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December 3, 2019

File: S18X-004

Mr. Mark Cliffe-Phillips  
Mackenzie Valley Environmental Impact Review Board  
200 Scotia Centre  
Box 938, 5102-50th Avenue  
Yellowknife, NT X1A 2N7

Sent by email

Dear Mr. Cliffe-Phillips,

**Re: Notice of Preliminary Screening Determination – Amendment Application for Land Use Permit – Oscar Creek Bridge Relocation - Geotechnical Investigation – Mackenzie Valley Winter Road, Sahtu Region, NT**

The Sahtu Land and Water Board (Board) met on December 3, 2019 and considered the Amendment Application from Government of the Northwest Territories – Department of Infrastructure (GNWT-INF) for Type A Land Use Permit (Permit) S18X-004 for the Oscar Creek Bridge Relocation Geotechnical Investigation in accordance with the *Mackenzie Valley Resource Management Act* (MVRMA).

The Board reviewed the updated preliminary screening based on the public record for the proceeding. Based on the evidence provided, the Board is satisfied the screening has been completed according to section 125 of the MVRMA and has decided **not to refer** the project to environmental assessment. The Board's reasons for decision, as required by section 121 of the MVRMA, are attached.

If the Board does not receive notice of referral to environmental assessment, it can proceed with issuance of Permit S18X-004 on Monday, December 16, 2019.

Our Board and staff look forward to continued communications throughout the pause period. If you have any questions or concerns regarding this letter, please contact Paul Dixon at (867) 598-2413 ext. 225 or email at [Paul.dixon@slwb.com](mailto:Paul.dixon@slwb.com).

Yours sincerely,

Larry Wallace  
Chair, Sahtu Land and Water Board

**Copied to:** Tulita and K'asho Got'ine Distribution Lists  
Kamra Ata GNWT-INF  
Nathalie Oldfield, GNWT-INF

**Attached:** Updated Preliminary Screening and Reasons for Decision

**PRELIMINARY SCREENING REPORT FORM**

|  |   |
|--|---|
| <p><b>PRELIMINARY SCREENER:</b> Aswathy Mary Varghese;<br/>Bonnie Bergsma</p> <p><b>REFERENCE / FILE NUMBER:</b> S18X-004</p> <p><b>APPLICANT:</b> GNWT-INF</p> <p><b>DATE:</b> January 8, 2019; <i>December 3, 2019 Amendment</i></p> | <p><b>EIRB REFERENCE NUMBER:</b></p> <p><b>TITLE:</b> Oscar Creek Bridge Relocation<br/>Geotechnical Investigation and Right of Way<br/>Clearing</p> <p><b>ORGANIZATION:</b> Sahtu Land and Water Board</p> |
|--|---|

**Type of Development:**

Miscellaneous

**Type of Development:**

(CHECK ALL THAT APPLY)

- New Development
- Amend*, EIRB Ref. #
- Renew, EIRB Ref. #
- Requires permit, licence or authorization
- Does not require permit, licence or authorization

**Project Summary:**

Since its construction in 2005, Oscar Creek has remained out of service due to alignment and erosion issues. Government of the Northwest Territories-Department of Infrastructure (GNWT-INF) is planning to relocate the Oscar Creek Bridge, located along the Mackenzie Valley winter road from its current location to a location 6 km upstream, as suggested from the 1975 Public Works of Canada (PWC) alignment. For this bridge relocation the GNWT-INF is continuing to work on the engineering design of the water crossings. Two critical and necessary elements for this work are the geotechnical data for the water crossings, and the identification of potential construction material sources in the surrounding area.

**Scope:**

A total of three (3) water crossings (Tributary 1, Tributary 2 and 2 *locations at Oscar Creek*) and three (3) material prospect sites will be investigated. The water crossings will be investigated using auger and core drills. The material prospects are all terrace landforms along Oscar Creek and these will be investigated using machine excavated test pits. The purpose of this project is to gain access to the proposed sites in the winter by clearing a width of 30m within the 60 m right of way along the proposed winter road alignment in order to support site investigations. Access to the sites will largely use existing cut lines and trails from the winter road alignment work completed in the 1970s. The project is expected to use approximately 8.5 km of existing cut lines and 4.1 km of new cut lines for accessing all sites. The estimated land use for the project (including winter road realignment, access roads, camp(s), and bridge/culvert clearings) will be 36 ha of which 19.7 ha is expected to be new clearings. *The additional clearing required to access the alternate crossing of Oscar Creek is expected to be approximately 1 ha.*

**Principal Activities (related to scoping)**

(CHECK ALL THAT APPLY)

- |  |   |   |
|--|---|---|
| <input checked="" type="checkbox"/> Construction   | <input type="checkbox"/> Exploration                  | <input type="checkbox"/> Decommissioning                  |
| <input checked="" 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 (re-suspension) | <input type="checkbox"/> Quarry                       | <input checked="" type="checkbox"/> Camp                  |
| <input type="checkbox"/> Repair                    | <input checked="" type="checkbox"/> Linear / Corridor | <input checked="" type="checkbox"/> Scientific / Research |

