

**SHEET INDEX**

- 1 OVERALL SITE PLAN
- 2 EXISTING CONDITIONS PLAN
- 3 SITE LAYOUT & UTILITY PLAN
- 4 GRADING PLAN
- 5 CONSTRUCTION DETAILS-1
- 6 CONSTRUCTION DETAILS-2
- 7 LANDSCAPE PLAN
- 8 LANDSCAPE DETAILS

**GENERAL NOTES:**

1. FRESHWATER WETLANDS DELINEATED BY ECOTONES, INC.
2. PROPERTY LINE AND TOPOGRAPHIC INFORMATION FROM PLANS BY SITUATE SURVEYS, INC.
3. SUBJECT SITE IS LOCATED WITHIN FLOOD HAZARD ZONE X AS PER F.I.R.M. PANEL NO. 44003001386, DATED 12-3-10.
4. PROPOSED DEVELOPMENT TO BE SERVICED BY UNDERGROUND UTILITIES INCLUDING WATER, SEWER, TELEPHONE, ELECTRIC, CABLE TV AND GAS LOCATED IN SOUTH COUNTY TRAIL AND FRENCHTOWN ROAD.
5. EROSION CONTROL MEASURES SHALL BE THE FIRST ITEM OF CONSTRUCTION AND SHALL BE MAINTAINED UNTIL ALL DISTURBED AREAS ARE PERMANENTLY STABILIZED.
6. ALL WORK AND LIMITS OF DISTURBANCE SHALL CONFORM TO ALL LOCAL AND STATE PERMITS AND SPECIFICATIONS.
7. ALL WORK SHALL BE ACCURATELY LOCATED AND CONSTRUCTION STAKED PRIOR TO COMMENCEMENT OF ANY WORK.
8. WORK WITHIN THE STATE R.O.W. SHALL BE IN CONFORMANCE WITH R.I.D.O.T. P.A.P. CONDITIONS AND R.I.D.O.T. STANDARD SPECIFICATIONS.
9. SITE WORK SHALL BE IN CONFORMANCE WITH R.I.D.E.M. FRESHWATER WETLANDS PERMIT REQUIREMENTS.
10. BIO-RETENTION AREAS SHALL BE PIPED TO SUBSURFACE CHAMBER DETENTION SYSTEMS WITH OVERFLOW TO THE WOODED SWAMP. POST-DEVELOPMENT RUNOFF SHALL NOT EXCEED PRE-DEVELOPMENT FLOW IN ACCORDANCE WITH TOWN AND DEM REGULATIONS.
11. THE RIDEM-OFFICE OF WASTE HAS ISSUED A CLOSURE CERTIFICATE FOR THE UNDERGROUND STORAGE TANKS REMOVED FROM THE SITE. REFERENCE RIDEM FACILITY ID #17999 AND LUST ID #913. PER THE CLOSURE CERTIFICATE, NO FURTHER ACTION IS REQUIRED. ANY EXCAVATION WITHIN THE CONTAMINATION AREA SHALL COMPLY WITH RIDEM REGULATIONS. AT A MINIMUM AN IMPERMEABLE CAP MUST BE PLACED OVER THE RESIDUAL CONTAMINATION AREA.

**ZONING DATA**

ZONING : CH COMMERCIAL HIGHWAY DISTRICT

DIMENSIONAL REGULATIONS

MIN. LOT AREA :	30,000 S.F.
MIN. FRONTAGE :	150'
MIN. YARDS :	FRONT 50'
	SIDE 40'
	REAR 40'
MAX. BUILDING HEIGHT:	35'
MAX. LOT COVERAGE :	25% (STRUCTURE) 70% (PAVEMENT)

**DEVELOPMENT AREAS**

BUILDINGS	5,489 S.F.	8.4%
PAVEMENT	15,492 S.F.	23.7%
LANDSCAPED	13,285 S.F.	20.2%
WOODED	31,222 S.F.	47.7%
<b>TOTAL</b>	<b>65,488 S.F.</b>	<b>100.0%</b>

**PARKING DATA**

6 BAYS X 2 P.S. / BAY = 12  
 7 EMPLOYEES X 1 P.S. = 7  
**REQUIRED PARKING : 19 SPACES**  
**PARKING PROVIDED : 19 SPACES**

**LEGEND**

- 180-- EXIST. CONTOUR
- 190-- PROP. CONTOUR
- A34 FLAGGED WETLANDS EDGE
- x104.2 EXIST. SPOT ELEVATION
- EXIST. STONE WALL
- EXIST. TREE LINE
- EXIST. UTILITY POLE
- EXIST. SEWER MANHOLE
- CATCH BASIN
- TEST HOLE
- 100 YR. FLOOD LIMIT
- TRAFFIC FLOW

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 OFFICE OF WATER RESOURCES  
 FRESHWATER WETLANDS PROGRAM  
 APPROVED WITH CONDITIONS  
 AS SPECIFIED IN THE LETTER OF APPROVAL  
 DATED DEC 6 2012 FILE # D-12-015  
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE

*Charles A. Moorehead*

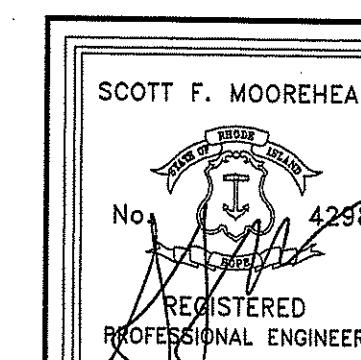
**OWNER:**  
**MJF, LLC**  
 2545 SOUTH COUNTY TRAIL  
 EAST GREENWICH, RHODE ISLAND

**PROPOSED QUICK LANE  
 AUTOMOBILE SERVICE FACILITY**

**BLOCK 29 A.P. 11 LOT 57  
 2532 SOUTH COUNTY TRAIL  
 EAST GREENWICH, R.I. 02818**

**PREPARED FOR:**  
**MJF, LLC**

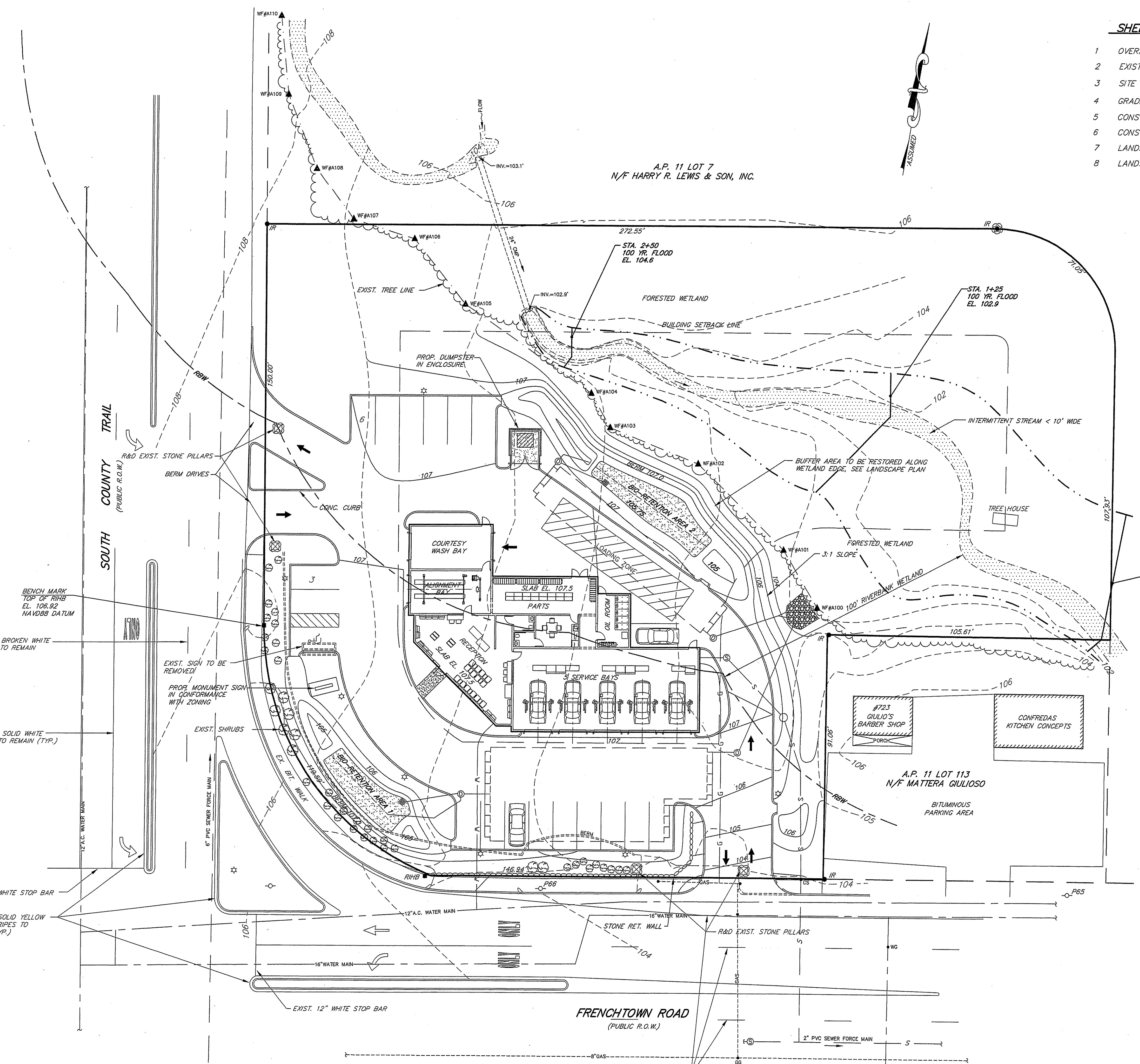
**OVERALL SITE PLAN**



**SFM**

DATE	REVISION
10-29-12	FWM COMMENTS

DWN. BY: LBC    DWG. NO. SFM7270SP-D  
 S.F.M. ENGINEERING ASSOCIATES  
 410 TIOGUE AVENUE  
 COVENTRY, R.I. 02816  
 (401)826-3736



BENCH MARK  
 TOP OF RIBB  
 EL. 106.92  
 NAVD83 DATUM

EXIST. 6" BROKEN WHITE  
 STRIPING TO REMAIN

EXIST. 6" SOLID WHITE  
 STRIPES TO REMAIN (TYP.)

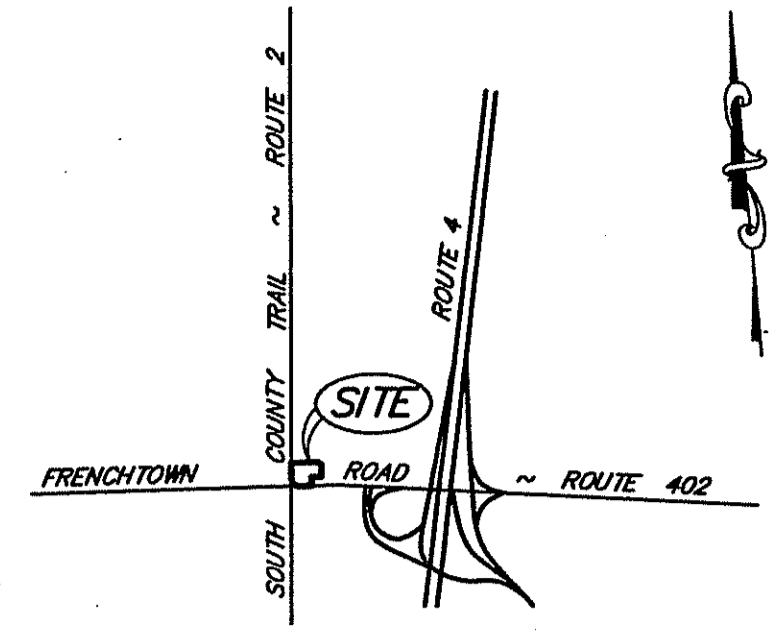
EXIST. 12" WHITE STOP BAR

EXIST. 4" SOLID YELLOW  
 ISLAND STRIPES TO  
 REMAIN (TYP.)

**FRENCHTOWN ROAD**  
 (PUBLIC R.O.W.)

EXIST. 6" SOLID WHITE AND  
 6" BROKEN WHITE STRIPING  
 TO REMAIN (TYP.)

SMH  
 RIM=103.76  
 INV.=98.1'



LOCATION PLAN SCALE: 1" = 2000'

PLAN REFERENCES

- RECORD PLAN SUN VALLEY MOBILE HOME VILLAGE EXPANSION ASSESSOR'S PLAT 11 LOT 7 SOUTH COUNTY TRAIL (ROUTE 2) EAST GREENWICH RHODE ISLAND PREPARED FOR SUN VALLEY MOBILE HOME VILLAGE DATE: MAY, 2006 SCALE: 1"=80' JOHN P. CAITO LAND PLANNERS RECORD PLAN #800
- CONDOMINIUM PLAN 717 FRENCHTOWN ROAD LLC EAST GREENWICH RHODE ISLAND ASSESSOR'S PLAT 11 LOT 113 SCALE: 1"=10' REVISED 7/14/09 RECORD PLAN #858

NOTES

- THE SOURCE OF ELEVATIONS SHOWN IS NGS DISK EG 009 V (LWS672), HELD AT 94.88' NAVD83. TO CONVERT ELEVATIONS ON THE NAVD83 VERTICAL DATUM TO NGVD28, ADD 0.86'
- TOPOGRAPHY WAS OBTAINED FROM AN ON-THE-GROUND SURVEY USING A CONVENTIONAL TOTAL STATION INSTRUMENT IN DECEMBER 2011.
- SURFACE EVIDENCE OF PUBLIC AND PRIVATE UTILITIES IS BASED UPON SURVEY LOCATION OF VISIBLE FEATURES. SUBSURFACE EVIDENCE IS BASED UPON WAKS AND RECORDS PROVIDED BY MUNICIPAL SOURCES, UTILITY COMPANIES, AND OTHER CONTROLLING AUTHORITIES. TOGETHER WITH SUCH REASONABLE ASSUMPTIONS AS MAY BE DRAWN FROM THE FIELD AND RECORD DATA, UTILITY INFORMATION MAY NOT BE ACCURATE OR COMPLETE, AND IS SUBJECT TO SUCH REVISIONS AND CHANGES AS ADDITIONAL DATA MAY DISCLOSE. ALL EXCAVATION MUST BE PRECEDED BY CONTACTING "DIG-SAFE" FOR A MORE ACCURATE AND RELIABLE LAYOUT OF EXISTING UTILITIES.
- THE SOURCE OF THE WETLANDS FLAGS DELINEATION HAS NOT BEEN PROVIDED TO THE SURVEYOR. LOCATIONS ARE SUBJECT TO VERIFICATION BY THE RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT, WETLANDS SECTION.

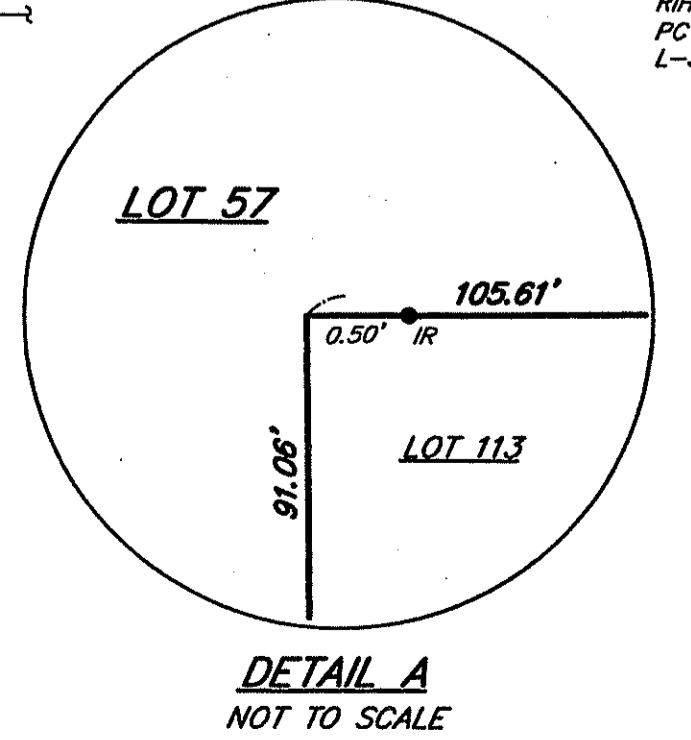
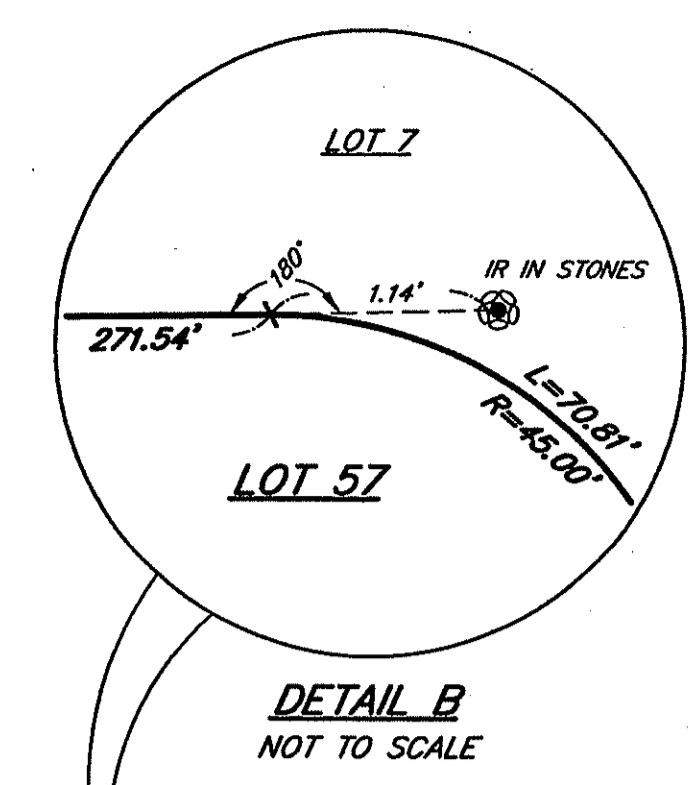
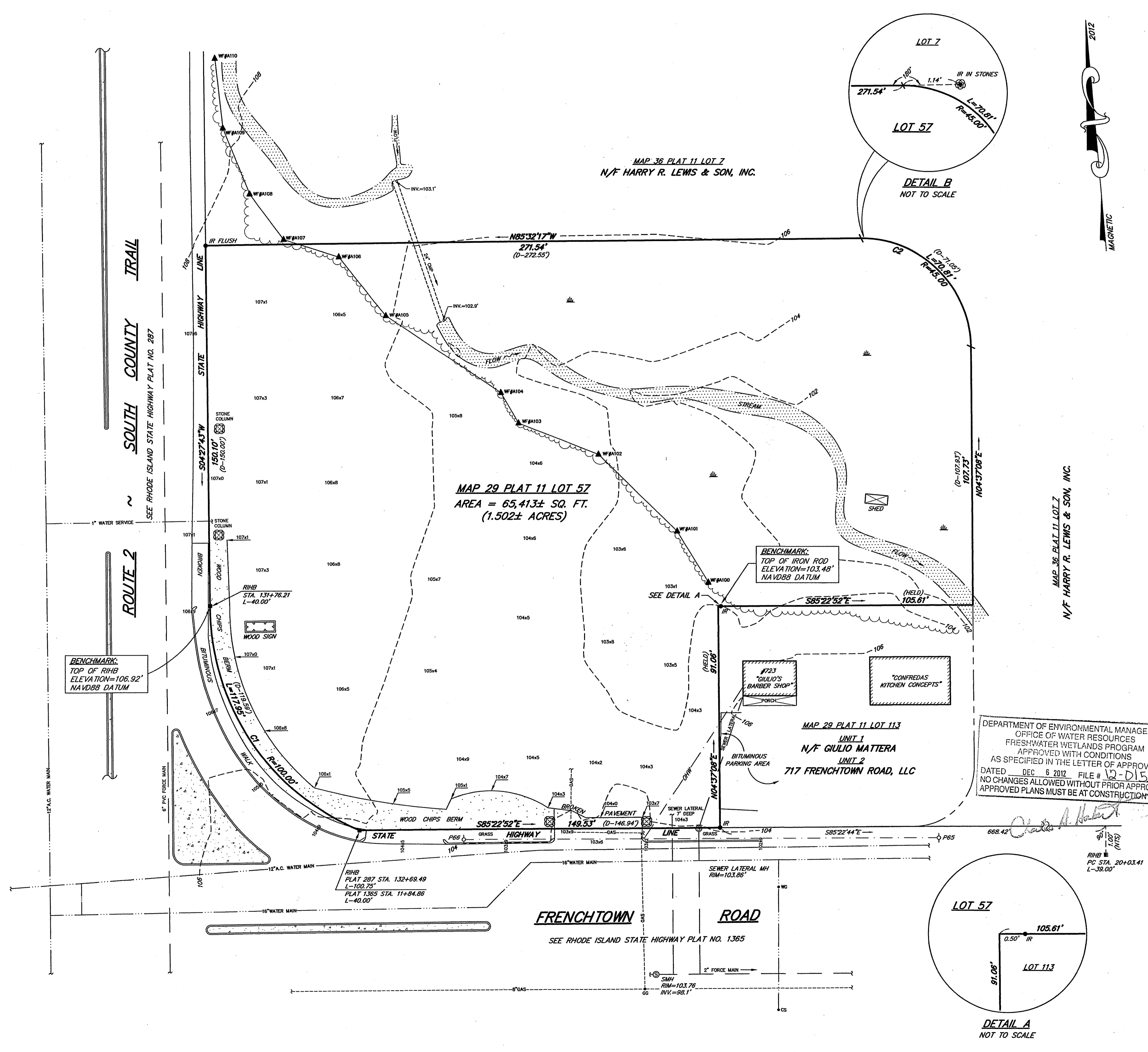
CURVE TABLE

CURVE	DELTA	RADIUS	LENGTH	TANGENT	CHORD ~ BEARING
* C1	67°34'57"	100.00'	117.95'	66.92'	111.23' ~ N28°42'34"W
* C2	90°09'25"	45.00'	70.81'	45.12'	63.73' ~ S40°27'35"E

\* NON-TANGENT

LEGEND

- N/F NOW OR FORMERLY
- SQ. FT. SQUARE FEET
- NTS NOT TO SCALE
- (D-) DEED DIMENSION
- RIHB RHODE ISLAND HIGHWAY BOUND FOUND
- IR IRON ROD FOUND
- SMH SEWER MANHOLE
- WV WATER GATE VALVE
- CS CURB STOP
- GS GAS VALVE
- UP UTILITY POLE/GUY WIRE
- OVERHEAD UTILITY LINE
- WATER LINE
- GAS MAIN
- SEWER MAIN
- TREELINE
- 202± SPOT ELEVATION
- ▲ WFA100 WETLAND DELINEATION FLAG



NOV 19 2012

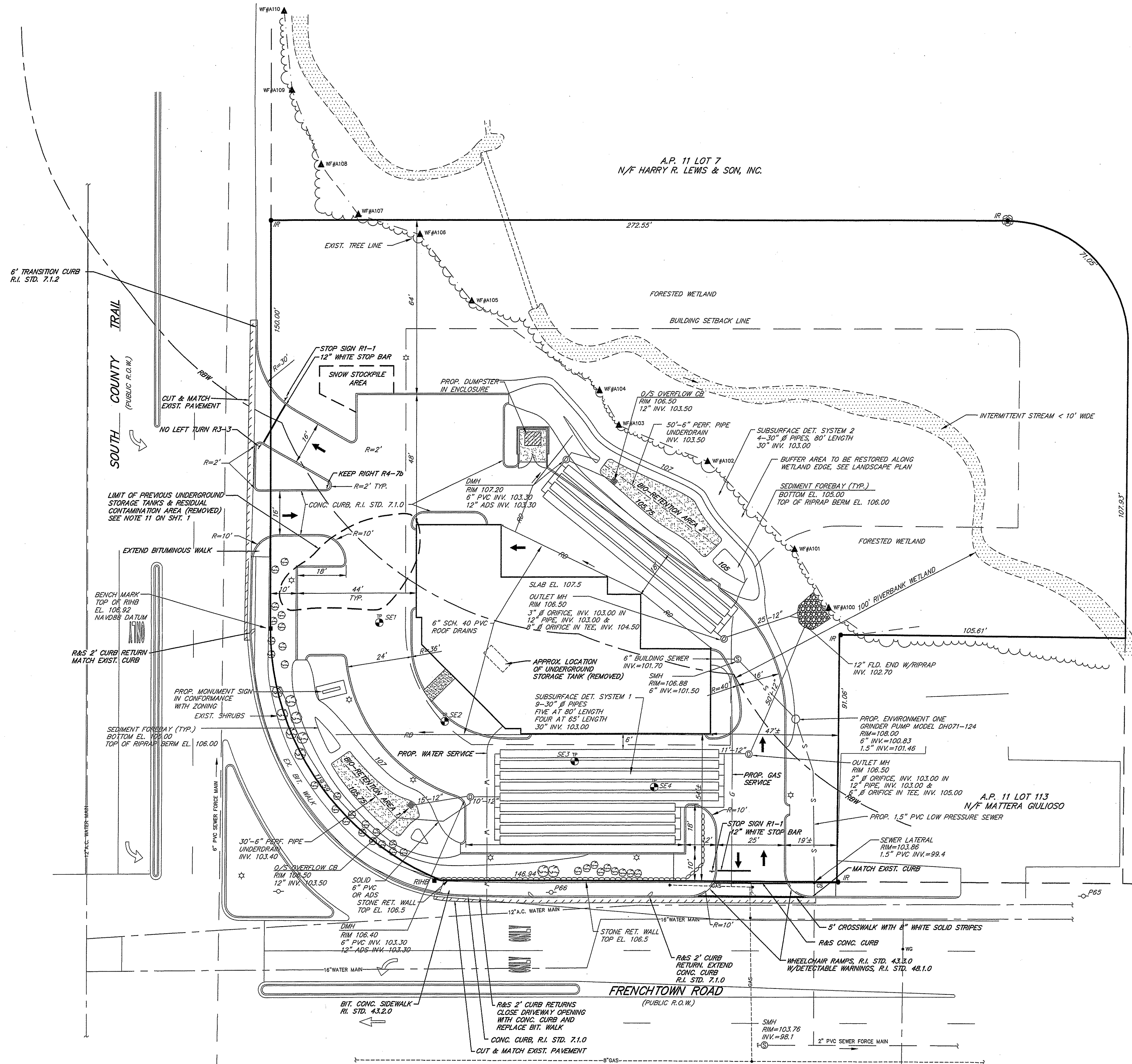
FOR STREET AND ROAD INDEX FILE UNDER:  
FRENCHTOWN ROAD & SOUTH COUNTY TRAIL

BOUNDARY AND EXISTING CONDITIONS SURVEYS  
DE LAND OF  
M.J.F. LLC  
MAP 29 PLAT 11 LOT 57  
FRENCHTOWN ROAD & SOUTH COUNTY TRAIL  
EAST GREENWICH, RHODE ISLAND

PROJECT NO.: SS2509 SHEET 2 OF 9  
DRAWING NO.: SS3845

SCALE: 1" = 20' DATE: FEBRUARY 20, 2012 REVISION:  
SCALE IN FEET: 20 10 0 20 40 60  
MAGNETIC  
NORTH  
2012  
SCALE IN FEET: 20 10 0 20 40 60  
JOHN MEISINGER, PROFESSIONAL LAND SURVEYOR NO. 1806

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
APPROVED WITH CONDITIONS  
AS SPECIFIED IN THE LETTER OF APPROVAL  
DATED DEC 6 2012 FILE # 12-D155  
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
APPROVED PLANS MUST BE AT CONSTRUCTION SITE



- ### GENERAL NOTES
- SPOT ELEVATIONS SHOWN AT CONC. CURB LINES ARE PAVEMENT EL. AT FACE OF CURB. TOP OF CURB IS .50' HIGHER.
  - SIDEWALK SLOPES SHALL BE .01 (MIN.) AND .05 (MAX.)
  - LANDSCAPE AREAS SHALL BE GRADED AT A MIN. S=.01 AWAY FROM BUILDINGS TO CATCH BASINS.
  - ALL PROPOSED WALKS SHALL BE CONCRETE, 4' WIDE (MIN.) WALKS SHALL BE 4.5' WIDE (MIN.) FROM BACK OF CURB.
  - ALL WORK WITHIN THE STATE ROW SHALL CONFORM TO THE RIDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, DEC. 2010 EDITION, WITH ALL REVISIONS. STANDARD DETAILS FOR WORK WITHIN THE STATE'S ROW ARE THE RHODE ISLAND STANDARD DETAILS, DEC. 2010 EDITION, WITH ALL REVISIONS.
  - REMOVE EXIST. PAVEMENT AND BASE FROM PROP. LANDSCAPE AREAS AND PROVIDE SUITABLE PLANTING SOILS. SEE LANDSCAPE PLANS FOR PLANTING DETAILS.
  - ALL EXISTING ON-SITE BIT. PAVEMENT AND CONC. PADS SHALL BE REMOVED AND DISPOSED OFF SITE.
  - ALL TRAFFIC CONTROLS SHALL CONFORM TO THE LATEST EDITION OF THE MANUAL FOR UNIFORM TRAFFIC CONTROL DEVICES, WITH ALL REVISIONS.

