

APPENDIX E SOIL MAP UNITS AND KEY SOIL PROPERTIES

Appendix E: Soil Map Units and Key Soil Properties

KP Begin	KP End	Soil Map Unit	Crossing Length (meters)	Component Name	Component Percent	Slope Range	Stoniness	Canada Land Inventory (CLI) Rating ¹	First CLI Subclass ¹	Second CLI Subclass ¹	Drainage Class	Surface Texture
0.00	0.06	ONOND004Vi:c0	60.7	Vineland Sandy Loam	100	2 - 5	Non-stony	2	Low fertility	None	Imperfectly	Sandy loam
0.06	0.33	ONOND004Gi:d0	264.9	Grimsby Sandy Loam	100	5 - 9	Non-stony	3	Low fertility and moisture	Topography	Well	Sandy loam
0.33	0.38	ONOND004Ji:B1	56.0	Jeddo Loam	100	0.5 - 2	Slightly Stony	3	Restricted rooting depth	Water Saturation	Poorly	Loam
0.38	0.70	ONOND004Gi:d0	317.2	Grimsby Sandy Loam	100	5 - 9	Non-stony	3	Low fertility and moisture	Topography	Well	Sandy loam
0.70	0.78	ONOND004Ji:B1	84.2	Jeddo Loam	100	0.5 - 2	Slightly Stony	3	Restricted rooting depth	Water Saturation	Poorly	Loam
0.78	0.81	ONOND004Gi:d0	30.0	Grimsby Sandy Loam	100	5 - 9	Non-stony	3	Low fertility and moisture	Topography	Well	Sandy loam
0.81	0.86	ONOND004Ji:B1	46.1	Jeddo Loam	100	0.5 - 2	Slightly Stony	3	Restricted rooting depth	Water Saturation	Poorly	Loam
0.86	0.89	ONOND004Gi:d0	30.4	Grimsby Sandy Loam	100	5 - 9	Non-stony	3	Low fertility and moisture	Topography	Well	Sandy loam
0.89	0.93	ONOND004Ji:B1	43.8	Jeddo Loam	100	0.5 - 2	Slightly Stony	3	Restricted rooting depth	Water Saturation	Poorly	Loam
0.93	0.96	ONOND004Gi:d0	22.5	Grimsby Sandy Loam	100	5 - 9	Non-stony	3	Low fertility and moisture	Topography	Well	Sandy loam
0.96	1.01	ONOND004Ji:B1	55.7	Jeddo Loam	100	0.5 - 2	Slightly Stony	3	Restricted rooting depth	Water Saturation	Poorly	Loam
1.01	1.42	ONOND004Gi:d0	411.4	Grimsby Sandy Loam	100	5 - 9	Non-stony	3	Low fertility and moisture	Topography	Well	Sandy loam
1.42	1.78	ONOND004Oi:C1	357.1	Oneida Loam	100	2 - 5	Slightly Stony	1	None	None	Well	Loam
1.78	2.55	ONOND004Gi:d0	767.6	Grimsby Sandy Loam	100	5 - 9	Non-stony	3	Low fertility and moisture	Topography	Well	Sandy loam
2.55	2.68	ONOND00410	133.7	Stream Course	100	N/A	Non-stony	5	Frequent flooding	None	N/A	N/A
2.68	3.28	ONOND004Gi:d0	598.4	Grimsby Sandy Loam	100	5 - 9	Non-stony	3	Low fertility and moisture	Topography	Well	Sandy loam
3.28	3.58	ONOND004Sp:d1	297.3	Springvale Sandy Loam	100	5 - 9	Slightly Stony	3	Low fertility and moisture	Topography	Well	Sandy loam
3.58	3.60	ONOND004Ji:A0	21.4	Jeddo Loam	100	0 - 0.5	Non-stony	3	Restricted rooting depth	Water Saturation	Poorly	Loam
3.60	3.67	ONOND00410	67.1	Stream Course	100	N/A	Non-stony	5	Frequent flooding	None	N/A	N/A
3.67	3.70	ONOND004Ji:A0	29.8	Jeddo Loam	100	0 - 0.5	Non-stony	3	Restricted rooting depth	Water Saturation	Poorly	Loam

