

**SOILS NOTES:**

JULY 10, 2012  
BY CAROLYN J. DOYLE, P.E. #4072

**TH #1 (ELEV. 35.9) OWTS DESIGN**  
0' - 8" Ap, 10YR 3/4 VFSL, SGR, LOOSE  
8" - 14" Bw, 2.5Y 3/4 VFSL, SGR, LOOSE  
14" - 120" C, 2.5Y 3/4 CBVFSL, O-M, FRIABLE  
DEPTH TO ESTIMATED GROUNDWATER = 120"  
GROUNDWATER ELEVATION = 25.9

**TH #2 (ELEV. 37.0) OWTS DESIGN**  
0' - 6" Ap, 10YR 3/4 VFSL, SGR, LOOSE  
6" - 22" Bw, 2.5Y 3/4 VFSL, SGR, LOOSE  
22" - 33" C1, 2.5Y 3/4 VFSL, O-M, FRIABLE  
33" - 120" C2, 2.5Y 3/4 CBLSL, O-M, FRIABLE  
DEPTH TO ESTIMATED GROUNDWATER = 120"  
GROUNDWATER ELEVATION = 27.0

**TH #3 (ELEV. 38.0)**  
0' - 5" Ap, 10YR 3/4 SL, SGR, LOOSE  
5" - 12" Bw, 10YR 3/4 SL, SGR, LOOSE  
12" - 18" C1, 10YR 3/4 CBLSL, O-M, FRIABLE  
18" - 75" C2, 2.5Y 3/4 CBCOS, O-M, LOOSE  
75" - 80" C3, 2.5Y 3/4 CBLSL, O-M, FRIABLE  
80" - 124" C4, 2.5Y 3/4 CBCOS, O-M, LOOSE  
124" - 168" C5, 2.5Y 3/4 CBLSL, O-M, FIRM  
DEPTH TO ESTIMATED GROUNDWATER = 168"  
GROUNDWATER ELEVATION = 24.0

**TH #4 (ELEV. 33.5)**  
0' - 12" Ap, 10YR 3/4 SL, SGR, LOOSE  
12" - 21" Bw1, 10YR 3/4 SL, SGR, LOOSE  
21" - 28" Bw2, 10YR 3/4 SL, O-M, FRIABLE  
28" - 48" C1, 2.5Y 3/4 SL, O-M, FRIABLE  
48" - 138" C2, 2.5Y 3/4 CBLSL, O-M, LOOSE  
DEPTH TO ESTIMATED GROUNDWATER = 138"  
GROUNDWATER ELEVATION = 22.0

**TH #5 (ELEV. 38.5)**  
0' - 6" Ap, 10YR 3/4 SL, SGR, LOOSE  
6" - 17" Bw1, 10YR 3/4 SL, SGR, LOOSE  
17" - 28" C1, 10YR 3/4 GRCOS, O-M, LOOSE  
28" - 168" C2, 2.5Y 3/4 GRSL, O-M, FRIABLE  
DEPTH TO ESTIMATED GROUNDWATER = 168"  
GROUNDWATER ELEVATION = 24.5

**TH #6 (ELEV. 37.7)**  
0' - 10" Ap, 10YR 3/4 SL, SGR, LOOSE  
10" - 21" Bw, 10YR 3/4 SL, SGR, LOOSE  
21" - 32" C1, 2.5Y 3/4 GRSL, O-M, FRIABLE  
32" - 156" C2, 2.5Y 3/4 GRSL, O-M, FRIABLE  
DEPTH TO ESTIMATED GROUNDWATER = 156"  
GROUNDWATER ELEVATION = 24.7

**UTILITIES:**  
THE LOCATION OF EXISTING UTILITIES SHOWN ON THIS PLAN ARE APPROXIMATE ONLY AND HAVE BEEN SHOWN USING THE BEST AVAILABLE DATA. THE CONTRACTOR SHALL CONTACT 'DIG-SAFE' AND/OR OTHER APPROPRIATE UTILITY COMPANIES TO ASCERTAIN THE EXACT LOCATION OF THE RESPECTIVE UTILITY PRIOR TO CONSTRUCTION. UTILITIES INCLUDE BUT ARE NOT LIMITED TO GAS, ELECTRIC, WATER, TELEPHONE, CABLE TV, ETC.

- NOTES:**
- EXISTING CONTOURS GENERATED FROM ONSITE SURVEYS PERFORMED BY FRISELLA ENGINEERING IN APRIL 2011.
  - EXISTING WETLAND EDGE SHOWN BASED ON ONSITE SURVEYS PERFORMED BY FRISELLA ENGINEERING IN 2011. REFERENCE EDGE VERIFICATION PERMIT 11-0069.
  - EXISTING ROADWAY PAVEMENTS SCALED PARTIALLY FROM 1963 SOUTH KINGSTOWN PHOTOGRAMMETRIC PLANS AND PARTIALLY FROM 2008 COLOR AERIAL ORTHOPHOTOS AND PARTIALLY FROM ONSITE SURVEYS IN APRIL 2011.
  - EXISTING MEDICAL BUILDING AND PARKING TAKEN FROM ONSITE SURVEYS PERFORMED BY FRISELLA ENGINEERING IN 1990.
  - SILVER LAKE TAKEN PARTIALLY FROM THE SOUTH KINGSTOWN GIS PARCEL LAYERS AND PARTIALLY FROM THE 2008 COLOR AERIAL ORTHOPHOTOS.
  - HYDROLOGIC SOIL BOUNDARIES TAKEN FROM NATURAL RESOURCES CONSERVATION SERVICE DATA.
  - STATE HIGHWAY PLATS 538, SHEET 7 OF 10 AND STATE HIGHWAY PLAT 543.

**APPLICANT:**

DLS FAMILY LTD PARTNERSHIP  
C/O VINCENT SIRAVO  
68 SOUTH ROAD  
WAKEFIELD, RI 02879  
401-789-0871

**PERMITS REQUIRED:**

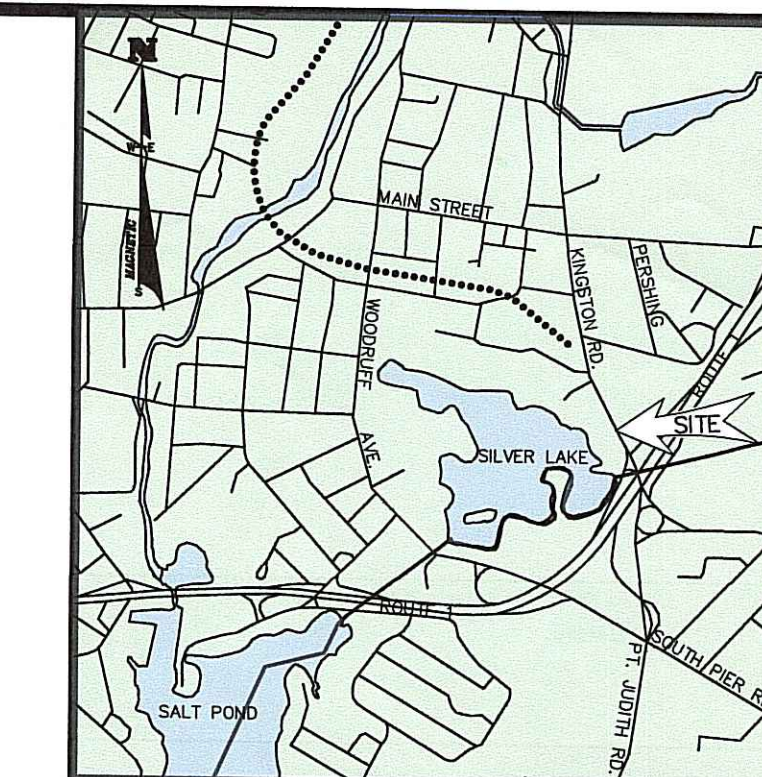
- RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT (RIDEM) FRESHWATER WETLANDS PERMIT.
- RIDEM OWTS PERMIT.
- RHODE ISLAND DEPARTMENT OF TRANSPORTATION (RIDOT) PHYSICAL ALTERATION PERMIT (PAP).
- SPECIAL USE PERMIT FROM THE TOWN OF SOUTH KINGSTOWN.

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
APPROVED WITH CONDITIONS  
AS SPECIFIED IN THE LETTER OF APPROVAL  
DATED NOV 1 2012 FILE # 12-0152  
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

*Matthew D. Wronski*

THIS SURVEY SUBSTANTIALLY CONFORMS TO A CLASS III STANDARD AS ADOPTED BY THE RHODE ISLAND BOARD OF REGISTRATION FOR PROFESSIONAL LAND SURVEYORS.

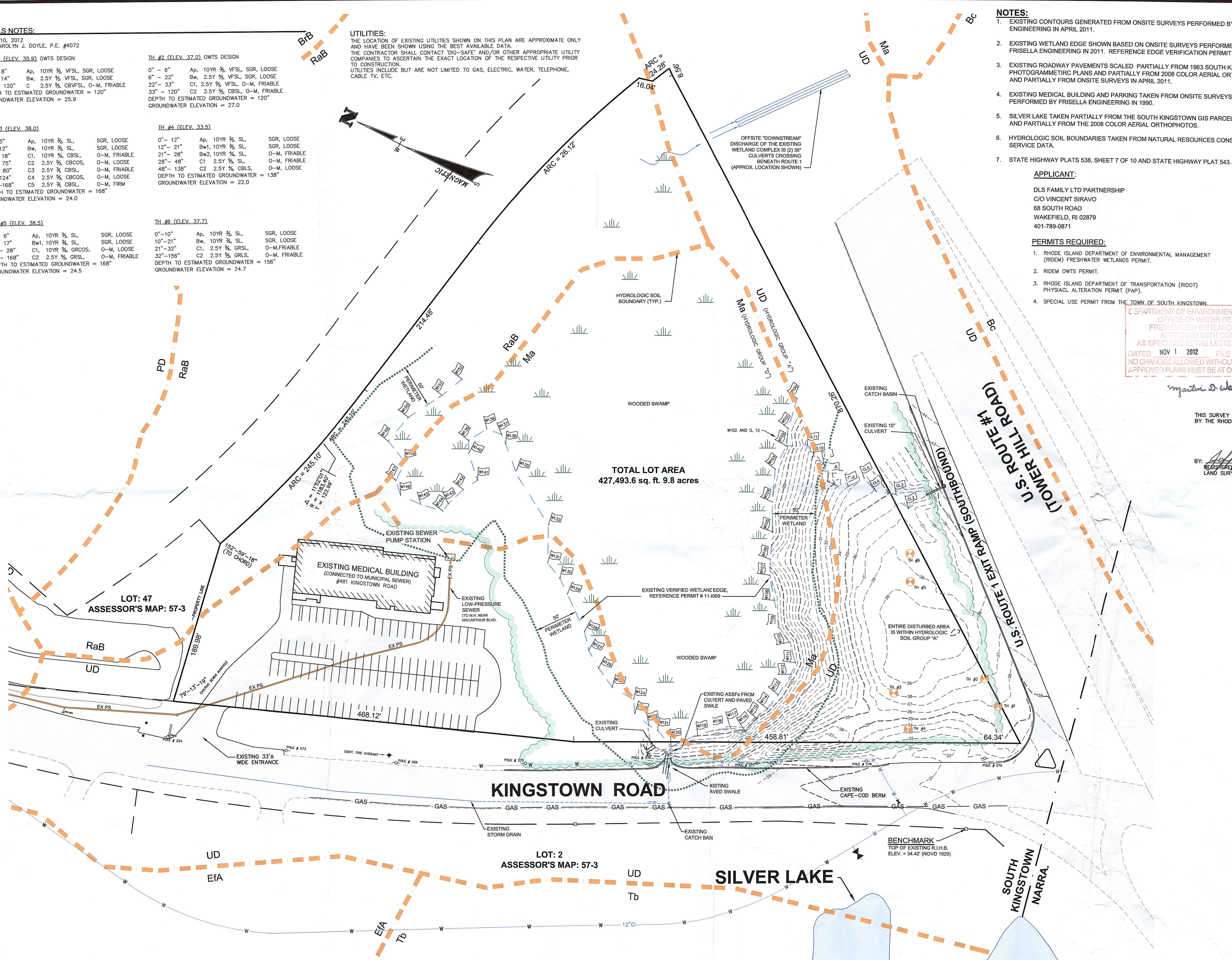
BY: *Carolyn J. Doyle* REGISTERED PROFESSIONAL LAND SURVEYOR DATE: 9/4/2012



**LOCATION PLAN**  
SCALE: 1" = 2000'

**LEGEND**

- PROPERTY LINE
- UTILITY POLE
- PROPOSED CONTOUR
- PROPOSED SPOT GRADE
- EXISTING CONTOUR
- SILT FENCE/LIMIT OF DISTURBANCE
- EXISTING WATER LINE
- EXISTING TEST HOLE WITH PIPE
- EXISTING EDGE OF BRUSH



TOTAL LOT AREA  
427,493.6 sq. ft. 9.8 acres

<p><b>FRISELLA-BALCH &amp; ASSOCIATES</b> LAND SURVEYING 33 NORTH ROAD, SUITE C-201, PEACE DALE, RI PHONE (401) 783-5949 FAX (401) 783-5997 www.frisella.com</p>	<p><b>CJ DOYLE, P.E.</b> CIVIL ENGINEERING MAILING ADDRESS P.O. BOX 1161, HOPE VALLEY, RI OFFICE LOCATION 33 NORTH ROAD, SUITE C-201A, PEACE DALE, RI PHONE (401) 284-2909 FAX (401) 783-5997 cjengine@cox.net</p>
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NO.	DATE	DESCRIPTION	BY

DRAWING TITLE:  
**PLAN OF EXISTING SITE CONDITIONS**

LOCATED ON:  
SOUTHERLY PORTION OF LOT 3, ASSESSOR'S MAP 57-3

OWNED BY:  
DLS FAMILY LTD. PARTNERSHIP

ADDRESS:  
KINGSTOWN ROAD  
IN THE TOWN OF SOUTH KINGSTOWN, RI

DATE: AUGUST 2012  
SCALE: 1" = 50'

DESIGNED BY: CAROLYN J. DOYLE, P.E.  
DRAWN BY: JK CHECKED BY: CJD & JKB

DRAWING NO. SHEET 1 OF 7

<p>JEFFREY K. BALCH No. 1839 PROFESSIONAL LAND SURVEYOR</p>	<p>CAROLYN J. DOYLE No. 5078 REGISTERED PROFESSIONAL ENGINEER</p>
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FOR SURVEYS ONLY FOR ENGINEERING

PIPE SCHEDULE:

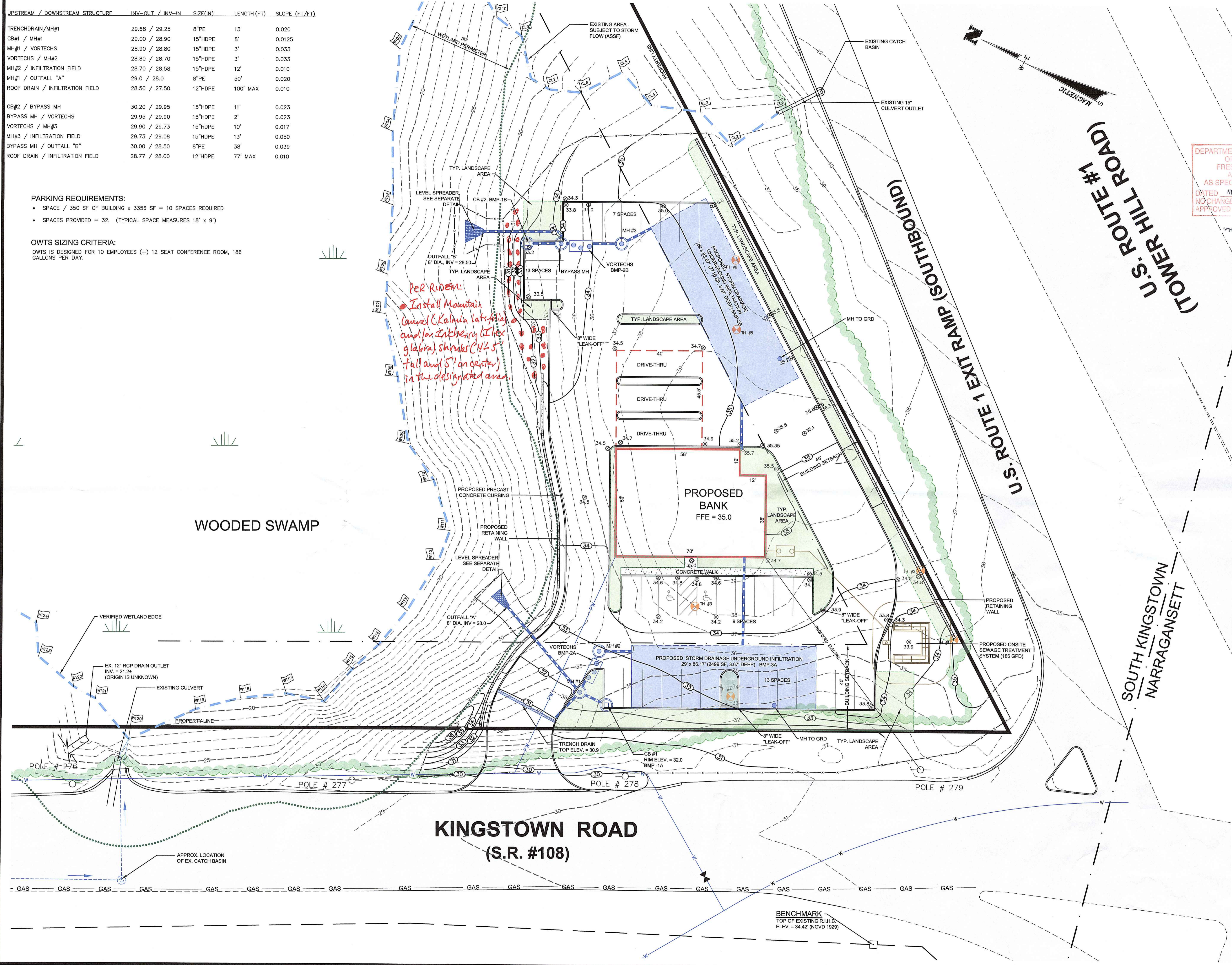
UPSTREAM / DOWNSTREAM STRUCTURE	INV-OUT / INV-IN	SIZE(N)	LENGTH(FT)	SLOPE (FT/FT)
TRENCH DRAIN / MH#1	29.68 / 29.25	8"PE	13'	0.020
CB#1 / MH#1	29.00 / 28.90	15"HDPE	8'	0.0125
MH#1 / VORTECHS	28.90 / 28.80	15"HDPE	3'	0.033
VORTECHS / MH#2	28.80 / 28.70	15"HDPE	3'	0.033
MH#2 / INFILTRATION FIELD	28.70 / 28.58	15"HDPE	12'	0.010
MH#1 / OUTFALL "A"	29.0 / 28.0	8"PE	50'	0.020
ROOF DRAIN / INFILTRATION FIELD	28.50 / 27.50	12"HDPE	100' MAX	0.010
CB#2 / BYPASS MH	30.20 / 29.95	15"HDPE	11'	0.023
BYPASS MH / VORTECHS	29.95 / 29.90	15"HDPE	2'	0.023
VORTECHS / MH#3	29.90 / 29.73	15"HDPE	10'	0.017
MH#3 / INFILTRATION FIELD	29.73 / 29.08	15"HDPE	13'	0.050
BYPASS MH / OUTFALL "B"	30.00 / 28.50	8"PE	38'	0.039
ROOF DRAIN / INFILTRATION FIELD	28.77 / 28.00	12"HDPE	77' MAX	0.010

PARKING REQUIREMENTS:

- SPACE / 350 SF OF BUILDING x 3356 SF = 10 SPACES REQUIRED
- SPACES PROVIDED = 32. (TYPICAL SPACE MEASURES 18' x 9')

OWTS SIZING CRITERIA:

OWTS IS DESIGNED FOR 10 EMPLOYEES (+) 12 SEAT CONFERENCE ROOM, 186 GALLONS PER DAY.



*PER RIDENI:  
Install Mountain Laurel (L. latifolia) and/or Zucchini (L. hex glabra) shrubs (4' x 5' tall and 5' on center) in the designated area.*

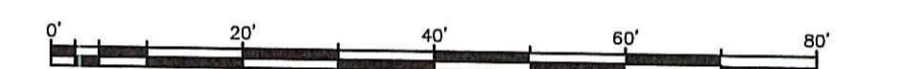
**STORMWATER NOTES:**  
 BMP #1: DEEP SUMP CATCH BASINS (CB#1, CB#2)  
 BMP #2: VORTECHS UNITS  
 BMP #3: INFILTRATION CHAMBERS

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 OFFICE OF WATER RESOURCES  
 FRESHWATER WETLANDS PROGRAM  
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 AS SPECIFIED IN THE LETTER OF APPROVAL  
 DATED NOV 1 2012 FILE # 12-0152  
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
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SEP - 6 2012  
 Environmental Management  
 Office of Water Resources

LEGEND

- PROPERTY LINE
- UTILITY POLE
- PROPOSED CONTOUR
- PROPOSED SPOT GRADE
- EXISTING CONTOUR
- SILT FENCE / LIMIT OF DISTURBANCE
- EXISTING WATER LINE
- EXISTING TEST HOLE WITH PIPE
- EXISTING EDGE OF BRUSH



**FRISELLA-BALCH & ASSOCIATES**  
 LAND SURVEYING  
 33 NORTH ROAD, SUITE C-201,  
 PEACE DALE, RI  
 PHONE (401) 783-5949  
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 PEACE DALE, RI  
 PHONE (401) 284-2909  
 FAX (401) 783-5997  
 cjenigne@cox.net

NO.	DATE	DESCRIPTION	BY

DRAWING TITLED:  
**PLAN OF A PROPOSED COMMERCIAL SITE DEVELOPMENT**

LOCATED ON:  
 SOUTHERLY PORTION OF LOT 3, ASSESSOR'S MAP 57-3

OWNED BY:  
 DLS FAMILY LTD. PARTNERSHIP

ADDRESS:  
 KINGSTOWN ROAD  
 IN THE TOWN OF SOUTH KINGSTOWN, RI

DATE: AUGUST 2012  
 SCALE: 1" = 20'

DESIGNED BY: CAROLYN J. DOYLE, P.E.  
 DRAWN BY: JK  
 CHECKED BY: CJD & JKB

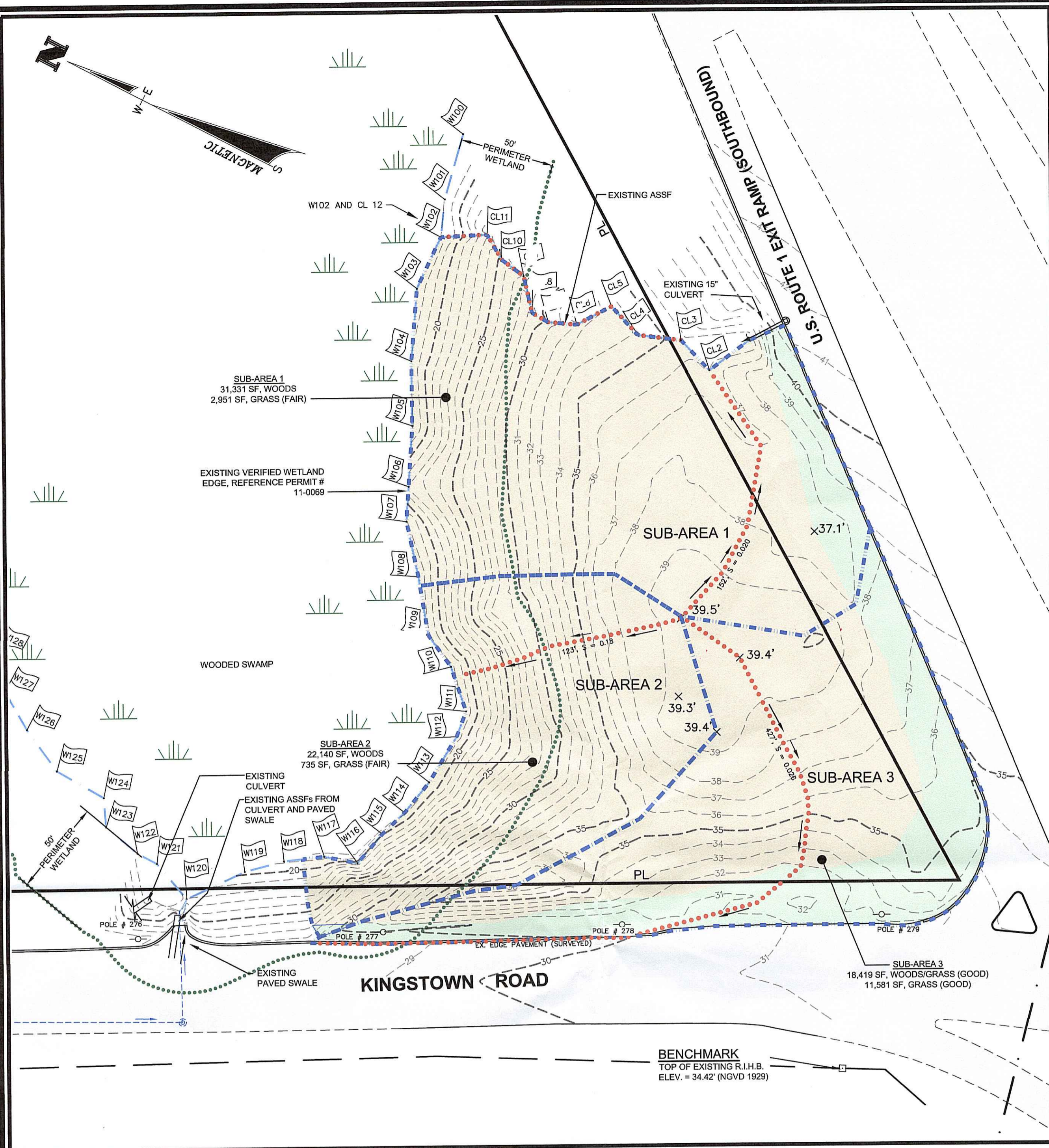
DRAWING No. SHEET 2 OF 7

JEFFREY K. BALCH  
 No. 1839  
 PROFESSIONAL LAND SURVEYOR

CAROLYN J. DOYLE  
 No. 5076  
 REGISTERED PROFESSIONAL ENGINEER

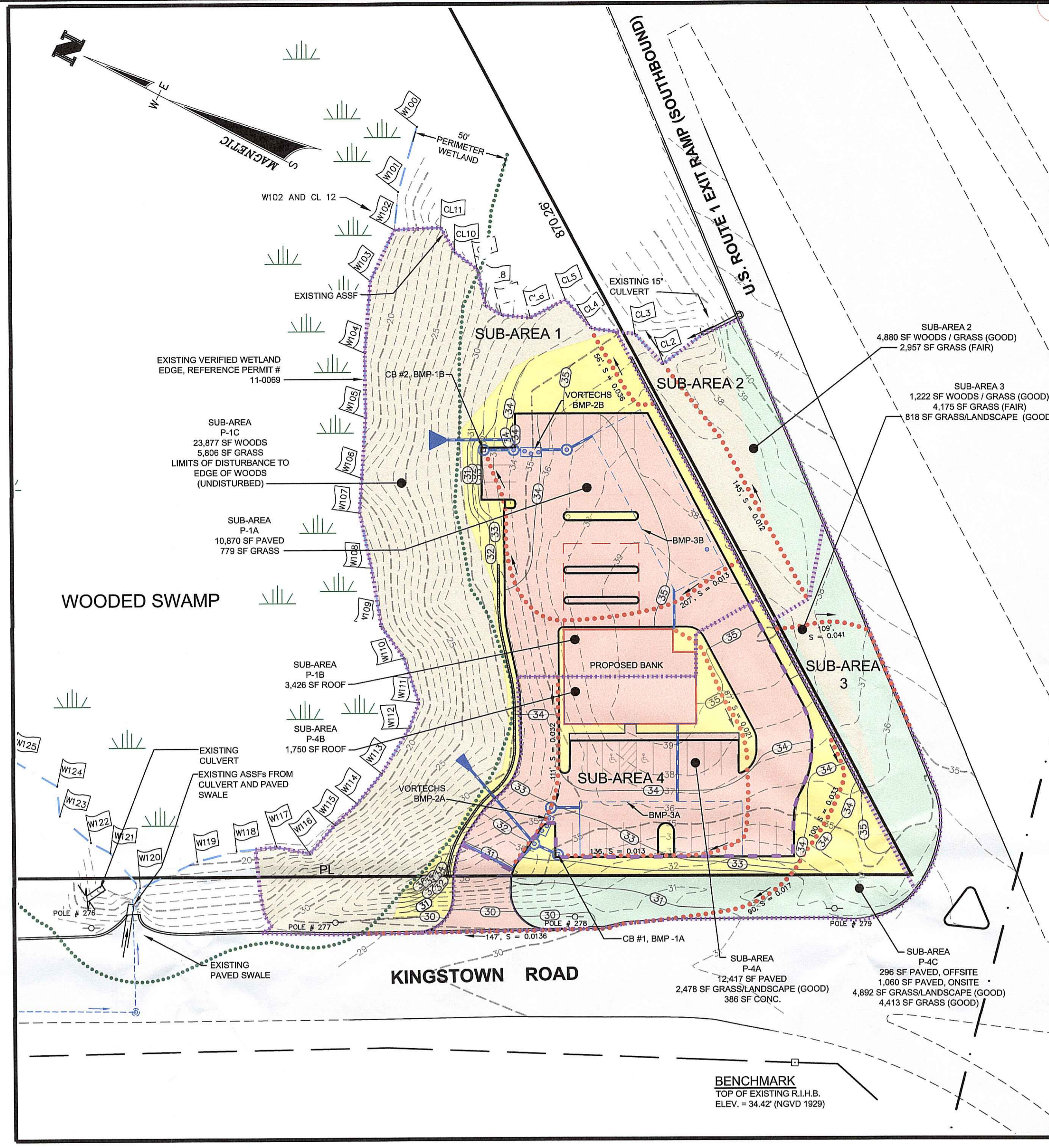
FOR SURVEYS ONLY      FOR ENGINEERING

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**EXISTING WATERSHED MAP**

INSET SCALE: 1" = 40'



**PROPOSED WATERSHED MAP**

INSET SCALE: 1" = 40'

**LEGEND**

- |  |                        |  |   |
|--|------------------------|--|---|
|  | IMPERVIOUS AREA        |  | INDEX CONTOUR                                   |
|  | GRASS AREA             |  | SURVEYED LOCATION OF WETLAND FLAG               |
|  | GRASS / LANDSCAPE AREA |  | EDGE OF EXISTING FRESHWATER WETLAND             |
|  | WOODS AREA             |  | EDGE OF EXISTING TREE/BRUSH LINE                |
|  |                        |  | EXISTING GROUND SURFACE ELEVATION               |
|  |                        |  | EXISTING R.I. HIGHWAY BOUND                     |
|  |                        |  | EXISTING WATERSHED BOUNDARY                     |
|  |                        |  | PROPOSED WATERSHED BOUNDARY                     |
|  |                        |  | RAINFALL PATH FOR LONGEST TIME OF CONCENTRATION |

**STORMWATER NOTES:**  
 BMP #1: DEEP SUMP CATCH BASINS (CB#1, CB#2)  
 BMP #2: VORTECHS UNITS  
 BMP #3: INFILTRATION CHAMBERS



DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 OFFICE OF WATER RESOURCES  
 FRESHWATER WETLANDS PROGRAM  
 APPROVED WITH CONDITIONS  
 AS SPECIFIED IN THE LETTER OF APPROVAL  
 DATED NOV 1 2012 FILE # 12-0182  
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 APPROVED PLANS MUST BE AT CONSTRUCTION SITE

