

LEGEND

I	ORGANIC TERRAIN (including muskeg)	Peat, fen; peat-fen complex; commonly occurring as a cover on Units II, IX and X; flat to moderately sloping.
II	SILT-CLAY PLAINS (marine and lake deposits)	Clay and silt, commonly surfaced by sand or silty sand, with discontinuous organic cover (see Unit I). Principally forming plains bordering rivers and coastal areas. Highly unstable in eroded slopes.
III	THERMOKARST LAKE BEDS	Clay, silt, peat, and local sand on low flat areas formerly occupied by tundra ponds. These materials generally less than ten feet thick over till or sand. Pings generally confined to this unit.
IV	BEACHES (marine and lake)	Gravel and/or sand ridges or flat areas along present or former shorelines.
V	RIVER DEPOSITS-FINE	Silt and silty sand in river channels, floodplains, low terraces adjoining rivers, and alluvial fans; includes organic silt, peat and minor gravel.
VI	RIVER DEPOSITS-COARSE	Gravel and sand in river channels, floodplains, low terraces adjoining rivers and alluvial fans. Includes some silt, peat, and organic silt.
VII	GRAVEL-SAND HILLS, RIDGES AND TERRACES	Gravel, sand and some silt. Includes eskers, and other glacial/valley deposits, river terraces, sand dunes, and moraines consisting of deformed gravely-sandy strata.
VIII	SILT-CLAY HILLS AND RIDGES	Mainly silt and clay with minor sand and gravel in moraines, strata tilted and folded.
IX	TILL PLAIN	Till, occurring as ground moraine with low rolling relief or parallel drumlin ridges. Large areas are clayey to silty till as a thin veneer on shale; locally forms a thin veneer on other kinds of bedrock. Includes undifferentiated areas of Unit I.
X	HUMMOCKY TILL	Clayey to gravely-sand till, local gravel, forming rolling to hilly moraine composed of individual and coalescent hummocks. Local contrasts in material and ground ice between well drained hills and poorly drained depressions. Includes small undifferentiated areas of Unit I.
XI	UPLAND AND PIEDMONT COMPLEXES	Areas of moderate to low slope, in part hilly, surfaced by till, disintegrated bedrock, and local clay, silt, sand, or gravel. Unconsolidated deposits generally form a thin veneer over rock but in places they are thick (>100 feet).
XII	MOUNTAINOUS AND ROCKY AREAS	Rock outcrop or rock thinly covered by rubble or drift. Moderate to steep slopes.
XIII	ERODED AND/OR ERODING RIVER BANKS, COASTAL CLIFFS, AND VALLEY WALLS (UNCONSOLIDATED MATERIAL)	Various unconsolidated materials on moderate to steep slopes, generally with surface veneer of slope debris; includes unstable areas.
XIIIR	ERODED AND/OR ERODING RIVER BANKS, COASTAL CLIFFS, AND VALLEY WALLS (BEDROCK)	Bedrock outcrops or bedrock partly covered by rock detritus or unconsolidated materials; slopes commonly steep; includes unstable areas.

Note: Detailed unit descriptions of terrain sensitivity and the performance rating table are presented on a separate sheet which accompanies this map.

