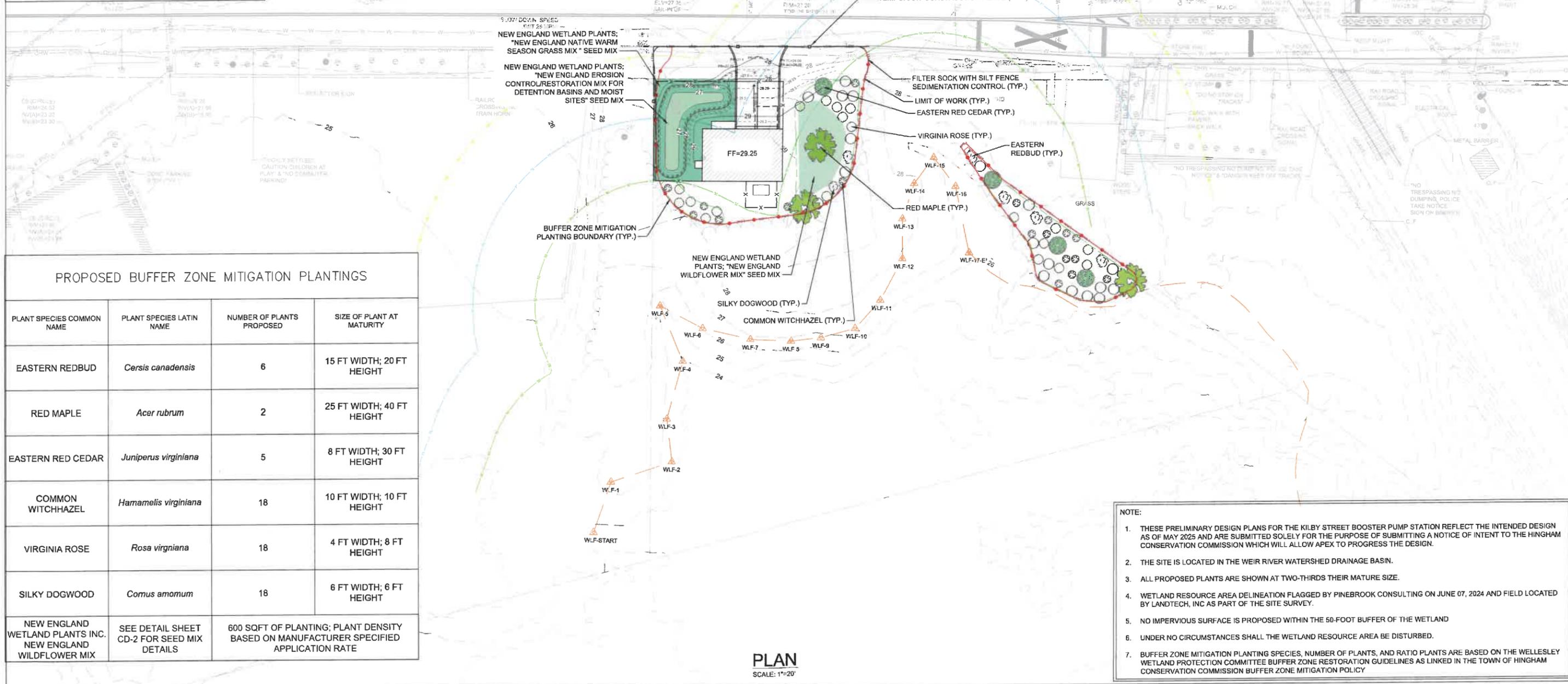


PROPOSED IMPERVIOUS SURFACE AREA WITHIN THE 100-FOOT BUFFER ZONE

SITE FEATURE	IMPERVIOUS AREA (SQFT)
BUILDING	672
GENERATOR PAD	30
CONCRETE LANDING PAD FOR BATHROOM DOORWAY	9
CONCRETE LANDING PAD FOR PUMP ROOM AND SEWER ROOM DOORWAYS	30
PARKING SPACES	609
TOTAL PROPOSED IMPERVIOUS AREA = 1,350 SQUARE FEET	
REQUIRED BUFFER MITIGATION POLICY PLANTING AREA 1:1 = 1,350 SQUARE FEET	
PROPOSED BUFFER MITIGATION POLICY PLANTING AREA = 2,416 SQUARE FEET	