*Carolyn J. Doyle*

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 cjenjine@cox.net

NO.	DATE	DESCRIPTION	BY

EXISTING & PROPOSED WATERSHED MAPS

LOCATED ON:  
 SOUTHERLY PORTION OF LOT 3, ASSESSOR'S MAP 57-3

OWNED BY:  
 DLS FAMILY LTD. PARTNERSHIP

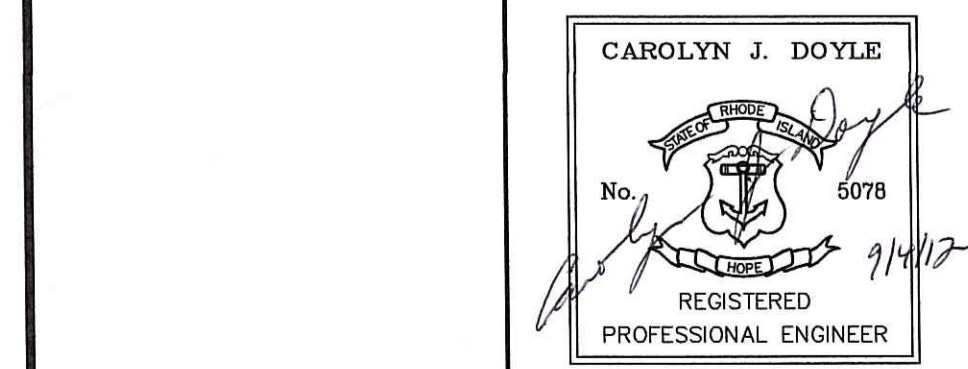
ADDRESS:  
 KINGSTOWN ROAD  
 IN THE TOWN OF SOUTH KINGSTOWN, RI

DATE: AUGUST 2012

SCALE: 1" = 40'

DESIGNED BY: CAROLYN J. DOYLE, P.E.  
 DRAWN BY: JK CHECKED BY: CJD

DRAWING No. SHEET 3 OF 7



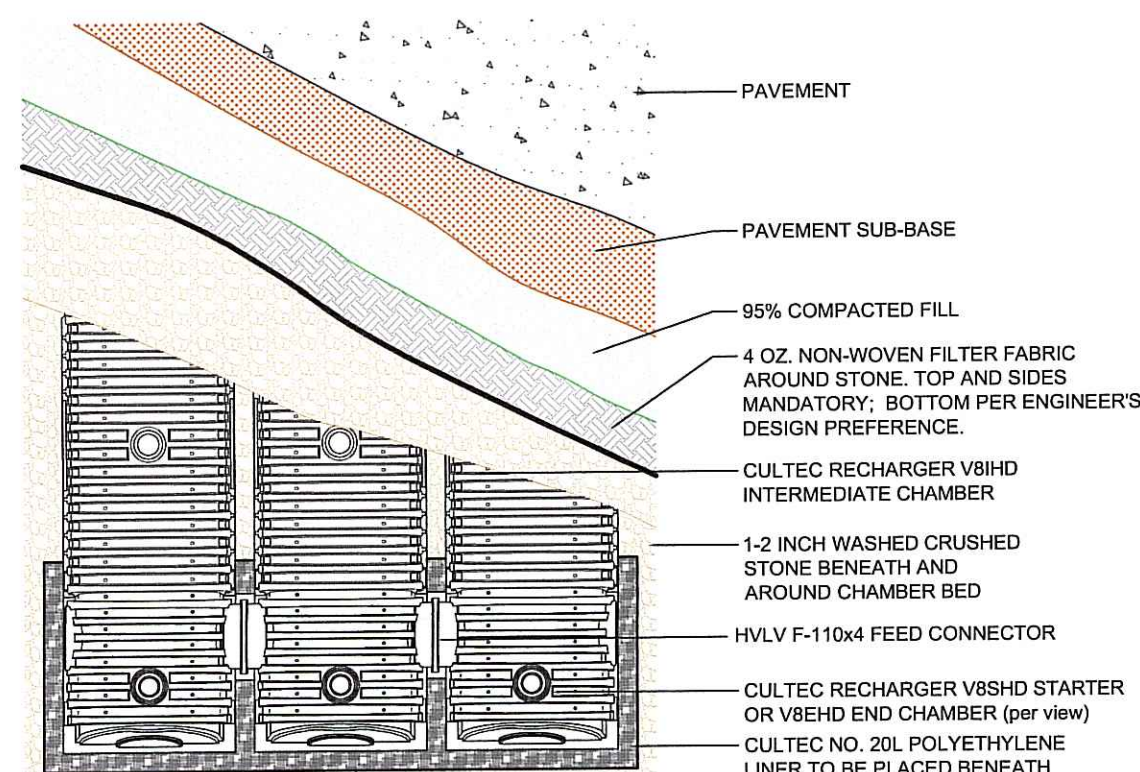
FOR SURVEYS ONLY FOR ENGINEERING

## CULTEC RECHARGER® V8HD PRODUCT SPECIFICATIONS

**GENERAL**  
CULTEC RECHARGER® V8HD CHAMBERS ARE DESIGNED FOR UNDERGROUND STORMWATER MANAGEMENT. THE CHAMBERS WILL BE USED FOR RETENTION, RECHARGING, DETENTION OR CONTROLLING THE FLOW OF ON-SITE STORMWATER RUNOFF.

### CHAMBER PARAMETERS

- THE CHAMBERS WILL BE MANUFACTURED BY CULTEC, INC. OF BROOKFIELD, CT. (203-775-4416 OR 1-800-428-5832)
- THE CHAMBER WILL BE VACUUM THERMOFORMED OF BLACK HIGH MOLECULAR WEIGHT HIGH DENSITY POLYETHYLENE (HMWHDPE).
- THE CHAMBER WILL BE ARCHED IN SHAPE.
- THE CHAMBER WILL BE OPEN-BOTTOMED.
- THE CHAMBER WILL BE JOINED USING AN INTERLOCKING OVERLAPPING RIB METHOD. CONNECTIONS MUST BE FULLY SHOULDERED OVERLAPPING RIBS, HAVING NO SEPARATE COUPLINGS OR SEPARATE END WALLS.
- THE NOMINAL CHAMBER DIMENSIONS OF THE CULTEC RECHARGER® V8HD INTERMEDIATE UNIT SHALL BE 32 INCHES (813 MM) TALL, 60 INCHES (1524 MM) WIDE AND 8 FEET (2.44 M) LONG. THE INSTALLED LENGTH OF A JOINED RECHARGER® V8HD SHALL BE 7.5 FEET (2.29 M).
- THE NOMINAL CHAMBER DIMENSIONS OF THE CULTEC RECHARGER® V8HD STARTER OR V8HD END UNIT SHALL BE 32 INCHES (813 MM) TALL, 60 INCHES (1524 MM) WIDE AND 5.08 FEET (1.55 M) LONG. THE INSTALLED LENGTH OF A JOINED RECHARGER® V8HD OR V8HD SHALL BE 4.58 FEET (1.4 M).
- THE CULTEC RECHARGER® V8HD STARTER OR V8HD END UNIT WILL HAVE TWO SIDE PORTALS TO ACCEPT CULTEC HVLV™ F-110X4 FEED CONNECTORS TO CREATE AN INTERNAL MANIFOLD. THE NOMINAL DIMENSIONS OF EACH SIDE PORTAL WILL BE 16 INCHES (406 MM) HIGH BY 21 INCHES (533 MM) WIDE. MAXIMUM ALLOWABLE PIPE SIZE IN THE SIDE PORTAL IS 12 INCHES (305 MM).
- THE CULTEC RECHARGER® V8HD INTERMEDIATE UNIT WILL HAVE TWO SIDE PORTALS TO ACCEPT CULTEC HVLV™ FC-24 FEED CONNECTORS TO CREATE AN INTERNAL MANIFOLD. THE NOMINAL DIMENSIONS OF EACH SIDE PORTAL WILL BE 10.5 INCHES (267 MM) HIGH BY 12 INCHES (305 MM) WIDE. MAXIMUM ALLOWABLE PIPE SIZE IN THE SIDE PORTAL IS 10 INCHES (254 MM).
- THE NOMINAL CHAMBER DIMENSIONS OF THE CULTEC HVLV™ FC-24 FEED CONNECTOR SHALL BE 12 INCHES (305 MM) TALL, 16 INCHES (406 MM) WIDE AND 24.2 INCHES (614 MM) LONG.
- THE NOMINAL CHAMBER DIMENSIONS OF THE CULTEC HVLV™ F-110X4 FEED CONNECTOR SHALL BE 18 INCHES (457 MM) TALL, 27.5 INCHES (699 MM) WIDE AND 39 INCHES (991 MM) LONG.
- THE NOMINAL STORAGE VOLUME OF THE RECHARGER® V8HD CHAMBER WILL BE 8.679 FT<sup>3</sup> / FT (0.806 M<sup>3</sup> / M) - WITHOUT STONE. THE NOMINAL STORAGE VOLUME OF A JOINED RECHARGER® V8HD STARTER OR V8HD END SHALL BE 39.779 FT<sup>3</sup> / UNIT (1.126 M<sup>3</sup> / UNIT) - WITHOUT STONE. THE NOMINAL STORAGE VOLUME OF A JOINED RECHARGER® V8HD INTERMEDIATE SHALL BE 65.093 FT<sup>3</sup> / UNIT (1.843 M<sup>3</sup> / UNIT) - WITHOUT STONE.
- THE NOMINAL STORAGE VOLUME OF THE HVLV™ FC-24 FEED CONNECTOR WILL BE 0.913 FT<sup>3</sup> / FT (0.085 M<sup>3</sup> / M) - WITHOUT STONE.
- THE NOMINAL STORAGE VOLUME OF THE HVLV™ F-110X4 FEED CONNECTOR WILL BE 1.968 FT<sup>3</sup> / FT (0.183 M<sup>3</sup> / M) - WITHOUT STONE.
- THE RECHARGER® V8HD CHAMBER WILL HAVE DISCHARGE HOLES BORED INTO THE SIDEWALLS OF THE UNIT'S CORE TO PROMOTE LATERAL CONVEYANCE OF WATER.
- THE ENDWALL OF THE CHAMBER, WHEN PRESENT, WILL BE AN INTEGRAL PART OF THE CONTINUOUSLY FORMED UNIT. SEPARATE END PLATES CANNOT BE USED WITH THIS UNIT.
- THE RECHARGER® V8HD STAND ALONE UNIT MUST BE FORMED AS A WHOLE CHAMBER HAVING TWO FULLY FORMED INTEGRAL ENDWALLS AND HAVING NO SEPARATE END WALLS. MAXIMUM INLET OPENING ON THE CHAMBER ENDWALL IS 24 INCHES (600 MM).
- THE RECHARGER® V8HD STARTER UNIT MUST BE FORMED AS A WHOLE CHAMBER HAVING ONE FULLY FORMED INTEGRAL ENDWALL AND ONE PARTIALLY FORMED INTEGRAL ENDWALL WITH A LOWER TRANSFER OPENING OF 18 INCHES (457 MM) HIGH X 42 INCHES (1067 MM) WIDE. MAXIMUM INLET OPENING ON THE CHAMBER ENDWALL IS 24 INCHES (600 MM).
- THE RECHARGER® V8HD INTERMEDIATE UNIT MUST BE FORMED AS A WHOLE CHAMBER HAVING ONE FULLY OPEN ENDWALL AND ONE PARTIALLY FORMED INTEGRAL ENDWALL WITH A LOWER TRANSFER OPENING OF 16 INCHES (406 MM) HIGH X 42 INCHES (1067 MM) WIDE.
- THE RECHARGER® V8HD END UNIT MUST BE FORMED AS A WHOLE CHAMBER HAVING ONE FULLY FORMED INTEGRAL ENDWALL AND ONE FULLY OPEN ENDWALL AND HAVING NO SEPARATE END WALLS. MAXIMUM INLET OPENING ON THE CHAMBER ENDWALL IS 24 INCHES (600 MM).
- THE HVLV™ FC-24 FEED CONNECTOR MUST BE FORMED AS A WHOLE CHAMBER HAVING TWO OPEN END WALLS AND HAVING NO SEPARATE END PLATES OR SEPARATE END WALLS. THE UNIT WILL FIT INTO THE SIDE PORTALS OF THE RECHARGER® V8HD INTERMEDIATE AND ACT AS CROSS FEED CONNECTIONS.
- THE HVLV™ F-110X4 FEED CONNECTOR MUST BE FORMED AS A WHOLE CHAMBER HAVING TWO OPEN END WALLS AND HAVING NO SEPARATE END PLATES OR SEPARATE END WALLS. THE UNIT WILL FIT INTO THE SIDE PORTALS OF THE RECHARGER® V8HD STARTER AND V8HD END AND ACT AS CROSS FEED CONNECTIONS.
- THE CHAMBER WILL BE DESIGNED TO WITHSTAND AASHTO H-25 LOAD RATING WHEN INSTALLED ACCORDING TO CULTEC'S RECOMMENDED INSTALLATION INSTRUCTIONS.
- HEAVY DUTY UNITS ARE DESIGNATED BY A COLORED STRIPE FORMED INTO THE PART ALONG THE LENGTH OF THE CHAMBER.
- THE CHAMBER WILL HAVE A RAISED INTEGRAL CAP AT THE TOP OF THE ARCH IN THE CENTER OF EACH UNIT TO BE USED AS AN OPTIONAL INSPECTION PORT OR CLEAN-OUT.
- THE UNITS MAY BE TRIMMED TO CUSTOM LENGTHS BY CUTTING BACK TO ANY CORRUGATION ON THE LARGE RIB END.
- THE CHAMBER SHALL BE MANUFACTURED IN AN ISO 9001:2000 CERTIFIED FACILITY.



**DETAIL TYPICAL PLAN VIEW**  
NOT TO SCALE

## CULTEC HVLV™ F-110X4 FEED CONNECTOR PRODUCT SPECIFICATIONS

**GENERAL**  
CULTEC HVLV™ F-110X4 FEED CONNECTORS ARE DESIGNED TO CREATE AN INTERNAL MANIFOLD FOR CULTEC RECHARGER V8HD STORMWATER CHAMBERS.

### CHAMBER PARAMETERS

- THE CHAMBERS WILL BE MANUFACTURED BY CULTEC, INC. OF BROOKFIELD, CT. (203-775-4416 OR 1-800-428-5832)
- THE CHAMBER WILL BE VACUUM THERMOFORMED OF BLACK HIGH MOLECULAR WEIGHT HIGH DENSITY POLYETHYLENE (HMWHDPE).
- THE CHAMBER WILL BE ARCHED IN SHAPE.
- THE CHAMBER WILL BE OPEN-BOTTOMED.
- THE NOMINAL CHAMBER DIMENSIONS OF THE CULTEC HVLV™ F-110X4 FEED CONNECTOR SHALL BE 18 INCHES (457 MM) TALL, 27.5 INCHES (699 MM) WIDE AND 39 INCHES (991 MM) LONG.
- THE NOMINAL STORAGE VOLUME OF THE HVLV™ F-110X4 FEED CONNECTOR WILL BE 1.968 FT<sup>3</sup> / FT (0.1828 M<sup>3</sup> / M) - WITHOUT STONE.
- THE HVLV™ F-110X4 FEED CONNECTOR CHAMBER SHALL HAVE 5 CORRUGATIONS.
- THE HVLV™ F-110X4 FEED CONNECTOR MUST BE FORMED AS A WHOLE CHAMBER HAVING TWO OPEN END WALLS AND HAVING NO SEPARATE END PLATES OR SEPARATE END WALLS. THE UNIT WILL FIT INTO THE SIDE PORTALS OF THE RECHARGER V8HD STARTER AND V8HD END STORMWATER CHAMBER AND ACT AS CROSS FEED CONNECTIONS CREATING AN INTERNAL MANIFOLD.
- THE CHAMBER WILL BE DESIGNED TO WITHSTAND AASHTO H-25 LOAD RATING WHEN INSTALLED ACCORDING TO CULTEC'S RECOMMENDED INSTALLATION INSTRUCTIONS.
- THE CHAMBER SHALL BE MANUFACTURED IN AN ISO 9001:2000 CERTIFIED FACILITY.

## CULTEC HVLV™ FC-24 FEED CONNECTOR PRODUCT SPECIFICATIONS

**GENERAL**  
CULTEC HVLV™ FC-24 FEED CONNECTORS ARE DESIGNED TO CREATE AN INTERNAL MANIFOLD FOR CULTEC RECHARGER MODEL 180HD, 280HD AND 330XLHD STORMWATER CHAMBERS.

