

UMA Engineering Ltd.
2540 Kensington Road NW
Calgary, AB T2N 3S3
T 403.270.9200 F 403.270.0399 www.uma.aecom.com

July 14, 2008

File Name: CAM-5 (3.6)

Phyllis Beaulieu
Manager of Licensing
Nunavut Water Board
P.O. Box 119
Gjoa Haven, NU X0B 1J0

Dear Phyllis:

Re: Water Use License Amendment: 1BR-MAC0712

UMA Engineering Ltd. is submitting the following amendment request for water use license 1BR-MAC0712. The amendment request is being submitted on behalf of Defence Construction Canada and the Department of National Defence.


In the original application, two water supply lakes were identified. One supply lake was Bagnall Lake and the other was an un-named lake at the upper site. Water samples were previously collected from these locations to determine their potability and they were acceptable at the time. After mobilizing to site in 2008, water samples were again collected from these locations to confirm the water quality. However, the analytical results for the samples collected in 2008 from both of these locations identified coliforms above the Canadian Drinking Water Criteria. In addition to the two identified water supply lakes in the original application, another un-named lake was tested. The results indicate the water from this location meets all drinking water criteria.

The proposed new water supply lake is located in the middle site area and can be accessed via an existing road from the borrow area. The lake is fairly large and is estimated to be at least 3 m deep, although the depth has not been confirmed because it is still ice covered. A site plan showing the location of the lake and the intake area is attached for reference.

We trust the information provided is sufficient for you to process the amendment. Please feel free to contact the undersigned if you have any questions or require any further information.

Sincerely,

UMA Engineering Ltd.



Eva Schulz, P.Ag.
Environmental Scientist
Eva.Schulz@uma.aecom.com

Encl. Site Plan

cc: Douglas Craig/Asha-Rani Boucher-Sharma, DCC
Barry Fedorak, UMA



P.O. Box 119
GJOA HAVEN, NU X0B 1J0
TEL: (867) 360-6338
FAX: (867) 360-6369

kNK5 wmoEp5 vtmpq
NUNAVUT IMALIRIYIN KATIMAYINGI
NUNAVUT WATER BOARD
OFFICE DES EAUX DU NUNAVUT

WATER LICENCE APPLICATION FORM

Application for: (check one)

☐ New ☐ Renewal ☒ Amendment ☐ Assignment ☐ Cancellation

LICENCE NO:

(for NWB use only)

<p>1. NAME AND MAILING ADDRESS OF APPLICANT/LICENSEE</p> <p><u>Douglas Craig, M.Sc.</u> <u>Environmental Officer</u> <u>DEW Line Clean Up Project</u> <u>Defence Construction Canada</u> <u>Constitution Square, Suite 1720</u> <u>350 Albert Street</u> <u>Ottawa, ON K1A 0K3</u></p> <p><u>Phone: 613-998-7288</u> <u>Fax: 613-998-0468</u> <u>E-Mail: douglas.craig@dcc-cdc.gc.ca</u></p> <p><u>Administered by:</u> <u>Eva Schulz, P.Ag.</u> <u>Environmental Scientist</u> <u>UMA Engineering Ltd.</u> <u>2540 Kensington Road NW</u> <u>Calgary, AB T2N 3S3</u></p> <p><u>Phone: 403-270-9200</u> <u>Fax: 403-270-0399</u> <u>e-mail: eva.schulz@uma.aecom.com</u></p>	<p>2. ADDRESS OF CORPORATE OFFICE IN CANADA (if applicable)</p> <p>_____</p> <p>Phone: _____ Fax: _____ e-mail: _____</p>
<p>3. LOCATION OF UNDERTAKING (describe and attach a topographical map, indicating the main components of the Undertaking)</p> <p>The CAM-5, Mackar Inlet DEW Line site is located on the western shore of the Melville Peninsula in the Committee Bay area of the Nunavut Territory.</p> <p>Latitude: (68°17' " N) Longitude: (85°7' " W) NTS Map Sheet No. <u>47B</u> Scale: <u>1:50,000</u></p>	
<p>4. DESCRIPTION OF UNDERTAKING (attach plans and drawings)</p> <p>The purpose of the project is to complete the environmental cleanup of the CAM-5 site. The main components of the cleanup include the following:</p> <ul style="list-style-type: none"> • Demolition and removal of the existing site facilities; 	

- Closure and remediation of existing landfills;
- Construction of two new landfills for the disposal of contaminated soils and non-hazardous debris generated as a result of the clean up;
- Excavation and either landfilling or treatment of contaminated soils;
- Removal of surface debris; and,
- Physical restoration of the site to as natural a state as practical.

