AGNICO EAGLE

November 2016

EXPLORATION

NWB Type B 8BC-AEA1525 Amendment to Include Additional Quarries: Main Application Document

Submitted to:
Nunavut Water Board
PO Box 119
Gjoa Haven, NU X0B 1J0

EXECUTIVE SUMMARY

The Amaruq Exploration Property (Amaruq) is a 408-square kilometre site located on Inuit Owned Land (IOL), approximately 150 kilometres north of Baker Lake, and approximately 50 kilometres northwest of the Meadowbank mine. Agnico Eagle Mines Limited (Agnico Eagle) leased exploration rights to the Amaruq Exploration Property from Nunavut Tunngavik Incorporated in April 2013, and maintains an exploration camp on the site.

The Amaruq Exploration Access Road is approved to be a 6.5 metre (m) wide exploration sized road that is 64.134 km in length, and will connect the Meadowbank mine site, north of Vault Pit operations, to the Amaruq Exploration site. The Amaruq Exploration Access Road was screened by NIRB on November 4th, 2015 and a Type 8BC-AEA1525 License was issued by the NWB on November 9th, 2016. The road is an important link to fuel and supplies for the advancement of the Amaruq Exploration project. Ultimately the rapid construction of the road will allow Agnico Eagle to conduct year round exploration drilling at the Amaruq exploration project, to continue to aggressively drill the inferred deposit, to begin building an exploration ramp in 2018, and to continue to assess the feasibility of the future mine site. Additional hard rock quarries will allow for the road to be constructed in a timely fashion that minimizes thaw susceptibility, and will ensure the construction of the access road is economical.

As a result, Agnico Eagle is applying to the Nunavut Water Board to amend the Type B 8BC-AEA1525 to include 6 additional quarries (Q *10+500; Q 26+250; Q 30+050; Q 34+900; Q 50+600; and Q 52+00;)* located immediately adjacent to the approved exploration access road. The proposed quarries are composed of non-potentially acid draining/ non-metal leaching (NPAG/ML) material, are small in size, are within the previously assessed local study area of the approved Amaruq Exploration Access Road, and are in locations that avoid impacts to archaeological and cultural sites. No significant environmental impacts are predicted as a result of adding these additional quarries to the construction and operation of the Amaruq Exploration Access Road.

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ᐊᒪᕈᖅ ᕿᓂᖅᓴᐃᑉᕙᒃ (ᐊᒪᕈᖅ) 408-ᓂᒃ ᑭᐸᕇᓇᒃᑐᓂᒃ ᑮᓕᒥᑕᓂᒃ ᐊᖏᑎᒋᔭᖅ ᐃᓄᐃᑦ ᓇᖕᒥᓂᕆᔭᖓᓐᓂᑦ ᓄᓇᒥᑦ, 150 ᑮᓕᒥᑕᕐᓗᐊᓂᒃ ᐅᖓᓯᒃᑎᒋᔭᖅ ᐅᐊᖕᓇᖓᓂᑦ ᖃᒪᓂᑦᑐᐊᕐᒥᑦ, ᐊᒻᒪᓗ 50 ᑮᓕᒥᑕᕐᓗᐊᓂᒃ ᐅᖓᓯᒃᑎᒋᐸᓗᓂ ᐅᐊᖕᓇᖅᐸᓯᖓᓂᑦ ᐱᖓᖕᓇᖅᐸᓯᖓᓂᑦ ᐊᐳᖅᑎᓐᓈᖅᑐᒥᑦ. ᐊᒃᓃᑯᒃᑯᑦ ᕿᓂᖅᓴᐃᓂᕐᒧᑦ ᐊᑐᖅᑐᐊᕐᓂᕐᒧᑦ ᐱᔭᖕᓇᐅᑎᒥᒃ ᐱᓚᐅᖅᑐᑦ ᐊᒪᕈᖅ-ᒧᑦ ᓄᓇᕗᑦ ᑐᙵᕝᕙᒃᑲᓐᓂᑦ ᐄᐳᓇ 2013-ᒥᑦ, ᕿᓂᖅᓴᐃᓂᕐᒧᑦ ᓄᓇᓕᐊᕌᖅᖢᑎᒡᓗ ᐃᓂᐅᔪᒥᑦ.

ᐊᒪᕈᖅ-ᒥᑦ ᕿᓂᖅᓴᐃᓂᕐᒥᑦ ᐊᑉᖁᑎ ᓈᒻᒪᕆᔭᐅᓯᒪᔭᖅ 6.5 ᒦᑕᓂᒃ ᓯᓕᒃᑎᒋᓗᓂ 64.134 ᑮᓕᒥᑕᓂᒃ ᑕᑭᑎᒋᓗᓂ, ᐊᒻᒪᓗ ᑲᑎᖕᓂᐊᖅᑐᖅ ᐊᐳᖅᑎᖕᓈᖅᑐᒧᑦ, ᐅᐊᖕᓇᖓᓂᑦ Vault ᓄᓇᒥᑦ ᐃᓗᑦᑐᖅᓯᒪᔭᕐᒧᑦ, ᐊᒪᕈᖅ ᕿᓂᖅᓴᐃᑉᕙᖕᒧᑦ. ᐊᒪᕈᖅ-ᒥᑦ ᕿᓂᖅᓴᐃᓂᕐᒥᑦ ᐊᑉᖁᑎ ᕿᒥᕐᕈᔭᐅᓚᐅᖅᑐᖅ ᐊᑲᐅᑎᓕᕆᓃᒃᑯᓐᓄᑦ ᓄᕝᕙ 4, 2015-ᒥᑦ ᐊᒻᒪᓗ Type 8BC-AEA1525 ᓚᐃᓭᓐᓯᒥᒃ ᑐᓂᔭᐅᐸᓗᑎᒃ ᐊᑲᐅᑎᓕᕆᓃᒃᑯᓐᓂᑦ ᓄᕝᐱᓇ 9, 2016-ᒥᑦ. ᐊᑉᖁᑎ ᐱᒻᒪᕆᐅᔭᖅ ᑲᑎᖕᓂᖃᖅᓱᓂ ᐅᖅᓯᐊᓗᖕᒧᑦ ᐊᒻᒪᓗ ᐱᕐᑯᑎᓄᑦ ᓯᕗᓪᓗᒋᐊᕐᓂᕐᒧᑦ ᐊᒪᕈᖅ ᕿᓂᖅᓴᐃᓂᕐᒧᑦ ᐱᓕᕆᐊᕐᒥᑦ. ᐱᐊᓚᔪᒥᒃ ᓴᓇᔭᐅᕙᓪᓕᐊᓂᖓᓄᑦ ᐊᑉᖁᑎ ᐊᒃᓃᑯᒃᑯᓐᓂᑦ ᐅᑭᐅᓗᒃᑖᕐᒥᑦ ᕿᓂᖅᓴᐃᓂᕐᒧᑦ ᐃᑰᑕᐃᓂᖃᖅᑎᑦᑎᔭᖕᓇᕐᓂᐊᖅᑐᖅ ᐊᒪᕈᖅ-ᒥᑦ, ᑲᔪᓯᓂᕐᒧᑦ ᐃᑰᑕᐃᓂᕐᒥᒃ ᐅᔭᖅᑲᓂᒃ, ᐃᑳᕈᑎᓕᐅᕐᓂᕐᒧᑦ ᕿᓂᖅᓴᐃᓂᕐᒧᑦ ᐊᑐᕐᓂᐊᖅᑐᒥᒃ 2018-ᒥᑦ, ᐊᒻᒪᓗ ᑲᔪᓯᓗᑎᒃ ᖃᐅᔨᓴᐃᓂᕐᒥᒃ ᐃᓱᐊᖅᑐᒥᒃ ᓯᕗᓂᒃᓴᒥᑦ ᐅᔭᕋᖕᓂᐊᕐᕕᐅᓂᐊᑐᖅᒥᒃ. ᓯᑐᔭᑦ ᐅᔭᖅᑲᓄᑦ ᓄᓇᒥᒃ ᐃᓗᑦᑐᖅᑎᓈᒃᑲᓂᕐᓂᐅᔭᑦ ᐊᑉᖁᓯᐅᕈᖕᓇᖅᑎᑦᑎᓂᐊᖅᑐᑦ ᐱᕙᖃᕐᓂᒃᑯᑦ ᒥᑭᓪᓕᒋᐊᖅᑎᑦᑎᔭᖅ ᐊᐅᒃᐸᓪᓕᐊᓂᕐᒥᒃ ᐊᑐᕐᓂᐊᕐᓂᕐᒧᑦ, ᐊᒻᒪᓗ ᓴᓇᔭᐅᓂᖓᓂᒃ ᐊᑉᖁᑎ ᐱᕈᖅᐸᓪᓕᐊᓂᖃᖅᑎᑦᑎᐸᓗᓂ.

