

## ARCHAEOLOGICAL OVERVIEW

### Amaruq Exploration Road

Results  
December 2014

#### 5.5 Recommendations

Based on the likelihood that unrecorded archaeological sites are present within the Project area, it is recommended that an archaeological impact assessment be conducted for the proposed Amaruq Exploration Road Project, including the road right-of-way and the proposed borrow sources, in advance of initiation of any Project construction activities.

It is recommended that the archaeological assessment include a helicopter flyover of the entire proposed road routing during unfrozen and snow-free conditions. Based on review of the satellite photos and topographic maps, proposed target areas have been illustrated in Appendix B. The target areas illustrated are generally broad but should serve to focus the assessment. However, during the helicopter overflight, additional target areas may be selected for field assessment, and the target areas as illustrated in Appendix B may also be refined and revised. Detailed inspection of these targeted study locations should include ground traverse and visual inspection to identify archaeological sites, including stone feature sites, historic period sites or other cultural remains such as stone tools or lithic debitage.

Upon identification of archaeological sites, the heritage value of the site will be evaluated, and recommendations will be formulated for site specific mitigation measures that will reduce or eliminate Project-related impacts to each site. Avoidance is the preferred mitigation measure where possible; Agnico Eagle will be provided with site-specific locational information that can be used in project planning and design to ensure avoidance of archaeological sites where possible. It is expected that in most cases archaeological sites that are identified within close proximity of the Project footprint will be avoided by altering the project footprint; buffers of minimally 30 to 50 metres are typically acceptable and appropriate, but will be determined based on the size and nature of each identified archaeological site.

In some cases, avoidance of an archaeological site may not be possible due to Project engineering requirements. If avoidance of archaeological sites is not feasible, alternate measures will be formulated and implemented to mitigate impacts to the site. These alternate mitigation measures could include detailed site mapping, mapping of stone features, archaeological excavation, and/or community consultation; acceptable mitigation measures would be formulated in discussion with personnel at the Nunavut Department of Culture and Heritage. Site-specific mitigation measures would be formulated for each individual identified site based on the nature and heritage value of the site. These mitigation measures would need to be implemented and completed to the specifications of the Department of Culture and Heritage prior to any Project-related impacts to the site.

Implementation of appropriate mitigation measures that are acceptable to the regulators, such as site avoidance or further investigation at archaeological sites that cannot be avoided, will reduce or eliminate impacts to archaeological sites as a result of the Project.



## ARCHAEOLOGICAL OVERVIEW

### Amaruq Exploration Road

References Cited  
December 2014

## 6.0 References Cited

- Blower, D. 2003. Heritage Resources Studies Mitigation and Assessment 2002. Bathurst Inlet Port and Road Project. Nunavut Permit 02-035A. Fedirchuk McCullough & Associates Ltd. Nunavut Department of Culture and Heritage. Iqaluit.
- Borden, C. E. 1954. A uniform site designation scheme for Canada. *Anthropology in British Columbia*, Vol. 4: 44-48.
- Bussey, J. 1994. Report on field investigations for the BHP NWT Diamonds Project (preliminary). Points West Heritage Consulting Ltd. Consultant's report on file, Prince of Wales Northern Heritage Centre. Yellowknife.
- Bussey, J. 1995. 1995 Archaeological investigations for the BHP Diamonds Inc. Points West Heritage Consulting Ltd. Consultant's report on file, Prince of Wales Northern Heritage Centre. Yellowknife.
- Bussey, J. 1997. 1996 Archaeological investigations for the BHP Diamonds Inc. Points West Heritage Consulting Ltd. Consultant's report on file, Prince of Wales Northern Heritage Centre. Yellowknife.
- Fedirchuk, G.J. 1995. Heritage resource impact assessment Kennecott Southwest Diavik Property. Fedirchuk McCullough & Associates Ltd. Consultant's report on file, Prince of Wales Northern Heritage Centre. Yellowknife.
- Fedirchuk, G.J. 1996a. Heritage resources studies Lytton Minerals Limited Jericho Project. Fedirchuk McCullough & Associates Ltd. Consultant's report on file, Prince of Wales Northern Heritage Centre. Yellowknife.
- Fedirchuk, G.J. 1996b. Heritage resources studies Mountain Province Mine Kennady Project. Fedirchuk McCullough & Associates Ltd. Consultant's report on file, Prince of Wales Northern Heritage Centre. Yellowknife.
- Fedirchuk, G.J. 2001. Heritage resource studies Bathurst Inlet Port and Road Project. Fedirchuk McCullough & Associates Ltd. Nunavut Department of Culture and Heritage. Iqaluit.
- Gordon, B.H.C. 1975. Of men and herds in barrenland prehistory. Canada, National Museum of Man, Archaeological Survey of Canada. Ottawa.
- Harp, E. Jr. 1958. Prehistory of the Dismal Lake Area, N.W.T., Canada. *Arctic*, Vol. 11, no. 4:219-249.
- Harp, E. Jr. 1961. The archaeology of the Lower and Middle Thelon, Northwest Territories. Arctic Institute of North America. Technical Paper No. 8. Montreal.

## ARCHAEOLOGICAL OVERVIEW

### Amaruq Exploration Road

References Cited  
December 2014

- Kroker, S. 1996. Ulu mine project archaeological impact assessment, phase II. Quaternary Consultants Limited. Consultant's report on file, Prince of Wales Northern Heritage Centre. Yellowknife.
- McGhee, R. 1970. Excavation at Bloody Falls, N.W.T., Canada. *Arctic Anthropology*, Vol. 6, no. 2: 53-72.
- McGhee, R. 1984. Thule Prehistory of Canada. In *Handbook of North American Indians*, Vol. V. Arctic, pp. 369-376. Smithsonian Institution, Washington.
- McGhee, R. 1990. *Canadian Arctic Prehistory*. Canadian Museum of Civilization. Hull.
- Maxwell, M. S. 1984. Pre-Dorset and Dorset Prehistory in Canada. In, *Handbook of North American Indians* Volume 5 Arctic. Pp 359-368. Smithsonian Institution, Washington.
- Metcalf, F. 1979. Rawalpindi River archaeological survey 1978. Manuscript on file, Archaeological Survey of Canada. Ottawa.
- Noble, W.C. 1971. Archaeological surveys and sequences in Central District of Mackenzie, N.W.T. *Arctic Anthropology*, Vol. 8, no. 1: 102-145.
- Noble, W.C. 1977. The Taltheilei Shale Tradition: an update. In *Problems in the Prehistory of the North American Subarctic: the Athapaskan questions*. Edited by J.W. Helmer, S. Van Dyke, and F.J. Kense. University of Calgary, Calgary.
- Noble, W.C. 1981. Prehistory of the Great Slave Lake and Great Bear Lake Region. *Handbook of North American Indians* Volume 6, Subarctic. Pp. 97-129. Smithsonian Institution. Washington.
- Novecosky, B. 2008. Report on Archaeological Baseline Collection for the Kiggavik/Sissons Uranium Project, Nunavut. Consultant's report on file. Nunavut Department of Culture and Heritage. Iqaluit.
- Nunavut Government. 2001. Archaeological and Palaeontological Sites Regulations.
- Prager, G. 2006. Meadowbank Gold Project 2005 Archaeological Investigations of a Proposed All-Season Road Final Permit Report. Consultant's report on file. Nunavut Department of Culture and Heritage. Iqaluit.
- Tischer, J.C. 2002. Heritage Resources Studies Final Report: Izok Mine Project. FMA Heritage Resources Consultants Inc. Consultant's report on file. Nunavut Department of Culture and Heritage. Iqaluit.
- Tischer, J.C. 2007. Archaeological Impact Assessment Cumberland Resources Meadowbank Mine All-Season Road and Borrow Sources Nunavut Permit 2006-027A. FMA Heritage

