

WETLAND ALTERATION AND REPLICATION SCHEDULE:
PROPOSED WETLAND ALTERATION:
 AREA = 3,815 SQ. FT. (AREA UNDER BRIDGE SPAN IS NOT INCLUDED)
PROPOSED WETLAND REPLICATION:
 AREA = 1,658 + 2,820 = 4,478 SQ. FT.
WETLAND REPLICATION AREA PLANTING SCHEDULE AND LEGEND

- RED MAPLE (ACER RUBRUM, FAC) - HEIGHT 4' TO 6' PLANTED 10'-15" O.C. 11 EA
- HIGH BUSH BLUEBERRY (VACCINIUM CORYMBOSUM FAC-) - HEIGHT 18" TO 24" PLANTED 6'-8" O.C. 40 EA
- SPICEBUSH (NORTHERN LINDERA BENZONINATA FAC-) - HEIGHT 18" TO 24" PLANTED 6'-8" O.C. 40 EA
- WINTERBERRY (COMMON ILEX VERTICILLATA FAC+) - HEIGHT 18" TO 24" PLANTED 6'-8" O.C. 40 EA.

□ GROUND COVER - SEE PLANTING NOTE

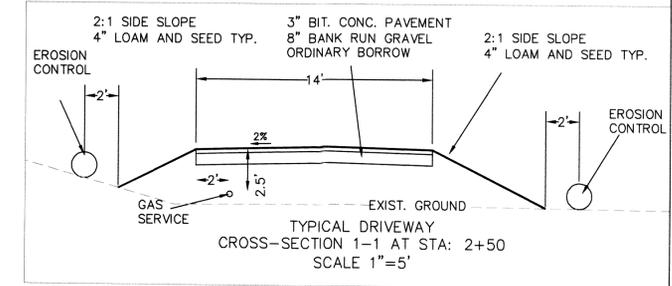
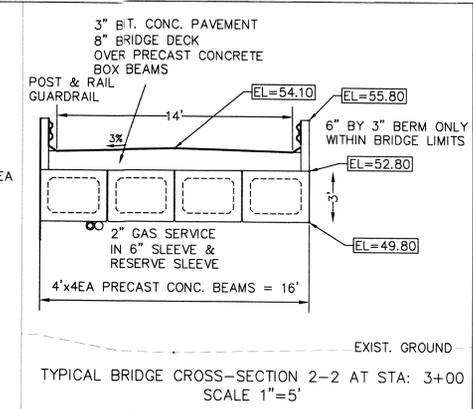
WETLAND REPLICATION AREA GROUND COVER PLANTING NOTE:
 APPLY NEW ENGLAND WETMIX (WETLAND SEED MIX) AS PROVIDED BY NEW ENGLAND WETLAND PLANTS, INC.
 820 WEST ST AMHERST MA 01002 (413) 548-8000 WWW.NEWP.COM
 APPLICATION RATE OF 1 (ONE) POUND PER 2,500 SF;
 SEE ATTACHED MANUFACTURER'S SPECIFICATIONS FOR DETAILS.

New England Wetmix (Wetland Seed Mix)

