



JULY 2011

STAGE 2 ARCHAEOLOGICAL ASSESSMENT

**Samsung Grand Renewable Energy Park, Various Lots
Concessions 1N-3N and 1S-5S,
The Earl Tract, The Haldimand Tract and
The Sheehan Tract, Dunn Township,
Concessions 1-9, Rainham Township,
Concessions 1N, 1S, 2, 3 and
The Jones Tract, North Cayuga Township,
Concessions 3-7 and The Fradenburgh Tract,
South Cayuga Township and
Concessions 1-12, Walpole Township,
Haldimand County, Ontario**

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REPORT





Executive Summary

A Stage 1 archaeological background study was previously conducted on behalf of Samsung Renewable Energy Inc. by Stantec Consulting Ltd. for a project area located in the Geographic Townships of Dunn, Rainham, South Cayuga, North Cayuga and Walpole in Haldimand County, Ontario. This area is proposed to be the site of approximately 67 wind turbines, at least three areas of solar panels and project-related infrastructure comprising the Grand Renewable Energy Park.

The Stage 1 archaeological assessment resulted in the determination that the potential for pre-contact Aboriginal and Euro-Canadian sites was deemed to be moderate to high. As a result, Stage 2 archaeological assessment was recommended for any areas to be impacted by turbine or solar panel construction, access road corridor construction or other infrastructure construction related activities.

During the winter of 2010 and 2011, Stage 2 archaeological assessment of a portion of the proposed project area was undertaken by Golder Associates Ltd. (Golder) on behalf of Stantec (Golder 2011). The winter 2010-2011 Stage 2 assessment focused upon the proposed wind turbine and solar lands layout, including turbine sites, collector cable routes, access road corridors, construction roads, transmission lines, laydown areas and substations. A total of approximately 75 hectares was subject to Stage 2 archaeological assessment, consisting of approximately 34 hectares of land that could not be ploughed and, therefore, was assessed using the test pit method at an interval of five metres as well as approximately 40.5 hectares of ploughed fields, assessed using the standard pedestrian survey method at an interval of five metres. The Stage 2 archaeological assessment conducted by Golder in winter 2010-2011 resulted in the identification of 55 locations, comprising 54 pre-contact Aboriginal sites and one historic Euro-Canadian site. In summary, 25 of the 55 archaeological locations identified within the study area in winter 2010-2011 were recommended for Stage 3 assessment to further evaluate their cultural heritage value or interest.

During the spring and summer of 2011, Stage 2 archaeological assessment of the remainder of the portion of the proposed project area to be assessed by Golder was undertaken and is the subject of this report. The spring and summer 2011 Stage 2 assessment focused on 22 turbine locations, 25 access road corridors or collector cable routes and three portions of solar panel lands. A total of approximately 160 hectares of ploughed agricultural fields was subject to Stage 2 archaeological assessment using the standard pedestrian survey method at an interval of five metres. Additionally, a small area of approximately 10 metres by 40 metres was assessed using the test pit method at an interval of five metres. The Stage 2 archaeological assessment conducted by Golder in the spring and summer of 2011 resulted in the identification of a further 128 locations, all of which are pre-contact Aboriginal sites. In order to further evaluate their cultural heritage value or interest, 48 of the 128 archaeological locations identified within the study area in the spring and summer of 2011 are recommended for Stage 3 assessment.

This assessment was undertaken in order to meet the requirements of an environmental assessment conducted under the Renewable Energy Approval (REA) process, as outlined in Ontario Regulation 359/09 section 22(3). For the purposes of this Stage 2 Assessment the Ministry of Tourism and Culture's 1993 *Archaeological Assessment Technical Guidelines (Stages 1-3 & Reporting Format)* was followed, but whenever possible the new 2011 Ministry of Tourism and Culture's *Standards and Guidelines for Consultant Archaeologists* were employed as best practices.



STAGE 2 ARCHAEOLOGICAL ASSESSMENT SAMSUNG GRAND RENEWABLE ENERGY PARK

The Ontario Ministry of Tourism and Culture is asked to review the results presented and to accept this report into the Ontario Public Register of Archaeological Reports. Additional archaeological assessment is still required and so the archaeological sites recommended for further archaeological fieldwork remain subject to Section 48(1) of the *Ontario Heritage Act* and may not be altered, or have artifacts removed, except by a person holding an archaeological licence.

The Executive Summary highlights key points from the report only; for complete information and findings, as well as the limitations, the reader should examine the complete report.



Table of Contents

1.0 INTRODUCTION.....	1
2.0 SUMMARY OF STAGE 1 ARCHAEOLOGICAL INVESTIGATIONS	4
2.1 Natural Environment.....	4
2.2 Previously Known Archaeological Resources and Surveys	5
2.3 Historic Research	6
2.4 Archaeological Potential	7
3.0 STAGE 2 STUDY METHODS AND RESULTS	8
3.1 Summary of Winter 2010-2011 Stage 2 Investigations.....	8
3.2 Stage 2 Field Assessment Methods	8
3.3 Stage 2 Field Assessment Results	23
3.3.1 Location 56	23
3.3.2 Location 57	24
3.3.3 Location 58 (AfGw-188)	24
3.3.4 Location 59 (AfGw-189)	24
3.3.5 Location 60	25
3.3.6 Location 61 (AfGw-230)	25
3.3.7 Location 62	25
3.3.8 Location 63	25
3.3.9 Location 64 (AfGw-190)	26
3.3.10 Location 65 (AfGw-191)	27
3.3.11 Location 66 (AfGw-192)	28
3.3.12 Location 67	29
3.3.13 Location 68 (AfGw-193)	29
3.3.14 Location 69 (AfGw-194)	30
3.3.15 Location 70 (AfGw-195)	30
3.3.16 Location 71 (AfGw-196)	30
3.3.17 Location 72 (AfGw-197)	31
3.3.18 Location 73 (AfGw-198)	31



STAGE 2 ARCHAEOLOGICAL ASSESSMENT SAMSUNG GRAND RENEWABLE ENERGY PARK

3.3.19	Location 74	32
3.3.20	Location 75	32
3.3.21	Location 76 (AfGw-231)	33
3.3.22	Location 77 (AfGw-232)	33
3.3.23	Location 78 (AfGw-199)	33
3.3.24	Location 79 (AfGw-200)	33
3.3.25	Location 80	34
3.3.26	Location 81 (AfGw-201)	35
3.3.27	Location 82 (AfGw-202)	35
3.3.28	Location 83	36
3.3.29	Location 84	36
3.3.30	Location 85 (AfGw-203)	36
3.3.31	Location 86 (AfGw-204)	37
3.3.32	Location 87 (AfGw-205)	37
3.3.33	Location 88 (AfGw-206)	38
3.3.34	Location 89 (AfGw-207)	38
3.3.35	Location 90	39
3.3.36	Location 91 (AfGw-208)	39
3.3.37	Location 92	40
3.3.38	Location 93	40
3.3.39	Location 94	40
3.3.40	Location 95	41
3.3.41	Location 96	41
3.3.42	Location 97	42
3.3.43	Location 98 (AfGw-226)	43
3.3.44	Location 99 (AfGw-227)	43
3.3.45	Location 100	44
3.3.46	Location 101	44
3.3.47	Location 102	44
3.3.48	Location 103	44
3.3.49	Location 104 (AfGw-209)	45



STAGE 2 ARCHAEOLOGICAL ASSESSMENT SAMSUNG GRAND RENEWABLE ENERGY PARK

3.3.50	Location 105 (AfGw-210)	45
3.3.51	Location 106 (AfGw-233)	46
3.3.52	Location 107	46
3.3.53	Location 108 (AfGw-234)	46
3.3.54	Location 109 (AfGw-211)	46
3.3.55	Location 110 (AfGw-212)	47
3.3.56	Location 111 (AfGw-213)	47
3.3.57	Location 112 (AfGw-235)	48
3.3.58	Location 113 (AfGw-236)	48
3.3.59	Location 114 (AfGw-214)	48
3.3.60	Location 115 (AfGw-215)	49
3.3.61	Location 116	49
3.3.62	Location 117	50
3.3.63	Location 118 (AfGw-216)	50
3.3.64	Location 119 (AfGw-217)	51
3.3.65	Location 120 (AfGw-237)	51
3.3.66	Location 121 (AfGw-238)	51
3.3.67	Location 122 (AfGw-218)	51
3.3.68	Location 123 (AfGw-219)	52
3.3.69	Location 124 (AfGw-220)	52
3.3.70	Location 125 (AfGw-221)	53
3.3.71	Location 126 (AfGw-222)	53
3.3.72	Location 127 (AfGw-228)	54
3.3.73	Location 128	54
3.3.74	Location 129 (AfGw-223)	55
3.3.75	Location 130	55
3.3.76	Location 131 (AfGx-737)	55
3.3.77	Location 132 (AfGx-738)	56
3.3.78	Location 133	56
3.3.79	Location 134 (AfGx-739)	56
3.3.80	Location 135 (AfGx-854)	56



STAGE 2 ARCHAEOLOGICAL ASSESSMENT SAMSUNG GRAND RENEWABLE ENERGY PARK

3.3.81	Location 136 (AfGx-740)	57
3.3.82	Location 137 (AfGx-741)	57
3.3.83	Location 138 (AfGx-855)	58
3.3.84	Location 139	58
3.3.85	Location 140 (AfGx-742)	58
3.3.86	Location 141	58
3.3.87	Location 142	59
3.3.88	Location 143	59
3.3.89	Location 144	60
3.3.90	Location 145	60
3.3.91	Location 146	60
3.3.92	Location 147	60
3.3.93	Location 148	61
3.3.94	Location 149 (AfGw-224)	61
3.3.95	Location 150 (AfGw-239)	62
3.3.96	Location 151	62
3.3.97	Location 152 (AfGw-225)	62
3.3.98	Location 153 (AfGw-240)	62
3.3.99	Location 154	63
3.3.100	Location 155 (AfGw-241)	63
3.3.101	Location 156	64
3.3.102	Location 157 (AfGw-242)	64
3.3.103	Location 158 (AfGw-243)	65
3.3.104	Location 159	66
3.3.105	Location 160	66
3.3.106	Location 161	66
3.3.107	Location 162	67
3.3.108	Location 163 (AfGw-244)	67
3.3.109	Location 164 (AfGw-245)	67
3.3.110	Location 165 (AfGw-246)	68
3.3.111	Location 166	68



STAGE 2 ARCHAEOLOGICAL ASSESSMENT SAMSUNG GRAND RENEWABLE ENERGY PARK

3.3.112	Location 167	68
3.3.113	Location 168	69
3.3.114	Location 169	69
3.3.115	Location 170	70
3.3.116	Location 171	70
3.3.117	Location 172	70
3.3.118	Location 173 (AfGw-248)	70
3.3.119	Location 174	71
3.3.120	Location 175	71
3.3.121	Location 176 (AfGw-249)	72
3.3.122	Location 177	72
3.3.123	Location 178	72
3.3.124	Location 179 (AfGw-250)	72
3.3.125	Location 180 (AfGw-251)	73
3.3.126	Location 181	73
3.3.127	Location 182	73
3.3.128	Location 183	73
4.0	SUMMARY OF SPRING AND SUMMER 2011 STAGE 2 INVESTIGATIONS	75
5.0	RECOMMENDATIONS AND ADVICE ON COMPLIANCE WITH LEGISLATION	77
5.1	Sites Recommended for Stage 3 Assessment.....	78
5.2	Sites Not Requiring any Further Archaeological Assessment.....	79
5.3	Summary	82
6.0	REFERENCES CITED	84
7.0	IMPORTANT INFORMATION AND LIMITATIONS OF THIS REPORT	90
 TABLES		
	Table 1: Summary of Temporal Affiliations of Pre-contact Aboriginal Sites in Study Area	75
	Table 2: Pre-contact Aboriginal Sites in Study Area with Known Cultural and Temporal Assignments.....	75
	Table 3: Pre-contact Aboriginal Sites Requiring Stage 3 Archaeological Assessment.....	78
	Table 4: Pre-contact Aboriginal Sites Not Requiring Any Further Archaeological Assessment	79



STAGE 2 ARCHAEOLOGICAL ASSESSMENT SAMSUNG GRAND RENEWABLE ENERGY PARK

FIGURES

Figure 1: Location of Study Area 3
Figure 2: Plate Locations and Photograph Directions 10

PLATES

Plate 1: Pedestrian Survey, Field Conditions, Solar Lands A, Walked at Five-Metre Intervals, Facing Northeast 11
Plate 2: Pedestrian Survey, Field Conditions, Solar Lands B, Walked at Five-Metre Intervals, Facing Southwest 11
Plate 3: Pedestrian Survey, Field Conditions, Turbine 56, Walked at Five-Metre Intervals, Facing Southeast 12
Plate 4: Pedestrian Survey, Field Conditions, Turbine 56/25 Corridor, Walked at Five-Metre Intervals, Facing Southeast 12
Plate 5: Pedestrian Survey, Field Conditions, Turbine 22, Walked at Five-Metre Intervals, Facing South 13
Plate 6: Field Conditions, Poorly Drained Area (Roadside Ditch), Turbine 22 Corridor, Not Assessed, Facing North 13
Plate 7: Pedestrian Survey, Field Conditions, Turbine 68/37 Cable Route, Walked at Five-Metre Intervals, Facing North 14
Plate 8: Pedestrian Survey, Field Conditions, Turbine 37, Walked at Five-Metre Intervals, Facing West 14
Plate 9: Pedestrian Survey, Field Conditions, Turbine 35/38 Corridor, Walked at Five-Metre Intervals, Facing South 15
Plate 10: Pedestrian Survey, Field Conditions, Turbine 14, Walked at Five-Metre Intervals, Facing Southeast 15
Plate 11: Pedestrian Survey, Field Conditions, Turbine 52 Corridor, Walked at Five-Metre Intervals, Facing South 16
Plate 12: Pedestrian Survey, Field Conditions, Turbine 57 Corridor A, Walked at Five-Metre Intervals, Facing Southeast 16
Plate 13: Pedestrian Survey, Field Conditions, Turbine 57 Corridor B, Walked at Five-Metre Intervals, Facing South 17
Plate 14: Pedestrian Survey, Field Conditions, Turbine 26 Corridor, Walked at Five-Metre Intervals, Facing North 17
Plate 15: Pedestrian Survey, Field Conditions, Turbine 8, Walked at Five-Metre Intervals, Facing Southeast 18
Plate 16: Field Conditions, Disturbed Area (Irrigation Pond), Turbine 3 Corridor, Not Assessed, Facing Southeast 18
Plate 17: Test Pit Survey, Field Conditions, Turbine 43 Corridor, Test Pitted at Five-Metre Intervals, Facing Northeast 19
Plate 18: Test Pit Survey, Test Pit, Turbine 43 Corridor, Facing Northeast 19
Plate 19: Field Conditions, Disturbed Area (Trailer Park), Turbine 9 Corridor, Not Assessed, Facing North 20
Plate 20: Field Conditions, Disturbed Area (Trailer Park), Turbine 9 Corridor, Not Assessed, Facing South 20
Plate 21: Field Conditions, Poorly Drained Area (North of Trailer Park), Turbine 9 Corridor, Not Assessed, Facing East 21
Plate 22: Pedestrian Survey, Field Conditions, Turbine 9, Walked at Five-Metre Intervals, Facing North 21
Plate 23: Pedestrian Survey, Field Conditions, Turbine 2 Corridor, Location 155, Walked at Five-Metre Intervals, Facing Northwest 22
Plate 24: Pedestrian Survey, Field Conditions, Turbine 2 Corridor, Location 157, Walked at Five-Metre Intervals, Facing Northwest 22
Plate 25: Location 64 (AfGw-190) Projectile Point and End Scraper (actual size) 26
Plate 26: Location 65 (AfGw-191) Biface (actual size) 27



STAGE 2 ARCHAEOLOGICAL ASSESSMENT SAMSUNG GRAND RENEWABLE ENERGY PARK

Plate 27: Location 65 (AfGw-191) Surface of Feature 1 (actual size)	28
Plate 28: Location 66 (AfGw-192) Projectile Points (actual size)	29
Plate 29: Location 71 (AfGw-196) Projectile Point (actual size)	31
Plate 30: Location 73 (AfGw-198) Projectile Point (actual size)	32
Plate 31: Location 79 (AfGw-200) Projectile Points (actual size)	34
Plate 32: Location 82 (AfGw-202) Projectile Point (actual size)	35
Plate 33: Location 87 (AfGw-205) Projectile Point (actual size)	37
Plate 34: Location 88 (AfGw-206) Projectile Point (actual size)	38
Plate 35: Location 91 (AfGw-208) Projectile Point and Biface (actual size)	39
Plate 36: Location 94 Projectile Point (actual size)	41
Plate 37: Location 96 Projectile Point (actual size)	42
Plate 38: Location 97 Projectile Point (actual size)	42
Plate 39: Location 98 (AfGw-226) Stemmed Biface (actual size)	43
Plate 40: Location 103 Projectile Point (actual size)	45
Plate 41: Location 109 (AfGw-211) Projectile Point (actual size)	47
Plate 42: Location 111 (AfGw-213) Pre-contact Aboriginal Ceramic (actual size)	48
Plate 43: Location 115 (AfGw-215) End Scraper and Side Scraper (actual size)	49
Plate 44: Location 118 (AfGw-216) Projectile Point (actual size)	50
Plate 45: Location 123 (AfGw-219) Projectile Point Preform (actual size)	52
Plate 46: Location 124 (AfGw-220) Thumbnail End Scraper (actual size)	53
Plate 47: Location 126 (AfGw-222) Projectile Point (actual size)	54
Plate 48: Location 136 (AfGx-740) Projectile Point (actual size)	57
Plate 49: Location 143 Projectile Point (actual size)	59
Plate 50: Location 149 (AfGw-224) Projectile Point (actual size)	61
Plate 51: Location 155 (AfGw-241) End Scraper (actual size)	64
Plate 52: Location 157 (AfGw-242) Artifacts (actual size)	65
Plate 53: Location 167 End Scraper (actual size)	69
Plate 54: Location 175 Projectile Point (actual size)	71
Plate 55: Location 183 Projectile Point (actual size)	74

APPENDICES

APPENDIX A

Aboriginal Engagement



STAGE 2 ARCHAEOLOGICAL ASSESSMENT SAMSUNG GRAND RENEWABLE ENERGY PARK

APPENDIX B

Stage 2 Study Methods and Results

APPENDIX C

Complete Stage 2 Catalogue

APPENDIX D

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1.0 INTRODUCTION

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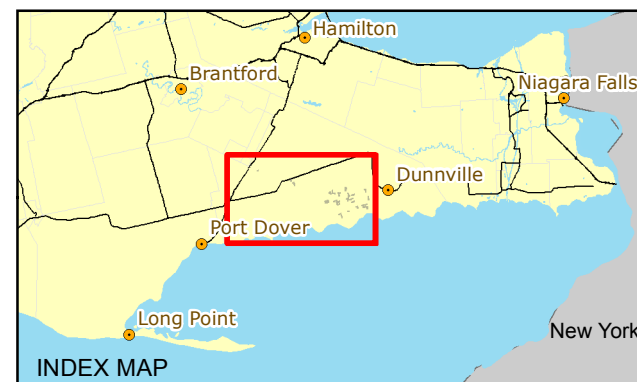
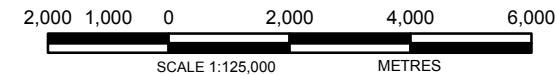
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LEGEND

- Principal Highway
- Major Road
- Local Road
- Waterbody
- Project Area

REFERENCE

Base Data - MNR NRVIS, obtained 2004, CANMAP v2006.4
 Produced by Golder Associates Ltd under licence from
 Ontario Ministry of Natural Resources, © Queens Printer 2008
 Projection: Transverse Mercator Datum: NAD 83 Coordinate System: UTM Zone 17



PROJECT **STAGE 2 ARCHAEOLOGICAL ASSESSMENT
 GRAND RENEWABLE ENERGY PARK
 HALDIMAND COUNTY, ONTARIO**

TITLE **LOCATION OF STUDY AREA**

 Mississauga, Ontario	PROJECT NO. 10-1136-0072	SCALE AS SHOWN	REV. 0.0
	DESIGN JO 14 Nov. 2008		
	GIS BC 24 Jun. 2011		
	CHECK		
	REVIEW		

FIGURE: 1



2.0 SUMMARY OF STAGE 1 ARCHAEOLOGICAL INVESTIGATIONS

A Stage 1 archaeological assessment of the study area was previously conducted by Stantec (2010:i). In compliance with the provincial standards and guidelines set out in the *Draft Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2009), the Stage 1 Archaeological Overview/Background Study included:

- review of aerial imagery
- consideration of existing archaeological potential mapping
- examination of the Ontario Ministry of Tourism and Culture's Archaeological Sites Database (ASDB) to determine the presence of known archaeological sites in and around the study area.
- appraisal of local physiography and topography; and
- scrutiny of 19th Century Census returns and mapping

In addition to the Stage 1 background research conducted by Stantec, Golder also examined additional background data sources located at the Ministry of Tourism and Culture Office in Toronto, the University of Western Ontario Map and Data Library in London, the Haldimand County Museum and Archives in Cayuga, Mills Memorial Library at McMaster University in Hamilton and Golder's corporate library.

2.1 Natural Environment

The study area is located in Haldimand County, in the Geographic Townships of Dunn, Rainham, South Cayuga, North Cayuga and Walpole, covering a total area of approximately 43,000 hectares of developed agricultural land (Stantec 2010:1). Within this area, a number of separate properties and lots across these five townships comprise the study area itself.

The study area falls within the Haldimand Clay Plain, which makes up much of the Niagara Peninsula (Chapman and Putnam 1984:156-159) and comprises approximately 3500 square kilometres of southern Ontario (MacDonald 1980:3). The northern portion of the Clay Plain, extending south from the Niagara escarpment is made up of recessional moraines (Chapman and Putnam 1984). The middle section is deeply cut by the southeast-flowing Grand River. The southern section, bounded by Lake Erie, is mainly low-lying, flat and poorly-drained and comprises back-shore wetlands and coastal marshes, but also sand ridges, dunes and limestone and cobble pavements (Chapman and Putnam 1984; MacDonald 1980). Presently, much of the land is devoted to cash crops of corn, soybeans and some wheat, as well as hayfields and pasture with some undeveloped wooded areas. Villages and small towns are found throughout the study area, often at the cross-roads of historic transportation routes. The study area is a level lake plain consisting primarily of lacustrine silty clay from the Haldimand and Smithville series (Presant and Acton 1984). There are also small deposits of lacustrine clays, some with thin loamy or sand caps from the Lincoln series, between the Nanticoke, Sandusk and Stoney watersheds (Presant and Acton 1984).



Alluvial deposits are found within river valley floodplains (Chapman and Putnam 1984; Presant and Acton 1984). Areas consisting of Haldimand and Smithville series soils would have been suitable for pre-contact Aboriginal agriculture. However, the Lincoln series soils would not have been suitable for pre-contact Aboriginal agricultural practices, given their poor drainage and high clay characteristics (Presant and Acton 1984:37, 40 and 47).

Historic records for Haldimand County indicate that inland areas, away from Lake Erie, the Grand River and other principal streams, were wet and swampy (H.R. Page & Co. 1879:5). Initially, the lumber industry developed in these inland areas, later replaced with large-scale farming (Chapman and Putnam 1984; H.R. Page & Co. 1879:5, 7). Potable water sources within the study area include Nanticoke Creek, Sandusk Creek, Stoney Creek, Hemlock Creek and several other small tributaries, most of which drain into Lake Erie and some into the Grand River before reaching Lake Erie. The Grand River forms the northern and/or eastern boundary of the study area.

2.2 Previously Known Archaeological Resources and Surveys

Previous archaeological assessments and research surveys in Haldimand County have demonstrated that the area was also intensively utilized by pre-contact Aboriginal communities. There are also 10 designated heritage properties in the vicinity of the study area (Stantec 2010:9). According to the Ontario Archaeological Sites Database (ASDB), there are 229 archaeological sites registered within the study area (Government of Ontario n.d.; Robert von Bitter, personal communication, January 17th, 2011). Registered sites, as of January 17th, 2011, comprised: one Palaeo-Indian (c. 9000-8000 B.C.) site, 36 Archaic (c. 8000-1000 B.C.) or possible Archaic sites, 14 Woodland (c. 1000 B.C. - Contact) or possible Woodland sites, 39 multi-component pre-contact Aboriginal sites (five of which containing Palaeo-Indian components), 84 pre-contact Aboriginal sites of undetermined cultural affiliation, 48 pre-contact Aboriginal sites for which no information was provided for cultural affiliation, one multi-component site that contained pre-contact Aboriginal and historic Aboriginal (c. 1580-1650 A.D.) components, two single-component historic Aboriginal sites, two multi-component sites that each contained pre-contact Aboriginal and historic Euro-Canadian components and two single-component historic Euro-Canadian sites.

Seventy further pre-contact Aboriginal sites requiring Stage 3 assessment were also documented in winter 2010-2011, during the first portion of Stage 2 work in the study area, by Golder (2011:i) and Stantec (2011:1) combined. This high number of registered sites within the study area attests to the long history of human occupation in this part of southern Ontario. Given the known pre-contact and historic use of Haldimand County by Aboriginal people, Stage 2 archaeological assessment included engagement with members of Six Nations of the Grand (see Appendix A).

In terms of raw materials for stone tool production, Haldimand County is considered to be resource rich. Known Onondaga, Bois Blanc and Dundee Formation chert outcrops are located within the study area (Eley and von Bitter 1989; Ellis *et al.* 2009) and their use has been documented on nearby sites such as the Slack-Caswell Quarry (Jamieson 1986), Cayuga Quarry (Jackson 1995) and Stelco 1 (Timmins 1995).



2.3 Historic Research

The study area is located in Haldimand County in the Geographic Townships of Dunn, Rainham, South Cayuga, North Cayuga and Walpole. The following provides a brief summary of the historical sources pertaining to the study area. For a more detailed historical background, refer to Golder (2011). The earliest recorded history of Haldimand County begins with the Aboriginal Neutral period. Little first-hand documentation of the Neutral by Europeans exists, however. In about 1626, French Recollet Father Daillon reportedly travelled the entire length of the Grand River and counted 28 Neutral villages in the area (Harper 1950:10-11; White 1978:410). In Haldimand County, about a dozen historic Neutral sites or possible historic Neutral sites are found along the Lower Grand River (Poulton et al. 1989:10). These sites are in the general location of a possible Neutral community known as the Antouaronon (White 1978:408; cf. Poulton et al. 1989:9-10).

In 1647, the Seneca attacked one eastern group of the Neutral (White 1978:410) and, by 1653, the Neutral had been 'dispersed' and/or assimilated by the Five Nations (Jamieson 1992:80; Noble 1978:161). Most of those Neutral survivors who were adopted or assimilated were likely taken in by the Seneca, the western-most of the Five Nations (Noble 1978:161).

The Five Nations at least sparsely populated southern Ontario during the third quarter of the 1600s. The Seneca village of Quinaouatoua or Tinawatawa, near the western end of Lake Ontario, was reportedly visited by La Salle and the Sulpician Fathers Dollier de Casson and Galinée in 1669 (MacDonald (ed.) 1992:4-7; Noble 1978:161-162; Stothers 1977:7). The Five Nations appear to have relinquished the Niagara Peninsula and northern Lake Ontario area before 1700, however, at which time the Algonkian-speaking Mississaugas began to move southwards from the Lake Huron watershed into the Lake Ontario and Lake Erie watersheds (Konrad 1981). Other migrations occurred during the 1700s, for example with Five Nations accepting the Tuscarora in 1722 (Pendergast 1995:107) in New York, together becoming the Six Nations.

During the American War of Independence, some factions within Six Nations sided with the British and others with the American cause. After the British defeat, United Empire Loyalists began to be granted land in southern Ontario and elsewhere in Eastern Canada. One proponent of the First Nation allies was the former Swiss mercenary, Sir Frederick Haldimand, Governor of Québec. Haldimand made preparations to grant a large plot of land in south-central Ontario to those Six Nations who were allies of the Crown (MacDonald 2004:10-12; Weaver 1978:525). Haldimand arranged for the purchase of territory in south-central Ontario from the Mississaugas. This is the Haldimand Tract, also known as the 1795 Crown Grant to the Six Nations, provided for in the Haldimand Proclamation of October 25th, 1784, which was intended to extend to six miles on each side of the Grand River over its entire length from mouth to source (or from Lake Erie to the 'Nichol block', see Weaver 1978:525).

Near the end of the American War of Independence, between 1779 and 1783, some Six Nations people were moving from New York into Ontario along the Niagara River (H.R. Page & Co. 1879:8). Beginning in late 1784 and early 1785, 1843 members of Six Nations, some from each member nation, as well as some other allies, relocated to the Haldimand Tract with Joseph Brant (Tanner 1987:77-78; Weaver 1978:525).



Most of those belonging to Six Nations relocated to the Brantford area, although Seneca, Delaware and Lower Cayuga initially settled along the Lower Grand River (Tanner 1987:75; Weaver 1978:525). Parcels of land from this tract were being lost through various means not long after its establishment (MacDonald 2004; H.R. Page & Co. 1879:4; Weaver 1978:525)

By 1834, it was accepted by the Crown that losses of portions of the Haldimand Tract to Euro-Canadian settlers were too numerous for all lands to be returned. Lands in the Lower Grand River area were surrendered by the Six Nations to the Government in 1832 at which point most Six Nations people moved into Tuscarora Township in Brant County and a narrow portion of Oneida Township (H.R. Page & Co. 1879:8; Tanner 1987:127; Weaver 1978:526).