PROPOSED BUFFER ZONE MITIGATION PLANTINGS

PLANT SPECIES COMMON NAME	PLANT SPECIES LATIN NAME	NUMBER OF PLANTS PROPOSED	SIZE OF PLANT AT MATURITY
EASTERN REDBUD	<i>Cercis canadensis</i>	6	15 FT WIDTH; 20 FT HEIGHT
RED MAPLE	<i>Acer rubrum</i>	2	25 FT WIDTH; 40 FT HEIGHT
EASTERN RED CEDAR	<i>Juniperus virginiana</i>	5	8 FT WIDTH; 30 FT HEIGHT
COMMON WITCHHAZEL	<i>Hamamelis virginiana</i>	18	10 FT WIDTH; 10 FT HEIGHT
VIRGINIA ROSE	<i>Rosa virginiana</i>	18	4 FT WIDTH; 8 FT HEIGHT
SILKY DOGWOOD	<i>Cornus amomum</i>	18	6 FT WIDTH; 6 FT HEIGHT
NEW ENGLAND WETLAND PLANTS INC. NEW ENGLAND WILDFLOWER MIX	SEE DETAIL SHEET CD-2 FOR SEED MIX DETAILS	600 SQFT OF PLANTING; PLANT DENSITY BASED ON MANUFACTURER SPECIFIED APPLICATION RATE	

- NOTE:
- THESE PRELIMINARY DESIGN PLANS FOR THE KILBY STREET BOOSTER PUMP STATION REFLECT THE INTENDED DESIGN AS OF MAY 2025 AND ARE SUBMITTED SOLELY FOR THE PURPOSE OF SUBMITTING A NOTICE OF INTENT TO THE HINGHAM CONSERVATION COMMISSION WHICH WILL ALLOW APEX TO PROGRESS THE DESIGN.
 - THE SITE IS LOCATED IN THE WEIR RIVER WATERSHED DRAINAGE BASIN.
 - ALL PROPOSED PLANTS ARE SHOWN AT TWO-THIRDS THEIR MATURE SIZE.
 - WETLAND RESOURCE AREA DELINEATION FLAGGED BY PINEBROOK CONSULTING ON JUNE 07, 2024 AND FIELD LOCATED BY LANDTECH, INC AS PART OF THE SITE SURVEY.
 - NO IMPERVIOUS SURFACE IS PROPOSED WITHIN THE 50-FOOT BUFFER OF THE WETLAND
 - UNDER NO CIRCUMSTANCES SHALL THE WETLAND RESOURCE AREA BE DISTURBED.
 - BUFFER ZONE MITIGATION PLANTING SPECIES, NUMBER OF PLANTS, AND RATIO PLANTS ARE BASED ON THE WELLESLEY WETLAND PROTECTION COMMITTEE BUFFER ZONE RESTORATION GUIDELINES AS LINKED IN THE TOWN OF HINGHAM CONSERVATION COMMISSION BUFFER ZONE MITIGATION POLICY

PLAN
SCALE: 1"=20'