ᑕᐃᒪᓐᓇᒧᑦ, ᐊᒃᓃᑯᒃᑯᑦ ᑐᒃᓯᕋᐅᓯᐅᕐᓂᐊᖅᑐᑦ ᓄᓇᕗᒻᒥ ᐃᒪᓕᓇᐅᒃᑯᓐᓄᑦ ᐋᖅᑭᒋᐊᖅᓯᕐᑯᓗᒋᑦ Type 8BC-AEA1525 ᓚᐃᓭᓐᓯᒥᒃ ᐃᓚᓯᓂᕐᒧᑦ 6-ᓂᒃ ᓄᓇᒥᒃ ᐃᓗᑦᑐᖅᓯᒪᔪᓂᒃ (*10+500; 26+250; 30+050; 34+900; 50+600; ᐊᒻᒪᓗ52+00)* ᐃᓂᐅᔫᒦᑦᑐᖅ ᐊᑭᐊᓂᑦ ᓈᒻᒪᕆᔭᐅᔪᒥᑦ ᕿᓂᖅᓴᐃᓂᕐᒧᑦ ᐊᑉᖁᑎᐅᑉ. ᓄᓇᒥᑦ ᐃᓗᑦᑐᖅᓯᒪᔪᓕᐊᖑᔪᒪᒧᑦ ᐋᓯᑦ-ᓕᐅᖅᑑᖏᑦᑐᑦ /ᓴᕙᓕᖕᓂᒃ ᐱᓕᐅᓇᙱᑦᑐᑦ, ᒥᑭᑦᑑᔪᑦ, ᖃᓂᑦᑐᒥᑦ ᖃᐅᔨᓴᖅᑕᐅᓯᒪᔫᒦᕐᓗᑎᒃ ᓈᒻᒪᕆᔭᐅᔪᒥᑦ ᐊᒪᕈᖅ ᕿᓂᖅᓴᐃᓂᕐᒧᑦ ᐊᑉᖁᑎᒥᑦ, ᐊᒻᒪᓗ ᐃᓂᐅᔫᒦᑦᑐᑦ ᐊᒃᑐᖅᓯᓂᖃᙱᑦᑐᓂᑦ ᐃᑦᑕᕐᓂᑕᖃᕐᕙᐅᔪᓂᑦ ᐱᖅᑯᓯᕆᔭᐅᔾᔪᑎᒍ ᐃᓂᐅᔪᓂᑦ. ᐊᖏᔪᒥᒃ ᐊᕙᑎᒧᑦ ᐊᒃᑐᖅᓯᓂᐅᔪᓂᒃ ᓂᕆᐅᓇᖅᑐᖃᙱᑦᑐᖅ ᐃᓚᓯᓂᕐᒧᑦ ᓄᓇᒥᒃ ᐃᓗᑦᑐᖅᓯᒪᔪᓂᒃ ᓴᓇᔭᐅᓂᖓᓄᑦ ᐊᒻᒪᓗ ᐊᐅᓚᖅᑎᑦᑎᓂᕐᒧᑦ ᐊᒪᕈᖅ ᕿᓂᖅᓴᐃᓂᕐᒧᑦ ᐊᑉᖁᑎ.

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DOCUMENT CONTROL

Version	Date	Section	Page	Revision
1	11/31/2015	All	All	Main Supporting Document for the Type B Amendment

Prepared by:
Agnico Eagle Mines Limited

Approved by:

Ryan Vanengen, M.Sc. – Environmental Superintendent Nunavut – Permitting and Regulatory Affairs

ABBREVIATIONS, ACRONYMS, AND UNITS

Agnico Eagle	Agnico Eagle Mines Limited
AWAR	All-weather Access Road
DFO	Fisheries and Oceans Canada
IOL	Inuit Owned Land
KIA	Kivalliq Inuit Association
km	Kilometre
km^2	square kilometre
L	Litre
NIRB	Nunavut Impact Review Board
m	Metre
m^3	cubic metre
mm	Millimetre
NPC	Nunavut Planning Commission
NWB	Nunavut Water Board

1.0 INTRODUCTION

1.1 Background

The Amaruq Exploration Property (Amaruq) is a 408-square kilometre site located on Inuit Owned Land (IOL), approximately 150 kilometres north of Baker Lake, and approximately 50 kilometres northwest of the Meadowbank mine. Agnico Eagle Mines Limited (Agnico Eagle) leased exploration rights to the Amaruq Exploration Property from Nunavut Tunngavik Incorporated in April 2013, and maintains an exploration camp on the site.

Advanced exploration at Amaruq has continued over the past three years to grow the resource estimate to approximately 3.7 million ounces of gold, and it continues to grow. Currently the Amaruq exploration site can only be operated safely on a seasonal basis as it is dependent upon either helicopter or snow cat access. Drilling activities can only be conducted when there are immediate and safe access to off-site medical care (in the event of a potential accident) for when there are periods when neither helicopter nor snow cat access is reliable (due to weather or ground conditions). These constraints limit the rate at which exploration and resource conversion drilling activity can be conducted at the Amaruq exploration site.

Accelerating development of the site by moving to year-round exploration activity is important to Agnico Eagle. As a result, on March 31st 2015, Agnico Eagle applied to the NWB for a Type B exploration road license. Following a conformity determination by the Nunavut Planning Commission on July 16th, 2016, Agnico Eagle received a positive screening decision from the Nunavut Impact Review Board (NIRB) on November 4th, 2015 for the construction and operation of the Amaruq Exploration Access Road. On November 9th, 2015, the Nunavut Water Board (NWB) issued a Type B license (8BC-AEA1525) to construct the 64.1 kilometre road to connect the Vault Pit at Meadowbank to the Amaruq Exploration project.

The approved exploration road is 6.5 metres wide, with 11 clear span bridges, 28 corrugated embedded round culverts to pass watercourse crossings, and many other localized drainage culverts to prevent erosion, reduce thaw susceptibility, and prevent washout of the road during freshet. The bridges will allow normal river and stream flow, and fish migration at road water crossings. The Amaruq Exploration Access Road has 7 borrow areas approved for use (referred to as Esker #1 to 7 borrow sources) with short spur roads, and an approved Vault Pit as a quarry. It is a private road constructed and operated by Agnico Eagle on both Crown and Inuit Owned Lands.

1.2 Amaruq Exploration Access Road Construction Update

The construction of the road began in February 2016 and continued until May 2016. As originally proposed, construction stopped during the open water season of 2016 to reduce impacts to the terrestrial and freshwater environment. The permanent bridges and associated materials were shipped north in the summer of 2016 and construction of the road resumed in October 2016, once the streams were frozen. As of November 1st, 2016 the base of the road has advanced to km 16+00 and the road construction is estimated to be completed by the beginning of 2018.

During the construction of the first 15 kilometers of the access road, Agnico Eagle had to overcome some challenges and identified areas that will improve the integrity and feasibility of the road. As a result of this evaluation, Agnico Eagle is requesting that excavation of bedrock material be included within the footprint of the approved esker borrow sources (Esker #1 to 7). Although this activity has been approved in borrow source

leases located on Crown Land (as per Territorial Quarrying Regulations), in esker borrow sources that contain non potentially acid generating and non-metal leaching material, Agnico Eagle is requesting this approval on IOL land for Eskers 5, 6 and 7. Agnico Eagle will continue to work with the KIA to update the lease and work plans to reflect this proposed change.

Furthermore, it has been determined that additional quarries are needed along the approved access road to:

- improve the haul- truck cycle time (this is expected to improve the rate of construction);
- provide larger aggregate material as a base to reduce thaw susceptibility and to reduce potential road washouts along the road by armouring;
- improve the long term integrity of the road structure and ensure redundancy in available borrow sources; and
- ultimately improve the feasibility of the road construction.

As a result, Agnico Eagle is applying to the Nunavut Water Board to amend the Type B 8BC-AEA1525 to include 6 additional quarries located immediately adjacent to the approved road. The proposed quarries are composed of non-potentially acid draining/ non-metal leaching (NPAG/ML) material; are within the previously assessed local study area of the Amaruq Exploration Access Road; have small footprints, and are in locations that avoid impacts to archaeological and cultural sites.

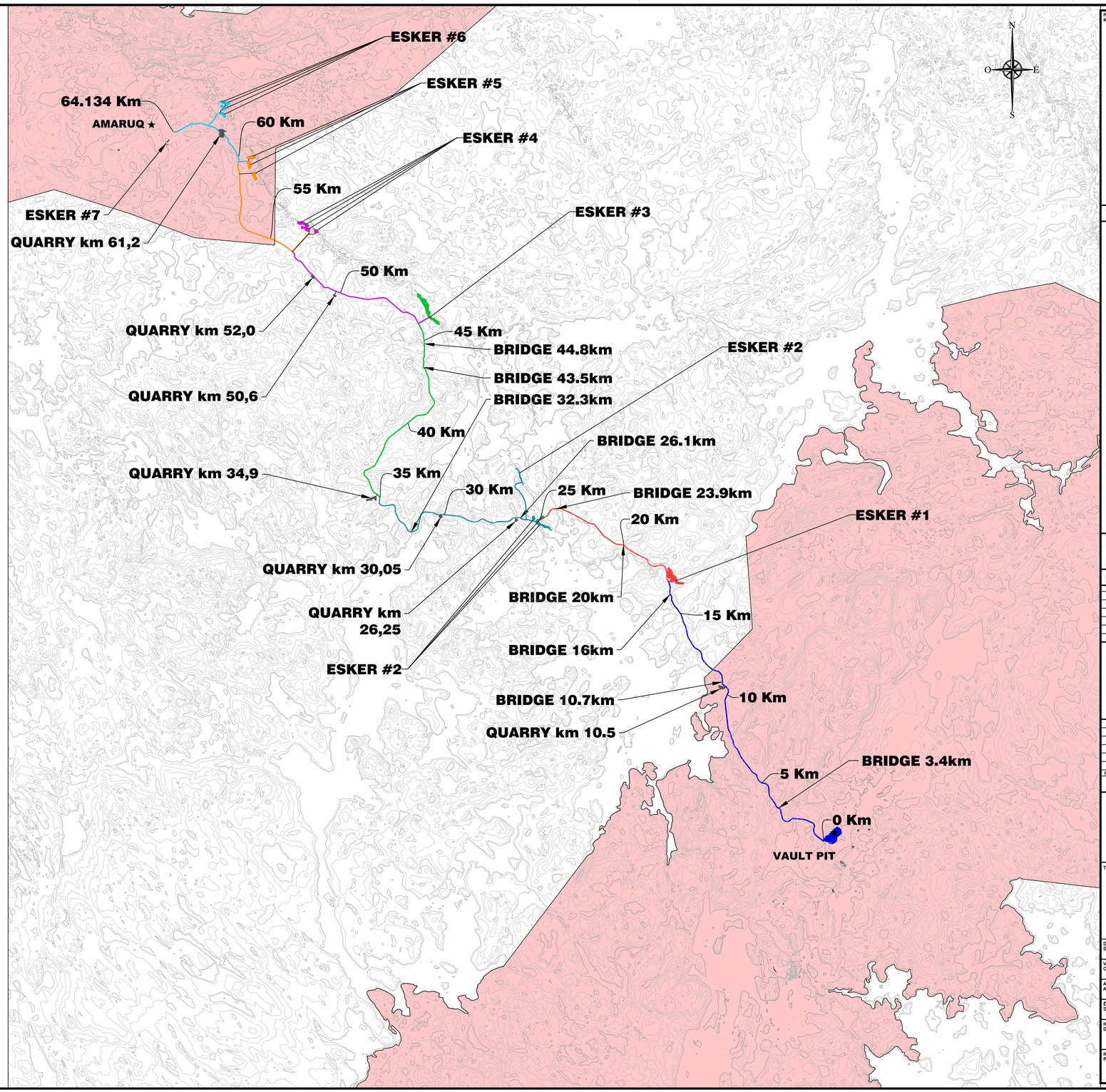
The location of the proposed quarries are presented in Figure 1.2-1.