Water Intake

Sewage

Solid Waste

Other:

(DESCRIBE)

**Principal Development Components (related to scoping)**  
(CHECK ALL THAT APPLY)

- Access Road
  - construction
  - abandonment/removal
  - modification e.g., widening, straightening
- Automobile, Aircraft or Vessel Movement
- Blasting
- Building
- Burning
- Burying
- Channeling
- Cut and Fill
- Cutting of Trees or Removal of Vegetation
- Dams and Impoundments
  - construction
  - abandonment/removal
  - modification
- Ditch Construction
- Drainage Alteration
- Drilling other than Geoscientific
- Ecological Surveys
- Excavation
- Explosive Storage
- Fuel Storage, drilling fluid, and hydraulic fracture fluid storage
- Topsoil, Overburden or Soil
  - fill
  - disposal
  - removal
  - storage

- Waste Management
  - disposal of hazardous waste
  - waste generation
  - drilling wastes
- Sewage
  - disposal of sewage
- Geoscientific Sampling
  - trenching
  - diamond drill
  - borehole core sampling
- Bulk soil sampling
- Gravel
- Hydrological Testing
- Site Restoration
  - fertilization
  - grubbing
  - planting/seeding
  - reforestation
  - scarify
  - spraying
  - recontouring
- Slashing and removal of vegetation
- Soil Testing
- Stream Crossing/Bridging
- Tunneling/Underground
- Water Intake
- Other

**NTS Topographic Map Sheet Numbers**  
(LIST ALL THAT APPLY) 096E

**NTS Map Sheet #s:**

Latitude/Longitude and UTM System:

Min. Latitude: 65°25'38.38"N Max.Latitude: 65°26'53.68"N  
Min. Longitude: 127°21'16.70"W Max. Longitude: 127°26'16.07"W

(DEGREES, MINUTES, SECONDS, MAP SHEET)

**Nearest Community and Water Body:**

Mackenzie River, Oscar Creek

**Land Status (consultation information)**  
(CHECK ALL THAT APPLY)

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

**Transboundary Implications**  
(CHECK ALL THAT APPLY - IF KNOWN & APPLICABLE)

- British Columbia
- Alberta
- Saskatchewan
- Yukon

Nunavut                       Wood Buffalo National Park                       Inuvialuit Settlement Region

N/A

**Type of Transboundary Implication:**                       Impact / Effect                       Development

Public Concern \_\_\_\_\_  
(DESCRIBE)

N/A

## PHYSICAL - CHEMICAL EFFECTS

### IMPACT

### MITIGATION

#### 1. Groundwater

Water table alteration

Water quality changes

1. Contaminates could enter the groundwater through drilling. Mitigation includes: 1) the augers used for the drilling will be free of any contaminants and so the intersection of the boreholes with groundwater will not introduce any contaminants to the groundwater; 2) each of the boreholes will be backfilled only with drill cuttings that came from that borehole so there will be no introduction of contaminants through backfilling.
2. The Spill Contingency Plan (SCP) will be in place to protect against spills and if any spills were to occur they would be cleaned up promptly and thoroughly to prevent groundwater contamination.

Infiltration changes

Other:

N/A

### IMPACT

### MITIGATION

#### 1. Surface Water

Water flow or level changes – water table alteration

1. To prevent intrusion of surface water, the applicant has stated monitoring wells will be sealed with bentonite at closure. Should a flowing artesian well be encountered during drilling, Condition #27 requires the Permittee to a) plug the Borehole in such a manner as to permanently prevent any further outflow of water; and (b) immediately report the occurrence to the Board and an Inspector.

Water quality changes

1. Mitigation methods to protect surface water quality include: 1) Any spills will be cleaned up properly in accordance with the Spill Contingency Plan 2) Any debris on the ice crossings will be removed by the end of the Project; 3) Standard spill kits will be located wherever fuel is used; 4) Portable drip pans and appropriately sized transfer hoses with pumps will be used during refueling to avoid any leaks/drips on the land.; 5) If a reportable spill occurs, it will be reported to the NWT 24-Hour Spill Report Line at (867) 920-8130 or spills@gov.nt.ca and Inspector 867-587-7206.

Water quantity changes

Drainage pattern changes

Temperature

Wetland changes / loss

Other: Usage of water

1. Usage of water (less than 100m<sup>3</sup>/day/source) for camps and winter road clearings. Not expected to bring a significant impact on quality/quantity of water.

N/A

**IMPACT**

**MITIGATION**

**2. Noise**

Noise increase

Noise in/near water

1. The localized impacts on noise will be low, rapidly reversible and the impact will be to the local area within which the specific activity is occurring. Mitigation includes: 1) Avoidance of unusual loud noises; 2) proper maintenance of equipment to reduce noise.

