

Project Number: 18-748-100

October 20, 2020

Manager, Environmental Site Management & Compliance Environmental Services Transportation & Works Department City of Mississauga 201 City Centre Drive, 8th Floor Mississauga, ON L5B 2T4

Attention: Nathan McFadden

Re: Decommissioning of Septic System and Monitoring Wells 5150 Ninth Line, Mississauga, Ontario

1. Introduction

DS Consultants Limited (DS) is providing this letter to document the decommissioning of the former septic system, domestic water well and monitoring wells associated present on the property with the municipal address of 5150 Ninth Line, Mississauga, Ontario.

DS has previously completed the following Phase One and Phase Two ESA investigations for the subject site:

- "Phase One Environmental Site Assessment, 5150 Ninth Line, Mississauga, Ontario", dated February 11, 2019
- * "Phase Two Environmental Site Assessment, 5150 Ninth Line, Mississauga, Ontario", dated October 16, 2019

The investigations identified that the house associated with 5150 Ninth Line included a septic system and a domestic supply well. The following monitoring wells were installed on the property as part of the Phase Two ESA investigation, and as part of the geotechnical and hydrogeological investigations:

Site Address	Well Type	Well ID	Well Location*
5150 Ninth Line,	Monitoring Well	MW19-1	South of Site Building A in the northeast portion of the property
Mississauga, Ontario	Monitoring Well	MW19-4	West portion of the property, just west of the walking path.
	Monitoring Well	BH9	Southwest portion of the property

Notes: * - Refer to Borehole Location Plan (appended) for monitoring well locations

It should be noted that the 2017 Phase Two ESA completed for the Site by Sirati and Partners Consultants Ltd indicated that a monitoring well designated as "MW4" was present in the vicinity of MW19-4. Upon completion of a site inspection no monitoring well was located in this area of the Site.



Evidence of a borehole was observed in the location of "MW4" was observed. MW4 is inferred to have been a temporarily sampling point, without installation of a monitoring well.

2. Septic Systems

Multiple site buildings were located on the property. Site Building A located in the southern lot was identified to be serviced with a septic system. The septic system was decommissioned by Blackwater Environmental Services in March 2020. The decommissioning procedure involved the septic system being pumped out and the structure excavated. The excavated concrete was loaded into a disposal bin and removed from the site to an appropriate waste disposal facility. A copy of the septic pumping receipt is appended.

3. Domestic Water Supply Wells

The Phase One ESA conducted for the subject site indicated that potentially two (2) domestic supply wells are located on the subject property. One (1) of the domestic wells was located in the vicinity of the house associated with 5150 Ninth Line. The second domestic well, as identified by the MECP well records was not encountered on 5150 Ninth Line, and is inferred to be associated with the building at 5170 Ninth Line.

The domestic supply well at 5150 Ninth Line was decommissioned on July 23, 2020 by Sonic Soil Inc., a licensed well contractor. A copy of the well decommissioning record is appended.

4. Monitoring Wells

DS retained the services of Langille Water Services, a licensed well contractor to complete the decommissioning of the monitoring wells on-Site on September 30, 2020. At the time of the well decommissioning activity the house at 5150 Ninth Line had been demolished. Monitoring well MW19-1 was discovered to have been removed previously, and appears to have been removed at the time of demolition of the house. Monitoring well MW19-4 was successfully located and decommissioned in accordance with O.Reg. 903. The well decommissioning record is appended to this letter. Monitoring well BH9 could not be located and is inferred to have been destroyed and/or removed from the property.



5. Closure

We trust that this memorandum provides the information requested. Should you have any questions regarding the content of this letter please do not hesitate to contact the undersigned.

Sincerely,

DS Consultants Ltd.

