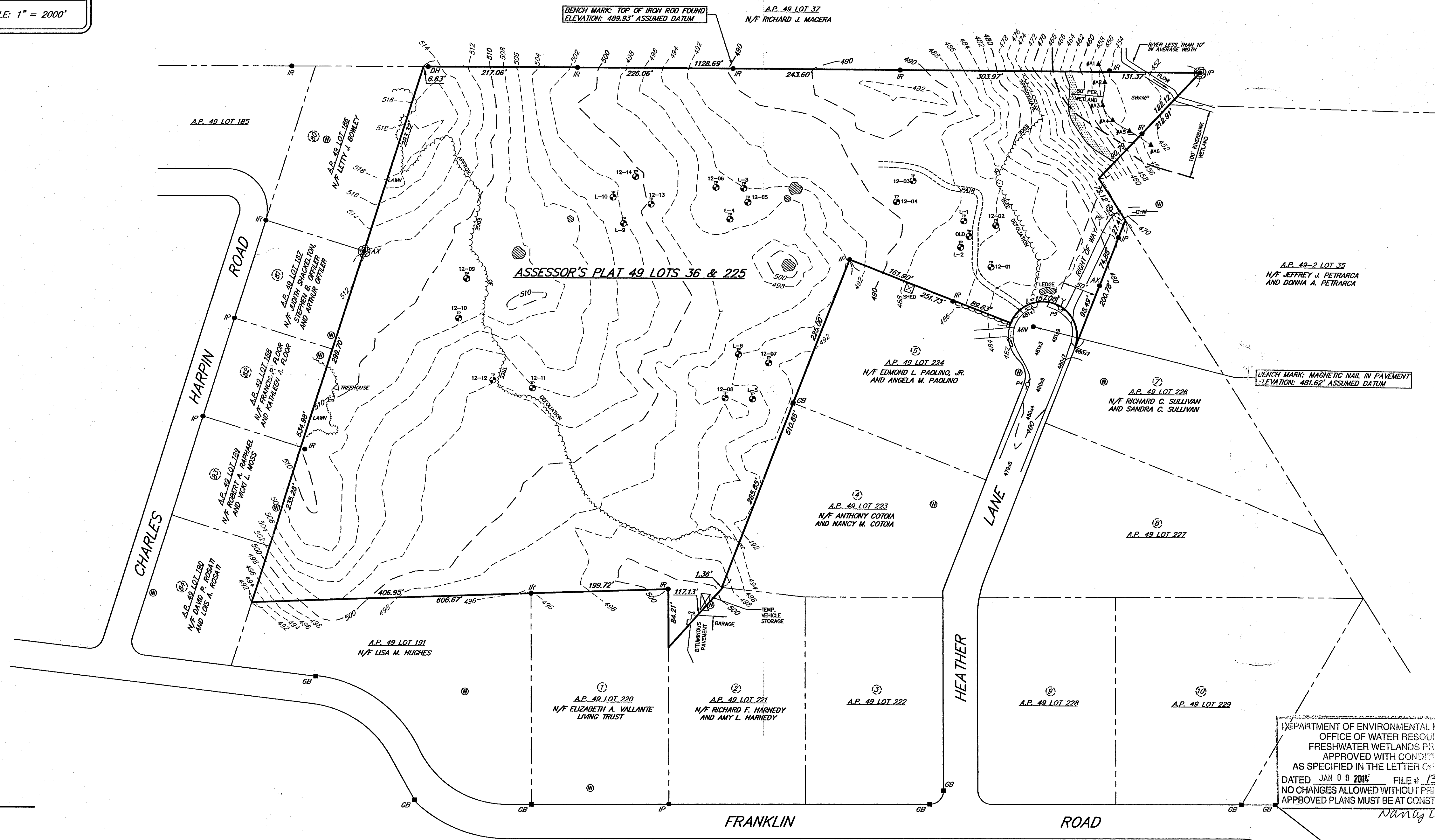
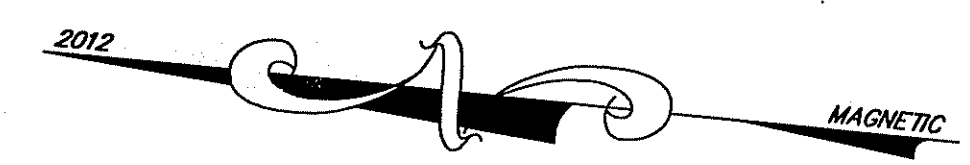


LOCATION PLAN SCALE: 1" = 2000'

NOTES:

1. AN APRIL 30, 2012 REPORT BY NATURAL RESOURCE SERVICES, INC. OF HARRISVILLE, R.I. DELINEATES THE SWAMP AND RIVER DEPICTED HEREON. THE FLAGS AND JURISDICTIONAL WETLANDS HAVE NOT BEEN VERIFIED BY THE WETLANDS SECTION OF THE RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT.
2. TOPOGRAPHY DEPICTED IS BASED ON AN ACTUAL GROUND SURVEY OF THE PROPERTY CONDUCTED IN APRIL-JUNE 2012. THE VERTICAL DATUM IS ASSUMED, BUT APPROXIMATES NGVD 29. THE ELEVATION WAS SCALED FROM THE COVENTRY CENTER U.S.G.S. QUADRANGLE MAP. THE CONTOUR INTERVAL IS TWO FEET.
3. THE SITE IS NOT WITHIN THE SCITUATE RESERVOIR WATERSHED.
4. THE SITE IS WITHIN FLOOD HAZARD ZONE X (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOOD PLAIN). SEE F.I.R.M. MAP NUMBER 44007C0401G AND MAP NUMBER 44007C0385G DATED MARCH 2, 2009.
5. THIS PLAN IS NOT A BOUNDARY SURVEY PLAN. FOR BOUNDARY DATA SEE PLAN ENTITLED "BOUNDARY SURVEY OF LAND OF EASTERN PROPERTIES, INC. ASSESSOR'S PLAT 49 LOTS 36 & 225 HEATHER LANE, SCITUATE, RHODE ISLAND SCALE: 1"=80" DATE: OCTOBER 19, 2012" BY SCITUATE SURVEYS, INC.



LEGEND

A.P.	ASSESSOR'S PLAT
N/F	NOW OR FORMERLY
●	IRON PIPE FOUND
●	IRON ROD FOUND
●	AXLE FOUND
●	AXLE FOUND IN HEAP OF STONES
●	IRON PIPE FOUND IN HEAP OF STONES
■	GRANITE BOUND FOUND
○	SOIL EVALUATION TEST HOLE
○	LEDGE PROBE TEST HOLE
○	EXISTING WELL
—	CHAIN LINK FENCE
—	UTILITY POLE
—	STONE WALL
●	BOULDER/BEDROCK
—	EDGE OF DEFOLIATION
②	RECORD LOT NUMBER

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF WATER RESOURCES
 FRESHWATER WETLANDS PROGRAM
 APPROVED WITH CONDITIONS
 AS SPECIFIED IN THE LETTER OF APPROVAL
 DATED JAN 08 2013 FILE # 13-0133
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 APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Nancy L. Filmon

8/29/13 SHEET NUMBER

THIS MAP WAS DESIGNED TO BE VIEWED AT A SCALE OF 1"=100' ON A SHEET SIZE OF 24"x36". ANY VERSION THAT DOES NOT MEET THIS SPECIFICATION IS NOT AN AUTHENTIC COPY.

FOR STREET AND ROAD INDEX FILE UNDER:
HEATHER LANE

THIS DATA COLLECTION SURVEY AND PLAN CONFORM TO A CLASS 7E AS GOVERNED BY STANDARD AS ADOPTED BY THE RHODE ISLAND STATE BOARD OF PROFESSIONAL LAND SURVEYORS.

John Mensinger
 No. 1006
 PROFESSIONAL
 LAND SURVEYOR

BY: *John Mensinger*, PROFESSIONAL LAND SURVEYOR NO. 1806

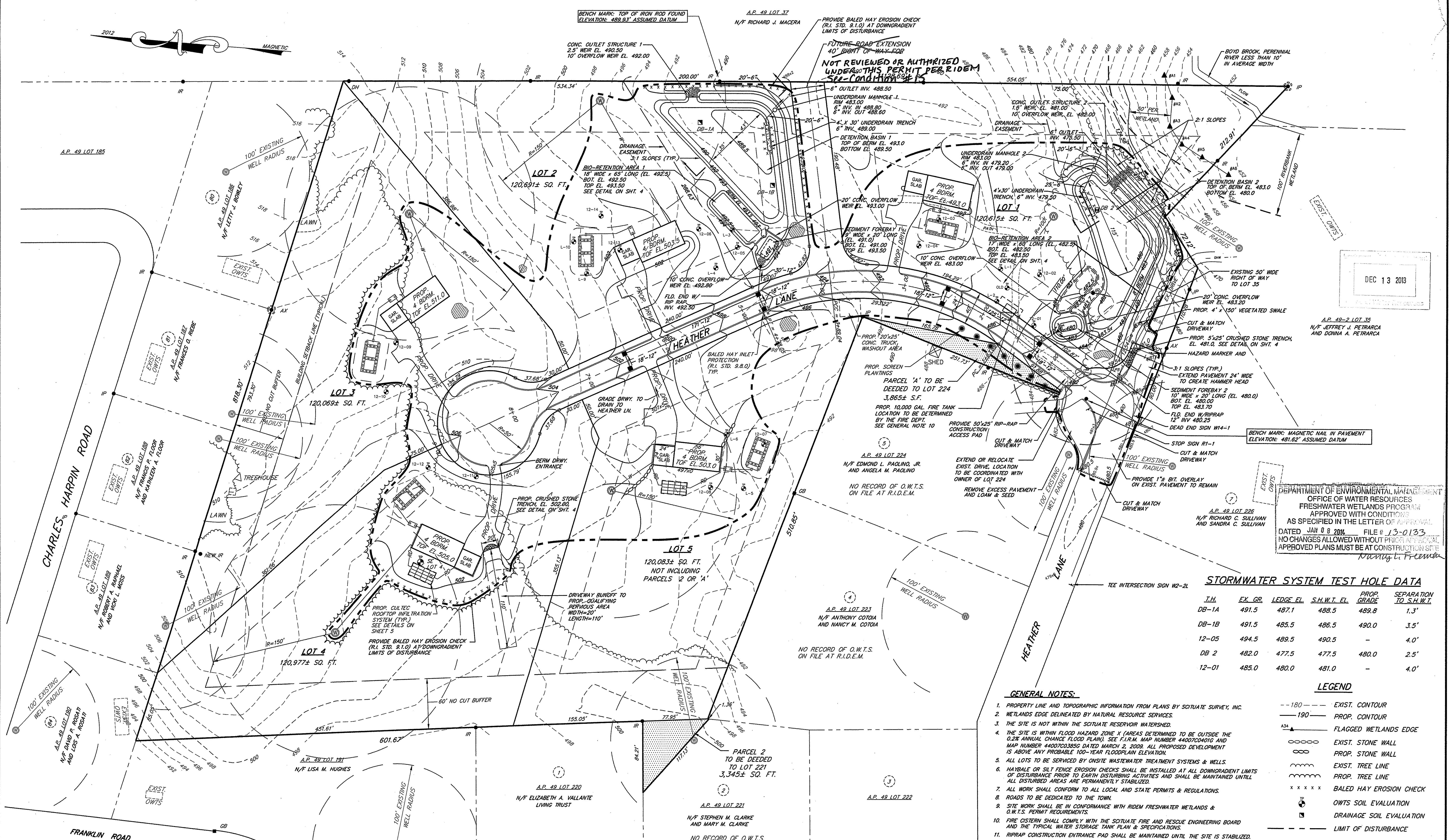
EXISTING CONDITIONS PLAN
 OF LAND OF
EASTERN PROPERTIES, INC.
 ASSESSOR'S PLAT 49 LOTS 36 & 225
 HEATHER LANE
 SCITUATE, RHODE ISLAND

SCALE: 1" = 80' DATE: JANUARY 11, 2013 REVISION: JUNE 20, 2013

SCITUATE SURVEYS, INC.
 410 TIOGUE AVENUE
 COVENTRY, RHODE ISLAND 02816
 401.881.8101
 LAND SURVEYING/MAPPING/SITE PLANNING

DEC 13 2013

SCALE IN FEET: 80 40 0 80 160 240



DEC 13 2013

A.P. 49-2 LOT 35
N/F JEFFREY J. PETRARCA
AND DONNA A. PETRARCA

A.P. 49-2 LOT 35
N/F JEFFREY J. PETRARCA
AND DONNA A. PETRARCA

A.P. 49-2 LOT 225
N/F RICHARD C. SULLIVAN
AND SANDRA G. SULLIVAN

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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Nancy L. Freeman

STORMWATER SYSTEM TEST HOLE DATA

T.H.	EX. GR.	LEDGE EL.	S.H.W.T. EL.	PROP. GRADE	SEPARATION TO S.H.W.T.
DB-1A	491.5	487.1	488.5	489.8	1.3'
DB-1B	491.5	485.5	486.5	490.0	3.5'
12-05	494.5	489.5	490.5	-	4.0'
DB 2	482.0	477.5	477.5	480.0	2.5'
12-01	485.0	480.0	481.0	-	4.0'

LEGEND

- 180-- EXIST. CONTOUR
- 190--- PROP. CONTOUR
- ▲334 FLAGGED WETLANDS EDGE
- EXIST. STONE WALL
- PROP. STONE WALL
- EXIST. TREE LINE
- PROP. TREE LINE
- x x x x x BALED HAY EROSION CHECK
- OWTS SOIL EVALUATION
- DRAINAGE SOIL EVALUATION
- - - - - LIMIT OF DISTURBANCE

- GENERAL NOTES:**
- PROPERTY LINE AND TOPOGRAPHIC INFORMATION FROM PLANS BY SCITUATE SURVEY, INC.
 - WETLANDS EDGE DELINEATED BY NATURAL RESOURCE SERVICES.
 - THE SITE IS NOT WITHIN THE SCITUATE RESERVOIR WATERSHED.
 - THE SITE IS WITHIN FLOOD HAZARD ZONE X (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOOD PLAIN). SEE F.I.R.M. MAP NUMBER 4407C0401G AND MAP NUMBER 4407C0355G DATED MARCH 2, 2009. ALL PROPOSED DEVELOPMENT IS ABOVE ANY PROBABLE 100-YEAR FLOODPLAIN ELEVATION.
 - ALL LOTS TO BE SERVICED BY ONSITE WASTEWATER TREATMENT SYSTEMS & WELLS.
 - HAYBALE OR SILT FENCE EROSION CHECKS SHALL BE INSTALLED AT ALL DOWNGRADIENT LIMITS OF DISTURBANCE PRIOR TO EARTH DISTURBING ACTIVITIES AND SHALL BE MAINTAINED UNTILL ALL DISTURBED AREAS ARE PERMANENTLY STABILIZED.
 - ALL WORK SHALL CONFORM TO ALL LOCAL AND STATE PERMITS & REGULATIONS.
 - ROADS TO BE DEDICATED TO THE TOWN.
 - SITE WORK SHALL BE IN CONFORMANCE WITH RIDEM FRESHWATER WETLANDS & O.W.T.S. PERMIT REQUIREMENTS.
 - FIRE CISTERN SHALL COMPLY WITH THE SCITUATE FIRE AND RESCUE ENGINEERING BOARD AND THE TYPICAL WATER STORAGE TANK PLAN & SPECIFICATIONS.
 - RIPRAP CONSTRUCTION ENTRANCE PAD SHALL BE MAINTAINED UNTIL THE SITE IS STABILIZED.

