



LOCUS MAP
NOT TO SCALE



PRELIMINARY PLAN SUBMISSION FOR A COMPREHENSIVE PERMIT Old North Village

BEING A.P. 23-3, LOT 117- LOT AREA = 1.4 ACRES
LOCATED AT
130 OLD NORTH ROAD
SOUTH KINGSTOWN, R.I. 02879

OWNER:
URI Board of Governors
301 Promenade Street
Providence, R.I. 02908

APPLICANT:
Habitat for Humanity for RI South County Inc.
P.O. Box 68
Shannock, R.I. 02875

PARCEL ZONING:
ZONE: G1 (Government and Institutional Zone)

This project has been designed using an R-10 Zone.

ZONED: R-10

MINIMUM AREA: 10,000 S.F.
FRONTAGE: 80 FEET
FRONT SETBACK: 25 FEET
CORNER SIDE SETBACK: 20 FEET
SIDE SETBACK: 10 FEET
REAR SETBACK: 30 FEET

FEMA DETERMINATION
ZONE "C" - AREA OF MINIMAL FLOODING
PANEL NO. - 445407 0015 D
REVISED - JANUARY 3, 1986

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED MAR 11 2011 FILE # 11-0018
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Chris A. Hest

- NOTES:
1. THERE IS 1 EXISTING LOT WITHOUT ANY DWELLINGS.
 2. THE PROPOSED LOT WILL HOST 4 SINGLE FAMILY DWELLINGS.
 3. THERE ARE NO AREAS OF AGRICULTURAL USE.
 4. EACH UNIT WILL BE SERVED BY PUBLIC WATER AND PUBLIC SEWER.
 5. THIS PROPOSED SUBDIVISION IS NOT LOCATED WITHIN ANY OF THE FOLLOWING AREAS:
 - NARROW RIVER SPECIAL AREA MANAGEMENT PLAN,
 - NATURAL HERITAGE DISTRICT
 - SALT PONDS SPECIAL AREA MANAGEMENT PLAN.
 6. THIS PROPOSED SUBDIVISION IS PARTIALLY LOCATED WITHIN THE GROUNDWATER PROTECTION OVERLAY DISTRICT.
 7. NO HISTORIC CEMETERIES HAVE BEEN OBSERVED ON THIS SITE.
 8. AN ESTIMATION OF THE PROPOSED POPULATION IS 13.
 9. AN ESTIMATION OF THE PROPOSED SCHOOL-AGED POPULATION IS 2.5.

SHEET INDEX:

1. 1/2 MILE RADIUS MAP
2. EXISTING CONDITIONS / PERIMETER SURVEY PLAN
3. PROPOSED CONDITIONS PLAN
4. STREET PLAN AND PROFILE
5. DRAINAGE DETAILS AND GENERAL NOTES
6. SEWER AND WATER NOTES AND DETAILS
7. SOIL AND EROSION CONTROL AND DETAILS



1/2 MILE RADIUS MAP
SCALE: 1" = 300'

1/2 MILE RADIUS MAP
FOR
Old North Village
LOCATED AT
130 OLD NORTH ROAD
SOUTH KINGSTOWN, R.I. 02879
OFFICE OF WATER RESOURCES
ENVIRONMENTAL MANAGEMENT
EIS - 3/2011

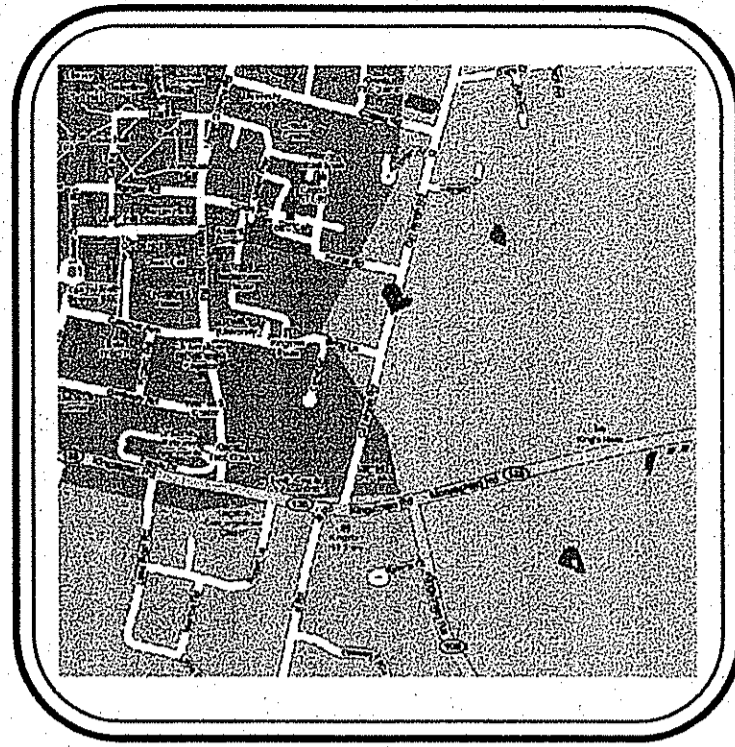
Drawn By: MJC Checked By: DrC
Scale: 1" = 300' Date: 1/11/2011

REVISIONS		BY	DATE
NO.	REVISION	ERM	1/11/11
1.	REVISED PER TRC COMMENTS		

DANIEL R. COTTA
REGISTERED PROFESSIONAL ENGINEER
NO. 12447
2/11

AMERICAN ENGINEERING, INC.
DANIEL R. COTTA Professional Engineer / Professional Land Surveyor
400 South County Trail - Suite A 201
Exeter, Rhode Island 02822
Phone (401) 294-4090 / Fax (401) 294-3625

Sheet
1
of 7 sheets
Drawing No. _____
Dr. _____ Sh. _____



LOCUS MAP
NOT TO SCALE

PRELIMINARY PLAN SUBMISSION

FOR A COMPREHENSIVE PERMIT Old North Village

BEING A.P. 23-3, LOT 117- LOT AREA = 1.4 ACRES

LOCATED AT
130 OLD NORTH ROAD
SOUTH KINGSTOWN, R.I. 02879

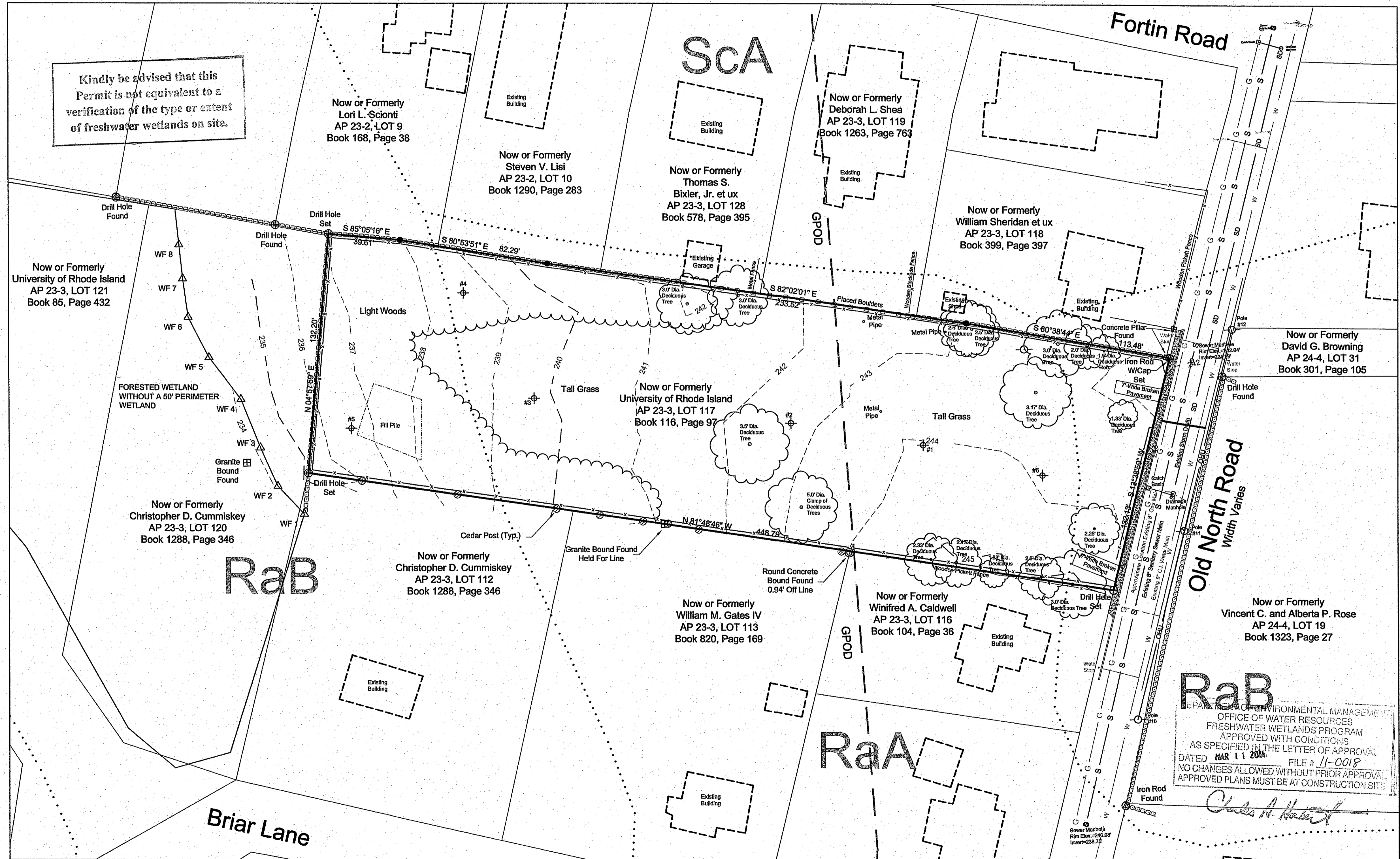
OWNER:
URI Board of Governors
301 Promenade Street
Providence, R.I. 02908

APPLICANT:
Habitat for Humanity for RI South County Inc.
P.O. Box 68
Shannock, R.I. 02875

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ZONE: GI (Government and Institutional Zone)
This project has been designed using an R-10 Zone.
ZONED: R-10
MINIMUM AREA: 10,000 S.F.
FRONTAGE: 80 FEET
FRONT SETBACK: 25 FEET
CORNER SIDE SETBACK: 20 FEET
SIDE SETBACK: 10 FEET
REAR SETBACK: 30 FEET

FEMA DETERMINATION
ZONE "C" - AREA OF MINIMAL FLOODING
PANEL NO. - 445407 0015 D
REVISED - JANUARY 3, 1986

NOTES:
1. THE LOT IS CURRENTLY VACANT CONSISTING OF TALL GRASS WITH SOME LIGHT WOODS AS SHOWN.
2. THERE ARE NO AREAS OF AGRICULTURAL USE.
3. THIS LOT IS NOT LOCATED WITHIN ANY OF THE FOLLOWING AREAS:
- NARROW RIVER SPECIAL AREA MANAGEMENT PLAN,
- NATURAL HERITAGE DISTRICT
- SALT PONDS SPECIAL AREA MANAGEMENT PLAN.
4. THIS LOT IS PARTIALLY LOCATED WITHIN THE GROUNDWATER PROTECTION OVERLAY DISTRICT.
5. NO HISTORIC CEMETERIES HAVE BEEN OBSERVED ON THIS SITE.
6. EXISTING CONDITIONS SHOWN TAKEN ON JANUARY 2010.
7. WETLAND EDGE FLAGGED BY ECOSYSTEM SOLUTIONS, INC. FEBRUARY, 2010.



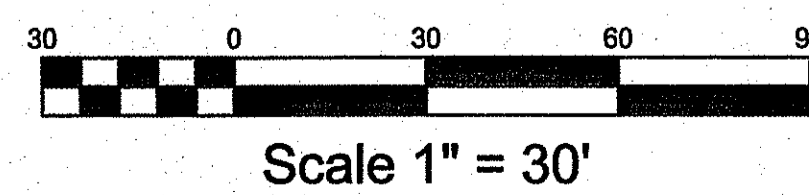
Kindly be advised that this Permit is not equivalent to a verification of the type or extent of freshwater wetlands on site.

REFERENCES:

- REFERENCE IS HEREBY MADE TO THAT PLAN ENTITLED "PLAT SHOWING SUB-DIVISION OF LAND OF L.P. DICKINSON IN KINGSTON, RI SCALE 1"=80" MAY 9TH, 1914 T.G. HAZARD JR. SURVEYOR" SAID PLAN BEING RECORDED IN THE TOWN OF SOUTH KINGSTOWN IN LAND EVIDENCE BOOK 39, PAGE 149.
- REFERENCE IS HEREBY MADE TO THAT PLAN ENTITLED "PLAT OF LAND OF OMER FORTIN SHOWING CHANGES IN LOTS 7, 8, & 18. KINGSTON, RI DEC. 6, 1929 SCALE 1"=100" SAID PLAN BEING RECORDED IN THE TOWN OF SOUTH KINGSTOWN IN LAND EVIDENCE BOOK 46, BETWEEN PAGES 274 AND 275.
- REFERENCE IS HEREBY MADE TO THAT PLAN ENTITLED "TOWN OF SOUTH KINGSTOWN PLAN AND PROFILE OF HIGHWAY AT KINGSTON FROM STA. 0. IN KINGSTOWN ROAD TO THE NORTHERLY LINE OF SCHOOL HOUSE LOT SCALE OF PLAN 1"=80" HOR., SCALE OF PROFILE 1"=80" VERT., SCALE OF PROFILE 1"=20" JULY 13TH 1908 LEON L. HOLLAND CIVIL ENGINEER"

LEGEND:

- BOUND FOUND
- ⊕ DRILL HOLE FOUND/SET
- ⊙ IRON ROD FOUND/SET
- ANGLE POINT
- ⊕ TEST HOLE
- ⊖ U-POLE
- ⊙ CEDAR POST FOUND
- WF 5 △ WETLAND FLAG
- ~ EXISTING TREELINE
- EXISTING TREE
- ▬ EXISTING SIDEWALK
- ▬ EXISTING STONEWALL
- GPOD GROUND WATER PROTECTION OVERLAY DISTRICT
- G EXISTING GAS MAIN
- S EXISTING SEWER MAIN
- SD EXISTING STORM DRAIN
- W EXISTING WATER MAIN
- OHU EXISTING OVERHEAD UTILITIES
- X EXISTING FENCE SEE PLAN FOR TYPE



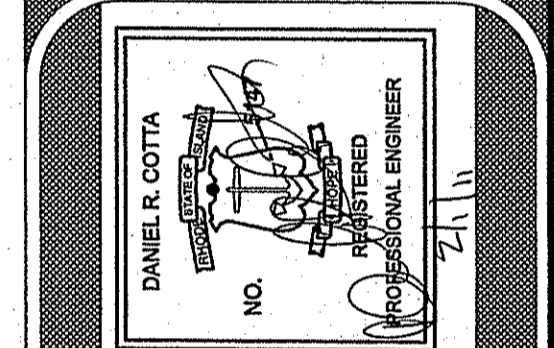
THE PERIMETER SURVEY AND PLAN CONFORMS TO A CLASS I STANDARD AS ADOPTED BY THE RHODE ISLAND BOARD OF REGISTRATION FOR PROFESSIONAL LAND SURVEYORS.

