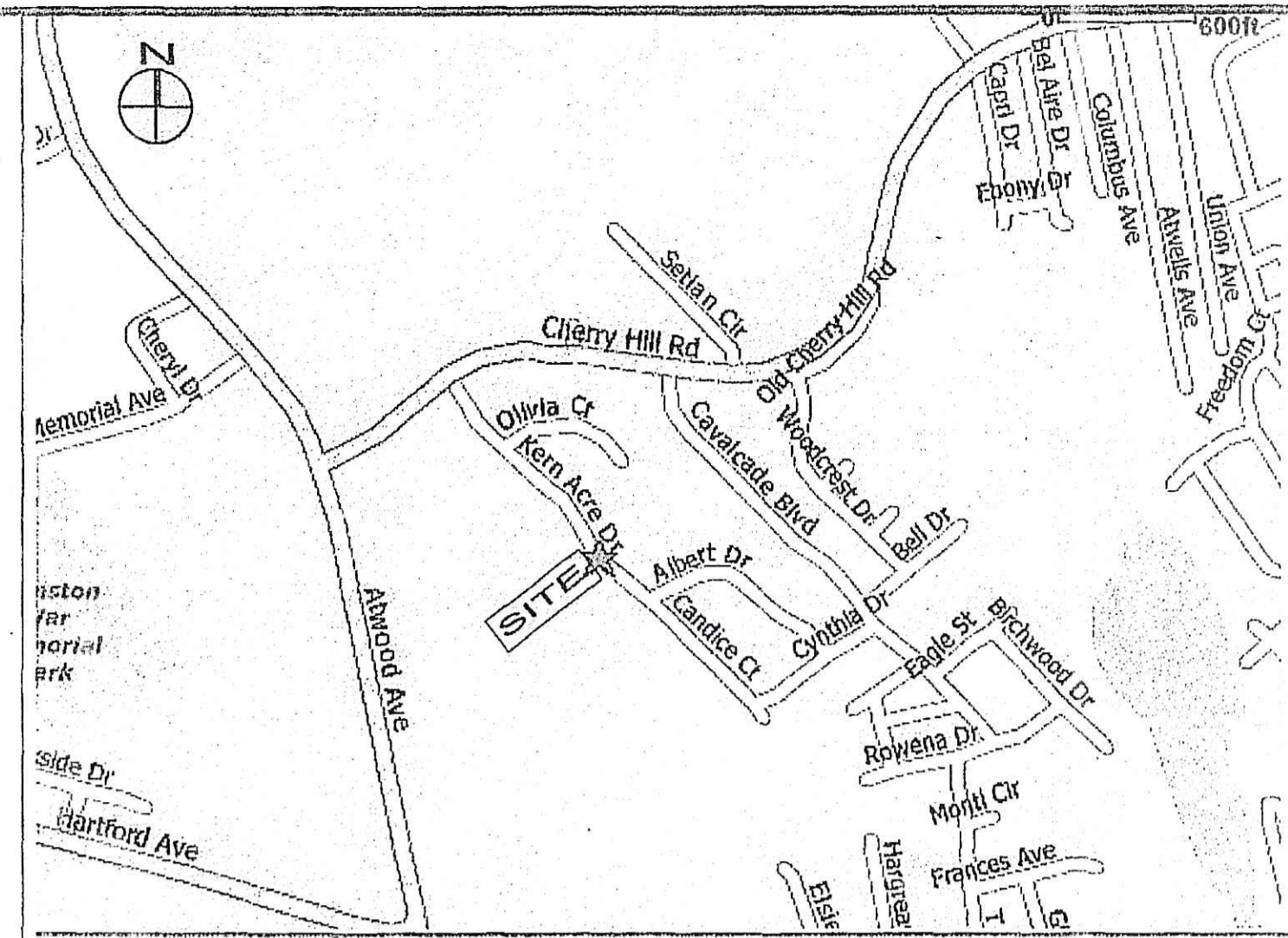
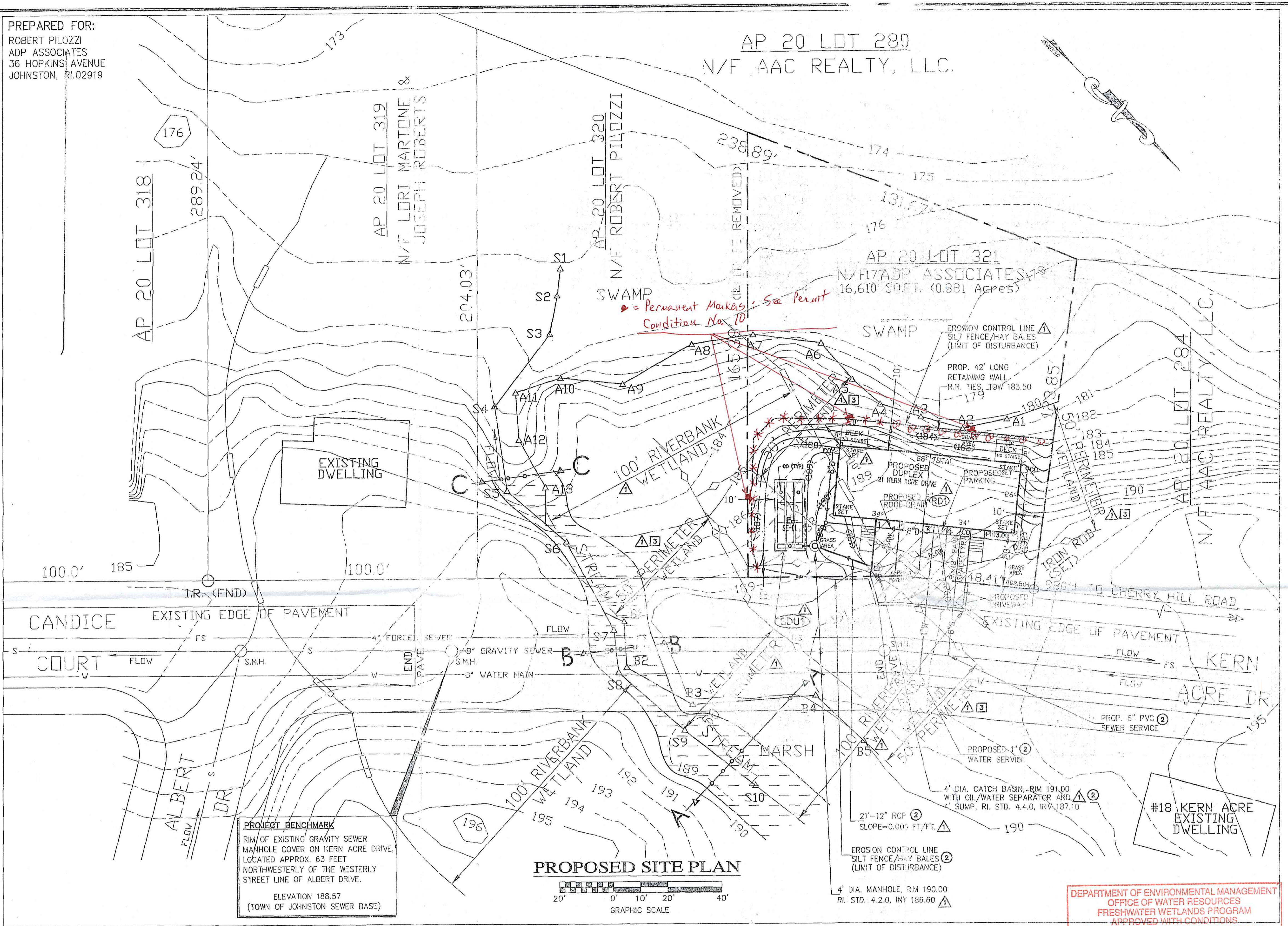