## ARCHAEOLOGICAL OVERVIEW

### Amaruq Exploration Road

References Cited  
December 2014

- Resources Consultants Inc. Consultant's report on file. Nunavut Department of Culture and Heritage. Iqaluit.
- Tischer, J.C. 2008. Archaeological Studies Pacific Ridge Exploration Ltd. Baker Basin Project Nunavut Permit 2007-026A. FMA Heritage Resources Consultants Inc. Consultant's report on file. Nunavut Department of Culture and Heritage. Iqaluit.
- Tischer, J.C. 2010. Archaeological Impact Assessment 2010 Agnico-Eagle Mines Limited Meadowbank Gold Project Nunavut Permit 10-022A. FMA Heritage Inc. Consultant's report on file. Nunavut Department of Culture and Heritage. Iqaluit.
- Tischer, J.C. 2012. Archaeological Impact Assessment Agnico-Eagle Meadowbank 2011 Exploration Studies, Nunavut Permit 11-015A. Stantec Consulting Ltd. Consultant's report on file. Nunavut Department of Culture and Heritage. Iqaluit.
- Tischer, J.C. 2013. Archaeological Impact Assessment Agnico-Eagle Meadowbank 2013 Exploration Studies Permit Number Nunavut 13-015A. Nunami-Stantec Limited. Consultant's report on file. Nunavut Department of Culture and Heritage. Iqaluit.
- Tischer, J.C. 2014. Archaeological Impact Assessment Agnico-Eagle Meadowbank 2014 Exploration Studies Permit Number Nunavut 14-017A. Nunami-Stantec Limited. Consultant's report on file. Nunavut Department of Culture and Heritage. Iqaluit.
- Unfreed, W.J. 1997. Continuing inventory: heritage resources impact assessment Kennecott Diavik Property. Fedirchuk McCullough & Associates Ltd. Consultant's report on file, Prince of Wales Northern Heritage Centre. Yellowknife.
- Webster, C. 2004. Cumberland Resources Ltd. Meadowbank Gold Project Baseline Archaeological Report Consultant's report on file. Nunavut Department of Culture and Heritage. Iqaluit.
- Wright, J.V. 1981. Prehistory of the Canadian Shield. In *Handbook of North American Indians*, Vol. VI. Subarctic, pp. 86-96. Smithsonian Institution. Washington.



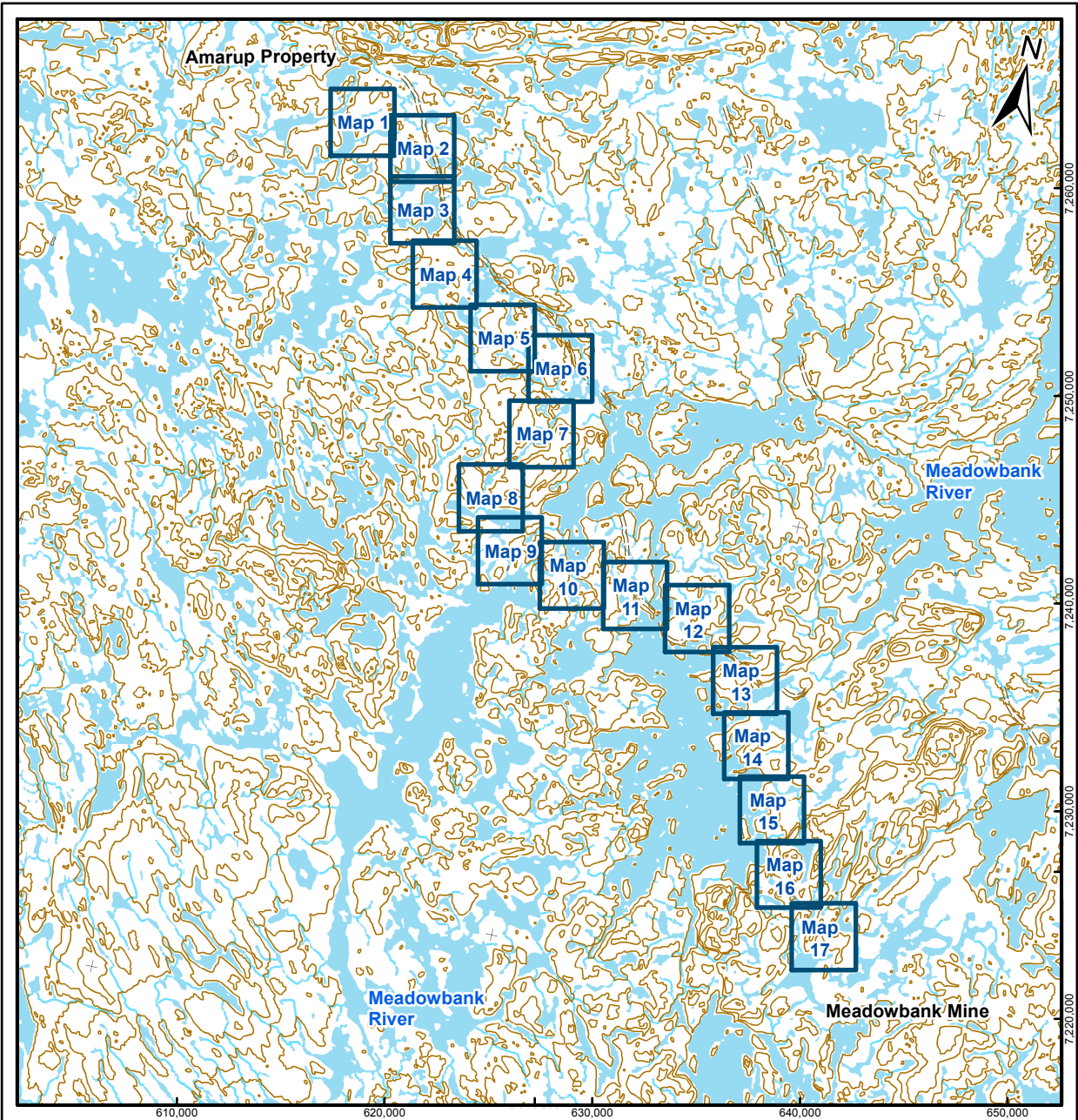
**ARCHAEOLOGICAL OVERVIEW**  
**Amaruq Exploration Road**

