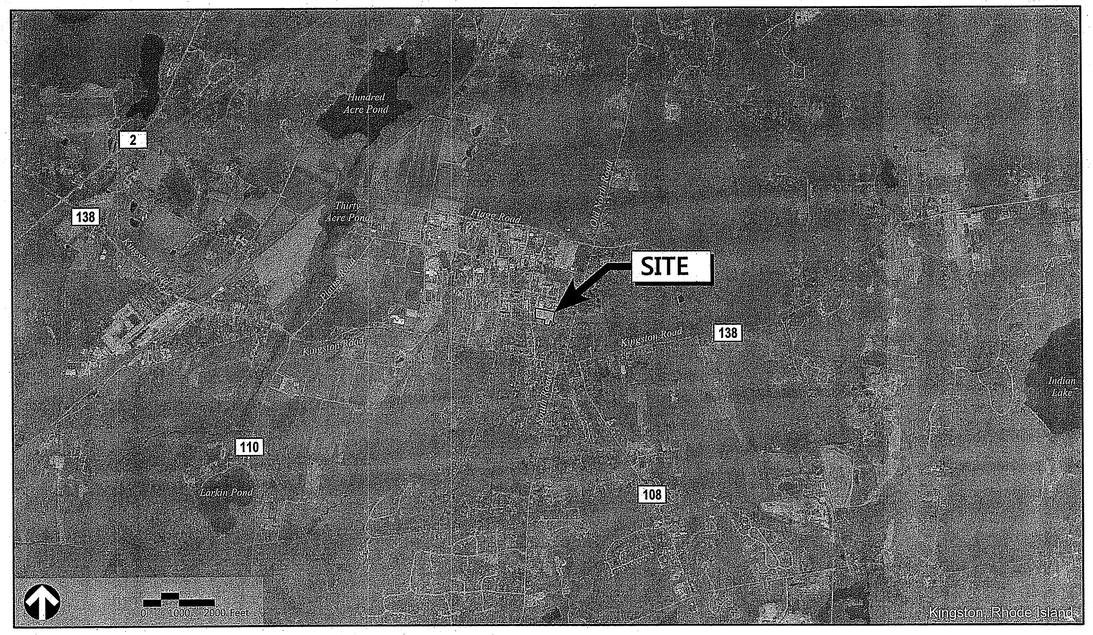
Site Plans

Issued for	RIDEM PDA
Date Issued	July 11, 2017
Latest Issue	July 11, 2017

URI Briar Lane Entrance Improvements

Upper College Road
Kingston, Rhode Island



Owner: A.P. 23-3 Lot 110

University of RI Foundation
C/O 21 Davis Hall
10 Lippitt Road
Kingston, RI 02881

Owner: A.P. 23-3 Lot 121

University of Rhode Island
C/O URI Board of Governors
301 Promenade Street
Providence, RI 02903

Applicant:

University of Rhode Island
45 Upper College Road
Kingston, RI 02881

Sheet Index

Reference Drawings

No.	Drawing Title	Latest Issue
	Boundary Survey & Existing Conditions Plan Sheets 1 and 2	March 2017

vhb.com

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1 Cedar Street
Suite 400
Providence, RI 02903
401.272.8100

Survey

National Surveyors-Developers, Inc.
42 Hamlet Avenue
Woonsocket, RI 02895
401.769.7779

JONATHAN B. STABACH
No. 7794
REGISTERED PROFESSIONAL ENGINEER (CIVIL)
7/11/17

VHB Project: 72772.00
Issued for: RIDEM PDA 7/11/2017

\\RIDATA\PROJECTS\72772.00\CAD\LD\PLANSET\RIDEM\72772 COV (RIDEM) 11 July 2017

Legend

Prop.	
	PROPERTY LINE
	PROJECT LIMIT LINE
	RIGHT-OF-WAY/PROPERTY LINE
	EASEMENT
	BUILDING SETBACK
	PARKING SETBACK
10+00	BASELINE
	CONSTRUCTION LAYOUT
	ZONING LINE
	LIMIT OF DISTURBANCE
	50' PERIMETER WETLAND
	WETLAND LIMIT WITH FLAG
EOP	EDGE OF PAVEMENT
PCC	PRECAST CONC. CURB
VGC	VERT. GRAN. CURB
	LIMIT OF CURB TYPE
	SAWCUT
	BUILDING
	BOLLARD
	SIGN
	DOUBLE SIGN
	HAY BALES
	SILT FENCE
	SILT SOCK / STRAW WATTLE
4	MINOR CONTOUR
20	MAJOR CONTOUR
(10)	PARKING COUNT
(C10)	COMPACT PARKING STALLS
DYL	DOUBLE YELLOW LINE
SL	STOP LINE
	CROSSWALK
	ACCESSIBLE CURB RAMP
	ACCESSIBLE PARKING
VAN	VAN-ACCESSIBLE PARKING

Prop.	
	CONCRETE
	CONSTRUCTION ENTRANCE
27.35 TC×	TOP OF CURB ELEVATION
26.85 BC×	BOTTOM OF CURB ELEVATION
132.75×	SPOT ELEVATION
45.0 TW× 38.5 BW×	TOP & BOTTOM OF WALL ELEVATION
	BORING LOCATION
	TEST PIT LOCATION
MW	MONITORING WELL
UD	UNDERDRAIN
12"D	DRAIN
6"RD	ROOF DRAIN
12"S	SEWER
OHW	OVERHEAD WIRE
6"DI	DUCTILE IRON WATER
4"FP	FIRE PROTECTION
2"DW	DOMESTIC WATER
G	GAS
E	ELECTRIC
T	TELEPHONE
FA	FIRE ALARM
CATV	CABLE TV
	DRAIN MANHOLE
	PLUG OR CAP
CO	CLEANOUT
DS	DOWN SPOUT
	SEWER MANHOLE
CS	CURB STOP & BOX
WV	WATER VALVE & BOX
TSV	TAPPING SLEEVE, VALVE & BOX
	FIRE DEPARTMENT CONNECTION FDC
HYD	FIRE HYDRANT
PIV	POST INDICATOR VALVE
GS	GAS GATE
GM	GAS METER
EMH	ELECTRIC MANHOLE
EM	ELECTRIC METER
	LIGHT POLE
TMH	TELEPHONE MANHOLE
T	TRANSFORMER PAD
	UTILITY POLE
	GUY POLE
	GUY WIRE & ANCHOR
HH	HAND HOLE
PB	PULL BOX

Abbreviations

General

ABAN	ABANDON
ACR	ACCESSIBLE CURB RAMP
ADJ	ADJUST
APPROX	APPROXIMATE
BIT	BITUMINOUS
BS	BOTTOM OF SLOPE
BWLL	BROKEN WHITE LANE LINE
CONC	CONCRETE
DYCL	DOUBLE YELLOW CENTER LINE
EL	ELEVATION
ELEV	ELEVATION
EXIST	EXISTING
EOP	EDGE OF PAVEMENT
FDN	FOUNDATION
FFE	FIRST FLOOR ELEVATION
GRAN	GRANITE
GTD	GRADE TO DRAIN
LA	LANDSCAPE AREA
LOD	LIMIT OF DISTURBANCE
MAX	MAXIMUM
MIN	MINIMUM
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
PERF	PERFORATED
PL	PROPERTY LINE
PROP	PROPOSED
REM	REMOVE
RET	RETAIN
R&D	REMOVE AND DISPOSE
R&R	REMOVE AND RESET
R&S	REMOVE AND SALVAGE
SWEL	SOLID WHITE EDGE LINE
SWLL	SOLID WHITE LANE LINE
TS	TOP OF SLOPE
TYP	TYPICAL

