJECT NO.:	DWN.:
GTR-23012833-A0	K.G.
SCALE:	CK:
AS NOTED	A.C.
DATE:	FIG. NO.:
NOVEMBER 2023	3



APEC	PCA Source Number	Potentially Contaminating Activity (PCA)
A1	S1	(Other) Salting and De-icing Activities
A2	S2	(Other) Salting and De-icing Activities
A3	S3	(Other) Salting and De-icing Activities
A4	S4	(58) - Waste Disposal and Waste Management, including thermal treatment, landfilling and transfer of waste, other than use of biosoils as soil conditioners
A5	S5	(40) - Pesticides (including Herbicides, Fungicides and Anti-Fouling Agents) Manufacturing, Processing, Bulk Storage and Large-Scale Applications

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LEGEND:

APPROXIMATE SITE BOUNDARY

APEC

- AREAS OF POTENTIAL ENVIRONMENTAL CONCERN

PCA

- POTENTIALLY CONTAMINATING ACTIVITY

(28)

- INDICATES ITEM NUMBER OF O. REG. 153/04 SCHEDULE D, TABLE 2

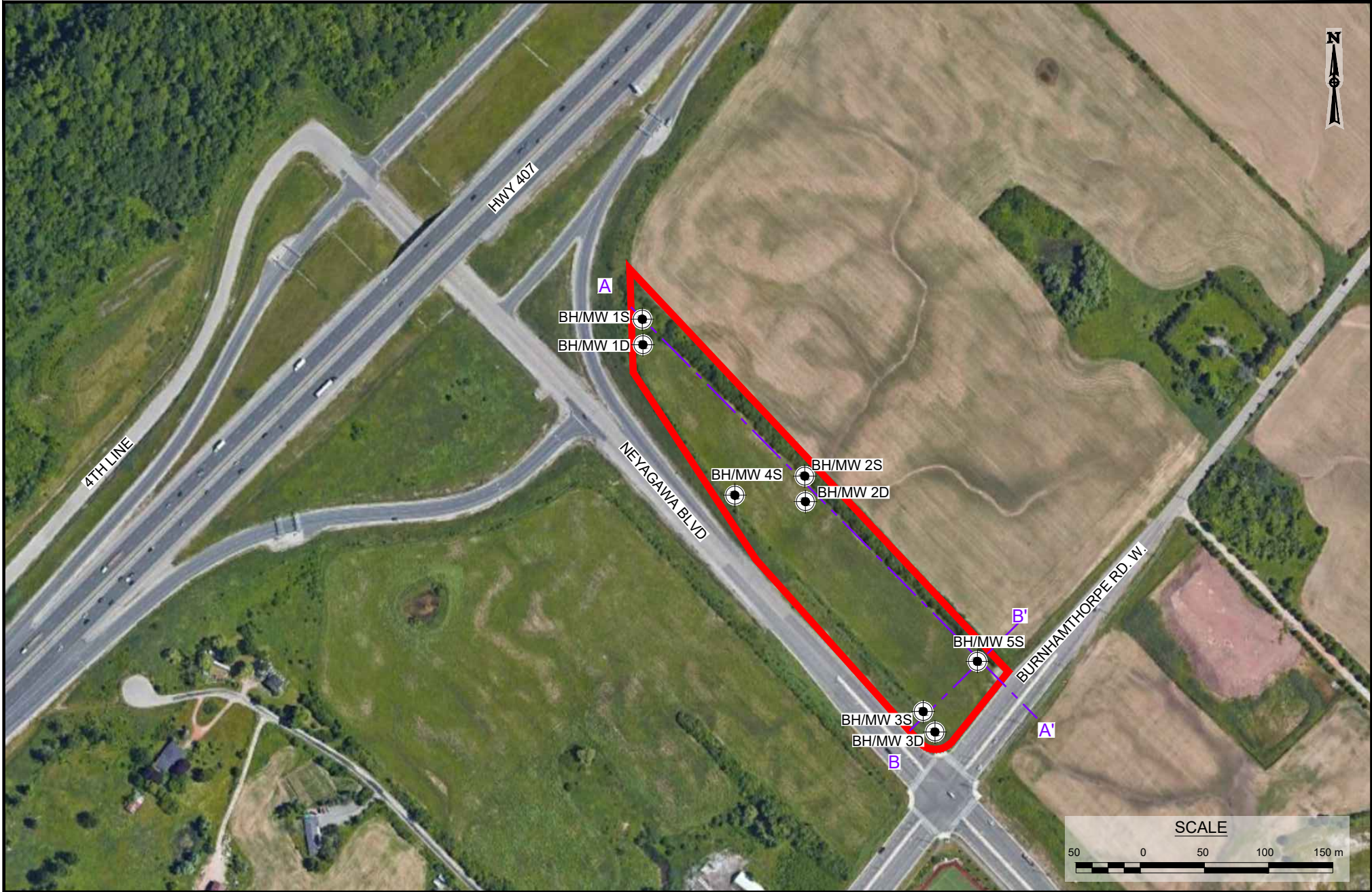
TITLE AND LOCATION:

AREAS OF POTENTIAL ENVIRONMENTAL CONCERN

NEYAGAWA BOULEVARD,

OAKVILLE, ONTARIO

PROJECT NO.:	GTR-23012833-A0	DWN.:	K.G.
SCALE:	AS NOTED	CK:	A.C.
DATE:	NOVEMBER 2023	FIG. NO.:	4



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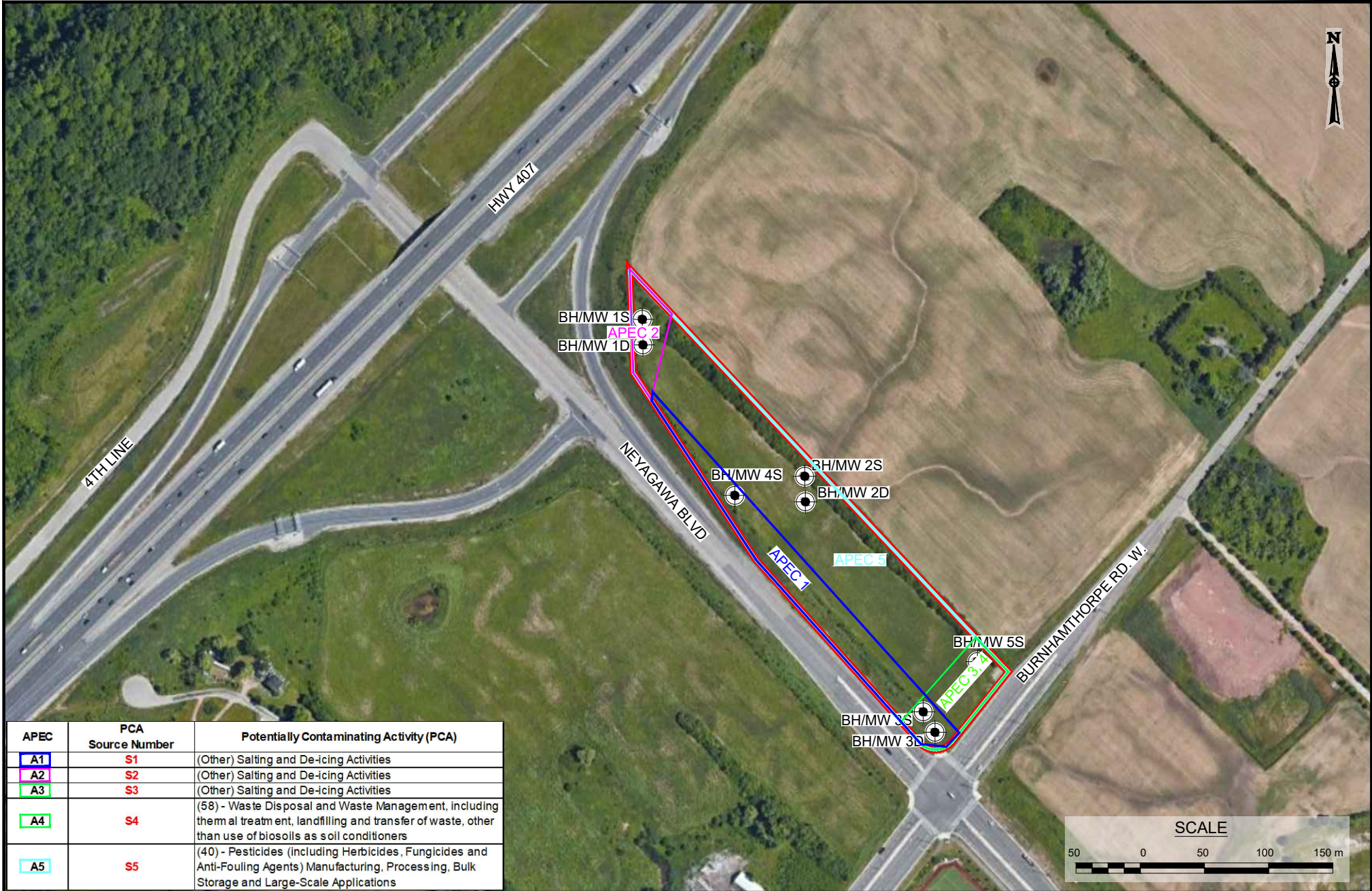
TEST HOLE WITH MONITORING WELL
(EXP, 2023)

TITLE AND LOCATION:

BOREHOLE/MONITORING
WELL LOCATION PLAN
AND CROSS SECTION PLAN
NEYAGAWA BOULEVARD,
OAKVILLE, ONTARIO

PROJECT NO.:	GTR-23012833-A0	DWN.:	K.G.
SCALE:	AS NOTED	CK:	A.C.
DATE:	NOVEMBER 2023	FIG. NO.:	5A

\\exp\data\BRM\GTR-23012833-A0\60 Execution\65 Drawings\GTR-23012833-A0 PH2.dwg



APEC	PCA Source Number	Potentially Contaminating Activity (PCA)
A1	S1	(Other) Salting and De-icing Activities
A2	S2	(Other) Salting and De-icing Activities
A3	S3	(Other) Salting and De-icing Activities
A4	S4	(58) - Waste Disposal and Waste Management, including thermal treatment, landfilling and transfer of waste, other than use of biosoils as soil conditioners
A5	S5	(40) - Pesticides (including Herbicides, Fungicides and Anti-Fouling Agents) Manufacturing, Processing, Bulk Storage and Large-Scale Applications

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LEGEND:

APPROXIMATE SITE BOUNDARY

TEST HOLE WITH MONITORING WELL (EXP, 2023)

