

- ♦ Civil Engineering
 - Wastewater Treatment
- ♦ Environmental Engineering
- Construction Management
- ♦ Title 5 Services/Septic Design

At the request of the Department of Environmental Protection, we are submitting additional information relative to the Notice of Intent submitted for 11 Walnut Street in Freetown, Massachusetts. Items requested, with responses, are as follows:

1. Evidence of the stream at this location being intermittent rather than perennial.

Information was sent to DEP with regards to this item and they have since issued a file number. Following is the information submitted and accepted.

The USGS mapping for this site shows what could be a perineal stream on the property. However, this possibility is overcome by the provisions of the Wetlands Act, which states:

Notwithstanding 310 CMR 10.58(2)(a)1.a. through c., the issuing authority shall find that any stream is intermittent based upon a documented field observation that the stream is not flowing. A documented field observation shall be made by a competent source and shall be based upon an observation made at least once per day, over four days in any consecutive 12-month period, during a non-drought period on a stream not significantly affected by drawdown from withdrawals of water supply wells, direct withdrawals, impoundments, or other human-made flow reductions or diversions. Field observations made after December 20, 2002 shall be documented by field notes and by dated photographs or video.

This stream was observed on August 26, 2023 by Byron Holmes, P.E. and David Duranleau, wetlands specialist, and again on August 30, September 2, and September 6, 2023 by Byron Holmes. At all times the streambed was completely dry and did not evidence any recent flow. Photos of the streambed at the beginning and end of this four-day observation are noted on the following page.

All regions across Massachusetts were removed from drought status on July 14, 2023 following a mostly wet and cool June, with above normal precipitation and mostly normal to below-normal temperatures throughout much of the state. The declarations were the result of recommendations made by the state's Drought Management Task Force. No change to this designation has been made as of September 6, 2023. It is also noted that Bristol County has not been in any drought status since November 14, 2022.

Based on the above, this stream would be classified as intermittent and therefore is not subject to the Massachusetts Rivers Act. It does, however, come under the remainder of the Wetlands Act and is thus subject to those regulations with regards to driveway crossings, wetlands fill, and replication requirements.

2. Alternative analysis

The Wetlands Act allows for the construction and maintenance of a new roadway or driveway of minimum legal and practical width acceptable to the Planning Board, where reasonable alternative means of access from a public way to an upland area of the same owner is unavailable.

The proposal here is for the creation of two residential lots that meet the requirements of the town's zoning requirements. Per the Rules and Regulations of the Planning Board, such a development would require a paved roadway with a right of way width of 42 feet and a paved width of 24 feet. Also required would be a 5-foot-wide sidewalk. In meetings with the Planning Board, it was indicated that in this instance, the roadway could be substantially reduced in order to minimize the crossing and to keep the roadway as a private way. In effect, allowing a single reduced access to service the two lots.

The majority of the frontage for this location has an easement containing an existing double underground gas line owned by Enbridge, Algonquin Gas Transmission. In discussions with Enbridge, it was determined that no use within this easement for a parallel roadway would be allowed. It was determined, however, that a crossing of the lines at a perpendicular would be allowable if accomplished to their standards. This leaves one option for the location of the reduced construction roadway, which is an area located between the gas line easement and the north property line. It is noted that the easement is actively maintained by Enbridge and thus is not vegetated to the degree of the remainder of the wetlands.

To summarize, by obtaining probable concessions from the Planning Board and Enbridge, the location of the access roadway has been placed so as to not infringe to any large degree on the wetland area or the easement. Only 2,477 square feet of wetland resource area is to be filled. An equal area adjacent to the same complex is proposed to provide replication.

Wetland Replication Guidelines

The wetland replication area will be prepared and planted in accordance with the specifications included with this response. Finish grading to be in keeping with existing wetland elevation.

TECHNICAL SPECIFICATIONS - WETLANDS REPLICATION

1. GENERAL

- A. Provide all materials, equipment and labor necessary to complete the work as specified herein.
- B. The principal work of this section includes, but may not be limited to, the following:
 - (1) Removal of existing upland trees, vegetation and soil
 - (2) Spreading Topsoil
 - (3) Grading of new wetland area
 - (4) Preparations of areas for new vegetation
 - (5) Wetland replication planting

2. TOPSOIL AND LOAM

A. The excavated topsoil and loam removed from the site is to be used for wetlands replication.

GRADING AND SPREADING TOPSOIL:

- A. Remove all existing trees of 4-inch caliper or under and vegetation to an elevation of 12 inches below the adjacent wetland edge.
- B. Trees over 4 inches in caliper may be removed if it is found that leaving these trees is an impedance to creation of a suitable wetland replication area.
- C. Scarify and loosen subgrade.
- Topsoil shall not be placed until subgrade is in suitable condition and free of excessive moisture.
- E. Stockpiled loam shall be spread as required on all disturbed and bare areas to produce a total depth of 12 inches. Fill all depressions in existing grades with suitable fill material prior to spreading of topsoil, then shape and finish grade to depth of topsoil required.
- F. Area shall be progressively fine graded and machine and hand raked, with stockpiled loam added as required to correct depressions and other irregularities, to produce smooth and unbroken finish grades and the depth of topsoil required.
- G. Finish grades shall be equal to grade of adjacent existing wetlands.
- H. No lime, fertilizer, seed or other product is to be applied.
- Planting as noted in Wetland Replication Species table is required.

WETLAND REPLICATION SPECIES:

<u>No.</u>	Common Name	Scientific Name	<u>Size</u>
9	Red Maple	Acer Rubrem	4' - 5'
18	High-Bush Blueberries	Vaccinium corymbosum	2' - 3'
15	Sweet Pepperbush	Clethra alnifolia	2' - 3'

All Species are available from: New England Wetland Plants, Inc. 820 West St. Amherst, MA 01002

Phone: (413) 548-8000 Fax: (413) 549-4000 Web Site: www.newp.com