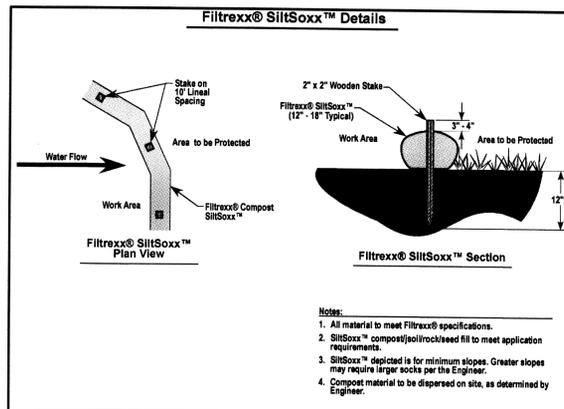
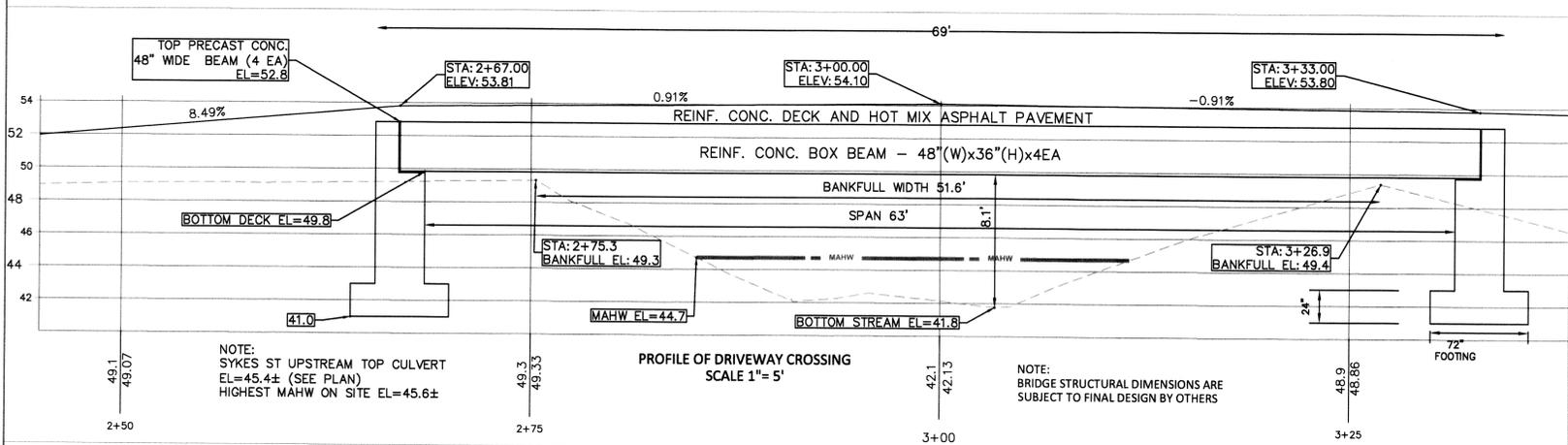
Botanical Name	Common Name	Indicator
<i>Carex lurida</i>	Lurid Sedge	OBL
<i>Carex scoparia</i>	Blunt Broom Sedge	FACW
<i>Verbena hastata</i>	Blue Vervain	FACW
<i>Carex lupulina</i>	Hop Sedge	OBL
<i>Scirpus atrovirens</i>	Green Bulrush	OBL
<i>Panicum rigidulum</i>	Redtop Panic Grass	FACW+
<i>Deschampsia cespitosa</i>	Tufted Hairgrass	FACW
<i>Bidens aristata</i>	Ticksseed Sunflower/Bur Marigold	FACW
<i>Eleocharis palustris</i>	Creeping Spike Rush	OBL
<i>Juncus effusus</i>	Soft Rush	FACW+
<i>Carex crinita</i>	Fringed Sedge	OBL
<i>Mimulus ringens</i>	Square Stemmed Monkey Flower	OBL
<i>Aster puniceus</i>	Swamp Aster	OBL
<i>Eupatorium perfoliatum</i>	Bonaset	FACW
<i>Glyceria canadensis</i>	Rattlesnake Grass	OBL
<i>Asclepias incarnata</i>	Swamp Milkweed	OBL
<i>Helenium autumnale</i>	Common Sneezeweed	FACW+
<i>Penthorum sedoides</i>	Ditch Stonecrop	OBL

PRIOR TO ANY CONSTRUCTION LOCATION OF DRIVEWAY, REPLICATION AND ALTERATION AREAS, AND EROSION CONTROL LINES SHALL BE STAKED OUT AND APPROVED BY THE CONSERVATION COMMISSION.

- CONSTRUCTION SEQUENCE:**
- INSTALL EROSION CONTROL AS SHOWN ON THE PLAN AND/OR AS DIRECTED BY THE CONSERVATION COMMISSION. EROSION CONTROL SHALL BE APPROVED BY THE CONSERVATION COMMISSION IN ORDER TO PROCEED WITH CONSTRUCTION.
 - EXCAVATE REPLICATION AREA 6" TO 8" BELOW THE PROPOSED GRADE.
 - EXCAVATE WETLAND AREAS TO BE FILLED AND TRANSFER AND SPREAD EXCAVATED MATERIAL INTO REPLICATION AREAS. EXCAVATED MATERIAL MAY BE AUGMENTED BY HYDRIC SOILS IF DIRECTED.
 - FINE GRADE WETLAND REPLICATION AREAS AND, IF REQUIRED, BRING HYDRIC SOIL IN ORDER TO MEET DESIGN FINISH GRADE AND IN ORDER TO PROVIDE AT LEAST 6" TO 8" OF TOP HYDRIC SOIL.
 - PLANT WETLAND REPLICATION AREAS AS PER WETLAND REPLICATION DETAIL.
 - CONSTRUCT DRIVEWAY UP TO BROOK WEST BANK FOR CONSTRUCTION EQUIPMENT ACCESS. CLEARING LIMITS NEXT TO BROOK CROSSING MAY BE MODIFIED FOR CONSTRUCTION PURPOSES.
 - PROCEED TO OPEN BOX CULVERT CONSTRUCTION AS FOLLOWS:
 - INSTALL FLOATING BOOM ALONG THE WATER EDGE
 - INSTALL SILTSOXX INSIDE FLOATING BOOM; INSTALLATION TO BE APPROVED BY THE CONSERVATION COMMISSION
 - MECHANICALLY EXCAVATE AND CAST IN PLACE CONCRETE FOOTINGS AND WINGWALLS ON THE WEST BANK OF THE BROOK
 - HAND EXCAVATE AND CAST IN PLACE CONCRETE FOOTINGS AND WINGWALLS ON THE EAST BANK OF THE BROOK
 - INSTALL PRE-CAST CONCRETE BOXBEAMS AND DECK



