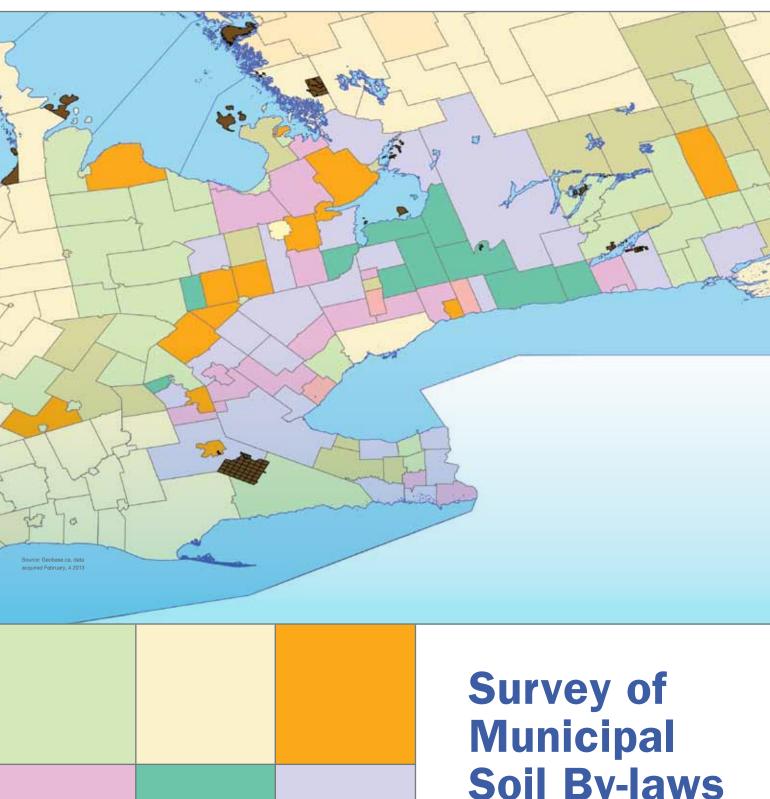
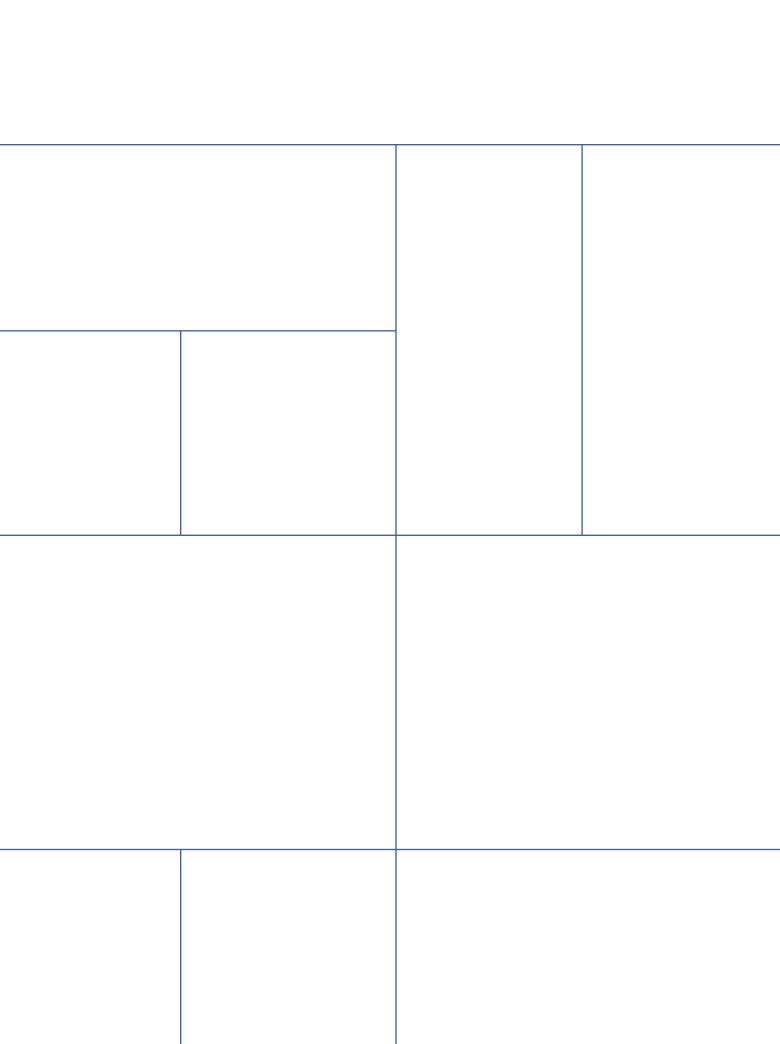


An Independent Study Commissioned by



Soil By-laws

March 2013



Survey of Municipal Soil By-laws

March 2013

An Independent Study
Commissioned by the
RESIDENTIAL AND CIVIL CONSTRUCTION
ALLIANCE OF ONTARIO

If you have any questions, please contact:



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EXECUTIVE SUMMARY

review of 135 municipalities in the Greater Toronto Area (GTA) shows that only a small percentage have soil quality regulations that reference the Province's criteria for soil quality. Inconsistencies between provincial and municipal regulatory frameworks contribute to the difficulty that contractors and developers experience to obtain or dispose of excess construction soil.

In 2011, Hatch Mott MacDonald (HMM) conducted a review of 33 municipalities in the GTA and found that 23 had a relevant by-law that mentions soil quality. In the fall of 2012, a scan of Municipal Fill By-laws was initiated focusing on municipalities, regions and counties either in the outer ring of the GTA or beyond the GTA. The objective of the review was to seek out relevant by-laws addressing the deposit of clean excess soil. Previously reviewed municipalities were also revisited to review any amendments.

The results of our follow-up review of municipalities and inquiry concluded that 70 out of 143 upper and lower tier municipalities reviewed have a fill by-law. Only eight municipalities, however, made reference to the Ontario Ministry of Environment's (MOE's) soil quality criteria tables (O.Reg. 153/04). Eight municipalities define contamination based upon concentrations greater than naturally occurring on the receiving property.

Our findings also suggest that, while the municipalities located nearest to the Toronto area have developed site alteration by-laws governing the placement of soil, those further away from the immediate GTA appear to be slower to adopt a fill by-law as fill disposal has not posed a significant issue thus far.

Based on these findings, recommendations include continuing to work toward a consistent approach for soil management in municipal by-law and procurement practices through the provincial-municipal-industry working group. In consultation with the working group, the Province should pick a key municipality and put resources in place to develop and pilot test site alteration by-laws with appropriate regulatory references to O.Reg. 153/04 that also adopts the principles of the forthcoming MOE Soil Best Management Practices (BMP) approach.

Ongoing formal education and capacity building to assist municipalities with the development, monitoring, and dissemination of experiences with soil management in municipal by-laws and procurement practices is also crucial. The Province should provide guidance to municipalities through the Planning Act or the Provincial Policy Statement to include comprehensive soil management planning as a requirement for site development applications.