### CHAMBER PARAMETERS

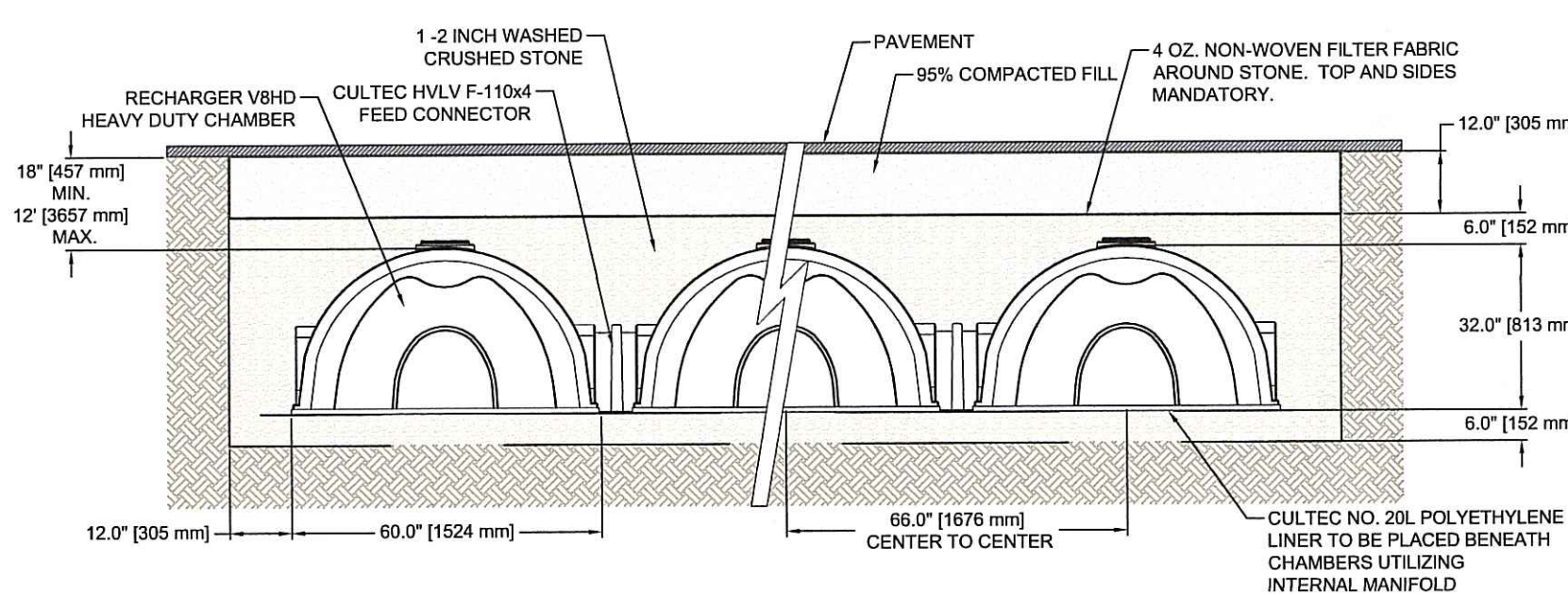
- THE CHAMBERS WILL BE MANUFACTURED BY CULTEC, INC. OF BROOKFIELD, CT. (203-775-4416 OR 1-800-428-5832)
- THE CHAMBER WILL BE VACUUM THERMOFORMED OF BLACK HIGH MOLECULAR WEIGHT HIGH DENSITY POLYETHYLENE (HMWHDPE).
- THE CHAMBER WILL BE ARCHED IN SHAPE.
- THE CHAMBER WILL BE OPEN-BOTTOMED.
- THE NOMINAL CHAMBER DIMENSIONS OF THE CULTEC HVLV™ FC-24 FEED CONNECTOR SHALL BE 12 INCHES (305 MM) TALL, 16 INCHES (406 MM) WIDE AND 24.2 INCHES (614 MM) LONG.
- THE NOMINAL STORAGE VOLUME OF THE HVLV™ FC-24 FEED CONNECTOR WILL BE 0.913 FT<sup>3</sup> / FT (0.085 M<sup>3</sup> / M) - WITHOUT STONE.
- THE HVLV™ FC-24 FEED CONNECTOR CHAMBER SHALL HAVE 2 CORRUGATIONS.
- THE HVLV™ FC-24 FEED CONNECTOR MUST BE FORMED AS A WHOLE CHAMBER HAVING TWO OPEN END WALLS AND HAVING NO SEPARATE END PLATES OR SEPARATE END WALLS. THE UNIT WILL FIT INTO THE SIDE PORTALS OF THE CULTEC RECHARGER STORMWATER CHAMBER AND ACT AS CROSS FEED CONNECTIONS CREATING AN INTERNAL MANIFOLD.
- THE CHAMBER WILL BE DESIGNED TO WITHSTAND AASHTO H-25 LOAD RATING WHEN INSTALLED ACCORDING TO CULTEC'S RECOMMENDED INSTALLATION INSTRUCTIONS.
- THE CHAMBER SHALL BE MANUFACTURED IN AN ISO 9001:2000 CERTIFIED FACILITY.

## CULTEC NO. 20L™ POLYETHYLENE LINER

**GENERAL**  
CULTEC NO. 20L™ POLYETHYLENE LINER IS DESIGNED AS AN IMPERVIOUS UNDERLAYMENT TO PREVENT SCOURING CAUSED BY WATER MOVEMENT WITHIN THE CULTEC CHAMBERS AND FEED CONNECTORS UTILIZING THE CULTEC MANIFOLD FEATURE.

### LINER PARAMETERS

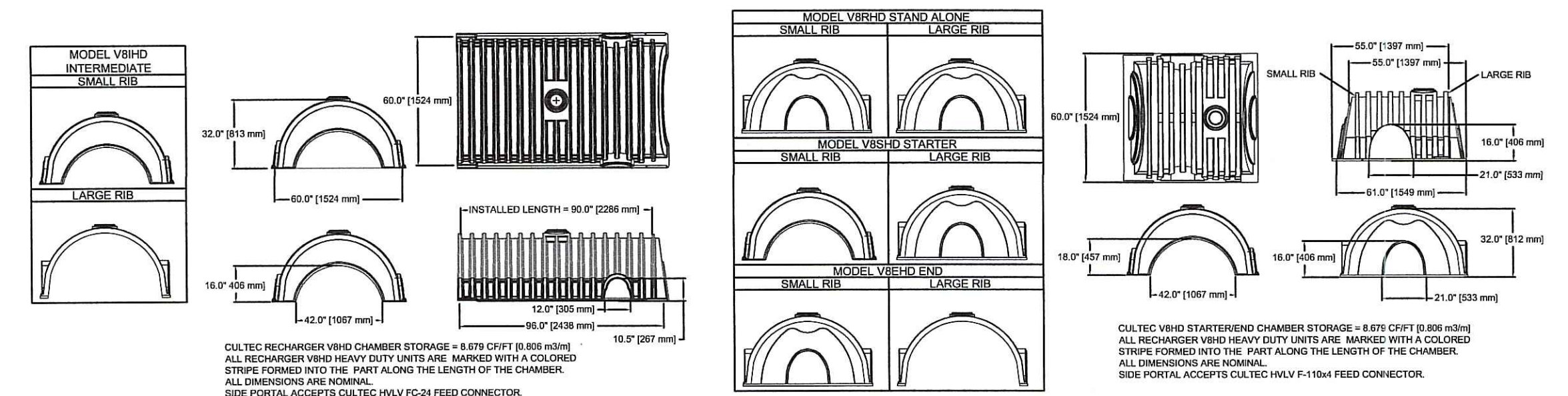
- THE LINER WILL BE MANUFACTURED BY CULTEC, INC. OF BROOKFIELD, CT. (203-775-4416 OR 1-800-428-5832)
- THE LINER WILL BE BLACK IN APPEARANCE.
- THE LINER WILL HAVE A NOMINAL THICKNESS OF 20 MIL (0.51 MM).
- THE LINER WILL HAVE A WEIGHT OF 93 LBS/MSF (453 G/M<sup>2</sup>).
- THE LINER WILL HAVE A TENSILE STRENGTH @ BREAK 1" (2.54 CM) OF 75 LBS (334 N) PER ASTM D6693 TESTING METHOD.
- THE LINER WILL HAVE AN ELONGATION AT BREAK OF 800% PER ASTM D6693 TESTING METHOD.
- THE LINER WILL HAVE A TEAR RESISTANCE OF 11 LBF (49 N) PER ASTM D1004 TESTING METHOD.
- THE LINER WILL HAVE A HYDROSTATIC RESISTANCE OF 100 PSI (689 KPA) PER ASTM D751 TESTING METHOD.
- THE LINER WILL HAVE A PUNCTURE RESISTANCE OF 30 LBF (133 N) PER ASTM D4933 TESTING METHOD.
- THE LINER WILL HAVE A VOLATILE LOSS OF <1% PER ASTM D1203 TESTING METHOD.
- THE LINER WILL HAVE A DIMENSIONAL STABILITY OF <2% PER ASTM D1204 TESTING METHOD.
- THE LINER WILL HAVE A MAXIMUM USE TEMPERATURE OF 1800 F (820 C).
- THE LINER WILL HAVE A MINIMUM USE TEMPERATURE OF -700 F (-570 C).
- THE LINER WILL HAVE A PERM RATING OF 0.041 U.S. PERMS (0.027 METRIC PERMS) PER ASTM E96 METHOD A.
- THE LINER WILL CONSIST OF A BLENDED LINEAR POLYETHYLENE.
- THE LINER WILL NOT CONTAIN PLASTICIZERS.



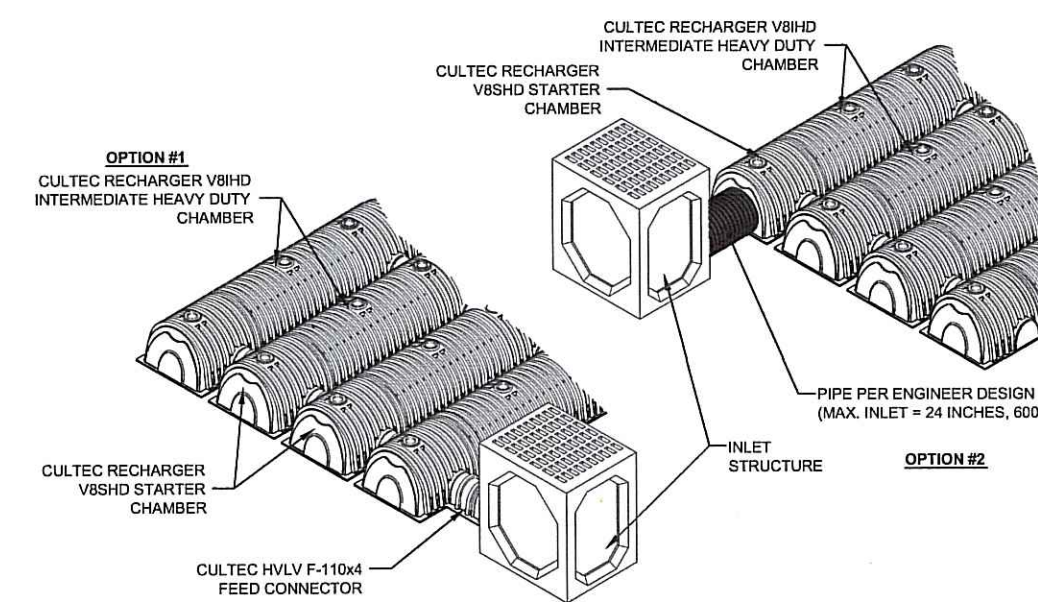
**GENERAL NOTES**  
RECHARGER V8HD BY CULTEC, INC. OF BROOKFIELD, CT. STORAGE PROVIDED = 13.274 CF/FT PER DESIGN UNIT. REFER TO CULTEC, INC.'S CURRENT RECOMMENDED INSTALLATION GUIDELINES.  
USE RECHARGER V8HD HEAVY DUTY FOR TRAFFIC AND/OR H-25 APPLICATIONS.

ALL RECHARGER V8HD HEAVY DUTY UNITS ARE MARKED WITH A COLOR STRIPE FORMED INTO THE PART ALONG THE LENGTH OF THE CHAMBER. ALL RECHARGER V8HD CHAMBERS MUST BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS.

**DETAIL TYPICAL CROSS-SECTION**  
NOT TO SCALE

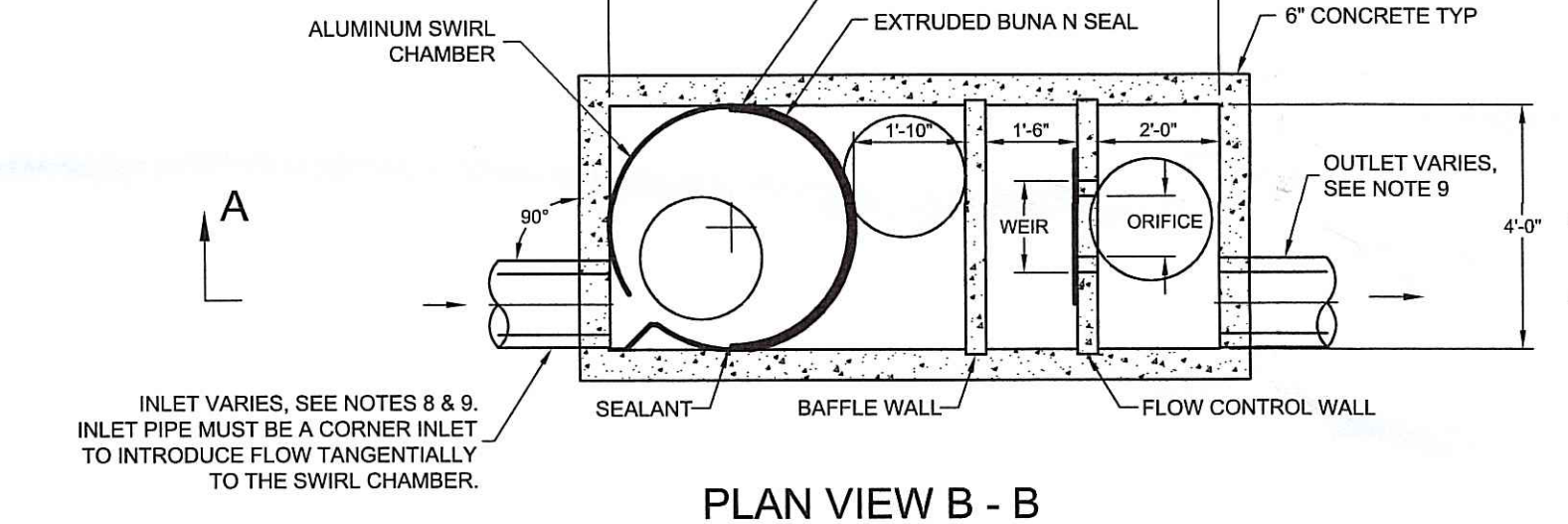


**DETAIL RECHARGER V8HD HEAVY DUTY "THREE" VIEW**  
NOT TO SCALE

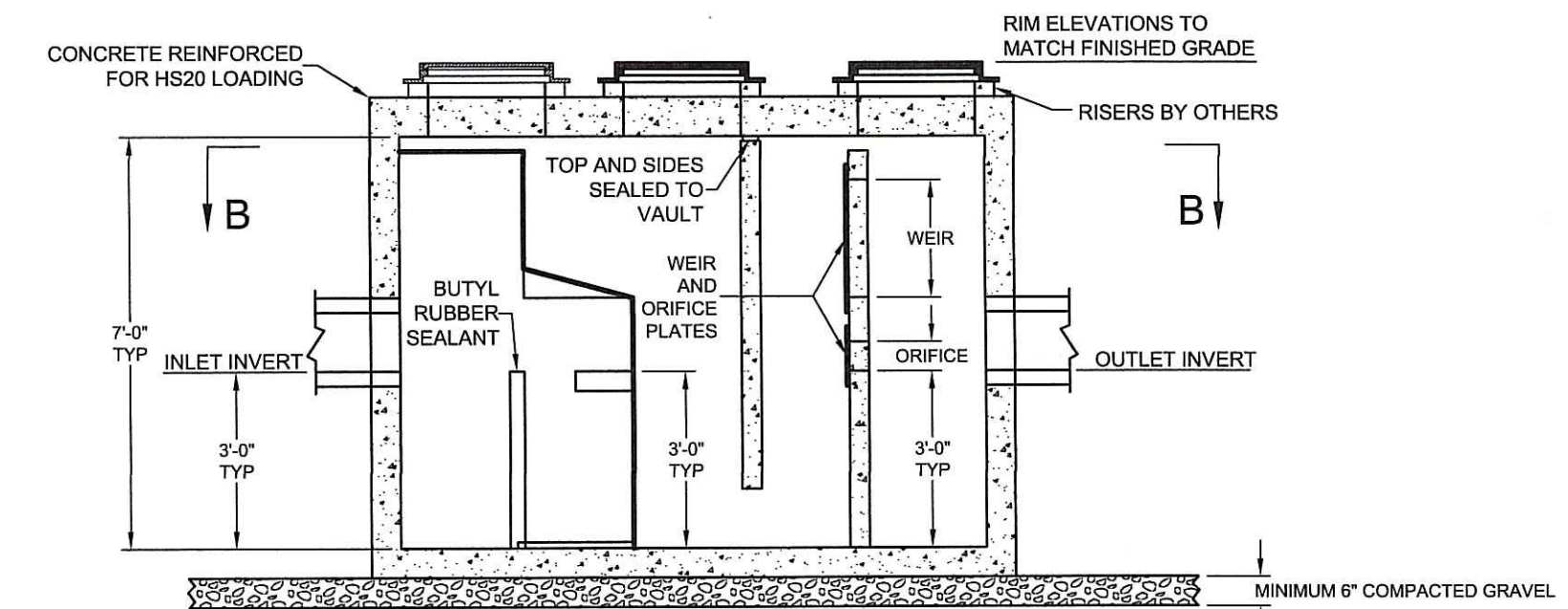


**DETAIL TYPICAL INLET CONNECTION**  
NOT TO SCALE

**NOTE:**  
VORTECHS SYSTEMS INSTALLED IN A BYPASS CONFIGURATION REQUIRE AN UPSTREAM DIVERSION STRUCTURE THAT SHALL BE DETAILED BY THE CONSULTING ENGINEER WITH ELEVATION AND WEIR WIDTH DATA PROVIDED BY CONTECH STORMWATER SOLUTIONS.