BY: *[Signature]* 2/11/11
REGISTERED PROFESSIONAL LAND SURVEYOR DATE

THIS PLAN IS TO BE INDEXED UNDER THE FOLLOWING ROADS:
1. OLD NORTH ROAD

EXISTING CONDITIONS / PERIMETER SURVEY PLAN FOR 2010
LOCATED AT
Old North Village
130 OLD NORTH ROAD
SOUTH KINGSTOWN, R.I. 02879

Drawn By: MJC	Checked By: DrC	
Scale: 1" = 30'	Date: 1/11/2011	
REVISIONS		
NO.	REVISION	DATE
1.	REVISED PER TRC COMMENTS	1/13/11



AMERICAN ENGINEERING, INC.
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of 7 sheets
Drawing No. _____
Dr. _____ Sh. _____

109168
PRELIMINARY 2 of 7

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PRELIMINARY PLAN SUBMISSION

FOR A
COMPREHENSIVE PERMIT
Old North Village

BEING A.P. 23-3, LOT 117- LOT AREA = 1.4 ACRES

LOCATED AT
130 OLD NORTH ROAD
SOUTH KINGSTOWN, R.I. 02879

OWNER:
URI Board of Governors
301 Promenade Street
Providence, R.I. 02908

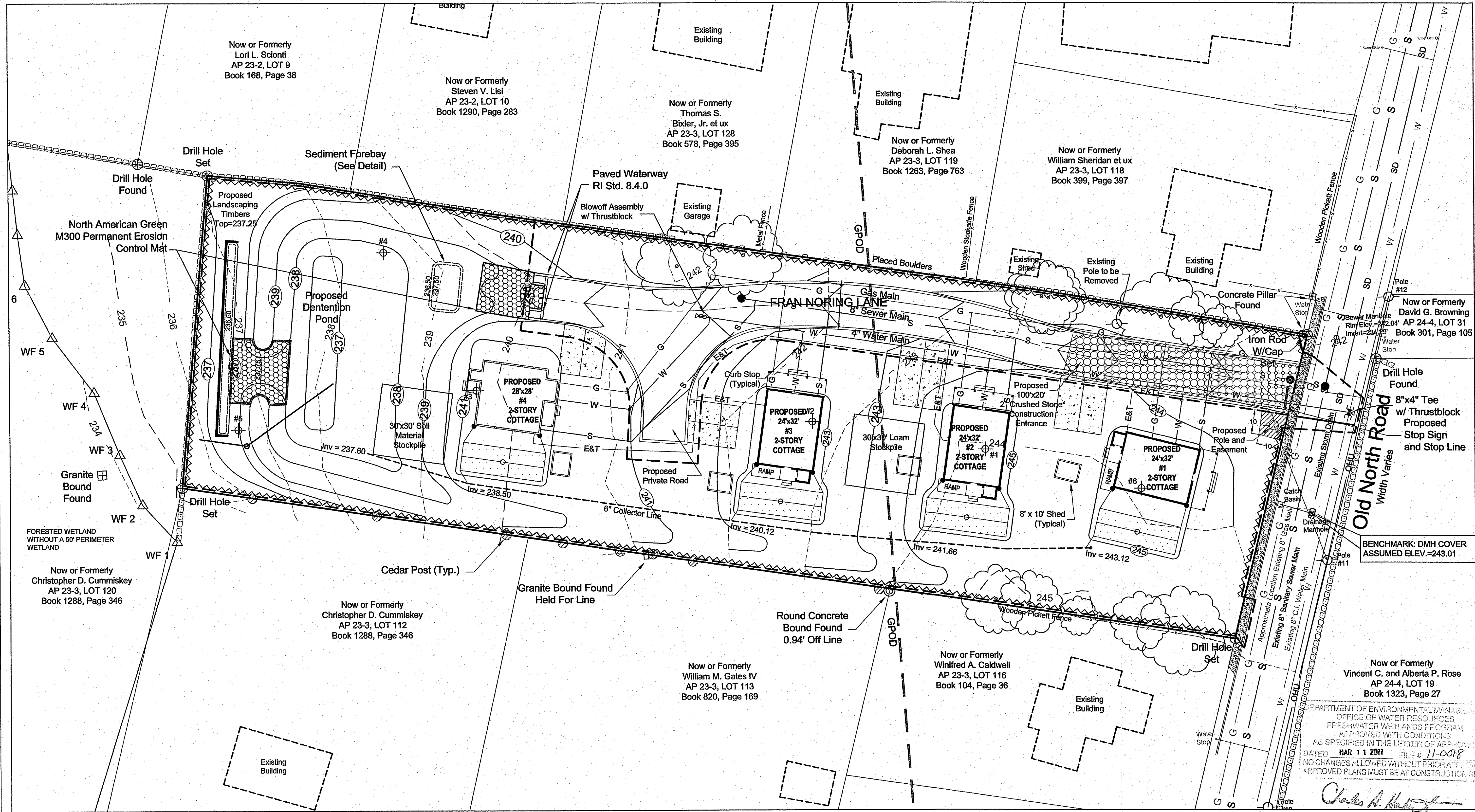
APPLICANT:
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P.O. Box 68
Shannock, R.I. 02875

PARCEL ZONING:
ZONE: GI (Government and Institutional Zone)
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ZONED: R-10
MINIMUM AREA: 10,000 S.F.
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FRONT SETBACK: 25 FEET
CORNER SIDE SETBACK: 20 FEET
SIDE SETBACK: 10 FEET
REAR SETBACK: 30 FEET
FEMA DETERMINATION
ZONE "C" - AREA OF MINIMAL FLOODING
PANEL NO. - 445407 0015 D
REVISED - JANUARY 3, 1996

NOTES:
1. THE EXISTING LOT IS VACANT.
2. THE PROPOSED LOT WILL HOST 4 SINGLE FAMILY DWELLINGS.
3. THERE ARE NO AREAS OF AGRICULTURAL USE.
4. EACH UNIT WILL BE SERVED BY PUBLIC WATER AND PUBLIC SEWER.
5. THIS PROPOSED SUBDIVISION IS NOT LOCATED WITHIN ANY OF THE FOLLOWING AREAS:
- NARROW RIVER SPECIAL AREA MANAGEMENT PLAN,
- NATURAL HERITAGE DISTRICT
- SALT PONDS SPECIAL AREA MANAGEMENT PLAN.
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9. AN ESTIMATION OF THE PROPOSED SCHOOL-AGED POPULATION IS 2.5.

LEGEND:

- BOUND FOUND
- DRILL HOLE FOUND/SET
- IRON ROD FOUND/SET
- ANGLE POINT
- U-POLE
- TEST HOLE
- CEDAR POST FOUND
- WATER LINE
- SEWER LINE
- GAS LINE
- UNDERGROUND INFILTRATION FROM ROOF LEADERS
- PROPOSED CONCRETE DRIVEWAY/PATIO AREA
- LIMIT OF DISTURBANCE
- SILT FENCE

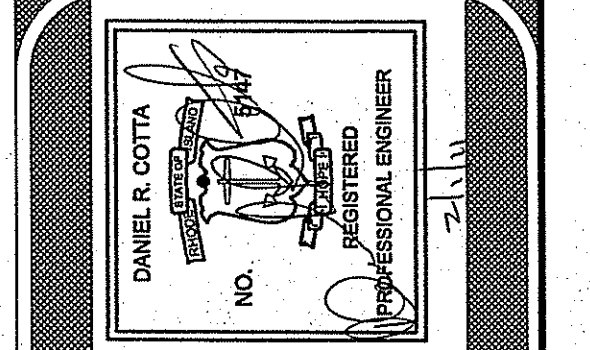


PROPOSED CONDITIONAL PLAN
FOR
Old North Village
LOCATED AT
130 OLD NORTH ROAD
SOUTH KINGSTOWN, R.I. 02879

Checked By: **DC**
Date: 1/11/2011

Drawn By: **MIC**
Scale: 1" = 20'

NO.	REVISION	DATE
1.	REVISED PER TRC COMMENTS	1/11/11

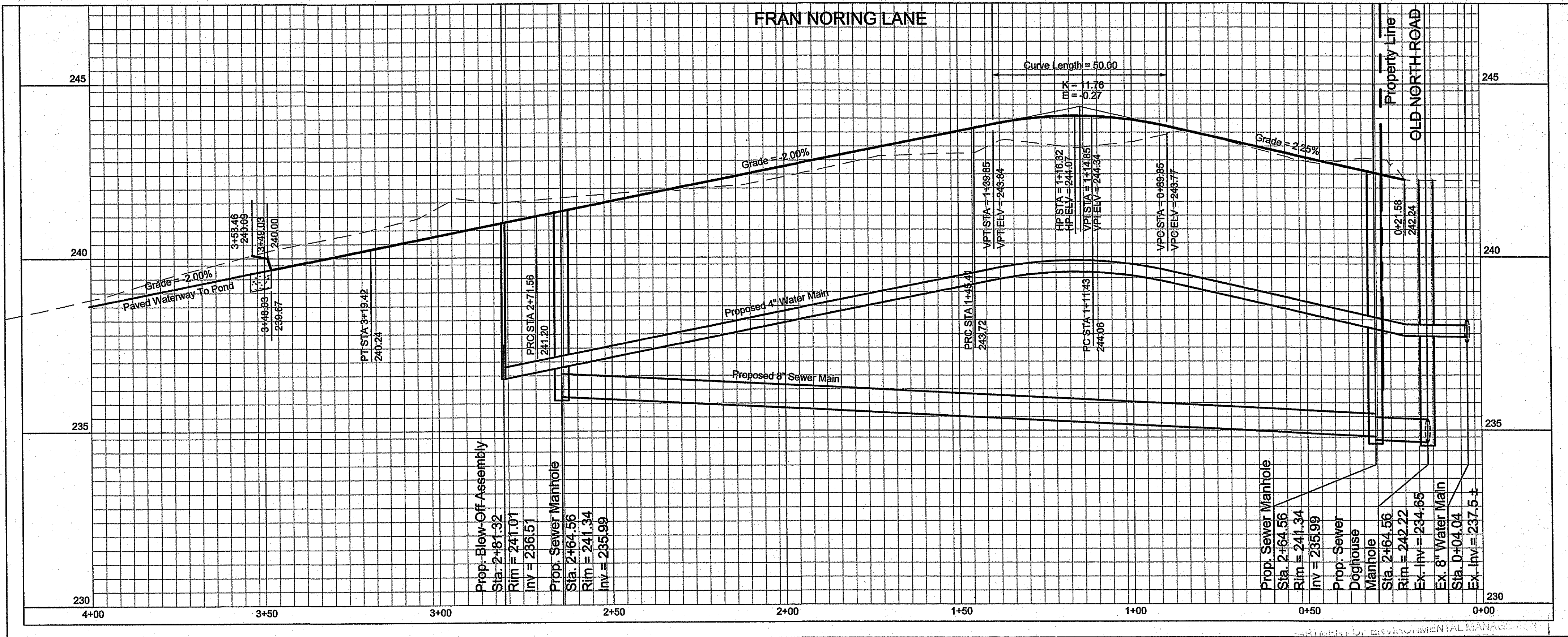
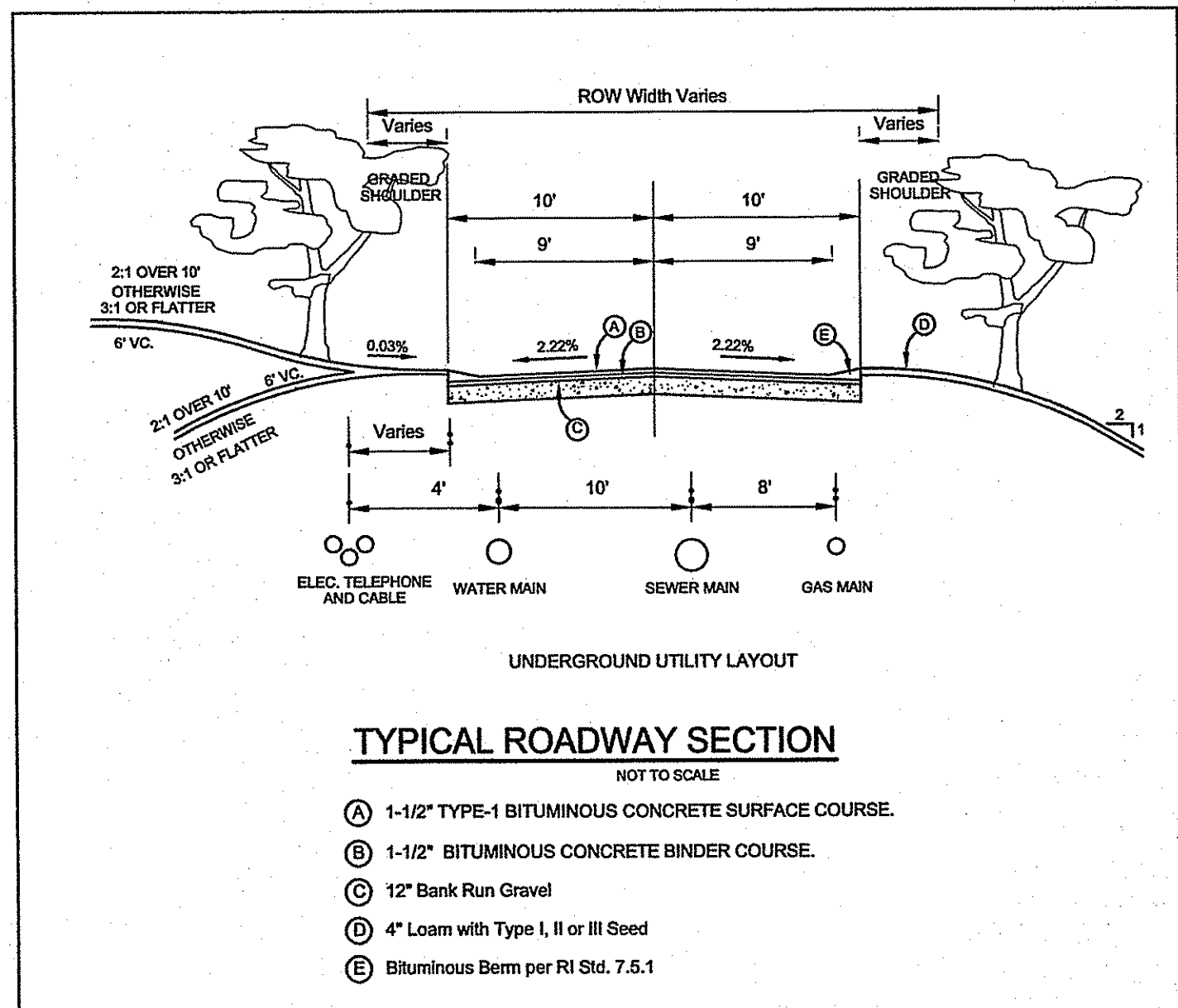
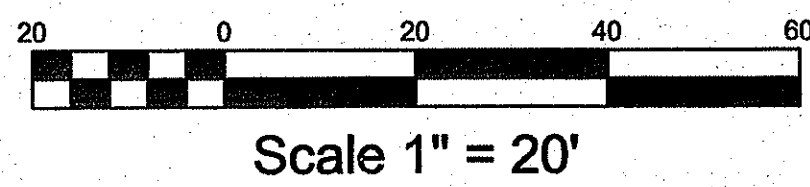
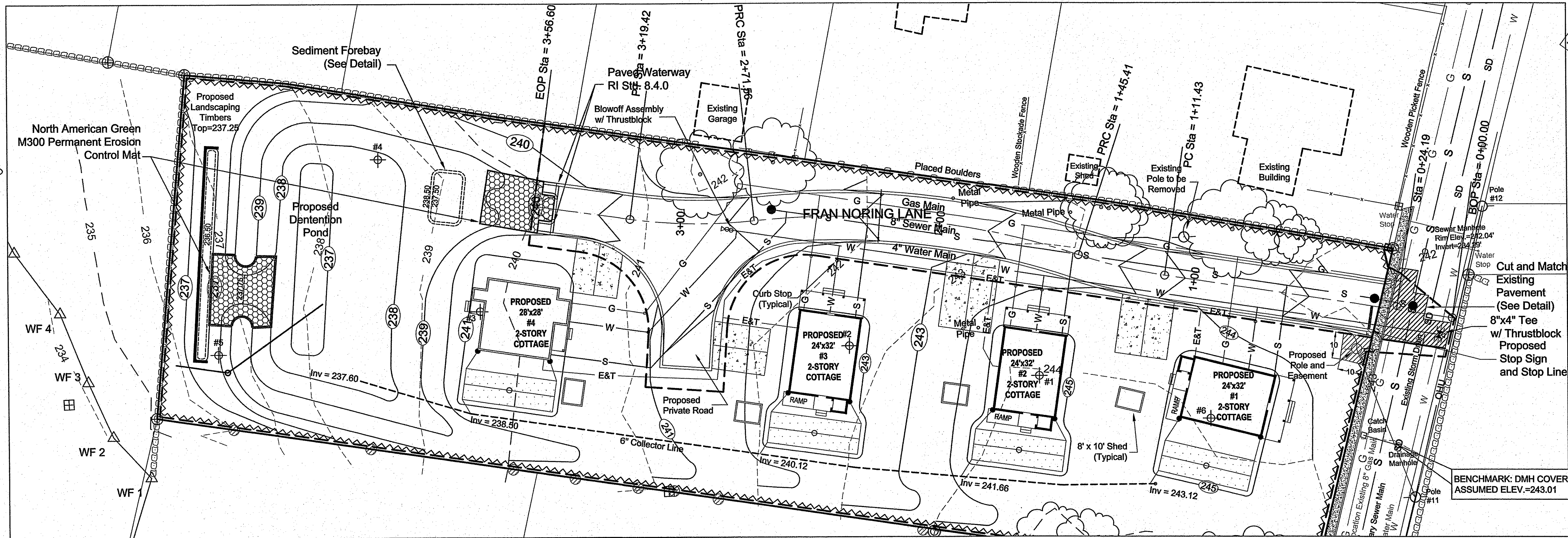


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Sheet
3
of 7 sheets
Drawing No. _____
Dr. _____ Sh. _____

PRELIMINARY 3 of 7

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Horz. Scale: 1" = 20'
Veret. Scale: 1" = 2'

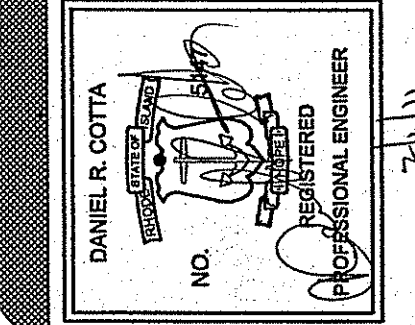
OFFICE OF WATER RESOURCES
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DATE: 11-0018
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APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Charles A. Harte

Street Plan and Profile
FOR
Habitat for Humanity
OWNER / APPLICANT:
URI Board of Governors
301 Promenade Street
Providence, R.I. 02908
LOCATED AT
130 Old North Road
SOUTH KINGSTOWN, R.I.