MARK	DATE	DESCRIPTION

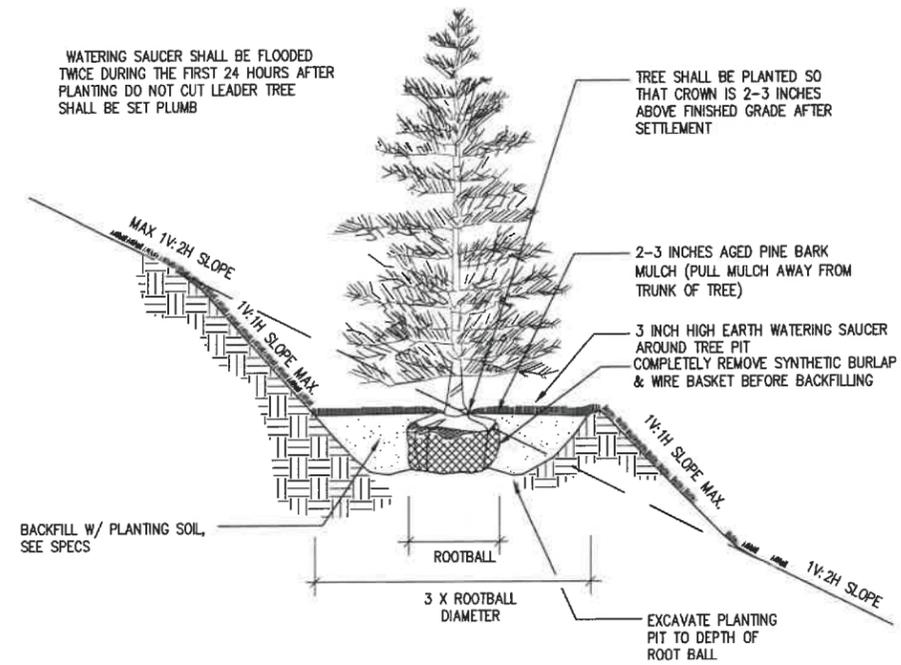
Scale	1" = 20'
Date	MAY 2025
Job No.	22012525
Designed by	JDH/AKS
Drawn by	JDH/AKS
Checked by	RPN
Approved by	RPN

