



NIRB Application for Screening #125631

Clyde River Small Craft Harbour Development

Application Type: New

Project Type: Coastal Infrastructure

Application Date: 8/10/2021 8:28:53 AM

Period of operation: from 0001-01-01 to 0001-01-01

Proposed Authorization: from 0001-01-01 to 0001-01-01

Project Proponent: Eleanor McEwan
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501 University Crescent
Winnipeg Manitoba R3T 2N6
Canada
Phone Number:: 204-805-3828, Fax Number::

DETAILS

Non-technical project proposal description

English: see PDF of Project description (attached)

French: n/a for North Baffin

Inuktitut: ᑕᑭᑭᑦ ᑭᑦᑭᑦᑭᑦ ᑭᑦᑭᑦᑭᑦ ᑭᑦᑭᑦᑭᑦ ᑭᑦᑭᑦᑭᑦ ᑭᑦᑭᑦᑭᑦ (ᑕᑭᑭᑦᑭᑦ)

Personnel

Personnel on site: 30

Days on site: 390

Total Person days: 11700

Operations Phase: from 2022-05-30 to 2025-09-29

Operations Phase: from 2025-09-30 to 2049-09-30

Post-Closure Phase: from to

Activities

| Location | Activity Type | Land Status | Site history | Site archaeological or paleontological value | Proximity to the nearest communities and any protected areas |
|------------------------------|-------------------------|-------------|--|---|---|
| Small Craft Harbour Location | Harbour infrastructure | Crown | The harbour area has been used for fishing, harvesting, transportation of goods for at least 60 years since the community of Clyde River was established in it's current location. | An archaeological Impact Assessment (AIA) was completed by Lifeways of Canada Limited in 2019. The AIA results state that there are no known archaeological or paleontological sites in the project area. | The closest community is Clyde River, which is located within 100 m of the Project area. The closest protected area is Isabella Bay, which is approximately 80 km southwest of the Project area. |
| Quarry Location | Quarry/Borrow pit | Municipal | There has been a quarry in the area for at least 16 years. | An archaeological Impact Assessment (AIA) was completed by Lifeways of Canada Limited in 2019. The AIA results state that there are no known archaeological or paleontological sites in the project area. | The closest community is Clyde River, which is approximately 1.5 km northwest of the quarry. The closest protected area is Isabella Bay, which is approximately 80 km southwest of the Project area. |
| Disposal at Sea Location | Marine Based Activities | Crown | Marine environment | No known archaeological resources. | The closest community is Clyde River, which is located within approximately 700 m of the disposal area. The closest protected area is Isabella Bay, which is approximately 80 km southwest of the Project area. |
| Haul Route | Access Road | Municipal | The road from the harbour location to the Clyde River airport has been in place since at least 1985. The haul route between the quarry and the airport was established in 2019. | No known archaeological resources. | The closest community is Clyde River, which the haul route goes through. The closest protected area is Isabella Bay, which is approximately 80 km southwest of the Project area. |

Community Involvement & Regional Benefits

| Community | Name | Organization | Date Contacted |
|-------------|--|-----------------------|----------------|
| Clyde River | Hamlet Council Members - Mayor, Councilors, SAO, etc | Hamlet of Clyde River | 2019-05-24 |

| | | | |
|-------------|---|-----------------------------|------------|
| Clyde River | Nangmautaq HTO members | Nangmautaq HTO | 2019-05-24 |
| Clyde River | Hamlet Council Members - Mayor, Councilors, SAO, etc | Hamlet of Clyde River | 2018-11-08 |
| Clyde River | Nangmautaq HTO members | Nangmautaq HTO | 2018-11-08 |
| Clyde River | Hamlet Council Members - Mayor, Councilors, SAO, etc | Hamlet of Clyde River | 2019-11-04 |
| Clyde River | Nangmautaq HTO members | Nangmautaq HTO | 2019-11-04 |
| Clyde River | Clyde River community members | Community Open House | 2020-02-24 |
| Clyde River | Nangmautaq HTO members | Nangmautaq HTO | 2020-02-25 |
| Clyde River | Hamlet Council Members - Mayor, Councilors, SAO, etc | Hamlet of Clyde River | 2020-02-26 |
| Clyde River | Hamlet Council Members - Mayor, Councilors, SAO, etc. | Hamlet of Clyde River | 2020-09-29 |
| Clyde River | Nangmautaq HTO members | Nangmautaq HTO | 2020-10-01 |
| Clyde River | Guardian Members | Guardians | 2020-10-02 |
| Clyde River | QIA local Members | Qikiqtani Inuit Association | 2020-10-02 |
| Clyde River | Hamlet Council Members - Mayor, Councilors, SAO, etc. | Hamlet of Clyde River | 2021-02-20 |
| Clyde River | Nangmautaq HTO members | Nangmautaq HTO | 2021-02-21 |
| Clyde River | Guardian Members | Guardians | 2021-02-22 |
| Clyde River | QIA local Members | Qikiqtani Inuit Association | 2021-02-24 |