Other:

N/A

**IMPACT**

**MITIGATION**

**3. Land**

Geologic structure changes

Soil contamination

Ground disturbance

1. Drill cuttings to be placed back into the holes after sampling.

Buffer zone loss

Soil compaction & settling

Destabilization / erosion

1. This phase of the Oscar Creek bridge relocation project will involve clearing of winter road areas and geotechnical investigations, and therefore poses very little risk relating to sediment control. Mitigation measures include: 1) Limiting the use of heavy equipment; 2) minimizing vegetation removal; 3) installing and maintaining erosion control measures when and where required and if requested by the inspector (LUP condition 26).

Permafrost regime alteration

1. The Project is in an area of discontinuous permafrost. Clearing of trees and brush will allow for the potential expansion of the active layer and the thawing of the ground-ice and permafrost in the future. Drilling the boreholes may disturb the permafrost if present. Mitigation includes: 1) During the clearing of trees and brush to provide access

for the Project, the surface organic layer will not be removed and root structures will be left intact wherever possible, which will help to protect the permafrost; 2) the drill cuttings will be placed back into the boreholes after sampling.

Other:

N/A

**IMPACT**

**MITIGATION**

**4. Non-Renewable Natural Resources**

Resource depletion

Other

N/A

**IMPACT**

**MITIGATION**

**5. Air / Climate / Atmosphere**

Greenhouse gases

1. There will be a low number of vehicles and equipment used for the Project with the typical localized and temporary effects on air quality. Mitigation includes: 1) Avoidance of incineration; 2) Vehicles and equipment will be maintained in proper operating condition; 3) Unnecessary idling of vehicles will be discouraged; 4) Vehicles and equipment will be plugged in at camps to minimize the need to keep running during cold weather.

Climate Change

1. This Project will take steps to avoid unnecessary greenhouse gas emissions. Mitigation includes: 1) proper insulation and winterization of the camp to limit heating fuel; 2) Vehicles and equipment will be maintained in proper operating condition; 3) Unnecessary idling of vehicles; 4) Plugging in vehicles and equipment to minimize running time.

**BIOLOGICAL ENVIRONMENT**

**IMPACT**

**MITIGATION**

**1. Vegetation**

Species composition

1. Clearing of vegetation (trees and brush) to be limited to the alignment of the winter road and at the two bridge *locations crossing Oscar Creek* and tributary locations. Mitigation includes: 1) Organic layer of soil to remain undisturbed and root structures to be remained intact; 2) minimize the size of areas to be cut taking into consideration safety and operational factors; 3) most clearing will be on pre-disturbed areas.
2. *When clearing the land to reach the two new borehole locations, the shortest route as possible will be cleared (Condition 74), including a dogleg approach from the current winter road (Condition 16). All salvageable timber*

*will be kept (Condition 76) and placed neatly in an area approved by an Inspector (Condition 77).*

✓ Species introduction

1. Equipment and vehicles used for this Project that are coming from outside of this area to be cleaned to prevent the spread of non-native plant species.

✓ Toxin / heavy metal accumulation

1. Proper maintenance of vehicles and controlled use of vehicles will help reduce the effect of dioxins, SOx and NOx emissions. Spill Contingency Plan to be properly executed to avoid/mitigate the effect of spilled fuel.

○ Loss of timber along seismic lines

✓ Damage to ground vegetation and permafrost

1. Proposed project will be designed and carried out in a matter that prevents and/or mitigates adverse environmental impacts resulting from the degradation or aggradation of permafrost. Mitigation includes: 1) Geotechnical investigation will help to determine presence of permafrost in the area; 2) Tracked dozers may be used for this clearing work by installing shoes on the blade so it cannot cut into/disturb the frozen ground; 3) Clearing of vegetation to be limited to winter road alignment; 4) Organic layer of soil not to be disturbed and root structures to be remained intact.

2. *When clearing the land to reach the two new borehole locations, the shortest route as possible will be cleared (Condition 74), including a dogleg approach from the current winter road (Condition 16).*

○ Increased fire hazard

○ N/A

**IMPACT**

**MITIGATION**

**3. Wildlife & Fish**

✓ Effects on rare, threatened or endangered species

1. ENR evaluated the potential for impact to species at risk and noted that “although the Project overlaps with the range(s) of Grizzly Bear, Boreal Caribou, Little Brown Myotis (bat) and Barren-ground Caribou, ENR is of the opinion that the scope, areal extent, scale and/or timing of the proposed project are such that the likelihood of significant impacts to NWT-listed or prelisted species at risk is minimal”. Mitigation includes: 1) A wildlife monitor may be present during project activities to monitor the location of overwintering caribou; 2) Cease project activities if caribou are within 500 m.

✓ Fish population changes

1. There are potential disturbance impacts on fish from the use of the ice crossings and the drilling of boreholes near the watercourses. These impacts are expected to be of a small magnitude, temporary and short-term in duration. Mitigation includes: 1) Limiting the use of heavy equipment to the immediate project areas; 2) Minimizing the use of heavy equipment on stream banks; 3) Immediately cleaning up any spills in accordance with the Spill Contingency Plan.