Utility

CB	CATCH BASIN
CMP	CORRUGATED METAL PIPE
CO	CLEANOUT
DCB	DOUBLE CATCH BASIN
DMH	DRAIN MANHOLE
CIP	CAST IRON PIPE
COND	CONDUIT
DIP	DUCTILE IRON PIPE
FES	FLARED END SECTION
FM	FORCE MAIN
F&G	FRAME AND GRATE
F&C	FRAME AND COVER
GI	GUTTER INLET
GT	GREASE TRAP
HDPE	HIGH DENSITY POLYETHYLENE PIPE
HH	HANDHOLE
HW	HEADWALL
HYD	HYDRANT
INV	INVERT ELEVATION
I=	INVERT ELEVATION
LP	LIGHT POLE
MES	METAL END SECTION
OHE	OVERHEAD ELECTRIC
PWW	PAVED WATER WAY
PVC	POLYVINYLCHLORIDE PIPE
PIV	POST INDICATOR VALVE
RCP	REINFORCED CONCRETE PIPE
RD	ROOF DRAIN
R=	RIM ELEVATION
SMH	SEWER MANHOLE
TSV	TAPPING SLEEVE, VALVE AND BOX
UG	UNDERGROUND
UP	UTILITY POLE

Notes:

General

1. CONTRACTOR SHALL NOTIFY "DIG-SAFE" (1-888-344-7233) AT LEAST 72 HOURS BEFORE EXCAVATING.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR SITE SECURITY AND JOB SAFETY. CONSTRUCTION ACTIVITIES SHALL BE IN ACCORDANCE WITH OSHA STANDARDS AND LOCAL REQUIREMENTS.
3. ACCESSIBLE ROUTES, PARKING SPACES, RAMPS, SIDEWALKS AND WALKWAYS SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE FEDERAL AMERICANS WITH DISABILITIES ACT AND WITH STATE AND LOCAL LAWS AND REGULATIONS (WHICHEVER ARE MORE STRINGENT).
4. WORK WITHIN THE LOCAL RIGHTS-OF-WAY SHALL CONFORM TO LOCAL MUNICIPAL STANDARDS. WORK WITHIN STATE RIGHTS-OF-WAY SHALL CONFORM TO THE LATEST EDITION OF THE STATE HIGHWAY DEPARTMENTS STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES.
5. UPON AWARD OF CONTRACT, CONTRACTOR SHALL MAKE NECESSARY CONSTRUCTION NOTIFICATIONS AND APPLY FOR AND OBTAIN NECESSARY PERMITS, PAY FEES, AND POST BONDS ASSOCIATED WITH THE WORK INDICATED ON THE DRAWINGS, IN THE SPECIFICATIONS, AND IN THE CONTRACT DOCUMENTS. DO NOT CLOSE OR OBSTRUCT ROADWAYS, SIDEWALKS, AND FIRE HYDRANTS, WITHOUT APPROPRIATE PERMITS.
6. TRAFFIC SIGNAGE AND PAVEMENT MARKINGS SHALL CONFORM TO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
7. AREAS OUTSIDE THE LIMITS OF PROPOSED WORK DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED BY THE CONTRACTOR TO THEIR ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE.
8. IN THE EVENT THAT SUSPECTED CONTAMINATED SOIL, GROUNDWATER, AND OTHER MEDIA ARE ENCOUNTERED DURING EXCAVATION AND CONSTRUCTION ACTIVITIES BASED ON VISUAL, OLFACTORY, OR OTHER EVIDENCE, THE CONTRACTOR SHALL STOP WORK IN THE VICINITY OF THE SUSPECT MATERIAL TO AVOID FURTHER SPREADING OF THE MATERIAL, AND SHALL NOTIFY THE OWNER IMMEDIATELY SO THAT THE APPROPRIATE TESTING AND SUBSEQUENT ACTION CAN BE TAKEN.
9. CONTRACTOR SHALL PREVENT DUST, SEDIMENT, AND DEBRIS FROM EXITING THE SITE AND SHALL BE RESPONSIBLE FOR CLEANUP, REPAIRS AND CORRECTIVE ACTION IF SUCH OCCURS.
10. DAMAGE RESULTING FROM CONSTRUCTION LOADS SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO OWNER.
11. CONTRACTOR SHALL CONTROL STORMWATER RUNOFF DURING CONSTRUCTION TO PREVENT ADVERSE IMPACTS TO OFF SITE AREAS, AND SHALL BE RESPONSIBLE TO REPAIR RESULTING DAMAGES, IF ANY, AT NO COST TO OWNER.
12. THE CONTRACTOR SHALL RED LINE THE SOIL EROSION AND SEDIMENT CONTROL PLAN BY ADDING THE FOLLOWING:
    A. BUILDING MATERIALS STAGING AREAS
    B. STOCKPILE AREAS, EROSION CONTROLS SHALL BE PLACED AT THE BASE OF ALL STOCKPILES
    C. DESIGNATED WASHOUT AREAS
    D. TEMPORARY SEDIMENT BASINS