NO. DESSIN
DRAWING NO. 6103-117-230-200

FORMAT ARCHD

LEGEND

PHASE #1:	SECTION 1 = 16.8 km VAULT TO ESKER #1 (CH:16+800)
PHASE #2:	
	SECTION 2 = 8.2 km ESKER #1 TO ESKER #2 (CH:25+000)
	SECTION 3 = 10 km ESKER #2 TO (CH:35+000)
	SECTION 4 = 11 km 35+000 TO ESKER #3 (CH:46+000)
	SECTION 5 = 7.7 km ESKER #3 TO ESKER #4 (CH:53+700)
	SECTION 6 = 6.1 km ESKER #4 TO ESKER #5 (CH:59+800)
	SECTION 7 = 4.334 km ESKER #5 TO AMARUQ (CH:64+134)
	BRIDGES: 3.4km, 6M –DRAWING #212 10.7km, 6M –DRAWING #217 16.0KM; 40M –DRAWING #221 20.0km, 6M –DRAWING #224 23.9KM; 60M –DRAWING #227 26.1km, 6M –DRAWING #228 32.3KM; 40M –DRAWING #233 43.5km, 6M –DRAWING #241 44.8KM; 40M –DRAWING #241
QUARRY	SECTION 1 @ 7



PLAN CLÉ
KEY PLAN

WSP

#141-21815-00

NOTE GÉNÉRALE / GENERAL NOTE

UTM ZONE 14 NAD 83 (CSRS)

LEGEND LIMIT	
INUIT OWNED LAND	

POUR CONSTRUCTION
FOR CONSTRUCTION
AGNICO EAGLE DATE : 2016-11-17

DESSINS EN RÉFÉRENCE / REFERENCE DRAWINGS

TITRE / TITLE	# DWG

AGNICO EAGLE

REV.	DATE	DESCRIPTION	PAR/BY	APP.	CLIENT
4	2016/11/17	ISSUED FOR CONSTRUCTION	S.D.	S.D.	E.T.
3	2016/02/08	ISSUE FOR CONSTRUCTION	S.D.	S.D.	E.T.
2	2016/01/19	ISSUE FOR CONSTRUCTION	S.D.	S.D.	E.T.
1	2015/11/23	ISSUE FOR CONSTRUCTION	S.D.	S.D.	E.T.
0	2015/10/08	ISSUE FOR CONSTRUCTION	S.D.	S.D.	

REVISIONS

AWR AMARUQ

TITRE / TITLE
AGNICO EAGLE – MEADOWBANK DIVISION
117–ROAD, YARDS, FENCES AND OTHER
230 EARTH WORK
PLAN
ROAD VAULT TO AMARUQ

DESSINÉ PAR / DRAWN BY	SYLVIE DUFOUR	DATE 2016/11/17
VERIFIÉ PAR / CHECKED BY	ÉRIC TRUDEL, P.Eng.	2016/11/17
APPROUVÉ PAR / APPROVED BY	STEPHAN DUPUIS, P.Eng.	2016/11/17
ÉCHELLE / SCALE 1 : 100 000	DATE 2014/07/07	
NO. DESSIN / DRAWING NO. 6103–117–230–200		
NO. PROJET / PROJECT NO. 6103	REVISION 4	FEUILLE / SHT 1 / 1

AE–CART–ARCH D

FILE NO. 6103–117–230–200_R4.dwg
6103–610–230–200 .DWG

1.3 Proponent Information

The Amaruq Exploration Property is owned and managed by Agnico Eagle Mines Limited (NYSE:AEM, TSX:AEM) ("Agnico Eagle" or the "Company"), a Canadian publicly traded mining company listed on the Toronto and New York Stock Exchange, trading symbol AEM, with head offices in Toronto, Ontario.

Agnico Eagle is a senior Canadian gold mining company that has produced precious metals since 1957. Its nine mines are located in Canada, Finland, and Mexico, with exploration and development activities in each of these regions as well as in the United States. Agnico Eagle began exploring for minerals in Canada since 1953 and has been active in the Kivalliq Region since 1990. Agnico Eagle owns and operates the Meadowbank mine, which is located 70 km directly north of Baker Lake and approximately 50 km southeast of the Amaruq Exploration site. In addition Agnico Eagle owns rights to the Meliadine Gold Project, which is located approximately 25 km north of Rankin Inlet, and 80 km southwest of Chesterfield Inlet. The Meliadine Gold Project has received a final Project Certificate from the NIRB and a NWB Type A.

Agnico Eagle is a senior mining company with a proven reputation for sustainability and economic success in Nunavut. Its success is based on grass roots exploration and successful mining in politically stable countries. Unlike venture capital exploration companies, the economic base and free cash flow from its operations, permits the construction of the Exploration Access Road to an exploration property that does not have a proven resource. Agnico Eagle has maintained strong relationships with the NIRB, NWB, and regulators on their projects, most notably on the recent approval for Amaruq Exploration Access Road, the Meliadine Project, and on the Meadowbank Mine Type A Water Licence Renewal. These relationships are built on thorough monitoring, reporting, and presentation of information to the regulators and stakeholders, backed by successful and accomplished operations. Agnico Eagle also sees the potential in the north, and if approved by the regulators, is willing to invest in the Amaruq Exploration Access Road, with the knowledge that building the road may not translate into additional resource extraction and production for Agnico Eagle.

Agncio Eagle's audited financial statements are available online at:

http://ir.agnicoeagle.com/files/doc_financials/2014/Annual-Audited-Financial-Statement-2014.pdf

The people who work for and with Agnico Eagle in advancing the Amaruq Exploration Access Road Project are listed below:

Agnico Eagle – Exploration Office:	Agnico Eagle Mines Limited CP 87, 765 Chemin de la mine Goldex Val-d'Or (Qc) J9P 4N9 Ph. 819 -874-5980
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Environmental Manager - Nunavut Services Group:	Jamie Quesnel – Environment Superintendent Baker Lake, Nunavut, Canada, X0C 0A0 Ph : 819-759-3555 (ext.6838) M : 819-856-0821

	Email : jamie.quesnel@agnicoeagle.com
Environmental Permitting:	Ryan Vanengen, Environment Superintendent: Permitting and Regulatory Affairs Baker Lake, Nunavut, Canada, X0C 0A0 M: 819-651-2974 Email: ryan.vanengen@agnicoeagle.com
Environmental Compliance:	Marie Pier Marcil, Sr. Compliance Technician Baker Lake, Nunavut, Canada, X0C 0A0 Ph : 819-759-3700 (ext.5193) Email: Marie-pier.marcil@agnicoeagle.com

1.4 Authorizations

The Lead authorizing agencies for the Amaruq Exploration Access Road Project are the Nunavut Planning Commission (NPC), the Nunavut Impact Review Board (NIRB), the Nunavut Water Board (NWB), and the Kivalliq Inuit Association (KIA).

1.4.1 Land Use

Agnico Eagle has sole responsibility for the construction and ongoing inspection and maintenance of all of the components of the proposed Amaruq Exploration Access Road, including the road bed, spur roads, the bridges, the culverts, and the borrow sites and the proposed quarries that are used in the construction of the exploration access road. This Exploration Access Road will not be part of any Territorial highway system.

Land Use Planning

All project proposals in the Keewatin Planning Region that require a licence or authorization from a land use authorizing agency must be assessed by the NPC for conformity with the Keewatin Regional Land Use Plan (NPC 2000). Agnico Eagle received an NPC conformity determination on July 16th, 2015 for the Amaruq Exploration Access Road (Refer to Appendix D). The Amaruq Exploration Access Road is entirely within the Kivalliq (Keewatin) region of Nunavut and therefore was subject to confirmation of conformity with the Keewatin Regional Land Use Plan.

Inuit Owned Land

As stated previously, the 408 km^2 Amaruq Property is located on IOL, and was acquired by Agnico Eagle in 2013 subject to a mineral exploration agreement with Nunavut Tunngavik Incorporated. The main routing of the Amaruq Exploration Access Road is on both IOL and Crown land as shown in Figure 1.2-1. The surface ownership of the land encompassing the Exploration Access Road right-of-way was transferred to the KIA when the Nunavut Land Claims Agreement came into effect. Land and environmental management in this area are generally governed by the provisions of the Nunavut Land Claims Agreement.