KP Begin	KP End	Soil Map Unit	Crossing Length (meters)	Component Name	Component Percent	Slope Range	Stoniness	Canada Land Inventory (CLI) Rating ¹	First CLI Subclass ¹	Second CLI Subclass ¹	Drainage Class	Surface Texture
3.70	4.61	ONOND004Sp:d1	912.5	Springvale Sandy Loam	100	5 - 9	Slightly Stony	3	Low fertility and moisture	Topography	Well	Sandy loam
4.61	5.21	ONOND004Fl:c1	597.4	Farmington Loam	100	2 - 5	Slightly Stony	6	Bedrock within 1 meter	None	Well	Loam
5.21	5.35	ONOND005Fl:c4	145.9	Farmington Loam	100	2 - 5	Exceedingly Stony	6	Bedrock within 1 meter	None	Well	Loam
5.35	5.70	ONOND005M:A0	346.8	Organics - Mesisol	100	0 - 0.5	Non-stony	N/A	None	None	Very Poorly	Organic
5.70	5.72	ONOND005Fl:c2	27.1	Farmington Loam	100	2 - 5	Moderately Stony	6	Bedrock within 1 meter	None	Well	Loam
5.72	5.94	ONOND005Gi:c2	219.1	Grimsby Sandy Loam	100	2 - 5	Moderately Stony	2	Low fertility	Low moisture	Well	Sandy loam
5.94	6.35	ONOND005Gl:D2	410.6	Guelph Loam	100	5 - 9	Moderately Stony	3	Topography	None	Well	Loam
6.35	6.39	ONOND005Li:c2	35.8	London Loam	100	2 - 5	Moderately Stony	1	None	None	Imperfectly	Loam
6.39	6.52	ONOND005Pi:A1	126.2	Parkhill Loam	100	0 - 0.5	Slightly Stony	2	Water Saturation	None	Poorly	Loam
6.52	6.85	ONOND005Li:c2	330.4	London Loam	100	2 - 5	Moderately Stony	1	None	None	Imperfectly	Loam
6.85	7.22	ONOND005Gu:c1	375.2	Guelph Sandy Loam	100	2 - 5	Slightly Stony	1	None	None	Well	Sandy loam
7.22	7.31	ONOND005Lo:C2	91.6	London Silt Loam	100	2 - 5	Moderately Stony	1	None	None	Imperfectly	Silt loam
7.31	7.42	ONOND005Co:A0	109.3	Colwood Silt Loam	100	0 - 0.5	Non-stony	2	Water Saturation	None	Poorly	Silt loam
7.42	7.51	ONOND005Li:C2	84.3	London Loam	100	2 - 5	Moderately Stony	1	None	None	Imperfectly	Loam
7.51	8.20	ONOND005Gl:c1	689.1	Guelph Loam	100	2 - 5	Slightly Stony	1	None	None	Well	Loam