Utilities

1. THE LOCATIONS, SIZES, AND TYPES OF EXISTING UTILITIES ARE SHOWN AS AN APPROXIMATE REPRESENTATION ONLY. THE OWNER OR IT'S REPRESENTATIVE(S) HAVE NOT INDEPENDENTLY VERIFIED THIS INFORMATION AS SHOWN ON THE PLANS. THE UTILITY INFORMATION SHOWN DOES NOT GUARANTEE THE ACTUAL EXISTENCE, SERVICEABILITY, OR OTHER DATA CONCERNING THE UTILITIES, NOR DOES IT GUARANTEE AGAINST THE POSSIBILITY THAT ADDITIONAL UTILITIES MAY BE PRESENT THAT ARE NOT SHOWN ON THE PLANS. PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL VERIFY AND DETERMINE THE EXACT LOCATIONS, SIZES, AND ELEVATIONS OF THE POINTS OF CONNECTIONS TO EXISTING UTILITIES AND, SHALL CONFIRM THAT THERE ARE NO INTERFERENCES WITH EXISTING UTILITIES AND THE PROPOSED UTILITY ROUTES, INCLUDING ROUTES WITHIN THE PUBLIC RIGHTS OF WAY.
2. WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, OR EXISTING CONDITIONS DIFFER FROM THOSE SHOWN SUCH THAT THE WORK CANNOT BE COMPLETED AS INTENDED, THE LOCATION, ELEVATION, AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR, AND THE INFORMATION FURNISHED IN WRITING TO THE OWNER'S REPRESENTATIVE FOR THE RESOLUTION OF THE CONFLICT AND CONTRACTOR'S FAILURE TO NOTIFY PRIOR TO PERFORMING ADDITIONAL WORK RELEASES OWNER FROM OBLIGATIONS FOR ADDITIONAL PAYMENTS WHICH OTHERWISE MAY BE WARRANTED TO RESOLVE THE CONFLICT.
3. SET CATCH BASIN RIMS, AND INVERTS OF SEWERS, DRAINS, AND DITCHES IN ACCORDANCE WITH ELEVATIONS ON THE GRADING AND UTILITY PLANS.
4. RIM ELEVATIONS FOR DRAIN AND SEWER MANHOLES, WATER VALVE COVERS, GAS GATES, ELECTRIC AND TELEPHONE PULL BOXES, AND MANHOLES, AND OTHER SUCH ITEMS, ARE APPROXIMATE AND SHALL BE SET/RESET AS FOLLOWS:
    A. PAVEMENTS AND CONCRETE SURFACES: FLUSH
    B. ALL SURFACES ALONG ACCESSIBLE ROUTES: FLUSH
    C. LANDSCAPE, LOAM AND SEED, AND OTHER EARTH SURFACE AREAS: ONE INCH ABOVE SURROUNDING AREA AND TAPER EARTH TO THE RIM ELEVATION.
5. THE LOCATION, SIZE, DEPTH, AND SPECIFICATIONS FOR CONSTRUCTION OF PROPOSED PRIVATE UTILITY SERVICES SHALL BE INSTALLED ACCORDING TO THE REQUIREMENTS PROVIDED BY, AND APPROVED BY, THE RESPECTIVE UTILITY COMPANY (GAS, TELEPHONE, ELECTRIC, FIRE ALARM, ETC.). FINAL DESIGN LOADS AND LOCATIONS TO BE COORDINATED WITH OWNER AND ARCHITECT.
6. CONTRACTOR SHALL MAKE ARRANGEMENTS FOR AND SHALL BE RESPONSIBLE FOR PAYING FEES FOR POLE RELOCATION AND FOR THE ALTERATION AND ADJUSTMENT OF GAS, ELECTRIC, TELEPHONE, FIRE ALARM, AND ANY OTHER PRIVATE UTILITIES, WHETHER WORK IS PERFORMED BY CONTRACTOR OR BY THE UTILITIES COMPANY.
7. UTILITY PIPE MATERIALS SHALL BE AS FOLLOWS, UNLESS OTHERWISE NOTED ON THE PLAN:
    A. STORM DRAIN PIPE SHALL BE HIGH DENSITY POLYETHYLENE PIPE (D) OR POLYVINYL CHLORIDE PIPE (PVC).
8. CONTRACTOR SHALL COORDINATE WITH ELECTRICAL CONTRACTOR AND SHALL FURNISH EXCAVATION, INSTALLATION, AND BACKFILL OF ELECTRICAL FURNISHED SITEWORK RELATED ITEMS SUCH AS PULL BOXES, CONDUITS, DUCT BANKS, LIGHT POLE BASES, AND CONCRETE PADS. SITE CONTRACTOR SHALL FURNISH CONCRETE ENCASEMENT OF DUCT BANKS IF REQUIRED BY THE UTILITY COMPANY AND AS INDICATED ON THE DRAWINGS.
9. ALL DRAINAGE STRUCTURE INTERIOR DIAMETERS (4' MIN.) SHALL BE DETERMINED BY THE MANUFACTURER BASED ON THE PIPE CONFIGURATIONS SHOWN ON THESE PLANS AND LOCAL MUNICIPAL STANDARDS. FOR MANHOLES THAT ARE 20 FEET IN DEPTH AND GREATER, THE MINIMUM DIAMETER SHALL BE 5 FEET.

Layout and Materials

1. DIMENSIONS ARE FROM THE FACE OF CURB, FACE OF BUILDING, FACE OF WALL, AND CENTER LINE OF PAVEMENT MARKINGS, UNLESS OTHERWISE NOTED.
2. CURBING SHALL BE PRECAST CONCRETE (PCC) AND VERTICAL GRANITE CURB (VGC) AS NOTED ON THE PLANS..
3. PROPOSED BOUNDS AND ANY EXISTING PROPERTY LINE MONUMENTATION DISTURBED DURING CONSTRUCTION SHALL BE SET OR RESET BY A PROFESSIONAL LICENSED SURVEYOR.
4. PRIOR TO START OF CONSTRUCTION, CONTRACTOR SHALL VERIFY EXISTING PAVEMENT ELEVATIONS AT INTERFACE WITH PROPOSED PAVEMENTS, AND EXISTING GROUND ELEVATIONS ADJACENT TO DRAINAGE OUTLETS TO ASSURE PROPER TRANSITIONS BETWEEN EXISTING AND PROPOSED FACILITIES.

Erosion Control

1. SEE SESC PLANS FOR EROSION CONTROL MEASURES, NOTES, AND DETAILS.

Existing Conditions Information

1. BASE PLAN: THE PROPERTY LINES AND EXISTING CONDITIONS SHOWN WERE TAKEN FROM PLAN ENTITLED EXISTING CONDITIONS, UNIVERSITY OF RHODE ISLAND AP 23-2 LOT 5, AP23-3 LOTS 108 & 121, UPPER COLLEGE ROAD, SOUTH KINGSTOWN, RHODE ISLAND, DATED JANUARY 2016; PROVIDED TO VHB BY THE OWNER.
   A. DELINEATION OF THE WETLANDS AND PLACEMENT OF THE FLAGS WAS PERFORMED BY: VHB
   B. FLAG MARKINGS THE WETLANDS WERE LOCATED BY: VHB USING GPS
2. BASE PLAN: THE PROPERTY LINES AND EXISTING CONDITIONS SHOWN WERE TAKEN FROM PLAN ENTITLED BOUNDRY SURVEY & EXISTING CONDITIONS PLAN, UNIVERSITY OF RHODE ISLAND AP 23-2 LOTS 5 & 18, AP23-3 LOTS 110 & 121, FORTIN ROAD & BRIAR LANE, SOUTH KINGSTOWN, RHODE ISLAND, DATED MARCH 2017; PROVIDED TO VHB BY THE OWNER.
3. TOPOGRAPHY: ELEVATIONS ARE BASED ON NAVD-88.

Document Use

1. THESE PLANS AND CORRESPONDING CADD DOCUMENTS ARE INSTRUMENTS OF PROFESSIONAL SERVICE, AND SHALL NOT BE USED, IN WHOLE OR IN PART, FOR ANY PURPOSE OTHER THAN FOR WHICH IT WAS CREATED WITHOUT THE EXPRESSED, WRITTEN CONSENT OF VHB. ANY UNAUTHORIZED USE, REUSE, MODIFICATION OR ALTERATION, INCLUDING AUTOMATED CONVERSION OF THIS DOCUMENT SHALL BE AT THE USER'S SOLE RISK WITHOUT LIABILITY OR LEGAL EXPOSURE TO VHB.
2. CONTRACTOR SHALL NOT RELY SOLELY ON ELECTRONIC VERSIONS OF PLANS, SPECIFICATIONS, AND DATA FILES THAT ARE OBTAINED FROM THE DESIGNERS, BUT SHALL VERIFY LOCATION OF PROJECT FEATURES IN ACCORDANCE WITH THE PAPER COPIES OF THE PLANS AND SPECIFICATIONS THAT ARE SUPPLIED AS PART OF THE CONTRACT DOCUMENTS.
3. SYMBOLS AND LEGENDS OF PROJECT FEATURES ARE GRAPHIC REPRESENTATIONS AND ARE NOT NECESSARILY SCALED TO THEIR ACTUAL DIMENSIONS OR LOCATIONS ON THE DRAWINGS. THE CONTRACTOR SHALL REFER TO THE DETAIL SHEET DIMENSIONS, MANUFACTURERS' LITERATURE, SHOP DRAWINGS AND FIELD MEASUREMENTS OF SUPPLIED PRODUCTS FOR LAYOUT OF THE PROJECT FEATURES.

