

APPENDIX 2

SOIL DESCRIPTIONS

Descriptions of the soils located in the Bought Road-Columbia Street area presented below by parent group:

- 1 **Hudson** soils are deep, moderately well drained, medium acid to neutral, fine textured soils formed in calcareous, clayey glacial lake deposits. They occupy level to dissected lake plains and other glacial landforms that were mantled with lake sediments. Hudson soils have 1 to 2 feet of moderately slowly permeable silt loam or silty clay loam over slowly permeable silty clay to a depth of 3-1/2 feet. These materials are underlain by slowly permeable lake-laid deposit consisting of layers of silty clay or clay separated by thinner silty layers. Available water capacity is high. A perched water table exists at 1-1/2 to 2 feet during November to April. The potential for frost action is high.

- 2 **Rhinebeck** soils are deep, somewhat poorly drained, medium acid to neutral soils, free of coarse fragments. They are on nearly level and gently sloping areas once occupied by glacial lakes. Rhinebeck soils have 1 foot of moderately to slowly permeable fine silt loam over slowly permeable silty clay loam or silty clay that extends to a depth of 2 to 3 feet. This soil material is underlain by layers of lake-laid calcareous silty clay separated by thin silty layers. Available water capacity is high. A perched water table exists at 1/2 foot to 1-1/2 feet during January to May. The potential for frost action is moderate.

- 3 **Madalin** soils are deep, poorly drained and very poorly drained, moderately fine textured soils formed in calcareous water-deposited materials. They are in level or nearly level areas on glacial lake plains and depressions in the uplands. Permeability is slow or very slow. Madalin soils have a silty clay loam surface layer over a silty clay subsoil. Available water capacity is high. An apparent high water table exists at the surface during December to May. Potential frost action is moderate.
- 7 **Udorthents Loamy, Smoothed** are areas where loamy fill material, that can not be identified as a natural soil, has been placed on soils of various drainage classes. These areas have been created to provide sites for buildings, roads, recreation areas. Some areas have been excavated and similar fill has been placed in these cuts. Slopes range from nearly level to steep, but, are generally nearly level to moderately sloping. A few areas have complex slopes. The loamy fill is commonly greater than 20 inches deep. Included in this unit are areas of deeply buried rubbish or other non-soil materials such as building trash, cinders, coal ashes and miscellaneous solid garbage wastes. Also included are small areas of undisturbed soils and freshwater marsh that were not covered up during filling activities. The available water capacity is low to moderate.
- 8 **Udorthents - Urban land complex** are areas where nearly 55 percent of the surface is disturbed loamy soils and fill material, 10 percent of the area is undisturbed natural soils, and nearly 35 percent of the surface has been covered with impervious materials, such as buildings and asphalt. These areas of disturbed loamy fills and urban land occur in such an intricate pattern that it was not feasible to separate them in mapping. Undisturbed loamy soils, disturbed loamy soils, and fill material range from well

drained to poorly drained. Slopes in this complex range from nearly level to steep. Available water capacity is variable. Depth to the water table is variable.

9 **Urban land - Udorthents complex** are areas where 50 to 85 percent of the surface has been covered with impervious materials, such as buildings and asphalt, and 15 to 50 percent of the surface is disturbed, loamy soils and fill material. Less than 10 percent of some areas have undisturbed, loamy soils. These areas of urban land and disturbed loamy fills occur in such an intricate pattern that it was not feasible to separate them in mapping. Disturbed loamy soils, undisturbed loamy soils and fill materials range from well drained to poorly drained. Slopes in the complex range from nearly level to steep. Available water capacity is variable. Depth to the water table is variable.

13 **Unadilla** soils are deep, well drained, strongly acid, very fine sandy loam and silt loam soils developed in water or windsorted deposits. They typically are on silty undulating to rolling areas of lake plains. Permeability is commonly moderate, but some areas of these soils have layers with slow permeability. Unadilla soils consist of stratified very fine sandy loam to silt loam. The depth to the water table is greater than 6 feet. Available water capacity is high. Potential frost action is high.

14 **Scio** soils are deep, moderately well drained, strongly acid, medium textured soils developed in wind or water deposited material very high in coarse silt and very fine sand. These nearly level to gently sloping areas

are on terraces, old alluvial fans and on lake plains. Scio soils have 3-1/2 or more feet of moderately permeable silt loam or very fine sandy loam underlain by layers of silt loam, silty clay and fine sandy loam. Available water capacity is high. An apparent high water table exists at 1-1/2 to 2 feet during March to May. Potential frost action is high.