Drawn By: ERM Checked By: DFC
Scale: 1" = 20' Date: 1/11/2011

NO.	REVISION	BY	DATE
1.	REVISED PER TRC COMMENTS	ERM	1/11/11



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Sheet
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of 7 sheets
Drawing No. _____
Dr. Sh. _____

10916B
PRELIMINARY 4 of 7

GENERAL BASIN NOTES

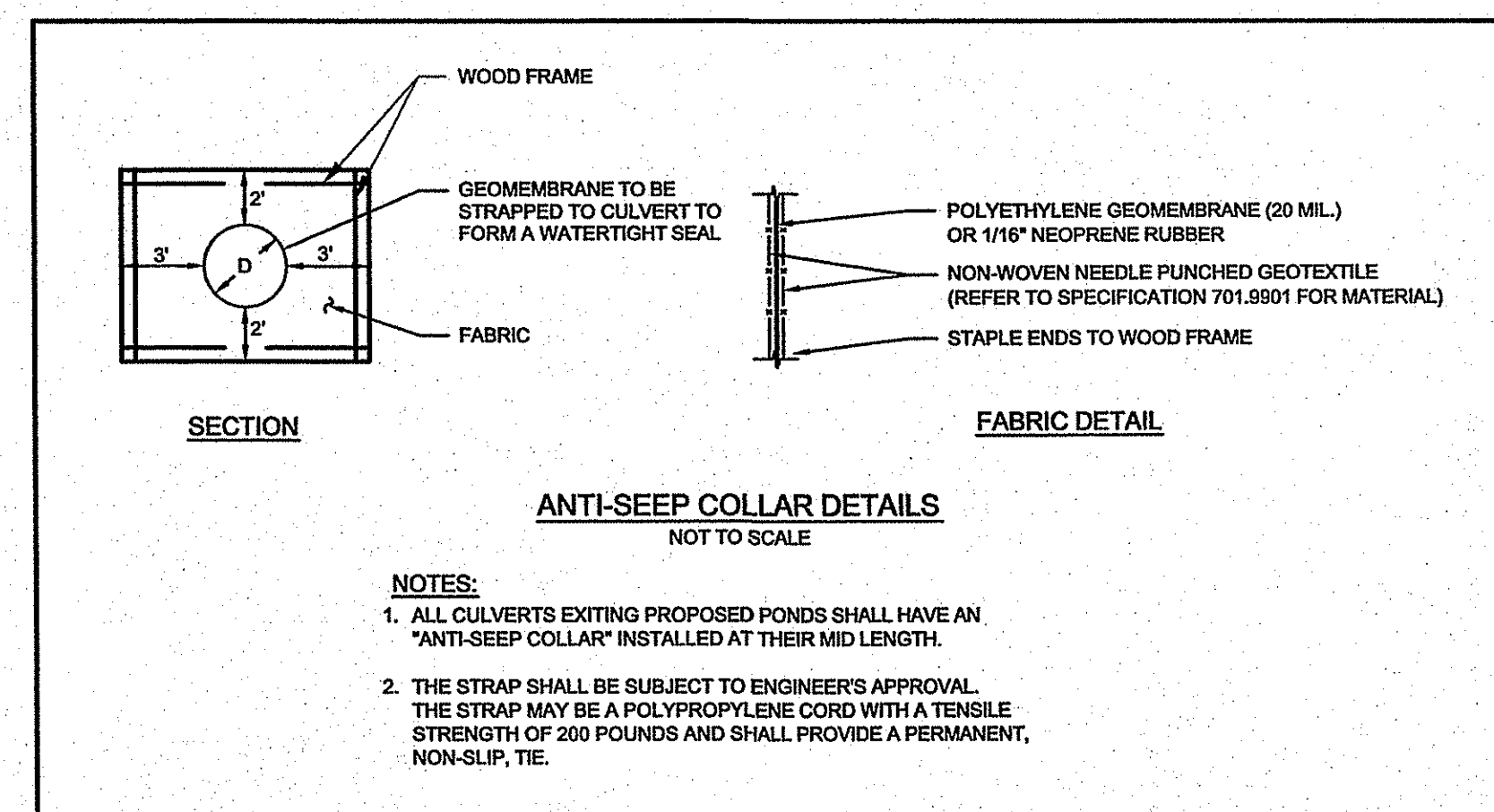
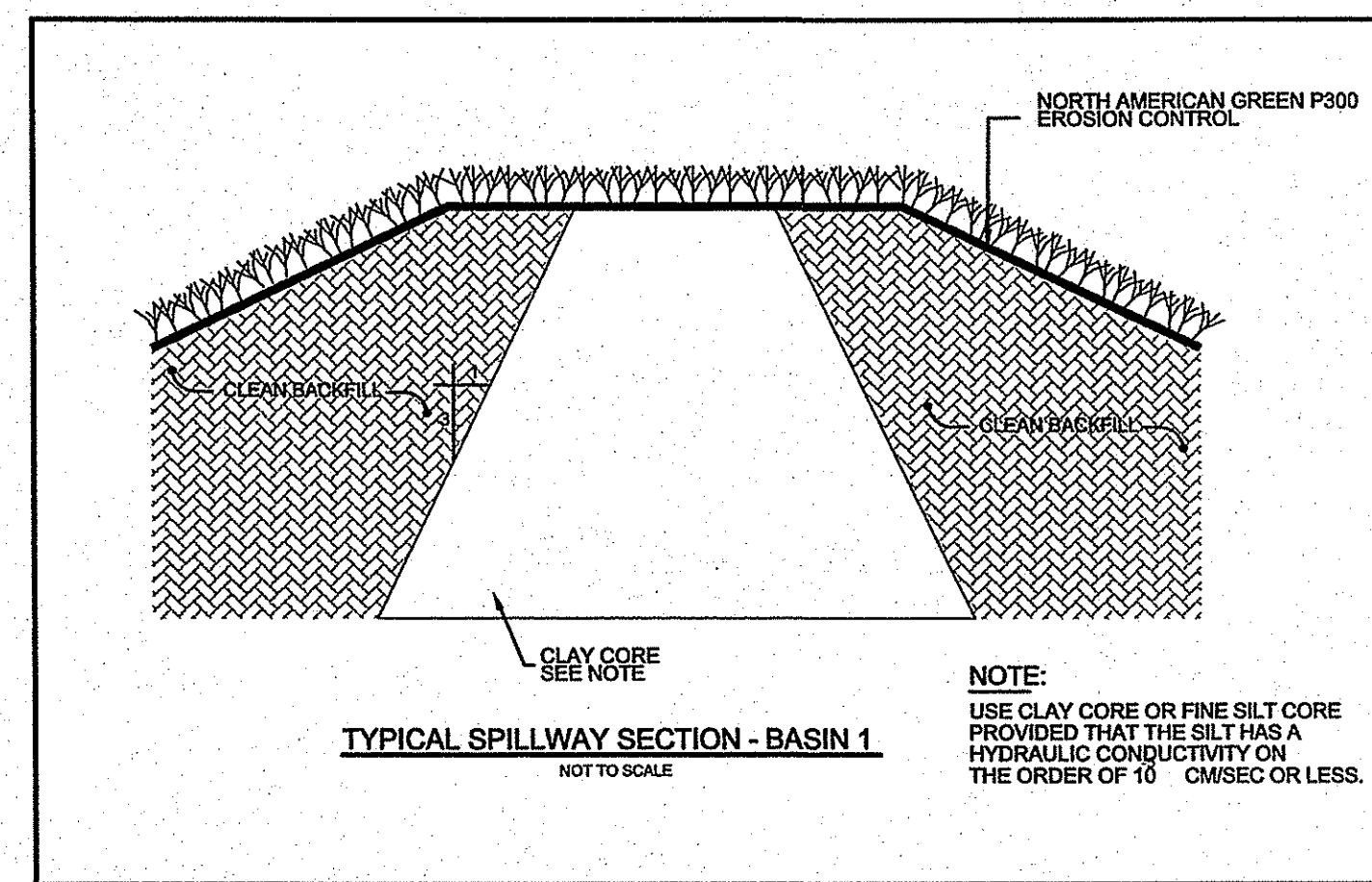
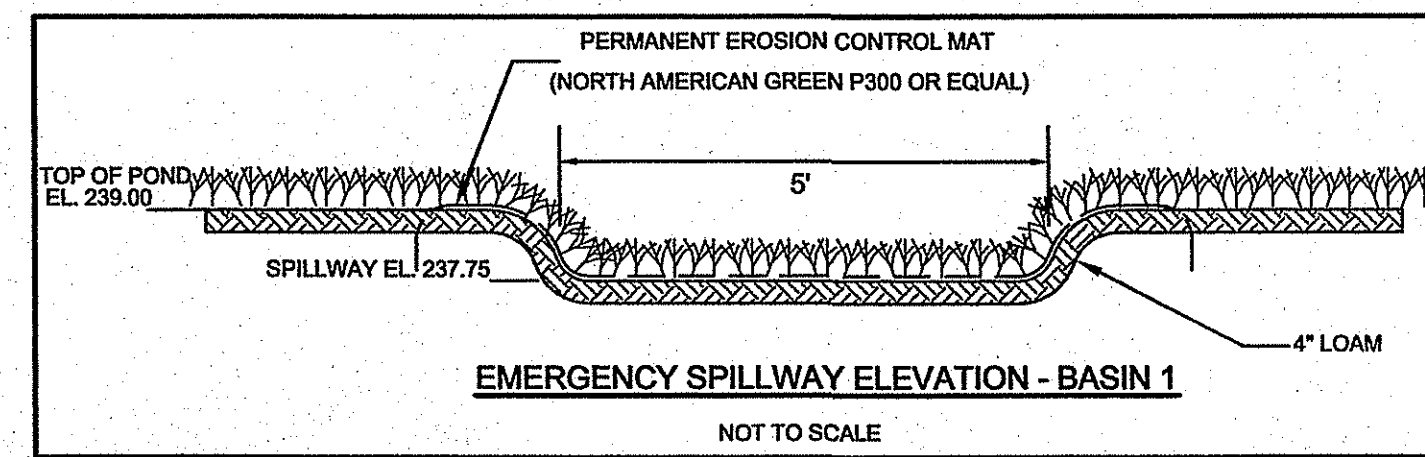
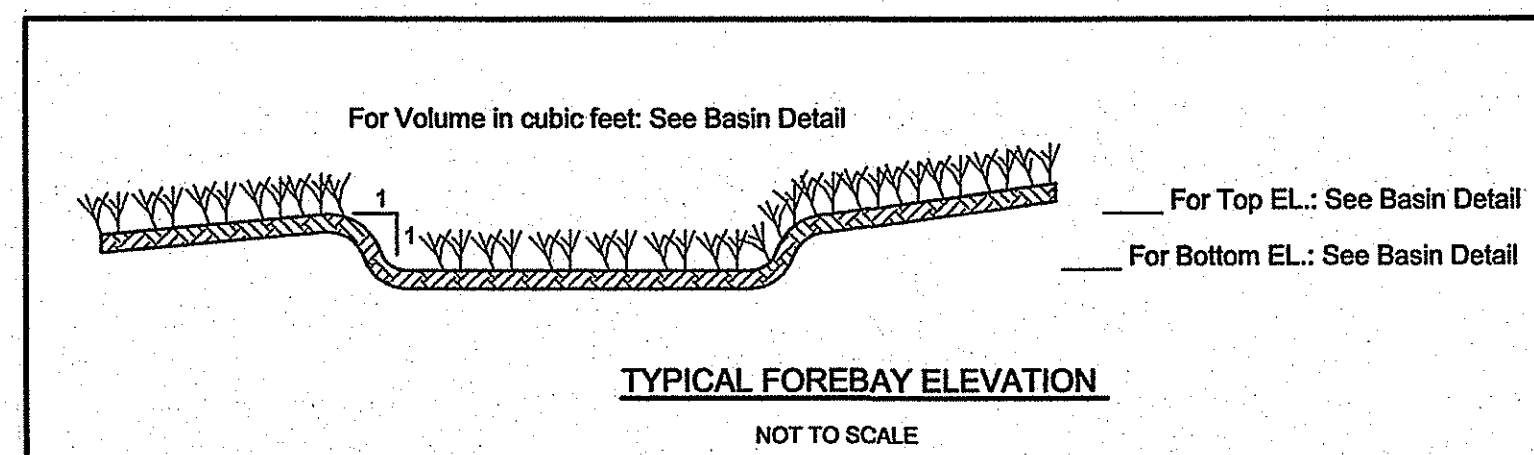
THE DETENTION BASIN SHALL BE MAINTAINED ACCORDING TO THE FOLLOWING SCHEDULE:

1. ALL TREES, SHRUBS AND STUMPS SHOULD BE REMOVED FROM THE SPILLWAY (BERM) SIDE OF THE BASIN.
2. TREES OR SHRUBS SHOULD NOT BE PLANTED ON ANY IMPOUNDING EMBANKMENTS (I.E., DIKES OR BERMS) OR WITHIN THE BASIN. SUCH PLANTINGS ARE GENERALLY DISCOURAGED IN ORDER TO REDUCE THE CHANCE OF FAILURE DUE TO ROOT DECAY AND SUBSURFACE DISTURBANCE. GRASSES ARE CONSIDERED THE ONLY ACCEPTABLE VEGETATION FOR PLANTING AND STABILIZING IMPOUNDING EMBANKMENTS.
3. THE ENTIRE BASIN MUST BE STABILIZED WITH A DENSE LAYER OF GRASS IMMEDIATELY FOLLOWING BASIN CONSTRUCTION. THIS MAY REQUIRE THE ADDITION OF 4-6 INCHES OF A LOAMY SOIL SUBSTRATE TO PROMOTE GOOD VEGETATIVE GROWTH AND INFILTRATION. THE ADDITION OF LOAMY SOIL TO THE BASIN MUST BE FACTORED INTO THE OVERALL VOLUME REQUIREMENT. THE BASIN SHALL BE SEEDED WITH TURF-TYPE TALL FESCUES OR SIMILAR.
4. THE DETENTION BASINS SHALL ALSO BE UTILIZED AS TEMPORARY BASINS DURING CONSTRUCTION. THESE BASINS SHALL THEN BE ENTIRELY CLEANED OF SEDIMENT AND THE BOTTOM SCARIFIED PRIOR TO SEEDING AND VEGETATION STABILIZATION. FAILURE TO DO SO WILL ALLOW EXCESSIVE QUANTITIES OF SEDIMENTS TO REMAIN IN THE BASINS AND WILL NECESSITATE MORE FREQUENT CLEANING OF THE DRAINAGE SYSTEM.
5. THE MAXIMUM ALLOWABLE SLOPE LEADING TO THE BASIN FLOOR SHALL BE 3:1 (3 HORIZONTAL TO 1 VERTICAL) TO FACILITATE MOWING AND OTHER MAINTENANCE OPERATIONS.

DETENTION BASIN MAINTENANCE PLAN

THE DETENTION BASIN SHALL BE MAINTAINED ACCORDING TO THE FOLLOWING SCHEDULE:

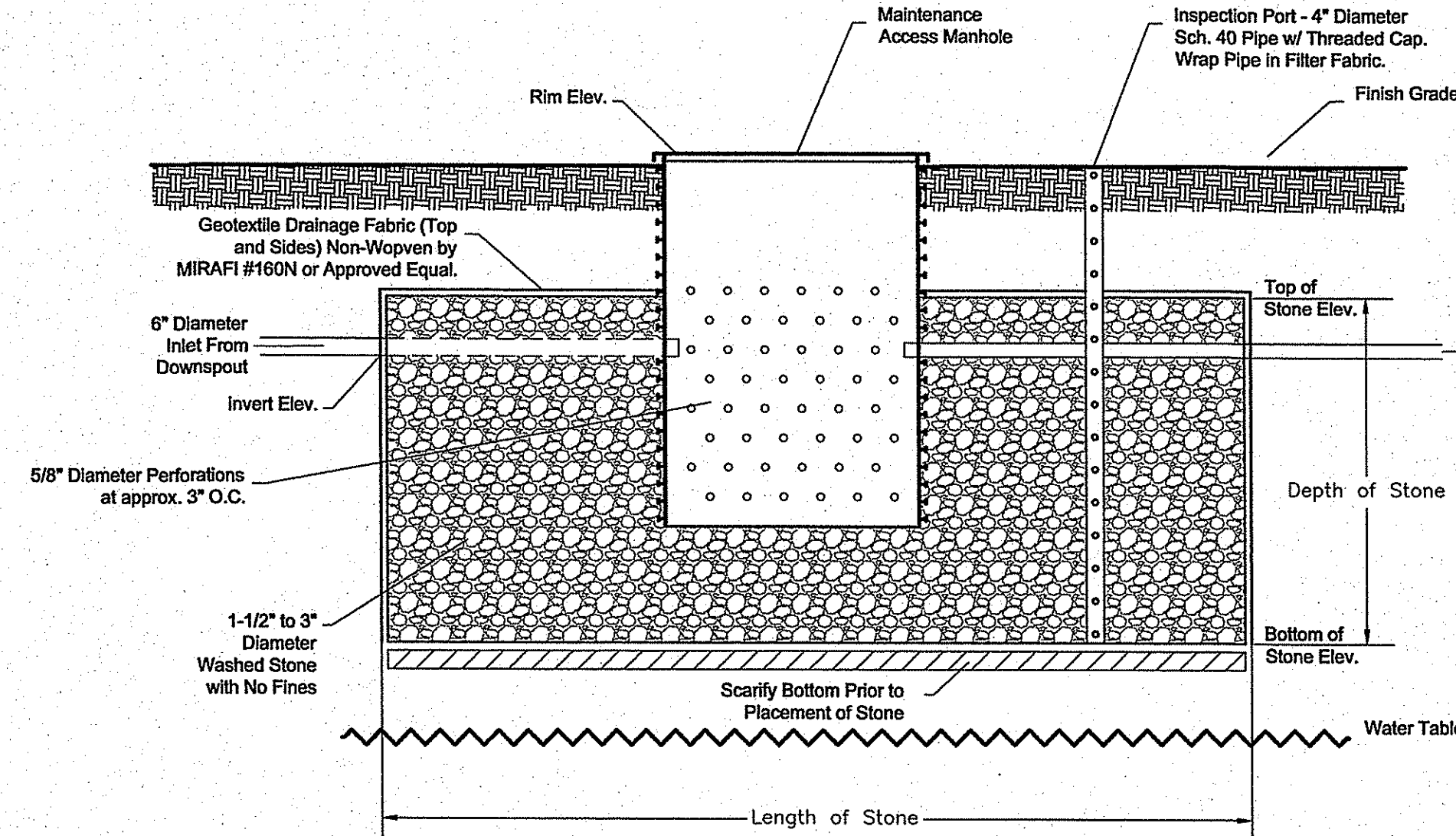
1. THE GRASS ON THE DETENTION BASIN (DIKE & SLOPES) SHALL BE MOWED THREE (3) TIMES BETWEEN THE MONTHS OF MAY AND OCTOBER. MOWED HEIGHT OF VEGETATION SHALL NOT BE LESS THAN TWO INCHES.
2. THE INLET & OUTLET PIPES TO THE DETENTION BASIN SHALL BE KEPT CLEAN OF SILT AND DEBRIS. THE PIPES SHALL BE CLEANED AT THE THREE (3) MOWINGS AND ONCE DURING THE WINTER MONTHS.
3. ACCUMULATED SILT AND DEBRIS SHALL BE REMOVED FROM THE BASIN THREE (3) TIMES A YEAR, PREFERABLE AT THE TIME OF MOWING.
4. ALL SILT, SAND AND DEBRIS REMOVED FROM THE BASINS SHALL BE DISPOSED OF OFF-SITE. DISPOSAL LOCATION SHALL BE PRE-APPROVED BY RIDEM.
5. DETENTION BASINS SHALL BE MAINTAINED BY THE CONTRACTOR UNTIL FINAL APPROVAL OF CONSTRUCTION.