Landscape Requirements

1. LANDSCAPE DESIGN AND INSTALLATION WILL BE COMPLETED BY URI. PLANT MATERIAL SHALL BE IN ACCORDANCE WITH THE RHODE ISLAND STORMWATER DESIGN AND INSTALLATION STANDARDS MANUAL, MARCH 2015: APPENDIX B, VEGETATION GUIDELINES AND PLANTING LIST.

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
REVIEWED SITE PLAN, APPLICATION NO. 17-0167
DATED SEP 26 2017
SEE LETTER OF SAME DATE.

RECEIVED JUL 14 2017

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1 Cedar Street
Suite 400
Providence, RI 02903
401.272.8100

URI Briar Lane Entrance Improvements

Upper College Road
Kingston, Rhode Island

No.	Revision	Date	Appvd.

Designed by | Checked by

Issued for | Date
RIDEM PDA | July 11, 2017

Not Approved for Construction

Drawing Title
Legend and General Notes

Drawing Number
C-1.1

JONATHAN B. STABACH
No. 7794
REGISTERED PROFESSIONAL ENGINEER (CIVIL)

Sheet 1 of 8

Project Number
72772.00

Sheet 2 of 11

\\RIDATA\projects\72772.00\cad\ld\Planset\RIDEM\72772 Plot-Briar Lane (RIDEM).dwg

Sign Summary

M.U.T.C.D. Number	Specification Width	Height	Desc.
R1-1	30"	30"	STOP
R4-7	24"	30"	
R7-8	12"	18"	RESERVED PARKING
R7-8P	12"	6"	VAN ACCESSIBLE

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URI Briar Lane Entrance Improvements

Upper College Road
Kingston, Rhode Island

No.	Revision	Date	Apprd.

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED SITE PLAN. APPLICATION NO.: RE-DMT
DATED SEP 26 2017
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Issued for: RIDEM PDA

Date: July 11, 2017

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Drawing Title: Layout and Materials Plan

Drawing Number: C-2.1

Sheet 2 of 8

Project Number: 72772.00

Sheet 3 of 11

JONATHAN B. STABACH
STATE OF RHODE ISLAND
No. 17794
REGISTERED PROFESSIONAL ENGINEER (CIVIL)
7/11/17

0 10 20 40 Feet

Saved Tuesday, July 11, 2017 8:33:34 AM ZPOISSON Plotted Tuesday, July 11, 2017 8:37:20 AM Poisson, Zachary

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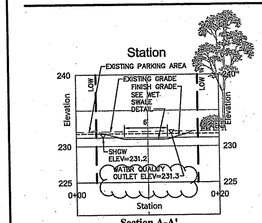
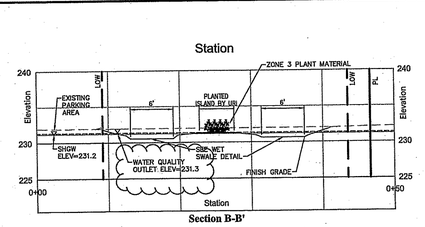
Wet Swale WS1 Sections



Section A-A'



Section B-B'

NOTE:
1. LANDSCAPE DESIGN AND INSTALLATION SHALL BE COMPLETED BY URI.

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URI Briar Lane Entrance Improvements

Upper College Road
Kingston, Rhode Island

No.	Revision	Date	Appvd.
1	RIDEM Comments	08/31/2017	kc

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Issued for: RIDEM PDA — Date: July 11, 2017

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Drawing Title: Grading and Drainage Plan

Drawing Number: C-3.1

Sheet 3 of 8

Project Number: 72772.00

Sheet 4 of 11

JONATHAN B. STABACH
STATE OF RHODE ISLAND
No. 7794
REGISTERED PROFESSIONAL ENGINEER (CIVIL)

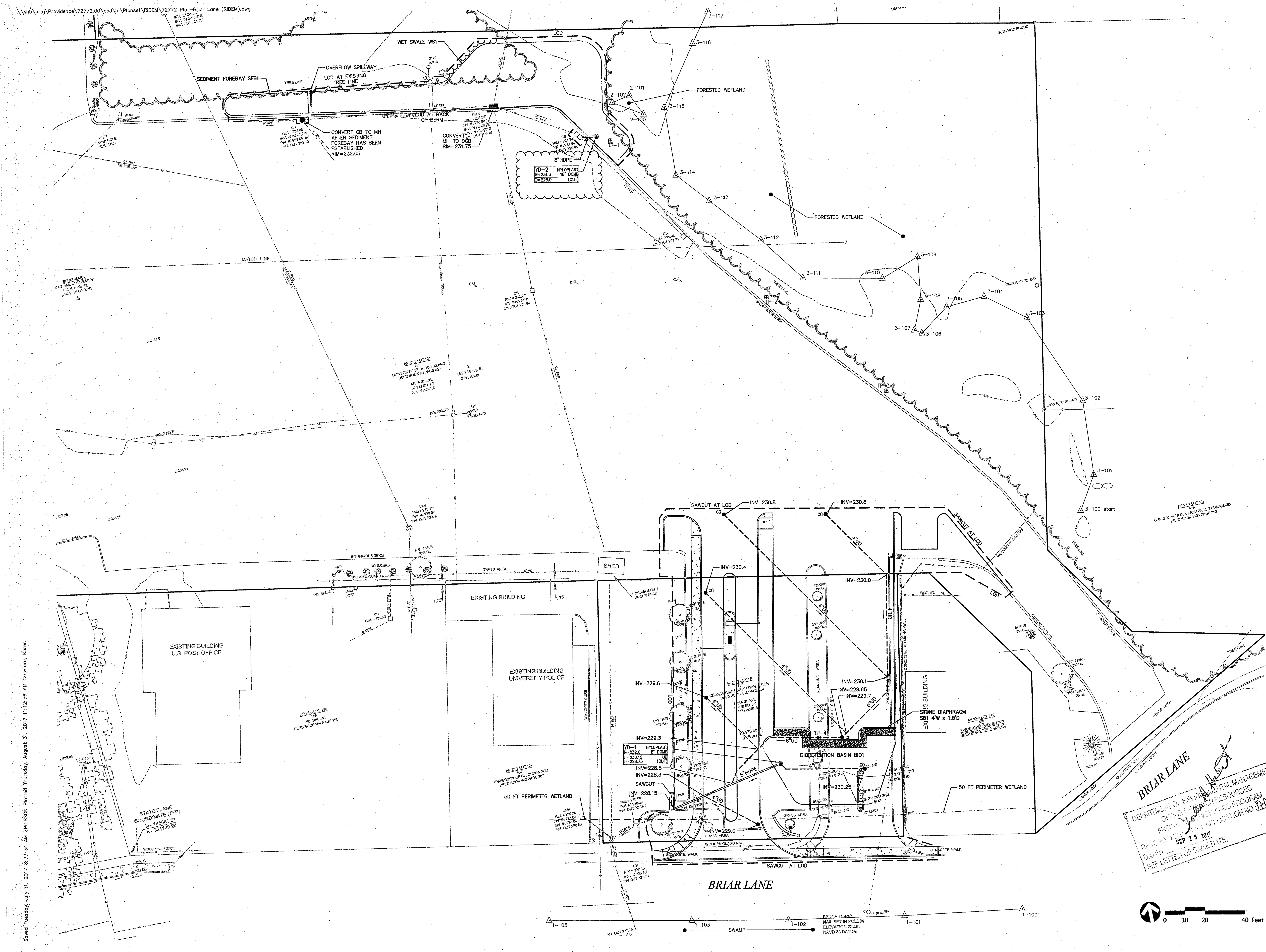
SEP 26 2017

BRIAR LANE

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
REVIEWED SITE PLAN, APPLICATION NO.: 17-D
DATED SEP 26 2017
SEE LETTER OF SAME DATE.

