

### ACIAL ICE-LAID DEPOSITS

- Thin Till
- Thick Till
- End Moraine deposits

### ACIAL MELT-WATER DEPOSITS

#### Deposits

- Flies (very fine sand, silt, and clay)

#### Coarse Deposits

- Gravel
- Sand and Gravel
- Sand

#### Unsorted Coarse Deposits

- Gravel overlying Sand and Gravel
- Gravel overlying Sand
- Sand and Gravel overlying Sand
- Sand and Gravel overlying Sand overlying Sand and Gravel
- Sand overlying Gravel
- Sand overlying Sand and Gravel

#### Sorted Coarse Deposits Overlying Fine Deposits

- Gravel overlying Sand overlying Fines

### POSTGLACIAL DEPOSITS

- Floodplain Alluvium
- Alluvium overlying undifferentiated Coarse deposits (g, sg, s)
- Alluvium overlying Sand
- Alluvium overlying Fines
- Alluvium overlying undifferentiated Coarse deposits overlying Fine deposits
- Alluvium overlying undifferentiated Fine deposits overlying Coarse deposits
- Swamp deposits
- Swamp deposits overlying Sand
- Swamp deposits overlying Fines
- Swamp deposits overlying Sand overlying Fines
- Swamp deposits overlying Fines overlying Sand
- Salt-Marsh and Tidal-Marsh deposits
- Salt-Marsh and Tidal-Marsh deposits overlying Sand
- Salt-Marsh and Tidal-Marsh deposits overlying Fines
- Talus
- Beach deposits
- Artificial Fill

\* Alluvium may be overlying any of the Coarse deposits (g, sg, s)

**Legend:**





















- Sand and Gravel overlying Sand overlying Fines
- Sand and Gravel overlying Fines
- Sand overlying Fines
- Fines overlying Sand and Gravel
- Fines overlying Sand
- Fines overlying Sand

**Grain-size classification (modified from Wentworth, 1922)**

GRAIN SIZE CLASSIFICATION											
GRAIN SIZE CLASSIFICATION (modified from Wentworth, 1922)											
GRAIN SIZE CLASSIFICATION (modified from Wentworth, 1922)											

Unconsolidated glacial and postglacial deposits, that range from a few feet to several hundred feet in thickness, overlie the bedrock surface of Connecticut (see Block Diagram). This map portrays the distribution of these deposits. The legend is designed to highlight the relationship between the depositional origins and the composition and character of the materials portrayed. Most of the Connecticut glacial and postglacial deposits can be divided into two broad depositional categories: Glacial Ice-Land deposits (tills and moraine) which are generally deposited on the land surface by glacial meltwater, and Glacial Marine deposits (stratified deposits) which are most commonly concentrated in valleys and lowlands. A mapping emphasis is placed on stratified meltwater deposits, which are the most important and variable, and historically influenced development patterns throughout the state.

**Glacial Ice-Laid Deposits** (tilts and moraine) were derived directly from the ice and consist of nonsorted, generally nonstratified, unconsolidated, noncemented, and nonlaminated material. The composition of most tills is predominantly sand and silt and boulders can be locally abundant. The moraine is composed of sand and gravel and occasionally masses of laminated fine-grained sediment. The lack of sorting and stratification typical of ice-laid deposits is the result of direct deposition from the ice. The till, silt, and gravel are commonly used as fill material for road and airport, while the silt, mud, and peat are used for agriculture. The sand and gravel are used for aggregate and concrete. The sand and gravel are also used for fill material for road and airport, while the silt, mud, and peat are used for agriculture. The sand and gravel are used for aggregate and concrete. The sand and gravel are also used for fill material for road and airport, while the silt, mud, and peat are used for agriculture.