2. Potential for erosion and sedimentation impacts on fish habitat are minimal due to winter frozen conditions.

○ Waterfowl population



- ✓ Breeding disturbances
  1. There is potential to impact raptor nesting which begins early March. Mitigation includes: 1) Avoid clearing during raptor nesting and fledging season (March to August) in all habitat types (this timing restriction includes early nesters such as owls and later nesters such as hawks); 2) As indicated in the SLUP, avoid known raptor nesting sites by 1 km, and not cause adverse negative effects on nesting raptors from March 1 to August 1; 3) Conduct a raptor nest survey within at least 1 km of the proposed footprint, including along Canyon Creek (nearest to km 0 to km 4.0 of the proposed Access Road); 4) Construction monitoring of known active nests present within 1 km may be required to confirm project activities are not causing adverse negative effects.
  
- ✓ Population reduction
  1. Wildlife mortality is a potential impact. Mitigation includes: 1) Equipment and vehicle movements and speeds will be kept low, which should minimize risk of collisions; 2) Any wildlife injury or mortality will be immediately reported to INF which will then inform ENR and the SLWB; 3) The cause will be investigated with potential new mitigation developed and applied; 4) Maintenance measures to reduce attraction of wildlife will be employed.
  
- Species diversity change
- Health changes (identify)
  
- ✓ Behavioral changes (identify)
  1. Since the work will occur during the winter, only mammals that hibernate in the winter (i.e. bears) will be potentially impacted. The stream and tributary crossings do not possess the typical habitat characteristics bears look for when constructing a den and, consequently, no bears are expected to den near the project site.
  2. Noise levels produced by the heavy equipment and bush clearing will inevitably impact some mammals, but these noise levels will only occur during the Project and be of short duration.
  3. Waste products will be stored in secured containers and transported to appropriate receiver facilities where arrangements have been made to receive the waste, if necessary.
  4. Wildlife deterrent mechanisms (including fencing and lights) will be used as needed.
  5. The camp will be designed to prevent wildlife interactions.
  6. Adequate outdoor lighting will be installed.
  7. Personnel will follow an approved Waste Management Plan.
  8. Vehicles and equipment will be maintained in proper operating condition, including the use of mufflers.
  9. Unnecessary idling will be discouraged.
  10. Vehicles and equipment will be plugged in at camps to minimize the need to keep running during cold weather.
  11. During construction, traffic along the alignment will be minimized by ensuring workers are transported to site via vans or extended crew cabs.
  12. Observations of wildlife by project staff will be reported to ENR.
  13. Operations will be temporarily suspended if caribou or moose are noticed within 500 m of Project activities.
  14. In the event that an active den is identified, ENR will be consulted to determine an appropriate strategy.
  15. Wildlife monitors will be on site to monitor wildlife and manage risks.
  16. Snow banks along the alignment will be kept low and escape points will be ploughed out for wildlife crossing. Frequency and distance intervals will be discussed with the land use inspector and ENR.
  17. Traffic volumes and speeds will kept be low.
  
- ✓ Habitat changes / effects
  1. The estimated 35.9 ha *plus 1 ha additional clearing* done for this Project will remain permanently cleared for the new Winter Road alignment. The additional land cleared for this Project (access cut lines and granular test sites) will revegetate naturally. There will be little to no

long-term direct or cumulative impacts on habitat loss and/or alteration due to this Project. Mitigation includes: 1) Clearing will be minimized to only those areas that are required; 2) Previously disturbed areas will be used wherever possible; 3) Personnel will not travel off corridor unless there is a specific requirement; 4) Project vehicles and equipment entering the area will be cleaned to minimize transport of non-native/invasive species of vegetation; 5) An approved Spill Contingency Plan will be followed to ensure spills are prevented and if they were to occur as a result of an accident, that they will be controlled to prevent the spills from impacting a large area; 6) *the shortest route possible, which will include a dogleg from the current winter road, will be cleared.*

Game species effects

Toxins / heavy metals

1. Potential impacts to wildlife from spills will be mitigated by: 1) Vehicles will be equipped with spill kits and fueled 100 m away from waterbodies; 2) Fuel storage areas will be equipped with spill kits, will be located at least 100 m away from waterbodies and large fuel storage tanks (above 2,000 L) will be double walled; 3) Spill response and containment will be completed expeditiously in accordance with the Spill Contingency Plan and the contractor's HSE manual and procedures; 4) Appropriate deterrents will be used to discourage wildlife from entering the area; 5) ENR will be contacted immediately to determine appropriate course of action, which may include capturing, relocating or treating contaminated wildlife.

Forestry changes

Agricultural changes

Other: General Wildlife

1. Minimize the project footprint to the extent possible.
2. Manage snow bank heights during winter operations (e.g., less than 1 m high) and create breaks in snow berms and windrowed timber (e.g., breaks 10 m wide every 300 m) to allow wildlife passage.
3. Discourage off-road vehicle access to the fire breaks and seismic lines/trails from the proposed project (i.e., soil mounding, placement of waste timber into windrows).
4. Prohibit littering, and provide appropriate food and waste disposal bins.
5. Policy giving all wildlife the right-of-way during project activities.
6. Project-related employees and contractors prohibited from harassing wildlife.