0 10 20 40 Feet

Saved Thursday, August 31, 2017 11:14:07 AM KCRAWFORD Plotted Thursday, August 31, 2017 11:31:31 AM Crawford, Karen



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URI Briar Lane Entrance Improvements

Upper College Road
Kingston, Rhode Island

No.	Revision	Date	Appvd.
1	RIDEM Comments	08/31/2017	kc

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Drawing Title
Utility Plan

Drawing Number
C-4.1

JONATHAN B. STABACH — No. 7794 — REGISTERED PROFESSIONAL ENGINEER (CIVIL)

Sheet 4 of 8

Project Number
72772.00

Sheet 5 of 11

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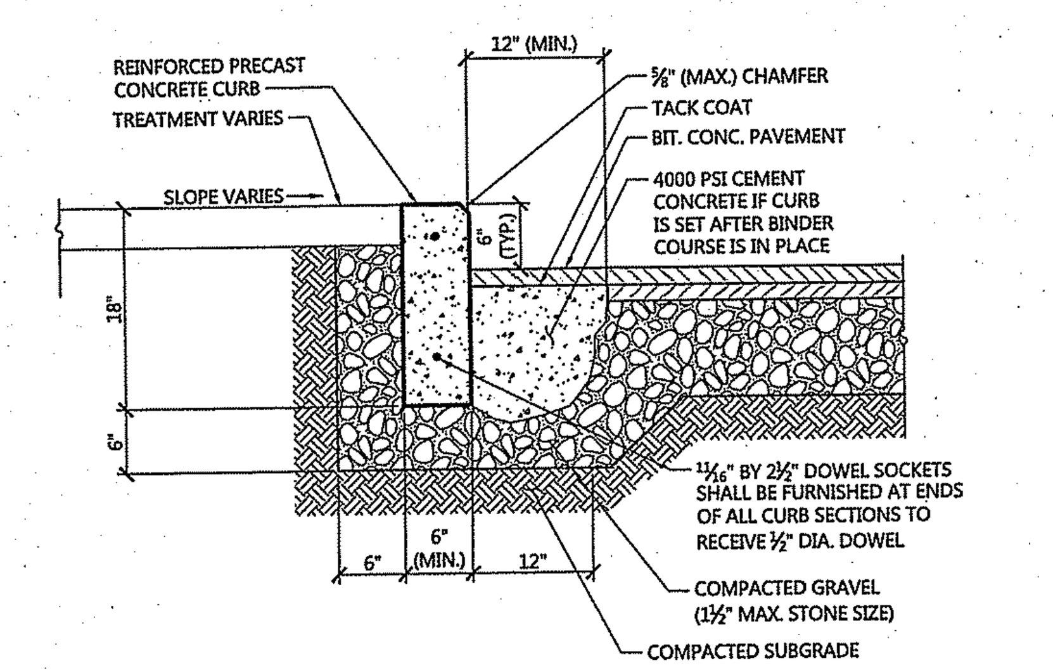
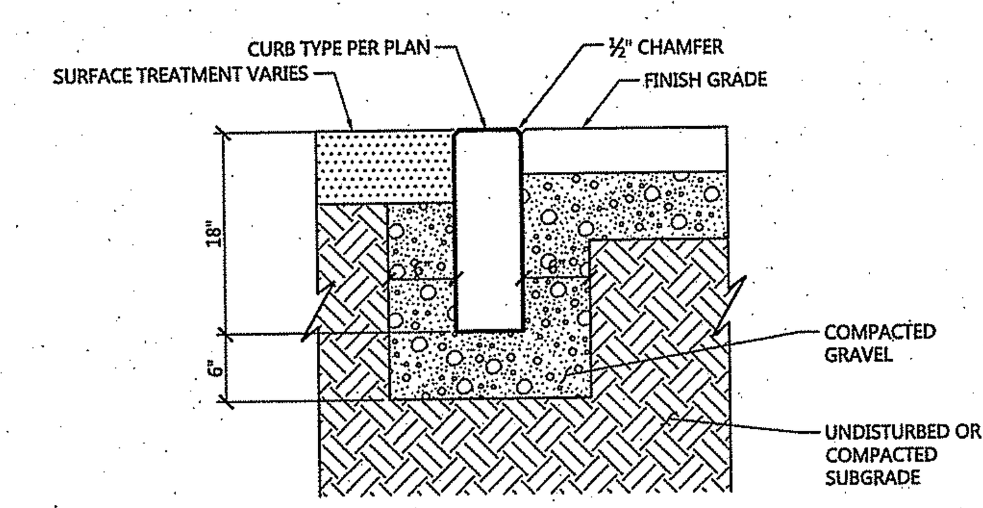