Authorizations

Indicate the areas in which the project is located:

North Baffin

Authorizations

| Regulatory Authority | Authorization Description | Current Status | Date Issued / Applied | Expiry Date |
|---------------------------------------|--|-----------------|-----------------------|-------------|
| Environment and Climate Change Canada | Disposal at Sea (DAS) is not considered likely, however if required a DAS application will be submitted to Environment and Climate Change Canada (ECCC). A sample analysis plan (SAP) was submitted to and approved by ECCC for sediment analysis in the dredge footprint of the SCH. ECCC has been engaged from an early stage in project planning as the proponent (DFO-SCH) is a federal agency. | Not Yet Applied | | |
| Transport Canada | A Notice of Works (NoW) is expected to be required from Transport Canada due to the potential for interferences to navigation during construction, and to confirm navigational markers required during operations of the SCH. TC has been engaged from an early stage in project planning as the proponent (DFO-SCH) is a federal agency. Maintaining access for harvesters to the marine environment during construction has been a key part of consultation and measures will be in place during construction to confirm there are no access restrictions for hunters. | Not Yet Applied | | |
| Natural Resources | A permit from NRCan | Not Yet Applied | | |

| | | | | |
|-----------------------------|---|-----------------|--|--|
| Canada | is expected to be required for the transportation and storage of explosives (required for blasting). NRCan compliance requirements will be the responsibility of the contractor and will be applied for after contract award and before the start of construction. | | | |
| Nunavut Water Board | A Type B license may be required if the haul road upgrades requires culverts to be installed or if stream alteration is required for the Project. The haul route will cross a river close to Clyde River. Any temporary structures used to cross the river may require review and licensing from NWB. NWB compliance requirements will be the responsibility of the contractor and will be applied for after contract award and before the start of construction. | Not Yet Applied | | |
| Fisheries and Oceans Canada | A Fisheries Act Authorization (FAA) will be required due to the permanent loss of seabed habitat due to the construction of the Small Craft Harbour. Any impacts resulting from a haul road river crossing structure will also be recognized by DFO-Fish and Fish Habitat Protection Program (FFHPP). DFO-FFHPP has been engaged from an early stage in project planning as the proponent (DFO-SCH) is a federal agency. | Not Yet Applied | | |

Project transportation types

| Transportation Type | Proposed Use | Length of Use |
|---------------------|---|---------------|
| Air | During construction, the Project will use commercially scheduled flights, with the potential for use of chartered flights but may need to use chartered | |

| | | |
|-------|--|--|
| | flights if the existing service cannot support the additional throughput. In addition, the Project will confirm that if commercial flights are used, that there is no effect to availability of flight service to locals | |
| Water | During construction, the Project will use the existing scheduled seahift deliveries | |
| Land | Heavy Equipment, and contractor light vehicles (pick-up trucks) will be used during construction. | |

