

EcoTec, Inc.

ENVIRONMENTAL CONSULTING SERVICES

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Riverfront Area Restoration Planting Specifications:

Lot 1A Prospect Street

Franklin, MA

September 6, 2023

Introduction: At the subject site, a Riverfront Area restoration of 3,060 sf is proposed. The subject area currently consists of a gravel drive that formerly provided access to the Varney sand and gravel mine located to the west. It is proposed to provide topsoil and native species plantings to restore the area to mimic natural conditions in the adjacent woodlands.

Proposed Protocol:

1. An erosion control barrier of straw wattle or compost sock will be installed across the front portion of the restoration area, near Prospect Street (may be temporarily moved for equipment access);
2. The surface of the restoration area will be scraped with the teeth of an excavator or backhoe bucket to loosen the surface soils;
3. A minimum of 6-inches of topsoil (obtained from other portions of the same larger property) will be spread throughout the restoration area. The topsoil may contain limited natural other materials including stones, roots, and branches;
4. Plantings will occur within the area, consisting of trees, shrubs, and herbaceous seeding, as detailed in the table below. Native species only are proposed to be planted. Plantings will be obtained from nursery stock, or may be transplanted from other portions of the property (outside of wetlands jurisdiction);
5. Stones, boulders, logs, and other coarse woody debris will be placed within the restoration area to mimic a natural forest floor;
6. Depending upon the weather and availability of a water source, the restoration area may be watered after planting;
7. Upon completion of the planting, a report detailing the restoration area condition, including photographs, will be provided to the Conservation Commission;
8. Near the end of the first and second growing seasons after planting, a status report documenting the condition of the restoration area will be provided to the Conservation Commission. The status report will include photos and an assessment of plant cover and any recommendations for mitigation, if warranted.

Proposed planting: Native woody species only are proposed to be planted. It is proposed that tree saplings, shrubs, and an herbaceous seed mix be planted, as outlined in the table below. Tree planting density is based on 15-feet on center (1 specimen per 225 sf yields 13.6); shrub

density is based on 7-feet on center (1 specimen per 49 sf yields 62.4). Herbaceous seed mix planting exceeds the supplier's application rate (1,50 sq ft/lb yields 2.4 pounds)

Woody vegetation will be planted throughout the restoration area in an irregular pattern, with shrubs in clusters of generally two to four plants, to mimic natural conditions. The plant list in Table 1, below is designed to allow for flexibility in obtaining plant stock, while ensuring species diversity.

Table 1: RFA Mitigation Area Planting Plan

SPECIES; SIZE; SPACING	NUMBER
Saplings; 4 to 6' height, min. 2-gallon container or balled & burlapped or transplanted from the property; White pine (<i>Pinus strobus</i>) Pitch pine (<i>Pinus rigida</i>) Red pine (<i>Pinus resinosa</i>) Red oak (<i>Quercus rubra</i>) White oak (<i>Quercus alba</i>)	15* *Comprised of at least three species, with a minimum of 3 specimens of each selected species
Shrubs; min 1 gal container or transplanted; Lowbush blueberry (<i>Vaccinium angustifolium</i>) Hazelnut (<i>Corylus americana</i>) Witch hazel (<i>Hamamelis virginiana</i>) Meadowsweet (<i>Spiraea latifolia</i>) Grey dogwood (<i>Cornus racemosa</i>) Sweet pepperbush (<i>Clethra alnifolia</i>) Maple leaved viburnum (<i>Viburnum acerifolium</i>)	65** **Comprised of at least four species, with a minimum of 10 specimens of each selected species
Herbaceous Seed Mix: New England Erosion Control/Restoration Mix for Dry Sites (see spec sheet appended)	3 pounds

Enc: Spec sheet: New England Erosion Control/Restoration Mix for Dry Sites

NEW ENGLAND WETLAND PLANTS, INC

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New England Erosion Control/Restoration Mix for Dry Sites

Botanical Name	Common Name	Indicator
<i>Elymus canadensis</i>	Canada Wild Rye	FACU+
<i>Festuca rubra</i>	Red Fescue	FACU
<i>Lolium multiflorum</i>	Annual Ryegrass	
<i>Lolium perenne</i>	Perennial Ryegrass	
<i>Schizachyrium scoparium</i>	Little Bluestem	FACU
<i>Panicum virgatum</i>	Switch Grass	FAC
<i>Sorghastrum nutans</i>	Indian Grass	UPL

PRICE PER LB. \$18.00 MIN. QUANTITY 5 LBS. TOTAL: \$90.00 APPLY: 35 LBS/ACRE :1250 sq ft/lb

The New England Erosion Control/Restoration Mix For Dry Sites provides an appropriate selection of native and naturalized grasses to ensure that dry and recently disturbed sites will be quickly revegetated and the soil surface stabilized. It is an appropriate seed mix for road cuts, pipelines, steeper slopes, and areas requiring quick cover during the ecological restoration process. The mix may be applied by hydro-seeding, by mechanical spreader, or on small sites it can be spread by hand. Lightly rake, or roll to ensure proper soil-seed contact. Best results are obtained with a Spring or late Summer seeding. Late Spring through Mid-Summer seeding will benefit from a light mulching of weed-free straw to conserve moisture. If conditions are drier than usual, watering will be required. Fertilization is not required unless the soils are particularly infertile. Preparation of a clean weed free seed bed is necessary for optimal results.

New England Wetland Plants, Inc. may modify seed mixes at any time depending upon seed availability. The design criteria and ecological function of the mix will remain unchanged. Price is \$/bulk pound, FOB warehouse, Plus SH and applicable taxes.