PREPARED FOR:
ROBERT PILOZZI
ADP ASSOCIATES
36 HOPKINS AVENUE
JOHNSTON, RI 02919

AP 20 LOT 280
N/F AAC REALTY, LLC.



GENERAL NOTES

1. THIS SITE DOES NOT CONTAIN ANY HISTORIC CEMETERIES WITHIN OR ADJACENT TO THE SITE.
2. FCI ENGINEERING GROUP HAS NOT BEEN RETAINED TO HAVE ANY CONTROL OVER OR BE IN CHARGE OF ACTS OF OMISSION OF ANY CONTRACTOR, SUBCONTRACTOR, OTHER AGENT OR EMPLOYEE OR ANY OTHER PERSON PERFORMING ALL OR PORTIONS OF THE WORK. FCI ENGINEERING EXPRESSLY DISCLAIMS ANY RESPONSIBILITY FOR MONITORING, OBSERVING, INSPECTING OR SUPERVISING THE CONSTRUCTION SERVICES, MEANS, METHODS, SEQUENCES OR TECHNIQUES USED TO CONSTRUCT THE PROJECT DEFINED BY THESE PLANS.
3. ANY MODIFICATION OR CHANGES TO THE WORK, AS SHOWN ON THESE DRAWINGS, MUST HAVE THE PRIOR WRITTEN APPROVAL OF THE ENGINEER.
4. ALL WORK SHALL BE IN ACCORDANCE WITH THE TOWN OF JOHNSTON STANDARDS, R.I.D.E.M. STANDARDS AND THE LATEST EDITION OF THE RHODE ISLAND DEPARTMENT OF TRANSPORTATION, RIDOT, STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION FOR EXCAVATION, PLACEMENT OF FILL, BITUMINOUS PAVEMENT, CUTTING INTO EXISTING PAVEMENT AND CONCRETE.
5. THE SURVEY INFORMATION PROVIDED ON THIS PLAN HAS BEEN PROVIDED BY N. VELTRI SURVEY, INC. OF 266 PUTNAM PIKE, SMITHFIELD, RHODE ISLAND, (401)231-3700.
6. REFERENCE THE "RHODE ISLAND EROSION AND SEDIMENT CONTROL HANDBOOK" (1989), PREPARED BY THE RHODE ISLAND DEPT. OF ENVIRONMENTAL MANAGEMENT, R.I. STATE CONSERVATION COMMISSION AND THE U.S. DEPT. OF AGRICULTURE, SOIL CONSERVATION SERVICE, AS A PRACTICAL GUIDE.
7. CONTRACTOR SHALL OBTAIN ALL REQUIRED APPROVALS AND PERMITS, AS SET FORTH IN THE TOWN OF JOHNSTON ORDINANCES, PRIOR TO THE BEGINNING OF CONSTRUCTION.
8. WATER PIPE SHALL TYPICALLY BE LOCATED AT LEAST TEN (10) FEET HORIZONTALLY FROM SEWER PIPE, AND AT A MINIMUM DEPTH OF COVER EQUAL TO 5'. WHERE A NEW WATER MAIN IS LESS THAN 10 FEET HORIZONTALLY OR 18 INCHES VERTICALLY ABOVE A SEWER OR WHERE A WATER MAIN PASSES BENEATH A SEWER OR STORM DRAIN, ENCASE THE SEWER OR THE DRAIN LINE IN 6" OF CONCRETE FOR A DISTANCE OF 10 FEET ON EACH SIDE OF THE CROSSING WATER MAIN. THE USE OF DUCTILE IRON TIGHT JOINT SEWER PIPE IN LIEU OF CONCRETE ENCASEMENT WILL BE CONSIDERED UPON CONTRACTOR'S SUBMITTAL OF SPECIFICATIONS TO THE ENGINEER FOR APPROVAL.
9. PROJECT SITE IS LOCATED WITHIN "ZONE X" (AREAS OF MINIMAL FLOODING) AS SHOWN ON F.E.M.A. FLOOD INSURANCE RATE MAP FOR THE TOWN OF JOHNSTON, RHODE ISLAND, COMMUNITY PANEL NO. 440018-0010C AND 440018-0020C, REVISED NOVEMBER, 1993.
10. THIS SITE DOES NOT CONTAIN ANY AGRICULTURAL USE AREAS.
11. ROOF LEADERS SHALL BE CONNECTED TO THE DRYWELL, WITH 8" SDR-35 PVC PIPING, S=0.01, AND HAVE A MINIMUM OF 3 FEET COVER.
12. EXTREME CARE SHALL BE EXERCISED TO PREVENT ANY UNSUITABLE MATERIAL FROM ENTERING THE WETLANDS.
13. ALL EROSION CONTROL TO REMAIN IN PLACE AND OPERATIONAL UNTIL SITE IS STABILIZED.
14. ALL DISTURBED AREAS TO BE FINE GRADED, LOAMED AND SEEDED.
15. PLANTINGS TO BE DONE PER PLAN.
16. THERE IS NO DISTURBANCE WITHIN R.I.D.E.M. WETLANDS.
17. THERE IS APPROXIMATELY 3,756 SQUARE FEET OF DISTURBANCE WITHIN RIDEM. WETLANDS JURISDICTION.
18. ROOF LEADERS SHALL BE CONNECTED TO THE SUBSURFACE DRAINAGE SYSTEM AS SHOWN, WITH SDR-35PVC PIPE, S=0.005 AND HAVE A MINIMUM OF 3' COVER.