Approximately 1/3 of the Exploration Access Road route will be constructed on IOL leased by Agnico Eagle from the KIA. In addition, permits have been sought for three (3) esker borrow pits on IOL and proximal to the proposed Exploration Access Road. The esker borrow pits are accessed from the Exploration Access Road via

approved spur roads. As part of this proposal, one (1) additional quarry and spur road on IOL are proposed to be used for the construction of the Amaruq Exploration Access Road (Q 10+500). Agnico Eagle has in place necessary mitigation measures to ensure that proposed quarries will not substantially affect the quality, quantity or flow of water through IOL.

Crown Land

Crown land use authorizations have been acquired from Indigenous and Northern Affairs Canada for use of four esker borrow areas accessed via spur roads located on Crown land and proximal to the Exploration Access Road. As part of this proposal, five (5) additional quarries and spur roads on Crown land are proposed to be used for the construction of the Amaruq Exploration Access Road (Q 26+250; Q 30+050; Q 34+900; Q 50+600; and Q 52+00). Agnico Eagle has in place necessary mitigation measures to ensure that the proposed quarries will not substantially affect the quality, quantity or flow of water through Crown land.

1.4.2 Environmental Screening and NWB Type B for the Amaruq Exploration Access Road

On November 4th, 2015, Agnico Eagle received a positive screening decision from the Nunavut Impact Review Board (NIRB) for the construction and operation of the Amaruq Exploration Access Road (Refer to Appendix D). On November 9th, 2015, the Nunavut Water Board (NWB) issued Type B license 8BC-AEA1525 to construct the Amaruq Exploration Access Road (Refer to Appendix D).

A list of permits, licenses, agreements and approvals for the Amaruq Exploration Access Road is presented in Table 1.4-1.

Table 1.4-1: Current Screenings, Licenses and Permits Held by Agnico-Eagle Mines Limited for the Amaruq Exploration Access Road

Licence Number	Screening, License and Permit	Issued By	Date of Expiry	Remarks
	Conformity determination with Keewatin Regional Land Use Plan	NPC	NA	Allows amendment to proceed to screening by NIRB
11EN010	Project Screening	NIRB	NA	Previously screened the road
8BC-AEA1525	Type B Water License Amaruq Exploration Access Road	NWB	Dec 31, 2025	Allows the for the construction and operation of the Amaruq Exploration Access Road
KVCA15Q02	IOL Borrow Lease	KIA	Nov 22, 2017	Borrow pits on IOL- authorize 306,000m^3 to be removed from land
KVRW15F01	IOL Road Lease	KIA	Nov 30, 2018	Allows the for the construction and operation of the Amaruq Exploration Access Road on IOL
N2015F0026	Land use Permit - Road	INAC	May 9, 2017	Allows the for the utilisation of the Crown Land
66H/8-02-1	Crown Land Road Lease	INAC	Dec 30, 2026	Allows the for the construction and operation of the Amaruq Exploration Access Road on Crown land
66H/8-01-1	Crown Land Quarry Lease	INAC	Dec 31, 2026	Allows the for the construction and operation of quarries along the Amaruq Exploration Access Road on Crown land
11-HCAA-CA7-00006	Letter of Advice	DFO	NA	Implementation of mitigation measures to avoid impacts to fish and fish habitat Amaruq Exploration Road

KIA = Kivalliq Inuit Association; INAC = Indigenous and Northern Affairs Canada; IOL = Inuit Owned Land; NIRB = Nunavut Impact Review Board; NWB = Nunavut Water Board; NPC = Nunavut Planning Commission

2.0 AMENDMENT PROPOSAL

Agnico Eagle believes prolonged mining in the Kivalliq region is a priority for continued uninterrupted economic benefits to Nunavummiut. The Amaruq Exploration Access Road is an important link to fuel and supplies for the advancement of the Amaruq Exploration project. Ultimately the rapid construction of the road will allow Agnico Eagle to conduct year round exploration drilling at the Amaruq exploration project, to continue to aggressively drill the inferred deposit, to begin building an exploration ramp in 2018, and to continue to assess the feasibility of the future mine site. Additional rock quarries will allow for the road to be constructed in a timely fashion that minimizes thaw susceptibility and will ensure the construction of the access road is economical.

The Amaruq Exploration Access Road is approved to be a 6.5 metre (m) wide exploration sized road that is 64.134 km in length, and will connect the Meadowbank mine site, north of Vault Pit operations, to the Amaruq Exploration site.

Given the challenges of constructing a road in Nunavut, during the construction of the first 15 kilometers of the access road, it was determined that additional hard rock quarries would be needed to:

- improve the truck cycle time during construction (and therefore increase the rate of construction),
- provide large aggregate material as a base to ensure reduced thaw susceptibility and washout in sections of the road,
- improve the long term integrity and stability of the road structure, and
- improve the economic feasibility of the road construction.

As a result, Agnico Eagle is applying to the Nunavut Water Board to amend the Type B 8BC-AEA1525 to include 6 additional quarries located immediately adjacent to the approved road. The proposed quarries are composed of non-potentially acid draining/ non-metal leaching (NPAG/ML) material, are small in size, are within the previously assessed local study area of the approved Amaruq Exploration Access Road, and are in locations that avoid impacts to archaeological and cultural sites.

The location of the proposed quarries are presented in Figure 1.2-1. The general description of the exploration access road is summarized in Table 2.0-1 along with a description of the requested amendments.

Table 2.0-1: Exploration Access Road General Description and Type B Proposed Amendment

Design Element	Design Details Licensed under 8BC-AEA1525	*Type B Proposed Amendment*
Width of Road	6.5 m surface with an average base of 12.5 m, assuming a 2.5:1 sloped embankments (average base of borrow pit roads is 7.5 m)	
Average Height	1.2 m	
Road Length	64.134 km (Average length spur roads is 0.6 km)	
Approved Quarries	1 (Vault Pit)	
Additional Quarries	*Additional hard rock quarries located adjacent to the approved Amaruq Exploration Access Road*	*Six (6) quarries:* *Q 10+500; Q 26+250; Q 30+050; Q 34+900; Q 50+600; Q 52+00;*
Number of Borrow Areas along the Esker	Seven (7)	
Total Volume of material approved	~2,033,000 m^3	
Total volume of additional material requested	*Additional volume requested from six (6) quarries*	*~1,400,630 m^3*

m = metre; m^3 = cubic metre; km = kilometre

2.1 Quarry Location and Design Criteria

The Exploration Access Road (see Figures 1.2-1) is approved with a minimum road depth of 0.45 m for areas over non-thaw susceptible soil (well-drained soil over bedrock) and 1.2 m for areas over thaw susceptible soil (poorly drained, ice-rich, organic or bog over bedrock). In these areas, Agnico Eagle has designed and been approved to construct localized drainage culverts, however to further induce freezing of the road base, reduce thaw susceptibility and armour the road, it is advantageous to use large coarse material at the base of the road which Agnico Eagle is proposing to source from the additional 6 quarries. Detailed quarry site layouts, spur road locations and surface areas of the proposed quarries are provided in Appendix A.

To minimize the impacts on the environment and ensure the protection of cultural and archaeological sites along the road, specific design criteria were selected, as presented in Table 2.1-1.

Table 2.1-1: Amaruq Access Road Quarry Design Criteria

Design Element	Criteria	Notes
Location and size	Proximity to the approved road route; reduce the surface area of the quarries to the greatest extent possible.	See Figure 1.2-1; detailed quarry design figures are provided in Appendix A.
Quarry material	Geotechnically stable, Non-Potentially Acid Generating (NPAG) and non- metal leaching (ML)	Refer to Section 3.4 and Appendix B
Archaeological site and cultural site avoidance	Locate and design such that quarries do not impact archaeological or traditional land use areas	Refer to Section 3.6 and Appendix C
	If archaeological sites are identified a minimum buffer of 30 m will be established	Refer to Section 3.6 and Appendix C
Terrestrial environment protection (including ungulates and predatory mammals)	Minimize the footprint of the proposed quarries; ensure quarries are operated and designed for closure	Standard Best Management Practices; adopt wildlife protection measures outlined in the Amaruq Exploration Access Road Management Plan
Fisheries and water quality protection	Avoid water bodies, ensure a standard 31 m buffer is respected; NPAG and non-ML sourced rock; design quarries to ensure controlled run-off for the protection of nearby waterbodies during operation and closure	Standard Best Management Practices

2.2 Quarry Assessment and Recommendations

A detailed quarry assessment was conducted and recommendations were based on the design criteria, weighted primarily to ensure environmental protection by ensuring that the material was Non –PAG/ ML material, that no archaeological sites would be impacted and to ensure the feasibility of the selected locations. The results of this assessment are presented in Table 2.2-1.

In conclusion, Agnico Eagle is proposing to amend the Type B License to include six (6) quarries located at km *10+500; 26+250; 30+050; 34+900; 50+600; and 52+00*.

Table 2.2 -1: Summary of the Assessment and Determination of Proposed Hard Rock Quarries for use in construction of the Amaruq Road

Hard Rock Quarry ID #	IOL or Crown Land	Non - Potentially Acid Generating and no metal leaching potential? *	Archaeological Assessment – Clearance to use quarry source?	Recommended for use?	Notes
Q 10+500	IOL	Yes	Yes	Yes	
13+200	Crown	No	Yes	No	Variable PAG
15+800	Crown	Yes	No	No	Archaeological site 2016-2 extends across north half of the proposed quarry
Q 26+250	Crown	Yes	Yes	Yes	
Q 30+050	Crown	Yes	Yes	Yes	
Q 34+900	Crown	Yes	Yes	Yes	
42+900	Crown	No	Yes	No	Variable PAG
Q 50+600	Crown	Yes	Yes	Yes	
Q 52+000	Crown	Yes	Yes	Yes	
53+650	Crown	Yes	No	No	Archaeological site 2016-3 extends across the central portion of the proposed quarry
61+150	IOL	No	Yes	No	Variable PAG; in order to be used, additional spatial drilling and geochemical results are required prior to construction and operation

* If approved, standard ARD – ML verification monitoring during exploitation will be conducted.