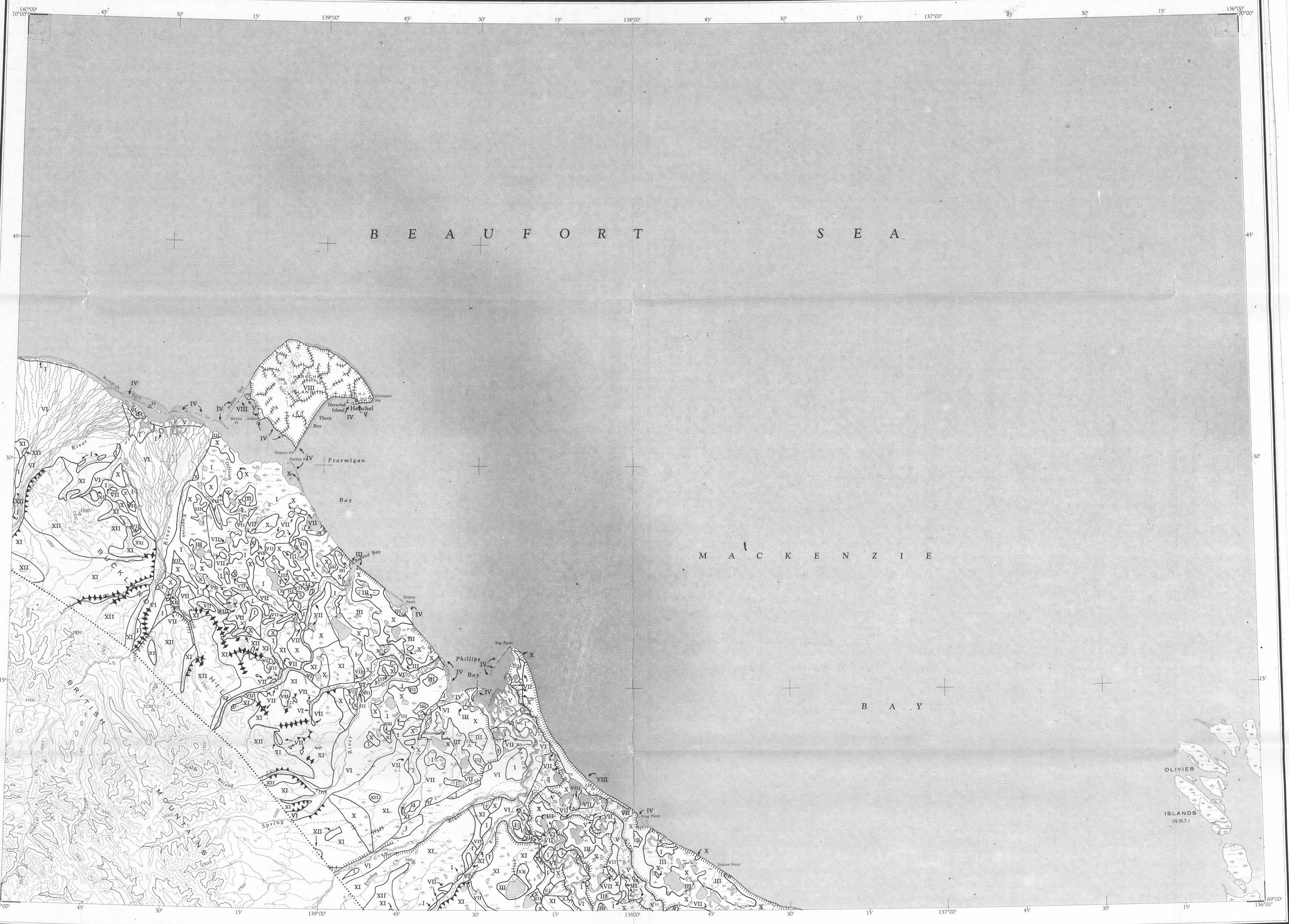
SOURCES OF INFORMATION

- Rampton, V.N., 1970: Surficial Geology Maps of Demarcation Point (1170), Herschel Island (1170), Blow River (117A), and Alakvik West (107B), Geological Survey of Canada Open File 21.
- Bamber, E.W., Waterhouse, J.B., 1971: "Carboniferous and Permian Stratigraphy and Paleontology, northern Yukon Territory Canada"; Bull. Can. Petrol. Geol. v. 19, no. 1 pp. 29-250.
- Douglas, R.J.W., Maclean B., 1963: "Geology, Yukon Territory and Northwest Territories" Map 30-1963, Geological Survey of Canada.
- Norris, D.K., 1972: "Structural and Stratigraphic Studies in the Tectonic Complex of Northern Yukon Territory, North of Porcupine River", Report of Activities, Part B, 1972 Geological Survey of Canada.
- Jeletzky, J.A., 1958: "Uppermost Jurassic and Cretaceous Rocks of Alakvik Range, Northwestern Richardson Mountains N.W.T.", Geological Survey of Canada Paper 55-2.
- Unpublished bedrock geology maps and data by D.K. Norris Institute of Sedimentary and Petroleum Geology, Geological Survey of Canada, 1972.

Compiled by R.L. Monroe 1972

Preliminary map prepared for open file, October, 1972.
Subject to revision and correction.

TERRAIN CLASSIFICATION AND SENSITIVITY SERIES (PRELIMINARY)



HERSCHEL ISLAND YUKON TERRITORY

Transverse Mercator Projection
North American Datum 1927
Contour Interval 500 feet
Elevations in feet above Mean Sea Level

Projection transverse de Mercator
Réseau géodésique nord-américain année 1927
Équidistance des courbes: 500 pieds
Élévations en pieds au-dessus du niveau moyen de la mer

Scale 1:250,000 Échelle

PROVISIONAL MAP
The nomenclature on this map has not been submitted to the Canadian Board on Geographical Names and may be subject to revision.