Following population decline and the surrender of most of their lands along the Credit River by 1818, the Mississaugas were given 6000 acres of land on the Six Nations Reserve, establishing the Mississaugas of New Credit First Nation in 1847 (Smith 2002:119). Some Mississaugas lived on the Grand River with the Mohawks at Davisville in the 1820s (Warrick 2005:2).

By 1792 the County system replaced the previous district administrative structure for Upper Canada. Following legislation passed in 1798, Haldimand County was officially proclaimed in 1800 (MacDonald 2004:120; Middleton and Landon 1927), splitting from Norfolk County, itself established in 1792 (MacDonald 2011). It was named after Sir Frederick Haldimand. In 1851, Haldimand County was divided into 10 townships: Oneida, Seneca, Dunn, Rainham, South Cayuga, North Cayuga, Walpole, Canborough, Moulton and Sherbrooke (MacDonald 2004:108). From 1974 to 2001, Haldimand was re-amalgamated with Norfolk to create the Regional Municipality of Haldimand-Norfolk. Since 2001, Haldimand County has had the legal status of City, but retains the designation 'county' for historical reasons (Jackson and Gayler 2011).

2.4 Archaeological Potential

As discussed in the Stage 1 archaeological assessment (Stantec 2010:12-13) and the Stage 2 interim archaeological assessments (Golder 2011; Stantec 2011), the archaeological potential for pre-contact Aboriginal sites is judged to be moderate to high. This judgement is based on the presence of nearby potable water sources, level topography, agriculturally suitable soils and known archaeological sites. Similarly, the archaeological potential for historic Euro-Canadian sites is judged to be moderate to high. This assessment is based on historic documentation indicating occupation from the late 18th Century onwards as well as the presence of historic transportation routes.



3.0 STAGE 2 STUDY METHODS AND RESULTS

3.1 Summary of Winter 2010-2011 Stage 2 Investigations

The Stage 2 archaeological assessment of a portion of the proposed project was undertaken by Golder, on behalf of Stantec (Golder 2011). The first portion of the Stage 2 Assessment undertaken by Golder was conducted from December 2nd, 2010 to January 3rd, 2011. This work was conducted under archaeological consulting licence P218, issued to Scott Martin, Ph.D., by the Ontario Ministry of Tourism and Culture. The winter 2010 to 2011 Stage 2 assessment focused upon the proposed wind turbine and solar lands layout, including turbine sites, collector cable routes, access road corridors, construction roads, transmission lines, laydown areas and substations. A total of approximately 75 hectares was subject to Stage 2 archaeological assessment, consisting of approximately 34 hectares of land that could not be ploughed and, therefore, was assessed using the test pit method at an interval of five metres as well as approximately 40.5 hectares of ploughed fields, assessed using the standard pedestrian survey method at an interval of five metres. There were 54 pre-contact Aboriginal locations discovered in winter 2010-2011. Two can be assigned date ranges and document use of the study area *circa* 3780 to 3200 B.C., during the Middle Archaic and *circa* 500 B.C. to A.D. 1, during the Early or Middle Woodland (Golder 2011). One historic Euro-Canadian location was also discovered (Golder 2011).

3.2 Stage 2 Field Assessment Methods

The study area encompasses the portion of the wind farm and solar farm layout assessed by Golder. The second portion of the Stage 2 Assessment undertaken by Golder, the subject of this report, was conducted from April 11th to July 6th, 2011. This work was conducted under archaeological consulting licence P218, issued to Scott Martin, Ph.D., by the Ontario Ministry of Tourism and Culture. The spring and summer 2011 Stage 2 assessment (see Appendix B) focused upon the proposed wind turbine and solar lands layout, including turbine sites, collector cable routes, access road corridors, construction roads, transmission lines, laydown areas and substations. A total of approximately 160 hectares was subject to Stage 2 archaeological assessment. Only those areas to be affected by the construction, operation, and decommissioning of the wind farm and solar lands have undergone archaeological assessment. Those areas include: turbine locations; laydown areas related to the construction of the wind farm; underground or overhead collector cables running between turbines and substations; access road corridors between turbines, substations, and the existing road grid; and construction roads between the turbines, the substations, and the existing road grid. Access routes were assessed with 50-metre wide survey corridors. Circular turbine locations were assessed on 70-metre radii. Buried cable routes were assessed with 30-metre wide survey corridors. Specified areas of open agricultural fields, where construction activity is planned, were assessed for proposed solar panels.



STAGE 2 ARCHAEOLOGICAL ASSESSMENT SAMSUNG GRAND RENEWABLE ENERGY PARK

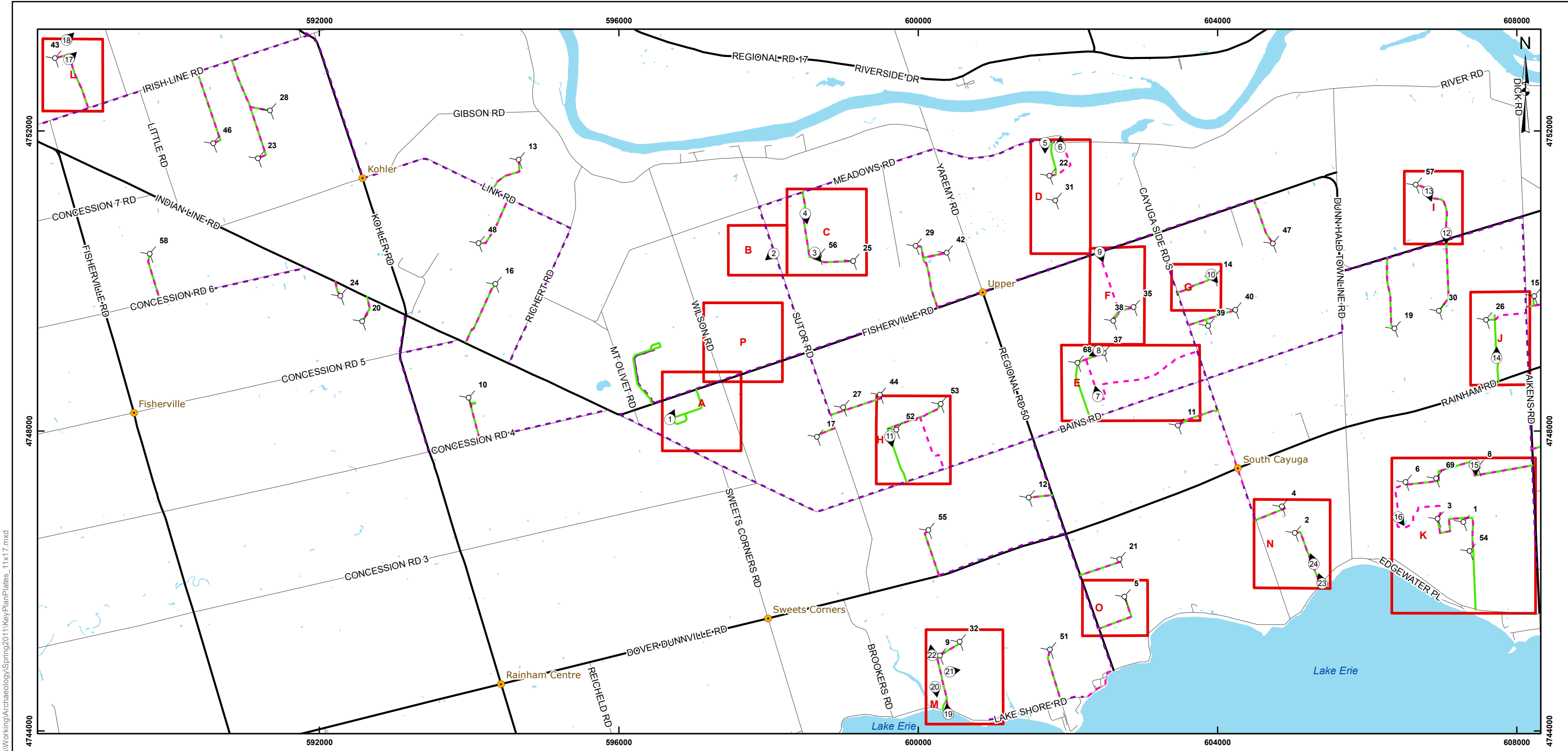
Plate locations and photograph directions are provided in Figure 2 and Appendix B. Approximately 160 hectares of well-weathered ploughed fields was assessed by the standard pedestrian survey method at transect intervals of five metres (Plates 1 to 5, 7 to 15 and 22 to 24). In the event that an artifact was encountered during pedestrian survey, survey intervals were intensified to one metre within a twenty-metre radius of the find.

An area approximately 10 metres by 40 metres in size was assessed by the test pit method (Plates 17 to 18). Each test pit was approximately 30 centimetres in diameter, excavated to subsoil, and then back filled (Plate 18). All soil was screened through six millimetre hardware cloth in order to facilitate the recovery of artifacts. No artifacts were recovered in this test pit area.

Numerous areas existed within the study area where pedestrian survey and test pit survey were possible, despite conditions visible on aerial photography. These included seasonal watercourses of widths less than one metre (in both ploughed and unploughed areas) and treed windbreaks of less than five metres in width (in ploughed agricultural fields). At the request of the Ministry of Tourism and Culture, the locations of small seasonal watercourses have been mapped in Appendix B as narrow areas of poor drainage. Their presence did not impact test pit distribution or pedestrian survey transects since they were generally accommodated between five metre transects, being less than one metre in width. The presence of treed windbreaks of less than five metres width is not indicated in Appendix B, as their presence did not preclude pedestrian survey at five metre intervals surrounding them and therefore test pit survey was not employed to assess them. Two areas of previous disturbance (Plates 16, 19 and 20) and two areas of poor drainage (Plates 6 and 21) were encountered in spring and summer 2011. These areas were judged to have low archaeological potential and were not assessed.

UTM coordinates (see Appendix D) were recorded for isolated surface finds and centroid coordinates were recorded for surface artifact scatters. No positive test pits were encountered and, therefore, no UTM coordinates were recorded for test pits. Coordinates were recorded by a Trimble Recon handheld GPS unit and/or a Garmin eTrex Legend handheld GPS unit, both using the North American Datum (NAD) 83. GPS readings were accurate to five metres or better.

The weather during the Stage 2 assessment in spring and summer 2011 ranged from sunny and cool to overcast and cold. At no time were the conditions detrimental to the recovery of archaeological material. Field visibility during the pedestrian and test pit surveys was excellent. Permission to enter the property and remove artifacts was given by proponent contact, Mr. Larry Galajda. All recovered artifacts will be housed at Golder's London office until their transfer to the Ontario Ministry of Tourism and Culture collections facility located at 900 Highbury Avenue, London.



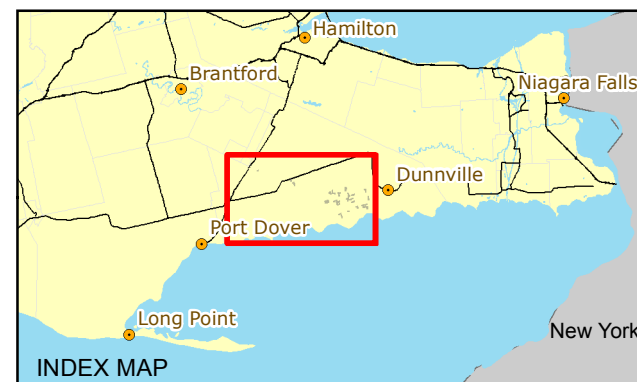
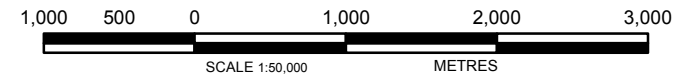
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LEGEND

- Turbine Location
- Plate Location and Direction
- Access Road
- Underground Cable
- Overhead Cable
- Principal Highway
- Major Road
- Local Road
- Map Tile
- Waterbody

REFERENCE

Base Data - MNR NRVIS, obtained 2004, CANMAP v2006.4
 Produced by Golder Associates Ltd under licence from
 Ontario Ministry of Natural Resources, © Queens Printer 2008
 Projection: Transverse Mercator Datum: NAD 83 Coordinate System: UTM Zone 17



PROJECT **STAGE 2 ARCHAEOLOGICAL ASSESSMENT
 GRAND RENEWABLE ENERGY PARK
 HALDIMAND COUNTY, ONTARIO**

TITLE **PLATE LOCATIONS AND
 PHOTOGRAPHIC DIRECTIONS**

 Mississauga, Ontario	PROJECT NO. 10-1136-0072	SCALE AS SHOWN	REV. 0.0
	DESIGN JO 14 Nov. 2008		
	GIS BC 24 Jun. 2011		
	CHECK		
REVIEW			FIGURE: 2



STAGE 2 ARCHAEOLOGICAL ASSESSMENT SAMSUNG GRAND RENEWABLE ENERGY PARK

Plate 1: Pedestrian Survey, Field Conditions, Solar Lands A, Walked at Five-Metre Intervals, Facing Northeast



Plate 2: Pedestrian Survey, Field Conditions, Solar Lands B, Walked at Five-Metre Intervals, Facing Southwest





STAGE 2 ARCHAEOLOGICAL ASSESSMENT SAMSUNG GRAND RENEWABLE ENERGY PARK

Plate 3: Pedestrian Survey, Field Conditions, Turbine 56, Walked at Five-Metre Intervals, Facing Southeast



Plate 4: Pedestrian Survey, Field Conditions, Turbine 56/25 Corridor, Walked at Five-Metre Intervals, Facing Southeast





STAGE 2 ARCHAEOLOGICAL ASSESSMENT SAMSUNG GRAND RENEWABLE ENERGY PARK

Plate 5: Pedestrian Survey, Field Conditions, Turbine 22, Walked at Five-Metre Intervals, Facing South



Plate 6: Field Conditions, Poorly Drained Area (Roadside Ditch), Turbine 22 Corridor, Not Assessed, Facing North





STAGE 2 ARCHAEOLOGICAL ASSESSMENT SAMSUNG GRAND RENEWABLE ENERGY PARK

Plate 7: Pedestrian Survey, Field Conditions, Turbine 68/37 Cable Route, Walked at Five-Metre Intervals, Facing North



Plate 8: Pedestrian Survey, Field Conditions, Turbine 37, Walked at Five-Metre Intervals, Facing West





STAGE 2 ARCHAEOLOGICAL ASSESSMENT SAMSUNG GRAND RENEWABLE ENERGY PARK

Plate 9: Pedestrian Survey, Field Conditions, Turbine 35/38 Corridor, Walked at Five-Metre Intervals, Facing South



Plate 10: Pedestrian Survey, Field Conditions, Turbine 14, Walked at Five-Metre Intervals, Facing Southeast





STAGE 2 ARCHAEOLOGICAL ASSESSMENT SAMSUNG GRAND RENEWABLE ENERGY PARK

Plate 11: Pedestrian Survey, Field Conditions, Turbine 52 Corridor, Walked at Five-Metre Intervals, Facing South



Plate 12: Pedestrian Survey, Field Conditions, Turbine 57 Corridor A, Walked at Five-Metre Intervals, Facing Southeast





STAGE 2 ARCHAEOLOGICAL ASSESSMENT SAMSUNG GRAND RENEWABLE ENERGY PARK

Plate 13: Pedestrian Survey, Field Conditions, Turbine 57 Corridor B, Walked at Five-Metre Intervals, Facing South



Plate 14: Pedestrian Survey, Field Conditions, Turbine 26 Corridor, Walked at Five-Metre Intervals, Facing North





STAGE 2 ARCHAEOLOGICAL ASSESSMENT SAMSUNG GRAND RENEWABLE ENERGY PARK

Plate 15: Pedestrian Survey, Field Conditions, Turbine 8, Walked at Five-Metre Intervals, Facing Southeast



Plate 16: Field Conditions, Disturbed Area (Irrigation Pond), Turbine 3 Corridor, Not Assessed, Facing Southeast





STAGE 2 ARCHAEOLOGICAL ASSESSMENT SAMSUNG GRAND RENEWABLE ENERGY PARK

Plate 17: Test Pit Survey, Field Conditions, Turbine 43 Corridor, Test Pitted at Five-Metre Intervals, Facing Northeast



Plate 18: Test Pit Survey, Test Pit, Turbine 43 Corridor, Facing Northeast





STAGE 2 ARCHAEOLOGICAL ASSESSMENT SAMSUNG GRAND RENEWABLE ENERGY PARK

Plate 19: Field Conditions, Disturbed Area (Trailer Park), Turbine 9 Corridor, Not Assessed, Facing North



Plate 20: Field Conditions, Disturbed Area (Trailer Park), Turbine 9 Corridor, Not Assessed, Facing South





STAGE 2 ARCHAEOLOGICAL ASSESSMENT SAMSUNG GRAND RENEWABLE ENERGY PARK

Plate 21: Field Conditions, Poorly Drained Area (North of Trailer Park), Turbine 9 Corridor, Not Assessed, Facing East



Plate 22: Pedestrian Survey, Field Conditions, Turbine 9, Walked at Five-Metre Intervals, Facing North





STAGE 2 ARCHAEOLOGICAL ASSESSMENT SAMSUNG GRAND RENEWABLE ENERGY PARK

Plate 23: Pedestrian Survey, Field Conditions, Turbine 2 Corridor, Location 155, Walked at Five-Metre Intervals, Facing Northwest



Plate 24: Pedestrian Survey, Field Conditions, Turbine 2 Corridor, Location 157, Walked at Five-Metre Intervals, Facing Northwest





3.3 Stage 2 Field Assessment Results

The spring and summer 2011 Stage 2 assessment conducted by Golder resulted in a total of 116 archaeological locations being identified with 115 of these representing pre-contact Aboriginal lithic-producing sites and one representing a pre-contact Aboriginal ceramic-producing site. Each location and its associated artifactual finds are discussed separately below, plotted on maps in Appendix B and provided with UTM coordinates in Appendix D. A complete Stage 2 catalogue for the spring and summer 2011 assessment is provided in Appendix C. The chert types identified at each location are summarised here:

- **Dundee chert:** a moderate quality Middle Devonian raw material that outcrops close to the embouchure of the Grand River along the north shore of Lake Erie. It is distinguishable from Selkirk chert, also found in the Dundee formation, by its predominantly mottled or banded grey colour. Its distribution as a secondary source material is similar to Onondaga chert and it is frequently encountered as far west as the Chatham area (Eley and von Bitter 1989; Fox 2009:362).
- **Haldimand chert:** a relatively high quality Lower Devonian raw material that outcrops along the Bois Blanc formation between Kohler and Hagersville, as well as in Cayuga, Ontario (Eley and von Bitter 1989; Fox 2009:361).
- **Kettle Point chert:** a relatively high quality Upper Devonian raw material that outcrops between Kettle Point and Ipperwash, on Lake Huron. Currently, Kettle Point occurs as submerged outcrops extending for approximately 1350 metres into Lake Huron. Secondary deposits of Kettle Point chert have been reported in Essex County and in the Ausable Basin (Eley and von Bitter 1989; Fox 2009:362).
- **Onondaga chert:** a high quality Middle Devonian raw material that outcrops along the north shore of Lake Erie east of the embouchure of the Grand River. This material can also be recovered from secondary, glacial deposits across much of southwestern Ontario, east of Chatham (Eley and von Bitter 1989; Fox 2009:361-362).

3.3.1 Location 56

2 CDE, not recommended:

Location 56 is a pre-contact Aboriginal site consisting of a surface lithic scatter of two Onondaga chert flakes located approximately 18 metres apart. The chipping detritus was not retained for laboratory analysis at this time. Given that these flakes are temporally non-diagnostic, the cultural heritage value or interest of this site is low and no further archaeological assessment is recommended.



3.3.2 Location 57

2 CDE, not recommended:

Location 57 is a pre-contact Aboriginal site consisting of a surface lithic scatter of two Onondaga chert flakes located approximately 11 metres apart. The chipping detritus was not retained for laboratory analysis at this time. Given that these flakes are temporally non-diagnostic, the cultural heritage value or interest of this site is low and no further archaeological assessment is recommended.

3.3.3 Location 58 (AfGw-188)

3 BIF, 1 SCR, 1 GRV, 24 CDE, recommended:

Location 58 (AfGw-188) is a pre-contact Aboriginal site, approximately 30 metres by 35 metres in size. The site consists of a surface lithic scatter of two biface preforms, manufactured from Onondaga chert; one biface preform fragment, manufactured from Dundee chert; one end scraper bit fragment, manufactured from Onondaga chert; one graver, manufactured from Onondaga chert; 19 Dundee chert flakes and five Onondaga chert flakes. The tools and chipping detritus were not retained for laboratory analysis at this time. It is recommended that this site be subject to a Stage 3 archaeological investigation to further evaluate its cultural heritage value or interest. The Stage 3 assessment would include the mapping of any surface finds and the hand excavation of a series of one-metre square test units.

3.3.4 Location 59 (AfGw-189)

1 BIF, 1 COR, 15 CDE, recommended:

Location 59 (AfGw-189) is a pre-contact Aboriginal site, approximately 25 metres by 30 metres in size. The site consists of a surface lithic scatter of one biface tip, manufactured from Onondaga chert; one wedge-shaped core, manufactured from Onondaga chert; and 15 Onondaga chert flakes. The tools and chipping detritus were not retained for laboratory analysis at this time. It is recommended that this site be subject to a Stage 3 archaeological investigation to further evaluate its cultural heritage value or interest. The Stage 3 assessment would include the mapping of any surface finds and the hand excavation of a series of one-metre square test units.



3.3.5 Location 60

3 CDE, not recommended:

Location 60 is a pre-contact Aboriginal site, approximately 12 metres by five metres in size. The site consists of a surface lithic scatter of three Onondaga chert flakes. The chipping detritus was not retained for laboratory analysis at this time. Given that these flakes are temporally non-diagnostic, the cultural heritage value or interest of this site is low and no further archaeological assessment is recommended.

3.3.6 Location 61 (AfGw-230)

8 CDE, not recommended:

Location 61 (AfGw-230) is a pre-contact Aboriginal site, approximately 10 metres by 15 metres in size. The site consists of a surface lithic scatter of eight Onondaga flakes. The chipping detritus was not retained for laboratory analysis at this time. Given that these flakes are temporally non-diagnostic, the cultural heritage value or interest of this site is low and no further archaeological assessment is recommended.

3.3.7 Location 62

1 RTF, not recommended:

Location 62 is a pre-contact Aboriginal site consisting of a surface find of one isolated, notched, retouched flake manufactured from Haldimand chert. This retouched flake was not retained for laboratory analysis at this time. As detailed in Section 3.2, survey intervals were intensified to one metre within a twenty metre radius of the find but no further artifacts were found. Given that this is the only find at this location and it is temporally non-diagnostic, the cultural heritage value or interest of this site is low and no further archaeological assessment is recommended.

3.3.8 Location 63

1 CDE, not recommended:

Location 63 is a pre-contact Aboriginal site consisting of a surface find of one isolated Onondaga chert flake. This piece of chipping detritus was not retained for laboratory analysis at this time. As detailed in Section 3.1, survey intervals were intensified to one metre within a twenty metre radius of the find but no further artifacts were found. Given that this flake is the only find at this location and it is temporally non-diagnostic, the cultural heritage value or interest of this site is low and no further archaeological assessment is recommended.



3.3.9 Location 64 (AfGw-190)

1 PPO, 3 BIF, 1 SCR, 1 DRI, 4 RTF, 2 COR, 1 HAM, 58 CDE, recommended:

Location 64 (AfGw-190) is pre-contact Aboriginal site, approximately 55 metres by 75 metres in size. The site consists of a surface lithic scatter of one Adena-like projectile point, manufactured from Dundee chert (Plate 25:1); three biface preforms, manufactured from Onondaga chert; one end scraper, manufactured from Dundee chert (Plate 25:2); one expanding-base drill, manufactured from Onondaga chert; four retouched flakes (one being fragmentary), manufactured from Onondaga chert; one conical core, manufactured from Onondaga chert; one bipolar core, manufactured from Onondaga chert; one hammerstone, manufactured from a material not identified in the field; and 58 Onondaga chert flakes. The Adena-like projectile point measures 59 millimetres long by 26 millimetres wide by 13 millimetres thick. In Ontario, this projectile point type dates to *circa* 500-100 B.C., during the Early Woodland (Justice 1987:191-196; Parker 1992; Spence et al. 1990:125, 138-139). The surviving portion of the end scraper measures 28 millimetres long by 32 millimetres wide by 10 millimetres thick. The other tools and chipping detritus were not retained for laboratory analysis at this time. It is recommended that this site be subject to a Stage 3 archaeological investigation to further evaluate its cultural heritage value or interest. The Stage 3 assessment would include the mapping of any surface finds and the hand excavation of a series of one-metre square test units.

Plate 25: Location 64 (AfGw-190) Projectile Point and End Scraper (actual size)



1: Projectile Point

2: Scraper



3.3.10 Location 65 (AfGw-191)

11 BIF, 3 SCR, 4 UFL, 2 COR, 1000+ CDE, recommended:

Location 65 (AfGw-191) is pre-contact Aboriginal site, approximately 85 metres by 130 metres in size. The site consists of a surface lithic scatter of one reworked stemmed lanceolate biface, manufactured from Onondaga chert (Plate 26:1); five biface preforms, manufactured from Onondaga chert; two biface bases, manufactured from Onondaga chert; three biface tips, manufactured from Onondaga chert; three end scrapers, manufactured from Onondaga chert; four utilized flakes, manufactured from Onondaga chert; two multidirectional cores, manufactured from Onondaga chert; and an estimate of over 1000 Onondaga chert flakes. The reworked stemmed lanceolate biface measures 56 millimetres long by 20 millimetres wide by 12 millimetres thick. Due to its reworked condition this biface cannot be assigned to a discrete typological category. The other tools and chipping detritus were not retained for laboratory analysis at this time. A probable feature (Feature 1) containing charcoal, fired soil and lithic chipping detritus was visible on a ridge of the ploughzone at this location (Plate 27). UTM coordinates for this feature are provided in Appendix D. It is recommended that this site be subject to a Stage 3 archaeological investigation to further evaluate its cultural heritage value or interest. The Stage 3 assessment would include the mapping of any surface finds and the hand excavation of a series of one-metre square test units.

Plate 26: Location 65 (AfGw-191) Biface (actual size)



1. Projectile Point



Plate 27: Location 65 (AfGw-191) Surface of Feature 1 (actual size)



3.3.11 Location 66 (AfGw-192)

3 PPO, 9 CDE, recommended:

Location 66 (AfGw-192) is a pre-contact Aboriginal site, approximately 20 metres by 30 metres in size. The site consists of a surface lithic scatter of one side-notched projectile point base, manufactured from Onondaga chert (Plate 28:1); one bifurcate base-like projectile point, manufactured from Onondaga chert (Plate 28:2); one corner-notched projectile point, missing its stem, manufactured from Dundee chert (Plate 28:3); and nine Onondaga chert flakes. The chipping detritus was not retained for laboratory analysis at this time. The surviving portion of the side-notched projectile point base measures 42 millimetres long by 29 millimetres wide by 8 millimetres thick. Due to its poor condition this projectile point cannot be assigned to a discrete typological category. The surviving portion of the bifurcate base-like projectile point base measures 15 millimetres long by 23 millimetres wide by 7 millimetres thick. In Ontario, this projectile point type dates to *circa* 8000-6910 B.C., during the late Early Archaic (Ellis et al. 1990:78; 2009:801-803). The surviving portion of the corner-notched projectile point fragment measures 44 millimetres long by 25 millimetres wide by 8 millimetres thick. Due to its poor condition this projectile point cannot be assigned to a discrete typological category. It is recommended that this site be subject to a Stage 3 archaeological investigation to further evaluate its cultural heritage value or interest. The Stage 3 assessment would include the mapping of any surface finds and the hand excavation of a series of one-metre square test units.



Plate 28: Location 66 (AfGw-192) Projectile Points (actual size)



3.3.12 Location 67

2 CDE, not recommended:

Location 67 is a pre-contact Aboriginal site consisting of a surface lithic scatter of two Onondaga flakes located approximately 4 metres apart. The chipping detritus was not retained for laboratory analysis at this time. Given that these flakes are temporally non-diagnostic, the cultural heritage value or interest of this site is low and no further archaeological assessment is recommended.

3.3.13 Location 68 (AfGw-193)

1 BIF, 1 COR, 8 CDE, recommended:

Location 68 (AfGw-193) is a pre-contact Aboriginal site, approximately 10 metres by 20 metres in size. The site consists of a surface lithic scatter of one biface preform, manufactured from Dundee chert; one multidirectional core, manufactured from Dundee chert; and eight Dundee chert flakes. The tools and chipping detritus were not retained for laboratory analysis at this time. It is recommended that this site be subject to a Stage 3 archaeological investigation to further evaluate its cultural heritage value or interest. The Stage 3 assessment would include the mapping of any surface finds and the hand excavation of a series of one-metre square test units.



3.3.14 Location 69 (AfGw-194)

1 SCR, 20 CDE, recommended:

Location 69 (AfGw-194) is a pre-contact Aboriginal site, approximately 20 metres by 35 metres in size. The site consists of a surface lithic scatter of one cobble spall end scraper, manufactured from Dundee chert, and 20 Dundee chert flakes. The scraper and chipping detritus were not retained for laboratory analysis at this time. It is recommended that this site be subject to a Stage 3 archaeological investigation to further evaluate its cultural heritage value or interest. The Stage 3 assessment would include the mapping of any surface finds and the hand excavation of a series of one-metre square test units.

