LEGEND

Notes regarding compound units: *Where surficial geology types are interspersed in patches or patterns too small to be discerned at the scale of mapping, the proportion of each surficial geology component is given (in descending order) by a compound unit designation. The relationship between these components is represented by a symbol between the individual components as follows:*

- *overlying (i.e. stratigraphic relationship).*
- *. approximates 50% cover for each surficial geology type in the label.*
- */ approximates 70% to 30%.*
- *// approximates 90% to 10%.*

Example: R/Tv *approximates 70% bedrock coverage and 30% till veneer.*

HOLOCENE

Ice ^{2002}***:*** *Glacial ice cover from ca. 2002 Landsat-7 coverage. Thickness is variable.*

Ice ^{1958}***:*** *Glacial ice cover from ca. 1958 aerial photographs. Thickness is variable.*

ALLUVIUM: *Predominantly sorted and commonly stratified gravels, sands, minor silt, and organic detritus deposited by post-glacial fluvial processes. Fan deposits may include gravelly diamicton.*

Ap — ***Alluvial plain/terrace:*** *Typically forms a single level (i.e. plain) within approximately 1 m of the active stream channel, or may form terraces separated by scarps. Thickness ranges from 1 to 10 m.*

Af — ***Alluvial fan:*** *Forms fan-shaped landforms that exhibits a steep gradient from the apex to the toe of the deposit. Thickness can reach up to 10 m.*

LACUSTRINE: *Composed of sand, silt, and minor clay deposited in active lacustrine environments.*

Lp — ***Lacustrine plain:*** *Deposit that forms the substrate of existing major fresh-water lakes. May also contain minor amounts of submerged rock, alluvium, colluvium, till, and/or glaciofluvial sediments. Thickness ranges from 1 m to 3 m.*

COLLUVIUM: *Mass wasting debris (i.e. deposited by direct gravity-induced movement that may involve water and/or ice). Typically unsorted, but may be stratified as a result of gravity induced movement (e.g. debris flows). The character of the deposit depends primarily on its parent material.*

Cv — ***Colluvial veneer:*** *Thin, discontinuous deposit. Thickness is less than 1 m.*

Ca — ***Colluvial apron:*** *Forms a slope deposits comprising debris flows, avalanche-dominated fans, and soliflucted sediments derived from bedrock and glacial sediment sources. Thickness is up to 10 m, thinning at head and toe of the deposit.*

Cb — ***Colluvial blanket:*** *A mantle of colluvium with a thickness greater than 1 m.*

Ch — ***Landslide sediments:*** *Forms a hummocky or ridged topography with ridges transverse to direction of movement. Thickness is highly variable, but may range up to 10 m.*

Cx — ***Colluvial complex:*** *Consists primarily of colluvial materials but may contain till, glaciolacustrine, glaciofluvial, glaciomarine, marine, and/or alluvial sediments that are interspersed with the primary constituent and are too small to be represented at the scale of mapping. Thickness is greater than 1 m.*

GLACIOLACUSTRINE: *Lacustrine deposits in, or along the margins of a glacial lake. May have been ice-dammed, or formed as a result of elevated water levels due to glacial melt. Typically well stratified silt and sand; deltas are composed of cross-stratified sand and gravels, and may include lenses of finer material.*

$L^{G}p$ — ***Glaciolacustrine plain:*** *Typically forms a single plain, or may form terraces and wave-cut benches separated by scarps. Thickness ranges from 1 m to greater than 20 m.*

$L^{G}d$ — ***Glaciolacustrine delta:*** *Sediment built-up from flowing glacially derived water entering a glacial lake. The feature may have gently- or steeply-dipping fronts. Thickness ranges from 3 m to greater than 10 m.*

$L^{G}r$ — ***Glaciolacustrine ridged:*** *Consists primarily of glaciolacustrine materials, but also includes cross-valley (De Geer) moraines. Local relief varies from 1 m to greater than 20 m, composed of sand and gravel. Deposits between ridges are more typical of glaciolacustrine deposits (silty-fine sands). Thickness ranges from 1 m to greater than 20 m.*

$L^{G}x$ — ***Glaciolacustrine complex:*** *Consists primarily of glaciolacustrine materials but may contain till, glaciofluvial, glaciomarine, marine, colluvium, and/or alluvium sediments that are interspersed with the primary constituent and are too small to be represented at the scale of mapping. In upper slopes of valleys with cross-valley (De Geer) moraines, more till is present and is inferred to represent the washing zone of a paleo-lake. Thickness is greater than 1 m.*