ZONE: RR-120

MINIMUM LOT SIZE	120,000 SQ. FT.
MINIMUM LOT WIDTH	300 FEET
BUILDING SETBACKS:	
FRONT	50 FEET
SIDE	35 FEET
REAR	60 FEET

AREA TABLE

AREA OF LOTS (5):	601,869± SQ.FT. (13.817± ACRES)
AREA OF ROAD:	56,019± SQ.FT. (1.286± ACRES)
PARCEL 2:	3,345± SQ.FT. (0.077± ACRES)
TOTAL AREA:	661,233± SQ.FT. (15.180± ACRES)
AREA OF JURISDICTIONAL WETLANDS:	15,819± SQ.FT.
ROADWAY LENGTH	826'

OWNER/APPLICANT
EASTERN PROPERTIES, INC.
23 BETTY POND ROAD
HOPE, RHODE ISLAND 02831
TEL. (401) 647-2927

SCOTT F. MOOREHEAD
No. 4298
REGISTERED PROFESSIONAL ENGINEER

DATE: 11-12-13
REVISION: FWW COMMENTS

DWN. BY: LBC
DWG. NO. SFM777GP

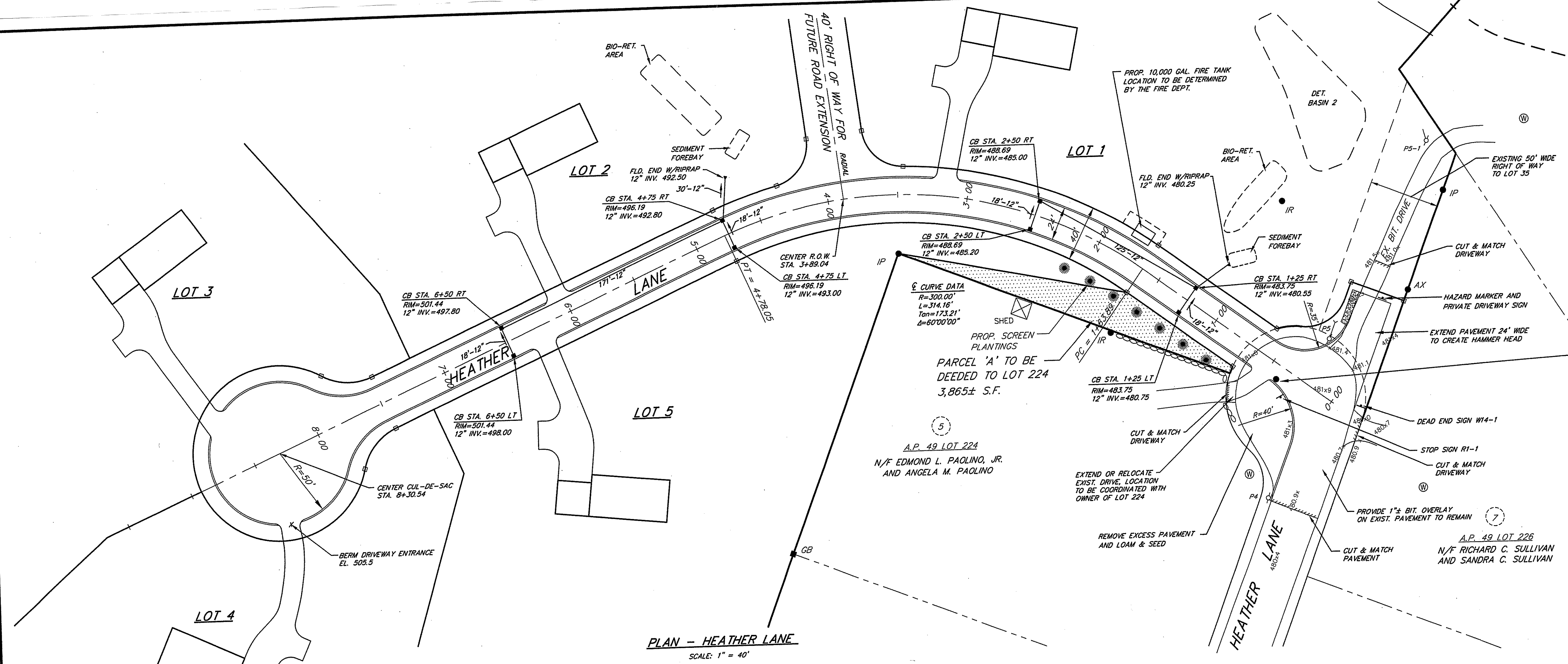
S.F.M. ENGINEERING ASSOCIATES
410 TIOGUE AVENUE
COVENTRY, R.I. 02816
(401)826-3736
SCOTT@SFM.NECOXMAIL.COM

SFM

PRELIMINARY PLAN
HEATHER LANE ESTATES
ASSESSOR'S PLAT 49 LOTS 36 & 225
HEATHER LANE
SCITUATE, RHODE ISLAND

GRADING PLAN

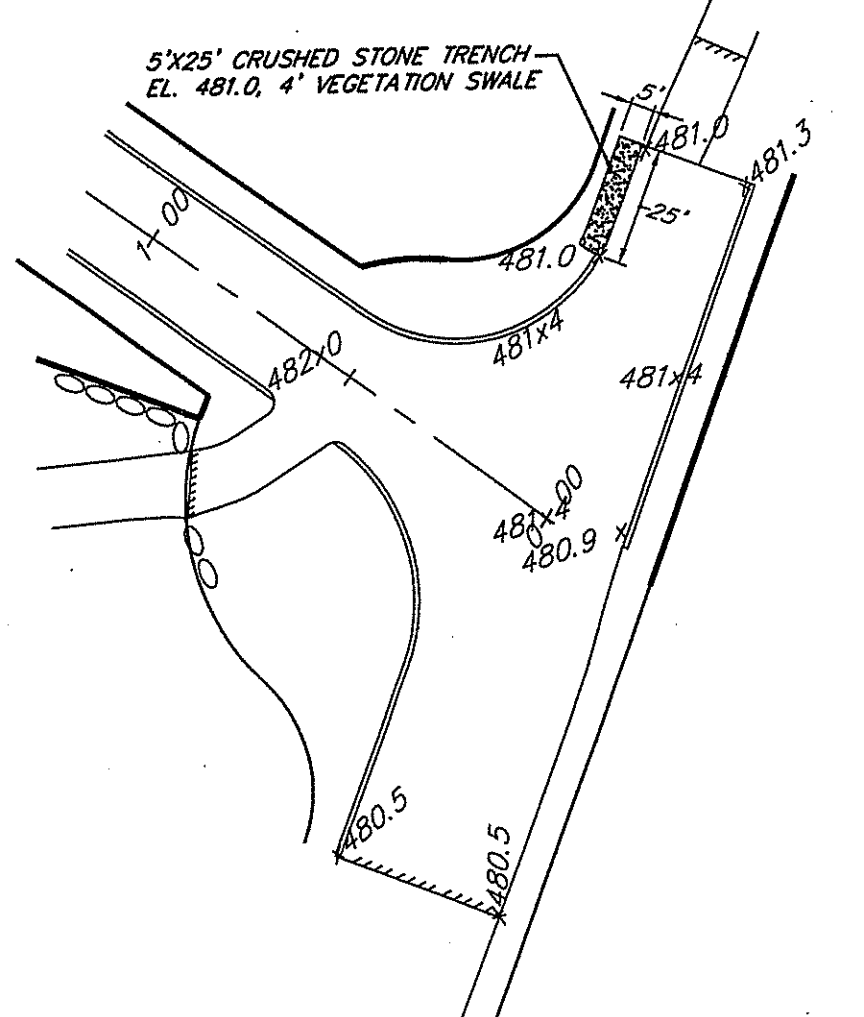
DATE: JUNE 10, 2013 SCALE: 1"= 50' SHEET 2 OF 5



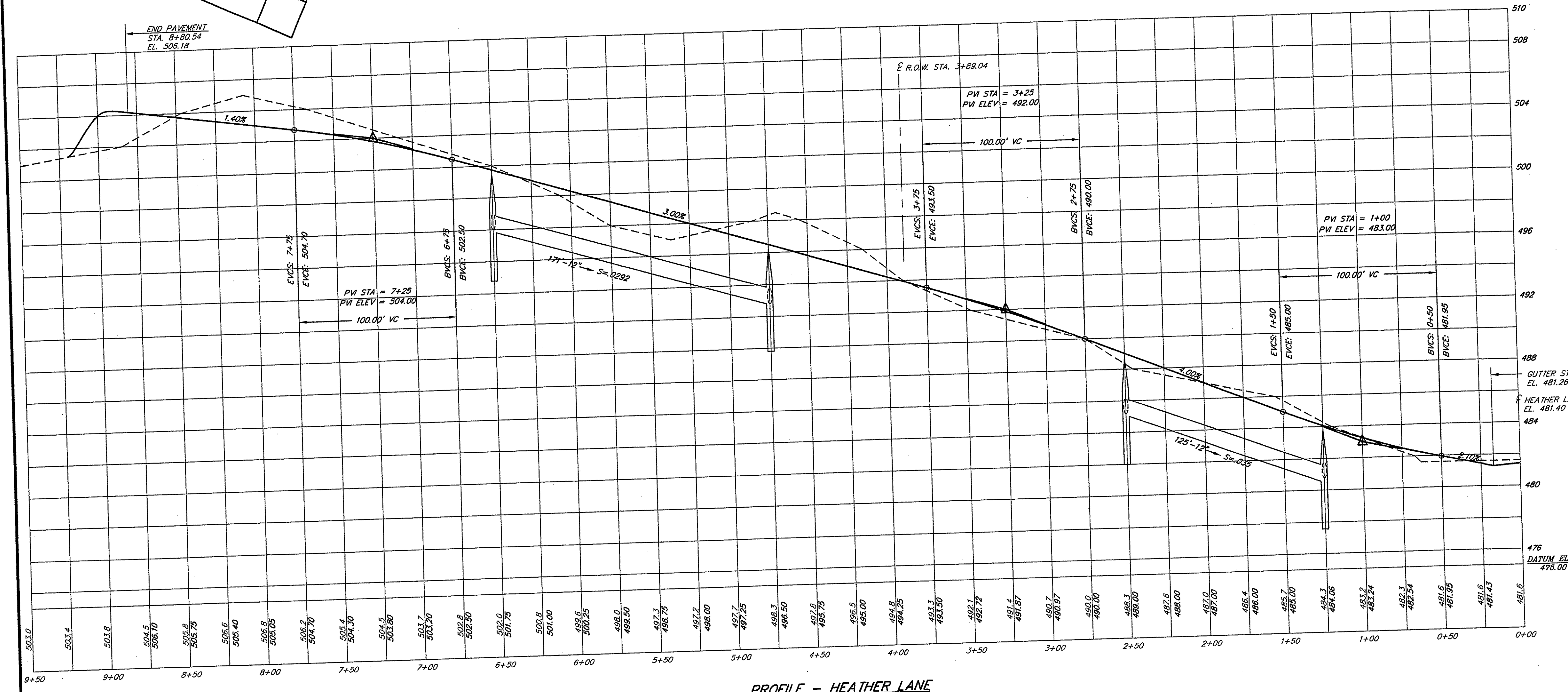
A.P. 49-2 LOT 35
N/F JEFFREY J. PETRARCA
AND DONNA A. PETRARCA

BENCH MARK: MAGNETIC NAIL IN PAVEMENT
ELEVATION: 481.62' ASSUMED DATUM

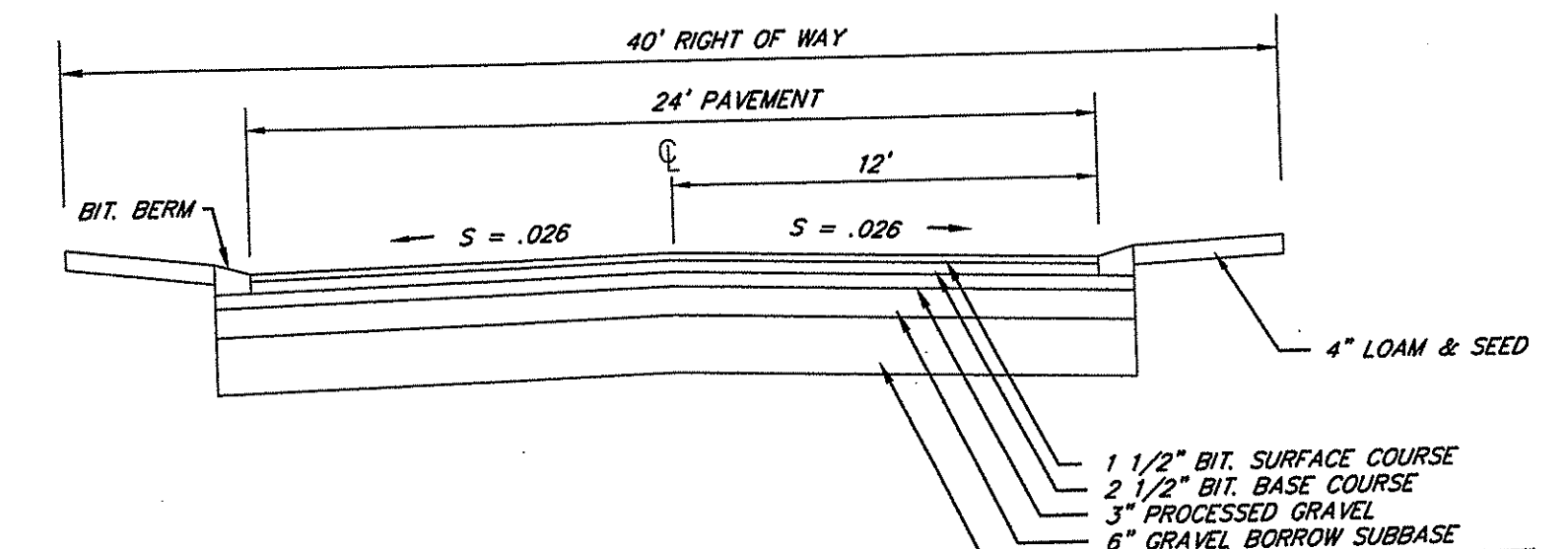
DEC 13 2013



PROPOSED HAMMERHEAD GRADING DETAIL
SCALE: 1"=40'



PROFILE - HEATHER LANE
SCALE: HOR. 1" = 40'
VERT. 1" = 4'