The Ministry should also begin to track incorporation of soil BMPs into municipal bylaws. This would facilitate measurement of progress and provide an overview of the status of the best practices that have been employed.

1.0 INTRODUCTION

t is a provincial requirement under the Environmental Protection Act (EPA) through the Ministry of Environment (MOE) to provide soil quality criteria. It is a municipal responsibility under the Planning Act to regulate the actual final placement of soil and fill through local site alteration by-laws. It has been noted by the MOE that municipalities are using Ontario Regulation (O.Reg) 153/04 (as amended) Table 2 criteria in their site alteration by-laws, however contractors and developers have reported that property owners will only accept soil that meets the O.Reg 153/04 (as amended) Table 1 criteria, which is more stringent than the criteria listed in O.Reg 153/04 (as amended) Table 2.

If there is an inconsistency between the provincial and municipal regulatory frameworks it may be contributing to restrictions on the ability of contractors and developers to obtain or dispose of excess construction soil.

A previous review of Municipal Fill By-laws was conducted by Hatch Mott MacDonald (HMM) in August, 2011. In that review, fill or site alteration by-laws for municipalities in the Greater Toronto Area (GTA) were reviewed to confirm whether fill quality was specified in the by-laws.

In the fall of 2012, a scan of Municipal Fill By-laws was initiated focusing on municipalities, regions and counties either in the outer ring of the Greater Toronto Area (GTA) or beyond the GTA. The objective of the review was to seek out relevant by-laws addressing the deposit of clean excess soil. Previously reviewed municipalities were also revisited to review any amendments.

After completing the initial scan, two formal letters were distributed in early November 2012. The first letter was issued to municipalities that have current fill by-laws, and the second letter was for municipalities that either did not have a fill by-law or it was not found on their website. The letters indicated our interest in learning about any existing fill by-laws, potential amendments, and the potential for implementing a fill by-law if one does not exist.

This memo summarizes the status of fill or site alteration by-laws for lower tier (Cities, Towns and Townships) municipalities compiled from the August 2011 review and the review of the 143 municipalities, regions and counties conducted for this update. A separate review for fill or site alteration by-laws was conducted by the Lakeridge Citizens for Clean Water, in June 2012. While the focus and geographical extent of the two surveys differed, the results of this review were consistent with the results reported by Lakeridge Citizens for Clean Water with respect to the presence for fill by-laws at the municipalities that were reviewed by both groups.

Appendix 1 on page 11 summarizes the results of the responses from the upper and lower tier municipalities. Appendix 2 on pages 12 to 19 summarizes the results of the fill by-law review, organized by upper tier and lower tier municipal government.

2.0 RESULTS OF THE MUNICIPAL BY-LAW REVIEW

rom our initial fill by-law research in August 2011, 23 municipalities out of 33 reviewed in the Greater Toronto Area had a relevant by-law that mentions soil quality. Of these 20 municipalities only Scugog and Uxbridge specifically referenced O.Reg 153/04, Table 1 standards for fill. It should be noted that the Town of Georgina has since revised their by-law to specifically reference O.Reg 153/04, Table 1 standards for fill.

The results of our follow-up review of municipalities and inquiry concluded that 70 out of 143 upper and lower tier municipalities reviewed have a fill by-law. Table 1 on page 8 summarizes how municipalities with fill by-laws define soil quality. Figure 1 on page 9 provides an illustration of the fill by-law soil quality provisions in the Greater Golden Horseshoe and adjacent areas in Southern Ontario.

The survey captured a range of information. For example, the Town of Lincoln responded that a fill by-law exists but is enforcing it on a case-by-case basis. City of Peterborough's response indicated that the municipality is considering developing a fill related by-law.

The counties and regions that have responded to our inquiry have informed us that the lower tier municipalities may choose to set and regulate individual by-laws governing fill and other matters. For instance, the County of Hastings is a two-tiered municipal government: the upper tier does not have a county fill by-law and only one of the local, lower tiered municipalities has a site alteration by-law. Region of Peel is an example of an upper-tier government that has no fill by-laws, however 2 of its 3 lower tier municipalities have fill by-laws. The County of Haldimand has informed us that it is currently conducting preliminary discussions about the need to develop a fill governing by-law. The County of Brant did not respond to our inquiry; however it currently has a fill by-law that refers to the Environmental Protection Act for soil quality.

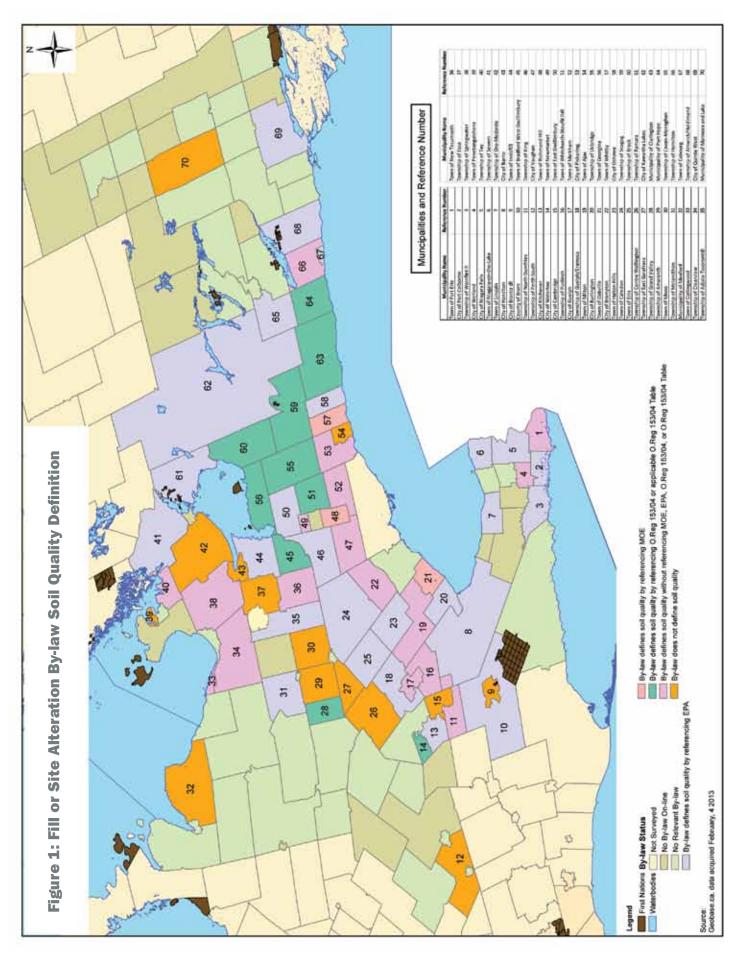
The remaining municipalities, regions and counties that have responded to our inquiry have confirmed that they currently do not have fill by-laws and state that they will not be implementing such by-laws in the near future.