A detailed Project Description of the work being completed at CAM-5 was included with the original application.

5. TYPE OF PRIMARY UNDERTAKING (A supplementary questionnaire must be submitted with the application for undertakings listed in “**bold**”)

- | | |
|--|--|
| <input type="checkbox"/> Industrial | <input type="checkbox"/> Agricultural |
| <input type="checkbox"/> Mining and Milling (includes exploration/drilling) | <input type="checkbox"/> Conservation |
| <input type="checkbox"/> Municipal (includes camps/lodges) | <input type="checkbox"/> Recreational |
| <input type="checkbox"/> Power | <input checked="" type="checkbox"/> Miscellaneous (describe below): |

DEW Line Clean Up Project

See Schedule II of *Northwest Territories Waters Regulations* for Description of Undertakings

6. WATER USE

- ☒ To obtain water
 ☐ Flood control
☐ To cross a watercourse
 ☐ To divert a watercourse
☐ To modify the bed or bank of a watercourse
 ☐ To alter the flow of, or store, water
☐ Other (describe):

The water supply lake originally intended contains coliforms above the drinking water criteria. An alternate water source has been identified that meets the drinking water criteria. The new water supply lake has an existing access road from the borrow area. See attached site plans.

7. QUANTITY OF WATER INVOLVED (cubic metres per day including both quantity to be used and quality to be returned to source)

Water use ☒ 100m³/day or less
☐ Greater than 100m³/day; if greater, indicate quantities to be used for each purpose (camp, drilling, etc.)

Water returned to source
0 m³/day

8. WASTE (for each type of waste describe: composition, quantity (cubic metres per day), methods of treatment and disposal, etc.)

- | | |
|---|--|
| <input checked="" type="checkbox"/> Sewage | <input checked="" type="checkbox"/> Waste oil |
| <input checked="" type="checkbox"/> Solid Waste | <input checked="" type="checkbox"/> Greywater |
| <input checked="" type="checkbox"/> Hazardous | <input checked="" type="checkbox"/> Sludges |
| <input checked="" type="checkbox"/> Bulky Items/Scrap Metal | <input checked="" type="checkbox"/> Other describe): |
- Descriptions were provided in the original application submitted in 2005.

9. OTHER PERSONS OR PROPERTIES AFFECTED BY THIS UNDERTAKING (give name, mailing address and location; attach if necessary)

Land Use Permit

DIAND ☒ Yes ☐ No If no, date expected _____

Regional Inuit Association ☐ Yes ☒ No If no, date expected _____

Commissioner ☐ Yes ☒ No If no, date expected _____

10. PREDICTED ENVIRONMENTAL IMPACTS OF UNDERTAKING AND PROPOSED MITIGATION MEASURES (direct, indirect, cumulative impacts, etc.)

NIRB Screening ☒ Yes ☐ No If no, date expected

11. INUIT WATER RIGHTS

Will the project or activity substantially affect the quality, quantity, or flow of water flowing through Inuit Owned Lands and the rights of Inuit under Article 20 of the Nunavut Land Claims Agreement?
No.

If yes, has the applicant entered into an agreement with the Designated Inuit organization to pay compensation for any loss or damage that may be caused by the alteration. If no compensation agreement has been made, how will compensation be determined?

N/A

12. CONTRACTORS AND SUB-CONTRACTORS (name, address and functions)

Biogenie S.R.D.C. Inc.
Sylvaine Laberge, Project Director
Guillome Robert, Site Superintendent
P.O. Box 1229
Iqaluit, NU X0A 0H0

13. STUDIES UNDERTAKEN TO DATE (list and attach copies of studies, reports, research, etc.)
See Section 2.5 in the Project Description for a list of the previous assessments and investigations.**14. THE FOLLOWING DOCUMENTS MUST BE INCLUDED WITH THE APPLICATION FOR THE REGULATORY PROCESS TO BEGIN**

Supplementary Questionnaire (where applicable: see section 5) ☐ Yes ☒ No If no, date expected _____

Inuktitut and/or Inuinnaqtun/English Summary of Project ☐ Yes ☒ No If no, date expected _____

Application fee of \$30.00 (Payee Receiver General for Canada) ☐ Yes ☒ No If no, date expected _____

