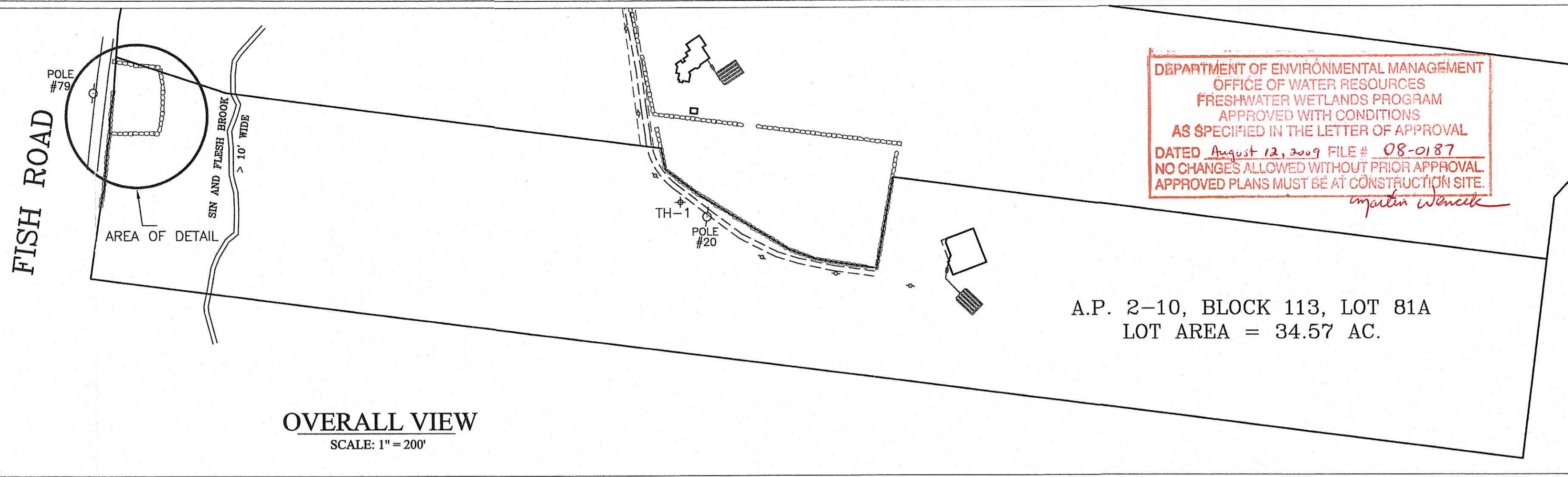


LOCUS MAP  
NOT TO SCALE

**OWNER/CONTACT:**  
JOHN E. FERRELL  
1248 FISH ROAD  
TIVERTON, RI 02878  
PHONE: 625-5943



OVERALL VIEW  
SCALE: 1" = 200'

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
APPROVED WITH CONDITIONS  
AS SPECIFIED IN THE LETTER OF APPROVAL  
DATED August 12, 2009 FILE # 08-0187  
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
APPROVED PLANS MUST BE AT CONSTRUCTION SITE  
*Angela Wozniak*

A.P. 2-10, BLOCK 113, LOT 81A  
LOT AREA = 34.57 AC.

**EROSION CONTROL & SOIL STABILIZATION PROGRAM**

- DENUDED SLOPES SHALL NOT BE UNATTENDED OR EXPOSED FOR EXCESSIVE PERIODS OF TIME SUCH AS THE INACTIVE WINTER SEASON.
- 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.
- 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.
- THE SEED MIX SHALL BE INOCULATED WITHIN 24 HOURS, BEFORE MIXING AND PLANTING, WITH APPROPRIATE INOCULUM FOR EACH VARIETY.
- THE DESIGN MIX SHALL BE COMPRISED OF THE FOLLOWING:

PERMANENT SEEDING MIXTURES:

MIXTURE	% BY WT.	SEEDING DATES
RED FESCUE	75	APRIL 1 - JUNE 15
KENTUCKY BLUEGRASS	15	AUG. 15 - OCT. 15
COLONIAL BENTGRASS	5	
PERENNIAL RYEGRASS	5	
TOTAL 100#/ACRE		