3.3.15 Location 70 (AfGw-195)

33 CDE, recommended:

Location 70 (AfGw-195) is a pre-contact Aboriginal site, approximately 20 metres by 25 metres in size. The site consists of a surface lithic scatter of 33 Onondaga chert flakes. The chipping detritus was not retained for laboratory analysis at this time. It is recommended that this site be subject to a Stage 3 archaeological investigation to further evaluate its cultural heritage value or interest. The Stage 3 assessment would include the mapping of any surface finds and the hand excavation of a series of one-metre square test units.

3.3.16 Location 71 (AfGw-196)

1 PPO, 1 BIF, 1 COR, 49 CDE, recommended:

Location 71 (AfGw-196) is a pre-contact Aboriginal site, approximately 25 metres by 50 metres in size. The site consists of a surface lithic scatter of one Meadowood projectile point, manufactured from Onondaga chert (Plate 29:1); one biface preform fragment, manufactured from Onondaga chert; one bipolar core, manufactured from Onondaga chert; and 49 Onondaga chert flakes. The reworked Meadowood projectile point measures 32 millimetres long by 22 millimetres wide by 7 millimetres thick. In Ontario, this projectile point type dates to *circa* 1000-500 B.C., during the Early Woodland (Kenyon 1980). The other tools and chipping detritus were not retained for laboratory analysis at this time. It is recommended that this site be subject to a Stage 3 archaeological investigation to further evaluate its cultural heritage value or interest. The Stage 3 assessment would include the mapping of any surface finds and the hand excavation of a series of one-metre square test units.



Plate 29: Location 71 (AfGw-196) Projectile Point (actual size)



1. Projectile Point

3.3.17 Location 72 (AfGw-197)

1 BIF, 55 CDE, recommended:

Location 72 (AfGw-197) is a pre-contact Aboriginal site, approximately 45 metres by 55 metres in size. The site consists of a surface lithic scatter of one biface preform, manufactured from Onondaga chert, and 55 Onondaga chert flakes. The biface and chipping detritus were not retained for laboratory analysis at this time. It is recommended that this site be subject to a Stage 3 archaeological investigation to further evaluate its cultural heritage value or interest. The Stage 3 assessment would include the mapping of any surface finds and the hand excavation of a series of one-metre square test units.

3.3.18 Location 73 (AfGw-198)

1 PPO, 2 BIF, 1 COR, 1 SCR, 41 CDE, recommended:

Location 73 (AfGw-198) is a pre-contact Aboriginal site, approximately 25 metres by 25 metres in size. The site consists of a surface lithic scatter of one Ace of Spades projectile point, possibly a knife, manufactured from Onondaga chert, (Plate 30:1); two biface fragments, manufactured from Onondaga chert; one side scraper, manufactured from Onondaga chert; one multidirectional core, manufactured from Onondaga chert; and 41 Onondaga chert flakes. The Ace of Spades projectile point measures 66 millimetres long by 33 millimetres wide by 9 millimetres thick. In Ontario, this projectile point type dates to *circa* 1800-1300 B.C., during the Small Point Late Archaic (Ellis et al. 1990:97, 106-109; Ellis et al. 2009:818-820). The other tools and chipping detritus were not retained for laboratory analysis at this time. It is recommended that this site be subject to a Stage 3 archaeological investigation to further evaluate its cultural heritage value or interest. The Stage 3 assessment would include the mapping of any surface finds and the hand excavation of a series of one-metre square test units.



Plate 30: Location 73 (AfGw-198) Projectile Point (actual size)



1. Projectile Point

3.3.19 Location 74

1 BIF, not recommended:

Location 74 is a pre-contact Aboriginal site consisting of a surface find of one isolated biface fragment, manufactured from Onondaga chert. The biface was not retained for laboratory analysis at this time. As detailed in Section 3.1, survey intervals were intensified to one metre within a twenty metre radius of the find but no further artifacts were found. Given that this biface is the only find at this location and it is temporally non-diagnostic, the cultural heritage value or interest of this site is low and no further archaeological assessment is recommended.

3.3.20 Location 75

1 CDE, not recommended:

Location 75 is a pre-contact Aboriginal site consisting of a surface find of one isolated Onondaga chert flake. This piece of chipping detritus was not retained for laboratory analysis at this time. As detailed in Section 3.1, survey intervals were intensified to one metre within a twenty metre radius of the find but no further artifacts were found. Given that this flake is the only find at this location and it is temporally non-diagnostic, the cultural heritage value or interest of this site is low and no further archaeological assessment is recommended.



3.3.21 Location 76 (AfGw-231)

6 CDE, not recommended:

Location 76 (AfGw-231) is a pre-contact Aboriginal site, approximately 15 metres by 15 metres in size. The site consists of a surface lithic scatter of six Onondaga chert flakes. The chipping detritus was not retained for laboratory analysis at this time. Given that these flakes are temporally non-diagnostic, the cultural heritage value or interest of this site is low and no further archaeological assessment is recommended.

3.3.22 Location 77 (AfGw-232)

7 CDE, not recommended:

Location 77 (AfGw-232) is a pre-contact Aboriginal site, approximately 10 metres by 10 metres in size. The site consists of a surface lithic scatter of seven Onondaga chert flakes. The chipping detritus was not retained for laboratory analysis at this time. Given that these flakes are temporally non-diagnostic, the cultural heritage value or interest of this site is low and no further archaeological assessment is recommended.

3.3.23 Location 78 (AfGw-199)

1 BIF, 16 CDE, recommended:

Location 78 (AfGw-199) is a pre-contact Aboriginal site, approximately 15 metres by 15 metres in size. The site consists of a surface lithic scatter of one biface tip fragment, manufactured from Onondaga chert, and 16 Onondaga chert flakes. The biface tip and chipping detritus were not retained for laboratory analysis at this time. It is recommended that this site be subject to a Stage 3 archaeological investigation to further evaluate its cultural heritage value or interest. The Stage 3 assessment would include the mapping of any surface finds and the hand excavation of a series of one-metre square test units.

3.3.24 Location 79 (AfGw-200)

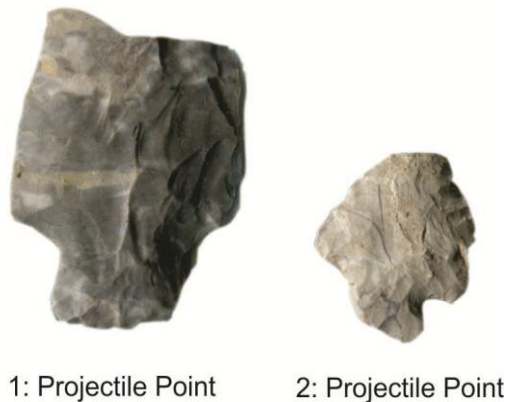
2 PPO, 1 BIF, 24 CDE, recommended:

Location 79 (AfGw-200) is a pre-contact Aboriginal site, approximately 15 metres by 40 metres in size. The site consists of a surface lithic scatter of one Ace of Spades base, manufactured from Onondaga chert (Plate 31:1); one corner-notched projectile point, missing its tip and a portion of the base, manufactured from Onondaga chert (Plate 31:2); one biface midshaft fragment, manufactured from Onondaga chert; and 24 Onondaga chert flakes. The surviving portion of the Ace of Spades projectile point base measures 42 millimetres long by 30 millimetres



wide by 10 millimetres thick. In Ontario, this projectile point type dates to *circa* 1800-1300 B.C., during the Small Point Late Archaic (Ellis et al. 1990:97, 106-109; Ellis et al. 2009:818-820). The surviving portion of the corner-notched projectile point measures 26 millimetres long by 21 millimetres wide by 4 millimetres thick. Due to its poor condition this projectile point cannot be assigned to a discrete typological category. The biface fragment and chipping detritus were not retained for laboratory analysis at this time. It is recommended that this site be subject to a Stage 3 archaeological investigation to further evaluate its cultural heritage value or interest. The Stage 3 assessment would include the mapping of any surface finds and the hand excavation of a series of one-metre square test units.

Plate 31: Location 79 (AfGw-200) Projectile Points (actual size)



3.3.25 Location 80

1 UFL, 1 CDE, not recommended:

Location 80 is a pre-contact Aboriginal site, approximately four metres by 14 metres in size. The site consists of a surface lithic scatter of one utilized flake, manufactured from Onondaga chert, and one Onondaga chert flake. The utilized flake and chipping detritus were not retained for laboratory analysis at this time. Given that these artifacts are temporally non-diagnostic, the cultural heritage value or interest of this site is low and no further archaeological assessment is recommended.



3.3.26 Location 81 (AfGw-201)

2 BIF, 1 RTF, 1 UFL, 50 CDE, recommended:

Location 81 (AfGw-201) is a pre-contact Aboriginal site, approximately 45 metres by 30 metres in size. The site consists of a surface lithic scatter of two biface preforms (one being fragmentary), manufactured from Onondaga chert; one retouched flake, manufactured from Onondaga chert; one utilized flake, manufactured from Onondaga chert; and 50 Onondaga chert flakes. The tools and chipping detritus were not retained for laboratory analysis at this time. It is recommended that this site be subject to a Stage 3 archaeological investigation to further evaluate its cultural heritage value or interest. The Stage 3 assessment would include the mapping of any surface finds and the hand excavation of a series of one-metre square test units.

3.3.27 Location 82 (AfGw-202)

1 PPO, 1 UFL, 20 CDE, recommended:

Location 82 (AfGw-202) is a pre-contact Aboriginal site, approximately 35 metres by 20 metres in size. The site consists of a surface lithic scatter of one Brewerton Side-Notched projectile point, with damaged tip and barb, manufactured from Onondaga chert (Plate 32:1), one utilized flake, manufactured from Onondaga chert, and 20 Onondaga chert flakes. The Brewerton Side-Notched projectile point measures 29 millimetres long by 20 millimetres wide by 6 millimetres thick. In Ontario, this projectile point type dates to *circa* 3780-3200 B.C., during the Middle Archaic (see Ellis et al. 2009:808). The utilized flake and chipping detritus were not retained for laboratory analysis at this time. It is recommended that this site be subject to a Stage 3 archaeological investigation to further evaluate its cultural heritage value or interest. The Stage 3 assessment would include the mapping of any surface finds and the hand excavation of a series of one-metre square test units.

Plate 32: Location 82 (AfGw-202) Projectile Point (actual size)



1. Projectile Point



3.3.28 Location 83

2 CDE, not recommended:

Location 83 is a pre-contact Aboriginal site consisting of a surface lithic scatter of two Onondaga chert flakes located approximately 10 metres apart. The chipping detritus was not retained for laboratory analysis at this time. Given that these flakes are temporally non-diagnostic, the cultural heritage value or interest of this site is low and no further archaeological assessment is recommended.

3.3.29 Location 84

1 CDE, not recommended:

Location 84 is a pre-contact Aboriginal site consisting of a surface find of one isolated Onondaga chert flake. This piece of chipping detritus was not retained for laboratory analysis at this time. As detailed in Section 3.1, survey intervals were intensified to one metre within a twenty metre radius of the find but no further artifacts were found. Given that this flake is the only find at this location and it is temporally non-diagnostic, the cultural heritage value or interest of this site is low and no further archaeological assessment is recommended.

3.3.30 Location 85 (AfGw-203)

1 SCR, 1 COR, 50 CDE, recommended:

Location 85 (AfGw-203) is a pre-contact Aboriginal site, approximately 25 metres by 32 metres in size. The site consists of a surface lithic scatter of one end scraper, manufactured from Onondaga chert; one multidirectional core, manufactured from Onondaga chert; and 50 Onondaga chert flakes. The core and chipping detritus were not retained for laboratory analysis at this time. It is recommended that this site be subject to a Stage 3 archaeological investigation to further evaluate its cultural heritage value or interest. The Stage 3 assessment would include the mapping of any surface finds and the hand excavation of a series of one-metre square test units.



3.3.31 Location 86 (AfGw-204)

8 BIF, 1 SCR, 5 RTF, 3 UFL, 100+ CDE, recommended:

Location 86 (AfGw-204) is a pre-contact Aboriginal site, approximately 80 metres by 65 metres in size. The site consists of a surface lithic scatter of eight bifaces (two being fragmentary), manufactured from Onondaga chert; one end scraper, manufactured from Onondaga chert; five retouched flakes, manufactured from Onondaga chert; three utilized flakes, manufactured from Onondaga chert; and over 100 Onondaga chert flakes. The tools and chipping detritus were not retained for laboratory analysis at this time. It is recommended that this site be subject to a Stage 3 archaeological investigation to further evaluate its cultural heritage value or interest. The Stage 3 assessment would include the mapping of any surface finds and the hand excavation of a series of one-metre square test units.

3.3.32 Location 87 (AfGw-205)

1 PPO, not recommended:

Location 87 (AfGw-205) is a pre-contact Aboriginal site consisting of a surface find of one isolated Meadowood projectile point base, manufactured from Onondaga chert (Plate 33:1). The surviving portion of this point measures 35 millimetres long by 25 millimetres wide by 4 millimetres thick. In Ontario, this projectile point type dates to *circa* 1000-500 B.C., during the Early Woodland (Kenyon 1980). As detailed in Section 3.1, survey intervals were intensified to one metre within a twenty metre radius of the find but no further artifacts were found. Given that this projectile point is the only find at this location, the cultural heritage value or interest of this site is low and no further archaeological assessment is recommended.

Plate 33: Location 87 (AfGw-205) Projectile Point (actual size)



1. Projectile Point



3.3.33 Location 88 (AfGw-206)

1 PPO, 1 BIF, recommended:

Location 88 (AfGw-206) is a pre-contact Aboriginal site consisting of one Nettling projectile point, manufactured from Haldimand chert (Plate 34:1), and one biface preform, manufactured from Onondaga chert, located approximately 10 centimetres apart. The surviving portion of the Nettling projectile point measures 33 millimetres long by 24 millimetres wide by 7 millimetres thick. In Ontario, this projectile point type dates to *circa* 8600-8000 B.C., during the middle Early Archaic (see Ellis et al. 1990:73; Ellis et al. 2009:796-800). The biface preform was not retained for laboratory analysis at this time. It is recommended that this site be subject to a Stage 3 archaeological investigation to further evaluate its cultural heritage value or interest. The Stage 3 assessment would include the mapping of any surface finds and the hand excavation of a series of one-metre square test units.

Plate 34: Location 88 (AfGw-206) Projectile Point (actual size)



1. Projectile Point

3.3.34 Location 89 (AfGw-207)

2 BIF, 1 RTF, 30 CDE, recommended:

Location 89 (AfGw-207) is a pre-contact Aboriginal site, approximately 30 metres by 20 metres in size. The site consists of a surface lithic scatter of two biface preforms, manufactured from Onondaga chert; one retouched flake, manufactured from Onondaga chert; and 30 Onondaga chert flakes. The tools and chipping detritus were not retained for laboratory analysis at this time. It is recommended that this site be subject to a Stage 3 archaeological investigation to further evaluate its cultural heritage value or interest. The Stage 3 assessment would include the mapping of any surface finds and the hand excavation of a series of one-metre square test units.



3.3.35 Location 90

1 CDE, not recommended:

Location 90 is a pre-contact Aboriginal site consisting of a surface find of one isolated Onondaga chert flake. This piece of chipping detritus was not retained for laboratory analysis at this time. As detailed in Section 3.1, survey intervals were intensified to one metre within a twenty metre radius of the find but no further artifacts were found. Given that this flake is the only find at this location and it is temporally non-diagnostic, the cultural heritage value or interest of this site is low and no further archaeological assessment is recommended.

3.3.36 Location 91 (AfGw-208)

1 PPO, 1 BIF, 1 GRV, 1 COR, 18 CDE, recommended:

Location 91 (AfGw-208) is a pre-contact Aboriginal site, approximately 20 metres by 30 metres in size. The site consists of a surface lithic scatter of one Brewerton Corner-Notched projectile point fragment, manufactured from Onondaga chert (Plate 35:1); one biface fragment, manufactured from Onondaga chert (Plate 35:2); one graver, manufactured from Onondaga chert; one conical core, manufactured from Onondaga chert; and 18 Onondaga chert flakes. The surviving portion of the Brewerton Corner-Notched point measures 38 millimetres long by 26 millimetres wide by 6 millimetres thick. In Ontario, this projectile point type dates to *circa* 3780-3200 B.C. (see Ellis et al. 2009:808). The surviving portion of the biface fragment measures 26 millimetres long by 44 millimetres wide by 12 millimetres thick. This biface has been burnt and exhibits a radial fracture at midshaft, as though it had been placed on an anvil stone and intentionally smashed. This may reflect a 'ritual kill' or other sacrifice of this biface. The other tools and chipping detritus were not retained for laboratory analysis at this time. It is recommended that this site be subject to a Stage 3 archaeological investigation to further evaluate its cultural heritage value or interest. The Stage 3 assessment would include the mapping of any surface finds and the hand excavation of a series of one-metre square test units.

Plate 35: Location 91 (AfGw-208) Projectile Point and Biface (actual size)



1: Projectile Point



2: Biface



3.3.37 Location 92

1 CDE, not recommended:

Location 92 is a pre-contact Aboriginal site consisting of a surface find of one isolated Onondaga chert flake. This piece of chipping detritus was not retained for laboratory analysis at this time. As detailed in Section 3.1, survey intervals were intensified to one metre within a twenty metre radius of the find but no further artifacts were found. Given that this flake is the only find at this location and it is temporally non-diagnostic, the cultural heritage value or interest of this site is low and no further archaeological assessment is recommended.

3.3.38 Location 93

1 UFL, not recommended:

Location 93 is a pre-contact Aboriginal site consisting of a surface find of one isolated utilized flake, manufactured from Onondaga chert. This utilized flake was not retained for laboratory analysis at this time. As detailed in Section 3.1, survey intervals were intensified to one metre within a twenty metre radius of the find but no further artifacts were found. Given that this utilized flake is the only find at this location and it is temporally non-diagnostic, the cultural heritage value or interest of this site is low and no further archaeological assessment is recommended.

3.3.39 Location 94

1 PPO, not recommended:

Location 94 is a pre-contact Aboriginal site consisting of a surface find of one isolated projectile point, missing its tip and stem, manufactured from Onondaga chert (Plate 36:1). The surviving portion of this point measures 43 millimetres long by 24 millimetres wide and is 5 millimetres thick. Due to its poor condition this projectile point cannot be assigned to a discrete typological category. As detailed in Section 3.1, survey intervals were intensified to one metre within a twenty metre radius of the find but no further artifacts were found. Given that this projectile point is the only find at this location and it is temporally non-diagnostic, the cultural heritage value or interest of this site is low and no further archaeological assessment is recommended.



Plate 36: Location 94 Projectile Point (actual size)



1. Projectile Point

3.3.40 Location 95

1 CDE, not recommended:

Location 95 is a pre-contact Aboriginal site consisting of a surface find of one isolated Dundee chert flake. This piece of chipping detritus was not retained for laboratory analysis at this time. As detailed in Section 3.1, survey intervals were intensified to one metre within a twenty metre radius of the find but no further artifacts were found. Given that this flake is the only find at this location and it is temporally non-diagnostic, the cultural heritage value or interest of this site is low and no further archaeological assessment is recommended.

3.3.41 Location 96

1 PPO, not recommended:

Location 96 is a pre-contact Aboriginal site consisting of a surface find of one isolated projectile point midsection fragment, manufactured from Onondaga chert (Plate 37:1). The surviving portion of this point measures 25 millimetres long by 26 millimetres wide and is 6 millimetres thick. Due to its poor condition this projectile point cannot be assigned to a discrete typological category. As detailed in Section 3.1, survey intervals were intensified to one metre within a twenty metre radius of the find but no further artifacts were found. Given that this projectile point is the only find at this location and it is temporally non-diagnostic, the cultural heritage value or interest of this site is low and no further archaeological assessment is recommended.



Plate 37: Location 96 Projectile Point (actual size)



1. Projectile Point

3.3.42 Location 97

1 PPO, not recommended:

Location 97 is a pre-contact Aboriginal site consisting of a surface find of one isolated projectile point, missing its stem, manufactured from Onondaga chert (Plate 38:1). The surviving portion of this point measures 36 millimetres long by 23 millimetres wide and is 5 millimetres thick. Due to its poor condition this projectile point cannot be assigned to a discrete typological category. As detailed in Section 3.1, survey intervals were intensified to one metre within a twenty metre radius of the find but no further artifacts were found. Given that this projectile point is the only find at this location and it is temporally non-diagnostic, the cultural heritage value or interest of this site is low and no further archaeological assessment is recommended.

Plate 38: Location 97 Projectile Point (actual size)



1. Projectile Point



3.3.43 Location 98 (AfGw-226)

2 BIF, 1 SCR, 4 CDE, recommended

Location 98 (AfGw-226) is a pre-contact Aboriginal site, approximately 10 metres by 17 metres in size. The site consists of a surface lithic scatter of one stemmed biface, reused as a side scraper, manufactured from Haldimand chert (Plate 39:1); one biface, manufactured from Onondaga chert; one end scraper, manufactured from Onondaga chert; and four Onondaga chert flakes. The stemmed biface has some damage to its stem and the surviving portion measures 42 millimetres long by 27 millimetres wide by 11 millimetres thick. The other tools and chipping detritus were not retained for laboratory analysis at this time. It is recommended that this site be subject to a Stage 3 archaeological investigation to further evaluate its cultural heritage value or interest. The Stage 3 assessment would include the mapping of any surface finds and the hand excavation of a series of one-metre square test units.

Plate 39: Location 98 (AfGw-226) Stemmed Biface (actual size)



1. Biface

3.3.44 Location 99 (AfGw-227)

1 BIF, 24 CDE, recommended:

Location 99 (AfGw-227) is a pre-contact Aboriginal site, approximately 10 metres by 20 metres in size. The site consists of a surface lithic scatter of one biface midshaft fragment, manufactured from Onondaga chert, and 24 Onondaga chert flakes. The biface fragment and chipping detritus were not retained for laboratory analysis at this time. It is recommended that this site be subject to a Stage 3 archaeological investigation to further evaluate its cultural heritage value or interest. The Stage 3 assessment would include the mapping of any surface finds and the hand excavation of a series of one-metre square test units.



3.3.45 Location 100

1 CDE, not recommended:

Location 100 is a pre-contact Aboriginal site consisting of a surface find of one isolated Dundee chert flake. This piece of chipping detritus was not retained for laboratory analysis at this time. As detailed in Section 3.1, survey intervals were intensified to one metre within a twenty metre radius of the find but no further artifacts were found. Given that this flake is the only find at this location and it is temporally non-diagnostic, the cultural heritage value or interest of this site is low and no further archaeological assessment is recommended.

3.3.46 Location 101

1 CDE, not recommended:

Location 101 is a pre-contact Aboriginal site consisting of a surface find of one isolated Onondaga chert flake. This piece of chipping detritus was not retained for laboratory analysis at this time. As detailed in Section 3.1, survey intervals were intensified to one metre within a twenty metre radius of the find but no further artifacts were found. Given that this flake is the only find at this location and it is temporally non-diagnostic, the cultural heritage value or interest of this site is low and no further archaeological assessment is recommended.

3.3.47 Location 102

1 UFL, not recommended:

Location 102 is a pre-contact Aboriginal site consisting of a surface find of one isolated utilized flake edge fragment, manufactured from Onondaga chert. This utilized flake fragment was not retained for laboratory analysis at this time. As detailed in Section 3.1, survey intervals were intensified to one metre within a twenty metre radius of the find but no further artifacts were found. Given that this utilized flake is the only find at this location and it is temporally non-diagnostic, the cultural heritage value or interest of this site is low and no further archaeological assessment is recommended.

3.3.48 Location 103

1 PPO, not recommended:

Location 103 is a pre-contact Aboriginal site consisting of a surface find of one isolated corner-notched projectile point, missing its stem, manufactured from Haldimand chert (Plate 40:1).



The surviving portion of this point measures 37 millimetres long by 24 millimetres wide by 6 millimetres thick. Due to its poor condition this projectile point cannot be assigned to a discrete typological category. As detailed in Section 3.1, survey intervals were intensified to one metre within a twenty metre radius of the find but no further artifacts were found. Given that this projectile point is the only find at this location and it is temporally non-diagnostic, the cultural heritage value or interest of this site is low and no further archaeological assessment is recommended.

Plate 40: Location 103 Projectile Point (actual size)



1. Projectile Point

3.3.49 Location 104 (AfGw-209)

10 CDE, recommended:

Location 104 (AfGw-209) is a pre-contact Aboriginal site, approximately 12 metres by 15 metres in size. The site consists of a surface lithic scatter of 10 Dundee chert flakes. The chipping detritus was not retained for laboratory analysis at this time. It is recommended that this site be subject to a Stage 3 archaeological investigation to further evaluate its cultural heritage value or interest. The Stage 3 assessment would include the mapping of any surface finds and the hand excavation of a series of one-metre square test units.

3.3.50 Location 105 (AfGw-210)

4 BIF, 24 CDE, recommended:

Location 105 (AfGw-210) is pre-contact Aboriginal site, approximately 23 metres by 28 metres in size. The site consists of a surface lithic scatter of four biface preforms, manufactured from Onondaga chert, and 24 Onondaga chert flakes. The bifaces and chipping detritus were not retained for laboratory analysis at this time. It is recommended that this site be subject to a Stage 3 archaeological investigation to further evaluate its cultural heritage value or interest. The Stage 3 assessment would include the mapping of any surface finds and the hand excavation of a series of one-metre square test units.



3.3.51 Location 106 (AfGw-233)

4 CDE, not recommended:

Location 106 (AfGw-233) is a pre-contact Aboriginal site, approximately one metre by two metres in size. The site consists of a surface lithic scatter of four Onondaga chert flakes. The chipping detritus was not retained for laboratory analysis at this time. Given that these flakes are temporally non-diagnostic, the cultural heritage value or interest of this site is low and no further archaeological assessment is recommended.

3.3.52 Location 107

1 UFL, not recommended:

Location 107 is a pre-contact Aboriginal site consisting of a surface find of one isolated utilized flake edge fragment, manufactured from Onondaga chert. This utilized flake fragment was not retained for laboratory analysis at this time. As detailed in Section 3.1, survey intervals were intensified to one metre within a twenty metre radius of the find but no further artifacts were found. Given that this utilized flake fragment is the only find at this location and it is temporally non-diagnostic, the cultural heritage value or interest of this site is low and no further archaeological assessment is recommended.

3.3.53 Location 108 (AfGw-234)

3 CDE, not recommended:

Location 108 (AfGw-234) is a pre-contact Aboriginal site, approximately five metres by five metres in size. The site consists of a surface lithic scatter of three Onondaga chert flakes. The chipping detritus was not retained for laboratory analysis at this time. Given that these flakes are temporally non-diagnostic, the cultural heritage value or interest of this site is low and no further archaeological assessment is recommended.

3.3.54 Location 109 (AfGw-211)

1 PPO, recommended:

Location 109 (AfGw-211) is a pre-contact Aboriginal site consisting of a surface find of one isolated Jack's Reef Corner-Notched projectile point, with tip and a portion of the base missing, manufactured from Kettle Point chert (Plate 41:1). The surviving portion of this point measures 29 millimetres long by 27 millimetres wide by 9 millimetres thick.



In Ontario, this projectile point type dates to *circa* A.D. 500-1000, during the early Late Woodland (see Justice 1987:215). It is recommended that this site be subject to a Stage 3 archaeological investigation to further evaluate its cultural heritage value or interest. The Stage 3 assessment would include the mapping of any surface finds and the hand excavation of a series of one-metre square test units.

Plate 41: Location 109 (AfGw-211) Projectile Point (actual size)



1. Projectile Point

3.3.55 Location 110 (AfGw-212)

1 BIF, 10 CDE, recommended:

Location 110 (AfGw-212) is pre-contact Aboriginal site, approximately 10 metres by 12 metres in size. The site consists of a surface lithic scatter of one biface preform, manufactured from Onondaga chert, and 10 Onondaga chert flakes. The biface and chipping detritus were not retained for laboratory analysis at this time. It is recommended that this site be subject to a Stage 3 archaeological investigation to further evaluate its cultural heritage value or interest. The Stage 3 assessment would include the mapping of any surface finds and the hand excavation of a series of one-metre square test units.

3.3.56 Location 111 (AfGw-213)

1 FSH, recommended:

Location 111 (AfGw-213) is a pre-contact Aboriginal site consisting of a surface find of one isolated pre-contact Aboriginal ceramic body sherd fragment (Plate 42:1). No decorative or surface treatments remain visible on this sherd, although what appears to be the external surface is orange in colour, reflecting an oxidizing firing atmosphere, while what appears to be the internal surface is grey-black in colour, reflecting a reducing firing atmosphere (Rye 1981:114-118). The surviving portion of this sherd measures 16 millimetres long by 15 millimetres wide by 9 millimetres thick. It is recommended that this site be subject to a Stage 3 archaeological investigation to further evaluate its cultural heritage value or interest. The Stage 3 assessment would include the mapping of any surface finds and the hand excavation of a series of one-metre square test units.



Plate 42: Location 111 (AfGw-213) Pre-contact Aboriginal Ceramic (actual size)



1. Fragmentary Sherd

3.3.57 Location 112 (AfGw-235)

8 CDE, not recommended:

Location 112 (AfGw-235) is a pre-contact Aboriginal site, approximately 15 metres by 20 metres in size. The site consists of a surface lithic scatter of eight Onondaga chert flakes. The chipping detritus was not retained for laboratory analysis at this time. Given that these flakes are temporally non-diagnostic, the cultural heritage value or interest of this site is low and no further archaeological assessment is recommended.