100-YEAR FLOOD STAGE

CROSS SECTION	FLOOD PROFILE ELEVATION
A-A	189.26
B-B	189.41
C-C	182.23

NO.	DATE	REVISION/DESCRIPTION	BY
3	2-22-08	REVISED TO ADDRESS RIDEM REVIEW COMMENTS OF 2/12/08	FCI
2	1-22-08	REVISED TO ADDRESS RIDEM REVIEW COMMENTS OF 12/27/07	FCI
1	11-26-07	REVISED TO ADDRESS RIDEM REVIEW COMMENTS OF 9/28/07	FCI

LEGEND

- UTILITY POLE
- N/F NOW OR FORMERLY
- HUB & TACK
- CONCRETE BOUND
- GAS VALVE
- WATER VALVE
- CATCH BASIN
- DRAIN MANHOLE
- SEWER MANHOLE
- RUNOFF FLOW PATTERN
- EXISTING CONTOUR
- DESIGN CONTOUR
- PROPOSED DRIVEWAY PAVEMENT
- APPROX. 100-YEAR FLOOD PLAIN
- CHAIN LINK FENCE CLEANOUT
- 128 FT - 6" PERFORATED ADS HOOP TRAIN CONDUIT, PERFORATIONS FACE DOWN SLOPE = 0.005 FT/FT
- SUBSURFACE DRAINAGE UNIT #1 3 ROWS OF 3 - CULTEC 150 UNITS. 11.25" W x 26.83" L x 24.5" H. AGGREGATE (1/2" AT BOTTOM). BOTTOM OF CHAMBER ELEV. 136.17. BOTTOM OF STONE ELEV. 185.60
- 50 FT PERIMETER WETLAND
- 100 FT RIVERBANK WETLAND
- SWAMP WETLAND FLAGS
- STREAM WETLAND FLAGS
- PROPOSED DRIVEWAY PAVEMENT
- SOIL EVALUATION TEST HOLE NO. 1

PLANTINGS REQUIRED PER RIDEM
 * = Northern White Cedar (*Thuja occidentalis*) 5'-4" high, 6" core-center
 @ = Zuckberry (*Ilex glabra*) 2-3' high, 6" core-center

DRAINAGE SYSTEM MAINTENANCE SCHEDULE

- UPON COMPLETION, THE SITE OWNER SHALL ADHERE TO THE FOLLOWING MAINTENANCE RECOMMENDATIONS:
1. CATCH BASINS, DRAIN LINES AND DRYWELL SYSTEMS SHALL BE INSPECTED ANNUALLY BY QUALIFIED PERSONNEL TO ENSURE PROPER OPERATION. THE INSPECTION SHALL INCLUDE, AT A MINIMUM, DAMAGE TO GRATES AND COVERS, EVIDENCE OF STANDING WATER, DEBRIS ACCUMULATION AND STRUCTURAL ALIGNMENT/INTEGRITY.
 2. IN ACCORDANCE WITH THE REQUIREMENTS OF THE RIDEM UNDERGROUND INJECTION CONTROL PROGRAM, THE DRYWELL UNITS ARE LOCATED AT LEAST 400 FEET FROM ANY PUBLIC WELL, 50 FEET FROM NON-CRITICAL SURFACE WATER, 75 FEET FROM OTHER SUBSURFACE DISPOSAL SYSTEMS (SIDE ETC) AND 10 FEET FROM ALL BUILDINGS.
 3. PROCEDURES FOR SOIL PREPARATION AND SEEDING SHALL BE DONE IN ACCORDANCE WITH THE RHODE ISLAND SOIL EROSION AND SEDIMENT CONTROL HANDBOOK, CHAPTER 4.
 4. THE ACCUMULATED SEDIMENTS IN THE CATCH BASINS SHALL BE MANUALLY REMOVED AT LEAST ONCE PER YEAR OR WHEN ACCUMULATED SEDIMENTS CAUSE A CHANGE IN THE GRADE ELEVATION. ALL REMOVED SEDIMENT IS TO BE TESTED TO DETERMINE POLLUTANT CONTENT. THE SEDIMENT IS TO BE PROPERLY DISPOSED IN UPLAND AREAS BASED UPON THE TEST RESULTS AND LOCAL, STATE AND FEDERAL REGULATIONS.

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED JUL 28 2008 FILE # 06-0342
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE IN CONSTRUCTION



Project: PROPOSED SITE PLAN - WETLANDS APPLICATION
21 KERN ACRE DRIVE
AP 20/2, LOT 321
JOHNSTON RHODE ISLAND
MAR 14 2008

FCI ENGINEERING GROUP, LLC
Civil engineering Consultants

Land development Transportation
Environmental structural

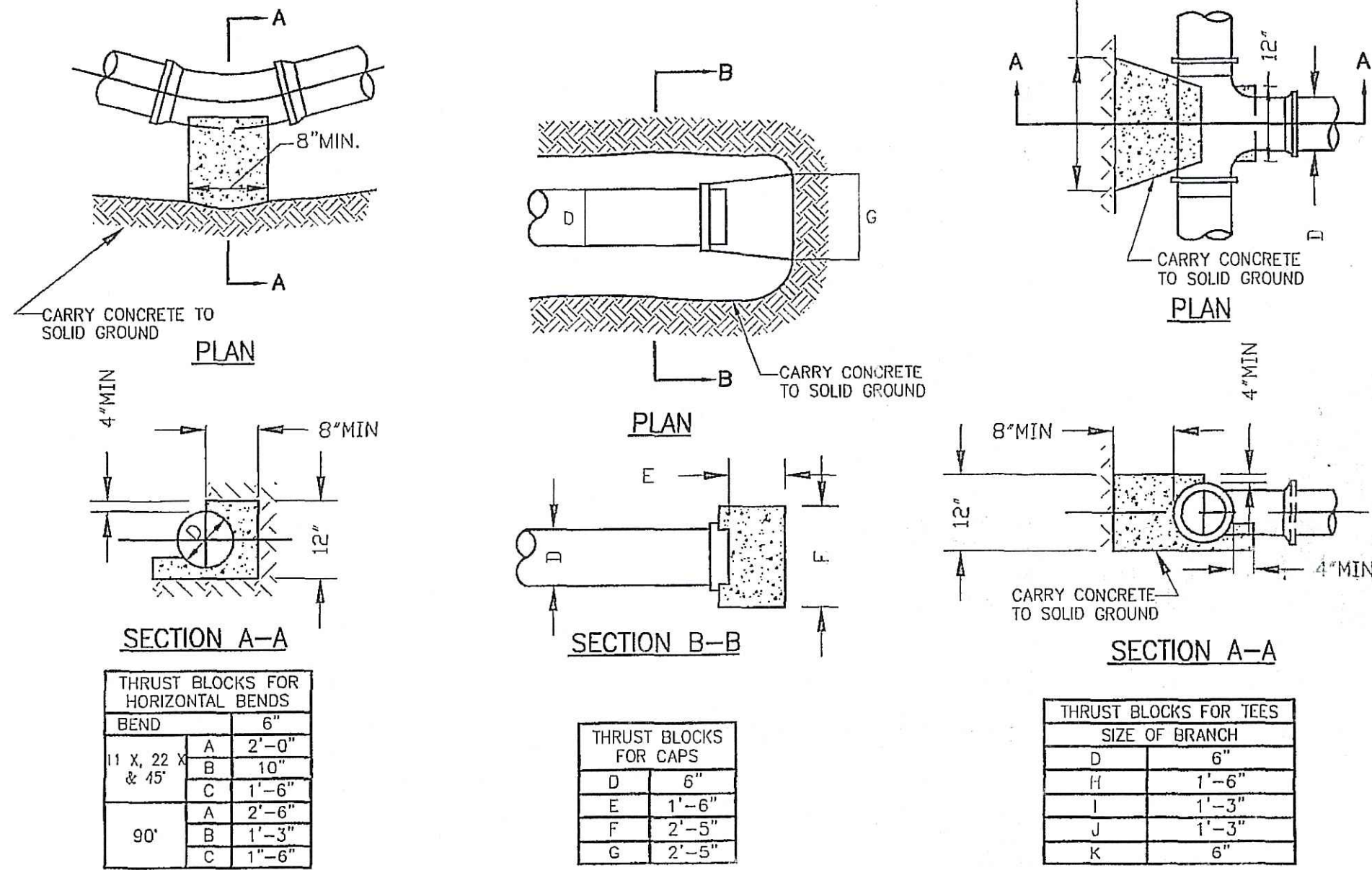
225 East Avenue, Pawtucket, RI 02860
Phone: 401-726-8300 Fax: 401-831-0038