8.20	8.33	ONOND005Li:C2	136.5	London Loam	100	2 - 5	Moderately Stony	1	None	None	Imperfectly	Loam
8.33	8.53	ONOND005Gl:c1	201.6	Guelph Loam	100	2 - 5	Slightly Stony	1	None	None	Well	Loam
8.53	8.96	ONOND005Li:C2	428.7	London Loam	100	2 - 5	Moderately Stony	1	None	None	Imperfectly	Loam
8.96	9.89	ONOND005Gl:c1	929.1	Guelph Loam	100	2 - 5	Slightly Stony	1	None	None	Well	Loam
9.89	10.20	ONOND005Ol:d1	304.0	Oneida Loam	100	5 - 9	Slightly Stony	3	Topography	None	Well	Loam
10.20	11.52	ONOND005Ch:c1	1324.3	Chinguacousy Clay Loam	100	2 - 5	Slightly Stony	1	None	None	Imperfectly	Clay loam
11.52	11.62	ONOND005Jc:B1	97.5	Jeddo Clay Loam	100	0.5 - 2	Slightly Stony	3	Restricted rooting depth	Water Saturation	Poorly	Clay loam
11.62	11.83	ONOND005Ch:B2	209.7	Chinguacousy Clay Loam	100	0.5 - 2	Moderately Stony	1	None	None	Imperfectly	Clay loam
11.83	12.20	ONOND005Ch:b0	372.5	Chinguacousy Clay Loam	100	0.5 - 2	Non-stony	1	None	None	Imperfectly	Clay loam
12.20	12.24	ONOND005Ch:c1	38.9	Chinguacousy Clay Loam	100	2 - 5	Slightly Stony	1	None	None	Imperfectly	Clay loam
12.24	12.37	ONOND005Ch:b0	131.9	Chinguacousy Clay Loam	100	0.5 - 2	Non-stony	1	None	None	Imperfectly	Clay loam
12.37	12.41	ONOND005Ch:c1	33.7	Chinguacousy Clay Loam	100	2 - 5	Slightly Stony	1	None	None	Imperfectly	Clay loam
12.41	12.47	ONOND005Ch:b0	63.4	Chinguacousy Clay Loam	100	0.5 - 2	Non-stony	1	None	None	Imperfectly	Clay loam
12.47	12.60	ONOND005Ch:c1	131.8	Chinguacousy Clay Loam	100	2 - 5	Slightly Stony	1	None	None	Imperfectly	Clay loam
12.60	12.89	ONOND005Ch:b0	287.0	Chinguacousy Clay Loam	100	0.5 - 2	Non-stony	1	None	None	Imperfectly	Clay loam
12.89	12.97	ONOND005Ch:c1	84.3	Chinguacousy Clay Loam	100	2 - 5	Slightly Stony	1	None	None	Imperfectly	Clay loam
12.97	13.13	ONOND005B.L.	156.2	Bottom Land	100	N/A	Non-stony	5	Frequent flooding	None	Variable	N/A

