

Preliminary Screening Report Form

Preliminary screener: MVLWB Reference / File number: MV2016S0019 TITLE: Geotechnical Drilling ORGANIZATION: Parsons Inc. MEETING DATE: August 11, 2016	EIRB Reference number:
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Type of Development:
(CHECK ALL THAT APPLY)

- | | |
|-------------------------------------|--|
| <input checked="" type="checkbox"/> | New |
| <input type="checkbox"/> | Amend, EIRB Ref. # |
| <input checked="" type="checkbox"/> | Requires permit, licence, or authorization |
| <input type="checkbox"/> | Does not require permit, licence, or authorization |

Project Summary

Work scope consists of the completion of nine boreholes for the purpose of assessing soil and groundwater conditions beneath the site. Depth of the boreholes will range from 9m to 20m below grade, with soil samples taken at varying depths in order to assess the characteristics of the soil. At least five of the boreholes will be completed with monitoring wells to access and test groundwater. Boreholes will be backfilled with drill cuttings and bentonite.

There is no proposed camp and no fuel storage associated with the Application. Garbage resulting from use of the area will be removed daily and will be deposited in the City of Yellowknife landfill. Arrangements have been made with the City of Yellowknife. Arrangements have also been made to remove and dispose of dill cuttings and slurry off-site.

Equipment to be used includes a hydrovac, straight vac and drill rig; these require diesel but will not refueled on-site.

Parsons Inc. has applied for a term of 13 months. The undertaking is anticipated to be completed in seven days.

Scope

Geotechnical drilling and completion of boreholes to assess soil and groundwater conditions on Lots 1-4, Block 22 in Yellowknife.

Land Use Eligibility - Section 18 Mackenzie Valley Land Use Regulations

18(b)

Type of Disposition

Disposition Number(s)

- | | |
|---|---|
| <input type="checkbox"/> Mineral Claims | |
| <input type="checkbox"/> Prospecting Permit (s) | |
| <input type="checkbox"/> Mineral Leases | |
| <input type="checkbox"/> Oil and Gas: EL/SDL/PL | |
| <input type="checkbox"/> Quarry Permit | |
| <input type="checkbox"/> Timber Permit | |
| <input checked="" type="checkbox"/> Other: | Permission from property owner (right to occupy land – 18(b)) |

Principal Activities (related to scoping)

(CHECK ALL THAT APPLY)

- | | | |
|--|--|--|
| <input type="checkbox"/> Construction | <input type="checkbox"/> Exploration | <input type="checkbox"/> Decommissioning |
| <input type="checkbox"/> Installation | <input type="checkbox"/> Industrial | <input type="checkbox"/> Abandonment |
| <input type="checkbox"/> Maintenance | <input type="checkbox"/> Recreation | <input type="checkbox"/> Aerial |
| <input type="checkbox"/> Expansion | <input type="checkbox"/> Municipal | <input type="checkbox"/> Harvesting |
| <input type="checkbox"/> Operation | <input type="checkbox"/> Quarry | <input type="checkbox"/> Camp |
| <input type="checkbox"/> Repair | <input type="checkbox"/> Linear / Corridor | <input type="checkbox"/> Scientific/ |
| <input type="checkbox"/> Research | <input type="checkbox"/> Sewage | <input type="checkbox"/> Solid Waste |
| <input type="checkbox"/> Water Intake | | |
| <input checked="" type="checkbox"/> Other: Geotechnical Investigations | | |

Principal Development Components (related to scoping)

- | | |
|--|---|
| <input type="checkbox"/> Access Road
<input type="checkbox"/> construction
<input type="checkbox"/> abandonment/removal
<input type="checkbox"/> modification e.g., widening, straightening
<input type="checkbox"/> Automobile, Aircraft or Vessel Movement
<input type="checkbox"/> Blasting
<input type="checkbox"/> Building
<input type="checkbox"/> Burning
<input checked="" type="checkbox"/> Burying
<input type="checkbox"/> Channelling
<input type="checkbox"/> Cut and Fill
<input type="checkbox"/> Cutting of Trees or Removal of Vegetation | <input checked="" type="checkbox"/> Waste Management
<input type="checkbox"/> disposal of hazardous waste
<input checked="" type="checkbox"/> waste generation
<input type="checkbox"/> sewage
<input type="checkbox"/> disposal of sewage
<input checked="" type="checkbox"/> Geoscientific Sampling
<input type="checkbox"/> Trenching
<input type="checkbox"/> Diamond drill
<input checked="" type="checkbox"/> Borehole core sampling
<input type="checkbox"/> Bulk soil sampling
<input type="checkbox"/> gravel
<input type="checkbox"/> hydrological Testing |
|--|---|