- ### UTILITY NOTES
- LOCATIONS AND SIZES OF EXISTING UTILITIES IS PLOTTED FROM BEST AVAILABLE INFORMATION. THE CONTRACTOR SHALL VERIFY ALL INFORMATION WITH THE APPROPRIATE UTILITY AUTHORITY AND DIG SAFE PRIOR TO ANY CONSTRUCTION OR EXCAVATION.
  - EXPLORATORY TEST PITS SHALL BE EXCAVATED TO CONFIRM LOCATION AND DEPTH AT ANY CRITICAL AREAS, AS REQUIRED.
  - SEE SHEET 4 FOR WATER AND SEWER DETAILS.
  - BUILDING SEWER LOCATIONS AND ELEVATIONS SHALL BE COORDINATED WITH THE ARCHITECTURAL PLANS.
  - CABLE, ELECTRIC AND TELEPHONE SERVICES SHALL BE AS PER APPROPRIATE UTILITY AUTHORITY.
  - UTILITY SERVICE INSTALLATIONS SHALL BE APPROVED AND INSPECTED BY THE APPROPRIATE UTILITY COMPANY.
  - SEE ELECTRICAL & LIGHTING PLANS FOR POWER SERVICE, SITE LIGHTING, TELEPHONE, CABLE AND WIRING DETAILS.
  - LOCATION AND SIZE OF ALL BUILDING UTILITY CONNECTIONS SHALL BE COORDINATED WITH THE BUILDING ARCHITECTURAL PLANS.
  - THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING A UTILITY PERMIT FROM THE R.I.D.O.T. MAINTENANCE SECTION BEFORE UNDERTAKING ANY WORK WITHIN THE STATE R.O.W. FOR UTILITY INSTALLATION.

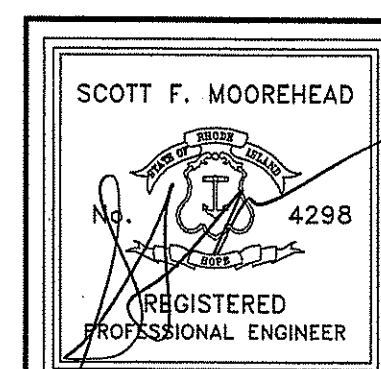
- ### WATER NOTES
- ALL WORK SHALL BE IN ACCORDANCE WITH THE KENT COUNTY WATER AUTHORITY RULES, REGULATIONS AND DETAILS. INSTALLATION MUST BE INSPECTED AND APPROVED BY KWVA.
  - WATER SERVICE SHALL BE TYPE K COPPER FROM THE MAIN TO THE CURB STOP. SERVICE MAY BE COPPER OR HDPE FROM THE CURB STOP TO THE METER. PROVIDE A 2" MASTER WATER AND 2" REDUCED PRESSURE BACKFLOW PREVENTER.
  - WATER SERVICE SHALL BE INSTALLED WITH 5" MIN. COVER. THE EXIST. 2" PRESSURE SEWER SHALL BE LOWERED TO PROVIDE 18" MIN. CLEARANCE. SEE SEWER NOTE 4.

- ### SEWER NOTES
- ALL SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE EAST GREENWICH SEWER AUTHORITY. INSTALLATION MUST BE INSPECTED AND APPROVED BY E.G. DPW.
  - PRESSURE SEWER SHALL BE SDR-21 PVC OR SDR-11 HDPE.
  - GRINDER PUMP UNIT SHALL BE ENVIRONMENT ONE MODEL DH071-124 OR APPROVED EQUAL.
  - BUILDING SEWER SHALL BE 6" SDR-35 PVC.

- ### LEGEND
- FLAGGED WETLANDS EDGE
  - EXIST. TREE LINE
  - EXIST. UTILITY POLE
  - EXIST. SEWER MANHOLE
  - STONE WALL
  - PROP. LIGHT POLE
  - CATCH BASIN
  - TEST HOLE
  - IRON ROD
  - DRAINAGE MANHOLE

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
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DATED DEC 6 2012 FILE # 12-0155  
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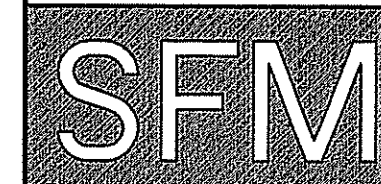
*Charles H. [Signature]*



DATE	REVISION
10-29-12	FWW COMMENTS

DWN. BY: LBC DWG. NO. SFM727SL-UP-D

S.F.M. ENGINEERING ASSOCIATES  
410 TIOGUE AVENUE  
COVENTRY, R.I. 02816  
(401)826-3736  
SCOTT@SFM.NECOMAIL.COM

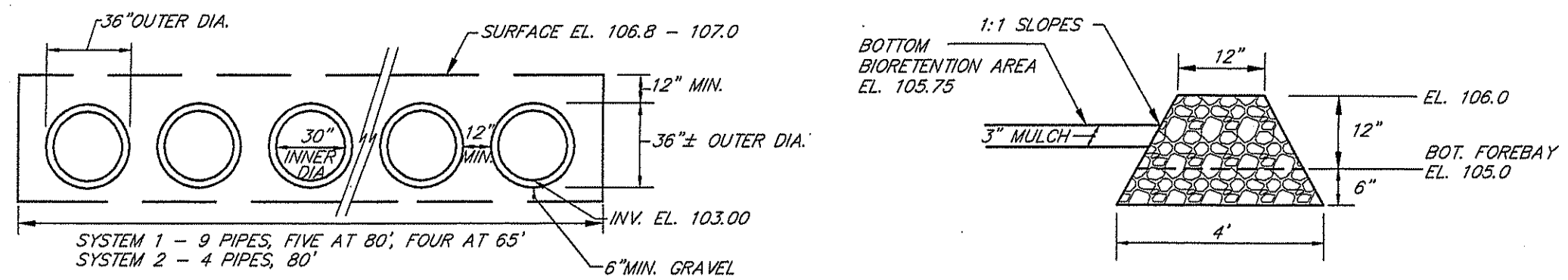


**PROPOSED QUICK LANE  
AUTOMOBILE SERVICE FACILITY**  
BLOCK 29 A.P. 11 LOT 57  
2532 SOUTH COUNTY TRAIL  
EAST GREENWICH, R.I. 02818

PREPARED FOR:  
M.F. LLC  
2545 SOUTH COUNTY TRAIL  
EAST GREENWICH, RHODE ISLAND

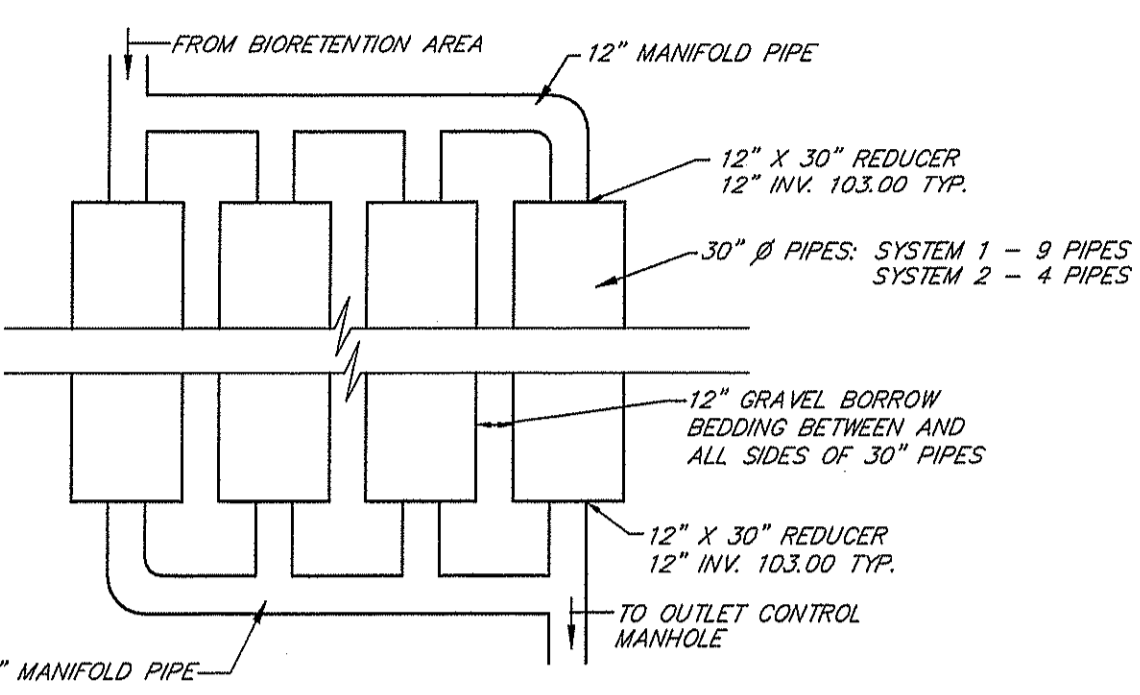
**SITE LAYOUT & UTILITY PLAN**

DATE: AUG. 8, 2012 SCALE: 1"=20' SHEET 3 OF 8

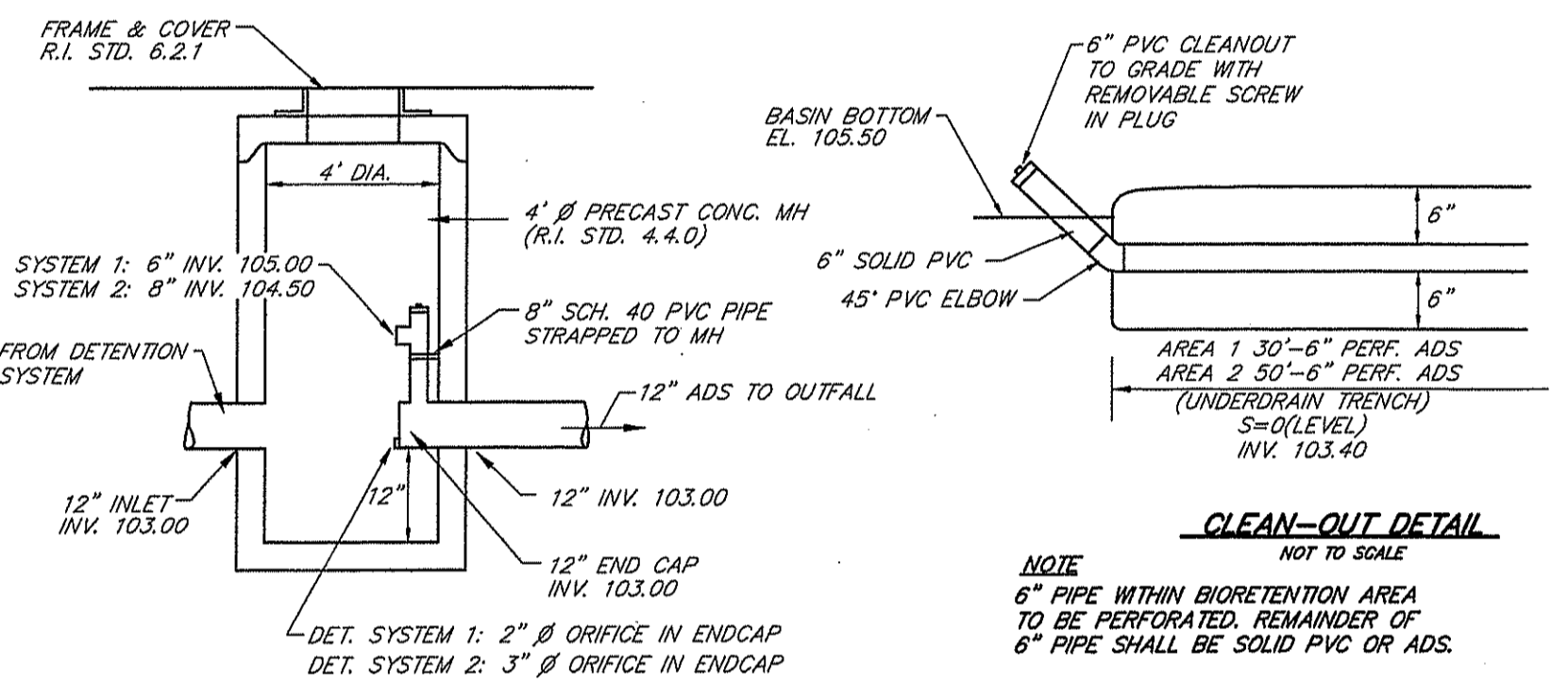


**TYP. SUBSURFACE DETENTION SYSTEM SECTION**  
NOT TO SCALE

**RIPRAP SEDIMENT FOREBAY BERM DETAIL**  
NOT TO SCALE

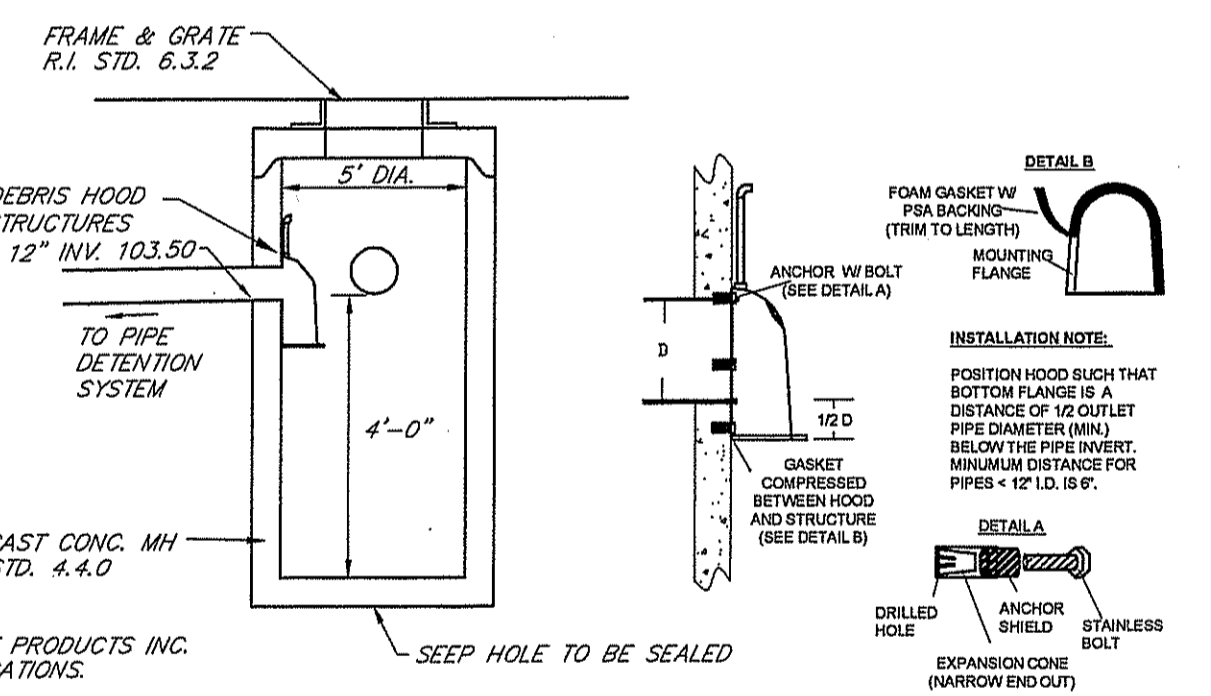


**TYP. SUBSURFACE DETENTION SYSTEM PLAN DETAIL**  
NOT TO SCALE



**CLEAN-OUT DETAIL**  
NOT TO SCALE

**OUTLET MANHOLE - CROSS SECTION**  
NOT TO SCALE



**OIL SEPARATOR CATCH BASIN DETAIL**  
NOT TO SCALE

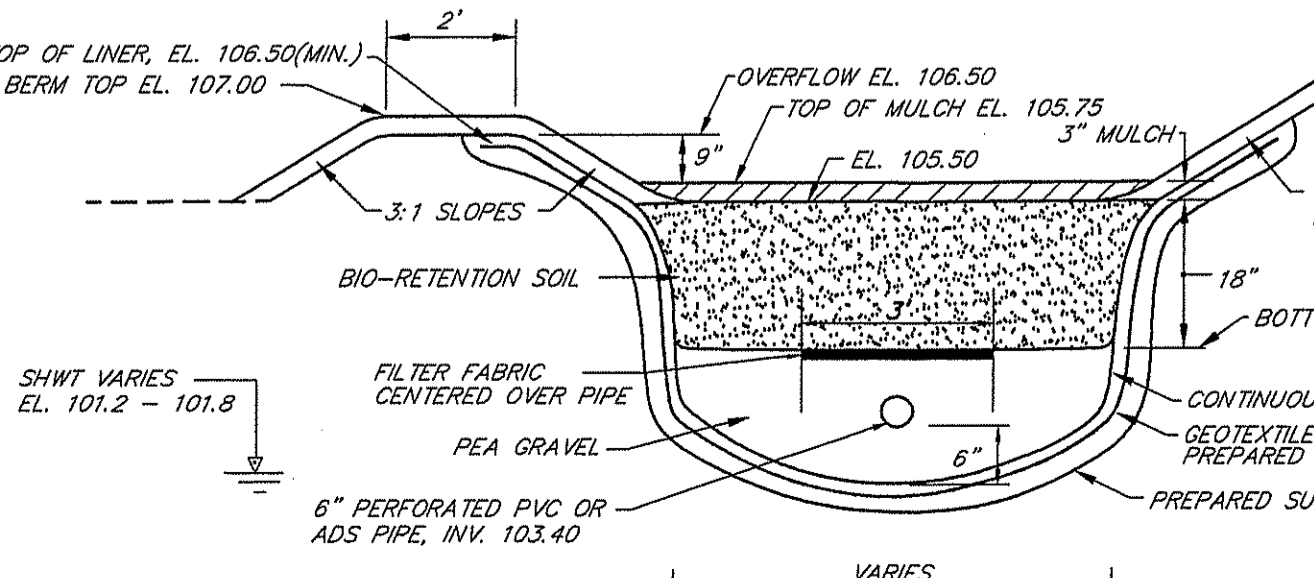
**SNOUT INSTALLATION DETAIL**  
NOT TO SCALE

**BIORETENTION AREA 1 NOTES:**

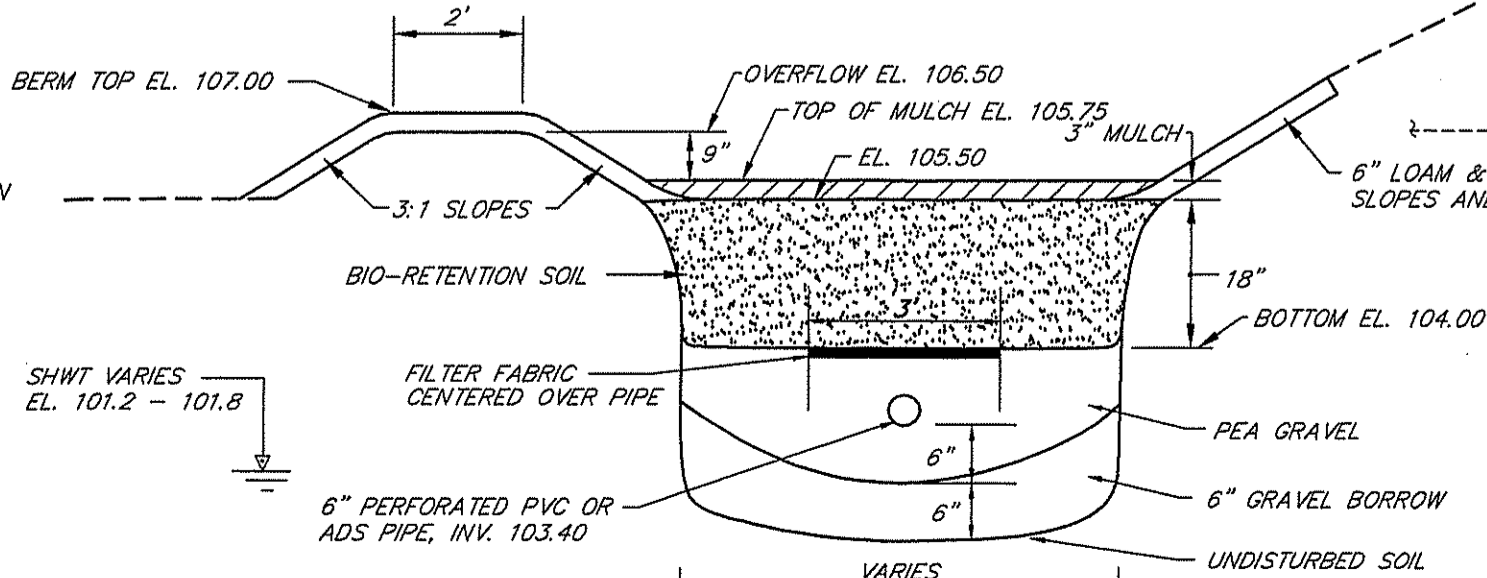
1. PREPARE SUBGRADE BY REMOVING ROCKS, ROOTS AND SHARP STICKS AND OBJECTS.
2. PROVIDE AN IMPERMEABLE PVC LINER WITH A MINIMUM 30 MIL THICKNESS. THE LINER SHALL BE UNDERLAIN BY GEOTEXTILE FABRIC. THE LINER & FABRIC SHALL MEET THE REQUIREMENTS OF ASTM D-751.
3. PROVIDE A WATER TIGHT FLEXIBLE PIPE SEAL AT ALL PIPES THROUGH LINER.
4. PROVIDE A PVC BOOT WITH STAINLESS STEEL CLAMPS TO SEAL LINER TO OUTLET PIPES.

**BIORETENTION AREA MAINTENANCE PLAN:**

1. BIORETENTION AREA SHALL BE INSPECTED TWICE PER YEAR.
2. SOIL EROSION GULLIES SHALL BE REPAIRED WHEN THEY OCCUR.
3. IF STANDING WATER REMAINS IN THE BIORETENTION AREA 48 HOURS AFTER A RAINFALL EVENT, THE BOTTOM SHALL BE ROTOTILLED AND THEN RESEDED.
4. MULCH LAYER SHALL BE REPLENISHED TO ORIGINAL DEPTH EVERY OTHER YEAR. PREVIOUS MULCH LAYER SHALL BE REMOVED. ALL ROOF DRAINS SHALL BE DIRECTED TO BIORETENTION AREA 2.
5. PRUNING OR REPLACEMENT OF VEGETATION SHOULD OCCUR WHEN DEAD OR DYING VEGETATION IS OBSERVED.
6. SEDIMENT FOREBAYS SHALL BE KEPT CLEAR OF SILTS & DEBRIS.



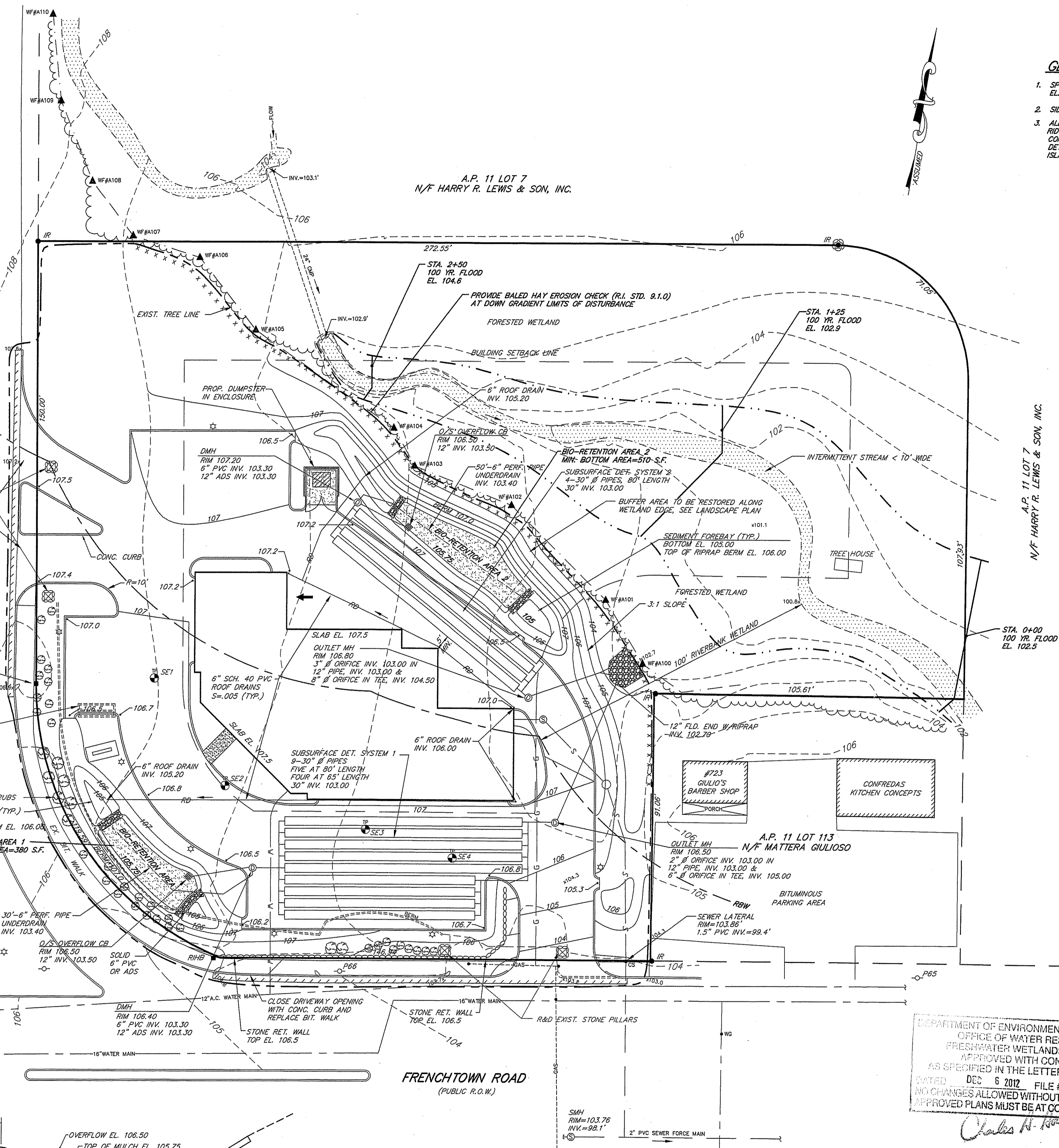
**BIORETENTION AREA 1: CROSS-SECTION**  
NOT TO SCALE



**BIORETENTION AREA 2: CROSS-SECTION**  
NOT TO SCALE

**BIORETENTION AREA:**

1. ALL LOAM & SUBSOIL SHALL BE STRIPPED AND THE AREA EXCAVATED TO DESIGN BOTTOM GRADE. BIORETENTION SOIL SHALL BE PLACED TO A DEPTH OF 18" AND COVERED WITH 3" OF MULCH.
2. MULCH SHALL BE SHREDDED HARDWOOD MULCH.
3. BIORETENTION SOIL SHALL HAVE A LOAMY SAND TEXTURE AND CONFORM TO THE FOLLOWING GRADATION:  
SAND 85 - 95%  
SILT 6 - 12%  
CLAY 0 - 2%  
ORGANIC MATTER 5%  
20% ADD by Volume To Mineral (Sand/Silt/Clay) Soil Max.
4. ROOF DRAINS SHALL BE 6" SCH. 40 PVC AT S=0.05 (MIN.). ALL ROOF DRAINS SHALL BE DIRECTED TO THE BIORETENTION AREA FOREBAYS.



- GENERAL NOTES**
1. SPOT ELEVATIONS SHOWN AT CONC. CURB LINES ARE PAVEMENT EL. AT FACE OF CURB. TOP OF CURB IS .30' HIGHER.
  2. SIDEWALK SLOPES SHALL BE .01 (MIN.) AND .05 (MAX.).
  3. ALL WORK WITHIN THE STATE ROW SHALL CONFORM TO THE RIDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 12-2010 EDITION, WITH ALL REVISIONS. STANDARD DETAILS FOR WORK WITHIN THE STATE'S ROW ARE THE RHODE ISLAND STANDARD DETAILS, 12-1-2010 EDITION, WITH ALL REVISIONS.