FCI Project No.	E0612
Scale:	AS SHOWN
Design:	F.I.
Drawn:	F.I.
Checked:	
Date:	2-20-2007
Drawing Number:	DEM-1

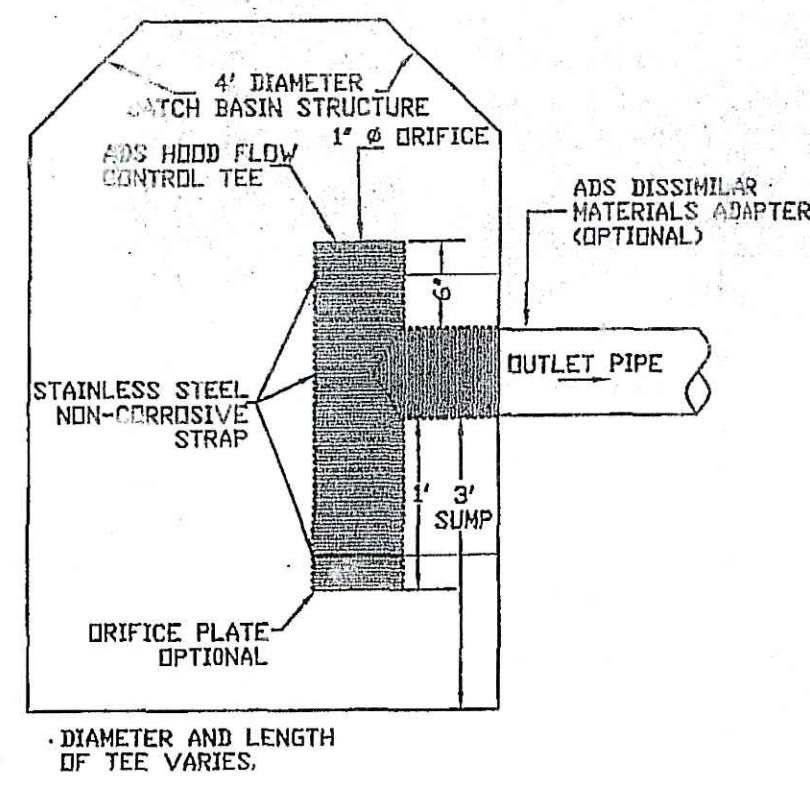
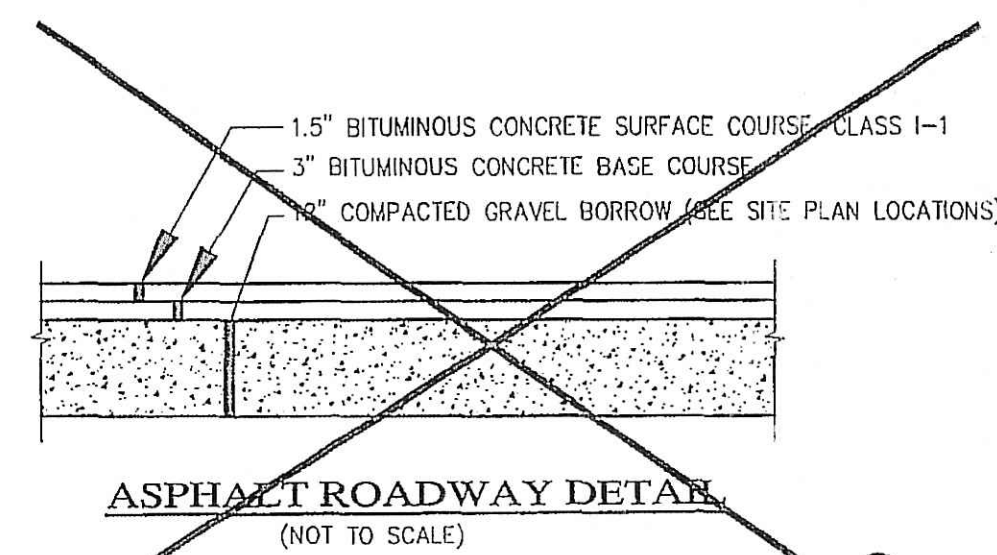
PLAN FOR NOTICE