N/A

## INTERACTING ENVIRONMENT

### 1. Habitat & Communities

Predator-prey

Wildlife habitat / ecosystem composition changes

Reduction / removal of keystone or endangered species

Removal of wildlife corridor

or buffer zone

✓ Other: Wildlife Incidents

1. An appropriately designated supervisor will educate all field workers on wildlife mitigation measures.
2. An appropriately designated supervisor will provide all field workers with wildlife response training and general wildlife awareness.
3. Workers will avoid all interactions with wildlife unless crew safety is at risk.
4. Workers will not feed, harass or approach wildlife.
5. All humans/wildlife conflicts and incidents will be reported to the appropriately designated supervisor and to INF.
6. All significant wildlife features, such as dens, will be documented and reported.
7. Firearms will not be allowed on-site except for firearms in the possession and control of authorized wildlife monitors.
8. No hunting or fishing by workers will be permitted.
9. All food and stored garbage will be kept in bear-proof areas or bear-proof containers to prevent wildlife attraction.
10. Any grease, oils, fuels stored on-site will be stored in bear-proof areas or containers and the Waste Management Plan will be followed.
11. Workers will be directed to report any suspicious activities related to wildlife. The appropriately designated supervisor will be responsible for obtaining and reporting this information to INF.
12. Wildlife sightings will be recorded (including GPS location data if possible), submitted to INF and ENR, and included in annual permit reporting to SLWB.

## 1. Social & Economic

Planning / zoning changes or conflicts

Rental house

Airport operations / capacity changes

Human health hazard

Impair the recreational use of water or aesthetic quality

Affect water use for other purposes

Affect other land use operations

Quality of life changes

Public concern

✓ Other: Economic / Employment opportunities

1. there will be short-term employment opportunities from this Project for residents of local communities (Norman Wells, Tulita and Fort Good Hope), with wildlife monitors, truck drivers, equipment operators, camp workers and drillers being examples.
2. businesses in the local communities will be part of the bidding process either as the primary Contractor or as sub-contractors.

N/A

## 1. Cultural & Heritage

Affects to historic property

Increased economic pressure

Changes to or loss of historic resources

Changes to or loss of archeological resources

1. An Archaeological Impact Assessment was completed on the area, including the proposed new Oscar Creek bridge location, both tributaries, proposed borrow sources and their associated access routes. The site work involved foot reconnaissance of the site areas, and the excavation and backfill of hand-dug test pits to assess any archaeological potential.
2. These studies concluded that the program could proceed with low likelihood of disturbing any cultural or archaeological resources at the proposed locations.
3. There are standard conditions in the Permit in the event that any unknown archaeological resources are encountered (52, 53, 54).
4. *An Archaeological Overview Assessment is being completed for the proposed alternate crossing which is located in an area of high archeological potential. All recommendations of that report will be implemented. In the event that the alternate location is selected over the original location an Archaeological Impact Assessment will be completed.*

Increased pressure on archeological resources

Effects to aboriginal lifestyle

1. There is the possibility that Project could disrupt hunting or trapping activities. However, no current traditional uses of the area were identified in the Traditional Knowledge Study. By notifying the local communities as to the start and end date for the field work as well as where the camps are located, INF believes that Project conflicts with hunting and trapping activities will be minimal to non-existent.

Other:

**PRELIMINARY SCREENER / REFERRING BODY INFORMATION**

|  | <b>RA or<br/>DRA</b> | <b>ADVISE</b> | <b>PERMIT<br/>REQUIRED</b> |
|--|----------------------|---------------|----------------------------|
| <b>Federal</b>   |                      |               |                            |
| ATOMIC ENERGY CONTROL BOARD                            | ○                    | ○             | ○                          |
| CANADIAN HERITAGE                                      | ○                    | ○             | ○                          |
| CANADIAN TRANSPORTATION AGENCY                         | ○                    | ○             | ○                          |
| ENVIRONMENT CANADA                                     | ○                    | ✓             | ○                          |
| FISHERIES & OCEANS                                     | ○                    | ✓             | ○                          |
| ABORIGINAL AFFAIRS AND NORTHERN DEVELOPMENT<br>CANADA  | ○                    | ✓             | ○                          |
| INDUSTRY CANADA  | ○                    | ○             | ○                          |
| NATIONAL DEFENSE                                       | ○                    | ○             | ○                          |
| NATIONAL ENERGY BOARD                                  | ○                    | ○             | ○                          |
| NATURAL RESOURCES                                      | ○                    | ○             | ○                          |
| PUBLIC WORKS & GOVERNMENT SERVICES                     | ○                    | ○             | ○                          |
| TRANSPORT CANADA                                       | ○                    | ○             | ○                          |
| CANADIAN NUCLEAR SAFETY COMMISSION                     | ○                    | ○             | ○                          |
| <b>Territorial</b>                                     |                      |               |                            |
| MUNICIPAL & COMMUNITY AFFAIRS                          | ○                    | ✓             | ○                          |
| PUBLIC WORKS & GOVERNMENT SERVICES                     | ○                    | ○             | ○                          |
| ENVIRONMENT & NATURAL RESOURCES                        | ○                    | ✓             | ○                          |
| TRANSPORTATION   | ○                    | ✓             | ○                          |
| DEPARTMENT OF HEALTH AND SOCIAL SERVICES               | ○                    | ✓             | ○                          |
| PRINCE OF WALES NORTHERN HERITAGE CENTRE               | ○                    | ✓             | ○                          |
| INDUSTRY, TOURISM AND INVESTMENT<br>LANDS              | ○                    | ✓             | ○                          |
| <b>Boards</b>  |                      |               |                            |
| GWICH'IN LAND & WATER BOARD                            | ○                    | ○             | ○                          |
| SAHTU LAND & WATER BOARD                               | ✓                    | ○             | ✓                          |
| MACKENZIE VALLEY LAND & WATER BOARD                    | ○                    | ✓             | ○                          |
| MACKENZIE VALLEY ENVIR. IMPACT REVIEW BOARD            | ○                    | ✓             | ○                          |
| SAHTU LAND USE PLANNING BOARD                          | ○                    | ✓             | ○                          |
| SAHTU RENEWABLE RESOURCES BOARD                        | ○                    | ✓             | ○                          |
| SAHTU HEALTH BOARD                                     | ○                    | ✓             | ○                          |
| <b>Aboriginal / First Nation</b>                       |                      |               |                            |
| SAHTU SECRETARIAT INCORPORATED                         | ○                    | ✓             | ○                          |
| NORMAN WELLS LAND CORPORATION                          | ○                    | ✓             | ○                          |
| TULITA RENEWABLE RESOURCES COUNCIL                     | ○                    | ✓             | ○                          |
| TULITA DISTRICT LAND CORPORATION                       | ○                    | ✓             | ○                          |
| FORT NORMAN METIS LOCAL #60 LAND CORPORATION           | ○                    | ✓             | ○                          |
| TULITA LAND CORPORATION                                | ○                    | ✓             | ○                          |
| NORMAN WELLS RENEWABLE RESOURCES COUNCIL               | ○                    | ✓             | ○                          |
| <b>Local Government</b>                                |                      |               |                            |
| TULITA HAMLET INCORPORATED                             | ○                    | ✓             | ○                          |
| TOWN OF NORMAN WELLS                                   | ○                    | ✓             | ○                          |
| K'AHSHO GOT'INE CHARTER COMMUNITY<br>OF FORT GOOD HOPE | ○                    | ✓             | ○                          |
| DELINE GOT'INE GOVERNMENT                              | ○                    | ✓             | ○                          |
| BEHDZI AHDA (COLVILLE LAKE)                            | ○                    | ✓             | ○                          |

**REASONS FOR DECISION**

The Sahtu Land and Water Board (Board) is satisfied that the preliminary screening of the application for S18X-004 by GNWT – Department of Infrastructure for geotechnical investigation of the Oscar Creek Bridge Relocation Project:

- Has been completed in accordance with section 125 of *the Mackenzie Valley Resource Management Act*.
- The Board is satisfied that a reasonable period of notice was given to Communities and First Nations affected by the application as required by subsection 63(2) of the MVRMA so that they could provide comments to the Board.
- Adequate time has been given to Reviewers to provide potential environmental impacts and mitigation measures on information as requested from the Applicant during the initial review period.
- The effects of the Project on the environment can take place in an environmentally responsible manner if mitigation measures outlined in terms and conditions of the Permit and the Applicant's Project Description Report are followed.
- *The potential for impact to archaeological resources will be mitigated by the completion and submission of an Archaeological Overview Assessment Report and following recommendations of the report and the PWNHC.*

Having received 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 that:

- There is no likelihood that the proposed development might have a significant adverse impact on the environment; and
- There is no likelihood that the proposed development might be a cause of public concern.

| -      | <b>PRELIMINARY SCREENING DECISION</b>   |
|--------|---|
| ○      | <b>Outside Local Government Boundaries</b>  |
| ○<br>✓ | The development proposal might have a significant adverse impact on the environment, <i>refer it to the EIRB.</i><br><i>Proceed with regulatory process and/or implementation.</i>                          |
| ○<br>✓ | The development proposal might have public concern, <i>refer it to the EIRB.</i><br><i>Proceed with regulatory process and/or implementation.</i>   |
| ○      | <b>Wholly within Local Government Boundaries</b>  |
| ○<br>○ | The development proposal is likely to have a significant adverse impact on air, water or renewable resources, <i>refer it to the EIRB.</i><br><i>Proceed with regulatory process and/or implementation.</i> |
| ○<br>○ | The development proposal might have public concern, <i>refer it to the EIRB.</i><br><i>Proceed with regulatory process and/or implementation.</i>   |