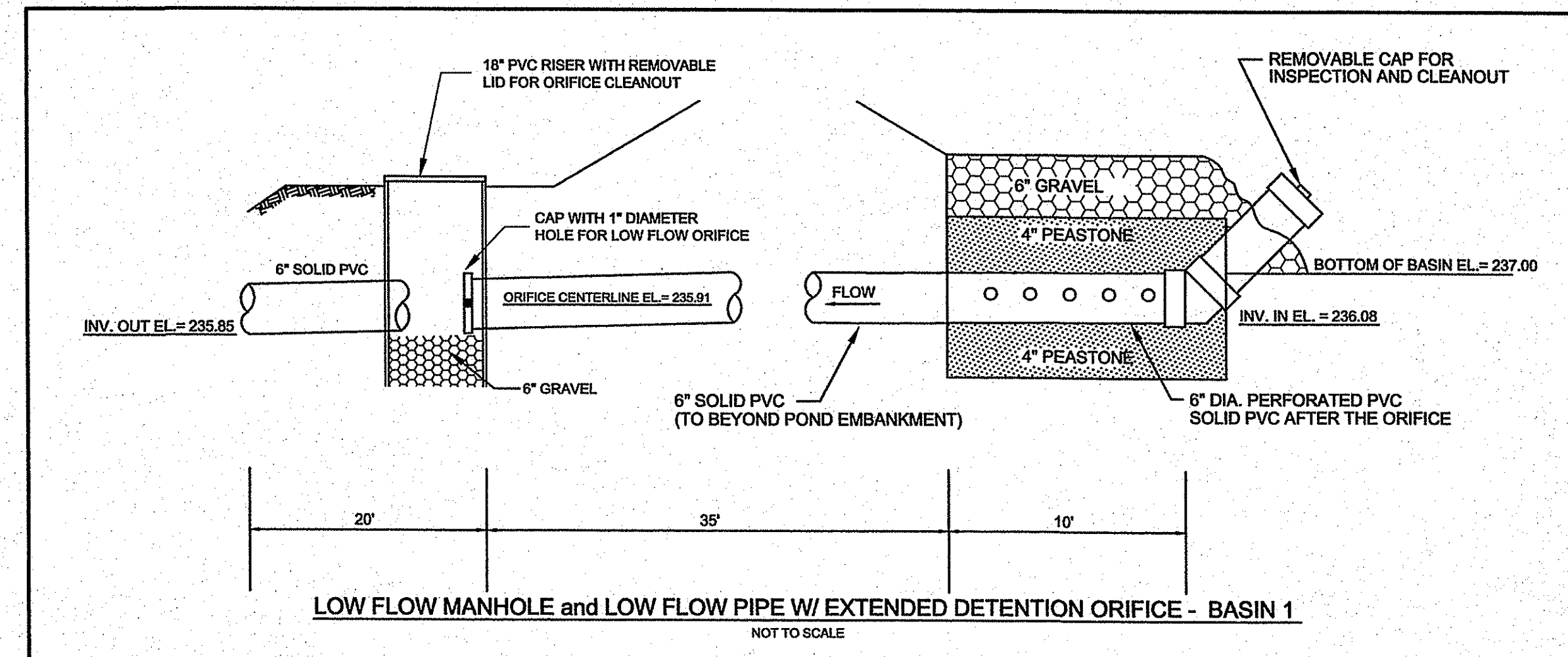
- NOTES:**
1. ALL CULVERTS EXITING PROPOSED PONDS SHALL HAVE AN "ANTI-SEEP COLLAR" INSTALLED AT THEIR MID LENGTH.
 2. THE STRAP SHALL BE SUBJECT TO ENGINEER'S APPROVAL. THE STRAP MAY BE A POLYPROPYLENE CORD WITH A TENSILE STRENGTH OF 200 POUNDS AND SHALL PROVIDE A PERMANENT, NON-SLIP, TIE.

House Drywell System Schedule				
House Number	1	2	3	4
Length of Stone	35'	35'	35'	35'
Width of Stone	10'	10'	10'	10'
Depth of Stone	1.0'	1.0'	1.0'	1.0'
Depth of Storage	0.5'	0.5'	0.5'	0.5'
Rim Elev.	245.00	245.00	243.25	241.25
Top of Stone Elev.	244.25	244.25	242.50	240.75
Invert Elev.	243.75	243.75	242.00	240.25
Bottom of Stone Elev.	243.25	243.25	241.50	239.75
Water Table	241.58	241.25	240.00	238.25

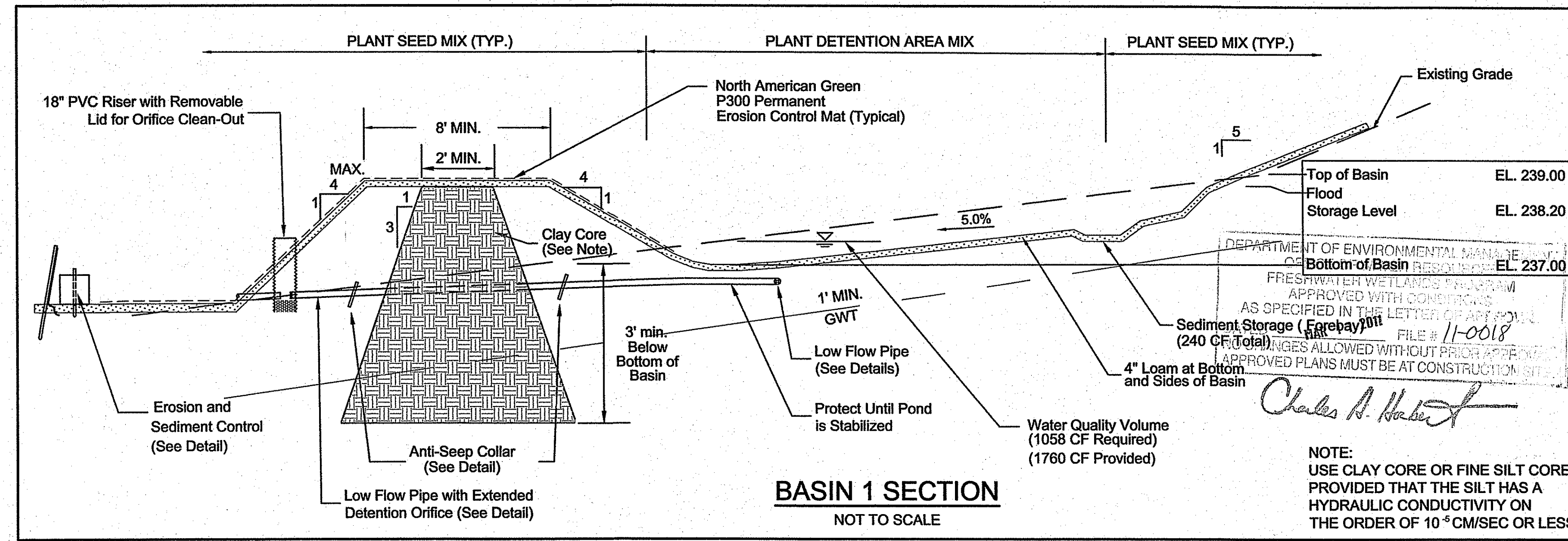
Note: 9' of cover 9' of cover 9' of cover 6' of cover



House Drywell System (Typical Detail)
NOT TO SCALE



LOW FLOW MANHOLE and LOW FLOW PIPE W/ EXTENDED DETENTION ORIFICE - BASIN 1
NOT TO SCALE



BASIN 1 SECTION
NOT TO SCALE

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
FILE # 11-0018
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Charles A. Hubert

NOTE:
USE CLAY CORE OR FINE SILT CORE PROVIDED THAT THE SILT HAS A HYDRAULIC CONDUCTIVITY ON THE ORDER OF 10⁻⁶ CM/SEC OR LESS.

Drainage Details and General Notes FOR Habitat for Humanity
 OWNER/APPLICANT: Providence, R.I. 02908
 301 Promenade Street
 LOCATED AT: 130 Old North Road
 SOUTH KINGSTOWN, R.I.

Checked By: **DrC** Date: 1/11/2011

Scale: 1" = 20'

NO.	REVISION	BY	DATE
1.	REVISED PER TRC COMMENTS	ERM	1/11/11

DANIEL R. COTTA
NO. 4147
REGISTERED PROFESSIONAL ENGINEER

AMERICAN ENGINEERING, INC.
 Daniel R. Cotta - Professional Engineer / Professional Land Surveyor
 400 South County Trail - Suite A 201
 Exeter, Rhode Island 02822
 Phone (401) 294-4090 / Fax (401) 294-3625

