



OBSERVATION - WELL DATA USES

Observation-well water-level data may be used to investigate the following topics. Individual observation wells do not necessarily provide all the information needed to investigate the following topics, but are commonly used in conjunction with other nearby observation wells.

CONSTRUCTION --

- Locating and designing of septic systems
- Evaluating landfill and other disposal sites
- Developing landscaping plans to avoid waterlogged land during construction and excavation
- Dewatering (pumping) of construction sites
- Preventing exposure of underground wooden pilings to air that causes rot and makes buildings structurally unsound

WATER QUALITY --

- Assessing areas (synoptically or other)
- Monitoring induced infiltration of surface water due to pumping of ground water
- Locating, monitoring, and cleaning up of ground-water contamination plumes
- Determining the assimilative capacity of ground water
- Monitoring saltwater intrusion

STATISTICAL ANALYSIS --

- Correlating water levels of observation wells to measured water levels at septic systems or other evaluation sites
- Calibrating ground-water-flow models
- Monitoring ground-water-level stage duration
- Developing short-term and long-term ground-water-level trends

WATER SUPPLY --

- Monitoring for depletion of ground-water storage
- Determining public and private supply well depths
- Augmenting surface-water supply wells (public or other)
- Determining ground water and surface water interaction (rivers, ponds, reservoirs, and lakes)
- Assessing the effects of evapotranspiration and seasonal influences on ground-water levels

The U.S. Geological Survey (USGS) maintains this network of 136 observation wells in cooperation with agencies of the States of Massachusetts and Rhode Island. Monthly water-level measurements are made at each well. Continuous measurements are made at 10 wells equipped with a digital recorder. The measurements are recorded in feet below the land surface at each location. These data are then stored in a computer data base and referenced by the name of the town in which the well is located (Macovsky, 1976).

Observation-well data are published annually in a report series entitled "Water Resources Data - Massachusetts and Rhode Island." The report and this map may be obtained by contacting:

U.S. Geological Survey
Earth Science Information Center, Open-File Reports Section
Box 25286, MS517, Denver Federal Center
Denver, CO 80225

Water-data reports beginning with water year 1990 also are available in limited numbers on Compact Disk - Read Only Memory (CD-ROM) at the same address.

The Ground-Water Site Inventory Data Base of the National Water Data Storage and Retrieval System (WATSTORE) contains computerized inventory data for more than 900,000 wells, springs, and other sources of ground water for all the States and some territories. For information contact:

U.S. Geological Survey
National Water Data Exchange
421 USGS National Center
Reston, Virginia 22092

Only local well locations and data from the USGS national network of observation wells are shown on this map. Additional well information for the local network of observation wells - including water levels, date of installation, period of records, instrumentation, construction data, and land-surface datum, may be obtained in the above mentioned report series.

Spatial data for this map - well locations, well names and numbers, and state, county, and town boundaries - are stored in a computerized Geographic Information System (GIS). This map was produced by a GIS.

REFERENCES:

Geddy, R.A., Seelow, R.S., Gromel, G.G., and
Ramsay, L.R., 1994, Water Resources Data -
Massachusetts and Rhode Island - Water Year 1993.
U.S. Geological Survey Water-Data Report MA-RH-93-1, 266 p.

Macovsky, A., 1976, Ground-water levels in Massachusetts,
1966-74, U.S. Geological Survey Hydrologic Data Report
No. 17, 107 p.

Table 1. Well name and number, aquifer material, and well depth below land surface for observation wells in Massachusetts and Rhode Island.