Table 1: Summary of Soil Quality Definition

By-law Does Not Define Soil Quality	By-law Defines Soil Quality without Referencing MOE, EPA, O.Reg 153/04, or O.Reg 153/04 Table	By-law Defines Soil Quality by Referencing MOE	By-law Defines Soil Quality by Referencing EPA	By-law Defines Soil Quality by Referencing O.Reg 153/04 or Applicable O.Reg 153/04 Table
Township of Amaranth	Township of Puslinch ⁴	Town of Oakville ⁴	Melancthon Township Town of Erin	The City of Waterloo ³
Township of East Garafraxa	Township of North Dumfries	Town of Richmond Hill	Township of Guelph/Eramosa	Bradford West Gwillimbury
Town of Mono Municipality	Township of Hamilton	Town of Whitby ⁴	City of Quinte West Brant County	Town of Georgina ¹
of Meaford	Clearview Township		Township of Cavan Monaghan	Brock Township ¹
City of Cambridge	Town of Collingwood		Town of Cobourg ⁴ Township of	Township of Scugog ¹
Municipality of Marmora and Lake	City of Welland		Alnwick/Haldimand City of Hamilton	Township of Uxbridge ¹
Township of	Town of Fort Erie		City of Kawartha Lakes	Town of Clarington ²
South Perth	City of Brampton Town of Milton		City of Niagara Falls City of Port Colborne	Municipality of
Township of Essa	City of Vaughan		Town of Lincoln	Port Hope ^{2, 4} Town of
Township of Oro-Medonte	Town of Markham		Niagara-on-the-Lake Town of Caledon	Whitchurch- Stouffville ^{2,3}
Town of Penetanguishene	Town of Newmarket		City of Burlington Town of Halton Hills	Grand Valley Township ¹
Town of Ajax	City of Pickering ⁴		Town of East Gwillimbury	
City of Barrie	Springwater Township		City of Oshawa City of Kitchener ⁴	
Wellington Centre Township	Town of New Tecumseth		Adjala-Tosorontio Township Ramara Township	
	Township of Tay		Town of Innisfil ⁴	
			Township of Severn Township of King	
			Wainfleet	

Footnotes:

- 1 Fill By-law Defines Soil Quality as 0.Reg 153/04 Table 1 $\,$
- 2 Fill By-law Defines Soil Quality as 0.Reg 153/04 Table 1 or Table 2 $\,$
- 3 Fill By-law allows selection of Table based upon land use and/or future land use
- 4 Fill By-law defines contamination as concentrations greater than naturally occurring on the receiving property



3.0 CONCLUSIONS

rom our ongoing research it appears that the municipalities located nearest to the Toronto area have developed site alteration by-laws governing the placement of soil. However, most site alteration by-laws do not specifically reference MOE O.Reg 153/04 criteria tables to define soil quality criteria. Municipalities further away from the immediate GTA appear to be slower to adopt a fill by-law as fill disposal has not posed a significant issue thus far.

4.0 RECOMMENDATIONS

Several recommendations to address these concerns can be considered:

- 1. Continue with provincial-municipal-industry working group to develop a consistent approach for soil management in municipal by-law and procurement practices.
- 2. The Province should consider providing guidance to municipalities through the Planning Act or the Provincial Policy Statement to include comprehensive soil management planning as a requirement for site development applications.
- 3. The Province should provide guidance to municipalities on the specific regulations and the applicable soil quality criteria table(s) that should be used in municipal by-laws.
- 4. The MOE should begin to track incorporation of soil management practices into municipal bylaws. This would track progress and provide an overview of the status of best practices employed.
- 5. Ongoing formal education and capacity building to assist municipalities with the development, monitoring and dissemination of experiences with soil management in municipal by-laws and procurement practices.
- 6. Government support for a consultation program, such as a series of ongoing sponsored symposiums, to capture, track developments and share successful approaches.
- 7. In consultation with the working group, pick a key municipality and put resources in place to develop and pilot test an integrated model site alteration by-law with appropriate regulatory references to O.Reg. 153/04 that also adopts the principles of the finalized MOE Soil Management BMP approach.

Appendix 1: Results from upper and lower tier municipalities

	Initial Review (ew (Aug 2011)	Follow-up Rev	riew (Jan 2013)	Initial	Letter	penss	PonodnoleT	Responses F	nses For Letter 1		Resp	lesponses For Letter 2	ter 2	Responses For Telephon	r Telephone
	Existing By-	Mention of Soil	Cultation Declare	Mention of Soil		,	Totale	Clorks	Anticipating	Not Updating By-	No	Have By-	No By-law	No	Not Updating	No By-law
	law	Quality	схізанів вучам	Quality	•	,	lotalis	CICINS	Updating By-law	Law	Response	laws	Exists	Response	By-Law	Exists
Upper Tier Municipality	1	1	1	1	1	s	9				1		8	2		
County	1	1	1	1	1	6	10				1		s	4		
City, Town & Municipality	16	13	43	36	16	42	59	1		8	80	2	8	32	1	
Township	15	00	25	18	15	23	40	2	1	2	12	-	2	70	2	
Totals	33	23	70	99	33	79	115	8	1	10	22	9	18	28	9	0