3.3.58 Location 113 (AfGw-236)

5 CDE, not recommended:

Location 113 (AfGw-236) is a pre-contact Aboriginal site, approximately 10 metres by 15 metres in size. The site consists of a surface lithic scatter of five Onondaga chert flakes. The chipping detritus was not retained for laboratory analysis at this time. Given that these flakes are temporally non-diagnostic, the cultural heritage value or interest of this site is low and no further archaeological assessment is recommended.

3.3.59 Location 114 (AfGw-214)

4 UFL, 41 CDE, recommended:

Location 114 (AfGw-214) is a pre-contact Aboriginal site, approximately 15 metres by 35 metres in size. The site consists of a surface lithic scatter of four utilized flakes, one an edge fragment, manufactured from Onondaga chert, and 41 Onondaga chert flakes. The utilized flakes and chipping detritus were not retained for laboratory analysis at this time. It is recommended that this site be subject to a Stage 3 archaeological investigation to further evaluate its cultural heritage value or interest. The Stage 3 assessment would include the mapping of any surface finds and the hand excavation of a series of one-metre square test units.



3.3.60 Location 115 (AfGw-215)

1 BIF, 2 SCR, 1 PER, 4 RTF, 1 UFL, 2 COR, 88+ CDE, recommended:

Location 115 (AfGw-215) is a pre-contact Aboriginal site, approximately 60 metres by 55 metres in size. The site consists of a surface lithic scatter of one biface preform, manufactured from Onondaga chert, one end scraper, manufactured from Onondaga chert (Plate 43:1), one side scraper, manufactured from Onondaga chert (Plate 43:2), one perforator, manufactured from Onondaga chert, four retouched flakes, manufactured from Onondaga chert, one utilized flake, manufactured from Onondaga chert, two multidirectional cores, manufactured from Onondaga chert, and 88+ Onondaga chert flakes. The end scraper measures 47 millimetres long by 39 millimetres wide by 9 millimetres thick. The side scraper measures 45 millimetres long by 29 millimetres wide by 11 millimetres thick. The other tools and chipping detritus were not retained for laboratory analysis at this time. It is recommended that this site be subject to a Stage 3 archaeological investigation to further evaluate its cultural heritage value or interest. The Stage 3 assessment would include the mapping of any surface finds and the hand excavation of a series of one-metre square test units.

Plate 43: Location 115 (AfGw-215) End Scraper and Side Scraper (actual size)



1: Scraper



2: Scraper

3.3.61 Location 116

1 CDE, not recommended:

Location 116 is a pre-contact Aboriginal site consisting of a surface find of one isolated Onondaga chert flake. This piece of chipping detritus was not retained for laboratory analysis at this time. As detailed in Section 3.1, survey intervals were intensified to one metre within a twenty metre radius of the find but no further artifacts were found. Given that this flake is the only find at this location and it is temporally non-diagnostic, the cultural heritage value or interest of this site is low and no further archaeological assessment is recommended.



3.3.62 Location 117

1 CDE, not recommended:

Location 117 is a pre-contact Aboriginal site consisting of a surface find of one isolated Dundee chert flake. This piece of chipping detritus was not retained for laboratory analysis at this time. As detailed in Section 3.1, survey intervals were intensified to one metre within a twenty metre radius of the find but no further artifacts were found. Given that this flake is the only find at this location and it is temporally non-diagnostic, the cultural heritage value or interest of this site is low and no further archaeological assessment is recommended.

3.3.63 Location 118 (AfGw-216)

1 PPO, 1 BIF, 1 RTF, 8 CDE, recommended:

Location 110 (AfGw-216) is pre-contact Aboriginal site, approximately 25 metres by 40 metres in size. The site consists of a surface lithic scatter of one reworked Otter Creek projectile point, missing one lateral edge and one ear, manufactured from Onondaga chert (Plate 44:1); one biface preform, manufactured from Onondaga chert; one retouched flake, manufactured from Onondaga chert; and eight Onondaga chert flakes. In Ontario, Otter Creek projectile points date to *circa* 4340-3960 B.C. or a little later, during the Middle Archaic period (Ellis et al. 2009:802; Ritchie 1971:40-41). The surviving portion of the Otter Creek projectile point measures 37 millimetres long by 23 millimetres wide by 6 millimetres thick. The other tools and chipping detritus were not retained for laboratory analysis at this time. It is recommended that this site be subject to a Stage 3 archaeological investigation to further evaluate its cultural heritage value or interest. The Stage 3 assessment would include the mapping of any surface finds and the hand excavation of a series of one-metre square test units.

Plate 44: Location 118 (AfGw-216) Projectile Point (actual size)



1. Projectile Point



3.3.64 Location 119 (AfGw-217)

57 CDE, recommended:

Location 119 (AfGw-217) is a pre-contact Aboriginal site, approximately 20 metres by 22 metres in size. The site consists of a surface lithic scatter of 57 Onondaga chert flakes. The chipping detritus was not retained for laboratory analysis at this time. It is recommended that this site be subject to a Stage 3 archaeological investigation to further evaluate its cultural heritage value or interest. The Stage 3 assessment would include the mapping of any surface finds and the hand excavation of a series of one-metre square test units.

3.3.65 Location 120 (AfGw-237)

7 CDE, not recommended:

Location 120 (AfGw-237) is a pre-contact Aboriginal site, approximately five metres by 10 metres in size. The site consists of a surface lithic scatter of seven Onondaga chert flakes. The chipping detritus was not retained for laboratory analysis at this time. Given that these flakes are temporally non-diagnostic, the cultural heritage value or interest of this site is low and no further archaeological assessment is recommended.

3.3.66 Location 121 (AfGw-238)

3 CDE, not recommended:

Location 121 (AfGw-238) is a pre-contact Aboriginal site, approximately one metre by five metres in size. The site consists of a surface lithic scatter of three Onondaga chert flakes. The chipping detritus was not retained for laboratory analysis at this time. Given that these flakes are temporally non-diagnostic, the cultural heritage value or interest of this site is low and no further archaeological assessment is recommended.

3.3.67 Location 122 (AfGw-218)

17 CDE, recommended:

Location 122 (AfGw-218) is a pre-contact Aboriginal site, approximately 10 metres by 12 metres in size. The site consists of a surface lithic scatter of 17 Onondaga chert flakes. The chipping detritus was not retained for laboratory analysis at this time. It is recommended that this site be subject to a Stage 3 archaeological investigation to further evaluate its cultural heritage value or interest. The Stage 3 assessment would include the mapping of any surface finds and the hand excavation of a series of one-metre square test units.



3.3.68 Location 123 (AfGw-219)

1 PPP, 1 BIF, 14 CDE, recommended:

Location 123 (AfGw-219) is a pre-contact Aboriginal site, approximately 18 metres by 25 metres in size. The site consists of a surface lithic scatter of one side-notched projectile point preform, with a damaged stem, manufactured from Onondaga chert (Plate 45:1); one biface fragment, manufactured from Onondaga chert; and 14 Onondaga chert flakes. The side-notched projectile point preform measures 44 millimetres long by 32 millimetres wide by 7 millimetres thick. The biface fragment and chipping detritus were not retained for laboratory analysis at this time. It is recommended that this site be subject to a Stage 3 archaeological investigation to further evaluate its cultural heritage value or interest. The Stage 3 assessment would include the mapping of any surface finds and the hand excavation of a series of one-metre square test units.

Plate 45: Location 123 (AfGw-219) Projectile Point Preform (actual size)



1. Projectile Point

3.3.69 Location 124 (AfGw-220)

1 BIF, 1 SCR, 42 CDE, recommended:

Location 124 (AfGw-220) is a pre-contact Aboriginal site, approximately 20 metres by 55 metres in size. The site consists of a surface lithic scatter of one triangular biface base fragment, manufactured from Onondaga chert; one large thumbnail end scraper, manufactured from Onondaga chert (Plate 46:1); and 42 Onondaga chert flakes. The thumbnail scraper measures 35 millimetres long by 28 millimetres wide by 11 millimetres thick. The biface fragment and chipping detritus were not retained for laboratory analysis at this time. It is recommended that this site be subject to a Stage 3 archaeological investigation to further evaluate its cultural heritage value or interest. The Stage 3 assessment would include the mapping of any surface finds and the hand excavation of a series of one-metre square test units.



Plate 46: Location 124 (AfGw-220) Thumbnail End Scraper (actual size)



1. Scraper

3.3.70 Location 125 (AfGw-221)

4 BIF, 29 CDE, recommended:

Location 125 (AfGw-221) is a pre-contact Aboriginal site, approximately 15 metres by 30 metres in size. The site consists of a surface lithic scatter of three biface fragments, manufactured from Onondaga chert; one biface fragment, manufactured from Haldimand chert; and 29 Onondaga chert flakes. The biface fragments and chipping detritus were not retained for laboratory analysis at this time. It is recommended that this site be subject to a Stage 3 archaeological investigation to further evaluate its cultural heritage value or interest. The Stage 3 assessment would include the mapping of any surface finds and the hand excavation of a series of one-metre square test units.

3.3.71 Location 126 (AfGw-222)

1 PPO, 1 CDE, recommended:

Location 126 (AfGw-222) is a pre-contact Aboriginal site consisting of a surface lithic scatter of one Brewerton Side-Notched projectile point, with damaged stem, manufactured from Onondaga chert (Plate 47:1), and one Onondaga chert flake located approximately eight metres apart. The Brewerton Side-Notched projectile point measures 55 millimetres long by 28 millimetres wide by 10 millimetres thick. In Ontario, this projectile point type dates to *circa* 3780-3200 B.C., during the Middle Archaic (see Ellis et al. 2009:808). The chipping detritus was not retained for laboratory analysis at this time. It is recommended that this site be subject to a Stage 3 archaeological investigation to further evaluate its cultural heritage value or interest. The Stage 3 assessment would include the mapping of any surface finds and the hand excavation of a series of one-metre square test units.



Plate 47: Location 126 (AfGw-222) Projectile Point (actual size)



1. Projectile Point

3.3.72 Location 127 (AfGw-228)

1 SCR, 8 CDE, recommended:

Location 127 (AfGw-228) is a pre-contact Aboriginal site, approximately five metres by 15 metres in size. The site consists of a surface lithic scatter of one end scraper, manufactured from Onondaga chert, and eight Onondaga chert flakes. The end scraper and chipping detritus were not retained for laboratory analysis at this time. It is recommended that this site be subject to a Stage 3 archaeological investigation to further evaluate its cultural heritage value or interest. The Stage 3 assessment would include the mapping of any surface finds and the hand excavation of a series of one-metre square test units.

3.3.73 Location 128

1 UFL, not recommended:

Location 128 is a pre-contact Aboriginal site consisting of a surface find of one isolated utilized flake edge fragment, manufactured from Onondaga chert. This utilized flake fragment was not retained for laboratory analysis at this time. As detailed in Section 3.1, survey intervals were intensified to one metre within a twenty metre radius of the find but no further artifacts were found. Given that this utilized flake fragment is the only find at this location and it is temporally non-diagnostic, the cultural heritage value or interest of this site is low and no further archaeological assessment is recommended.



3.3.74 Location 129 (AfGw-223)

1 SCR, 31 CDE, recommended:

Location 129 (AfGw-223) is a pre-contact Aboriginal site, approximately five metres by 35 metres in size. The site consists of a surface lithic scatter of one end scraper, manufactured from Onondaga chert, and 31 Onondaga chert flakes. The end scraper and chipping detritus were not retained for laboratory analysis at this time. It is recommended that this site be subject to a Stage 3 archaeological investigation to further evaluate its cultural heritage value or interest. The Stage 3 assessment would include the mapping of any surface finds and the hand excavation of a series of one-metre square test units.

3.3.75 Location 130

1 CDE, not recommended:

Location 130 is a pre-contact Aboriginal site consisting of a surface find of one isolated Onondaga chert flake. This piece of chipping detritus was not retained for laboratory analysis at this time. As detailed in Section 3.1, survey intervals were intensified to one metre within a twenty metre radius of the find but no further artifacts were found. Given that this flake is the only find at this location and it is temporally non-diagnostic, the cultural heritage value or interest of this site is low and no further archaeological assessment is recommended.

3.3.76 Location 131 (AfGx-737)

4 BIF, 1 COR, 92 CDE, recommended:

Location 131 (AfGx-737) is a pre-contact Aboriginal site, approximately 30 metres by 60 metres in size. The site consists of a surface lithic scatter of four biface preforms, manufactured from Onondaga chert; one multidirectional core, manufactured from Onondaga chert, and 92 Onondaga chert flakes. The biface preforms, core and chipping detritus were not retained for laboratory analysis at this time. It is recommended that this site be subject to a Stage 3 archaeological investigation to further evaluate its cultural heritage value or interest. The Stage 3 assessment would include the mapping of any surface finds and the hand excavation of a series of one-metre square test units.



3.3.77 Location 132 (AfGx-738)

1 BIF, 10 CDE, recommended:

Location 132 (AfGx-738) is a pre-contact Aboriginal site, approximately 10 metres by 10 metres in size. The site consists of a surface lithic scatter of one triangular biface base fragment, manufactured from Onondaga chert, and 10 Onondaga chert flakes. The biface fragment and chipping detritus were not retained for laboratory analysis at this time. It is recommended that this site be subject to a Stage 3 archaeological investigation to further evaluate its cultural heritage value or interest. The Stage 3 assessment would include the mapping of any surface finds and the hand excavation of a series of one-metre square test units.

3.3.78 Location 133

2 CDE, not recommended:

Location 133 is a pre-contact Aboriginal site consisting of a surface lithic scatter of two Onondaga chert flakes located approximately 2 metres apart. The chipping detritus was not retained for laboratory analysis at this time. Given that these flakes are temporally non-diagnostic, the cultural heritage value or interest of this site is low and no further archaeological assessment is recommended.

3.3.79 Location 134 (AfGx-739)

1 SCR, 2 CDE, not recommended:

Location 134 (AfGx-739) is a pre-contact Aboriginal site, approximately five metres by 10 metres in size. The site consists of a surface lithic scatter of one end scraper, manufactured from Onondaga chert, and two Onondaga chert flakes. The end scraper and chipping detritus were not retained for laboratory analysis at this time. Given that these artifacts are temporally non-diagnostic, the cultural heritage value or interest of this site is low and no further archaeological assessment is recommended.

3.3.80 Location 135 (AfGx-854)

3 CDE, not recommended:

Location 135 (AfGx-854) is a pre-contact Aboriginal site, approximately four metres by four metres in size. The site consists of a surface lithic scatter of three Onondaga chert flakes. The chipping detritus was not retained for laboratory analysis at this time. Given that these flakes are temporally non-diagnostic, the cultural heritage value or interest of this site is low and no further archaeological assessment is recommended.



3.3.81 Location 136 (AfGx-740)

1 PPO, not recommended:

Location 136 (AfGx-740) is a pre-contact Aboriginal site consisting of a surface find of one isolated Brewerton Side-Notched projectile point, manufactured from Onondaga chert (Plate 48:1). This projectile point measures 58 millimetres long by 34 millimetres wide by 9 millimetres thick. In Ontario, this projectile point type dates to *circa* 3780-3200 B.C. (see Ellis et al. 2009:808). As detailed in Section 3.1, survey intervals were intensified to one metre within a twenty metre radius of the find but no further artifacts were found. Given that this projectile point is the only find at this location, the cultural heritage value or interest of this site is low and no further archaeological assessment is recommended.

Plate 48: Location 136 (AfGx-740) Projectile Point (actual size)



1. Projectile Point

3.3.82 Location 137 (AfGx-741)

1 COR, 31 CDE, recommended:

Location 137 (AfGx-741) is a pre-contact Aboriginal site, approximately 15 metres by 25 metres in size. The site consists of a surface lithic scatter of one multidirectional core, manufactured from Onondaga chert, and 31 Onondaga chert flakes. The core and chipping detritus were not retained for laboratory analysis at this time. It is recommended that this site be subject to a Stage 3 archaeological investigation to further evaluate its cultural heritage value or interest. The Stage 3 assessment would include the mapping of any surface finds and the hand excavation of a series of one-metre square test units.



3.3.83 Location 138 (AfGx-855)

4 CDE, not recommended:

Location 138 (AfGx-855) is a pre-contact Aboriginal site, approximately 10 metres by 10 metres in size. The site consists of a surface lithic scatter of four Onondaga chert flakes. The chipping detritus was not retained for laboratory analysis at this time. Given that these flakes are temporally non-diagnostic, the cultural heritage value or interest of this site is low and no further archaeological assessment is recommended.

3.3.84 Location 139

1 CDE, not recommended:

Location 139 is a pre-contact Aboriginal site consisting of a surface find of one isolated Onondaga chert flake. This piece of chipping detritus was not retained for laboratory analysis at this time. As detailed in Section 3.1, survey intervals were intensified to one metre within a twenty metre radius of the find but no further artifacts were found. Given that this flake is the only find at this location and it is temporally non-diagnostic, the cultural heritage value or interest of this site is low and no further archaeological assessment is recommended.

3.3.85 Location 140 (AfGx-742)

2 BIF, 1 COR, 48 CDE, recommended:

Location 140 (AfGx-742) is a pre-contact Aboriginal site, approximately 25 metres by 25 metres in size. The site consists of a surface lithic scatter of two biface preforms, manufactured from Onondaga chert; one multidirectional core, manufactured from Onondaga chert; and 48 Onondaga chert flakes. The tools and chipping detritus were not retained for laboratory analysis at this time. It is recommended that this site be subject to a Stage 3 archaeological investigation to further evaluate its cultural heritage value or interest. The Stage 3 assessment would include the mapping of any surface finds and the hand excavation of a series of one-metre square test units.

3.3.86 Location 141

1 CDE, not recommended:

Location 141 is a pre-contact Aboriginal site consisting of a surface find of one isolated Onondaga chert flake. This piece of chipping detritus was not retained for laboratory analysis at this time.



As detailed in Section 3.1, survey intervals were intensified to one metre within a twenty metre radius of the find but no further artifacts were found. Given that this flake is the only find at this location and it is temporally non-diagnostic, the cultural heritage value or interest of this site is low and no further archaeological assessment is recommended.

3.3.87 Location 142

1 CDE, not recommended:

Location 142 is a pre-contact Aboriginal site consisting of a surface find of one isolated Onondaga chert flake. This piece of chipping detritus was not retained for laboratory analysis at this time. As detailed in Section 3.1, survey intervals were intensified to one metre within a twenty metre radius of the find but no further artifacts were found. Given that this flake is the only find at this location and it is temporally non-diagnostic, the cultural heritage value or interest of this site is low and no further archaeological assessment is recommended.

3.3.88 Location 143

1 PPO, not recommended:

Location 143 is a pre-contact Aboriginal site consisting of a surface find of one isolated stemmed projectile point, shoulders and stem damaged, manufactured from Haldimand chert (Plate 49:1). The surviving portion of this projectile point measures 47 millimetres long by 26 millimetres wide by 6 millimetres thick. Due to its poor condition this projectile point cannot be assigned to a discrete typological category. As detailed in Section 3.1, survey intervals were intensified to one metre within a twenty metre radius of the find but no further artifacts were found. Given that this projectile point is the only find at this location and it is temporally non-diagnostic, the cultural heritage value or interest of this site is low and no further archaeological assessment is recommended.

Plate 49: Location 143 Projectile Point (actual size)



1. Projectile Point



3.3.89 Location 144

1 CDE, not recommended:

Location 144 is a pre-contact Aboriginal site consisting of a surface find of one isolated Dundee chert flake. This piece of chipping detritus was not retained for laboratory analysis at this time. As detailed in Section 3.1, survey intervals were intensified to one metre within a twenty metre radius of the find but no further artifacts were found. Given that this flake is the only find at this location and it is temporally non-diagnostic, the cultural heritage value or interest of this site is low and no further archaeological assessment is recommended.

3.3.90 Location 145

4 CDE, not recommended:

Location 145 is a pre-contact Aboriginal site, approximately eight metres by 30 metres in size. The site consists of a surface lithic scatter of four Onondaga chert flakes. The chipping detritus was not retained for laboratory analysis at this time. Given that these flakes are temporally non-diagnostic, the cultural heritage value or interest of this site is low and no further archaeological assessment is recommended.

3.3.91 Location 146

1 BIF, not recommended:

Location 146 is a pre-contact Aboriginal site consisting of a surface find of one isolated biface fragment, manufactured from Onondaga chert. This biface fragment was not retained for laboratory analysis at this time. As detailed in Section 3.1, survey intervals were intensified to one metre within a twenty metre radius of the find but no further artifacts were found. Given that this biface fragment is the only find at this location and it is temporally non-diagnostic, the cultural heritage value or interest of this site is low and no further archaeological assessment is recommended.

3.3.92 Location 147

1 BIF, not recommended:

Location 147 is a pre-contact Aboriginal site consisting of a surface find of one isolated biface fragment, manufactured from Onondaga chert. This biface fragment was not retained for laboratory analysis at this time.



As detailed in Section 3.1, survey intervals were intensified to one metre within a twenty metre radius of the find but no further artifacts were found. Given that this biface fragment is the only find at this location and it is temporally non-diagnostic, the cultural heritage value or interest of this site is low and no further archaeological assessment is recommended.

3.3.93 Location 148

2 CDE, not recommended:

Location 148 is a pre-contact Aboriginal site consisting of a surface lithic scatter of two Onondaga chert flakes located approximately two metres apart. The chipping detritus was not retained for laboratory analysis at this time. Given that these flakes are temporally non-diagnostic, the cultural heritage value or interest of this site is low and no further archaeological assessment is recommended.

3.3.94 Location 149 (AfGw-224)

1 PPO, not recommended:

Location 149 (AfGw-224) is a pre-contact Aboriginal site consisting of a surface find of one isolated Meadowood projectile point base, missing one ear, manufactured from Onondaga chert (Plate 50:1). The surviving portion of this projectile point measures 35 millimetres long by 25 millimetres wide by 6 millimetres thick. In Ontario, this projectile point type dates to *circa* 1000-500 B.C., during the Early Woodland (Kenyon 1980). As detailed in Section 3.1, survey intervals were intensified to one metre within a twenty metre radius of the find but no further artifacts were found. Given that this projectile point is the only find at this location, the cultural heritage value or interest of this site is low and no further archaeological assessment is recommended.

Plate 50: Location 149 (AfGw-224) Projectile Point (actual size)



1. Projectile Point



3.3.95 Location 150 (AfGw-239)

1 UFL, 4 CDE, not recommended:

Location 150 (AfGw-239) is a pre-contact Aboriginal site, approximately five metres by 10 metres in size. The site consists of a surface lithic scatter of one utilized flake, manufactured from Onondaga chert, and four Onondaga chert flakes. The utilized flake and chipping detritus were not retained for laboratory analysis at this time. Given that these artifacts are temporally non-diagnostic, the cultural heritage value or interest of this site is low and no further archaeological assessment is recommended.

3.3.96 Location 151

1 CDE, not recommended:

Location 151 is a pre-contact Aboriginal site consisting of a surface find of one isolated Onondaga chert flake. This piece of chipping detritus was not retained for laboratory analysis at this time. As detailed in Section 3.1, survey intervals were intensified to one metre within a twenty metre radius of the find but no further artifacts were found. Given that this flake is the only find at this location and it is temporally non-diagnostic, the cultural heritage value or interest of this site is low and no further archaeological assessment is recommended.

3.3.97 Location 152 (AfGw-225)

10 CDE, recommended:

Location 152 (AfGw-225) is a pre-contact Aboriginal site, approximately five metres by eight metres in size. The site consists of a surface lithic scatter of 10 Onondaga chert flakes. The chipping detritus was not retained for laboratory analysis at this time. It is recommended that this site be subject to a Stage 3 archaeological investigation to further evaluate its cultural heritage value or interest. The Stage 3 assessment would include the mapping of any surface finds and the hand excavation of a series of one-metre square test units.

3.3.98 Location 153 (AfGw-240)

4 CDE, not recommended:

Location 153 (AfGw-240) is a pre-contact Aboriginal site, approximately six metres by eight metres in size. The site consists of a surface lithic scatter of three Onondaga chert flakes and one Haldimand chert flake.



The chipping detritus was not retained for laboratory analysis at this time. Given that these flakes are temporally non-diagnostic, the cultural heritage value or interest of this site is low and no further archaeological assessment is recommended.

3.3.99 Location 154

1 CDE, not recommended:

Location 154 is a pre-contact Aboriginal site consisting of a surface find of one isolated Onondaga chert flake. This piece of chipping detritus was not retained for laboratory analysis at this time. As detailed in Section 3.1, survey intervals were intensified to one metre within a twenty metre radius of the find but no further artifacts were found. Given that this flake is the only find at this location and it is temporally non-diagnostic, the cultural heritage value or interest of this site is low and no further archaeological assessment is recommended.

3.3.100 Location 155 (AfGw-241)

1 SCR, 1 GRV, 7 RTF, 1 UFL, 4 COR, 1 HAM, 15 CDE, recommended:

Location 155 (AfGw-241) is a pre-contact Aboriginal site, approximately 10 metres by 20 metres in size. The site consists of a surface lithic scatter of one end scraper, possibly a reused perforator, manufactured from Onondaga chert (Plate 51:1), one graver, manufactured from Onondaga chert, seven retouched flakes, manufactured from Onondaga chert, one utilized flake, manufactured from Onondaga chert, four multidirectional cores, manufactured from Onondaga chert, one hammerstone, manufactured from a material not identified in the field, and 15 Onondaga chert flakes. The end scraper measures 49 millimetres long by 45 millimetres wide by 19 millimetres thick. The other tools and chipping detritus were not retained for laboratory analysis at this time. It is recommended that this site be subject to a Stage 3 archaeological investigation to further evaluate its cultural heritage value or interest. The Stage 3 assessment would include the mapping of any surface finds and the hand excavation of a series of one-metre square test units.



Plate 51: Location 155 (AfGw-241) End Scraper (actual size)



1: Scraper

3.3.101 Location 156

1 RTF, 1 CDE, not recommended:

Location 156 is a pre-contact Aboriginal site, approximately 10 metres by three metres in size. The site consists of a surface lithic scatter of one retouched flake, manufactured from Onondaga chert, and one Onondaga chert flake. The retouched flake and chipping detritus were not retained for laboratory analysis at this time. Given that these artifacts are temporally non-diagnostic, the cultural heritage value or interest of this site is low and no further archaeological assessment is recommended.

3.3.102 Location 157 (AfGw-242)

4 BIF, 2 SCR, 4 GRV, 13 RTF, 4 UFL, 7 COR, 3 HAM, 115 CDE, recommended:

Location 157 (AfGw-242) is a pre-contact Aboriginal site, approximately 70 metres by 115 metres in size. The site consists of a surface lithic scatter of four bifaces, manufactured from Onondaga chert, one of which a two-piece cross-mend (Plate 52:1), another of which a midshaft fragment (Plate 52:2) and two of which preforms, one end scraper, manufactured from Onondaga chert (52:3), one side scraper, manufactured from Onondaga chert (52:4), four graters, manufactured from Onondaga chert, 13 retouched flakes, manufactured from Onondaga chert, four utilized flakes, manufactured from Onondaga chert, seven multidirectional cores, manufactured from Onondaga chert, three hammerstones, manufactured from a material not identified in the field, and 115 Onondaga chert flakes. The cross-mending biface measures 52 millimetres long by 25 millimetres wide by 5 millimetres thick. The surviving portion of the midshaft biface fragment measures 26 millimetres long by 25 millimetres wide by 5 millimetres thick. The end scraper measures 22 millimetres long by 23 millimetres wide by 6 millimetres thick.



The side scraper measures 45 millimetres long by 37 millimetres wide by 11 millimetres thick. The other tools and chipping detritus were not retained for laboratory analysis at this time. It is recommended that this site be subject to a Stage 3 archaeological investigation to further evaluate its cultural heritage value or interest. The Stage 3 assessment would include the mapping of any surface finds and the hand excavation of a series of one-metre square test units.

Plate 52: Location 157 (AfGw-242) Artifacts (actual size)



1: Biface



2: Biface



3: Scraper



4: Scraper

3.3.103 Location 158 (AfGw-243)

2 RTF, 1 UFL, 1 HAM, 1 CDE, not recommended:

Location 158 (AfGw-243) is a pre-contact Aboriginal site, approximately 20 metres by 15 metres in size. The site consists of a surface lithic scatter of two retouched flakes, manufactured from Onondaga chert, one utilized flake, manufactured from Dundee chert, one hammerstone, manufactured from a material not identified in the field, and one Onondaga chert flake.



The tools and chipping detritus were not retained for laboratory analysis at this time. Given that these artifacts are temporally non-diagnostic, the cultural heritage value or interest of this site is low and no further archaeological assessment is recommended.

3.3.104 Location 159

1 RTF, not recommended:

Location 159 is a pre-contact Aboriginal site consisting of a surface find of one isolated retouched flake, manufactured from Onondaga chert. This retouched flake was not retained for laboratory analysis at this time. As detailed in Section 3.1, survey intervals were intensified to one metre within a twenty metre radius of the find but no further artifacts were found. Given that this retouched flake is the only find at this location and it is temporally non-diagnostic, the cultural heritage value or interest of this site is low and no further archaeological assessment is recommended.

3.3.105 Location 160

2 CDE, not recommended:

Location 160 is a pre-contact Aboriginal site, approximately five metres by three metres in size. The site consists of a surface lithic scatter of two Onondaga chert flakes. The chipping detritus was not retained for laboratory analysis at this time. Given that these flakes are temporally non-diagnostic, the cultural heritage value or interest of this site is low and no further archaeological assessment is recommended.