Project accommodation types

Temporary Camp

Material Use

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

| Equipment Type | Quantity | Size - Dimensions | Proposed Use |
|--------------------------------------|----------|--|---|
| Drill Rig | 2 | 5.5 x 2.3.m | Quarrying |
| Excavator | 5 | 4 x 3.4m | Quarrying, material handling, excavating |
| Rock Truck 35 ton - Articulating | 4 | 11.1 x 4.2 m | Transporting quarried rock |
| Front end loader 966 - 988 | 3 | 7.5 x 2.5 m | Material loading & handling |
| Compactor - 20 ton | 1 | 6.2 x 2.5m | Work surface and road compaction |
| Bulldozer D8 | 1 | 3.2 x 2.7m | Work surface and road levelling |
| Grader 140 ton | 1 | 10.1 x 2.5m | Work surface and road grading |
| Spud Bard/derrick with 150 ton crane | 1 | 20 x 50m | Dredging, transporting material and equipment |
| Material Scow 500 cubic meter | 2 | 47 x 11m | Dredging and disposal of dredged material |
| Tug 1000 - 1500 hp | 1 | 14.85 x 5.8m | Transport and movement of marine equipment |
| Work boat - 50-500ho | 2 | 9.75 x 2.9m | Transport and movement of marine equipment and personnel |
| Pick -up truck 3/4 ton | 3 | 4.8 x 1.9m | Material and personnel transport |
| Fuel/service truck 10 ton | 1 | 13 x 2.5m | Transport fuel from GN PPD dispensers to construction equipment |
| Water truck 10 ton | 1 | 9.5 x 2.5m | Transport water from municipal water supply to work camp and construction site |
| Wastewater truck 10 ton | 1 | 9.5 x 2.5m | Transport wastewater from work camp and construction site to municipal treatment facility |
| Telehandler/forklifts | 1 | 6.2 x 2.6m | Material and equipment handling |
| Rough terrain crane 250 ton | 1 | 14.5 x 7.9 m | Material and equipment loading/handling/movement |
| Rock crusher for quarry 125 ton | 1 | 14.6 x 4.2 m; 14.3 x 4.2 m; 17 x 3.6 m | Portable jaw crusher, cone and screening plant for the manufacturing of aggregate |

Detail Fuel and Hazardous Material Use

| Detail fuel material use: | Fuel Type | Number of containers | Container Capacity | Total Amount | Units | Proposed Use |
|---------------------------|-----------|----------------------|--------------------|--------------|--------------|--|
| Diesel | fuel | 1 | 3800 | 3800 | Cubic Meters | Fuel for equipment, generators, heaters. Fuel will be dispensed on a daily basis from existing facilities in Clyde River. Container capacity field contains estimated total value. |
| Gasoline | fuel | 1 | 140 | 140 | Cubic Meters | Fuel for small equipment, trucks, work boats. Fuel will |

| | | | | | | |
|-------------------|-----------|----|-----|------|--------------|---|
| | | | | | | be dispensed on a daily basis from existing facilities in Clyde River. Container capacity field contains estimated total volume |
| Propane | fuel | 10 | 100 | 1000 | Lbs | Camp use - heating, refrigeration, cooking |
| Other | fuel | 10 | 4 | 40 | Cubic Meters | Acetylene - metal cutting and welding torches |
| Oils & Lubricants | hazardous | 10 | 5 | 50 | Gallons | Equipment maintenance |
| Paint | hazardous | 10 | 1 | 10 | Gallons | Painting wharf hardware & mics. components |
| Explosives | hazardous | 1 | 1 | 1 | Cubic ft | ANFO explosives for quarrying. Quantity to be determined. Storage and handling will be in accordance with license/cert/permit issued under the Explosives Act and Regulations |

Water Consumption

| Daily amount (m3) | Proposed water retrieval methods | Proposed water retrieval location |
|-------------------|----------------------------------|-----------------------------------|
| 6 | Water truck. | Community water supply. |

Waste

Waste Management

| Project Activity | Type of Waste | Projected Amount Generated | Method of Disposal | Additional treatment procedures |
|------------------------|---|----------------------------|--|---------------------------------|
| Camp | Combustible wastes | 2 tonnes | Deposit in municipal landfill. | n/a |
| Camp | Greywater | 800 m ³ | Collected in wastewater truck and transported to municipal wastewater treatment facility. | n/a |
| Harbour infrastructure | Hazardous | 100 L | Package, sealed and transported south in shipping containers for disposal in accordance with applicable regulations. | n/a |
| Camp | Non-Combustible wastes | 0.5 tonnes | Deposit in municipal landfill. | n/a |
| Quarry/Borrow pit | Overburden (organic soil, waste material, tailings) | Negligible | Stockpiled at quarry. | n/a |
| Dredging | Overburden (organic soil, waste material, tailings) | 12, 000 m ³ | Infilling and/or disposal at sea | n/a |
| Camp | Sewage (human waste) | 1,500 m ³ | Collected in wastewater truck and transported to municipal wastewater treatment facility. | n/a |

Environmental Impacts:

Potential environmental impacts and mitigation measures are described in the Project Proposal (Chapter 7 and Chapter 8) and Construction Environmental Management Plan. There may be some negative residual environmental effects that will remain despite mitigation measures, predominantly with respect to ambient light, air quality, noise, marine water and sediments, marine fish and fish habitat and marine mammals, however, no residual effects are predicted to be significant.