TYPICAL ROADWAY SECTION
NOT TO SCALE

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DURING L. FREEMAN

SCOTT F. MOOREHEAD
No. 1298
REGISTERED PROFESSIONAL ENGINEER

DATE	11-12-13
FWM COMMENTS	
DWN. BY:	LBC
DWG. NO.	SFM777PP

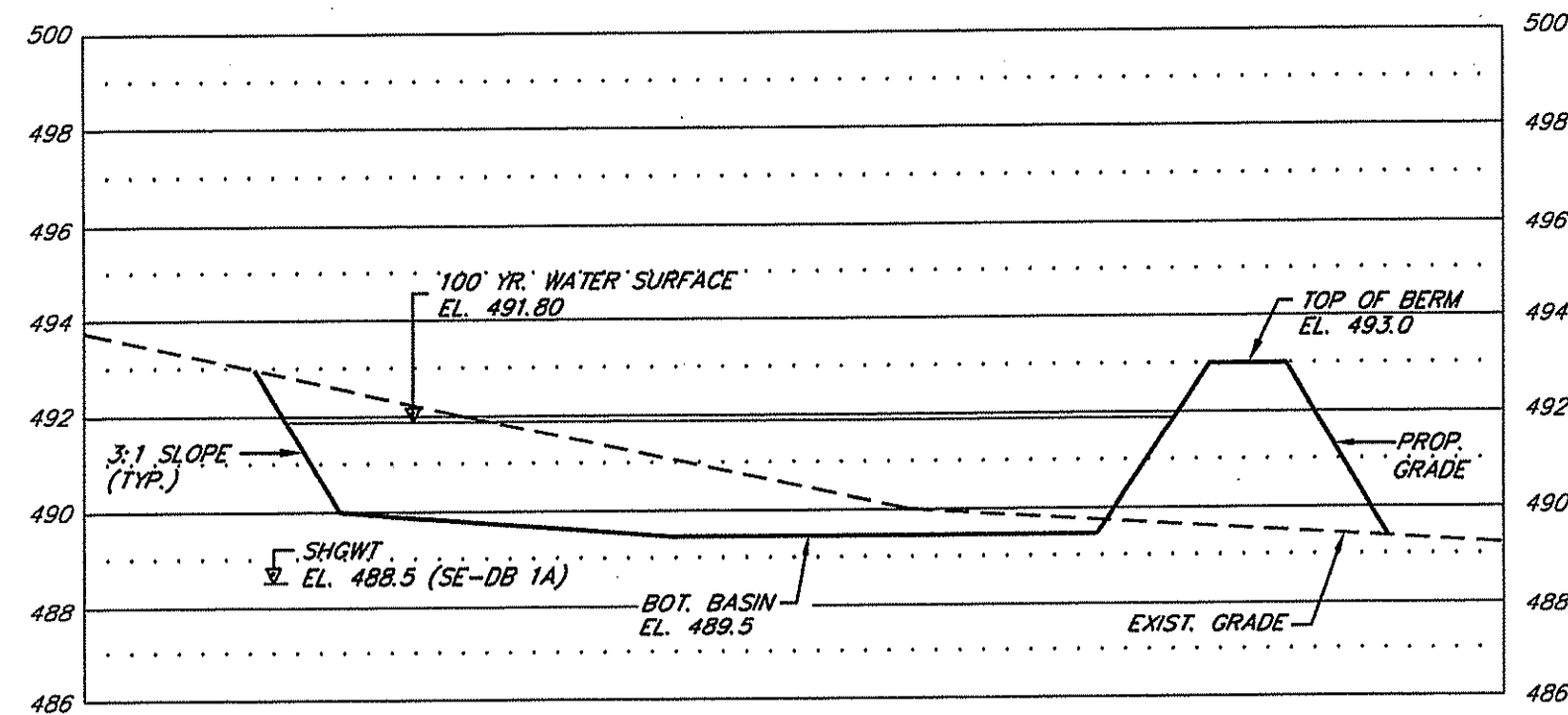
SFM

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

PRELIMINARY PLAN
HEATHER LANE ESTATES
ASSESSOR'S PLAT 49 LOTS 36 & 225
HEATHER LANE
SCITUATE, RHODE ISLAND

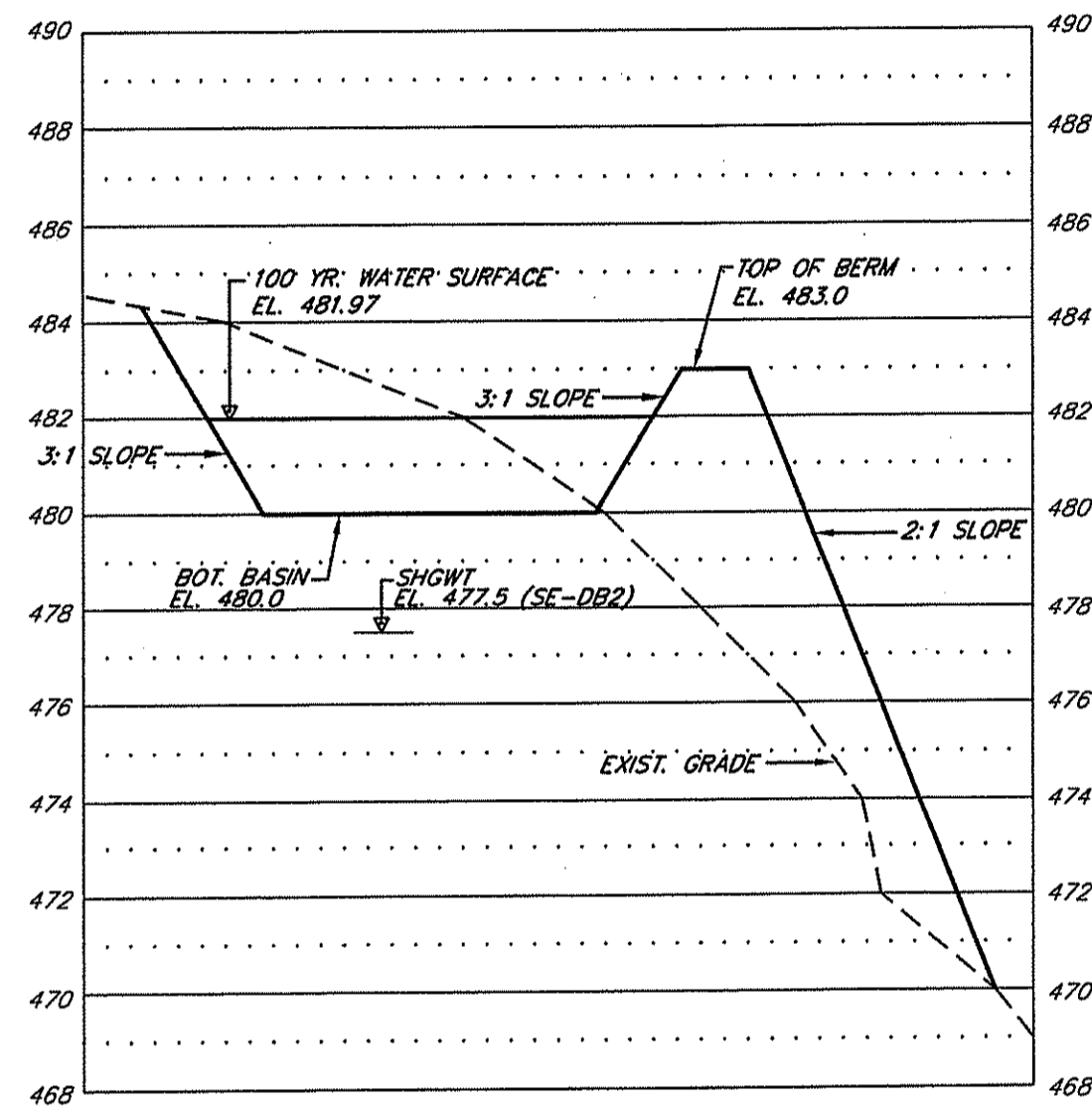
PLAN & PROFILE

DATE: JUNE 10, 2013 SCALE: AS NOTED SHEET 3 OF 5



CROSS SECTION - DETENTION BASIN 1

SCALE: HOR. 1" = 20'
VERT. 1" = 8'

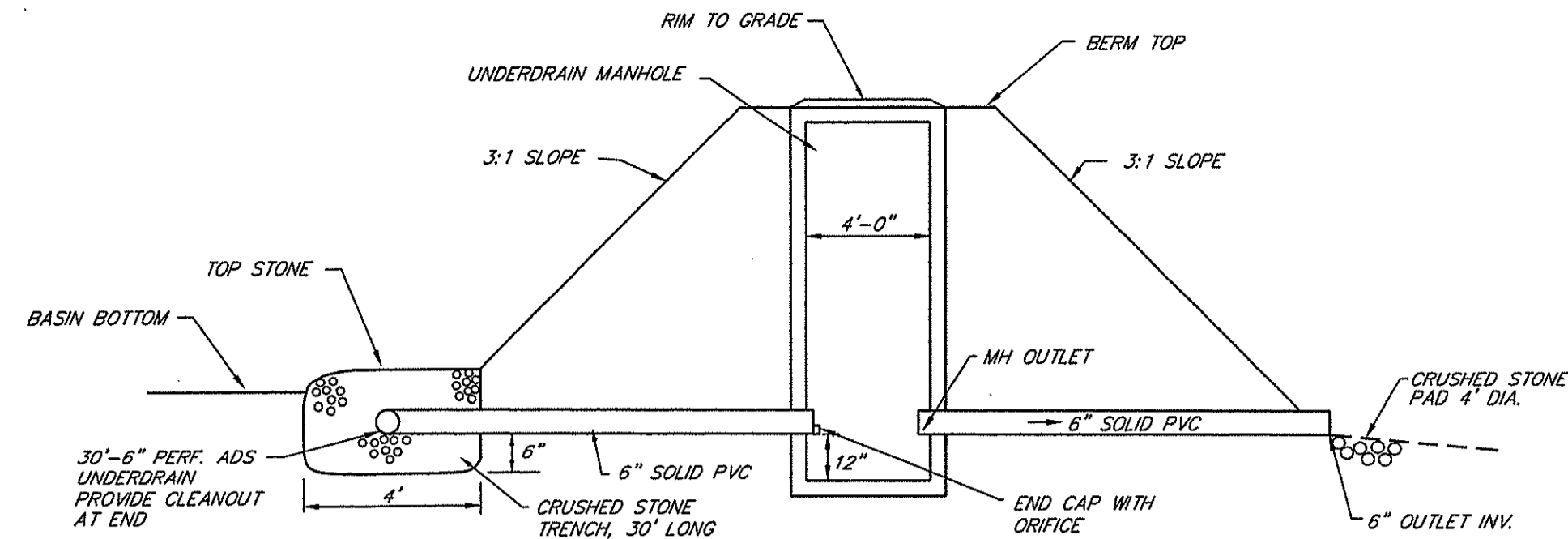


CROSS SECTION - DETENTION BASIN 2

SCALE: HOR. 1" = 20'
VERT. 1" = 8'

STORMWATER SYSTEM - DIMENSION TABLE

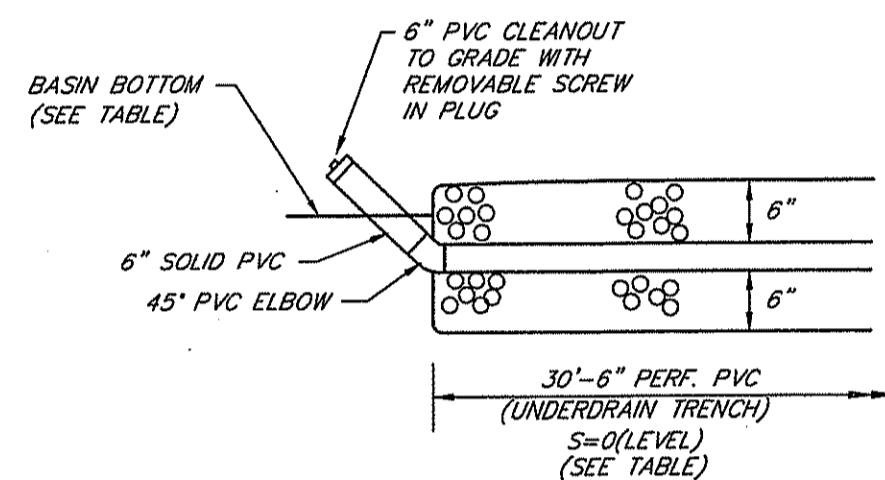
SYSTEM	COMPONENT	ELEV. (FT.)	AREA (S.F.)	OUTLET DATA
1	DET. BASIN	488.5	2,855	
		490	9,010	2.5' WEIR, EL. 490.50
		492	11,830	10' OVERFLOW WEIR, EL. 492.00
		493	13,510	
	SED. FOREBAY	491	160	
SED. FOREBAY		492	445	
		493	780	
		493.5	910	
	BIO-RET.	492	1,170	
	493	1,780		
2	DET. BASIN	480	4,130	
		482	7,300	1.5' WEIR, EL. 481.00
		483	9,050	10' OVERFLOW WEIR, EL. 482.00
	SED. FOREBAY	480	190	
	482	635		
	483	995		
	483.7	1,200		
BIO-RET.	482.5	920		
	483	1,160		
	483.5	1,620		



UNDERDRAIN DETAIL - DETENTION BASIN

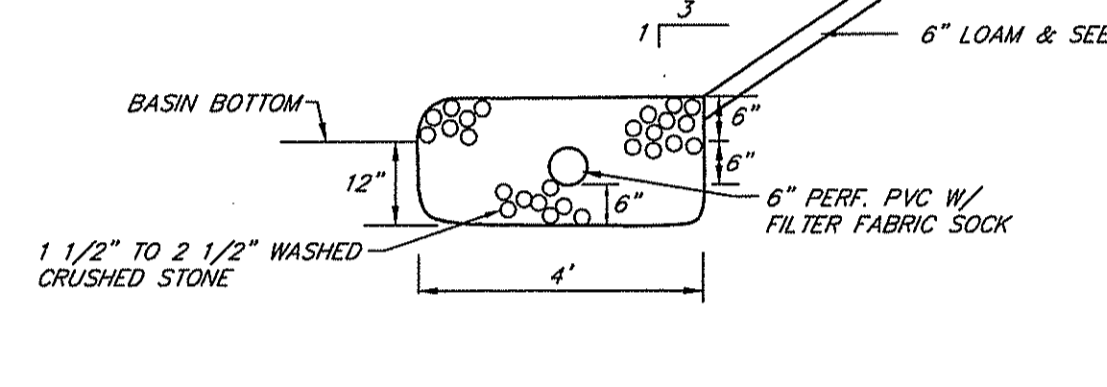
NOT TO SCALE

DETENTION BASIN		UNDERDRAIN TO MANHOLE			UNDERDRAIN MANHOLE TO OUTLET					
NO.	BOTTOM ELEV.	TOP OF BERM ELEV.	TOP OF STONE ELEV.	6" PIPE LENGTH	UNDER DRAIN 6" INV.	DRAIN ORIFICE DIA.	DRAIN ORIFICE INV.	M.H. OUTLET INV.	6" PIPE LENGTH	6" OUTLET INV.
1	488.50	493.00	490.00	15'	488.00	2"	488.80	488.70	20'	488.50
2	480.00	483.00	480.50	25'	478.50	1.5"	478.20	479.00	20'	478.50



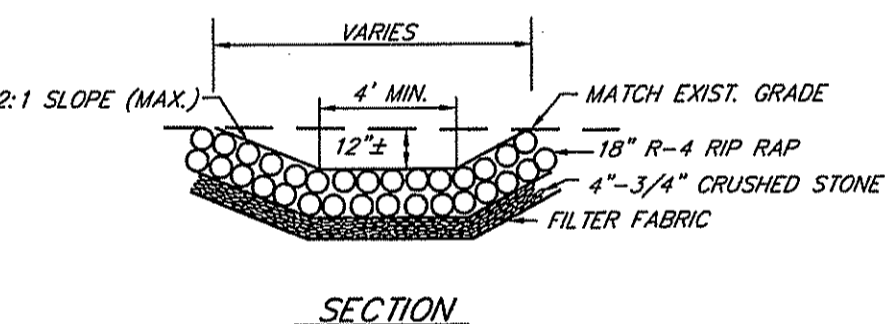
CLEAN-OUT DETAIL

NOT TO SCALE



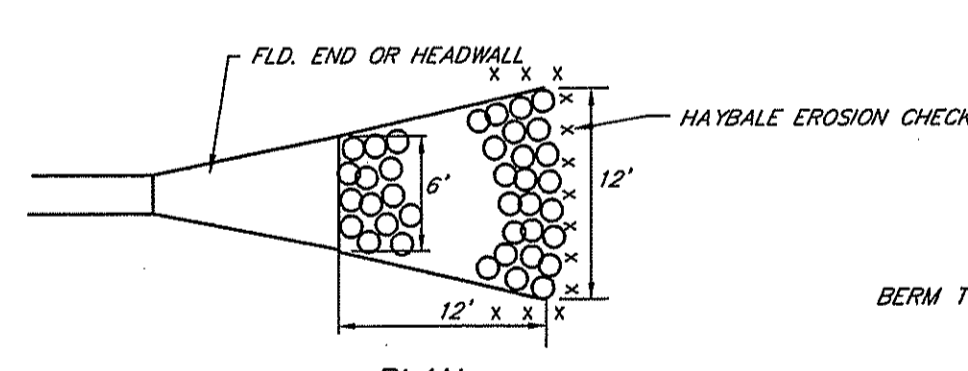
UNDERDRAIN TRENCH

NOT TO SCALE



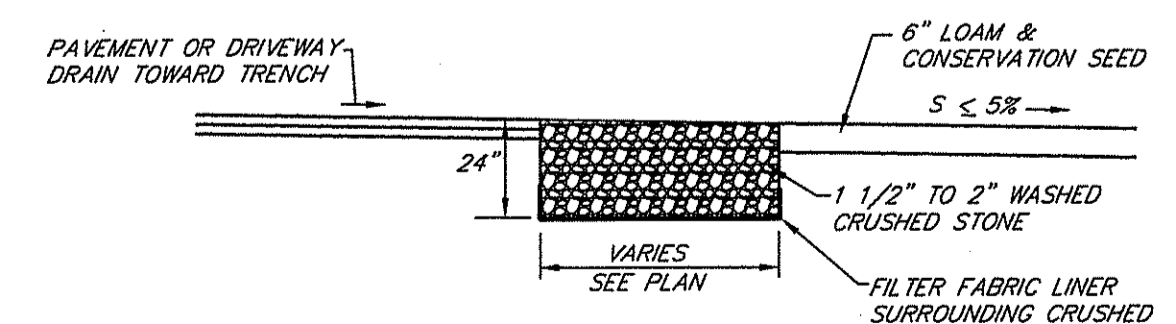
SECTION

NOTE:
RIP RAP SWALES SHALL BE 6" WIDE AT FLD. END AND WIDEN TO 12", LENGTH = 12'



