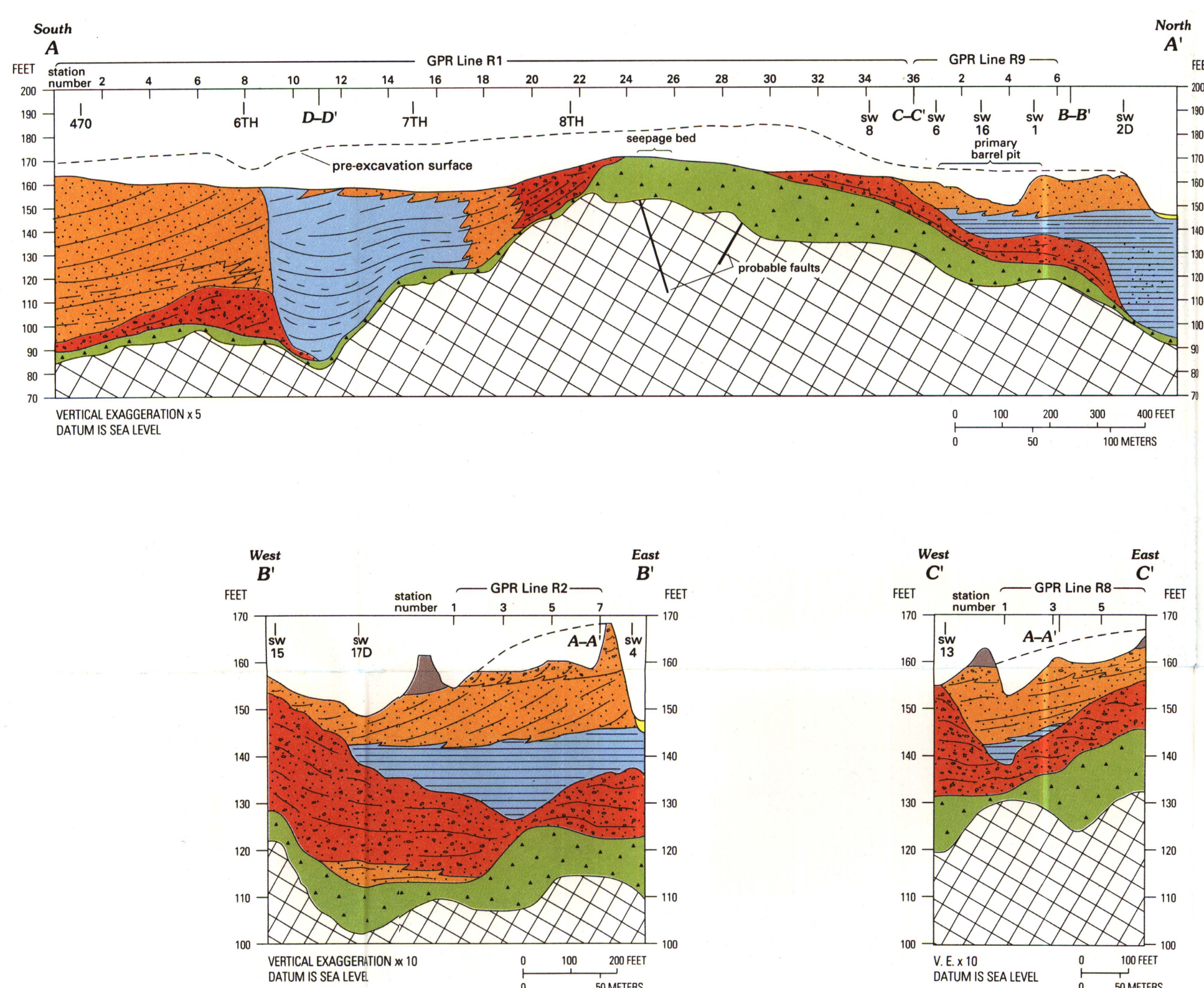


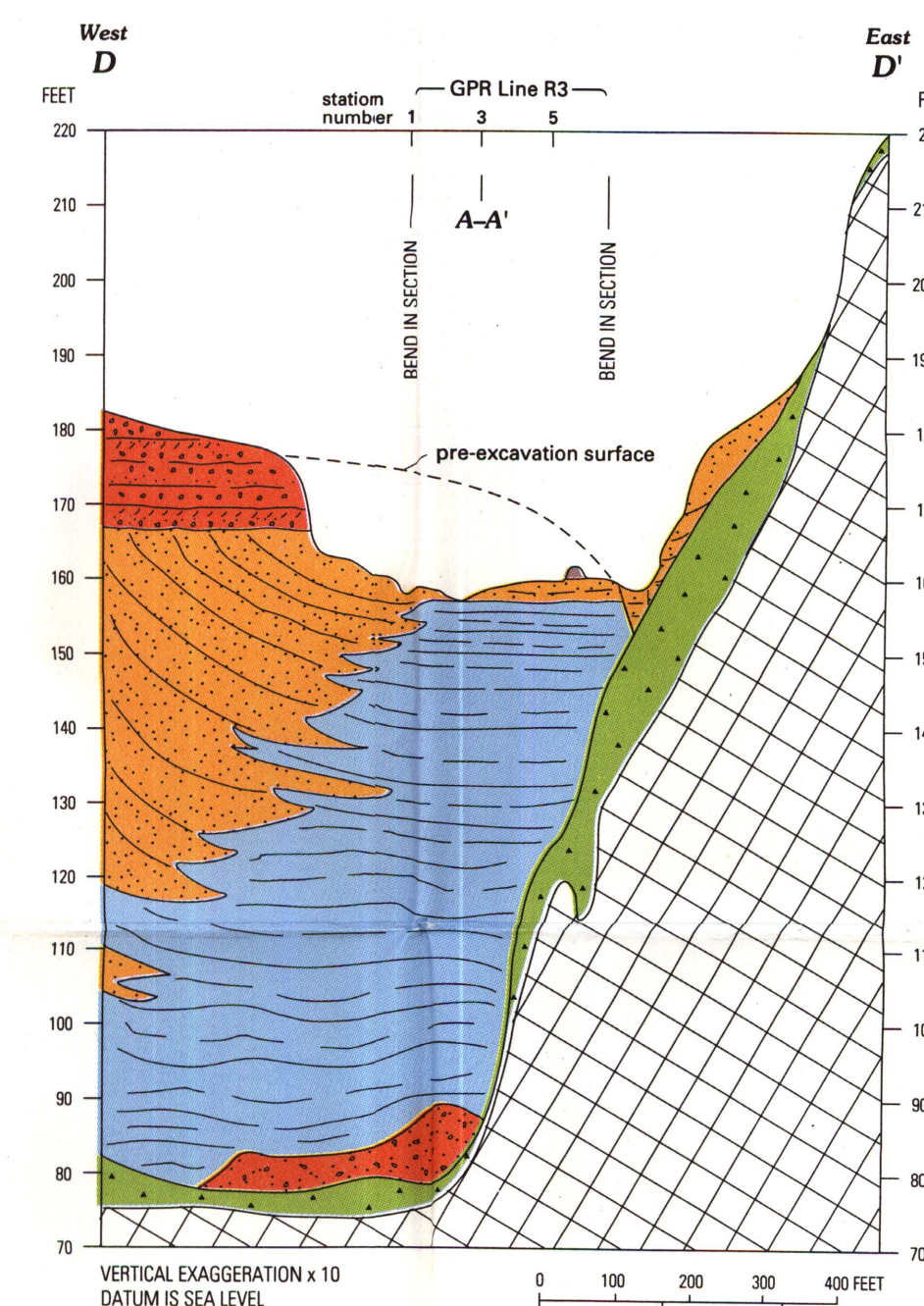
- ### EXPLANATION
- POSTGLACIAL DEPOSITS**
- Artificial fill**—Includes large road and railroad embankments and "spill" piles at Gallup's Quarry and along the channelized section of Fry Brook. Artificial and "disturbed" material less than 1 foot thick is present over most of the quarry area and other nearby areas of development and sand and gravel extraction. Mapped bodies of artificial fill overlie surrounding glacial or postglacial deposits.
 - Alluvium**—Composed of sand and silt, locally gravel, with some organic material on flood-plain surfaces of Mill Brook; locally gradational with swamp deposits. Alluvium overlies various textural units of glacial stratified deposits (see description below) indicated by "stacked unit" letter symbols.
 - Swamp deposit**—Composed of peat and muck with minor amounts of sand, silt, and clay in kettle-hole swamps. Swamp deposits overlie various textural units of glacial stratified deposits (see description below) indicated by "stacked unit" letter symbols.
- GLACIAL STRATIFIED DEPOSITS (STRATIFIED DRIFT)**
- Gravel, sand, silt, and clay particles, as defined in adjacent particle-size diagram, that occur in layers and are classified into four textural units based on grain-size distribution.
- Gravel deposits**—Composed of more than 50-percent gravel-sized particles; cobbles and boulders predominate; lesser amounts of sand within gravel beds, and sand beds comprise few separate layers. Gravel layers are generally poorly sorted, and bedding is commonly distorted and faulted due to postdepositional collapse. Typical hydraulic conductivity is 200-800 feet per day.