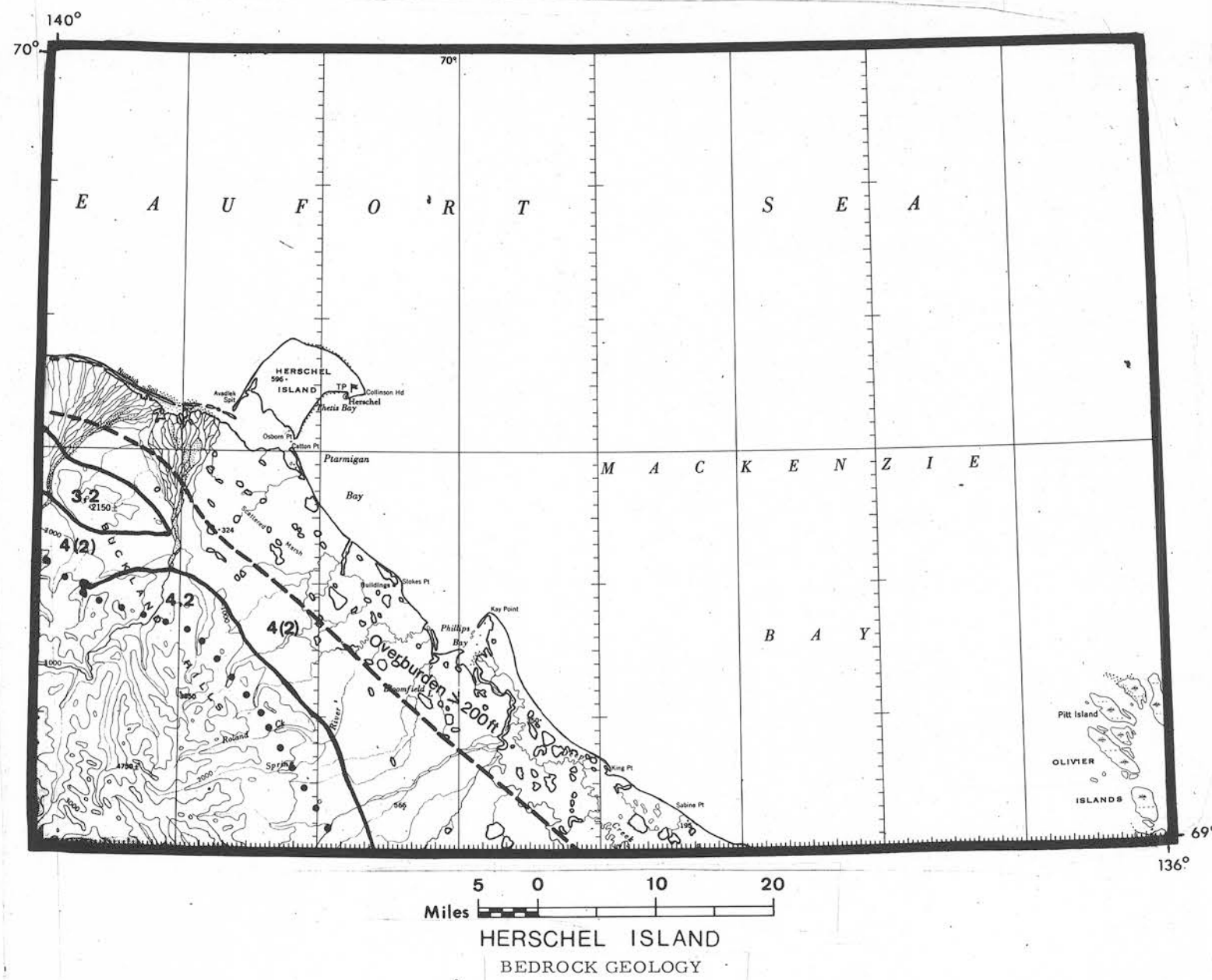
CARTE PROVISOIRE
La nomenclature de la présente carte n'a pas été soumise à la Commission canadienne des noms géographiques et, par conséquent, elle pourrait faire l'objet d'une révision.

GEOLOGICAL SURVEY OF CANADA
DEPARTMENT OF ENERGY, MINES AND RESOURCES

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BEDROCK LEGEND

- Resistant, competent quartz sandstone, and volcanic rocks, potentially suitable for use as rip-rap. Mid Jurassic Bug Creek Formation, and Lower Cretaceous Upper Berriasian and Valanginian formation, both comprise resistant quartz sandstone units in the Richardson Mts.
- Coherent or moderately competent rocks; fairly resistant to erosion but not strongly cemented; probably would break down under heavy traffic (e.g., if crushed and used for road surfacing). In British Mts. includes Carboniferous Lisburne Group consisting of limestone and dolomite limestone with highly shattered beds.
- Moderately coherent rocks; more resistant than 4 and less easily eroded; capable of maintaining a steep face 150 ft. high. Includes Precambrian argillite as found in the Neruokuk Formation. For the most part the argillite is interbedded with limestone, dolomite and/or sandstone.
- (2) Mainly incoherent rocks; soft easily eroded, subject to slumping. Includes Jurassic Kingak Formation which is highly fissile, soft and recessive shale and siltstone, and the Cretaceous shale and siltstone recessive units of the Richardson Mts. and the Arctic Coastal Plain. Bedrock highs commonly of fine-grained sandstone occur interspersed within this unit and display a coherence rating of 2.
- 2, Undivided Precambrian Neruokuk Formation. Argillite interbedded with limestone, dolomite and/or sandstone.
- 4, Undivided shale, sandstone and/or limestone. This unit includes the Permian Sadlerochit Formation and the Jurassic Husky Formation in the Richardson Mts., and the undivided Jurassic unit in the British Mts.



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