



NIRB Application for Screening #126434

Co-evolution of life and environment across the Ediacaran-Cambrian boundary in Northeastern Ellesmere Island

Application Type: New

Project Type: Scientific Research

Application Date: Wednesday, April 8, 2026

Period of operation: from 2026-07-01 to 2026-08-17

Project Proponent: Peter Crockford
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Activities

Location	Activity Type	Land Status	Site history	Site archaeological or paleontological value	Proximity to the nearest communities and any protected areas
Scoresby Camp and field area	Scientific/International Polar Year Research	Crown	Geologic mapping by the Geological Survey of Canada in the 1990s	The specific sites are of Ediacaran and Cambrian age however fossils are unknown.	The closest settlement is Grise Fjord which is \approx 450 km away from this study location.
Alternate field area at Radmore Harbor	Scientific/International Polar Year Research	Crown	Geologic mapping by the Geological Survey of Canada in the 1990s	The specific sites are of Ediacaran and Cambrian age however fossils are unknown.	The closest settlement is Grise Fjord \approx 450 km from this location.
Nunatak Camp and field area	Scientific/International Polar Year Research	Crown	Geologic mapping by the Geological Survey of Canada in the 1990s	The specific sites are of Ediacaran and Cambrian age however fossils are unknown.	The closest settlement is Grise Fjord which is \approx 450 km away from this study location.

Community Involvement & Regional Benefits

Community	Name	Organization	Date Contacted
Information is not available			

Authorizations

Indicate the areas in which the project is located:

North Baffin

Authorizations

Regulatory Authority	Authorization Description	Current Status	Date Issued / Applied	Expiry Date
Nunavut Planning Commission	The NPC has completed its review of this project and it conforms to the Northern Baffin Regional Land Use Plan. The proponent has undertaken to comply with the applicable conformity requirements of appendix C, H, and I of the NBRLUP.	Active	2026-03-10	
Nunavut Research Institute	Everything is in good order however the NRI is awaiting approval from the NIRB	Applied, Decision Pending		

Project transportation types

Transportation Type	Proposed Use	Length of Use
Air	Fixed wing plane from Resolute to Eureka and then Helicopter transport from Eureka to and from field areas.	

Project accommodation types

Temporary Camp

Material Use

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

Equipment Type	Quantity	Size - Dimensions	Proposed Use
Rock Hammer	6	33 cm	To sample golf ball sized scientific research rock samples - carbonate, shale.
Helicopter	1	40 ft	For transportation to and from field camps

Detail Fuel and Hazardous Material Use

Detail fuel material use:	Fuel Type	Number of containers	Container Capacity	Total Amount	Units	Proposed Use
Aviation fuel	fuel	8	200	1600	Liters	To power helicopter
Other	fuel	3	1	3	Liters	cooking fuel - white gas

Water Consumption

Daily amount (m3)	Proposed water retrieval methods	Proposed water retrieval location
0	Safe manual collection from streams and ice melt.	We will collect water near camps.

Waste

Waste Management

Project Activity	Type of Waste	Projected Amount Generated	Method of Disposal	Additional treatment procedures
Camp	Non-Combustible wastes	3 kg	We will pack this out of camps and will dispose of this in a municipal dumpster in Ottawa	N/A
Camp	Other, Used cooking fuel cans	3 1L cans	We will pack out empty cans which will be disposed of properly at a PCSP facility	N/A
Camp	Sewage (human waste)	22.5 kg	All waste of this nature will be packed out of camp in sealed buckets lined with materials designed for this purpose.	N/A

Environmental Impacts:

This is a purely scientific expedition which will require minimal surface sampling in two locations of golf-ball sized rock samples taken from the surface with a rock hammer and stored in sample bags. Camps will have a strict zero-footprint policy which will entail all generated waste and materials to be packed out at the end of the campaign. Due to surface weathering, sampling marks will be removed within several years.

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

Rocky hills, streams and glaciers (which we will not be traversing).

Description of Existing Environment: Biological Environment

Snow algae, arctic lichen, arctic plant life. Birds and minor mammals.

Description of Existing Environment: Socio-economic Environment

This is a remote location with no nearby human settlements or communities.

Miscellaneous Project Information

Identification of Impacts and Proposed Mitigation Measures

There will be a strict zero-footprint policy. All materials brought in will be packed out. Minimal surface sampling of small golf-ball sized rock samples will be undertaken however this will be of zero impact to the environment.

