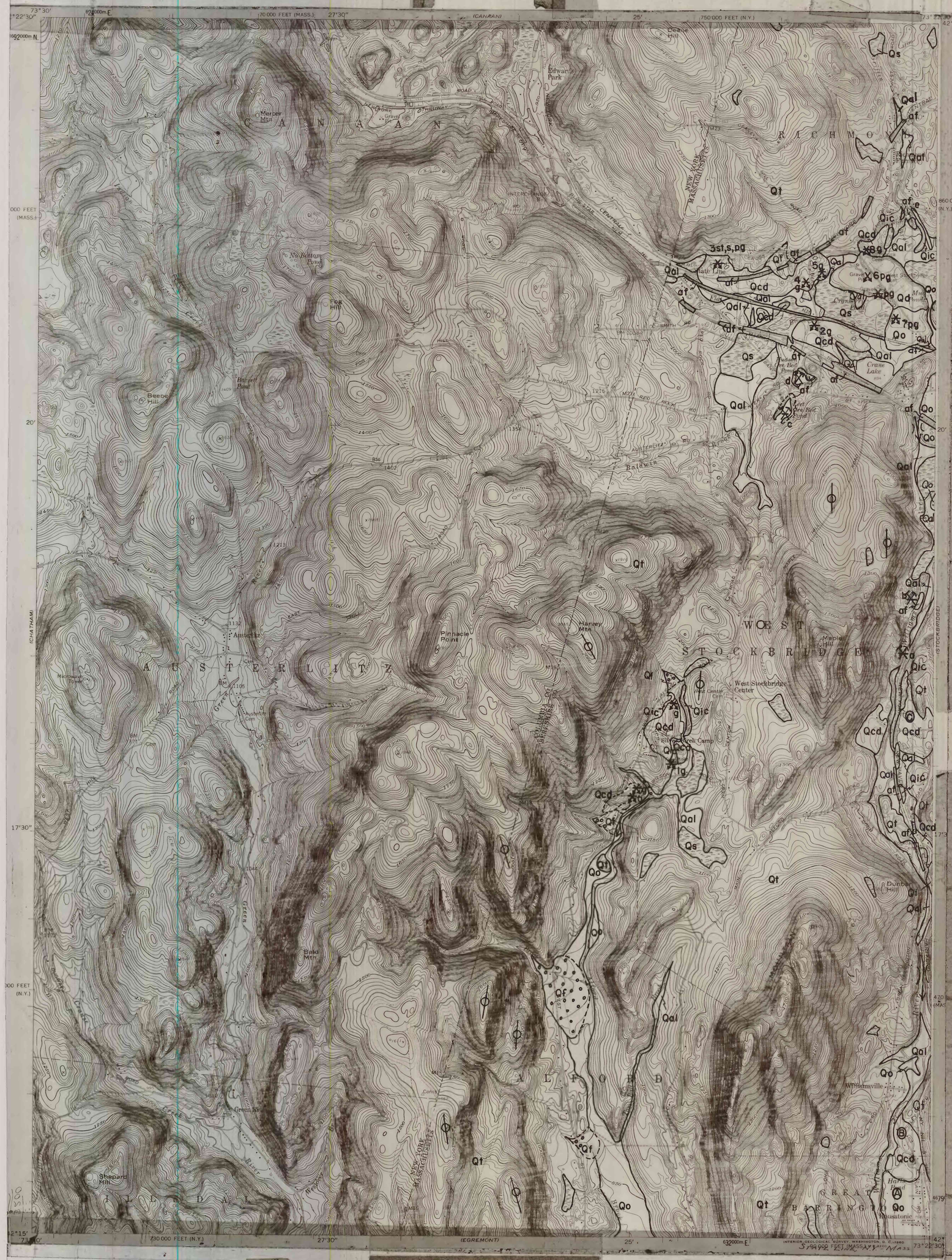
DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

Surficial Geology of the Massachusetts portion of the State Line Quadrangle, Massachusetts-New York

OFR 64-84



EXPLANATION

Recent

Qal — Alluvium
Silt, sand, and gravel, and in places boulders, in modern flood plains and in swales. Occurs as a low terrace subject to floods. Overprint of circles indicates boulders

Qf — Alluvial-fan deposits
Silt, sand, and gravel, poorly sorted and stratified. Overprint of circles indicates boulders

Qs — Swamp deposits
Organic matter, undecomposed to partly decomposed, generally mixed with sand and silt; locally peaty. Mineral matter accumulates by colluvial, alluvial, or eolian processes

Pleistocene

Qo — Outwash deposits
Sand and gravel deposited by meltwater streams in front of the glacier and beyond areas of buried glacial ice.

Qcd — Ice-contact stratified drift
Kettled, collapsed, or eroded glaciofluvial deposits, mostly gravel, sand, and some silt. Forms include kames and kame terraces.

Qic — Ice-channel deposits
Gravel and sand, normally well stratified and poorly sorted, in narrow ridges, deposited in ice tunnels or other ice channels

Qd — Deltaic deposits
Gravel and sand, poorly to well sorted, moderately well stratified, and commonly showing topset and foreset bedding; deposited against glacial ice and into temporary meltwater lakes

Qt — Till
Boulders, gravel, sand, silt, and clay, nonsorted to poorly sorted, with a few inclusions of stratified sand and gravel. Deposited directly by glacial ice which advanced generally from northwest to southeast

QUATERNARY

Contact, dashed where approximate

af — Artificial fill, chiefly highway or railway embankments, debris from quarries, and iron furnace slag

Glacial spillway used by meltwater stream. Arrow shows inferred drainage direction

Summit of drumlin, a hill composed of till smoothed and streamlined by glacial motion. Shaft is parallel to long axis of drumlin

a — Abandoned quarry or mine. Letter symbol keyed to table; letter alone indicates other source of coarse aggregate

3g — Construction materials pit. s indicates sand; g, gravel of mixed sizes; pg, pebble gravel; st, silt. Number refers to data sheets; crossbar indicates inactive pit. Data not available for pits without numbers

A — Indicates major source of unexploited construction materials. Keyed to supplementary data sheets

Major sources of coarse aggregate

a. Dolostone quarry, abandoned
b. Limestone quarry, abandoned, with tailings
c. Limonite iron mine, flooded, with tailings
d. Limonite iron mine, flooded, with tailings
e. Three piles of glassy slag from abandoned Richmond Furnace

Major sources of unexploited construction materials (see supplementary data sheets)

A. Outwash: gravel
B. Ice contact stratified drift: gravel
C. Ice contact stratified drift: gravel

PRELIMINARY MATERIALS MAP
MASSACHUSETTS PORTION OF THE STATE LINE QUADRANGLE, MASSACHUSETTS-NEW YORK
By
G. William Holmes

Base map by the U.S.Geological Survey, 1959

APPROXIMATE MEAN DECLINATION, 1959
MAGNETIC NORTH
TRUE NORTH

SCALE 1:24000
1 MILE
1000 0 1000 2000 3000 4000 5000 6000 7000 FEET
1/2 0 1 KILOMETER
CONTOUR INTERVAL 10 FEET

U. S. Geological Survey
OPEN FILE REPORT
This report is preliminary and has not been edited or reviewed for conformity with Geological Survey standards or nomenclature.

Geology mapped in 1962-1963 by G. William Holmes assisted by John Atherton

State Line, Mass.-N. Y. quadrangle
G. William Holmes, 1962-1963.