**Preliminary Screening Organization**

Sahtu Land & Water Board \_\_\_\_\_

**Signatures**

 \_\_\_\_\_



## Sahtu Land and Water Board

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### Reasons for Decision

|                        |  |
|------------------------|--|
| Reference/File Number: | S18X-004 (Type A Land Use Permit)  |
| Permittee:             | Government of the Northwest Territories Department of Infrastructure (GNWT-INF)                      |
| Subject:               | Land Use Permit Amendment Application – Additional Boreholes at an Alternate Crossing of Oscar Creek |

## Decision from the Sahtu Land and Water Board

### Meeting of December 3, 2019

#### 1.0 Decision

The Sahtu Land and Water Board (the Board) met on December 3, 2019 and considered an Amendment Application from the Government of the Northwest Territories Department of Infrastructure (GNWT-INF) for the Oscar Creek Bridge Relocation Geotechnical Investigation. The application requested that an alternate crossing location identified in the original application be investigated. This would require the clearing of an additional 1 ha of land and the drilling of two additional boreholes. The Board conducted a preliminary screening of this Amendment Application based on the public record for the proceeding. Based on the evidence provided, the Board is satisfied the screening has been completed according to subsection 124(1) of the *Mackenzie Valley Resource Management Act* (MVRMA) and has decided that, in its opinion, there is no reasonable likelihood that the proposed application might have a significant adverse impact on the environment and that the proposed application is not a cause for public concern as set out in paragraph 125(1)(a) of the MVRMA.

The Board has therefore decided the following:

1. **not to refer** the Project to Environmental Assessment;
2. to approve the GNWT-INF's Amendment Application for two additional boreholes at the alternate crossing of Oscar Creek; and
3. if no referral to environmental assessment is received by end of day December 13, 2019, it will issue the amended S18X-004 Permit on December 16, 2019.

## 2.0 Background

On January 10, 2019, the Board issued a Type A Land Use Permit to GNWT-INF to complete geotechnical investigations for the proposed relocation of Oscar Creek Bridge from its current out of service location along the Mackenzie Valley Winter Road to a location approximately 6 km upstream. The project consists of auger and core drilling at three proposed watercourse crossings (Tributary 1, Tributary 2 and Oscar Creek) and the identification and test pitting at three potential material prospect sources in the surrounding area. In developing the work plan for the upcoming 2020 winter season, GNWT-INF reviewed additional feedback received from their consultant who presented an alternate, and potentially more suitable crossing of Oscar Creek.

This alternate proposed location, if selected for bridge relocation, would result in a shorter realignment of the winter road, with less area being cleared. In addition, it would not necessitate crossing Tributary 1, further reducing the potential impact to the land and water. With consideration to the future construction of the Mackenzie Valley Highway and the need for a permanent relocation of the Oscar Creek Bridge, INF has deemed it necessary to verify this alternative crossing location. The attached map (Figure 1) shows the existing crossing location (far left), as well as the initial new crossing location proposed in the application (far right). The location circled in the middle shows another possible crossing location identified by Stantec.

Figure 1 Oscar Creek Tributary Realignment



On October 25, 2019, the Board received an Amendment Application to allow an additional borehole to be drilled on each side of Oscar Creek at the proposed alternate location. The coordinates of these two additional boreholes are: 65°26'8.97"N and 127°24'33.20"W. Access will be obtained from the existing winter road to Oscar Creek, requiring approximately 1 ha of additional clearing.



Aside from the two additional boreholes and clearing to access them, the scope and contents of the original application remain unchanged. The approved Management Plans do not require any updates and this location does not affect the determination of conformity with the Sahtu Land Use Plan made with the original application. A letter was circulated to all parties identified in the approved Engagement Plan, informing them of this request. The proposed alternate location was contemplated in the original application package but had not been formally identified or screened.

The work is expected to occur between January and March 2020. GNWT-INF is currently completing an Archaeological Overview Assessment (AOA) on the additional proposed area and intends to follow the outcomes/recommendations from that report. Should the results of geotechnical work in the winter of 2020 result in INF selecting this alignment and crossing location over the original proposed crossing, further archaeological work will be completed.