**TEST HOLE DATA**

TH #	GR. EL.	SHWT
SE 1	107.0	101.7
SE 2	106.2	101.2
SE 3	104.8	101.8
SE 4	104.4	101.4

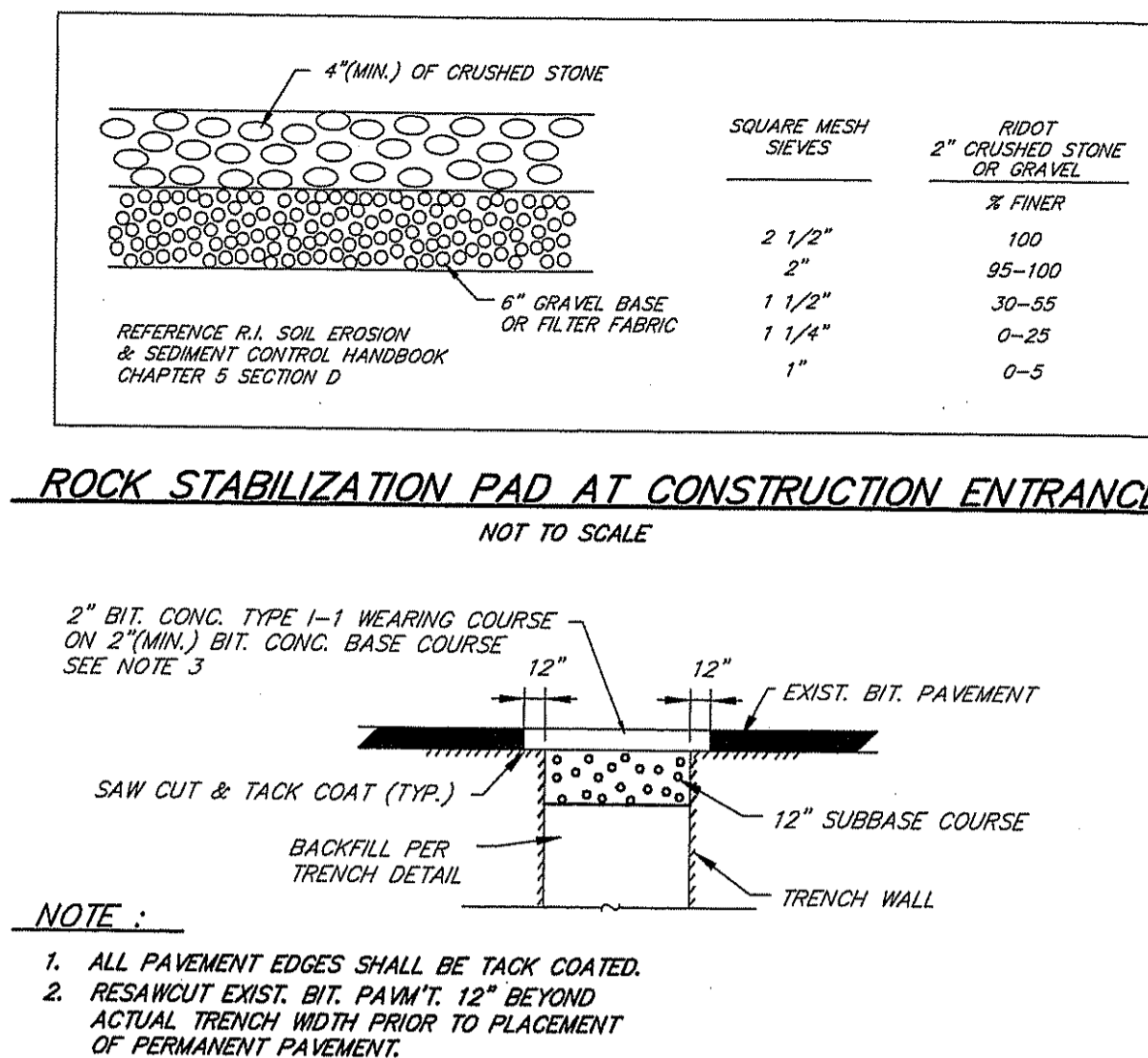
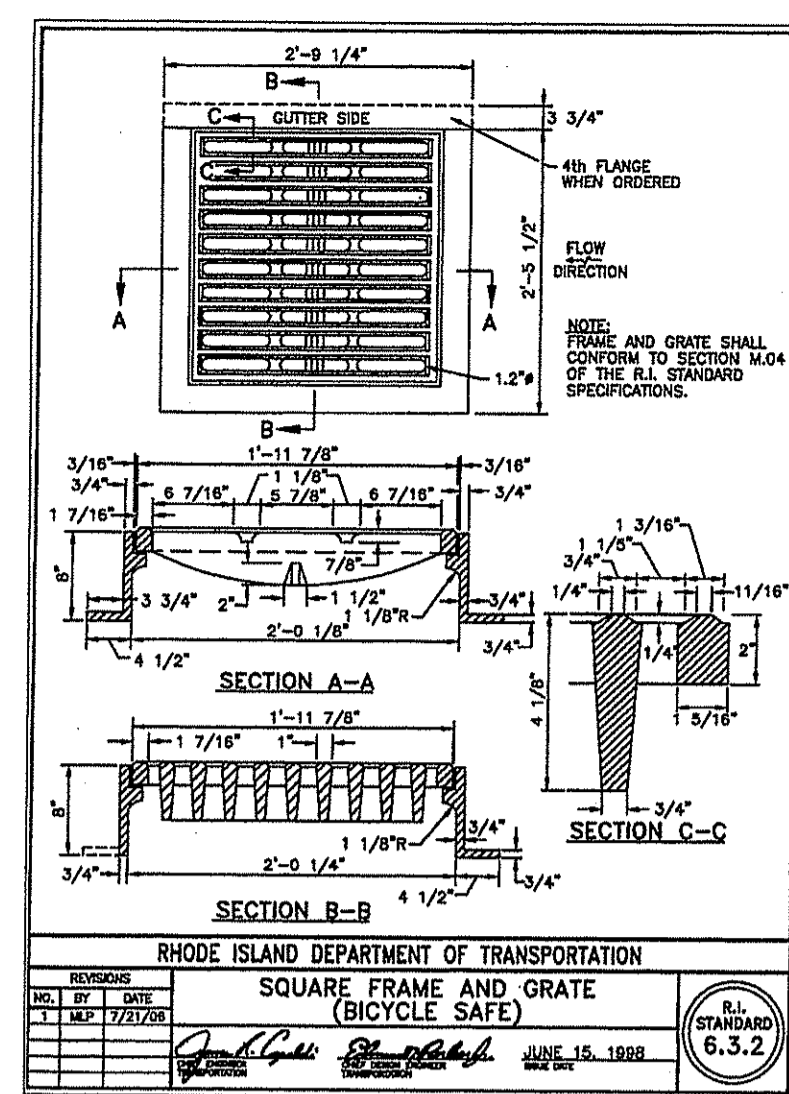
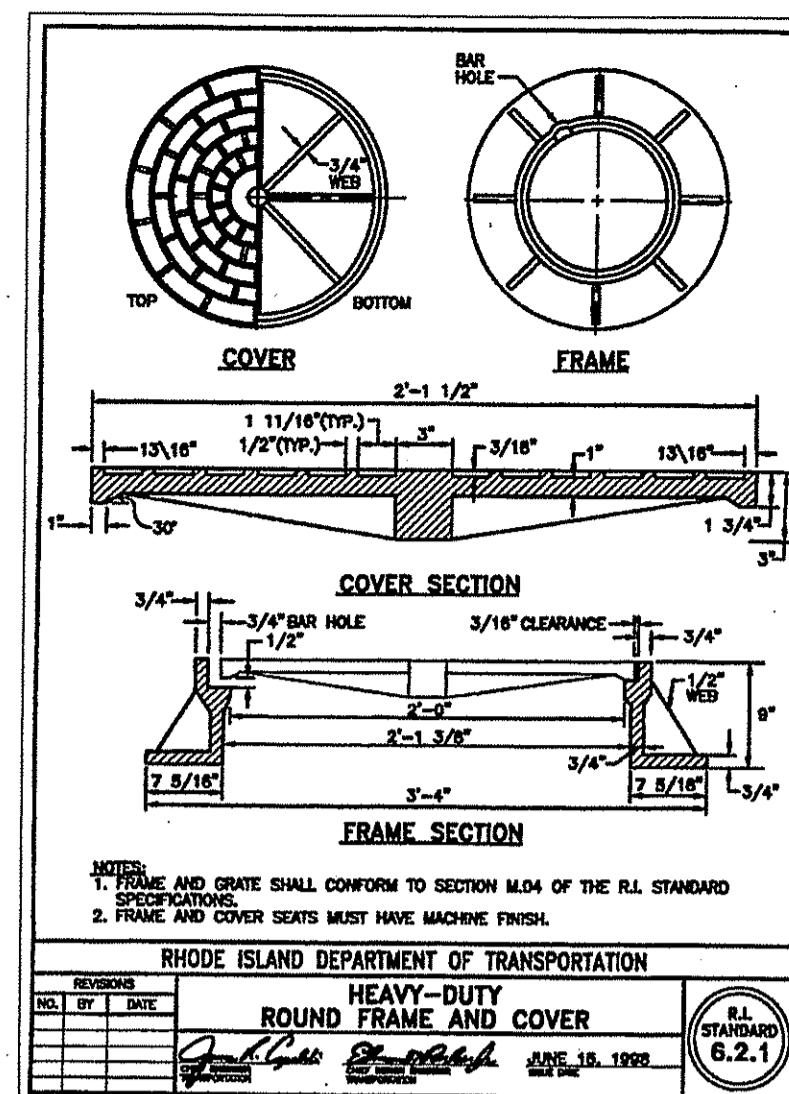
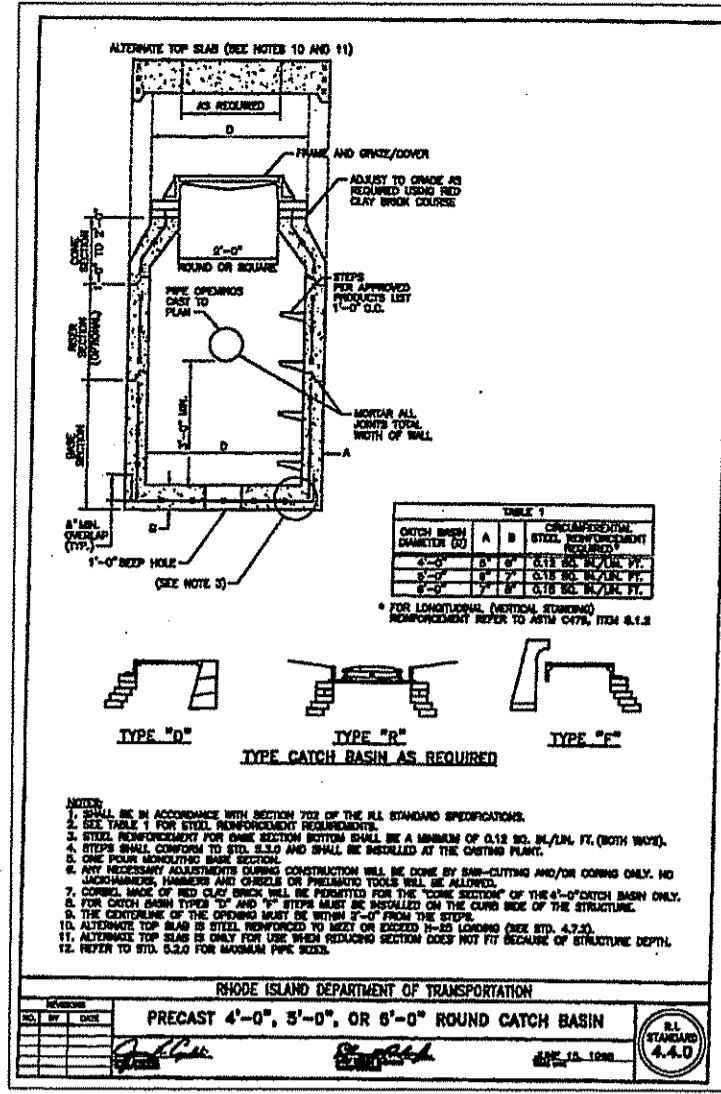
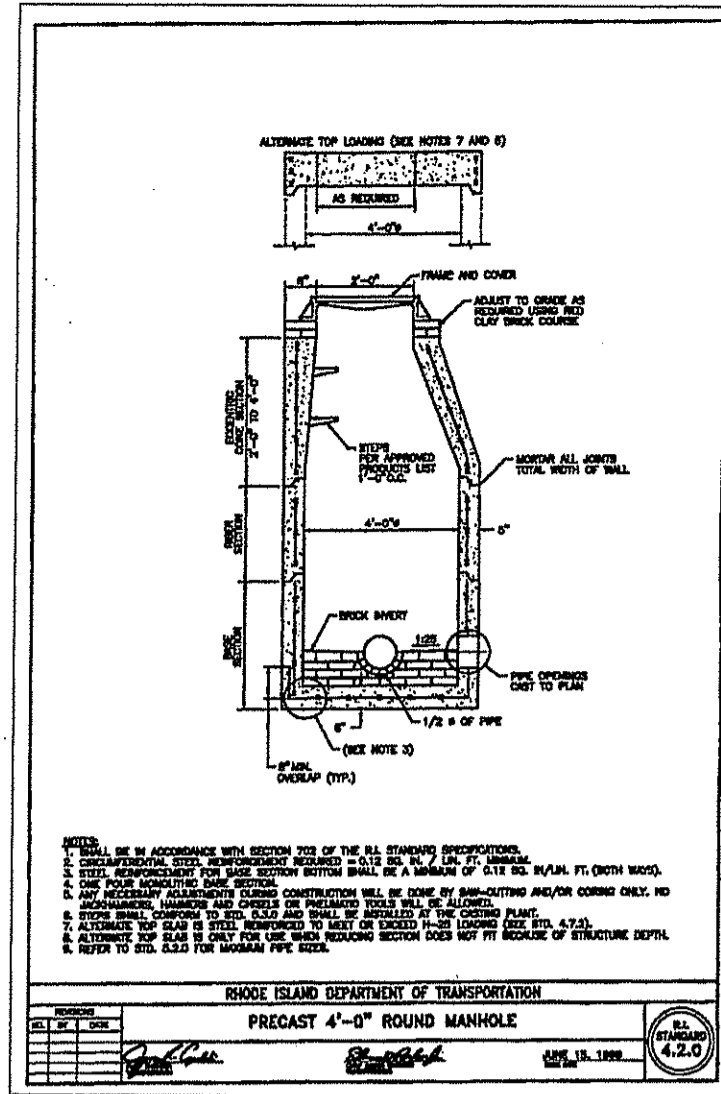
**LEGEND**

- 180- - - - - EXIST. CONTOUR
- 190- - - - - PROP. CONTOUR
- A34 - - - - - FLAGGED WETLANDS EDGE
- +104.2 - - - - - EXIST. SPOT ELEVATION
- 106.7 - - - - - PROP. SPOT ELEVATION
- - - - - - EXIST. STONE WALL
- - - - - - EXIST. TREE LINE
- - - - - - EXIST. UTILITY POLE
- ⊙ - - - - - EXIST. SEWER MANHOLE
- CB - - - - - CATCH BASIN
- ⊙ - - - - - TEST HOLE
- W- - - - - PROP. WATER LINE
- G- - - - - GAS LINE
- S- - - - - EXIST. SEWER LINE
- PS- - - - - PROP. SEWER LINE
- E- - - - - PROP. ELECTRIC LINE
- RD- - - - - PROP. ROOF DRAIN
- ★ - - - - - PROP. SITE LIGHTING
- x x x - - - - - BALED HAY EROSION CHECK
- - - - - LIMIT OF DISTURBANCE
- - - - - 100 YR. FLOOD LIMIT

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
PREWATER WETLANDS PROGRAM  
AS SPECIFIED IN THE LETTER OF APPROVAL  
DATED DEC 6 2012 FILE # 12-D155  
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

SCOTT F. MOOREHEAD  
REGISTERED PROFESSIONAL ENGINEER  
DATE: 10-29-12  
REVISION: FWW COMMENTS  
DWN. BY: LBC  
DWG. NO. SFM7279P-D  
S.F.M. ENGINEERING ASSOCIATES  
410 TIQUUE AVENUE  
COVENTRY, R.I. 02816  
(401)826-3736  
SCOTT@SFM.NECCOXMAIL.COM

**PROPOSED QUICK LANE  
AUTOMOBILE SERVICE FACILITY**  
BLOCK 29 A.P. 11 LOT 57  
2532 SOUTH COUNTY TRAIL  
EAST GREENWICH, R.I. 02818  
PREPARED FOR:  
M.F.F. LLC  
2545 SOUTH COUNTY TRAIL  
EAST GREENWICH, RHODE ISLAND  
**GRADING PLAN**  
DATE: AUG. 8, 2012 SCALE: 1"=20' SHEET 4 OF 8



**GENERAL NOTES:**

- ALL WORK PERFORMED HEREIN SHALL BE GOVERNED BY THE R.I.O.T. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, DEC. 2010 EDITION, WITH ALL REVISIONS AND THE R.I. STD. DETAILS, DEC. 1, 2010 EDITION, WITH ALL REVISIONS.
- EMBANKMENT SLOPES AND ALL DISTURBED AREAS ARE TO RECEIVE 4" OF TOPSOIL AND SEEDED. SEE EROSION CONTROL PROGRAM.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING AND MAINTAINING ALL TEMPORARY SEDIMENTATION AND EROSION CONTROLS.
- IN ALL EXCAVATION AND REPLACEMENT OF FILL, THE CONTRACTOR SHALL PERFORM THE WORK IN FULL COMPLIANCE WITH THE R.I. STANDARD SPECIFICATION SECTION 202.
- ALL EXCESS SOIL, STUMPS, TREES, ROCKS, Boulders AND OTHER REFUSE SHALL BE DISCARDED OFF SITE OUTSIDE OF ALL WETLANDS AND WETLANDS SETBACK AREAS UNLESS OTHERWISE SPECIFIED.
- ALL WORK SHALL BE PERFORMED IN STRICT COMPLIANCE WITH THE REQUIREMENTS OF ALL STATE AND TOWN REGULATIONS AND PERMITS.
- ALL TRAFFIC CONTROL SHALL CONFORM TO THE LATEST EDITION OF THE MANUAL FOR UNIFORM TRAFFIC CONTROL DEVICES, WITH ALL REVISIONS.

**EROSION CONTROL & SOIL STABILIZATION PROGRAM**

- DEVELOPED 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 SEED OR PROTECTED BY THAT DATE FOR ANY WORK COMPLETED DURING EACH CONSTRUCTION YEAR.
- THE TOP SOIL 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:

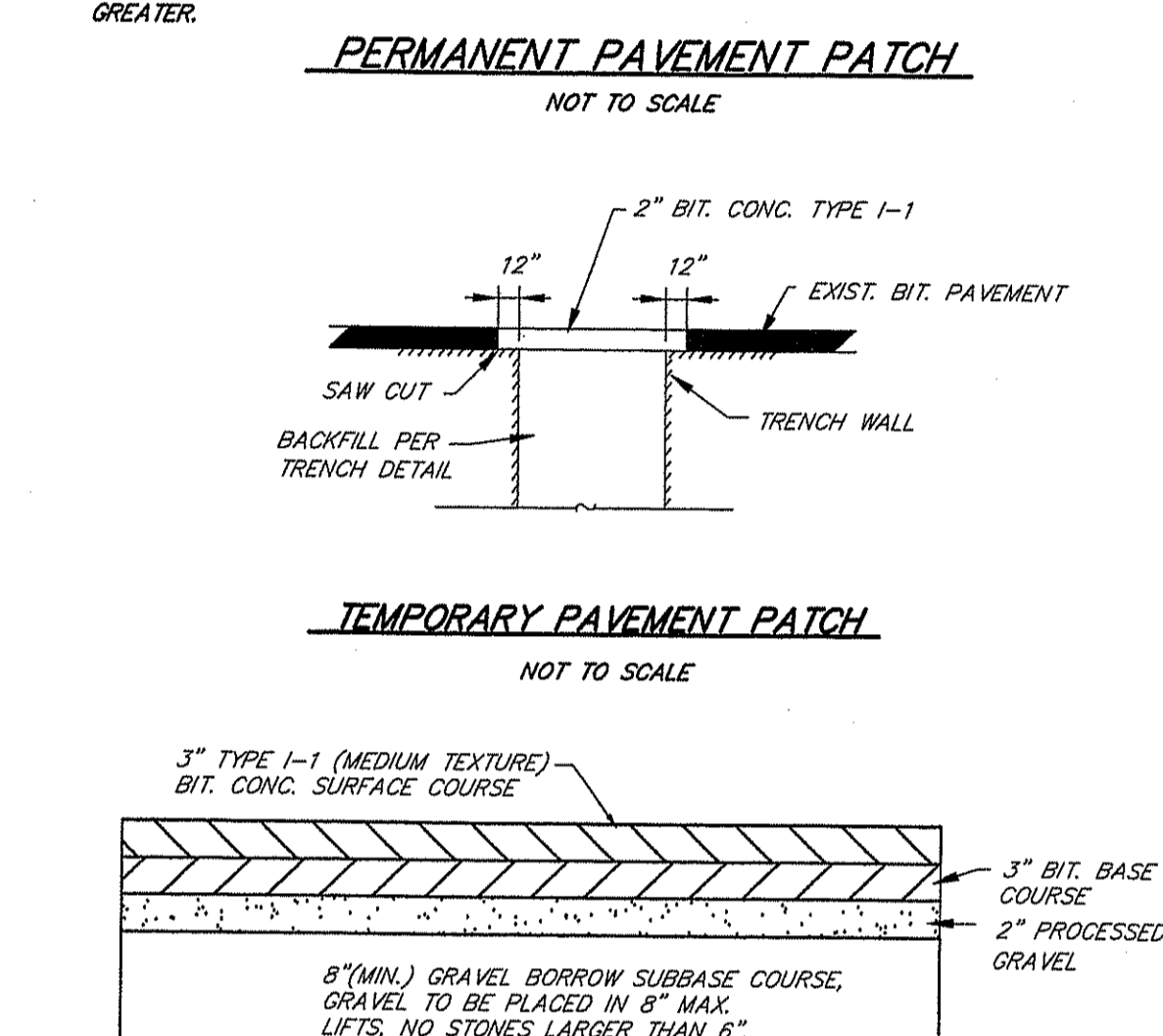
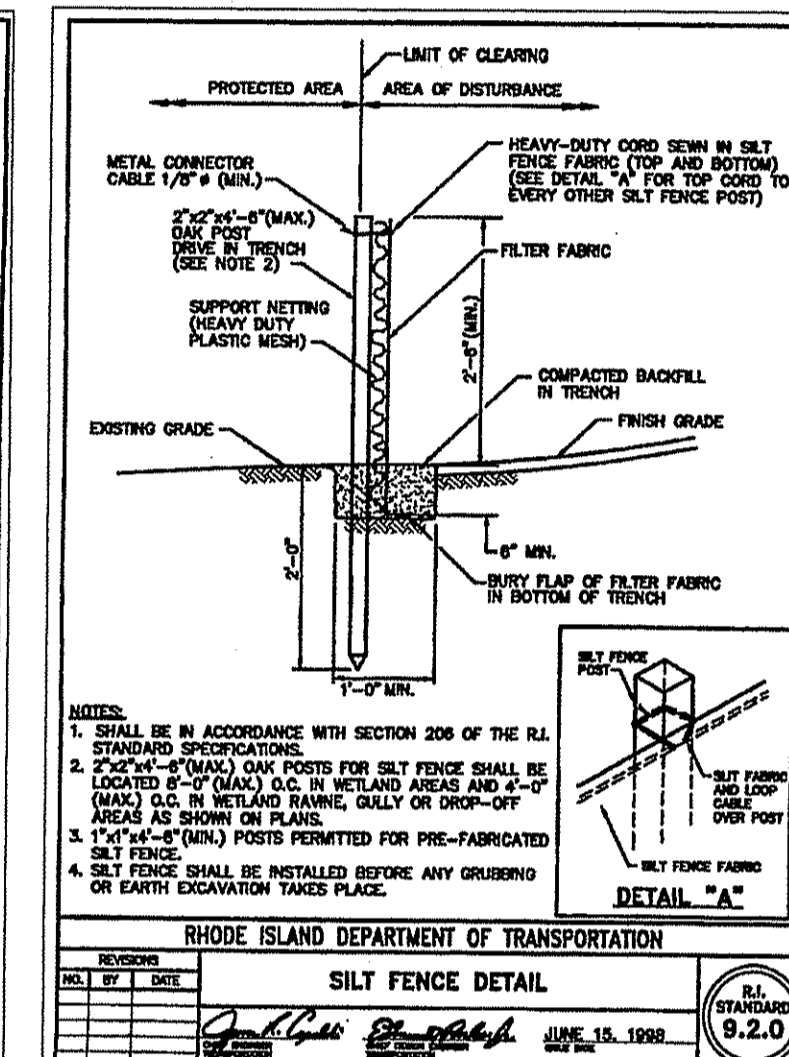
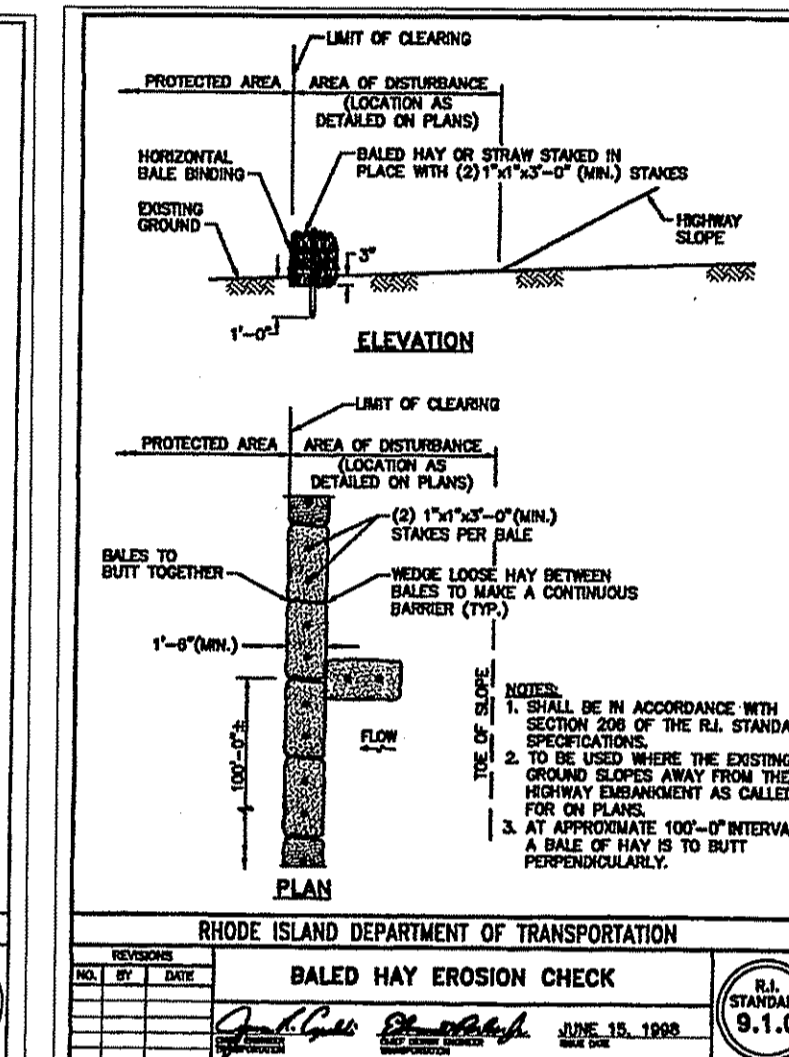
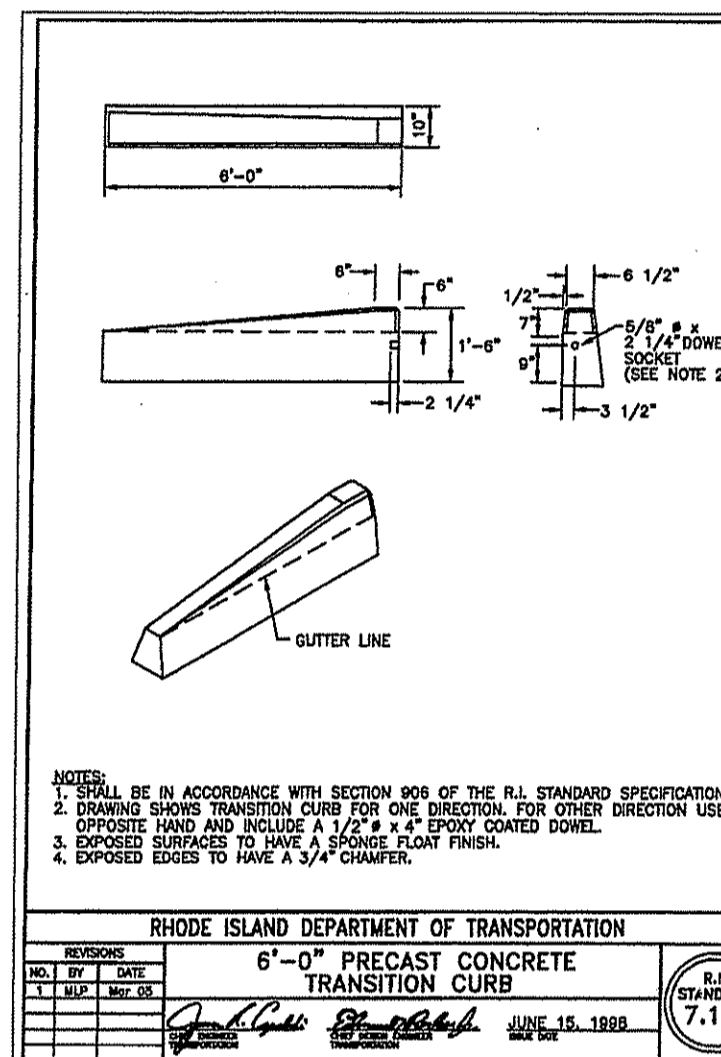
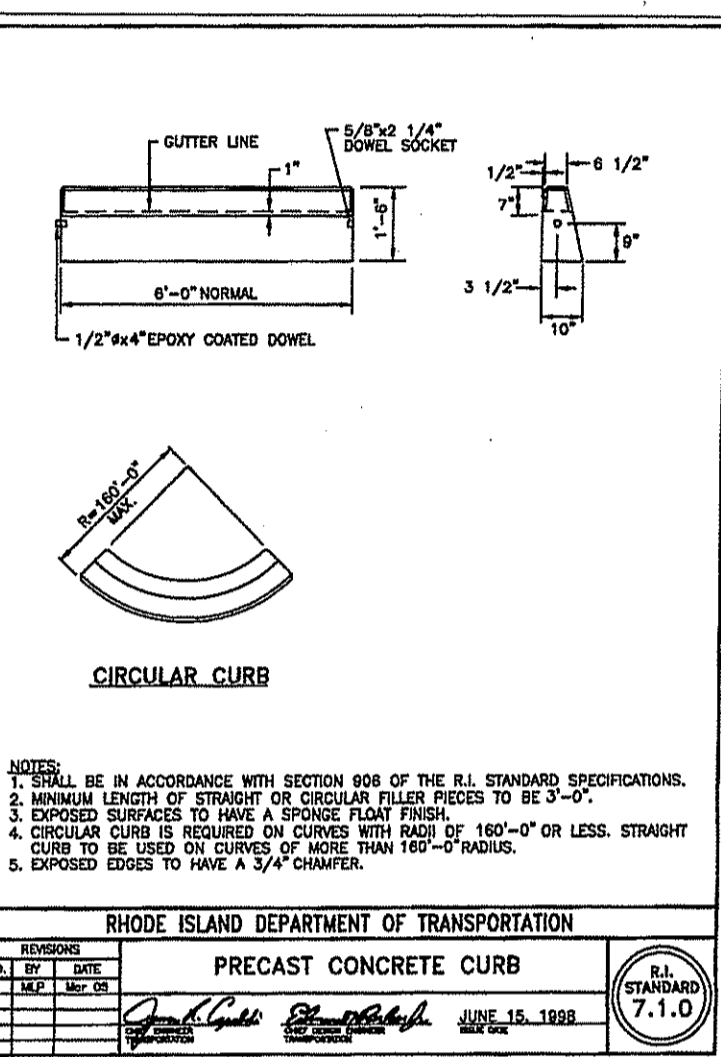
MIXTURE	% BY WT.	SEEDING DATES
RED FESCUE	70	APRIL 1-JUNE 15
KENTUCKY BLUEGRASS	15	APRIL 1-JUNE 15
COLONIAL BENTGRASS	5	AUG. 15-OCT. 15
PERENNIAL RYEGRASS	10	
TOTAL	200 LBS/AC	