Sheet **5**
of 7 sheets
Drawing No. _____
Dr. _____

109168
PRELIMINARY 5 of 7

SANITARY SEWER NOTES

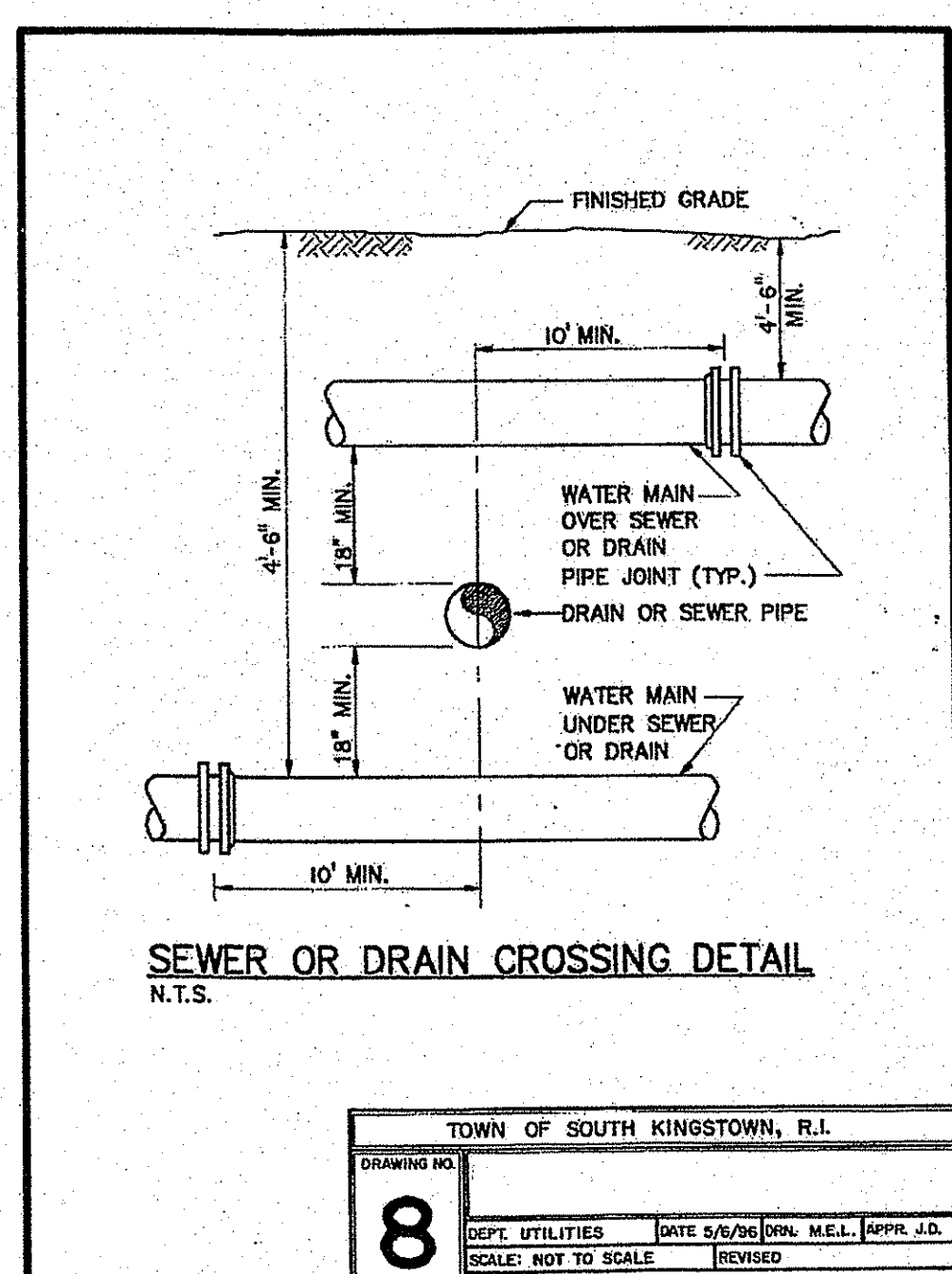
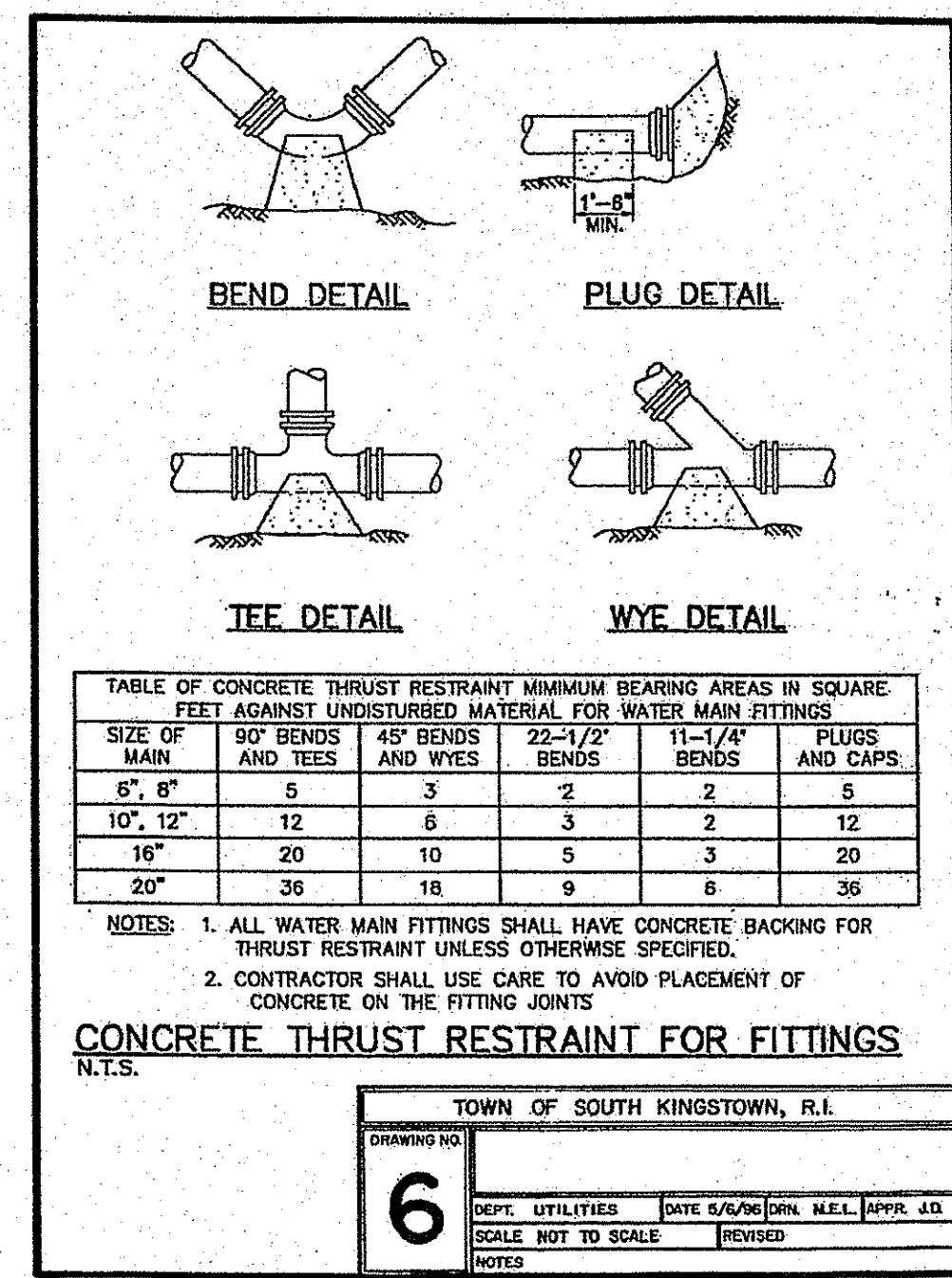
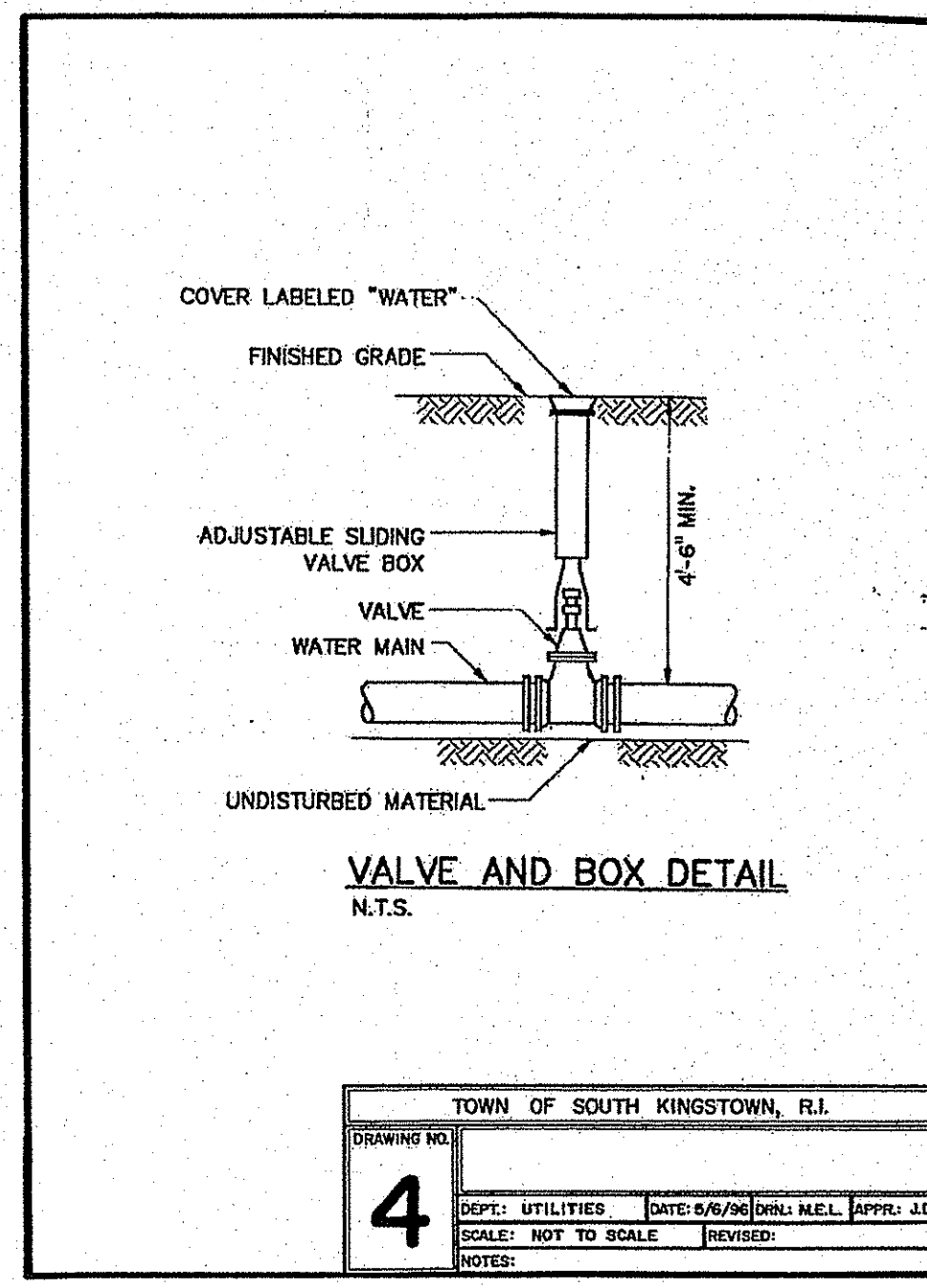
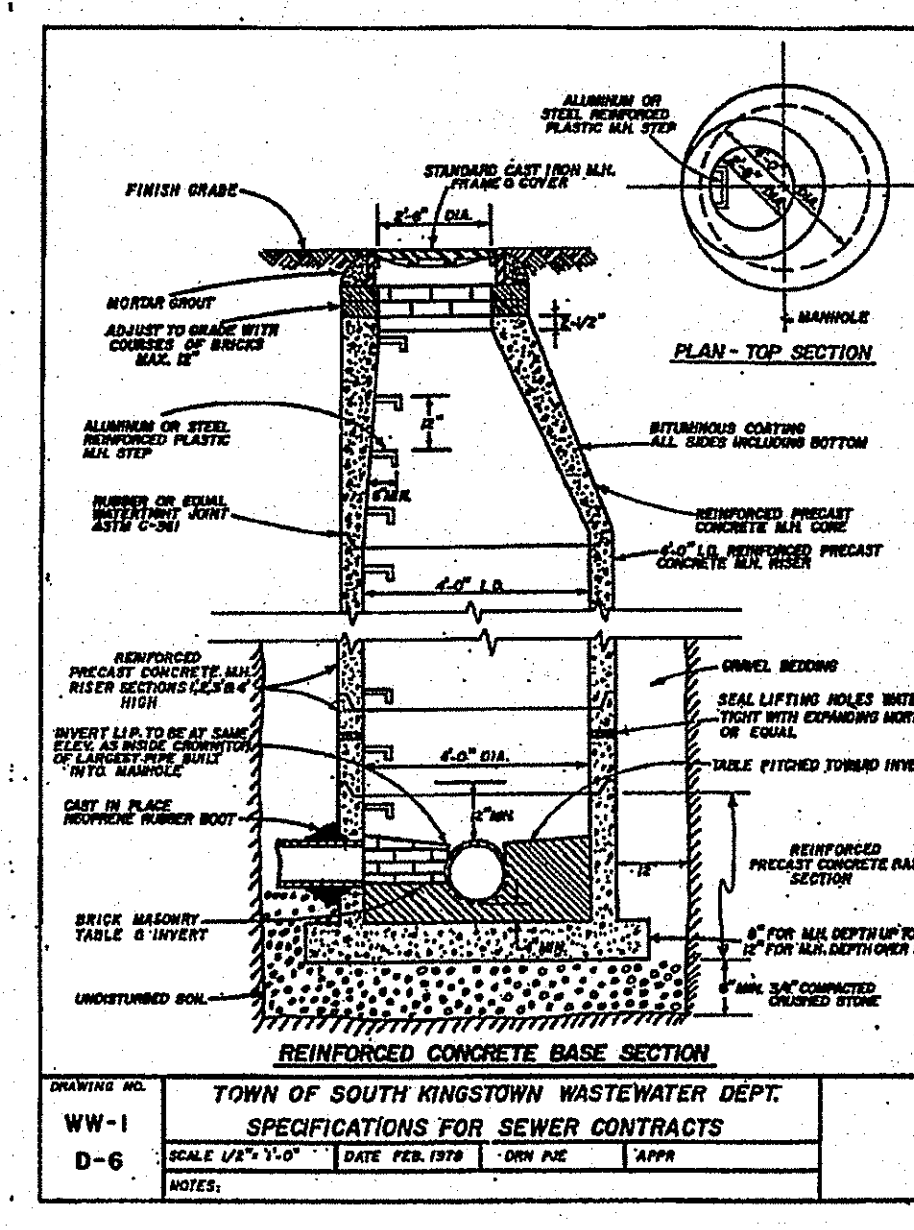
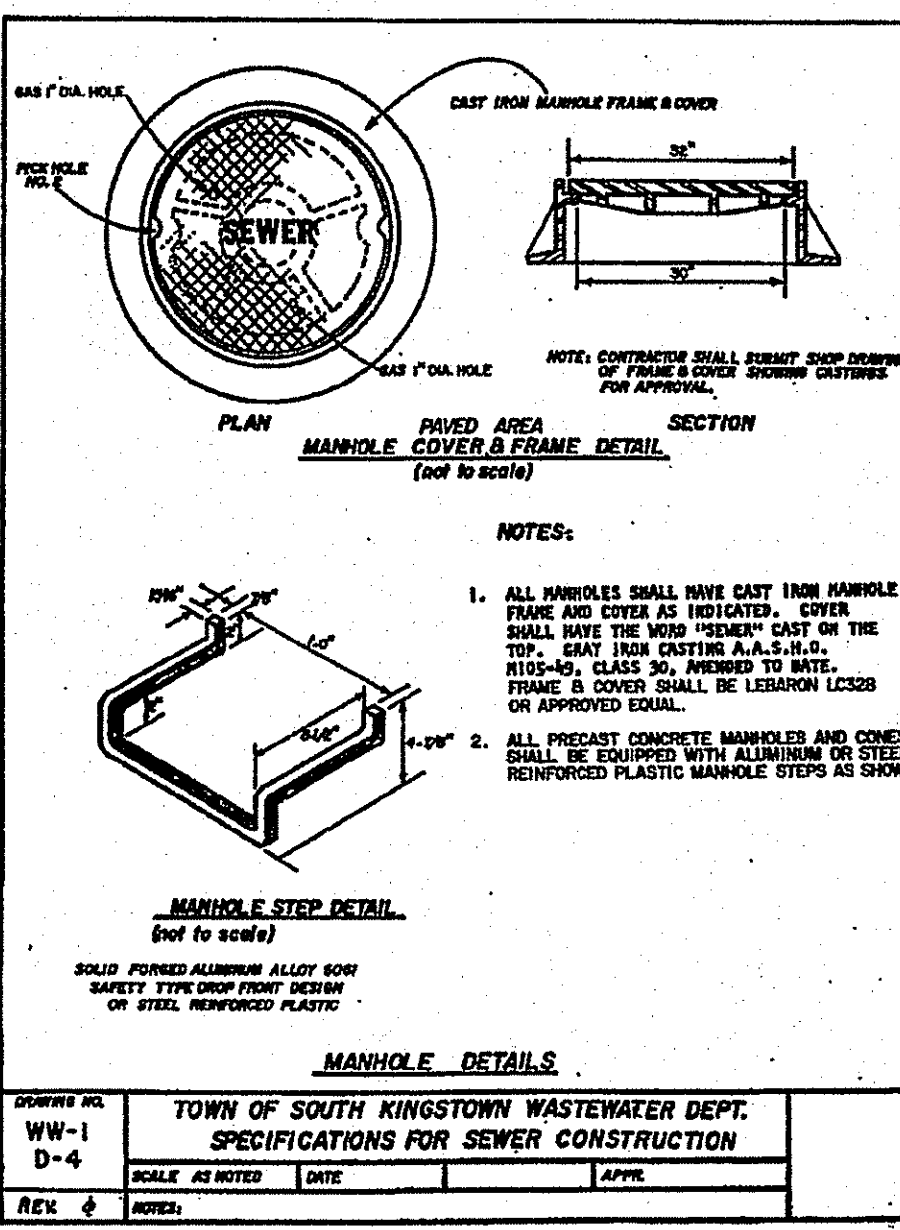
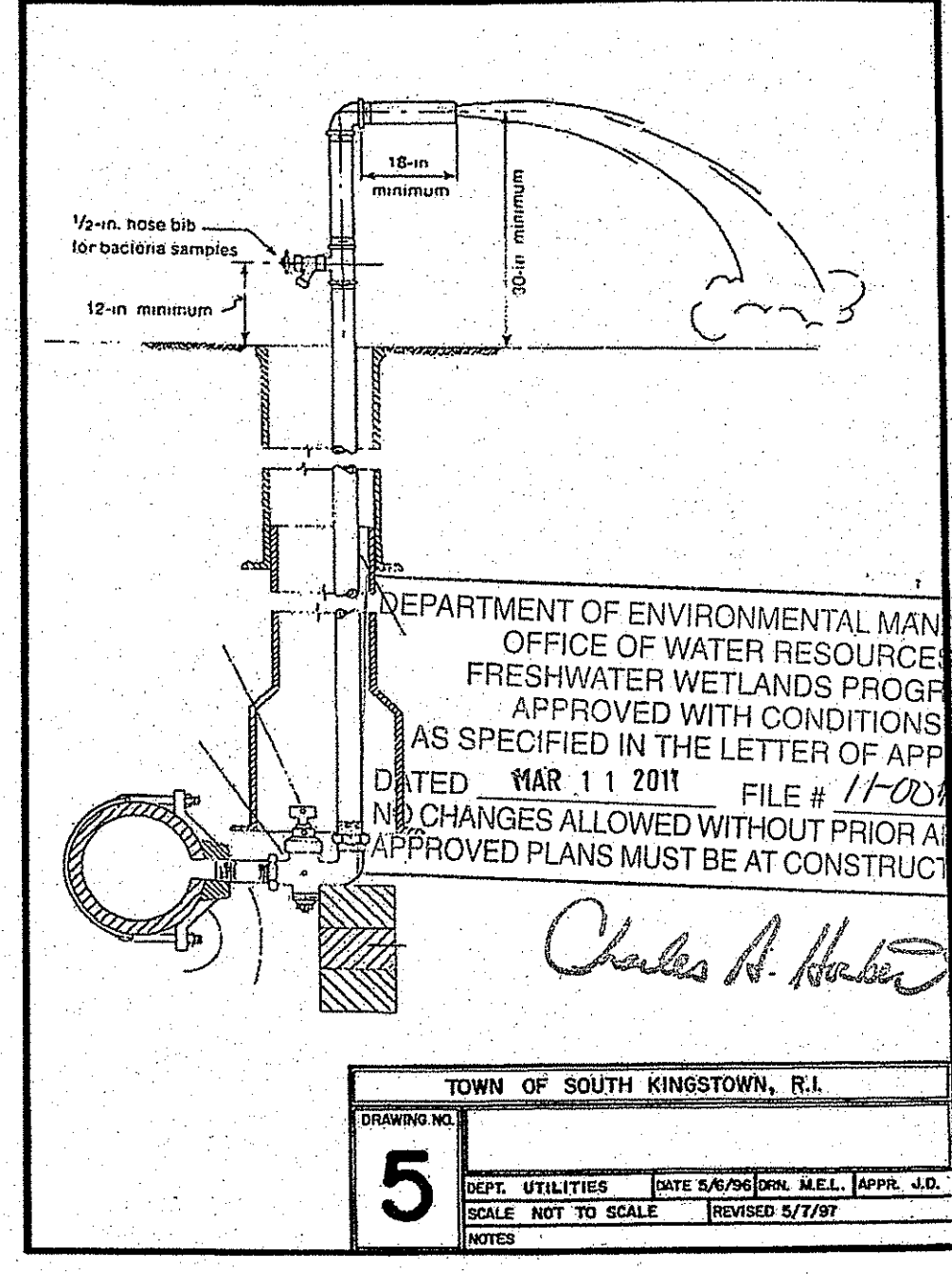
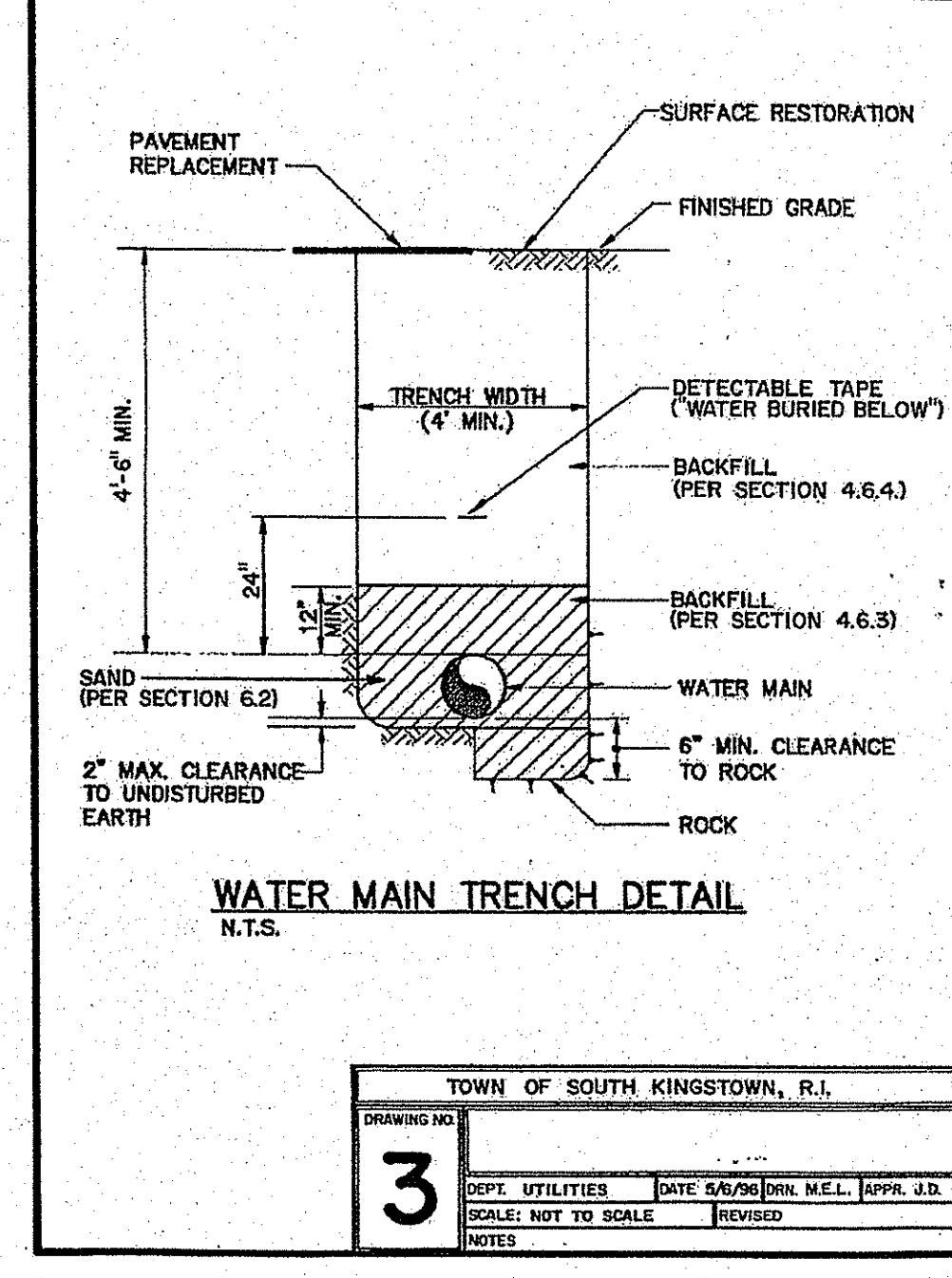
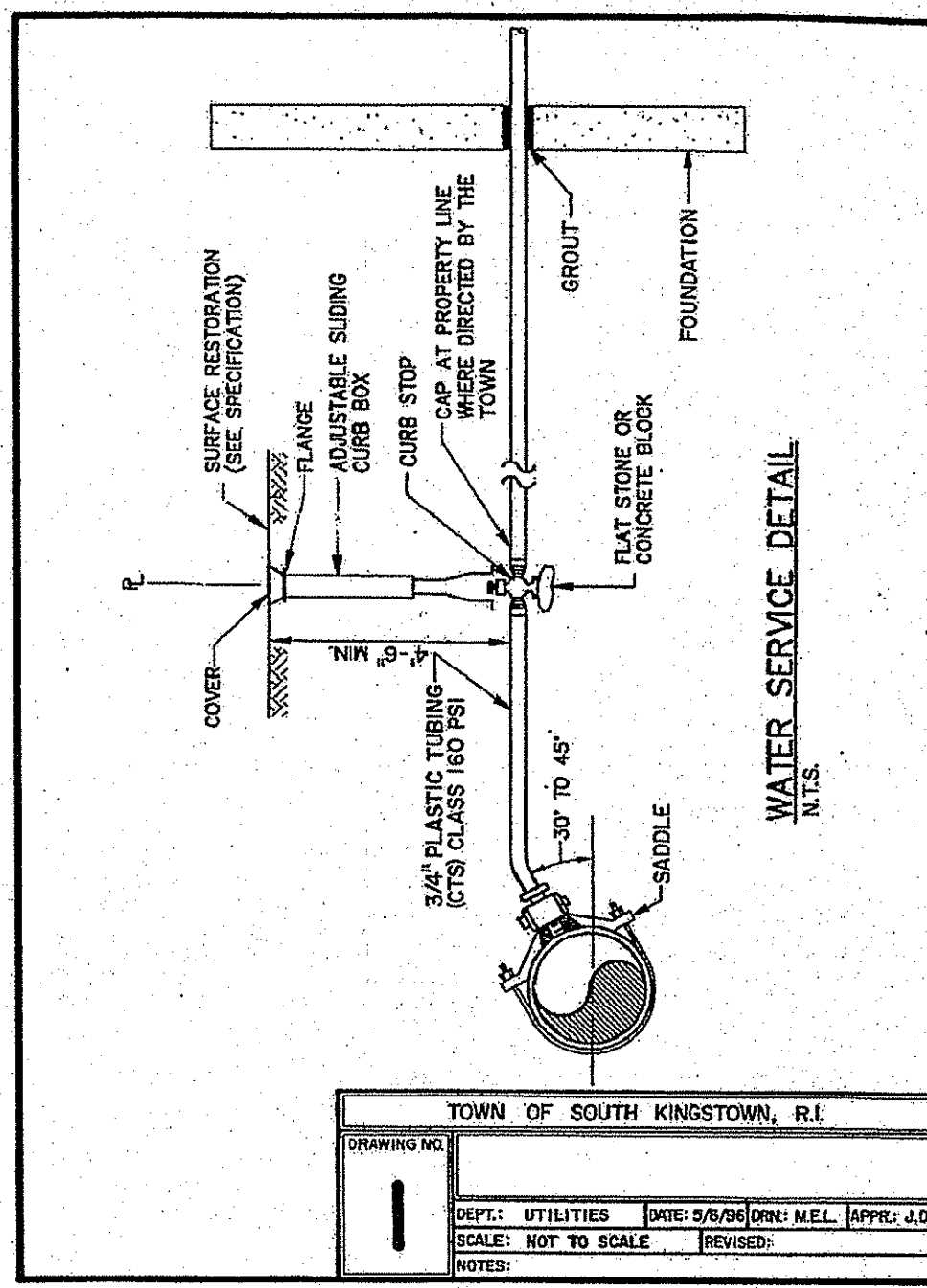
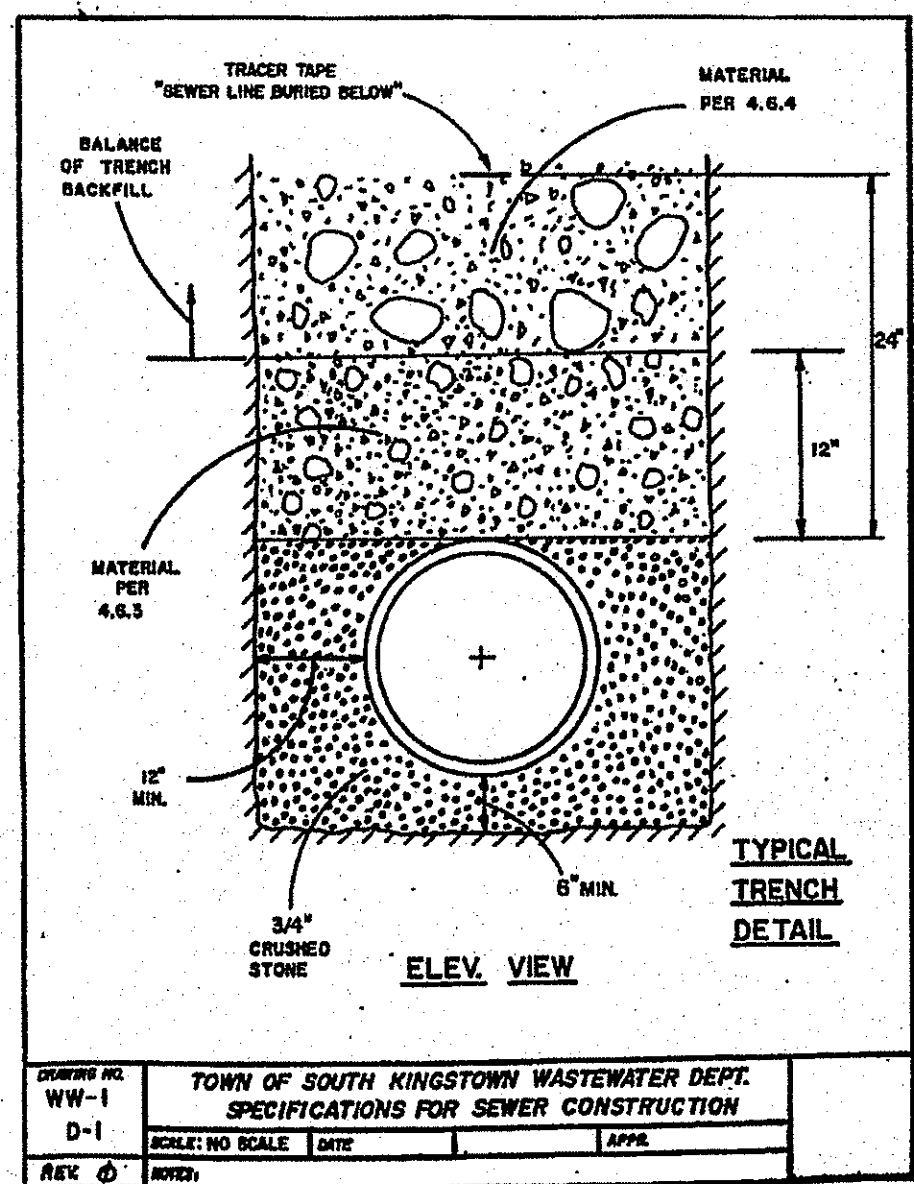