**PLAN VIEW B - B**



**SECTION A - A**

- NOTES:**
- STORMWATER TREATMENT SYSTEM (SWTS) SHALL HAVE: PEAK TREATMENT CAPACITY: 2.8 CFS; SEDIMENT STORAGE: 1.2 CU YD; SEDIMENT CHAMBER DIA. 4" MIN.
  - SWTS SHALL BE CONTAINED IN ONE RECTANGULAR STRUCTURE.
  - SWTS REMOVAL EFFICIENCY SHALL BE DOCUMENTED BASED ON PARTICLE SIZE.
  - SWTS SHALL RETAIN FLOATABLES AND TRAPPED SEDIMENT UP TO AND INCLUDING PEAK TREATMENT CAPACITY.
  - SWTS INVERTS IN AND OUT ARE TYPICALLY AT THE SAME ELEVATION.
  - SWTS SHALL NOT BE COMPROMISED BY EFFECTS OF DOWNSTREAM TAILWATER.
  - SWTS SHALL HAVE NO INTERNAL COMPONENTS THAT OBSTRUCT MAINTENANCE ACCESS.
  - INLET PIPE MUST BE PERPENDICULAR TO THE STRUCTURE.
  - PIPE ORIENTATION MAY VARY; SEE SITE PLAN FOR SIZE AND LOCATION.
  - PURCHASER SHALL NOT BE RESPONSIBLE FOR ASSEMBLY OF UNIT.
  - MANHOLE FRAMES AND PERFORATED COVERS SHALL BE INSTALLED WITH SYSTEM, NOT INSTALLED.
  - PURCHASER TO PREPARE EXCAVATION AND PROVIDE CRANE FOR OFF-LOADING AND SETTING AT TIME OF DELIVERY.
  - VORTECHS SYSTEMS BY CONTECH STORMWATER SOLUTIONS, PORTLAND, OR (800) 548-6667; SCARBOROUGH, ME (877) 907-8676; LINTHICUM, MD (866) 740-3316.

PROPRIETARY INFORMATION - NOT TO BE USED FOR CONSTRUCTION PURPOSES

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contechstormwater.com

**STANDARD DETAIL**  
**STORMWATER TREATMENT SYSTEM**  
**VORTECHS® MODEL 2000**

U.S. PATENT No. 5,799,415

**DETAIL TYPICAL MANIFOLD**  
NOT TO SCALE

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
APPROVED WITH CONDITIONS  
AS SPECIFIED IN THE LETTER OF APPROVAL  
DATED NOV 1 2012 FILE # 12-0152  
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

*Signature*

**FRISELLA-BALCH & ASSOCIATES**  
LAND SURVEYING

33 NORTH ROAD, SUITE C-201,  
PEACE DALE, RI  
PHONE (401) 783-5949  
FAX (401) 783-5997  
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**CJ DOYLE, P.E.**  
CIVIL ENGINEERING

MAILING ADDRESS  
P.O. BOX 1161, HOPE VALLEY, RI  
OFFICE LOCATION  
33 NORTH ROAD, SUITE C-201A,  
PEACE DALE, RI  
PHONE (401) 284-2909  
FAX (401) 783-5997  
cjenigne@cox.net

NO.	DATE	DESCRIPTION	BY

DRAWING TITLED:  
**DETAILS STORMWATER MANAGEMENT**

LOCATED ON:  
SOUTHERLY PORTION OF LOT 3, ASSESSOR'S MAP 57-3

OWNED BY:  
DLS FAMILY LTD. PARTNERSHIP

ADDRESS:  
KINGSTOWN ROAD

IN THE TOWN OF SOUTH KINGSTOWN, RI

DATE: AUGUST 2012

SCALE: AS SHOWN

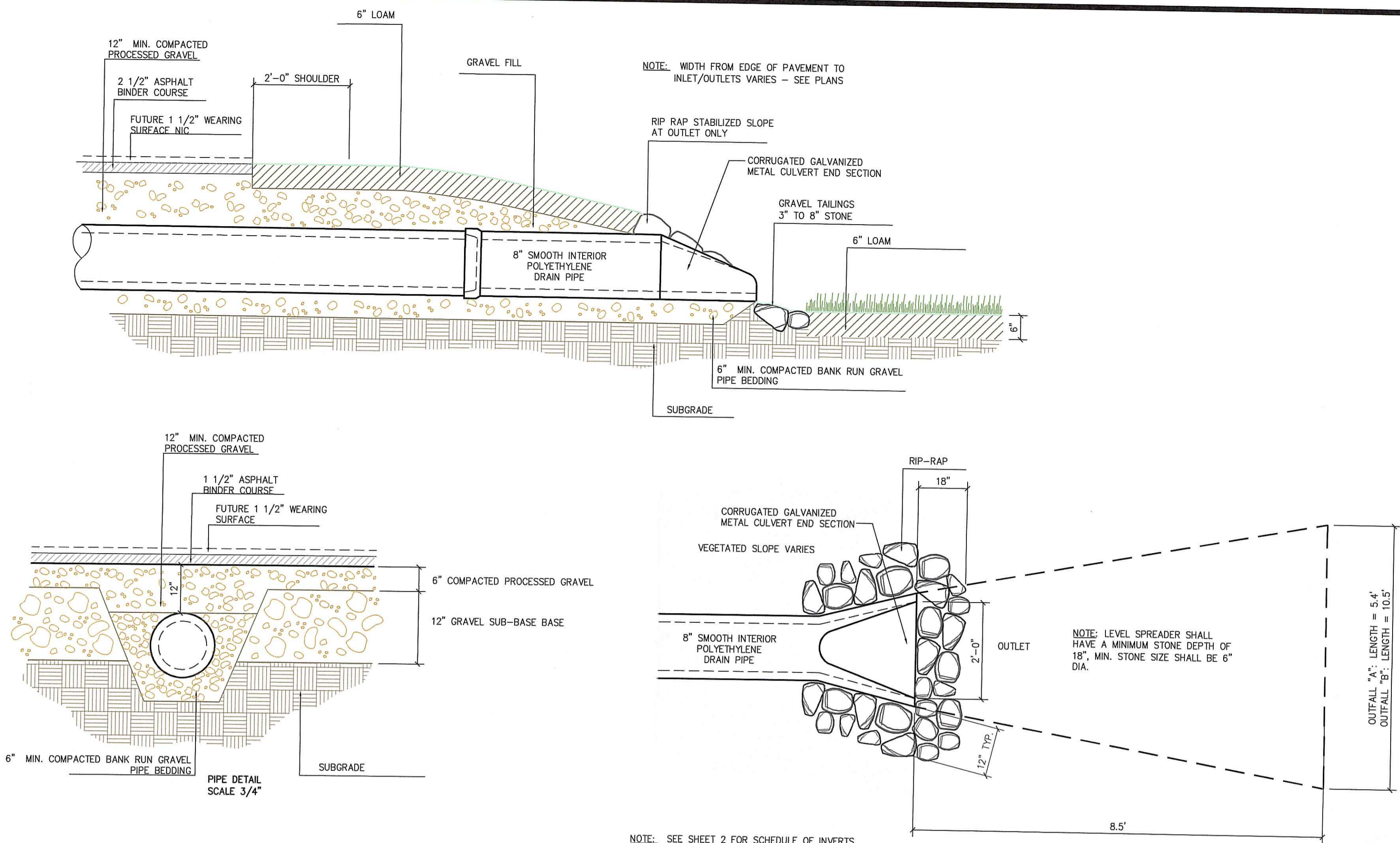
DESIGNED BY: CAROLYN J. DOYLE, P.E.