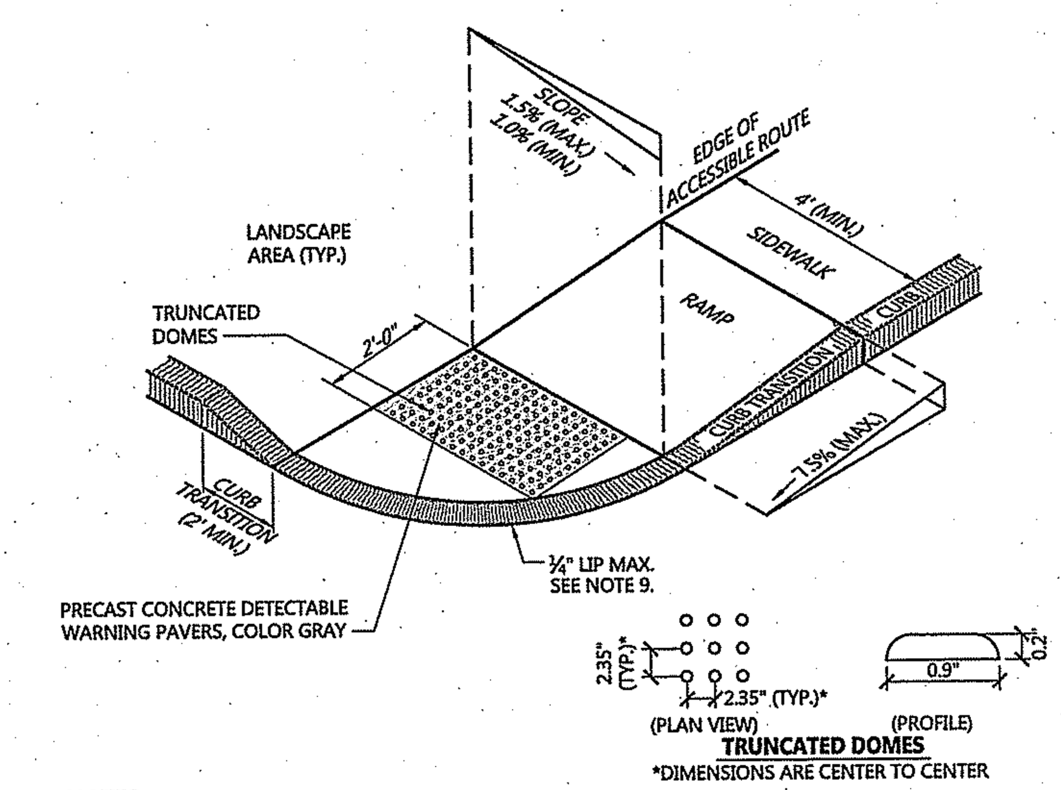
Precast Concrete Curb (PCC) 1/16

N.T.S. Source: VHB LD_404



Flush Curb 6/17

N.T.S. Source: VHB REV LD_409

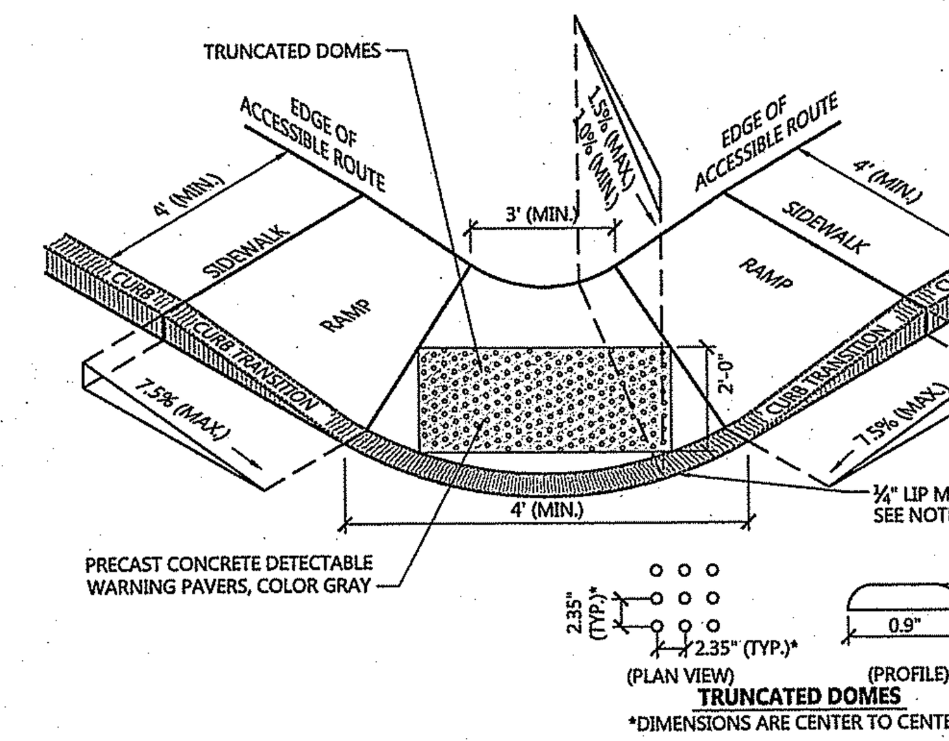


NOTES

1. THE MAXIMUM ALLOWABLE SIDEWALK AND CURB RAMP CROSS SLOPES SHALL BE 1.5 (1% MIN.).
2. THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE EXCLUDING CURB RAMPS SHALL BE 5%.
3. THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE AT CURB RAMPS SHALL BE 7.5%.
4. A MINIMUM OF 3 FEET CLEAR SHALL BE MAINTAINED AT ANY PERMANENT OBSTACLE IN ACCESSIBLE ROUTE (I.E., HYDRANTS, UTILITY POLES, TREE WELLS, SIGNS, ETC.).
5. CURB TREATMENT VARIES, SEE PLANS FOR CURB TYPE.
6. RAMP, CURB AND ADJACENT PAVEMENTS SHALL BE GRADED TO PREVENT PONDING.
7. SEE TYPICAL SIDEWALK SECTION FOR RAMP CONSTRUCTION.
8. WHERE ACCESSIBLE ROUTES ARE LESS THAN 5' IN WIDTH (EXCLUDING CURBING) A 5' x 5' PASSING AREA SHALL BE PROVIDED AT INTERVALS NOT TO EXCEED 200 FEET.
9. ELIMINATE CURBING AT RAMP WHERE IT ABUTS ROADWAY, EXCEPT WHERE VERTICAL CURBING IS INDICATED ON THE DRAWINGS TO BE INSTALLED AND SET FLUSH.
10. DETECTABLE WARNINGS SHALL CONTRAST VISUALLY WITH ADJOINING SURFACES.
11. DETECTABLE WARNINGS SHALL BE INSTALLED PERPENDICULAR TO THE ACCESSIBLE ROUTE.
12. CONTRACTOR TO SUBMIT R.F.I. FOR THIS TYPE OF ACCESSIBLE CURB RAMP FOR APEX ROADWAY CROSSINGS.

Accessible Curb Ramp (ACR) - Type 'B-D' 1/16

N.T.S. Source: VHB LD_501



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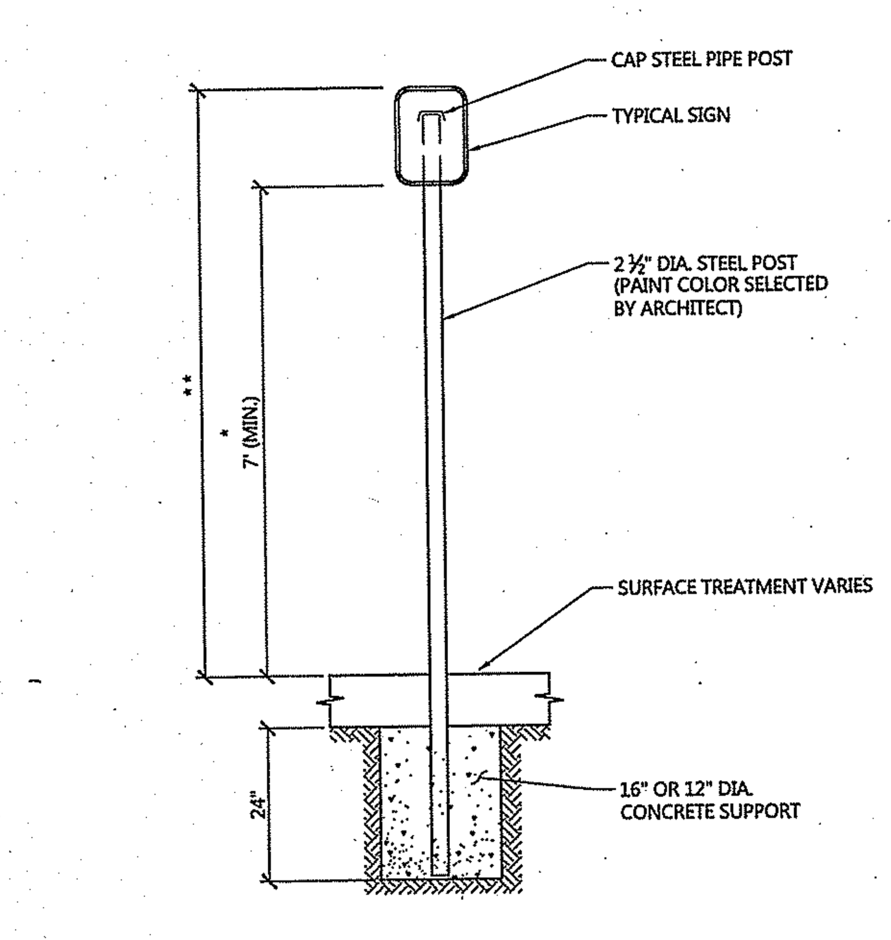
Accessible Curb Ramp (ACR) Type 'C-D' 1/16