2.3 Quarry Equipment and Materials Management

As with many industrial activities in the North, the schedule for the construction and amount of equipment is based on the timing of regulatory approvals, and a balance of logistical and technical considerations. To improve the efficiency of the construction of the road, Agnico Eagle is proposing to use two teams: one that will operate equipment in the approved esker borrow areas and another team that will operate in the proposed quarries along the approved access road. This will ensure the sequence of construction required to construct the Middle Section of the Exploration Access Road (around km 32) is achieved in the winter season (Q4 2016 to end of Q2 2017); this will ensure minimal effects to the environment as stated in the original application.

Tables 2.3-1 summarizes the equipment needs for the Amaruq Exploration Access Road and the additional needs for quarry equipment.

Table 2.3-1: Amaruq Exploration Road Equipment and Additional Equipment Needs for Quarrying

Component	Equipment
Exploration Access Road Construction Equipment	3– Pickup trucks; 1 – Dray; 1 – Excavator K400 + Hammer; 1 – Dozer D8 + Riper; 1 – Loader #980; 15 – 12-wheeler Trucks; 1 – Roll Compactor; 1 – Foreman; and 2 – Surveyors.
Esker Borrow Area Equipment	1 – Dozer D8 + Riper 1 – Excavator
Additional Quarry Equipment	1 – Excavator (1250 or 365) 1 – Loader (K600) 1 – Drill (B12) 1 – Haul truck 773 1 – Emulsion truck (Dyno - a contractor) 1 – Drill (B12) 3– Pickup trucks;

Fuel delivery, storage, containment and handling for quarrying will follow applicable standards; all fuel will be stored in secondary containment as self- supporting insta-berms or constructed berms that will contain 110% of the maximum volume. No additional storage of Hazardous material will be required for this amendment.

Negligible waste will be generated as a result of the proposed additional quarrying. Based on previous experience and given that maintenance of equipment will be centered at the Meadowbank mine maintenance facilities, negligible waste is expected to be produced in addition to what has been previously approved to be disposed of at authorized facilities. All waste generated will be backhauled to approved/licensed waste disposal facilities; volumes will be tracked at approved facilities.

To ensure proper handing and management of explosives will be in accordance with established standards set out in the Northern Land use Guidelines, Pits, and Quarries prepared by the AANDC (2008) and the activities will comply with the Explosive Use Act and Regulations, and the Mine Health and Safety Act and Regulations. The emergency response and spill contingency plan already addresses use, management, mitigation and contingency measures for explosive materials including transportation, storage, methods, potential types, volumes, and hazard class.

2.4 Quarry Operation, Volumes and Design

Prior to operations, the quarries will initially be surveyed and staked to provide operational boundaries to ensure the protection of the environment (i.e. ensure that there are no nesting or denning sites). After pre-stripping standard blast procedures will be implemented to ensure geotechnical stability, safety of operators; consideration for drainage and closure will be made in the design of the blasts and quarries. The proposed location of the quarries are shown in Figure 1.2-1. The estimated surface area, volumes of material to be extracted from the proposed quarries, length of spur road and UTMs are presented in Table 2.4-1.

Drilling and Blasting

Blasting in the borrow pits (i.e. for approved Esker #1 to 7 borrow sources) was considered and are discussed in the Amaruq Road Management Plan and will be updated to include the additional six quarries. The engineering department will provide a quarry design as well as some plan blast sequences for the construction team. A surveyor will stake out the pattern designated in the planning and the engineering department will provide a 24h notice for an upcoming sequence blast so they can prepare the tie-in map and the guard position maps.

On day shift, when the drill and blast supervisor is ready to load the pattern, he will contact AEM supervisor and/or the emulsion bulk truck operator 2 hours before and let him know that he is ready to receive the emulsion. The loading has to follow loading instruction provided by the engineering department. Standard ARD – ML verification monitoring of material during exploitation will be conducted prior to material being used for construction of the road.

The construction team and associated departments will send a blast notice the morning of the blast through their dispatcher. Blast monitoring equipment (including seismograph and camera) need to be installed before the blast. Once a blast pattern has been cleared by the blaster, it can be release for mucking and used for the construction of the road.

Pre-stripping and Excavation

The pre-stripping will be done with an excavator or loader inside the lease. Unfrozen Esker material will be excavated following the frozen ground creating a safe rolling surface for the hauling unit equipment, such as the Cat 773. The hauling/access route between the Esker/Quarry and the Amaruq road will stay within the limits of the lease.

The excavation of the hard rock quarry will be done with an excavator or loader. The height of the working face shall not be more than 2 m higher than the reach of the loading equipment. Considering the height of the blast (varies between 4 to 12m), the passes will be needed at some places in the quarry. Meadowbank Mine Operation standards will be applied on the quarry following the NWT Mine Health and Safety Act and Regulation. Every quarry is designed to drain the water; if needed, a trench will be designed and constructed.

Closure of the quarry

Progressive closure of the quarries will occurred during operation while the next Esker will be reached. Material may be stockpiled in the quarries for future use. However, prior to leaving the quarry, inspection will be made by Agnico Eagle in order to evaluate the closure condition such as a slope of 1% toward the dewatering trench to avoid water ponding in the quarry. The quarries that do not have sufficient drainage will be inspected, design changes may be necessary and the quarry will be altered as needed. The closure of the quarry needs to be assessed by the engineering and environment department prior to leaving the site; quarry closure plans will be presented to regulatory agencies and thereafter approved for final closure.

Table 2.4-1: Amaruq Exploration Access Road Additional Quarry Information

Quarry ID	Surface Area (ha)	Volume (m^3)	Land Ownership	Length of Spur Road (m)	Center location of the Quarry in UTM Zone 14 W Easting(m) Northing (m)	
Q 10+500	3.8921	201,581.30	IOL	52	635417.61	7227576.87
**17+000	0.74	365,103.02	CL	122	632864.21	7233152.85
**25+350	0.39	47,511.79	CL	57	626069.6	7236014.84
Q 26+250	1.2745	213,993.87	CL	62	625212.32	7235908.69
Q 30+050	1.8475	312,165.52	CL	13.8	621441.32	7236099.24
Q 34+900	5.17	427,198.94	CL	120	617989.43	7236966.68
Q 50+600	1.0842	35,214.70	CL	180	616168.74	7247090.18
Q 52+000	1.0085	210,479.36	CL	30	615075.34	7248018.72
Total	**15.41 ha**	**1,400,630 m^3**				

** bedrock material within approved esker borrow sources; surface areas and volumes are included in the total despite already gaining approval within the footprint of the eskers and within the existing lease boundary

[a] Volumes are provisional at this time and are subject to change.

CL=Crown Land, IOL= Inuit Owned Land.

3.0 DESCRIPTION OF ENVIRONMENTAL SETTING, IMPACTS, AND MITIGATION

As previously submitted and screened by the NIRB, the Exploration Access Road will interact with the natural and human environment of the area in both time and space. The Exploration Access Road has been determined to present few negative effects to the environment. The identified impacts will not occur in the long-term, or be significant due to mitigative measures and standard best practices that will be implemented. Agnico Eagle believes the addition of six (6) quarries, is not expected to change the conformity decision by NPC nor substantively change the predicted impacts previously screened by NIRB.

Nevertheless, for the purposes of this application and as an extension of the approved Exploration Access Road activities, Agnico Eagle has conducted an abridged environmental assessment, that considers the temporal boundary for construction, operation, and closure of the additional six (6) quarries to be about nine years (i.e., two years construction (2016 to 2018), up to five years operation, and two years for closure following closure of the advanced exploration project infrastructure).

As discussed in Section 2.1, during the design phase of the proposed quarry application, Agnico Eagle prioritized the need to ensure all quarries had low environmental impact. As previously described, Agnico Eagle selected quarries that are small in size, were located to ensure material is Non- PAG/ML (refer to Appendix B), will be constructed within permafrost, the locations were 31 m setback from waterbodies, and that all selected locations did not impact archaeological sites (refer to Appendix C). As a result of these design decisions, no impacts to surface hydrology, fish or fish habitat (avoidance of waterbodies), wildlife (given the small size of the quarries), surface water quantity or quality are predicted. Furthermore, there will be nil to negligible changes to the physical environment, air and noise (atmosphere) and cumulative effects.

Overall, the potential impacts on the Terrain and Permafrost, Soil, Potential for Acid Generation/ Metal Leaching, Terrestrial Environment and Archaeological and Heritage Sites, and Traditional Knowledge due to the construction, operation, and reclamation of the additional quarries were considered and assessed. The details provided in the following section are primarily taken from Agnico Eagle (2015), however have been adapted to this quarry amendment application, and describe the existing environment, environmental impacts, and mitigation for the proposed amendment to include six additional quarries. Agnico Eagle believes the content provided is appropriate for the type, scope, and scale of the application for amendment to the Type B Water Licence, for NPC to complete a conformity review, and NIRB to provide screening that may be required. Detailed supporting documents are provided in Appendix B, C and D.

3.1 General Description of the Environmental Setting

The proposed quarries are located adjacent to the approved Amaruq Exploration Access Road which is an all-season road that lies mainly on land, avoiding lake edges and crossing a number of small and medium-sized drainages. The terrain through which the road extends includes a variety of features, including boulder fields, level elevated landforms, lower terrain associated with lakes and drainages, and glacial features. Water crossings will necessitate the installation of culverts and bridges. A long, well-defined esker generally runs parallel to the road (to the east of the road) along the northern half of the road; borrow materials will be extracted from a number of areas along this esker as well as six other quarry locations described previously in this document. Additional hard rock quarry material will be needed, and will be obtained from the proposed quarries

within proximity of the approved road. The proposed quarry locations generally consist of elevated bedrock landforms.