THIS LINE IS ONE INCH LONG WHEN PLOTTED AT FULL SCALE ON A 22" X 34" DRAWING

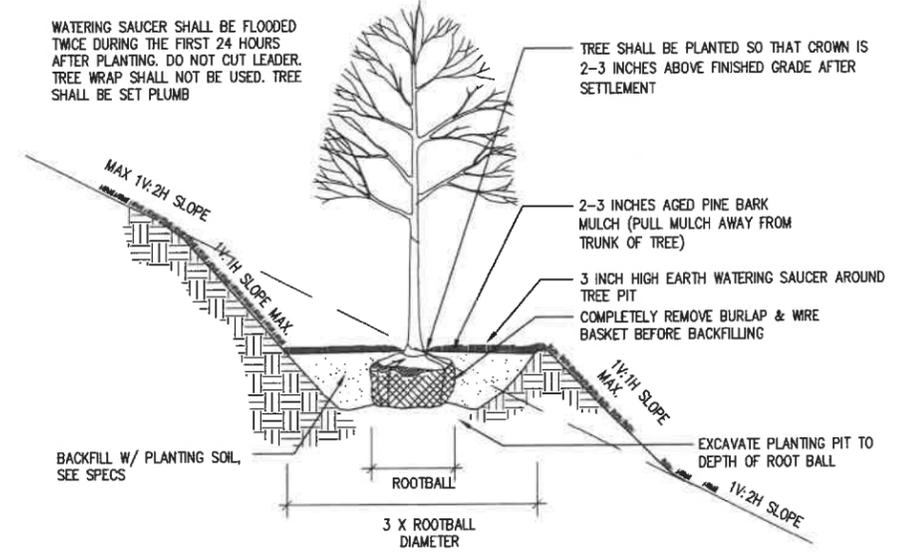
KILBY STREET BOOSTER PUMP STATION
WEIR RIVER WATER SYSTEM

BUFFER ZONE MITIGATION AND STORMWATER MANAGEMENT

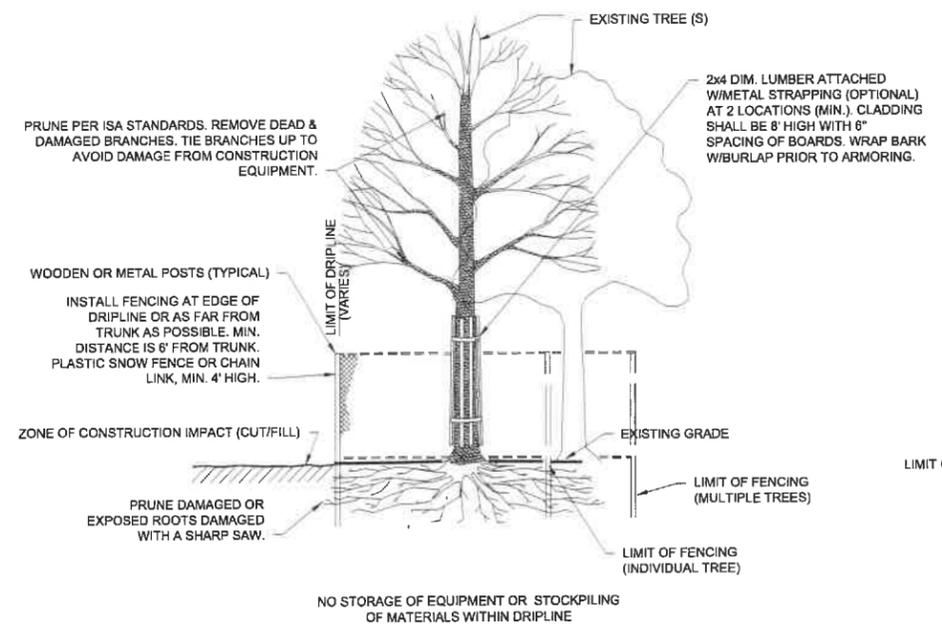
FOR PERMITTING
Sheet No.
C-3



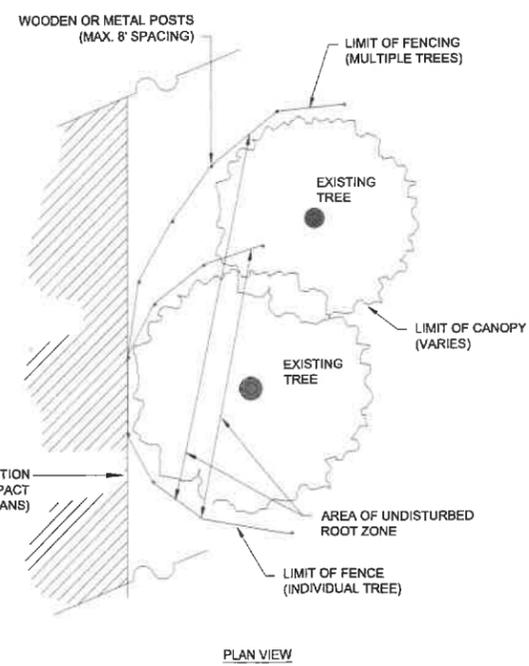
EVERGREEN TREE PLANTING
SCALE: N.T.S.