DRAWN BY: JK  
CHECKED BY: CJD

DRAWING No. **SHEET 4 OF 7**

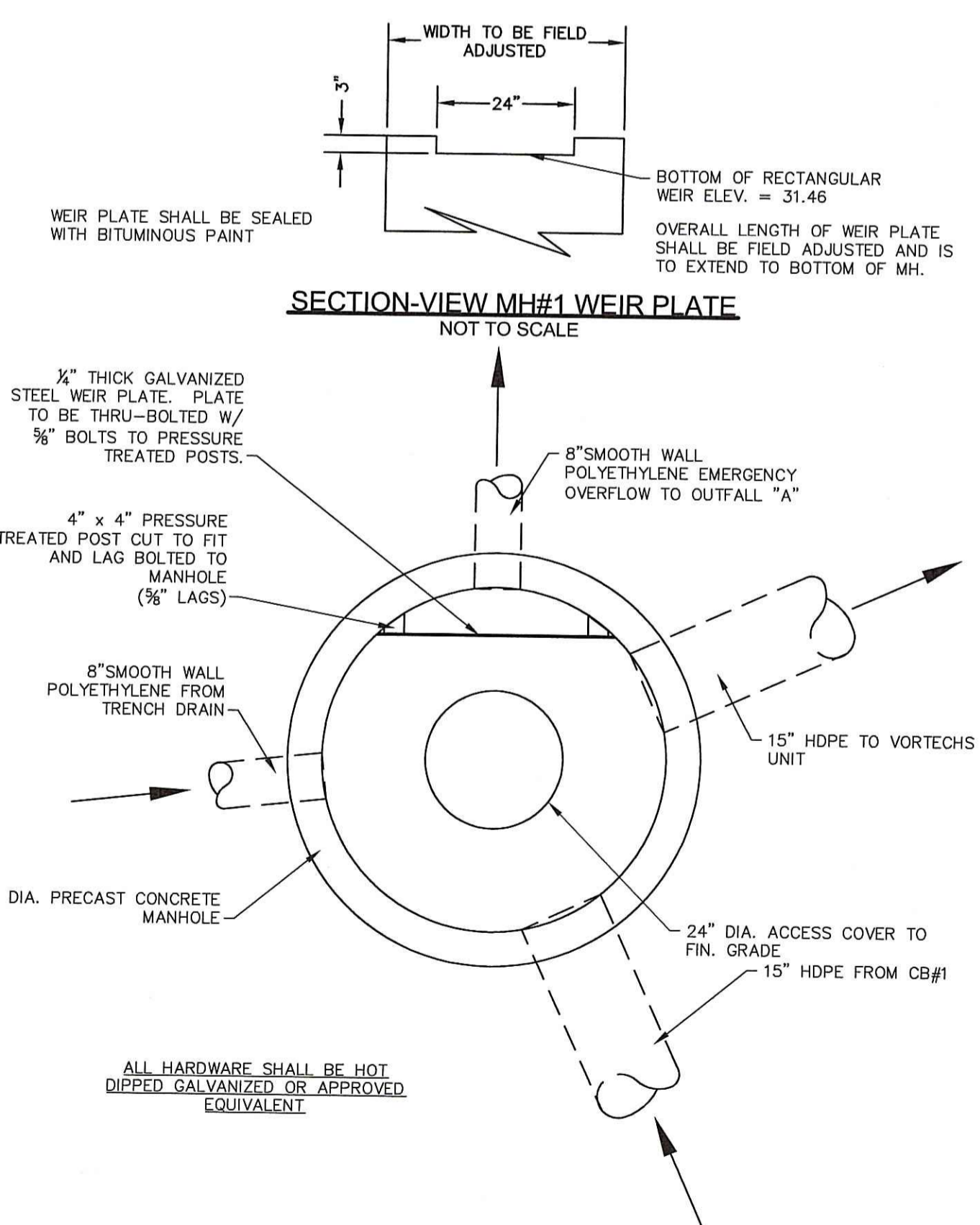
CAROLYN J. DOYLE  
No. 5078  
REGISTERED PROFESSIONAL ENGINEER

FOR SURVEYS ONLY  
FOR ENGINEERING

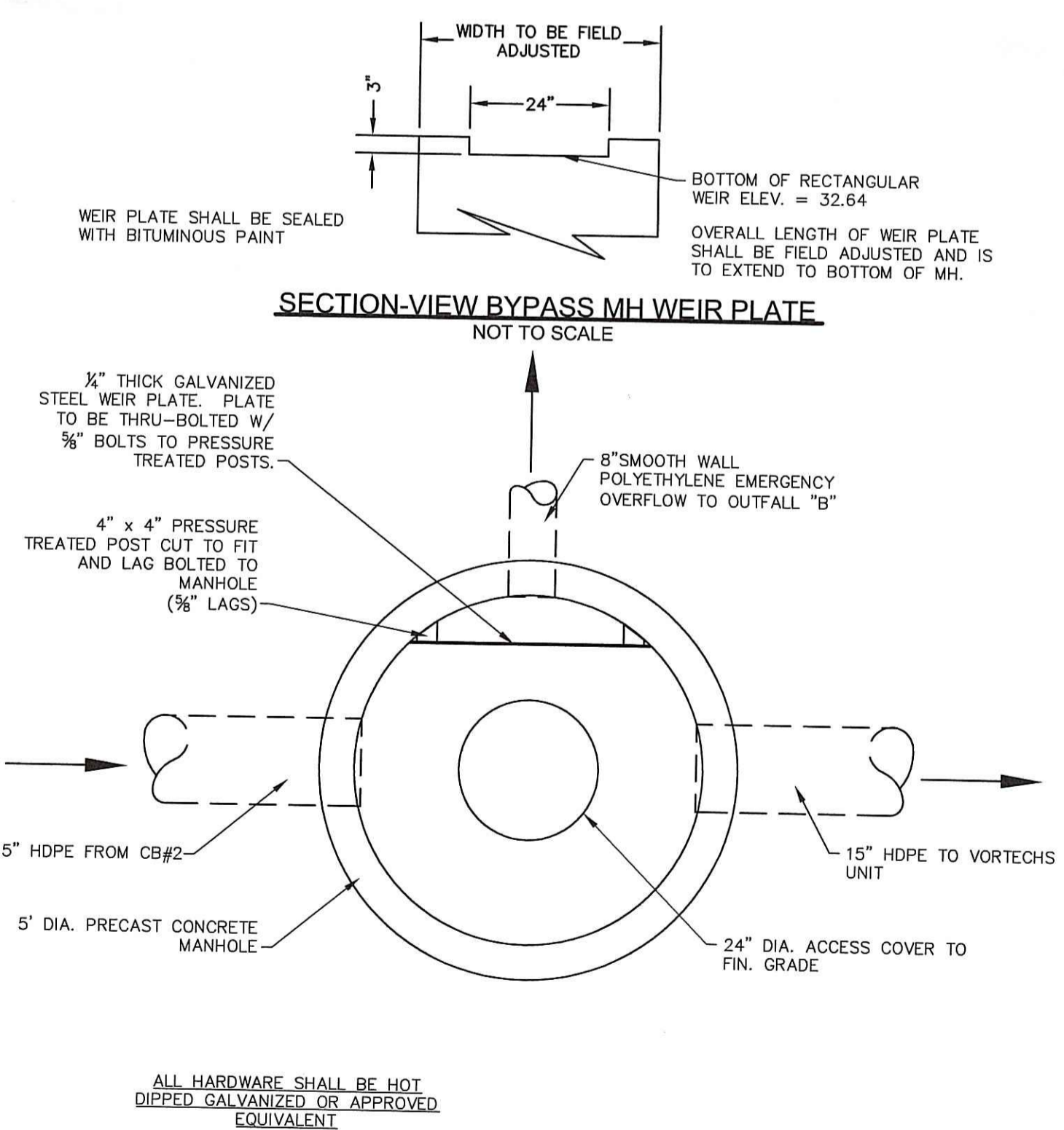


**DETAIL TYPICAL DRAINAGE OVERFLOW OUTLET**  
NOT TO SCALE

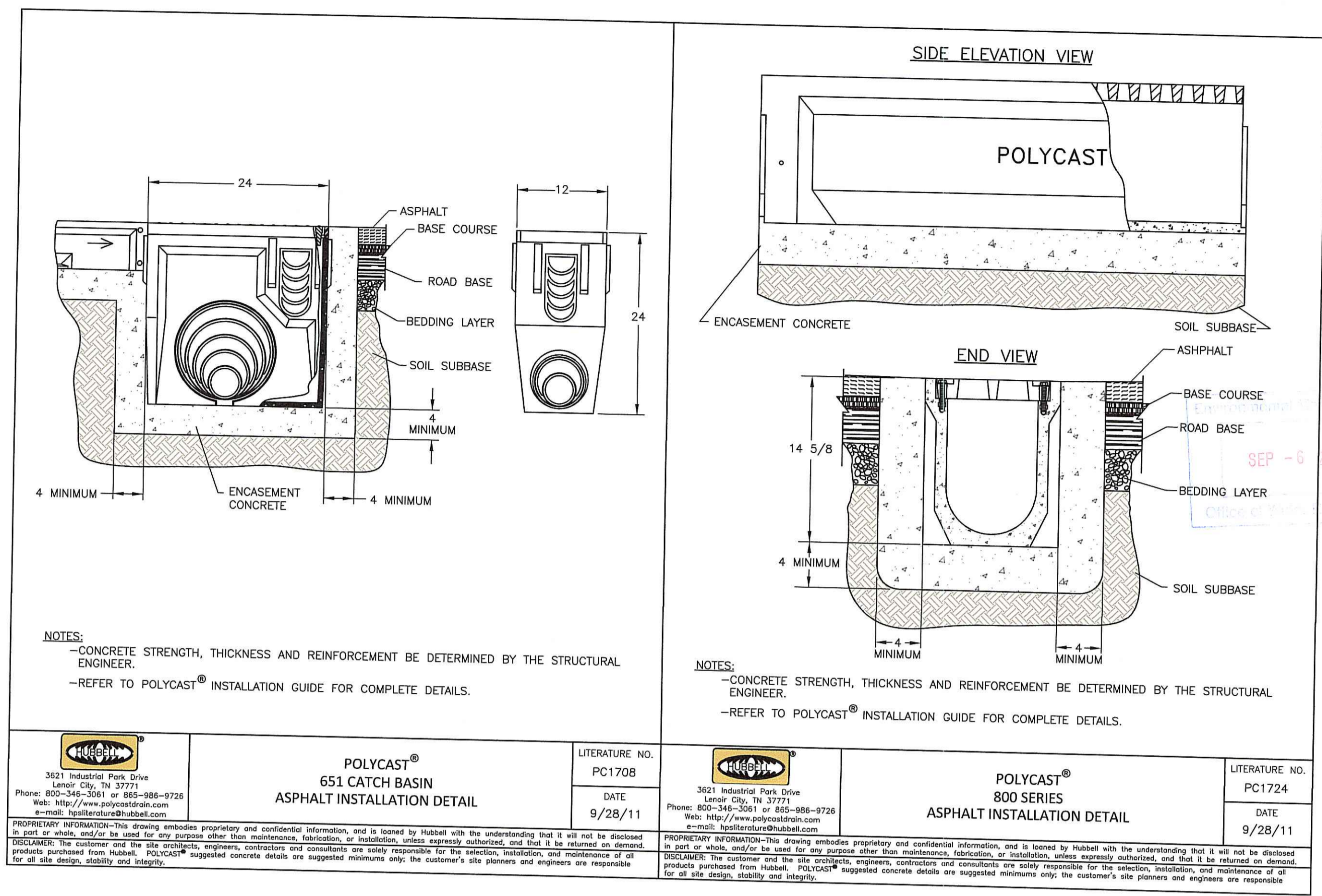
NOTE: SEE SHEET 2 FOR SCHEDULE OF INVERTS



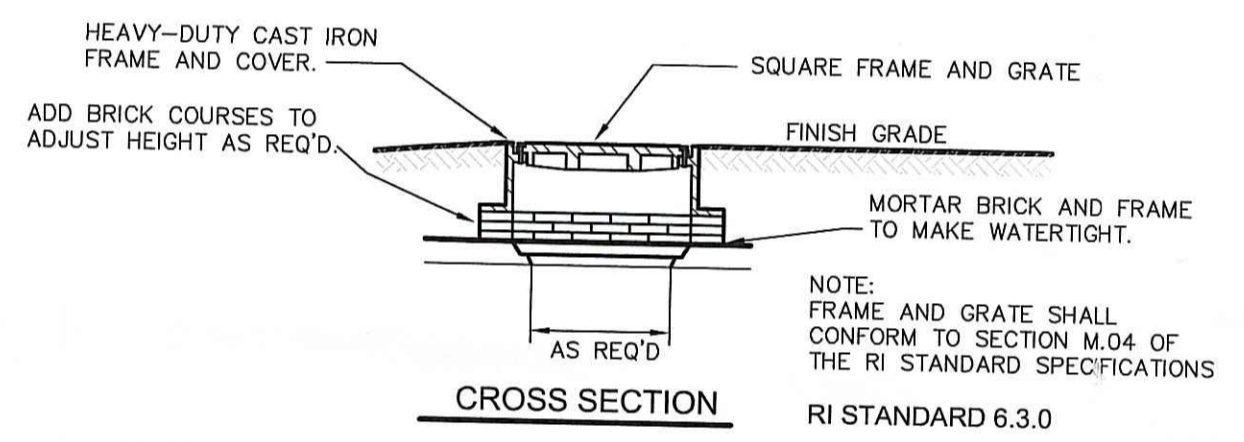
**DETAIL PLAN-VIEW MANHOLE #1 (MH#1)**  
NOT TO SCALE



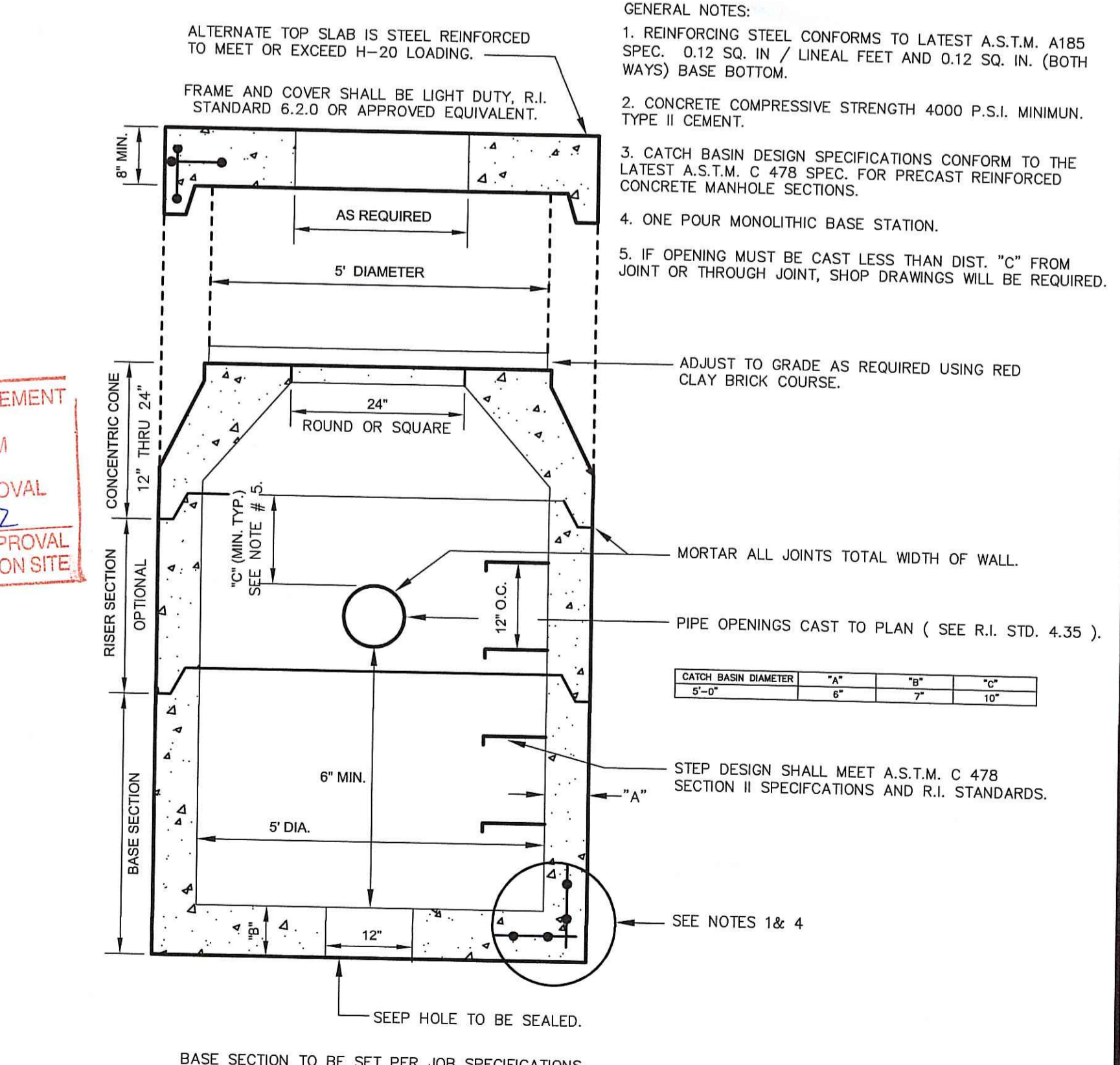
**DETAIL PLAN-VIEW BYPASS MANHOLE**  
NOT TO SCALE



<p>3521 Industrial Park Drive Lenoir City, TN 37771 Phone: 800-345-3261 or 865-986-9726 Web: <a href="http://www.polycast.com">http://www.polycast.com</a> E-mail: <a href="mailto:technical@polycast.com">technical@polycast.com</a></p>	<p><b>POLYCAST®</b> 651 CATCH BASIN ASPHALT INSTALLATION DETAIL</p>	<p>LITERATURE NO. PC170B</p> <p>DATE 9/28/11</p>	<p>3521 Industrial Park Drive Lenoir City, TN 37771 Phone: 800-345-3261 or 865-986-9726 Web: <a href="http://www.polycast.com">http://www.polycast.com</a> E-mail: <a href="mailto:technical@polycast.com">technical@polycast.com</a></p>	<p><b>POLYCAST®</b> 800 SERIES ASPHALT INSTALLATION DETAIL</p>	<p>LITERATURE NO. PC1724</p> <p>DATE 9/28/11</p>
	<p><small>PROPRIETARY INFORMATION: This drawing embodies proprietary and confidential information, and is loaned by Hubbell with the understanding that it will not be disclosed in part or whole, and/or be used for any purpose other than the maintenance, fabrication, or installation, unless expressly authorized, and that it be returned on demand to the manufacturer. The customer and the site contractor, engineer, contractor and consultants are solely responsible for the selection, installation, and maintenance of all products purchased from Hubbell. POLYCAST® suggested concrete details are suggested minimums only; the customer's site planners and engineers are responsible for all site design, stability and integrity.</small></p>			<p><small>PROPRIETARY INFORMATION: This drawing embodies proprietary and confidential information, and is loaned by Hubbell with the understanding that it will not be disclosed in part or whole, and/or be used for any purpose other than the maintenance, fabrication, or installation, unless expressly authorized, and that it be returned on demand to the manufacturer. The customer and the site contractor, engineer, contractor and consultants are solely responsible for the selection, installation, and maintenance of all products purchased from Hubbell. POLYCAST® suggested concrete details are suggested minimums only; the customer's site planners and engineers are responsible for all site design, stability and integrity.</small></p>	



**H-20 CAST IRON RISER AND COVER WITH BRICK AND MORTAR HEIGHT ADJUSTMENT**  
NO SCALE



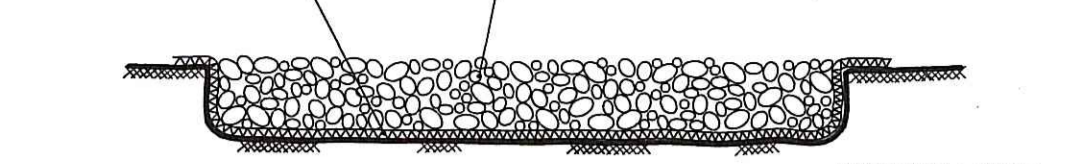
**PRECAST ROUND MANHOLE**  
5' DIAMETER  
NO SCALE

<p><b>FRISELLA-BALCH &amp; ASSOCIATES</b> LAND SURVEYING 33 NORTH ROAD, SUITE C-201, PEACE DALE, RI PHONE (401) 783-5849 FAX (401) 783-5997 <a href="http://www.friseλλα.com">www.friseλλα.com</a></p>	<p><b>CJ DOYLE, P.E.</b> CIVIL ENGINEERING MAILING ADDRESS P.O. BOX 1161, HOPE VALLEY, RI OFFICE LOCATION 33 NORTH ROAD, SUITE C-201A, PEACE DALE, RI PHONE (401) 284-2809 FAX (401) 783-5997 <a href="mailto:cjengine@cox.net">cjengine@cox.net</a></p>
<p>DRAWING TITLED: <b>DETAILS STORMWATER MANAGEMENT AND EROSION &amp; SEDIMENT CONTROL</b></p>	
<p>LOCATED ON: SOUTHERLY PORTION OF LOT 3, ASSESSOR'S MAP 57-3</p>	
<p>OWNED BY: DLS FAMILY LTD. PARTNERSHIP</p>	
<p>ADDRESS: KINGSTOWN ROAD IN THE TOWN OF SOUTH KINGSTOWN, RI</p>	
<p>DATE: AUGUST 2012</p>	
<p>SCALE: AS SHOWN</p>	
<p>DESIGNED BY: CAROLYN J. DOYLE, P.E.</p>	
<p>DRAWN BY: JK</p>	<p>CHECKED BY: CJD</p>
<p>DRAWING No. SHEET 5 OF 7</p>	
<p>FOR SURVEYS ONLY</p>	<p>FOR ENGINEERING</p>

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
PRESERVATION OF WETLANDS PROGRAM  
APPROVED WITH CONDITIONS  
AS SHOWN IN THE LETTER OF APPROVAL  
DATED NOV 1 2012 FILE # 12-0152  
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
APPROVED PLANS MUST BE AT CONSTRUCTION SITE  
*Carolyn J. Doyle*

H:\Vend Projects\Grove - Remo Cor. Lot\Vend\Grove Conceptual Site Plan.dwg 9/1/2012 11:29:31 AM

NOTE: SEE MAIN PLAN FOR LENGTH AND WIDTH.  
5" MINIMUM DEPTH OF CRUSHED STONE. STONE SHALL CONFORM TO THE REQUIREMENTS OF SUBSECTION M.01.09, TABLE 1, COLUMN 2 OF THE RI DOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2004 EDITION.