Water Use fee of \$30.00 (unless otherwise indicated in Section 9 of the *NWT Waters Regulations*; Payee Receiver General for Canada)

☐ Yes ☒ No If no, date expected _____

15. PROPOSED TIME SCHEDULE (unless otherwise indicated, the NWB will consider the application for a five (5) year term)

☐ one year or less (or) ☒ Multi Year

Start Date: July 1, 2008 Completion Date: October 30, 2010

Eva Schulz
Name (Print)

Environmental Scientist
Title (Print)

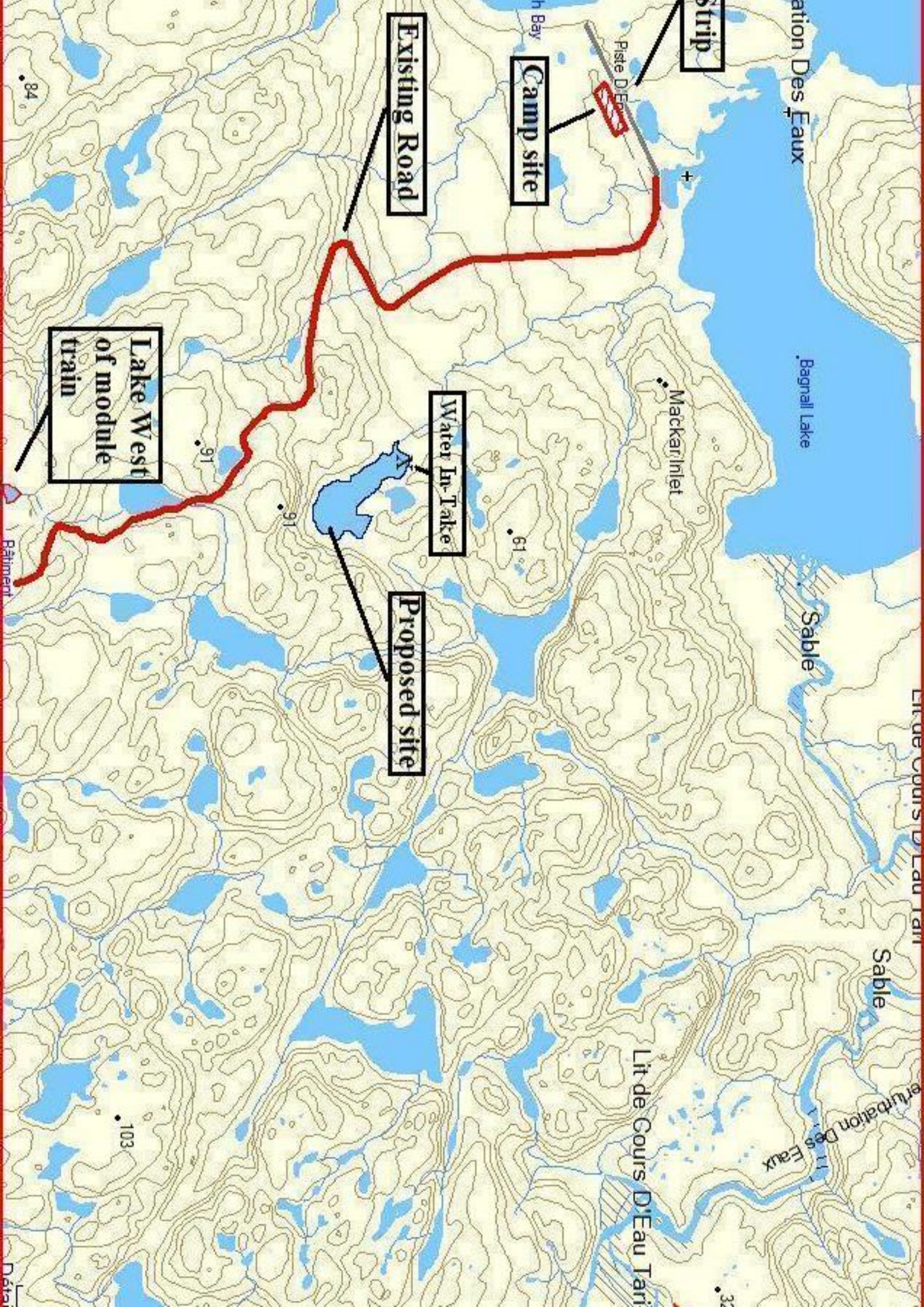

Signature