Appendix 2: Municipal By-Law Review, Part 1

Upper Tier Municipality	Lower Tier Municipality	Fill By-law Status Initial Review ¹	Issued	Response	Revised Fill By- Law Status	Bylaw No.	Bylaw Name	Section	Soll Criteria Reference	
	Dufferin County	No	Yes	Yes	No				No relevant by-law	
	Amaranth Township	Yes	Yes	No	Yes	65-2009	Site Alteration		No mention of soil quality	
	East Garafraxa Township	Yes	Yes	No	Yes	19-2008	Site Alteration		No mention of soil quality	
Dufferin County	Grand Valley	Yes	Yes	Yes	Yes	2012-37	Fill and Site Alteration	2.5, Schedule B	"No person shall place or dump fill or cause or permit fill to be placed or dumped unless such fill is tested, when applicable, in accordance with the Township's Operational Guideline and MOE Best Management Principles." & MOE Table 1	
	Melancthon Township	Yes	Yes	Yes	Yes	40-2012	Site Alteration	11.(c) (bx)	Environmental Protection Act	
	Mono	Yes	Yes	No	Yes	2012-17	Site Alteration		No mention of soil quality	
	Mulmur Township	No	Yes	No	No				No by-law online	
	Orangeville	No	Yes	No	No			-	No relevant by-law	
	Shelburne	No	say.	No	No				No relevant by-law	
	Wellington County	No	Yes	No	No				No relevant by-law	
	Guelph	No	No		Yes	(2007) 18420	Site Alteration	8. c)	"such material is clean and free of any glass, plastics, rubber, metals, liquid, garbage and/or contaminants."	
	Wellington North Township	No	Yes	No	No				No relevant by-law	
	Minto	No	Yes	Yes	No				No relevant by-law	
	Erin	Yes	Yes	Yes	Yes	18-Dec	Site Alteration, Placement of Fill and Removal of Topsoil	5.1(a)	Environmental Protection Act	_
Wellington County	Guelph/Eramosa Township	Yes	Yes	No	Yes	42/2010	Site Alterations, Placement of Fill and Removal of Topsoil	4.1(e.)	Environmental Protection Act	
	Puslinch Township	Yes	Yes	N N	Yes	31/12	Site Alteration	2 & 8.(3)	"All imported fill and soils regraded or distributed on any lands shall not have any chemical qualities or compounds that are greater that the native material on the site." any fill to be usedsuch material is clean and free of any glass, plastic, rubber, metals, liquid, free of any glass, plastic, rubber, metals, liquid,	
	Township of Mapleton	No	No						No relevant by-law	
	Wellington Centre Township	No	Yes	No	No	99-46	Site Alteration		No mention of soil quality	
	Grey County	No	Yes	Yes	No				No relevant by-law	
	Owen Sound	No	Yes	Yes	No				No relevant by-law	_
	The Blue Mountains	No	Yes	No	No				No relevant by-law	_
	Hanover	ON No	yes Ves	ON S	ON No.		, Comment		No by-law online	_
Grey County	Georgian Bluffs	N N	yes Ves	S N	No		dia.		No relevant by-law	
	Grey Highlands	No	Yes	Yes	No				No relevant by-law	
	Southgate	No	Yes	Yes	No				No relevant by-law	
	Chatsworth	No	No						No relevant by-law	_
	West Grey	No	Yes	Yes	No				No relevant by-law	
	Hasting County	No No	Yes	yes No	ON ON				No relevant by-law	_
	Town of Description	No.	Voc	S N	ON ON				No relevant builder	
	Municipality of Centre Hastings	No	Yes	No	No		,		No relevant by-law	
Hastings County	Municipality of Hastings Highlands	No	Yes	No	No				No by-law online	
	Township of Carlow/Mayo	No	Yes	No	No				No By-law online	
	Township of Faraday	No	Yes	No	No				No by-law online	
	Township of Limerick	No	Yes	No	No				No relevant by-law	_

Appendix 2: Municipal By-Law Review, Part 2

	Township of Madoc Municipality Marmora and Lake Township of Stirling-Rawdon	Initial Review 1	retter		20000				
	pality Marmora and Lake Iship of Stirling-Rawdon	oN.	Yes	Š	oN.			,	No relevant by-law
<u> </u>	ship of Stirling-Rawdon	No	Yes	No.	No	2003-22	Site Alteration		No mention of soil quality
		No	Yes	oN N	No			,	No relevant by-law
	Township of Tudor and Cashel	No	Yes	No	No				No by-law online
100 TO	Municipality of Tweed	No	Yes	No	No				No by-law online
<u>0</u>	Township of Tyendinaga	No	Yes	No	No			,	No relevant by-law
	Township of Wollaston	No	Yes	No	No				No by-law online
	Belleville	No	Yes	No	No				No by-law online
	Quinte West	Yes	Yes	Š	Yes	30-Aug	Site Alteration	S. (i) d; 6. (f)	"Where the Fill includes material from the demolition of any structure or includes "refuse", as amended or includes toxic or hazardous materials, glass or sewage;" & Environment Protection Act
	Brant County	Yes	Yes	No	Yes	112-12	Fill	4.(c)	Environmental Protection Act
Brant County	Brantford	No	No		Yes	Chapter 442	GARBAGE - DISPOSAL SITES	442.3.1	"excepting thereout inflammable wastes of any kind which shall be prohibited at all times,"
	Region of Waterloo	No	yes	Yes	No				No relevant by-law
	City of Cambridge	Yes	Yes	No	Yes	160-09	Grading By-law	633.1.5	No mention of soil quality
Nyeseko	City of Kitchener	Yes	Yes	Š	Yes	Chapter 633	Fill - Dumping Alteration of Grade	633.1.5	"contaminated fill" means material which contains any solid, liquid, gas, odour, waste product, radioactivity or any combination thereof which is present in a concentration greater than that which naturally occurs in the location of the site in question and which has the potential to have adverse effect on the natural environment, human activity, and/or health and safety as defined under the Environmental Protection Act.
Material	City of Waterloo	Yes	Yes	Yes	Yes	2010-066	Site Alteration Bylaw	2. (o) & 9. (h)	"Fill quality based on analysis completed according to O. Reg. 153/04 or O. Reg 347, Schedule 4 - Leachate quality criteria both under the EPA, R.S.O. 1990, c. E.19" "Fill quality for the land use of the site in accordance with O.Reg 153/04"
P.	Township of Woolwich	No	Yes	N _o	No	,		,	No relevant by-law
2	Township of Wellesley	No	Yes	°N	No				No relevant by-law
	Township of Wilmot	No	Yes	No	No				No by-law online
Towr	Township of North Dumfries	Yes	Yes	No	Yes	2393-09	Grading and Fill	3.7	All fill used shall be clean and free of rubbish, glass, garbage, termites, organic materials, liquid and toxic chemicals and other contaminants

Appendix 2: Municipal By-Law Review, Part 3

Upper Tier Municipality	Lower Tier Municipality	Fill By-law Status Initial Review ¹	Issued	Response	Revised Fill By- Law Status	Bylaw No.	Bylaw Name	Section	Soll Criteria Reference
	Peterborough County	No	Yes	No	No				No relevant by-law
	Township of Cavan-Monaghan	Yes	Yes	No	Yes	2012-27	Dumping of Fill and Alteration of	2. (10)	Environmental Protection Act
	Peterborough	ON.	Yes	Yes	No				No relevant by-law
	Smith-Ennisomore-Lakefield	No	Yes	No	No	,		,	No relevant by-law
Peterborough County		No	Yes	No	No				No by-law online
	Trent Lakes	No	No				•		No by-law online
	North Kawartha	No	N _o	,		ļ		,	No by-law online
	Douro-Dummer	S.	No.			·			No relevant by-law
	Otonabee - South Monagham	S.	Š			·			No relevant by-law
	Havelock-Belmont-Methuen	No	Yes	Yes	No	ļ			No relevant by-law
	Perth County	No	Ves	No	No.	·			No relevant by-law
	Township of North Perth	Q 2	Ses.	Q 2	8 2				No by-law online
	Township of Perth South	ON ON	Sea Nov	No.	S A	2012-69	Dumping of Fill		No Mention of Soil quality
Perth County	Township of West Perth	N.	, kes	Yes	No.				No relevant by-law
	The City of Stratford	No	Yes	No	No				No relevant by-law
	Town of St. Marys	No.	Yes	No	No				No relevant by-law
	Northumberland County	N _o	Yes	No	No				No relevant by-law
	Municipality of Brighton	oN.	Yes	N	No	,		,	No relevant by-law
									"Contouring the fill shall see a section of the last
	Town of Cobourg	Yes	ěs	Yes	Yes	035-2012	Fill By-law to Control the Dumping	1.3 & 5.3 f.	Contaminated hill shall mean material which contains any solid, liquid, gas, odour, waste product, radioactivity or any combination thereof which is present in a concentration greater than that which naturally occurs in the location of th
							פוום אפוואספון מדיוו		une location of the lot of parcer or lains in question. " & "the fill contains no Contaminated Fill as defined in the Environmental Protection Act, R.S.O. 1990, c.
Northumberland County	Municipality of Port Hope	Yes	Yes	ON 2	Yes	47/2012	Site Alteration & Fill	1.3 1.28, 1.29, 4.1 (f); 5.2 (i)	"material which contains any solid, liquid, gas, odour, waste product, radioactivity or any combination thereof which is present in a concentration greater than that which naturally occurs in the location of the lot or parcel of land in question" Table 1 Standards. & Table 2 Standards: "where the Fill includes material from the demolition of any structure, toxic or hazardous materials, glass, raw sewage, Contaminated Fill, construction refuse, debris or other deleterious materials;" & "certifying that the Fill contains no contaminants as defined in the Environmental Protection Act, R.S.O. 1990, c. E. 19, and this By-law."
	Municipality of Trent Hills	No	, les	ON	ON.				No relevant by-law
	Township of Alnwick/Haldimand	Yes	Yes	Yes	Yes	46-2012	Dumping	4.1 (f)	certurying trast the Fill contrains no Contaminated Fills as defined in the Environmental Protection Act, R.S.O. 1990, c. F. 19 and this bullaur.
									C.13 dild (fils by-ldw;

