NIRB Application for Screening #125744

EXTRACTION OF GRAVEL AND SAND DEPOSIT AT THE WATERFRONT

Application Type:	New
Project Type:	Pits and Quarries
Application Date:	12/7/2022 4:48:47 PM
Period of operation:	from 0001-01-01 to 0001-01-01
Proposed Authorization:	from 0001-01-01 to 0001-01-01
Project Proponent:	Rita Sewornu Government of Nunavut - CGS P O Box 145 Kinngait NU X0A0C0 Canada Phone Number:: 8678973619, Fax Number::

DETAILS

Non-technical project proposal description

English: This project is being proposed by the Municipal Corporation of the Hamlet of Pangnirtung. Temporal access to extract natural gravel and sand deposits in the Pangnirtung Fjord for winter road maintenance. Municipality of Pangnirtung could not stockpile sufficient gravel for winter road maintenance this year due to a damaged crusher. With the arrival of winter, municipal roads are covered with snow and have become slippery. As water and sewage are trucked, the delivery of these services to the resident has become a dangerous daily task since roads are not safe to drive on. To make roads safer for winter driving they need to spread fresh gravel over the slippery road surfaces. Municipality has identified natural gravel and sand deposits on the beach that they could extract to maintain the municipal roads this winter season. This site is located within the community, the site western boundary adjoins the Small Craft Habour lot - Lot 775, Plan 4135. There is no known protected area that is close to the site.This is an emergency, and this application is for a temporal seasonal access from January 28, 2023, to June 30, 2023

French: Ce projet est proposé par la Corporation municipale du Hameau de Pangnirtung.Accès temporaire pour extraire les dépôts naturels de gravier et de sable dans le fjord de Pangnirtung pour l'entretien hivernal des routes.La municipalité de Pangnirtung n'a pas pu stocker suffisamment de gravier pour l'entretien hivernal des routes cette année en raison d'un concasseur endommagé. Avec l'arrivée de l'hiver, les routes municipales sont recouvertes de neige et sont devenues glissantes. Comme l'eau et les égouts sont transportés par camion, la prestation de ces services aux résidents est devenue une tâche quotidienne dangereuse puisque les routes ne sont pas sécuritaires pour la conduite. Pour rendre les routes plus sûres pour la conduite hivernale, ils doivent étendre du gravier frais sur les surfaces glissantes de la route. La municipalité a identifié des dépôts naturels de gravier et de sable sur la plage qu'elle pourrait extraire pour entretenir les routes municipales cet hiver. Ce site est situé dans la communauté, la limite ouest du site jouxte le lot du port pour petits bateaux - lot 775, plan 4135. Il n'y a aucune zone protégée connue à proximité du site.Il s'agit d'une urgence, et cette application est pour un accès saisonnier temporaire du 28 janvier 2023 au 30 juin 2023

