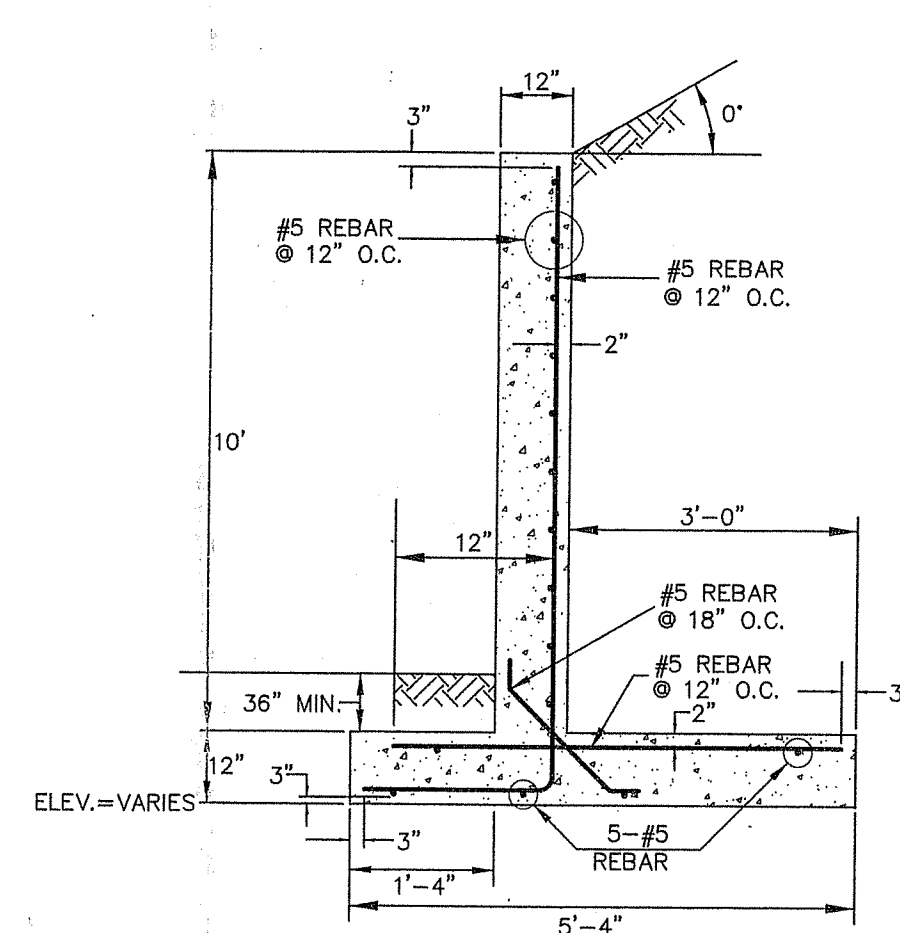


EROSION CONTROL & SOIL STABILIZATION PROGRAM

- CIRCLED NOTES APPLY**
- 1 DENUDE SLOPES SHALL NOT BE UNATTENDED OR EXPOSED FOR EXCESSIVE PERIODS OF TIME SUCH AS THE INACTIVE WINTER SEASON.
 - 2 ALL DISTURBED SLOPES EITHER NEWLY CREATED OR EXPOSED PRIOR TO OCTOBER 15, SHALL BE SEEDED OR PROTECTED BY THAT DATE FOR ANY WORK COMPLETED DURING EACH CONSTRUCTION PERIOD.
 - 3 THE TOPSOIL SHALL HAVE A SANDY LOAM TEXTURE RELATIVELY FREE OF SUBSOIL MATERIAL, STONES, ROOTS, LUMPS OF SOIL, TREE LIMBS, TRASH OR CONSTRUCTION DEBRIS AND SHALL CONFORM WITH R.I. STANDARD SPECIFICATION M. 20.
 - 4 THE SEED MIX SHALL BE INOCULATED WITHIN 24 HOURS, BEFORE MIXING AND PLANTING, WITH APPROPRIATE INOCULUM FOR EACH VARIETY.
 - 5 THE DESIGN MIX SHALL BE COMPRISED OF THE FOLLOWING:
PERMANENT SEEDING MIXTURES:
A -LAWNS:
FOR SUN OR SHADED; MODERATE MANAGEMENT SUGGESTED (IMPROVED U.R.I. NUMBER 2 LAWN SEED MIXTURE).
RED FESCUE LBS/ACRE LBS/1000SF .40 .90
KENTUCKY BLUEGRASS * 40 .90
PERENNIAL RYEGRASS ** 20 .45
* 50% (20 LBS/ACRE) MUST BE NAMED OR IMPROVED VARIETY, SUCH AS AMERICAN KENTUCKY BLUEGRASS.
** MUST BE NAMED OR IMPROVED VARIETY, SUCH AS YORKTOWN II PERENNIAL RYEGRASS.
B. -SOD WATERWAYS, DRAINAGE DITCHES, DETENTION BASINS, ETC.
LBS/ACRE LBS/1000SF
CREEPING RED FESCUE 20 .45
TALL FESCUE OR
REED CANARYGRASS * 20 .45
* USE REED CANARY GRASS WHERE MOWING IS NOT REQUIRED.
SUCH AS AMERICAN KENTUCKY BLUEGRASS.
SOURCE: USDA, SOIL CONSERVATION SERVICE
C. -SAND DUNES, BLOWING SAND
NO./ACRE NO./1000SF
'CAPE' AMERICAN 58,500 1,345