N.T.S. Source: VHB LD_502

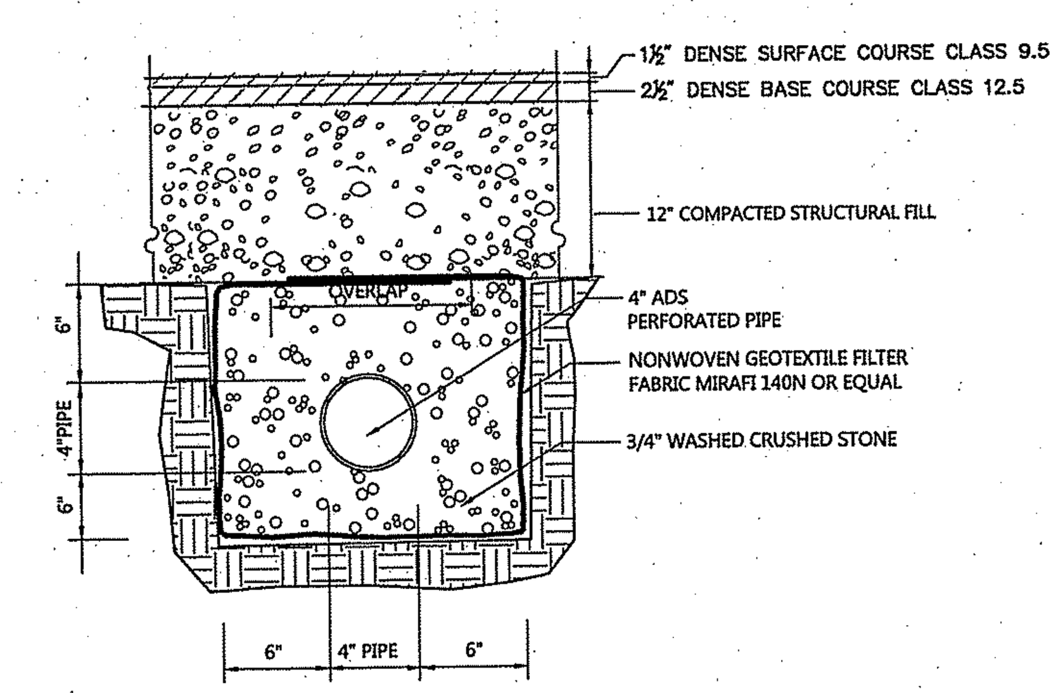


* THIS DIMENSION SHALL BE A MINIMUM OF 5' FOR ACCESSIBLE SIGNAGE.

** THIS DIMENSION SHALL BE A MAXIMUM OF 8' FOR ACCESSIBLE SIGNAGE.

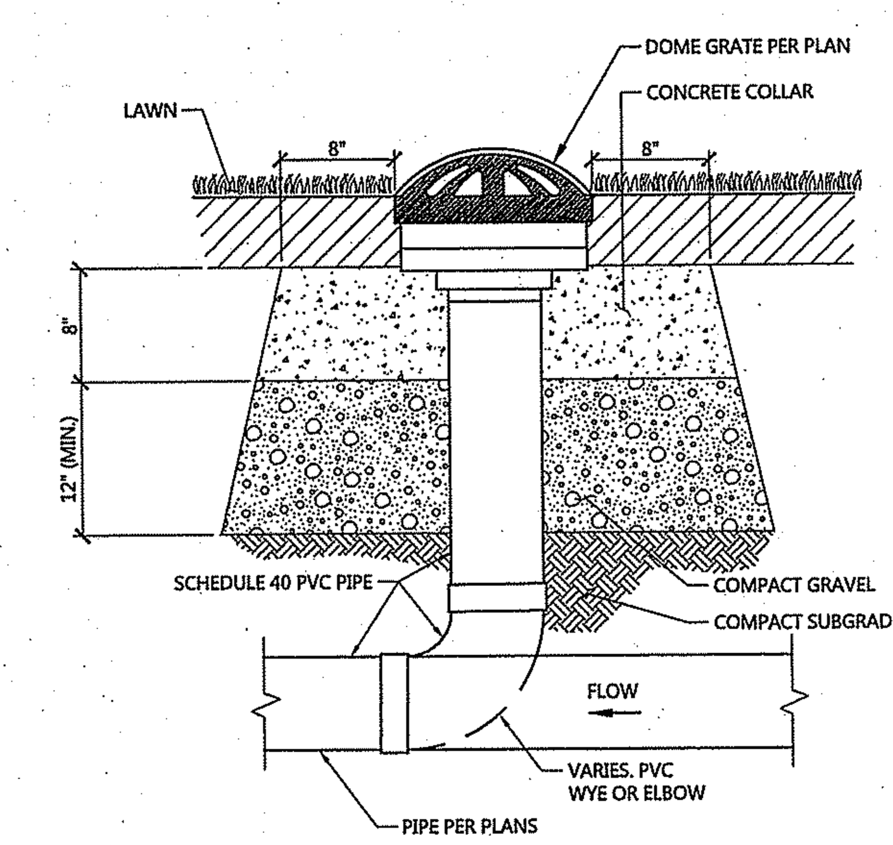
Sign Post - Type 'A' 1/16

N.T.S. Source: VHB LD_701



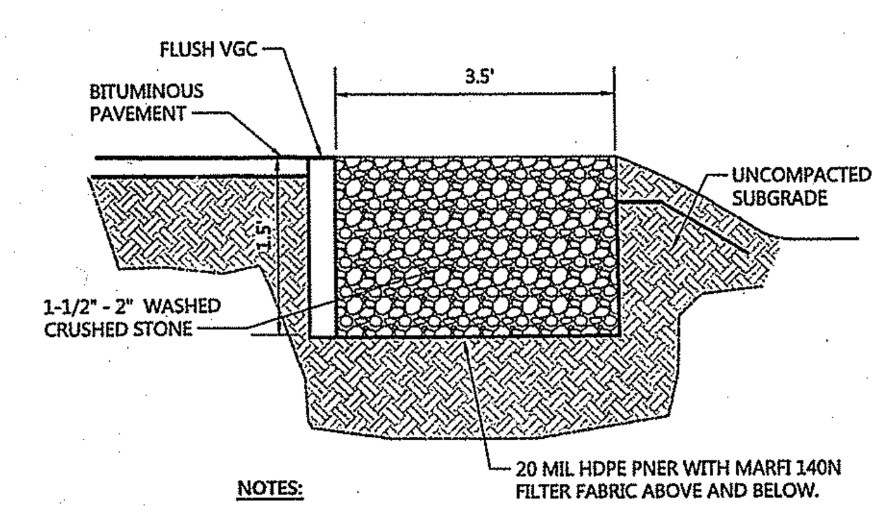
Bituminous Pavement Underdrain Section 5/17