PERMANENT SEEDING MIXTURES:

MIXTURE	% BY WT.	SEEDING DATES
RED FESCUE	75	APRIL 1 - JUNE 15
PERENNIAL RYEGRASS	5	AUG. 15 - OCT. 15
COLONIAL BENTGRASS	5	
BIRDFOOT TREFOIL	15	
TOTAL 100#/ACRE		

- A - MOWED AREA: ALL FLAT OR SLOPES LESS THAN 3:1
- B - UNMOWED AREA OR INFREQUENTLY MOWED: FLAT OR SLOPES GREATER THAN 3:1
- TEMPORARY TREATMENTS SHALL CONSIST OF A HAY, STRAW OR FIBER MULCH OR PROTECTIVE COVERS SUCH AS A MAT OF FIBER LINING (BURLAP, JUTE, FIBERGLASS NETTING, EXCLOSURE BLANKETS). THEY SHALL BE INCORPORATED INTO THE WORK AS WARRANTED OR AS ORDERED BY THE ENGINEER.

SPECIES	LIBS/ACRE	LIBS/1,000 SQ. FT.	SEEDING DATES
ANNUAL RYEGRASS	60	1.5	MAR. 15 - JUNE 15
PERENNIAL BUDEN GRASS	40	1.0	MAY 15 - AUGUST 15
MILLET	40	1.0	MAY 15 - AUGUST 15
WINTER RYE	120	3.0	AUGUST 15 - JUNE 15
ORTS	120	3.0	MAR. 15 - JUNE 15
WEEPING LOVEGRASS	20	0.5	MAY 1 - JUNE 30

- 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.
- THE NORMAL ACCEPTABLE SEASONAL SEEDING DATES ARE APRIL 1ST THRU OCT. 15TH.
- ALL FILL SHALL BE THOROUGHLY COMPACTED UPON PLACEMENT IN STRICT CONFORMANCE WITH THE R.I.D.P.W. STANDARD SPECIFICATIONS SECTION 202.
- STABILIZATION OF ONE FORM OR ANOTHER AS DESCRIBED ABOVE SHALL BE ACHIEVED WITHIN 15 DAYS OF FINAL GRADING.
- 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.
- ON BOTH STEEP AND LONG SLOPES CONSIDERATION SHOULD BE GIVEN TO "CRIMPING" OR "TRACKING" TO TACK DOWN MULCH APPLICATIONS.
- REFERENCE THE "RHODE ISLAND EROSION AND SEDIMENT CONTROL HANDBOOK" PREPARED BY THE U.S. DEPT. OF AGRICULTURE, SOIL CONSERVATION SERVICE, 1989, WITH ANY AMENDMENTS, AS A GUIDE.

**SEDIMENTATION CONTROL PROGRAM**

- ALL DISTURBED AREAS SUBJECT TO EROSION TENDENCIES WHETHER THEY ARE NEWLY FILLED OR EXCAVATED SHALL RECEIVE SUITABLE SLOPE PROTECTION.
- FOR MAINTAINING DRAINAGE AND RUNOFF FLOW DURING STORMS AND PERIODS OF RAINFALL, THE CONTRACTOR SHALL MAINTAIN EXISTING OR PROPOSED DRAINAGE OR SEWER STRUCTURES.
- CARE SHALL BE TAKEN SO AS TO PREVENT ANY UNSUITABLE MATERIAL FROM ENTERING EITHER EXISTING OR PROPOSED DRAINAGE OR SEWER STRUCTURES.
- SEDIMENTATION CONTROL DEVICES SHALL BE INSPECTED PERIODICALLY AND AFTER PERIODS OF RAINFALL. SUCH DEVICES SHALL BE REPAIRED OR REPLACED AS NEEDED.
- 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.
- ADDITIONAL HAYBALES, SILT FENCE OR SANDBAGS SHALL BE LOCATED AS CONDITIONS WARRANT OR AS DIRECTED BY THE ENGINEER.
- REFERENCE THE "RHODE ISLAND EROSION AND SEDIMENT CONTROL HANDBOOK" PREPARED BY THE U.S. DEPT. OF AGRICULTURE, SOIL CONSERVATION SERVICE, 1989, WITH ANY AMENDMENTS, AS A GUIDE.