15 Raynham soils consist of deep, nearly level, poorly drained to somewhat poorly drained, medium to high lime, medium textured soils that have developed in material very high in silt and fine sands. Permeability is slow. They are on nearly level areas in the lake plain. Available water capacity is high. An apparent high water table occurs at 1/2 foot to 2 feet during November to June. Potential frost action is high.

16 Birdsall soils consist of deep, very poorly drained, strongly acid to neutral, medium textured soils that have developed in water-laid deposits of silt and very fine sand. The silt loam surface is high in organic matter. Permeability is slow. An apparent high water table occurs at the surface from October to July. Available water capacity is high. Potential frost action is high.

21 Riverhead soils are deep, well drained, strongly to very strongly acid, moderate coarse textured soils that formed in outwash and morainic sediments. They are on nearly level to steeply sloping topography. Riverhead soils have 1-1/2 to 3 feet of moderately rapid sandy loam or fine sandy loam soil material overlying very rapidly permeable stratified coarse sand and gravel that extends to great depths. Depth to the water table is greater than 6 feet. Available water capacity is moderate. Potential frost action is moderate.

- 30 Colonie soils are deep, excessively drained, strongly to medium acid, coarse textured soils that formed in outwash or lacustrine materials and associated wind blown deposits dominated by fine and very fine sand. The soil is typically free of gravel. These nearly level to steep soils are on landforms associated with deltaic deposits. Colonie soils have 16 to 24 inches of very friable, rapidly permeable loamy fine sand over friable to loose, rapidly permeable fine sand containing thin, moderately permeable dark brown bands. Available water capacity is low to moderate.
- 50 Nunda soils are deep, moderately well drained, medium textured soils developed in medium lime glacial till. These are nearly level to steep soils in upland glaciated areas. Nunda soils have a moderately permeable, coarse silty upper deposit up to 3 feet thick underlain by a slowly permeable gravelly, channery or shaly silt loam or clay loam. Available water capacity is moderate. A perched water table exists at 1-1/2 to 2 feet below the surface during March through May. Potential frost action is high.
- 51 Burdett soils are deep, somewhat poorly drained, medium textured soils developed in medium lime glacial till dominated by clayey shales. These nearly level to moderately steep soils are found in the glaciated uplands. Burdett soils have 2 feet of moderately permeable silt loam over slowly permeable shaly clay loam or shaly loam. Available water capacity is moderate to high. A perched water table 1/2 to 1-1/2 feet below the surface exists from December to May. Potential frost action is high.
- 80 Valois soils are deep, well drained, acid, medium textured soils formed in glacial till dominated by sandstone, silt-stone or shale. They are gently sloping to sloping. They are commonly found on low lying till plains or complex slopes characteristic of end or lateral moraines. Valois soils

have 2-1/2 feet of gravelly loam over 1-1/2 feet of gravelly silt loam. Permeability is moderate. Available water capacity is moderate. High water table is at 3 to 6 feet below the surface. Potential frost action is low.

122 Nassau soils are somewhat excessively drained, medium textured soils that are shallow over hard acid shale or slate bedrock. These soils are on nearly level to hilly bedrock-controlled glacially modified landforms. Nassau soils have a moderately permeable shaly silt loam surface layer six inches thick over a moderately permeable very shaly silt loam subsoil. Acid bedrock is at a depth of 10 to 20 inches. Available water capacity is very low. Potential frost action is moderate.

265 Nassau very shaly silt loam, very rocky consists of areas of Nassau soil that contains bedrock outcroppings. Outcroppings occupy from 1 to 10 percent of the surface area. (Refer to soil number 122 for description of Nassau soils.) The depth to the water table is greater than 6 feet. Potential frost action is low.

305 Fluvaquents loamy, are alluvial soils in which the drainage ranges from good to very poor, but are dominately very poor. Textures are variable. They occur adjacent to streams and creeks and are subject to frequent flooding.

311 Urban Land consists of areas where more than 85 percent of the surface is covered by asphalt, concrete, buildings or other impervious surfaces. Parking lots, shopping centers, industrial parks and urban centers are examples of urban land. They are nearly level to sloping. Examination and identification of earthy materials is impractical in this unit.