3.2 Terrain and Permafrost

Environmental Setting

Terrain mapping of the road corridor was completed using 1:60,000 scale black and white photographs from 1979 and 1982 (Agnico Eagle, 2015) and is inclusive of the proposed quarries. The topography within the terrain LSA is rugged and somewhat dissected at the south end of the corridor, and becomes undulating and subdued towards the north end. The surficial geology is mainly composed of till veneers and blankets overlying undulating bedrock topography. Lacustrine veneers overlying till blankets are found at the north end of the corridor. Glaciofluvial deposits, including eskers, are also found in the northern part of the corridor and the eskers are oriented mainly in a northwest/southeast direction. Till deposits tend to be moderately well to imperfectly drained. The lacustrine deposits are finer textured and are imperfectly to poorly drained especially in low lying areas. Glaciofluvial deposits are coarser textured and are therefore moderately well to rapidly drained.

The approved Exploration Access Road is found in the zone of continuous permafrost (Natural Resources Canada 1995) meaning that permafrost is found under 90 to 100% of the landscape and the ground ice content in the upper 10 to 20 m of ground is expected to be between 0 and 10% (Agnico Eagle, 2015). The terrain mapping identified only a few areas where patterned ground was obvious from the aerial photographs. Stripes were identified in the lacustrine sediments at the north end of the corridor and are an indication that periglacial processes such as frost sorting, frost heave and frost creep are acting on these fine-grained deposits. Other forms of patterned ground (e.g., mudboils, circle and polygons), frost shattering of bedrock and solifluction lobes are also likely to be present in this area but are too small to be seen on the aerial photographs.

Impacts, Mitigation, and Monitoring for Additional Quarries

Effects to the terrain and permafrost are anticipated to be confined to the narrow footprint area of the additional quarries. The additional quarries will require the construction of small spur roads which will have minimal but measureable effects on the terrain in that materials will be directly covered by fill materials. The thickness of the fill materials is designed to preserve the underlying permafrost in areas of thaw-stable soils, and to promote the aggradation, or building, of permafrost into the road structure in these areas of thaw sensitive soils. Numerous localized drainage culverts will be installed to reduce thaw susceptibility; however, water accumulation against the Exploration Access Road may result in thaw settlement. Following closure, terrain can be contoured, to the extent practical, to blend the residual footprint with the surrounding landscape.

To the greatest extent possible, most of the construction of the Exploration Access Road, and therefore construction and operation of the proposed quarries will be carried out during winter months. As a result, Agnico Eagle does not expect excessive settlement. The development of additional quarries to provide suitable road construction materials will result in open excavations on the landscape. Excavation will result in changes in thermal regimes and permafrost conditions within the eskers. As a consequence the active layer beneath the excavated portions of the eskers may be depressed slightly and it is expected that small impacts within the footprint of the quarries will occur associated with permafrost degradation, which may include thaw-induced settlement. There will be localized negative effects to individual sources of borrow material; however, this is not expected to be a measureable impact to the terrain previously assessed within the LSA of the Amaruq

Exploration Access Road. Where possible the excavated portions of the additional quarries will be designed to promote drainage from the eskers so that no water accumulation occurs.

3.3 Soil

Environmental Setting

The soil regional study area (RSA) of the approved road was defined as a 1.5 km radius from the proposed Amaruq Exploration Access Road (Agnico Eagle, 2015) and therefore is inclusive of the proposed quarries. Soil conditions in the area of the Exploration Access Road were classified and mapped using the general principles and methods outlined by the Expert Committee on Soil Survey (1982) and the Mapping Systems Working Group (Agriculture Canada 1981). All soils were mapped according to the Canadian System of Soil Classification (Soil Classification Working Group 1998). Note that all mapping was undertaken by desktop processes with no field verification.

The objective of the soil mapping for the approved Amaruq Exploration Access Road assessment was to describe and characterize the existing soil resources, the distribution across the landscape, and associated soil quality and sensitivities within the area (Agnico Eagle, 2015). The approach to classifying and describing soil units involved a review of existing information, and development of soil maps in a Geographical Information System (GIS) platform.

The Exploration Access Road is found within the Wagner Bay Plateau Ecoregion, an area composed of massive Archean rocks of the Canadian Shield that form broad, sloping uplands, plains, and valleys (Agnico Eagle, 2015). It rises gradually westward from Chesterfield Inlet to 600 masl elevation, where it is deeply dissected. Turbic and Static Cryosols developed on discontinuous, thin, sandy moraine and alluvial deposits are the dominant soils in the ecoregion. The soils mapped in the area of the proposed road include static cryosols, regosols and rock and are described below:

- The static cryosol soils typically occur on the lower slopes of ridges and eskers or as veneers over flat rocky plains characterized by frost boils.
- Soils of the Regosolic order are most commonly associated with landforms where the land surface is (or has recently been) unstable. Because of the unstable surface, the soil has had little time to develop, and hence soil horizons are very weakly expressed if present at all. The instability could be from either erosion of the landsurface or through deposition of sediment and burial of an earlier surface; in some cases, this can occur in different portions of the same landscape. River floodplains also commonly have Regosolic soils associated with them.
- Rock is unvegetated areas with bedrock at the soil surface.

Impacts, Mitigation, and Monitoring

Site clearing and soil stripping and storage will occur at the quarries, whereas soils will be covered with the rock base along the footprint of the proposed spur roads. This will result in changes to soil quantity, distribution, and/or availability of soil. Soil removal will occur at the beginning of the construction phase for the opening of the quarries, but due to the nature of these sites, quantities of soils are expected to be small.

With appropriate soil salvage and reclamation techniques, soils can be returned to the landscape and support natural plant communities. However, soil can be altered or lost through the following project components and activities:

- wind and water erosion during site preparation and reclamation phases, and
- disturbance of soil during construction for the footprint of the road.

An area of approximately 15.4 hectare (ha) is expected to be disturbed for the additional Exploration Access Road proposed borrow pits during operation. The 15.4 ha of disturbed area will be reclaimed at closure.

During the processes of soil salvage and stockpiling, and storage of topsoils at quarries, the quantity of soils available for site reclamation may be reduced due to wind and water erosion. Use of standard erosion and sediment control techniques and the short duration of storage will result in negligible loss of the stockpiled soils

3.4 Potential for Acid Generation/Metal leaching

Environmental Setting

Geochemical testing to determine the suitability of the bedrock material for construction in the six quarries was done in June 2016, and follow-up testing was completed at 61+150 in September 2016, using static test methods to assess its chemical composition, its potential to generate acid rock drainage (ARD), and its' potential to leach metals to the receiving environment upon exposure to ambient conditions (refer to Appendix B for the full report).

Impacts, Mitigation, and Monitoring

Based on testing for the results from the six proposed quarries, the sampled quarry locations showed no potential to generate acid drainage based on low sulphide content and sufficient buffering capacity. The sampled quarry material also demonstrated low metal leaching potential in all quarries. Leaching test metal concentrations were generally below effluent discharge criteria (MMER 2012), for all constituents with the exception of Aluminum, where there was a marginal exceedance in quarry Q 50+600. Exceedances in laboratory leach tests do not necessarily imply non-compliance of contact water quality, rather the results serve to highlight chemicals of environmental interest as actual natural drainage quality will depend on material exposure, drainage patterns and site climate that affect the ratio of leaching solution to solid material and water-rock contact time.

Through appropriate quarry design, monitoring, and standard mitigative measures (including controlling runoff), potential effects to the environment are not expected to result in long-term or significant impacts due to geochemistry of the rock or ARD. Agnico Eagle will conduct additional geochemical evaluations in these quarries to determine the rock types. Furthermore, additional samples will be taken during operation to confirm ML/ARD potential.

3.5 Terrestrial Environment

Environmental Setting

In 2015 a Terrestrial Baseline Characterization Report (TBCR) for the proposed exploration road (including proposed esker borrow sites and spur roads) (Dougan and Associates 2015) was prepared based on the findings of field studies and an analysis of records from the annual Baker Lake Hunter Harvest Study, a wildlife

log sheet posted at the Amaruq exploration camp, and an analysis of Caribou satellite-collaring data. The TBCR did not identify any Species at Risk (SARA). The 2014 baseline work was repeated in 2015 and in 2016 (Dougan and Associates, 2016) and generally confirmed the initial baseline reporting results. The TBCR included habitat suitability maps for each ecosystem component, based on Ecological Land Classification (ELC) mapping for the study area:

- vegetation (wildlife habitat);
- ungulates;
- predatory mammals;
- small mammals;
- raptors;
- waterfowl; and
- upland breeding birds.

The spatial scale of the terrestrial assessment for the Amaruq Exploration Access Road encompassed a LSA is a 3 km corridor with a total area of 20,401 ha, while the RSA is a 50 km corridor with a total area of 466,599 ha (Agnico Eagle, 2015) and therefore is inclusive of the proposed quarries. Each of these study areas are measured from the centerline of all of the construction works, which include the exploration road.

Please refer to Agnico Eagle, 2015, for more detailed information on this previously assessed area (Figure 4.3-1 for the vegetation communities and impact assessment study areas, and Figure 4.3-2 for the caribou ranges and impact assessment study areas).

Impacts, Mitigation, and Monitoring

The main sources of potential effects identified for the approved Amaruq Exploration Access Road that will negligibly change with the development of the proposed quarries includes ground traffic, and increased human presence. During the operation stage, sensory disturbances to wildlife will occur and the creation and deposition of dust within approximately 50 m of the road and quarries may result in habitat degradation and contaminant loading in vegetation adjacent to the roadway. Effects during the closure and post-closure phase will be reduced compared to effects during the construction and operation phases, as the spur road bed and quarries will be geo-technically stable, designed to ensure proper drainage, will potentially become revegetated at their base, and use of the road by vehicles will be discontinued. Natural succession of vegetation communities and thus habitat restoration will begin, and sensory disturbances to wildlife will cease.