3.3.106 Location 161

1 BIF, not recommended:

Location 161 is a pre-contact Aboriginal site consisting of a surface find of one isolated biface preform, manufactured from Onondaga chert. This biface preform was not retained for laboratory analysis at this time. As detailed in Section 3.1, survey intervals were intensified to one metre within a twenty metre radius of the find but no further artifacts were found. Given that this biface preform is the only find at this location and it is temporally non-diagnostic, the cultural heritage value or interest of this site is low and no further archaeological assessment is recommended.



3.3.107 Location 162

1 BIF, not recommended:

Location 162 is a pre-contact Aboriginal site consisting of a surface find of one isolated biface fragment, manufactured from Onondaga chert. This biface fragment was not retained for laboratory analysis at this time. As detailed in Section 3.1, survey intervals were intensified to one metre within a twenty metre radius of the find but no further artifacts were found. Given that this biface fragment is the only find at this location and it is temporally non-diagnostic, the cultural heritage value or interest of this site is low and no further archaeological assessment is recommended.

3.3.108 Location 163 (AfGw-244)

1 RTF, 1 UFL, 1 COR, 20 CDE, recommended:

Location 163 (AfGw-244) is a pre-contact Aboriginal site, approximately 15 metres by 15 metres in size. The site consists of a surface lithic scatter of one retouched flake, manufactured from Onondaga chert, one utilized flake, manufactured from Onondaga chert, one multidirectional core, manufactured from Onondaga chert, 15 Dundee chert flakes and five Onondaga chert flakes. The tools and chipping detritus were not retained for laboratory analysis at this time. It is recommended that this site be subject to a Stage 3 archaeological investigation to further evaluate its cultural heritage value or interest. The Stage 3 assessment would include the mapping of any surface finds and the hand excavation of a series of one-metre square test units.

3.3.109 Location 164 (AfGw-245)

1 RTF, 3 CDE, not recommended:

Location 164 (AfGw-245) is a pre-contact Aboriginal site, approximately 10 metres by 4 metres in size. The site consists of a surface lithic scatter of one retouched flake, manufactured from Onondaga chert, two Onondaga chert flakes and one Dundee chert flake. The retouched flake and chipping detritus were not retained for laboratory analysis at this time. As detailed in Section 3.1, survey intervals were intensified to one metre within a twenty metre radius of the find but no further artifacts were found. Given that these artifacts are temporally non-diagnostic, the cultural heritage value or interest of this site is low and no further archaeological assessment is recommended.



3.3.110 Location 165 (AfGw-246)

2 RTF, 12 CDE, recommended:

Location 165 (AfGw-246) is a pre-contact Aboriginal site, approximately 15 metres by 10 metres in size. The site consists of a surface lithic scatter of two retouched flakes, manufactured from Onondaga chert, 10 Dundee chert flakes and two Onondaga chert flakes. The retouched flakes and chipping detritus were not retained for laboratory analysis at this time. It is recommended that this site be subject to a Stage 3 archaeological investigation to further evaluate its cultural heritage value or interest. The Stage 3 assessment would include the mapping of any surface finds and the hand excavation of a series of one-metre square test units.

3.3.111 Location 166

1 RTF, 1 COR, not recommended:

Location 156 is a pre-contact Aboriginal site, approximately three metres by one metre in size. The site consists of a surface lithic scatter of one retouched flake, manufactured from Onondaga chert, and one multidirectional core, manufactured from Onondaga chert. The retouched flake and core were not retained for laboratory analysis at this time. Given that these artifacts are temporally non-diagnostic, the cultural heritage value or interest of this site is low and no further archaeological assessment is recommended.

3.3.112 Location 167

1 SCR, not recommended:

Location 167 is a pre-contact Aboriginal site consisting of a surface find of one isolated end scraper, manufactured from Onondaga chert (Plate 53:1). The end scraper measures 51 millimetres long by 40 millimetres wide by 11 millimetres thick. As detailed in Section 3.1, survey intervals were intensified to one metre within a twenty metre radius of the find but no further artifacts were found. Given that this scraper is the only find at this location and it is temporally non-diagnostic, the cultural heritage value or interest of this site is low and no further archaeological assessment is recommended.



Plate 53: Location 167 End Scraper (actual size)



1: Scraper

3.3.113 Location 168

1 CDE, not recommended:

Location 168 is a pre-contact Aboriginal site consisting of a surface find of one isolated Onondaga chert flake. This piece of chipping detritus was not retained for laboratory analysis at this time. As detailed in Section 3.1, survey intervals were intensified to one metre within a twenty metre radius of the find but no further artifacts were found. Given that this flake is the only find at this location and it is temporally non-diagnostic, the cultural heritage value or interest of this site is low and no further archaeological assessment is recommended.

3.3.114 Location 169

1 UFL, not recommended:

Location 169 is a pre-contact Aboriginal site consisting of a surface find of one isolated utilized flake, manufactured from Onondaga chert. This utilized flake was not retained for laboratory analysis at this time. As detailed in Section 3.1, survey intervals were intensified to one metre within a twenty metre radius of the find but no further artifacts were found. Given that this utilized flake is the only find at this location and it is temporally non-diagnostic, the cultural heritage value or interest of this site is low and no further archaeological assessment is recommended.



3.3.115 Location 170

1 RTF, not recommended:

Location 170 is a pre-contact Aboriginal site consisting of a surface find of one isolated retouched flake, manufactured from Onondaga chert. This retouched flake was not retained for laboratory analysis at this time. As detailed in Section 3.1, survey intervals were intensified to one metre within a twenty metre radius of the find but no further artifacts were found. Given that this retouched flake is the only find at this location and it is temporally non-diagnostic, the cultural heritage value or interest of this site is low and no further archaeological assessment is recommended.

3.3.116 Location 171

1 CDE, not recommended:

Location 171 is a pre-contact Aboriginal site consisting of a surface find of one isolated Onondaga chert flake. This piece of chipping detritus was not retained for laboratory analysis at this time. As detailed in Section 3.1, survey intervals were intensified to one metre within a twenty metre radius of the find but no further artifacts were found. Given that this flake is the only find at this location and it is temporally non-diagnostic, the cultural heritage value or interest of this site is low and no further archaeological assessment is recommended.

3.3.117 Location 172

1 CDE, not recommended:

Location 172 is a pre-contact Aboriginal site consisting of a surface find of one isolated Onondaga chert flake. This piece of chipping detritus was not retained for laboratory analysis at this time. As detailed in Section 3.1, survey intervals were intensified to one metre within a twenty metre radius of the find but no further artifacts were found. Given that this flake is the only find at this location and it is temporally non-diagnostic, the cultural heritage value or interest of this site is low and no further archaeological assessment is recommended.

3.3.118 Location 173 (AfGw-248)

5 CDE, not recommended:

Location 173 (AfGw-248) is a pre-contact Aboriginal site, approximately five metres by eight metres in size. The site consists of a surface lithic scatter of five Onondaga chert flakes.



The chipping detritus was not retained for laboratory analysis at this time. Given that these flakes are temporally non-diagnostic, the cultural heritage value or interest of this site is low and no further archaeological assessment is recommended.

3.3.119 Location 174

1 CDE, not recommended:

Location 174 is a pre-contact Aboriginal site consisting of a surface find of one isolated Onondaga chert flake. This piece of chipping detritus was not retained for laboratory analysis at this time. As detailed in Section 3.1, survey intervals were intensified to one metre within a twenty metre radius of the find but no further artifacts were found. Given that this flake is the only find at this location and it is temporally non-diagnostic, the cultural heritage value or interest of this site is low and no further archaeological assessment is recommended.

3.3.120 Location 175

1 PPO, not recommended:

Location 175 is a pre-contact Aboriginal site consisting of a surface find of one isolated stemmed projectile point, its tip, shoulders and stem damaged, manufactured from Haldimand chert (Plate 54:1). The surviving portion of this projectile point measures 40 millimetres long by 25 millimetres wide by 5 millimetres thick. Due to its poor condition this projectile point cannot be assigned to a discrete typological category. As detailed in Section 3.1, survey intervals were intensified to one metre within a twenty metre radius of the find but no further artifacts were found. Given that this projectile point is the only find at this location and it is temporally non-diagnostic, the cultural heritage value or interest of this site is low and no further archaeological assessment is recommended.

Plate 54: Location 175 Projectile Point (actual size)



1: Projectile Point



3.3.121 Location 176 (AfGw-249)

1 COR, 16 CDE, recommended:

Location 176 (AfGw-249) is a pre-contact Aboriginal site, approximately 20 metres by 20 metres in size. The site consists of a surface lithic scatter of one multidirectional core, manufactured from Onondaga chert, and 16 Onondaga chert flakes. It is recommended that this site be subject to a Stage 3 archaeological investigation to further evaluate its cultural heritage value or interest. The Stage 3 assessment would include the mapping of any surface finds and the hand excavation of a series of one-metre square test units.

3.3.122 Location 177

1 RTF, 1 CDE, not recommended:

Location 177 is a pre-contact Aboriginal site, approximately one metre by two metres in size. The site consists of a surface lithic scatter of one retouched flake, manufactured from Onondaga chert, and one Onondaga chert flake. The retouched flake and chipping detritus were not retained for laboratory analysis at this time. Given that these artifacts are temporally non-diagnostic, the cultural heritage value or interest of this site is low and no further archaeological assessment is recommended.

3.3.123 Location 178

1 CDE, not recommended:

Location 178 is a pre-contact Aboriginal site consisting of a surface find of one isolated Onondaga chert flake. This piece of chipping detritus was not retained for laboratory analysis at this time. As detailed in Section 3.1, survey intervals were intensified to one metre within a twenty metre radius of the find but no further artifacts were found. Given that this flake is the only find at this location and it is temporally non-diagnostic, the cultural heritage value or interest of this site is low and no further archaeological assessment is recommended.

3.3.124 Location 179 (AfGw-250)

6 CDE, not recommended:

Location 179 (AfGw-250) is a pre-contact Aboriginal site, approximately six metres by eight metres in size. The site consists of a surface lithic scatter of six Onondaga chert flakes. The chipping detritus was not retained for laboratory analysis at this time. Given that these flakes are temporally non-diagnostic, the cultural heritage value or interest of this site is low and no further archaeological assessment is recommended.



3.3.125 Location 180 (AfGw-251)

8 CDE, not recommended:

Location 180 (AfGw-251) is a pre-contact Aboriginal site, approximately 20 metres by 25 metres in size. The site consists of a surface lithic scatter of eight Onondaga chert flakes. The chipping detritus was not retained for laboratory analysis at this time. Given that these flakes are temporally non-diagnostic, the cultural heritage value or interest of this site is low and no further archaeological assessment is recommended.

3.3.126 Location 181

1 CDE, not recommended:

Location 181 is a pre-contact Aboriginal site consisting of a surface find of one isolated Haldimand chert flake. This piece of chipping detritus was not retained for laboratory analysis at this time. As detailed in Section 3.1, survey intervals were intensified to one metre within a twenty metre radius of the find but no further artifacts were found. Given that this flake is the only find at this location and it is temporally non-diagnostic, the cultural heritage value or interest of this site is low and no further archaeological assessment is recommended.

3.3.127 Location 182

1 CDE, not recommended:

Location 182 is a pre-contact Aboriginal site consisting of a surface find of one isolated Onondaga chert flake. This piece of chipping detritus was not retained for laboratory analysis at this time. As detailed in Section 3.1, survey intervals were intensified to one metre within a twenty metre radius of the find but no further artifacts were found. Given that this flake is the only find at this location and it is temporally non-diagnostic, the cultural heritage value or interest of this site is low and no further archaeological assessment is recommended.

3.3.128 Location 183

1 PPO, not recommended:

Location 183 is a pre-contact Aboriginal site consisting of a surface find of one isolated projectile point, missing its tip and one ear with one reworked lateral edge, manufactured from Kettle Point chert (Plate 55:1). The surviving portion of this projectile point measures 38 millimetres long by 21 millimetres wide by 5 millimetres thick.



Due to its poor condition this projectile point cannot be assigned to a discrete typological category. As detailed in Section 3.1, survey intervals were intensified to one metre within a twenty metre radius of the find but no further artifacts were found. Given that this projectile point is the only find at this location and it is temporally non-diagnostic, the cultural heritage value or interest of this site is low and no further archaeological assessment is recommended.

Plate 55: Location 183 Projectile Point (actual size)



1: Projectile Point



4.0 SUMMARY OF SPRING AND SUMMER 2011 STAGE 2 INVESTIGATIONS

The pre-contact Aboriginal locations documented during the spring and summer 2011 Stage 2 assessment of the study area range in age from the Early Archaic to the Late Woodland. Of the 116 pre-contact Aboriginal locations discovered in spring 2011, 15 can be assigned date ranges. Table 1 presents a summary of site numbers and their cultural and temporal affiliations. Table 2 presents a detailed listing of each site’s cultural and temporal affiliation with the typological artifact identified.

Table 1: Summary of Temporal Affiliations of Pre-contact Aboriginal Sites in Study Area

Affiliation	# of Sites	Date Range
Palaeo-Indian	n/a	9000 - 8000 B.C.
Late Palaeo-Indian	n/a	8400 - 8000 B.C.
Early Archaic	2	8000 - 6000 B.C.
Middle Archaic	5	6000 - 2500 B.C.
Middle/Late Archaic	n/a	6000 - 1400 B.C.
Broad Point Late Archaic	n/a	1800 - 1500 B.C.
Broad Point/Small Point Late Archaic	n/a	1800 - 1100 B.C.
Small Point Late Archaic	2	1500 - 1100 B.C.
Terminal Archaic	n/a	1100 – 1000/950 B.C.
Early Woodland	4	1000 - 100 B.C.
Middle Woodland	n/a	400 B.C. - A.D. 500
Late Woodland	2	A.D. 500 - Contact

Table 2: Pre-contact Aboriginal Sites in Study Area with Known Cultural and Temporal Assignments

Loc.	Borden No.	Based On	Time Period	Date Range
64	AfGw-190	Adena-like projectile point	Early Woodland	c. 500-100 B.C.
66	AfGw-192	bifurcate base-like projectile point	Early Archaic	c. 8000-6910 B.C.
71	AfGw-196	Meadowood projectile point	Early Woodland	c. 1000-500 B.C.
73	AfGw-198	Ace of Spades projectile point	Late Archaic	c. 1800-1300 B.C.
79	AfGw-200	Ace of Spades projectile point	Late Archaic	c. 1800-1300 B.C.
82	AfGw-202	Brewerton Side-Notched projectile point	Middle Archaic	c. 3780-3200 B.C.
87	AfGw-205	Meadowood projectile point	Early Woodland	c. 1000-500 B.C.



STAGE 2 ARCHAEOLOGICAL ASSESSMENT SAMSUNG GRAND RENEWABLE ENERGY PARK

Loc.	Borden No.	Based On	Time Period	Date Range
88	AfGw-206	Nettling projectile point	Early Archaic	c. 8600-8000 B.C.
91	AfGw-208	Brewerton Corner-Notched projectile point	Middle Archaic	c. 3780-3200 B.C.
109	AfGw-211	Jack's Reef Corner-Notched projectile point	Late Woodland	c. A.D. 500-1000
111	AfGw-213	Aboriginal ceramic	Late Woodland	c. A.D. 500-Contact
118	AfGw-216	Otter Creek projectile point	Middle Archaic	c. 4340-3960 B.C.
126	AfGw-222	Brewerton Side-Notched projectile point	Middle Archaic	c. 3780-3200 B.C.
136	AfGx-740	Brewerton Side-Notched projectile point	Middle Archaic	c. 3780-3200 B.C.
149	AfGw-224	Meadowood projectile point	Early Woodland	c. 1000-500 B.C.



5.0 RECOMMENDATIONS AND ADVICE ON COMPLIANCE WITH LEGISLATION

A Stage 1 archaeological background study was previously conducted on behalf of Samsung by Stantec for a project area located in the Geographic Townships of Dunn, Rainham, South Cayuga, North Cayuga and Walpole in Haldimand County, Ontario. This area is proposed to be the site of approximately 67 wind turbines, at least three areas of solar panels and project-related infrastructure comprising the Grand Renewable Energy Park.

The Stage 1 archaeological assessment resulted in the determination that the potential for pre-contact Aboriginal and Euro-Canadian sites was deemed to be moderate to high. As a result, Stage 2 archaeological assessment was recommended for any areas to be impacted by turbine or solar panel construction, access road corridor construction or other infrastructure construction related activities.

During the winter of 2010 and 2011, Stage 2 archaeological assessment of a portion of the proposed project area was undertaken by Golder on behalf of Stantec (Golder 2011). The winter 2010-2011 Stage 2 assessment focused upon the proposed wind turbine and solar lands layout, including turbine sites, collector cable routes, access road corridors, construction roads, transmission lines, laydown areas and substations. A total of approximately 75 hectares was subject to Stage 2 archaeological assessment, consisting of approximately 34 hectares of land that could not be ploughed and, therefore, was assessed using the test pit method at an interval of five metres as well as approximately 40.5 hectares of ploughed fields, assessed using the standard pedestrian survey method at an interval of five metres. The Stage 2 archaeological assessment conducted by Golder in winter 2010-2011 resulted in the identification of 55 locations, comprising 54 pre-contact Aboriginal sites and one historic Euro-Canadian site. In summary, 25 of the 55 archaeological locations identified within the study area in winter 2010-2011 were recommended for Stage 3 assessment to further evaluate their cultural heritage value or interest.

During the spring and summer of 2011, Stage 2 archaeological assessment of the remainder of the portion of the proposed project area to be assessed by Golder Associates Ltd. was undertaken and is the subject of this report (Figure 1). The spring and summer 2011 Stage 2 assessment focused on 22 turbine locations, 25 access road corridors or collector cable routes and three portions of solar panel lands. A total of approximately 160 hectares of ploughed agricultural fields was subject to Stage 2 archaeological assessment using the standard pedestrian survey method at an interval of five metres. Additionally, a small area of approximately 10 metres by 40 metres was assessed using the test pit method at an interval of five metres. The Stage 2 archaeological assessment conducted by Golder in the spring and summer of 2011 resulted in the identification of a further 128 locations, all of which are pre-contact Aboriginal sites. In order to further evaluate their cultural heritage value or interest, 48 of the 128 archaeological locations identified within the study area in the spring and summer of 2011 are recommended for Stage 3 assessment.

Recommendations are made concerning these locations in the subsections below.



5.1 Sites Recommended for Stage 3 Assessment

Table 3 lists the pre-contact Aboriginal sites requiring Stage 3 assessment. Of the 128 pre-contact Aboriginal archaeological locations recorded in the spring and summer of 2011, 48 of them are being recommended for further archaeological assessment.

Table 3: Pre-contact Aboriginal Sites Requiring Stage 3 Archaeological Assessment

Site Name	Borden Number	Cultural Affiliation	Date
Location 58	AfGw-188	pre-contact Aboriginal	indeterminate
Location 59	AfGw-189	pre-contact Aboriginal	indeterminate
Location 64	AfGw-190	pre-contact Aboriginal	c. 500-100 B.C.
Location 65	AfGw-191	pre-contact Aboriginal	indeterminate
Location 66	AfGw-192	pre-contact Aboriginal	c. 8000-6910 B.C.
Location 68	AfGw-193	pre-contact Aboriginal	indeterminate
Location 69	AfGw-194	pre-contact Aboriginal	indeterminate
Location 70	AfGw-195	pre-contact Aboriginal	indeterminate
Location 71	AfGw-196	pre-contact Aboriginal	c. 1000-500 B.C.
Location 72	AfGw-197	pre-contact Aboriginal	indeterminate
Location 73	AfGw-198	pre-contact Aboriginal	c. 1800-1300 B.C.
Location 78	AfGw-199	pre-contact Aboriginal	indeterminate
Location 79	AfGw-200	pre-contact Aboriginal	c. 1800-1300 B.C.
Location 81	AfGw-201	pre-contact Aboriginal	indeterminate
Location 82	AfGw-202	pre-contact Aboriginal	c. 3780-3200 B.C.
Location 85	AfGw-203	pre-contact Aboriginal	indeterminate
Location 86	AfGw-204	pre-contact Aboriginal	indeterminate
Location 88	AfGw-206	pre-contact Aboriginal	c. 8600-8000 B.C.
Location 89	AfGw-207	pre-contact Aboriginal	indeterminate
Location 91	AfGw-208	pre-contact Aboriginal	c. 3780-3200 B.C.
Location 98	AfGw-226	pre-contact Aboriginal	indeterminate
Location 99	AfGw-227	pre-contact Aboriginal	indeterminate
Location 104	AfGw-209	pre-contact Aboriginal	indeterminate
Location 105	AfGw-210	pre-contact Aboriginal	indeterminate
Location 109	AfGw-211	pre-contact Aboriginal	c. A.D. 500-1000
Location 110	AfGw-212	pre-contact Aboriginal	indeterminate
Location 111	AfGw-213	pre-contact Aboriginal	c. A.D. 500-Contact



STAGE 2 ARCHAEOLOGICAL ASSESSMENT SAMSUNG GRAND RENEWABLE ENERGY PARK

Site Name	Borden Number	Cultural Affiliation	Date
Location 114	AfGw-214	pre-contact Aboriginal	indeterminate
Location 115	AfGw-215	pre-contact Aboriginal	indeterminate
Location 118	AfGw-216	pre-contact Aboriginal	c. 4340-3960 B.C.
Location 119	AfGw-217	pre-contact Aboriginal	indeterminate
Location 122	AfGw-218	pre-contact Aboriginal	indeterminate
Location 123	AfGw-219	pre-contact Aboriginal	indeterminate
Location 124	AfGw-220	pre-contact Aboriginal	indeterminate
Location 125	AfGw-221	pre-contact Aboriginal	indeterminate
Location 126	AfGw-222	pre-contact Aboriginal	c. 3780-3200 B.C.
Location 127	AfGw-228	pre-contact Aboriginal	indeterminate
Location 129	AfGw-223	pre-contact Aboriginal	indeterminate
Location 131	AfGx-737	pre-contact Aboriginal	indeterminate
Location 132	AfGx-738	pre-contact Aboriginal	indeterminate
Location 137	AfGx-741	pre-contact Aboriginal	indeterminate
Location 140	AfGx-742	pre-contact Aboriginal	indeterminate
Location 152	AfGw-225	pre-contact Aboriginal	indeterminate
Location 155	AfGw-241	pre-contact Aboriginal	indeterminate
Location 157	AfGw-242	pre-contact Aboriginal	indeterminate
Location 163	AfGw-244	pre-contact Aboriginal	indeterminate
Location 165	AfGw-246	pre-contact Aboriginal	indeterminate
Location 176	AfGw-249	pre-contact Aboriginal	indeterminate

5.2 Sites Not Requiring any Further Archaeological Assessment

Table 4 lists the pre-contact Aboriginal sites not requiring Stage 3 assessment. Of the 128 pre-contact Aboriginal archaeological locations recorded in the spring and summer of 2011, 80 of them have been sufficiently documented and require no further archaeological assessment.

Table 4: Pre-contact Aboriginal Sites Not Requiring Any Further Archaeological Assessment

Site Name	Borden Number	Cultural Affiliation	Date
Location 56	none	pre-contact Aboriginal	indeterminate
Location 57	none	pre-contact Aboriginal	indeterminate
Location 60	none	pre-contact Aboriginal	indeterminate
Location 61	AfGw-230	pre-contact Aboriginal	indeterminate



STAGE 2 ARCHAEOLOGICAL ASSESSMENT SAMSUNG GRAND RENEWABLE ENERGY PARK

Site Name	Borden Number	Cultural Affiliation	Date
Location 62	none	pre-contact Aboriginal	indeterminate
Location 63	none	pre-contact Aboriginal	indeterminate
Location 67	none	pre-contact Aboriginal	indeterminate
Location 74	none	pre-contact Aboriginal	indeterminate
Location 75	none	pre-contact Aboriginal	indeterminate
Location 76	AfGw-231	pre-contact Aboriginal	indeterminate
Location 77	AfGw-232	pre-contact Aboriginal	indeterminate
Location 80	none	pre-contact Aboriginal	indeterminate
Location 83	none	pre-contact Aboriginal	indeterminate
Location 84	none	pre-contact Aboriginal	indeterminate
Location 87	AfGw-205	pre-contact Aboriginal	c. 1000-500 B.C.
Location 90	none	pre-contact Aboriginal	indeterminate
Location 92	none	pre-contact Aboriginal	indeterminate
Location 93	none	pre-contact Aboriginal	indeterminate
Location 94	none	pre-contact Aboriginal	indeterminate
Location 95	none	pre-contact Aboriginal	indeterminate
Location 96	none	pre-contact Aboriginal	indeterminate
Location 97	none	pre-contact Aboriginal	indeterminate
Location 100	none	pre-contact Aboriginal	indeterminate
Location 101	none	pre-contact Aboriginal	indeterminate
Location 102	none	pre-contact Aboriginal	indeterminate
Location 103	none	pre-contact Aboriginal	indeterminate
Location 106	AfGw-233	pre-contact Aboriginal	indeterminate
Location 107	none	pre-contact Aboriginal	indeterminate
Location 108	AfGw-234	pre-contact Aboriginal	indeterminate
Location 112	AfGw-235	pre-contact Aboriginal	indeterminate
Location 113	AfGw-236	pre-contact Aboriginal	indeterminate
Location 116	none	pre-contact Aboriginal	indeterminate
Location 117	none	pre-contact Aboriginal	indeterminate
Location 120	AfGw-237	pre-contact Aboriginal	indeterminate
Location 121	AfGw-238	pre-contact Aboriginal	indeterminate
Location 128	none	pre-contact Aboriginal	indeterminate
Location 130	none	pre-contact Aboriginal	indeterminate
Location 133	none	pre-contact Aboriginal	indeterminate
Location 134	AfGx-739	pre-contact Aboriginal	indeterminate



STAGE 2 ARCHAEOLOGICAL ASSESSMENT SAMSUNG GRAND RENEWABLE ENERGY PARK

Site Name	Borden Number	Cultural Affiliation	Date
Location 135	AfGx-854	pre-contact Aboriginal	indeterminate
Location 136	AfGx-740	pre-contact Aboriginal	c. 3780-3200 B.C.
Location 138	AfGx-855	pre-contact Aboriginal	indeterminate
Location 139	none	pre-contact Aboriginal	indeterminate
Location 141	none	pre-contact Aboriginal	indeterminate
Location 142	none	pre-contact Aboriginal	indeterminate
Location 143	none	pre-contact Aboriginal	indeterminate
Location 144	none	pre-contact Aboriginal	indeterminate
Location 145	none	pre-contact Aboriginal	indeterminate
Location 146	none	pre-contact Aboriginal	indeterminate
Location 147	none	pre-contact Aboriginal	indeterminate
Location 148	none	pre-contact Aboriginal	indeterminate
Location 149	AfGw-224	pre-contact Aboriginal	c. 1000-500 B.C.
Location 150	AfGw-239	pre-contact Aboriginal	indeterminate
Location 151	none	pre-contact Aboriginal	indeterminate
Location 153	AfGw-240	pre-contact Aboriginal	indeterminate
Location 154	none	pre-contact Aboriginal	indeterminate
Location 156	none	pre-contact Aboriginal	indeterminate
Location 158	AfGw-243	pre-contact Aboriginal	indeterminate
Location 159	none	pre-contact Aboriginal	indeterminate
Location 160	none	pre-contact Aboriginal	indeterminate
Location 161	none	pre-contact Aboriginal	indeterminate
Location 162	none	pre-contact Aboriginal	indeterminate
Location 164	AfGw-245	pre-contact Aboriginal	indeterminate
Location 166	none	pre-contact Aboriginal	indeterminate
Location 167	none	pre-contact Aboriginal	indeterminate
Location 168	none	pre-contact Aboriginal	indeterminate
Location 169	none	pre-contact Aboriginal	indeterminate
Location 170	none	pre-contact Aboriginal	indeterminate
Location 171	none	pre-contact Aboriginal	indeterminate
Location 172	none	pre-contact Aboriginal	indeterminate
Location 173	AfGw-248	pre-contact Aboriginal	indeterminate
Location 174	none	pre-contact Aboriginal	indeterminate
Location 175	none	pre-contact Aboriginal	indeterminate
Location 177	none	pre-contact Aboriginal	indeterminate



Site Name	Borden Number	Cultural Affiliation	Date
Location 178	none	pre-contact Aboriginal	indeterminate
Location 179	AfGw-250	pre-contact Aboriginal	indeterminate
Location 180	AfGw-251	pre-contact Aboriginal	indeterminate
Location 181	none	pre-contact Aboriginal	indeterminate
Location 182	none	pre-contact Aboriginal	indeterminate
Location 183	none	pre-contact Aboriginal	indeterminate

5.3 Summary

In summary, 48 of the 128 archaeological locations identified within the study area in the spring and summer of 2011 are recommended for Stage 3 assessment since they are judged to be of cultural heritage value or interest requiring further documentation.

The Ontario Ministry of Tourism and Culture is asked to review the results presented and to accept this report into the Ontario Public Register of Archaeological Reports. Additional archaeological assessment is still required; hence the archaeological sites recommended for further archaeological fieldwork remain subject to Section 48(1) of the *Ontario Heritage Act* and may not be altered, or have artifacts removed, except by a person holding an archaeological licence.

This report is submitted to the Minister of Tourism and Culture as a condition of licensing in accordance with Part VI of the *Ontario Heritage Act*, R.S.O. 1990, c 0.18. The report is reviewed to ensure that it complies with the standards and guidelines that are issued by the Minister, and that the archaeological fieldwork and report recommendations ensure the conservation, protection and preservation of the cultural heritage of Ontario. When all matters relating to archaeological sites within the project area of a development proposal have been addressed to the satisfaction of the Ministry of Tourism and Culture, a letter will be issued by the ministry stating that there are no further concerns with regard to alterations to archaeological sites by the proposed development.