Inuktitut: ᐱᓕᓴᐸᔪᑎᓄᖅᑎᑕᑐᖅ ᓄᐃᓭᓯᒪᔪᖅ – ᑐᐊᕐᑕᖅᑕᕐᕕᒃᓗ ᕿᓂᖅᑐᒃᑎᒋᔭᓄ ᐱᓕᓴᐊᑦᓴᖅ ᑐᑦᓯᐅᑭᐅᓭᖅ ᕿᐊᒡᒪᓪᓚᖅᑦ ᑯᐊᐳᓴᓴᖅᑎᓗᒃ ᓄᓇᓕᖅᑎᑕ ᕿᓂᖅᑐᒃᑎᒥ.ᐊᖅᑯᑎᑎ ᐊᑐᐃᓐᓄᐅᑎᑕᐅᖅᐃᐃᓐᓄᖅᓂᖅ ᓄᐊᑦᓯᕕᐅᕐᑯᓪᓗᒍ ᑐᐊᕐᔭᓂ ᓯᐅᕐᕐᓂᓗ ᕿᓂᖅᑐᒃᑎᒥ ᐅᑭᐅᖅᑯᑦ ᐊᑐᓇᐊᑦ ᓯᐅᕐᓕᖅᑕᐅᕐᑯᑦᓗᒥ.ᕿᓂᖅᑐᒃᑎᕐ ᕼᐊᒪᓪᓚᖅᑯᖅᑎ ᓄᐊᑦᓯᒍᓐᓄᖅᓯᐅᓪᓚᓂ ᓴᒻᒪᑦᑕᓂ ᑐᑭᓯᓂᓗ ᑕᕿᓂᖅᑐᒃᑎᒥ ᓯᐅᕐᕐᓂᓗ ᑕᕿᓂᖅᑐᒃᑎᒥ ᐊᐱᒪᕐᓕᕐᒪ ᐅᑭᐅᖅᑯᑦ ᐊᐱᒪᕐᓕᕐᒪ ᐊᐱᒪᕐᓕᕐᒪ. ᐅᑭᐅᖅᔪᓕᕐᒪ ᐊᑐᓇᐊᑦ ᐊᐱᒪᕐᓕᕐᒪ ᓴᒋᐊᔾᔨᓕᖅᓯᑎᓗ. ᐃᒥᖅᑕᐅᑎᑦ ᓴᒋᕐᖅᑕᐅᑎᑦᓗ ᓄᓇᓯᐅᑎᖅᒋᐊᓪᓚᒪᑕ ᑕᑦᒋᐊ ᐱᐅᑦᓯᐅᑎᑦ ᓄᓇᓕᒥᒥᑕ ᐊᑕᓇᖅᑐᑎᑦ ᐅᑭᐅᖅᑯᑦ ᐊᑕᓇᖅᑕ ᐊᖅᑭᒋᐊᓕᖅᑎᑦ ᑐᑭᓯᓯᐊᕐᓂᒥᑦ ᓄᑕᒥᒃ ᓯᐊᐊᕐᑐᖅᑎ. ᐊᑐᓇᐊᑦ ᐊᑕᓇᖅᑎᑦᑕᐃᓕᓴᒋᓕᒥᑦ ᐅᑭᐅᖅᑯᑦ ᐊᒋᐊᔾᔨᓕᖅᑎᑦ ᓯᐊᒡᒪᑦᑕᐅᑐᖅᑐᑦ ᐅᑭᐅᖅᑎᑦ ᓯᐊᐊᕐᑐᖅᑎᑦ.ᕼᐊᒡᒪᓪᓚᖅᑯᑦ ᓄᓪᓄᐃᖅᓯᐅᒪᔾᑦ ᑐᐊᕐᑐᖅ ᓯᐅᕐᓯᓪᓗ ᓯᐣᔨᒥ ᓄᐊᑦᓯᐅᑎᔪᓐᓄᖅᑕᒥᓂ ᕼᐊᒡᒪᓪᓚᖅᑯᑦ ᐊᑐᓇᐊᖅᑎᓐᓂᖅ ᑕᑭᑦᓂ ᐅᑭᐅᖅᔪᐊᒥᖅ. ᒐᑦᓯᒪ ᐃᓂᖅᓄᓄᓇᑦ ᐃᓪᓗᐊᓂᑐᓄᖅ, ᐃᓂᖅᓴᑕᓪ ᑭᓪᓕᖅᓴ ᓂᒋᑦᓯᓯᐊᔪ ᐊᑦᑐᐊᔨ ᐅᒥᐊᕐᓇᖅᔪᓂᖅᓴᓄᑦ ᑐᓪᓕᑦᓯᐃᐅᑦ ᓄᓇᖅᓴᓄ – ᓄᓇᐅᑦ ᓇᓴᐅᑎᖅᓴ 775, ᕿᖓᓇᐅᑎᖅᓴ 4135. ᓴᓐᔨᕆᐅᓯᒪᔪᖅᑎᖅᕕᒋᓪᓕ ᓄᓇᒥ ᖃᐅᔨᓴᒪᕆᒥ ᖃᖅᑎᑕᑐᒥᑦ ᒐᑦᓯᒪ ᐃᓂᖅᓄᓂ.ᒐᓐᓇ ᑐᐊᐱᓴᓄᖅᑐᑦ, ᐅᓇᓗ ᑐᑦᓯᕕᐅᑎ ᑐᖅᐃᓐᓇᐃᖅᑐᑎᑦᓴᓐᓂᒃᑯᑦ ᐅᓇᓗᒍ ᐱᓕᕐᓂᖅᑐᑎᑦ ᓄᓇᖅᑐᑦ 23, 2023ᒥᑦ, ᔪᓂ 30, 2023ᒍᑦ.

