

May 8, 2019 Annual Town Meeting

Article PB-5

Section 200-20

Article PB-5. To see if Town Meeting will amend Chapter 200 (the Stormwater Management Bylaw) Section 200-20 in regards to Specific Design Criteria to restrict the discharge of runoff originating in the Zone II or Zone III of the Dry Brook Public Water Supply Well from being diverted to places outside of said Zone II or Zone III as detailed in the Planning Board's Report to Town Meeting, or take any other action relative thereto.

The changes to be made in the Stormwater Management Bylaw are as follows:

1. Amend Section 200-20 - "Specific design criteria" of the South Hadley Stormwater Management Bylaw by inserting a new paragraph J would read as follows:

J. Protection of the public water supply (including retention of the recharge of the groundwater supply) is vital to the health and safety of the Town. Accordingly, the Stormwater management system and site grading must be designed to maximize recharge of Stormwater runoff into the ground water. No runoff originating within the DEP Zone II or DEP Zone III of the Dry Brook Public Water Supply Well is to be diverted out of said Zone II and Zone III, unless the Planning Board, based on the recommendations of an independent peer review engineer, determines that such 100% retention of runoff is not feasible due to the unique characteristics of the project site, grants a waiver to this requirement and the applicant provides what the Planning Board determines to be reasonable and appropriate mitigation.

OBJECTIVE: The proposed amendment seeks to reinforce efforts to protect and maintain the public water supply.

SUMMARY: This article makes changes in Section 200-20. The proposed amendment is a new design criteria that would apply to anyone proposing to disturb an acre or more of land within the area covered by Zone II or Zone III of the Dry Brook Public Water Supply Well.

ANNOTATED PROVISIONS: An annotated version of the existing provisions is provided in Attachment A. Letters and words proposed to be deleted are identified with "strike through markings" while letters and words proposed to be inserted are identified as "italicized, underlined".

**DRAFT PROPOSED AMENDMENT TO STORMWATER MANAGEMENT BYLAW
REGARDING RUNOFF RETENTION IN THE WATER SUPPLY RECHARGE AREAS**

§ 200-20 Specific design criteria.

Additional policy, criteria, and information, including specifications and design standards, may be found in the Stormwater Design Manual and the erosion and sediment control guidance documents and may also be utilized.

A. Infiltration systems.

- (1) Infiltration systems shall be equipped with clean stone and/or filter fabric adjacent to the soil or other sediment removal mechanisms;
- (2) Infiltration systems greater than three feet deep shall be located at least 10 feet from basement walls;
- (3) Due to the potential for groundwater contamination from dry wells, they shall not be an acceptable method for management of runoff containing pollutants;
- (4) Infiltration systems designed to handle runoff from commercial or industrial impervious parking areas shall be a minimum of 100 feet from any drinking water supply well;
- (5) Infiltration systems shall not be used as sediment control basins during construction unless specific plans are included to restore or improve the basin surface;
- (6) Infiltration basins shall be constructed with a three-foot minimum separation between the bottom of the structure and the seasonal high groundwater elevation, as determined by a certified soil evaluator; and
- (7) Provisions shall be made for safe overflow passage, in the event of a storm which exceeds the capacity of an infiltration system.

B. Retention and detention ponds shall be designed and constructed in accordance with the criteria set forth in the stormwater design manual.

C. The applicant shall give consideration in any plan to incorporating the use of natural topography and land cover such as natural swales and depressions as they exist prior to development to the degree that they can accommodate the additional flow of water.

D. The Planning Board shall give preference to the use of swales in place of the traditional use of curbs and gutters based on a case-by-case review of stormwater management plans by the Town Engineer and Planning Board.

E. The applicant shall consider public safety in the design of any stormwater facilities. The banks of detention, retention, and infiltration basins shall be sloped at a gentle grade into the water as a safeguard against personal injury, to encourage the growth of vegetation and to allow the alternate flooding and exposure of areas along the shore. Basins shall have a 4:1 slope to a depth two feet below the control elevation. Side slopes must be stabilized and planted with vegetation to prevent erosion and provide pollutant removal. The banks of detention and retention areas shall be designed with sinuous rather than straight shorelines so that the length of the shoreline is maximized, thus offering more space for the growth of vegetation.

F. Where a stormwater management plan involves direction of some or all runoff off of the site, it shall be the responsibility of the applicant to obtain from adjacent property owners any easements or other necessary property interests concerning flowage of water. Approval of a stormwater management plan does not create or affect any such rights.

DRAFT PROPOSED AMENDMENT TO STORMWATER MANAGEMENT BYLAW REGARDING RUNOFF RETENTION IN THE WATER SUPPLY RECHARGE AREAS

- G. All applicants for projects which involve the storage or use of hazardous or toxic chemicals, materials or waste shall incorporate handling and storage best management practices that prevent such chemicals, materials and waste from contaminating runoff discharged from a site into infiltration systems, receiving water bodies or storm drains, and shall include a list of such chemicals, materials and waste and their amounts in the application.
- H. Runoff from parking lots shall be treated by oil and water separators or other controls to remove oil and sediment;
- I. The basic design criteria methodologies, and construction specifications, subject to the approval of the Planning Board and Town Engineer, shall be those generally found in the most current edition of the stormwater design manual.

J. Protection of the public water supply (including retention of the recharge of the groundwater supply) is vital to the health and safety of the Town. Accordingly, the Stormwater management system and site grading must be designed to maximize recharge of Stormwater runoff into the ground water. No runoff originating within the DEP Zone II or DEP Zone III of the Dry Brook Public Water Supply Well is to be diverted out of said Zone II and Zone III, unless the Planning Board, based on the recommendations of an independent peer review engineer, determines that such 100% retention of runoff is not feasible due to the unique characteristics of the project site, grants a waiver to this requirement and the applicant provides what the Planning Board determines to be reasonable and appropriate mitigation.