July 14, 2008
Date

For Nunavut Water Board office use only

APPLICATION FEE Amount: \$ _____ Pay ID No.: _____

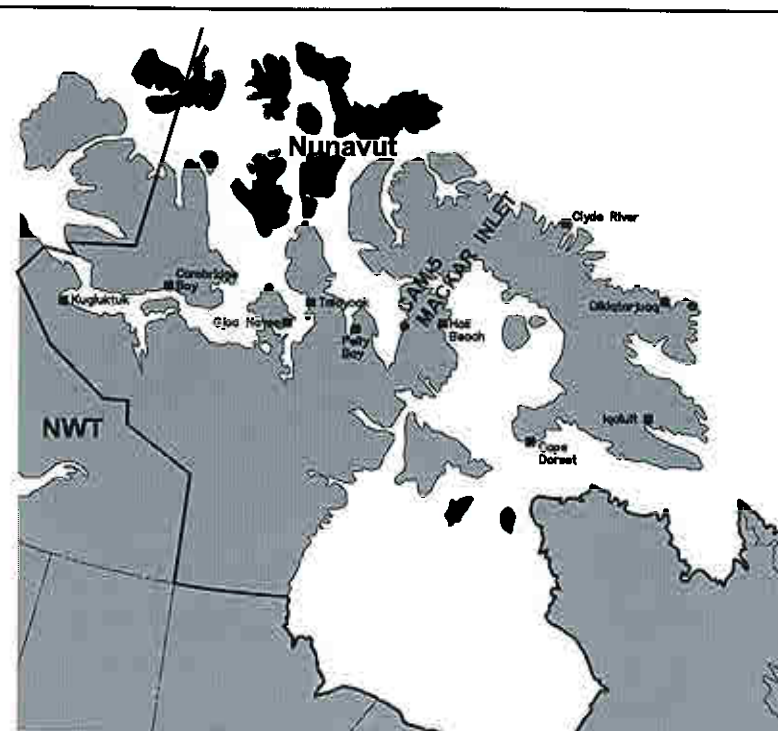
WATER USE DEPOSIT Amount: \$ _____ Pay ID No.: _____



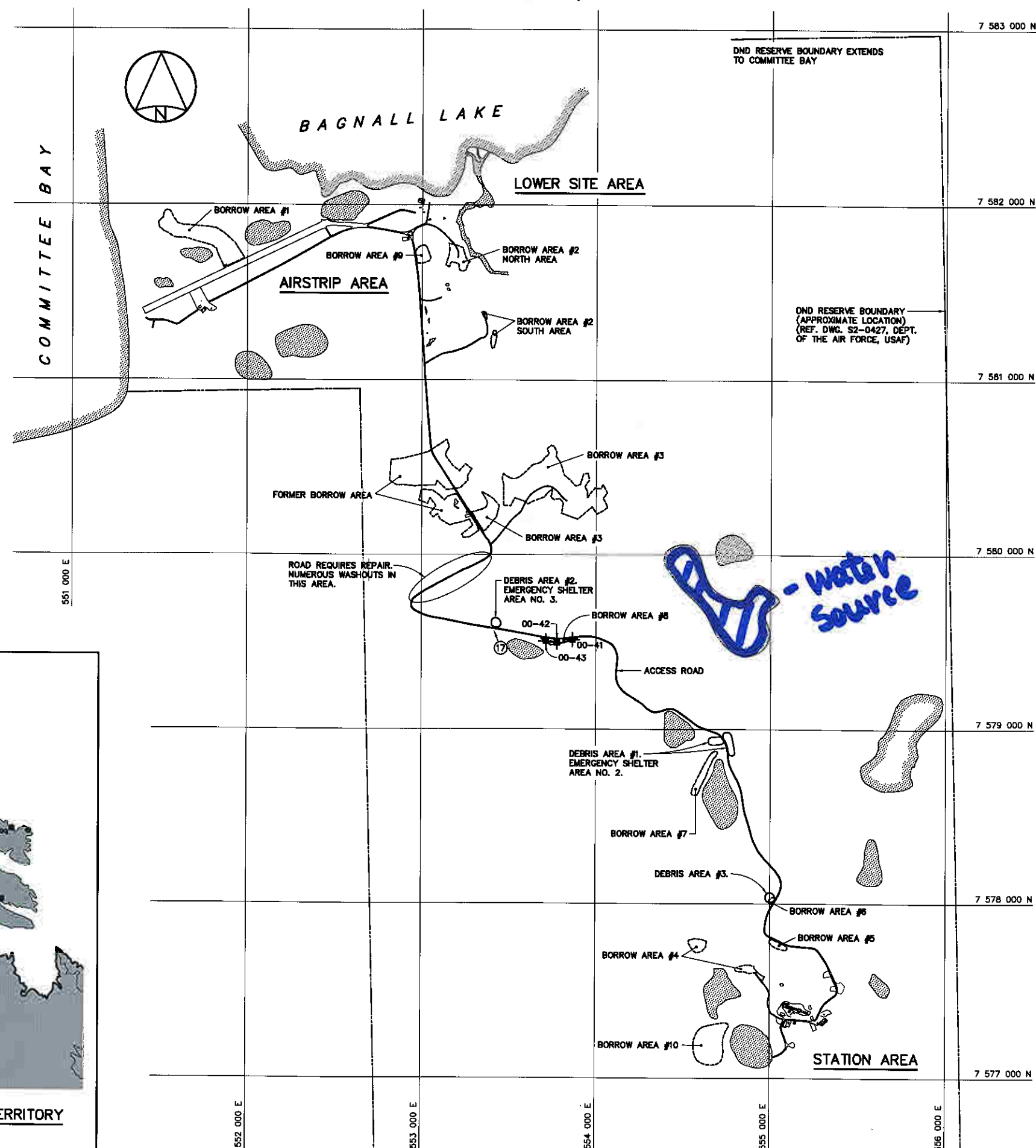
POTENTIAL SOURCES FOR GRANULAR MATERIALS						
BORROW AREA	GRANULAR TYPE (SEE SECTION 02226 IN SPECIFICATION)					
	TYPE 1	TYPE 2	TYPE 3	TYPE 4	TYPE 5	TYPE 6
1		✓	✓			✓
2				✓*		
3	✓	✓	✓		✓	✓
4		✓				
5		✓				
6		✓				
7		✓				
8				**		
9				✓*		
10		✓		**		