The assessment found that there are two main areas where effects will occur:

- The use of quarry material, development of quarries and construction of small spur roads will result in a physical loss of habitat. The amount of high suitability habitat lost varies as each ecosystem component has different habitat requirements, but overall habitat losses are small in comparison to the RSA and the landscape as a whole. This effect will occur during the construction phase, continue through operation, and be reversed upon closure when the road will be rehabilitated.

- Sensory disturbances occurring during construction and road operation will result in effective habitat loss for the wildlife ecosystem components. The amount of effective habitat loss is measured in a zone of influence which is different for each ecosystem component depending on their sensitivity to disturbance. Ungulates, predatory mammals, and raptors will be most affected by sensory disturbance. Literature suggests that small mammals, waterfowl, and upland breeding birds are less affected by sensory disturbance by proximity to roads. This effect will occur during the construction and operations phases and end at closure when use of the road will cease.

Measures taken to mitigate effects on wildlife habitat include:

- minimizing the construction footprints, and
- completion of the majority of the construction work in the winter season.

Various mitigation measures to reduce sensory disturbances will be implemented, including:

- follow safe and approved blasting procedures,
- ensuring vehicles are properly muffled,
- limiting personnel access into adjacent habitat; and
- enforcing a 50 km/h speed limit.

With these mitigation measures the effects of the habitat losses and sensory disturbances will be not significant. The Exploration Access Road and proposed quarries are closed to the public and will have controlled access at the Meadowbank mine site, and will only be available to Agnico Eagle personnel and contractors.

There are a number of other impacts which have the potential to occur, which include deposition of dust and contamination through exhaust and other vehicle by-products, off-road vehicle access, increased predation, and vehicle collisions. The assessment found that these effects would be negligible. Continued monitoring, the implementation of the mitigation measures and best management practices for construction and Amaruq Access road operations will ensure that potential impacts to the terrestrial environment as a result of the construction, operation, and closure of the quarries are minimized and mitigatable.

3.6 Archaeology and Heritage Sites

Environmental Setting

Archaeological field studies were conducted in July 2016. All proposed quarry locations consist of bedrock landforms, and as such surficial inspection using aerial fly-overs and ground inspections were the means of identifying archaeological sites. For this evaluation, shovel testing was not determined to be necessary. Inspection for stone features and archaeological cultural material (lithic, bone or historic artifacts) was conducted at each quarry location. A summary of the archaeological potential, field assessment coverage, results of the assessment and recommendations relative to use of each proposed quarry were summarized previously are presented in Appendix C.

After completion of the field surveys at the proposed quarries a desktop review of the final planned quarry footprints against satellite imagery and tracked logs of the archaeological field studies was conducted. This

included the archaeological studies conducted relative to exploration activities in 2011, 2013, 2014 and the 2015 archaeological studies conducted for the proposed Whale Tail Project and associated access road/borrow sources. These studies were reviewed relative to field evaluation coverage, as well as relative to identified archaeological sites. The review confirmed that most of the proposed quarries were located on terrain features that would be considered to be of high or moderate potential to contain archaeological sites, based on the nature of the landform and proximity to water sources. However, some quarries were considered to be of low archaeological potential due to the low profile of the landform or the lack of proximity to water sources.

Based on the archaeological studies, of the proposed quarry locations that were assessed, Q 10+500, Q 26+250, Q 30+050, Q 34+900, Q 50+600, and Q 52+00, are recommended for development as they avoid all nearby archaeological sites. Two quarries (15+800 and 53+650) were not recommended for use due to the presence of large archaeological sites. The archaeological sites identified at these quarries are both relatively large and complex, and these sites would require significant additional archaeological investigation before the quarries could be used. As a result of these findings, at this time, Agnico Eagle is no longer proposing to use these locations as quarry sites. In the future, if these quarry sites are necessary, additional consultation with stakeholders and archaeology studies would need to take place prior to any impacts at the quarries, including additional assessment and detailed archaeological mapping/excavation of the sites located at both quarry 15+800 and 53+650. A summary of the environmental assessment and findings for the proposed quarries is presented Table 2.2-1 of this document.

Impacts, Mitigation, and Monitoring

As previously described, implementation of appropriate mitigation (site avoidance) has reduced or eliminated impacts to archaeological and cultural sites for the 6 additional quarries.

As previously stated, during development of the proposed quarries, avoidance of nearby archaeological sites is planned for: Q 10+500; Q 26+250; Q 30+050; Q 34+900; Q 50+600; Q 52+00. If in the future this plan changes and monitoring of the area prior to development determines 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 access road related impacts to the site.

3.7 Traditional Knowledge

Environmental Setting

Results of the Baseline Traditional Knowledge Report v.2 (Agnico Eagle 2014) indicated that the general area around the approved Amaruq Exploration Access Road is valued both for practicing traditional land use (TLU) activities and for providing access to important TLU sites in the past (Agnico Eagle, 2015). The region was used for trapping, hunting, fishing and plant harvesting by the local people. Today, the approved access road area is currently used as a travel corridor between Baker Lake and the Back River area to access important TLU sites, and harvesting occurs opportunistically in the general area. Access is via trails used by ATVs in the summer

and snowmobiles in the winter. However, the proposed quarry locations are not located near designated sensitive environmental areas, parks, recreational areas, sport or commercial fisheries, protected wildlife areas or other designated protected areas.

Impacts, Mitigation, and Monitoring

The approved Exploration Access Road is closed to the public and will have controlled access at the Meadowbank mine site, and will only be available to exploration personnel and contractors. Additionally, the proposed road does not connect to any Kivalliq or other communities. Therefore, there is no link between the proposed road and access to traditional use areas.

A decrease in the availability of resources for harvesting, including for wildlife, vegetation and fish due to effects of the Exploration Access Road is not anticipated. In addition, Agnico Eagle selected quarry locations to avoid archaeological and cultural sites. As a result changes in the use of culturally important sites due to effects of the use of the additional quarries are not anticipated.

4.0 MANAGEMENT AND OPERATIONS

Agnico Eagle prides itself on the fact that as a Company it can rely on a highly experienced senior management team that have remained together for many years (the senior management team members each average approximately 20 years of service with Agnico Eagle). As a Company, Agnico Eagle has an excellent track record as a local employer; in being a valued member of the communities in which they operate; in managing the environmental impact of our mining operations; in providing a safe work place and in reporting our performance to all of our stakeholders.

Agnico Eagle also has in place an Environmental Policy and a Health and Safety Policy to ensure core values for operating safely, protecting the environment, treating people and communities with respect, and making a profit are achieved.

In support of the original application for the Amaruq Exploration Access Road, Agnico Eagle prepared the following plans:

- Road Management Plan;
- Emergency Response and Spill Contingency Plan; and
- Conceptual Closure and Reclamation Plan.

All management plans identified have taken into account established Nunavut guidelines and standards. In construction and operation of the proposed quarries, Agnico Eagle will ensure practices outlined in the road management, emergency response and spill contingency plan are followed in accordance with the NWB Guidelines.

If deemed necessary, the above management plans will be updated to reflect commitments and conditions made by Agnico Eagle through the Type B quarry amendment process.

5.0 RECLAMATION AND CLOSURE

The Exploration Access Road (along with the proposed quarries) will be decommissioned and reclaimed by Agnico Eagle if exploration on the Amaruq property fails to support further exploration activity or future satellite ore deposit development. Closure and reclamation of the road would be initiated within a year following the completion of closure and reclamation of the Amaruq camp and exploration sites.

It is Agnico Eagle's responsibility to decommission and reclaim the Exploration Access Road and quarries once its activity in the area is complete. For a third party to take over the road (including borrow sources and additional quarries), that third party would have to complete its own arrangements with the land owners (the KIA and the Crown) and then complete its own permitting process covering future use. Agnico Eagle does not own the land on which the Exploration Access Road is to be constructed and, thus, it cannot transfer future ownership or use privileges to any third party. Agnico Eagle must complete its obligation to decommission and reclaim the Exploration Access Road unless directed otherwise by a combination of the land owners and regulatory agencies who issued permits/authorizations for the road.

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APPENDIX A

Quarry Site Layout Drawings

NO. DESSIN
DRAWING NO. 6103-117-230-297

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PLAN QUARRY km 26,25 ÉCH :1 :2000

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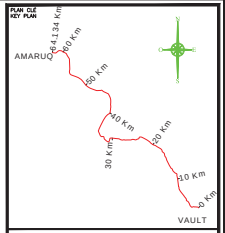

NOTE GÉNÉRALE / GENERAL NOTE

UTM ZONE 14 NAD 83 (CSRS)

LEGEND

QUARRY AREA

ESKER AREA

31m SHORELINE PROTECTION ZONE

POUR CONSTRUCTION
FOR CONSTRUCTION
DATE : 2016/11/17

WSP

REF-WSP: 141-21815-00

DESSINS EN RÉFÉRENCE / REFERENCE DRAWINGS

TITRE / TITLE	# DWG

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TITRE / TITLE

AGNICO EAGLE – MEADOWBANK DIVISION
117–ROAD, YARDS, FENCES, AND OTHER
230–GENERAL EARTH WORK
QUARRY km 10.5 & 26,25

DESSINÉ PAR DRAWN BY	SYLVIE DUFOUR.	DATE 2016/11/17
VÉRIFIÉ PAR CHECKED BY	ÉRIC TRUDEL, P. Eng.	2016/11/17
APPROUVÉ PAR APPROVED BY	STEPHAN DUPUIS, P.Eng.	2016/11/17
ÉCHELLE SCALE	INDICATED	DATE 2016/08/22