WATER NOTES

- ALL INSTALLATION, JOINTS, CONSTRUCTION METHODS AND MATERIALS SHALL BE ACCORDING TO THE PROVIDENCE WATER SUPPLY BOARD (PWSB) REQUIREMENTS, THE AMERICAN WATER WORKS ASSOCIATION (AWWA) STANDARDS AND OTHER GOVERNMENTAL REQUIREMENTS.
- THE GENERAL CONTRACTOR SHALL, PRIOR TO CONSTRUCTION, CONTACT THE PWSB FOR THE ACTUAL WATERLINE PLAN AND PERMIT.
- PRESSURE AND LEAKAGE TESTS AND DISINFECTING PIPES SHALL BE PERFORMED BY THE CONTRACTOR PRIOR TO CONNECTION TO THE PWSB SYSTEM AND IN CONFORMANCE TO AWWA RECOMMENDATIONS, PROVIDENCE WATER SUPPLY BOARD'S REQUIREMENTS AND OTHER GOVERNMENTAL AGENCIES HAVING JURISDICTION.
- WATER PIPE SHALL TYPICALLY BE LOCATED AT LEAST TEN (10) FEET HORIZONTALLY FROM SEWER PIPE, AND AT A MINIMUM DEPTH OF COVER EQUAL TO 5', WHERE A NEW WATER MAIN IS LESS THAN 18 INCHES CLEAR DISTANCE ABOVE A SEWER OR WHERE A WATER MAIN PASSES BENEATH A SEWER OR STORM DRAIN, ENCASE THE SEWER OR WATER MAIN IN 6" OF CONCRETE FOR A DISTANCE OF 10 FEET ON EACH SIDE OF THE CROSSING WATER MAIN. THE USE OF DUCTILE IRON TIGHT JOINT SEWER PIPE IN LIEU OF CONCRETE ENCASEMENT WILL BE CONSIDERED UPON CONTRACTOR'S SUBMITTAL OF SPECIFICATIONS TO ENGINEERS FOR APPROVAL.
- ALL SYSTEM COMPONENTS AND CONSTRUCTION METHODS, SUCH AS PIPE, RESTRAINED MECHANICAL JOINTS, FITTINGS, CASTINGS, ETC. SHALL BE SUBMITTED TO THE PROVIDENCE WATER SUPPLY BOARD AND ENGINEER FOR APPROVAL PRIOR TO PURCHASE AND INSTALLATION. THIS SUBMISSION SHALL INCLUDE MANUFACTURER'S LITERATURE, SHOP DRAWINGS, PROPOSED CONSTRUCTION METHODS, ETC.
- WATER LINE TRENCH TO BE AWWA TYPE 5. A METALIZED DETECTABLE IDENTIFICATION TAPE 2" IN WIDTH, BLUE IN COLOR AND PRINTED WITH "CAUTION WATERLINE BURIED BELOW" SHALL BE UTILIZED OVER ALL MAINS. TAPE SHALL BE SET AT APPROXIMATELY 1'-0" BELOW FINISHED GRADE.
- EACH 1" DOMESTIC WATER SERVICE SHOWN SHALL BE VERIFIED BY THE PWSB PRIOR TO THE CONTRACTOR ORDERING PIPE, METERS AND BACKFLOW PREVENTER.
- EACH 1" DOMESTIC WATER SERVICE SHOWN SHALL BE INSPECTED BY THE PWSB FROM CURB STOP TO UTILITY ROOM PRIOR TO BEING BACKFILLED. 48 HOUR NOTICE REQUIRED. TO SCHEDULE INSPECTION CALL (401)521-6300, EXTENSION 7234.
- WATER SERVICE PIPES SHALL BE INSTALLED AT A MINIMUM OF 10 FEET FROM ANY SEPTIC TANK, GREASE TRAP OR DISTRIBUTION BOX AND AT LEAST 25 FEET FROM ANY CESSPOOL, SEEPAGE PIT, DISPOSAL TRENCH/BED OR OTHER LEACHING STRUCTURE.



THRUST BLOCKS FOR CAPS TEES AND HORIZONTAL BENDS
NOT TO SCALE



- NOTES:**
- FOR RETROFIT INSTALLATIONS OR DISSIMILAR MATERIALS, ADAPTING TEE SHALL BE FABRICATED WITH H-12 DISSIMILAR MATERIALS ADAPTER (SHOWN ABOVE).
 - FOR NEW INSTALLATIONS CONNECTING TO HDPE PIPE, CONNECTION FROM OUTLET PIPE TO TEE SHALL BE MADE WITH ADS SPLIT COUPLER. JOINT SHALL BE LOCATED AT MIDPOINT OF STRUCTURE WALL AND SHALL EITHER BE GROUTED OR BOOTED IN PLACE.
 - TEE SHALL BE SUPPORTED WITH A MINIMUM OF THREE STAINLESS STEEL STRAPS AT APPROXIMATE LOCATIONS SHOWN.
 - STAINLESS STEEL STRAPS SHALL BE ANCHORED INTO STRUCTURE WITH FASTENERS.
 - IF ORIFICES ARE INCORPORATED FOR FLOW CONTROL, CARE SHALL BE TAKEN SO AS TO NOT INSTALL STRAPS OVER THE ORIFICE.
 - FINAL DIAMETER AND LENGTH OF TEE AND SIZE AND LOCATION OF ORIFICES (EITHER ON PLATE OR IN THE TEE) SHALL BE DETERMINED BY THE ENGINEER.

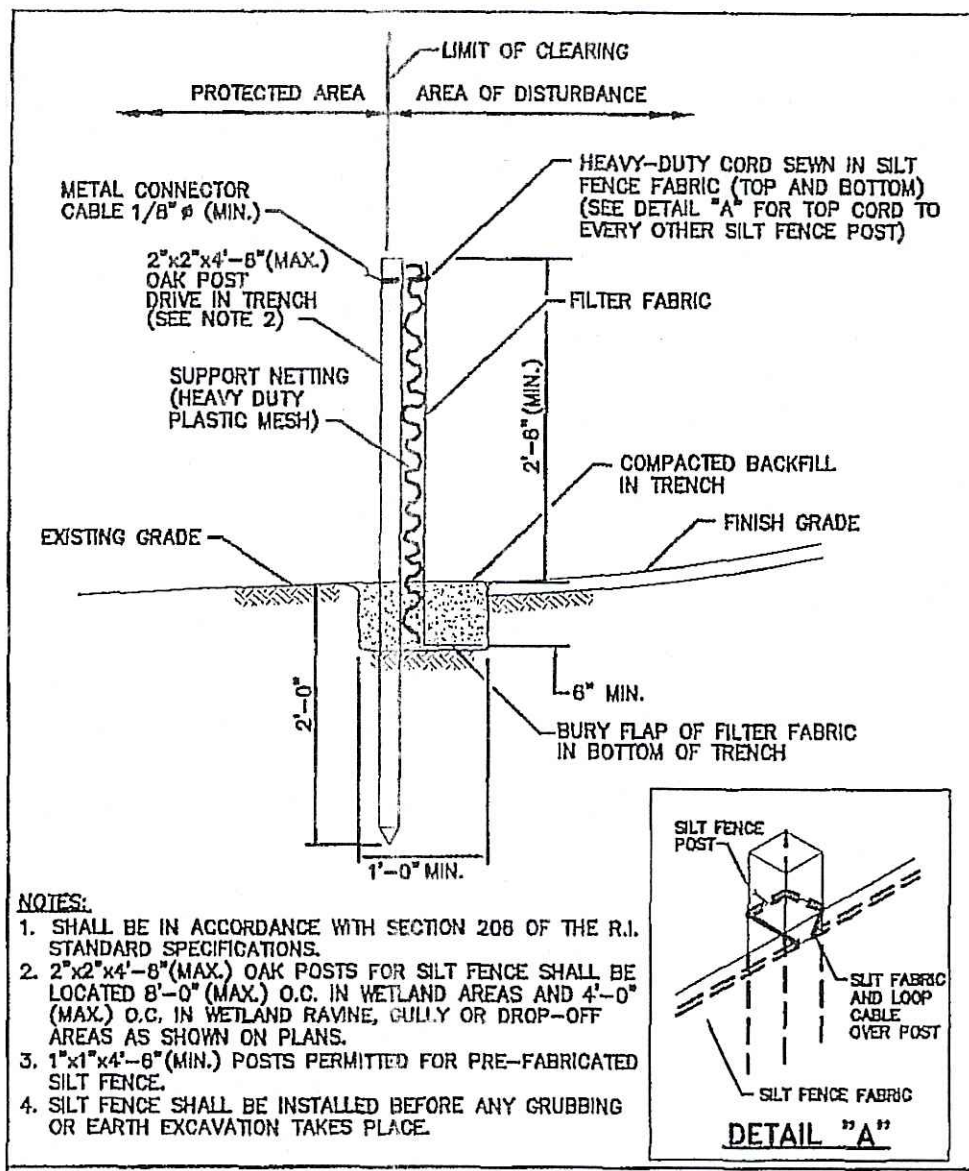
HOOD/FLOW CONTROL TEE
(NOT TO SCALE)