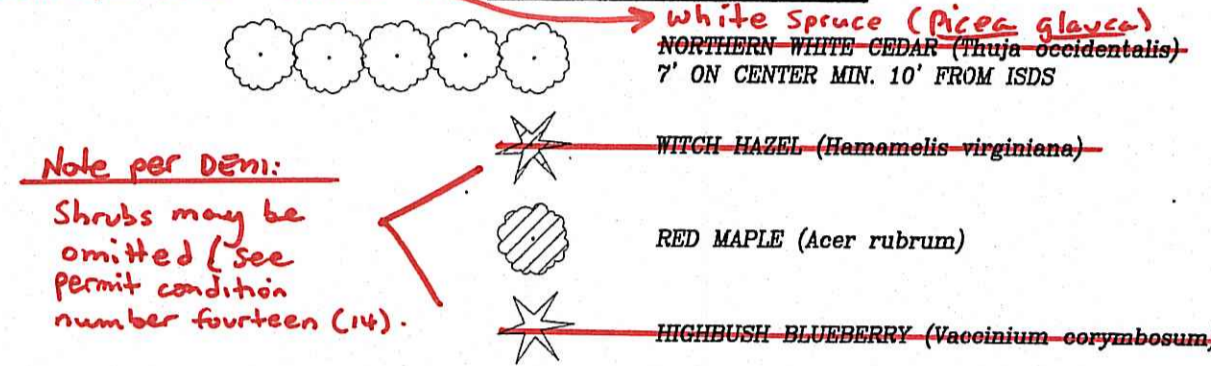
**MAINTENANCE AND RESPONSIBILITY**

- THE CONSTRUCTION SUPERINTENDENT SHALL HAVE THE SOLE RESPONSIBILITY FOR THE DESIGN IMPLEMENTATION. HE SHALL ALSO BE RESPONSIBLE FOR ENSURING THAT ALL CONSTRUCTION WORKERS AND SUB-CONTRACTORS ARE AWARE OF THE PROVISIONS OF THE PLAN AND THE ENGINEER'S REPORT.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL ASPECTS OF THE DESIGN PRIOR TO FINAL APPROVAL BY THE TOWN. DURING THAT TIME, ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHOULD BE CHECKED ON A WEEKLY BASIS AS WELL AS AFTER EACH SIGNIFICANT RAINFALL. ALL SUCH MEASURES SHOULD BE CLEANED OR REPLACED AS NECESSARY.
- REPLANTING, REGRADING OR OTHER REPAIRS NEEDED AS A RESULT OF EROSION AND SEDIMENTATION SHOULD BE DONE PROMPTLY.

**ORDER OF PROCEDURE**

- IMMEDIATELY UPON COMPLETION OF THE CLEARING AND GRUBBING OPERATION AND PRIOR TO ANY GRADING, TEMPORARY HAYBALES OR SILT FENCE SHALL BE PLACED INSIDE THE LIMITS OF DISTURBANCE AS SHOWN ON THE PLANS. (I.E. ALONG NEW ROADWAYS, STREAMBANKS, CRITICAL AREAS, ETC.)
- ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE PERIODICALLY CLEANED AND MAINTAINED AS PER THE RESPECTIVE PROGRAMS DURING THE CONSTRUCTION.
- IF WORK PROGRESS IS TO BE INTERRUPTED AT ANY TIME, REFERENCE EROSION AND SEDIMENTATION CONTROL PROGRAMS FOR TEMPORARY CONTROL.