It is an offence under Sections 48 and 69 of the *Ontario Heritage Act* for any party other than a licensed archaeologist to make any alteration to a known archaeological site or to remove any artifact or other physical evidence of past human use or activity from the site, until such time as a licensed archaeologist has completed fieldwork on the site, submitted a report to the Minister stating that the site has no further cultural heritage value or interest, and the report has been filed in the Ontario Public Register of Archaeology Reports referred to in Section 65.1 of the *Ontario Heritage Act*.

Should previously undocumented archaeological resources be discovered, they may be a new archaeological site and therefore subject to Section 48(1) of the *Ontario Heritage Act*. The proponent or person discovering the archaeological resources must cease alteration of the site immediately and engage a licensed consultant archaeologist to carry out archaeological fieldwork, in compliance with Section 48(1) of the *Ontario Heritage Act*.



STAGE 2 ARCHAEOLOGICAL ASSESSMENT SAMSUNG GRAND RENEWABLE ENERGY PARK

The *Cemeteries Act*, R.S.O. 1990 c. C.4 and the *Funeral, Burial and Cremation Services Act*, 2002, S.O. 2002, c. 33 (when proclaimed in force) require that any person discovering human remains must notify the police or coroner and the Registrar of Cemeteries at the Ministry of Consumer Services.

GOLDER ASSOCIATES LTD.

ORIGINAL SIGNED

Tracie Carmichael, B.A., B.Ed.
Project Archaeologist

ORIGINAL SIGNED

Jim Wilson, M.A.
Principal, Senior Archaeologist

SWJM/TLC/JAW/slc

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6.0 REFERENCES CITED

Chapman, Lyman John and Donald F. Putnam

1984 The Physiography of Southern Ontario. 3rd Edition. Ontario Geological Survey Special Volume 2. Ontario Ministry of Natural Resources, Toronto.

Eley, Betty and Peter von Bitter

1989 *Cherts of Southern Ontario*. Royal Ontario Museum, Toronto.

Ellis, Chris and Neal Ferris (eds.)

1990 *The Archaeology of Southern Ontario to A.D. 1650*. Occasional Publication Number 5. London Chapter, Ontario Archaeological Society, London, ON.

Ellis, Christopher, Peter Timmins and Holly Martelle

2009 At the Crossroads and Periphery: The Archaic Archaeological Record of Southern Ontario. In *Archaic Societies: Diversity and Complexity across the Midcontinent*, edited by Thomas E. Emerson, Dale L. McElrath and Andrew C. Fortier, pp. 787-837. State University of New York Press, Albany, NY.

Fox, William

1982 The Princess Point Concept. *Arch Notes* 82(2):17-26.

2009 Ontario Cherts Revisited. In *Painting the Past With a Broad Brush: Papers in Honour of James Valliere Wright*, edited by David Keenlyside and Jean-Luc Pilon, pp. 353-370. Mercury Series, Archaeology Paper 170. Canadian Museum of Civilization, Gatineau.

Golder Associates Ltd.

2011 *Interim Stage 2 Archaeological Assessment. Grand Renewable Energy Park, Various Lots, Concessions 1N-3N and 1S-5S, The Earl Tract, The Haldimand Tract and The Sheehan Tract, Dunn Township, Concessions 1-9, Rainham Township, Concessions 1N, 1S, 2, 3 and The Jones Tract, North Cayuga Township, Concessions 3-7 and the Fradenburgh Tract, South Cayuga Township and Concessions 1-12, Walpole Township, Haldimand County, Ontario*. Report on file, Ontario Ministry of Tourism and Culture, Toronto.



STAGE 2 ARCHAEOLOGICAL ASSESSMENT SAMSUNG GRAND RENEWABLE ENERGY PARK

Government of Ontario

- 1993 *Archaeological Assessment Technical Guidelines (Stages 1-3 & Reporting Format)*. Ministry of Culture, Tourism and Recreation, Cultural Programs Branch, Archaeology and Heritage Planning, Toronto.
- 2009 *Standards and Guidelines for Consultant Archaeologists – Final Draft*. Ministry of Tourism and Culture, Toronto.
- 2011 *Standards and Guidelines for Consultant Archaeologists*. Ministry of Tourism and Culture, Toronto.
- n.d. Archaeological Sites Database (ASDB) Files. Culture Services Unit, Ontario Ministry of Tourism and Culture, Toronto.

Harper, Russell

- 1950 *The Early History of Haldimand County*. Grand River Sachem, Caledonia, ON.

Jackson, John and H.J. Gayler

- 2011 "Haldimand County". In *The Canadian Encyclopedia*. Electronic Document: <http://www.thecanadianencyclopedia.com/index.cfm?PgNm=TCE&Params=A1ARTA0003529>. Last Accessed January 18th, 2011.

Jackson, Lawrence

- 1995 Cayuga Quarry. *Arch Notes* 95(1):8-11.

Jamieson, Susan

- 1986 Late Middleport Catchment Areas and the Slack-Caswell Example. *Ontario Archaeology* 45:27-38.
- 1992 Regional Interaction and Ontario Iroquois Evolution. *Canadian Journal of Archaeology* 16:70-88

Justice, Noel

- 1987 *Stone Age Spear and Arrow Points of the Midcontinental and Eastern United States: A Modern Survey and Reference*. Indiana University Press, Bloomington, IN.

Kenyon, Ian

- 1981 Brewerton Corner-Notched Points. *KEWA* 81(8):11.



Konrad, Victor

1981 An Iroquois Frontier: The North Shore of Lake Ontario during the Late Seventeenth Century. *Journal of Historical Geography* 7(2):129-144.

MacDonald, Cheryl (ed.)

1992 *Grand Heritage: A History of Dunnville and the townships of Canborough, Dunn, Moulton, Sherbrooke and South Cayuga*. Dunville District Heritage Association, Dunville, ON.

MacDonald, Cheryl

2004 *Haldimand History: The Early Years: 1784-1850*. Heronwood Enterprises, Nanticoke, ON.

2011 "Norfolk County". In *The Canadian Encyclopedia*. Electronic Document: <http://www.thecanadianencyclopedia.com/index.cfm?PgNm=TCE&Params=A1ARTA0009664>. Last Accessed January 18th, 2011.

MacDonald, I.D.

1980 *Life Science Features of the Haldimand Clay Plain Physiographic Region*. Ontario Ministry of Natural Resources, Parks and Recreation Section, Central Region, Richmond Hill, ON.

Middleton, Jesse Edgar and Fred Landon

1927 *Province of Ontario: A History 1615 to 1927*. Dominion Publishing Company, Toronto.

Noble, William

1978 The Neutral Indians. In *Essays in Northeastern Anthropology in Memory of Marian E. White*, edited by William Engelbrecht and Donald Grayson, pp. 152-164. Occasional Publications in Northeastern Anthropology 5. Department of Anthropology, Franklin Pierce College, Rindge, NH.

Page, H.R. & Co.

1879 *Illustrated Historical Atlas of The County of Haldimand, Ont.* H.R. Page & Co., Toronto.



Parker, L.

1992 Kramer Points. *KEWA* 92(8).

Pendergast, James

1995 The Identity of Jacques Cartier's Stadaconans and Hochelagans: The Huron-Iroquois Option. In *Origins of the People of the Longhouse: Proceedings of the 21st Annual Symposium of the Ontario Archaeological Society*, edited by André Bekerman and Gary Warrick, pp. 106-118. Ontario Archaeological Society, North York.

Poulton, D.R., C.F. Dodd, M.W. Spence and R.D. Fecteau

1996 The Fradenburg Site: An Historic Neutral Village on the Lower Grand River. *KEWA* 96(4-5):2-51.

Presant, E.W. and C.J. Acton

1984 *The Soils of the Regional Municipality of Haldimand-Norfolk*. Report No. 57 of the Ontario Institute of Pedology. Land Resource Research Institute Contribution No. 84-13. 2 vols. Land Resource Research Institute, Research Branch, Agriculture Canada, Guelph.

Ritchie, William

1971 *A Typology and Nomenclature for New York Projectile Points*. Revised Edition. New York State Museum and Science Service, Bulletin Number 384. The University of the State of New York, The State Education Department, Albany, New York.

Rye, Owen

1981 *Pottery Technology: Principles and Reconstruction*. Taraxacum, Washington, D.C.

Smith, Donald

2002 Their Century and a Half on the Credit: The Mississaugas in Mississauga. In *Mississauga: The First 10,000 Years*, edited by Frank Dieterman, pp. 107-122. Eastend Books, Toronto.



Spence, Michael, Robert Pihl and Carl Murphy

1990. Cultural complexes of the Early and Middle Woodland periods. In *The Archaeology of Southern Ontario to A.D. 1650*, edited by Christopher Ellis and Neal Ferris, pp. 125-169. Occasional Papers of the London Chapter, Ontario Archaeological Society, No. 5. Ontario Archaeological Society, London, ON.

Stantec Consulting Inc.

- 2010 *Final Report, Stage 1 Archaeological Assessment, Grand Renewable Energy Park, Haldimand County, Ontario*. Report submitted to Samsung Renewable Energy Inc., Mississauga.
- 2011 *Interim Report, Stage 2 Archaeological Assessment, Samsung Grand Renewable Energy Park, Haldimand County, Ontario*. Report submitted to Samsung Renewable Energy Inc., Mississauga.

Stothers, David

- 1977 *The Princess Point Complex*. Mercury Series No. 58. Archaeological Survey of Canada, National Museum of Man, Ottawa.

Tanner, Helen (ed.)

- 1987 *Atlas of Great Lakes Indian History*. University of Oklahoma Press, Norman, OK.

Timmins, Peter

- 1995 Stelco 1: a Late Paleo-Indian Hi-Lo Site in the Region of Haldimand Norfolk, Ontario. *KEWA* 95(5):2-22.

Warrick, Gary

- 2005 Finding the Invisible Mississaugas of Davisville. *Grand Actions, Newsletter of the Grand River Conservation Authority* 10(4):1-2.

Weaver, Sally

- 1978 Six Nations of the Grand River, Ontario. In *Handbook of North American Indians. Volume 15: Northeast*, edited by Bruce Trigger, pp. 525-536. Smithsonian Institution, Washington.



**STAGE 2 ARCHAEOLOGICAL ASSESSMENT
SAMSUNG GRAND RENEWABLE ENERGY PARK**

White, Marian

1978 Neutral and Wenro. In *Handbook of North American Indians Volume 15: Northeast*, edited by Bruce G. Trigger, pp. 407-411. Smithsonian Institution, Washington.



7.0 IMPORTANT INFORMATION AND LIMITATIONS OF THIS REPORT

Golder Associates Ltd. (Golder) has prepared this report in a manner consistent with that level of care and skill ordinarily exercised by members of the archaeological profession currently practicing under similar conditions in the jurisdiction in which the services are provided, subject to the time limits and physical constraints applicable to this report. No other warranty, expressed or implied is made.

This report has been prepared for the specific site, design objective; developments and purpose described to Golder, by Stantec Consulting Ltd. The factual data, interpretations and recommendations pertain to a specific project as described in this report and are not applicable to any other project or site location.

The information, recommendations and opinions expressed in this report are for the sole benefit of the Client. No other party may use or rely on this report or any portion thereof without Golder's express written consent. If the report was prepared to be included for a specific permit application process, then upon the reasonable request of the Client, Golder may authorize in writing the use of this report by the regulatory agency as an Approved User for the specific and identified purpose of the applicable permit review process. Any other use of this report by others is prohibited and is without responsibility to Golder. The report, all plans, data, drawings and other documents as well as electronic media prepared by Golder are considered its professional work product and shall remain the copyright property of Golder, who authorizes only the Client and Approved Users to make copies of the report, but only in such quantities as are reasonably necessary for the use of the report by those parties. The Client and Approved Users may not give, lend, sell, or otherwise make available the report or any portion thereof to any other party without the express written permission of Golder. The Client acknowledges the electronic media is susceptible to unauthorized modification, deterioration and incompatibility and therefore the Client cannot rely upon the electronic media versions of Golder's report or other work products.

Unless otherwise stated, the suggestions, recommendations and opinions given in this report are intended only for the guidance of the Client in the design of the specific project.

Special risks occur whenever archaeological investigations are applied to identify subsurface conditions and even a comprehensive investigation, sampling and testing program may fail to detect all or certain archaeological resources. The sampling strategies incorporated in this study comply with those identified in the Ministry of Tourism and Culture's 1993 *Archaeological Assessment Technical Guidelines (Stages 1-3 & Reporting Format)*.



APPENDIX A

Aboriginal Engagement



APPENDIX A ABORIGINAL ENGAGEMENT

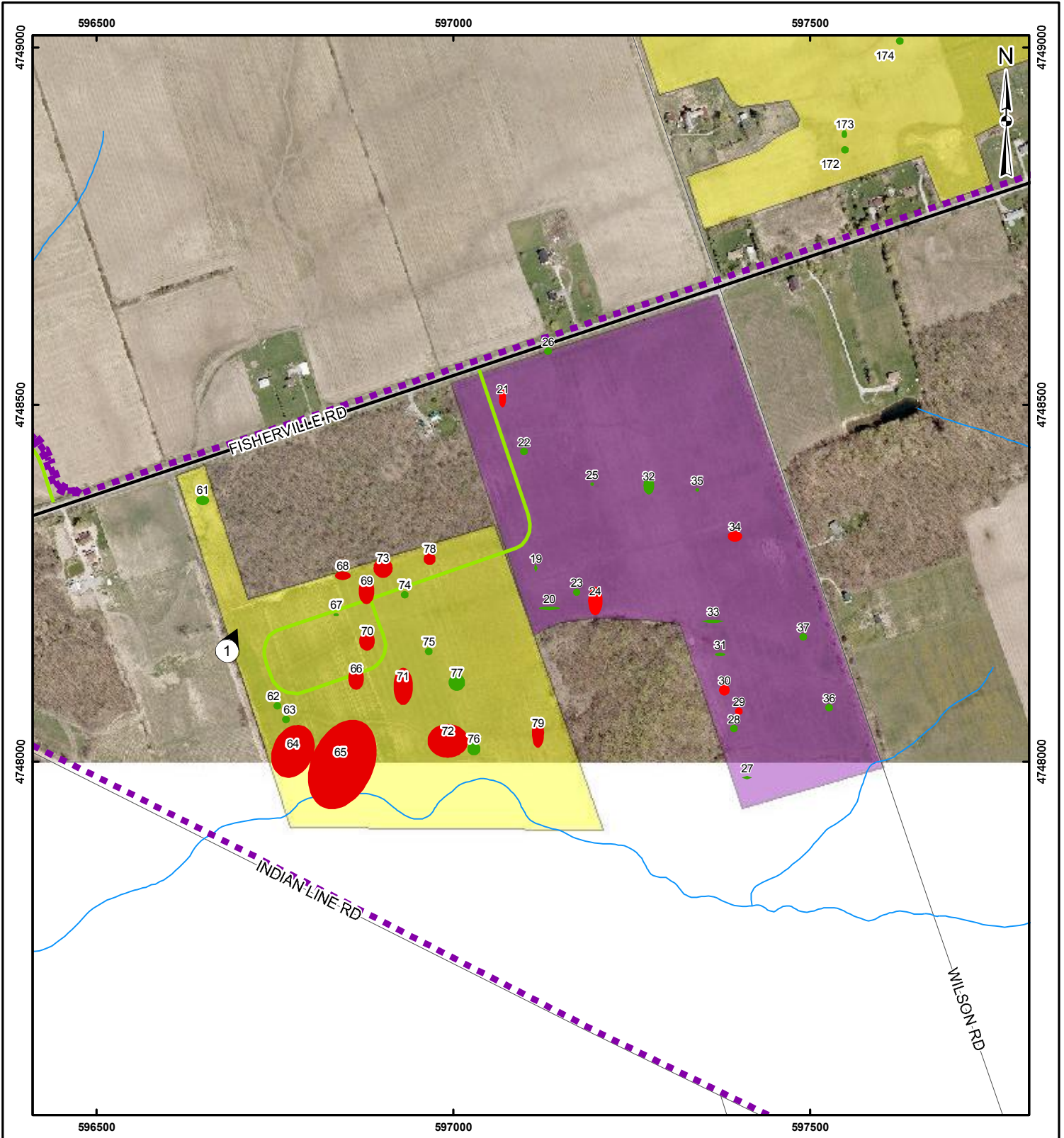
The Stage 2 archaeological assessment of the Grand Renewable Energy Park has involved consultation with and participation by First Nations people whose traditional territories are affected by the study area. The study area falls within the territory outlined by Treaty Number 3 made between the British and the Mississaugas, on December 7th, 1792, though purchased as early as 1784. Treaty Number 3 served to set aside lands for Six Nations settlement in the Grand River Valley through the Haldimand Proclamation of October 25th, 1784. Given the historic connection between Six Nations, the Grand River Valley and Haldimand County, two members of Six Nations, Jason Silver and Sheila Silver, were asked to take part in the Stage 2 Archaeological Assessment for the Grand Renewable Energy Park. Both Jason and Sheila worked as archaeological field technicians for Golder Associates in 2010 and 2011. Aside from their duties as archaeological field technicians, Jason and Sheila also work as First Nations monitors for the Haldimand Tract and report annually to Mr. Paul General of the Six Nations Eco-Centre on archaeological projects conducted within the Haldimand Tract.

Mrs. Silver was present in the field on December 6th and 11th, 2010, June 14th, 2011 and July 6th, 2011. Mr. Silver was present in the field on December 6th, 2010, June 14th, 2011 and July 6th, 2011. With the expanding role that First Nations engagement is taking in Ontario Cultural Resource Management, it is expected and understood that the involvement of First Nations will increase if any Stage 3 or Stage 4 archaeological assessment is to be conducted within the study area.



APPENDIX B

Stage 2 Study Methods and Results



LEGEND

- Turbine
- Plate Number and Direction
- Overhead Cable
- Access Road
- Watercourse
- Archaeological Site (No Stage 3 Required)
- Archaeological Site (Stage 3 Required)
- Stage 2 Completed Winter 2010-2011
- Surveyed Area Spring and Summer 2011 (Pedestrian 5m Intervals)

REFERENCE

Base Data - MNR NRVIS, obtained 2004, CANMAP v2006.4
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






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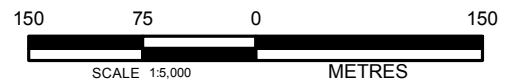
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-  Surveyed Area Spring and Summer 2011 (Pedestrian 5m Intervals)
-  Overhead Cable

REFERENCE

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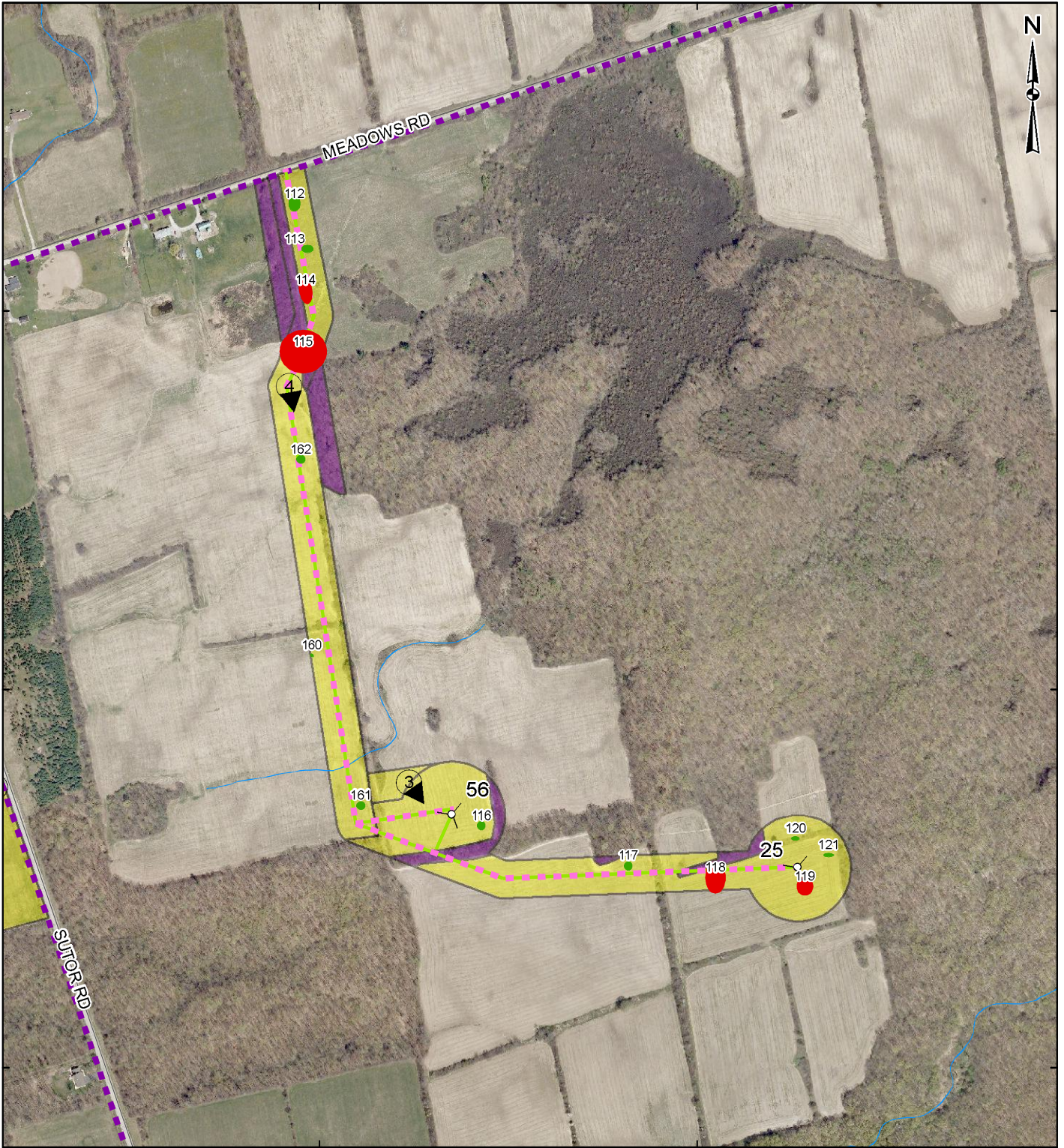
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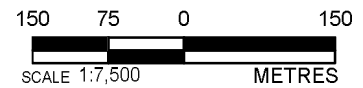


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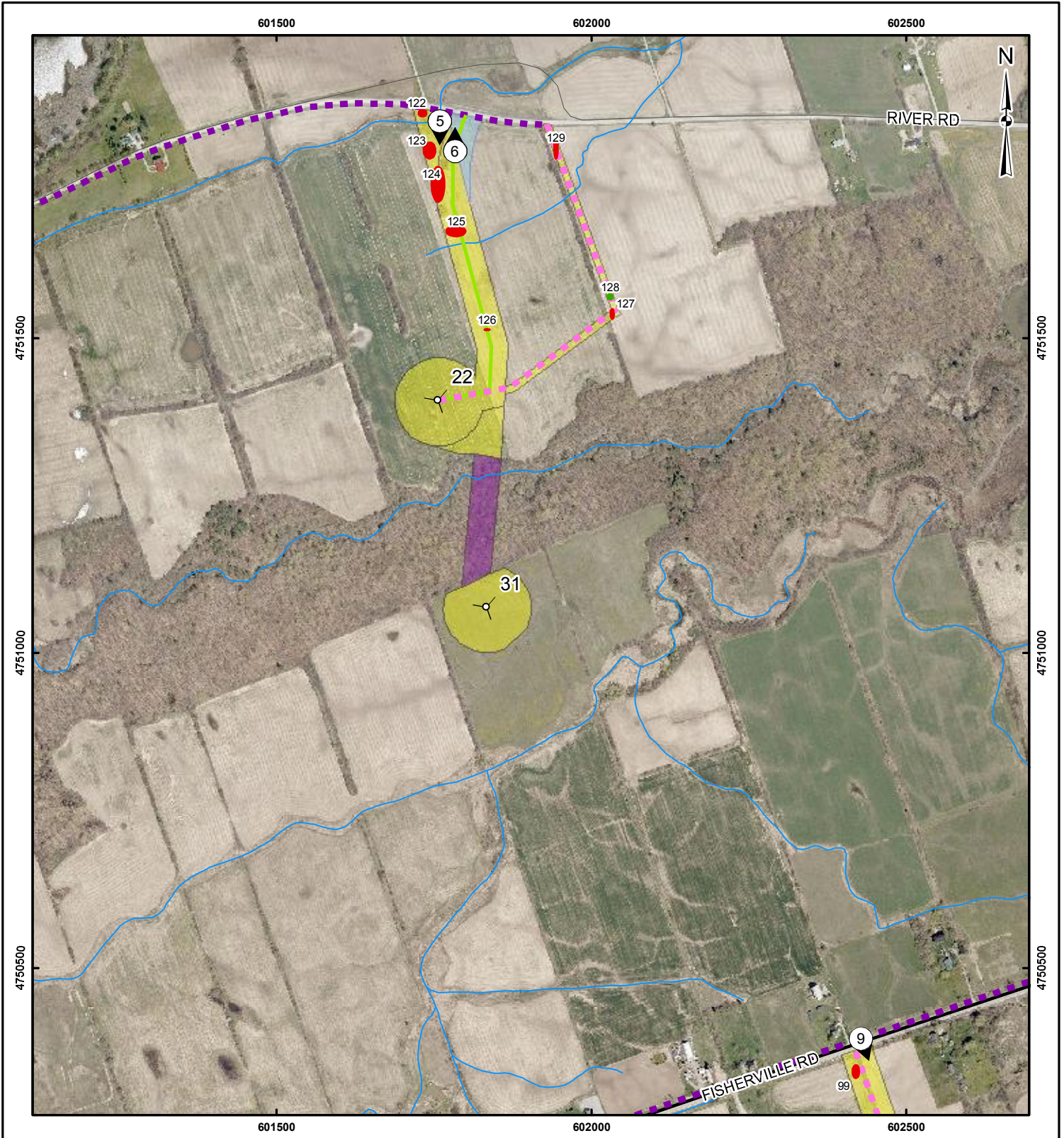
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- Plate Number and Direction
- Underground Cable
- Overhead Cable
- Access Road
- Watercourse

REFERENCE












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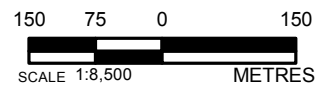



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-  Poorly Drained Area
-  Underground Cable
-  Overhead Cable
-  Access Road
-  Watercourse
-  Plate Number and Direction

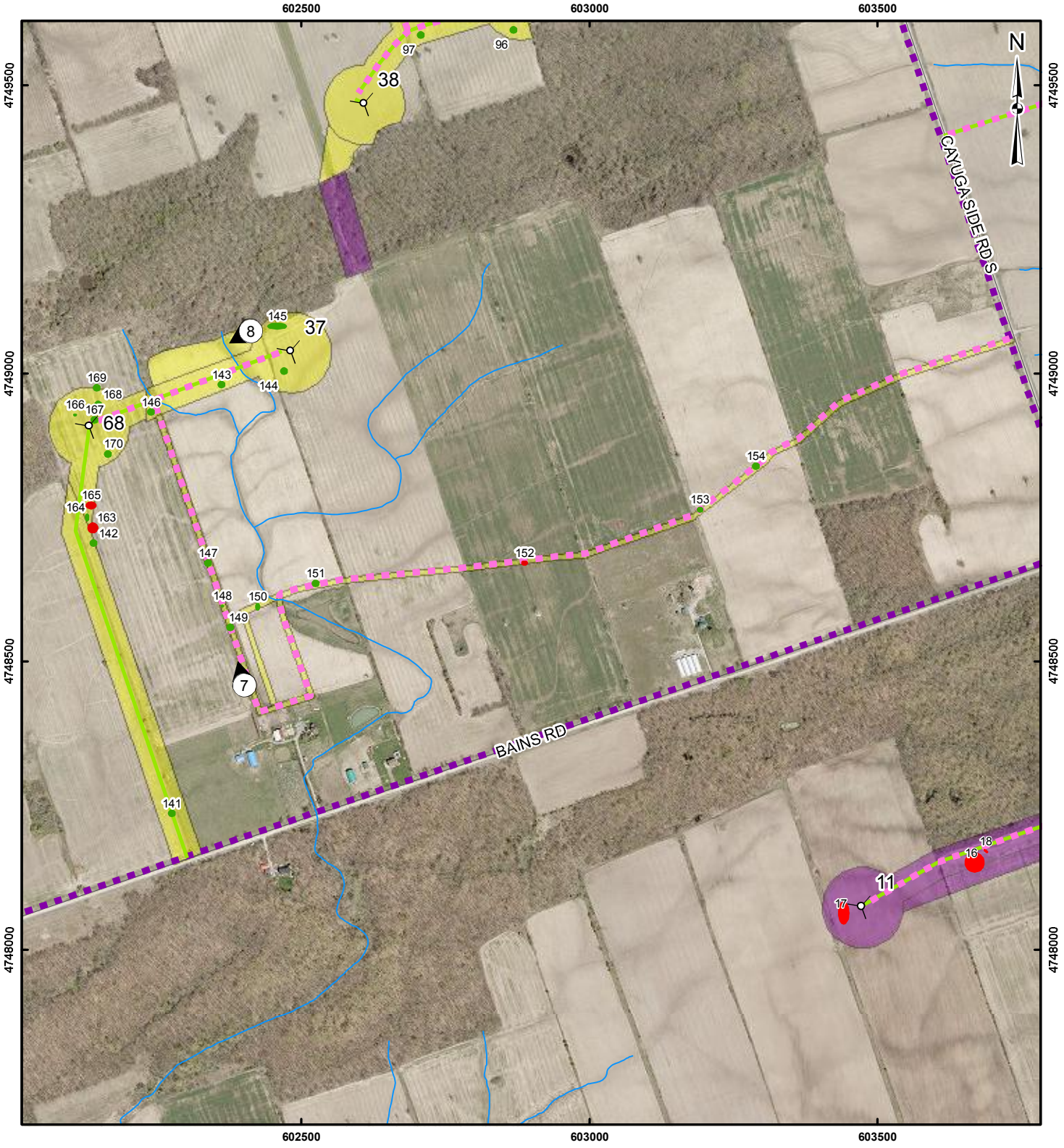
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