BEACHGRASS CULMS
D. -GENERAL PURPOSE LAWN
LBS/ACRE LBS/1000SF
RED FESCUE 75 1.75
KENTUCKY BLUEGRASS 15 .35
COLONIAL BENTGRASS 5 .11
PERENNIAL RYEGRASS 5 .11
SOURCE: U.R.I. AGRICULTURAL EXPERIMENT STATION BULLETIN 432 KINGSTON, R.I. (R.I. DEPT. OF TRANSPORTATION 'PARK' SEED MIXTURE).
E. -GENERAL PURPOSE :
MINIMUM MAINTENANCE; UNMOWED OR INFREQUENTLY MOWED
LBS/ACRE LBS/1000SF
RED FESCUE 75 1.75
KENTUCKY BLUEGRASS 'EXETER' 5 .11
PERENNIAL RYEGRASS 5 .11
BIRDFOOT TREFLOIL 'EMPIRE' 15 .35
*USE INOCULATED SEED; MAY INCLUDE 20% HARD SEED.
SOURCE: U.R.I. AGRICULTURAL EXPERIMENT STATION BULLETIN 432 KINGSTON, R.I. (R.I. DEPT. OF TRANSPORTATION 'SLOPE' SEED MIXTURE).
F. -BUFFER ZONES ADJACENT TO WETLANDS OR SURFACE WATERS AND WETLAND AREAS
LBS/ACRE LBS/1000SF
REED CANARY GRASS 20 .45
LADINO CLOVER*
*USE INOCULATED SEED.
SEEDING DATES:
EARLY SPRING OR LATE SUMMER SEEDING IS RECOMMENDED; MID-SUMMER SEEDING IS NOT RECOMMENDED. SPRING SEEDINGS OF ALL SEED MIXES WITH LEGUMES IS RECOMMENDED, HOWEVER LATE SUMMER SEEDINGS PRIOR TO SEPTEMBER 1 CAN BE MADE. THE RECOMMENDED SEEDING DATES ARE: APRIL 1 THROUGH JUNE 15 AND AUGUST 15 THROUGH SEPTEMBER 30. THE FINAL SEEDING DATES MAY BE EXTENDED 15 DAYS IN NEWPORT COUNTY.

- 6 TEMPORARY TREATMENTS SHALL CONSIST OF A HAY, STRAW OR FIBER MULCH OR PROTECTIVE COVERS SUCH AS A MAT OR FIBER LINING (BURLAP, JUTE, FIBERGLASS NETTING, EXCELSIOR BLANKETS). THEY SHALL BE INCORPORATED INTO THE WORK AS WARRANTED OR AS ORDERED BY THE ENGINEER.
- 7 HAY OR STRAW APPLICATIONS SHOULD BE IN THE AMOUNT OF 3000-4000 LBS/AC.