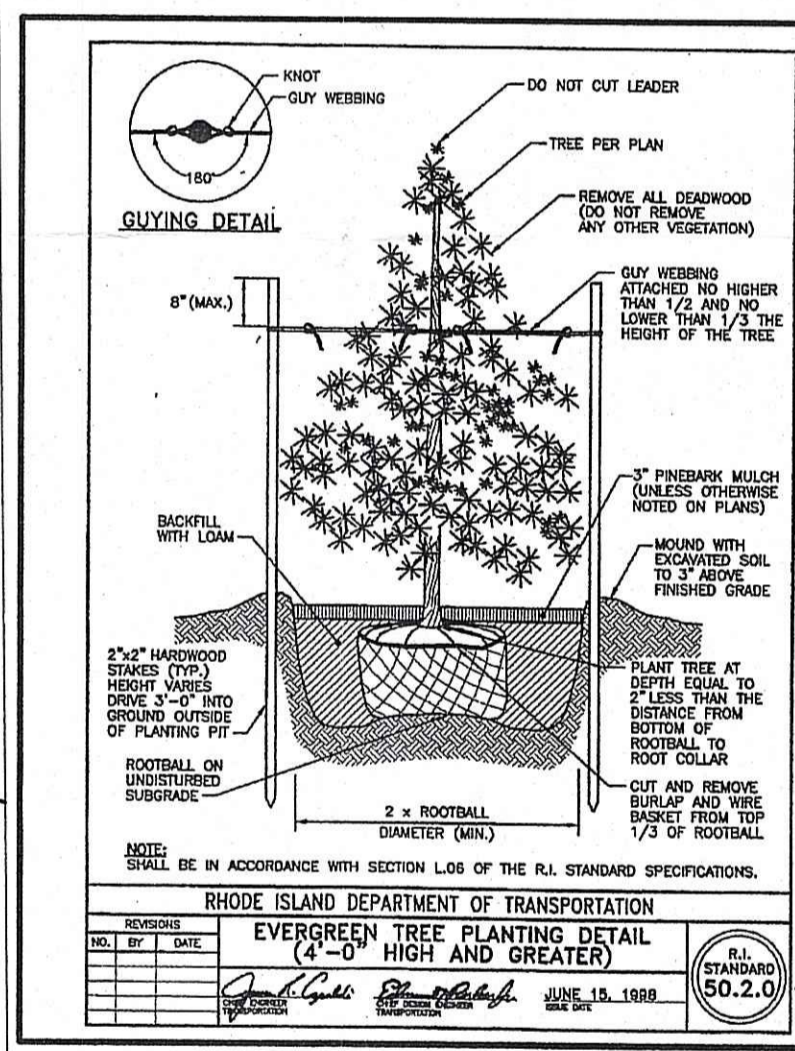
**PLANTING LEGEND**



Note per DEM: (condition number 17)  
Shrubs may be omitted (see permit condition number fourteen (14)).

**Planting Notes:**  
-All stock shall be planted between April 15 and October 15.  
-Plants shall be spaced 10' - 15' on center.  
-Bagged/ balled plant stock shall be planted in accordance with RI Standard Detail 50.1.  
-Bare-root plant stock shall be planted in accordance with RI Standard Detail 50.2.  
-In areas where ledge/ stoniness prevents planting according to detail, such area shall be locally backfilled with loam.  
-Plants shall be watered regularly during the first two growing seasons, as needed.  
-Dead plants shall be replaced in-kind during the first year after planting.  
-Disturbed areas immediately surrounding plantings shall be planted with appropriate seed mix.  
-Trees and shrubs shall be a minimum of 6' height at time of planting.

Note per DEM: See permit condition number seventeen (17).