EROSION CONTROL & SOIL STABILIZATION PROGRAM

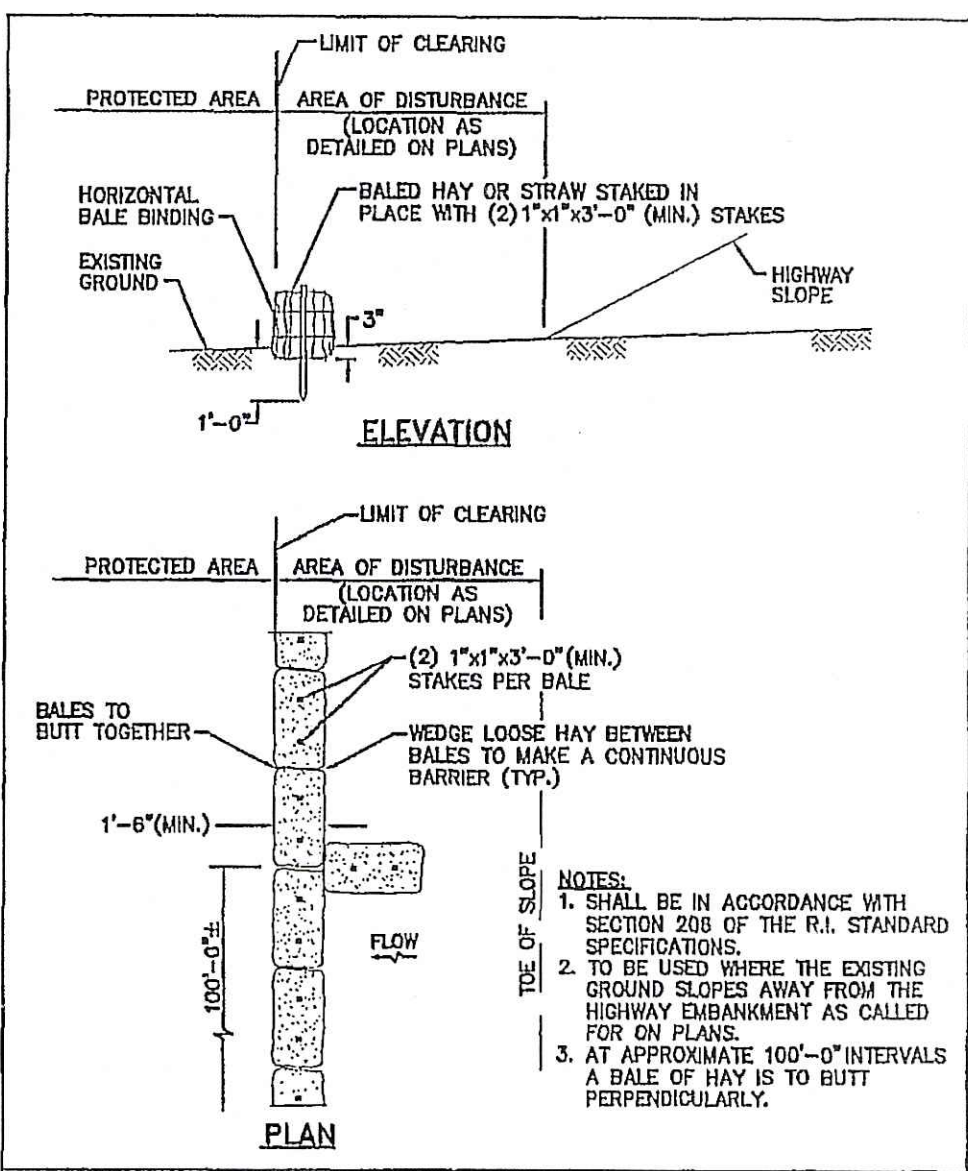
- Denuded slopes shall not be unattended or exposed for excessive periods of time such as the inactive winter season.
- Extreme care shall be exercised so as to prevent any unsuitable material from entering wetlands.
- All disturbed areas subject to erosive tendencies whether they are newly filled or excavated, shall receive suitable slope protection.
- During construction, the contractor and/or developer shall be responsible for maintaining drainage and runoff flow during storms and periods of rainfall.
- Reference the "Rhode Island Erosion and Sediment Control Handbook" prepared by the U.S. Dept. Of Agriculture, Soil Conservation Service 1980, as a guide.

