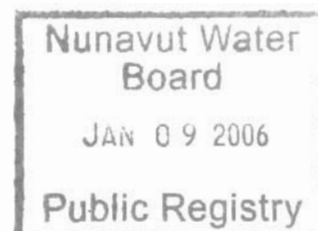


FOX-3, Dewar Lakes DEW Line Site
Site Investigation Project Description Abstract

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- [illegible]

[illegible][illegible][illegible][illegible]



FOR OFFICE USE ONLY – RÉSERVÉ AU BUREAU

Application fee	Land use fee	General receipt no.	Date	Class	Permit no.
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To be completed by applicants:

☒ New application

☐ Amendment

1. Applicant's name and mailing address (Full name, no initials) Philip Warren, P.Eng., PMP Defence Construction Canada Constitution Square, Suite 1720 350 Albert Street Ottawa, ON K1A 0K3		Fax no. 613-998-0468
		Telephone no. 613-998-7288
2. Head office address Same as above.		Fax no. Same as above.
		Telephone no. Same as above.
Field supervisor Field supervisor has not yet been determined. In the interim, please contact Philip Warren.	Radio telephone	E-mail address Philip.Warren@dcc-cdc.gc.ca
		Telephone no.

3. Other personnel (subcontractor, contractors, company staff, etc.)

The outfitter contract has not yet been awarded, therefore the names of the contractors, subcontractors, etc. are not available. There will be a number of staff on-site representing the owner from UMA Engineering Ltd., Environmental Sciences Group and EBA Engineering Consultants Ltd.

TOTAL: 20-30 people

4. Qualifications

Refer to Section 21 of the Territorial Land Use Regulations

a(i) ☐ a(ii) ☐ a(iii) ☐ b ☒ c ☐

No(s) exploration permit mineral claims (if applicable)

5. a) Summary of operation (Describe purpose, nature and location of all activities.)

Refer to Section 22(2)(b) of the Territorial Land Use Regulations (Use last page of form if necessary.)

The purpose of the project is to conduct a site investigation to obtain the detailed information required to finalize the clean up plans for the FOX-3, Dewar Lakes DEW Line site.

Please refer to the attached topographic map segment and Drawings 101-102 for the site location, overall site plan and project layout.

Site investigation activities include the following:

- Collection of soil samples to delineate known areas of contaminated soil. Subsurface samples will be collected from test pits excavated using a mini-excavator.
- Collection of water samples. May include surface and groundwater samples. Temporary groundwater wells may be installed in test pits.
- Collection of structural materials samples.
- Inventory of buildings and facilities on-site.
- Identification of surface debris areas.
- Geophysical survey of landfills to determine lateral extent of buried waste.
- Identification of potential sources of granular material required for the clean up activities.
- Identifications of potential locations for new landfills, storage areas, construction camp, etc. required during the clean up.
- Completion of topographic and location surveys.

Post Investigation

- Upon completion of the investigation work the site will be restored as follows:

- All excavated test pits will be backfilled.
- Laboratory waste will be containerized and stored (in an on-site building) for disposal during site clean up.
- Camp facilities and equipment will be removed from the site. Excess fuels and laboratory wastes are labelled and stored in an on-site building for use or disposal during the site clean up.

b) Please indicate if a camp is to be set up (Use last page to provide details.)



APPLICATION FOR LAND USE PERMIT

A camp will be set up and will operate for the duration of the investigation activities.

Summary of potential environmental and resource impacts

(Describe the effects of the proposed program on land, water, flora and fauna and related socio-economic areas.)
(Use separate pages if necessary.)