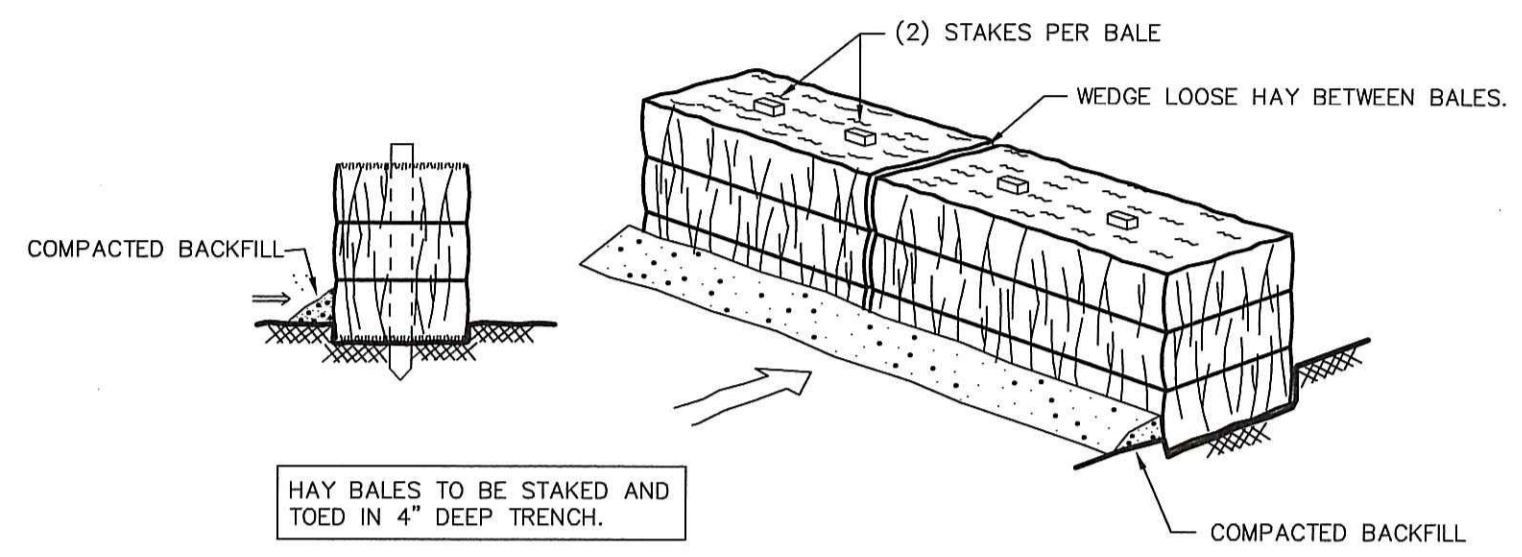


- WIDTH SHALL NOT BE LESS THAN THE FULL WIDTH OF THE RESPECTIVE POINTS OF INGRESS OR EGRESS (12" MINIMUM).
- THE LENGTH OF CONSTRUCTION ENTRANCE SHALL BE AT LEAST 50 FEET WHERE THE SOILS ARE SANDS OR GRAVELS, EXCEPT WHERE THE TRAVELED LENGTH IS LESS THAN 50 FEET. WHERE SOILS ARE CLAYS OR SILTS, THE LENGTH OF CONSTRUCTION ENTRANCES SHALL BE AT LEAST 100 FEET EXCEPT WHERE THE TRAVELED LENGTH IS LESS THAN 100 FEET.

MATERIAL SIZE	
SQUARE MESH SIEVE	RI DOT #2 CRUSHED STONE % FINER
2 1/2"	100
2"	90-100
1 1/2"	30-55
1 1/4"	0-25
1"	0-5

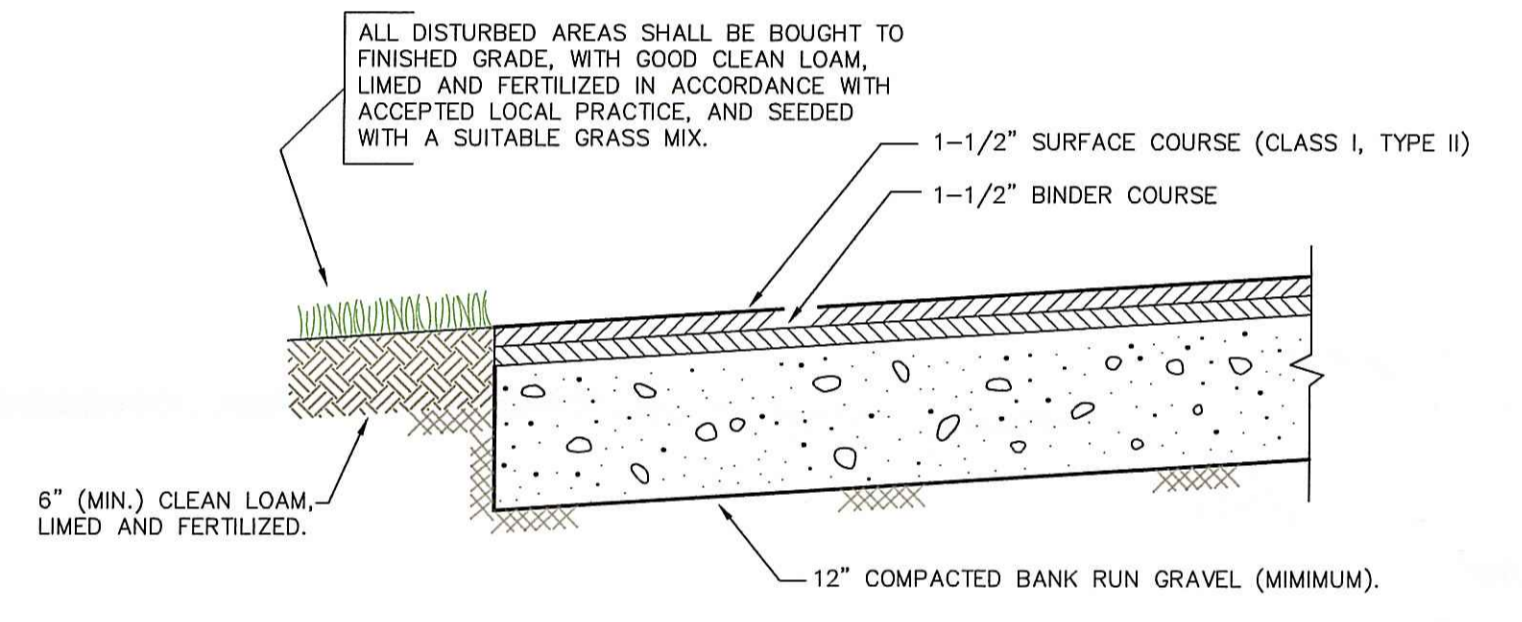
**CONSTRUCTION ENTRANCE SECTION**

SCALE: NONE



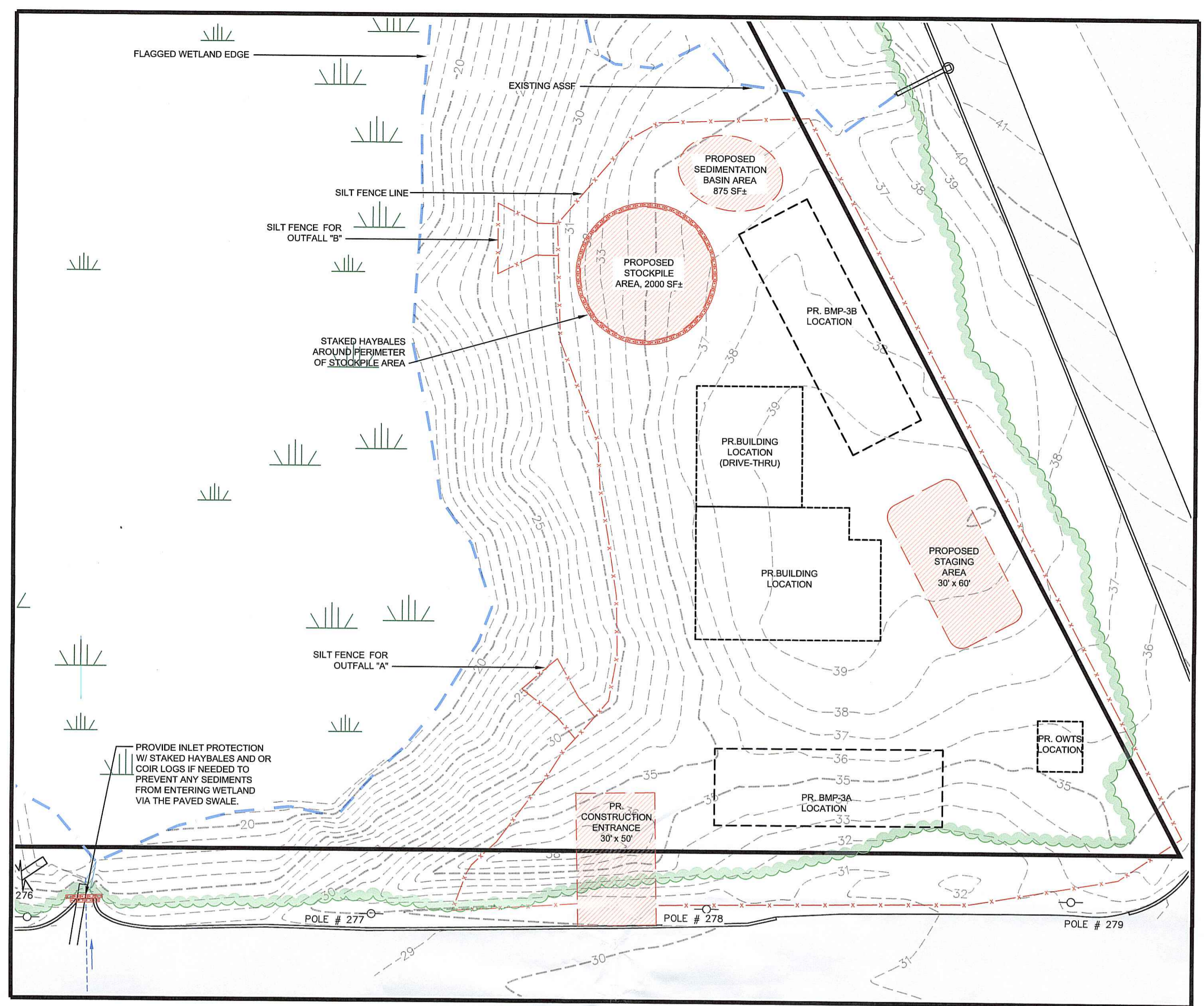
**HAY BALE DETAIL**

SCALE: NONE



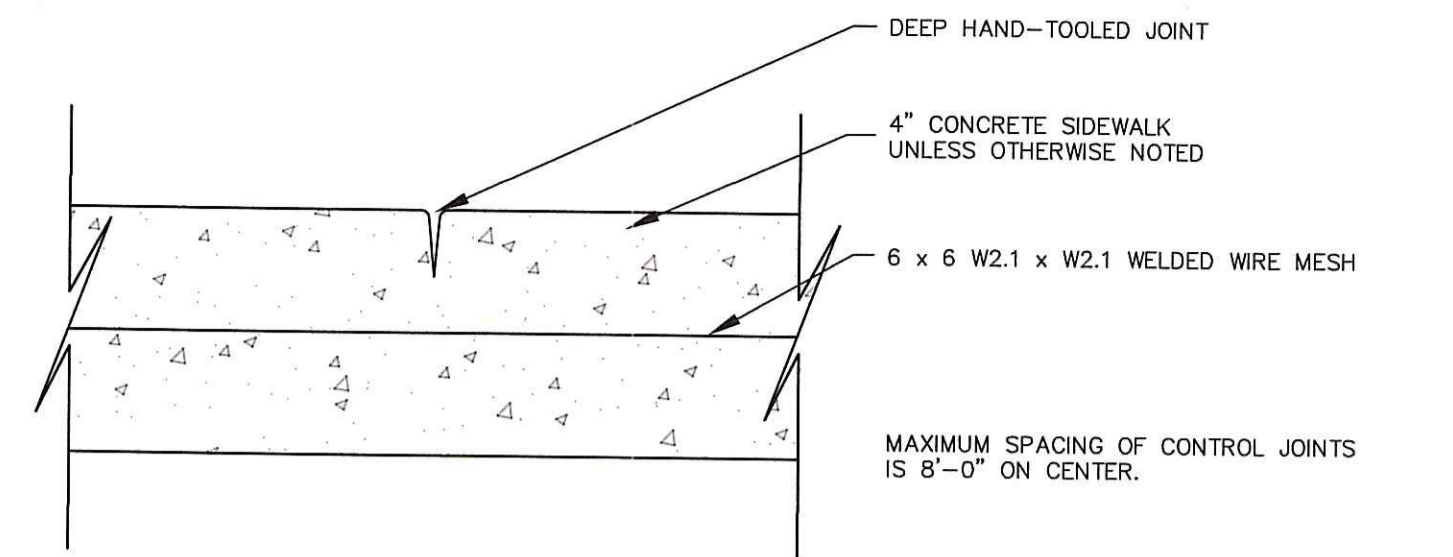
**TYPICAL PAVEMENT SECTION**

SCALE: NONE



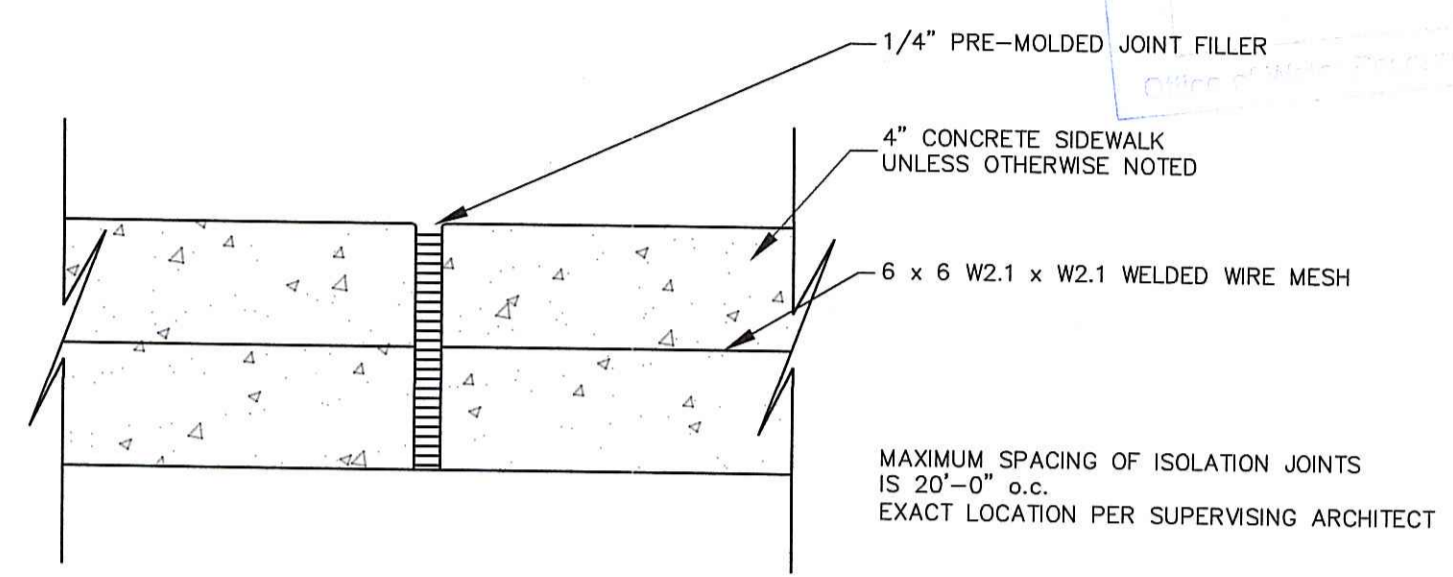
**DETAIL SITE SEDIMENT AND EROSION CONTROL**

INSET SCALE: 1" = 30'