- Dams and Impoundments
 - construction
 - abandonment/removal
 - modification
- Ditch Construction
- Drainage Alteration
- Drilling other than Geoscientific
- Ecological Surveys
- Excavation
- Explosive Storage
- Fuel Storage
- Topsoil, Overburden or Soil
 - fill
 - disposal
 - removal
 - storage

- Site Restoration
 - fertilization
 - grubbing
 - planting/seeding
 - reforestation
 - scarify
 - spraying
 - re-contouring
- Slashing and removal of vegetation
- Soil Testing
- Stream Crossing/Bridging
- Tunnelling/Underground
- Other: Geotechnical Drilling

NTS topographic map sheet numbers:
85J08

Latitude / longitude and UTM system:
62°27'20.76" to 62°27'22.63" Latitude
114°22'17.51" to 114°22'21.64" Longitude
NAD 83

Nearest community and water body:
Yellowknife and Frame Lake

Land Status (consultation information)

- Free Hold/Private Commissioner's/Territorial Lands
- Federal Crown Land
- Municipal Land

Transboundary/Transregional Implications

- British Columbia
- Nunavut
- Wek'èezhii
- Alberta
- National Park
- Gwich'in
- Saskatchewan
- Inuvialuit Settlement Region
- Sahtu
- Yukon

Type of transboundary implication: Impact / Effect Development

Public concern: _____
(Describe.)

Physical - Chemical Effects

Impact	Mitigation	Location of condition
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1) Ground Water

- water table alteration
- water quality changes
- infiltration changes
- other:
- N/A

Impact
2) Surface Water

Mitigation

Location of condition

- flow or level changes
- water quality changes

There is a minor risk that fuel could potentially be spilled during the operation. Standard conditions requiring spill equipment and adherence to a spill contingency plan will mitigate this risk.

Section 26(1)(m)

- water quantity changes
- drainage pattern changes
- temperature
- wetland changes/loss

other:

N/A

Impact
3) Noise

Mitigation

**Location of
condition**

noise in/near water

noise increase

There will be increased noise during drilling activities. These will be temporary in nature. No mitigation is suggested.

other:

N/A

Impact
4) Land

Mitigation

**Location of
condition**

geologic structure changes

soil contamination

There is a minor risk that fuel could potentially be spilled during the operation. Standard conditions requiring spill equipment and adherence to a spill contingency plan will mitigate this risk.

Section
26(1)(m)

buffer zone loss

soil compaction and settling

destabilization/erosion

permafrost regime alteration

explosives/scarring

other:

N/A

Impact
**5) Non-renewable natural
resources**

Mitigation

**Location of
condition**

resource depletion

other:

N/A

Impact
6) Air/climate/atmosphere

Mitigation

**Location of
condition**

other:

N/A

BIOLOGICAL ENVIRONMENT

Impact
1) Vegetation

Mitigation

**Location of
condition**

species composition

species introduction

toxin/heavy accumulation

other: Linear Migration routes,
habitat fragmentation

N/A

Impact	Mitigation	Location of condition
2) Wildlife and Fish		
<input type="checkbox"/> effects on rare, threatened or endangered species		
<input type="checkbox"/> fish population changes		
<input type="checkbox"/> waterfowl population changes		
<input type="checkbox"/> breeding disturbance		
<input type="checkbox"/> population reduction		
<input type="checkbox"/> species diversity change		
<input type="checkbox"/> health changes		
<input type="checkbox"/> behavioural changes		
<input type="checkbox"/> habitat changes / effects		
<input type="checkbox"/> game species effects		
<input type="checkbox"/> toxins/ heavy metals		
<input type="checkbox"/> forestry changes		
<input type="checkbox"/> agricultural changes		
<input type="checkbox"/> other:		
<input checked="" type="checkbox"/> N/A		
Interacting Environment		

Impact	Mitigation	Location of condition
1) Habitat and Communities		
<input type="checkbox"/> predator-prey		
<input type="checkbox"/> wildlife habitat/ecosystem composition changes		
<input type="checkbox"/> reduction/removal of keystone or endangered species		
<input type="checkbox"/> removal of wildlife corridor or buffer zone		
<input type="checkbox"/> other:		
<input checked="" type="checkbox"/> N/A		

Impact	Mitigation	Location of condition
2) Social and Economic		
<input type="checkbox"/> planning/zoning changes or conflicts		
<input type="checkbox"/> increase in urban facilities or services use		
<input type="checkbox"/> rental house		
<input type="checkbox"/> airport operations/capacity changes		
<input type="checkbox"/> human health hazard		
<input type="checkbox"/> impair the recreational use of water or aesthetic quality		
<input type="checkbox"/> affect water use for other		

purposes

- affect other land use operations
- quality of life changes
- public concern
- other:
- N/A