KP Begin	KP End	Soil Map Unit	Crossing Length (meters)	Component Name	Component Percent	Slope Range	Stoniness	Canada Land Inventory (CLI) Rating ¹	First CLI Subclass ¹	Second CLI Subclass ¹	Drainage Class	Surface Texture
13.13	13.28	ONOND005On:a1	157.1	Oneida Clay Loam	100	0 - 0.5	Slightly Stony	1	None	None	Well	Clay loam
13.28	13.38	ONOND005Ch:f1	91.6	Chinguacousy Clay Loam	100	15 - 30	Slightly Stony	1	None	None	Imperfectly	Clay loam
13.38	13.46	ONOND005On:a1	84.8	Oneida Clay Loam	100	0 - 0.5	Slightly Stony	1	None	None	Well	Clay loam
13.46	13.52	ONOND005Ch:a0	56.9	Chinguacousy Clay Loam	100	0 - 0.5	Non-stony	1	None	None	Imperfectly	Clay loam
13.52	13.61	ONOND005Ch:a1	91.0	Chinguacousy Clay Loam	100	0 - 0.5	Slightly Stony	1	None	None	Imperfectly	Clay loam
13.61	13.67	ONOND005Ch:a0	56.1	Chinguacousy Clay Loam	100	0 - 0.5	Non-stony	1	None	None	Imperfectly	Clay loam
13.67	14.15	ONOND005Ch:f1	487.3	Chinguacousy Clay Loam	100	15 - 30	Slightly Stony	1	None	None	Imperfectly	Clay loam
14.15	14.31	ONOND005On:a1	156.7	Oneida Clay Loam	100	0 - 0.5	Slightly Stony	1	None	None	Well	Clay loam
14.31	14.42	ONOND005Ch:a0	110.5	Chinguacousy Clay Loam	100	0 - 0.5	Non-stony	1	None	None	Imperfectly	Clay loam
14.42	14.58	ONOND005On:a1	159.9	Oneida Clay Loam	100	0 - 0.5	Slightly Stony	1	None	None	Well	Clay loam
14.58	14.65	ONOND005Jc:B1	65.5	Jeddo Clay Loam	100	0.5 - 2	Slightly Stony	3	Restricted rooting depth	Water Saturation	Poorly	Clay loam
14.65	14.81	ONOND005On:a1	166.3	Oneida Clay Loam	100	0 - 0.5	Slightly Stony	1	None	None	Well	Clay loam
14.81	15.25	ONOND005Ch:a0	436.3	Chinguacousy Clay Loam	100	0 - 0.5	Non-stony	1	None	None	Imperfectly	Clay loam
15.25	15.59	ONOND005On:A0	339.3	Oneida Clay Loam	100	0 - 0.5	Non-stony	1	None	None	Well	Clay loam
15.59	15.66	ONOND005Ch:A0	77.8	Chinguacousy Clay Loam	100	0 - 0.5	Non-stony	1	None	None	Imperfectly	Clay loam
15.66	15.79	ONOND005On:A0	123.5	Oneida Clay Loam	100	0 - 0.5	Non-stony	1	None	None	Well	Clay loam
15.79	15.91	ONOND005Ch:a0	120.2	Chinguacousy Clay Loam	100	0 - 0.5	Non-stony	1	None	None	Imperfectly	Clay loam
15.91	16.02	ONOND005On:A0	108.0	Oneida Clay Loam	100	0 - 0.5	Non-stony	1	None	None	Well	Clay loam
16.02	16.18	ONOND005Ch:a0	163.9	Chinguacousy Clay Loam	100	0 - 0.5	Non-stony	1	None	None	Imperfectly	Clay loam
16.18	16.47	ONOND005On:A0	291.6	Oneida Clay Loam	100	0 - 0.5	Non-stony	1	None	None	Well	Clay loam
16.47	16.56	ONOND005Jc:B1	89.0	Jeddo Clay Loam	100	0.5 - 2	Slightly Stony	3	Restricted rooting depth	Water Saturation	Poorly	Clay loam
16.56	16.70	ONOND005Ch:A0	136.5	Chinguacousy Clay Loam	100	0 - 0.5	Non-stony	1	None	None	Imperfectly	Clay loam
16.70	16.76	ONOND005Jc:B1	62.9	Jeddo Clay Loam	100	0.5 - 2	Slightly Stony	3	Restricted rooting depth	Water Saturation	Poorly	Clay loam
16.76	16.86	ONOND005On:A0	97.8	Oneida Clay Loam	100	0 - 0.5	Non-stony	1	None	None	Well	Clay loam
16.86	17.34	ONOND005Jc:B1	486.1	Jeddo Clay Loam	100	0.5 - 2	Slightly Stony	3	Restricted rooting depth	Water Saturation	Poorly	Clay loam
17.34	17.41	ONOND005Jc:B1	70.3	Jeddo Clay Loam	100	0.5 - 2	Slightly Stony	3	Restricted rooting depth	Water Saturation	Poorly	Clay loam
17.41	17.56	ONOND005Jc:B1	144.7	Jeddo Clay Loam	100	0.5 - 2	Slightly Stony	3	Restricted rooting depth	Water Saturation	Poorly	Clay loam
17.56	17.68	ONOND005Jc:B1	117.7	Jeddo Clay Loam	100	0.5 - 2	Slightly Stony	3	Restricted rooting depth	Water Saturation	Poorly	Clay loam
17.68	18.11	ONOND005Jc:B1	433.6	Jeddo Clay Loam	100	0.5 - 2	Slightly Stony	3	Restricted rooting depth	Water Saturation	Poorly	Clay loam
18.11	18.24	ONOND005On:C1	128.6	Oneida Clay Loam	100	2 - 5	Slightly Stony	1	None	None	Well	Clay loam