| WELL NAME and NO. | AQUIFER MATERIAL | DEPTH (ft) | WELL NAME and NO. | AQUIFER MATERIAL | DEPTH (ft) | WELL NAME and NO. | AQUIFER MATERIAL | DEPTH (ft) | WELL NAME and NO. | AQUIFER MATERIAL | DEPTH (ft) | WELL NAME and NO. | AQUIFER MATERIAL | DEPTH (ft) | WELL NAME and NO. | AQUIFER MATERIAL | DEPTH (ft) |
|----------------------|--------------------------------|---------------|----------------------|--------------------------------|---------------|----------------------|--------------------------------|---------------|----------------------|--------------------------------|---------------|----------------------|--------------------------------|---------------|---------------------------|--------------------------------|---------------|
| MASSACHUSETTS -- | | | | | | | | | | | | | | | | | |
| BARNSTABLE COUNTY | | | | | | | | | | | | | | | | | |
| Barnstable 290 | Unconsolidated sand and gravel | 35.8 | Attleborough 83 | Unconsolidated sand and gravel | 20.6 | Orange 63 | Unconsolidated sand and gravel | 20.6 | Chelmsford 68 | Glacial outwash | 50.0 | Duxbury 80 | Bedrock | 181.0 | PROVIDENCE COUNTY (con't) | | |
| Barnstable 247 | Unconsolidated sand and gravel | 52.0 | Ware 116 | Unconsolidated sand and gravel | 42.0 | Sturbridge 7 | Unconsolidated sand and gravel | 54.0 | Chelmsford 384 | Glacial outwash | 42.0 | East Bridgewater 30 | Bedrock | 24.0 | RHODE ISLAND -- | | |
| Bourne 198 | Unconsolidated sand and gravel | 50.0 | Ware 116 | Unconsolidated sand and gravel | 27.3 | Sturbridge 68 | Unconsolidated sand and gravel | 28.0 | Concord 167 | Unconsolidated sand and gravel | 66.7 | Hallifax 97 | Bedrock | 945.0 | Kent County 1 | Unconsolidated sand and gravel | 107.0 |
| Brewster 21 | Unconsolidated sand and gravel | 25.0 | Ware 116 | Unconsolidated sand and gravel | 19.4 | Ware 116 | Unconsolidated sand and gravel | 19.4 | Lexington 104 | Unconsolidated sand and gravel | 20.7 | Lakeville 14 | Unconsolidated sand and gravel | 41.0 | Coweney 342 | Unconsolidated sand and gravel | 13.1 |
| Brewster 22 | Unconsolidated sand and gravel | 25.0 | Ware 116 | Unconsolidated sand and gravel | 14.4 | Ware 116 | Unconsolidated sand and gravel | 14.4 | Worcester 274 | Unconsolidated sand and gravel | 12.0 | Middleborough 82 | Glacial till | 26.5 | Coweney 411 | Unconsolidated sand and gravel | 43.0 |
| Charlton 138 | Unconsolidated sand and gravel | 44.0 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Worcester 274 | Unconsolidated sand and gravel | 12.0 | Plymouth 22 | Glacial outwash | 42.0 | Coweney 466 | Glacial till | 17.8 |
| Marblehead 29 | Unconsolidated sand and gravel | 40.0 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Worcester 274 | Unconsolidated sand and gravel | 12.0 | Plymouth 494 | Glacial outwash | 47.0 | Warwick 39 | Glacial till | 27.0 |
| Sandwich 253 | Unconsolidated sand and gravel | 70.0 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Worcester 274 | Unconsolidated sand and gravel | 12.0 | Worcester 274 | Glacial outwash | 9.65 | West Greenwich 181 | Unconsolidated sand and gravel | 18.5 |
| Sandwich 253 | Unconsolidated sand and gravel | 70.0 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Worcester 274 | Unconsolidated sand and gravel | 12.0 | Worcester 274 | Glacial outwash | 9.65 | West Greenwich 206 | Glacial till | 9.6 |
| Ware 116 | Unconsolidated sand and gravel | 27.7 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Worcester 274 | Unconsolidated sand and gravel | 12.0 | Worcester 274 | Glacial outwash | 9.65 | Worcester 274 | Glacial till | 18.5 |
| Ware 116 | Unconsolidated sand and gravel | 27.7 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Worcester 274 | Unconsolidated sand and gravel | 12.0 | Worcester 274 | Glacial outwash | 9.65 | Worcester 274 | Glacial till | 18.5 |
| Ware 116 | Unconsolidated sand and gravel | 27.7 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Worcester 274 | Unconsolidated sand and gravel | 12.0 | Worcester 274 | Glacial outwash | 9.65 | Worcester 274 | Glacial till | 18.5 |