⑧ ALL HAYBALES OR TEMPORARY PROTECTION SHALL REMAIN IN PLACE UNTIL AN ACCEPTABLE STAND OF GRASS OR APPROVED GROUND COVER IS ESTABLISHED. IF NEEDED, TEMPORARY SEEDING CAN HELP TO MINIMIZE EROSION. A TEMPORARY SEEDING GUIDE MUST BE INCLUDED AS A REFERENCE. THE FOLLOWING SPECIES ARE RECOMMENDED:

SPECIES	LBS/ACRE	LBS/1,000 SQ. FT.	SEEDING DATES
ANNUAL RYEGRASS	60	1.5	MARCH 1 - JUNE 15 & AUGUST 1 - OCTOBER 1
PERENNIAL RYEGRASS	60	1.5	MARCH 1 - JUNE 15 & AUGUST 1 - OCTOBER 1
SUDAN GRASS	40	1.0	MAY 15 - AUGUST 15
MILLET	40	1.0	MAY 15 - AUGUST 15
WINTER RYE	100	2.5	AUGUST 15 - OCTOBER 1

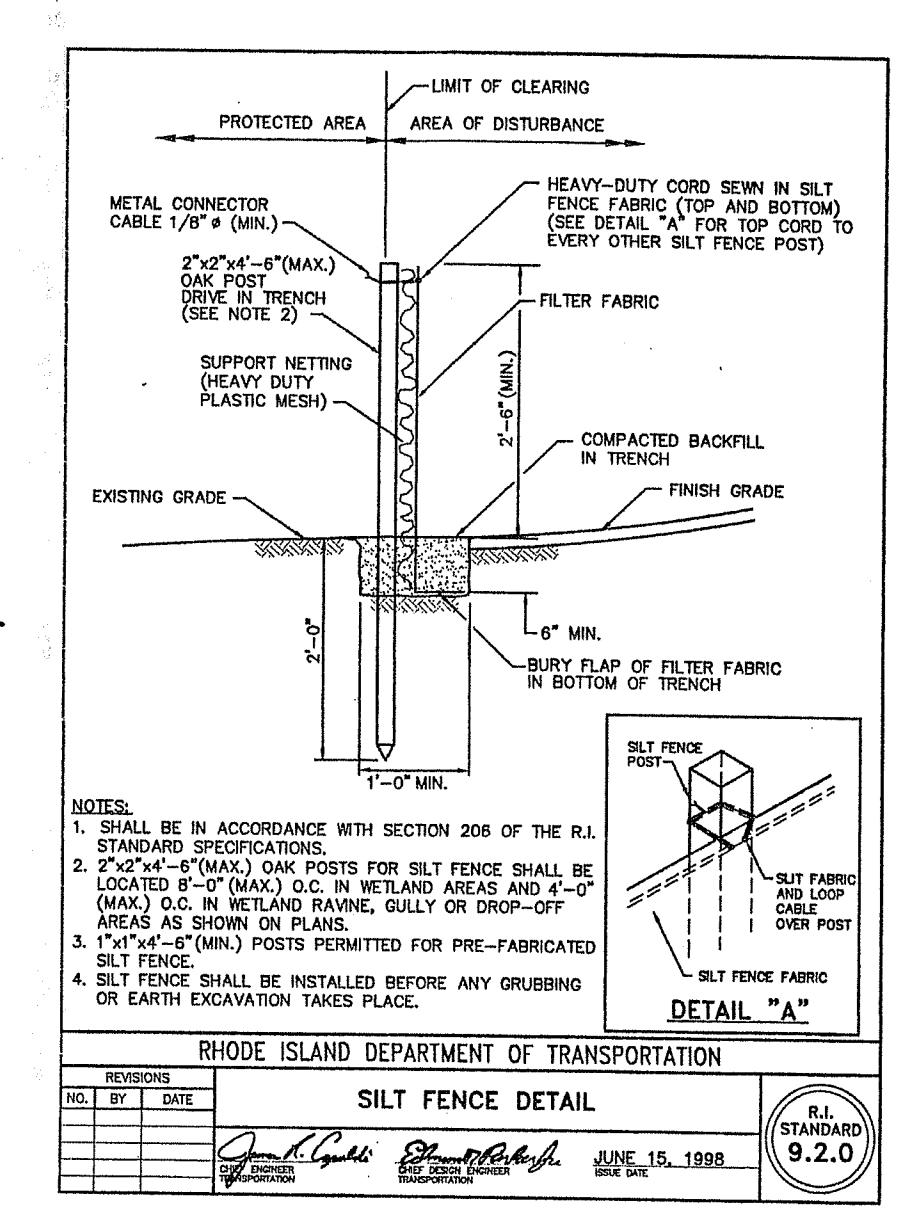
- 9 THE CONTRACTOR MUST REPAIR AND OR RESEED ANY AREAS THAT DO NOT DEVELOP WITHIN THE PERIOD OF ONE YEAR AND HE SHALL DO SO AT NO ADDITIONAL EXPENSE.
- 10 THE NORMAL ACCEPTABLE SEASONAL SEEDING DATES ARE APRIL 1ST THRU OCTOBER 15TH.
- 11 ALL FILL SHALL BE THOROUGHLY COMPACTED UPON PLACEMENT IN STRICT CONFORMANCE WITH THE R.I.D.O.T. STANDARD SPECIFICATIONS SECTION 202.
- 12 STABILIZATION OF ONE FORM OR ANOTHER AS DESCRIBED ABOVE SHALL BE ACHIEVED WITHIN 15 DAYS OF FINAL GRADING.
- 13 STOCKPILES OF TOPSOILS SHALL NOT BE LOCATED NEAR WATERWAYS OR WETLANDS THEY SHALL HAVE SIDE SLOPES NO GREATER THAN 30% AND STOCKPILES SHALL ALSO BE SEEDED AND/OR STABILIZED.
- 14 ON BOTH STEEP AND LONG SLOPES CONSIDERATION SHOULD BE GIVEN TO "CRIMPING" OR "TRACKING" TO TACK DOWN MULCH APPLICATIONS.
- 15 REFERENCE THE SEDIMENTATION CONTROL PROGRAM AND ORDER OF PROCEDURE FOR PROPER COORDINATION.
- 16 ANY DETENTION/RETENTION FACILITIES AND THE DRAINAGE SYSTEM SHALL RECEIVE ONE FINAL CLEANING PRIOR TO ACCEPTANCE OF THE OVERALL PROJECT BY THE OWNER. SEDIMENTS SHALL BE DISPOSED OF IN A PROPER MANNER.