* MATERIAL IS WET AND SOFT AND REQUIRES BLENDING WITH SAND AND GRAVEL TO PRODUCE TYPE 4 GRANULAR FILL.

** REQUIRES FURTHER INVESTIGATION TO VERIFY THIS POSSIBLE SOURCE.



LOCATION OF MACKAR INLET WITHIN NUNAVUT TERRITORY
N.T.S.



National Defence
Défense nationale

Headquarters
Quartier général

General Notes:

1. ALL COORDINATES ARE REFERENCED TO NAD83 (CSRS), UTM ZONE 18N. ELEVATIONS ARE REFERENCED TO MEAN SEA LEVEL, RELATIVE TO GEOID MODEL CANADIAN HT2.0.
2. ALL NON-HAZARDOUS DEBRIS WITHIN PLAN AREA TO BE PLACED IN NON-HAZARDOUS WASTE LANDFILL.
3. REFER TO TABLE 02219-1 IN SPECIFICATIONS FOR DESCRIPTION OF DEBRIS AREAS.

Legend:

- PHOTOGRAPHIC VIEWPOINT
- TEST PIT LOCATION
- BODY OF WATER
- APPROXIMATE EXTENT OF DEBRIS AREAS
- APPROXIMATE EXTENT OF BORROW AREAS
- APPROXIMATE LOCATION OF PROPERTY BOUNDARIES

8 05-06-24 ISSUED FOR R.F.A.P. RAN

No. DATE REVISION REVISION APPR.

UMA AECOM SGE Acres

SCALE - ECHILLE 200 100 0 200 400 600m

PROJECT - PROJET
CAM-5 MACKAR INLET

DEW LINE CLEAN UP

© COPYRIGHT
HER MAJESTY THE QUEEN IN RIGHT OF
CANADA 2005, AS REPRESENTED BY THE
MINISTER OF NATIONAL DEFENCE.

TRADE - METIER SITING DATE 2005-06-24

SUBJECT - SUJET

OVERALL SITE PLAN

PRODUCTION	CONCURRENCE - ASSENTIMENT
DESIGNED ETUDIE CI/NWF	DES OFF. AGENT CONCEPT
DRAWN DESSINE IC/CH	SECT HD CHIEF SECT
CHECKED VERIFIE RAN	DES MOR GEST CONCEPT
COORDINATION SAG	REVIEWED - REVU

DWG. NO. - DESSIN NO.
H-M27/1-9101-101

Canada