- STREAM CROSSING STANDARDS**
- TYPE OF CROSSING**
 - GENERAL: SPANS (BRIDGES, 3-SIDED BOX CULVERTS, OPEN-BOTTOM CULVERTS OR ARCHES) ARE STRONGLY PREFERRED.
 - OPTIMUM: USE A BRIDGE.
 - EMBEDMENT**
 - ALL CULVERTS SHOULD BE EMBEDDED (SUNK INTO STREAM) A MINIMUM OF 2 FEET, AND ROUND PIPE CULVERTS AT LEAST 25%.
 - IF PIPE CULVERTS CANNOT BE EMBEDDED THIS DEEP, THEN THEY SHOULD NOT BE USED.
 - WHEN EMBEDMENT MATERIAL INCLUDES ELEMENTS >15 INCHES IN DIAMETER, EMBEDMENT DEPTHS SHOULD BE AT LEAST TWICE THE D84 (PARTICLE WIDTH LARGER THAN 84% OF PARTICLES) OF THE EMBEDMENT MATERIAL. STANDARD DOES NOT APPLY. CULVERT IS NOT PROPOSED.
 - CROSSING SPAN**
 - GENERAL: SPANS CHANNEL WIDTH (A MINIMUM OF 1.2 TIMES THE BANKFULL WIDTH OF THE STREAM).
 - OPTIMUM: SPANS THE STREAMBED AND BANKS (AT LEAST 1.2 TIMES BANKFULL WIDTH) WITH SUFFICIENT HEADROOM TO PROVIDE DRY PASSAGE FOR WILDLIFE.
 - BANKFULL WIDTH AT THE CROSSING = 51.6'
 - PROPOSED SPAN = 63' - OUTSIDE THE STREAMBED AND BANKS; RATIO = 63'/51.6' = 1.22
 - OPENNESS**
 - GENERAL: OPENNESS RATIO (CROSS-SECTIONAL AREA/CROSSING LENGTH) OF AT LEAST 0.82 FEET (0.25 METERS). THE CROSSING SHOULD BE WIDE AND HIGH RELATIVE TO ITS LENGTH.
 - OPTIMUM: OPENNESS RATIO OF AT LEAST 1.64 FEET (0.5 METERS) AND MINIMUM HEIGHT OF 6 FEET. IF CONDITIONS SIGNIFICANTLY REDUCE WILDLIFE PASSAGE NEAR A CROSSING (E.G., STEEP EMBANKMENTS, HIGH TRAFFIC VOLUMES, AND PHYSICAL BARRIERS), MAINTAIN A MINIMUM HEIGHT OF 8 FEET (2.4 METERS) AND OPENNESS RATIO OF 2.46 FEET (0.75 METERS).
 - PROPOSED CROSS-SECTIONAL AREA = 255 SF PROPOSED CROSSING LENGTH = 16'
 - OPENNESS = CROSS-SECTIONAL AREA/CROSSING LENGTH = 15.9'
 - HEIGHT = 8' - EXCEEDS HEIGHT OF THE UPSTREAM CULVERT AT SYKES ST
 - SUBSTRATE**
 - NATURAL BOTTOM SUBSTRATE SHOULD BE USED WITHIN THE CROSSING AND IT SHOULD MATCH THE UPSTREAM AND DOWNSTREAM SUBSTRATES. THE SUBSTRATE AND DESIGN SHOULD RESIST DISPLACEMENT DURING FLOODS AND MAINTAIN AN APPROPRIATE BOTTOM DURING NORMAL FLOWS.
 - NO CHANGE IN SUBSTRATE IS PROPOSED - CROSSING SPANS THE STREAM FROM OUTSIDE MAHW
 - WATER DEPTH AND VELOCITY**
 - WATER DEPTHS AND VELOCITIES ARE COMPARABLE TO THOSE FOUND IN THE NATURAL CHANNEL AT A VARIETY OF FLOWS.
 - NO CHANGE IN WATER DEPTH AND VELOCITIES IS EXPECTED - CROSSING SPANS THE STREAM FROM OUTSIDE MAHW AND FROM OUTSIDE BANKFULL ELEVATION



SHEET 2 OF 2

DRIVEWAY CROSSING DETAILS TO ACCOMPANY NOTICE OF INTENT

CURT ST MAP 21 LOT 23 SEEKONK, MA
 APPLICANT: JMV REALTY C/O JOSEPH VIEIRA

PROPERTY OWNERS:
 (1):KAREN LEARY; (2):RONALD SPIEGEL; (3):CHRISTA J. FORGUE; (4):H. CURT SPIEGEL; (5):STEPHANIE MAHER;
 C/O ATTY. THOMAS J. MCANDREW ONE TURKS HEAD PLACE SUITE 205 PROVIDENCE RI 02903

DATE: JUNE 26, 2014 REVISED 12/8/14
 SCALE AS NOTED
 GORODETSKY ENGINEERING LLC
 422 NORTH MAIN STREET
 FALL RIVER MASS. 02720
 (508) 324-1163