**SEDIMENTATION CONTROL PROGRAM**

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

**ORDER OF PROCEDURE**

- PRIOR TO ANY CONSTRUCTION OR EXCAVATION, HAYBALES OR SILT FENCE SHALL BE INSTALLED AT THE PROPERTY LINE OR LIMIT OF DISTURBANCE. TEMPORARY HAYBALES OR SILT FENCE SHALL BE INSTALLED AT THE LIMIT OF WORK ACTIVITY IF CONSTRUCTION IS TO BE DONE IN PHASES.
- ALL EROSION AND SEDIMENTATION CONTROL STRUCTURES SHALL BE PERIODICALLY MAINTAINED AS PER THE RESPECTIVE PROGRAMS FOR TEMPORARY CONTROL.
- IF WORK PROGRESS IS TO BE INTERRUPTED AT ANY TIME, REFERENCE EROSION AND SEDIMENTATION PROGRAMS FOR TEMPORARY CONTROL.
- TEMPORARY HAYBALES AND SANDBAGS ALONG AND AT THE ENDS OF ROADWAYS MAY ALSO BE REMOVED AFTER FINAL SOIL STABILIZATION HAS BEEN ACHIEVED AND APPROVED.
- HAYBALES LOCATED AT DRAINAGE INLETS OR 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.
- 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 1 - OCTOBER 15.
- ALL FILL SHALL BE THOROUGHLY COMPACTED UPON PLACEMENT IN STRICT COMPLIANCE WITH THE R.I.D.P.W. STD. SPECIFICATIONS SECTION 202.
- STABILIZATION OF ONE FORM OR ANOTHER AS DESCRIBED ABOVE SHALL BE ACHIEVED WITHIN 15 DAYS OF FINAL GRADING.
- STACKS OF TOPSOILS SHALL NOT BE LOCATED NEAR WATERWAYS. THEY SHALL HAVE SIDE SLOPES NO GREATER THAN 30% AND STOCKPILES SHALL ALSO BE SEED 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.

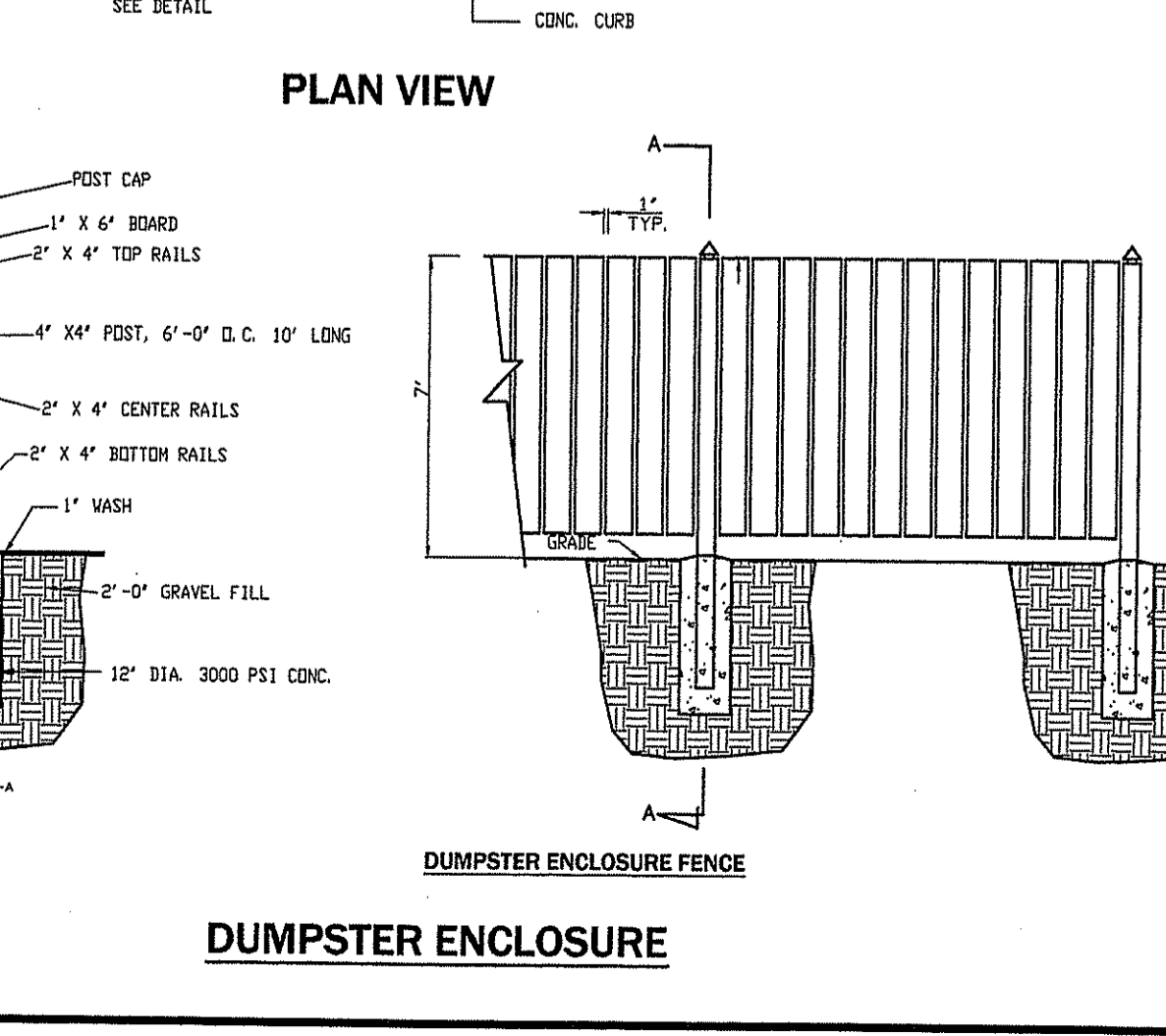
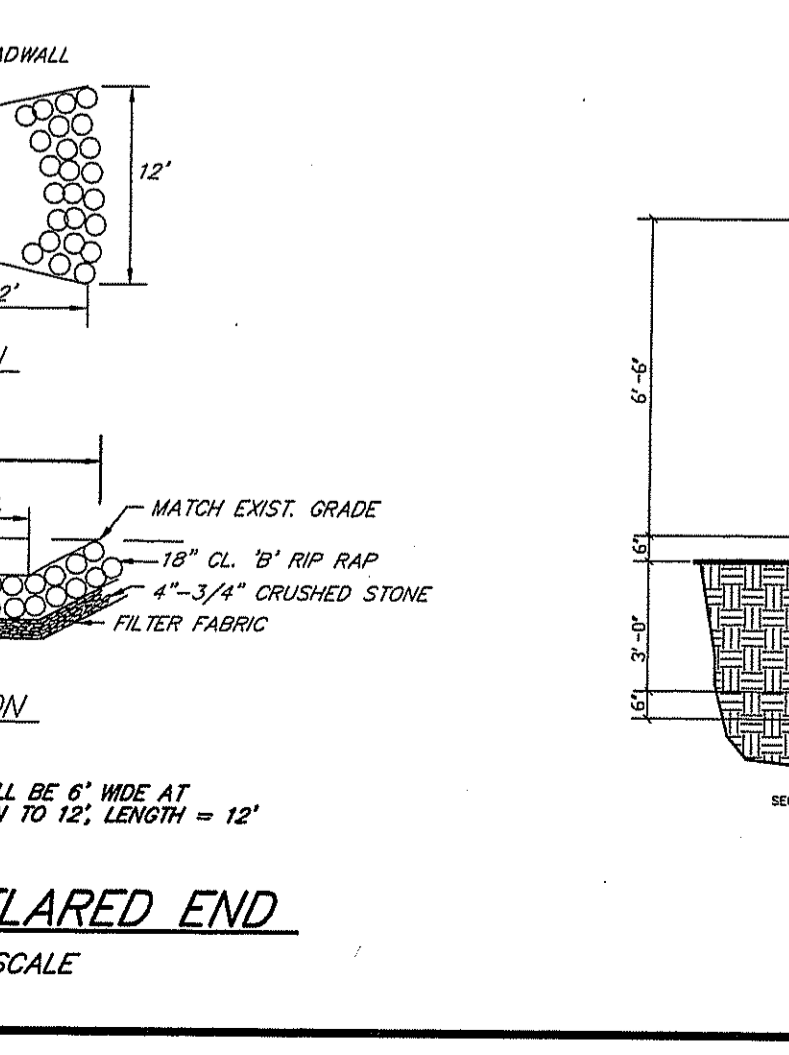
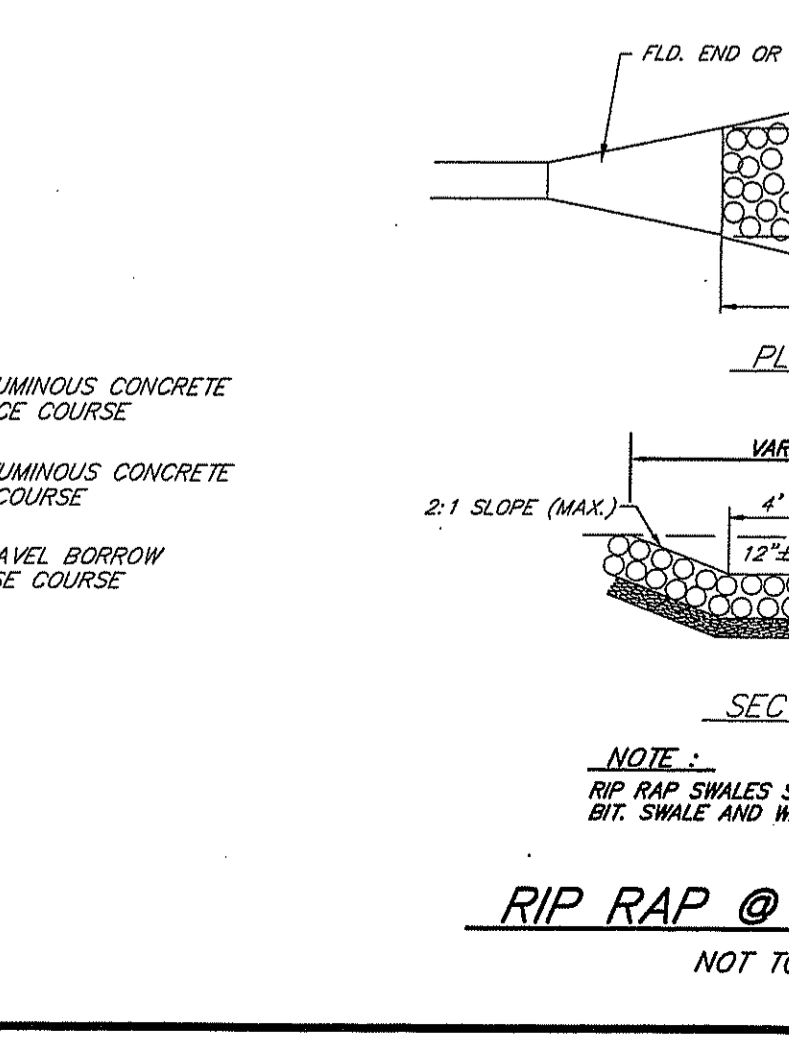
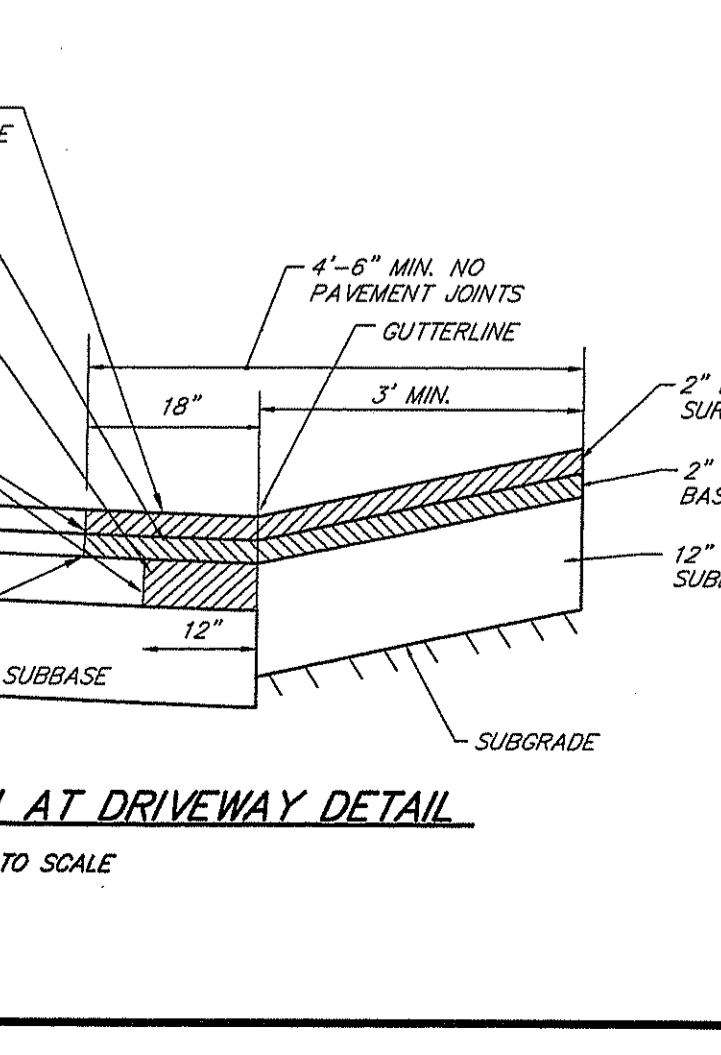
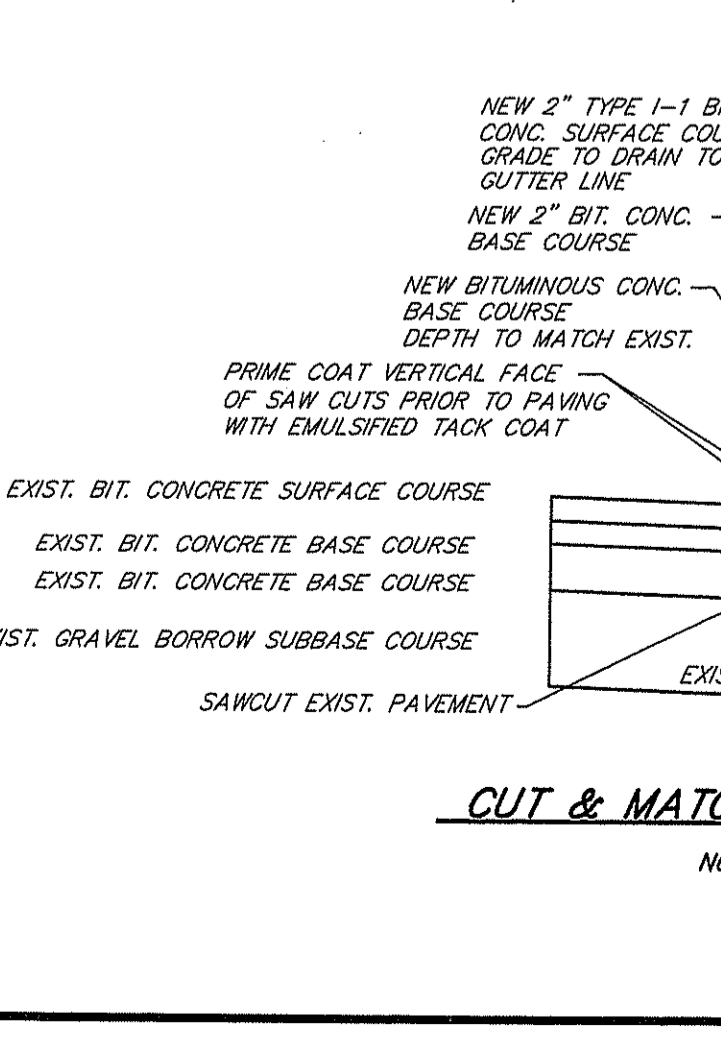
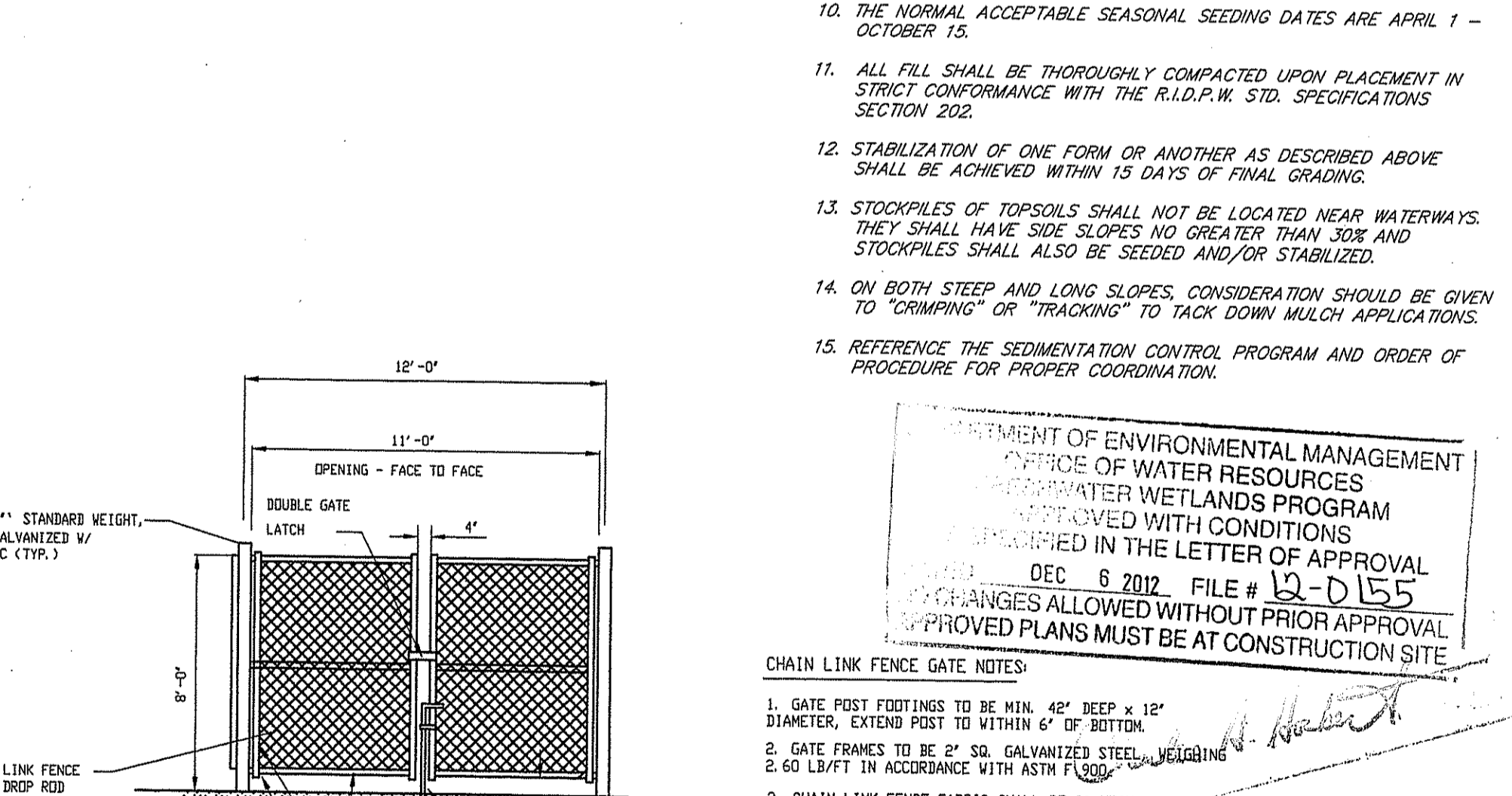
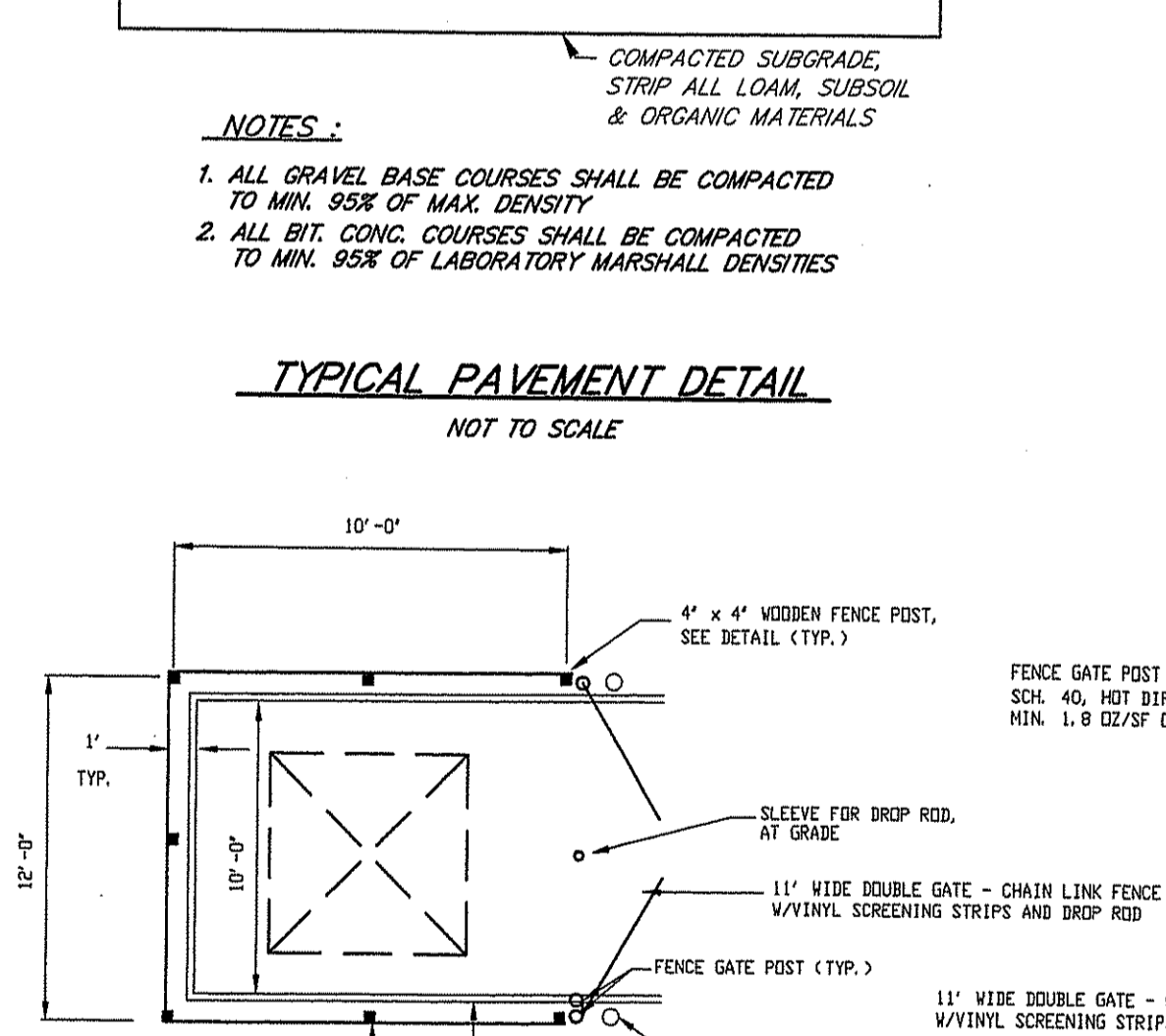
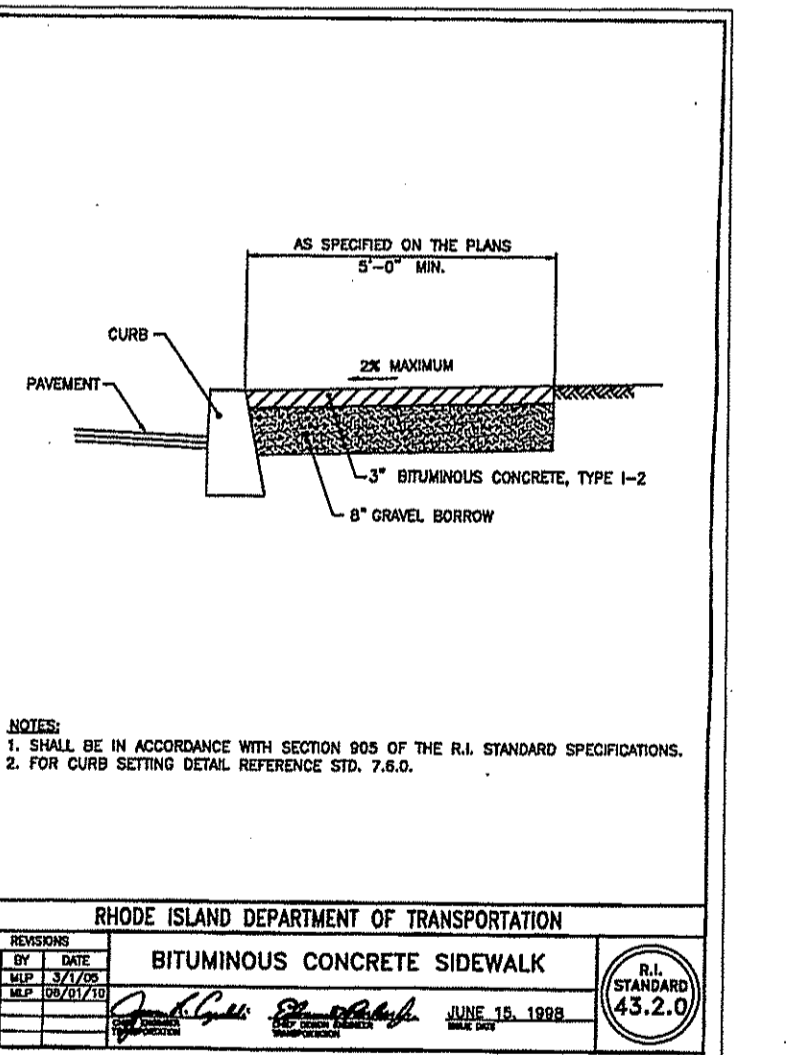
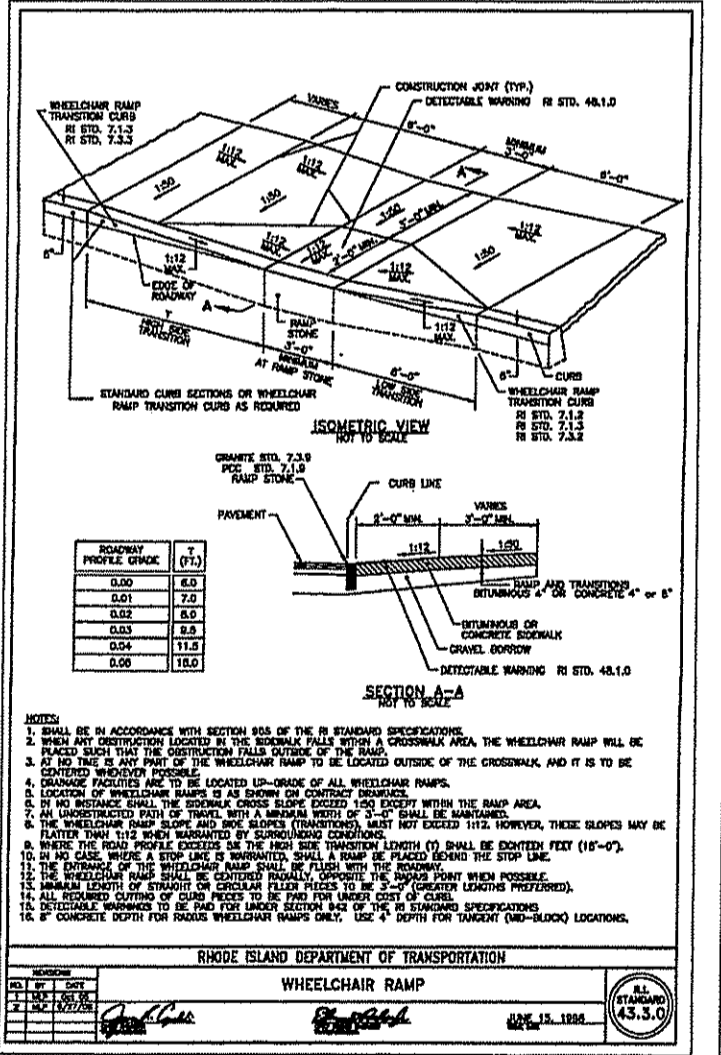
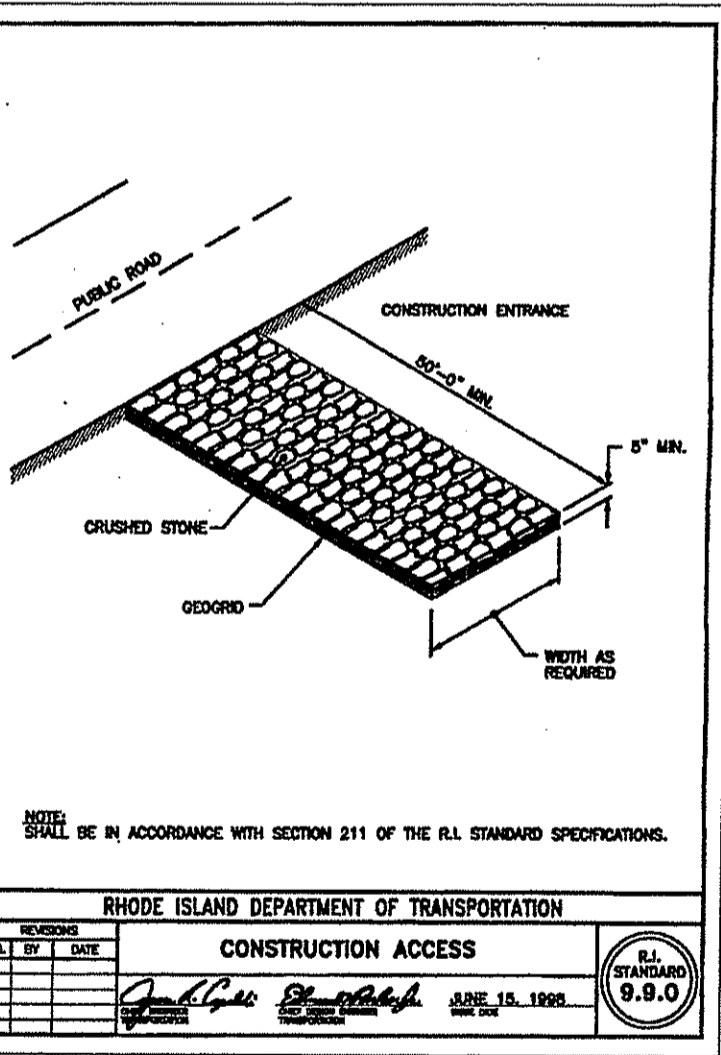