EXPLANATION OF CROSS-SECTION VIEW		EXPLANATION OF SURFACE VIEW	
	Gravel deposits		Sand and gravel deposits
	Sand and gravel deposits		Fluvial deposits
	Sand deposits		Gravel overlying sand
	Fluvial deposits		Sand and gravel overlying sand
	Alluvium		Sand overlying sand and gravel
	Till		Sand and gravel overlying sand overlying till
	Talus		Sand and gravel overlying fluvial
			Sand overlying fluvial
			Fluvial overlying sand and gravel
			Alluvium
			Alluvium overlying fluvial
			Till and bedrock
			Thick till

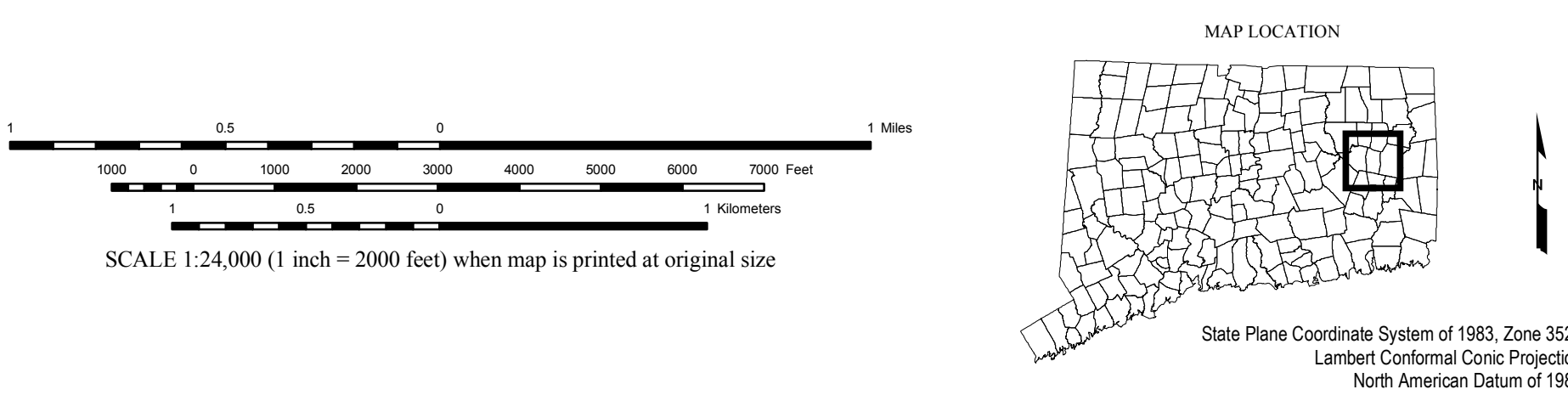
**SURFICIAL MATERIALS DATA** – Surficial Materials shown on this map are from the Surficial Material Poly dataset which contains polygon data intended to be used at 1:24,000 scale. Based on data collected by the U.S. Geological Survey in 1995 by the Connecticut Department of Environmental Protection, in cooperation with the U.S. Geological Survey. These data were digitized from the 1:24,000-scale compilation sheets prepared for the Connecticut State Surface Water Survey (Storck, J.R., Schaefer, J.P., London, E.H., and Thompson, W.B., 1995, *Geological Survey of Connecticut, 1:24,000-scale compilation sheets, 2 sheets*, scale 1:125,000).

**QUATERNARY GEOLOGY AND SURFICIAL MATERIALS DATA** - 1:24,000-scale digital spatial data of Connecticut Quaternary Geology and Surficial Materials combined into one dataset. These data were digitized from the 1:24,000-scale compilation sheets prepared for the Connecticut State Surface Water Survey (Storck, J.R., Schaefer, J.P., London, E.H., and Thompson, W.B., 1995, *Geological Survey of Connecticut, 1:24,000-scale compilation sheets, 2 sheets*, scale 1:125,000).

