LEGEND

Each outlined area is assigned a classification consisting of up to three genetic categories and modifiers that designate the types of deposits within each area. Each category within a classification is listed in order of dominance and is separated from the other categories by a slash (e.g., Tv/R). Generally, the areas are divided so that up to three landforms or deposit types are identified within a given area. The classification system is also used to denote the approximate percentage of landforms occurring within an outlined area, but those which form less than 5 percent of the area are not included in the classification. Four variations of the landform system are as follows:

- 1. Where three different landforms are included in a single map unit they are each separated by a single slash (/) and their relative percentages are (60 80), (15 35), and (5 15).
- 2. Where two landforms are included in a single map unit, a double slash (//) or single slash (/) is used to separate them, and their relative percentages are (85 95) // (5 15) for double slash, or (60 85) / (15 40) for a single slash.
- 3. A hyphen between two landform types indicates that they are approximately equal in area. For example, Tv-Rc indicates that till veneer and rock concealed by vegetation or a thin regolith are equal in area.
- 4. A composite symbol is used to show combinations of the above cases. For example, T indicates that about 60 85 percent of the area is covered by fluvial sediment, 15 40 percent by glaciofluvial sediments, and is underlain by till.

GENETIC CLASSIFICATION

Symbol	Depositional Environments	Origin and Characteristics of Materials
0	Bog	Poorly drained accumulations of peat, peat moss and other organic matter; developed in areas o poor drainage
F	Fluvial	Alluvium consisting of silt and clay to bouldery gravel, forms terraces and plains associated wit modern stream channels, their floodplains and deltas; usually less than 1 m thick; deposited b fluvial action at or below maximum flood levels
С	Colluvial	Coarse-grained bedrock derived materials; may include sand, silt or clay; accumulates on the lower parts, or at the base of steep rock faces; transported by gravity
E	Aeolian	Medium-to fine-grained sand and silt, well sorted, poorly compacted; commonly forms as dunes u to 10 m high; transported and deposited by wind
G	Glaciofluvial	Fine-grained sand to coarse-grained cobbly gravel; forms plains, ridges (eskers), hummocks terraces and deltas; generally greater than 1 m thick; deposited as outwash in an ice-contact of proglacial position
L	Lacustrine	Silt, clay, gravel and sand; forms as plains and blankets; silt and clay is deposited in freshwate lakes from suspension, sand and silt by lake-floor currents, gravel and sand by shoreline wav action
M	Marine	Clay, silt, gravel and diamicton; sand is present in some places, generally moderately to well sorte and commonly stratified, but may be massive; forms beach ridges, deltas, terraces and bar deposited in a marine environment; gravel and sand are formed by shoreline wave action; mainclude shells, clay and silt deposited from suspension and turbidity currents; gravel is generally wavewashed lag
Tv Tb, Te, Tp, T	Glacial	Includes all types of till; composed of diamicton; transported and subsequently deposited by/or from glacier ice with no significant sorting by water. These include relatively thin (Tv) or thicker (Tb, Te, Tp, T) till with little or no surface expression; features produced by actively flowing ice (Td, Tl, Tr) of sediment deposited through ice disintegration (Th, Tk)
Td, Tl, Tr		
Th, Tk		
R	Rock	Bedrock, either exposed (R) or concealed by vegetation (Rc)
Rc		