OPERATION & MAINTENANCE PLAN

- 1 EXTREME CARE SHALL BE EXERCISED SO AS TO PREVENT ANY UNSUITABLE MATERIAL FROM ENTERING THE WETLANDS.
- 2 ALL DISTURBED AREAS SUBJECT TO EROSION TENDENCIES WHETHER THEY ARE NEWLY FILLED OR EXCAVATED SHALL RECEIVE SUITABLE SLOPE PROTECTION.
- 3 DURING CONSTRUCTION, THE CONTRACTOR AND/OR DEVELOPER SHALL BE RESPONSIBLE FOR MAINTAINING DRAINAGE AND RUNOFF FLOW DURING STORMS AND PERIODS OF RAINFALL.
- 4 CARE SHALL BE TAKEN SO AS TO PREVENT ANY UNSUITABLE MATERIAL FROM ENTERING EITHER EXISTING OR PROPOSED DRAINAGE OR SEWER STRUCTURES.
- 5 SEDIMENTATION CONTROL DEVICES SHALL BE INSPECTED PERIODICALLY AND AFTER PERIODS OF RAINFALL. SUCH DEVICES SHALL BE REPAIRED OR REPLACED AS NEEDED.
- 6 CARE SHALL BE TAKEN SO AS NOT TO PLACE "REMOVED SEDIMENTS" WITHIN THE PATH OF EXISTING, NEWLY CREATED (BOTH TEMPORARY AND PERMANENT) OR PROPOSED WATERCOURSES OR THOSE AREAS SUBJECT TO STORM WATER FLOW.
- 7 ADDITIONAL HAYBALES OR SANDBAGS SHALL BE LOCATED AS CONDITIONS WARRANT OR AS DIRECTED BY THE ENGINEER.
- 8 ALL SEDIMENTS SHALL BE REMOVED FROM THE DETENTION BASINS OR STRUCTURES WHEN DIRECTED BY THE ENGINEER OR THE LOCAL CONSERVATION COMMISSION.
- 9 REFERENCE THE "STATE OF RHODE ISLAND STORMWATER MANAGEMENT" GUIDANCE FOR INDIVIDUAL SINGLE-FAMILY RESIDENTIAL LOT DEVELOPMENT."
- 10 THE CONTACT PERSON IN RESPONSIBLE CHARGE IS SUSAN SNOW, TEL. 401-783-0576.