Appendix 2: Municipal By-Law Review, Part 4

Upper Tier Municipality	Lower Tier Municipality	Fill By-law Status Initial Review ¹	Issued	Response	Revised Fill By- Law Status	Bylaw No.	Bylaw Name	Section	Soil Criteria Reference	
	Township of Cramahe	No	Yes	Yes	No				No relevant by-law	
Northumberland County (continued)	Township of Hamilton	Yes	Yes	ĝ	Yes	2012-10	Site Alteration	2. h) ii)	the fill to be dumped or placed is clean and free of asphalt, trash, rubbish, glass, liquid or toxic chemicals, hazardous waste or garbage materials:	
Hamilton	City of Hamilton	Yes	Yes	N _O	Yes	03-126	Alteration of Property	9.1 (g)	Environmental Protection Act	
	Simcoe County	No	Kes	No	No				No relevant by-law	
	Adjala-Tosorontio Township	Yes	Yes	No	Yes	31-Aug	Fill	3.(3) (e)	Environmental Protection Act	
	New Tecumseth	, kes	Ş.	ĝ	Yes	2012-136	Site Alteration and Fill By-Law	7.1(f)	*Ensure that all fill used is clean and free of rubbish, rubber, plastics, metals, glass, garbage, termites, organic material, liquid or solid and/or toxic chemicals and other contaminants or related waste and for this purpose the Chief Building Official may require contaminant testing of the fill to be placed or dumped.*	
	Essa Township	Yes	Yes	Š.	Yes	2012-17	Placing or Dumping of Fill, Soil Stripping and/or Alteration		No mention of soil quality	
	Barrie	No	Yes	Yes	Yes	2006-101	Site Alteration By-law		No mention of soil quality	
Simcoe County	Bradford West Gwillimbury	Yes	Yes	N N	Yes	2012-061	Site Alteration By-law	2.1(e.)	"place or dump fill or cause or permit fill to be placed or dumped unless such fill complies with the O. Reg. 153/04 and has been tested in accordance with Town protocol as designated by Director."	
	Ramara Township	ON.	Yes	S.	N O	2012-70	Placing or Dumping of FIII	2.9 (b) & 4.1 (f)	"all fill to be dumped or placed is clean and free of trash, rubbish, glass, liquid or toxic chemicals or garbage materials," "Certification of the source of the fill to be placed on site that the fill does not exceed the maximum contaminant levels as set out in the Soil, Ground Water and Sediment Standards for Use Under Part XX.1 of the Environmental Protection Act."	
	Clearview Township	Yes	Yes	N N	Yes	Feb-62	Grading	7(b)	all fill to be dumped or placed is clean and free of trash, rubbish, glass, liquid or toxic chemicals, wastes, hazardous wastes or garbage materials;	
	Collingwood	Yes	Yes	Yes	Yes	03-103	Fill	8 P)	all fill to be dumped or placed is clean and free of trash, rubbish, glass,	

Appendix 2: Municipal By-Law Review, Part 5

Upper Tier Municipality	Lower Tier Municipality	Fill By-law Status Initial Review ¹	Issued	Response	Revised Fill By- Law Status	Bylaw No.	Bylaw Name	Section	Soil Criteria Reference	
•	linisfil	<u>8</u>	Yes	Yes	, Yes	118-07; Interim 015- 13	Site Alteration	10. (f) 10.; & 11(a)(6)	"any contravention of regulations, standards or guidelines established pursuant to the Environmental Protection Act," & "The Owner shall provide characterization and analytical records of the quality of soil being brought to the site and confirmation by a Professional, prior to receiving any material, that the soil is appropriate based on site location/sensitivity, anticipated land uses, groundwater use/sensitivity, pre-existing site concentrations or other factors to ensure that there is no likelihood of adverse effect based on the importation of the soil to the cite."	
Simcoe County	Midland	No	Yes	Yes	No				No relevant by-law	
	Oro-Medonte Township	Yes	Yes	No	Yes	98-134	Placing or Dumping of Fill		No mention of soil quality	
	Penetanguishene	Yes	Yes	Yes	Yes	2012-69	Regulate the Removal, Placing or Dumping of Fill		No Mention of Soil quality	
	Tiny	No	Yes	No	No				No by-law online	
	Springwater Township	Yes	Yes	No.	Yes	2007-053	Cut and Fill	8.1 b)	all fill to be dumped or placed is clean and free of demolition materials, stumps, trash, rubbish, glass, liquid or toxic chemic	
	Tay Township	Yes	Yes	No	Yes	98-43	Dumping of Fill	4.1 (b)	All Fill to be used is free of garbage and is clean	_
	Wasaga Beach	S.	Yes	oN N	No				No relevant by-law	
	Orillia	Yes	Yes	No	No	Chapter 839	Dumping		No by-law online	
	Township of Severn	No	No			2011-23	Placement, Removal or Stockpiling of Fill	10.1 2)	Environmental Protection Act	
Kawartha Lakes	City of Kawartha Lakes	Yes	Yes	No	Yes	2012-200	Fill		Environmental Protection Act	
Haldimand County	Haldimand County	oN.	Yes	Yes	No				No relevant by-law	
	Regional Municipality of Niagara	No	Yes	No	No				No relevant by-law	
	Niagara Falls	Yes	Yes	o _N	Yes	2007-260	Site Alteration	5. (a)	Environmental Protection Act, R.S.O. 1990, c. E.I9, as amended;	
Niagara	Port Colborne	Yes	Yes	o _N	Yes	5528/125/10	Site Alteration	6. (a)	Environmental Protection Act, R.S.O. 1990, c.E.19	
	St. Catharines	No	Yes	No	No				No relevant by-law	_
	Thoroid	No	Yes	No	No				No relevant by-law	-
	Welland	Yes	Yes	o N	Yes	2010-88	Site Alteration	2.6.2	all fill to be dumped or placed is clean and free of trash. rubbish. glass. liquid or toxic chemicals, hazardous waste or garbage materials:	
Niagara	Fort Erie	Yes	Yes	No	Yes	1996-201	Fill and Site Alteration	8.2 (b)	all fill to be used is free of garbage and is reasonably clean;	
	Grimsby	No	Yes	No	No				No by-law online	_
	Lincoln	Yes	Yes	Yes	Yes	99-43	Fill and Site Alteration	7 (d) (ix)	Environmental Protection Act	
	Niagara-on-the-Lake	Yes	Yes	Yes	Yes	3941-05	Regulate the Removal, Placing or Dumping of Fill	7 (a)	Certify that the fill contains no contaminants within the meaning of the EPA, R.S.O. 1990	_
	Pelham	No	Yes	No	No				No by-law online	_