**QUATERNARY GEOLOGY AND SURFICIAL MATERIALS DATA** - 1:24,000-scale digital spatial data of Connecticut Quaternary Geology and Surficial Materials combined into one dataset. These data were digitized from the 1:24,000-scale compilation sheets prepared for both the Surficial Materials Map of Connecticut (Storck, J.R., Schaefer, J.P., London, E.H., and Thompson, W.B., 1995, *Geological Survey of Connecticut, 1:24,000-scale compilation sheets, 2 sheets*, scale 1:125,000) and the Quaternary Geology Map of Connecticut (Storck, J.R., Schaefer, J.P., London, E.H., and Thompson, W.B., 1995, *Geological Survey of Connecticut, 1:24,000-scale compilation sheets, 2 sheets*, scale 1:125,000).







**RELATED INFORMATION**  
This map is intended to be printed at its original dimensions in order to maintain the 1:24,000 scale (1 inch = 2000 feet).

**MAPS AND DIGITAL DATA** - Go to the CT ECO website for this map and a variety of others. Go to the CT DEP website for the digital spatial data shown on this map.



Mudward deposits are depicted using four basic texturally-based map units: gravel, sand and gravel, sand, and fine. To the extent that it is known or can be inferred, the subsurface texture and thickness of the mudward deposits is also indicated by the thickness. In many places similar conditions persisted for the entire time that a mudward deposit was being laid down, and a single map unit (e.g. s-sand) is sufficient to describe the entire mudward sequence. Areal and vertical texture variability can occur within the mudward sequence, and is indicated by the use of the 'a' and 's' sediment varies with each mudward setting (stream, delta, lake, etc.), and settings can change over time. High-energy depositional environments near glacial margins (proximal) tend to favor deposition of coarse material but as time passes, and the glacial margin retreats, the mudward sequence becomes dominated by fine-grained deposits as become predominant. Where more complex stratigraphic relationships existed because of changing conditions during deposition, "stacked" map units are used to characterize the mudward sequence, such as gravel overlying sand overlying sand. Where mudward deposits are overlain by glacial ice, this relationship is also shown (e.g. a/s + glauver overlying sand).

A geological map of the Central Gneiss Complex. The map shows several distinct rock units: a large area of 'S/Sg' (Schist/Gneiss) in the center, surrounded by 'S/Sg' and 'S/Sg' units. To the left, there are units labeled 'S/Sg' and 'S/Sg'. The bottom of the map is labeled 'Crystalline bedrock'. The map is color-coded: green for 'S/Sg', yellow for 'S/Sg', orange for 'S/Sg', and blue for 'S/Sg'. The map is oriented with North at the top.

EXPLANATION OF SURFACE VIEW		
level deposits		Sand overlying fines
		Fines overlying sand and gravel
ing sand		Aluminum
level overlying sand		Aluminum overlying fines
ing sand and gravel		Till and bedrock
level overlying sand overlying fines		Thick till
level overlying fines		

**QUATERNARY GEOLOGY AND SURFICIAL MATERIALS DATA** - 1:24,000-scale digital spatial data of Connecticut Quaternary Geology and Surficial Materials combined into one dataset, published by the Connecticut Department of Environmental Protection, in cooperation with the U.S. Geological Survey. These data were digitized from the 1:24,000-scale compilation sheets prepared for both the Surficial Materials Map of Connecticut, Stone and others, 1992, 1:125,000 and the Quaternary Geologic Map of Connecticut and Long Island Sound Basin, Stone and others, 2005, 1:125,000.

**MAPS AND DIGITAL DATA** - Go to the CT ECO website for this map and a variety of others. Go to the CT DEP website for the digital spatial data shown on this map.