| Ware 116 | Unconsolidated sand and gravel | 27.7 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Worcester 274 | Unconsolidated sand and gravel | 12.0 | Worcester 274 | Glacial outwash | 9.65 | Worcester 274 | Glacial till | 18.5 |
| Ware 116 | Unconsolidated sand and gravel | 27.7 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Worcester 274 | Unconsolidated sand and gravel | 12.0 | Worcester 274 | Glacial outwash | 9.65 | Worcester 274 | Glacial till | 18.5 |
| Ware 116 | Unconsolidated sand and gravel | 27.7 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Worcester 274 | Unconsolidated sand and gravel | 12.0 | Worcester 274 | Glacial outwash | 9.65 | Worcester 274 | Glacial till | 18.5 |
| Ware 116 | Unconsolidated sand and gravel | 27.7 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Worcester 274 | Unconsolidated sand and gravel | 12.0 | Worcester 274 | Glacial outwash | 9.65 | Worcester 274 | Glacial till | 18.5 |
| Ware 116 | Unconsolidated sand and gravel | 27.7 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Worcester 274 | Unconsolidated sand and gravel | 12.0 | Worcester 274 | Glacial outwash | 9.65 | Worcester 274 | Glacial till | 18.5 |
| Ware 116 | Unconsolidated sand and gravel | 27.7 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Worcester 274 | Unconsolidated sand and gravel | 12.0 | Worcester 274 | Glacial outwash | 9.65 | Worcester 274 | Glacial till | 18.5 |
| Ware 116 | Unconsolidated sand and gravel | 27.7 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Worcester 274 | Unconsolidated sand and gravel | 12.0 | Worcester 274 | Glacial outwash | 9.65 | Worcester 274 | Glacial till | 18.5 |
| Ware 116 | Unconsolidated sand and gravel | 27.7 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Worcester 274 | Unconsolidated sand and gravel | 12.0 | Worcester 274 | Glacial outwash | 9.65 | Worcester 274 | Glacial till | 18.5 |
| Ware 116 | Unconsolidated sand and gravel | 27.7 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Worcester 274 | Unconsolidated sand and gravel | 12.0 | Worcester 274 | Glacial outwash | 9.65 | Worcester 274 | Glacial till | 18.5 |
| Ware 116 | Unconsolidated sand and gravel | 27.7 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Worcester 274 | Unconsolidated sand and gravel | 12.0 | Worcester 274 | Glacial outwash | 9.65 | Worcester 274 | Glacial till | 18.5 |
| Ware 116 | Unconsolidated sand and gravel | 27.7 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Worcester 274 | Unconsolidated sand and gravel | 12.0 | Worcester 274 | Glacial outwash | 9.65 | Worcester 274 | Glacial till | 18.5 |
| Ware 116 | Unconsolidated sand and gravel | 27.7 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Worcester 274 | Unconsolidated sand and gravel | 12.0 | Worcester 274 | Glacial outwash | 9.65 | Worcester 274 | Glacial till | 18.5 |
| Ware 116 | Unconsolidated sand and gravel | 27.7 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Worcester 274 | Unconsolidated sand and gravel | 12.0 | Worcester 274 | Glacial outwash | 9.65 | Worcester 274 | Glacial till | 18.5 |
| Ware 116 | Unconsolidated sand and gravel | 27.7 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Worcester 274 | Unconsolidated sand and gravel | 12.0 | Worcester 274 | Glacial outwash | 9.65 | Worcester 274 | Glacial till | 18.5 |
| Ware 116 | Unconsolidated sand and gravel | 27.7 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Worcester 274 | Unconsolidated sand and gravel | 12.0 | Worcester 274 | Glacial outwash | 9.65 | Worcester 274 | Glacial till | 18.5 |
| Ware 116 | Unconsolidated sand and gravel | 27.7 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Worcester 274 | Unconsolidated sand and gravel | 12.0 | Worcester 274 | Glacial outwash | 9.65 | Worcester 274 | Glacial till | 18.5 |
| Ware 116 | Unconsolidated sand and gravel | 27.7 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Worcester 274 | Unconsolidated sand and gravel | 12.0 | Worcester 274 | Glacial outwash | 9.65 | Worcester 274 | Glacial till | 18.5 |
| Ware 116 | Unconsolidated sand and gravel | 27.7 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Worcester 274 | Unconsolidated sand and gravel | 12.0 | Worcester 274 | Glacial outwash | 9.65 | Worcester 274 | Glacial till | 18.5 |