NO. DESSIN DRAWING NO. 6103-117-230-297

NO. PROJET PROJECT NO.	REVISION	FEUILLE / SHT
6103	0	1 / 1

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FILE NO. 6103-117-230-297@300_0-.dwg

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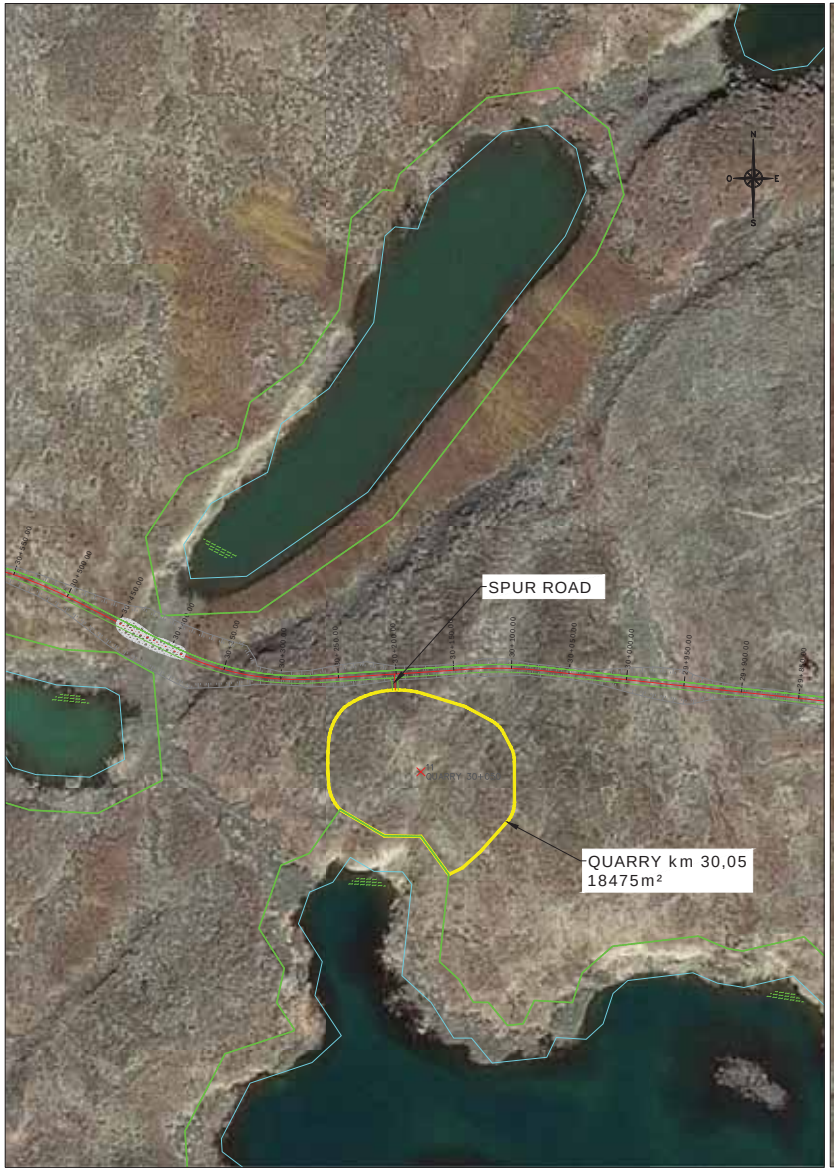

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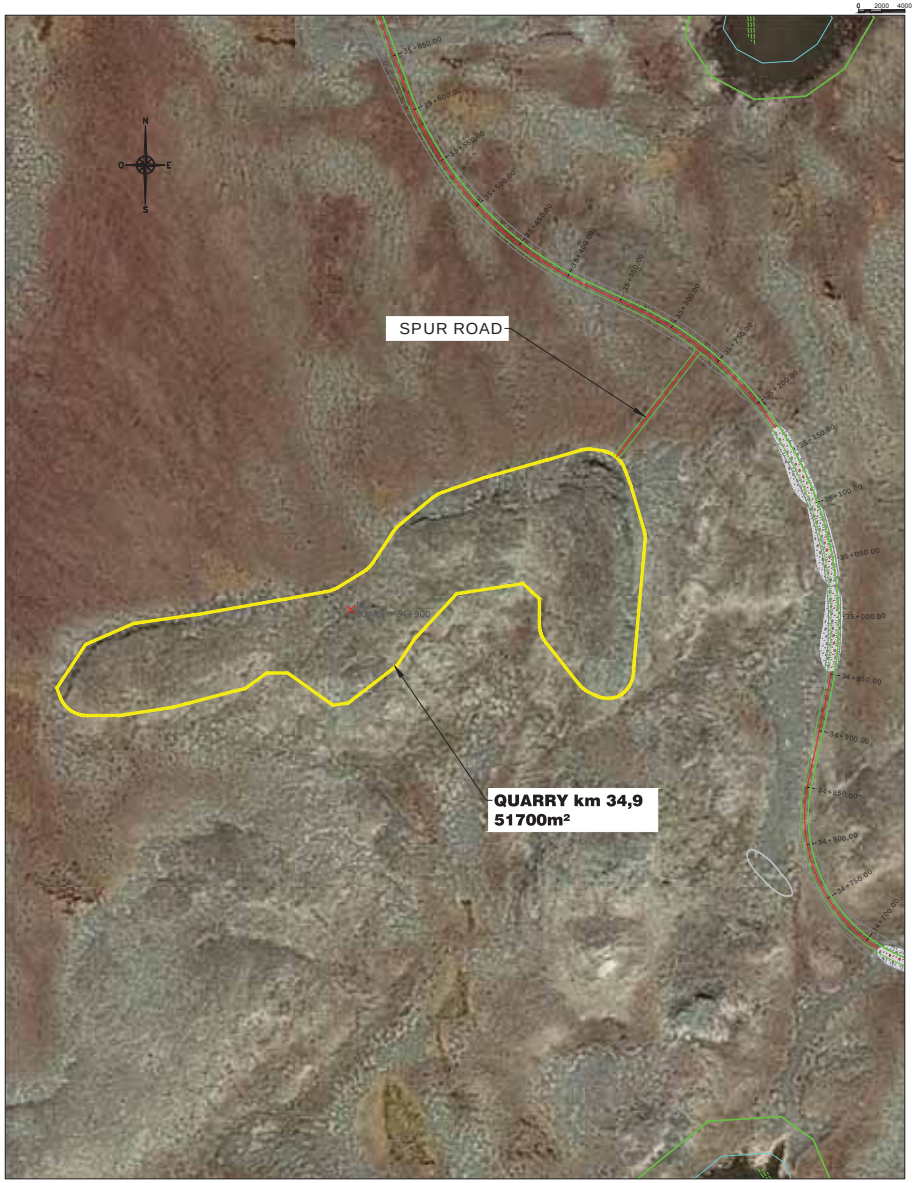

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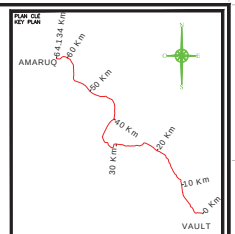

NOTE GÉNÉRALE / GENERAL NOTE

UTM ZONE 14 NAD 83 (CSRS)

LEGEND
QUARRY AREA
ESKER AREA
31m SHORELINE PROTECTION ZONE

POUR CONSTRUCTION
FOR CONSTRUCTION
DATE : 2016/11/17

WSP

REF-WSP: 141-21815-00

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230-GENERAL EARTH WORK
QUARRY KM 30.05 & 34,9

DESSINÉ PAR DRAWN BY	SYLVIE DUFOUR.	DATE 2016/11/17
VÉRIFIÉ PAR CHECKED BY	ÉRIC TRUDEL, P. Eng.	2016/11/17
APPROUVÉ PAR APPROVED BY	STEPHAN DUPUIS, P.Eng.	2016/11/17
ÉCHELLE SCALE	INDICATED	DATE 2016/08/22

NO. DESSIN DRAWING NO. 6103-117-230-298

NO. PROJET PROJECT NO.	REVISION	FEUILLE / SHT
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FILE NO. 6103-117-230-297@300_0-.dwg

NO. DESSIN
DRAWING NO. 6103-117-230-299

FORMAT ARCH D

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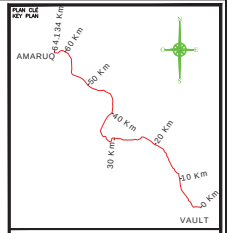

NOTE GÉNÉRALE / GENERAL NOTE

UTM ZONE 14 NAD 83 (CSRS)

LEGEND
QUARRY AREA
ESKER AREA
31m SHORELINE PROTECTION ZONE

POUR CONSTRUCTION
FOR CONSTRUCTION
DATE : 2016/11/17

WSP

REF-WSP: 141-21815-00

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117-ROAD, YARDS, FENCES, AND OTHER
230-GENERAL EARTH WORK
QUARRY km 50,6 & km 52,0

DESSINÉ PAR DRAWN BY	SYLVIE DUFOUR.	DATE 2016/11/17
VERIFIÉ PAR CHECKED BY	ÉRIC TRUDEL, P. Eng.	2016/11/17
APPROUVÉ PAR APPROVED BY	STEPHAN DUPUIS, P.Eng.	2016/11/17
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NO. PROJET PROJECT NO.	6103	REVISION 0 / FEUILLE / SHT 1 / 1

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APPENDIX B

Technical Memorandum: Geochemical Test Results For Rock Samples Collected From Potential Quarries Between Meadowbank and Amaruq

APPENDIX C

Archaeological Studies: Proposed Quarries Between Meadowbank and Amaruq.

APPENDIX D

Amaruq Exploration Access Road: NPC Conformity Review; NIRB Screening Decision; NWB Type B.