The following Environmental Impact Summary Table provides the identified impacts associated with the site investigation activities at the FOX-3 site and the required mitigative actions

Description	Significance	Monitoring/Mitigation Requirements
Degradation of permafrost due to test pit excavation.	Potentially significant in excavations in ice rich ground.	<ul style="list-style-type: none">• Backfill excavations as soon as practical.
Potential risks to soils, terrestrial and aquatic habitat and human safety from accidental events, such as fuel spills.	Potentially significant in the case of spillage.	<ul style="list-style-type: none">• Development of and adherence to a contingency plan outlining procedures to follow in the event of an accidental spill, including secondary containment.• Training and education of personnel in emergency procedures.• Proper fuel handling and storage techniques.
Disruption of heritage sites from test pit excavation and activities of on-site personnel.	Potentially significant (prior to mitigation) in areas of high archaeological resources.	<ul style="list-style-type: none">• Report and record any features of potential interest, ensure areas are clearly marked.• Monitor during excavation for additional features.• All personnel to be discouraged from visiting archaeological and other heritage sites.
Effect of site investigation activities and/or personnel on habitats and vegetation.	Potentially significant on previously undisturbed areas.	<ul style="list-style-type: none">• Use of ATVs and other vehicles to be restricted to existing roadways (where possible).
Effect of site investigation activities on wildlife (i.e., noise or other disturbances)	Potentially significant on sites where wildlife is noted.	<ul style="list-style-type: none">• Avoid wildlife during site investigation activities.
Effect of camp operations on habitats, vegetation, wildlife and heritage resources.	Potentially significant in previously undisturbed areas and areas where wildlife is noted.	<ul style="list-style-type: none">• Locate the camp and storage areas on previously disturbed areas and at least 30 m from the nearest water body.• Avoid locating the camp in areas containing archaeological/heritage features.• Store camp kitchen waste in animal proof containers to prevent scavenging by wildlife.• Dispose of domestic garbage and sewage as required in the land use permit and water use license.
Use of local services and northern residents during implementation of site investigation activities.	Positive impact on northern socio-economic development.	<ul style="list-style-type: none">• Maximize employment and business opportunities in the North.

7. Proposed restoration plans (Please use last page if required.)

Upon completion of the site investigation, the site will be restored to a safe condition. Please note that the DEW Line Clean Up operation at FOX-3 is scheduled to commence in 2010 and be completed in 2013.

8. Other rights, licences or permits related to this permit application (mineral claims, Yukon timber permits, water licences, etc.)

A water use license from the Nunavut Water Board has been applied for

Roads

☐

Is this to be a pioneered road?
Provide details on back page

X

Has the route been laid out or ground truthed?



- see attached drawings

Proposed disposal methods

a) Garbage: Garbage will be incinerated and the residual materials will be buried on-site and the location surveyed so that it can be excavated and disposed of in the Non-Hazardous Waste Landfill during the site clean up.

b) Sewage (Sanitary and grey water): Sewage will be deposited into pit toilets. Greywater will be discharged into a pit for settlement and then discharged to an area at least 30 metres away from any waterbodies or watercourses.

c) Brushed & trees: N/A

d) Overburden (Organic soils, waste material, etc.): Overburden will be stockpiled for use in grading and contouring of the site.

10. Equipment (Includes drills, pumps, etc.) - NOTE: The equipment list is based on the list provided for a similar DEW Line site and is approximate only. The equipment list will be updated once the contract has been awarded.

Number	Type	Proposed use
2	mini-excavators	excavation of test pits
15	all-terrain vehicles	transportation
2	generators	camp use
1	satellite phone	communication
1	hand pump	fuel transfer
	laboratory equipment	analysis of soil samples
11. Fuels	Quantity	
Diesel	3,500 L	
Gasoline	205 L	
Aviation Fuel	n/a	
Propane	n/a	
Other	n/a	

12. Containment fuel spill contingency plans (Please attach separate contingency plan if necessary.)

Diesel and gasoline will be used during the site investigation of FOX-3. As fuels are usually stored and transferred in barrels of 205 litres or smaller capacity, any spill quantity would likely be small. In the event of a spill, protection of human health and safety is paramount. Contamination of personnel involved in clean is a real possibility as is contamination of the surrounding workplace and environment. The individual discovering a spill shall:

- Ensure personnel are appropriately trained.
- Provide materials and equipment necessary for adequate response to fuel spills, such as mini-excavators for creating earthen dykes and hydrocarbon absorbent booms.
- Warn people in the immediate vicinity and evacuate the area if necessary.
- Wear protective clothing as required for handling spills.
- Isolate and eliminate all ignition sources.
- Identify the spilled material if possible, and take all safety precautions before approaching it.
- Attempt to immediately stop the leakage and contain the spill, if safe to do so.
- Make every effort to contain the spill by dyking with earth or other barriers on land and containment booms on water.
- Report to the field team leader the spill location, type of material, volume and extent, status of spill (direction of movement), and prevailing meteorological conditions.
- Follow all applicable federal/territorial regulations and guidelines for the disposal of spill materials.
- Document all events and actions taken. Include information required by applicable regulations and guidelines.
- Notify appropriate government agencies using the contact list. Report spills immediately on the 24 Hour Spill Report Line (867) 920-8130.



APPLICATION FOR LAND USE PERMIT

7. Methods of fuel transfer (To other tanks, vehicles, etc)

Fuel will be transferred using hand pumps from the barrels.

14. Period of operation (Includes time to cover all phases of project work applied for including restoration.)

The site investigation activities will occur in July/August 2006

15. Period of permit (Up to two years,
with maximum of one year extension)

Start date 2006/05/01

Completion date 2008/05/01

16. Location of activities by map coordinates (Attached maps and sketches.) See Drawings in Appendix A

Minimum Latitude Degrees 68	Minutes 40
Maximum Latitude Degrees 71	Minutes 14

Map sheet no: ~~37~~ 27 B

17. Applicant: Eva Schulz (for Phil Warren)	Signature:	Date: December 13, 2005
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18. Fees

☐ Class A - \$150

☐ Class B - \$150

\$150.00

Land Use Fees

Less than or equal to 2 hectares

\$50.00

\$50.00

For each additional hectare over 2 hectares or portion of a hectare

x \$50.00 =

\$

Total application and land use fees

\$

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19. Calculation of area involved (Includes access, staging areas, airstrips, campsites, etc.)

Total area (ha)	Less than or equal to 2 hectares	TOTAL (For fee calculations)
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20. Application checklist

a) ☐ Application signed and dated

e) ☐ Screening report

b) ☐ Fees attached

f) ☐ Timber permit applied for - Yukon

c) ☐ Map included

g) ☐ Fees attached

d) ☐ Address and telephone number

h) ☐ Lease applied for

Accepted by:

Date

Remarks (Please use last page if additional space is required.)

21. Additional information (Attach additional pages if necessary.)

*FOX-3, Dewar Lakes DEW Line Site
Site Investigation Project Description Summary*

From 1955 to 1993, the Distant Early Warning - DEW Line – system provided radar surveillance of the polar approaches to North America using a chain of 42 radar stations. As the North American Air Defence System was upgraded, some of the DEW Line sites were upgraded or dismantled. The former FOX-3, Dewar Lakes DEW Line Site has been abandoned and is no longer required for any operations.

Prior to all DEW Line clean up (DLCU) activities, a detailed site investigation is undertaken to provide information to be used in the reclamation design. The FOX-3 site investigation is scheduled for July through August of 2006.

The FOX-3 site investigation activities will include the following:

- Collection of soil samples to delineate known areas of contaminated soil. Subsurface samples will be collected from test pits excavated using a mini-excavator.
- Collection of water samples. Sampling location may include surface and groundwater samples. Temporary groundwater wells may be installed in test pits.
- Collection of structural materials samples.
- Inventory of buildings and facilities on site.
- Identification of surface debris areas.
- Geophysical survey of landfills to determine lateral extent of buried waste.
- Identification of potential sources of granular material required for the clean up activities.
- Identification of potential locations for site disposal facilities, storage areas, construction camp, etc. required for clean up activities.
- Completion of topographic and location surveys.

The existing airstrip will be used to access the site and the existing roads will be utilized for vehicular traffic on site. The proposed site investigation activities are not anticipated to impact any of the existing roads, landing strips, streams, or other features and structures located at the site.

