CANADA
DEPARTMENT
OF
MINES AND TECHNICAL SURVEYS

GEOLOGICAL SURVEY OF CANADA

SHEET 21 N/B

LEGEND

QUATERNARY
PLEISTOCENE AND RECENT

CENOZOIC

- **12** — *Swamp deposits: muck, peat*
- **11A / 11B** — *Alluvial deposits:*
  11A. *Flood plain: fine sand*
  11B. *Alluvial fan, delta, bar: gravel and sand*
- **10** — *Slopewash and slump deposits: reworked till; minor sand and gravel in valley bottoms*

ST. JACQUES DRIFT

- **8A / 8B** — *Late stage Lake Madawaska sediments:*
  8A. *Bottom deposits: clay, silt and sand (exposed in sections 2, 3, 4 and 5)*
  8B. *Beach and bar: pebbles; gravel and sand*
- **7A / 7B** — **7A.** *Pond deposits: silt*
  7B. *Delta: gravel*
- **6** — *Ablation moraine: buff, loose, gravelly till with angular pebbles*
- **5** — *Kame: gravel and sand with angular rock fragments*
- **4** — *End moraine: grey, compact, silty till with subrounded pebbles; minor stratified silt*

GRAND FALLS DRIFT

- **3** — *Early stage Lake Madawaska bottom sediments: clay, sand (exposed in section 5)*
- **2A / 2B** — **2A.** *Esker and crevasse filling: sand and gravel*
  2B. *Outwash deposits: sand and gravel*
- **1** — *Lodge (ground) moraine: grey, compact, clay till with subrounded pebbles*

ST. JACQUES AND GRAND FALLS DRIFT UNDIVIDED

- **9A / 9B / 9C** — **9A.** *Valley train: gravel and sand*
  9B. *Kame terrace: gravel and sand*
  9C. *Kame: gravel and sand*

PALÆOZOIC

BEDROCK OUTCROPS

- A, B, C, D — *A, slate; B, quartz pebble conglomerate; C, diabase; D, calcareous slate*

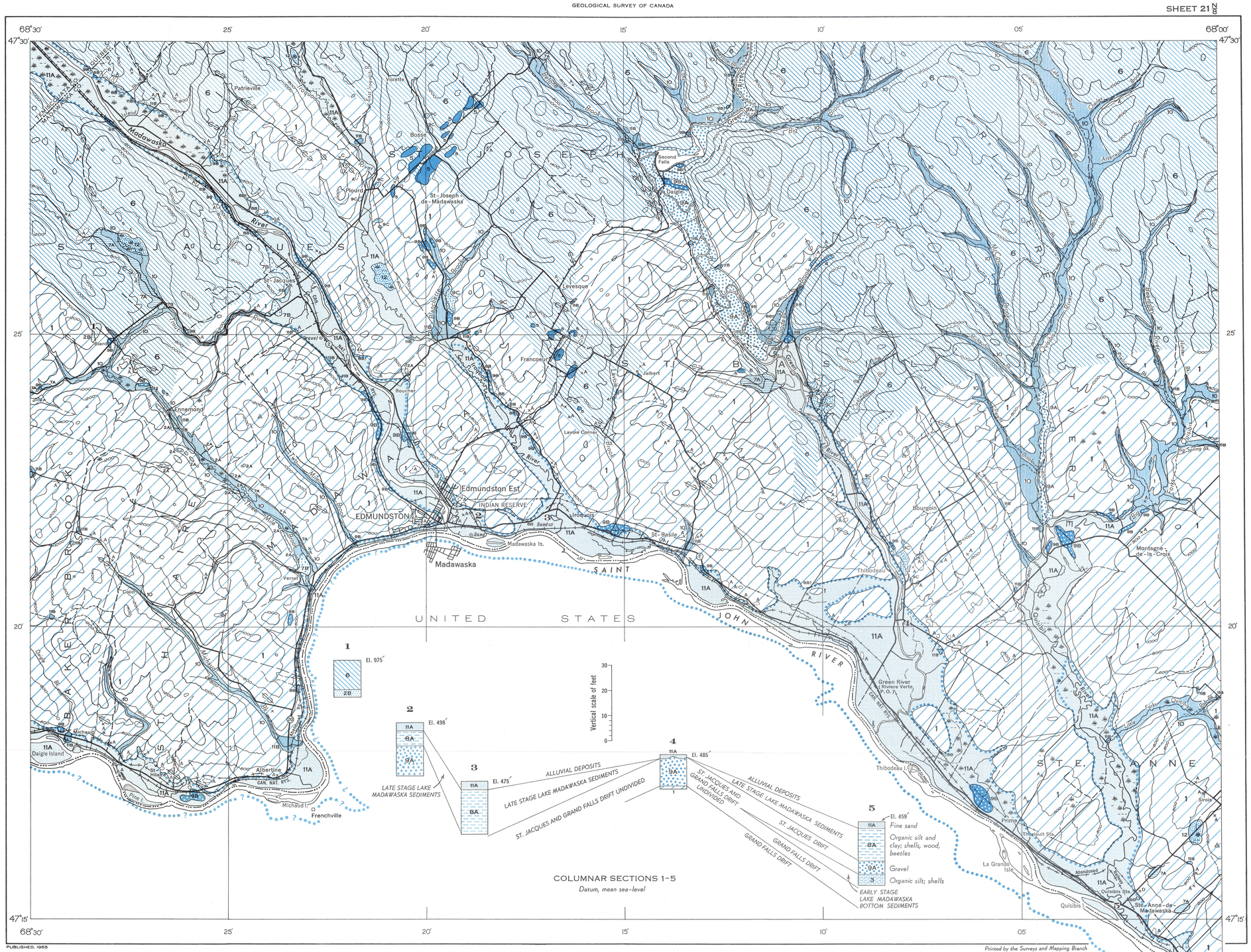
Glacial striæ (direction of movement determined)
Glacial striæ (direction of movement unknown)
Highest strandline of Glacial Lake Madawaska (largely inferred)
Position of sections on map . . . 2

Geology by Hulbert A. Lee, 1950

Main highway
Other roads
Trail
Electric power line (along road)
International boundary
Interprovincial boundary
Parish boundary
Triangulation station
Stream (intermittent)
Marsh
Foreshore flats
Contours (interval 200 feet)

Approximate magnetic declination, 22° 21′ West

Cartography by the Geological Cartography Unit, 1955


68°30′
25′
20′
15′
10′
05′
68°00′
47°30′
25′
20′
47°15′
Edmundston
Madawaska
Frenchville
Saint-Jean-Baptiste
Saint-Basile
Saint-Hilaire
Saint-Jacques
Saint-Joseph-de-Madawaska
Saint-Léonard
Saint-Anne-de-Madawaska
Saint-Quentin
Saint-Sylvestre
Saint-Zénon
Saint-Hilarion
Saint-Éphrem-de-Tobin
Saint-Cyr
Saint-Éloi
Saint-Ignace-de-Loyola
Saint-Jacques
Saint-Joseph
Saint-Louis
Saint-Malachie
Saint-Pierre-de-Lamy
Saint-Raphaël