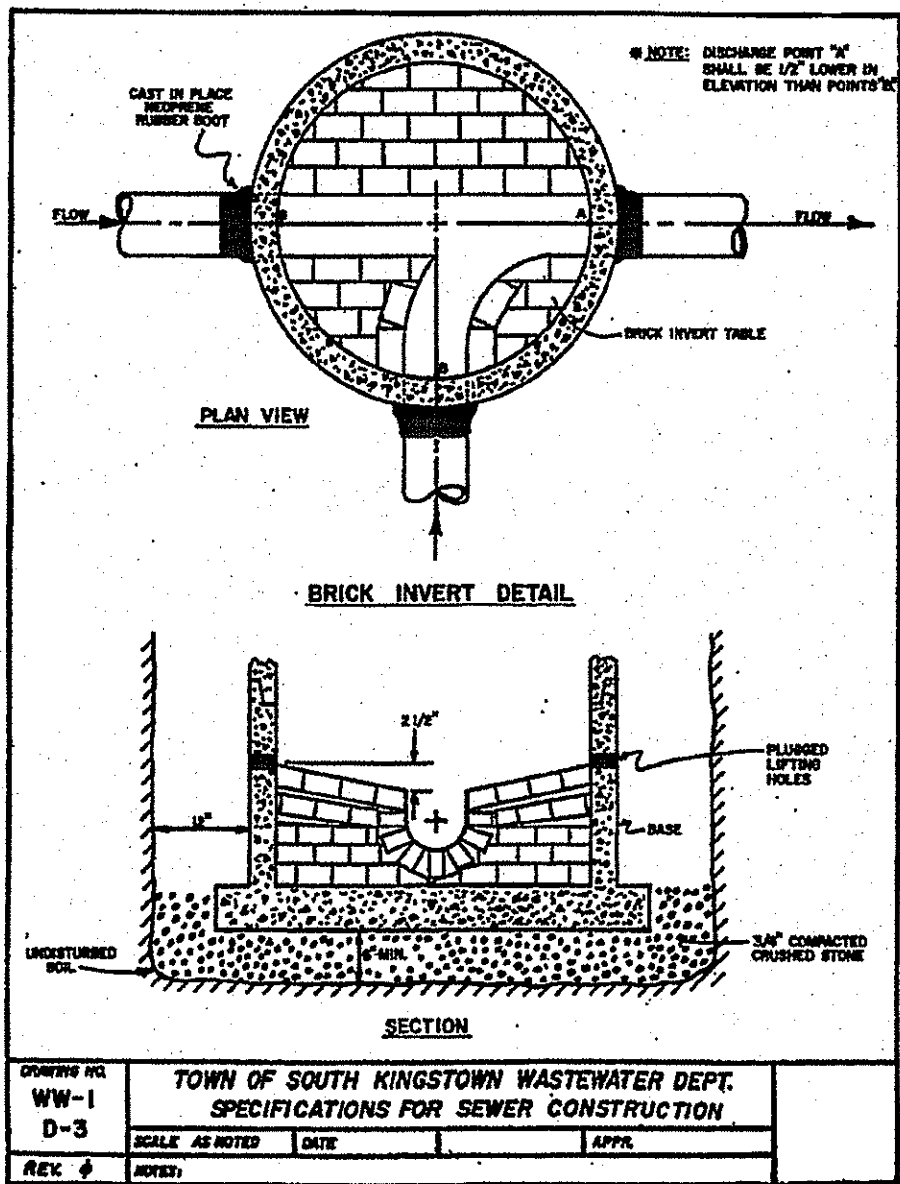
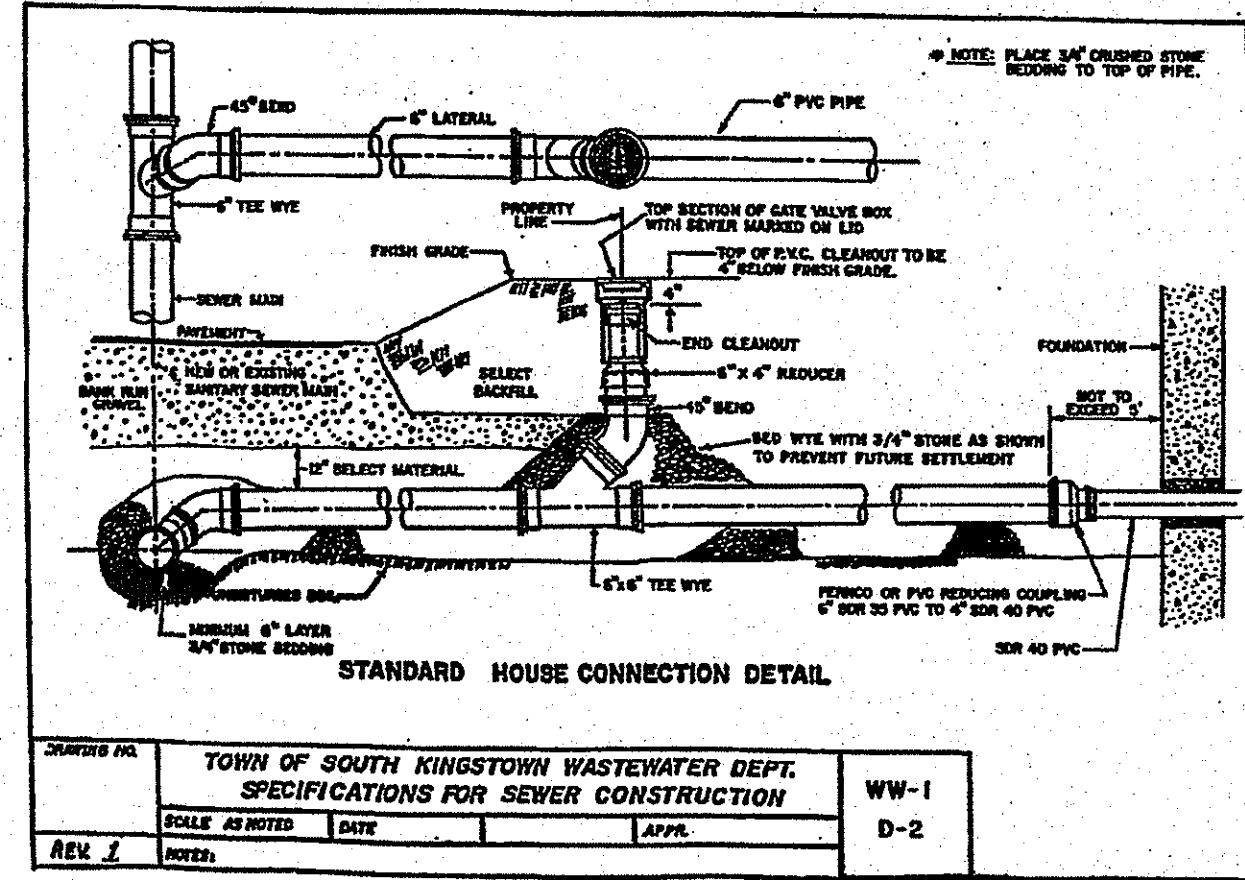
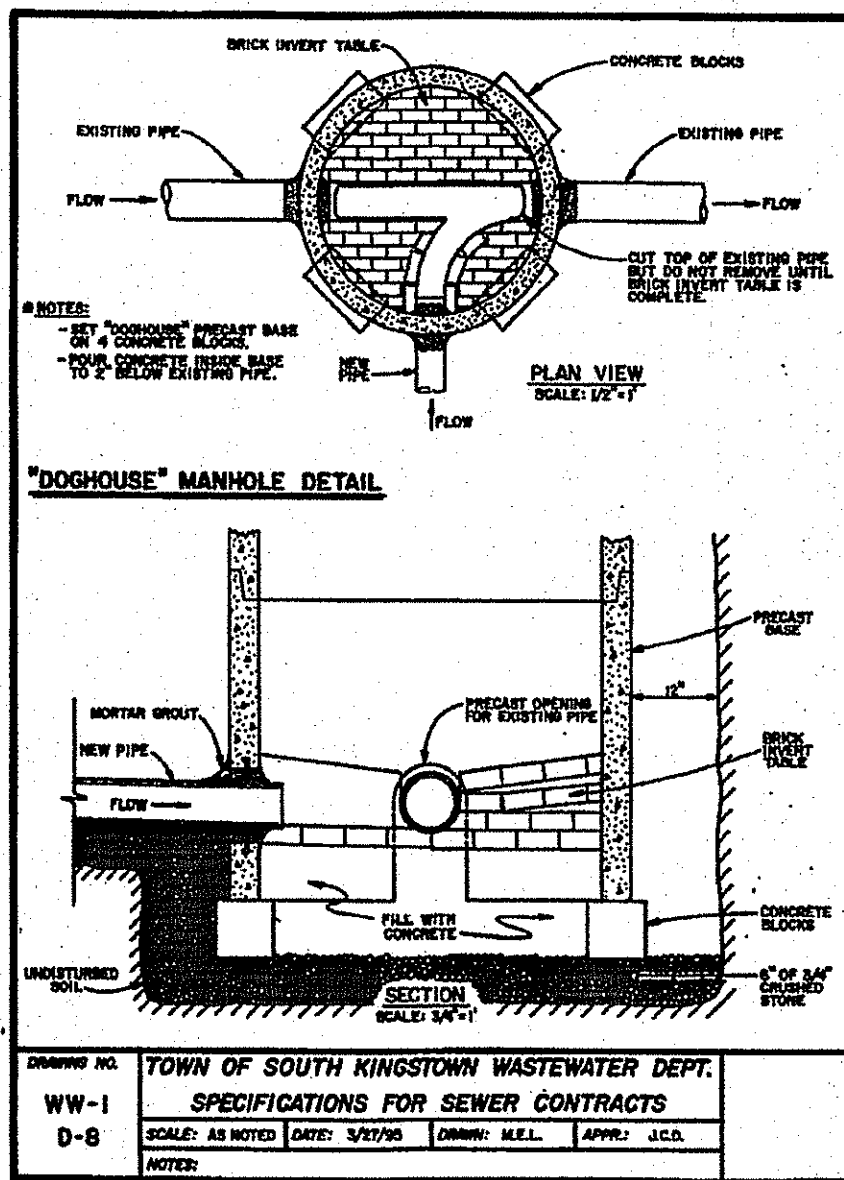
1. ALL PROPOSED SEWER PIPE MATERIAL TO BE (PVC SDR-35).
2. MAINTAIN A 10' MINIMUM HORIZONTAL & 18" VERTICAL SEPARATION BETWEEN SEWER AND WATER LINES.
3. WHERE SEWER AND WATER MAINS CROSS, OR WHEREVER THE 10' SEPARATION BETWEEN SEWER AND WATER LINES CANNOT BE MAINTAINED, THE SEWER MAIN IS TO BE ENCASED IN A DUCTILE IRON SLEEVE 10' ON EITHER SIDE OF THE WATER MAIN.

