

NEW ENGLAND ENVIRONMENTAL SERVICES

Wetland Consulting Specialists Since 1983

Wetland Report

121 Upper Pattagansett Road
East Lyme, Connecticut

The proposal is to convert a portion of a wetland biofilter in order to renovate stormwater. The wetland biofilter is proposed in an isolated wetland along Pattagansett Road. The wetland is lightly wooded. The tree species in the wetland is Red Maple. The shrub species include Japanese Barberry, Mountain Laurel, Ironwood, and Witch Hazel. The herbaceous plant species include New York Fern, Sensitive Fern, Broom Sedge, White Wood Aster, and Green Briar. The vine species include Poison Ivy and Virginia Creeper.

The soil type in the wetland is Leicester. Leicester is a poorly drained soil formed in glacial outwash. The topsoil and subsoil has a fine sandy loam texture. The substratum (unweathered glacial till) has a gravelly sandy loam texture.

The wetland disturbance area for the construction of the wetland biofilter is 2,900 ft². The wetland biofilter area is 3,800 ft². The wetland biofilter is designed to retain one inch of water after a storm event.

Wetland Biofilter Details

1. Eight inches of topsoil will be placed in the wetland biofilter to provide a suitable soil medium for the establishment of herbaceous wetland plants. The topsoil will be placed loose and not compacted. The topsoil will have a texture of very fine sandy loam, fine sandy loam, or silt loam.
2. The following native herbaceous wetland plants will be installed in the wetland biofilter to improve water quality:

<u>Scientific Name</u>	<u>Common Name</u>	<u>Quantity</u>
<i>Carex lurida</i>	Lurid Sedge	200
<i>Carex stricta</i>	Tussock Sedge	150
<i>Juncus effusus</i>	Soft Rush	200
<i>Scirpus cyperinus</i>	Fringed Sedge	100
<i>Carex lupulina</i>	Hop Sedge	100
<i>Carex stipata</i>	Awl-fruited Sedge	150

The plants will be 2" plugs.

3. The following shrubs will be installed on the side slopes of the wetland biofilter:

<u>Scientific Name</u>	<u>Common Name</u>	<u>Quantity</u>	<u>Height</u>
<i>Amelanchier canadensis</i>	Shadblow	20	4'
<i>Cornus racemosa</i>	Gray Dogwood	10	4'
<i>Cornus sericea</i>	Red-osier Dogwood	15	4'
<i>Vaccinium corymbosum</i>	Highbush Blueberry	14	4'