**SEEDING MIXTURES:**

MIXTURE	% BY WT.	SEEDING DATES
RED FESCUE	70	APRIL 1-JUNE 15
COLONIAL BENTGRASS	5	AUG. 15-OCT. 15
PERENNIAL RYEGRASS	10	
TOTAL	200 LBS/AC	

**CONSERVATION SEEDING AREAS**

MIXTURE	% BY WT.	SEEDING DATES
TALL FESCUE	32	APRIL 1-JUNE 15
PERENNIAL RYEGRASS	24	AUG. 15-OCT. 15
MULDOVE GRASS	18	
RED CANARY GRASS	15	
REDTOP	4	
TOTAL	200 LBS/AC	



**DEPARTMENT OF ENVIRONMENTAL MANAGEMENT**  
**OFFICE OF WATER RESOURCES**  
**WATER WETLANDS PROGRAM**  
**APPROVED WITH CONDITIONS**  
**SHOWN IN THE LETTER OF APPROVAL**  
**DEC 6 2012 FILE # 12-0155**  
**CHANGES ALLOWED WITHOUT PRIOR APPROVAL**  
**APPROVED PLANS MUST BE AT CONSTRUCTION SITE**

**CHAIN LINK FENCE GATE NOTES:**

- GATE POST FOOTINGS TO BE MIN. 42" DEEP x 12" DIAMETER, EXTEND POST TO WITHIN 6" OF BOTTOM.
- GATE FRAMES TO BE 2" GALVANIZED STEEL WEIGHING 2.60 LB/FT IN ACCORDANCE WITH ASTM F1418.
- CHAIN LINK FENCE FABRIC SHALL BE 2" MESH, 9 GAUGE, ZINC COATED STEEL CORE WIRE. INSTALL MESH WITH HOOK BOLTS AND TENSION BARS ON ALL 4 SIDES, ATTACH AT 15" MAX.
- DOUBLE GATE LATCH TO BE FORKED TYPE CAPABLE OF RETAINING GATE IN CLOSED POSITION AND HAVE PROVISION FOR PAD LOCK. LATCH SHALL BE OPERABLE FROM EITHER SIDE OF GATE.
- ALL HARDWARE TO BE HOT DIPPED GALVANIZED STEEL TO SUIT GATE SIZE.
- POST AND RAILS TO BE PRESSURE TREATED.
- BOARDS TO BE #1 EASTERN WHITE CEDAR.
- RAILS AND BOARDS TO BE ATTACHED WITH CORROSION RESISTANT SCREWS.
- ALL WOOD TO BE PAINTED WITH ACRYLIC LATEX STAIN.

**PROPOSED QUICK LANE**  
**AUTOMOBILE SERVICE FACILITY**  
 BLOCK 29 A.P. 11 LOT 57  
 2532 SOUTH COUNTY TRAIL  
 EAST GREENWICH, R.I. 02818  
 PREPARED FOR:  
 MAF, LLC  
 2545 SOUTH COUNTY TRAIL  
 EAST GREENWICH, RHODE ISLAND

**SCOTT F. MOOREHEAD**  
 REGISTERED PROFESSIONAL ENGINEER  
 No. 14298

**S.F.M. ENGINEERING ASSOCIATES**  
 410 TOGUE AVENUE  
 COVENTRY, R.I. 02816  
 (401)828-3736  
 SCOTT@SFM.NECCOXMAIL.COM

**CONSTRUCTION DETAILS-1**  
 DATE: AUG. 8, 2012 SCALE: AS NOTED SHEET 5 OF 8

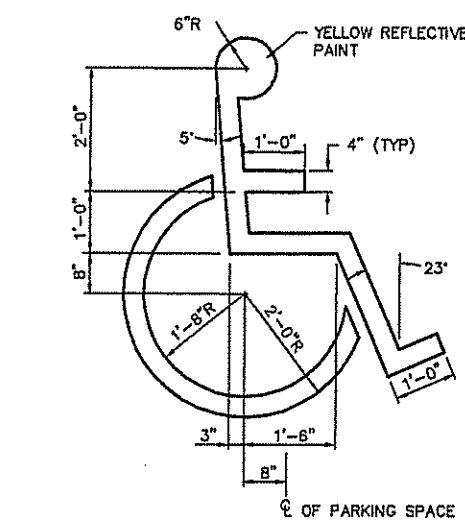


SIZE: 12" X 18"  
 LINE 1: 3"  
 LINE 2: 3"  
 LINE 3: 2"  
 LINE 4: 2"  
 LINE 5: ARROW  
 BACKGROUND: WHITE  
 LEGEND: RED  
 MARGIN: 3/8"  
 BORDER: 3/8"

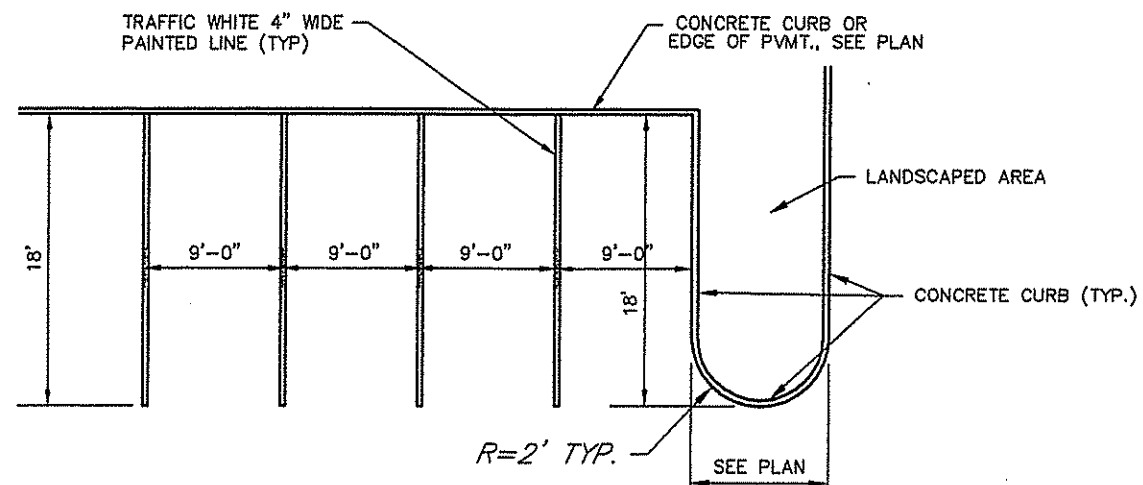
**INSTALLATION**

- SIGNS SHALL BE LOCATED ON THE RIGHT SIDE OF THE ROADWAY FACING APPROACHING TRAFFIC.
- SIGNS SHALL BE INSTALLED APPROXIMATELY TWO FEET OFF OF PAVEMENT EDGE OR FACE OF CURB.
- THE HEIGHT OF THE SIGN SHALL BE A MINIMUM OF SEVEN (7) FEET, MEASURED FROM THE BOTTOM OF THE SIGN TO THE GROUND.
- ALL SIGNS SHALL BE INSTALLED FACING TRAFFIC AT AN ANGLE OF BETWEEN 30 AND 45 DEGREES WITH A LINE PARALLEL TO THE FLOW OF TRAFFIC. THE SIGN LEGENDS SHALL INCLUDE SINGLE-HEADED ARROWS POINTING IN THE DIRECTION OF THE REGULATION IF THE SIGNS ARE AT THE END OF THE ZONE, OR DOUBLE-HEADED ARROWS POINTING IN BOTH DIRECTIONS IF THE SIGNS ARE AT INTERMEDIATE POINTS WITHIN A ZONE.
- POST MOUNT ON R.I. STD. 24.6.0, BUILDING MOUNT WHERE REQUIRED @ 50' O.C.

**FIRE LANE SIGN**



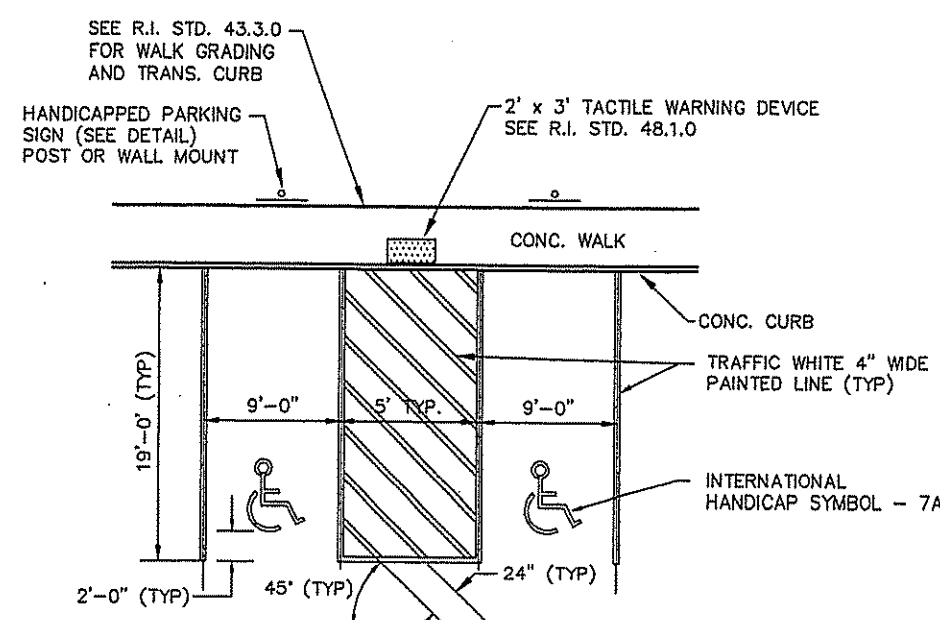
**INTERNATIONAL HANDICAP SYMBOL**



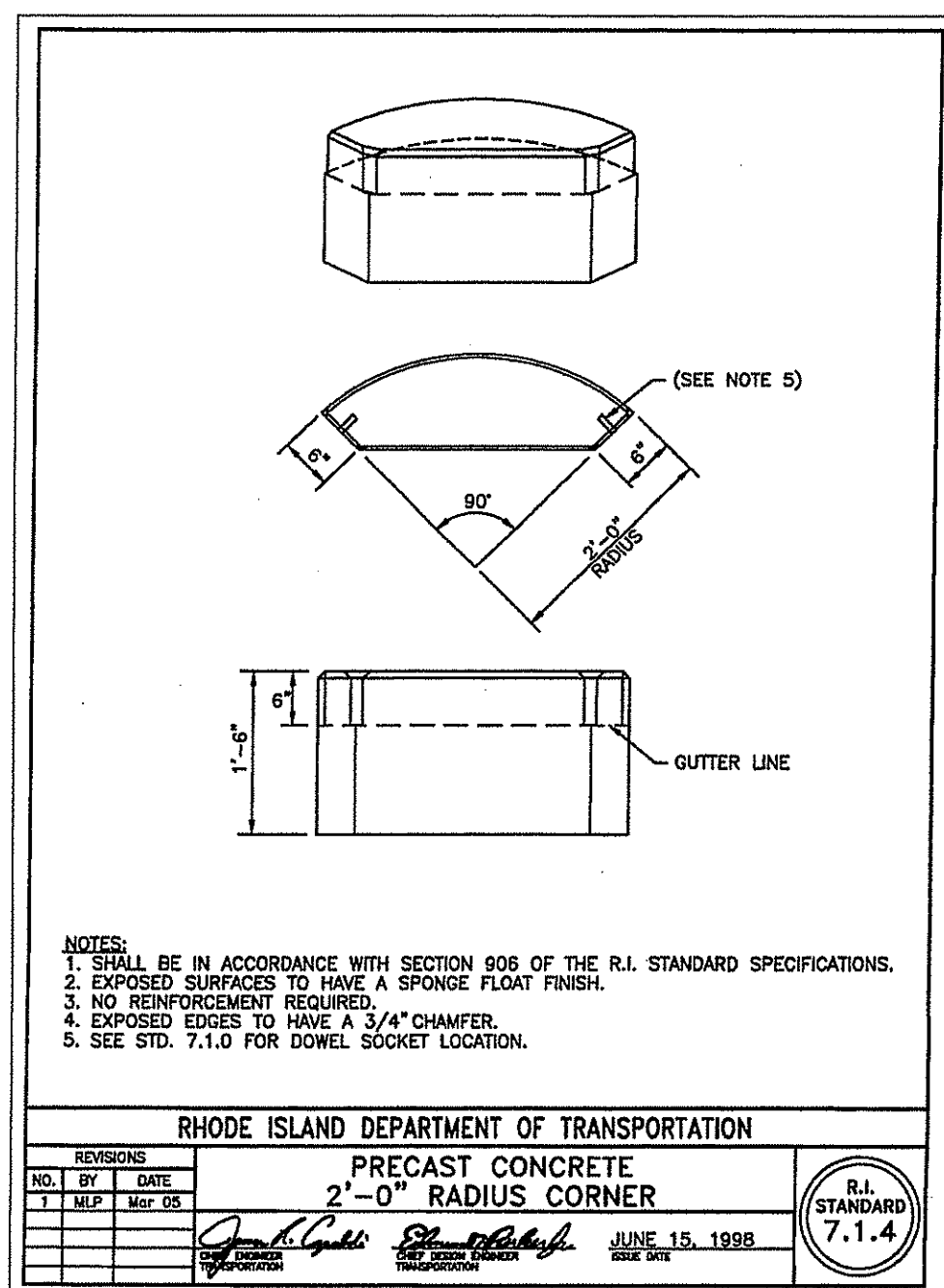
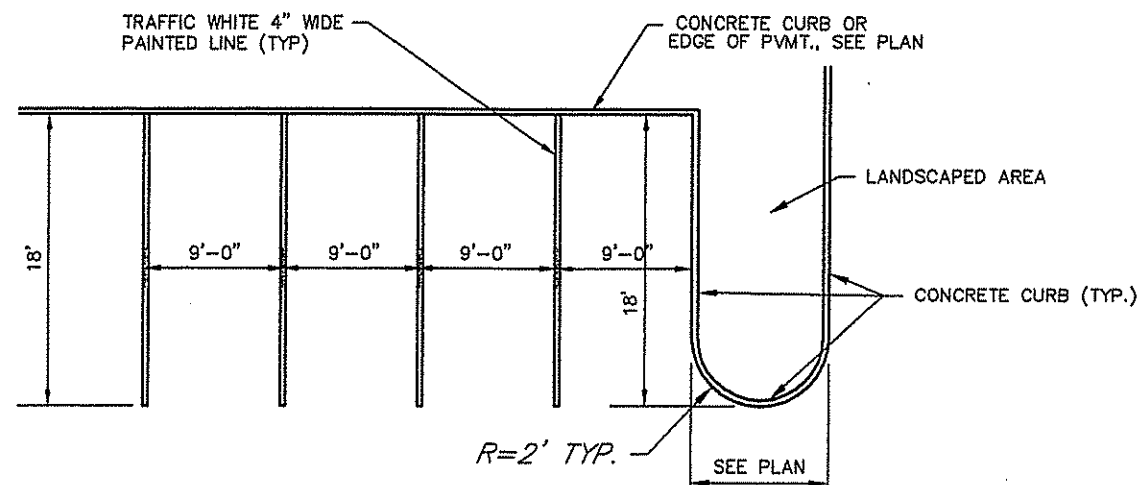
**HANDICAP PARKING SIGNS**

- NOTES:  
 1. HANDICAP PARKING SIGN SHALL CONFORM WITH CURRENT STATE AND LOCAL CODES AND REGULATIONS.

**HANDICAPPED PAVEMENT MARKINGS & SIGNAGE**

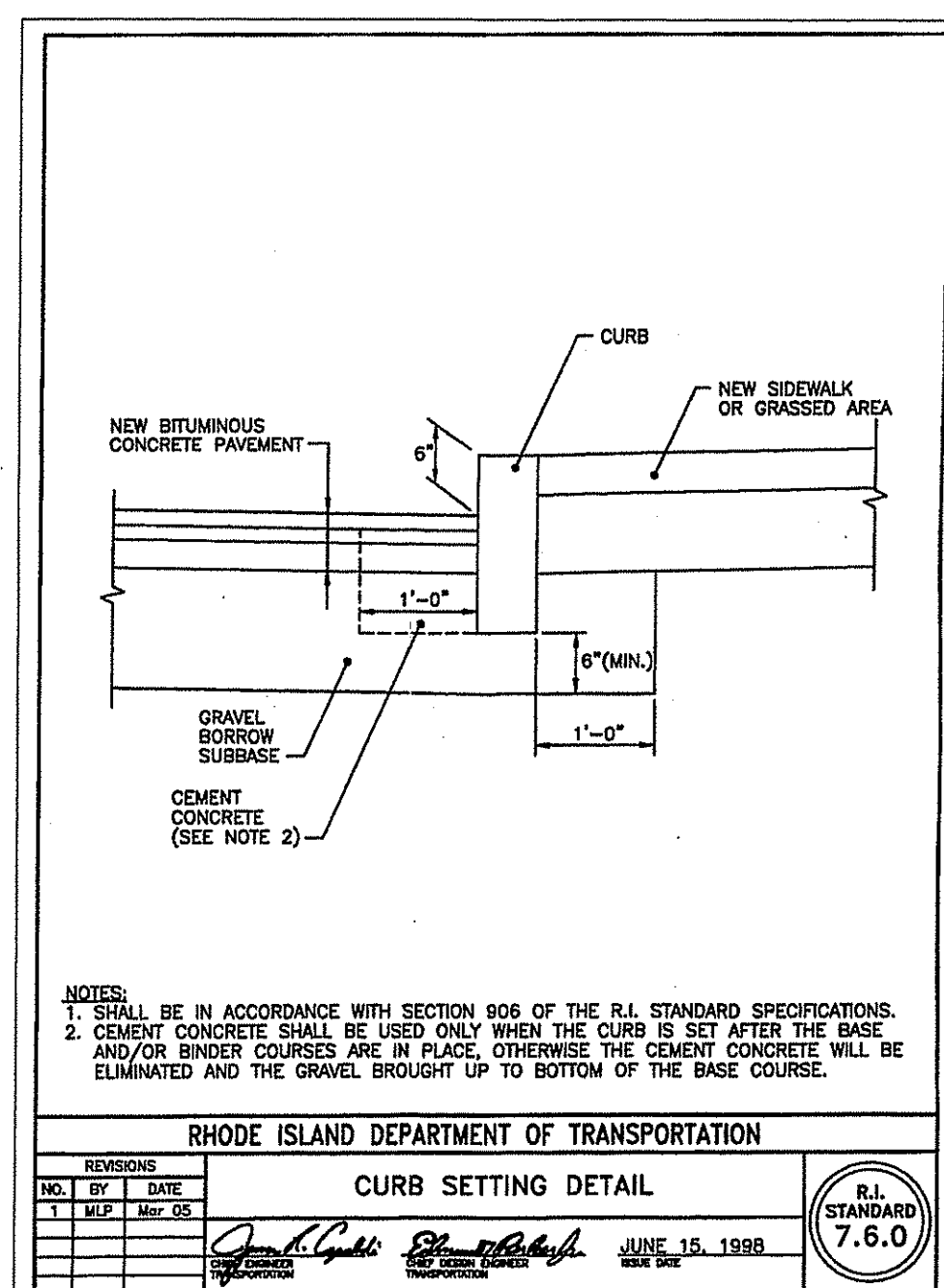


**90° PARKING STALL LAYOUT**



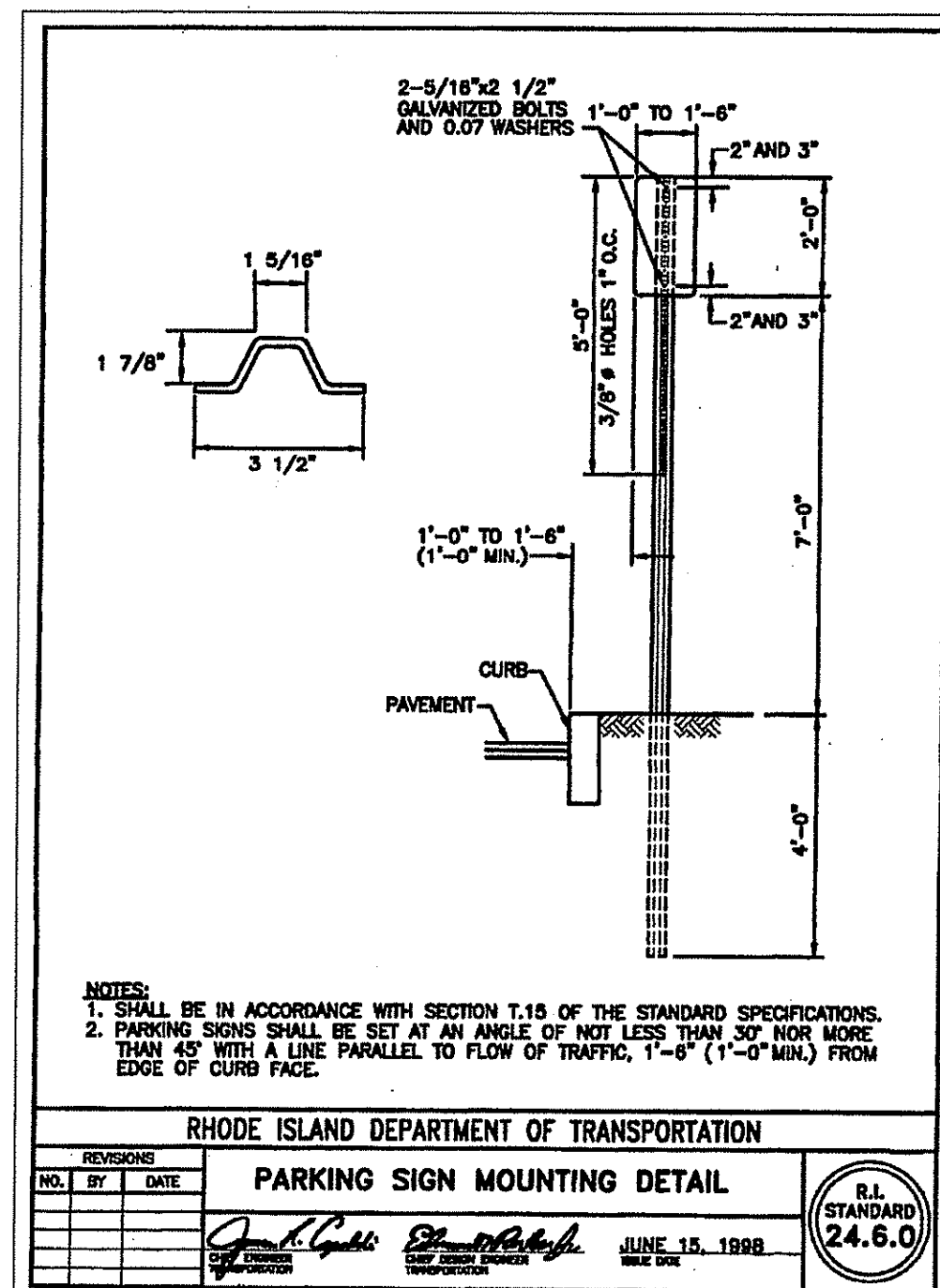
- NOTES:  
 1. SHALL BE IN ACCORDANCE WITH SECTION 906 OF THE R.I. STANDARD SPECIFICATIONS.  
 2. EXPOSED SURFACES TO HAVE A SPONGE FLOAT FINISH.  
 3. NO REINFORCEMENT REQUIRED.  
 4. EXPOSED EDGES TO HAVE A 3/4" CHAMFER.  
 5. SEE STD. 7.1.0 FOR DOWEL SOCKET LOCATION.