The preliminary screening identifies potential impacts and mitigations for the proposed activities. In accordance with subsection 125 of the MVRMA, the Board must conduct a preliminary screening of the Amendment Application to determine whether the project might have a significant adverse impact on the environment or might be a cause for public concern.<sup>1</sup>

To assist the Board in completing a Preliminary Screening of this Amendment Application, the Board distributed the Amendment Application for public review on October 29, 2019 inviting Parties to provide comments and recommendations (e.g., on impacts and mitigation measures) using the Online Review System (ORS)<sup>2</sup>. Comments were due November 14, 2019 with responses due November 21, 2019. The Board received comments from the Government of the Northwest Territories Department of Lands Sahtu Region (GNWT-Lands) Inspector who recommended that when clearing the land to reach the two new borehole locations, the shortest route as possible should be cleared (Condition 74), including a dogleg approach from the current winter road (Condition 16). All salvageable timber should be kept (Condition 76) and placed neatly in an area approved by an Inspector (Condition 77); the Government of the Northwest Territories – Environment and Natural Resources (GNWT- ENR) indicated they had no comments or recommendation; and the Prince of Wales Northern Heritage Centre (PWNHC) who recommended that the standard Land Use Permit conditions for Archaeological Overview Assessment (AOA) and AIA-High Potential be included in the Permit since the proposed new borehole location and access are located within an area of high archaeological potential and the proposed clearing and geotechnical activities may place unrecorded archaeological sites at risk of impact. No additional comments or concerns were raised by reviewers from the public review.

Since no concerns were raised during the public review and no requests to extend reviewer comment deadline were received, the Board is satisfied that a reasonable period of notice was given to affected communities and First Nations, as required by subsection 63(2) of the MVRMA.

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<sup>1</sup> See the Mackenzie Valley Environmental Impact Review Board ([www.reviewboard.ca](http://www.reviewboard.ca)) for the *Environmental Impact Assessment Guidelines*, 2004.

<sup>2</sup> See SLWB Online Registry for [S18X-004](#)

### **3.0 Reasons for Decision**

#### **3.1 Preliminary Screening**

The Board completed an update to the preliminary screening approved in the original application in accordance with subsection 124(1) of the MVRMA. In the Amendment Application, GNWT-INF has not proposed any changes to impacts or mitigations as a result of this Amendment Application. The Board conducted its own analysis of potential impacts and proposed mitigations. In evaluating the additional potential impacts of accessing and drilling at the proposed alternate locations the Board considered the following factors:

- 1) The Project will require some additional clearing of trees and brush (approximately 1 ha) but it will not require the removal of the surface organic layer;
- 2) The Project may impact areas of high archaeological potential.

The following sections of the Preliminary Screening Report form were updated to provide additional impact and mitigation measures for the proposed alternate crossing of Oscar Creek

#### **Biological Environment**

##### **Vegetation – species composition; damage to ground vegetation and permafrost**

The additional 1 ha of vegetation clearing required to access the alternate crossing location will result in a direct loss of vegetation and could result in damage to ground vegetation and permafrost. The following mitigation measures will be implemented to minimize disturbance to vegetation: When clearing the land to reach the two new borehole locations, the shortest route as possible will be cleared (Condition 76), including a dogleg approach from the current winter road (Condition 16). All salvageable timber will be kept (Condition 78) and placed neatly in an area approved by an Inspector (Condition 79).

##### **Wildlife and Fish – habitat changes**

The additional 1 ha of vegetation clearing required to access the alternate crossing location will result in a direct loss habitat for wildlife. Mitigation for the new clearing of vegetation required to access the alternate creek crossing includes: clearing the shortest route possible, which will include a dogleg from the current winter road.

The Board does not believe that the loss of an additional 1 ha of vegetation and wildlife habitat might have a significant adverse impact on the environment or be a cause of public concern with regards to potential impacts to the biological environment.

#### **Cultural and Heritage**

##### **Changes to or loss of archaeological resources**

The alternate crossing location is in an area of high archaeological potential. An Archaeological Overview Assessment is being completed and drilling at that location will depend on the outcomes and

recommendations from the AOA. In the event that the alternate location is selected over the original location an Archaeological Impact Assessment will be completed.

The Board is satisfied that the requirement for AOA and AIA is adequate to ensure there will be no significant adverse impact on the environment or be a cause of public concern with regards to potential impacts to culture and heritage resources.

Based on the information provided in the application and the public review, it is the Board's view that there is not enough evidence to suggest that the proposed activities for accessing and drilling at the proposed alternate location on Oscar Creek might have a significant adverse impact on the environment or might be a cause of public concern and therefore, has decided not to refer the Project to Environmental Assessment.

### **3.2 Amendment Application and Supporting Plan**

The Board is satisfied that there are no outstanding concerns with respect to accessing and drilling at the proposed alternate location on Oscar Creek because:

- a) Parties were provided the opportunity to provide comments and recommendations on the potential impacts and mitigation related to the proposed application; and
- b) The Board believes the Permit and requirements for completing AOA and AIA include adequate mitigations to address any potential impacts and concerns as a result of accessing and drilling at the proposed alternate location on Oscar Creek.


Therefore, the Board approves the GNWT-INF's Land Use Permit Application for accessing and drilling two additional boreholes at the proposed alternate location on Oscar Creek.

If the Board does not receive a notice of referral to environmental assessment by end of day Friday December 13, 2019, it will issue the amendment Permit, S18X-004 on Monday December 16, 2019.

**Signed the 3<sup>rd</sup> Day of December, 2019, on behalf of the Sahtu Land and Water Board**



Witness



Larry Wallace  
Chair, Sahtu Land and Water Board