A temporary camp will be set up at the site to facilitate the site investigation activities. The outfitter contract for the camp operation will be put out for tender in the spring of 2006. Major equipment requirements will include items such as ATVs and trailers, pumps, mini-excavators, satellite phones and radios, and laboratory analytical equipment. Typically, domestic garbage is incinerated and the residual waste is buried along with sewage.

Bear monitors from nearby communities will be employed for wildlife management during the site investigation.

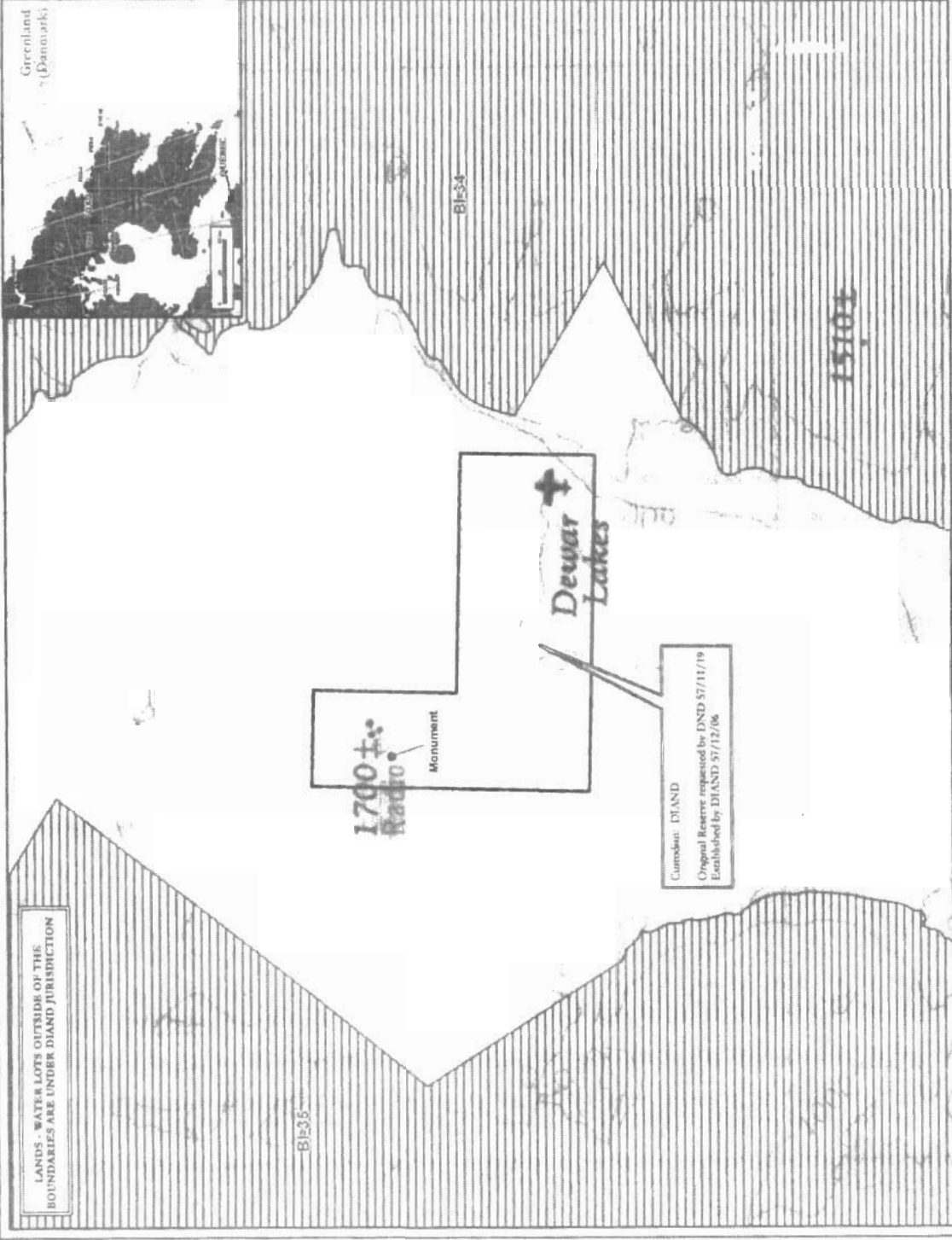
Upon completion of the investigation work, all excavated test pits will be backfilled; laboratory waste will be containerized and stored in an on-site building for disposal during site clean up; and camp facilities, equipment and excess fuel will be removed from the site. Surplus materials that cannot be stored safely for disposal during clean up are also removed.