GLACIOMARINE AND MARINE DEPOSITS: *Sediments deposited during postglacial regression of a high sea level. Typically fine sand, silt, clay, and stoney mud; sometimes rhythmically stratified. Beach sediments may be composed of gravel and sand. Deltas are composed of cross-stratified sand and gravels, and may include lenses of finer material. Low-lying, fine-grained sediment supports vegetation cover.*

Mv — ***Marine veneer:*** *Less than 1 m thick or may occur in patches over rock.*

Mp — ***Offshore marine:*** *Usually forms thick sequences that exhibit extensive gullying; locally fossiliferous. Thickness ranges from 1 m to >20 m. In most cases rhythmically stratified silt, silty-clay, and clay.*

$M^{G}d$ — ***Glaciomarine delta:*** *Sediment build-up from flowing water entering the marine environment. Usually have steeply-dipping fronts.*

EARLY HOLOCENE AND PLEISTOCENE (Late Wisconsinan)

GLACIOFLUVIAL: *Well to poorly stratified gravel, sand, and silt; minor diamicton; deposited behind, at, or in front of the ice margin by glacial meltwater.*

Gt — ***Glaciofluvial terraces/plain:*** *Typically forms a single level (i.e. a plain) and/or forms terraces separated by scarps. Patches of colluvium that are too small to be represented at the scale of mapping may be present along the terrace scarps. Thickness ranges from 1 m to greater than 20 m.*

Gh — ***Ice contact glaciofluvial:*** *Complex arrangement of slopes extending from rounded depressions, to irregular conical mounds and includes esker ridges; 5 to 15 m thick.*

Gx — ***Glaciofluvial complex:*** *Consists primarily of glaciofluvial materials but may contain till, glaciolacustrine, glaciomarine, marine, colluvium, and/or alluvium sediments that are interspersed with the primary constituent and are too small to be represented at the scale of mapping. Thickness is greater than 1 m.*

TILL: *Diamicton deposited directly by or from glacier ice; sandy to silty matrix (with minor clay) with striated clasts of various lithologies.*

Tv / Tv/* — ***Till veneer:*** *Thin, discontinuous deposit. Hatch-fill is used when the veneer is the dominant proportion of a compound unit. Thickness is less than 1 m.*

Tb / Tb^{p} — ***Till blanket:*** *Surface morphology conforms to underlying bedrock topography. May exhibit crag-and-tails, flutings, and/or other drumlinoid forms; occasionally exhibits roches moutonnées in areas of thin till blankets (e.g. 1 to 2 m). Some areas have large frost polygons and stone nets (Tb^{p}). Thickness ranges from 1 to 5 m.*

Tr — ***Ridged till complex:*** *Surface morphology forms parallel ridges (i.e. moraines) less than 15 m high and less than 50 m apart. Moraines are composed of till, intervening areas may be till and/or ice-marginal glaciofluvial deposits. Thickness is variable, but is usually less than 15 m.*

Th / Th^{p} — ***Hummocky till:*** *Forms hummocky surface morphology (i.e. kame and kettle topography); in places the unit may exhibit prominent ridges marking recessional ice margins, or diffuse zones marking boundaries between glacial-ice regimes. Some areas have large frost polygons and stone nets (Th^{p}). Thickness is highly variable, but is usually less than 20 m.*

Tx — ***Till complex:*** *Consists primarily of till but may contain glaciofluvial, glaciolacustrine, glaciomarine, lacustrine, marine, colluvium, and/or alluvium sediments that are interspersed with the primary constituent and are too small to be represented at the scale of mapping. Thickness is greater than 1 m.*

PRE-GLACIAL

R — ***Bedrock:*** *Outcrops of bedrock, may have thin mantle (<10 cm) of unconsolidated or organic material.*

Observation point +

Flute

Ice movement indicator, Uni-directional

Ice movement indicator, Bi-directional

Delta ▲

Kame ⊗

Surficial materials contact (defined, approximate, inferred)

Esker (direction known, unknown)

Moraine; major

Moraine; minor

Moraine; De Geer, cross valley

Cirque

Ice contact

Meltwater channel; minor

Meltwater channel; lateral (barb on upslope side)

Shoreline; major

Escarpment