**CONTROL JOINT @ CONCRETE SIDEWALK**

NOT TO SCALE

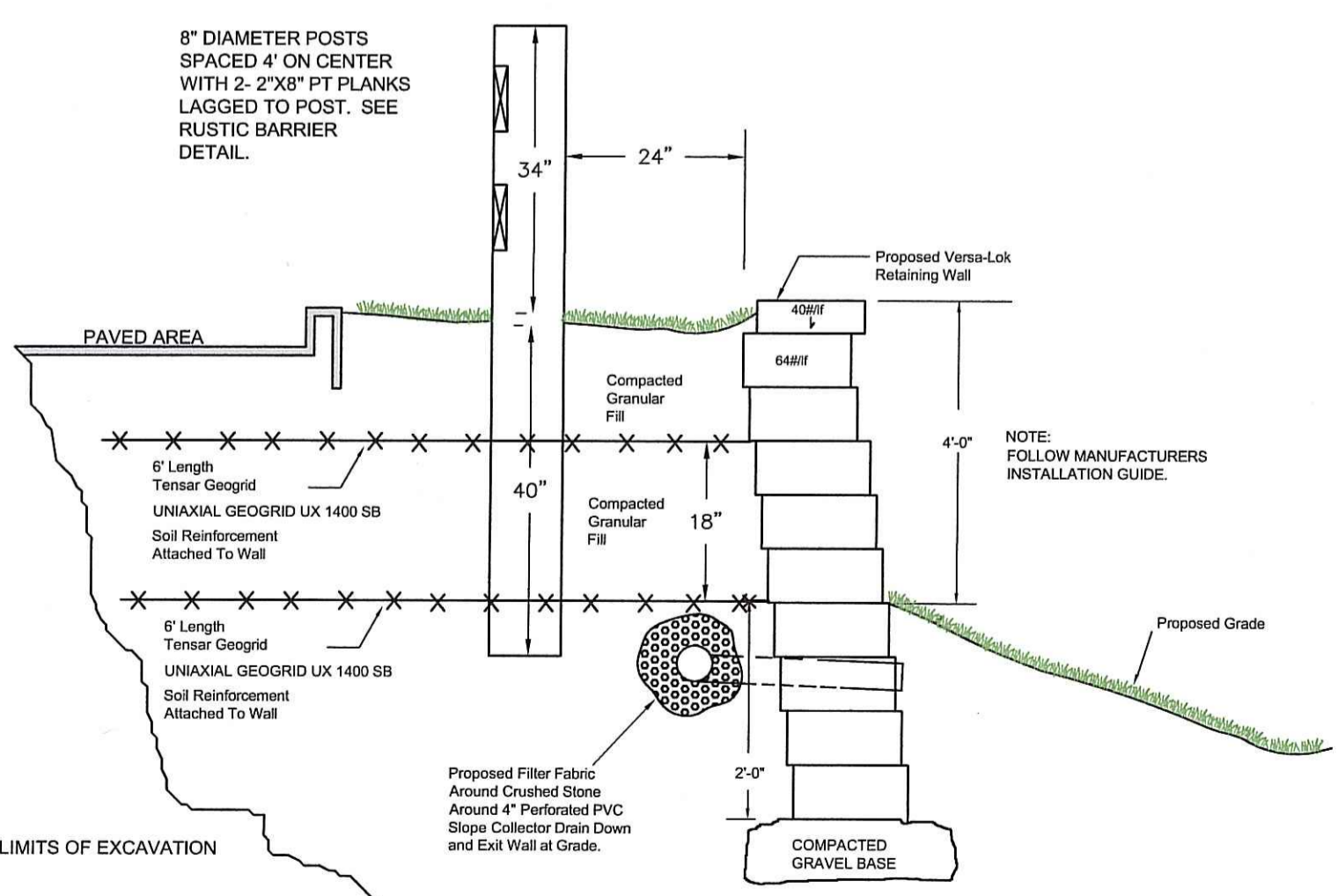


**ISOLATION JOINT @ CONCRETE SIDEWALK**

NOT TO SCALE

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
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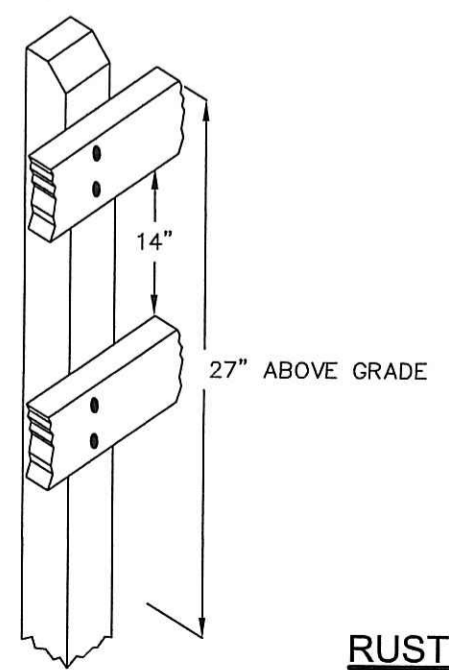
*Martin D. Wenzel*



**DETAIL TYPICAL SEGMENTAL BLOCK WALL**

NOT TO SCALE

\*STRUCTURAL DESIGN, STAMPED BY P.E. REQUIRED PRIOR TO CONSTRUCTION\*



**RUSTIC BARRIER**

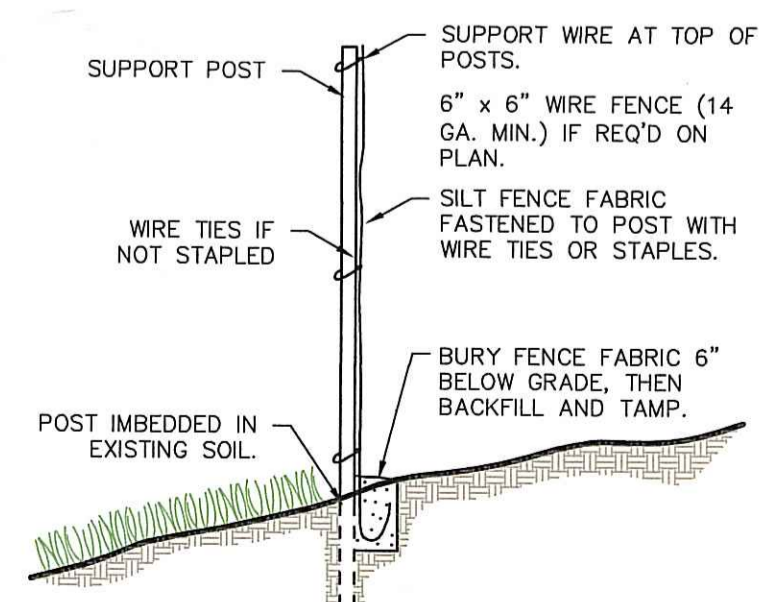
NOT TO SCALE

**CONSTRUCTION WASTE:**

- IT IS THE SOLE RESPONSIBILITY OF THE SITE CONTRACTOR FOR THE FOLLOWING:
- ALL CONSTRUCTION WASTE SHALL BE PROPERLY HANDLED AND DISPOSED IN A PROPER MANNER, I.E., STORED IN APPROPRIATE CONTAINERS AND DISPOSED OFFSITE AT APPROPRIATE FACILITIES.
  - HAZARDOUS MATERIALS SHALL BE HANDLED IN ACCORDANCE WITH LOCAL, STATE OR FEDERAL LAWS OR REGULATIONS.
  - THE CONSTRUCTION SITE SHALL BE MAINTAINED IN A CLEAN ORDERLY FASHION WITH DEBRIS, LITTER AND CONSTRUCTION WASTE CLEANED UP AS NEEDED. THE SITE SHALL ALSO BE CLEANED AT THE END OF EACH DAY.
  - CONCRETE WASHDOWN WATER USED TO CLEAN CONCRETE TOOLS AND EQUIPMENT SHALL BE DISPOSED OF PROPERLY AND SHALL NOT BE ALLOWED TO ENTER STORM DRAINS, SANITARY SEWERS OR PERMITTED TO DISCHARGE TO STREET SURFACES. HARDENED WASTE CONCRETE CAN BE DISPOSED IN A MANNER SIMILAR TO ANY EARTH SPOILS PROVIDED THE MATERIALS ARE NOT CONTAMINATED WITH HAZARDOUS SUBSTANCES.
  - A SUFFICIENT NUMBER OF ONSITE PORTABLE TOILETS SHALL BE PROVIDED FOR PERSONNEL IF OTHER TOILET FACILITIES ARE NOT ALREADY AVAILABLE.
  - CONTRACTOR SHALL INSURE TRUCKS AND VEHICLES DO NOT CARRY MUD FROM THE SITE ONTO ABUTTING STREETS OR PROPERTIES BY THE USE OF APPROPRIATE VEHICLE CONSTRUCTION ENTRANCE PADS. THE CONTRACTOR SHALL BE ESPECIALLY DILIGENT WHERE CONSTRUCTION PADS CANNOT BE USED OR ARE UNEASIBLE DUE TO SITE CONSTRAINTS, E.G.: EXISTING PAVEMENT OR LIMITED AREA.
  - CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING TRACKED MUD FROM ABUTTING STREETS, STORM DRAINS, ETC., TO THE SATISFACTION OF THE OWNER OF THE STREET OR DRAINS.

**EROSION AND SEDIMENTATION CONTROL NOTES:**

- TEMPORARY AND/OR PERMANENT EROSION CONTROL DEVICES SUCH AS BALED HAY, SILT FENCING, ETC. SHALL BE INSTALLED PRIOR TO ANY CLEARING, EXCAVATION AND STOCKPILING.
- THE CONTRACTOR SHALL USE SILT FENCING UNLESS DIRECTED TO USE HAYBALES.
- SILT FENCING SHALL BE PLACED IMMEDIATELY DOWN SLOPE AND ADJOINING AREAS OF SOIL DISTURBANCE AND STOCKPILES. GENERAL LOCATIONS HAVE BEEN SHOWN ON THE EROSION CONTROL PLAN. ADDITIONAL LOCATIONS MAY BE ADDED DURING CONSTRUCTION AS CONDITIONS WARRANT.
- CLEARING OF EXISTING VEGETATION SHALL BE DONE IN A CONTROLLED MANNER SO AS TO AVOID EXTENSIVE AREAS OF DEFOLIATED TERRAIN SUBJECT TO EROSION. AREAS SO DISTURBED SHALL BE BROUGHT TO FINAL GRADES AND STABILIZED AS SOON AS POSSIBLE.
- DURING CONSTRUCTION THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING DRAINAGE AND RUNOFF FLOW DURING STORMS AND PERIODS OF RAINFALL.
- ALL EROSION CONTROL DEVICES SHALL BE INSPECTED AND MAINTAINED ON A REGULAR BASIS DURING CONSTRUCTION, ESPECIALLY AFTER EACH RAINFALL.
- SILT FENCING TOED AND STAKED IN ACCORDANCE WITH THE TYPICAL SILT FENCE DETAIL SHOWN.
- THE CONTRACTOR IS REQUIRED TO KEEP LOCAL AND STATE ROADS FREE OF MUD AND DEBRIS CAUSED BY CONSTRUCTION VEHICLES LEAVING THE CONSTRUCTION SITE.
- CONSTRUCTION ENTRANCE PADS ARE REQUIRED. THE PADS SHALL BE MAINTAINED IN A CONDITION FOR WHICH THEY ARE INTENDED BY REGULAR ADDITIONS OF STONE OR REMOVAL OF ACCUMULATED SEDIMENT.
- ALL EROSION AND SEDIMENTATION CONTROL DEVICES AND BMP'S SHALL BE INSPECTED AND REPAIRED AS NEEDED PRIOR TO ANTICIPATED STORMS.
- DUE TO CHANGING CHARACTERISTICS OF THE SITE CAUSED BY AND DURING CONSTRUCTION ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED AS SITE CONDITIONS WARRANT.
- IF CONSTRUCTION IS SUSPENDED, ALL DISTURBED AREAS SHALL BE SEEDED AND ALL NECESSARY EROSION CONTROL DEVICES SHALL BE IN PLACE AND IN GOOD WORKING ORDER. IF SEEDING IS NOT POSSIBLE THEN EROSION CONTROL MATS SHALL BE PLACED OVER ALL DISTURBED SOIL.
- EROSION CONTROL BLANKETS (MATS) SHALL BE INSTALLED ACCORDING TO THE MANUFACTURERS RECOMMENDATIONS. EROSION CONTROL BLANKETS (MATS) SHALL BE MANUFACTURED BY NORTH AMERICAN GREEN (1-800-772-2040) OR APPROVED EQUIVALENT AND INSTALLED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.
- ALL EROSION CONTROL METHODS, MATERIALS AND MAINTENANCE SHALL BE DONE IN ACCORDANCE WITH THE "RHODE ISLAND SOIL EROSION AND SEDIMENT CONTROL HANDBOOK".
- ALL DISTURBED AREAS SHALL BE BROUGHT TO FINISH GRADE WITH 6" OF GOOD CLEAN LOAM AND SEEDED WITH A SUITABLE GRASS MIX (SUCH AS URI #2 OR EQUIVALENT), AT A RATE OF 2.5 LBS./1000 SQUARE FEET.
- PRIOR TO SEEDING, FERTILIZE WITH 10-10-10 OR EQUAL. AT LEAST 40% OF THE FERTILIZER SHALL BE OF THE SLOW RELEASE FORM. LIME AND FERTILIZER SHALL BE INCORPORATED INTO THE TOP 3" TO 4" OF THE SOIL.
- APPLY FERTILIZER AT THE RATE OF 8 LBS./1000 SQUARE FEET, AND LIME AT A RATE OF 1 TON/ACRE. SEEDING SHALL BE DONE ACCORDING TO FOLLOWING DATES:  
SPRING: MARCH 15 TO MAY 31  
FALL: AUGUST 15 TO OCTOBER 31
- THE CONTRACTOR SHALL KEEP ALL SEEDED AREAS WATERED AND IN GOOD CONDITION UNTIL A GOOD HEALTHY, UNIFORM GROWTH IS ESTABLISHED OVER THE ENTIRE AREA.
- ALL PLANTINGS WHICH DO NOT SURVIVE THE FIRST GROWING SEASON SHALL BE REPLANTED.



**SILT FENCE DETAIL**

NOT TO SCALE

<p><b>FRISELLA-BALCH &amp; ASSOCIATES</b> LAND SURVEYING 33 NORTH ROAD, SUITE C-201, PEACE DALE, RI PHONE (401) 783-8949 FAX (401) 783-5997 www.frissella.com</p>	<p><b>CJ DOYLE, P.E.</b> CIVIL ENGINEERING MAILING ADDRESS P.O. BOX 1161, HOPE VALLEY, RI OFFICE LOCATION 33 NORTH ROAD, SUITE C-201A, PEACE DALE, RI PHONE (401) 284-2909 FAX (401) 783-5997 cjenline@cox.net</p>
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NO.	DATE	DESCRIPTION	BY

**DETAILS FOR SITE STRUCTURES AND EROSION & SEDIMENT CONTROL**

LOCATED ON:  
**SOUTHERLY PORTION OF LOT 3, ASSESSOR'S MAP 57-3**

OWNED BY:  
**DLS FAMILY LTD. PARTNERSHIP**

ADDRESS:  
**KINGSTOWN ROAD**

IN THE TOWN OF **SOUTH KINGSTOWN, RI**

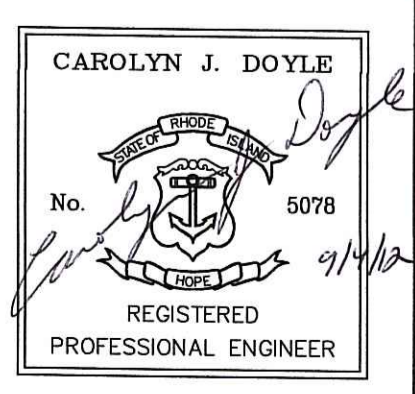
DATE: **AUGUST 2012**

SCALE: **AS SHOWN**

DESIGNED BY: **CAROLYN J. DOYLE, P.E.**

DRAWN BY: **JK** CHECKED BY: **CJD**

DRAWING NO. **SHEET 6 OF 7**



FOR SURVEYS ONLY FOR ENGINEERING