 - Sand and gravel deposits**—Composed of mixtures of gravel and sand particles within individual layers and as alternating layers; sand and gravel layers range from 25- to 50-percent gravel particles and from 50- to 75-percent sand particles. Layers are well to poorly sorted; bedding may be distorted by postdepositional collapse. Typical horizontal hydraulic conductivity is 100 to 500 feet per day.
 - Sand deposits**—Composed mainly of very coarse to fine sand particles; coarser layers may contain up to 25-percent gravel particles, generally granules and pebbles; finer layers may contain some very fine sand, silt, and clay. Layers are commonly well sorted. Typical horizontal hydraulic conductivity is 25 to 250 feet per day.
 - Fine Deposits**—Composed of very fine sand, silt, and clay particles, generally in well-sorted, thin layers of alternating silt and clay and (or) very fine sand; locally may contain lenses of coarser material. Typical horizontal hydraulic conductivity is less than 5 feet per day.
- The texture of glacial stratified deposits is described throughout their whole vertical extent either as a single textural unit or two or more units in various orders of superposition referred to as "stacked units." Contacts between subsurface textural units are not mapped with as great an accuracy and detail as those at the surface. All units of glacial stratified deposits overlie glacial till and (or) bedrock which is not included in the stacked unit.
- Gravel**
 - Sand and gravel**
 - Sand and gravel overlying sand**
 - Sand overlying sand and gravel**
 - Sand**
 - Sand and gravel overlying sand overlying fines**