RHODE ISLAND DEPARTMENT OF TRANSPORTATION			
PRECAST CONCRETE 2'-0" RADIUS CORNER			
NO.	BY	DATE	REV.
1	J.P.	J.M.	1
JUN 15, 1998 R.I. STANDARD 7.1.4			



- NOTES:  
 1. SHALL BE IN ACCORDANCE WITH SECTION 906 OF THE R.I. STANDARD SPECIFICATIONS.  
 2. CEMENT CONCRETE SHALL BE USED ONLY WHEN THE CURB IS SET AFTER THE BASE AND/OR BORROW COURSES ARE IN PLACE. OTHERWISE THE CEMENT CONCRETE WILL BE ELIMINATED AND THE GRAVEL BROUGHT UP TO BOTTOM OF THE BASE COURSE.

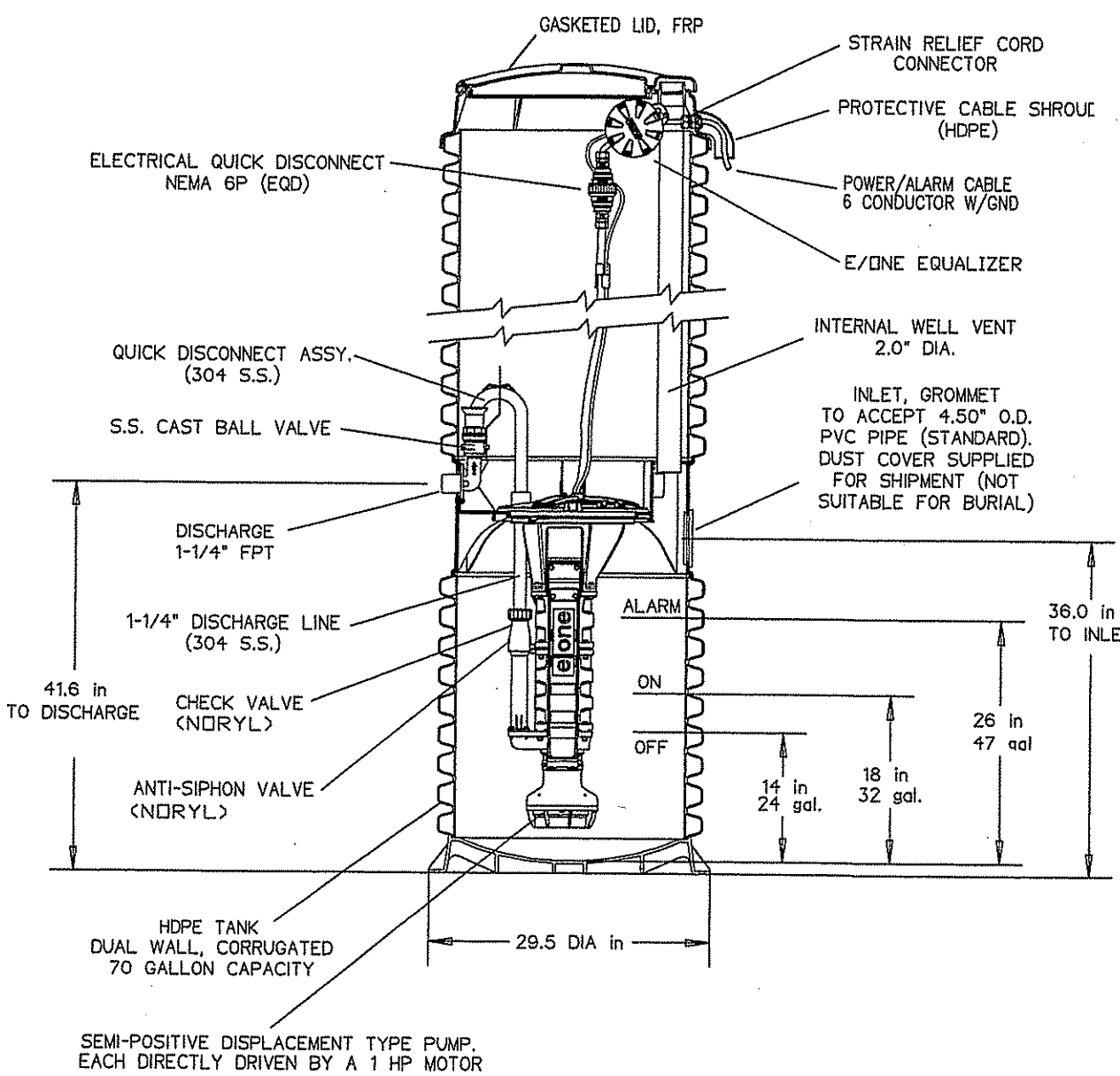
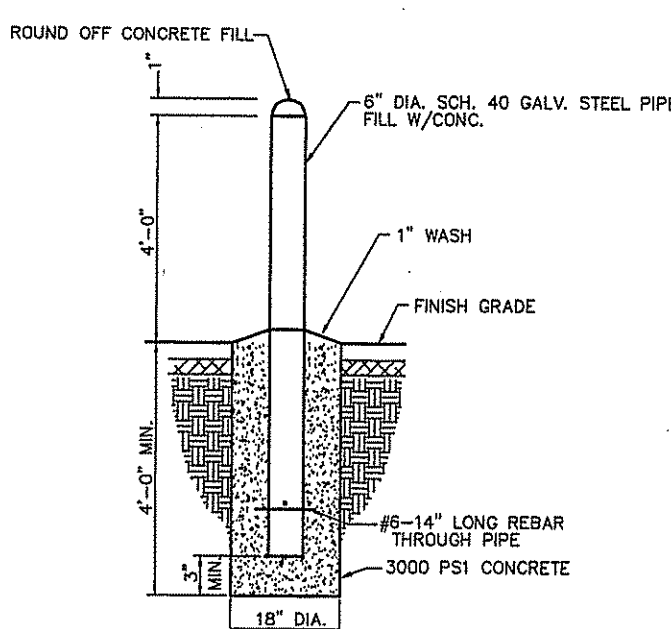
RHODE ISLAND DEPARTMENT OF TRANSPORTATION			
CURB SETTING DETAIL			
NO.	BY	DATE	REV.
1	J.P.	J.M.	1
JUN 15, 1998 R.I. STANDARD 7.6.0			



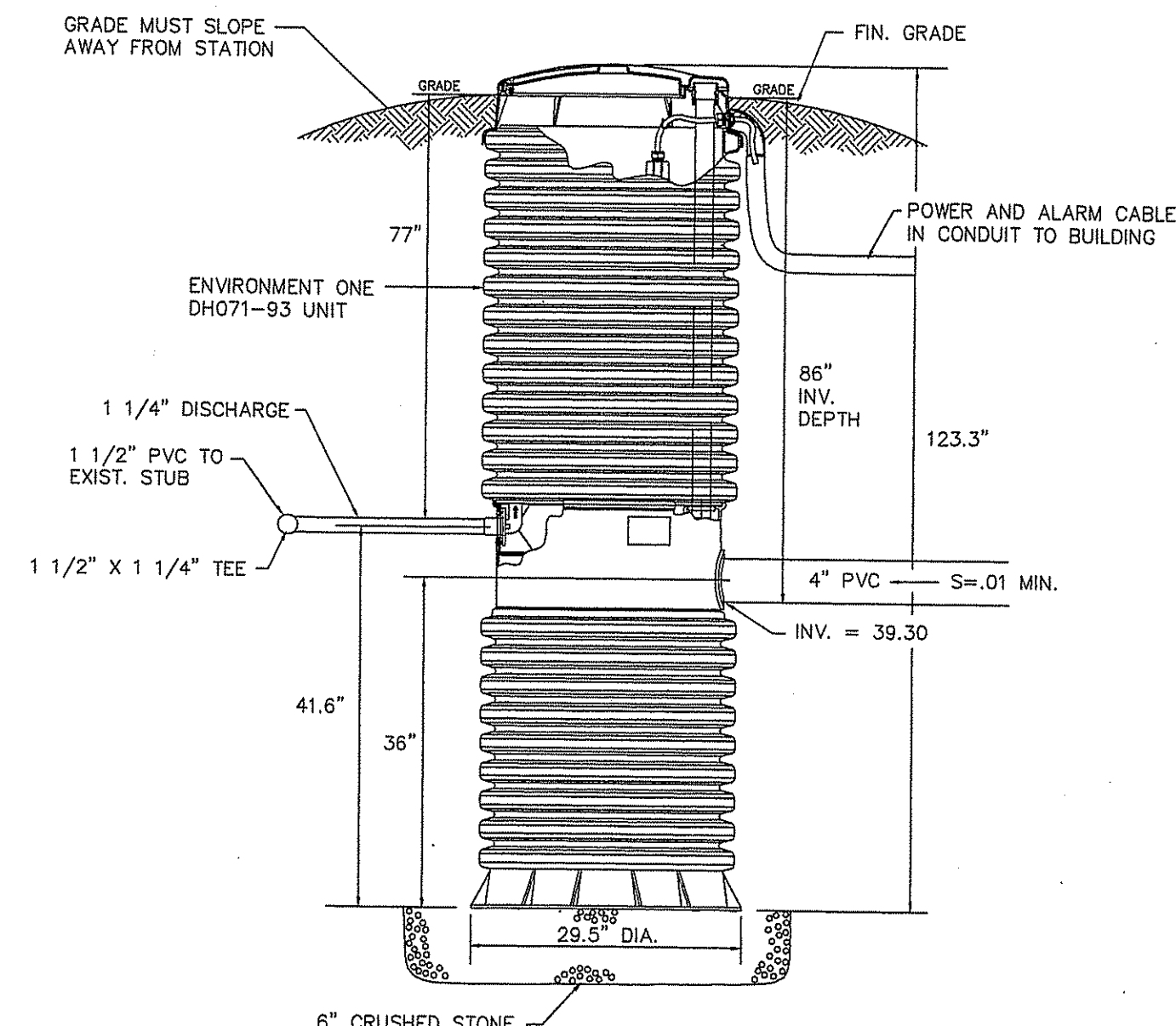
- NOTES:  
 1. SHALL BE IN ACCORDANCE WITH SECTION 1.18 OF THE STANDARD SPECIFICATIONS.  
 2. PARKING SIGNS SHALL BE SET AT AN ANGLE OF NOT LESS THAN 30° NOR MORE THAN 45° WITH A LINE PARALLEL TO FLOW OF TRAFFIC, 1'-0" (1'-0" MIN.) FROM EDGE OF CURB FACE.

RHODE ISLAND DEPARTMENT OF TRANSPORTATION			
PARKING SIGN MOUNTING DETAIL			
NO.	BY	DATE	REV.
1	J.P.	J.M.	1
JUN 15, 1998 R.I. STANDARD 24.6.0			

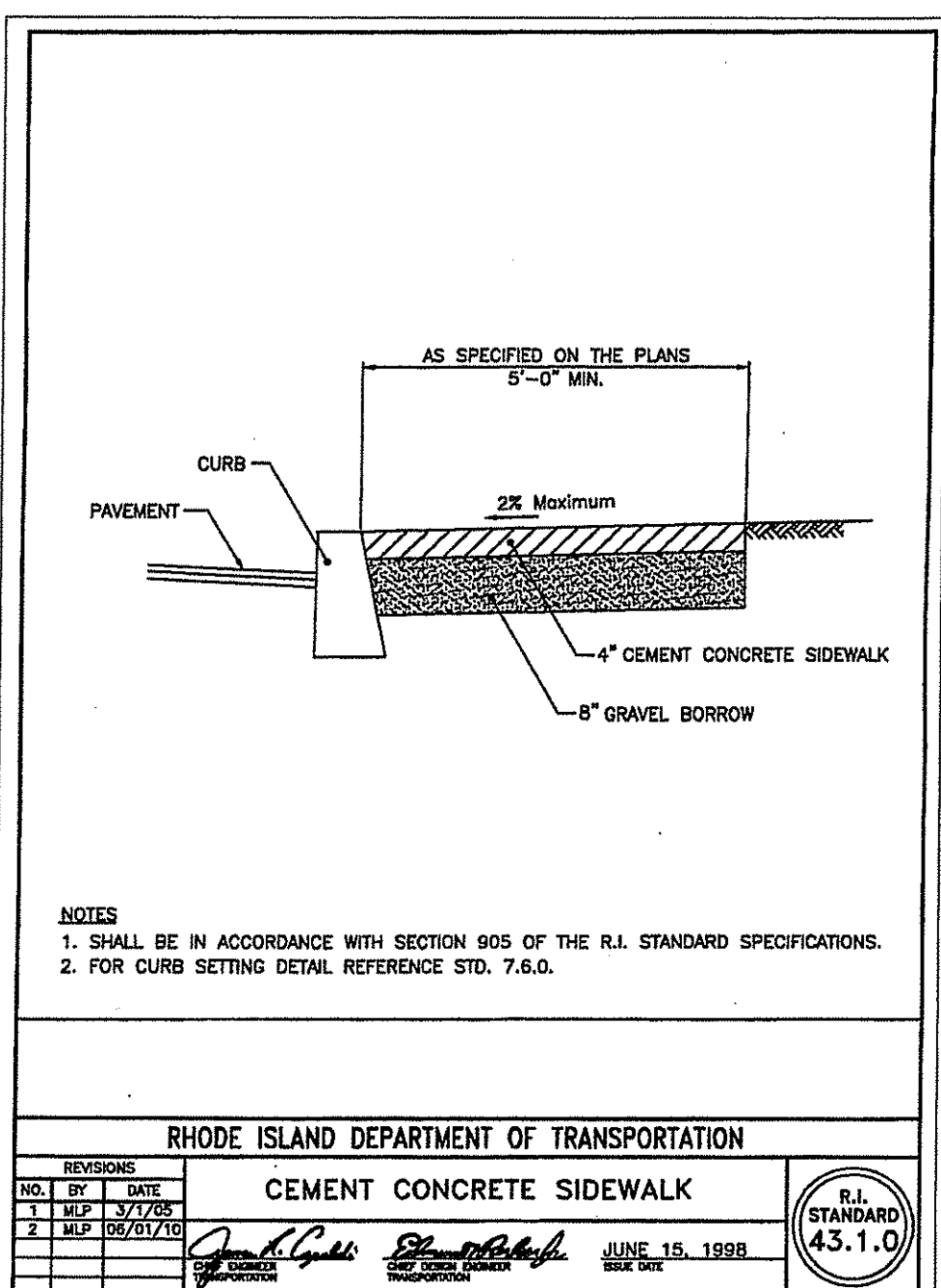
**FIXED PIPE BOLLARD DETAIL**



**ENVIRONMENTAL ONE GRINDER PUMP**

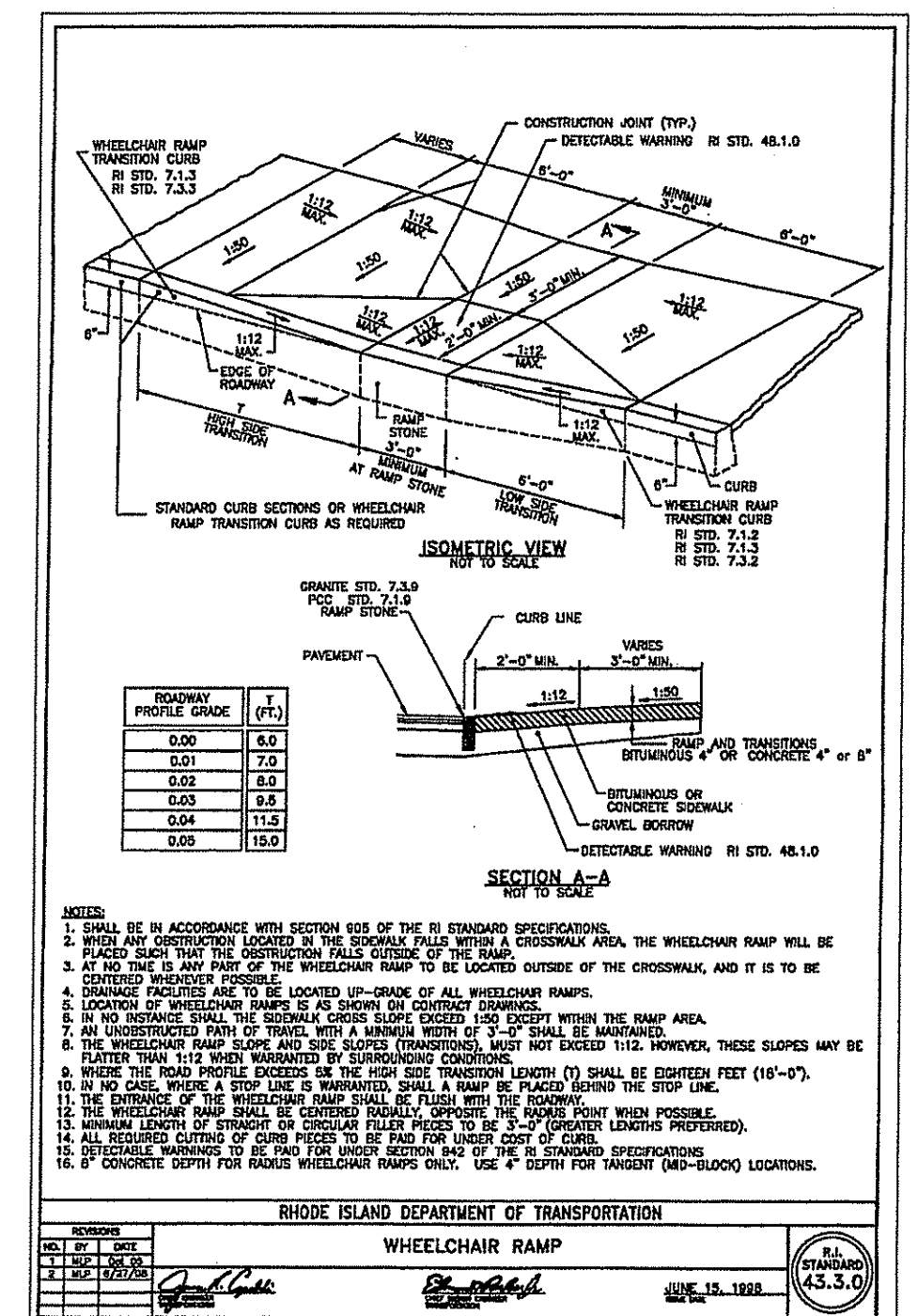


**GRINDER PUMP DETAIL**  
 DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 OFFICE OF WATER RESOURCES  
 FRESHWATER WETLANDS PROGRAM  
 APPROVED WITH CONDITIONS  
 AS SPECIFIED IN THE LETTER OF APPROVAL  
 DATED 6-20-12 FILE # 12-D155  
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE



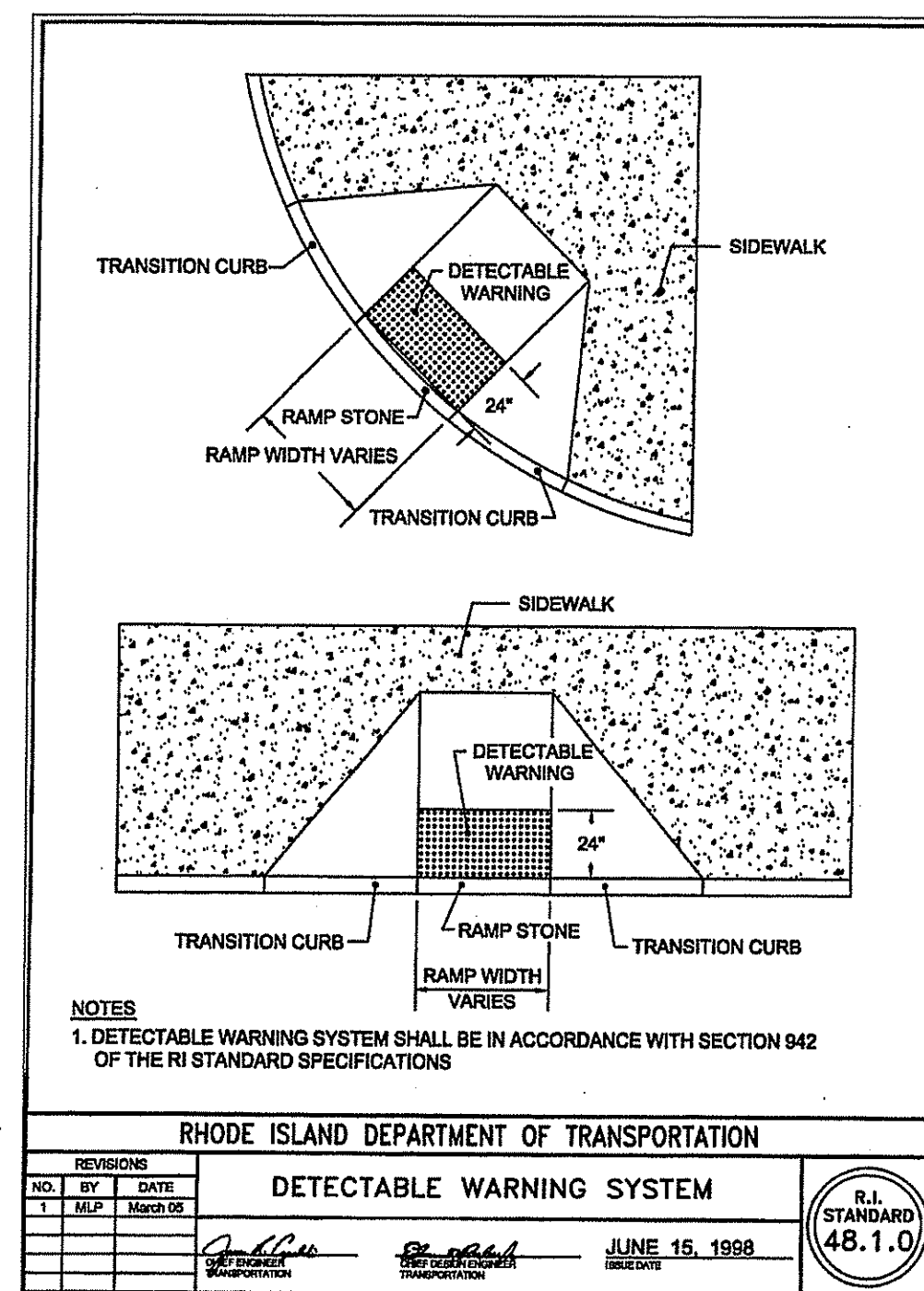
- NOTES:  
 1. SHALL BE IN ACCORDANCE WITH SECTION 905 OF THE R.I. STANDARD SPECIFICATIONS.  
 2. FOR CURB SETTING DETAIL REFERENCE STD. 7.6.0.

RHODE ISLAND DEPARTMENT OF TRANSPORTATION			
CEMENT CONCRETE SIDEWALK			
NO.	BY	DATE	REV.
1	J.P.	J.M.	1
JUN 15, 1998 R.I. STANDARD 43.1.0			



GRADE	PROFILES	MIN. (FT.)
0.00	0.50	1.50
0.01	0.50	1.50
0.02	0.50	1.50
0.03	0.50	1.50
0.04	0.50	1.50
0.05	0.50	1.50

RHODE ISLAND DEPARTMENT OF TRANSPORTATION			
WHEELCHAIR RAMP			
NO.	BY	DATE	REV.
1	J.P.	J.M.	1
JUN 15, 1998 R.I. STANDARD 43.3.0			

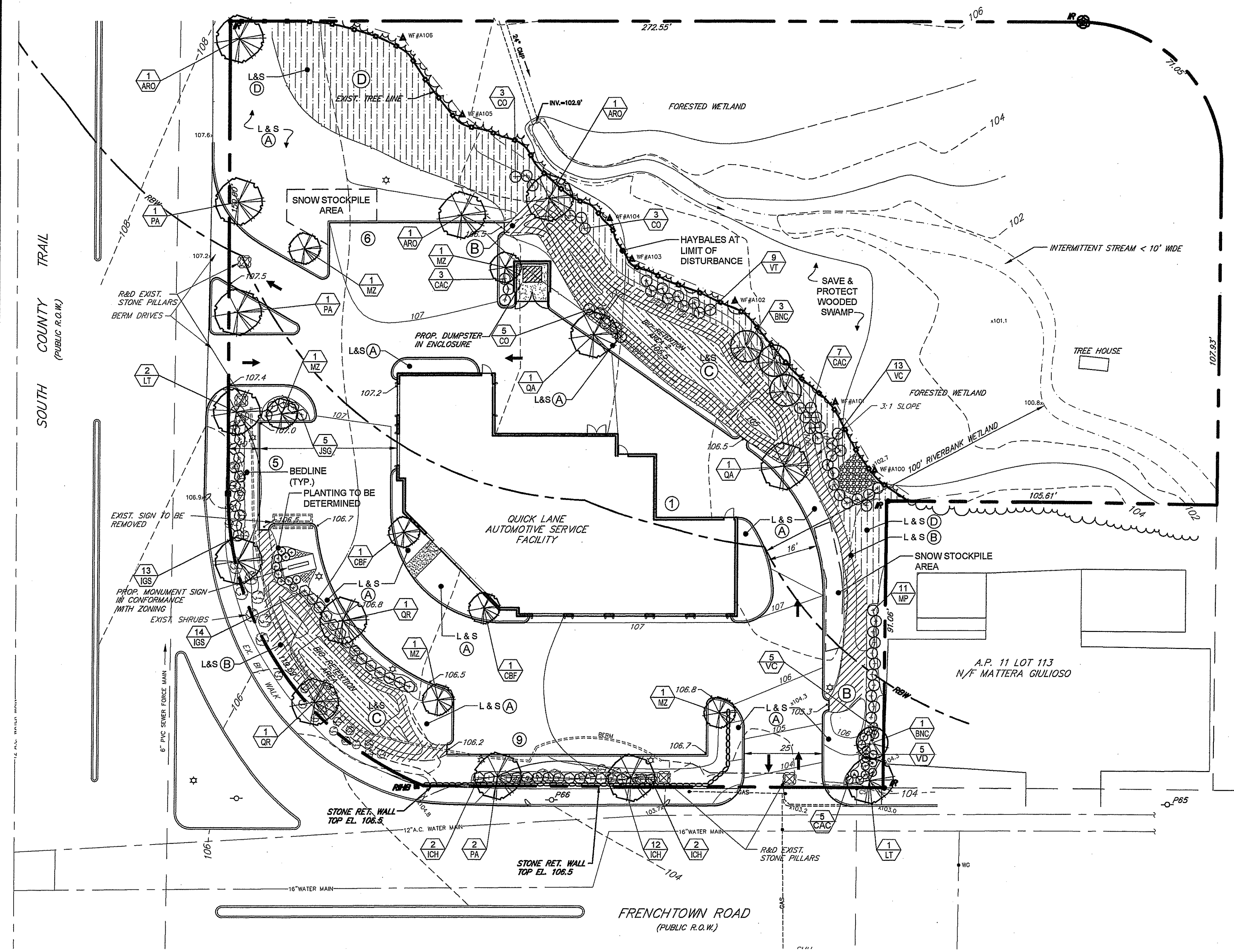
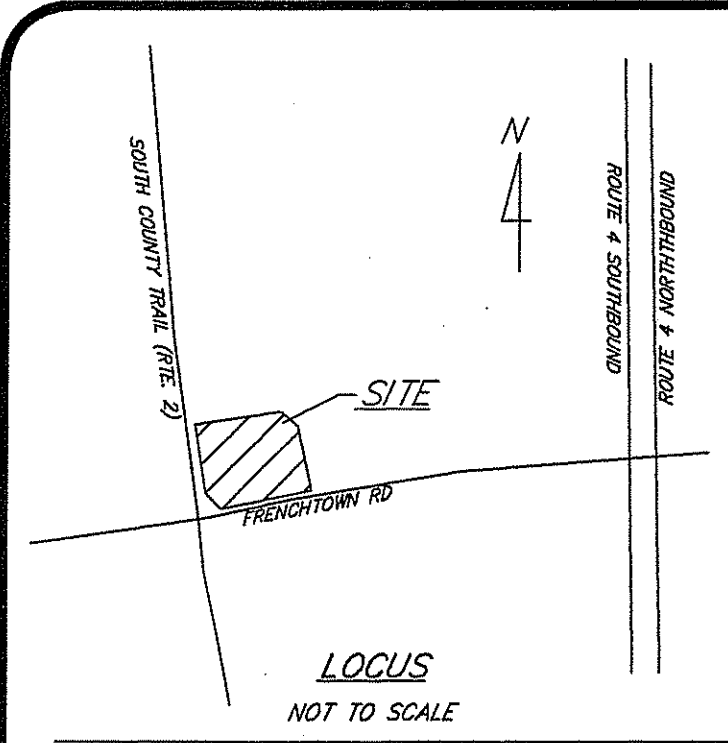