Appendix A  
Topographic Maps  
December 2014

Appendix A  
**Topographic Maps**





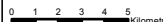




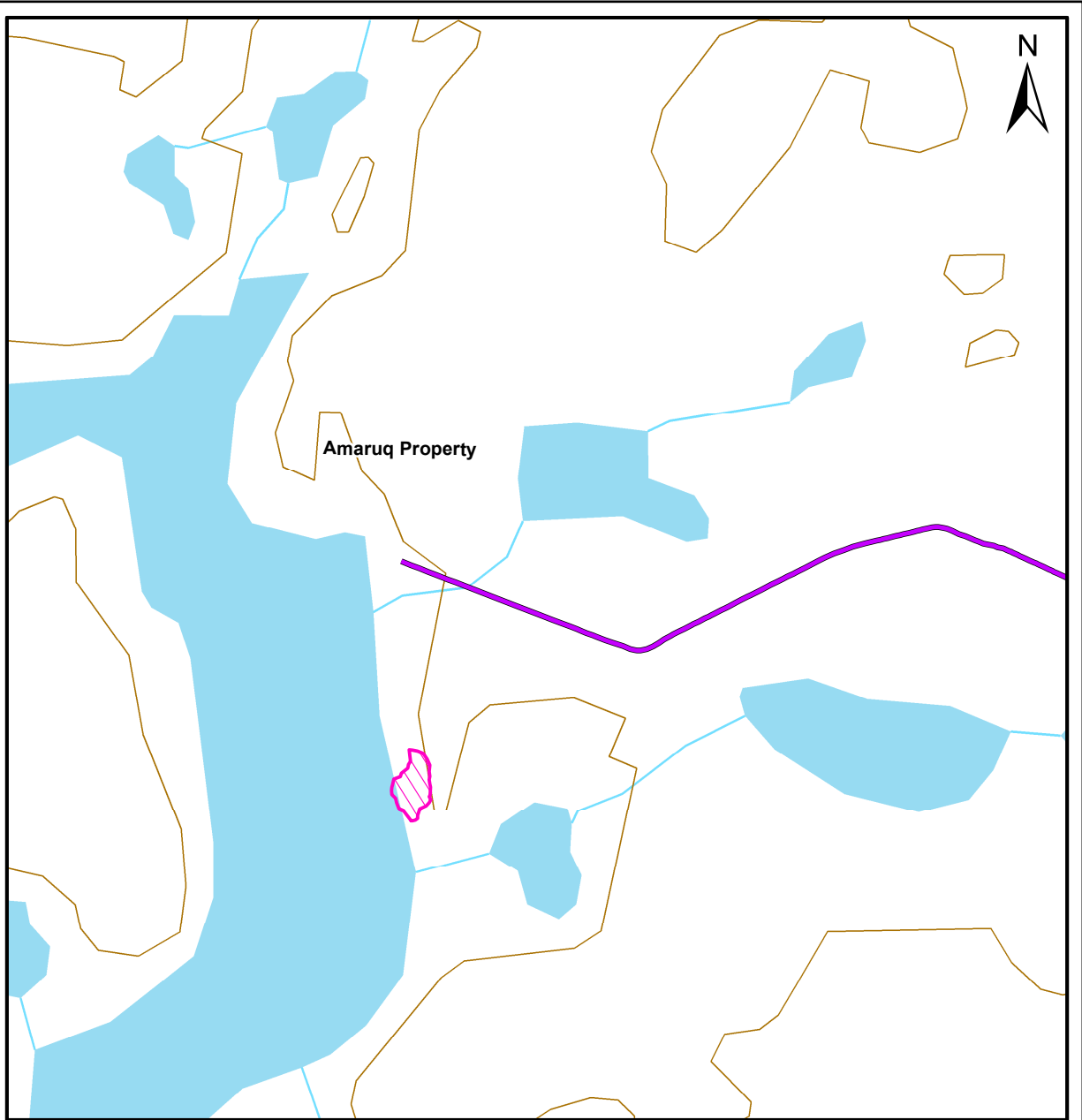
## Legend

 Mapbook Index (1:20,000)






PREPARED FOR 		PREPARED BY 	
DATA SOURCE Department of Energy, Mines and Resources NTDB 1:250,000 Data 66H, 56E, 56D, 66A,			
SPATIAL REFERENCE UTM Zone 14		DATUM NAD 83	SCALE 1:325,000
DRAFT DATE 2014 Apr 2	DRAWN BY EStrangward	PROJECT 124910368	PERMIT N/A
REVISED DATE 2014 Dec 12	REVISED BY EStrangward		




H:\1249 Projects\124910300s\124910368\mxd\10\124910368\_Mapbook\_20kOrtho\_index\_v1.mxd



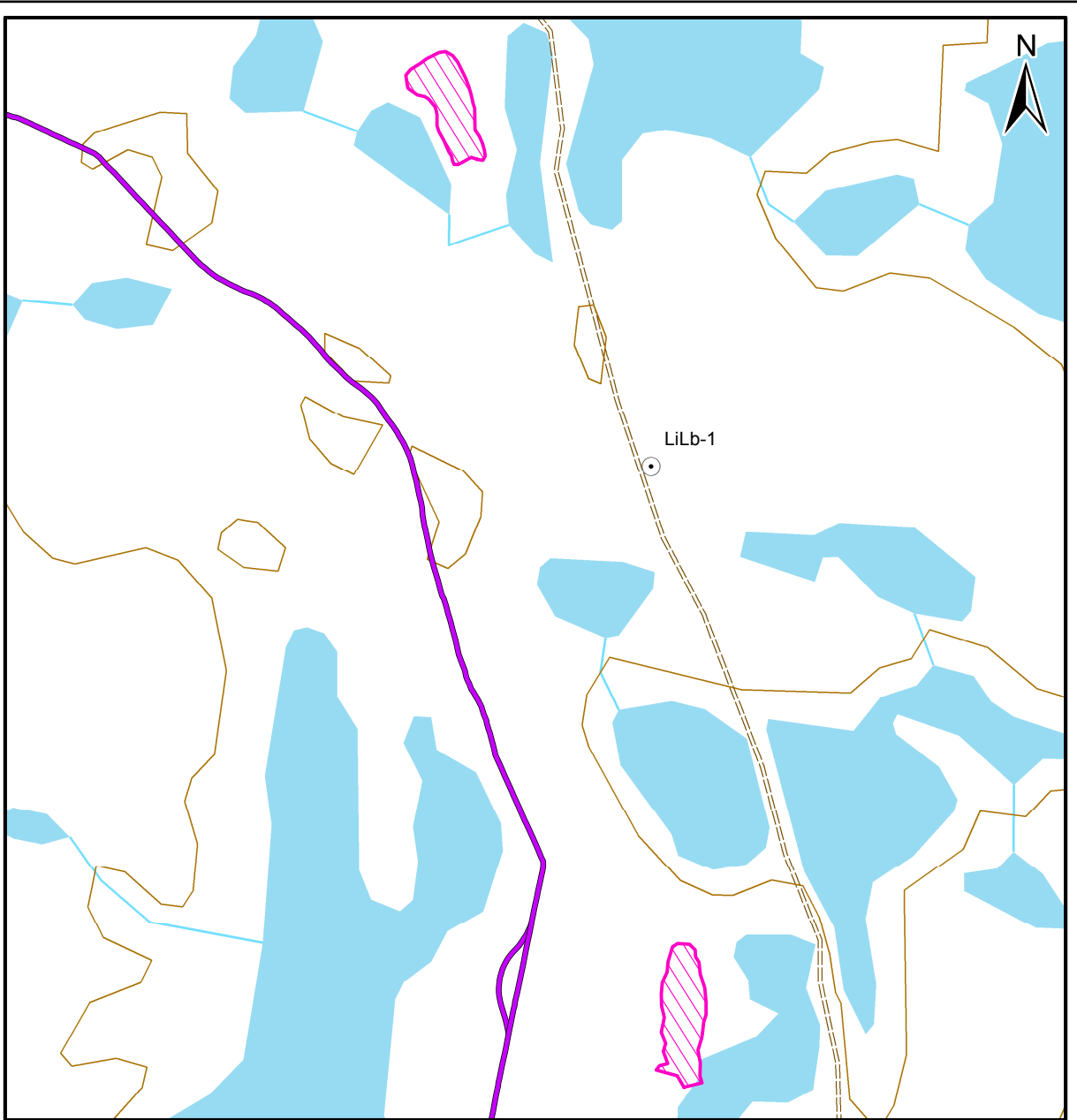
### Legend

-  Archaeological Site
-  Amaruq Exploration Road
-  Proposed Borrow Area






PREPARED FOR		PREPARED BY	
			
Map Number	DATA SOURCE		
Map 1	Geoeye Satellite coverage provided by Agnico Eagle		
SPATIAL REFERENCE		DATUM	SCALE
UTM Zone 14		NAD 83	1:20,000
DRAFT DATE	DRAWN BY	PROJECT	PERMIT
2014 Nov 01	EStrangward	124910368	N/A
REVISED DATE	REVISED BY		
2014 Dec 16	EStrangward		
			