Personnel

Personnel on site: 4

Days on site: 12

Total Person days: 48

Operations Phase: from 2023-01-28 to 2023-06-30

Activities

Location	Activity Type	Land Status	Site history	Site archaeological or paleontological value	Proximity to the nearest communities and any protected areas
Sandbar	Quarry/Borrow pit	Crown	The site is the beach outside the Ordinary High Water Mark	Unknown	Within town

Community Involvement & Regional Benefits

Community	Name	Organization	Date Contacted
Pangnirtung	Jamie Evic	Municipality of Pangnirtung	2022-11-15

Authorizations

Indicate the areas in which the project is located:

South Baffin

Authorizations

Regulatory Authority	Authorization Description	Current Status	Date Issued / Applied	Expiry Date
Aboriginal Affairs and Northern Development Canada	Quarrying Permit	Not Yet Applied		
Nunavut Water Board	License	Not Yet Applied		

Project transportation types

Transportation Type	Proposed Use	Length of Use
Land		

Project accomodation types

Other,

Material Use

Equipment to be used (including drills, pumps, aircraft, vehicles, etc)

Equipment Type	Quantity	Size - Dimensions	Proposed Use
Excavator	1	3500mm x 3500mm	To extract gravel and sand
Loader Backhoe/Trader	1	3500mm x 3500mm	To load materials for transportation

Detail Fuel and Hazardous Material Use

Detail fuel material use:	Fuel Type	Number of containers	Container Capacity	Total Amount	Units	Proposed Use
Gasoline	fuel	1	345	345	Metric Tons	To be used in the excavator and the loader

Water Consumption

Daily amount (m3)	Proposed water retrieval methods	Proposed water retrieval location
0		

Waste

Waste Management

Project Activity	Type of Waste	Projected Amount Generated	Method of Disposal	Additional treatment procedures
Dredging	Non-Combustible wastes	1 ton	A bin will be placed on site to collect waste.	None

Environmental Impacts:

The site will be used to extract sand and gravel deposits to be used for winter road maintenance in the community of Pangnirtung. Stockpiling of aggregate may occur. Depending on the exact location that material will extracted from, dredging could occur in the small stream that runs through the area. Minor slumping may occur but will be levelled off in the summer. Care will be taken not to extract material from sections that could result in silting of the stream. No water will be used in this project and no waste will be dumped into any water source. The runoff from this site will be all natural material (dust,sand etc.) in which runoff of this material already occurs in nature. No plans for snow accumulation exist due to the fact that any changes in snow drifting in this area from extraction of aggregate will be minimal (if any)No fuel will be stored at this location so no official plan exists. In the unlikely event that a transportation vehicle's (dump truck/loader) fuel tank is punctured, the Municipality will call the NU 24-hour spill report line at (867) 920-8130 and immediately extract and remove the aggregate at the point of the spill. The contaminated soil will be relocated to the community land farm. The Municipality's contact information is as follows: ATTN: Will Gange, Municipality of Pangnirtung P.O. Box 253, Pangnirtung, NU X0C 0R0 PH: (867) 473-8953. Dust Control Measures - Extraction is happening during the winter, the production of duct will be greatly reduced. Reducing haul trips and limiting speeds on unpaved roads. Wetting material prior to processing or loading. Covering stock piles, conveyor belts, and loads in trucks. Locating stock piles in locations that limit their exposure to wind. Proper loading of trucks