ORDER OF PROCEDURE

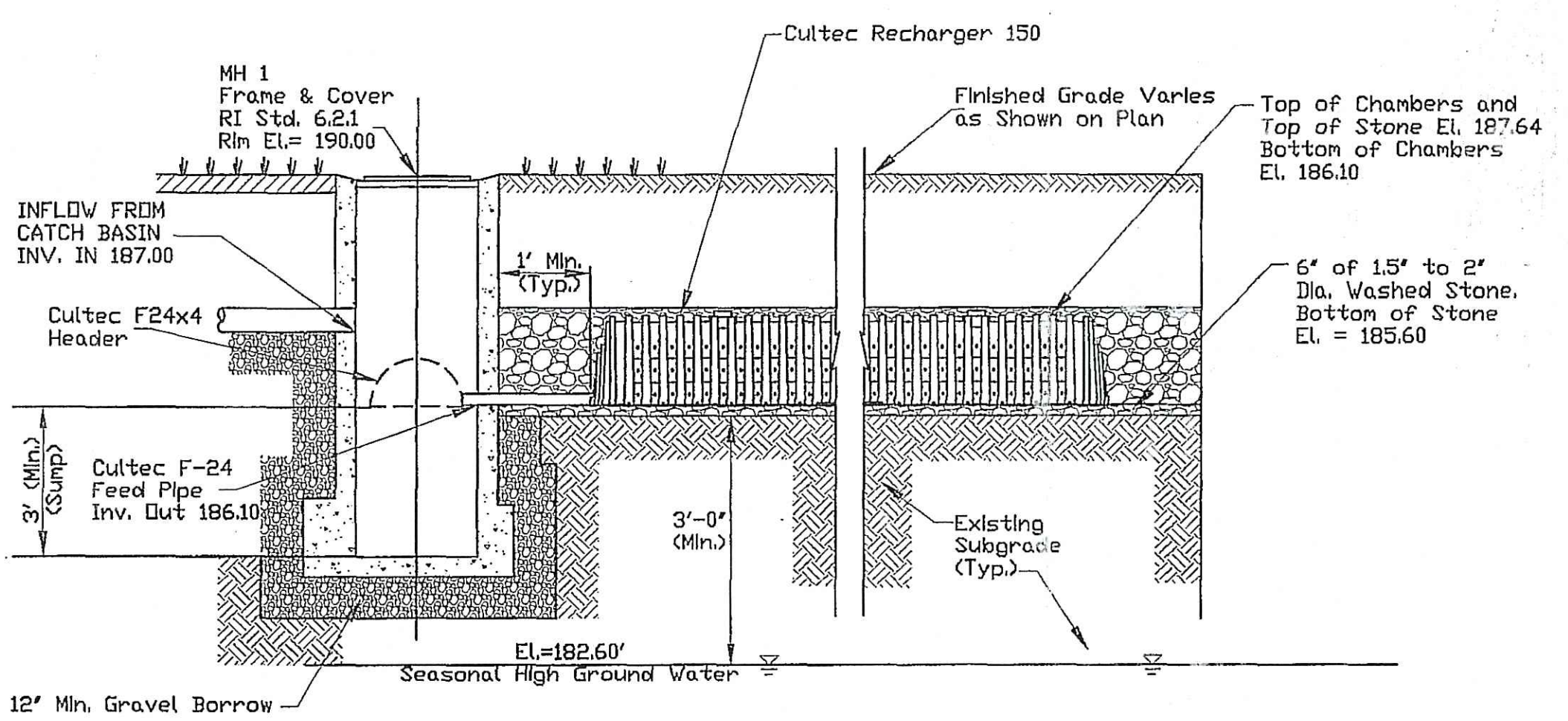
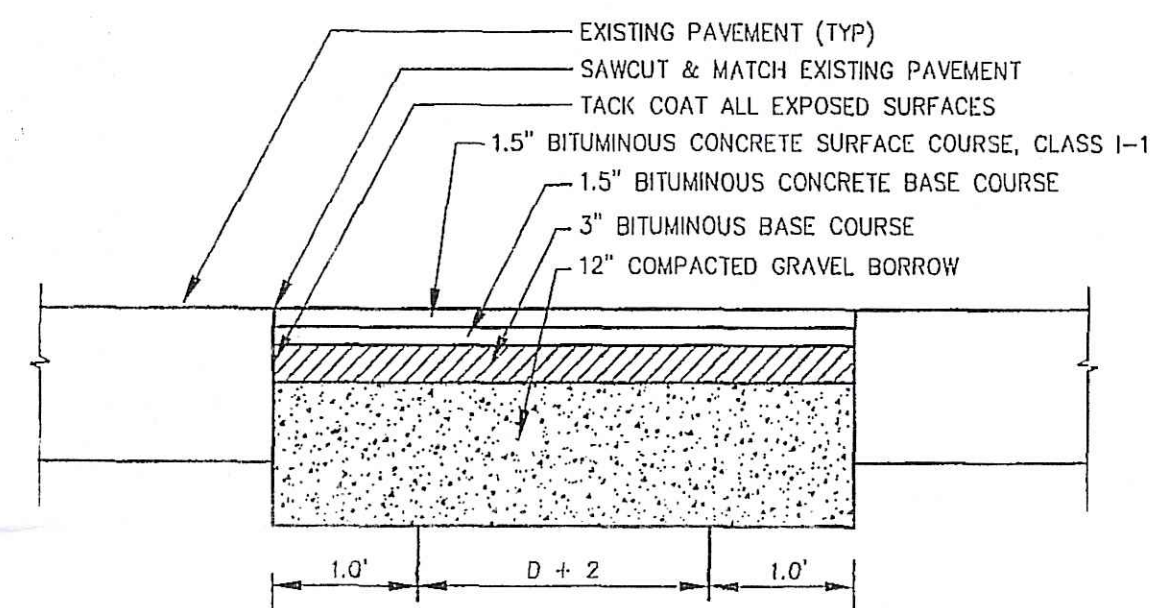
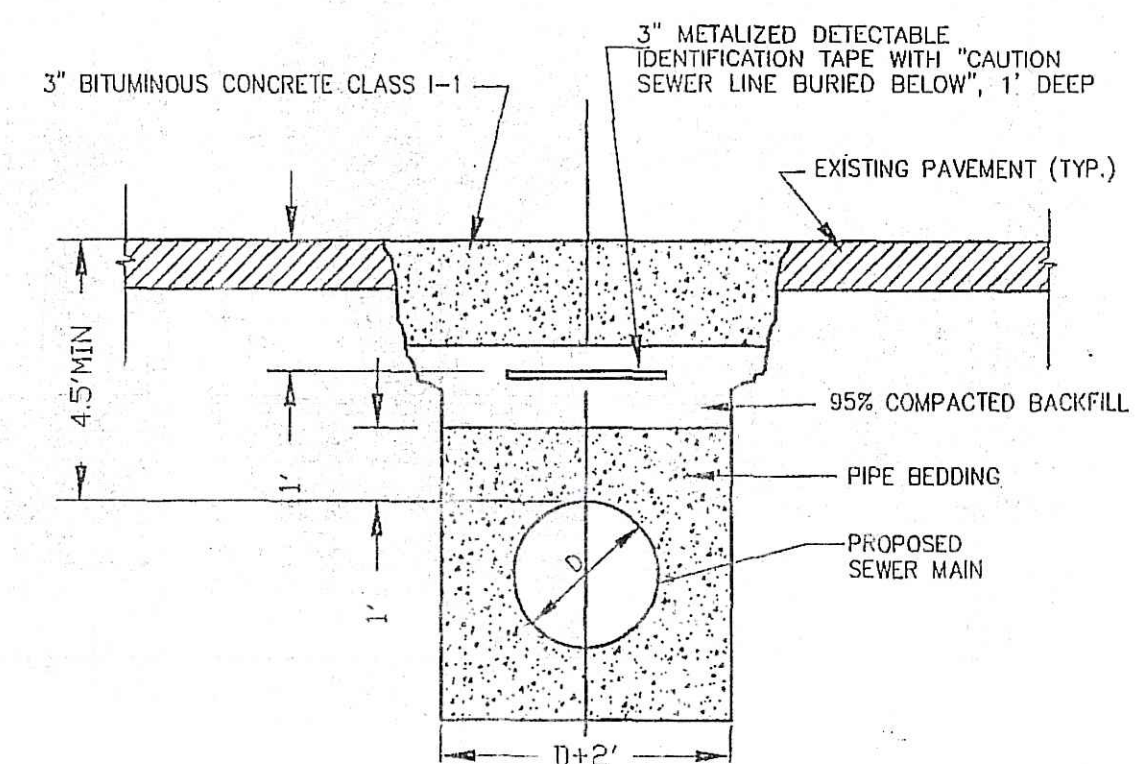
- All sediment control devices shall be set in place prior to the start of any construction.
- All erosion and sedimentation control structures shall be periodically cleaned and maintained as per the respective programs during the construction.
- If work progress is interrupted at any time, reference erosion and sedimentation programs for temporary control.