APEC - AREAS OF POTENTIAL ENVIRONMENTAL CONCERN

PCA - POTENTIALLY CONTAMINATING ACTIVITY

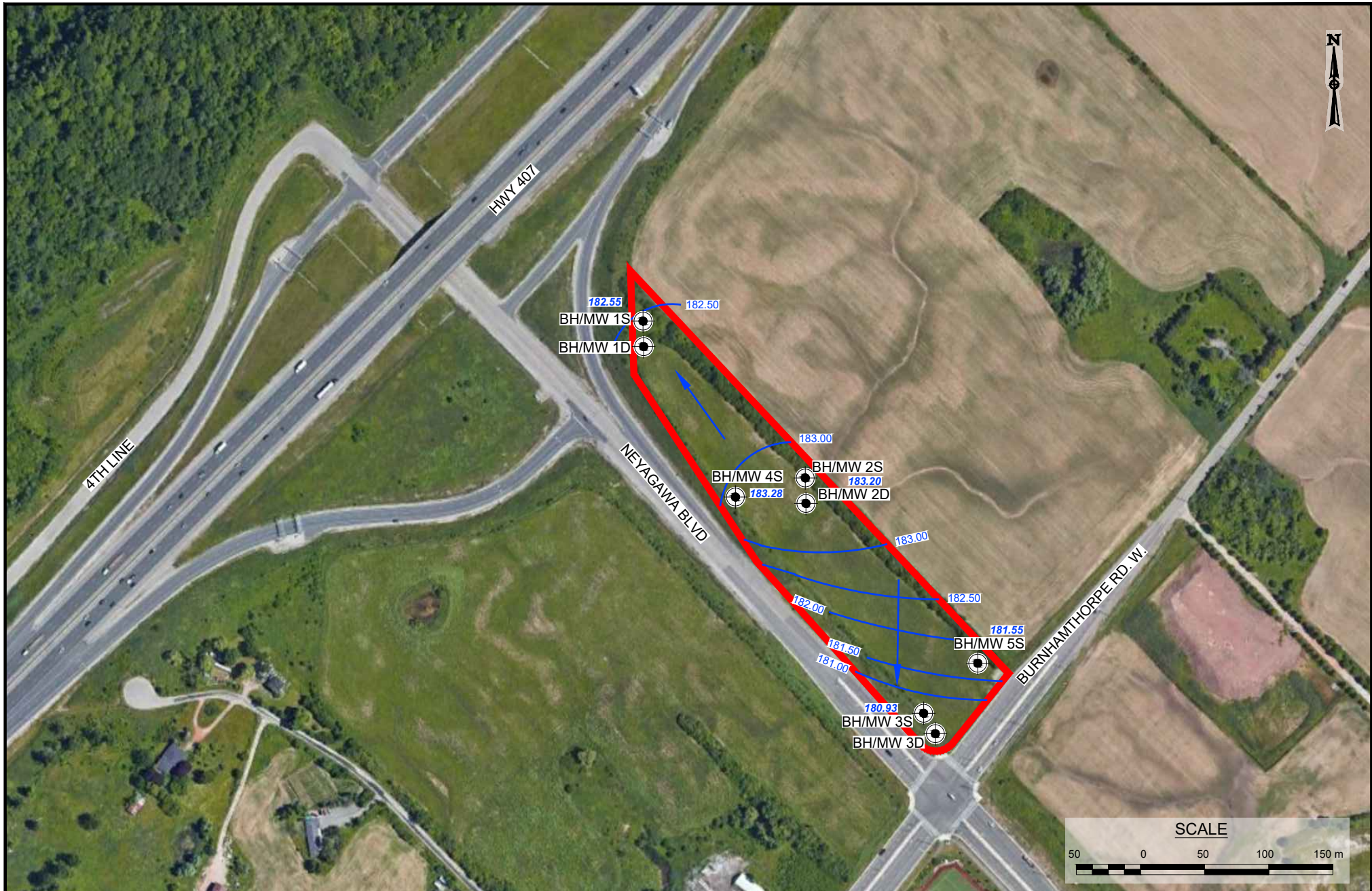
(28) - INDICATES ITEM NUMBER OF O. REG. 153/04 SCHEDULE D, TABLE 2

TITLE AND LOCATION:

BOREHOLE/MONITORING WELL LOCATION PLAN AND APEC

NEYAGAWA BOULEVARD, OAKVILLE, ONTARIO

PROJECT NO.:	GTR-23012833-A0	DWN.:	K.G.
SCALE:	AS NOTED	CK:	A.C.
DATE:	NOVEMBER 2023	FIG. NO.:	5B



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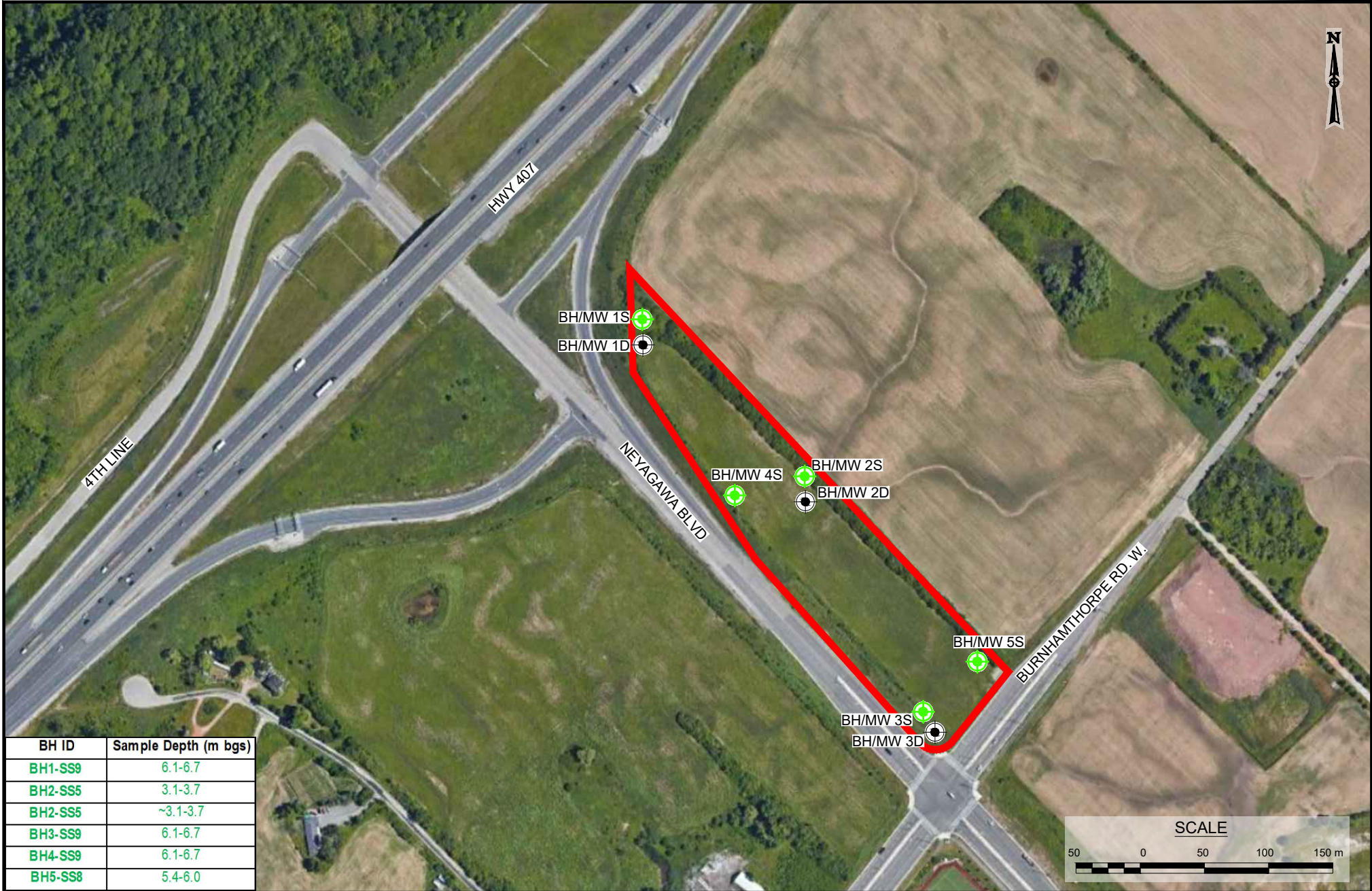
LEGEND:

-  APPROXIMATE SITE BOUNDARY
-  TEST HOLE WITH MONITORING WELL (EXP, 2023)
-  180.93 GROUND WATER ELEVATION (m)
-  180.93 GROUND WATER ELEVATION CONTOUR (m)
-  GROUND WATER FLOW DIRECTION

TITLE AND LOCATION:

**GROUNDWATER
CONTOUR PLAN
(NOVEMBER 2, 2023)**
NEYAGAWA BOULEVARD,
OAKVILLE, ONTARIO

PROJECT NO.:	DWN.:
GTR-23012833-A0	K.G.
SCALE:	CK:
AS NOTED	A.C.
DATE:	FIG. NO.:
NOVEMBER 2023	6



BH ID	Sample Depth (m bgs)
BH1-SS9	6.1-6.7
BH2-SS5	3.1-3.7
BH2-SS5	~3.1-3.7
BH3-SS9	6.1-6.7
BH4-SS9	6.1-6.7
BH5-SS8	5.4-6.0

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LEGEND:

APPROXIMATE SITE BOUNDARY

TEST HOLE WITH MONITORING WELL (EXP, 2023)

*STANDARDS SHOWN ARE FOR A RESIDENTIAL/PARKLAND/INSTITUTIONAL PROPERTY USE WITH FINE TEXTURED SOILS.

~ INDICATES FIELD DUPLICATE SAMPLE.

mbgs - METRES BELOW GROUND SURFACE.

ALL RESULTS IN UNITS OF µg/g, UNLESS OTHERWISE NOTED.

LOCATION WHERE SAMPLE IS WITHIN O. REG. 153/04 TABLE 2 STANDARDS FOR ALL PARAMETERS ANALYZED IS SHOWN IN GREEN

TITLE AND LOCATION:

SOIL ANALYTICAL RESULTS – PETROLEUM HYDROCARBONS INCLUDING BTEX

NEYAGAWA BOULEVARD, OAKVILLE, ONTARIO

PROJECT NO.:	GTR-23012833-A0	DWN.:	K.G.
SCALE:	AS NOTED	CK:	A.C.
DATE:	NOVEMBER 2023	FIG. NO.:	7A



BH ID	Sample Depth (m bgs)
BH1-SS9	6.1-6.7
BH1-SS9	~6.1-6.7
BH2-SS5	3.1-3.7
BH3-SS9	6.1-6.7
BH4-SS9	6.1-6.7
BH5-SS8	5.4-6.0

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LEGEND:

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 TEST HOLE WITH MONITORING WELL (EXP, 2023)

*STANDARDS SHOWN ARE FOR A RESIDENTIAL/PARKLAND/INSTITUTIONAL PROPERTY USE WITH FINE TEXTURED SOILS.

~ INDICATES FIELD DUPLICATE SAMPLE.

mbgs - METRES BELOW GROUND SURFACE.