**FEMA DETERMINATION**  
ZONE C - AREA OF MINIMAL FLOODING  
PANEL NO. - 440012 0003 C  
DATED: MARCH 15, 1984

**LEGEND**

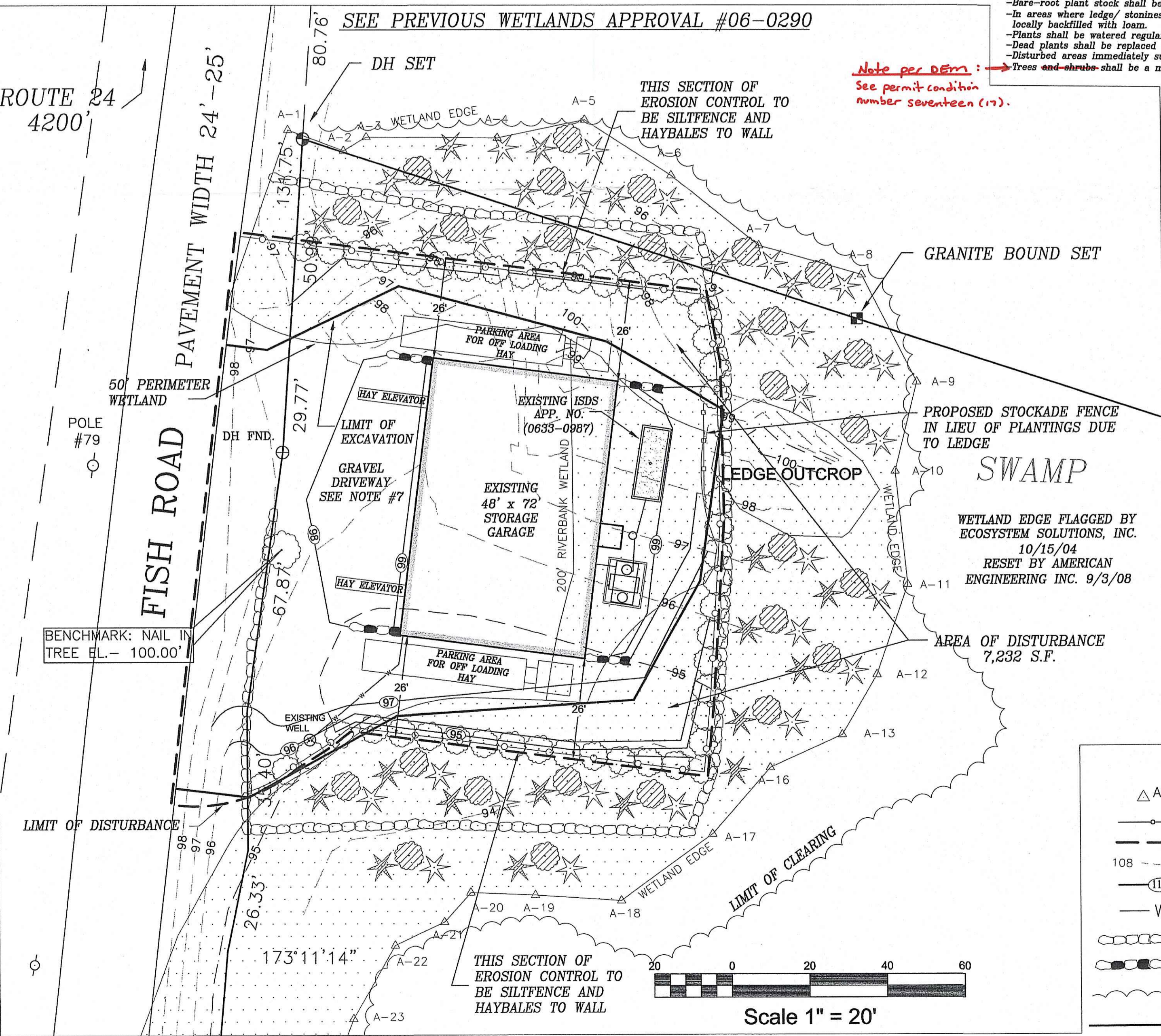