Prepared by:

Reviewed by:

millart

Drew Doak, B.ScE., P.Eng., QP_{ESA} Environmental Project Manager

horanan

Patrick Fioravanti, B.Sc., P.Geo., QP_{ESA} Manager – Environmental

Enclosures

- Appendix A Borehole/Monitoring Well Location Plan
- Appendix B Septic pumping receipt
- Appendix C Domestic Well Decommissioning Report
- Appendix D Monitoring Well Decommissioning Report



Appendix A





Appendix B



Invoice

Date Invoice # 2020-04-01 24188

Site

5150 Ninth Line Mississauga

Invoice To

Terrain Excavation

		P.O. No.		Terms
				Net 30
Service Date	Description	Rate	Hours	Amount
	1000 Gallon Septic Tank credit card admin fee HST (ON) on sales			
	1	Sales Ta	x	
GST/HST No. 8	369405340	Total		



Appendix C



General Instructions and Explanations for completing a Well Record

A completed electronic Well Record Form must be delivered to the well purchaser and the owner of the land on which the well is situated within 14 days after the date on which the well's structural stage is complete. The electronic Well Record must also be forwarded within 30 days after the date on which the well's structural stage is complete to the ministry through email to the following email address: <u>WellRecordSubmission@ontario.ca</u>

False and Misleading Information

Subsection 98(2) of the Ontario Water Resources Act, R.S.O. 1990 c. O. 40, states that:

"No person shall orally, in writing or electronically, give or submit false or misleading information in any statement, document or data, to any provincial officer, the Minister, the Ministry or the Agency, any employee in or agent of the Ministry or the Agency, or any person involved in carrying out a program of the Ministry or the Agency in respect of any matter related to this Act or the regulations."

Further, subsection 98(3) of the Act states that:

"No person shall include false or misleading information in any document or data required to be created, stored or submitted under this Act."

Measurements

All measurements must be recorded in the specified unit, metric or imperial by checking off the applicable box on the top of the form. You must use the checked unit consistently throughout the well record. Measurements must be reported to 1/10th of a metre if the unit is a metre. All measurements of depth must be referenced to ground surface.

Well Owner's Information

A "well owner" means the owner of land upon which a well is situated and includes a tenant or lessee of the land and a well purchaser. If the "well owner" is an individual, record the owner's last name and first name or if the "well owner" is a business, government or other organization, record the name in the "organization" area.

Well Location

Street Number/Name and City/town/Village must be provided, if available.

Geographic Township, Concession and Lot must be reported if the well is located in an area where such information exists.

UTM Coordinates must be recorded each time a Well Record is completed. Click the button [Test UTM in Map] to use the UTM Coordinates to plot the location to Google map. This allows verification of the UTM Coordinates. This will also automatically populate the County/District.

Municipal Plan and Sublet Number may be provided, if available.

Overburden and Bedrock Materials

For each formation encountered during construction, choose words from the lists that best describe the formation on the basis of general colour, most common material, other materials, and general description of the formation.

General Colours are White, Yellow, Grey, Brown, Blue, Red, Green and Black.

Examples of Materials are: Fill, Silt, Top Soil, Coarse Sand, Slate, Muck, Gravel, Limestone, Dolomite, Quartzite, Peat, Stones, Fine Sand, Shale, Granite, Clay, Boulders, Medium Sand, Sandstone, and Greenstone. Some definitions are as follows:

- Clay: Composed of very fine particles. Forms dense hard lumps or clods when dry and a very elastic putty-like mass when wet. It can be rolled between fingers to form a long, flexible ribbon.
- Silt: Grain size, midway between sand and clay. It may form clods which, when broken, feel soft and floury. When moist, it will form a cast that can be handled freely without breaking. Rolled between thumb and finger, it will not "ribbon" but will give a broken appearance.

- Sand: Grains are loose and granular and may be seen and felt readily. Squeezed in the hand when dry, it falls apart when the pressure is released. Squeezed when moist, it will form a cast that will crumble when touched. Should be listed as fine sand, medium sand or coarse sand.
- Gravel: Rock fragments greater than 0.3 cm in diameter.

Examples of General Descriptions are Loose, Cemented, Previously Dug or Bored, Porous, Layered, Previously Drilled, Dense, Soft, Wood Fragments, Packed, Hard.

Abandonment

To report abandonment of a well, check off the applicable box in Type on the top of the form. Details of abandonment must be recorded in the Abandonment and Sealing Section. Additional comments may be entered in the comments box under the Information section.