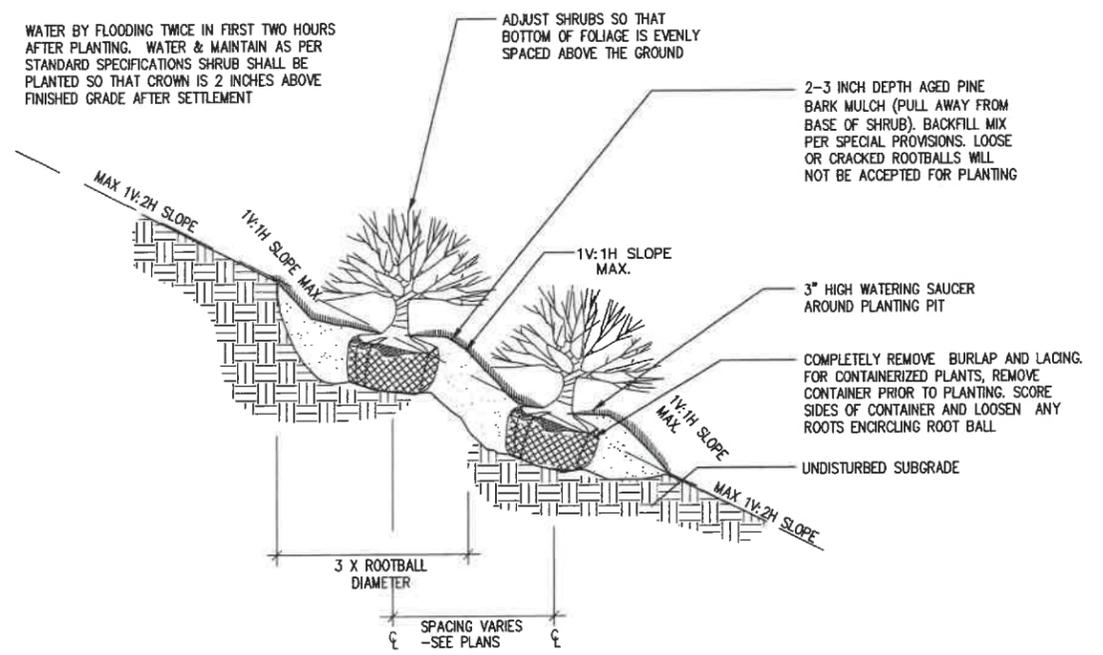
CONIFEROUS TREE PLANTING
SCALE: N.T.S.



TREE PROTECTION DETAIL
SCALE: N.T.S.



PLAN VIEW



CONTAINERIZED SHRUB PLANTING
SCALE: N.T.S.



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**KILBY STREET BOOSTER PUMP STATION
WEIR RIVER WATER SYSTEM**

CIVIL CONSTRUCTION DETAILS I

FOR PERMITTING
Sheet No.
CD-1

Drawing file: C:\Users\blodan\OneDrive\Temp\Pub\Pub\145136\Civil\Detail\Sheets.dwg Plot Date: May 20, 2025 2:08pm

NEW ENGLAND WETLAND PLANTS, INC

14 Pearl Lane South Hadley, MA 01075
 PHONE: 413-548-8000 FAX 413-549-4000
 EMAIL: INFO@NEWP.COM WEB ADDRESS: WWW.NEWP.COM

New England Erosion Control/Restoration Mix For Detention Basins and Moist Sites

Botanical Name	Common Name	Indicator
<i>Elymus riparius</i>	Riverbank Wild Rye	FACW
<i>Schizachyrium scoparium</i>	Little Bluestem	FACU
<i>Festuca rubra</i>	Red Fescue	FACU
<i>Andropogon gerardii</i>	Big Bluestem	FAC
<i>Panicum virgatum</i>	Switch Grass	FAC
<i>Vernonia noveboracensis</i>	New York Ironweed	FACW+
<i>Agrivis perennans</i>	Upland Bentgrass	FACU
<i>Bidens frondosa</i>	Beggar Ticks	FACW
<i>Eupatorium maculatum (Erechtium maculatum)</i>	Spotted Joe Pye Weed	OBL
<i>Eupatorium pefoliatum</i>	Boneset	FACW
<i>Aster novae-angliae (Symphyotrichum novae-angliae)</i>	New England Aster	FACW-
<i>Scirpus cyperinus</i>	Wool Grass	FACW
<i>Juncus effusus</i>	Soft Rush	FACW+

APPLY: 35 LBS/ACRE :1250 sq ft/lb

The New England Erosion Control/Restoration Mix for Detention Basins and Moist Sites contains a selection of native grasses and wildflowers designed to colonize generally moist, recently disturbed sites where quick growth of vegetation is desired to stabilize the soil surface. It is an appropriate seed mix for ecologically sensitive restorations that require stabilization as well as long-term establishment of native vegetation. This mix is particularly appropriate for detention basins that do not hold standing water. Many of the plants in this mix can tolerate infrequent inundation, but not constant flooding. The mix may be applied by hand, by mechanical spreader, or by hydro-seeder. After sowing, lightly rake, roll or cultipack to insure good seed-to-soil contact. Best results are obtained with a Spring or late Summer seeding. Late Fall and Winter dormant seeding requires an increase in the application rate. A light mulching of clean, weed-free straw is recommended.