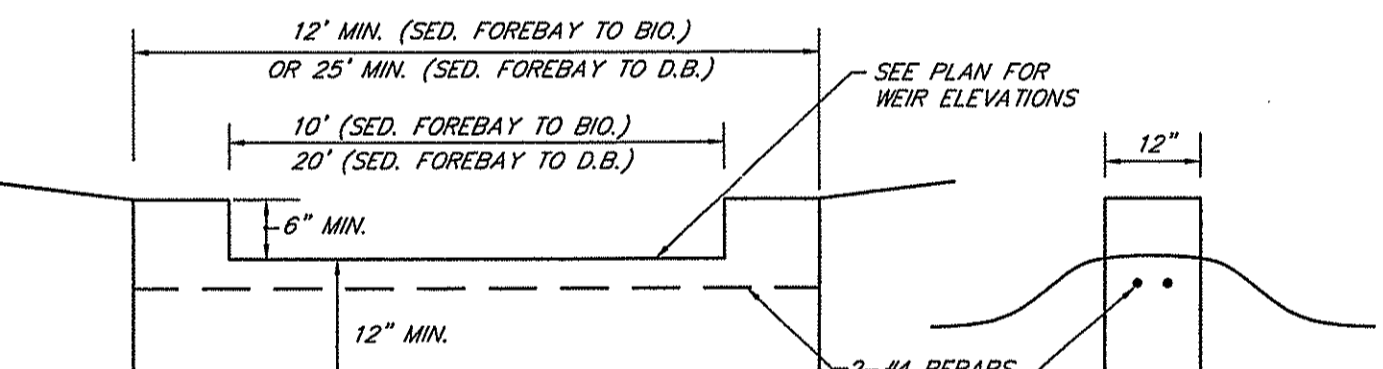
RIP RAP @ FLARED END

NOT TO SCALE



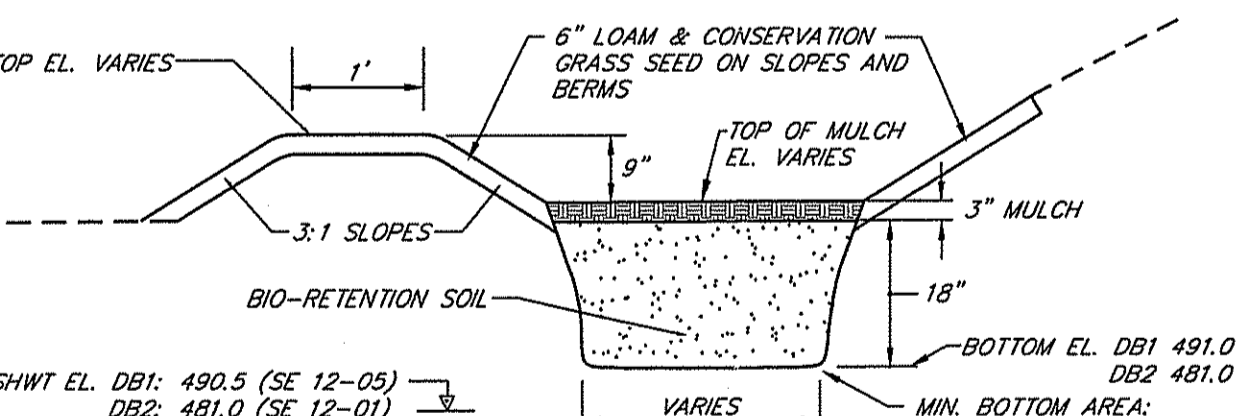
CRUSHED STONE TRENCH DETAIL

NOT TO SCALE



TYPICAL CONC. OVERFLOW WEIR

NOT TO SCALE

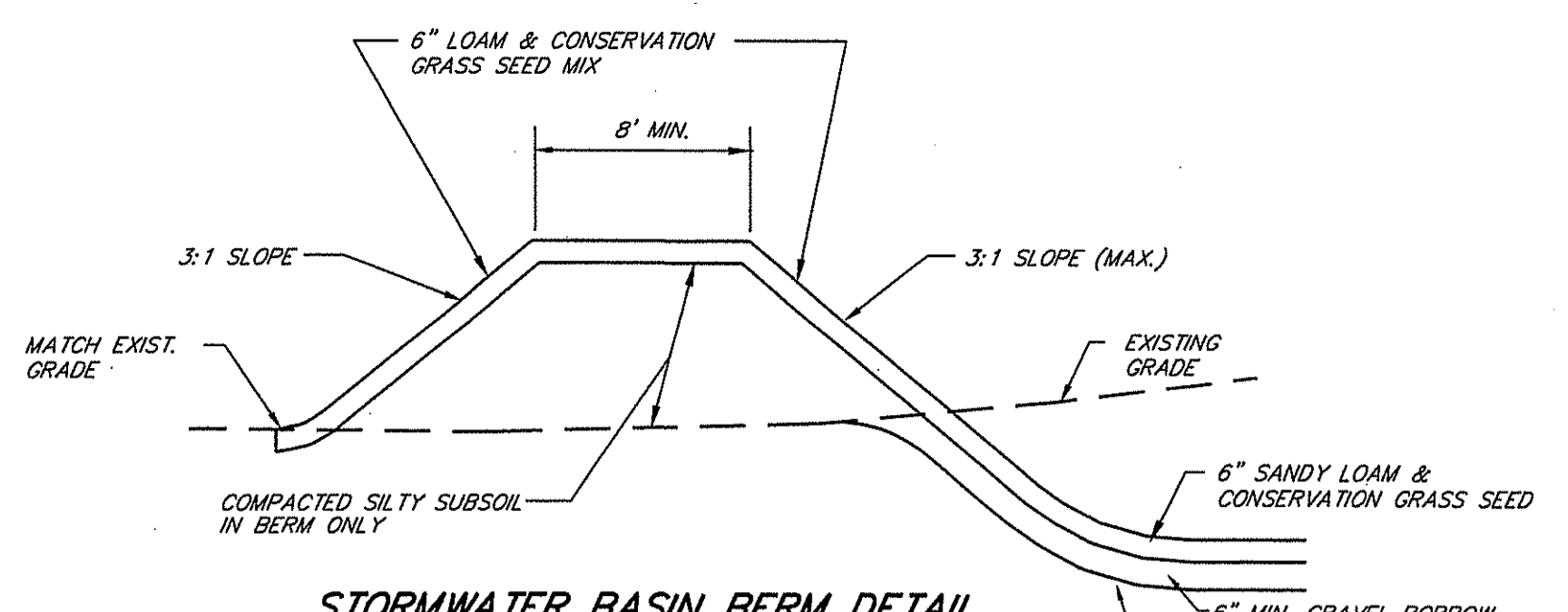


BIO-RETENTION AREA CROSS-SECTION

NOT TO SCALE

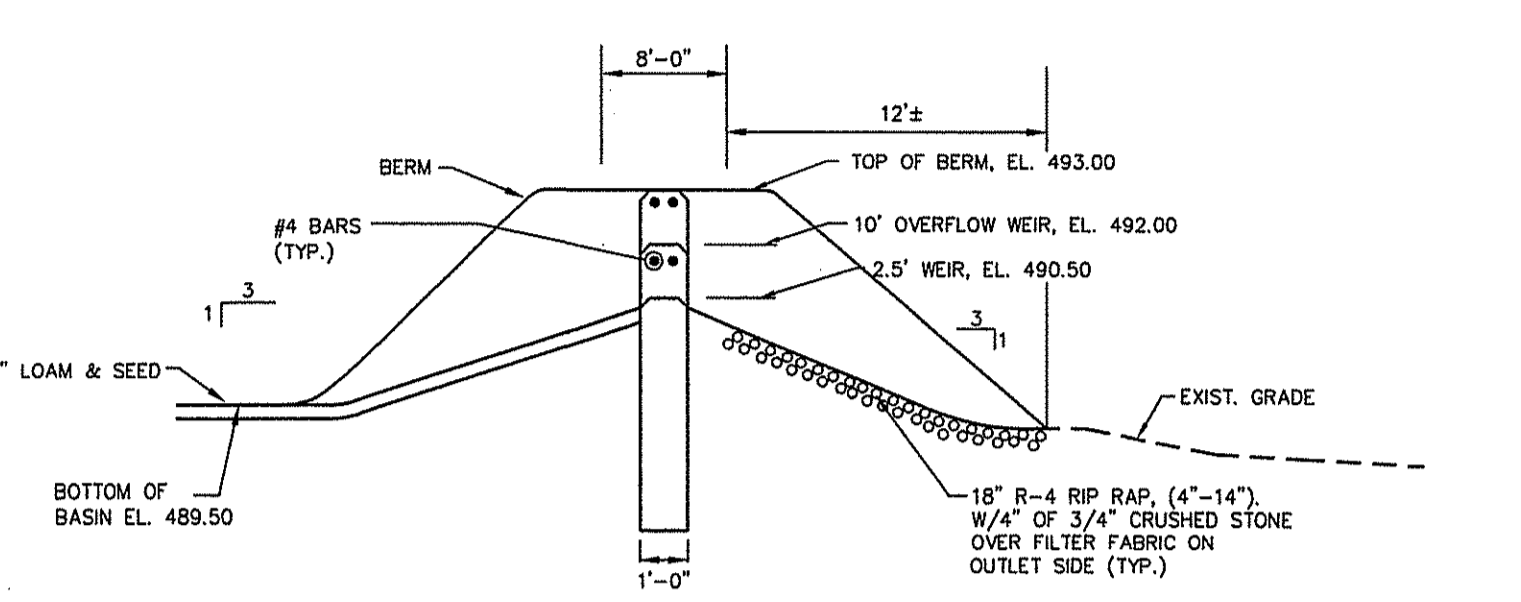
BIO-RETENTION AREA NOTES

- BIO-RETENTION AREA TO BE PROTECTED PRIOR TO COMMENCEMENT OF CONSTRUCTION TO PREVENT COMPACTION OF BOTTOM AREA.
- ALL LOAM & SUBSOIL SHALL BE STRIPPED AND THE AREA EXCAVATED TO DESIGN BOTTOM GRADE. BIO-RETENTION SOIL SHALL BE PLACED TO A DEPTH OF 18" AND COVERED WITH 3" OF MULCH.
- MULCH SHALL BE SHREDDED HARDWOOD MULCH.
- PLANTINGS SHALL BE SELECTED BY A LANDSCAPE ARCHITECT TO COMPLY WITH APPENDIX B.9.3 OF THE R.I. STORMWATER DESIGN AND INSTALLATION STANDARDS MANUAL (DECEMBER 2010).
- BIO-RETENTION AREA PLANTINGS SHALL BE INSTALLED BY A LANDSCAPE CONTRACTOR. SURVIVAL SHALL BE GUARANTEED FOR ONE YEAR.
- BIO-RETENTION SOIL SHALL HAVE A LOAMY SAND TO SANDY LOAM TEXTURE AND CONFORM TO THE FOLLOWING GRADATION:
SAND 85 - 88%
SILT 8 - 12%
CLAY 0 - 2%
ORGANIC MATTER 20% BY VOLUME TO MINERAL SOIL (SAND/SILT/CLAY)
- BIO-RETENTION AREAS SHALL BE PROTECTED FROM RECEIVING STORMWATER RUNOFF UNTIL THE CONTRIBUTING SITE AREA HAS A DENSE VEGETATED COVER.