Annular Space

Record all material placed in the annular space around the single casing or around the permanent outer casing. If the well is a telescoped well [i.e., a well with an outer casing and inner casing(s)] or if the well is a multi-level nested test hole, report the depth from, depth to, material and volume placed for the annular space between two different sized casings or between the inner casing(s) and the side of the well in the "Comments" area of this electronic well record form.

Method of Construction

If the equipment used to construct the well is not on the list, check "Other (specify)" and record the type of equipment, check each equipment that applies.

Well Use

If the well's use is not provided on the list, check "Other (specify)" and record the use of the well. If the well has multiple uses, check each use that applies.

Status of Well

If the well's status is not provided on the list, check "Other (specify)" and record the use of the well. If the well has multiple statuses, check each use that applies.

Construction Record – Casing and Open Hole

Use negative values to report the top of casing above ground surface. For example, if the top of the casing is 0.4 metres above the ground surface and the bottom of the casing 6.0 metres below the ground surface, record the casing "Depth From" as -0.4.

If the top of casing is located below the ground surface (e.g., if a test hole is constructed and the top of casing is located below the ground surface in a flush mounted well vault), report the top of the casing from below ground surface. For example, if the top of the casing is 0.1 metres below the ground surface and the bottom of the casing is 6 metres below the ground surface, record the casing "Depth From" as 0.1.

Note: If a drive shoe is used, the shoe is considered casing and it must be reported if the shoe has a different inside diameter thickness.

If a portion of the well was created an open hole, record the location of the open hole on a separate row, including the diameter and the depth (top and bottom of open hole) from the ground surface.

Construction Record – Well Screen

A "well screen" means perforated pipe or tubing, unsealed concrete tiles or other material installed in a well to filter out particulate matter and form the water intake zone. Therefore, the length of a well screen includes any slotted or perforated area and unsealed area of pipe or tiles.

Water Details

- if groundwater was located, record the depth from the ground surface to the location of the groundwater resource, and
- record if the groundwater quality is "Untested," "Fresh" (i.e., not salty), or "Other (specify)." If "Other (specify)" is
 recorded, use the "Other (specify)" dropdown list toselect the type of groundwater (e.g., salty, blackish water,
 yellowish water, mineralized, etc.).

Check off "Gas" if natural gas was encountered during well construction.

Note: Natural gas encounters need to be immediately reported to the ministry at 1-800-268-6060, well purchaser and the owner of the land.

Results of Well Yield Testing

Check off "Pumping Discontinued" if pumping was discontinued before 1 hour of continuous pumping. Explain the reason why pumping was discontinued or in some cases not performed (e.g., the well went dry, impossible to install pump in small diameter well, static water level from test hole or dewatering well was obtained and is reported instead of completing a yield test etc.).

Note: Equipment breakdown is not an acceptable reason for checking off "Pumping Discontinued" on the well record form. If groundwater in the well is flowing out of the well, provide the rate of flow, and check off "Flowing Well" (i.e., static water level above the ground surface).

In the "Results of Well Yield Testing" section of the well record form, record:

- the depth to the intake of the pump,
- the rate of pumping and duration of pumping period during the yield test,
- the final water level when pumping stops,
- water level measurements made during pumping (drawdown) and recovery. All water level measurements must be referenced from below the ground surface for each time interval specified in the drawdown and recovery boxes.

If the water level measurements remain the same over a period of time, continue to measure and report the same water level measurement for the remaining pumping or recovery time intervals.

If pumping continuously for at least 1 hour, but the design of the well does not allow for water level measurements (e.g., driven point well), the person constructing the well is not required to report drawdown or recovery water level measurements.

Map of Well Location

In the "Map of Well Location" section of the well record form, click the map area to attach a map of the well location. The map must show sufficient information to locate the well, including:

- a mark on the map showing the well,
- a scale on the map, and
- where available, the name of the structure, street or surface water body nearest to the well.

Note: More than one map can be added to the well record form by clicking on "Add Map (+)" to add an additional map.