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.

RETENTION POND SEED MIX SPECIES DETAIL

NEW ENGLAND WETLAND PLANTS, INC

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New England Wildflower Mix

Botanical Name	Common Name	Indicator
<i>Schizachyrium scoparium</i>	Little Bluestem	FACU
<i>Sorghastrum nutans</i>	Indian Grass	LUPL
<i>Chamaecrista fasciculata</i>	Partridge Pea	FACU
<i>Elymus virginicus</i>	Virginia Wild Rye	FACW-
<i>Elymus canadensis</i>	Canada Wild Rye	FACU+
<i>Festuca rubra</i>	Red Fescue	FACU
<i>Asclepias tuberosa</i>	Butterfly Milkweed	NI
<i>Vernonia noveboracensis</i>	New York Ironweed	FACW+
<i>Oenothera biennis</i>	Evening Primrose	FACU-
<i>Aster novae-angliae (Symphyotrichum novae-angliae)</i>	New England Aster	FACW-
<i>Rudbeckia hirta</i>	Black Eyed Susan	FACU-
<i>Solidago juncea</i>	Early Goldenrod	
<i>Eupatorium fistulosum (Erechtium fistulosum)</i>	Hollow-Stem Joe Pye Weed	FACW
<i>Aster laevis (Symphyotrichum lateriflorum)</i>	Starved/Calico Aster	FACW

APPLY: 23 LBS/ACRE :1900 sq ft/lb

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.

HERBACEOUS PLANTINGS SEED MIX SPECIES DETAIL

NEW ENGLAND WETLAND PLANTS, INC

14 Pearl Lane South Hadley, MA 01075
 PHONE: 413-548-8000 FAX 413-549-4000
 EMAIL: INFO@NEWP.COM WEB ADDRESS: WWW.NEWP.COM

New England Native Warm Season Grass Mix

Botanical Name	Common Name	Indicator
<i>Schizachyrium scoparium</i>	Little Bluestem	FACU
<i>Andropogon gerardii</i>	Big Bluestem	FAC
<i>Elymus virginicus</i>	Virginia Wild Rye	FACW-
<i>Sorghastrum nutans</i>	Indian Grass	LUPL
<i>Festuca rubra</i>	Red Fescue	FACU
<i>Panicum virgatum</i>	Switch Grass	FAC

APPLY: 23 LBS/ACRE :1900 sq ft/lb

The New England Native Warm Season Grass Mix contains a broad spectrum of native warm season grasses to insure that a variety of the species will survive in the sandy, droughty conditions typically found along roadsides, gravel mine reclamation areas, and other low-fertility well drained soil conditions. This mix is somewhat slow to germinate and establish during the first year of planting, but it will produce good cover by the end of the second growing season to produce long-living native stands. The cool season grasses have been added as a "starter" seed for erosion control. This mix has excellent heat and drought tolerance, and grows best in well drained soils. Warm season grasses provide excellent year round cover and food for wildlife, particularly as winter cover for small animals. This mix can be applied by hydroseeding, by mechanical spreader or by hand. Best results are obtained with a mid-late Spring seeding.

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.

NATIVE GRASS SEED MIX SPECIES DETAIL



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Date	MAY 2025
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**KILBY STREET BOOSTER PUMP STATION
 WEIR RIVER WATER SYSTEM**

CIVIL CONSTRUCTION DETAILS II

FOR PERMITTING

Sheet No.

CD-2