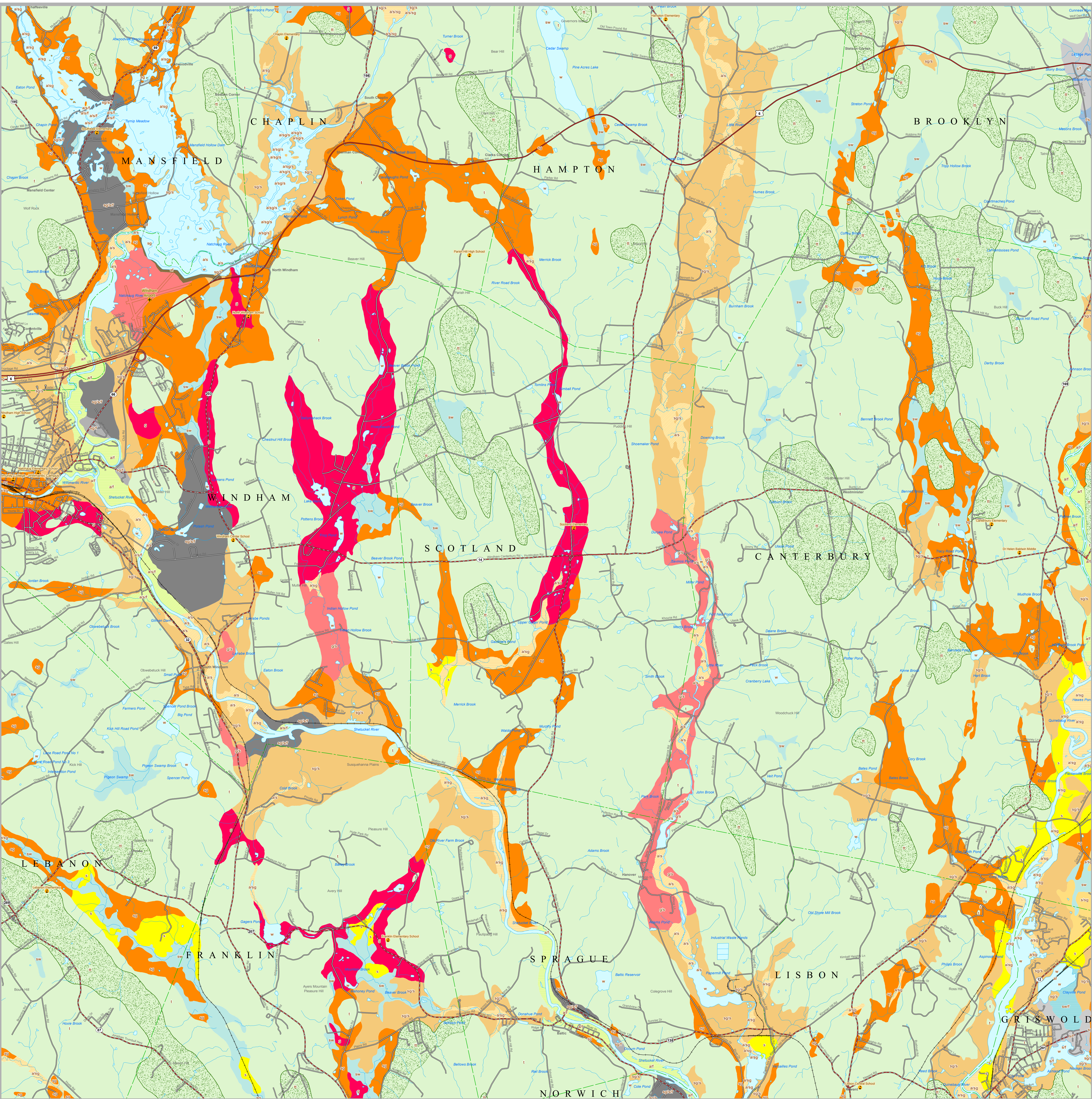
MAP LOCATION

5 Miles

State Plane Coordinate System of 1983, Zone 350  
 Lambert Conformal Conic Projection  
 North American Datum of 1983



USGS  
science for a changing world



STATE OF CONNECTICUT  
DEPARTMENT OF  
ENVIRONMENTAL PROTECTION  
79 Elm Street  
Hartford, CT 06106-5127

Map created by CT DEP  
August 2009  
Map is not colorfast  
Protect from light and moisture