Information

Record any additional information (e.g., observations, tests, additional licensed well technicians who worked on the well, additional annular space details for a telescoped well or a multi-level nested test hole, reasons for not providing a well owner information package) in the comments area.

Declaration

Check the declaration statement to confirm that the person constructing the well agrees with the following statement: "I hereby confirm that I am the person who constructed the well and I hereby confirm that the information on the form is correct and accurate".

Validate

Click the validate button. If there is no missing information, you will be asked to enter the well tag again to make sure the well tag is entered correctly (only enter the numeric portion of the tag number). The audit number will then be changed from "**incomplete**" to an assigned audit number. The signature field will then be available. Click on "signature" to enter the well technician's electronic signature. For instructions on how to create an electronic signature, please visit the Adobe Digital IDs website using the following link: <u>https://helpx.adobe.com/acrobat/using/digital-ids.html</u>



Notice of Collection of Personal Information

Personal information contained on this form is collected pursuant to sections 35-50 and 75(2) of the Ontario Water Resources Act and section 16.3 of the Wells Regulation. This information will be used for the purpose of maintaining a public record of wells in Ontario. This form and the information contained on the form will be stored in the Ministry's well record database and made publicly available. Questions about this collection should be directed to the Water Well Customer Service Representative at the Wells Help Desk, 125 Resources Road, Toronto Ontario M9P 3V6, at 1-888-396-9355 or wellshelpdesk@ontario.ca.

Fields marked with an asterisk (*) are mandatory.

							Well Tag Number * Help						
									No Tag on	No Tag on Well			
Type *													
Construction	n	🖌 A	bandonn	nent									
Measurement	reco	rded in	*										
Metric		🗌 In	nperial										
1. Well Own	er's	Inform	nation										
Last Name and	First	Name,	, or Orga	nization	is m	andatory. *	_						
Last Name							First N	ame					
Organization Mattamy (5150 Ninth Line) Limited							Email A	Address					
Current Address													
Unit Number <mark>3</mark>		Street I 7800	Number *	* Stre Kee	eet N ele S	lame * Street	City/Town/Village Vaughan						
Country Canada						Province Ontario			Postal Code L4K 4G7	Telep	bhone Number		
2. Well Loca	tion	I											
Address of We	ell Lo	cation											
Unit Number	Stre 515	et Num 0	ber *	Street N Ninth L	lam iine	e *	Township Trafalgar						
Lot 1				Conces <mark>9</mark>	sion	I	County/District/Municipality Peel						
City/Town Mississauga								Province Ontario	Province Posta Ontario L5M		Postal Code .5M 0R5		
UTM Coordinat	es Z	Zone *	Easting *	k	No	rthing *		1	Municipal Plan and	I Sublc	ot Number		
NAD 83		17	601989	9	48	321329	Test	UTM in Map	M in Map				
Other													
3 Abandonm	ent	and Se	alina										

3. Abandonment and Sealing

21.3

Provide information of well (e.g. construction date, original contractor). Do not enter private information

(m)

Original Owner

		Depth From (m)	Depth To (m)							
Add Row (+)										
4. Annular Sp	ace									
Depth From	rom Depth To Type of Sealant Used (Material and Type) Volume Placed									
(m)	(m)				(cubic ı	netres)				
0	2.2		grade to surface	e	1	.4 -				
2.2	2.6		bentonite		0.	38 -				
2.6	20.7		clean fill		1	.9 -				
20.7	21.3		bentonite		0.	17 -				
Add Row ((+)									
5. Method of	Constructio	on								
Cable Tool	Rotary	/ (Conventional) 🗌 Rota	ıry (Reverse)	Boring Air perc	ussion 🗌 Di	amond				
 Jetting		g 🗌 Digging 🖳 Rota	ıry (Air)	☐ Augering ☐ Direct P	ush					
Other (speci	fy)		L							
6 Well Lise										
			oling & Air Condit	ioning						
			t lleed	loning						
			wataring							
	ნ.)		watering							
	iy)									
7. Status of W	Vell									
Water Suppl	ly	Replacement Well		Test Hole						
Recharge W	/ell	Dewatering Well		Observation and/or Monit	toring Hole					
Alteration (C	onstruction)	Abandoned, Insufficie	ent Supply	Abandoned, Poor Water	Quality					
 Abandoned, 	other (speci	fy) customer request								
Other (speci	fy)									
8. Constructio	on Record	- Casing (use negative	number(s) to indi	cate depth above ground	d surface)					
Inside	Ope	en Hole or Material (Galvan	ized, Fibreglass,	Wall	Depth From	Depth To				
(cm)		Concrete, Flastic, 3		THICKIESS	(m)	(m)				
90		Concrete			0 213					