GENERAL NOTES

1. 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.
2. 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.
3. THE LOCATION OF EXISTING UTILITIES AS SHOWN ARE APPROXIMATE AND SHOULD BE VERIFIED BY THE CONTRACTOR WITH THE APPROPRIATE UTILITY COMPANIES. CALL DIG-SAFE 1-800-225-4977.
4. ALL EXCAVATION AND PLACEMENT OF FILL SHALL BE PERFORMED IN FULL COMPLIANCE WITH R.I. STANDARD SPECIFICATION SECTION 202.
5. ALL CONSTRUCTION AND UTILITY WORK SHALL CONFORM TO THE LATEST TOWN OF SOUTH KINGSTOWN STANDARDS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN, COMPREHEND AND IMPLEMENT THESE REQUIREMENTS PROPERLY.

WATER NOTES

1. WATER PIPE SHALL BE DOUBLE CEMENT MORTAR LINED DUCTILE IRON PIPE CLASS 2 AND SHALL MEET THE REQUIREMENTS OF ANSI/AWWA C104/A21.53.
2. ALL FITTINGS SHALL BE DUCTILE IRON MECHANICAL CLASS 350 DOUBLE CEMENT MORTAR LINED COMPACT STYLE (BY AMERICAN MANUFACTURER ONLY). FITTINGS SHALL MEET THE REQUIREMENTS OF ANSI/AWWA C153/A21.53. JOINTS SHALL MEET ALL THE REQUIREMENTS OF ANSI/AWWA C111/A21.21.
3. ALL INSTALLATION JOINTS, CONSTRUCTION METHODS AND MATERIALS SHALL BE ACCORDING TO MANUFACTURER'S RECOMMENDATIONS, KINGSTON WATER DISTRICT RECOMMENDATIONS, AWWA STANDARDS AND GOVERNMENTAL REQUIREMENTS.
4. CONSTRUCTION SHALL INCLUDE ALL PIPE, JOINTS, BENDS TEES FITTINGS, THRUST BLOCKS, GATE VALVES, GATE BOXES, SERVICE CONNECTIONS AND ALL MISCELLANEOUS ITEMS REQUIRED TO CONSTRUCT THE PROPOSED SYSTEM.
5. CONCRETE THRUST, ANCHOR OR BEARING BLOCKS SHALL BE INSTALLED IN ALL LOCATIONS INDICATED AND AT ALL BENDS, FITTINGS, PLUGS, ETC. WHEN A THRUST BLOCK CANNOT BE PLACED AGAINST UNDISTURBED EARTH, A REACTION BLOCK SUBSTITUTE SHALL BE DESIGNED AND SUBMITTED TO THE ENGINEER FOR APPROVAL.
6. LEAKAGE TESTS AND DISINFECTING PIPES SHALL BE PERFORMED BY THE CONTRACTOR IN CONFORMANCE TO THE AMERICAN WATERWORKS ASSOCIATION (AWWA) RECOMMENDATIONS, KINGSTON WATER DISTRICT REQUIREMENTS AND GOVERNMENTAL AGENCIES HAVING JURISDICTION.
7. ALL GATE VALVES, FITTINGS, PIPE, JOINTS, ETC. SHALL BE DESIGNED FOR 1.5 TIMES WORKING PRESSURE BUT NOT LESS THAN 150 PSI.
8. WATER PIPE SHALL TYPICALLY BE LOCATED AT LEAST (10) FEET HORIZONTALLY FROM SEWER PIPE, AND AT A MINIMUM DEPTH OF COVER EQUAL TO 4'. 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 DRAIN IN 6" OF CONCRETE FOR A DISTANCE OF 10 FEET ON EACH SIDE OF THE CROSSING WATER MAIN.
9. ALL SYSTEM COMPONENTS AND CONSTRUCTION METHODS, SUCH AS GATE VALVE, PIPE, THRUST BLOCKS, FITTINGS, CASTING, ETC. SHALL BE SUBMITTED TO THE KINGSTON WATER DISTRICT AND ENGINEER FOR APPROVAL PRIOR TO PURCHASE AND INSTALLATION. THIS SUBMISSION SHALL INCLUDE MANUFACTURER'S LITERATURE, SHOP DRAWINGS, PROPOSED CONSTRUCTION METHODS, ETC.
10. WATER LINE TRENCH TO BE AWWA TYPE 5.
11. VALVES TO BE MUELLER IRON BODY BRONZE MOUNTED DOUBLE DISC PARALLEL SEAT TYPE OR AMERICAN DARLING RESILIENT VALVE SEAT.
12. THE CONTRACTOR MAY SUBSTITUTE THE MEGALUG RESTRAINING SYSTEM FOR THE THRUST BLOCK RESTRAINING SYSTEM PRIOR TO CONSTRUCTION. THE CONTRACTOR WILL HAVE THE MEGALUG SYSTEM APPROVED BY THE KINGSTON WATER DISTRICT.



Sewer and Water Notes and Details
FOR
Habitat for Humanity
 OWNER / APPLICANT: Habitat for Humanity
 901 Broad Street
 Providence, RI 02908
 LOCATED AT:
 130 Old North Road
 SOUTH KINGSTOWN, R.I.

Checked By: **DrC**
Date: **1/11/2011**

Drawn By: **ERM**
Scale: **As Shown**

NO.	REVISION	BY	DATE
1.	REVISED PER TRC COMMENTS	ERM	1/11/11

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED **MAR 11 2011** FILE # **11-0248**
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Charles A. Horton

DRAWING NO. **5**
TOWN OF SOUTH KINGSTOWN, R.I.
DEPT. UTILITIES
SCALE: NOT TO SCALE

AMERICAN ENGINEERING, INC.
 Daniel R. Cotta
 Professional Engineer / Professional Land Surveyor
 400 South County Trail - Suite A 201
 Exeter, Rhode Island 02822
 Phone (401) 294-4090 / Fax (401) 294-3625

Sheet **6**
of **7** sheets

Drawing No. _____
Dr. _____ Sh. _____

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PRELIMINARY 6 of 7

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:

A - MOWED AREA: ALL FLAT OR SLOPES LESS THAN 3:1

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

TOTAL 100#/ACRE

PERMANENT SEEDING MIXTURES:

B - UNMOWED AREA OR INFREQUENTLY MOWED: FLAT OR SLOPES GREATER THAN 3:1

MIXTURE	% BY WT.	SEEDING DATES
RED FESCUE	75	APRIL 1 - JUNE 15
PERENNIAL RYEGRASS	5	AUG. 15 - OCT. 15
COLONIAL BENTGRASS	5	
BIRDSFOOT TREFLOIL	15	

TOTAL 100#/ACRE

- 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.
- HAY OR STRAW APPLICATIONS SHOULD BE IN THE AMOUNT OF 3000-4000 LBS/AC.
- 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 BE USED TO HELP 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	MAR. 15 - JUNE 15
PERENNIAL SUDAN 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
OATS	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 SEDIMENTATION CONTROL PROGRAM AND ORDER OF PROCEDURE FOR PROPER COORDINATION.
- 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.

SEDIMENTATION CONTROL PROGRAM

- RIP-RAP SPLASH PADS SHALL BE INSTALLED AT THE OUTLETS FOR ALL CULVERTS DISCHARGED INTO A WATERWAY.
- EXTREME CARE SHALL BE EXERCISED SO AS TO PREVENT ANY UNSUITABLE MATERIAL FROM ENTERING THE WETLANDS.
- ALL DISTURBED AREAS SUBJECT TO EROSION 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.
- 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.
- ALL SEDIMENTS SHALL BE REMOVED FROM THE DETENTION BASIN OR STRUCTURES WHEN DIRECTED BY THE ENGINEER OR THE LOCAL CONSERVATION COMMISSION.
- 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.

ORDER OF PROCEDURE

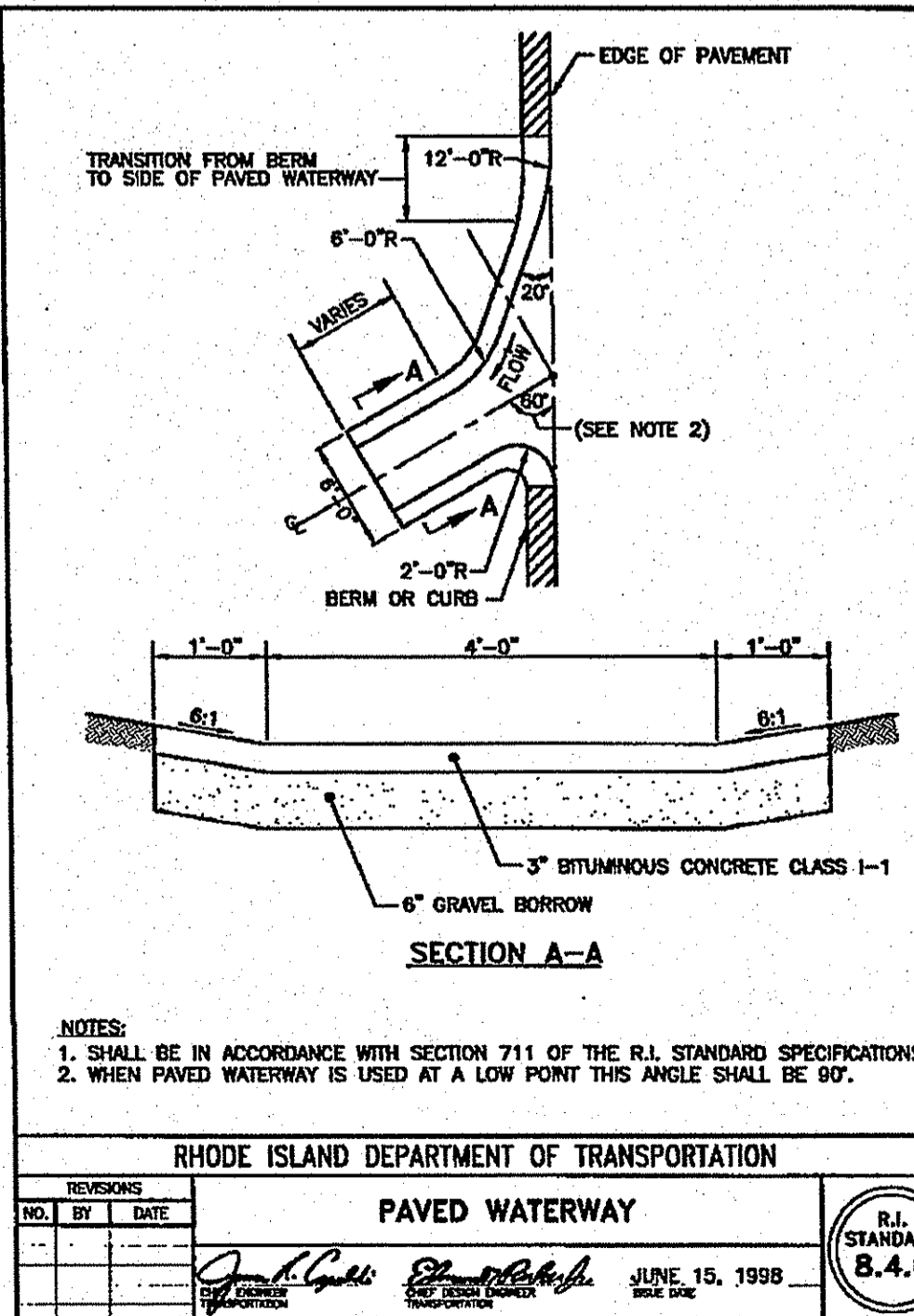
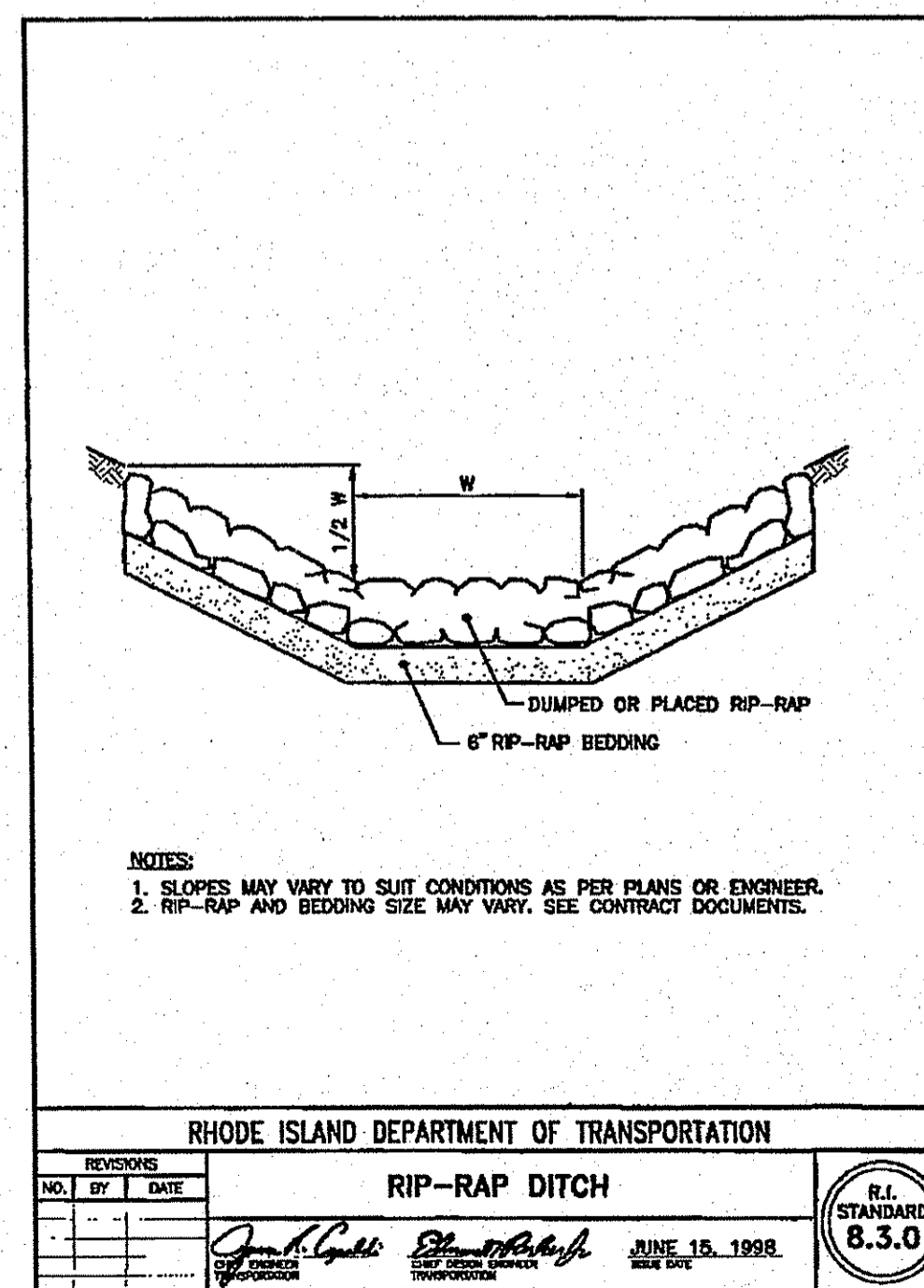
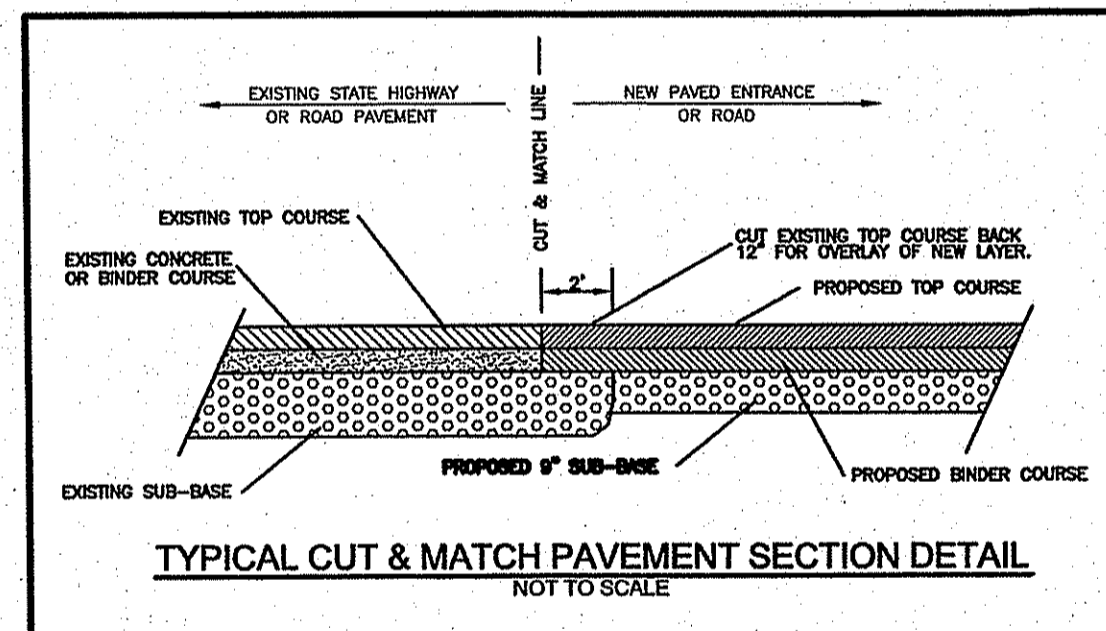
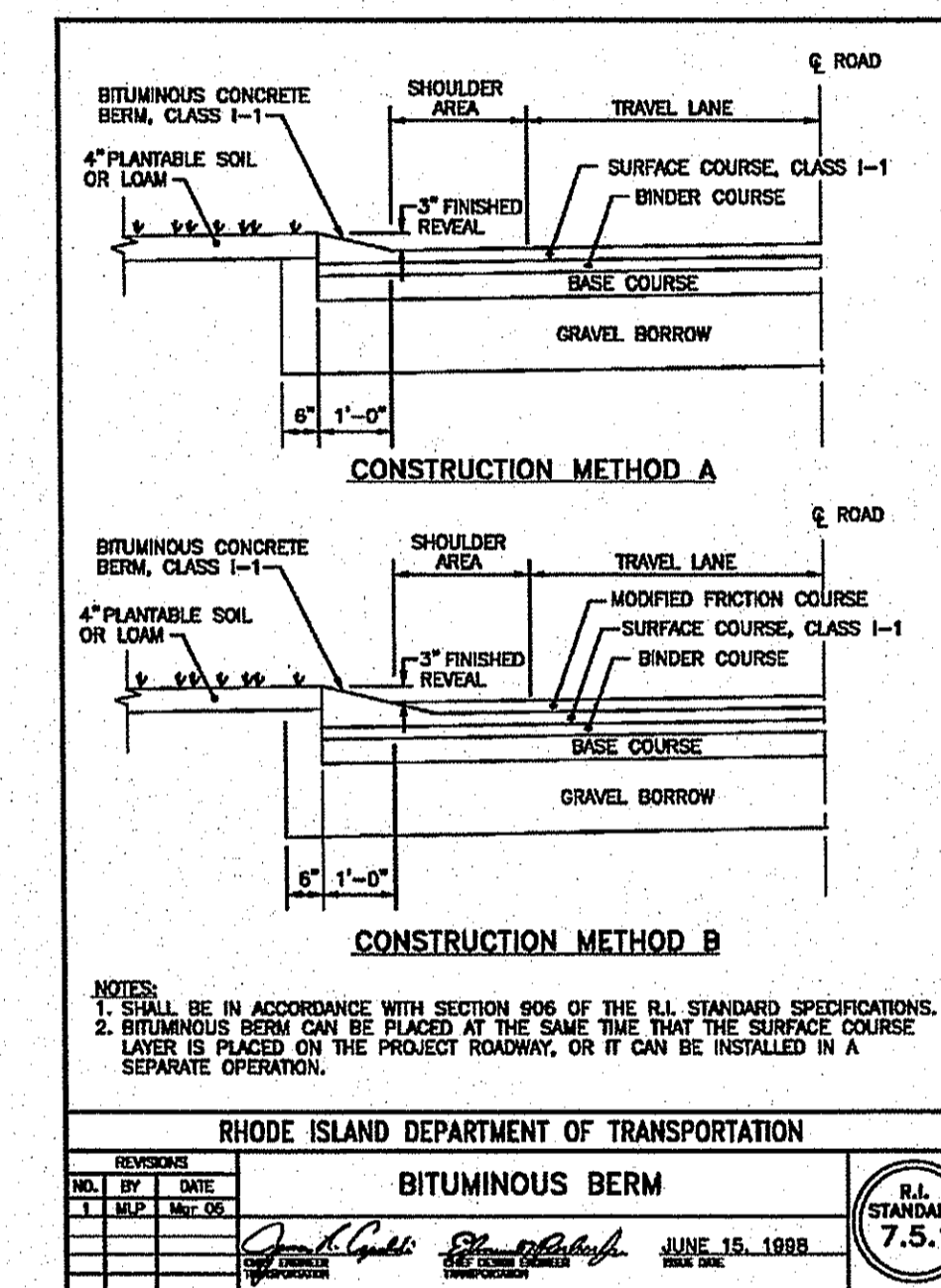
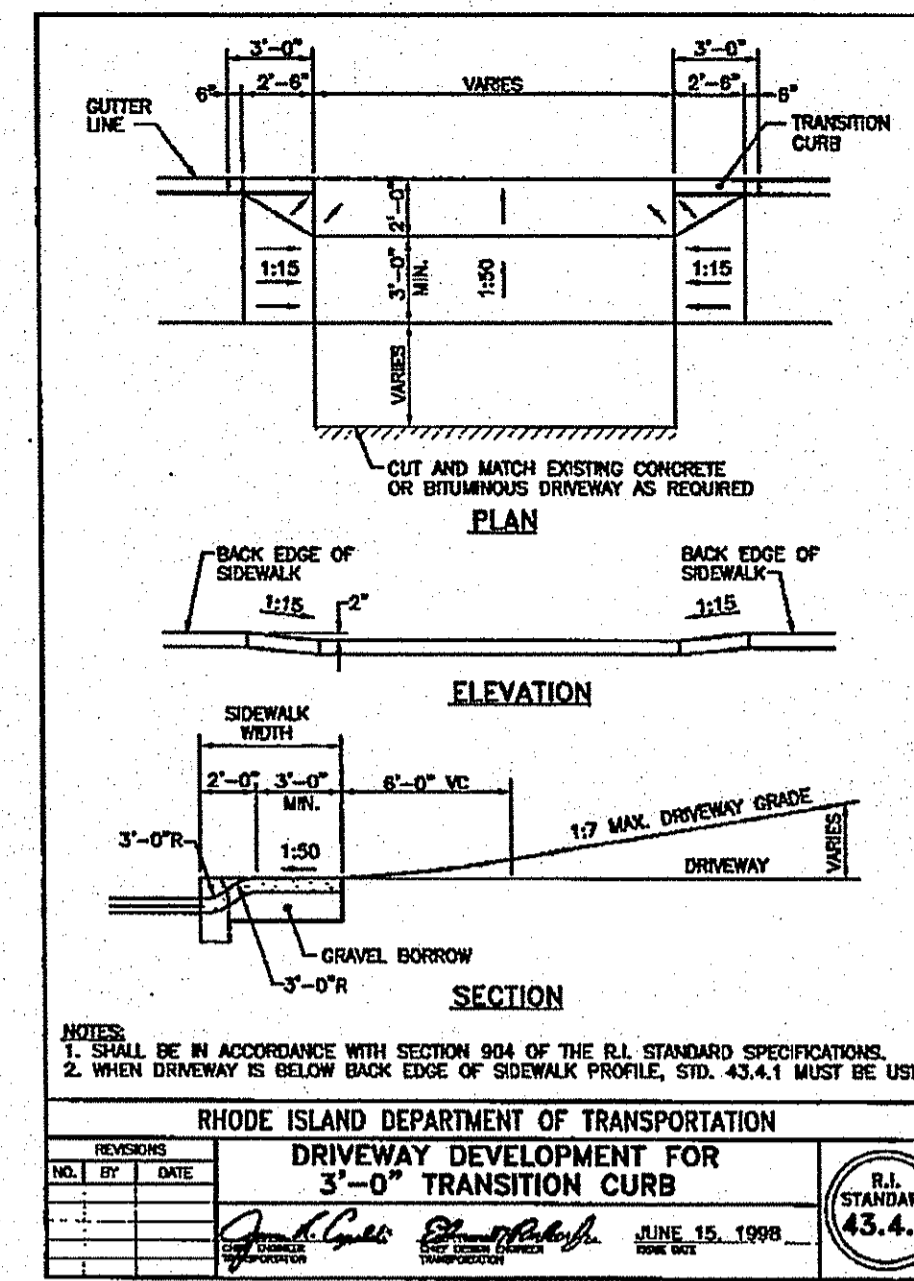
- IMMEDIATELY UPON COMPLETION OF THE CLEARING AND GRUBBING OPERATION AND PRIOR TO ANY GRADING, TEMPORARY HAYBALES, SILTFENCE OR SANDBAGS SHALL BE PLACED OUTSIDE THE LIMITS OF DISTURBANCE AS SHOWN ON THE PLANS. (I.E. ALONG NEW ROADWAYS, STREAMBANKS, CRITICAL AREAS, ETC.)
- ALL EROSION AND SEDIMENTATION 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.
- TEMPORARY HAYBALES, SILTFENCE AND SANDBAGS ALONG AND AT THE EDGE OF ROADWAYS MAY BE REMOVED AFTER FINAL SOIL STABILIZATION HAS BEEN ACHIEVED AND APPROVED.
- EROSION CONTROL MEASURES 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.