Impact
3) Cultural and Heritage

Mitigation

Location of condition

- effects to historic property
- increased economic pressure on historic properties
- change to or loss of historic resources
- change to or loss of archaeological resources
- increased pressure on archaeological sites
- change to or loss of aesthetically important sites
- effects to aboriginal lifestyle
- other:
- N/A

- Pursuant to Schedule 4.1 of the **Northwest Territory Métis Nation** (NWTMN) Interim Measures Agreement, the MVLWB determined that written notice was given to the NWTMN and that a reasonable period of time was allowed for NWTMN to make representations with respect to the application.
- Pursuant to subsection 1.6, paragraphs (a) and (b) of the **Akaiicho Territory Dene First Nations** (ATDFN) Interim Measures Agreement, the MVLWB determined that written notice was given to the ATDFN and that a reasonable period of time was allowed for ATDFN to make representations with respect to the Application.

Preliminary Screener / Referring Body Information

Organization
Akaitcho IMA Implementation Office
Bathurst Inlet Development Ltd.
Bathurst Inlet Lodge
Boxxer Gold Corp.
Canadian Northern Economic Development Agency
CanNor NWT Region
City of Yellowknife
Dene Nation
Deninu K'ue First Nation
Ecology North
Environment and Climate Change Canada
Fisheries and Oceans Canada
Fort Resolution Metis Council
GNWT - DOT
GNWT - ENR
GNWT - Health
GNWT - ITI
GNWT - Lands
GNWT - MACA
GNWT - Prince of Wales Northern Heritage Centre
GNWT- OROGO
Golder Associates
Gov. of Canada
Hamlet of Fort Resolution
Hay River Metis Council
INAC - Contaminants and Remediation Directorate
INAC - NWT Inspectors
Katlodeeche First Nation
Lutsel K'e Dene First Nation - Chief or Wildlife, Lands and Environment
Mackenzie Valley Environmental Impact Review Board
Manitoba Denesuline
MVLWB
National Energy Board
North Slave Metis Alliance
Northwest Territory Metis Nation
Salt River First Nations
Smith Landing First Nation
Snap Lake Environmental Monitoring Agency - SLEMA
Tlicho Government
Town of Fort Smith
West Point First Nation
Workers' Safety and Compensation Commission
Yellowknives Dene First Nation

Reasons For Decision

(List all reasons and supporting rationales for preliminary screening decision)

DECISION

The Mackenzie Valley Land and Water Board (the Board) is satisfied that the preliminary screening of Application MV2016S0019, Parsons Inc., Geotechnical drilling, downtown Yellowknife has been completed in accordance with section 125 of the *Mackenzie Valley Resource Management Act* (MVRMA).

The Board is satisfied that communities and First Nations affected by the Application have been notified and provided adequate time to provide comment on the Application as required by land claim and self-government agreements, the MVRMA, policy directions relating to Interim Measures Agreements, and any other applicable legislation and agreements.

Having reviewed all relevant evidence on the Public Registry, including the submissions of the Applicant, the written comments received by the Board and any Staff Reports prepared for the Board, the Board has decided that in its opinion:

- The proposed development will not have a significant adverse impact on the environment; and
- The proposed development is not a cause of public concern.

The Board is also of the opinion that the Application can proceed through the regulatory process and that any impacts of the development on the environment can be mitigated through the imposition of the terms and conditions in the attached Land Use Permit.

As a result, the Board, having due regard to the facts and circumstances, the merits of the submissions made to it, and to the purpose, scope, and intent of the MVRMA and the Mackenzie Valley Land Use Regulations has decided that this Land Use Permit be issued subject to the terms and conditions contained therein.

Preliminary Screening Decision	
<input type="checkbox"/>	Outside Local Government Boundaries
<input type="checkbox"/>	The development proposal might have a significant adverse impact on the environment, <i>refer it to the EIRB.</i>
<input type="checkbox"/>	<i>Proceed with regulatory process and/or implementation.</i>
<input type="checkbox"/>	The development proposal might have public concern, <i>refer it to the EIRB.</i>
<input type="checkbox"/>	<i>Proceed with regulatory process and/or implementation.</i>
<input checked="" type="checkbox"/>	Wholly Within Local Government Boundaries
<input type="checkbox"/>	The development proposal is likely to have a significant adverse impact on air, water or renewable resources, <i>refer it to the EIRB.</i>
<input checked="" type="checkbox"/>	<i>Proceed with regulatory process and/or implementation.</i>
<input type="checkbox"/>	The development proposal might have public concern, <i>refer it to the EIRB.</i>
<input type="checkbox"/>	<i>Proceed with regulatory process and/or implementation.</i>

Preliminary Screening Organization

Mackenzie Valley Land and Water Board

August 11, 2016

Signatures



Floyd Adlem, A/Chair