- NOTES:  
 1. DETECTABLE WARNING SYSTEM SHALL BE IN ACCORDANCE WITH SECTION 942 OF THE R.I. STANDARD SPECIFICATIONS

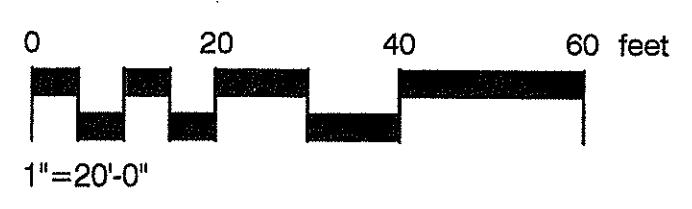
RHODE ISLAND DEPARTMENT OF TRANSPORTATION			
DETECTABLE WARNING SYSTEM			
NO.	BY	DATE	REV.
1	J.P.	J.M.	1
JUN 15, 1998 R.I. STANDARD 43.1.0			

NOV 19 2012  
 Check for updates

	DATE	REVISION	<b>PROPOSED QUICK LANE          AUTOMOBILE SERVICE FACILITY</b> BLOCK 29 A.P. 11 LOT 57 2532 SOUTH COUNTY TRAIL EAST GREENWICH, R.I. 02818 PREPARED FOR: M.F.F. LLC 2545 SOUTH COUNTY TRAIL EAST GREENWICH, RHODE ISLAND <b>CONSTRUCTION DETAILS-2</b>
	DWN. BY: LBC	DWG. NO. SFM727CD2	
	S.F.M. ENGINEERING ASSOCIATES 410 TIOGUE AVENUE COVENTRY, R.I. 02816 (401)826-3736		
	DATE: AUG. 8, 2012 SCALE: AS NOTED SHEET 6 OF 6		



**GENERAL NOTES:**  
 1. CALL 1-800-DIGSAFE BEFORE CONSTRUCTION  
 2. PROTECT EXISTING VEGETATION AS NOTED WITH APPROVED TREE PROTECTION DEVICE  
 3. LOAM & SEED ALL DISTURBED AREAS WITH SEED MIX A UNLESS OTHERWISE NOTED  
 4. THE INFORMATION ON THIS PLAN WAS COMPILED FROM DRAWINGS BY SFM ENGINEERING. THIS IS NOT A REGISTERED SURVEY. TO THE BEST OF OUR KNOWLEDGE, THIS DRAWING IS A TRUE REPRESENTATION OF THE ACTUAL FIELD CONDITIONS



PLANT SCHEDULE				
KEY	QTY.	BOTANICAL NAME - Common Name	SIZE	NOTES
<b>TREES</b>				
ARO	3	ACER RUBRUM 'OCTOBER GLORY' - Red Maple	2.5'-3' Cal B&B	LIMBED TO 7'
BNC	4	BETULA NIGRA - River Birch	8-10' B&B	SEE PLAN
CBF	2	CARPINUS BETULUS 'FASTIGIATA' - Columnar Hornbeam	10-12' B&B	SEE PLAN
LT	3	LIRIODENDRON TULIPIFERA - Tulip Tree	2.5'-3' Cal B&B	LIMBED TO 7'
MZ	5	MALUS 'ZUMI' - Zumi Crabapple	2-2.5' Cal B&B	LIMBED TO 7'
PA	4	PLATANUS x ACERFOLIA - London Plane Tree	2.5'-3' Cal B&B	LIMBED TO 7'
QA	2	QUERCUS ALBA - White Oak	2-2.5' Cal B&B	LIMBED TO 7'
QR	2	QUERCUS ROBUR - English Oak	2.5'-3' Cal B&B	LIMBED TO 7'
<b>SHRUBS</b>				
CO	11	CEPHALOTAXUS OCCIDENTALIS - BUTTONBUSH	18-24" CONT.	3' O.C.
CAC	15	CLETHRA ALNIFOLIA 'COMPACTA' - Summersweet Clethra	18-24" CONT.	3' O.C.
IGS	27	ILEX GLABRA 'SHAMROCK' - Shamrock Inkberry	18-24" B&B	3' O.C.
ICH	16	ILEX CRENATA 'HELLER' - Japanese Holly	18-24" B&B	3' O.C.
JSG	5	JUNIPERUS CHINENSIS 'SEA GREEN' - Sea Green Chin. Junip.	18-24" B&B	3' O.C.
MP	11	MYRTICA PENNSYLVANICA - Bayberry	18-24" B&B	3' O.C.
VC	18	VACCINIUM CORYMBOSUM - Low Bush Blueberry	18-24" CONT.	3' O.C.
VD	5	VIBURNUM DENTATUM - Arrowwood Viburnum	18-24" B&B	3' O.C.
VT	9	VIBURNUM TRILOBUM - Cranberry Viburnum	18-24" B&B	3' O.C.

**SEEDING NOTES**

- LOAM SHALL BE SPREAD TO A MINIMUM DEPTH OF 6" OVER ALL AREA DESIGNATED ON PLANS.
- SHAPE AND SMOOTH THE SURFACE TO THE LINES AND GRADES AS SHOWN ON PLANS.
- FERTILIZE WITH 10-10-10 OR EQUIVALENT ANALYSIS. AT LEAST 40% OF THE FERTILIZER NITROGEN SHALL BE IN A SLOW RELEASE FORM. INCORPORATE THE FERTILIZER INTO THE TOP 3 TO 4 INCHES OF THE PLANTING SOIL. APPLY AT THE RATE OF 8 POUNDS PER 1,000 SQ. FT. AT SEEDING.
- LIME: SPREAD EVENLY AND WORK INTO THE SOIL DURING PREPARATION OF SEED BED AT THE RATE OF ONE TON PER ACRE. INCORPORATE INTO THE SOIL BY DICING OR OTHER APPROVED METHOD. DISTRIBUTE LIME UNIFORMLY AND WORK INTO TOP 4 INCHES OF TOP SOIL (MINIMUM) AND UNIFORMLY BLEND BY DICING OR ROTOTILLING.
- ANY LOAM EXPOSED FOR ONE WEEK SHALL BE PLANTED WITH ANNUAL RYE GRASS SEED & SEED MIX #1. ALL LOAM STOCKPILES TO BE SEEDED IMMEDIATELY.
- APPLICATION OF SEED:
  - RATE OF APPLICATION OF SEED SHALL BE 8 POUNDS PER 1,000 SQ. FT. OR AS INDICATED ON PLANS.
  - SEEDING SHALL BE DONE IN ACCORDANCE WITH SECTION L02.03 OF THE RI STANDARD SPECIFICATIONS AND ONLY DURING THE FOLLOWING DATES:  
 SPRING SEEDING: AUGUST 1 TO MAY 31  
 FALL SEEDING: AUGUST 15 TO OCTOBER 15
  - THE CONTRACTOR SHALL KEEP ALL SEEDED AREAS WATERED AND IN GOOD CONDITION, RESEEDING IF AND WHEN NECESSARY FOR AN 8-WEEK PERIOD OR UNTIL A GOOD, HEALTHY, UNIFORM GROWTH IS ESTABLISHED OVER THE ENTIRE AREA. THE CONTRACTOR SHALL LEAVE THESE AREAS IN GOOD CONDITION, ALSO MAINTAIN THESE AREAS IN GOOD CONDITION UNTIL PROVISIONAL ACCEPTANCE.
  - DURING THIS PERIOD, WATER TURF AS NECESSARY TO MAINTAIN AN ADEQUATE SUPPLY OF MOISTURE, THE EQUIVALENT OF ONE INCH OF ABSORBED WATER PER WEEK THAT IS DELIVERED AT WEEKLY INTERVALS IN THE FORM OF NATURAL RAIN OR IS AUGMENTED AS REQUIRED BY PERIODIC WATERINGS IS REQUIRED.
  - OVERSEED WHEN NECESSARY TO PROMOTE GRASS GROWTH
  - REPLANT AREAS VOID OF TURF ONE SQUARE FOOT OR LARGER.
  - SEED ALL AREAS DESIGNATED ON PLAN AS WELL AS ALL DISTURBED EXISTING AREAS WITH THE FOLLOWING SEED MIX:

**BIO-RETENTION SOIL & SEEDING NOTES (ZONE 2)**

**YEAR 1: SITE PREPARATION AND SEEDING YEAR**  
 PREPARE THE BIO RETENTION BED WITH THE FOLLOWING SOIL MIX:  
 • LOAMY SAND TO A SANDY LOAM  
 • 80% SAND  
 • < 20% SILT  
 • < 2% CLAY  
 • WELL AGED GRADED COMPOST (25% OF SOIL MIX)  
 • WELL AGED, AERATED HARD-WOOD MULCH (AGED 6 MONTHS IF POSSIBLE).  
 PLANT IN FALL AS A FIRST PLANTING (MID-OCT OR AFTER) OR SPRING (APRIL 1ST -MAY 31ST) AS A SECOND CHOICE. DO NOT PLANT IN THE SUMMER.

**YEAR 2: FIRST GROWING SEASON**  
 KEEP THE AREA CUT TO 4-6" THIS YEAR. DON'T PULL ANY WEEDS! THIS WILL DISTURB THE ROOT SYSTEMS OF THE NEARBY NATIVES TRYING TO ESTABLISH.

**YEAR 3: SECOND GROWING SEASON**  
 MOW ONCE, IF NECESSARY

**SEED MIX CHART**  
**(A)**  
**MOWED AREAS SEED MIX**

TYPE	% BY WEIGHT
NASSAU KENT BLUE	60
JAMESTOWN CHEWINGS FESCUE	20
PALMER PERENNIAL RYE GRASS	20

APPLICATION RATE = 200 LBS. / Acre

**(B)**  
**ZONE 3 SEED MIX**  
**SWALES & SLOPES**

TYPE	% BY WEIGHT
CREeping RED FESCUE	28
TALL FESCUE	24
PERENNIAL RYE GRASS	18
LITTLE BLUESTEM	15
REEDTOP	4
NORTHEAST WILDFLOWER MIX	4

APPLICATION RATE = 220 LBS. / Acre

**(C)**  
**ZONE 2 SEED MIX**  
**BIO-RETENTION BASIN FLOOR**

TYPE	% BY WEIGHT
SWEET FLAG	1.46
MUD PLANTAIN	0.73
NODDING ONION	1.46
CANADA ANEMONE	0.36
ANGELICA	5.35
SWAMP MILKWEED	4.01
NEW ENGLAND ASTER	1.34
FLAT-TOPPED ASTER	0.35
FALSE ASTER	0.35
SWEET INDIAN PLANTAIN	0.67
JOE PYE WEED	0.67
BONESET	0.67
BOTTLE GENTIAN	0.37
CREAM GENTIAN	0.37
SNEEZEWEED	0.73
EARLY SUNFLOWER	0.73
ROSE MALLOW	1.34
GREAT ST. JOHN'S WORT	0.67
SOUTHERN BLUE FLAG	2.91
PRAIRIE BLAZING STAR	3.64
CARDINAL FLOWER	0.67
GREAT BLUE LOBELIA	1.34
WATER HOREHOUND	1.34
PRAIRIE LOOSESTRIFE	0.33
MARSH BETONY	0.73
OBEDIENT PLANT	0.73
MOUNTAIN MINT	0.73
BLACK-EYED SUSAN	1.46
SWEET BLACK-EYED SUSAN	0.36
BROWN-EYED SUSAN	1.46
COMPASS PLANT	1.34
CUP PLANT	1.00
PRAIRIE DOCK	1.67
RIDDELL'S GOLDENROD	0.73
PURPLE MEADOW RUE	2.18
BLUE VERVAIN	1.34
COMMON IRONWEED	1.46
CULVER'S ROOT	0.35
GOLDEN ALEXANDERS	2.67
BIG BLUESTEM	8.73
FRINGED BROME	5.24
BLUE JOINT GRASS	0.35
BEBB'S OVAL SEDGE	1.46
BRISTLY SEDGE	1.46
PORCUPINE SEDGE	1.46
COMMON HOP SEDGE	1.46
COMMON FOX SEDGE	1.46
CANADA WILD RYE	5.24
VIRGINIA WILD RYE	5.24
REED MANN'S GRASS	1.46
CANADA RUSH	0.33
INLAND RUSH	0.29
SWITCH GRASS	1.46
DARK-GREEN BULRUSH	0.73
WOOL GRASS	0.38
GREAT BULRUSH	0.73
INDIAN GRASS	9.61
CORD GRASS	1.46

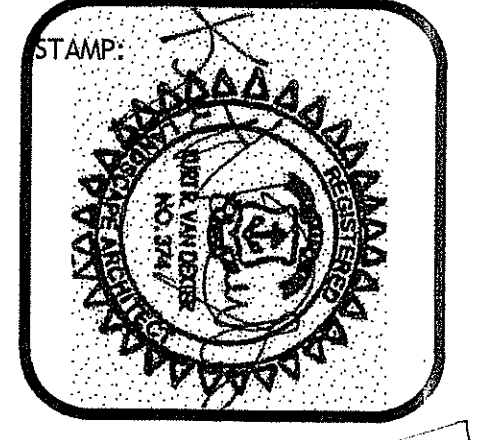
APPLICATION RATE = 10 LBS. / Acre

**(D)**  
**CONSERVATION SEED MIX**

TYPE	% BY WEIGHT
HARD FESCUE	35
SHEEP FESCUE	35
BLUE FESCUE	25
WHITE CLOVER	15

APPLICATION RATE = 1-2 LBS. PER 1,000 SQ. FT.

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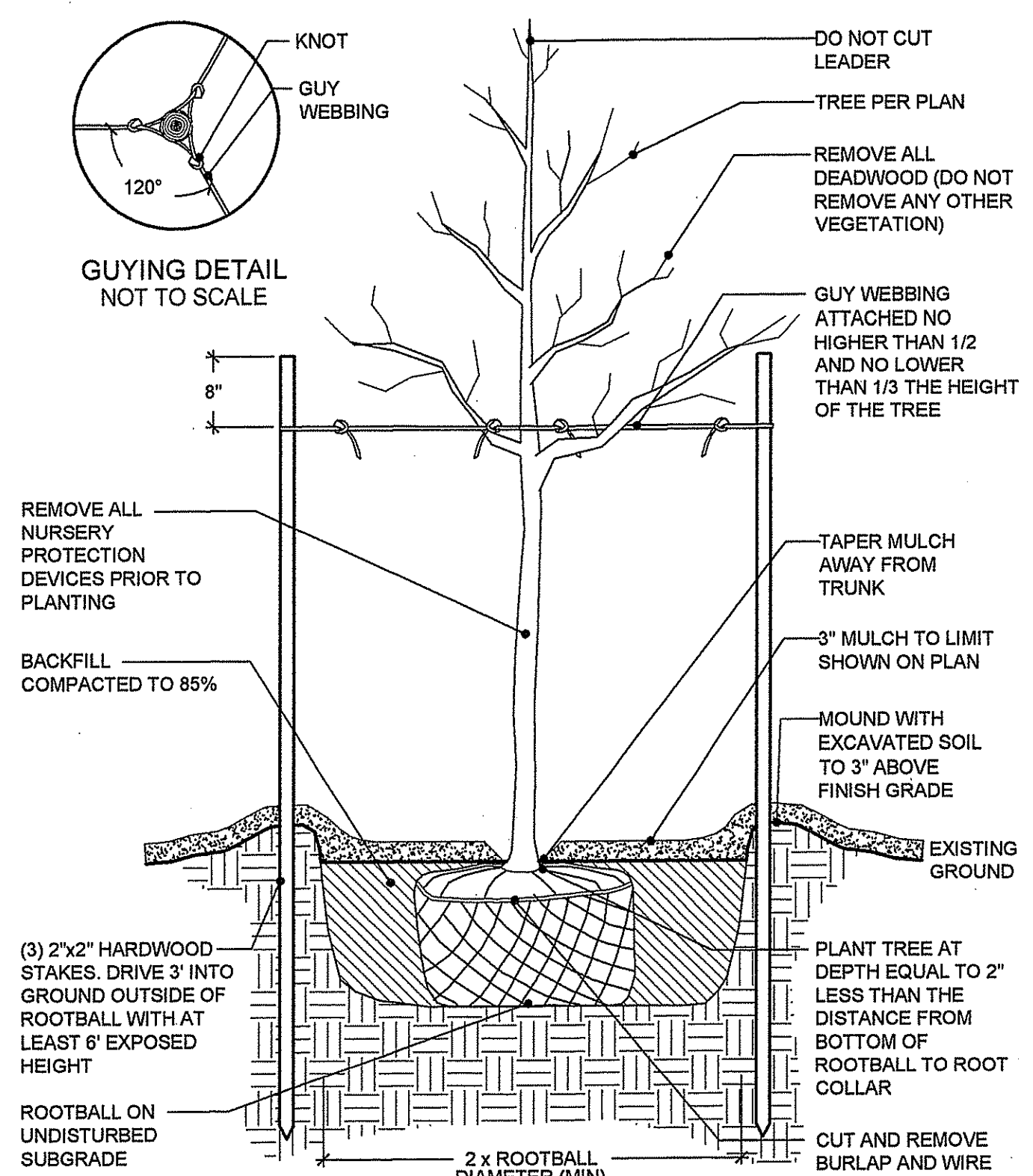


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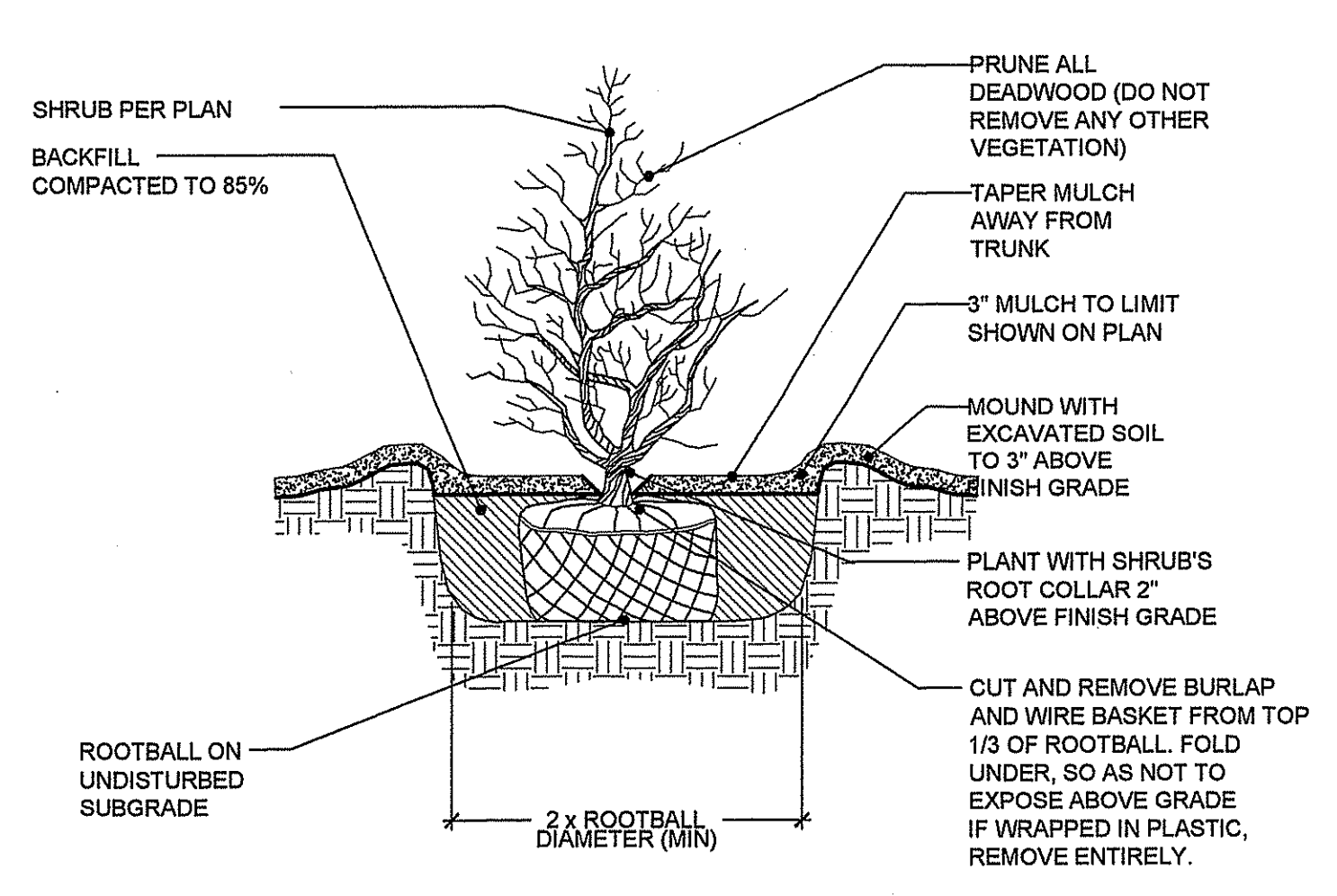
**LANDSCAPE PLAN**  
**PROPOSED QUICK LANE**  
**AUTOMOBILE SERVICE FACILITY**  
**BLOCK 29, AP 11, LOT 57**  
**2532 SOUTH COUNTY TRAIL - EAST GREENWICH, RI**

REVISION:  
 MAY 16, 2012  
 JUNE 7, 2012  
 AUG 8, 2012  
 DATE: FEBRUARY 21, 2012  
 DRAWN BY: SGG  
 SCALE: 1" = 20'-0"  
 SHEET  
**L-1**  
 SHEET NO. 7 OF 8  
 JOB NO. -

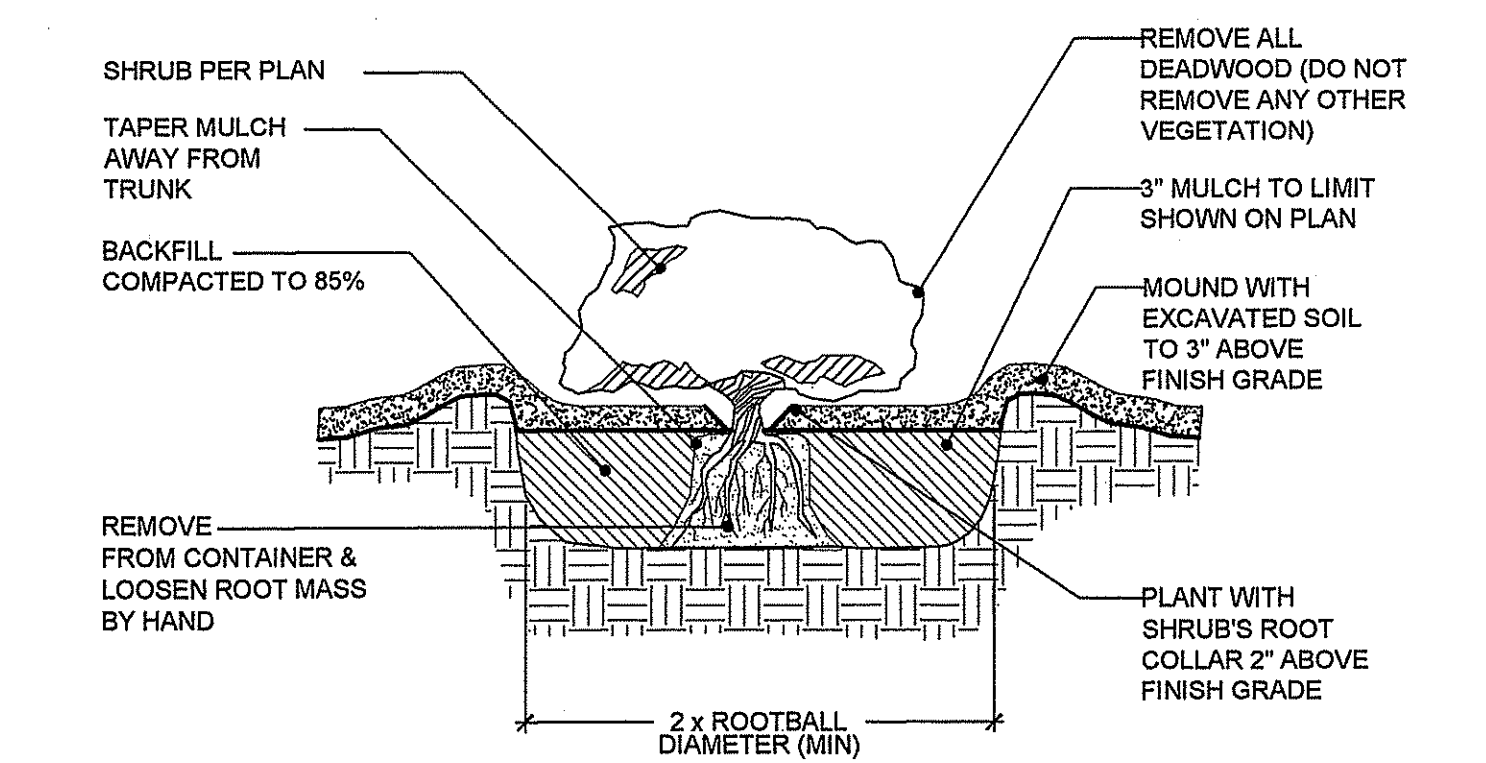


NOTE:  
1. AFTER THE GUARANTEE PERIOD THE CONTRACTOR WILL BE RESPONSIBLE FOR THE REMOVAL OF STAKES AND GUY WEBBING.