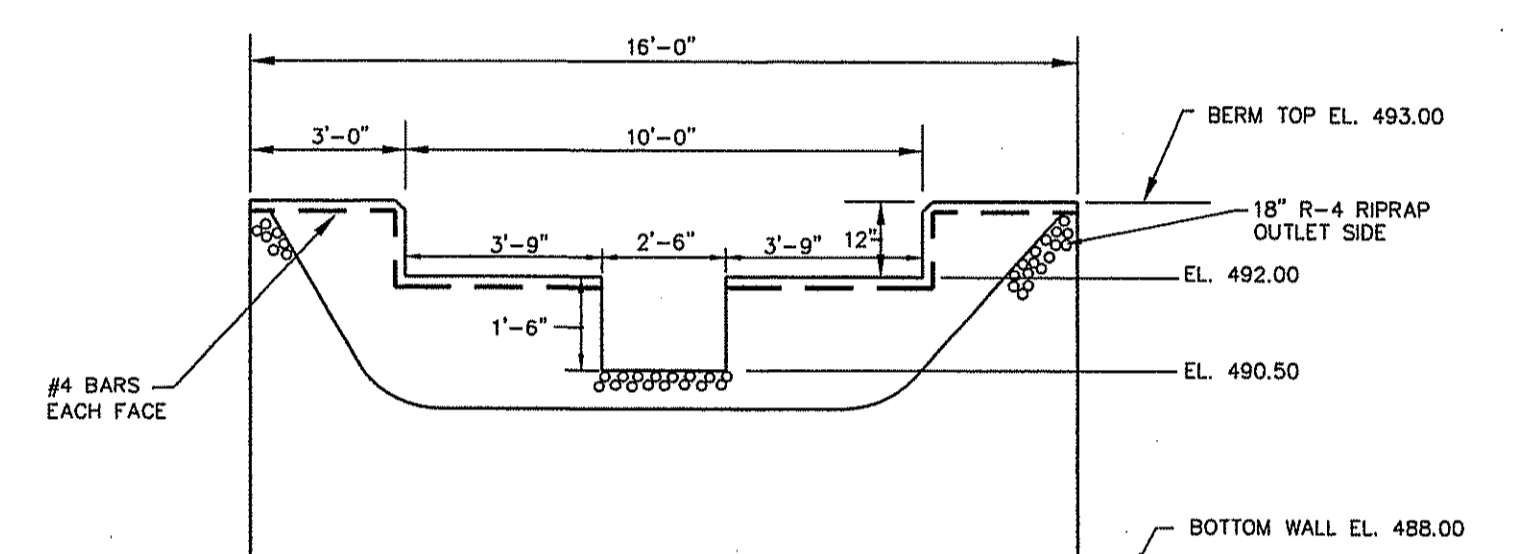
STORMWATER BASIN BERM DETAIL

NOT TO SCALE



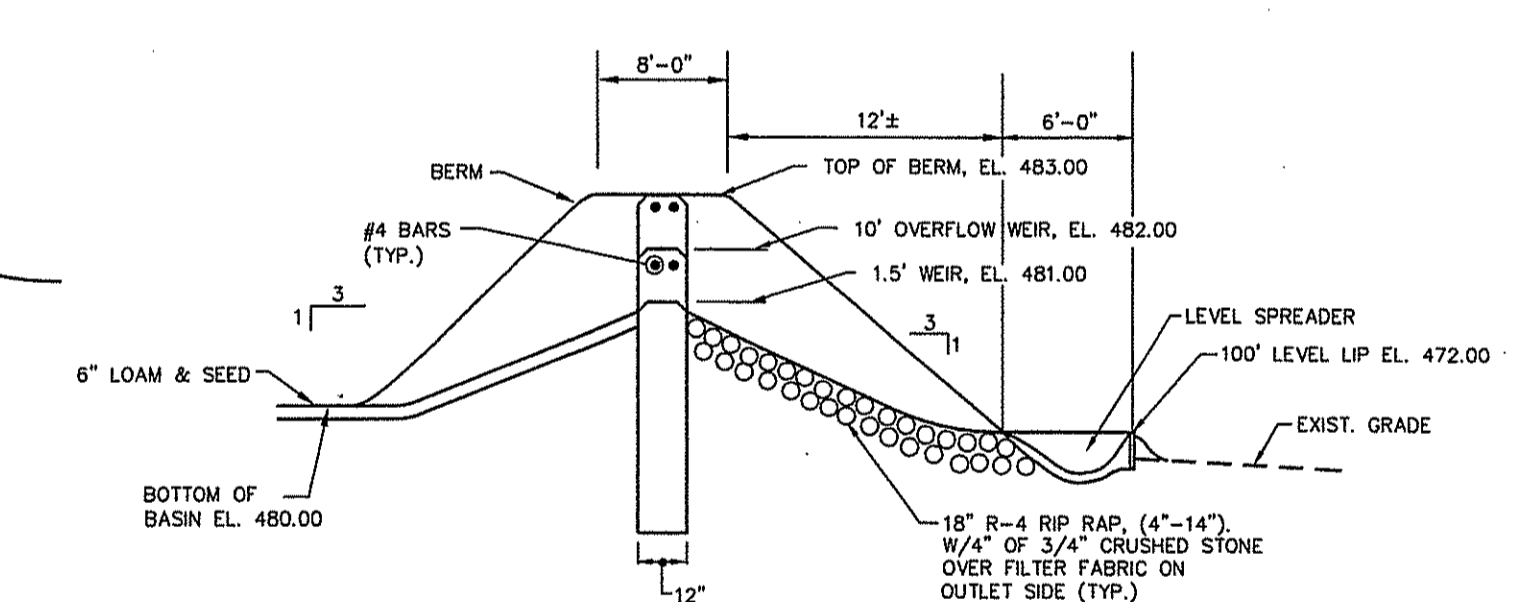
DETENTION BASIN 1 CONCRETE OVERFLOW DETAILS

NOT TO SCALE



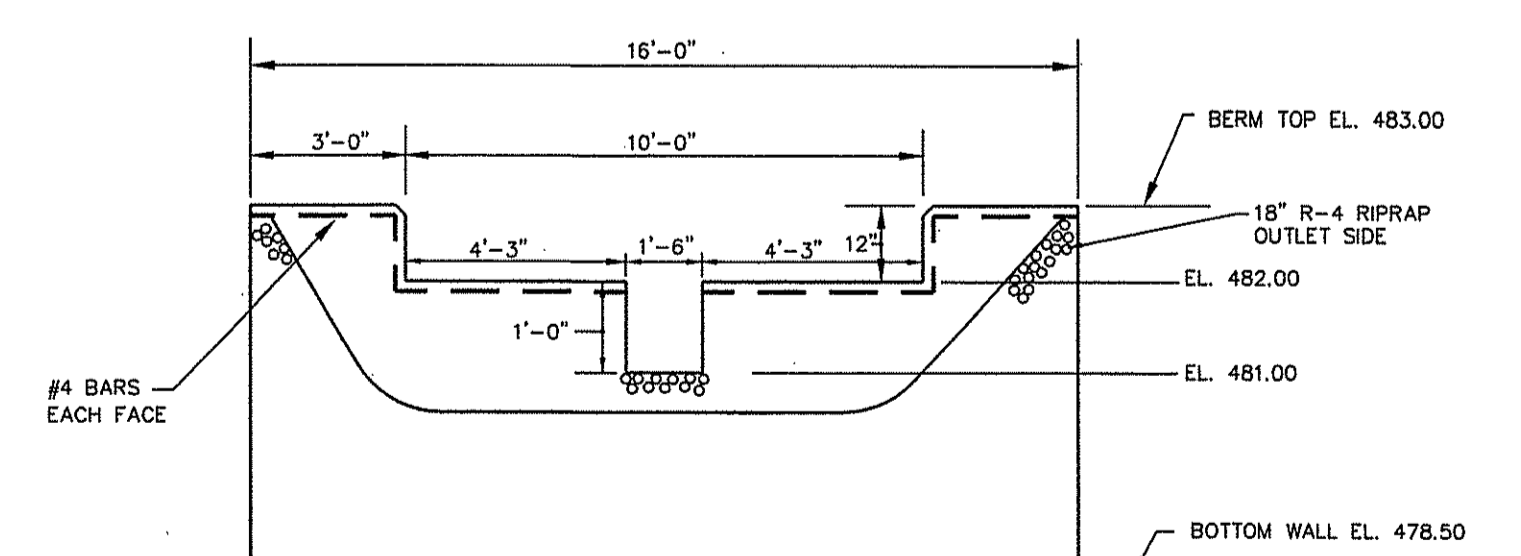
DETENTION BASIN 1 CONCRETE OVERFLOW WEIR DETAIL

NOT TO SCALE



DETENTION BASIN 2 CONCRETE OVERFLOW DETAILS

NOT TO SCALE



DETENTION BASIN 2 CONCRETE OVERFLOW WEIR DETAIL

NOT TO SCALE

STORMWATER SYSTEM MAINTENANCE PLAN

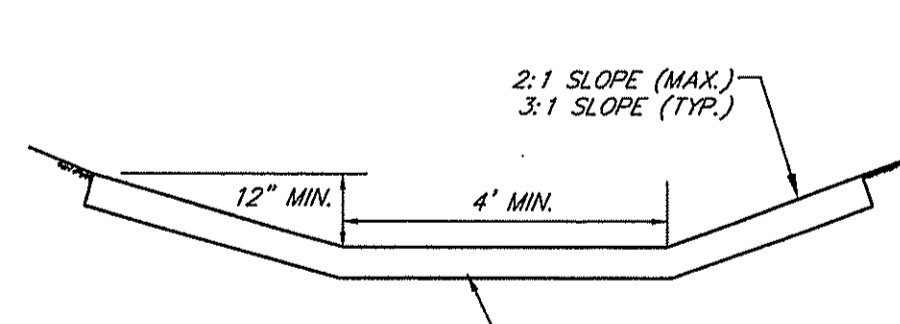
- THE SITE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SITE STORMWATER SYSTEM FACILITY PROTECTION, INSPECTION AND MAINTENANCE PRIOR TO, DURING AND POST CONSTRUCTION UNTIL FINAL ACCEPTANCE OF CONSTRUCTION.
- BIO-RETENTION AREAS, DETENTION BASIN BOTTOM, AND QUALIFYING PERVIOUS AREA SHALL BE PROTECTED PRIOR TO COMMENCEMENT OF CONSTRUCTION TO PREVENT COMPACTION OF BOTTOM AREA.
- DETENTION BASINS & SEDIMENT FOREBAYS SHALL BE MAINTAINED ACCORDING TO THE FOLLOWING SCHEDULE:
 - THE GRASS ON THE BASIN & FOREBAY (BOTTOM & SLOPES) SHALL BE MOVED THREE (3) TIMES BETWEEN THE MONTHS OF MAY AND OCTOBER. MOVED HEIGHT OF VEGETATION SHALL NOT BE LESS THAN TWO INCHES. MAXIMUM HEIGHT OF VEGETATION IN THE SEDIMENT FOREBAY IS 18" INCHES.
 - THE INLET & OUTLET STRUCTURES TO THE BASIN & FOREBAY SHALL BE KEPT CLEAN OF SILT AND DEBRIS. THE PIPES SHALL BE CLEARED AT THE THREE (3) MORNINGS AND ONCE DURING THE WINTER MONTHS.
 - ACCUMULATED SILT AND DEBRIS SHALL BE REMOVED FROM THE DETENTION BASIN ONCE EVERY YEAR OR AS NEEDED.
 - SILT & DEBRIS SHALL BE REMOVED FROM THE SEDIMENT FOREBAY EVERY YEAR OR WHEN THE ACCUMULATION EXCEEDS ONE FOOT IN DEPTH.
- CATCH BASINS SHALL BE CLEARED & MAINTAINED A MINIMUM OF TWICE PER YEAR (SPRING & FALL). ACCUMULATED SILT, SAND, DEBRIS & OIL SHALL BE REMOVED AND DISPOSED OF AT A LICENSED WASTE FACILITY.
- ALL PAVED AREAS SHALL BE SWEEPED EACH YEAR. ACCUMULATED SILT, SAND & DEBRIS SHALL BE REMOVED AND DISPOSED OF AT A LICENSED WASTE FACILITY.
- BIO-RETENTION AREA SHALL BE MAINTAINED ACCORDING TO THE FOLLOWING SCHEDULE:
 - BIO-RETENTION AREA SHALL BE INSPECTED TWICE PER YEAR.
 - SOIL EROSION GULLIES SHALL BE REPAIRED WHEN THEY OCCUR.
 - IF STANDING WATER REMAINS 48 HOURS AFTER A RAINFALL EVENT, THE BOTTOM SHALL BE ROTO-TILED THEN RE-SEED.
 - MULCH LAYER SHALL BE REPLENISHED TO ORIGINAL DEPTH EVERY OTHER YEAR. PREVIOUS MULCH LAYER SHALL BE REMOVED.
 - PRUNING OR REPLACEMENT OF VEGETATION SHOULD OCCUR WHEN DEAD OR DYING VEGETATION IS OBSERVED.
 - SILT AND DEBRIS SHALL BE REMOVED WHEN THE ACCUMULATION EXCEEDS ONE INCH.
 - QUALIFYING PERVIOUS AREA SHALL BE INSPECTED ANNUALLY. DEPOSITED SEDIMENTS SHALL BE REMOVED AND ANY PONDING OR EROSION SHALL BE REPAIRED.
 - UPON FINAL ACCEPTANCE OF THE CONSTRUCTION, THE TOWN OF SCITUATE SHALL BE RESPONSIBLE FOR ALL DRAINAGE SYSTEM INSPECTION & MAINTENANCE.

DETENTION BASIN NOTES

- SLOPES OF BASIN SHALL BE 3:1 (TYP.).
- BOTTOM OF DETENTION BASIN SHALL HAVE A MINIMUM OF 6" LOAM, AND SHALL BE PLANTED WITH REED CANARY GRASS. ALL OTHER AREAS NOT RIP RAPPED SHALL HAVE A MINIMUM OF 6" LOAM, CONSERVATION SEED MIX AND STRAW MULCH.
- DETENTION BASIN SHALL BE CONSTRUCTED AND STABILIZED PRIOR TO OTHER CONSTRUCTION. TEMPORARY DRAINAGE SHALL BE DIVERTED TO DETENTION BASINS.
- ACCUMULATED SILTS AND SEDIMENTS SHALL BE REMOVED FROM THE DETENTION BASIN AS REQUIRED DURING SITE CONSTRUCTION. AFTER EVERY RAIN EVENT AND IMMEDIATELY PRIOR TO LOAMING AND SEEDING.
- INLETS AND OUTLETS TO BASINS SHALL BE PROTECTED WITH HAY BALE EROSION CHECKS.
- UNDERDRAINS SHALL BE PROTECTED WITH HAY BALE EROSION CHECKS UNTIL PERMANENT STABILIZATION IS ESTABLISHED. ACCUMULATED SILTS SHALL BE REMOVED AND PEASTONE AND SAND ENVELOPE REPLACED AS REQUIRED.
- DETENTION BASIN SHALL BE CONSTRUCTION STAKED BY THE PROJECT SURVEYOR TO INSURE ACCURATE LOCATION AND ELEVATION. THE PROJECT SURVEYOR SHALL AS-BUILT SURVEY THE BASINS PRIOR TO SEEDING AND PROVIDE A REPORT TO S.F.M. ENGINEERING. ANY DISCREPANCIES SHALL BE CORRECTED PRIOR TO SEEDING.

DRAINAGE NOTES

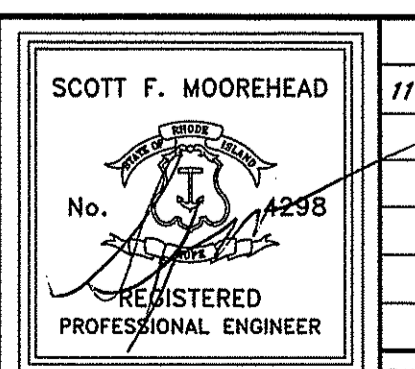
- CATCH BASINS SHALL BE 4' I.D. PRECAST CONC. WITH 4" SUMP R.I. STD. 4.4.0 TYPE 'F'.
- CATCH BASIN FRAMES & GRATES SHALL BE R.I. STD. 6.3.2. FRAME & GRATES SHALL BE SET 1 1/2" BELOW DESIGN GRADE UNTIL FINAL PAVEMENT COURSE IS TO BE INSTALLED. AT FINAL PAVING, RAISE FRAME & GRATE TO DESIGN GRADE.
- MANHOLES SHALL BE 4' I.D. PRECAST CONC. R.I. STD. 4.2.0.
- MANHOLE FRAMES & COVERS SHALL BE R.I. STD. 6.2.1.
- ON-SITE DRAINAGE PIPING SHALL BE HDPE ADS-N-12 (OR EQUAL) UNLESS OTHERWISE SPECIFIED.
- ALL DRAINAGE INLETS AND OUTLETS SHALL HAVE STAKED HAYBALE EROSION CHECKS WHICH SHALL BE MAINTAINED UNTIL THE SITE IS FULLY STABILIZED.
- THE SITE SHALL HAVE A DENSE VEGETATIVE COVER PRIOR TO DISCHARGE OF STORMWATER RUNOFF INTO THE BIO-RETENTION AREAS.