ALL RESULTS IN UNITS OF µg/g, UNLESS OTHERWISE NOTED.

LOCATION WHERE SAMPLE IS WITHIN O. REG. 153/04 TABLE 2 STANDARDS FOR ALL PARAMETERS ANALYZED IS SHOWN IN GREEN

TITLE AND LOCATION:

SOIL ANALYTICAL RESULTS
– VOLATILE ORGANIC COMPOUNDS
NEYAGAWA BOULEVARD,
OAKVILLE, ONTARIO

PROJECT NO.:	GTR-23012833-A0	DWN.:	K.G.
SCALE:	AS NOTED	CK:	A.C.
DATE:	NOVEMBER 2023	FIG. NO.:	7B



BH ID	Sample Depth (m bgs)
BH1-SS1	0-0.6
BH2-SS1	0-0.6
BH3-SS1	0-0.6
BH3-SS1	~0-0.6
BH4-SS1	0-0.6
BH5-SS1	0-0.6

HWS-B	Hot Water Soluble Boron
Cr(VI)	Hexavalent Chromium
Hg	Mercury
CN-	Cyanide
EC	Electrical Conductivity
SAR	Sodium Adsorption Ratio

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LEGEND:

APPROXIMATE SITE BOUNDARY

TEST HOLE WITH MONITORING WELL (EXP, 2023)

*STANDARDS SHOWN ARE FOR A RESIDENTIAL/PARKLAND/INSTITUTIONAL PROPERTY USE WITH FINE TEXTURED SOILS.

~ INDICATES FIELD DUPLICATE SAMPLE.

mbgs - METRES BELOW GROUND SURFACE.

ALL RESULTS IN UNITS OF µg/g, UNLESS OTHERWISE NOTED.

LOCATION WHERE SAMPLE IS WITHIN O. REG. 153/04 TABLE 2 STANDARDS FOR ALL PARAMETERS ANALYZED IS SHOWN IN GREEN

TITLE AND LOCATION:

SOIL ANALYTICAL RESULTS – METALS (INCLUDING HYDRIDE FORMING METALS) AND ORPs (Cr(VI), CN-, Hg, HWS-B, EC, SAR, pH)

NEYAGAWA BOULEVARD, OAKVILLE, ONTARIO

PROJECT NO.:

GTR-23012833-A0

DWN.:

K.G.

SCALE:

AS NOTED

CK:

A.C.

DATE:

NOVEMBER 2023

FIG. NO.:

7C

\\exp\data\BRM\GTR-23012833-A0\60 Execution\65 Drawings\GTR-23012833-A0 PH2.dwg



BH ID	Sample Depth (m bgs)
BH1-SS1	0-0.6
BH2-SS1	0-0.6
BH3-SS1	0-0.6
BH4-SS1	0-0.6
BH4-SS1	~0-0.6
BH5-SS1	0-0.6

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LEGEND:

APPROXIMATE SITE BOUNDARY



TEST HOLE WITH MONITORING WELL (EXP, 2023)

*STANDARDS SHOWN ARE FOR A RESIDENTIAL/PARKLAND/INSTITUTIONAL PROPERTY USE WITH FINE TEXTURED SOILS.

~ INDICATES FIELD DUPLICATE SAMPLE.

mbgs - METRES BELOW GROUND SURFACE.

ALL RESULTS IN UNITS OF µg/g, UNLESS OTHERWISE NOTED.

LOCATION WHERE SAMPLE IS WITHIN O. REG. 153/04 TABLE 2 STANDARDS FOR ALL PARAMETERS ANALYZED IS SHOWN IN GREEN

TITLE AND LOCATION:

SOIL ANALYTICAL RESULTS

– OCs

NEYAGAWA BOULEVARD, OAKVILLE, ONTARIO

PROJECT NO.:	GTR-23012833-A0	DWN.:	K.G.
SCALE:	AS NOTED	CK:	A.C.
DATE:	NOVEMBER 2023	FIG. NO.:	7D



MW ID	Sample Depth (m bgs)
BH3S	5.7-8.7
BH3S	~5.7-8.7
BH5S	4.8-7.8



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LEGEND:

-  APPROXIMATE SITE BOUNDARY
-  TEST HOLE WITH MONITORING WELL (EXP, 2023)

*STANDARDS SHOWN ARE FOR ALL PROPERTY USE WITH FINE TEXTURED SOILS.
~ INDICATES FIELD DUPLICATE SAMPLE.
mbgs - METRES BELOW GROUND SURFACE.
ALL RESULTS IN UNITS OF µg/L, UNLESS OTHERWISE NOTED.

LOCATION WHERE SAMPLE IS WITHIN O. REG. 153/04 TABLE 2 STANDARDS FOR ALL PARAMETERS ANALYZED IS SHOWN IN **GREEN**

TITLE AND LOCATION:

GROWNDWATER
ANALYTICAL RESULTS –
PETROLEUM
HYDROCARBONS
INCLUDING BTEX
NEYAGAWA BOULEVARD,
OAKVILLE, ONTARIO

PROJECT NO.:	GTR-23012833-A0	DWN.:	K.G.
SCALE:	AS NOTED	CK:	A.C.
DATE:	NOVEMBER 2023	FIG. NO.:	8A



MW ID	Sample Depth (m bgs)
BH3S	5.7-8.7
BH3S	~5.7-8.7
BH5S	4.8-7.8

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LEGEND:

APPROXIMATE SITE BOUNDARY

TEST HOLE WITH MONITORING WELL (EXP, 2023)

*STANDARDS SHOWN ARE FOR ALL PROPERTY USE WITH FINE TEXTURED SOILS.

~ INDICATES FIELD DUPLICATE SAMPLE.

mbgs - METRES BELOW GROUND SURFACE.

ALL RESULTS IN UNITS OF µg/L, UNLESS OTHERWISE NOTED.

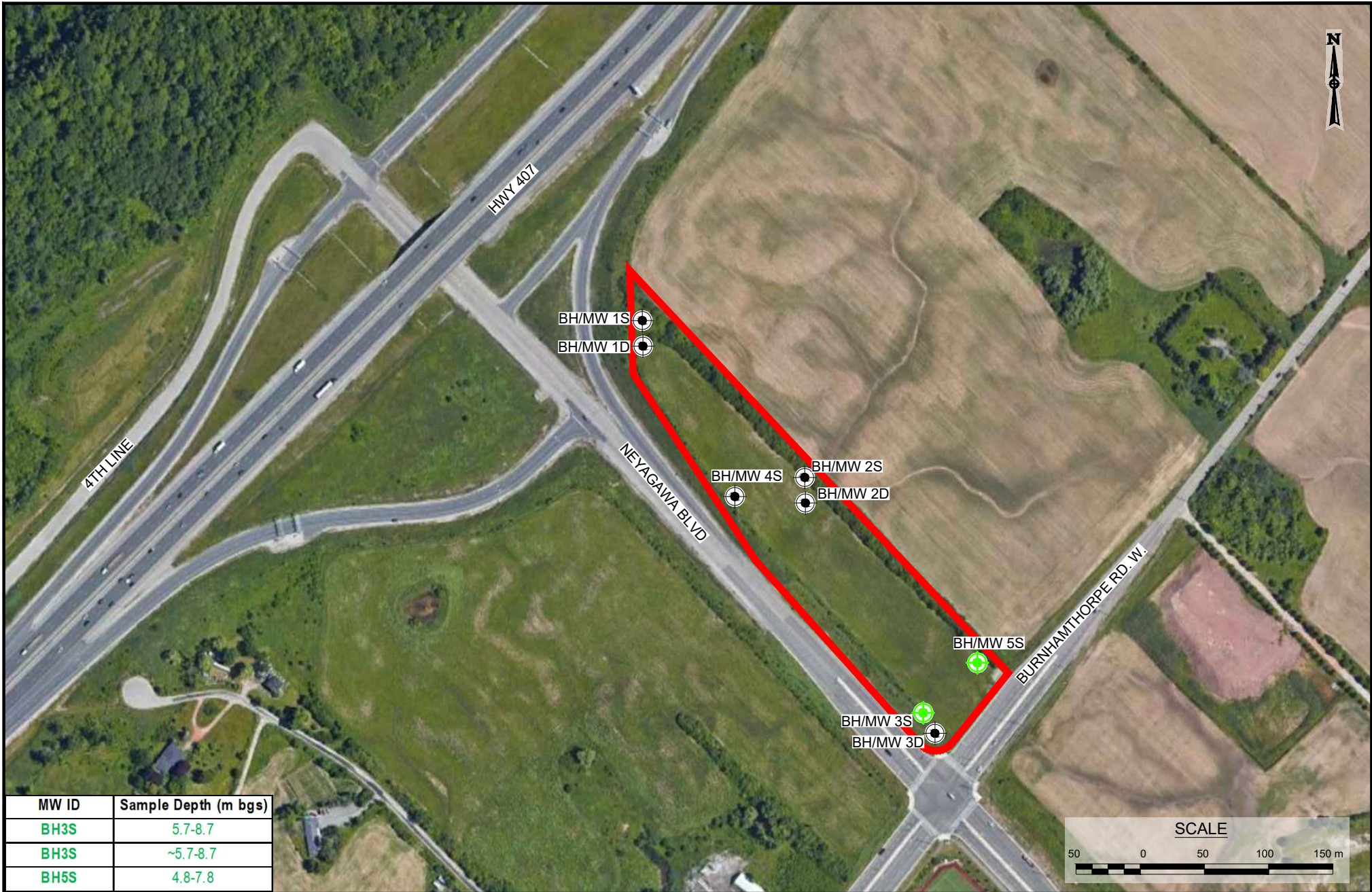
LOCATION WHERE SAMPLE IS WITHIN O. REG. 153/04 TABLE 2 STANDARDS FOR ALL PARAMETERS ANALYZED IS SHOWN IN GREEN

TITLE AND LOCATION:

GROWNDWATER ANALYTICAL RESULTS – VOLATILE ORGANIC COMPOUNDS

NEYAGAWA BOULEVARD, OAKVILLE, ONTARIO

PROJECT NO.:	GTR-23012833-A0	DWN.:	K.G.
SCALE:	AS NOTED	CK:	A.C.
DATE:	NOVEMBER 2023	FIG. NO.:	8B



MW ID	Sample Depth (m bgs)
BH3S	5.7-8.7
BH3S	~5.7-8.7
BH5S	4.8-7.8

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LEGEND:

 APPROXIMATE SITE BOUNDARY

 TEST HOLE WITH MONITORING WELL (EXP, 2023)

*STANDARDS SHOWN ARE FOR ALL PROPERTY USE WITH FINE TEXTURED SOILS.

~ INDICATES FIELD DUPLICATE SAMPLE.

mbgs - METRES BELOW GROUND SURFACE.

ALL RESULTS IN UNITS OF µg/L, UNLESS OTHERWISE NOTED.