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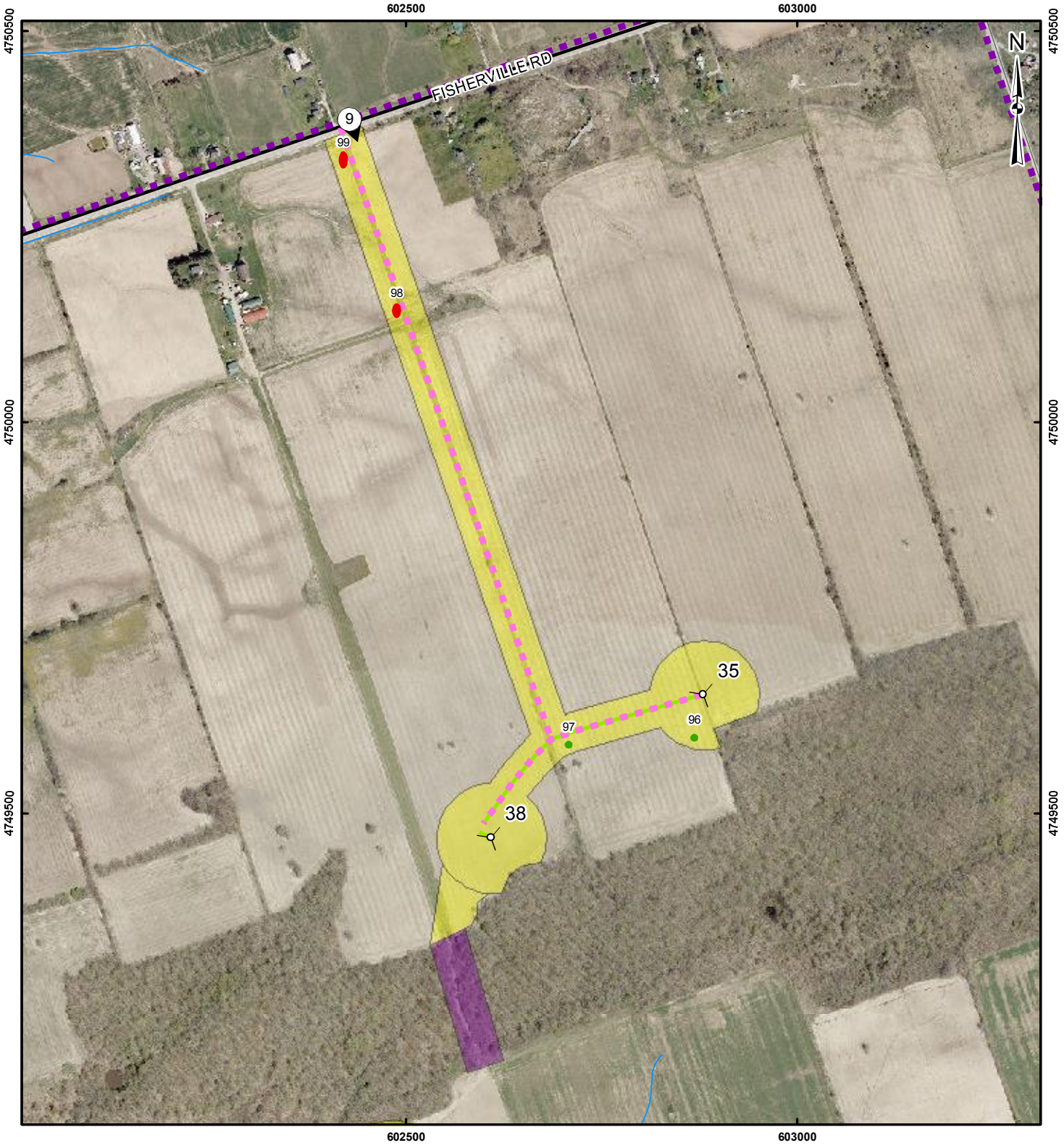
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-  Underground Cable
-  Overhead Cable
-  Access Road
-  Watercourse

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







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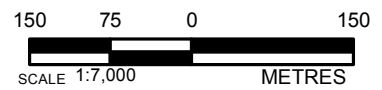



LEGEND

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-  Underground Cable
-  Overhead Cable
-  Access Road
-  Watercourse
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-  Stage 2 Completed Winter 2010-2011

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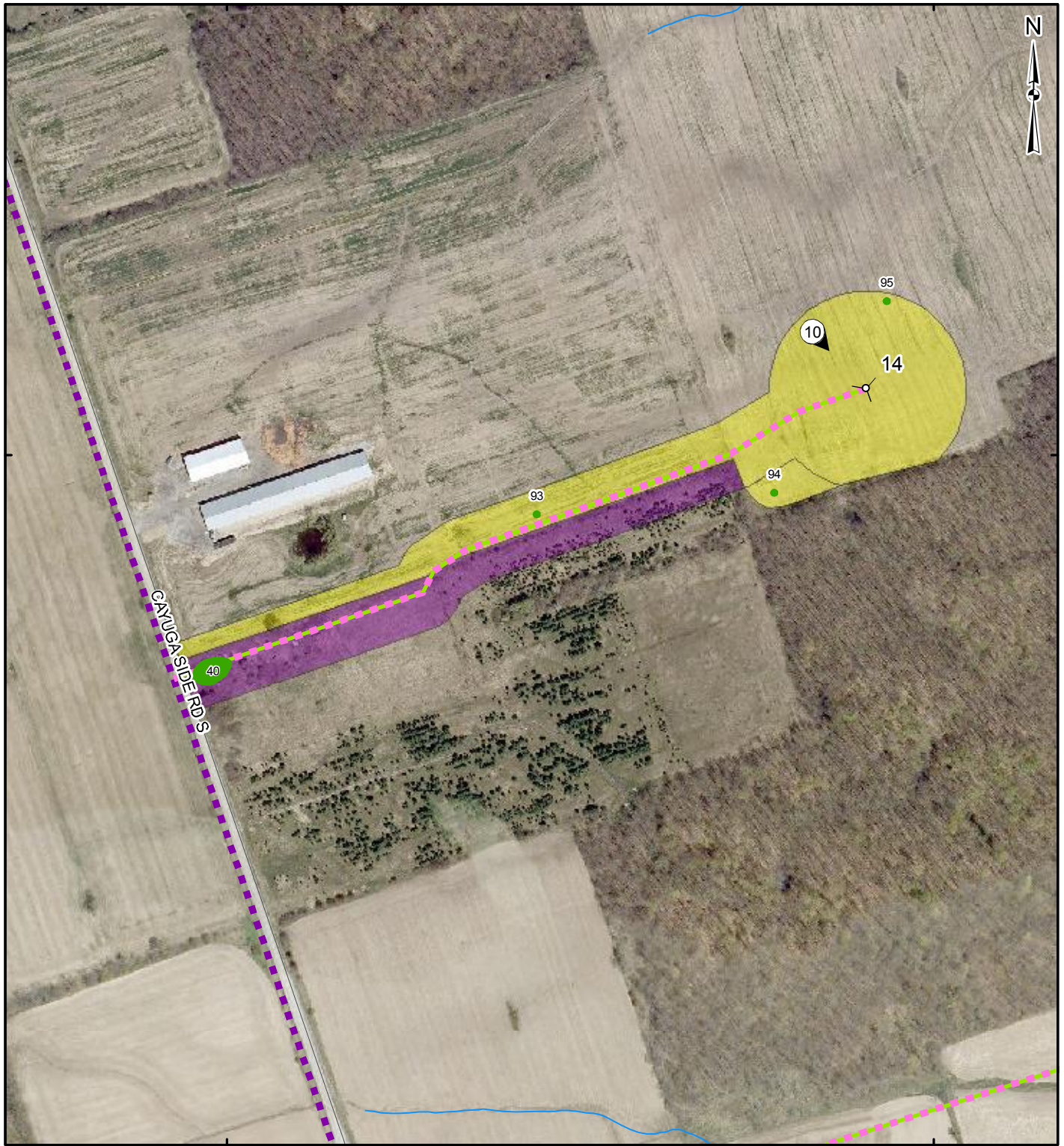
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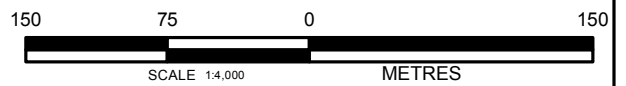
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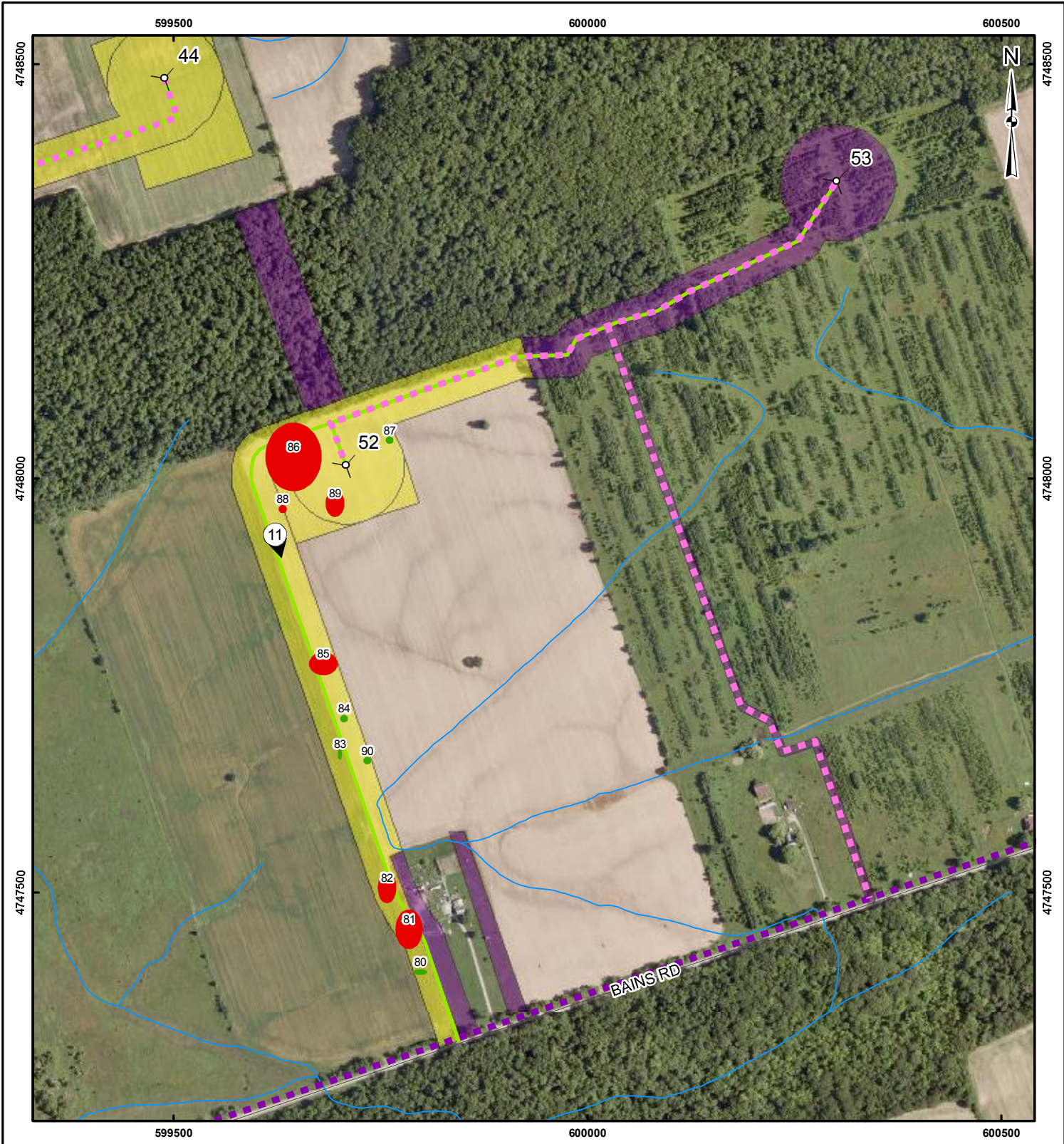
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- Access Road
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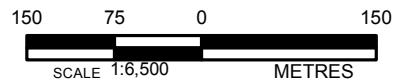


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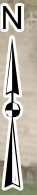


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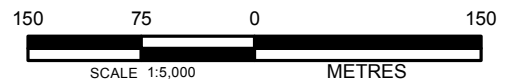
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LEGEND

-  Turbine
-  Archaeological Site (No Stage 3 Required)
-  Archaeological Site (Stage 3 Required)
-  Stage 2 Completed Winter 2010-2011
-  Surveyed Area Spring and Summer 2011 (Pedestrian 5m Intervals)
-  Disturbed Area
-  Underground Cable
-  Overhead Cable
-  Access Road
-  Watercourse
-  Plate Number and Direction

REFERENCE

Base Data - MNR NRVIS, obtained 2004, CANMAP v2006.4
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PROJECT	STAGE 2 ARCHAEOLOGICAL ASSESSMENT GRAND RENEWABLE ENERGY PARK HALDIMAND COUNTY, ONTARIO		
TITLE	STAGE 2 METHODS AND RESULTS		
	PROJECT NO. 10-1136-0072	SCALE AS SHOWN	REV. 0.0
	DESIGN AH 12 Jan. 2011		
	GIS BC 3 May. 2011		
	CHECK		
	REVIEW		
 Mississauga, Ontario		TILE I	

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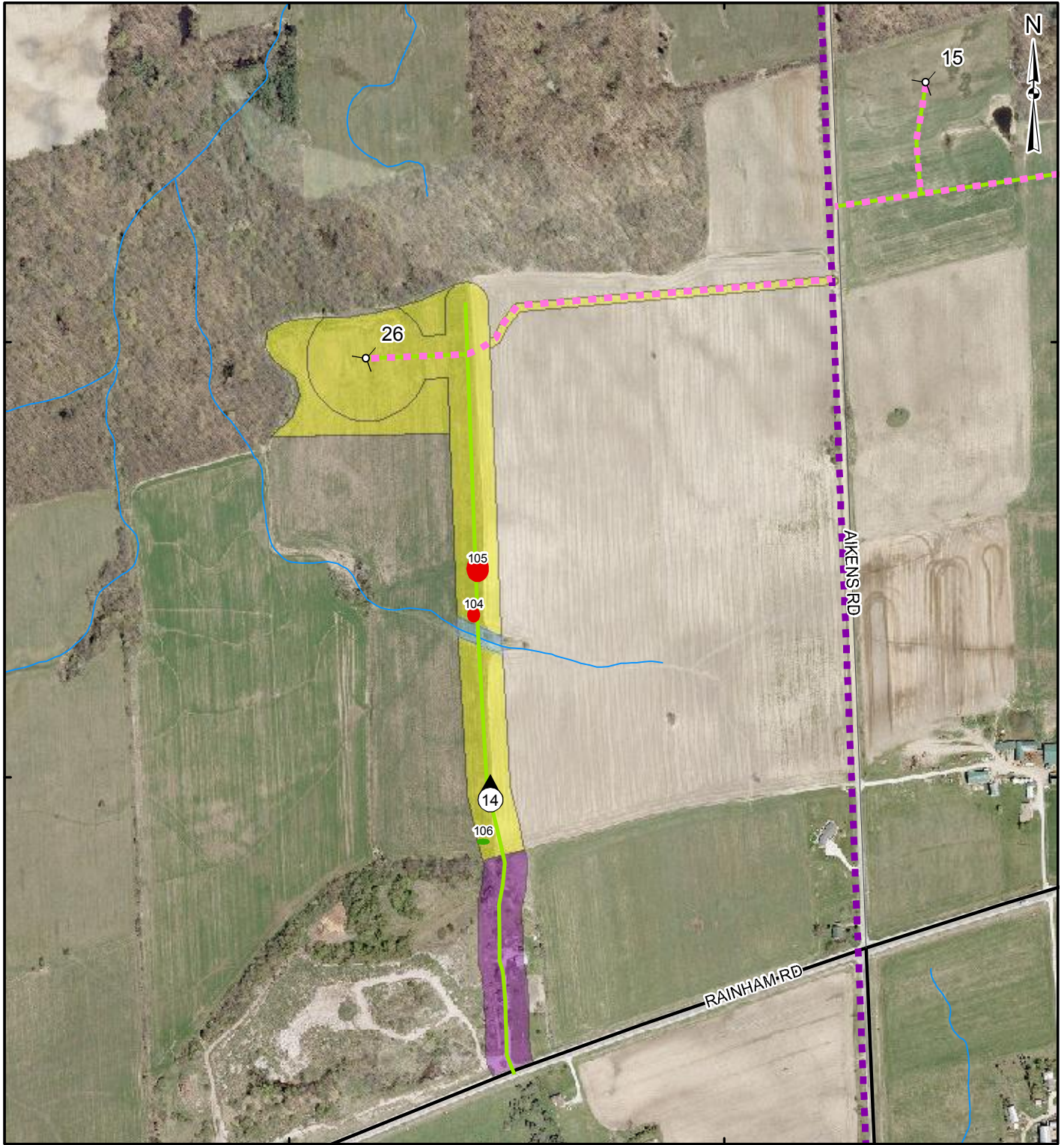
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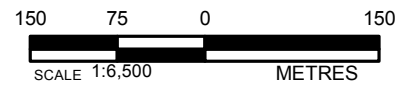


LEGEND

- Turbine
- Plate Number and Direction
- Archaeological Site (No Stage 3 Required)
- Archaeological Site (Stage 3 Required)
- Stage 2 Completed Winter 2010-2011
- Surveyed Area Spring and Summer 2011 (Pedestrian 5m Intervals)
- Poorly Drained Area
- Underground Cable
- Overhead Cable
- Access Road
- Watercourse

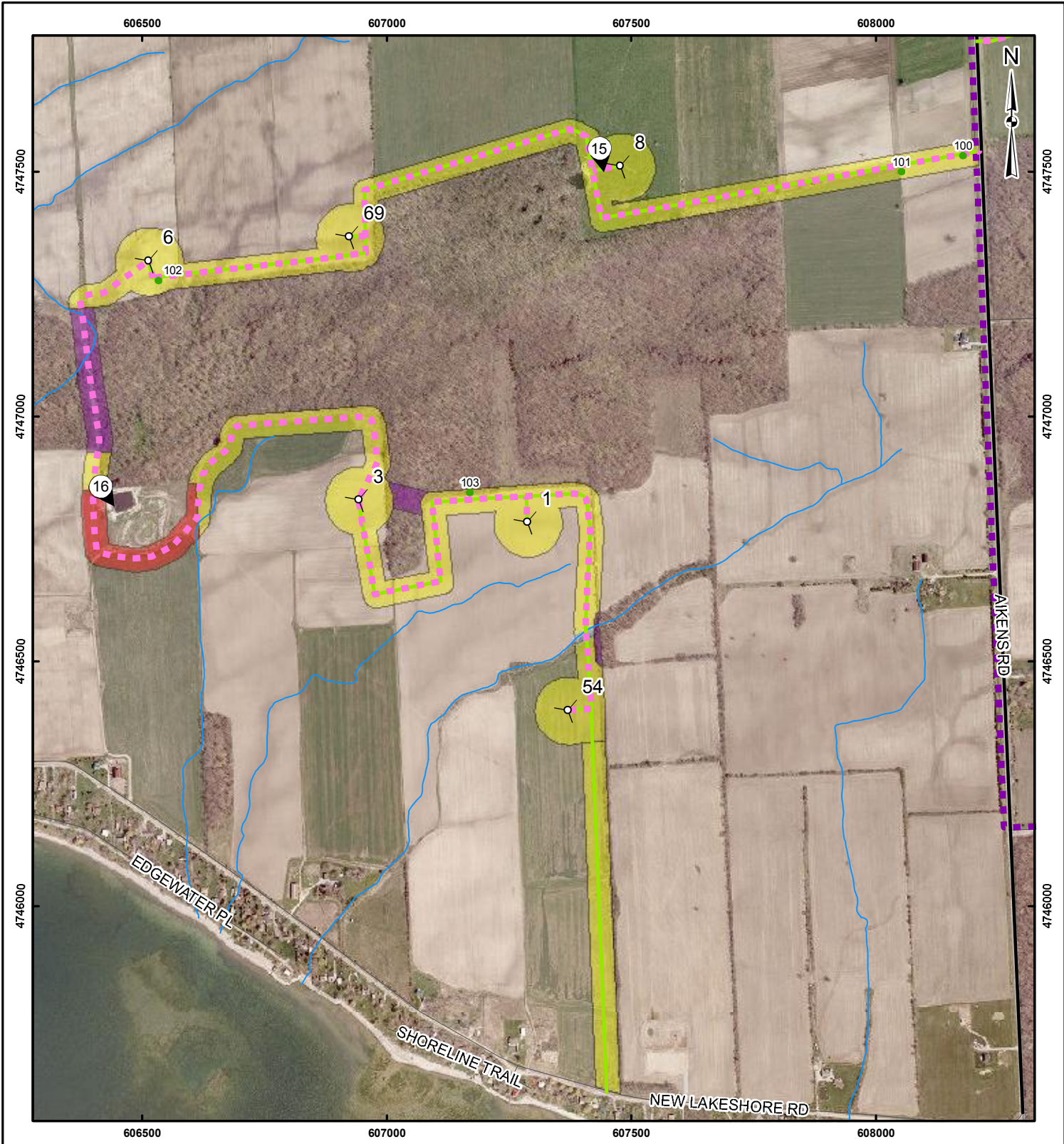
REFERENCE

Base Data - MNR NRVIS, obtained 2004, CANMAP v2006.4
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PROJECT	STAGE 2 ARCHAEOLOGICAL ASSESSMENT GRAND RENEWABLE ENERGY PARK HALDIMAND COUNTY, ONTARIO		
TITLE	STAGE 2 METHODS AND RESULTS		
 Mississauga, Ontario	PROJECT NO.	10-1136-0072	SCALE AS SHOWN
	DESIGN	AH 12 Jan. 2011	REV. 0.0
	GIS	BC 3 May. 2011	
	CHECK		
	REVIEW		

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LEGEND

- Turbine
- Plate Number and Direction
- Archaeological Site (No Stage 3 Required)
- Stage 2 Completed Winter 2010-2011
- Surveyed Area Spring and Summer 2011 (Pedestrian 5m Intervals)
- Disturbed Area
- Poorly Drained Area
- Underground Cable
- Overhead Cable
- Access Road
- Watercourse

REFERENCE

Base Data - MNR NRVIS, obtained 2004, CANMAP v2006.4
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PROJECT	STAGE 2 ARCHAEOLOGICAL ASSESSMENT GRAND RENEWABLE ENERGY PARK HALDIMAND COUNTY, ONTARIO		
TITLE	STAGE 2 METHODS AND RESULTS		
 Golder Associates Mississauga, Ontario		PROJECT NO. 10-1136-0072	SCALE AS SHOWN
		DESIGN AH 12 Jan. 2011	REV. 0.0
		GIS BC 3 May. 2011	
		CHECK	
REVIEW			

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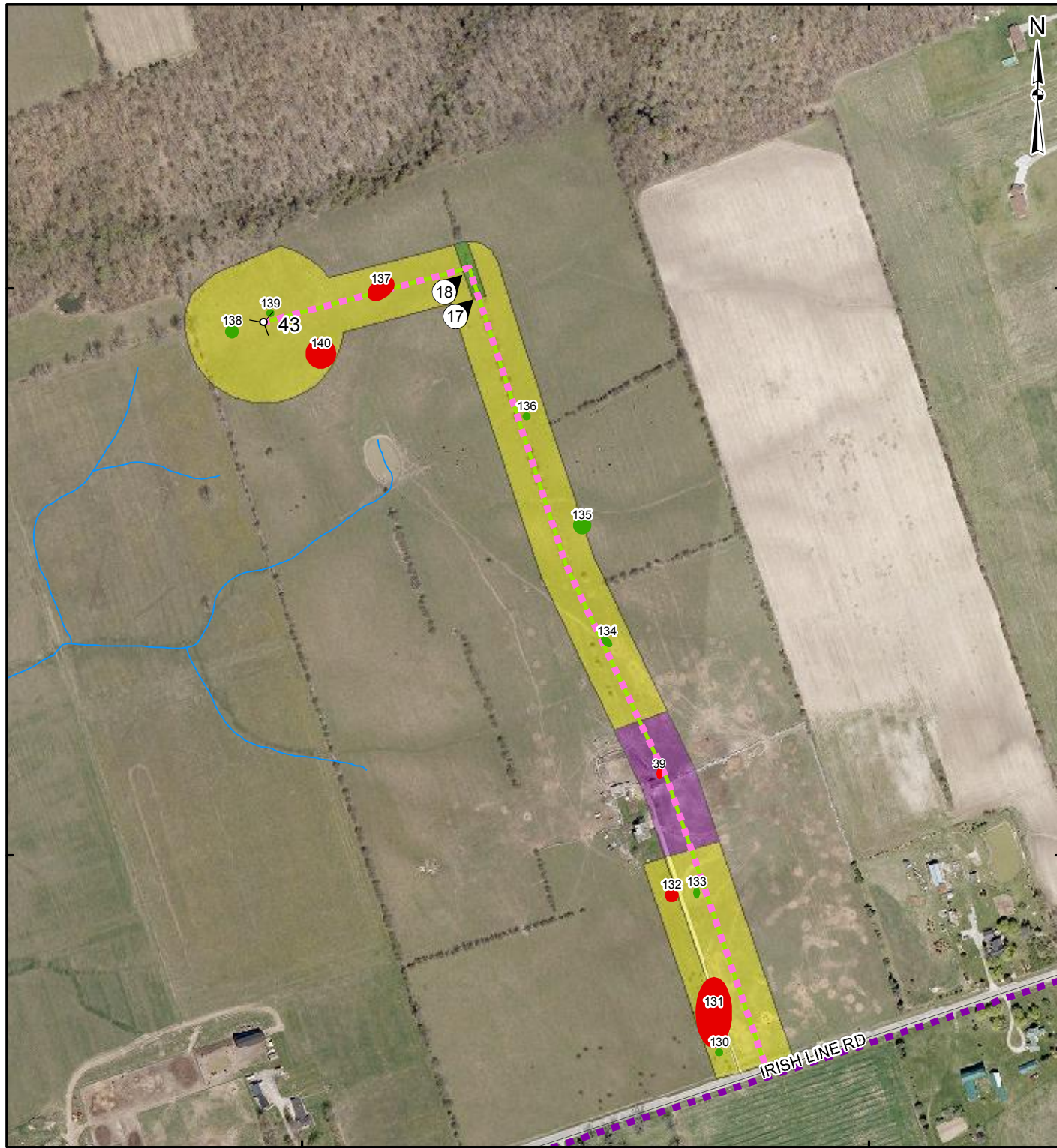
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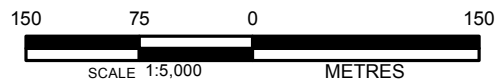


LEGEND

- Turbine
- Archaeological Site (No Stage 3 Required)
- Archaeological Site (Stage 3 Required)
- Stage 2 Completed Winter 2010-2011
- Surveyed Area Spring and Summer 2011 (Pedestrian 5m Intervals)
- Surveyed Area Spring 2011 (Test Pitted 5m Intervals)
- Underground Cable
- Overhead Cable
- Access Road
- Watercourse
- Plate Number and Direction