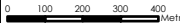
H:\1249 Projects\1249103006\124910368\mxd\10\124910368\_20k\_Mapbook\_v1.mxd



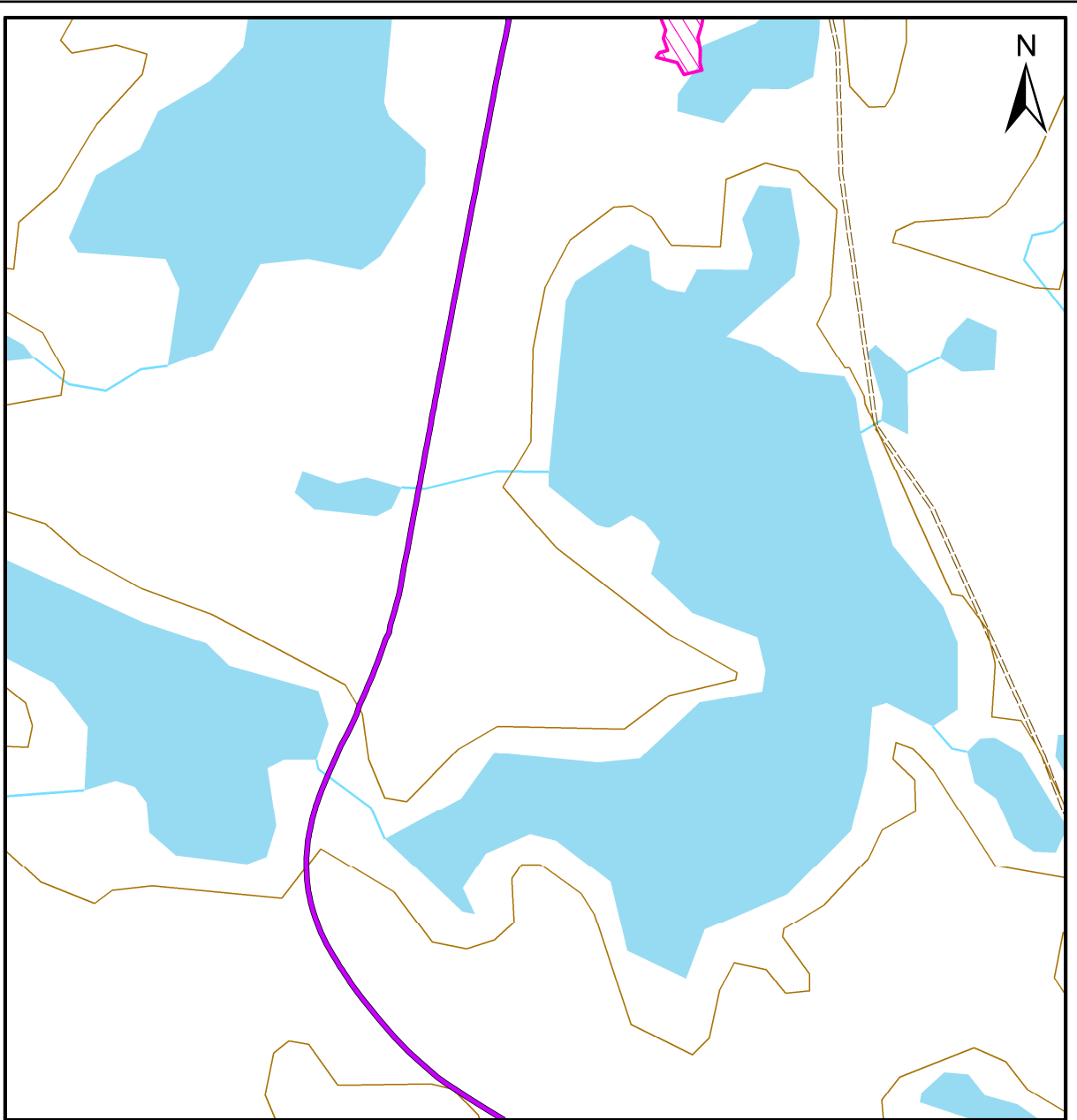
### Legend

-  Archaeological Site
-  Amaruq Exploration Road
-  Proposed Borrow Area






PREPARED FOR		PREPARED BY	
			
Map Number	DATA SOURCE		
Map 2	Geosy Satellite coverage provided by Agnico Eagle		
SPATIAL REFERENCE		DATUM	SCALE
UTM Zone 14		NAD 83	1:20,000
DRAFT DATE	DRAWN BY	PROJECT	PERMIT
2014 Nov 01	EStrangward	124910368	N/A
REVISED DATE	REVISED BY		
2014 Dec 16	EStrangward		
			