GRASS/VEGETATED SWALE DETAIL

NOT TO SCALE

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS DIVISION
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED JAN 08 2013 FILE # 13-0133
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE
Nancy L. Freeman

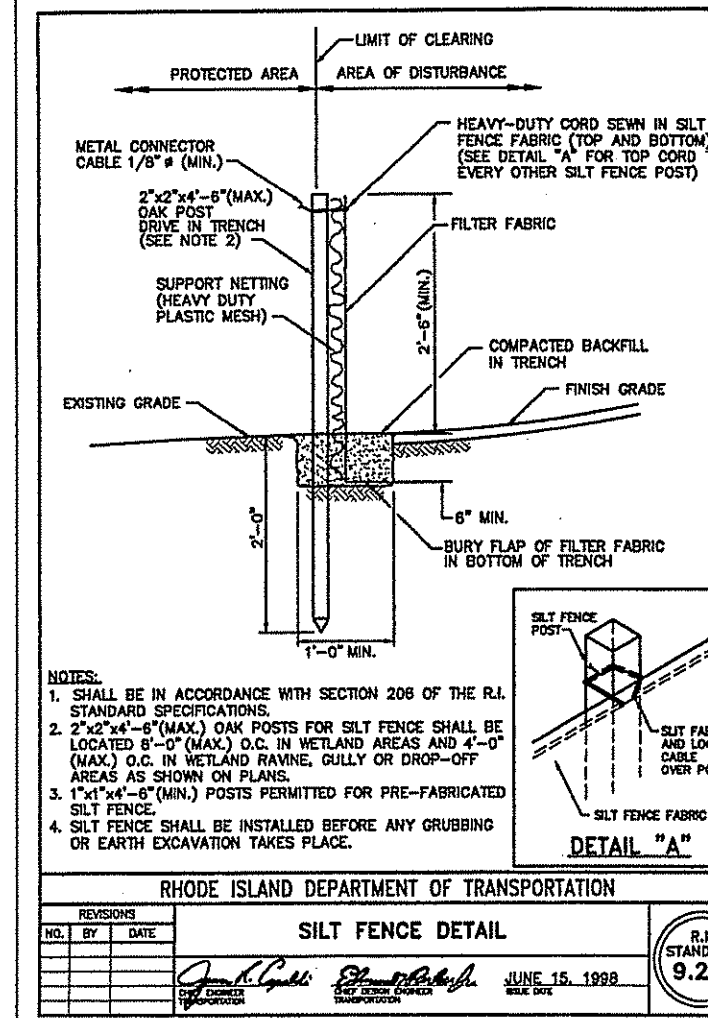
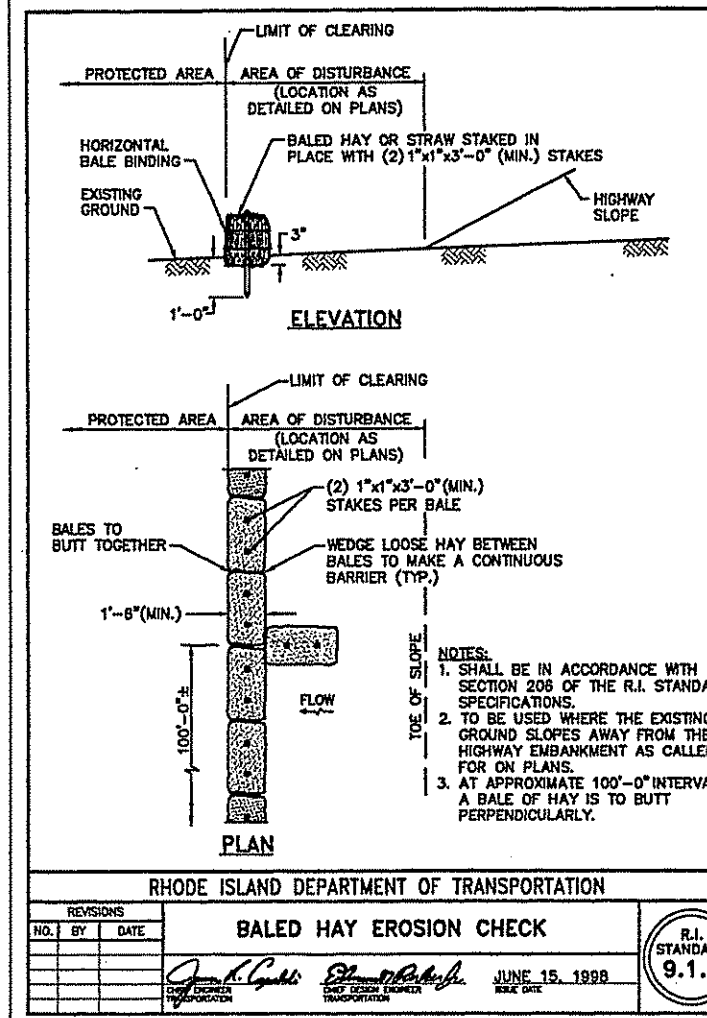