LOCATION WHERE SAMPLE IS WITHIN O. REG. 153/04 TABLE 2 STANDARDS FOR ALL PARAMETERS ANALYZED IS SHOWN IN GREEN

TITLE AND LOCATION:

GROWNDWATER ANALYTICAL RESULTS – POLYCYCLIC AROMATIC HYDROCARBONS

NEYAGAWA BOULEVARD, OAKVILLE, ONTARIO

PROJECT NO.:	GTR-23012833-A0	DWN.:	K.G.
SCALE:	AS NOTED	CK:	A.C.
DATE:	NOVEMBER 2023	FIG. NO.:	8C



Na	Sodium
Cr(VI)	Hexavalent Chromium
Hg	Mercury

MW ID	Sample Depth (m bgs)
BH3S	5.7-8.7
BH3S	~5.7-8.7
BH5S	4.8-7.8

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LEGEND:

 APPROXIMATE SITE BOUNDARY

 TEST HOLE WITH MONITORING WELL (EXP, 2023)

*STANDARDS SHOWN ARE FOR ALL PROPERTY USE WITH FINE TEXTURED SOILS.

~ INDICATES FIELD DUPLICATE SAMPLE.

mbgs - METRES BELOW GROUND SURFACE.

ALL RESULTS IN UNITS OF µg/L, UNLESS OTHERWISE NOTED.

LOCATION WHERE SAMPLE IS WITHIN O. REG. 153/04 TABLE 2 STANDARDS FOR ALL PARAMETERS ANALYZED IS SHOWN IN GREEN

TITLE AND LOCATION:

GROWNDWATER ANALYTICAL RESULTS – METALS (INCLUDING HYDRIDE FORMING METALS) AND ORPs (Cr(VI), CN-, Hg, Na, Cl)

NEYAGAWA BOULEVARD, OAKVILLE, ONTARIO

PROJECT NO.:	GTR-23012833-A0	DWN.:	K.G.
SCALE:	AS NOTED	CK:	A.C.
DATE:	NOVEMBER 2023	FIG. NO.:	8D

\\exp\data\BRM\GTR-23012833-A0\60 Execution\65 Drawings\GTR-23012833-A0 PH2.dwg



BH ID	Sample Depth (m bgs)
BH1S	5.2-8.2
BH2S	5.8-8.8
BH3S	5.7-8.7
BH3S	~5.7-8.7
BH4S	6.0-9.0
BH5S	4.8-7.8

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LEGEND:

 APPROXIMATE SITE BOUNDARY

 TEST HOLE WITH MONITORING WELL (EXP, 2023)

*STANDARDS SHOWN ARE FOR ALL PROPERTY USE WITH FINE TEXTURED SOILS.

~ INDICATES FIELD DUPLICATE SAMPLE.

mbgs - METRES BELOW GROUND SURFACE.

ALL RESULTS IN UNITS OF µg/L, UNLESS OTHERWISE NOTED.

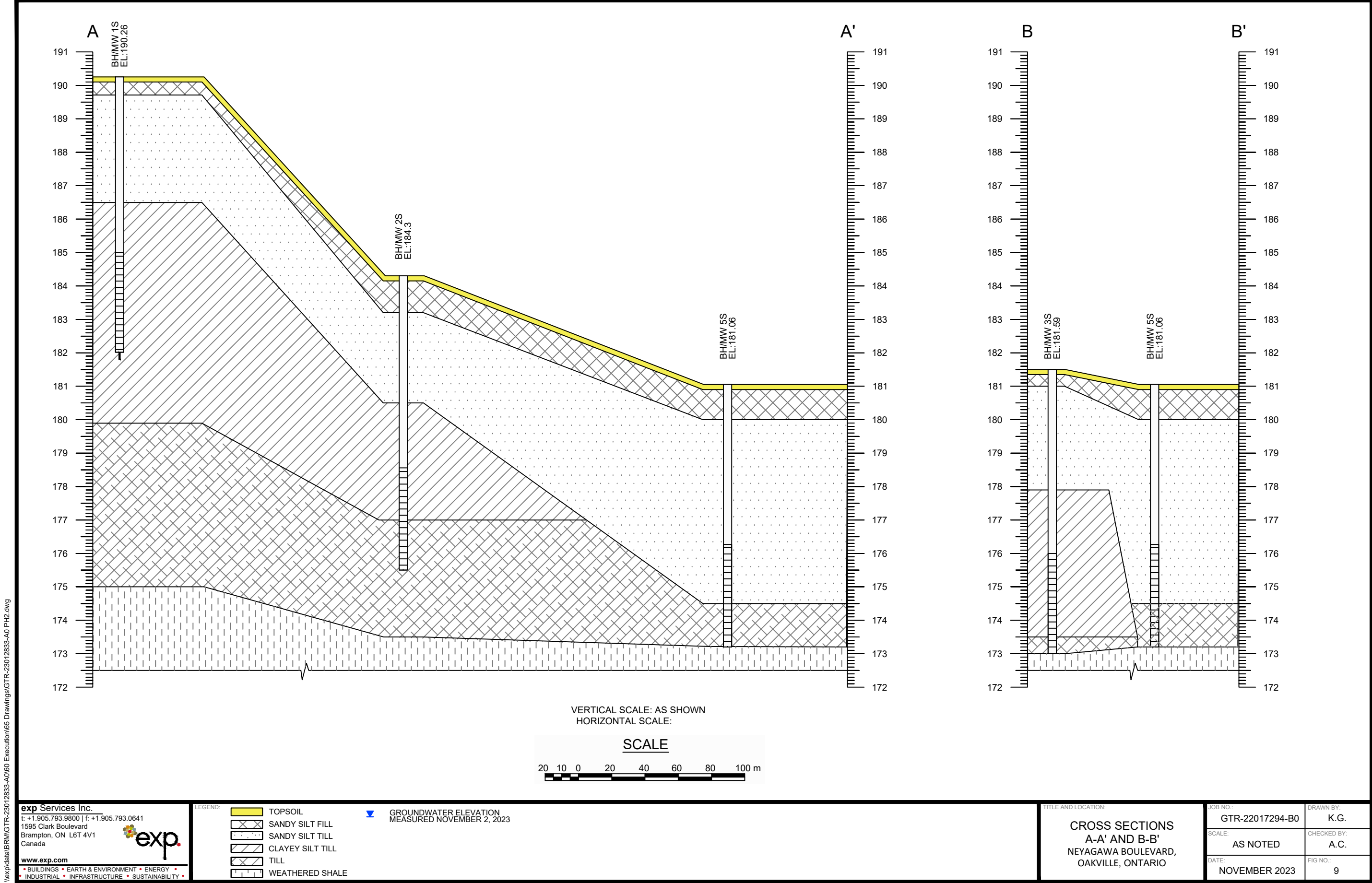
LOCATION WHERE SAMPLE IS WITHIN O. REG. 153/04 TABLE 2 STANDARDS FOR ALL PARAMETERS ANALYZED IS SHOWN IN GREEN

TITLE AND LOCATION:

GROWNDWATER ANALYTICAL RESULTS – OCs

NEYAGAWA BOULEVARD, OAKVILLE, ONTARIO

PROJECT NO.:	DWN.:
GTR-23012833-A0	K.G.
SCALE:	CK:
AS NOTED	A.C.
DATE:	FIG. NO.:
NOVEMBER 2023	8E



EXP Services Inc.

Site Location: Neyagawa Boulevard, Oakville, Ontario

Project Number: GTR-23012833-B1

Date: September 15, 2025

Appendix A – Limitation and Use of Report



LIMITATIONS AND USE OF REPORT

BASIS OF REPORT

The Report is based on site conditions known or inferred by the investigation undertaken as of the date of the Report. Should changes occur which potentially impact the condition of the site the recommendations of EXP may require re-evaluation. Where special concerns exist, or the Client has special considerations or requirements, these should be disclosed to EXP to allow for additional or special investigations to be undertaken not otherwise within the scope of investigation conducted for the purpose of the Report.

Where applicable, recommended field services are the minimum necessary to ascertain that construction is being carried out in general conformity with building code guidelines, generally accepted practices and EXP's recommendations. Any reduction in the level of services recommended will result in EXP providing qualified opinions regarding the adequacy of the work. EXP can assist design professionals or contractors retained by the Client to review applicable plans, drawings, and specifications as they relate to the Report or to conduct field reviews during construction.

RELIANCE ON INFORMATION PROVIDED

The evaluation and conclusions contained in the Report are based on conditions in evidence at the time of site inspections and information provided to EXP by the Client and others. The Report has been prepared for the specific site, development, building, design or building assessment objectives and purpose as communicated by the Client. EXP has relied in good faith upon such representations, information and instructions and accepts no responsibility for any deficiency, misstatement or inaccuracy contained in the Report as a result of any misstatements, omissions, misrepresentation or fraudulent acts of persons providing information. Unless specifically stated otherwise, the applicability and reliability of the findings, recommendations, suggestions or opinions expressed in the Report are only valid to the extent that there has been no material alteration to or variation from any of the information provided to EXP.

STANDARD OF CARE

This report ("Report") has been prepared in a manner consistent with the degree of care and skill exercised by engineering consultants currently practicing under similar circumstances and locale. No other warranty, expressed or implied, is made. Unless specifically stated otherwise, the Report does not contain environmental consulting advice.

COMPLETE REPORT

All documents, records, data and files, whether electronic or otherwise, generated as part of this assignment form part of the Report. This material includes, but is not limited to, the terms of reference given to EXP by the Client, communications between EXP and the Client, other reports, proposals or documents prepared by EXP for the Client in connection with the site described in the Report. In order to properly understand the suggestions, recommendations and opinions expressed in the Report, reference must be made to the Report in its entirety. EXP is not responsible for use by any party of portions of the Report.



USE OF REPORT

The information and opinions expressed in the Report, or any document forming part of the Report, are for the sole benefit of the Client. No other party may use or rely upon the Report in whole or in part without the written consent of EXP. Any use of the Report, or any portion of the Report, by a third party are the sole responsibility of such third party. EXP is not responsible for damages suffered by any third party resulting from unauthorised use of the Report.

REPORT FORMAT

Where EXP has submitted both electronic file and a hard copy of the Report, or any document forming part of the Report, only the signed and sealed hard copy shall be the original documents for record and working purposes. In the event of a dispute or discrepancy, the hard copy shall govern. Electronic files transmitted by EXP utilize specific software and hardware systems. EXP makes no representation about the compatibility of these files with the Client's current or future software and hardware systems. Regardless of format, the documents described herein are EXP's instruments of professional service and shall not be altered without the written consent of EXP.

EXP Services Inc.