Additional Information

SECTION A1: Project Info

Details can be found in the Project Proposal sections: Chapter 1 and 4

SECTION A2: Allweather Road

An existing road is planned to be used to support the transportation of rock materials from the quarry to the SCH. Upgrades to the road will occur prior to construction and will be described in the Project Proposal document. In required, the contractor will be responsible for necessary permits from the NWB. Measures to manage traffic interactions with the community will be described in the CEMP, and the contractor will be required to develop a Traffic Management Plan (TMP) to detail methodologies (e.g. use of dust suppressants, speed limits, training requirements) to be undertaken to support CEMP requirements.

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

Details can be found in the Project Proposal sections: 4.5.3

SECTION D1: Facility

Details can be found in the Project Proposal sections: Chapter 4

SECTION D2: Facility Construction

Details can be found in the Project Proposal sections: Chapter 4

SECTION D3: Facility Operation

The SCH once operational will remain the responsibility of DFO-SCH. An Operations Environmental Management Plan (OEMP) will be prepared prior to operations of the SCH. There are not expected to be any differences in vessel use before and after the construction of the SCH. Details can be found in the Project Proposal sections: Chapter 4.4

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

There is no shipping associated with the project construction as all materials will arrive under existing scheduled sealift deliveries. It is anticipated that small vessels related to the construction of the Harbour

SECTION H2: Disposal At Sea

It has not been determined if disposal at sea is required, however the preferred DAS site is shown in the Project Proposal.

SECTION I1: Municipal Development

Description of Existing Environment: Physical Environment

Details can be found in the Environmental and Socio-Economic Baseline Report sections: 2, 4-5. Details can be found in the Project Proposal sections: Chapter 5

Description of Existing Environment: Biological Environment

Details can be found in the Environmental and Socio-Economic Baseline Report sections: 2, 6-10. Details can be found in the Project Proposal sections: Chapter 5

Description of Existing Environment: Socio-economic Environment

Details can be found in the Environmental and Socio-Economic Baseline Report sections: 11. Details can be found in the Project Proposal sections: Chapter 6

Miscellaneous Project Information

Identification of Impacts and Proposed Mitigation Measures

Details can be found in the Project Proposal sections: Chapter 7. Additional mitigations will be found in the Construction Environmental Management Plan (CEMP)

Cumulative Effects

There may be some negative residual environmental effects that will remain despite mitigation measures, predominantly with respect to ambient light, air quality, noise, marine water and sediments, marine fish and fish habitat and marine mammals, however, no residual effects are predicted to be significant. Details can be found in the Project Proposal sections: Chapter 8