Additional Information

SECTION A1: Project Info

SECTION A2: Allweather Road

SECTION A3: Winter Road

SECTION B1: Project Info

SECTION B2: Exploration Activity

SECTION B3: Geosciences

SECTION B4: Drilling

SECTION B5: Stripping

SECTION B6: Underground Activity

SECTION B7: Waste Rock

SECTION B8: Stockpiles

SECTION B9: Mine Development

SECTION B10: Geology

SECTION B11: Mine

SECTION B12: Mill

SECTION C1: Pits

SECTION D1: Facility

SECTION D2: Facility Construction

SECTION D3: Facility Operation

SECTION D4: Vessel Use

SECTION E1: Offshore Survey

SECTION E2: Nearshore Survey

SECTION E3: Vessel Use

SECTION F1: Site Cleanup

SECTION G1: Well Authorization

SECTION G2: Onland Exploration

SECTION G3: Offshore Exploration

SECTION G4: Rig

SECTION H1: Vessel Use

SECTION H2: Disposal At Sea

SECTION I1: Municipal Development

Description of Existing Environment: Physical Environment

The quarry site is located at the water front and a small stream runs through the site. The site contain natural deposit of sand and gravel.

Description of Existing Environment: Biological Environment

Unknown

Description of Existing Environment: Socio-economic Environment

the site is not located near any known archaeological and cultural historic sites. The extraction will assist the Hamlet to maintain roads during this winter water delivery and trucking of sewage.

Miscellaneous Project Information

Identification of Impacts and Proposed Mitigation Measures

The site contain natural deposit of gravel and sand. Stockpiling of aggregate may occur. Depending on the exact location that material will extracted from, dredging could occur in the small stream that runs through the area. Minor slumping may occur but will be levelled off in the summer. Care will be taken not to extract material from sections that could result in silting of the stream. No water will be used in this project and no waste will be dumped into any water source. The runoff from this site will be all natural material (dust,sand etc.) in which runoff of this material already occurs in nature. No plans for snow accumulation exist due to the fact that any changes in snow drifting in this area from extraction of aggregate will be minimal (if any)No fuel will be stored at this location so no official plan exists. In the unlikely event that a transportation vehicle's (dump truck/loader) fuel tank is punctured, the Municipality will call the NU 24-hour spill report line at (867) 920-8130 and immediately extract and remove the aggregate at the point of the spill. The contaminated soil will be relocated to the community land farm. The Municipality's contact information is as follows: ATTN: Will Gange, Municipality of Pangnirtung P.O. Box 253, Pangnirtung, NU X0C 0R0 PH: (867) 473-8953Dust Control Measures Dust control Measures - Regular washing of extraction, processing and transport equipment. Reducing haul trips and limiting speeds on unpaved roads. Wetting material prior to processing or loading.Covering stock piles, conveyor belts, and loads intrucks.Locating stock piles in locations that limit theirexposure to wind. proper loading of trucksAvoid scheduling loading, unloading and blasting activities on a windy days•• Re-vegetating disturbed areas as soon as possible to reduce erosion and minimize dust.Erosion Control Measures. An un-disturbed, vegetation buffer zone and sediment fence barrier will be maintained between the quarry and the ocean where possible; Progressive site stabilization will be implemented as soon as practically possible, and maintained at all times during the extraction. This is a temporal access and only about 140 cubic meters of material will be taken.