Site Location: Neyagawa Boulevard, Oakville, Ontario

Project Number: GTR-23012833-B1

Date: September 15, 2025

Appendix B – Property Survey Plan

PLAN OF SURVEY
SHOWING TOPOGRAPHICAL INFORMATION OF
**PART OF LOT 20
CONCESSION 2**
NORTH OF DUNDAS STREET
GEOGRAPHIC TOWNSHIP OF TRAFALGAR
TOWN OF OAKVILLE
REGIONAL MUNICIPALITY OF HALTON

SCALE 1:500
10 0 10 20 30 40 50m
KRCMAR SURVEYORS LTD. 2023

METRIC: DISTANCES AND COORDINATES SHOWN HEREON ARE IN METRES
AND CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048

BEARING

BEARINGS SHOWN HEREON ARE GRID DERIVED FROM GPS OBSERVATIONS OF OBSERVED REFERENCE POINTS 'A' AND 'B' USING THE LEICA SMARTNET RTK NETWORK AND ARE REFERRED TO THE 6° UTM COORDINATE SYSTEM, ZONE 17, CENTRAL MERIDIAN 81°00' WEST LONGITUDE.
(NAD 83 (CSRS)(2010)).

DISTANCES SHOWN HEREON ARE GROUND DISTANCES AND CAN BE CONVERTED TO GRID DISTANCES BY MULTIPLYING BY A COMBINED SCALE FACTOR OF 0.9997215.

INTEGRATION DATA

6° UTM ZONE 17 COORDINATES NAD 83 (CSRS)(2010) (CENTRAL MERIDIAN 81°00' WEST LONGITUDE) THE UTM COORDINATES LISTED BELOW ARE TO URBAN ACCURACY AND COMPLY WITH SUBSECTION 14(2) OF ONTARIO REGULATION 216/10 FILED UNDER THE SURVEYORS ACT.		
OBSERVED REFERENCE POINTS		
MONUMENT ID.	NORTHING	EASTING
(A) CP(OU)	4 815 333.381	599 940.941
(B) CC(OU)	4 815 066.881	600 270.284
REFERENCE POINTS		
POINT	NORTHING	EASTING
1	4 815 322.76	599 933.82
2	4 815 028.99	600 234.68
3	4 814 984.07	600 181.42
4	4 815 250.52	599 947.16
COORDINATE VALUES SHOWN ARE FOR GEOGRAPHIC INFORMATION SYSTEM INTEGRATION ONLY. COORDINATES CANNOT, IN THEMSELVES, BE USED TO RE-ESTABLISH CORNERS OR BOUNDARIES SHOWN ON THIS PLAN.		

ELEVATION

ELEVATIONS SHOWN HEREON ARE GEODETIC AND ARE RELATED TO THE TOWN OF OAKVILLE BENCHMARK No. 263, HAVING AN ELEVATION OF 156.460 METRES.
(VERTICAL DATUM: CGVD28:PRE78)

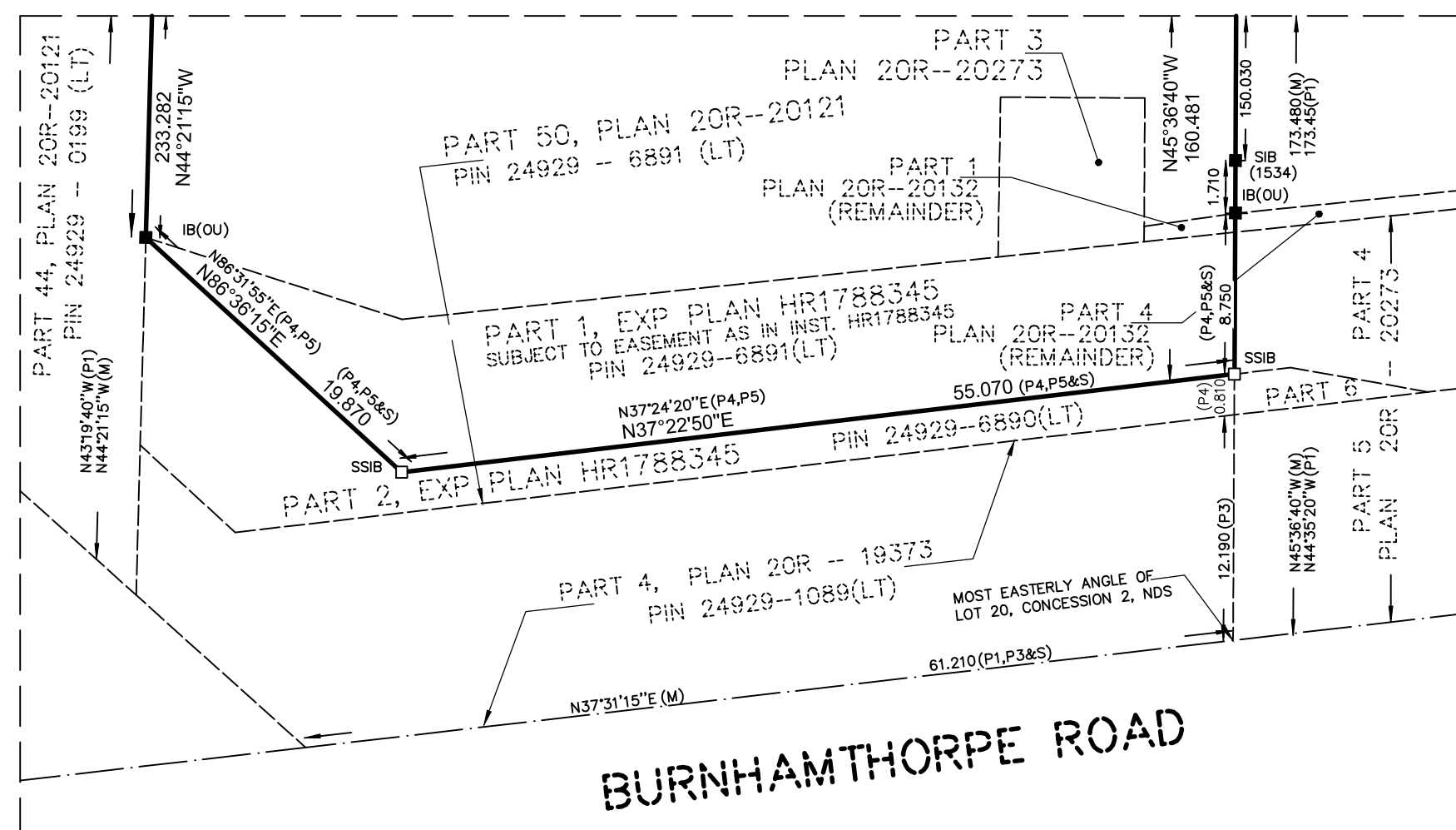
LEGEND

■	DENOTES SURVEY MONUMENT FOUND
□	DENOTES SURVEY MONUMENT PLANTED
SB	DENOTES STANDARD IRON BAR
SSB	DENOTES SHORT STANDARD IRON BAR
IB	DENOTES IRON BAR
CP	DENOTES CONCRETE PIN
CC	DENOTES CUT CROSS
(M)	DENOTES MEASURED
(S)	DENOTES SET
(OU)	DENOTES ORIGIN UNKNOWN
(WT)	DENOTES WITNESS
(P1)	DENOTES PLAN 20R-16345
(P2)	DENOTES PLAN 20R-11833
(P3)	DENOTES PLAN 20R-19373
(P4)	DENOTES PLAN 20R-20132
(P5)	DENOTES EXPROPRIATION PLAN HR1788345
(P6)	DENOTES PLAN 20R-20121
(1370)	DENOTES KRCMAR SURVEYORS LTD. O.L.S.
(CH)	DENOTES CARTER & HORWOOD, LIMITED, O.L.S.
(1534)	DENOTES D. E. HUNT, O.L.S.
(1280)	DENOTES A. KIKAS, O.L.S.
(MMM)	DENOTES MMM GEOMATICS ONTARIO LIMITED, O.L.S.
EXP.	DENOTES EXPROPRIATION
NDS	DENOTES NORTH OF DUNDAS STREET
(Tc)	DENOTES TOP OF CURB
(Bc)	DENOTES BOTTOM OF CURB
AS	DENOTES ANCHOR, WOOD POST
WP	DENOTES ANCHOR, WOOD POST
156.460	DENOTES EXISTING GRADE ELEVATION
20R-16345	DENOTES BELL PEDESTAL
156.460	DENOTES CATCH BASIN
156.460	DENOTES DECIDUOUS TREE WITH TRUNK DIAMETER
156.460	DENOTES DOWN GUY ANCHOR
156.460	DENOTES HYDRO HAND WELL
156.460	DENOTES LAMP STANDARD
156.460	DENOTES MANHOLE
156.460	DENOTES SIGN
156.460	DENOTES TRAFFIC LIGHT
156.460	DENOTES TRAFFIC LIGHT WITH LAMP STANDARD

SURVEY REPORT

- THE RE-ESTABLISHMENT OF THE SUBJECT PROPERTY BOUNDARIES IS BASED ON INFORMATION CONTAINED IN THE RELEVANT TITLE DOCUMENTS, REGISTERED PLANS AND ON THE EVIDENCE OF PRIOR SURVEYS FOUND DURING THE COURSE OF PREPARING THE SUBJECT SURVEY.
- THE TYPE AND LOCATION OF THE EXISTING BUILDINGS AND OTHER IMPROVEMENTS, FENCES ETC., ON OR NEAR THE SUBJECT PROPERTY ARE AS SHOWN ON THE SURVEY PLAN.
- COMPLIANCE WITH MUNICIPAL ZONING REQUIREMENTS IS NOT CERTIFIED BY THIS REPORT.
- THE LAND COMPRISES ALL OF PIN 24929-6891(LT).
- THE PROPERTY SUBJECT TO EASEMENT AS IN INST. HR1788345 (PART 1, EXPROPRIATION PLAN HR1788345)

TOTAL SITE AREA = 2.4050 ha



SURVEYOR'S CERTIFICATE

- I CERTIFY THAT:
- THIS SURVEY AND PLAN ARE CORRECT AND IN ACCORDANCE WITH THE SURVEYORS ACT, THE SURVEYORS ACT AND THE REGULATIONS MADE UNDER THEM.
 - THE SURVEY WAS COMPLETED ON THE 31st DAY OF OCTOBER, 2023.

DATE: NOVEMBER 2, 2023

STUART M. MOORE
ONTARIO LAND SURVEYOR

THIS PLAN OF SURVEY RELATES TO AOLS PLAN
SUBMISSION FORM NUMBER V-60195

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MUNICIPAL ADDRESS: Burnhamthorpe Rd. West & Neyagawa Blvd., Oakville
FIELD: D.L. DRAWN: J.M. CHECKED: S.M.M. JOB NO: 23-155
DWG NAME: 23-155R01 | PLOT INFO: 15.23.02/Nov/2023 | WORK ORDER NO: 38807
1137 Centre Street, Thornhill ON L4J 3M6 905.738.0053 | 905.738.9221 | www.krcmar.ca
PLAN AVAILABLE AT www.ProtectYourBoundaries.ca

KRCMAR

EXP Services Inc.