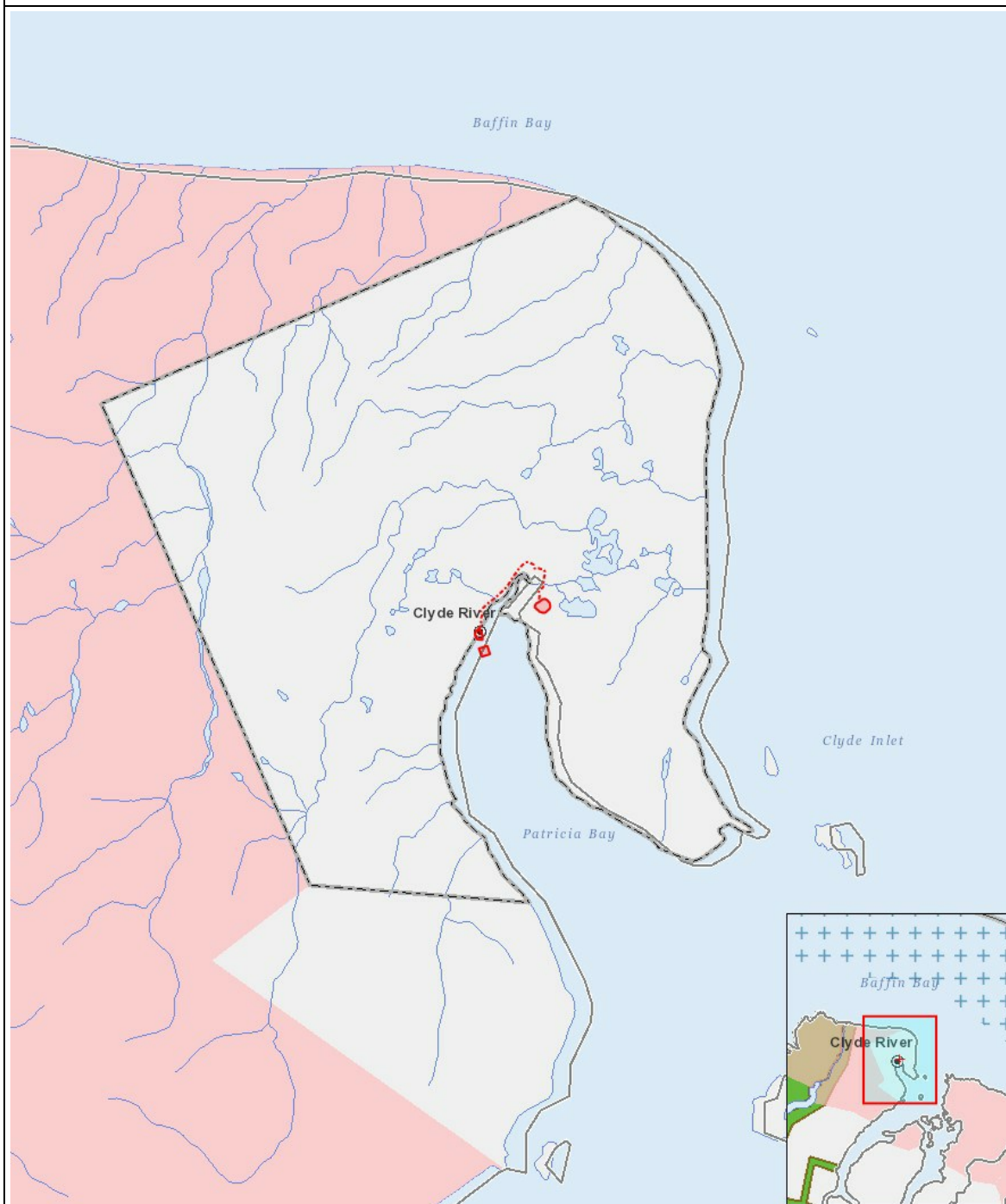
Impacts

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 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Harbour infrastructure | | - | - | M | - | M | - | - | M | M | - | M | M | | N | N | N | N | - | | - | P | - | M | M |
| Quarry/Borrow pit | | - | - | N | - | - | - | - | N | N | - | N | N | | M | N | - | N | - | | - | - | - | - | N |
| Access Road | | - | - | M | - | M | - | - | - | M | - | M | M | | M | M | - | M | - | | - | - | - | P | M |
| Marine Based Activities | | - | - | - | - | M | - | - | - | - | - | - | M | | - | - | - | M | - | | - | P | - | - | - |
| Operation | | | | | | | | | | | | | | | | | | | | | | | | | |
| Harbour infrastructure | | - | - | - | - | - | - | - | - | - | - | - | - | | - | - | - | - | - | | - | P | P | P | - |
| Access Road | | - | - | - | - | - | - | - | - | - | - | - | - | | - | - | - | - | - | | - | - | - | P | - |
| Marine Based Activities | | - | - | - | - | - | - | - | - | - | - | - | - | | - | - | - | - | - | | - | P | P | P | P |
| Decommissioning | | | | | | | | | | | | | | | | | | | | | | | | | |
| - | | - | - | - | - | - | - | - | - | - | - | - | - | | - | - | - | - | - | | - | - | - | - | - |

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

Project Location



List of Project Geometries

| | | |
|---|----------|------------------------------|
| 1 | polygon | Small Craft Harbour Location |
| 2 | polygon | Quarry Location |
| 3 | polygon | Disposal at Sea Location |
| 4 | polyline | Haul Route |