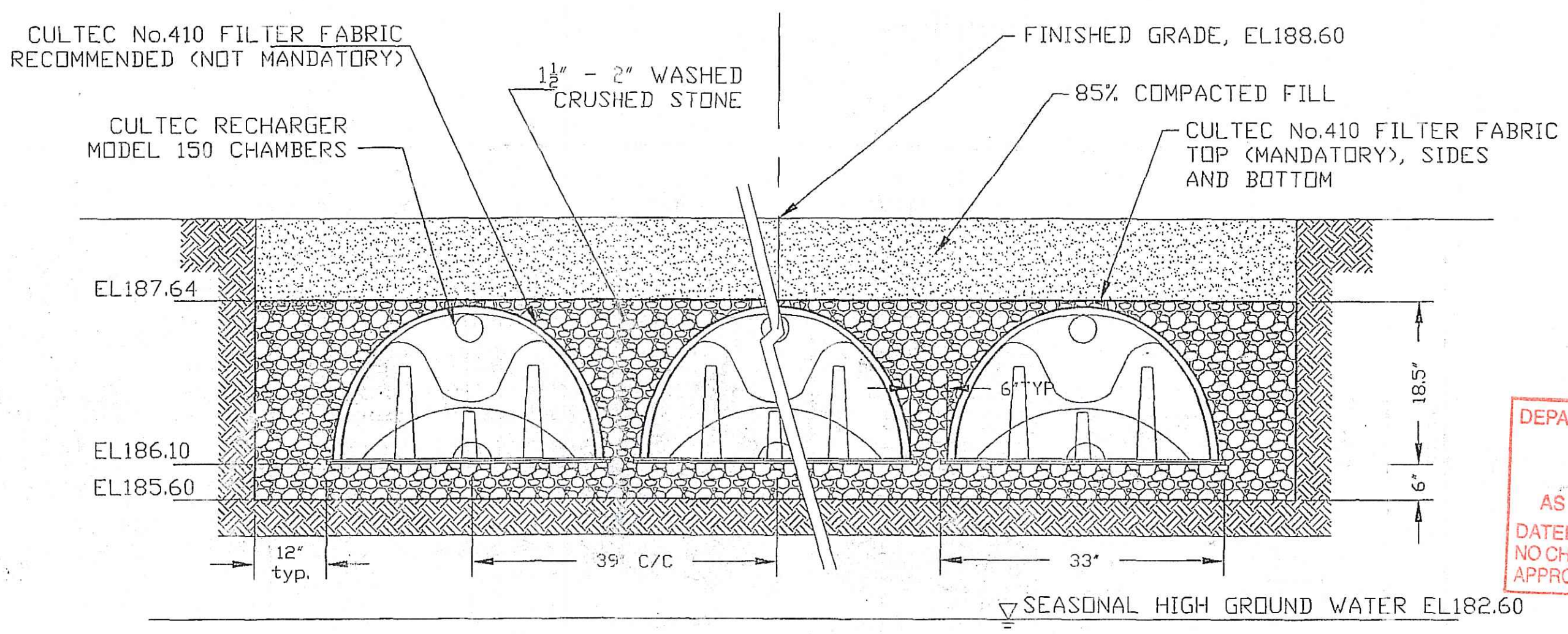
RHODE ISLAND DEPARTMENT OF TRANSPORTATION
SILT FENCE DETAIL
NO. BY DATE
James Capolli, Edmund T. Parker, JUNE 15, 1998
R.I. STANDARD 9.2.0



RHODE ISLAND DEPARTMENT OF TRANSPORTATION
BALED HAY EROSION CHECK
NO. BY DATE
James Capolli, Edmund T. Parker, JUNE 15, 1998
R.I. STANDARD 9.1.0



- Notes:**
- System to contain 3 rows of three(3) Cultec 150 units.
 - Rows are installed 39-inches on center. See typical cross section.



Note:
Recharger 150 by CULTEC, INC. of Brookfield, CT. All Recharger 150 Chambers must be installed in accordance with all applicable local, state and federal regulations. Refer to manufacturer, CULTEC, INC.'s recommended installation guidelines. CALCULATIONS BASED ON 40% STONE VOID VOLUME.

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED FILE # 01-0392
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE CONSIDERED FINAL

NO.	DATE	REVISION/DESCRIPTION	BY
2	1-22-08	REVISED TO ADDRESS RIDEM REVIEW COMMENTS OF 12/27/07	FCI
1	1-26-07	REVISED TO ADDRESS RIDEM REVIEW COMMENTS OF 9/28/07	FCI

PREPARED FOR:
ROBERT PILOZZI
ADP ASSOCIATES
36 HOPKINS AVENUE
JOHNSTON, RI.02919

Stamp:
FERDINAND C. IHENACHO
REGISTERED PROFESSIONAL ENGINEER
No. 6136
2/26

FCI ENGINEERING GROUP, LLC
Civil engineering Consultants
Land development Transportation
Environmental Expert Witness
225 East Avenue, Pawtucket, RI.02860
Phone: 401-726-8300 Fax: 401-831-0038

Drawing: **DETAILS SHEET**
Project: **PROPOSED SITE PLAN - WETLANDS APPLICATION**
21 KERN ACRE DRIVE
AP 20/2, LOT 321
JOHNSTON, RHODE ISLAND
MAR 14 2008
Scale: AS SHOWN
Design: F.I.
Drawn: F.I.
Checked:
Date: 2-20-2007
Drawing Number:
DEM-2
Sheet 2 of 2