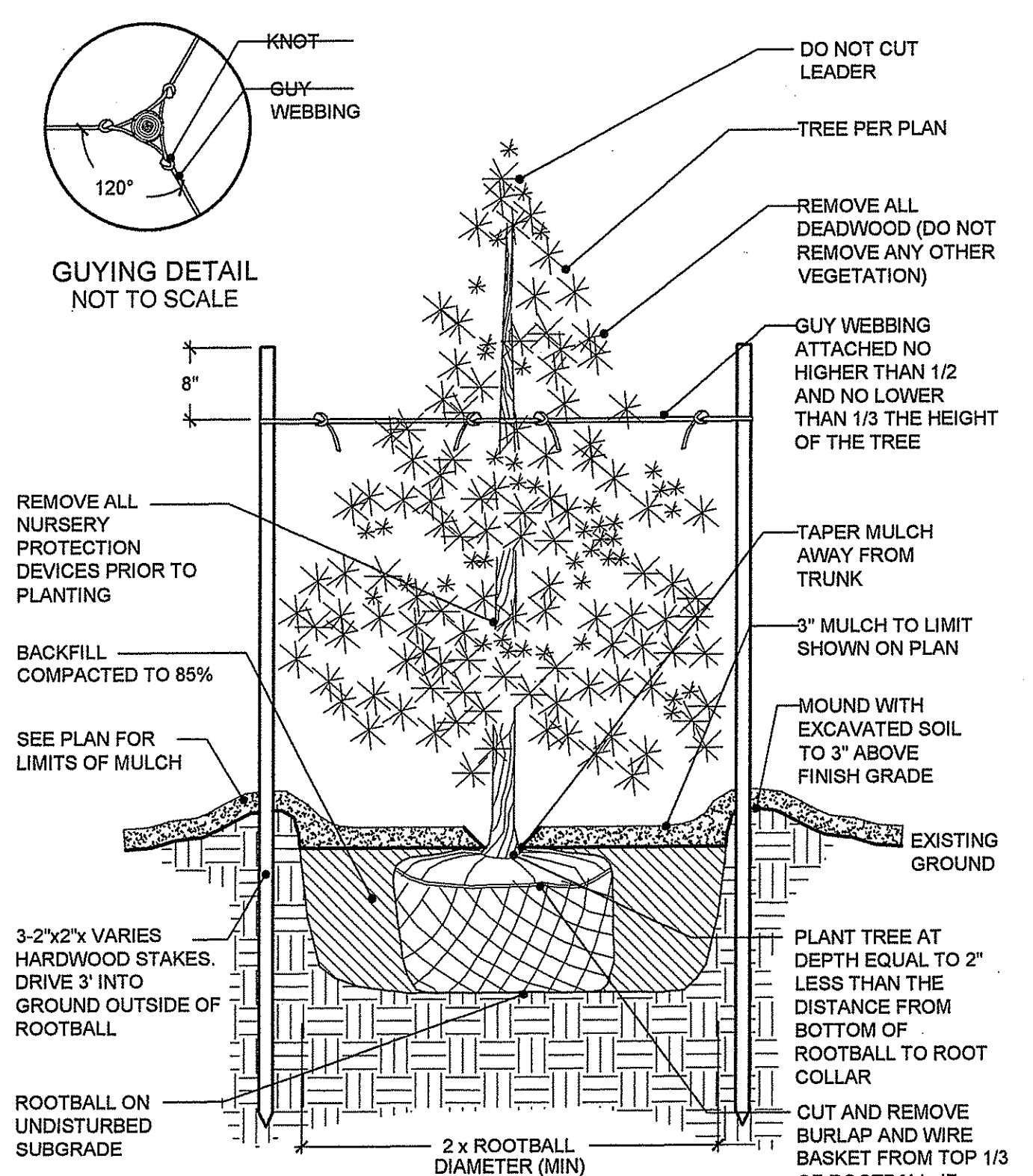
**DECIDUOUS TREE PLANTING DETAIL**



**B&B SHRUB PLANTING DETAIL**

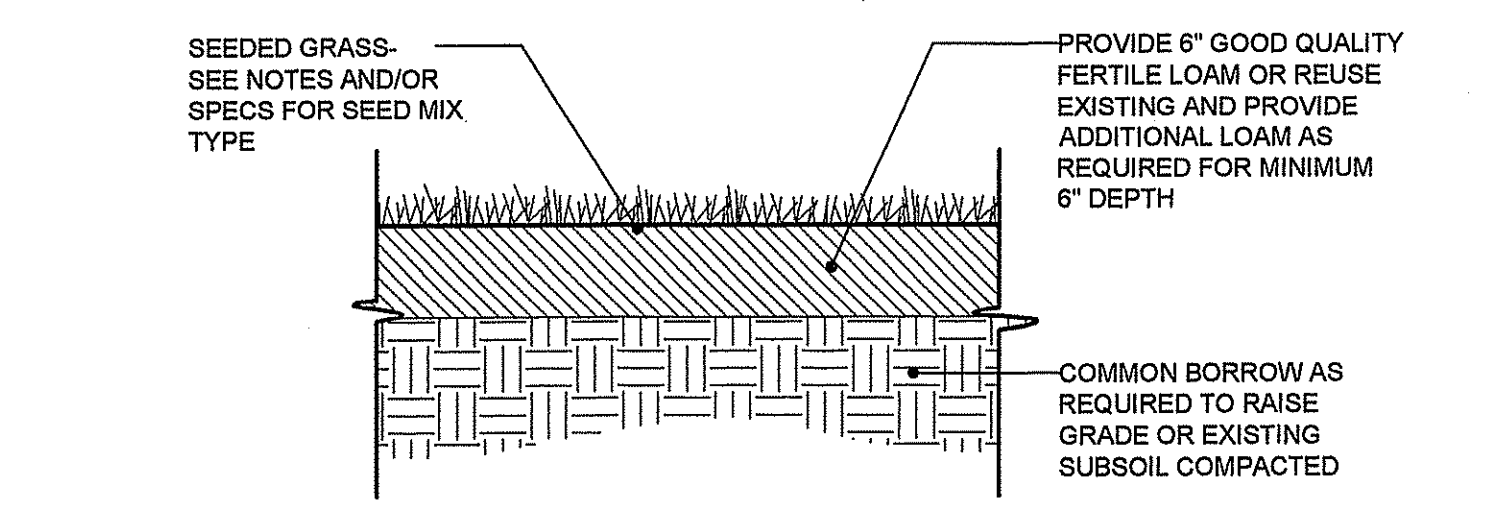


**CONTAINER GROWN SHRUB PLANTING DETAIL**

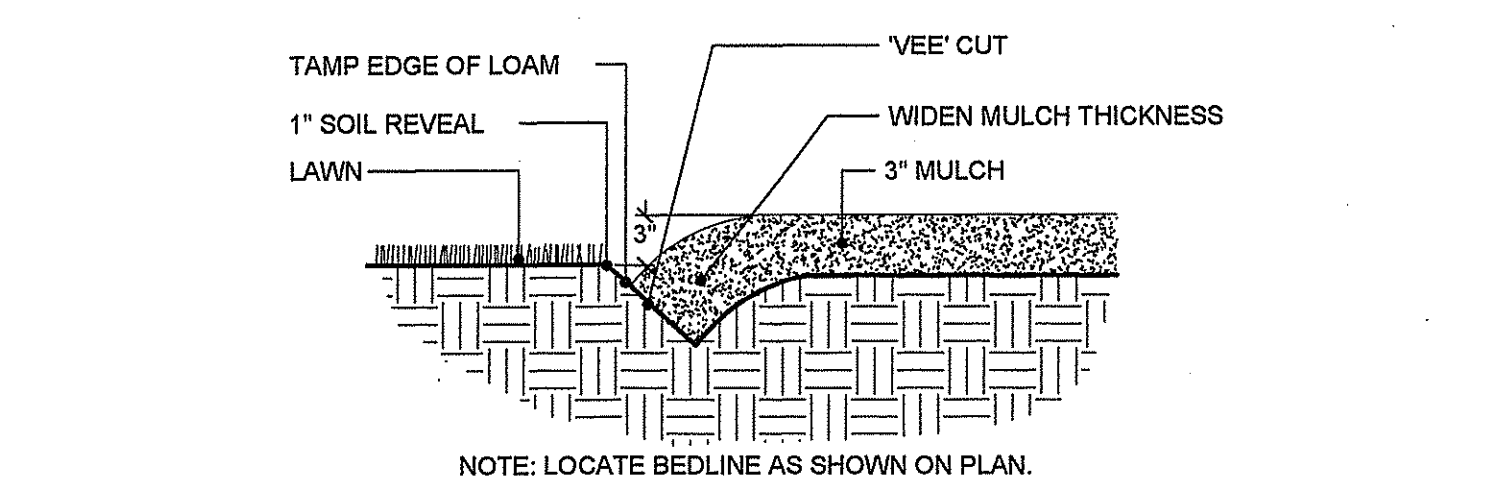


NOTE:  
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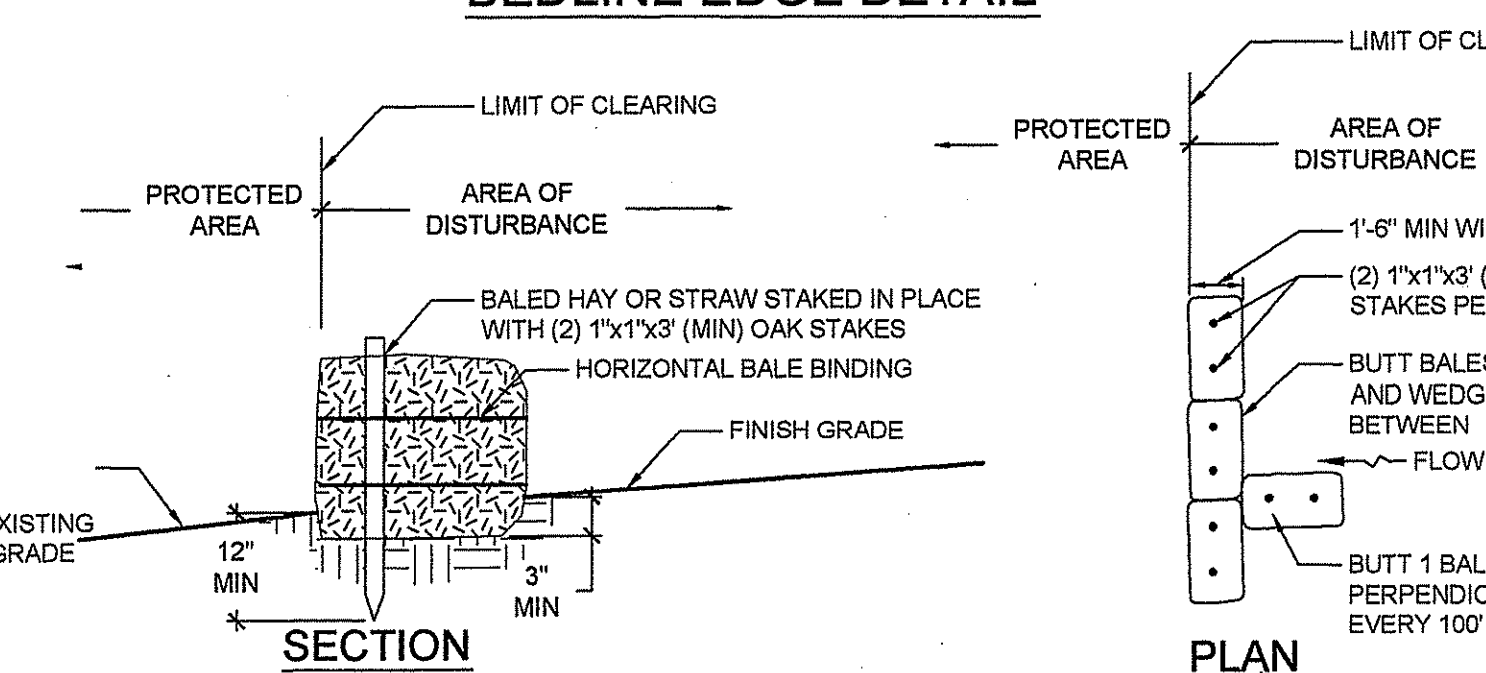
**EVERGREEN TREE PLANTING DETAIL**



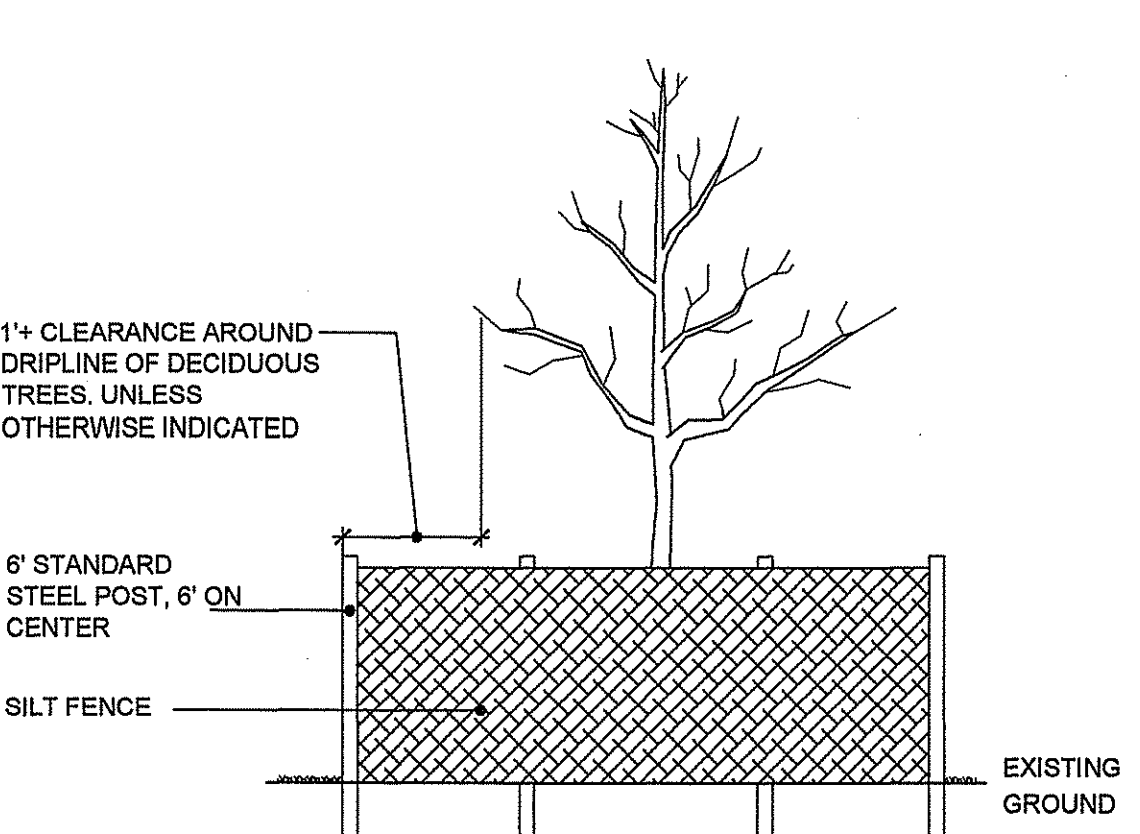
**LOAM & SEED DETAIL**



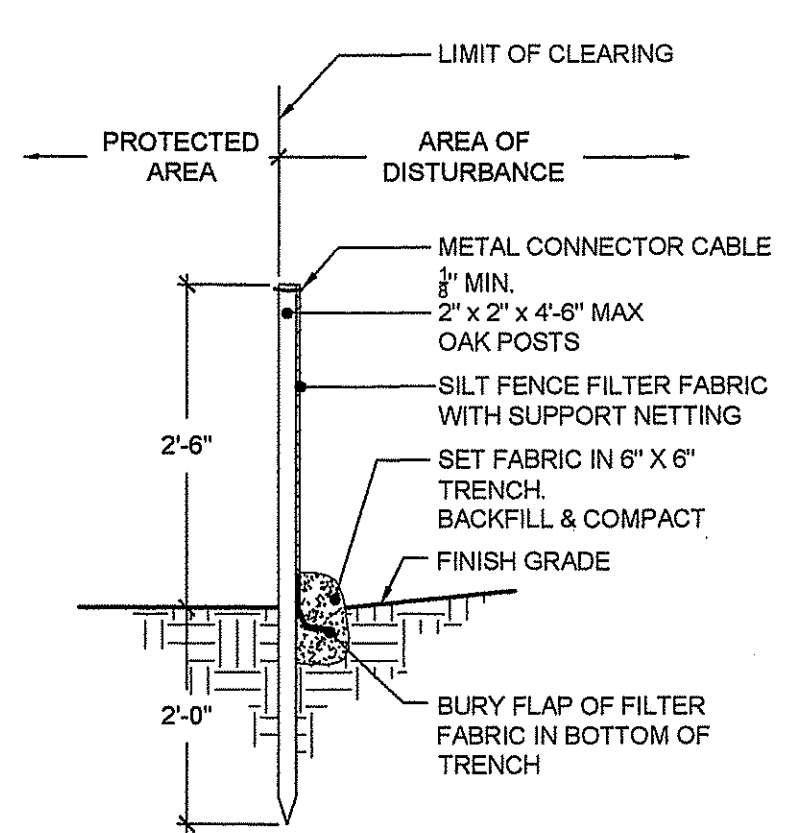
**BEDLINE EDGE DETAIL**



**HAYBALE DETAIL**



**SILT FENCE & TREE PROTECTION DETAIL**



NOTES:  
1. POSTS SHALL BE LOCATED 8'-0" O.C. MAX IN FLAT WETLAND AREAS 4'-0" O.C. ON SLOPES  
2. 1"x1" POSTS PERMITTED FOR PRE-FABRICATED SILT FENCE  
3. SILT FENCE SHALL BE INSTALLED BEFORE ANY GRUBBING OR EARTH EXCAVATION TAKES PLACE

**SILT FENCE DETAIL**

**CONSTRUCTION NOTES:**

1. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND GRADES ON SITE AND SHALL IMMEDIATELY REPORT ANY DISCREPANCIES OR DEVIATIONS FROM THE CONSTRUCTION PLANS TO THE LANDSCAPE ARCHITECT. THE CONTRACTOR SHALL ALSO REPORT ANY CONDITIONS UNCOVERED IN THE WORK THAT ARE NOT REFLECTED WITHIN THE PLANS.
2. THE CONTRACTOR SHALL, UNDER THE DIRECTION OF THE OWNER, ESTABLISH CONSTRUCTION LIMITS ON THE SITE BY ACCEPTABLE VISIBLE MARKERS PLACED AT EYE LEVEL. ALL WORK AND EQUIPMENT SHALL BE CONFINED TO WITHIN THESE LIMITS. THE CONTRACTOR SHALL REMOVE ALL MARKERS WHEN DIRECTED BY OWNER.
3. THE SITE SHALL BE "ROUGH GRADED" TO THE ELEVATIONS AND CONTOURS SET FORTH ON THE PLANS, ALLOWING FOR GRAVEL, LOAMING AND FINAL GRADING.
4. THE CONTRACTOR SHALL STRIP AND STOCKPILE EXISTING LOAM FROM THOSE AREAS THAT ARE TO BE EXCAVATED OR FILLED AND TO WITHIN THE PROJECT LIMITS. STOCKPILED LOAM SHALL NOT BE MIXED WITH ANY SUBSOIL OR OTHER UNSUITABLE MATERIAL UNLESS DIRECTED BY OWNER. ALL EXCESS SOIL REMAINS THE PROPERTY OF THE OWNER. EARTH EXCAVATION SHALL BE LIMITED TO THE DIMENSIONS AND REQUIREMENTS SHOWN ON THE DRAWINGS.
5. THE INTENTION OF THE OWNER IS TO MAINTAIN THE BOUNDARIES OF THE SITE IN ITS EXISTING CONDITION AND THEREFORE THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONFINING THE WORK TO WITHIN THE CONSTRUCTION LIMITS.
6. ALL EXISTING VEGETATION (TREES, SHRUBS, GRASSES, ETC.) TO REMAIN SHALL BE PROTECTED BY INJURY. INDIVIDUAL TREES AND SHRUBS TO BE SAVED WITHIN THE DESIGNATED WORK AREA SHALL BE ADEQUATELY PROTECTED BY THE CONTRACTOR. THE CONTRACTOR SHALL REMOVE ALL PROTECTIVE BARRIERS AS DIRECTED BY THE OWNER.
7. ALL EXISTING GRASSED AREAS NOT ADEQUATELY PROTECTED AND THEREFORE DAMAGED DURING CONSTRUCTION SHALL BE REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
8. CONTRACTOR IS RESPONSIBLE FOR ADHERING TO ALL WETLANDS, COASTAL, CITY/TOWN, AND STATE REGULATIONS.
9. ALL PLANTINGS SHALL BE MAINTAINED IN A MANNER SO AS TO PROMOTE OPTIMUM GROWTH OF PLANT MATERIALS.
10. ALL TREES, SHRUBS, GROUND COVERS, AND OTHER PLANT MATERIALS MUST BE REPLACED IF THEY DIE OR BECOME UNHEALTHY BECAUSE OF ACCIDENTS, DRAINAGE PROBLEMS, DISEASE, OR OTHER CAUSES. ALL SUCH REPLACEMENTS SHALL CONFORM TO ALL STANDARDS THAT GOVERNED THE ORIGINAL INSTALLATION. WHERE NO SUCH STANDARDS EXIST, NEW PLANTINGS SHALL MATCH THE REPLACED MATERIALS IN TYPE, SPECIES, AND QUANTITY.
11. SOIL OR LOAM THAT IS STORED OR STOCKPILED DURING CONSTRUCTION SHOULD ALSO BE MULCHED OR COVERED WITH A MAT OF LOOSE HAY AND CAN BE SEEDED WITH A TEMPORARY SEED MIX. STOCKPILES SHOULD ALSO BE ENCLOSED WITH SILT OR HAYBALES.
12. ENTRANCE TO CONSTRUCTION SITE SHOULD BE COVERED WITH GRAVEL TO TRAP SEDIMENT FROM THE TIRES OF VEHICLES EXISTING THE SITE.

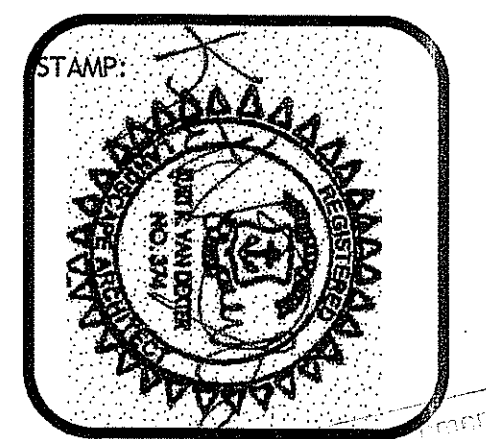
**PLANTING NOTES:**

1. FURNISH AND INSTALL ALL PLANTS SHOWN ON THE DRAWINGS SPECIFIED HEREIN, AND IN THE QUANTITIES LISTED ON THE PLANT LIST. NO SUBSTITUTIONS WILL BE PERMITTED, UNLESS APPROVED BY THE LANDSCAPE ARCHITECT AND PROJECT ADMINISTRATOR.
2. LOAM TO BE GOOD QUALITY, FERTILE, FREE OF WEEDS, STICKS STONES OVER 3/4", AND ROOTS. SPREAD TO A MINIMUM OF 4" OVER ALL PLANTED AREAS AND 12" IN ALL AREAS DESIGNATED.
3. NURSERY STOCK SHALL MEET THE STANDARDS OF THE AMERICAN ASSOCIATION OF NURSERYMEN AS TO GRADING AND QUALITY.
4. ONLY NURSERY-GROWN PLANTS, GROWN IN ACCORDANCE WITH ACCEPTED HORTICULTURAL PRACTICES AND GROWN UNDER CLIMATIC CONDITIONS SIMILAR TO THOSE IN THE LOCALITY OF THE PROJECT FOR AT LEAST (2) YEARS, WILL BE ACCEPTED.
5. SET PLANTS PLUMB AND AT A LEVEL THAT AFTER SETTLEMENT THEY BEAR THE SAME RELATION TO THE SURROUNDING GROUND AS THEY BORE TO THE GROUND FROM WHICH THEY WERE DUG. SETTLE BACKFILL MATERIAL FOR PLANTS, THOROUGHLY AND PROPERLY BY FIRING OR TAMPING FORM SAUCERS CAPABLE OF HOLDING WATER ABOUT INDIVIDUAL PLANTS, BY PLACING RIDGES OF PLANTING SOIL AROUND EACH.
6. STREET TREES SHALL BE SECURELY TRIPLE-STAKED WITH STAKES OF A MINIMUM SIZE OF TWO INCHES BY TWO INCHES BY SIX FEET.
7. TREES IN OPEN AREAS TO HAVE A NATURALIZED BRANCHING HABIT
8. ALL STREET TREES ADJACENT TO SIDEWALKS AND ROADS MUST HAVE A MINIMUM CLEARANCE HEIGHT OF 7' (7 FEET) TO THE FIRST BRANCH
9. WATERING: WATER ALL PLANTS WITHIN 48 HOURS AFTER PLANTING IF CONDITIONS WARRANT, AND AS MANY TIMES THEREAFTER TO SUSTAIN HEALTHY CONDITIONS. SATURATE THE SOIL AROUND EACH PLANT THOROUGHLY AT EACH WATERING, WHICH EVER IS REQUIRED BY SITE CONDITIONS
10. PRUNING: PRUNE PLANTS, AS DIRECTED BY OWNER, AT THE PROJECT SITE BEFORE OR IMMEDIATELY AFTER PLANTING IN ACCORDANCE WITH THE BEST HORTICULTURAL PRACTICE. CUT BROKEN, DEAD OR INJURED BRANCHES FLUSH WITH THE TRUNK OR THE LIMB. PRUNE ALL BROKEN ROOTS ON THE PLANT SIDE OF THE BREAK. PRUNING SHALL NOT DEFORM OR OTHERWISE DESTROY THE TYPICAL SHAPE OR SYMMETRY OF THE PLANT AND SHALL NOT REDUCE THE HEIGHT BY MORE THAN ONE-THIRD. DO NOT CUT BACK THE LEADER OF THE PLANT UNLESS DIRECTED BY THE LANDSCAPE ARCHITECT.
11. FERTILIZING: FERTILIZE SHRUB BEDS WITH 10-6-4 FERTILIZER AT A RATE OF THREE POUNDS PER 100 SQUARE FEET OF SURFACE AREA, BROAD CAST. APPLY THE FERTILIZER UNIFORMLY TO THE SURFACE BEDS AND WORK INTO THE UPPER TWO INCHES OF SOIL. FERTILIZE INDIVIDUAL TREES AT THE RATE OF ONE AGRIFORM PELLET PER INCH OF TRUNK DIAMETER (FOLLOW MANUFACTURER'S WRITTEN INSTRUCTIONS). APPLY A SECOND APPLICATION OF FERTILIZER TO ALL PLANT ITEMS AT THE SAME SPECIFIED RATES OVER THE MULCH AT THE END OF AN EIGHT WEEK PERIOD.
12. MULCHING: COVER ALL PLANTED AREAS WITH 3" DARK BROWN PINE BARK MULCH WITHIN A SEVENTY - TWO HOUR PERIOD AFTER PLANTING. NO RED MULCH ACCEPTED.
13. GUARANTEE: ALL PLANTS FURNISHED BY THE CONTRACTOR SHALL BE GUARANTEED FOR A PERIOD OF TWO (2) YEARS AFTER PRELIMINARY INSPECTION AND SHALL BE ALIVE AND IN SATISFACTORY GROWTH AT THE END OF THE GUARANTEE PERIOD. ALL DEAD OR DYING PLANT MATERIAL SHALL BE REPLACED AT ONCE BY THE CONTRACTOR, FREE OF CHARGE.
14. ALL TREES ARE TO HAVE ONE MAIN LEADER.
15. CONTRACTOR IS RESPONSIBLE FOR CHECKING THE IRRIGATION AND WATER AMOUNTS FOR THE FIRST YEAR.

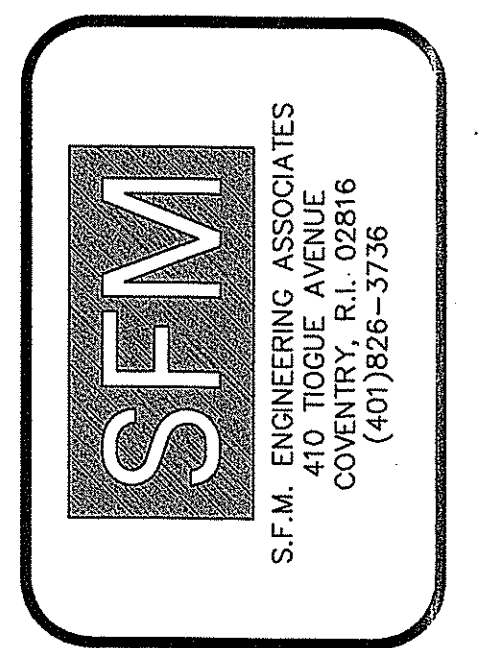
**DIG SAFE**

1. RHODE ISLAND LAW REQUIRES THAT DIG SAFE AND ALL UTILITY COMPANIES BE NOTIFIED BY THE CONTRACTOR A MINIMUM OF 48 HOURS - 2 BUSINESS DAYS - PRIOR TO ANTICIPATED EXCAVATION. THIS DOES NOT INCLUDE WEEKENDS OR LEGAL HOLIDAYS. DIG SAFE MAY BE CONTACTED BY CALLING 1-888-344-7233 MONDAY THRU FRIDAY FROM 6 A.M. TO 6 P.M.
2. STATE LAW REQUIRES ALL EXCAVATORS TO PRE-MARK THE AREA OF EXCAVATION BEFORE NOTIFYING DIG SAFE. PRE-MARKING IS DEFINED AS MARKING OUT THE SCOPE OF THE PROPOSED EXCAVATION ARE, USING STAKES, PAINT OR FLAGS.
3. LOCATE AND RECORD ALL BURIED UTILITIES AND CONFORM TO REQUIREMENTS GOVERNING EXCAVATION AND CHANGES IN THIS AREA.
4. THE DEPTH OF UNDERGROUND FACILITIES IS VARIABLE, THEREFORE STATE LAW REQUIRES EXCAVATORS TO USE NON-MECHANICAL MEANS WHEN DIGGING WITHIN 18" OF A MARKED UNDERGROUND FACILITY. THE CURRENT DEPTH OF A FACILITY MIGHT NOT BE THE SAME AS WHEN IT WAS ORIGINALLY INSTALLED, DUE TO SOIL EROSION, GRADING AND MANY OTHER FACTORS. TO ENSURE THE SAFETY OF EXCAVATORS AND TO AVOID DISRUPTION, IT MAKES SENSE TO HAND DIG WHEN NEAR AND UNDERGROUND FACILITY.
5. IF DAMAGE OCCURS TO A UTILITY LINE, AND THERE IS A POSSIBILITY THAT THE DAMAGE MAY POSE A THREAT TO THE HEALTH AND SAFETY OF THE PUBLIC, CALL 911 IN ORDER TO DISPATCH LOCAL OFFICIALS WHO WILL DETERMINE WHETHER THE COMMUNITY IS IN IMMEDIATE DANGER. NEXT, ACCORDING TO STATE LAW, IT IS THE RESPONSIBILITY OF THE EXCAVATOR TO NOTIFY THE AFFECTED UTILITY COMPANY DIRECTLY AFTER DAMAGE OCCURS. STATE LAW PROHIBITS THE CONTRACTOR FROM ATTEMPTING TO REPAIR THE LINE, OR BACKFILLING BEFORE THE LINE HAS BEEN REPAIRED BY THE UTILITY COMPANY. FAMILIARIZE YOURSELF WITH YOUR LOCAL UTILITY COMPANIES' SAFETY PROCEDURES AND PROTOCOL IN THE EVENT OF UTILITY LINE DISRUPTION.
6. A DIG SAFE PERMIT SHOULD BE PROCESSED ONLY IF YOU INTEND TO EXCAVATE WITHIN 30 DAYS.

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SHEET  
**L-2**  
SHEET NO. 8 OF 8  
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