ORDER OF PROCEDURE

- 1 IMMEDIATELY UPON COMPLETION OF THE CLEARING AND GRUBBING OPERATION AND PRIOR TO ANY ROUGH GRADING, TEMPORARY HAYBALES OR SANDBAGS SHALL BE PLACED OUTSIDE THE LIMITS OF CONSTRUCTION AS PER THE PLANS (I.E. ALONG NEW ROADWAYS, STREAMBANKS, CRITICAL AREAS, ETC.)
- 2 ALL EROSION AND SEDIMENTATION STRUCTURES SHALL BE PERIODICALLY CLEANED AND MAINTAINED AS PER THE RESPECTIVE PROGRAMS DURING THE CONSTRUCTION.
- 3 IF WORK PROGRESS IS TO BE INTERRUPTED AT ANY TIME, REFERENCE EROSION AND SEDIMENTATION PROGRAMS FOR TEMPORARY CONTROL.
- 4 TEMPORARY HAYBALES AND SANDBAGS ALONG AND AT THE END OF ROADWAYS MAY BE REMOVED AFTER FINAL SOIL STABILIZATION HAS BEEN ACHIEVED AND APPROVED.
- 5 HAYBALES LOCATED AT DRAINAGE OUTLETS MUST REMAIN UNTIL SUCH TIME THAT A DESIRABLE STAND OF GRASS OR GROUND COVER HAS BEEN ESTABLISHED AND THE PROJECT RECEIVES A FAVORABLE APPROVAL FOR FINAL ACCEPTANCE FROM THE ENGINEER.
- 6 ONLY THOSE AREAS SHOWN ON THE ATTACHED SITE PLAN, THE LIMITS OF WHICH ARE DESIGNATED BY THE EXTENT OF THE PROPOSED CONTOURS, ARE SUBJECT TO THE EROSION CONTROL MEASURES SPECIFIED ABOVE.



Kindly be advised that this Permit is not equivalent to a verification of the type or extent of freshwater wetlands on site.

WETLAND/SERC PLAN PREPARED FOR SUSAN B. SNOW ASSESSOR'S PLAT 9 LOT 21 SITUATED IN THE TOWN OF SOUTH KINGSTOWN, RHODE ISLAND

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS AS SPECIFIED IN THE LETTER OF APPROVAL DATED JUN 23 2021 FILE # 21-0085
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL APPROVED PLANS MUST BE AT CONSTRUCTION SITE
Justin D. Wencsek

NO.	REVISION	DATE

WILLIAM D. DOWELL
No. 4217
REGISTERED PROFESSIONAL ENGINEER

Environmental Management
APR 01 2021
Office of Water Resources

DOWELL
DOWELL ENGINEERING,
CIVIL & ENVIRONMENTAL ENGINEERS
SURVEYORS & LAND PLANNERS
P.O. BOX 1684 • 3949 OLD POST ROAD
CHARLESTOWN, RHODE ISLAND 02813
(401) 364-1027

JOB NO. 2704	DRAWN BY: R.L.C.
DWG. NO. 2704-SERC	CHECKED: W.D.D.
SCALE: 1"=20'	APPROVED: W.D.D.
SHEET: 1	DATE: MAR. 25, 2021

1 OF 1 SHEETS