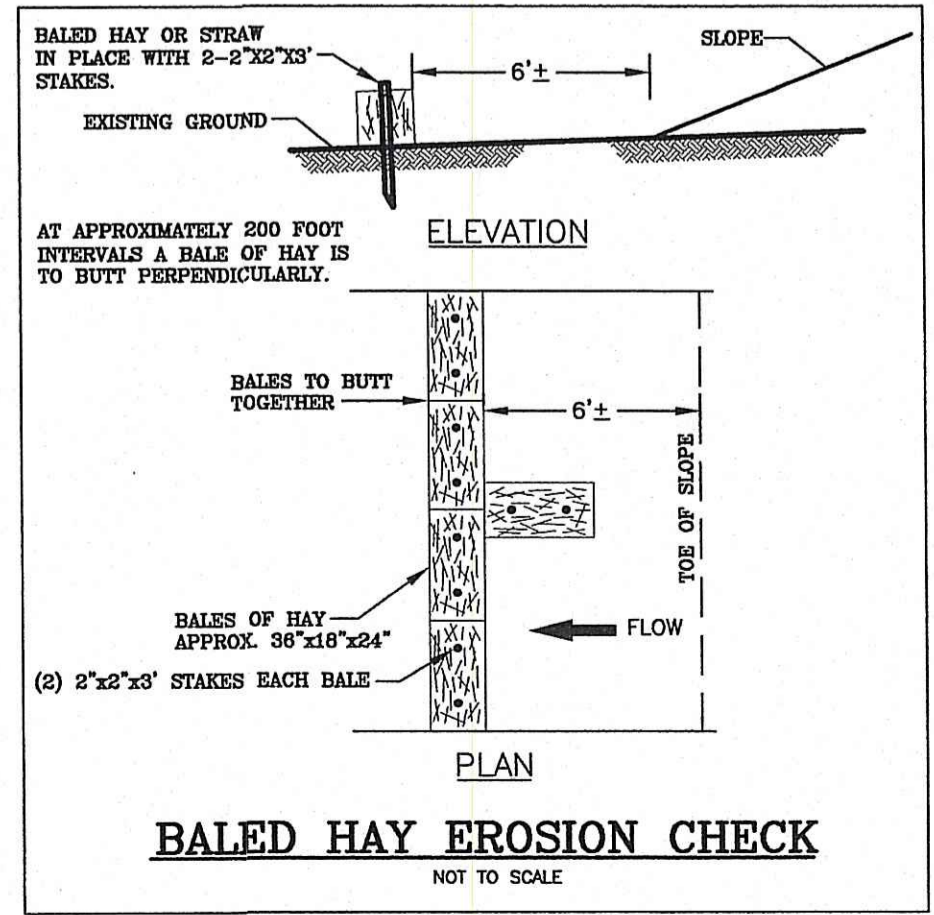
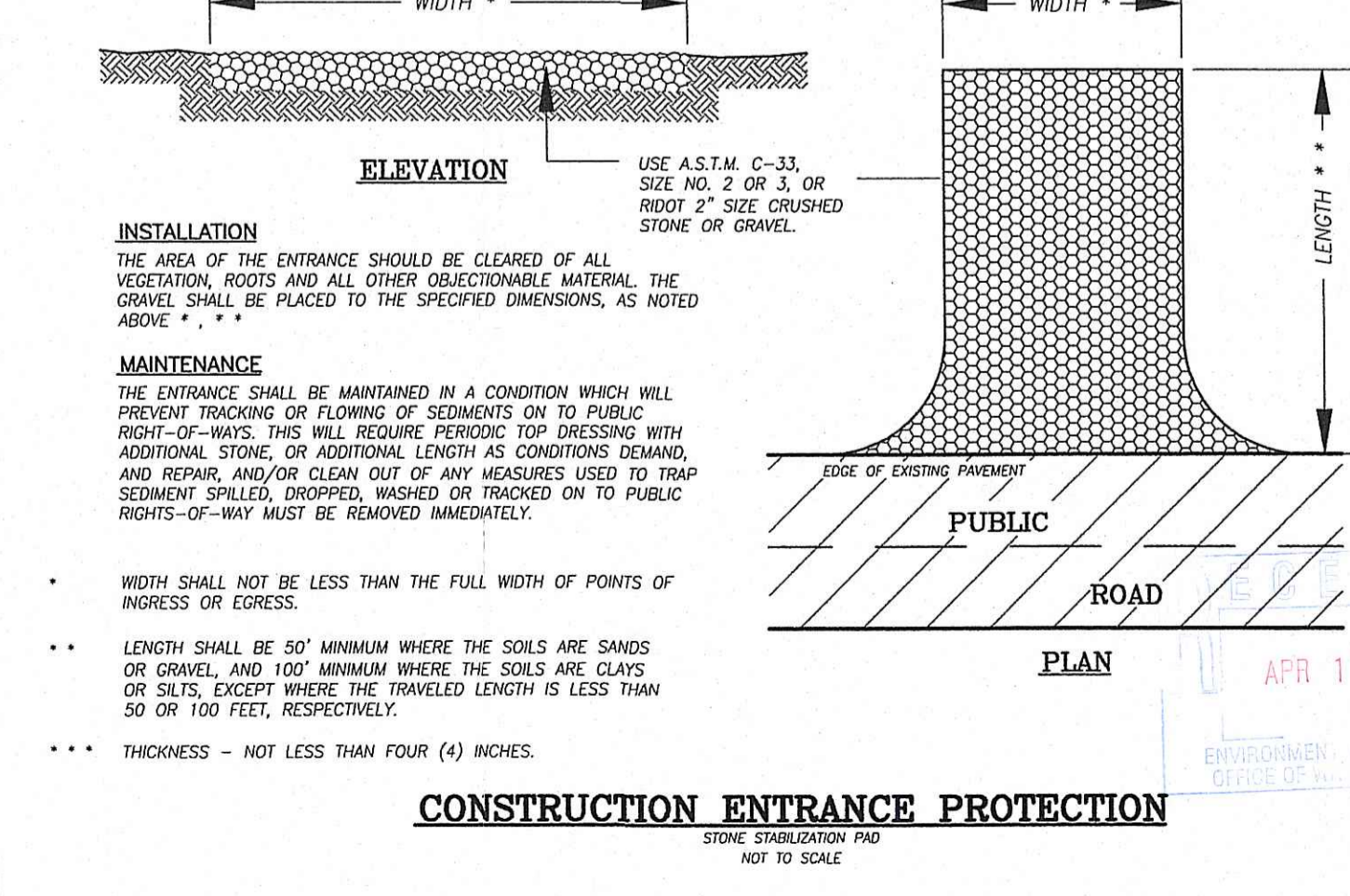
- △ A-11 WETLAND FLAG
- SILT FENCE/HAYBALES
- LIMITS OF DISTURBANCE
- 108 --- EXISTING CONTOURS
- (12) --- PROPOSED CONTOURS
- W --- WATER LINE
- EXISTING STONEWALL
- PROPOSED WALL
- LIMIT OF CLEARING
- LIMIT OF EXCAVATION