COMMENT FORM FOR NIRB SCREENINGS

The Nunavut Impact Review Board has a mandate to protect the integrity of the ecosystem for the existing and future residents of Nunavut. In order to assess the environmental and socio-economic impacts of the project proposals, NIRB would like to hear your concerns, comments and suggestions about the following project application:

Project Title: Site Investigation Activities-Dew Line Site	
Proponent: Defence Construction Canada	
Location: FOX-3, Dewar Lakes, Baffin	
Comments Due By: January 20, 2006	NIRB #: 06DN004
Indicate your concerns about the project proposal below:	
<input type="checkbox"/> no concerns	<input type="checkbox"/> traditional uses of land
<input type="checkbox"/> water quality	<input type="checkbox"/> Inuit harvesting activities
<input type="checkbox"/> terrain	<input type="checkbox"/> community involvement and consultation
<input type="checkbox"/> air quality	<input type="checkbox"/> local development in the area
<input type="checkbox"/> wildlife and their habitat	<input type="checkbox"/> tourism in the area
<input type="checkbox"/> marine mammals and their habitat	<input type="checkbox"/> human health issues
<input type="checkbox"/> birds and their habitat	<input type="checkbox"/> other: _____
<input type="checkbox"/> fish and their habitat	_____
<input type="checkbox"/> heritage resources in area	_____
Please describe the concerns indicated above:	
Do you have any suggestions or recommendations for this application?	
Do you support the project proposal? Yes <input type="checkbox"/> No <input type="checkbox"/> Any additional comments?	
Name of person commenting: _____ of _____	
Position: _____	Organization: _____
Signature: _____	Date: _____

LANDS WATER LOTS OUTSIDE OF THE
BOUNDARIES ARE UNDER DIAND JURISDICTION



FOX-3

DEWAR LAKES

FINAL

Version 2.0

- Reserve to DND / Réserve à la MDN
- Inuit Owned Lands / Terres en propriété Inuit
- National Park / Parc National