REFERENCE

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PROJECT	STAGE 2 ARCHAEOLOGICAL ASSESSMENT GRAND RENEWABLE ENERGY PARK HALDIMAND COUNTY, ONTARIO		
TITLE	STAGE 2 METHODS AND RESULTS		
	PROJECT NO. 10-1136-0072	SCALE AS SHOWN	REV. 0.0
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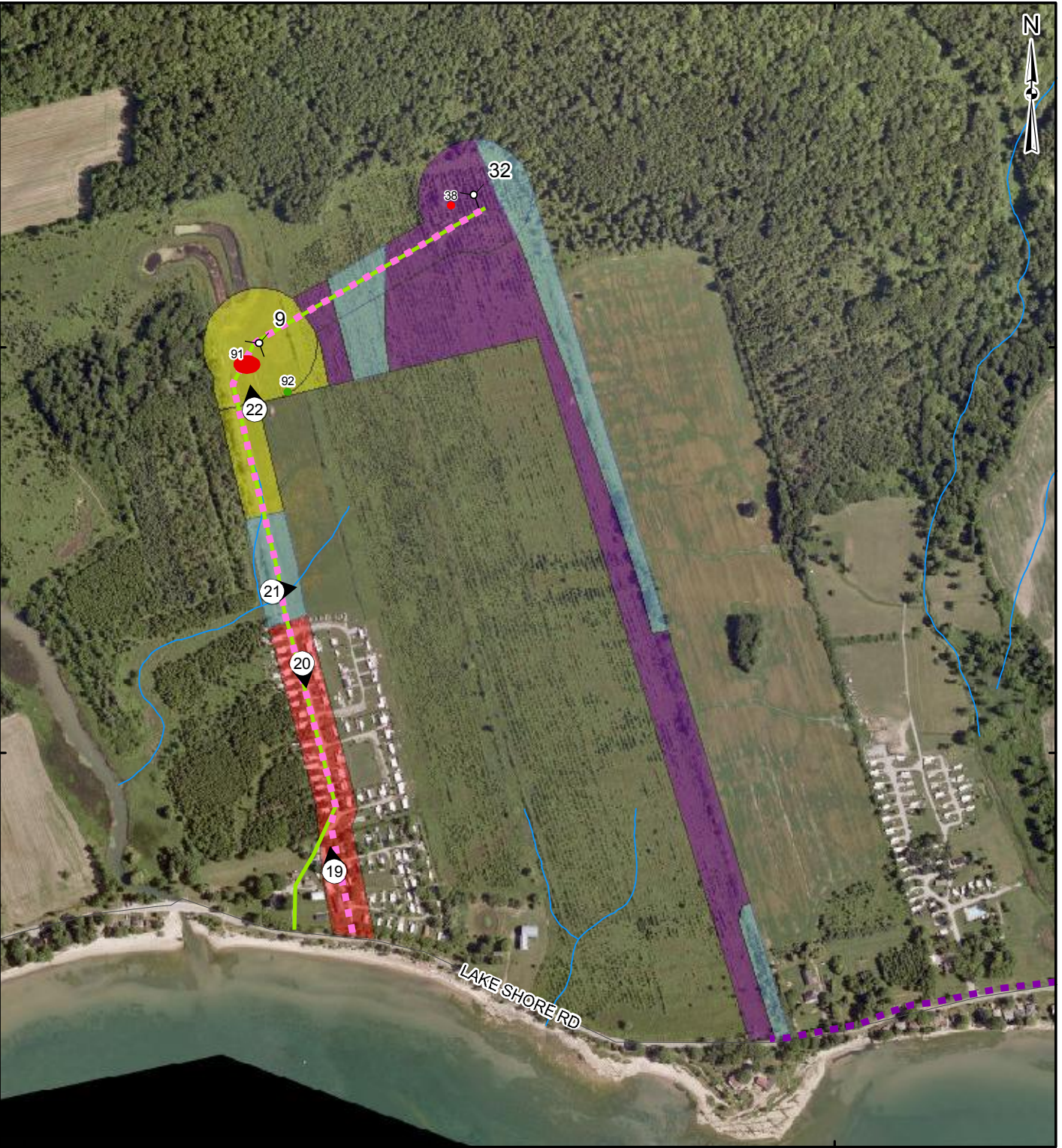
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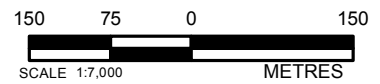
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LEGEND

- Turbine
- Plate Number and Direction
- Underground Cable
- Overhead Cable
- Access Road
- Watercourse
- Archaeological Site (No Stage 3 Required)
- Archaeological Site (Stage 3 Required)
- Stage 2 Completed Winter 2010-2011
- Surveyed Area Spring and Summer 2011 (Pedestrian 5m Intervals)
- Poorly Drained Area
- Disturbed Area

REFERENCE

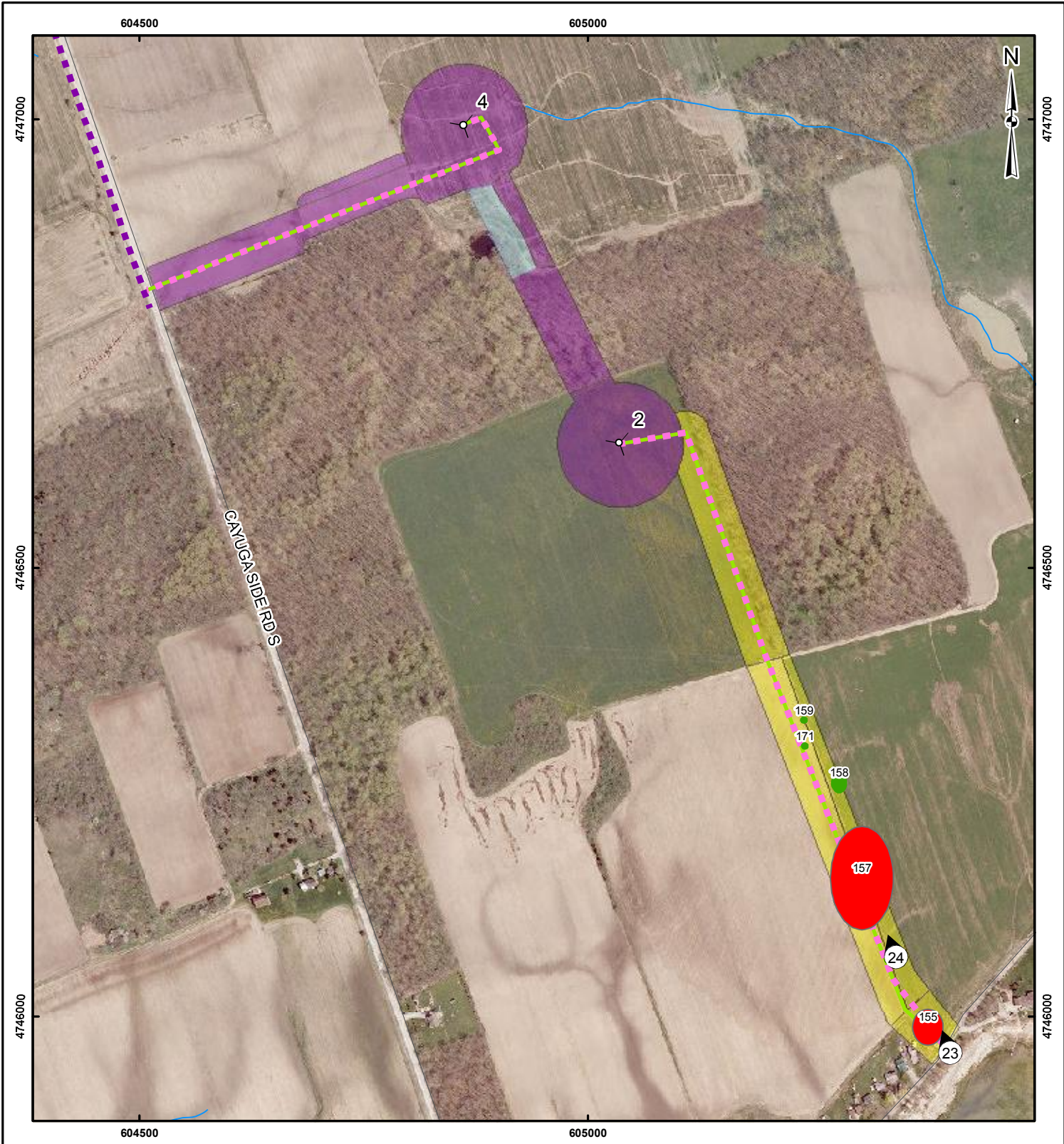
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TITLE		STAGE 2 METHODS AND RESULTS	
 Mississauga, Ontario	PROJECT NO.	10-1136-0072	SCALE AS SHOWN
	DESIGN	AH 12 Jan. 2011	REV. 0.0
	GIS	BC 3 May. 2011	
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	REVIEW		

TILE M

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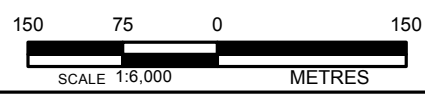


LEGEND

- Turbine
- Plate Number and Direction
- Archaeological Site (No Stage 3 Required)
- Archaeological Site (Stage 3 Required)
- Stage 2 Completed Winter 2010-2011
- Surveyed Area Spring and Summer 2011 (Pedestrian 5m Intervals)
- Poorly Drained Area
- Underground Cable
- Overhead Cable
- Access Road
- Watercourse

REFERENCE

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PROJECT	STAGE 2 ARCHAEOLOGICAL ASSESSMENT GRAND RENEWABLE ENERGY PARK HALDIMAND COUNTY, ONTARIO		
TITLE	STAGE 2 METHODS AND RESULTS		
 Golder Associates Mississauga, Ontario	PROJECT NO. 10-1136-0072	SCALE AS SHOWN	REV. 0.0
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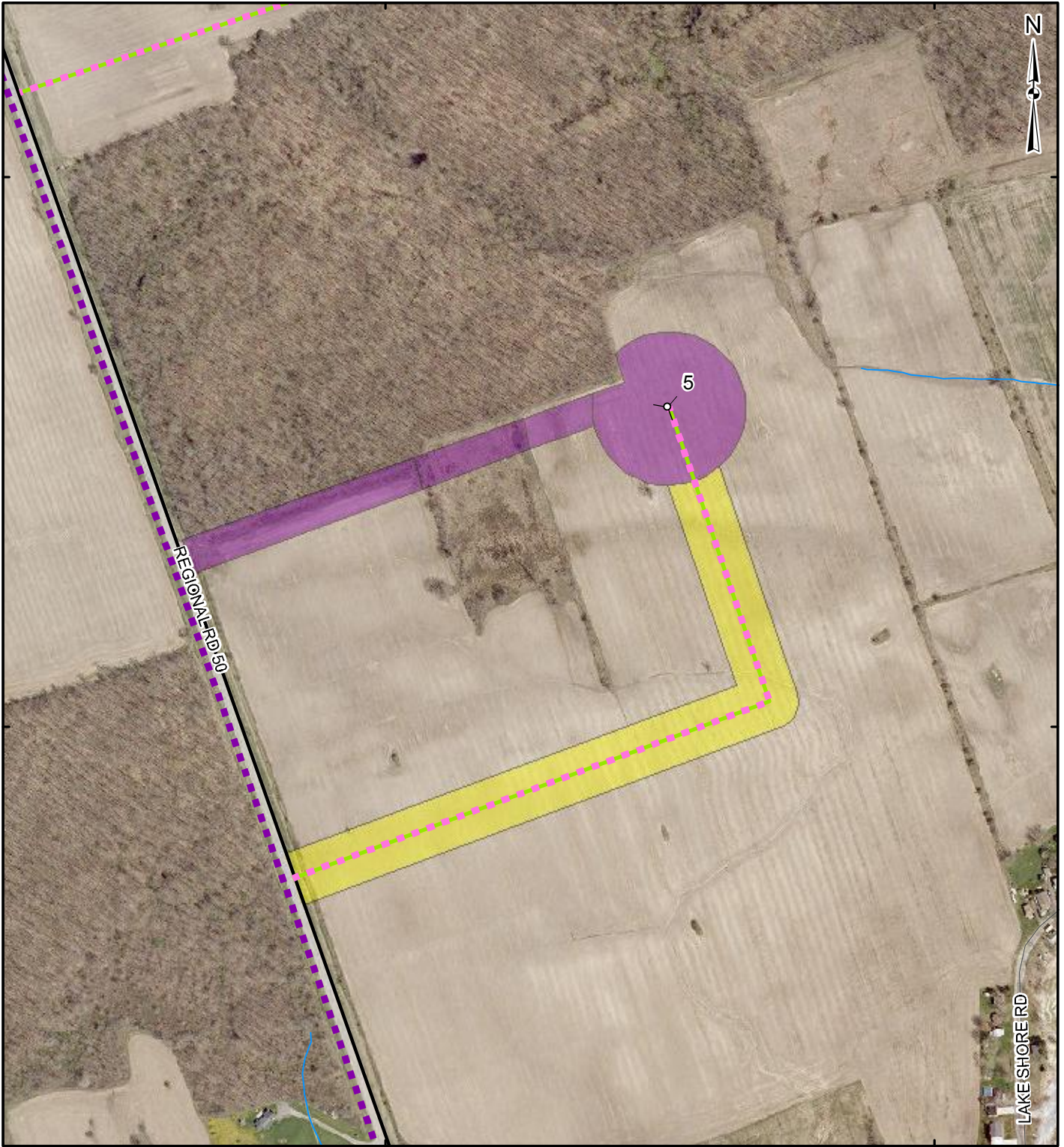
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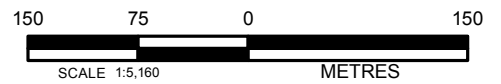



LEGEND

-  Turbine
-  Plate Number and Direction
-  Underground Cable
-  Overhead Cable
-  Access Road
-  Watercourse
-  Stage 2 Completed Winter 2010-2011
-  Surveyed Area Spring and Summer 2011 (Pedestrian 5m Intervals)

REFERENCE

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TITLE	STAGE 2 METHODS AND RESULTS		
 Mississauga, Ontario	PROJECT NO.	10-1136-0072	SCALE AS SHOWN
	DESIGN	AH 12 Jan. 2011	REV. 0.0
	GIS	BC 3 May. 2011	
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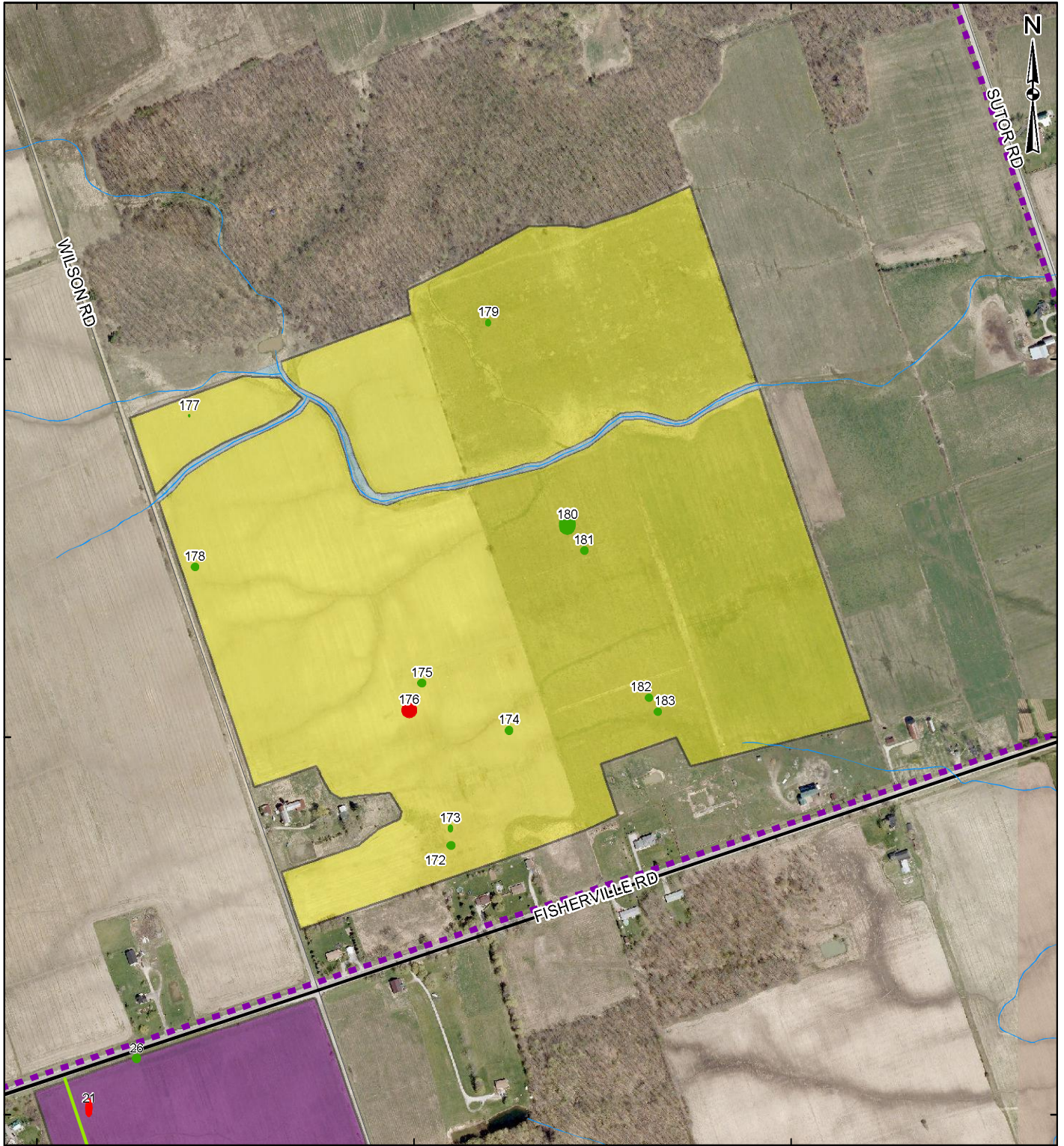
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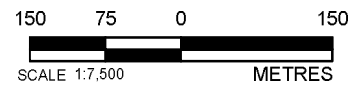


LEGEND

- Turbine
- Plate Number and Direction
- Overhead Cable
- Access Road
- Watercourse
- Archaeological Site (No Stage 3 Required)
- Archaeological Site (Stage 3 Required)
- Stage 2 Completed Winter 2010-2011
- Surveyed Area Spring and Summer 2011 (Pedestrian 5m Intervals)
- Poorly Drained Areas

REFERENCE

Base Data - MNR NRVIS, obtained 2004, CANMAP v2006.4
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PROJECT	STAGE 2 ARCHAEOLOGICAL ASSESSMENT GRAND RENEWABLE ENERGY PARK HALDIMAND COUNTY, ONTARIO		
TITLE	STAGE 2 METHODS AND RESULTS		
 Golder Associates Mississauga, Ontario	PROJECT NO.	10-1136-0072	SCALE AS SHOWN
	DESIGN	AH 12 Jan. 2011	REV. 0.0
	GIS	BC 3 May, 2011	
	CHECK		
	REVIEW		

TILE P



APPENDIX C

Complete Stage 2 Catalogue



APPENDIX C COMPLETE STAGE 2 CATALOGUE

Location 64 (AfGw-190)	Cat. No.	Context	Artifact(s)	Freq.	Comments
	1	surface	PPO	1	Onondaga; Adena-like
	2	surface	SCR	1	Dundee; end

Location 65 (AfGw-191)	Cat. No.	Context	Artifact(s)	Freq.	Comments
	1	surface	BIF	1	Onondaga; stemmed lanceolate; reworked

Location 66 (AfGw-192)	Cat. No.	Context	Artifact(s)	Freq.	Comments
	1	surface	PPO	1	Onondaga; side-notched; base
	2	surface	PPO	1	Onondaga; bifurcate base-like; base; one tang edge damaged
3	surface	PPO	1	Dundee; corner-notched; stem missing; tip damaged	

Location 71 (AfGw-196)	Cat. No.	Context	Artifact(s)	Freq.	Comments
	1	surface	PPO	1	Onondaga; Meadowood; reworked

Location 73 (AfGw-198)	Cat. No.	Context	Artifact(s)	Freq.	Comments
	1	surface	PPO	1	Onondaga; Ace of Spades; possible knife

Location 79 (AfGw-200)	Cat. No.	Context	Artifact(s)	Freq.	Comments
	1	surface	PPO	1	Onondaga; Ace of Spades; base
2	surface	PPO	1	Onondaga; corner-notched; tip and one tang edge missing	

Location 82 (AfGw-202)	Cat. No.	Context	Artifact(s)	Freq.	Comments
	1	surface	PPO	1	Onondaga; Brewerton Side-Notched; tip damaged; one barb damaged



APPENDIX C COMPLETE STAGE 2 CATALOGUE

Location	Cat. No.	Context	Artifact(s)	Freq.	Comments
Location 87 (AfGw-205)	1	surface	PPO	1	Onondaga; Meadowood; midshaft
Location 88 (AfGw-206)	1	surface	PPO	1	Haldimand; Nettling
Location 91 (AfGw-208)	1	surface	PPO	1	Onondaga; Brewerton Corner-Notched
	2	surface	BIF	1	Onondaga; fragment; radial fracture; burnt; possible ritual kill
Location 94	1	surface	PPO	1	Onondaga; stem and tip missing
Location 96	1	surface	PPO	1	Onondaga; mid-shaft
Location 97	1	surface	PPO	1	Onondaga; stem missing
Location 98 (AfGw-226)	1	surface	BIF	1	Haldimand; stemmed; base damaged; reused as side scraper
Location 103	1	surface	PPO	1	Haldimand; corner-notched; stem missing



APPENDIX C COMPLETE STAGE 2 CATALOGUE

Location 109 (AfGw-211)	Cat. No.	Context	Artifact(s)	Freq.	Comments
	1	surface	PPO	1	Kettle Point; Jack's Reef Corner-Notched; tip and one tang edge missing

Location 111 (AfGw-213)	Cat. No.	Context	Artifact(s)	Freq.	Comments
	1	surface	FSH	1	Aboriginal ceramic; surface treatment obliterated

Location 115 (AfGw-215)	Cat. No.	Context	Artifact(s)	Freq.	Comments
	1	surface	SCR	1	end; lateral edges also retouched
	2	surface	SCR	1	side

Location 118 (AfGw-216)	Cat. No.	Context	Artifact(s)	Freq.	Comments
	1	surface	PPO	1	Onondaga; Otter Creek; one lateral edge and tang edge missing

Location 123 (AfGw-219)	Cat. No.	Context	Artifact(s)	Freq.	Comments
	1	surface	PPP	1	Onondaga; side-notched; stem damaged

Location 124 (AfGw-220)	Cat. No.	Context	Artifact(s)	Freq.	Comments
	1	surface	SCR	1	Onondaga; thumbnail; end

Location 126 (AfGw-222)	Cat. No.	Context	Artifact(s)	Freq.	Comments
	1	surface	PPO	1	Onondaga; Brewerton Side-Notched; stem damaged

Location 136 (AfGx-740)	Cat. No.	Context	Artifact(s)	Freq.	Comments
	1	surface	PPO	1	Onondaga; Brewerton Side-Notched



APPENDIX C COMPLETE STAGE 2 CATALOGUE

Location	Cat. No.	Context	Artifact(s)	Freq.	Comments
Location 143	1	surface	PPO	1	Haldimand; stemmed; shoulders and stem damaged
Location 149 (AfGw-224)	1	surface	PPO	1	Onondaga; Meadowood; base; one tang edge missing
Location 157 (AfGw-241)	1	surface	SCR	1	end; possible perforator reused
Location 157 (AfGw-242)	1	surface	BIF	1	prob. corner notched; two-piece mend; base missing; reused
	2	surface	BIF	1	midshaft; serrated
	3	surface	SCR	1	side
	4	surface	SCR	1	end; fossil cavity near bit end
Location 167	1	surface	SCR	1	end
Location 175	1	surface	PPO	1	Haldimand; stemmed; tip, shoulders and stem damaged
Location 183	1	surface	PPO	1	Kettle Point; possibly corner notched; extensive base and tip damage; lateral edge reworked



APPENDIX D

UTM Coordinates of Archaeological Sites



APPENDIX D UTM COORDINATES OF ARCHAEOLOGICAL SITES

Site Name	Borden Number	UTM Coordinates
Location 56	none	17T 598058/4750396
Location 57	none	17T 598069/4750322
Location 58	AfGw-188	17T 598015/4750320
Location 59	AfGw-189	17T 597993/4750294
Location 60	none	17T 597971/4750280
Location 61	AfGw-230	17T 596649/4748366
Location 62	none	17T 596754/4748078
Location 63	none	17T 596766/4748059
Location 64	AfGw-190	17T 596776/4748011
Location 65	AfGw-191	17T 596842/4748000
Location 65 F1	AfGw-191	17T 596869/4748000
Location 66	AfGw-192	17T 596864/4748117
Location 67	none	17T 596836/4748206
Location 68	AfGw-193	17T 596845/4748261
Location 69	AfGw-194	17T 596879/4748239
Location 70	AfGw-195	17T 596879/4748169
Location 71	AfGw-196	17T 596930/4748106
Location 72	AfGw-197	17T 596992/4748029
Location 73	AfGw-198	17T 596902/4748271
Location 74	none	17T 596932/4748234
Location 75	none	17T 596966/4748154
Location 76	AfGw-231	17T 597029/4748018
Location 77	AfGw-232	17T 597005/4748111
Location 78	AfGw-199	17T 596967/4748284
Location 79	AfGw-200	17T 597119/4748041
Location 80	none	17T 599798/4747404
Location 81	AfGw-201	17T 599785/4747456
Location 82	AfGw-202	17T 599758/4747506
Location 83	none	17T 599701/4747667
Location 84	none	17T 599706/4747710
Location 85	AfGw-203	17T 599681/4747776
Location 86	AfGw-204	17T 599645/4748026
Location 87	AfGw-205	17T 599761/4748046
Location 88	AfGw-206	17T 599632/4747963
Location 89	AfGw-207	17T 599695/4747970
Location 90	none	17T 599734/4747659
Location 91	AfGw-208	17T 600275/4744979
Location 92	none	17T 600325/4744945



APPENDIX D UTM COORDINATES OF ARCHAEOLOGICAL SITES

Site Name	Borden Number	UTM Coordinates
Location 93	none	17T 603719/4749958
Location 94	none	17T 603887/4749973
Location 95	none	17T 603967/4750109
Location 96	none	17T 602868/4749596
Location 97	none	17T 602708/4749587
Location 98	AfGw-226	17T 602488/4750143
Location 99	AfGw-227	17T 602419/4750335
Location 100	none	17T 608178/4747533
Location 101	none	17T 608052/4747500
Location 102	none	17T 606533/4747278
Location 103	none	17T 607169/4746844
Location 104	AfGw-209	17T 607712/4749187
Location 105	AfGw-210	17T 607717/4749240
Location 106	AfGw-233	17T 607723/4748926
Location 107	none	17T 606864/4751162
Location 108	AfGw-234	17T 606794/4751249
Location 109	AfGw-211	17T 606711/4751346
Location 110	AfGw-212	17T 606675/4751296
Location 111	AfGw-213	17T 606657/4751233
Location 112	AfGw-235	17T 598467/4751142
Location 113	AfGw-236	17T 598484/4751082
Location 114	AfGw-214	17T 598482/4751028
Location 115	AfGw-215	17T 598481/4750946
Location 116	none	17T 598715/4750320
Location 117	none	17T 598909/4750267
Location 118	AfGw-216	17T 599024/4750251
Location 119	AfGw-217	17T 599143/4750240
Location 120	AfGw-237	17T 599130/4750303
Location 121	AfGw-238	17T 599174/4750281
Location 122	AfGw-218	17T 601731/4751857
Location 123	AfGw-219	17T 601743/4751798
Location 124	AfGw-220	17T 601756/4751744
Location 125	AfGw-221	17T 601785/4751670
Location 126	AfGw-222	17T 601834/4751513
Location 127	AfGw-228	17T 602033/4751538
Location 128	none	17T 602030/4751565
Location 129	AfGw-223	17T 601943/4751803
Location 130	none	17T 588868/4752326



APPENDIX D UTM COORDINATES OF ARCHAEOLOGICAL SITES

Site Name	Borden Number	UTM Coordinates
Location 131	AfGx-737	17T 588863/4752361
Location 132	AfGx-738	17T 588826/4752465
Location 133	none	17T 588848/4752467
Location 134	AfGx-739	17T 588769/4752688
Location 135	AfGx-854	17T 588747/4752791
Location 136	AfGx-740	17T 588698/4752887
Location 137	AfGx-741	17T 588570/4753000
Location 138	AfGx-855	17T 588438/4752962
Location 139	none	17T 588472/4752978
Location 140	AfGx-742	17T 588517/4752943
Location 141	none	17T 602275/4748236
Location 142	none	17T 602139/4748705
Location 143	none	17T 602362/4748980
Location 144	none	17T 602470/4749004
Location 145	none	17T 602458/4749082
Location 146	none	17T 602239/4748933
Location 147	none	17T 602338/4748671
Location 148	none	17T 602363/4748596
Location 149	AfGw-224	17T 602377/4748559
Location 150	AfGw-239	17T 602424/4748595
Location 151	none	17T 602525/4748635
Location 152	AfGw-225	17T 602887/4748671
Location 153	AfGw-240	17T 603192/4748763
Location 154	none	17T 603289/4748839
Location 155	AfGw-241	17T 605384/4745996
Location 156	none	17T 605361/4746050
Location 157	AfGw-242	17T 605301/4746154
Location 158	AfGw-243	17T 605280/4746260
Location 159	none	17T 605241/4746330
Location 160	none	17T 598490/4750545
Location 161	none	17T 598555/4750347
Location 162	none	17T 598476/4750804
Location 163	AfGw-244	17T 602138/4748732
Location 164	AfGw-245	17T 602128/4748750
Location 165	AfGw-246	17T 602135/4748771
Location 166	none	17T 602107/4748928
Location 167	none	17T 602141/4748919
Location 168	none	17T 602147/4748946



APPENDIX D

UTM COORDINATES OF ARCHAEOLOGICAL SITES

Site Name	Borden Number	UTM Coordinates
Location 169	none	17T 602145/4748975
Location 170	none	17T 602164/4748860
Location 171	none	17T 605242/4746301
Location 172	none	17T 597549/4748857
Location 173	AfGw-248	17T 597548/4748879
Location 174	none	17T 597626/4749009
Location 175	none	17T 597510/4749071
Location 176	AfGw-249	17T 597494/4749036
Location 177	none	17T 597202/4749425
Location 178	none	17T 597209/4749226
Location 179	AfGw-250	17T 597598/4749549
Location 180	AfGw-251	17T 597703/4749281
Location 181	none	17T 597725/4749247
Location 182	none	17T 597811/4749053
Location 183	none	17T 597822/4749034

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