Appendix 2: Municipal By-Law Review, Part 6

Upper Tier Municipality	Lower Tier Municipality	Fill By-law Status Initial Review ¹	Issued	Response	Revised Fill By- Law Status	Bylaw No.	Bylaw Name	Section	Soil Criteria Reference
Niagara (continued)	Wainfleet	Ŷ.	Yes	N _O	ON.	012-2009	Вегт	7 (d) (ix)	any contravention of regulations, standards or guidelines established pursuant to the Environmental Protection Act
	West Lincoln	No	Yes	Yes	No				No by-law online
	Region of Peel	No	Yes	Yes	No				No relevant by-law
bee	Brampton	Yes	N		Yes	143-95	FIII By-law	2.(8)(b)	"all fill to be used is clean and free of trash, rubbish, glass, liquid or toxic chemicals, garbage or organic materials."
	Caledon	Yes	Š		Yes	2007-059	Fill By-law	18.(1)	Environmental Protection Act
	Mississauga	Yes	No		No				No relevant by-law.
	Halton Region	No	Yes	No	No				No relevant by-law
	Burlington	Yes	No		Yes	6-2003	Topsoil Preservation and Site Alteration By-law	2.4 (a)	Environmental Protection Act
	Halton Hills	Yes	N.		Yes	2010-0119	Site Alteration By-law	Schedule A - 5.(d)	Environmental Protection Act
Halton	Milton	Yes	N _o		Yes	033-2004	Site Alteration By-law	23.(b)	"material is clean and free of any glass, plastics, rubber, metals, liquid, garbage and/or contaminants;"
									"ensure that all fill is reasonably clean and
	Oskville	Yes	Š		Yes	2003-021	Site Alteration By-law	7.3 (k) & (l)	free from garbage;" & "ensure that all fill meets standards prescribed by the Ministry of the
									Environment for any current land use and any future land use."
	York Region	No	Yes	Yes	No				No relevant by-law
	Vaughan	Yes	oN.		Yes	189-96	Fill By-law	2(7)(b)	"all fill to be dumped or placed is clean and free of trash, rubbish, glass, liquid
	Aurora	Yes	N		No				No bu-law online
	East Gwillimbury	Yes	yes	Yes	Yes	2012-XX	Fill	1.19)	Environmental Protection Act
	Georgina	Yes	No		Yes	2011-0044	Site Alteration By-law	4.2 g) (ii)	O Reg. 153/04, as amended - Table 1
	Markham	Yes	Š.		Yes	2011-232	Site Alteration By-law	2.7.2	"all fill to be dumped or placed is clean and free of trash, rubbish, glass, liquid or toxic chemicals, hazardous waste or garbage materials"
York									"Refuse or debris shall, for the purposes of this by-law, include tin cans, discarded
	Newmarket	Yes	§.		Yes	1990-86	Dumping	7	machinery, discarded motor vehicles or parts thereof, furniture, fill, dirt, earth, rock, stone or any waste materials of any kind.
	Richmond Hill	Yes	N _o		Yes	2967	Dumping and Fill By-law	967.7.2 (m)	Ministry of the Environment for current or future land use
									To ensure that all fill meets the standards
	Whitchurch-Stouffville	Yes	ê		Yes	2008-016-RE	Site Alteration By-law	4.2 (m)	prescribed in MOE Table 2 or such other Table contained in the SGSS as is appropriate to the current land use and any future land use designated under the Official Plans of the Corporation and The Regional
									Municipality of York;

Appendix 2: Municipal By-Law Review, Part 7

Upper Tier Municipality	Lower Tier Municipality	Fill By-law Status Initial Review ¹	Issued	Response	Revised Fill By- Law Status	Bylaw No.	Bylaw Name	Section	Soil Criteria Reference
York (continued)	King	Yes	N N		Yes	97-84	Fill Control By-law	3.(3)&4(1) (d)	"E.P.A" "No person may place or dump fill: "where the fill includes material from the demolition of any structure or includes "refuse" as that term is defined within the meaning of the Corporation of the Township of King Waste Disposal By-Law 89-1.11 (as amended or successor legislation thereto) or includes toxic or hazardous materials, glass or sewage."
	Durham Region	No	Yes	No	No				No relevant by-law
	Oshawa	Yes	No		Yes	85-2006	Site Alteration By-law	5.2 (f)	"no contaminants as defined in the Environmental Protection Act"
	Pickering	Yes	Š		Yes	6060/02	Fill and Topsoil Disturbance By-law	1 e)	contaminated fill means soil fill or other material containing any solid liquid gas odour waste product radioactivity or any combination thereof which is present in a concentration greater than which naturally occurs and which has the potential to have an adverse effect on human activity
Durham	Clarington	Yes	Called	Yes	Same	2012-022	Site Alteration By-law	1.21.1&1.	"Table 1 Standards" means the standards set out in Table 1 of the "Soil, Ground Water and Sediment Standards for Use under Part XVI.1 of the Environmental Protection Act published by the Ministry of the Environment dated April 15, 2011, as amended from time to time. "Table 2 Standards means the standards set out in Table 2 of the "Soil, Ground Water and Sediment Standards for Use under Part XVI.1 of the Environmental Protection Act published by the Ministry of the Environment dated April 15, 2011, as amended from time to time."
	Ajax	Yes	N N		Yes	22008	Erosion and Sediment Control By- law	3.1	Says "No Person shall place or dump fill or cause or permit fill to be placed or dumped in the Town except in accordance with this Bylaw." but there is no mention of soil quality.
	Whitby	Yes	Ŷ.		Yes	5849-06	Fill Control By-law	3. (3) (b)	"no person or corporation shall place or allow to be placed or remove or allow to be removed any contaminated fill on or from any land within the town unless the placing or removal of such fill is authorized by a certificate Issued by the Ministry of Environment." "contaminated fill means soil fill or other material containing any soild liquid gas odour waste product radioactivity or any combination thereof which is present in a concentration greater than which naturally occurs and which has the potential to have an adverse effect on human activity"