M	ORF	PHO	LO	GY

Symbol	Morphology	Description
а	apron	A relatively gentle slope at the foot of a steeper slope, commonly used to describe colluvium at the base of a rock escarpment; consists of materials derived from the usually steeper upper slope
b	blanket	Any deposit greater than 1.5 m thick; minor irregularities of the underlying unit are masked but the major topographic form is still evident
C	concealed by vegetation	Vegetation mat developed on either colluvial surfaces or a thin layer of angular frost-shattered and frost-heaved rock fragments overlying bedrock; includes areas of shallow (less than 1 m), discontinuous overburden
d	drumlinoid	Elongate ridge(s) between 1.5 and 20 m high, 20 and 300 m wide, and 200 to 5000 m long; ridges have a rounded end pointing in the up-ice direction and gently curving sides that taper in the downice direction; exhibit a convex longitudinal profile, commonly with a steeper slope in the up-ice direction; consist of subglacially formed deposits shaped in a streamlined form parallel to the direction of glacial flow; commonly consist of till, although some may contain stratified drift; may have a rock core
е	eroded and dissected	A series of closely spaced gullies or deeply incised channels; can have a dendritic pattern or may be a single straight or arcuate channel; gullies and channels may contain underfit streams
	fan	A gently sloping accumulation of debris deposited by a stream issuing from a valley onto a lowland; has its apex at the mouth of the valley from which the stream issues; the fan shape results from the deposition of material as the stream swings back and forth across the lowland; fluvial fans are usually derived from eroded glacial and glaciofluvial deposits; glaciofluvial fans (deltas) are deposited in standing water rather than in a terrestrial environment; colluvial fans are derived from bedrock and are usually steeper (i.e., cone shaped)
h	hummock	An apparently random assemblage of knobs, mounds, ridges and depressions without any pronounced parallelism, significant form or orientation; formed by glacial melting during ice stagnation and disintegration. Includes subglacial, englacial, supraglacial and stratified materials
k	kettle	A basin or bowl-shaped closed depression or hollow in glacial drift; results from the melting of a buried or partly buried detached block or lens of glacier ice; commonly occurs in association with hummocks
	lineated	Elongate spindle-shaped ridge(s) between 6 and 60 m high, 75 and 300 m wide and up to 4000 m long; ridges are commonly straight sided, taper at one or both ends, and have a flat longitudinal profile; consist of subglacially formed deposits shaped in a streamlined form parallel to the direction of ice flow; commonly consist of till, although some may contain stratified drift; may have a rock core. Includes slope lineated bogs (OI)
p	plain	A comparatively flat, level, or slightly undulating tract of land; materials are either till, glaciofluvial, alluvial, marine, lacustrine or organic sediments; bedrock features are commonly masked by the overlying sediments
	ridge	Narrow, elongated and commonly steep-sided feature that rises above the surrounding terrain; materials are either rock, till, glaciofluvial, fluvial, marine, lacustrine, aeolian, or organic sediments. Includes string bogs (Or)
t	terrace	Long, narrow, level or gently inclined step-like surface, bounded along one edge by a steeper descending slope or scarp and along the other by a steeper ascending slope or scarp; materials are either till, glaciofluvial, fluvial or lacustrine sediments; generally formed by fluvial and glaciofluvial erosion or marine wave action
V	veneer	Any deposit less than 1.5 m thick; morphology of the underlying unit is evident
W	weathered	A thin layer, generally less than 1 m thick, of frost-heaved and frost-shattered bedrock fragments
X	complex	Commonly used to indicate numerous esker ridges that are closely spaced; can be used where any genetic category exhibits numerous surface expressions in a small area, and in which no single element can be defined at this scale



DEPARTMENT OF NATURAL RESOURCES

GEOLOGICAL SURVEY



SYMBOLS				
	Geological boundary	Drumlin (direction known, unknown)		
	Scarp face at edge of fluvial terrace .	Crag-and-tail hill		
	Cirque	Fluting		
	Esker (flow direction known or assumed, unknown)	Rôche moutonnée		
	Meltwater channel (small, large)	Striation (direction known, unknown) / / / 💢 💢 (numbers indicate relative age)		
	Crestline of major moraine ridge	Avalanche track		
	Trend of ribbed or minor moraine ridges	Kettle hole (small, large)		
	Beach ridges	Sinkhole (small, large)		
	Crevasse fill ridge	Observation site		
	Sand dunes	Delta		
	Note: All symbols and classifications may not occur on this map. Elevation in feet above mean sea level. Contour interval 50 feet.	Radiocarbon date		