STATE OF CONNECTICUT
GEOLOGICAL AND NATURAL HISTORY SURVEY
JOE WEBB PEOPLES, DIRECTOR

QUADRANGLE REPORT NO. 26
PLATE 1

Open Report

SURFICIAL GEOLOGIC MAP OF THE SPRING HILL QUADRANGLE, CONNECTICUT

By Perry H. Rahn, 1966-1968

SCALE 1:24000

Base map by U.S. Geological Survey

Control by USGS and Connecticut Geodetic Survey
Topography by plane-table surveys 1943. Revised 1953

Polyconic projection. 1927 North American datum
10,000-foot grid based on Connecticut coordinate system

Broken blue lines indicate areas subject to inundation

UTM GRID AND 1954 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

CONTOUR INTERVAL 10 FEET
DATUM IS MEAN SEA LEVEL

QUADRANGLE LOCATION

EXPLANATION

QUATERNARY

Recent

af — Artificial fill
Man made lands, including dams, dikes, roads, and railroad embankments composed of sand, gravel, till, and some trash.

s — Swamp deposits
Partly decomposed organic matter, commonly mixed with silt and sand; includes some peat: shown only where thickness is estimated to exceed 5 feet.

al — Alluvium
Silt, sand, and gravel under floodplains; commonly overlies glacial sediments.

ta — Terrace alluvium
Thin cover of sand and gravel capping a stream terrace along lower Natchaug River.

Pleistocene

kt kp k ic — Ice-contact stratified drift
Silt, sand, cobbles, and boulders. In many places poorly sorted with abrupt changes in grain size. Bedding commonly slumped and faulted. Generally found in valleys.

kt—*Kame-terrace sediments. Sand and gravel terracing the valleys. Commonly the terrace surface is flat, but in places is marked by kettles and ice-contact slump features.*

kp—*Kame-plain sediments. Isolated sand and gravel areas near the middle of valleys. Characterized by flat tops.*

k—*Kame sediments. Small hills of sand and gravel in valleys.*

ic—*Ice-channel fillings. Includes eskers and crevasse fillings. Poorly stratified sand, gravel, and boulders. Bedding slumped and faulted. Occurs as ridges on valley floors.*

sg — Sand and gravel, undifferentiated
Sand and gravel deposited in local upland basins

t — Till
Poorly sorted, unstratified sediments deposited directly by glacier ice, ranging from clay-sized particles to boulders; includes small lenses of stratified material. In most areas till is oxidized, olive-brown, and very compact (lower till). Occasionally the lower till is overlain by a less oxidized, olive-gray, very friable till (upper till). Thickness of till is variable, averaging about 15 ft. Diagonal pattern indicates where thickness is inferred to exceed 40 ft as estimated from air photo and topographic data.

Bedrock
Metamorphic rocks of Devonian or earlier age. Includes interlayered medium-grained quartzo-feldspathic gneiss, biotite schist, and some pegmatite sills and dikes.

Geologic contact
Dashed where approximate.

Abandoned meltwater spillway channel
Meltwater channel used by a temporary glacial stream.
Arrow shows inferred direction of flow.

Current direction
Average flow direction in delta or channel.

Drumlin or drumlinoid hill
Hill of till, smoothed and streamlined by glacier, with or without bedrock core. Long axis shows presumed direction of flow of glacier.

Glacial striae
Arrow shows inferred direction of ice movement. Point of observation at tip of arrow.

Active — Inactive

Construction materials pit
Letter symbols indicate texture of deposit; superposed symbols indicate superposed materials. Read hyphen as "to".
b, boulder gravel
c, cobble gravel
p, pebble gravel
s, sand
g, gravel of mixed sizes
tu, upper till
tl, lower till

Artificial pond not shown on topographic base map.

Horsebarn Hill
Geographic and local names mentioned in text but not shown on topographic base map are printed in red.

Williams & Heintz Map Corporation, Washington, D.C. 20027