Cumulative Effects

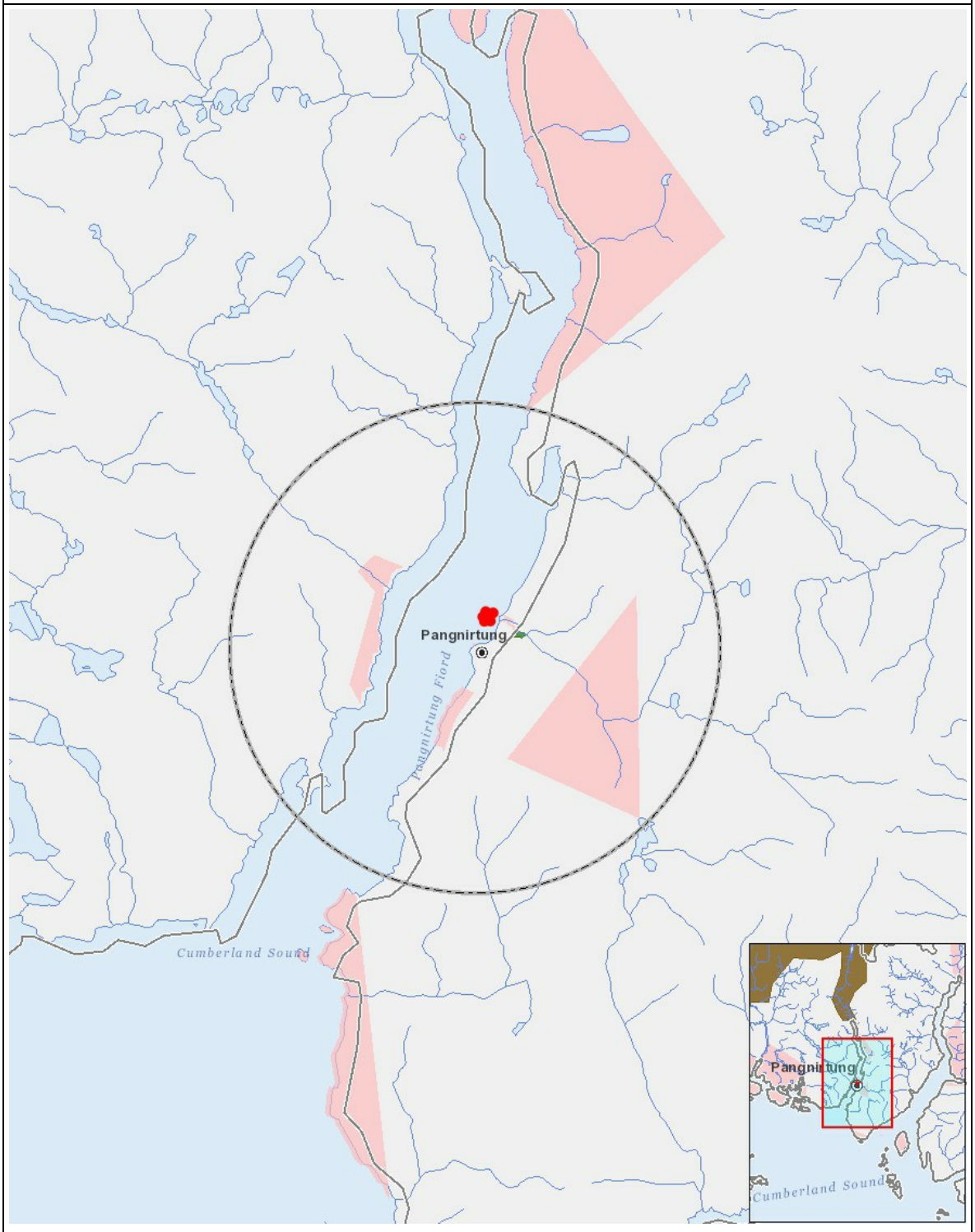
Impacts

Identification of Environmental Impacts

	PHYSICAL	Designated environmental areas	Ground stability	Permafrost	Hydrology / Limnology	Water quality	Climate conditions	Eskers and other unique or fragile landscapes	Surface and bedrock geology	Sediment and soil quality	Tidal processes and bathymetry	Air quality	Noise levels	BIOLOGICAL	Vegetation	Wildlife, including habitat and migration patterns	Birds, including habitat and migration patterns	Aquatic species, incl. habitat and migration/spawning	Wildlife protected areas	SOCIO-ECONOMIC	Archaeological and cultural historic sites	Employment	Community wellness	Community infrastructure	Human health
Construction																									
-		-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-		-	-	-	-	-
Operation																									
Quarry/Borrow pit		U	U	P	-	M	M	U	U	P	M	M	M		U	U	U	M	U		U	U	P	P	U
Decommissioning																									
-		-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-		-	-	-	-	-

(P = Positive, N = Negative and non-mitigatable, M = Negative and mitigatable, U = Unknown)

Project Location



List of Project Geometries

1	polyline	Sandbar
2	point	TP-2
3	point	TP-3
4	point	TP-2
5	point	TP-1
6	point	TP-5