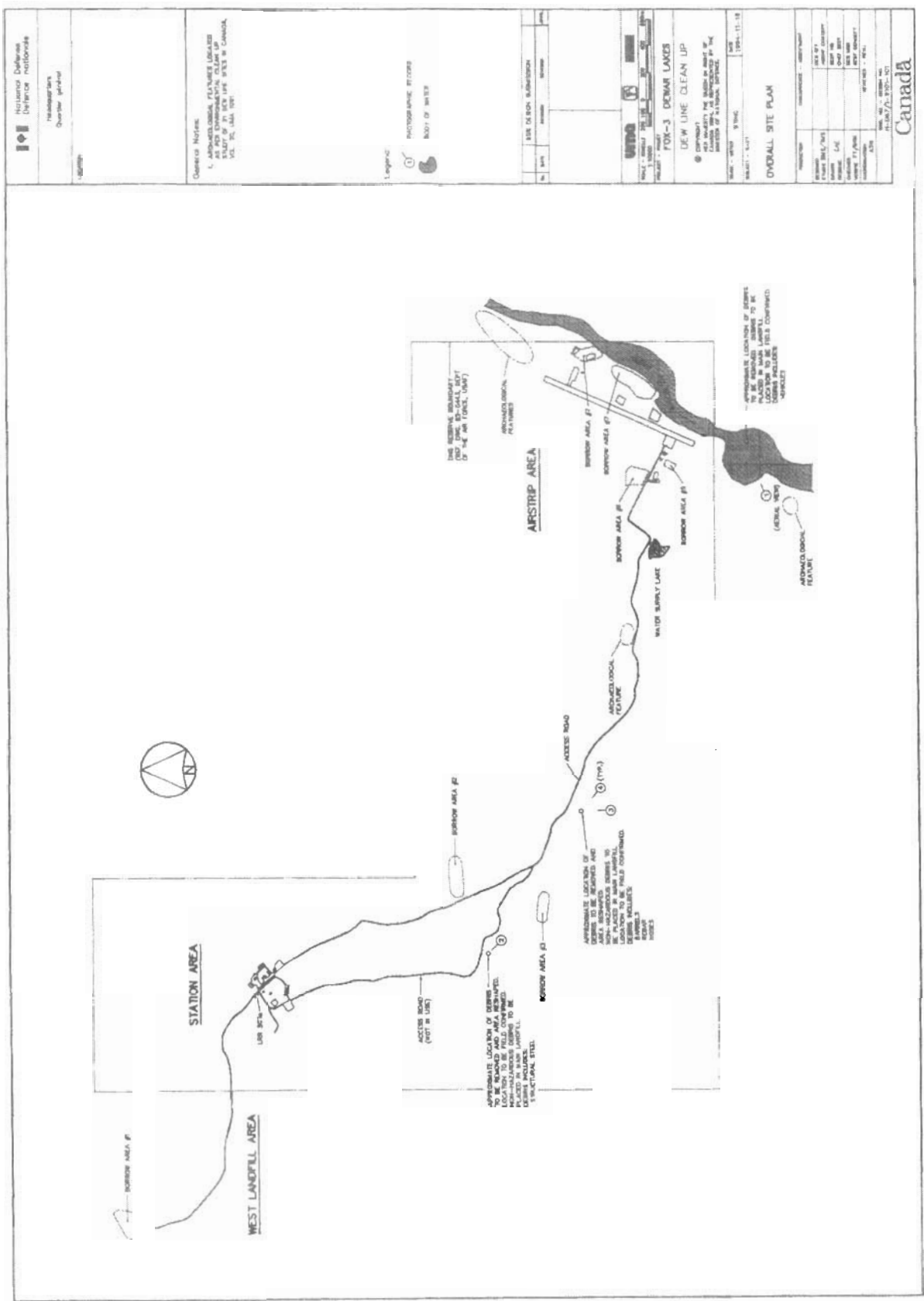
Carte de l'aire de réserve topographique "3" (Fox-3) (Échelle: 1:65 000) - Zone (TPS) (S)
Produit par le Service des services géomatiques immobiliers
Ministère de l'Industrie, des Sciences et des Technologies (MIST)
Produit par le Service des services géomatiques immobiliers
Ministère de l'Industrie, des Sciences et des Technologies (MIST)
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Ministère de l'Industrie, des Sciences et des Technologies (MIST)