 - Sand overlying fines overlying sand and gravel**
 - Sand overlying fines**
 - Fines overlying sand and gravel**
- GLACIAL DEPOSITS (NONSTRATIFIED)**
- Till**—Non-sorted, nonstratified, compact mixture of grain sizes ranging from clay to large boulders; matrix is largely sand particles containing up to 25-percent silt and clay. Hydraulic conductivity is generally less than 1 foot per day. Till blankets the bedrock surface in most places and underlies glacial stratified drift but is not included in the stacked units.
- MAP SYMBOLS**
- Contact between map units; dashed where inferred
 - Bedrock outcrop
 - Bedrock contour—Shows altitude of the bedrock surface. Contour interval is 10 feet. Datum is sea level (shown only in immediate Gallup's Quarry area)
 - Trace of probable fault in bedrock (shown only in immediate Gallup's Quarry area)
 - Cross-section line—Numbers are GPR stations shown in cross sections
 - Artificial scarp produced by sand and gravel excavation or road cut
 - Location of wells and test holes, logs of which were used in mapping

PARTICLE DIAMETER										
10	2.5	.16	.08	.04	.02	.01	.005	.0025	.0015	in.
256	64	4	2	1	.5	.25	.125	.068	.004	mm
Boulders	Cobbles	Pebbles	Granules	Very coarse sand	Coarse sand	Medium sand	Fine sand	Very fine sand	Silt	Clay
GRAVEL PARTICLES			SAND PARTICLES				FINE PARTICLES			

Grain-size classification used in this report (modified from Wentworth, 1922)



- ### EXPLANATION
- Artificial fill
 - Sand and gravel
 - Sand
 - Fines
 - Till
 - Bedrock



GEOLOGIC MAP AND ACCOMPANYING CROSS SECTIONS SHOWING SURFICIAL MATERIALS IN THE GALLUP'S QUARRY AREA, PLAINFIELD, CONNECTICUT

By
Janet R. Stone
1995