H:\1249 Projects\1249103006\124910368\mxd\10\124910368\_20k\_Mapbook\_v1.mxd



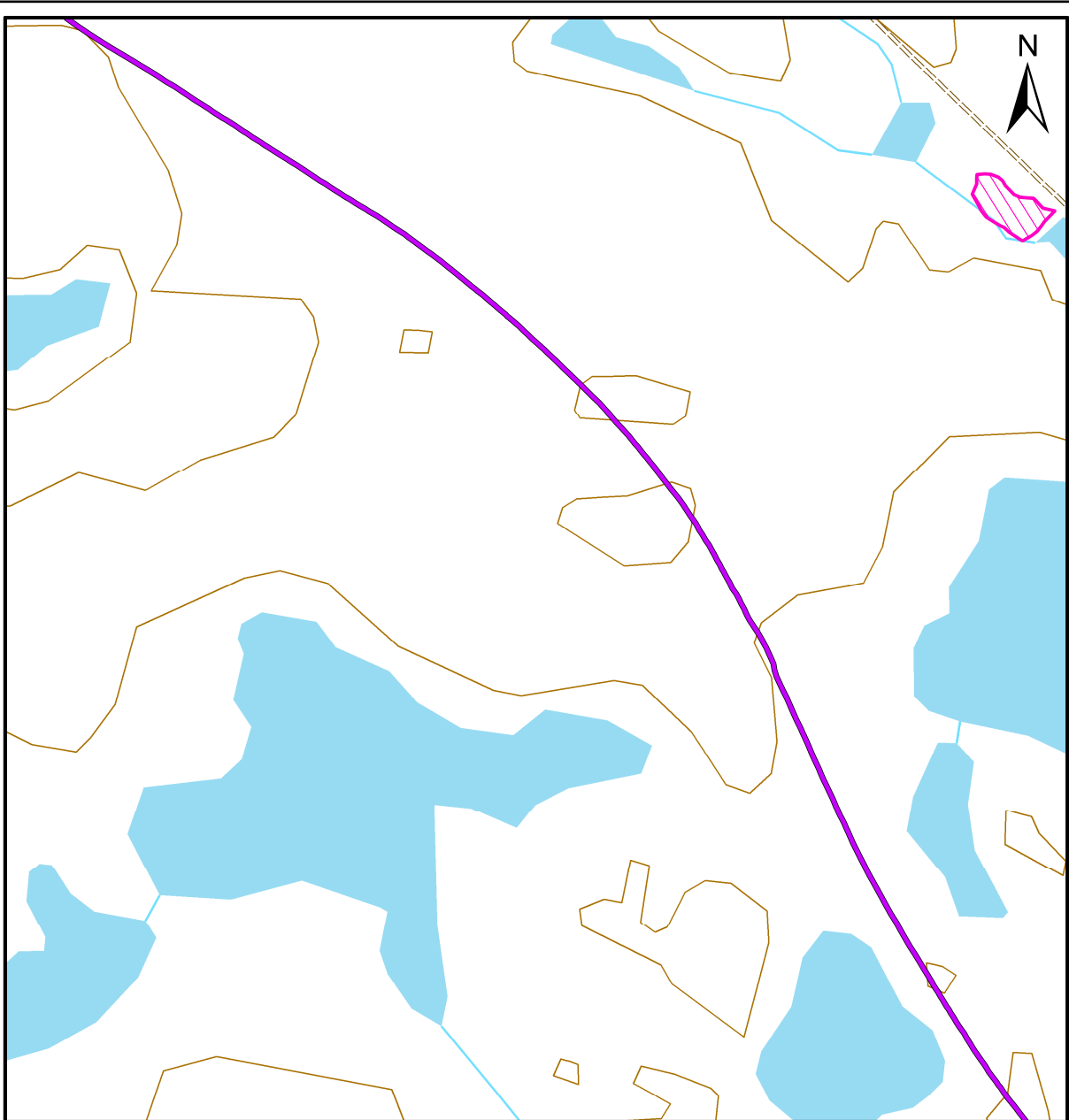
### Legend

-  Archaeological Site
-  Amaruq Exploration Road
-  Proposed Borrow Area






PREPARED FOR		PREPARED BY	
			
Map Number	DATA SOURCE		
Map 3	Geoeey Satellite coverage provided by Agnico Eagle		
SPATIAL REFERENCE		DATUM	SCALE
UTM Zone 14		NAD 83	1:20,000
DRAFT DATE	DRAWN BY	PROJECT	PERMIT
2014 Nov 01	EStrangward	124910368	N/A
REVISED DATE	REVISED BY		
2014 Dec 16	EStrangward		
			



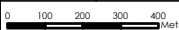
H:\1249 Projects\1249103006\124910368\mxd\10\124910368\_20k\_Mapbook\_v1.mxd



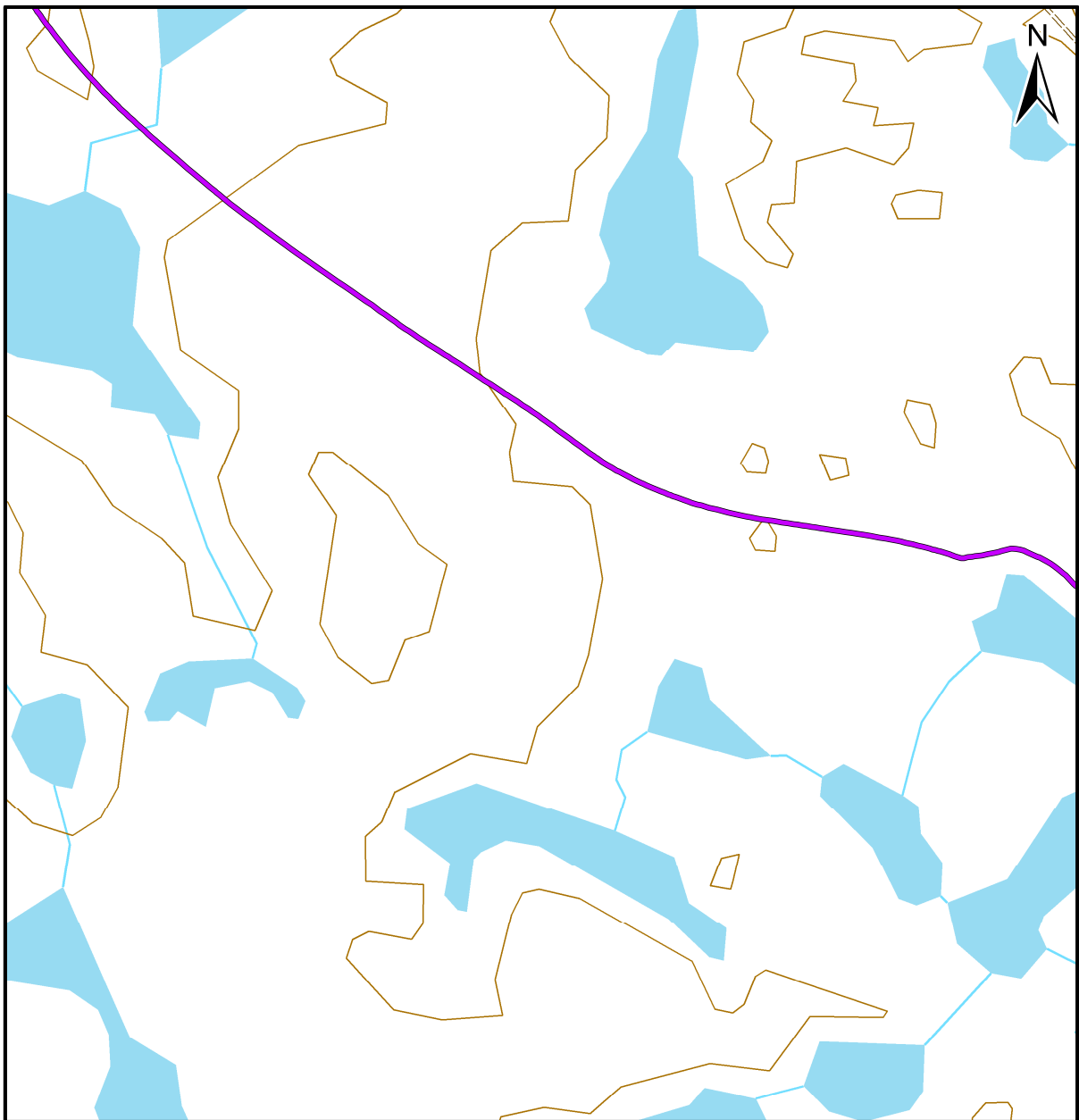
### Legend

-  Archaeological Site
-  Amaruq Exploration Road
-  Proposed Borrow Area






PREPARED FOR		PREPARED BY	
			
Map Number		DATA SOURCE	
Map 4		Geosy Satellite coverage provided by Agnico Eagle	
SPATIAL REFERENCE		DATUM	SCALE
UTM Zone 14		NAD 83	1:20,000
DRAFT DATE	DRAWN BY	PROJECT	PERMIT
2014 Nov 01	EStrangward	124910368	N/A
REVISED DATE	REVISED BY		
2014 Dec 16	EStrangward		
			



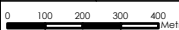
H:\1249 Projects\1249103006\124910368\mxd\10\124910368\_20k\_Mapbook\_v1.mxd