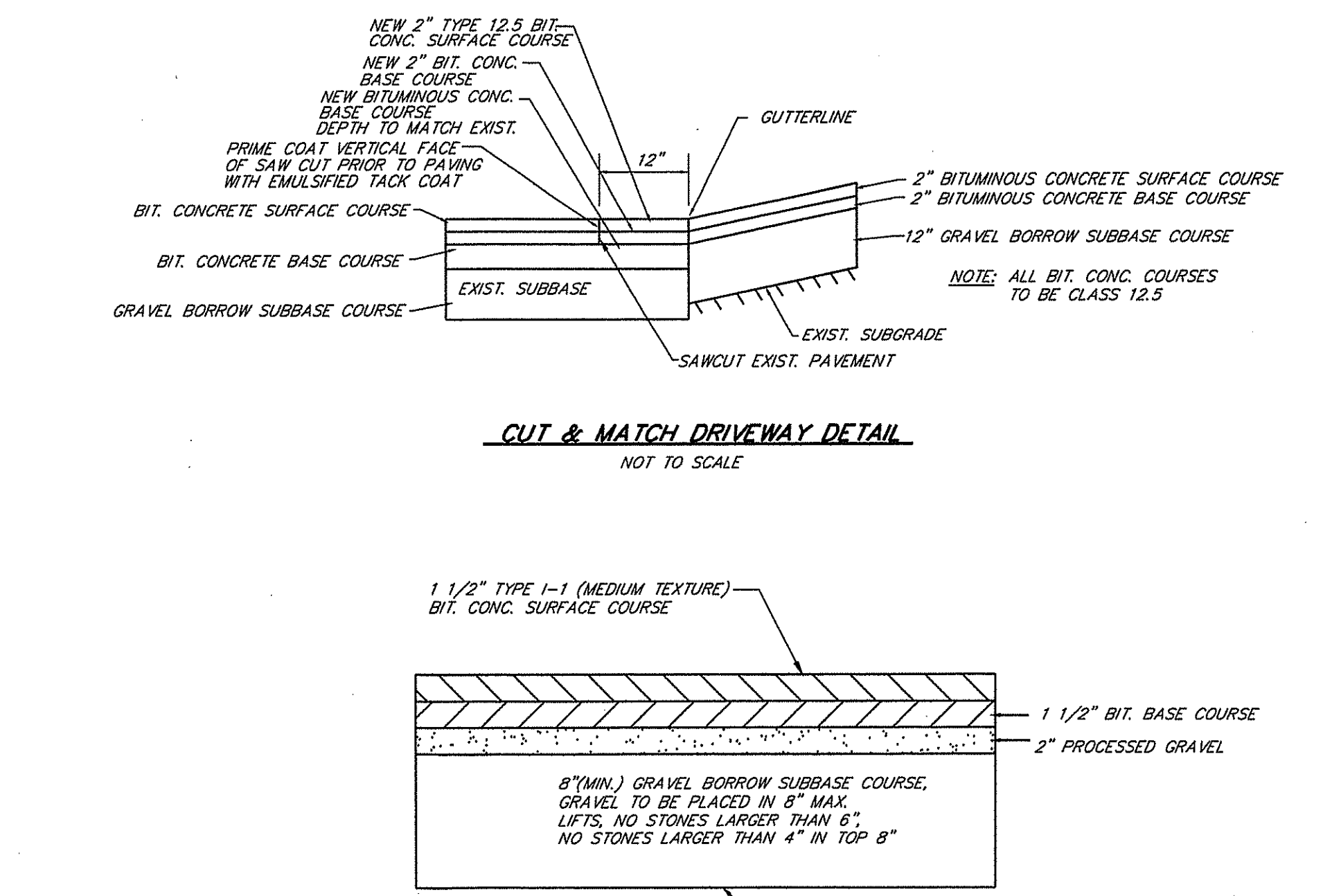
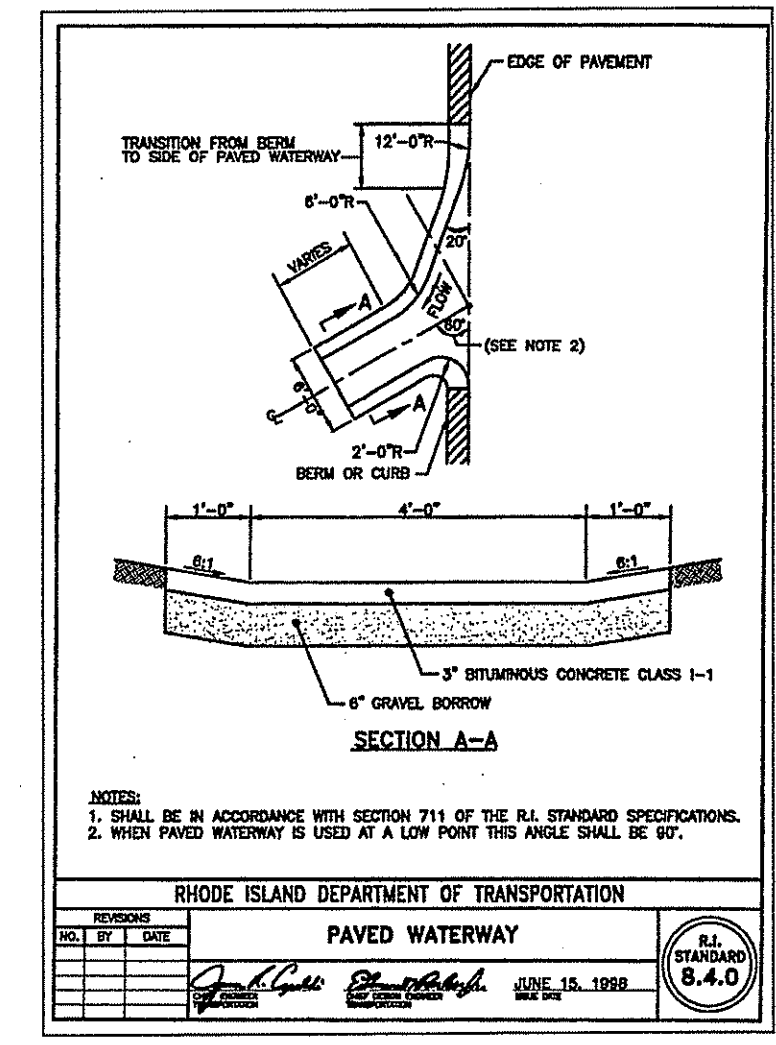
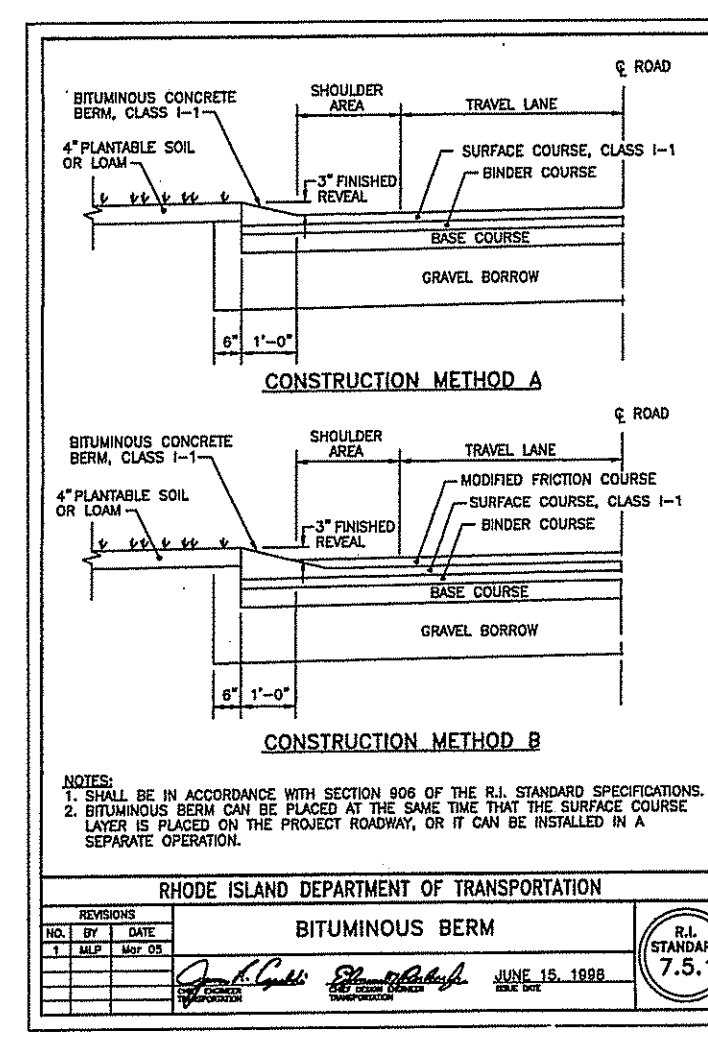
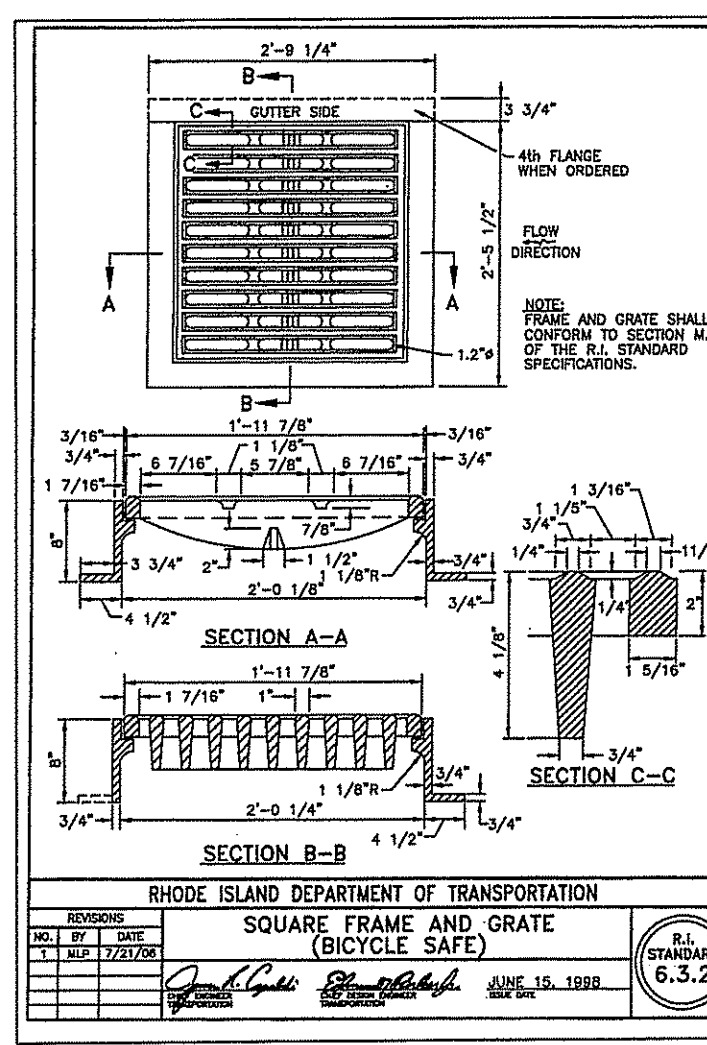
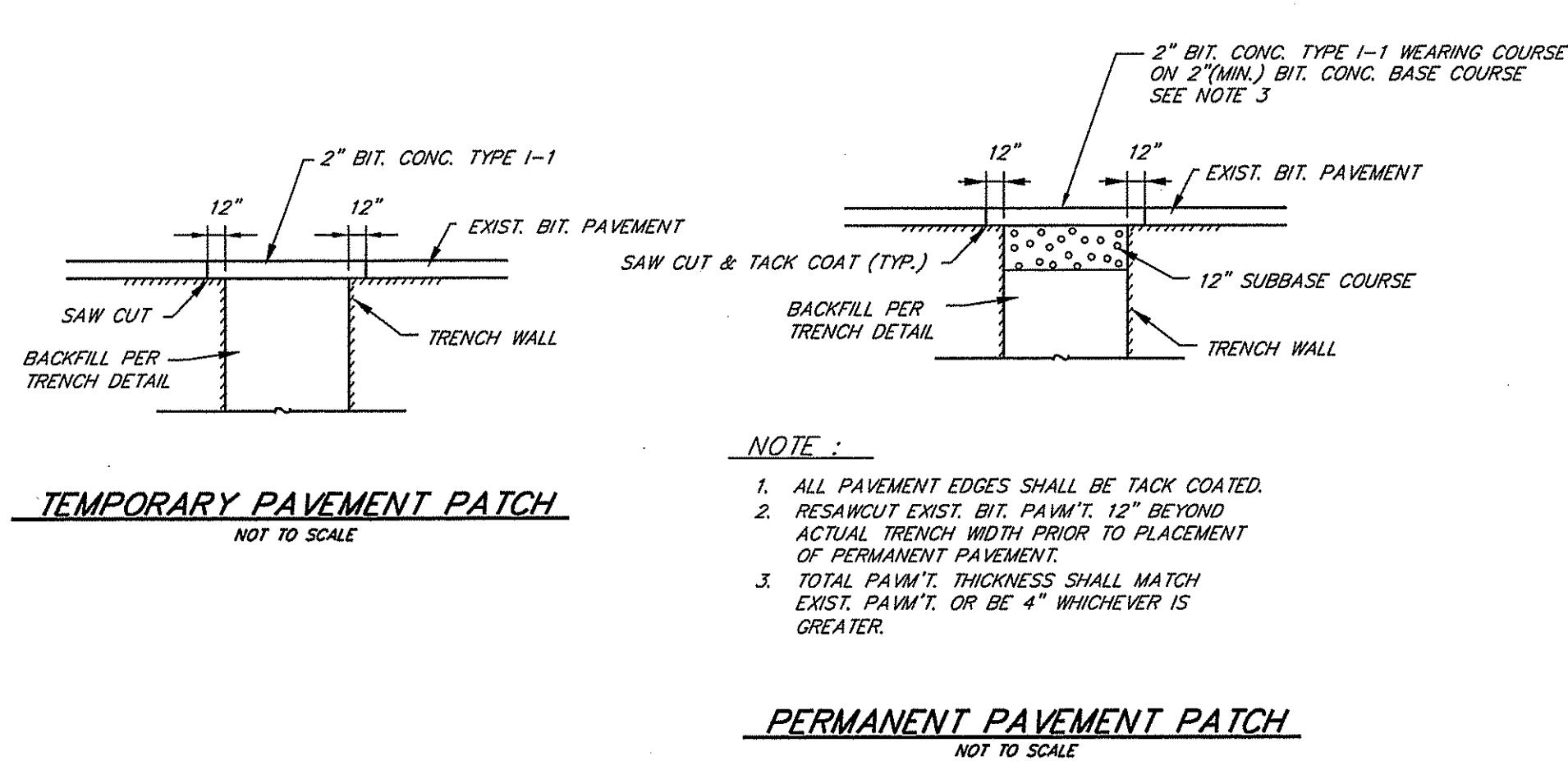
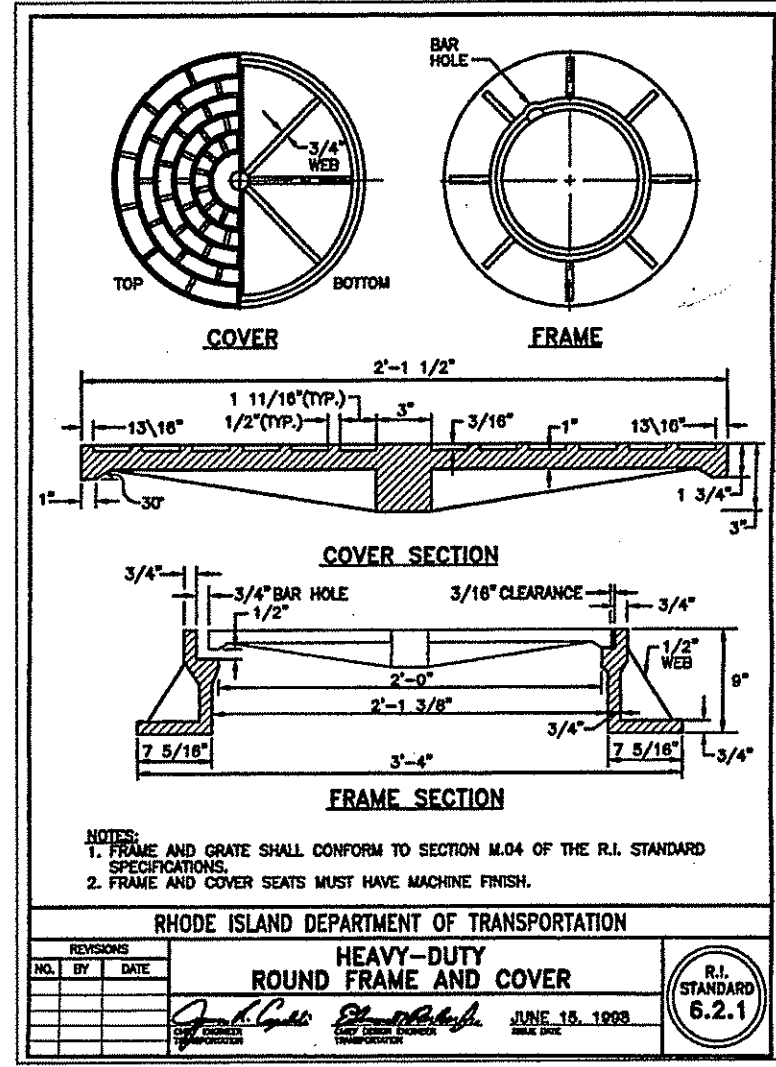
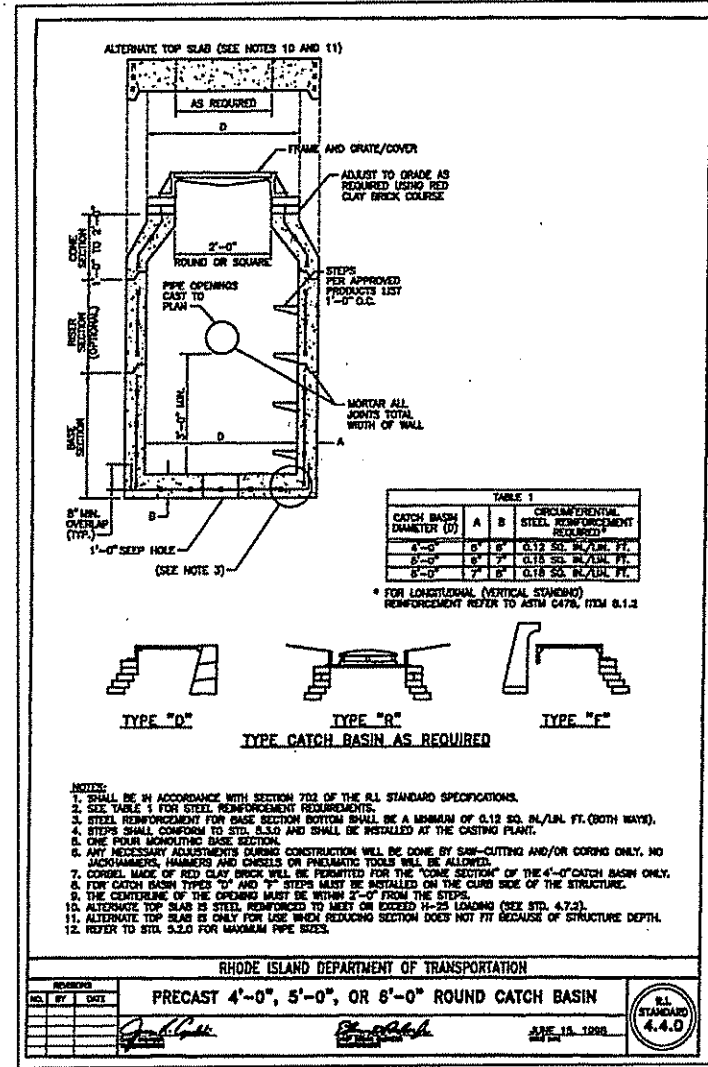
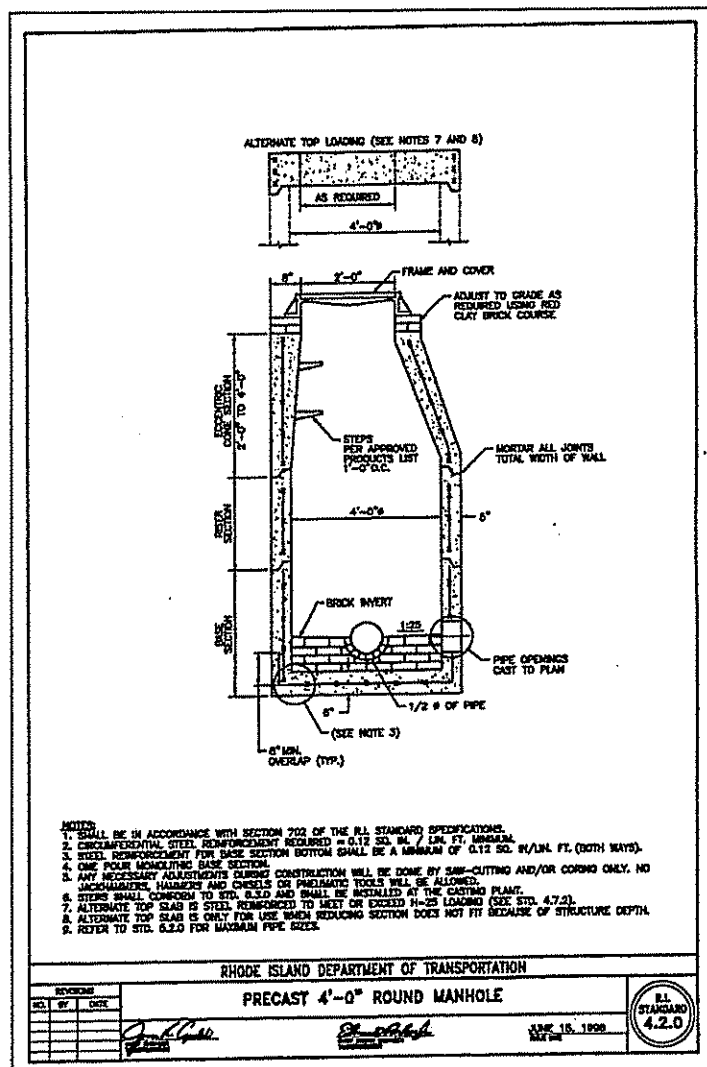