Appendix 2: Municipal By-Law Review, Part 8

8	t out in Table t; referenced in s	unt in Table 1 of sert Standards 104; In that the free wet or slurried ar in Table 1 of an Standards set water standards set water standards set water standards set water is an Standards set in Standards set is an Standards set in Standards set in Standards set is an Standards set in Sta	rial that does rial and which criteria: criteria: s set out in Aster and d in O.Reg. xtent that the sulfing wet or dands set out m the liquid d in O.Reg. m the liquid d in O.Reg. \$1.153/04; \$1.153/04; considered on onsidered on onsidered on onsidered on where there is ormation
Soil Criteria Reference	tets the standards set 1 of the Soil, ground; Sediment Standards re O.Reg. 153/04, or as amended;	ii) Soil that meets the standards set out in Table 1 of the Soil, Ground Water and Sediment Standards referenced in O.Reg., 153/04; iii) Liquid slurry material, to the extent that the free water is removed and the resulting wet or shurried material meets the standards set out in Table 1 of the Soil, Ground Water and Sediment Standards set out in Table 1 of the Soil, Ground Water and Sediment Standards set out in Table 1 of the Soil, Ground Water and Sediment Standards set out in Table 1 of the Soil, Ground Water and Sediment Standards referenced in O.Reg. 153/04; iii) Uquid slurry material, to the extent that the free water standards set out in Table 1 of the Soil, Ground Water and Sediment Standards set out in Table 1 of the Soil, Ground Water and Sediment Standards set out in Table 1 of the Soil, Ground Water and Sediment Standards set out in Table 1 of the Soil, Ground Water and Water and Water and Sediment Standards referenced in O.Reg. 153/04, or as amended;	Ensure that all fill used is material that does not contain any putrescible material and which meets any of the following criteria: ii) Soil that meets the standards set out in Table 1 of the Soil, Ground Water and Sediment Standards referenced in O.Reg. 1153/04; iii) Liquid slurry material, to the extent that the free water is removed and the resulting wet or slurried material meets the standards set out in Table 1 of the Soil, Ground Water and Sediment Standards referenced in O.Reg. 153/04, and any free water from the liquid slurry that meets the standards set out in Table 1 of the Soil, Ground Water and Sediment Standards referenced in O.Reg. 153/04; *Soils that meet Table 2 will be considered on a case by case basis by the CBO, where there is sufficient hydrogeological information
Soll	Soil that meets the standards set out in Table 1 of the Soil, ground: Water and Sediment Standards referenced in O.Reg. 153/04, or as amended;	in) Soil that meets the standards set out in Table 1 of the Soil, Ground Water and Sediment Standards referenced in O.Reg. 153/04; iii) Liquid slurry material, to the extent that the free water is removed and rehe resulting wet or slurried material meets the standards set out in Table 1 of the Soil, Ground Water and Sediment Standards set out in Table 1 of the Soil, Ground Water and Sediment Standards set out in Table 1 of the Soil, Ground Water and Sediment Standards referenced in O.Reg. 153/04; iiii) Liquid slurry material, to the extent that the free water is removed and the resulting wet or slurried material meets the standards set out in Table 1 of the Soil, Ground Water and Sediment Standards referenced in O.Reg. 153/04, and any free water from the liquid slurry that meets weter from the liquid slurry that meets weter from the Ilquid slurry that meets and Sediment Standards referenced in O.Reg. 153/04, or Sediment Standards referenced in O.Reg. 153/04, or as amended;	2 2 %
Section	(ii (n) 6	4.05 (u)	4.5 (s) and 4.6
Bylaw Name	Site Alteration By-Law	Site Alteration By-law	Site Alteration By-law
Bylaw No.	2335-2011-PP	52-10	2010-84
Revised Fill By- Law Status	Yes	Same	, Ves
Response	Yes	Yes	
Issued	Called	Called	ON.
Fill By-law Status Initial Review ¹	Yes	Yes	Yes
Lower Tier Municipality	Brock	ฮือฮิกวร	Uxbridge
Upper Tier Municipality	Durham (continued)		Durham

APPENDIX 3: LETTER 1

This letter indicates that HMM thinks that the municipality has a by-law.



Hatch Mott MacDonald 2800 Speakman Drive Mississauga, ONT L5K 2R7

www.hatchmott.com

31 October 2012

Clerks Department City of Niagara Falls 4310 Queen Street Niagara Falls Ontario L2E 6X5 Canada

To Whom It May Concern:

Hatch Mott MacDonald (HMM) has been retained by the Residential and Civil Construction Alliance of Ontario (for more information, go to www.rccao.com) to prepare an update to a Municipal Fill By-law review. Historically the term "fill" has been used to cover a wide range activities involving the handling and placement of soil. While the primary objective of this review is to update and document the status of by-laws in place at municipalities, regions and counties within and surrounding the Greater Toronto Area with respect to restrictions on the disposal of fill material, there is an overall need to further understand local requirements involving the handling and relocation of excess soils.

Although the Ministry of the Environment (MOE) provides soil quality criteria under the Environmental Protection Act, it is the responsibility of the municipalities, regions and counties to regulate the placement of fill with appropriate by-laws. Our initial research has noted that your municipality has an existing by-law restricting the quality of fill, however, the fill by-law does not cite specific soil quality criteria, such as the those under O.Reg 153/04 (as amended) for accepting fill.

We would like to inquire whether changes to your fill by-law are contemplated to incorporate more stringent soil quality criteria and what those changes may entail. In addition to updating any specific fill by-law soil quality reference changes, we would also like to know of any anticipated related local by-law changes or initiatives planned regarding encouraging the beneficial reuse or recycling of excess soils.

APPENDIX 4: LETTER 2

This letter indicates that HMM thinks that the municipality does not have a Soil or Fill by-law.



Hatch Mott MacDonald 2800 Speakman Drive Mississauga, ONT L5K 2R7

www.hatchmott.com

02 November 2012

Clerk's Office City of Owen Sound 808-2nd Avenue East Owen Sound Ontario N4K 2H4 Canada

To Whom It May Concern:

Hatch Mott MacDonald (HMM) has been retained by the Residential and Civil Construction Alliance of Ontario (RCCAO) to prepare an update to a Municipal Fill By-law review. Historically the term "fill" has been used to cover wide range activities involving the handling and placement of soil. While the primary objective of this review is to update and document the status of by-laws in place at municipalities, regions and counties within and surrounding the Greater Toronto Area with respect to restrictions on the disposal of fill material, there is an overall need to further understand local requirements involving the handling and relocation of excess soils.