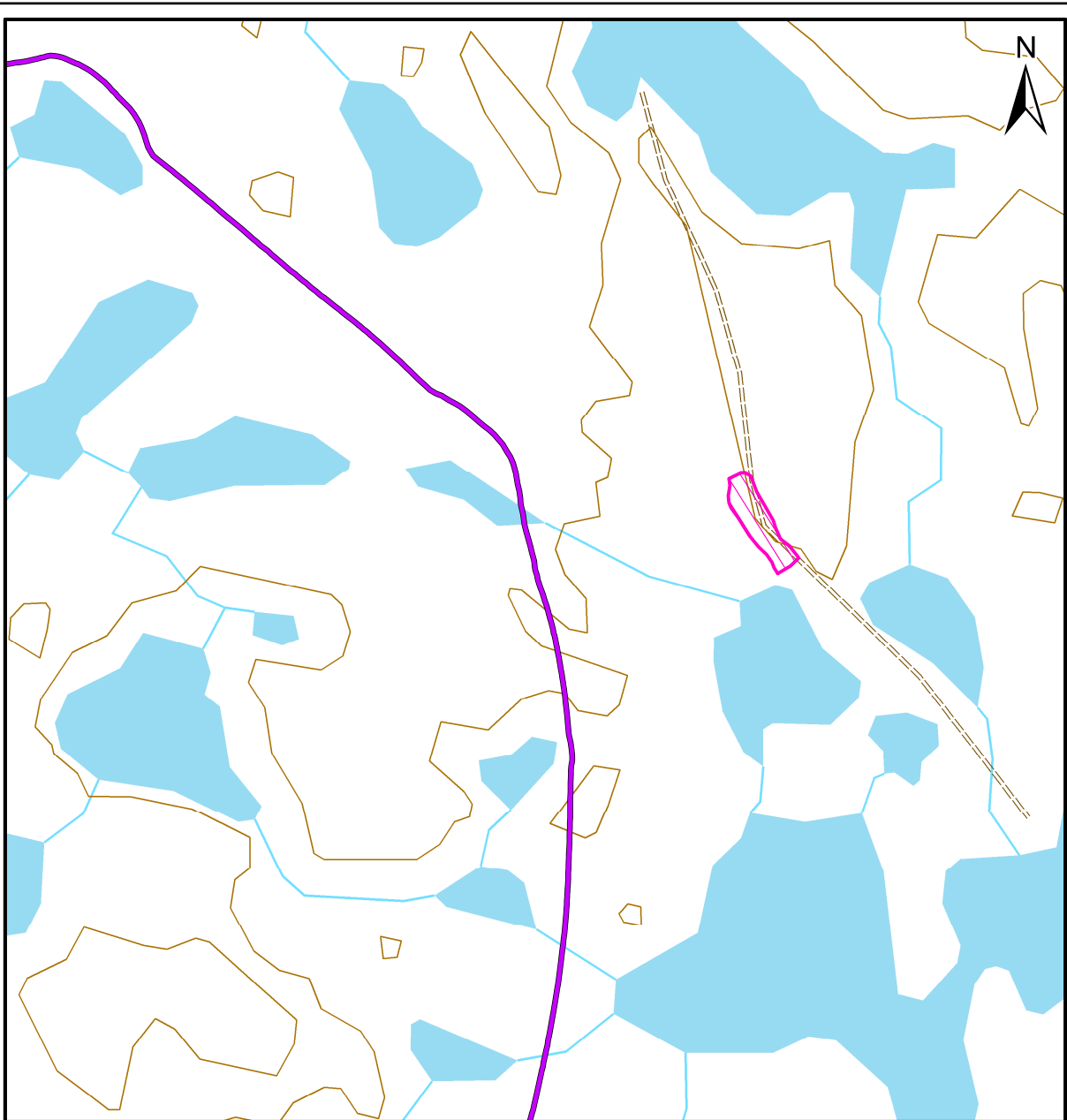
### Legend

-  Archaeological Site
-  Amaruq Exploration Road
-  Proposed Borrow Area






PREPARED FOR		PREPARED BY	
			
Map Number	DATA SOURCE		
Map 5	Geosy Satellite coverage provided by Agnico Eagle		
SPATIAL REFERENCE		DATUM	SCALE
UTM Zone 14		NAD 83	1:20,000
DRAFT DATE	DRAWN BY	PROJECT	PERMIT
2014 Nov 01	EStrangward	124910368	N/A
REVISED DATE	REVISED BY		
2014 Dec 16	EStrangward		



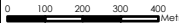
H:\1249 Projects\1249103006\124910368\mxd\10\124910368\_20k\_Mapbook\_v1.mxd



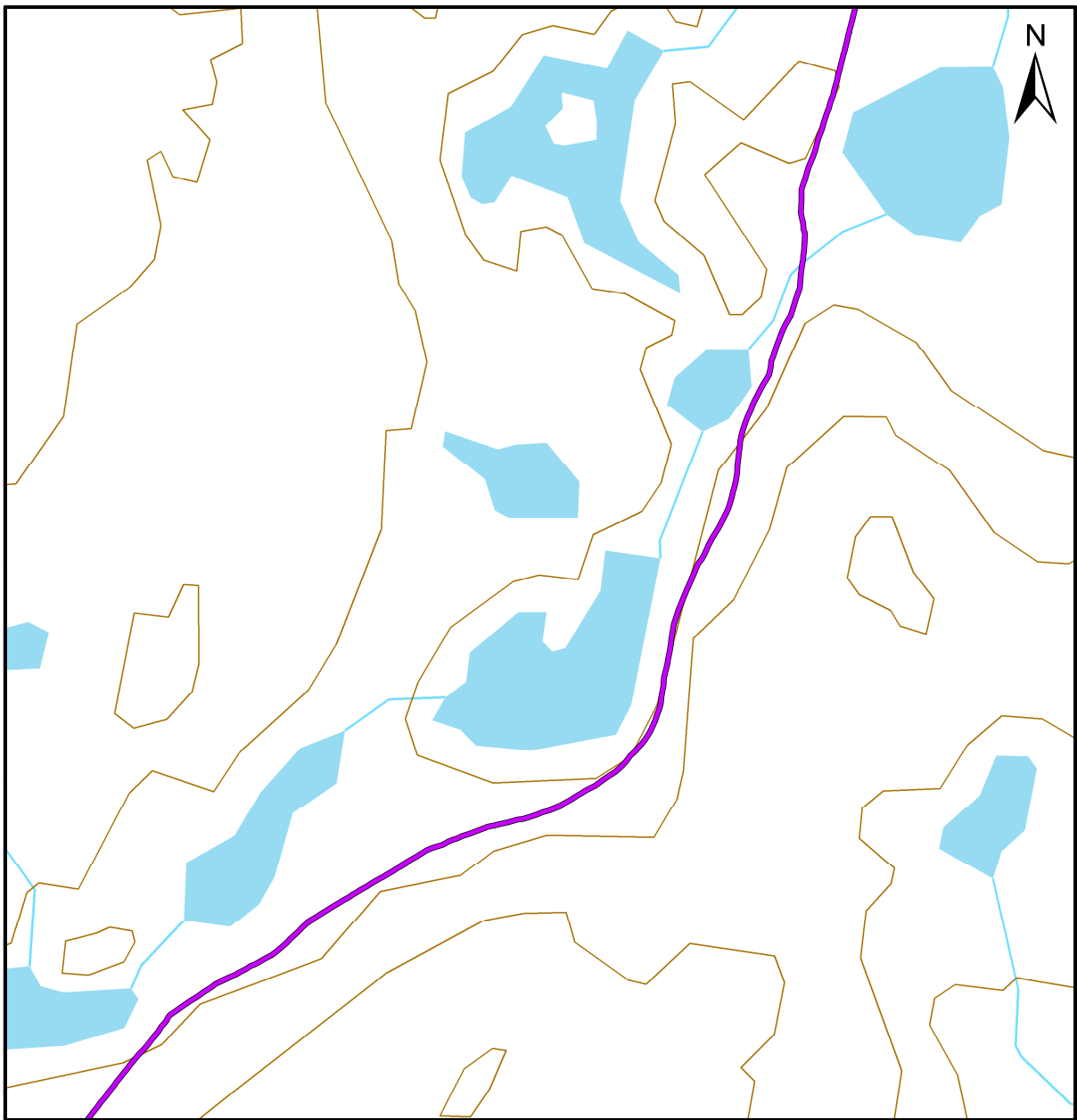
### Legend

-  Archaeological Site
-  Amaruq Exploration Road
-  Proposed Borrow Area






PREPARED FOR		PREPARED BY	
			
Map Number	DATA SOURCE		
Map 6	Geoeey Satellite coverage provided by Agnico Eagle		
SPATIAL REFERENCE		DATUM	SCALE
UTM Zone 14		NAD 83	1:20,000
DRAFT DATE	DRAWN BY	PROJECT	PERMIT
2014 Nov 01	EStrangward	124910368	N/A
REVISED DATE	REVISED BY		
2014 Dec 16	EStrangward		
			




