CHURCH POINT 21B/8E

SURFICIAL GEOLOGY

SCALE 1:50,000

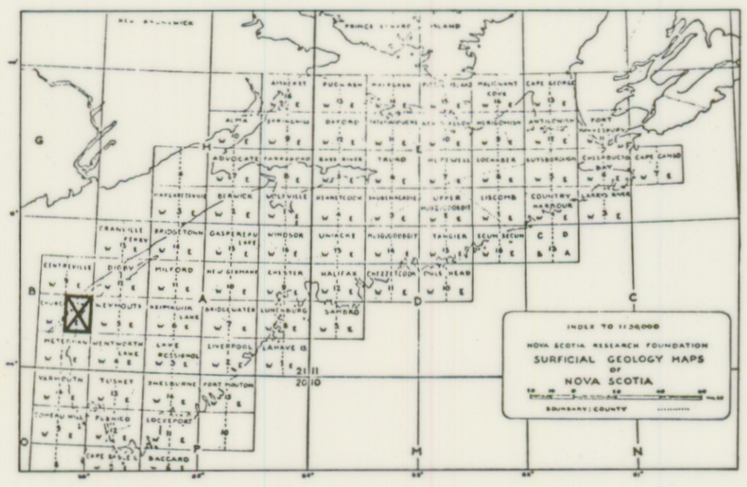
1.25 inches to 1 mile approximately

1 0 1 2 3 Miles

1000 500 0 1000 2000 3000 4000 Metres

NOVA SCOTIA RESEARCH FOUNDATION CORPORATION

Geology by R.H. Mac Neill, 1956



LEGEND

- DRUMLIN & MORAINE
- KAME
- ESKER
- DELTA
- TILL AREAS (undiff.)
- SWAMP
- ROADS & TRAILS
- STREAMS
- STRIAE

DESCRIPTIVE NOTES

GENERAL

The area contains two distintly different bedrock areas: North Mountain, underlain by the tholeiite or basalt of Triassic age, and the mainland area underlain by rocks of the Cambro-Ordovician Meguma Group. These two areas have been subjected to both erosional and depositional glacial action.

NORTH MOUNTAIN AREA

The North Mountain area has a thin cover of till, varying from zero to only a few feet in localized places. Only a very small nuber of drumlins appear and these are not large. Kames occur in the Sandy Cove pass filling what appears to have been an ancient water channel.

Beach gravels are to be found on a few of the elevated terraces around the Digby Neck region. Striae were not observed in any other place or in any other place or in any other direction than those shown on Goldthwait's Map of Nova Scotia, 1923.

MAINLAND

The low lying peneplane is well covered by debris varying from till to glaciofluvial sands and gravels. The thickness of the till varies from very thin to more than 20'.

ABANDONED SHORELINES

Abandoned shorelines may be found around the basalt islands and peninsula ranging from ten feet to over one hundred feet above average high tide level, but these do not show as continuing prominent features.

DRUMLINS

The drumlins are scattered liberally over the area and have a generally north-south orientation. Ispatineaux, or elongated drumlins, are to be found occasionally. These depcsits have a sandy matrix with small fragments and boulders of slate, quartzite, and basalt. Other rocks were not plentiful in the drift. The colour of these drumlins is generally red-brown in contrast to those of the Pubnico and Tusket regions.

KAMES

Kame areas occur east of Belliveau Cove, east of Church Point, in North Weymouth, in St. Joseph, and just east of Comeauville along Spectacle Brook.

DELTAS/OUTWASH

An extensive delta is to be found in Belliveau Cove and a lesser one in the area southwest of New Edinburgh. A Third is found east of Margot Lake and a smaller one southeast of Grosses Coques. A glaciofluvial deposit having a delta-like structure but having uneven and, sometimes, turbulent stratification, here named an outwash, may be found extending from Little Brook southward to Saulnierville.

ICE STAGES/SUB-STAGES

Two different ages of drift were found, but these are probably part of the Wisconsin (Late) and the local glaciation which followed. Marine clays and silts occur North of Weymouth but were not found in the Church Point map area.