MAINTENANCE AND RESPONSIBILITY

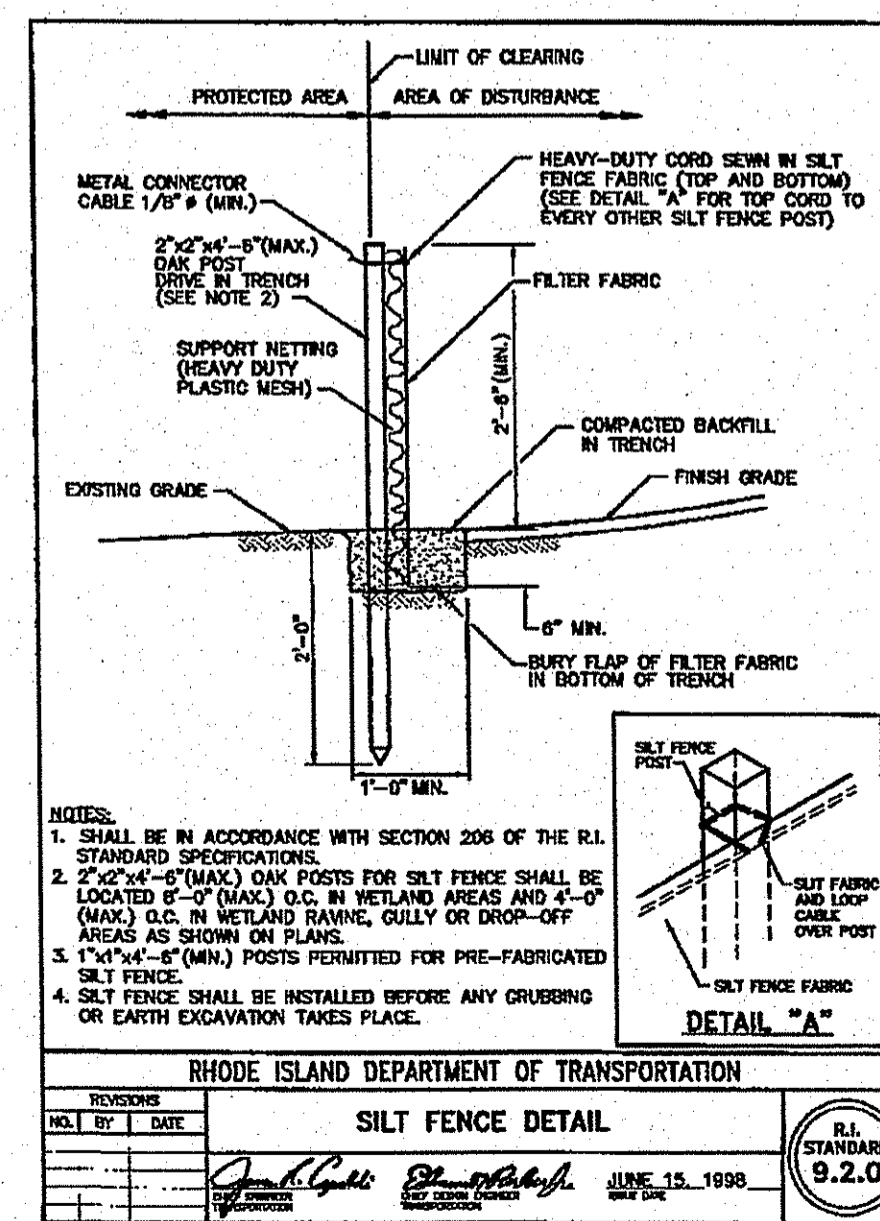
- THE CONSTRUCTION SUPERINTENDENT SHALL HAVE THE SOLE RESPONSIBILITY FOR THE DESIGN IMPLEMENTATION. HE SHALL ALSO BE RESPONSIBLE FOR ENSURING THAT ALL CONSTRUCTION WORKERS AND SUB-CONTRACTORS ARE AWARE OF THE PROVISIONS OF THE PLAN AND THE ENGINEER'S REPORT.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR 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.
- UPON FINAL APPROVAL OF THE PROJECT BY THE TOWN THE OWNER SHALL BE RESPONSIBLE FOR THE UPKEEP AND MAINTENANCE OF THE SITE.
- ALL NON-AQUATIC VEGETATION SHOULD BE MOWED AT LEAST TWICE A YEAR.
- REPLANTING, REGRADING OR OTHER REPAIRS NEEDED AS A RESULT OF EROSION AND SEDIMENTATION SHOULD BE DONE PROMPTLY.
- TRASH, DEBRIS, ETC. SHOULD BE REMOVED FROM THE DRAINAGE SWALE AND DETENTION PONDS AT LEAST TWICE A YEAR.
- REMOVAL OF SEDIMENTS FROM THE DETENTION PONDS SHOULD TAKE PLACE IMMEDIATELY AFTER THE VEGETATION HAS BEEN STABILIZED AND AGAIN WHEN THE SEDIMENT REACHES ELEVATION 203.50 (EL. 204 FOR POND A - NORTH). THESE CLEANINGS SHOULD BE AT APPROXIMATELY 10 YEARS INTERVALS.
- ANY REQUIRED REPAIR OR REPLACEMENT MUST BE DONE PROMPTLY TO ENSURE PROPER FUNCTIONING OF THE SYSTEM. THIS INCLUDES BUT IS NOT LIMITED TO SIDE SLOPES AND BOTTOM OF THE PROPOSED DETENTION PONDS, OUTLET STRUCTURES, DRAINAGE SWALE, PLANTINGS, DRIVEWAYS, ETC.
- AN INSPECTION OF THE INTEGRITY AND STABILITY OF THE DRAINAGE SWALE AND DETENTION POND SHOULD TAKE PLACE AT LEAST ONCE A YEAR.
- ALL VEGETATION NOT SURVIVING AT LEAST ONE FULL GROWING SEASON SHALL BE REPLACED AT THE OWNERS EXPENSE.

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.
- UNLESS OTHERWISE SPECIFIED, ALL STORM DRAINS SHALL BE REINFORCED CONCRETE CLASS III PIPE WITH MORTAR JOINTS.
- 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, HYDRANTS, FIRE ALARMS, ANY AND ALL CONSTRUCTION FOR ACCEPTANCE OF ROAD AND EASEMENTS.
- 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 (1888)344-7233.
- IN ALL EXCAVATION AND PLACEMENT OF FILL THE CONTRACTOR SHALL PERFORM THE WORK IN FULL COMPLIANCE WITH THE R.I. STANDARD SPECIFICATION SECTION 202.
- FLARED END SECTIONS ARE TO BE R.I. STANDARD 2.3.0 WITH CLASS C RIP-RAP END SECTION (UNLESS OTHERWISE NOTED).
- CATCH BASINS ARE TO BE R.I. STANDARD 4.31, TYPE "F" WITH R.I. STANDARD 5.17 FRAME AND GRATE (UNLESS OTHERWISE NOTED).
- DRAIN MANHOLES ARE TO BE R.I. STANDARD 4.2.0 WITH A R.I. STANDARD 6.2.1 HEAVY DUTY FRAME AND COVER.
- BRICK AND BLOCK MANHOLES AND CATCH BASINS MAY BE USED IN LIEU OF THE MENTIONED STRUCTURES WITH PRIOR APPROVAL OF THE ENGINEER.
- PIPE BEDDING SHALL CONFORM TO R.I. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION SECTION 701. CLASS B BEDDING WILL BE USED FOR ALL STORM DRAINS UNLESS OTHERWISE SPECIFIED ON THE PLANS.



NO.	DESCRIPTION	DATE
1	REVISION PER TRC COMMENTS	1/11/2011



Soil and Erosion Control and Details
FOR
Habitat for Humanity
 OWNER / APPLICANT: Habitat for Humanity
 301 Promenade Street
 Providence, RI 02908
 LOCATED AT:
 130 Old North Road
 SOUTH KINGSTOWN, RI.

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF WATER RESOURCES
 FRESHWATER WETLANDS PROGRAM
 APPROVED WITH CONDITIONS
 AS SPECIFIED IN THE LETTER OF APPROVAL
 DATED MAR 11 2011 FILE # 11-0018
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE
Charles H. Hackett

Drawn By: ERM
 Checked By: DrC
 Scale: 1" = 20'
 Date: 1/11/2011
 REVISIONS:
 NO. REVISION
 1. REVISED PER TRC COMMENTS

AMERICAN ENGINEERING, INC.
 DANIEL R. COITA Professional Engineer / Professional Land Surveyor
 400 South County Trail - Suite A 201
 Exeter, Rhode Island 02822
 Phone (401) 294-4080 / Fax (401) 294-3625

Sheet **7**
 of 7 sheets
 Drawing No. _____
 Dr. _____

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 PRELIMINARY 7 of 7