DATE	REVISION
11-12-13	FWW COMMENTS



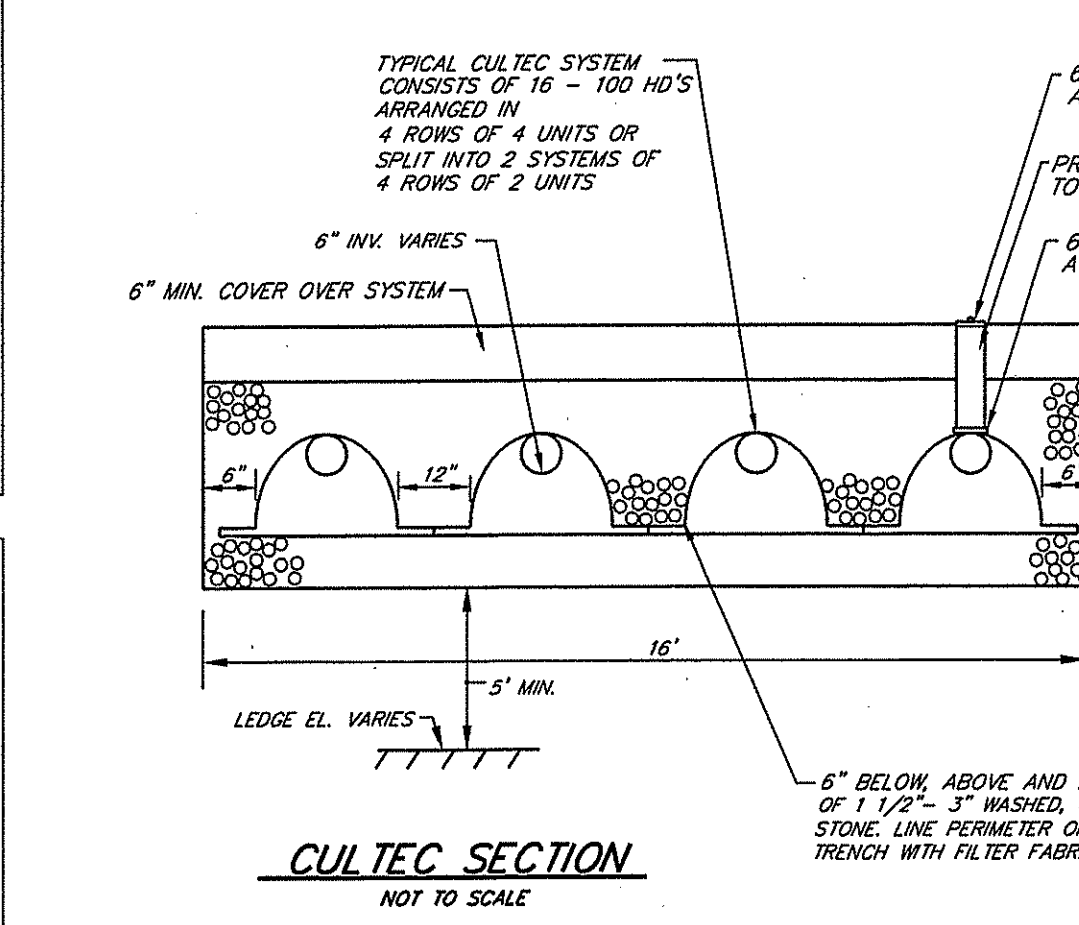
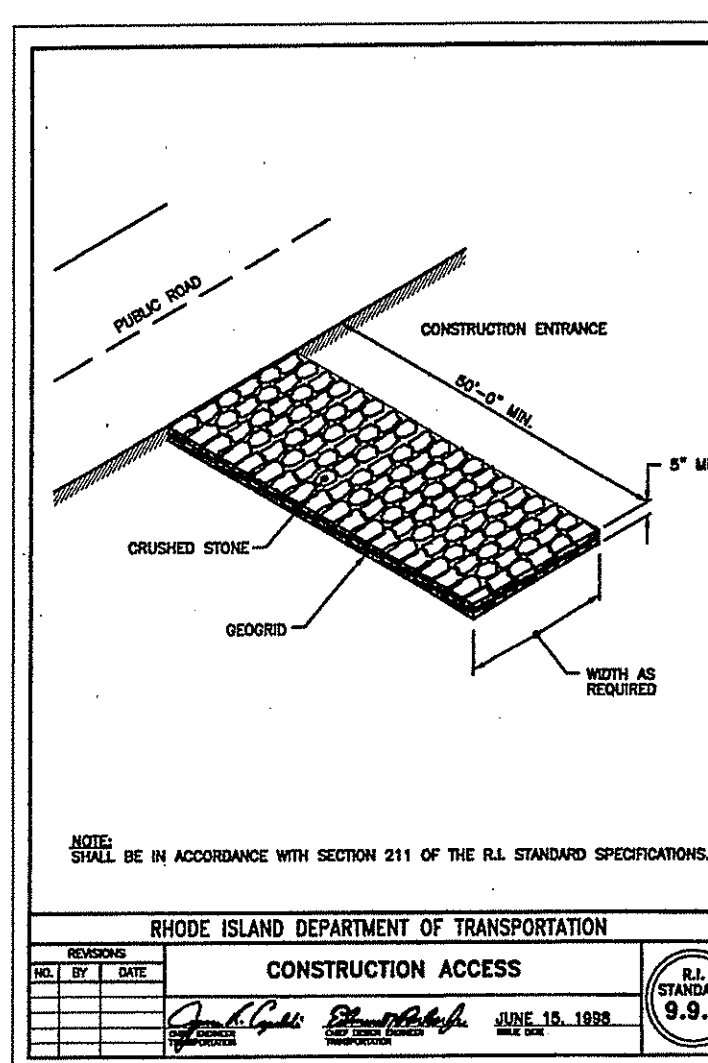
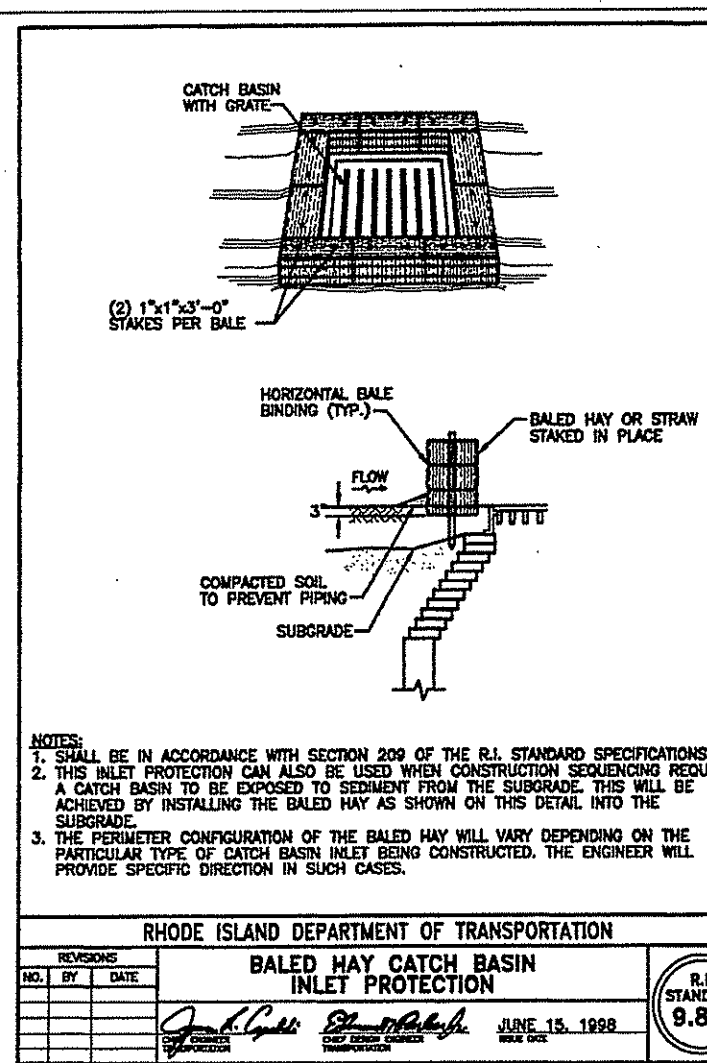
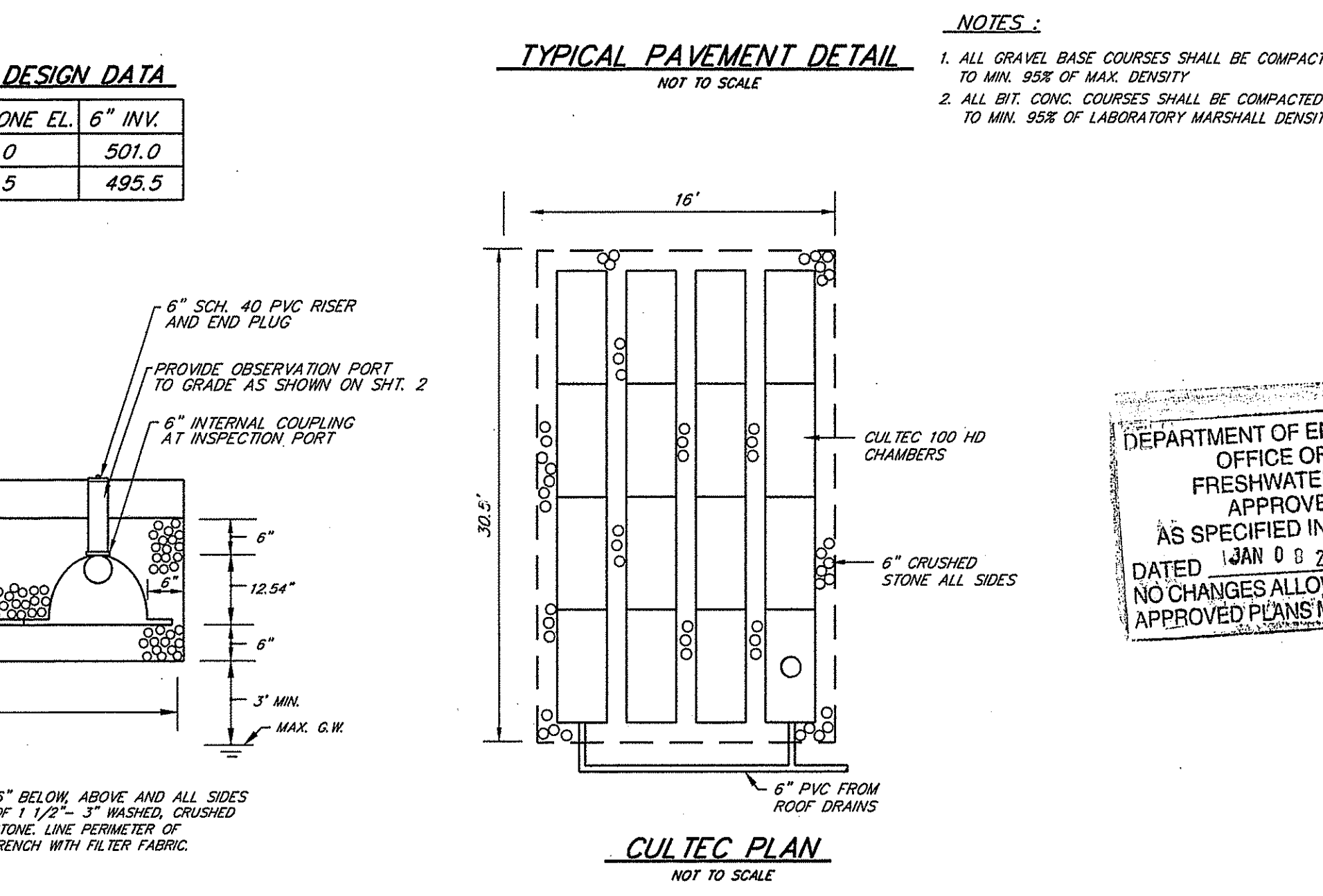
S.F.M. ENGINEERING ASSOCIATES
410 TIOGUE AVENUE
COVENTRY, R.I. 02816
(401)826-3736
SCOTT@SFM.NECCOMAIL.COM

PRELIMINARY PLAN
HEATHER LANE ESTATES
ASSESSOR'S PLAT 49 LOTS 36 & 225
HEATHER LANE
SCITUATE, RHODE ISLAND
DRAINAGE NOTES & DETAILS
DATE: JUNE 10, 2013 SCALE: AS NOTED SHEET 4 OF 5



ROOF INFIL. SYSTEM DESIGN DATA

LOT #	GW EL.	BOT. STONE EL.	6" INV.
4	496.0	500.0	501.0
5	490.5	494.5	495.5



CULTEC NOTES:

- ROOF INFILTRATION SYSTEM AREA SHALL BE PROTECTED PRIOR TO COMMENCEMENT OF CONSTRUCTION TO PREVENT COMPACTION OF BOTTOM AREA.
- CULTEC SYSTEM LOCATIONS AND ELEVATIONS MUST BE SET AND VERIFIED BY THE PROJECT ENGINEER PRIOR TO INSTALLATION.
- CULTEC SYSTEM INSTALLATION MUST BE INSPECTED BY THE PROJECT ENGINEER.
- CULTEC SYSTEMS MAY BE SPLIT INTO TWO SYSTEMS EACH RECEIVING HALF OF THE ROOF AREA.
- INFILTRATION SYSTEM CHAMBERS SHALL BE CULTEC RECHARGERS 100 HD UNITS WITH 6" OF STONE BELOW ABOVE AND ON ALL SIDES.
- STONE AROUND INFILTRATORS SHALL BE 1 1/2" TO 3" WASHED, CRUSHED STONE.
- FILTER FABRIC LINER SHALL BE MIRAFL 100-N 4 OR AMOCO 4532 OR EQUAL.
- ROOF DRAINS SHALL BE 6" PVC OR ADS AT 5'-0" (MIN).

CULTEC MAINTENANCE NOTES:

- THE CULTEC CHAMBERS SHALL BE PERIODICALLY INSPECTED AND MAINTAINED DURING CONSTRUCTION AND A MINIMUM OF TWICE PER YEAR UPON COMPLETION OF CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSPECTION AND MAINTENANCE OF ALL DRAINAGE FACILITIES, AS PER THEIR RESPECTIVE PROGRAMS, UNTIL FINAL ACCEPTANCE BY THE OWNER.
- UPON FINAL ACCEPTANCE, THE LOT OWNER SHALL BE RESPONSIBLE FOR ALL DRAINAGE INSPECTION AND MAINTENANCE.
- ANY UNWARRANTED OR DELIBERATE DISCHARGE OF WASTE OIL OR ANY OTHER POLLUTANT TO THE STORMWATER DISPOSAL SYSTEM REQUIRES IMMEDIATE NOTIFICATION OF THE RIDEM-UC PROGRAM.
- ANY INCIDENT OF GROUNDWATER CONTAMINATION RESULTING FROM THE IMPROPER DISCHARGE OF CONTAMINANTS TO THE DISPOSAL SYSTEM SHALL BE THE RESPONSIBILITY OF THE PROPERTY OWNER. THE RIDEM WILL REQUIRE THE PROPERTY OWNER TO REMEDIATE ANY INCIDENTS THAT MAY ADVERSELY IMPACT THE QUALITY OF THE GROUNDWATER.

GENERAL NOTES:

- ALL WORK PERFORMED HEREIN SHALL BE GOVERNED BY THE R.I. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (REVISION OF 12-2010) WITH ALL CORRECTIONS AND ADDENDA AND THE 12-1-2010 R.I. STANDARD DETAILS WITH ALL CORRECTIONS AND ADDENDA.
- 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.

EROSION CONTROL & SOIL STABILIZATION PROGRAM:

- UNDISTURBED 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 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:

A. MOWED AREA (ALL FLATS OR SLOPES LESS THAN 3:1)

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

B. UNMOWED AREA OR INFREQUENTLY MOWED (FLAT OR SLOPES GREATER THAN 3:1)

MIXTURE	% BY WT.	SEEDING DATES
RED FESCUE	70	APRIL 1-JUNE 15
COLONIAL BENTGRASS	5	APRIL 1-JUNE 15
PERENNIAL RYEGRASS	10	AUG. 15-OCT. 15
BIRDSEED TREFOIL	15	
TOTAL	100 LBS/AC	

C. CONSERVATION SEEDING AREAS

MIXTURE	% BY WT.	SEEDING DATES
TALL FESCUE	32	APRIL 1-JUNE 15
RED FESCUE	24	AUG. 15-OCT. 15
PERENNIAL RYEGRASS	15	
WILDFLOWER MIX	15	
RED CANARY GRASS	7	
RETOP	4	
TOTAL	200 LBS/AC	

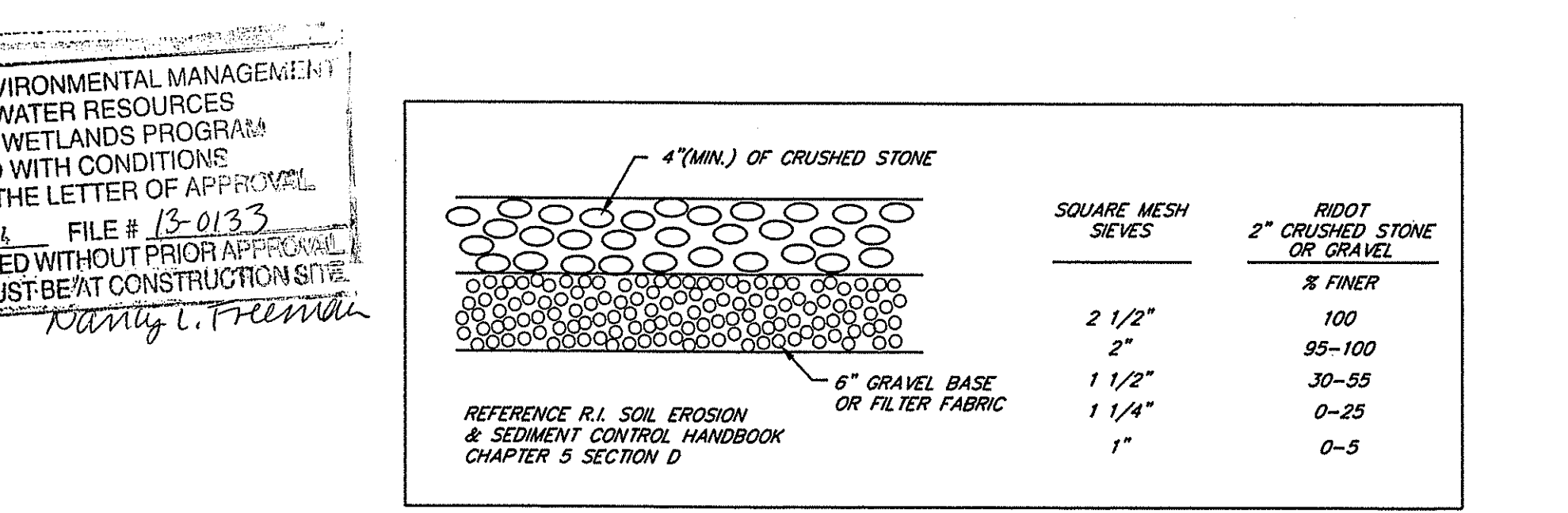
SEEDING DATES: DEC 13 2013

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 FAVORABLE APPROVAL FOR FINAL ACCEPTANCE FROM THE ENGINEER.

CATCH BASIN SEDIMENTATION BASIN:

- AT NO TIME DURING CONSTRUCTION SHALL THE SUBGRADE OF THE NEW PAVEMENT BE SUCH THAT SURFACE RUNOFF WILL BE PERMITTED TO DIRECTLY ENTER ANY DRAINAGE STRUCTURE. A TEMPORARILY DEPRESSED AREA AROUND THE STRUCTURE SHALL BE INCORPORATED AS A SEDIMENTATION TRAP. THE MOUTH OF THE TRAP SHALL BE LINED WITH HAYBALES AROUND THE COMPLETE PERIMETER, SIMILAR TO R.I. STD. DETAIL 9.8.0. DURING ALL PRELIMINARY STAGES THE TOP OF THE STRUCTURE SHALL ALWAYS BE HIGHER THAN THE SUBGRADE.
- HAYBALE EROSION CHECK SHALL BE MAINTAINED AROUND ALL CATCH BASINS UNTIL ALL UPGRADED DISTURBED AREAS ARE STABILIZED BY PAVEMENT OR VEGETATION.



DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
 APPROVED WITH CONDITIONS
 AS SPECIFIED IN THE LETTER OF APPROVAL
 DATED JAN 0 0 2014 FILE # 13-0133
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE
 KATHY T. FREEMAN

DATE	REVISION
11-12-13	FWM COMMENTS

SCOTT F. MOOREHEAD
 No. 1285
 REGISTERED PROFESSIONAL ENGINEER

DWN. BY: LBC DWG. NO. SFM777ER
 S.F.M. ENGINEERING ASSOCIATES
 410 TIGUE AVENUE
 COVENTRY, R.I. 02816
 (401)826-3736
 SCOTT@SFM.NECOXMAL.COM

PRELIMINARY PLAN
HEATHER LANE ESTATES
 ASSESSOR'S PLAT 49 LOTS 36 & 225
 HEATHER LANE
 SCITUATE, RHODE ISLAND

EROSION CONTROL NOTES & DETAILS

DATE: JUNE 10, 2013 SCALE: AS NOTED SHEET 5 OF 5