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18.24	18.47	ONOND005Jc:B1	229.1	Jeddo Clay Loam	100	0.5 - 2	Slightly Stony	3	Restricted rooting depth	Water Saturation	Poorly	Clay loam
18.47	18.48	ONOND005On:C1	10.1	Oneida Clay Loam	100	2 - 5	Slightly Stony	1	None	None	Well	Clay loam
18.48	19.06	ONOND005Jc:B1	583.2	Jeddo Clay Loam	100	0.5 - 2	Slightly Stony	3	Restricted rooting depth	Water Saturation	Poorly	Clay loam
19.06	19.16	ONOND005On:E1	103.1	Oneida Clay Loam	100	9 - 15	Slightly Stony	4	Topography	None	Well	Clay loam
19.16	19.54	ONOND005On:A1	374.6	Oneida Clay Loam	100	0 - 0.5	Slightly Stony	1	None	None	Well	Clay loam
19.54	19.69	ONOND005B.L.	152.4	Bottom Land	100	N/A	Non-stony	5	Frequent flooding	None	Variable	N/A
19.69	19.88	ONOND005On:C2	188.3	Oneida Clay Loam	100	2 - 5	Moderately Stony	1	None	None	Well	Clay loam
19.88	20.17	ONOND005On:D1	289.6	Oneida Clay Loam	100	5 - 9	Slightly Stony	3	Topography	None	Well	Clay loam
20.17	20.68	ONOND005On:c1	513.7	Oneida Clay Loam	100	2 - 5	Slightly Stony	1	None	None	Well	Clay loam
20.68	21.04	ONOND005On:c1	359.4	Oneida Clay Loam	100	2 - 5	Slightly Stony	1	None	None	Well	Clay loam
21.04	21.09	ONOND005On:D1	48.5	Oneida Clay Loam	100	5 - 9	Slightly Stony	3	Topography	None	Well	Clay loam
21.09	21.38	ONOND005On:A0	291.4	Oneida Clay Loam	100	0 - 0.5	Non-stony	1	None	None	Well	Clay loam
21.38	21.56	ONOND005Ch:C0	177.7	Chinguacousy Clay Loam	100	2 - 5	Non-stony	1	None	None	Imperfectly	Clay loam
21.56	22.31	ONOND005On:A0	753.7	Oneida Clay Loam	100	0 - 0.5	Non-stony	1	None	None	Well	Clay loam
22.31	22.54	ONOND005B.L.	229.8	Bottom Land	100	N/A	Non-stony	5	Frequent flooding	None	Variable	N/A
22.54	22.73	ONOND005On:D2	182.4	Oneida Clay Loam	100	5 - 9	Moderately Stony	3	Topography	None	Well	Clay loam
22.73	22.79	ONOND005On:D0	64.1	Oneida Clay Loam	100	5 - 9	Non-stony	3	Topography	None	Well	Clay loam
22.79	23.48	ONOND005On:D2	685.0	Oneida Clay Loam	100	5 - 9	Moderately Stony	3	Topography	None	Well	Clay loam
23.48	23.85	ONOND005Ch:C0	374.7	Chinguacousy Clay Loam	100	2 - 5	Non-stony	1	None	None	Imperfectly	Clay loam
23.85	24.02	ONOND005On:D2	168.0	Oneida Clay Loam	100	5 - 9	Moderately Stony	3	Topography	None	Well	Clay loam
24.02	24.48	ONOND005Ch:C0	465.9	Chinguacousy Clay Loam	100	2 - 5	Non-stony	1	None	None	Imperfectly	Clay loam
24.48	25.01	ONOND005On:D2	526.3	Oneida Clay Loam	100	5 - 9	Moderately Stony	3	Topography	None	Well	Clay loam
25.01	25.45	ONOND005Ch:C0	438.1	Chinguacousy Clay Loam	100	2 - 5	Non-stony	1	None	None	Imperfectly	Clay loam
25.45	25.48	ONOND005Jc:B1	30.0	Jeddo Clay Loam	100	0.5 - 2	Slightly Stony	3	Restricted rooting depth	Water Saturation	Poorly	Clay loam
25.48	25.62	ONOND005Ch:C0	139.8	Chinguacousy Clay Loam	100	2 - 5	Non-stony	1	None	None	Imperfectly	Clay loam
25.62	25.77	ONOND005Jc:B1	154.9	Jeddo Clay Loam	100	0.5 - 2	Slightly Stony	3	Restricted rooting depth	Water Saturation	Poorly	Clay loam
25.77	25.92	ONOND005On:D2	148.2	Oneida Clay Loam	100	5 - 9	Moderately Stony	3	Topography	None	Well	Clay loam
25.92	26.04	ONOND005Jc:B1	123.1	Jeddo Clay Loam	100	0.5 - 2	Slightly Stony	3	Restricted rooting depth	Water Saturation	Poorly	Clay loam
26.04	26.57	ONOND005Ch:C0	525.5	Chinguacousy Clay Loam	100	2 - 5	Non-stony	1	None	None	Imperfectly	Clay loam
26.57	26.73	ONOND005Jc:B1	162.3	Jeddo Clay Loam	100	0.5 - 2	Slightly Stony	3	Restricted rooting depth	Water Saturation	Poorly	Clay loam
26.73	26.94	ONOND005On:D2	205.2	Oneida Clay Loam	100	5 - 9	Moderately Stony	3	Topography	None	Well	Clay loam