Add Row (+)

9. Construction Record - Screen														
Outside Diamete (cm)	r	Material (Plastic, Galvanized, Steel)							Slot Number		Depth (r	ı From n)	Dept (r	th To n)
Add Row	(+)													
10. Water Details														
Water found at Depth 3.1 (m) Gas Kind of water Fresh Vuntested Other														
Add Water Details (+)														
11. Hole Diameter														
D	epth Fro	m			Dep	th To					Diamete	er		
	(m)				(r	n)					(cm)			
	0													
Add Row	(+)													
12. Results o	f Well \	rield Te	esting											
Pumping Dis	scontinu	ed												
Explain														
If flowing give ra	ate													
Flowing					((L/min)								
Draw down									-			1	1	
Time (min)	Static Level	; 1	2	3	4	5	10	15	20	25	30	40	50	60
Water Level (m)														
Recovery														
Time (mir	ר)	1	2	3	4	5	10	15	20	25	30	40	50	60
Water Lev (m)	vel													
After test of we	ll yield, v	vater wa	S											
Clear and sa	and free	Oth	ner (spe	cify)										
Pump intake se	t at Pu	mping ra	te	Duratio	n of pur	nping		Final wa	ater leve	el end of	pumpinę	g Dis	infected	?
	(m)		(L/min)		hrs -	+	min				(m)		Yes	No
Recommended pump depth Recom				mended	pump ra	ate We	ell produc	tion						
40.14		(m)			(L/n	nin)			(L/min)					
13. Map of W		ation *									<u> </u>			
Map 1. Please Cl	lick the m	ap area l	pelow to i	mport an	image file	e to use	as the ma	р.	Mal	ke map a	area bigo	ger		—

-

	5150 Ninth LineMississauga KON LSM OR6	
2004	to the location of the locatio	
Add Map (+)		

14. Information		
Well owner's information package delivered	Date Package Delivered (yyyy/mm/dd)	Date Work Completed (yyyy/mm/dd) * 2020/07/23
Comments		

15. Well Contractor and Well Technician Information										
Business Name of Well Contractor * Sonic Soil Sampling Inc.							Well Contractor's License Number * 7147			
Business Address										
Unit Number 15	Street Number 668	ber Street Name * Millway Avenue								
City/Town/Villag	ge *			Pro On	ovince Itario		Postal Code * L4K 3V2			
Business Telep 905-660-0501	hone Number	Busine sonic@	ss Email Addı	ress om	·			·		
Last Name of V Osborne	Vell Technician *		First Name of Well Technician * Tim			Well Technician's Li 4078		ian's License Number *		
16. Declaration	on *									
✓ I hereby cor and accurat	nfirm that I am th e.	e persoi	n who constru	icted the well and I I	hereby	confirm tha	t the information	on on the form is correct		
Last Name Archibald			First Name Alan			Email Address sonic@sonicsoil.com				
Stigheturre						Date Submitted (yyyy/mm/dd)				
Digitâliy sign DN: cn=Alan Date: 2020.0				Digitality signed by Alan DN: cn=Alan, o=Sonic Soil Sampling Inc., ou, email=sonic@sonnicsoil.com, Date: 2020.08.13 15:07:05 -04'00'			2020/08/13			
17. Ministry U	Jse Only									
Audit Number										
F7E2 5SBL										
Validate	Save Fo	rm	Print Form					Clear Form		