Site Location: Neyagawa Boulevard, Oakville, Ontario

Project Number: GTR-23012833-B1

Date: September 15, 2025

Appendix C – Site Photographs



Photo 1: General view of the Site, looking northwest



Photo 2: General view of the Site, looking southeast



Photo 3: View of neighbouring residential properties to the south of the Site, looking west



Photo 4: View of neighbouring property under construction to the southeast of the Site, looking east



Photo 5: View of neighbouring properties along Burnhamthorpe Road looking northeast from the Site

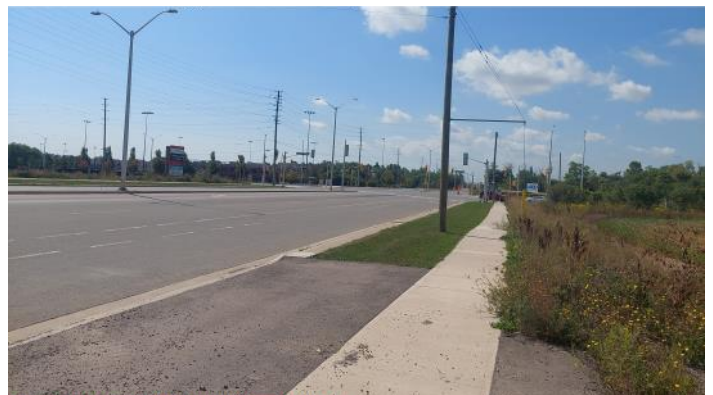


Photo 6: View of neighbouring properties along Burnhamthorpe Road looking southwest from the Site



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220 Commerce Valley
Drive West
Markham, Ontario
L3T 0A8
T: 905-793-9800
F: 905-793-0641

SITE PHOTOGRAPHS

PROJ. NO: GTR-23012833-B1

Corner of Neyagawa Blvd
And Burnhamthorpe Road
West, Oakville

SCALE: NTS

DRAWN: KM

CHECKED: SL

C1

SEPT 2025

Appendix D – Table of Current and Past Uses

TABLE OF CURRENT AND PAST USES OF THE PHASE ONE PROPERTY

(Refer to clause 16(2)(b), Schedule D, O.Reg. 153/04)
Neyagawa Boulevard, Oakville, Ontario

Year	Name of Owner	Description of Property Use	Property Use	Other Observations from Aerial Photographs, Fire Insurance Plans, Etc.
Prior to October 31, 1809	Crown	Vacant land/ Agricultural Land	Agriculture or Other Use	Based on the aerial photographs, the site was vacant or used for agricultural purposes.
October 31, 1809 to June 9, 1820	Jacob Huffman			
June 9, 1820 to June 9, 1820	James Finch			
June 9, 1820 to March 23, 1822	George Marvin			
March 23, 1822 to September 7, 1833	Samuel Finch			
September 7, 1833 to March 9, 1835	Thomas Fitzgerald			
March 9, 1835 to March 13, 1844	Newton Bosworth			
March 13, 1844 to August 22, 1845	Andrew Biggar			
August 22, 1845 to April 11, 1856	John Askin			
April 11, 1856 to February 7, 1863	Francis Campell			
February 7, 1863 to August 27, 1904	John Askin			
August 27, 1904 to December 5, 1909	Frank Askin			
December 5, 1909 to October 28, 1926	William John Johnston			
October 28, 1926 to December 12, 1951	Albert Hubert Johnston			
December 12, 1951 to July 4, 1989	Jean Arlene Wright			
July 4, 1989 to July 21, 2012	Dorham Holdings Inc.			
July 21, 2012 to present	Burnhamthorpe/Oakville Holdings Inc.			

EXP Services Inc.

GTR-23012833-B1

Notes:

1 - for each owner, specify one of the following types of property use (as defined in O.Reg. 153/04) that applies:

- Agriculture or other use
- Commercial use
- Community use
- Industrial use
- Institutional use
- Parkland use
- Residential use

2 - when submitting a record of site condition for filing, a copy of this table must be attached

****Cette publication hautement spécialisée n'est disponible qu'en anglais en vertu du règlement 671/92, qui en exempte l'application de la Loi sur les services en français. Pour obtenir de l'aide en français, veuillez communiquer avec le ministère de l'Environnement au 1-800-461-6290**

Appendix E – Phase One Conceptual Site Model



Phase One ESA Conceptual Site Model

Neyagawa Boulevard, Oakville, Ontario

This section presents the Phase One Conceptual Site Model (P1CSM), as it relates to the Site designated as the north corner of Neyagawa Boulevard and Burnhamthorpe Avenue West, in Oakville, Ontario, providing a narrative and graphical description integrating information related to the areas of potential environmental concern/potential contaminating activities and the presence and distribution of potential contaminants of concern. The P1CSM was completed in accordance with Ontario Regulation 153/04, as amended (O.Reg. 153/04), as defined by the Ontario Ministry Environment, Conservation and Parks (MECP). There is no uncertainty or absence of information noted in the Phase One Environmental Site Assessment.

1.1 Introduction

The Site is located at the northeast side of Neyagawa Boulevard, between Burnhamthorpe Road West and Highway 407, in Oakville Ontario as shown on Figure 1. The Site measures approximately 2.4050 hectares (5.943 acres) in area. The Site has no municipal address, at this time.

Contact information for Mr. Marc J. Pourvahidi, a representative of the Site owner, is presented below:

Mr. Marc J. Pourvahidi
Sky Property Group Inc.
1 Steeles Avenue East
Toronto, ON
M2M 3Y2

The legal description, property identification numbers (PIN) and ownership for the Site are provided below:

Table 1: Site Summary

Municipal Address	PIN	Legal Description	Property Owner
n/a	24929-6891 (LT)	Part of Lot 20, Concession 2, Traf NDS, Parts 1&2 20R16345, Except Part 4 20R19373, Part 2 HR1788345	Burnhamthorpe/Oakville Holdings Inc.

The approximate Universal Transverse Mercator (UTM) coordinates for the Site centroid are NAD83 17T- 4815149 m N 600070 m E.

1.2 Background

Based on our review of the fire insurance plans, inspection reports, previous environmental report and aerial photographs, the Site has never been developed, and has been vacant since prior to 1954.

1.3 Geological and Hydrogeological Conditions

Based on the review of the above maps, the following information was obtained:

- The Site and surrounding areas are generally located within the South Slope.
- The geology of the Site and surrounding area is comprised of till moraines and till plains, which comprises of silty to clayey deposits.

- The bedrock in the general area consists of shale, limestone, dolostone, and siltstone belonging to the Queenston Formation, Georgian Bay, Blue Mountain and Billings Formations and Collingwood and Eastview Members.
- Based on the topographic map, the Site slopes gently towards the south in the southern portion and north in the northern portion of the Site. East Sixteen Mile Creek is located approximately 385 m north of the Site. Groundwater flow within the Phase One Study Area is anticipated to be towards the north to northwest.
- Based on the review of available resources from the Ministry of Natural Resources and Forestry website on October 24, 2023, no areas of natural significance were identified at the Site or within 30 m of the Site. A natural heritage system is located on the northwest side of Highway 407, approximately 125 metres northwest of the Site.

1.4 Previous Investigations

No environmental reports were available for review at the time of the Phase One investigation.

1.5 Underground Utilities

The Site utilities and services were identified at the Site based on information provided in environmental records, relevant utility infrastructure observed during the Site reconnaissance. It is noted that the precise underground location of the utilities cannot be determined without professional locate services.

Utility	Source	Location	Site Entry
Natural Gas	Enbridge Gas	Underground	Unknown. Given that the Site is vacant, this utility is not anticipated to be present on-Site.
Sanitary Sewer	Town of Oakville	Underground	Manholes were observed along Neyagawa Boulevard and Burnhamthorpe Road West. Given that the Site is vacant, this utility is not anticipated to be present on-Site.
Storm Sewer	Town of Oakville	Underground	Catch basins were observed along Neyagawa Boulevard and Burnhamthorpe Road West. Given that the Site is vacant, this utility is not anticipated to be present on-Site.
Water	Halton Region	Underground	Unknown Given that the Site is vacant, this utility is not anticipated to be present on-Site.
Electricity	Hydro-electric	Overhead	Overhead hydro wires were observed along Neyagawa Boulevard and Burnhamthorpe Road West. Given that the Site is vacant, this utility is not anticipated to be present on-Site.
Telecommunications	Bell Canada	Underground	Unknown Given that the Site is vacant, this utility is not anticipated to be present on-Site.

1.6 Potentially Contaminating Activities and Areas of Potential Environmental Concern:

Refer to Table 2 for the list of on-site and off-site potentially contaminating activities (PCAs) within the Phase One Study Area. Figure 2 shows the on-site PCAs and off-site PCAs within the Phase One Study Area.

Table 2: Potentially Contaminating Activities

PCA Identifier	Address	Location of Activity (in relation to Site) ⁽¹⁾	Potentially Contaminating Activity (PCA) ⁽²⁾	Approximate timeline that PCA occurred	Contributes to APEC (Yes or No)?
Surrounding Properties (Off-Site PCAs)					
1	Neyagawa Boulevard	West Adjacent	PCA#N/A – Salting and De-icing	Based on the site walkover, Neyagawa Boulevard is located adjacent to the site and likely undergoes salting and de-icing during winter months for the purposes of keeping vehicular traffic and/or pedestrians safe.	Yes, based on the close proximity to the Site.
2	Highway 407	Northwest Adjacent	PCA#N/A – Salting and De-icing	Based on the site walkover, Neyagawa Boulevard is located adjacent to the site and likely undergoes salting and de-icing during winter months for the purposes of keeping vehicular traffic and/or pedestrians safe.	Yes, based on the close proximity to the Site.
3	Burnhamthorpe Road West	Southeast Adjacent	PCA#N/A – Salting and De-icing	Based on the site walkover, Neyagawa Boulevard is located adjacent to the site and likely undergoes salting and de-icing during winter months for the purposes of keeping vehicular traffic and/or pedestrians safe.	Yes, based on the close proximity to the Site.
4	4 TH Line	650 m South	PCA #58 - Waste Disposal and Waste Management, including thermal treatment, landfilling and transfer of waste, other than use of biosoils as soil conditioners	The Regional Municipality of Halton was registered as a waste generator of Steel Making Residues, Inorganic Tannery Wastes, Petroleum Distillates and/or Landfill Leachates from 1986 to 2015.	Yes, given the large capacity, long operation (20 years) and upgradient location of the historical dump.
5	Entire Site	On-Site	#40 - Pesticides (including Herbicides, Fungicides and Anti-Fouling Agents) Manufacturing, Processing, Bulk Storage and Large-Scale Applications	As a conservative measure, it is assumed pesticides have been applied since the early 1900s to present.	Yes, given that it is located on-Site.