**GENERAL NOTES**

- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN ANY AND ALL PERMITS REQUIRED BY THE STATE OF RHODE ISLAND AND THE MUNICIPALITY PRIOR TO COMMENCING ANY WORK.
- IT SHALL ALSO BE THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN THE INTEGRITY OF ALL EXISTING UTILITIES, STRUCTURES, AND ABUTTING PROPERTIES. THE COST OF ANY REPAIR OR REPLACEMENT OF DAMAGED ITEMS SHALL BE BORNE BY THE CONTRACTOR.
- THE CONTRACTOR SHALL COORDINATE ALL WORK WITH THE MUNICIPAL ENGINEERING DEPARTMENT AND ALL UTILITY INSTALLATIONS AND INSPECTIONS WITH THE APPROPRIATE UTILITY CO. A 48 HOUR ADVANCE NOTICE IS REQUIRED BEFORE WORK COMMENCEMENT.
- ALL WORK PERFORMED HEREIN SHALL BE GOVERNED BY THE "R.I. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (REVISION OF 1997)", WITH ALL CORRECTIONS AND ADDENDA AND THE 1998 R.I. STANDARD DETAILS WITH ALL CORRECTIONS AND ADDENDA.
- THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR QUANTITY TAKE OFF IN COMPUTING ANY ESTIMATES.
- EMBANKMENT SLOPES AND ALL DISTURBED AREAS ARE TO RECEIVE 4" OF TOPSOIL AND SEED. SEE EROSION CONTROL PROGRAM DETAILS.
- THE CONTRACTOR IS RESPONSIBLE FOR ALL CONSTRUCTION INDICATED ON THESE PLANS. THAT INCLUDES ANY CONSTRUCTION TO BRING UTILITIES TO THE SITE, ANY REPAIRS, ANY TRENCHING REQUIRED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING AND MAINTAINING ALL TEMPORARY SEDIMENTATION AND SOIL EROSION CONTROL MEASURES.
- THE LOCATION OF EXISTING UTILITIES AS SHOWN ARE APPROXIMATE AND SHOULD BE VERIFIED BY THE CONTRACTOR WITH THE APPROPRIATE UTILITY COMPANIES. CALL DIG-SAFE (800)252-4877.
- IN ALL EXCAVATION AND PLACEMENT OF FILL THE CONTRACTOR SHALL PERFORM THE WORK IN FULL COMPLIANCE WITH THE R.I. STANDARD SPECIFICATION SECTION 202.
- ALL CONSTRUCTION AND UTILITY WORK SHALL CONFORM TO THE LATEST TOWN OF TIVERTON STANDARDS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN, COMPREHEND AND IMPLEMENT THESE REQUIREMENTS PROPERLY.

**NOTES:**

- ALL EROSION CONTROL MEASURES TO REMAIN FOR 3 CONSECUTIVE MOWINGS.
- CONTRACTOR TO CALL PUBLIC WORKS PRIOR TO CONSTRUCTION AND AGAIN FOR FINAL INSPECTION.
- THIS SITE AS DESIGNED WILL HAVE NO ADVERSE EFFECT ON ADJUTING PROPERTIES ASSUMING EROSION CONTROL PLAN IS IMPLEMENTED.
- FOR DRIVEWAYS SLOPING DOWN TOWARD THE ROAD HAYBALES TO BE SET ACROSS DRIVEWAY AT THE END OF DAY.
- CONSTRUCTION TO COMMENCE IMMEDIATELY FOLLOWING APPROVAL AND WILL TAKE APPROXIMATELY 6 MONTHS TO COMPLETE.
- BASEMAP AND PHYSICAL DATA TAKEN FROM AN ON SITE SURVEY WITH A HORIZONTAL ACCURACY OF +/- .5' AND A VERTICAL ACCURACY OF +/- .5'.
- THE AREA WITHIN THE PROPOSED LIMIT OF DISTURBANCE IS PROPOSED TO BE GRAVEL. NO PAVED AREAS ARE PROPOSED FOR THIS SITE.



Scale 1" = 20'

WETLAND SUBMISSION FOR  
**JOHN E. FERRELL**  
1248 FISH ROAD  
TIVERTON, RHODE ISLAND 02878  
LOCATED AT  
POLE #79 FISH ROAD  
TIVERTON, RHODE ISLAND 02878

BEING A PORTION OF A.P. 2-10,  
BLOCK 113, LOT 81A  
LOT AREA = 34.57 AC.

Checked By: DrC  
Scale: AS SHOWN Date: 3/12/2008

NO.	REVISION	DATE
1	REVISED PER WETLAND COMMENTS	12/22/08
2	REVISED PER WETLAND COMMENTS	1/22/09
3	REVISED PER WETLAND COMMENTS	2/18/09

DANIEL R. COTTA  
REGISTERED PROFESSIONAL ENGINEER  
No. 147

**AMERICAN ENGINEERING, INC.**  
Registered Professional Engineer  
DANIEL R. COTTA  
15 SHEFFIELD HILL ROAD  
EXETER, RHODE ISLAND 02822  
PHONE (401) 294-4090

Sheet 1 of 1 sheets  
Drawing No. \_\_\_\_\_  
Dr. \_\_\_\_\_ Sh. \_\_\_\_\_