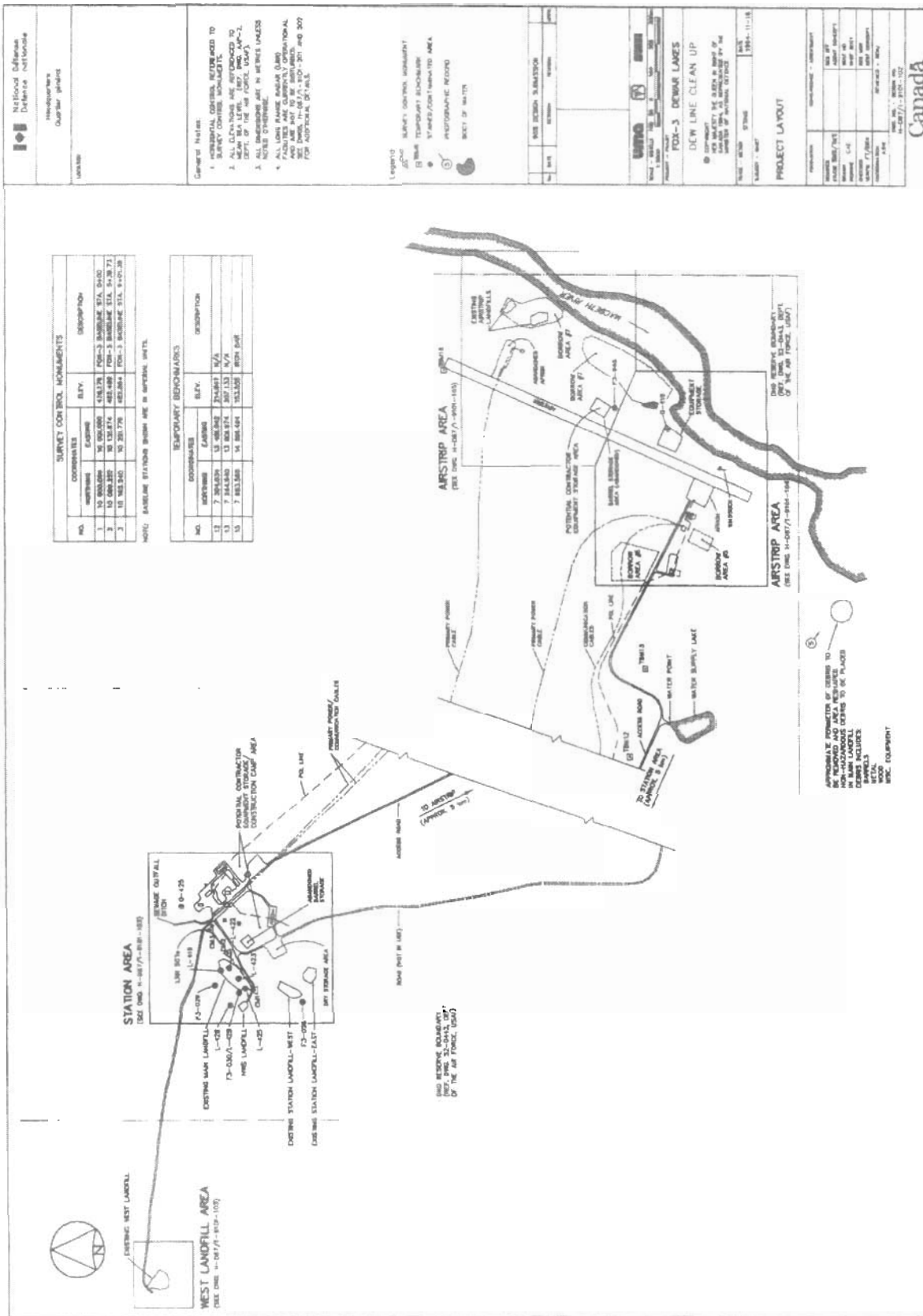


Scale / Echelle: 1:65 000

0 2 4 km

This map is the work of the geomatics services only.
This map is not a legal document.
This map should not be used as a basis for legal proceedings.





January 9, 2006

Dear Baffin Distribution List

Re: Your comments on this application.

NIRB#: 06DN004

Project: Site Investigation Activities FOX-3, Dewar Lakes , Baffin

Proponent: Defence Construction Canada

Nunavut Impact Review Board has received an application for a Site Investigation near Dewar Lakes. Please use NIRB file No. 05YN124 and the contact person listed below, in all future correspondence regarding this application.

The application documents are available through the internet on the NIRB ftp site at [www://ftp.nunavut.ca/nirb](http://ftp.nunavut.ca/nirb) in the folder "06DN004-Site Investigation Activities FOX-3, Dewar Lakes Dew Line, Baffin-Defence Construction Canada".

Please assess the project proposal for the potential effects on the ecosystemic and socio-economic environments, from your knowledge of the area or your field of expertise.

Please forward your comments and recommendations to NIRB by January 20th, 2006, 1:00pm mountain time.

A comment form has been included with the package.

If you have any questions regarding the application, please do not hesitate to contact our office. Your input is greatly appreciated.

Yours truly,

Sylvia Novoligak
Environmental Administrator Trainee
Phone (867) 983-4613
Fax (867) 983-2574 or (867) 983-2594