| Ware 116 | Unconsolidated sand and gravel | 27.7 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Worcester 274 | Unconsolidated sand and gravel | 12.0 | Worcester 274 | Glacial outwash | 9.65 | Worcester 274 | Glacial till | 18.5 |
| Ware 116 | Unconsolidated sand and gravel | 27.7 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Worcester 274 | Unconsolidated sand and gravel | 12.0 | Worcester 274 | Glacial outwash | 9.65 | Worcester 274 | Glacial till | 18.5 |
| Ware 116 | Unconsolidated sand and gravel | 27.7 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Worcester 274 | Unconsolidated sand and gravel | 12.0 | Worcester 274 | Glacial outwash | 9.65 | Worcester 274 | Glacial till | 18.5 |
| Ware 116 | Unconsolidated sand and gravel | 27.7 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Worcester 274 | Unconsolidated sand and gravel | 12.0 | Worcester 274 | Glacial outwash | 9.65 | Worcester 274 | Glacial till | 18.5 |
| Ware 116 | Unconsolidated sand and gravel | 27.7 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Worcester 274 | Unconsolidated sand and gravel | 12.0 | Worcester 274 | Glacial outwash | 9.65 | Worcester 274 | Glacial till | 18.5 |
| Ware 116 | Unconsolidated sand and gravel | 27.7 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Worcester 274 | Unconsolidated sand and gravel | 12.0 | Worcester 274 | Glacial outwash | 9.65 | Worcester 274 | Glacial till | 18.5 |
| Ware 116 | Unconsolidated sand and gravel | 27.7 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Worcester 274 | Unconsolidated sand and gravel | 12.0 | Worcester 274 | Glacial outwash | 9.65 | Worcester 274 | Glacial till | 18.5 |
| Ware 116 | Unconsolidated sand and gravel | 27.7 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Worcester 274 | Unconsolidated sand and gravel | 12.0 | Worcester 274 | Glacial outwash | 9.65 | Worcester 274 | Glacial till | 18.5 |
| Ware 116 | Unconsolidated sand and gravel | 27.7 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Worcester 274 | Unconsolidated sand and gravel | 12.0 | Worcester 274 | Glacial outwash | 9.65 | Worcester 274 | Glacial till | 18.5 |
| Ware 116 | Unconsolidated sand and gravel | 27.7 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Worcester 274 | Unconsolidated sand and gravel | 12.0 | Worcester 274 | Glacial outwash | 9.65 | Worcester 274 | Glacial till | 18.5 |
| Ware 116 | Unconsolidated sand and gravel | 27.7 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Worcester 274 | Unconsolidated sand and gravel | 12.0 | Worcester 274 | Glacial outwash | 9.65 | Worcester 274 | Glacial till | 18.5 |
| Ware 116 | Unconsolidated sand and gravel | 27.7 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Worcester 274 | Unconsolidated sand and gravel | 12.0 | Worcester 274 | Glacial outwash | 9.65 | Worcester 274 | Glacial till | 18.5 |
| Ware 116 | Unconsolidated sand and gravel | 27.7 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Worcester 274 | Unconsolidated sand and gravel | 12.0 | Worcester 274 | Glacial outwash | 9.65 | Worcester 274 | Glacial till | 18.5 |
| Ware 116 | Unconsolidated sand and gravel | 27.7 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Worcester 274 | Unconsolidated sand and gravel | 12.0 | Worcester 274 | Glacial outwash | 9.65 | Worcester 274 | Glacial till | 18.5 |
| Ware 116 | Unconsolidated sand and gravel | 27.7 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Worcester 274 | Unconsolidated sand and gravel | 12.0 | Worcester 274 | Glacial outwash | 9.65 | Worcester 274 | Glacial till | 18.5 |
| Ware 116 | Unconsolidated sand and gravel | 27.7 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Worcester 274 | Unconsolidated sand and gravel | 12.0 | Worcester 274 | Glacial outwash | 9.65 | Worcester 274 | Glacial till | 18.5 |
| Ware 116 | Unconsolidated sand and gravel | 27.7 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Worcester 274 | Unconsolidated sand and gravel | 12.0 | Worcester 274 | Glacial outwash | 9.65 | Worcester 274 | Glacial till | 18.5 |