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26.94	27.00	ONOND005Jc:B1	60.5	Jeddo Clay Loam	100	0.5 - 2	Slightly Stony	3	Restricted rooting depth	Water Saturation	Poorly	Clay loam
27.00	27.33	ONOND005On:D2	336.7	Oneida Clay Loam	100	5 - 9	Moderately Stony	3	Topography	None	Well	Clay loam
27.33	27.40	ONOND005Jc:B1	68.9	Jeddo Clay Loam	100	0.5 - 2	Slightly Stony	3	Restricted rooting depth	Water Saturation	Poorly	Clay loam
27.40	27.49	ONOND005On:D2	84.1	Oneida Clay Loam	100	5 - 9	Moderately Stony	3	Topography	None	Well	Clay loam
27.49	27.56	ONOND005Ch:C1	68.5	Chinguacousy Clay Loam	100	2 - 5	Slightly Stony	1	None	None	Imperfectly	Clay loam
27.56	27.58	ONOND005Jc:B1	26.5	Jeddo Clay Loam	100	0.5 - 2	Slightly Stony	3	Restricted rooting depth	Water Saturation	Poorly	Clay loam
27.58	27.67	ONOND005Jc:B1	84.9	Jeddo Clay Loam	100	0.5 - 2	Slightly Stony	3	Restricted rooting depth	Water Saturation	Poorly	Clay loam
27.67	62.02	ONOND999BU	34354.9	Built Up Area	100	N/A	N/A	N/A	N/A	N/A	N/A	N/A

¹ Definitions of the CLI classes and subclasses are shown below.

CLI Soil Class Definitions

Class Number	Definition
Class 1	Soils in this class have no significant limitations in use for crops.
Class 2	Soils in this class have moderate limitations that reduce the choice of crops or require moderate conservation practices.
Class 3	Soils in this class have moderately severe limitations that reduce the choice of crops or require special conservation practices.
Class 4	Soils in this class have severe limitations that restrict the choice of crops or require special conservation practices and very careful management, or both.
Class 5	Soils in this class have very severe limitations that restrict their capability to producing perennial forage crops, and improvement practices are feasible.
Class 6	Soils in this class are unsuited for cultivation but are capable of use for unimproved permanent pasture.
Class 7	This class includes marsh, rockland, and soil on very steep slopes.

Source: Ontario Ministry of Agriculture, Food, and Rural Affairs, 2018