H:\1249 Projects\1249103006\124910368\mxd\10\124910368\_20k\_Mapbook\_v1.mxd



### Legend

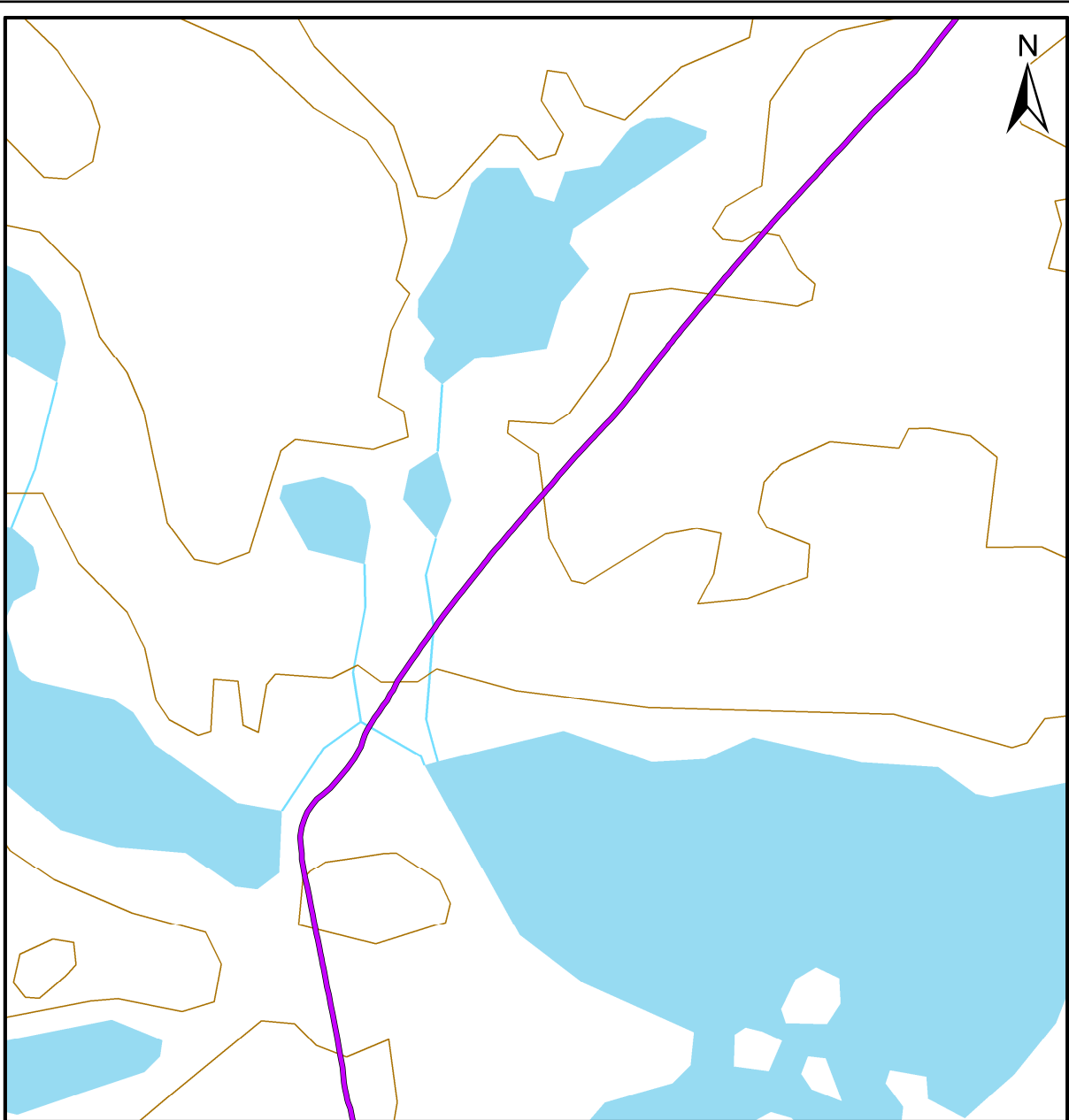
-  Archaeological Site
-  Amaruq Exploration Road
-  Proposed Borrow Area






PREPARED FOR		PREPARED BY	
			
Map Number	DATA SOURCE		
Map 7	Geosy Satellite coverage provided by Agnico Eagle		
SPATIAL REFERENCE		DATUM	SCALE
UTM Zone 14		NAD 83	1:20,000
DRAFT DATE	DRAWN BY	PROJECT	PERMIT
2014 Nov 01	EStrangward	124910368	N/A
REVISED DATE	REVISED BY		
2014 Dec 16	EStrangward		
			