Cumulative Effects

None that can be anticipated.

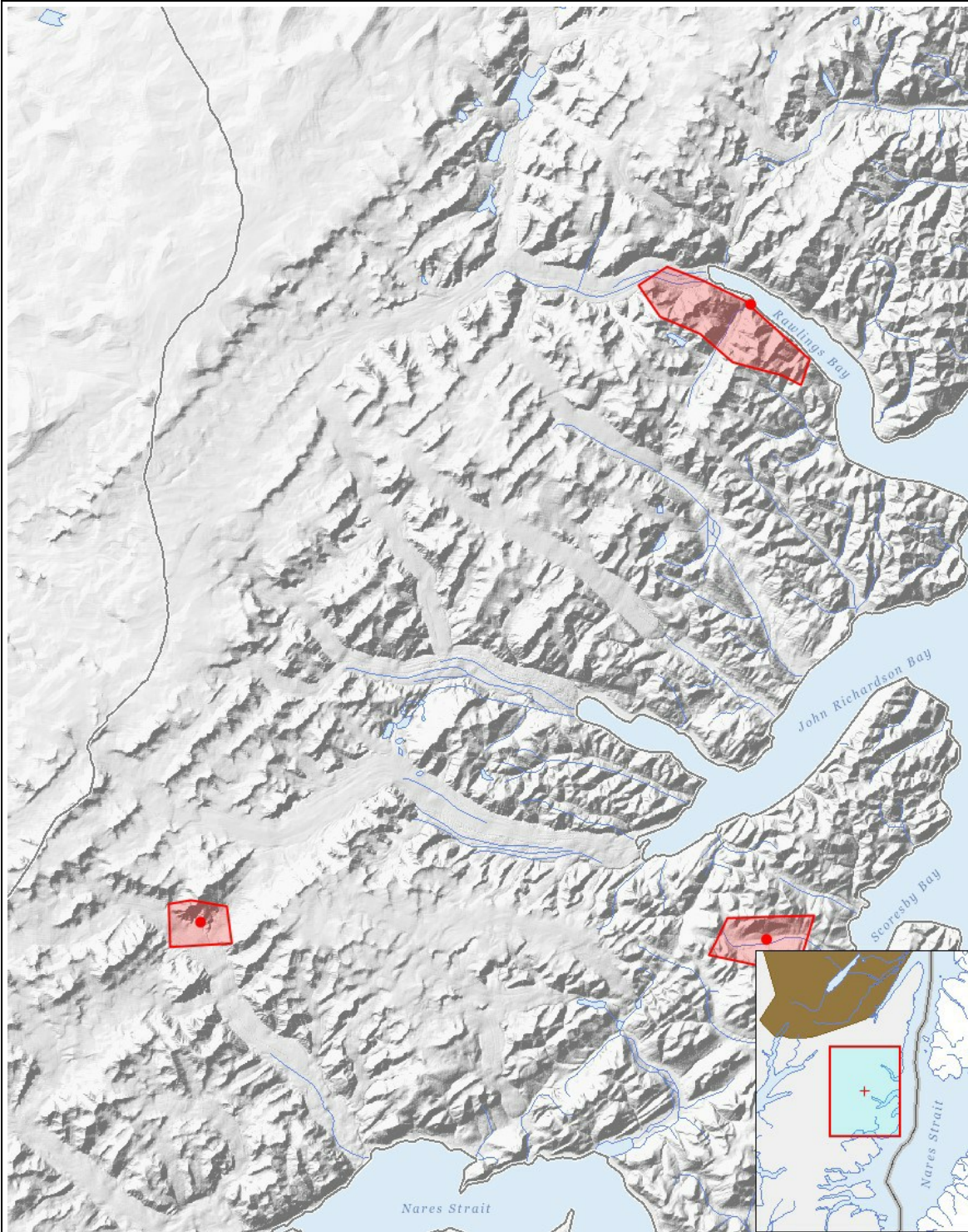
Impacts

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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Decommissioning	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

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

Project Location



List of Project Geometries

- | | | |
|---|---------|--|
| 1 | polygon | Nunatak Camp and field area |
| 2 | polygon | Scoresby Camp and field area |
| 3 | polygon | Alternate field area at Radmore Harbor |
| 4 | point | Nunatak Camp |
| 5 | point | Scoresby Camp |
| 6 | point | Alternate Camp at Radmore Harbor |