(1) Distances are approximate. Precise distances are not possible due to the age of some listings and the aggregation and/or loss of addresses.

- (2) Potentially contaminating activity means a use or activity set out in Column A of Table 2 of Schedule D (O. Reg. 153/04, as amended) that is occurring or has occurred in a Phase One Study area.

1.7 Areas of Potential Environmental Concern

Based on the above, the following APECs were identified for the Site.

Area of Potential Environmental Concern (1)	Location of Area of Potential Environmental Concern on Site	Potentially Contaminating Activity (2)	Location of the PCA (On-Site/Off-Site)	Contaminants of Potential Concern (Soil)	Media of Concern Soil /Groundwater
APEC 1	Western portion of Site	(PCA 1) #NA - Application of De-icing Salts	Off-site	EC, SAR	Soil
APEC 2	Northwestern portion of Site	(PCA 2) #N/A - Application of De-icing Salts	Off-site	EC, SAR	Soil
APEC 3	Southwestern portion of Site	(PCA 3) #N/A – Application of De-icing Salts	Off-site	EC, SAR	Soil
APEC 3	Southwestern portion of Site	(PCA 4) #58 - Waste Disposal and Waste Management, including thermal treatment, landfilling and transfer of waste, other than use of biosoils as soil conditioners	Off-site	PHCs, BTEX, VOCs, PAHs, Metals, As, Sb, Se, HWS-B, Cr (VI), Hg, CN-	Groundwater
APEC 4	Entire Site	(PCA 5) #40 - Pesticides (including Herbicides, Fungicides and Anti-Fouling Agents) Manufacturing, Processing, Bulk Storage and Large-Scale Applications	On-site	OCPs	Soil and Groundwater

EC - Electrical Conductivity, SAR - Sodium adsorption Ratio, Na - Sodium, Cl - Chloride, PHCs - Petroleum Hydrocarbons, BTEX - Benzene, Toluene, Ethylbenzene, Toluene, VOC - Volatile Organic Compounds, PAHs - Polycyclic Aromatic Hydrocarbons, Metals – Includes barium, beryllium, boron (total), cadmium, chromium, cobalt, copper, lead, molybdenum, nickel, silver, thallium, uranium, vanadium, zinc; As – Arsenic; Sb – Antimony; Se – Selenium; HWS-B – Hot Water Soluble Boron; Cr(VI) – Hexavalent Chromium; Hg – Mercury; CN- - Free Cyanide

- (1) Area of Potential Environmental Concern means the area on, in or under a phase one study area where one or more contaminants are potentially present, as determined through the PI ESA, including through (a) identification of past or present uses on, in or under the phase one property, and (b) identification of potentially contaminating activities.
- (2) Potentially contaminating activity means a use or activity set out in Column A of Table 2 of Schedule D (O.Reg.153/04, as amended) that is occurring or has occurred in a phase one Study area.

List of Figures

The Phase One CSM makes reference to the following list of figures:

Figure 1 – Site Location Plan

Figure 2 – Phase One Study Area, Surrounding Land Use Plan and Potentially Contaminating Activities (PCAs)

Figure 3 – Site Plan

Figure 4 – Areas of Potential Environmental Concern (APECs)

Appendix F – Phase Two Conceptual Site Model



Phase Two Conceptual Site Model – Neyagawa Boulevard, Oakville, Ontario

This section presents a P2CSM providing a narrative, graphical and tabulated description integrating information related to the Site geologic and hydrogeologic conditions, areas of potential environmental concern/potential contaminating activities, the presence and distribution of potential contaminants of concern, contaminant fate and transport, and potential exposure pathways. These components are discussed in the following sections. The Phase Two CSM was completed in accordance with O. Reg.153/04 as defined by the MECP. The list of figures referenced throughout this report is provided below.

List of Figures

Figure 1 – Site Location Plan

Figure 2 – Surrounding Land Use Plan, Phase One Study Area and PCAs

Figure 3 – Site Plan

Figure 4 – Areas of Potential Environmental Concern

Figure 5A – Borehole / Monitoring Well Location Plan and Cross Section Plan

Figure 5B – Borehole / Monitoring Well Location Plan and APEC

Figure 6 – Groundwater Contour Plan

Figure 7A – Soil Analytical Results – PHCs including BTEX

Figure 7B – Soil Analytical Results – Volatile Organic Compounds

Figure 7B – Soil Analytical Results – Metals and Other Regulated Parameters (including B-HWS, Cr (VI), Hg, CN-, EC, SAR)

Figure 7C – Soil Analytical Results – OCs

Figure 8A – Groundwater Analytical Results – PHCs including BTEX

Figure 8B – Groundwater Analytical Results – VOCs

Figure 8C – Groundwater Analytical Results – PAHs

Figure 8D – Groundwater Analytical Results – Metals and Other Regulated Parameters (including Na, Hg)

Figure 8E – Groundwater Analytical Results – OCs

Figure 9 – Cross Section A-A' and B-B'

1. Introduction

The Site is located on the northeast side of Neyagawa Boulevard, between Burnhamthorpe Road West and Highway 407, in Oakville Ontario (hereinafter referred to as the “Site”). Details of the Site are as follows:

Table 1: Site Identification Information

Municipal Address	N/A
Current Land Use	Agricultural and/or Other Use
Proposed Land Use	Residential
Legal Description	Part of Lot 20, Concession 2, Traf NDS, Parts 1&2 20R16345, Except Part 4 20R19373, Part 2 HR1788345
Property Identification Number (PIN)	24929-6891 (LT)
Approximate Universal Transverse Mercator (UTM) coordinates	NAD83 17T- 4815149 m N 600070 m E
Accuracy Estimate of UTM	10-15 m
Site Area	2.63 hectares (6.5 acres)
Property Owners	Burnhamthorpe/Oakville Holdings Inc.

2. Potentially Contaminating Activities and Areas of Potential Environmental Concern

2.1 Potentially Contaminating Activities

A Draft Phase One ESA, in accordance with O.Reg.153/04, has been conducted by EXP in November 2023 for the Phase One Property. Potentially Contaminating Activities (PCAs) were identified on-Site and within 250 m from the Phase One Property site boundaries. All PCAs that were identified within 250 m property are shown on Figure 2. Each PCA was further evaluated to determine if the activity may be contributing to an APEC at the Phase One Property.

The QP determined that select PCAs may contribute to an APEC for the property. Refer to Table 2 for the evaluation of the PCAs in the Phase One Study Area.

Table 2: Potentially Contaminating Activities in the Phase One Study Area

PCA Identifier	Address	Location of Activity (in relation to Site) ⁽¹⁾	Potentially Contaminating Activity (PCA) ⁽²⁾	Approximate timeline that PCA occurred	Contributes to APEC (Yes or No)?
1	Neyagawa Boulevard	West adjacent	PCA#N/A – Salting and De-icing	1950s to present. Based on the Site walkover, Neyagawa Boulevard is located adjacent to the Site and likely undergoes salting and de-icing during winter months for the purposes of	Yes, based on the close proximity to the Site.

PCA Identifier	Address	Location of Activity (in relation to Site) ⁽¹⁾	Potentially Contaminating Activity (PCA) ⁽²⁾	Approximate timeline that PCA occurred	Contributes to APEC (Yes or No)?
				keeping vehicular traffic and/or pedestrians safe.	
2	Highway 407	Northeast Adjacent	PCA#N/A – Salting and De-icing	1970s to present. Based on the Site walkover, Neyagawa Boulevard is located adjacent to the Site and likely undergoes salting and de-icing during winter months for the purposes of keeping vehicular traffic and/or pedestrians safe.	Yes, based on the close proximity to the Site.
3	Burnhamthorpe Road West	Southeast Adjacent	PCA#N/A – Salting and De-icing	1950s to present. Based on the Site walkover, Neyagawa Boulevard is located adjacent to the Site and likely undergoes salting and de-icing during winter months for the purposes of keeping vehicular traffic and/or pedestrians safe.	Yes, based on the close proximity to the Site.
4	4 TH Line	650 m South	PCA #58 - Waste Disposal and Waste Management, including thermal treatment, landfilling and transfer of waste, other than use of biosoils as soil conditioners	1986 to 2015. The Regional Municipality of Halton was registered as a waste generator of Steel Making Residues, Inorganic Tannery Wastes, Petroleum Distillates and/or Landfill Leachates from 1986 to 2015.	Yes, given the large capacity, long operation (20 years) and upgradient location of the historical dump.
5	Entire Site	On-Site	#40 - Pesticides (including Herbicides, Fungicides and Anti-Fouling Agents) Manufacturing, Processing, Bulk Storage and Large-Scale Applications	1900s to present. As a conservative measure, it is assumed pesticides have been applied since the early 1900s to present.	Yes, given that it is located on-Site.

(1) Distances are approximate. Precise distances are not possible due to the age of some listings and the aggregation and/or loss of addresses.

(2) Potentially contaminating activity means a use or activity set out in Column A of Table 2 of Schedule D (O.Reg 153/04, as amended) that is occurring or has occurred in a phase one Study area.

2.2 Areas of Potential Environmental Concern

Based on the evaluation of the PCAs located within the Phase One Study Area APECs were identified, as presented in Figure 4, and summarized in Table 3 below.

Table 3: Areas of Potential Environmental Concern (APECs)

Area of Potential Environmental Concern	Location of Area of Potential Environmental Concern on Site	Potentially Contaminating Activity	Location of the PCA (On-Site/Off-Site)	Contaminants of Potential Concern (Soil)	Media of Concern Soil /Groundwater
APEC 1 Salting along Neyagawa Boulevard	Western portion of Site	(PCA 1) #NA - Application of De-icing Salts	Off-site	EC, SAR	Soil
APEC 2 Salting along Highway 407	Northeastern portion of Site	(PCA 2) #N/A - Application of De-icing Salts	Off-site	EC, SAR	Soil
APEC 3 Salting along Burnhamthorpe Road West	Southwestern portion of Site	(PCA 3) #N/A – Application of De-icing Salts	Off-site	EC, SAR Na, Cl	Soil and Groundwater
APEC 3	Southwestern portion of Site	(PCA 4) #58 - Waste Disposal and Waste Management, including thermal treatment, landfilling and transfer of waste, other than use of biosoils as soil conditioners	Off-site	PHCs, BTEX, VOCs, PAHs, Metals, As, Sb, Se, HWS-B, Cr (VI), Hg, CN-	Groundwater
APEC 4	Entire Site	(PCA 5) #40 - Pesticides (including Herbicides, Fungicides and Anti-Fouling Agents) Manufacturing, Processing, Bulk Storage and Large-Scale Applications	On-site	OCs	Soil and Groundwater

(1) Potentially contaminating activity means a use or activity set out in Column A of Table 2 of Schedule D (O.Reg.153/04, as amended) that is occurring or has occurred in a phase one Study area.

Based on the findings of the Phase One ESA and conclusions, a Phase Two ESA is required to assess the soil and groundwater conditions at the Site.