H:\1249 Projects\1249103006\124910368\mxd\10\124910368\_20k\_Mapbook\_v1.mxd



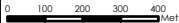




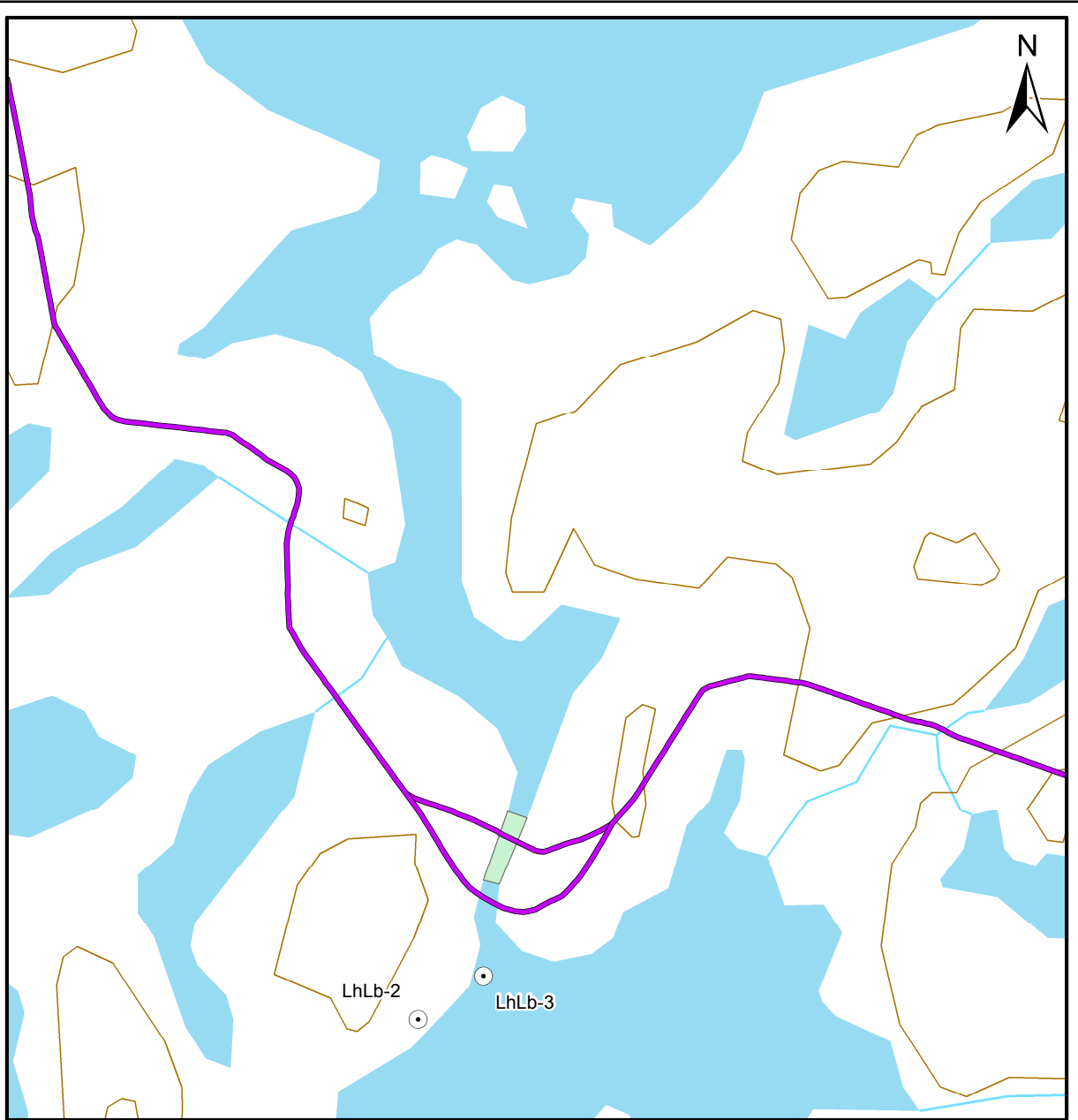
### Legend

-  Archaeological Site
-  Amaruq Exploration Road
-  Proposed Borrow Area






PREPARED FOR		PREPARED BY	
			
Map Number	DATA SOURCE		
Map 8	Geoeey Satellite coverage provided by Agnico Eagle		
SPATIAL REFERENCE		DATUM	SCALE
UTM Zone 14		NAD 83	1:20,000
DRAFT DATE	DRAWN BY	PROJECT	PERMIT
2014 Nov 01	EStrangward	124910368	N/A
REVISED DATE	REVISED BY		
2014 Dec 16	EStrangward		
			



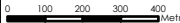
H:\1249 Projects\1249103006\124910368\mxd\10\124910368\_20k\_Mapbook\_v1.mxd



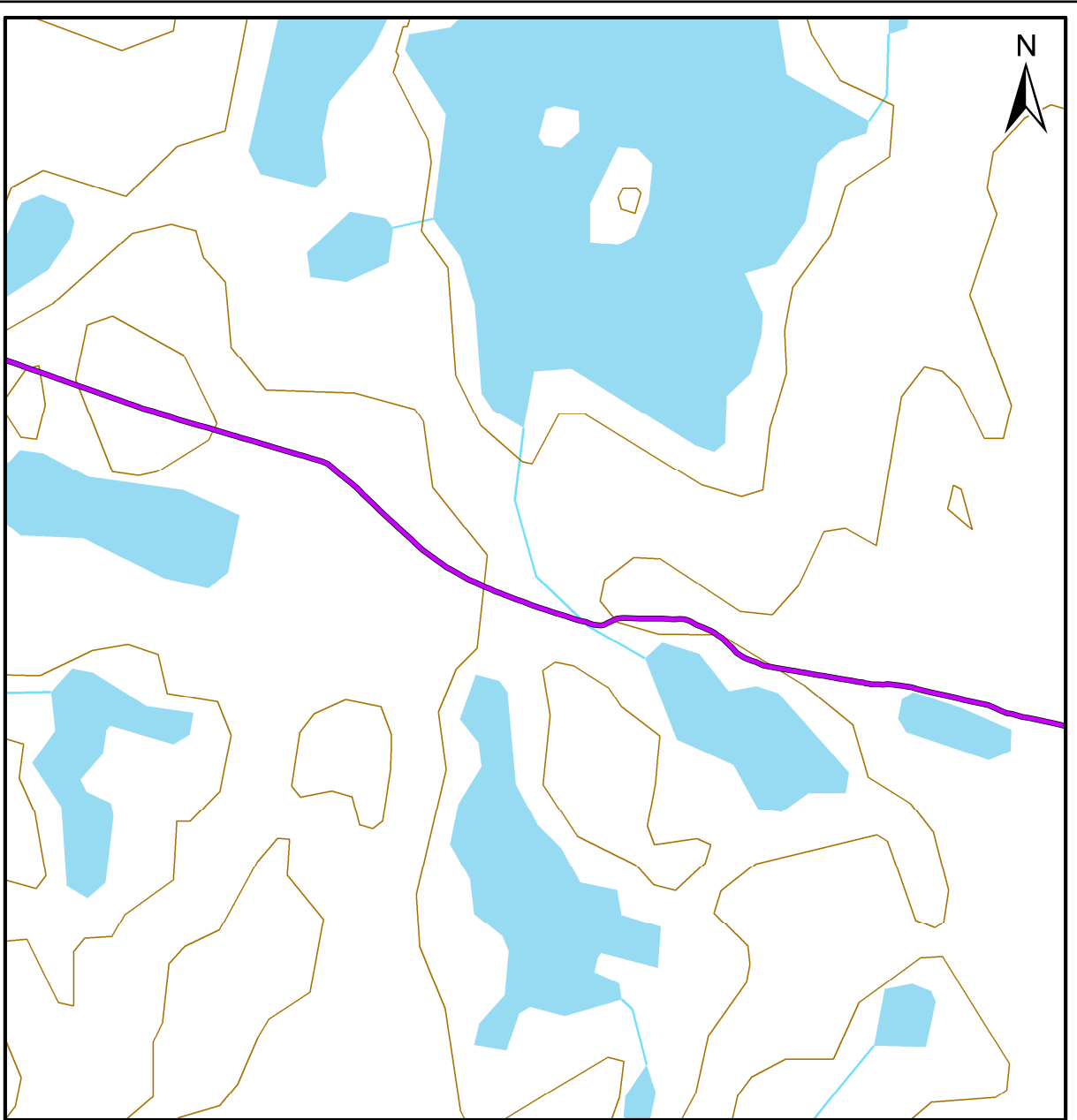
### Legend

-  Archaeological Site
-  Amaruq Exploration Road
-  Proposed Borrow Area






PREPARED FOR		PREPARED BY	
			
Map Number	DATA SOURCE		
Map 9	Geosy Satellite coverage provided by Agnico Eagle		
SPATIAL REFERENCE		DATUM	SCALE
UTM Zone 14		NAD 83	1:20,000
DRAFT DATE	DRAWN BY	PROJECT	PERMIT
2014 Nov 01	EStrangward	124910368	N/A
REVISED DATE	REVISED BY		
2014 Dec 16	EStrangward		
			



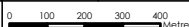
H:\1249 Projects\1249103006\124910368\mxd\10\124910368\_20k\_Mapbook\_v1.mxd



### Legend

-  Archaeological Site
-  Amaruq Exploration Road
-  Proposed Borrow Area



PREPARED FOR		PREPARED BY	
			
Map Number		DATA SOURCE	
Map 10		Geosy Satellite coverage provided by Agnico Eagle	
SPATIAL REFERENCE		DATUM	SCALE
UTM Zone 14		NAD 83	1:20,000
DRAFT DATE	DRAWN BY	PROJECT	PERMIT
2014 Nov 01	EStrangward	124910368	N/A
REVISED DATE	REVISED BY		
2014 Dec 16	EStrangward		
			

H:\1249 Projects\1249103006\124910368\mxd\10\124910368\_20k\_Mapbook\_v1.mxd