

## Westborough Conservation Department Checklist for Detention Basins and Subsurface Infiltration Systems

<input type="checkbox"/>	Does the report contain a NRCS Soil Conservation Service Map?
<input type="checkbox"/>	Does the report identify the NRCS Soil Map unit for each basin?
<input type="checkbox"/>	Does the report explain any differences between the NRCS Soil Map and the soil hydrologic group (A, B, C, D) used for each basin location?
<input type="checkbox"/>	Does the report explain how Seasonal High Groundwater was estimated for each basin (mottling, direct observation, Frimpter method)?
<input type="checkbox"/>	Is there at least one test pit or boring for every 5,000 sf of basin area with a minimum of three subsurface investigations per basin within the basin footprint?
<input type="checkbox"/>	Is each test pit log recorded on a DEP Form 11 or equivalent?
<input type="checkbox"/>	Are all fields filled out for each test pit log?
<input type="checkbox"/>	If borings were drilled, does the total depth of the boring extend to a minimum depth of 20 feet below ground surface or until a limiting layer is encountered (boring refusal, bedrock [ledge])?
<input type="checkbox"/>	Does each log show the depth to Seasonal High Groundwater? If not, does it explain why the value is not included?
<input type="checkbox"/>	Does each log show the NRCS soil textural class for each layer?
<input type="checkbox"/>	Were the test pits/borings survey located (x, y, elevation)?
<input type="checkbox"/>	Is the bottom of each basin a minimum of 2 feet above Seasonal High Groundwater?
<input type="checkbox"/>	If the bottom of a basin less than 4 feet above Seasonal High Groundwater, was a mounding analysis performed?
<input type="checkbox"/>	Does the mounding analysis provide a Height vs Time graph showing the basin will drain in 72 hours post storm?
<input type="checkbox"/>	If fill is observed in soil logs, is the bottom of the basin in the fill layer?
<input type="checkbox"/>	Does the report explain how the presence of fill will be addressed?
<input type="checkbox"/>	Does the report explain how shallow bedrock beneath a basin will be addressed in the design?
<input type="checkbox"/>	Do the site plans show one monitoring well will be installed in the basin floor per every 5,000 square feet of basin floor with a minimum of three wells per basin?
<input type="checkbox"/>	Does the O & M plan provide a schedule for measuring the monitoring well water levels after each storm event of 2 years or greater duration?
<input type="checkbox"/>	If permeameter tests were done, were they done at the level where the basin bottom is proposed?

Massachusetts Department of Environmental Protection (DEP), 2008a, *Massachusetts Stormwater Handbook Volume 2 Chapter 2: Structural BMP Specifications for the Massachusetts Stormwater Handbook*. Pages 88-92.

<https://www.mass.gov/doc/massachusetts-stormwater-handbook-vol-2-ch-2-stormwater-best-management-practices/download>