Refer to Figure 4 or the location of APECs on the Site. Boreholes/monitoring wells advanced on the Site to investigate the identified APECs, are shown on Figure 5.

2.3 Impediments

No impediments to the work were encountered during the Phase Two ESA.

2.4 Underground Utilities

The Site utilities and services were identified at the Site based on information provided in environmental records and relevant utility infrastructure observed during the Site reconnaissance. The Site utilities are summarized in the table below and noted on Figure 3, where available.

Table 4: Site Utilities

Utility	Source	Location	Site Entry
Natural Gas	Enbridge Gas	Underground	Unknown.

Utility	Source	Location	Site Entry
			Given that the Site is vacant, this utility is not anticipated to be present on-Site.
Sanitary Sewer	Town of Oakville	Underground	Manholes were observed along Neyagawa Boulevard and Burnhamthorpe Road West. Given that the Site is vacant, this utility is not anticipated to be present on-Site.
Storm Sewer	Town of Oakville	Underground	Catch basins were observed along Neyagawa Boulevard and Burnhamthorpe Road West. Given that the Site is vacant, this utility is not anticipated to be present on-Site.
Water	Halton Region	Underground	Unknown Given that the Site is vacant, this utility is not anticipated to be present on-Site.
Electricity	Hydro-electric	Overhead	Overhead hydro wires were observed along Neyagawa Boulevard and Burnhamthorpe Road West. Given that the Site is vacant, this utility is not anticipated to be present on-Site.
Telecommunications	Bell Canada	Underground	Unknown Given that the Site is vacant, this utility is not anticipated to be present on-Site.

Preferential pathways for COCs in groundwater include underground utilities, building footings and subsurface features. As no COCs were identified in soil and groundwater at the Site, preferential pathways provided by subsurface structures and utilities will not affect groundwater contaminant fate or transport.

3. Physical Site Description

3.1 Geological and Hydrogeological Conditions

The Site and surrounding areas are generally located within the South Slope. The geology of the Site and surrounding area is comprised of till moraines and till plains, which comprises of silty to clayey deposits. The bedrock in the general area consists of shale, limestone, dolostone, and siltstone belonging to the Queenston Formation, Georgian Bay, Blue Mountain and Billings Formations and Collingwood and Eastview Members. Based on the Phase Two ESA, shale bedrock was encountered below the silt till at BH1D to BH3D. Depths of bedrock ranged from approximately 8.7 and 15.3 mbgs. Based on the topographic map, the Site slopes gently towards the south in the southern portion and north in the northern portion of the Site. East Sixteen Mile Creek is located approximately 385 m north of the Site. Groundwater flow within the Phase One Study Area is anticipated to be towards the north to northwest. Based on the groundwater contour map for the Site, the groundwater is anticipated to be multi-directional and flows in a northwesterly direction at the northern portion of the Site and a southerly direction at the southern portion of the Site.

Based on the review of available resources from the Ministry of Natural Resources and Forestry website on October 24, 2023, no areas of natural significance were identified at the Site or within 30 m of the Site. A natural heritage system is located on the northwest side of Highway 407, approximately 125 metres to the northwest.

3.1.1 Surface Material

No pavement or asphalt were present on-Site. Soil was exposed across the entirety of the Site.

Topsoil was present at all borehole locations. The topsoil extends to depths of approximately 0.1 to 0.18 mbgs. The topsoil consists of brown silt and organic material.

3.1.2. Native Material

Sandy Silt Till

The sandy silt till extends to a depth of approximately 3.5 to 6.4 mbgs. The silt is brown, becoming grey around the water table depth.

Clayey Silt Till

A clayey silt till deposit was intersected below the sandy silt till or silt till in BH1S to BH4S. The clayey silt till extends to depths of approximately 7.3 to 10.2 mbgs. The clayey silt till is brown to grey in colour and contains trace sand and gravel at some depths and locations.

Silt Till

A silt till deposit was intersected below the clayey silt till in BH1S to BH4S. The silt till extends to the top of the shale bedrock, to depth of approximately 8.7 and 15.3 mbgs. The silt till is grey in colour with trace clay, sand, and/or gravel.

3.1.3 Bedrock

Shale bedrock was encountered below the silt till at BH1D to BH3D. Depths of bedrock ranged from approximately 8.7 and 15.3 mbgs. BH1S to BH5S were terminated prior to hitting bedrock. The details findings from the rock cores are presented in the geotechnical report, on a separate coverage.

All five (5) environmental boreholes were terminated within the silt or clayey silt till.

3.2 Hydrogeology

Based on the groundwater contour map for the Site, the groundwater is anticipated to be multi-directional and flows in a northwesterly direction at the northern portion of the Site and a southerly direction at the southern portion of the Site. Refer to Table 5 (below) for the Site hydrogeology characteristics based on groundwater monitoring observations.

Table 5: Site Hydrogeology Characteristics

Location	Observation
Depth to Groundwater	0.661 (BH3S) to 7.708 mbgs (BH1S)
Groundwater Elevation	180.93 (BH3S) to 183.28 masl (BH4S)
Direction of Groundwater Flow	Multi-directional: Northwesterly at the northern portion and southerly in the southern portion
Horizontal Hydraulic Gradient	0.003 m/m

mbgs = metres below ground surface
masl = meters above sea level

The hydrogeology of the Phase Two Property is illustrated on the groundwater contour plan (Figure 6).

3.3 Site Sensitivity

The Site Sensitivity classification with respect to the conditions set out under Sections 35, 41 and 43.1 of O.Reg.153/04 were evaluated to determine if the Site is sensitive, as presented in Table 6.

Table 6: Site Sensitivity

Sensitivity	Classification	Does Sensitivity Apply to Site?
Section 35 applies if	(i) The full depth generic site condition standards in a non-potable groundwater condition	No
	(ii) The stratified site condition standards in a non-potable groundwater condition	No
	(iii) The property, and all other properties located, in whole or in part, within 250 metres of the boundaries of the property, are supplied by a municipal drinking water system	No
	(iv) The record of site condition does not specify agricultural or other use as the type of property use	No
	(v) The property is located in an area designated in the municipal official plan as a well-head protection area or other designation identified by the municipality for the protection of groundwater	No
	(vi) The property or one of the properties in the phase one study area has a well used or intended for use as a source of water for human consumption or agriculture.	Yes
	(vii) A person authorized by the owner of a property has given the clerk of the municipality a written notice of intention to apply the standards in preparing a record of site condition for the property.	No
Section 41 applies if	(i) property is within an area of natural significance	No
	(ii) property includes or is adjacent to an area of natural significance or part of such an area	No
	(iii) property includes land that is within 30 m of an area of natural significance or part of such an area	No
	(iv) soil at property has a pH value for surface soil less than 5 or greater than 9	No
	(v) soil at property has a pH value for sub-surface soil less than 5 or greater than 11	No
	(vi) a qualified person is of the opinion that, given the characteristics of the property and the certifications the qualified person would be required to make in a record of site condition in relation to the property as specified in Schedule A, it is appropriate to apply this section to the property	No
Section 43.1 applies if	(i) property is a shallow soil property	No
	(ii) property includes all or part of a water body or is adjacent to a water body or includes land that is within 30 m of a water body	No

3.3.1 Excess Soil Importation

Fill material is typically brought to a property as a base for buildings and pavement areas. Fill can also be used to re-grade a property, and to backfill excavations.

Based on the reviewed information, very small amounts of reworked native material is present across the Site. No excess soil has been brought to the Site during the Phase Two ESA or has historically anticipated to be brought to the Site.

3.4 Land Use

At the time of the Phase Two ESA, the Site was occupied by vacant land containing soy bean crops.

Reportedly, the Site is intended to be redeveloped for residential purposes. Design plans have not been finalized, at this time.

4. Contaminants of Concern

For assessment purposes, EXP selected the MECP (2011) Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition for Residential/Parkland/Institutional Property Use and fine-textured soil was considered applicable for determining contaminants of concern (COCs), based on the rationale presented in Table 7 below.

Table 7: Site Condition Standards

Description	Site Specific Condition
Section 35 Site Sensitivity	Not Applicable
Section 41 Site Sensitivity	Not applicable <ul style="list-style-type: none"> The soil at the Site has pH values between 5 and 9 for surficial soil; and, between 5 and 11 for subsurface soil. The Site is not located within, and/or located adjacent to an area of natural significance/an environmentally sensitive area.
Section 43.1 Site Sensitivity	Not Applicable <ul style="list-style-type: none"> The Site is not considered a shallow soil property, based on the recovered soil cores, which indicated that more than two-thirds of the Site has an overburden thickness in excess of 2 m. The Site is not located within 30 m of a surface water body
Land Use	Residential/Parkland/Institutional <ul style="list-style-type: none"> The proposed future use of the Site is for residential use.
Soil Texture	Medium and Fine textured <ul style="list-style-type: none"> The predominant texture of soils at the Site is considered to be medium and fine, based on soil characteristics identified in the borehole logs

Based on the reported analytical results, soil and groundwater parameters were not detected at concentrations above the applicable MECP Table 2 SCS.

4.1 Soil

Soil was within the Table 2 SCS for all parameters analyzed. Therefore, no soil COCs are present at the Site at concentrations above the Table 2 SCS.

4.2 Groundwater

Groundwater was within the Table 2 SCS for all parameters analyzed. Therefore, no groundwater COCs are present at the Site at concentrations above the Table 2 SCS.

4.3 Mechanism of Discharge of Contaminants

No COCs were identified at the Site during the Phase Two ESA.

4.4 Migration of Contaminants

As no soil or groundwater COCs were identified, underground utility corridors are not considered an applicable pathway for migration of any contaminant plume. Furthermore, fill is not anticipated to affect groundwater contaminant migration.

4.5 Climatic and Meteorological Conditions Affecting Migration

No soil or groundwater exceedances of the MECP Table 2 SCS were identified at the site. As such, temporal variability in groundwater flow direction due to climatic and meteorological conditions is not expected to be a factor concerning the distribution and migration of contaminants.

4.6 Soil Vapour Intrusion

As no volatile soil and groundwater COCs were identified, vapour intrusion pathways are not considered complete.

5. Uncertainty in the Phase Two Investigation

The investigation undertaken by EXP, and any conclusions or recommendations resulting from the work, reflect EXP's judgment based on the Site conditions observed at the time of EXP's site inspections and on information available at the time of preparation of the work. EXP has confirmed neither the completeness nor the accuracy of the records that were provided by others; as such, the historical records review is identified as a potential source of uncertainty during the investigation. The CSM is developed using multiple lines of evidence, searches and source information to make every reasonable attempt to ensure that findings of environmental significance are captured.

Any uncertainty or absence of information in the records review, interviews, and site reconnaissance components of the Phase One investigation, or any uncertainty or absence of information within the Phase Two or subsequent investigations, are not anticipated to materially affect the validity of the Phase Two CSM.