



PRELIMINARY MATERIALS MAP  
PLAINFIELD QUADRANGLE  
MASSACHUSETTS  
By  
G. William Holmes

SCALE 1:24 000



CONTOUR INTERVAL 20 FEET  
DASHED LINES REPRESENT 10-FOOT CONTOURS  
DATUM IS MEAN SEA LEVEL

Base map by the United States Geological Survey, 1955

Surficial Geology of the  
PLAINFIELD QUADRANGLE  
MASSACHUSETTS

Recent  
Pleistocene

**Qal**  
Alluvium  
Silt, sand and gravel, in modern flood  
plains and in swales. Occurs as a  
low terrace subject to floods

**Qst**  
Stream terrace deposits  
Pebble-cobble gravel and sand, well to poorly  
stratified, deposited in one or more uneven  
terraces. Probably glacial in origin, at least  
in part, but not clearly related to an ice  
front position. Lower terraces subject to  
infrequent flooding

**Qcd**  
Ice-contact stratified drift  
Kettled, collapsed or eroded glacio-  
fluvial deposits, mostly sand.  
Typically poorly sorted and  
unevenly stratified. Occurs  
as kames

**Qt**  
Till  
Boulders, gravel, sand, silt, and clay,  
nonsorted to poorly sorted, with a  
few inclusions of stratified sand and  
gravel. Includes areas of thinly  
mantled or exposed bedrock. De-  
posited directly by glacial ice which  
advanced generally from northwest to  
southeast

**Qtc**  
Ice channel deposits  
Sand, normally well stratified  
and poorly sorted, in nar-  
row ridges, deposited in ice  
tunnels or other channels in  
the glacier

Contact

Summit of drumlinoid hill, composed  
partly of till, smoothed and stream-  
lined by glacial motion. Shaft is  
parallel to long axis of drumlin

EXPLANATION

Swamp deposits

Organic matter, undecomposed  
to partly decomposed, mixed  
with sand and silt, and in  
places including peat. Indicated  
by conventional symbol

Glacial spillway used by melt-  
water stream. Arrow shows  
inferred drainage direction

Construction materials pit  
Number refers to data sheets. Letter  
symbols: s, sand; pcg, pebble cobble  
gravel; ps, pebble sand; t, till;  
sbt, sandy boulder till. Crossbar  
indicates abandoned pit

Terrace scarp  
Ticks point downslope

Plainfield, Mass. quadrangle  
G. William Holmes, 1965, 1966

This map is preliminary and has  
not been edited or reviewed for  
conformity with Geological Survey  
standards or nomenclature.

Geology mapped in 1965 by  
G. William Holmes