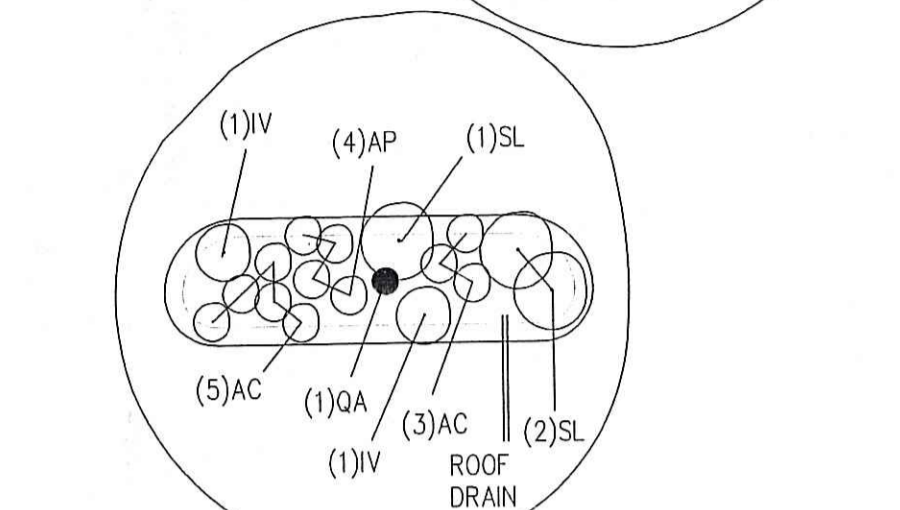
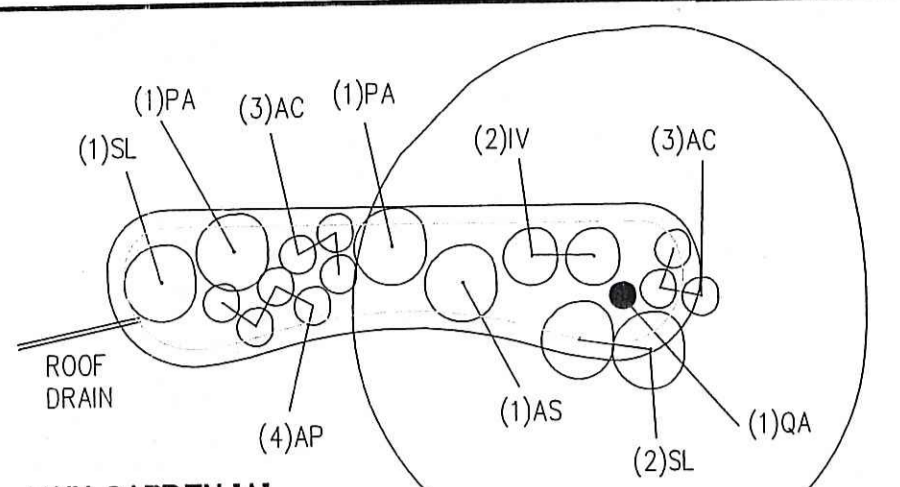
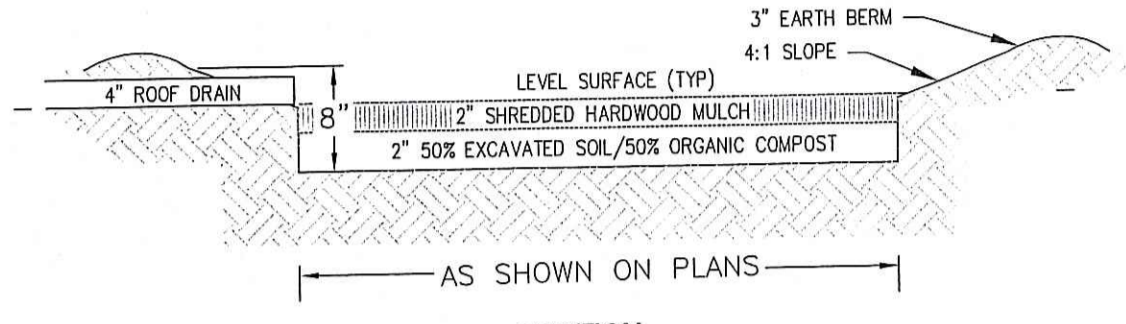


NOTES:

1. RAIN GARDEN AMENDED SOIL SHALL CONTAIN 50% EXCAVATED SOIL AND 50% ORGANIC COMPOST.
2. EACH RAIN GARDEN SHALL HAVE A BOTTOM AREA AS SHOWN ON THE PLAN.
3. RAIN GARDEN PLANT LIST:

KEY	QTY	BOTANICAL NAME	COMMON NAME	SIZE
AC	14	ACHILLEA "CORONATION GOLD"	YELLOW YARROW	#1
AS	1	AMELANCHIER STOLONIFERA	(RUNNING SERVICEBERRY)	#3
AP	8	ASTER PUNICEUS	(SWAMP ASTER)	#1
IV	4	IRIS VERSICOLOR	(BLUE FLAG IRIS)	#1
PA	2	PANICUM AMARUM "DEWEY BLUE"	(SWITCH GRASS)	#1
QA	2	QUERCUS-ALBA	(WHITE OAK)	1"-1.5" B&B
SL	6	SPIREA LATIFOLIA	(MEADOWSWEET)	#3

4. EACH RAIN GARDEN SHALL BE NO CLOSER THAN 10' TO BUILDING FOUNDATIONS AND 15' TO THE OWTS.



SECTION RAIN GARDEN DETAILS NTS

SEDIMENTATION CONTROL PROGRAM:

1. EXTREME CARE SHALL BE EXERCISED SO AS TO PREVENT ANY SEDIMENTS FROM ENTERING THE STATE HIGHWAY OR ADJOINING PROPERTIES.
2. BANKS OR SLOPES OVER 5% SHALL BE SEEDED AS SOON AS POSSIBLE AND SHALL BE PROTECTED WITH A HAY, STRAW OR FIBER MULCH.
3. DURING CONSTRUCTION, THE CONTRACTOR AND/OR DEVELOPER SHALL BE RESPONSIBLE FOR MAINTAINING DRAINAGE AND RUNOFF FLOW DURING STORMS AND PERIODS OF RAINFALL.
4. SEDIMENTATION CONTROL DEVICES SHALL BE INSPECTED CLOSELY AND MAINTAINED PROMPTLY AFTER EACH RAINFALL.
5. 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 SUBJECTED TO STORM WATER FLOW.
6. ADDITIONAL HAYBALES, SILT FENCE OR SANDBAGS SHALL BE LOCATED AS CONDITIONS WARRANT OR AS DIRECTED BY THE ENGINEER.
7. REFERENCE THE "R.I. SOIL EROSION AND SEDIMENT CONTROL HANDBOOK" PREPARED BY THE U.S. DEPT. OF AGRICULTURE, SOIL CONSERVATION SERVICE, 1989, AS A GUIDE.

EROSION CONTROL and SOIL STABILIZATION PROGRAM:

1. DENUDE SLOPES SHALL NOT BE LEFT EXPOSED FOR EXCESSIVE PERIODS OF TIME.
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 YEAR.
3. 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.
4. HAY OR STRAW APPLICATIONS SHOULD BE IN THE AMOUNT OF 2000 LBS/ACRE.
5. ALL HAYBALES OR TEMPORARY PROTECTION SHALL REMAIN IN PLACE UNTIL AN ACCEPTABLE STAND OF GRASS OR APPROVED GROUND COVER IS ESTABLISHED.
6. 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 RHODE ISLAND STANDARD SPECIFICATION M.18.02.
7. THE SEED MIX SHALL BE INOCULATED WITHIN TWENTY FOUR (24) HOURS, BEFORE MIXING AND PLANTING, WITH APPROPRIATE INOCULUM FOR EACH VARIETY.
8. THE DESIGN MIX FOR TEMPORARY EROSION CONTROL AND SOIL STABILIZATION SHALL BE COMPRISED OF THE FOLLOWING:

TYPE	% BY WEIGHT
CREeping RED FESCUE	70
ASTORIA BENTGRASS	5
BIRDFOOT TREEFOIL	15
PERENNIAL RYEGRASS	10

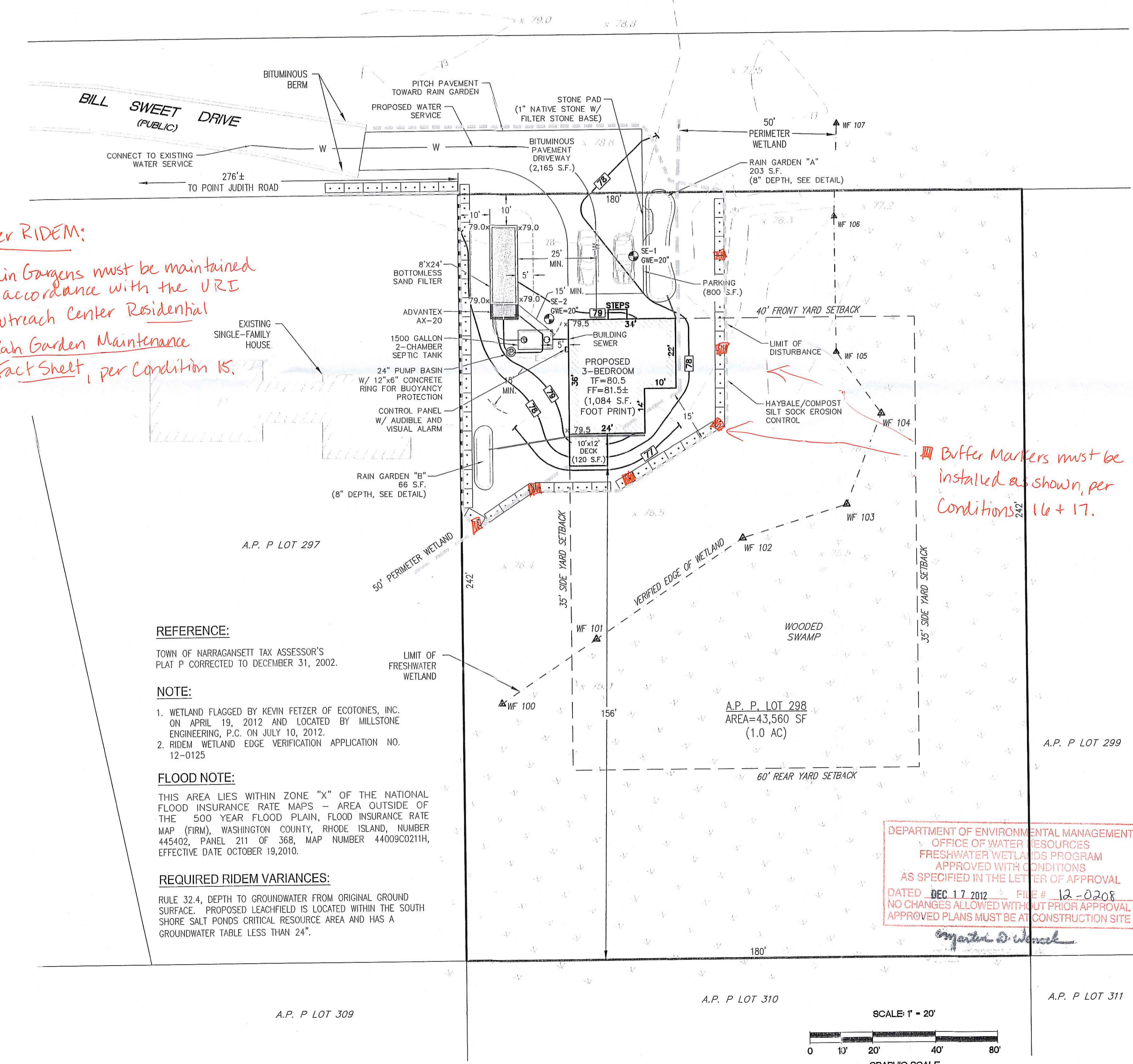
APPLICATION RATE 100 LBS/ACRE

9. THE CONTRACTOR MUST REPAIR AND/OR RESEED ANY AREAS THAT DO NOT DEVELOP WITHIN THE PERIOD OF ONE (1) YEAR, AND HE SHALL DO SO AT NO ADDITIONAL EXPENSE.
10. THE NORMAL ACCEPTABLE SEASONAL SEEDING DATES ARE APRIL 1ST THROUGH OCTOBER 15TH.
11. STABILIZATION OF ONE FORM OR ANOTHER AS DESCRIBED ABOVE SHALL BE ACHIEVED WITHIN FIFTEEN (15) DAYS OF FINAL GRADING.
12. STOCKPILES OF TOPSOIL SHALL NOT BE LOCATED NEAR WATERWAYS OR FLOOD PLAINS. THEY SHALL HAVE SIDE SLOPES NO GREATER THAN THIRTY PERCENT (30%) AND STOCKPILES SHALL ALSO BE SEEDED AND/OR STABILIZED AND COMPLETELY ENCLOSED WITH A CONTINUOUS LINE OF STAKED HAYBALES AND/OR SILTFENCE. (SEE DETAIL)
13. ON BOTH STEEP AND LONG SLOPES, CONSIDERATION SHOULD BE GIVEN TO "CRIMPING" OR "TRACKING" TO TACK DOWN MULCH APPLICATIONS.