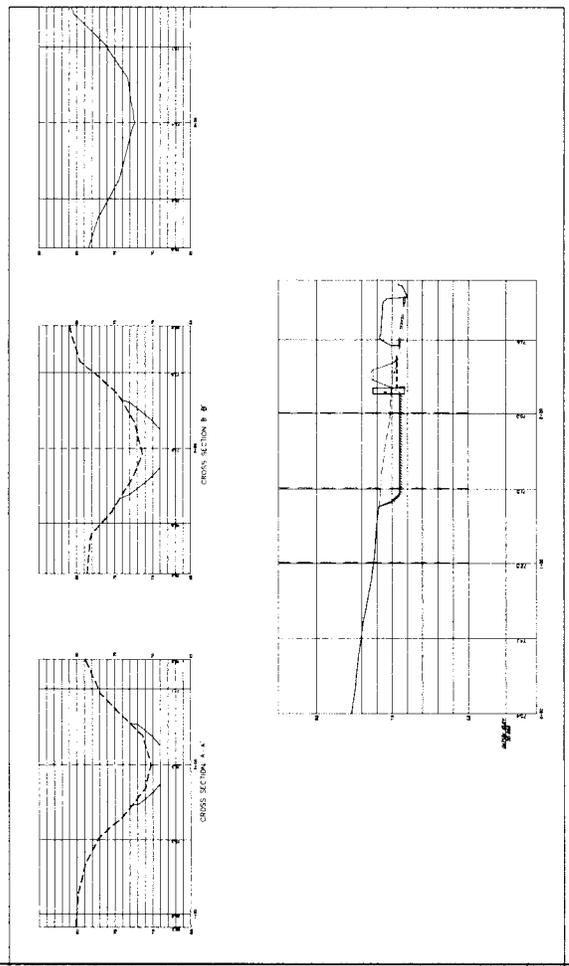
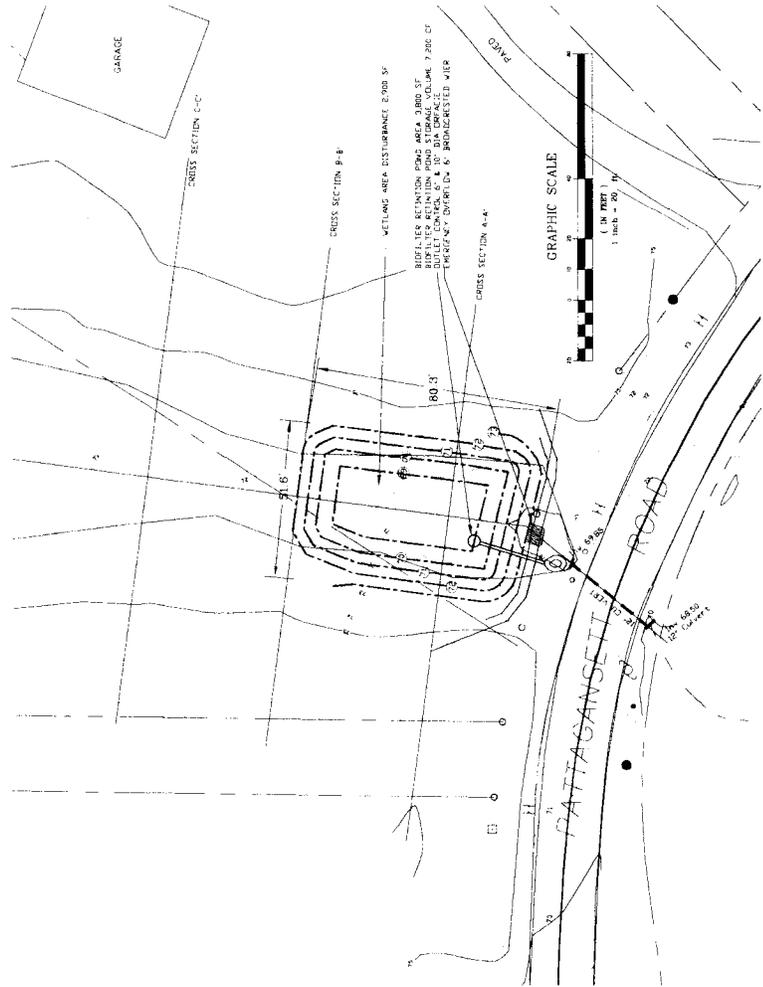
4. The location of the herbaceous wetland plants in the wetland biofilter and shrubs will be determined by Richard Snarski, Wetland Scientist, when the plants are installed.
5. The side slopes of the wetland biofilter will be seeded with "New England Conservation/Wildlife Mix", prepared by New England Wetland Plants, Inc., phone: 413-548-8000.
6. The wetland biofilter will be monitored after one full growing season. The monitoring report will address the success of the plantings. Recommendations will be provided for replanting if an 85 percent survival rate is not achieved. Photography will be included in the monitoring report. The monitoring report will be sent to the East Lyme Wetland Commission in September.

Prepared by:



R. Richard Snarski
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Professional Wetlands Scientist #1391
Consulting Botanist

August 16, 2021



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 Civil Engineering and Site Planning
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BIOFILTER RETENTION POND

SCALE: 1"=20' & as noted
 DATE: 05 AUG 2021
 JOB NUMBER: SHEET
 1 of 1

For Property
 Nottingham Hills
 Subdivision Phase V
 121 Upper Pattagansett Road
 EAST LYME, CT 06333

DESCRIPTION: BIOFILTER DESIGN, OUTLET CONTROL & CROSS SECTION