Although the Ministry of Environment (MOE) provides soil quality criteria under the Environmental Protection Act, it is the responsibility of the municipalities to regulate the placement of fill with appropriate by-laws. Many of the municipalities in the GTA have created by-laws regulating the placement or dumping of fill based on soil quality criteria tables issued by MOE's O.Reg 153/04 (as amended) for accepting fill. From our initial research we have noted that your municipality does not have a by-law regarding the placement of fill, or it is not available for viewing on your website. If you do have an existing fill by-laws could you please forward it to us either electronically the email below or by mail to the address listed at the top of this letter. If you do have an existing fill related by-law, are there proposed amendments being contemplated? If your municipality does not currently have a fill by-law is a by-law being contemplated?

We would like to inquire whether changes to your fill by-law are contemplated to incorporate more stringent soil quality criteria and what those changes may entail. In addition to updating any specific fill by-law soil quality reference changes, we would also like to know of any anticipated related local by-law changes or initiatives planned regarding encouraging the beneficial reuse or recycling of excess soils.



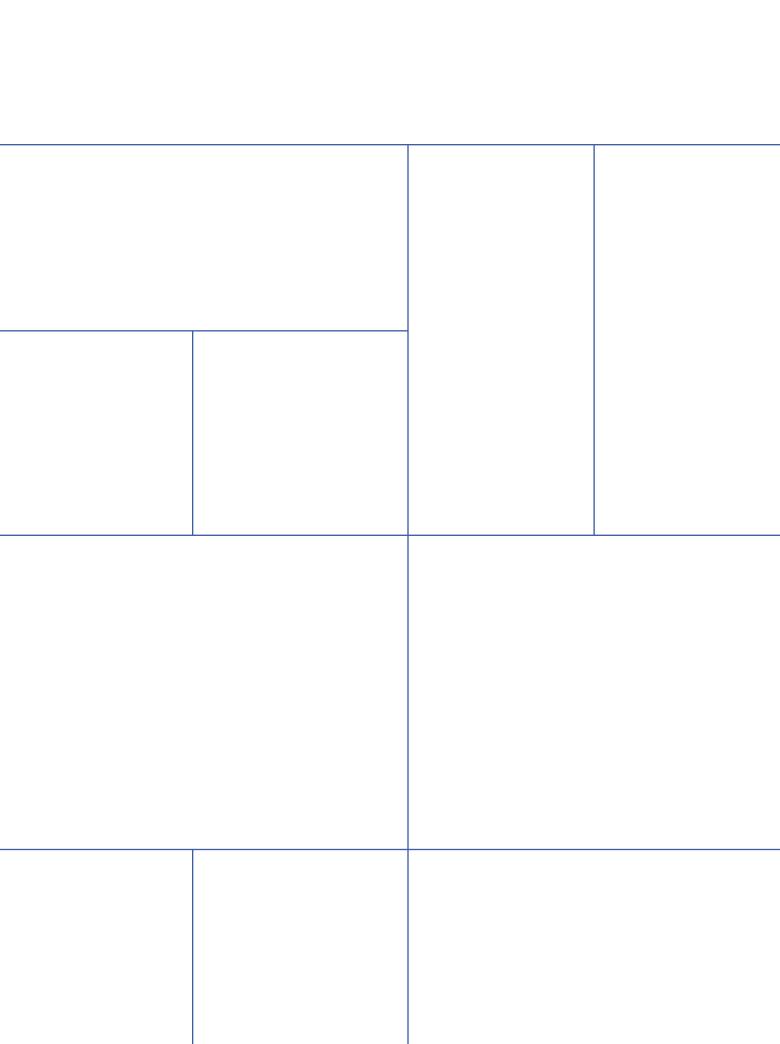
RCCAO

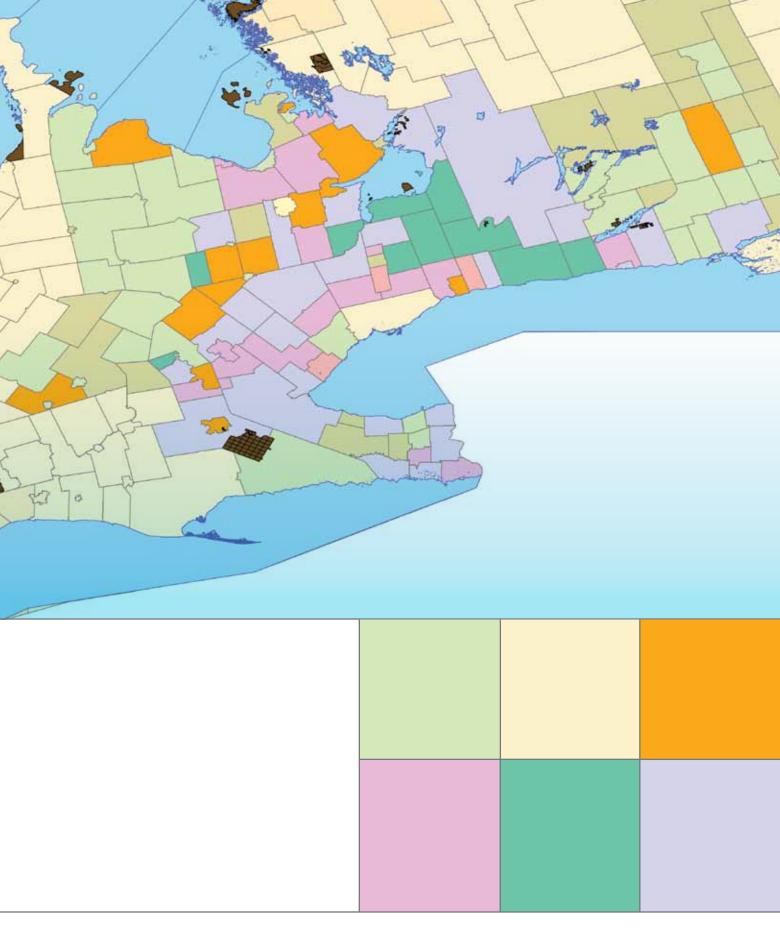
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The Residential and Civil Construction Alliance of Ontario (RCCAO) is composed of management and labour groups that represents a wide spectrum of the Ontario construction industry. The RCCAO's goal is to work in cooperation with governments and related stakeholders to offer realistic solutions to a variety of challenges facing the construction industry and which also have wider societal benefits. For more information on the RCCAO or to view copies of other studies and submissions, please visit the RCCAO website at www.rccao.com

RCCAO members include: Carpenters' Union • Greater Toronto Sewer and Watermain Contractors Association • Heavy Construction Association of Toronto • International Union of Operating Engineers, Local 793 • International Union of Painters and Allied Trades, District Council 46 • Joint Residential Construction Council • LIUNA Local 183

• Residential Carpentry Contractors Association • Toronto and Area Road Builders Association





View this report and more at rccao.com