Appendix D

Ministry of Conservation	of the Environment, ation and Parks etric _ Imperial	ag No. (Place Sticker	and/or Print Below)	ion 903 Ontario	Well Record
Well Owner's Information First Name Mailing Address (Street Number/Name 788 O Keelet, Va Well Location Address of Well Location (Street Number)	st Name / Organization latamy (SISO Ni ft nghn	Ling Ltd - Municipality York -	E-mail Address Provinge DN 2444	Pa ode 467	age of Well Constructed by Well Owner ne No. (<i>inc. area code</i>)
SISO Ninth Line County/District/Municipality //a/Tom UTM Coordinates Zone Easting NAD 8 3 / D 6 0 1 8 Overburden and Bedrock Materials	Northing	City/Town/Village MISSISSAUG Municipal Plan and Sup ord (see Instructions on t	N (TVG fabjar) Lot A St Number) Conces N Province Ontario Other	sion Postal Code
General Colour Most Common Bentonite	n Material Ot	her Materials	General Descripti	on	Depth (<i>m/ft</i>) From To 7.6
Casingre	movel				
Depth Set at (<i>m/ft</i>) Ty From To (M	Annular Space pe of Sealant Used faterial and Type)	Volume Placed (m³/ft³)	Results of M After test of well yield, water was: □ Clear and sand free □ Other, specify If pumping discontinued, give reason Pump intake set at (m/ft)	Vell Yield Testin Draw Down Time Water Le (min) (m/ft) Static Level 1	g Recovery vel Time Water Level (min) (m/ft) 1
Method of Construction Cable Tool Diamond Rotary (Conventional) Jetting Rotary (Reverse) Driving Boring Digging Air percussion Other, specify	Well Use Public Commer Domestic Municipa Livestock Test Hole Irrigation Cooling & Industrial Other, specify	e cial Dewatering Dewatering Air Conditioning	Pumping rate (l/min / GPM) Duration of pumping	2 3 4 5 10 15	2 3 4 5 10 15
Construction Reco Inside Diameter (cm/in) Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel) Th 5-0% plastic 1	rd - Casing Wall Depth (m/ft) ickness From To OS O O.6	Status of Well Water Supply Replacement Well Test Hole Recharge Well Dewatering Well Observation and/or Monitoring Hole	Recommended pump depth (<i>m/ft</i>) Recommended pump rate (<i>l/min / GPM</i>) Well production (<i>l/min / GPM</i>)	15 20 25 30 40	15 20 25 30 40
Outside Diameter (<i>cm/in</i>) (Plastic, Galvanized, Steel) S	rd - Screen Slot No. Depth (<i>m/ft</i>) From To	 Alteration Alteration Construction) Abandoned, Insufficient Supply Abandoned, Poor Water Quality Abandoned, other, specify Specify Other, specify 	Disinfected? Yes No Map of W Please provide a map below follow	fell Location	the back.
Water Details Water found at Depth Kind of Water: (m/ft) Gas Other, specify Water found at Depth Kind of Water: Image: Colspan="2">Image: Colspan="2">Image: Colspan="2">Image: Colspan="2">Colspan="2">Water found at Depth (m/ft) Gas Other, specify (m/ft) Gas Other, specify Water found at Depth Kind of Water: Image: Colspan="2">Image: Colspan="2">Colspan="2">Image: Colspan="2">Image: Colspan="2" Image: Colspan="2">Image: Colspan="2" Image: Colspan="2" Im	Fresh Untested From	ole Diameter (m/ft) Diameter To (cm/in)	253M	qti	Line
(<i>m/ft</i>) Gas Other, specify Well Contractor an Business Name of Well Contractor Langille Waley Se Business Alidress (Street Number/Name) S3 Jane St. Gue	Well Technician Information	n Contractor's Licence No. 2523 cipality	Comments:	Egl	ington Ave w
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	f Well Technician (Last Name) Fi hours key / h ichnician and/or Contractor Date	Submitted	Well owner's information package delivered Date Package Delivered Y Y M Date Work Completed Date Work Completed Y Y Y	d Minis Audit No. 2 3 0 Received	try Use Only 333775

Ministry's Copy

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