| Ware 116 | Unconsolidated sand and gravel | 27.7 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Worcester 274 | Unconsolidated sand and gravel | 12.0 | Worcester 274 | Glacial outwash | 9.65 | Worcester 274 | Glacial till | 18.5 |
| Ware 116 | Unconsolidated sand and gravel | 27.7 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Worcester 274 | Unconsolidated sand and gravel | 12.0 | Worcester 274 | Glacial outwash | 9.65 | Worcester 274 | Glacial till | 18.5 |
| Ware 116 | Unconsolidated sand and gravel | 27.7 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Worcester 274 | Unconsolidated sand and gravel | 12.0 | Worcester 274 | Glacial outwash | 9.65 | Worcester 274 | Glacial till | 18.5 |
| Ware 116 | Unconsolidated sand and gravel | 27.7 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Worcester 274 | Unconsolidated sand and gravel | 12.0 | Worcester 274 | Glacial outwash | 9.65 | Worcester 274 | Glacial till | 18.5 |
| Ware 116 | Unconsolidated sand and gravel | 27.7 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Worcester 274 | Unconsolidated sand and gravel | 12.0 | Worcester 274 | Glacial outwash | 9.65 | Worcester 274 | Glacial till | 18.5 |
| Ware 116 | Unconsolidated sand and gravel | 27.7 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Worcester 274 | Unconsolidated sand and gravel | 12.0 | Worcester 274 | Glacial outwash | 9.65 | Worcester 274 | Glacial till | 18.5 |
| Ware 116 | Unconsolidated sand and gravel | 27.7 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Worcester 274 | Unconsolidated sand and gravel | 12.0 | Worcester 274 | Glacial outwash | 9.65 | Worcester 274 | Glacial till | 18.5 |
| Ware 116 | Unconsolidated sand and gravel | 27.7 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Worcester 274 | Unconsolidated sand and gravel | 12.0 | Worcester 274 | Glacial outwash | 9.65 | Worcester 274 | Glacial till | 18.5 |
| Ware 116 | Unconsolidated sand and gravel | 27.7 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Worcester 274 | Unconsolidated sand and gravel | 12.0 | Worcester 274 | Glacial outwash | 9.65 | Worcester 274 | Glacial till | 18.5 |
| Ware 116 | Unconsolidated sand and gravel | 27.7 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Worcester 274 | Unconsolidated sand and gravel | 12.0 | Worcester 274 | Glacial outwash | 9.65 | Worcester 274 | Glacial till | 18.5 |
| Ware 116 | Unconsolidated sand and gravel | 27.7 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Worcester 274 | Unconsolidated sand and gravel | 12.0 | Worcester 274 | Glacial outwash | 9.65 | Worcester 274 | Glacial till | 18.5 |
| Ware 116 | Unconsolidated sand and gravel | 27.7 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Worcester 274 | Unconsolidated sand and gravel | 12.0 | Worcester 274 | Glacial outwash | 9.65 | Worcester 274 | Glacial till | 18.5 |
| Ware 116 | Unconsolidated sand and gravel | 27.7 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Worcester 274 | Unconsolidated sand and gravel | 12.0 | Worcester 274 | Glacial outwash | 9.65 | Worcester 274 | Glacial till | 18.5 |
| Ware 116 | Unconsolidated sand and gravel | 27.7 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Worcester 274 | Unconsolidated sand and gravel | 12.0 | Worcester 274 | Glacial outwash | 9.65 | Worcester 274 | Glacial till | 18.5 |
| Ware 116 | Unconsolidated sand and gravel | 27.7 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Worcester 274 | Unconsolidated sand and gravel | 12.0 | Worcester 274 | Glacial outwash | 9.65 | Worcester 274 | Glacial till | 18.5 |
| Ware 116 | Unconsolidated sand and gravel | 27.7 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Worcester 274 | Unconsolidated sand and gravel | 12.0 | Worcester 274 | Glacial outwash | 9.65 | Worcester 274 | Glacial till | 18.5 |
| Ware 116 | Unconsolidated sand and gravel | 27.7 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Worcester 274 | Unconsolidated sand and gravel | 12.0 | Worcester 274 | Glacial outwash | 9.65 | Worcester 274 | Glacial till | 18.5 |
| Ware 116 | Unconsolidated sand and gravel | 27.7 | Ware 116 | Unconsolidated sand and gravel | 20.0 | Ware 116 | Unconsolid | | | | | | | | | | |