OWNER/APPLICANT:
 ROBERT B. GATES, EXECUTOR OF
 ESTATE OF HELEN W. DEMAYO
 262 SILVER LAKE AVENUE
 WAKEFIELD, RI 02879

PLAN LEGEND

- PROPERTY LINE
- ABUTTING PROPERTY LINE
- RIGHT OF WAY LINE
- EXISTING EDGE OF PAVEMENT
- EXISTING BUILDING
- EXISTING BUILDING SETBACK LINE
- DELINEATED WETLAND
- WETLAND FLAG NUMBER
- WETLAND SETBACK
- UTILITY POLE
- SOIL EVALUATION LOCATION



*Per RIDEM:
 Rain Gardens must be maintained
 in accordance with the URI
 Outreach Center Residential
 Rain Garden Maintenance
 Fact Sheet, per Condition 15.*

*Buffer Markers must be
 installed as shown, per
 Conditions 16 + 17.*

REFERENCE:

TOWN OF NARRAGANSETT TAX ASSESSOR'S PLAT P CORRECTED TO DECEMBER 31, 2002.

NOTE:

1. WETLAND FLAGGED BY KEVIN FETZER OF ECOTONES, INC. ON APRIL 13, 2012 AND LOCATED BY MILLSTONE ENGINEERING, P.C. ON JULY 10, 2012.
2. RIDEM WETLAND EDGE VERIFICATION APPLICATION NO. 12-0125

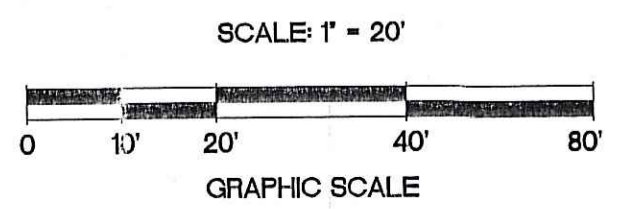
FLOOD NOTE:

THIS AREA LIES WITHIN ZONE "X" OF THE NATIONAL FLOOD INSURANCE RATE MAPS - AREA OUTSIDE OF THE 500 YEAR FLOOD PLAIN, FLOOD INSURANCE RATE MAP (FIRM), WASHINGTON COUNTY, RHODE ISLAND, NUMBER 445402, PANEL 211 OF 368, MAP NUMBER 44009C0211H, EFFECTIVE DATE OCTOBER 19, 2010.

REQUIRED RIDEM VARIANCES:

RULE 32.4, DEPTH TO GROUNDWATER FROM ORIGINAL GROUND SURFACE. PROPOSED LEACHFIELD IS LOCATED WITHIN THE SOUTH SHORE SALT PONDS CRITICAL RESOURCE AREA AND HAS A GROUNDWATER TABLE LESS THAN 24".

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF WATER RESOURCES
 FRESHWATER WETLANDS PROGRAM
 APPROVED WITH CONDITIONS
 AS SPECIFIED IN THE LETTER OF APPROVAL
 DATED DEC 17 2012 FILE # 12-0208
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE



NO.	DATE	REVISION

DEC - 4 2012
 City of Wakefield, MA

JEFFREY C. HANSON
 No. 5238
 REGISTERED PROFESSIONAL ENGINEER

MILLSTONE ENGINEERING, P.C.
 CIVIL ENGINEERING • LANDSCAPE ARCHITECTURE • LAND PLANNING
 250 CENTREVILLE ROAD, BUILDING #12, WARWICK, RHODE ISLAND 02886 P. (401)951-3344 F. (401)951-3303

OWTS, SITE, AND GRADING PLAN

BILL SWEET DRIVE

A.P. P. LOT 298
 BILL SWEET DRIVE
 NARRAGANSETT, RI

PREPARED FOR:
 ROBERT B. GATES

SCALE 1" = 20'
 DECEMBER, 2012

Drawn By: RJB
 Checked By: JCH

Sheet

1
 of 2

FILE NO.: 12.83.120