N.T.S. Source: VHB LD_



Yard Drain (YD) 6/17

N.T.S. Source: VHB REV LD_193

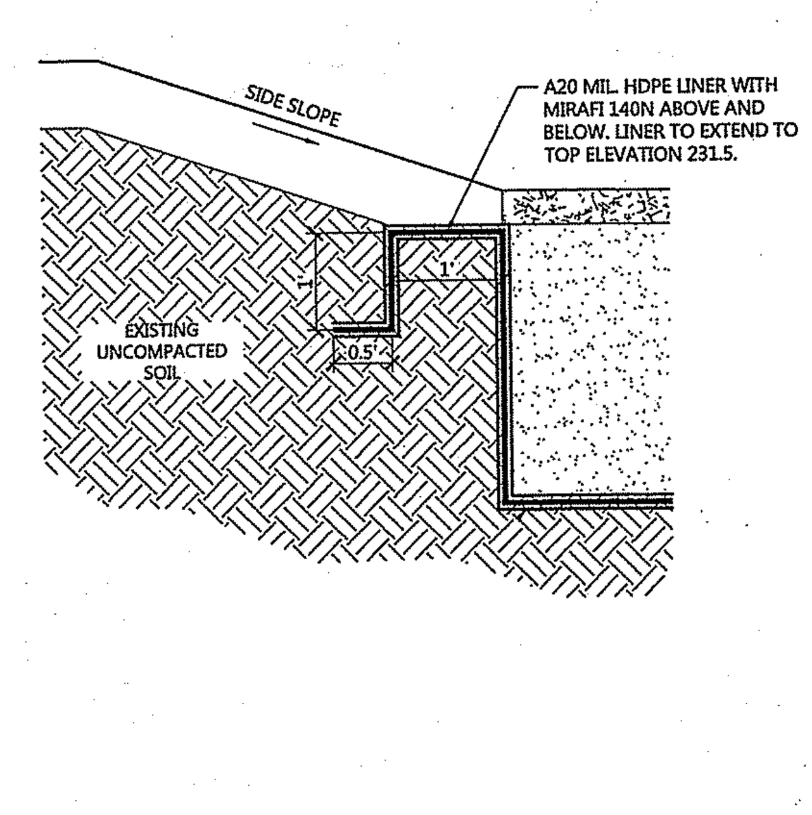


NOTES:

1. LENGTH OF STONE DIAPHRAGM PER PLANS.

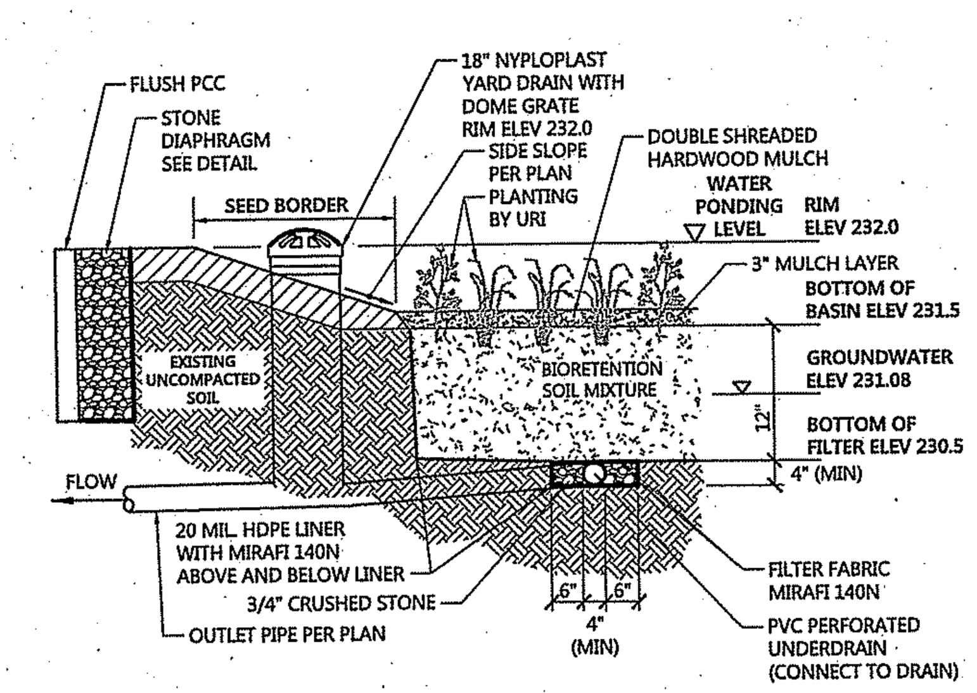
Stone Diaphragm SD1 6/17

N.T.S. Source: VHB



HDPE Liner and Anchor Detail 6/17

N.T.S. Source: VHB

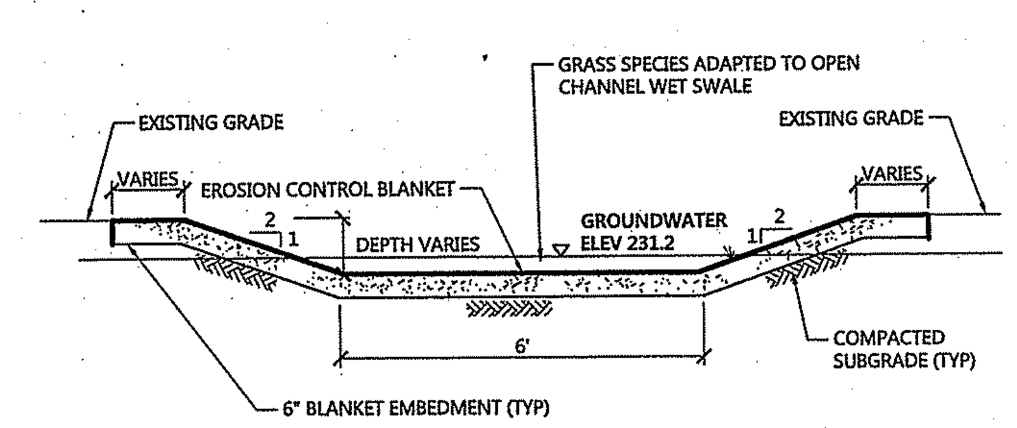


NOTES

1. BIORETENTION SOIL MIX. THE SOIL SHALL BE A UNIFORM MIX, FREE FROM STONES, STUMPS, ROOTS OR OTHER SIMILAR OBJECTS LARGER THAN 2 INCHES. THE SOIL SHALL BE FREE OX NOXIOUS WEEDS. RHE COMPOSITION SHALL BE AS FOLLOWS:
   - ORGANIC 3% TO 5%
   - MINERAL AGGREGATE
     - SOIL FINES 8% TO 12% (NO MORE THAN 2% CLAY)
     - SAND 85% TO 88%
2. ADD 20% (BY VOLUME) OF WELL-AGED (6-12 MONTHS), WELL-AERATED, LEAF COMPOST TO THE BIORETENTION SOIL MIX.

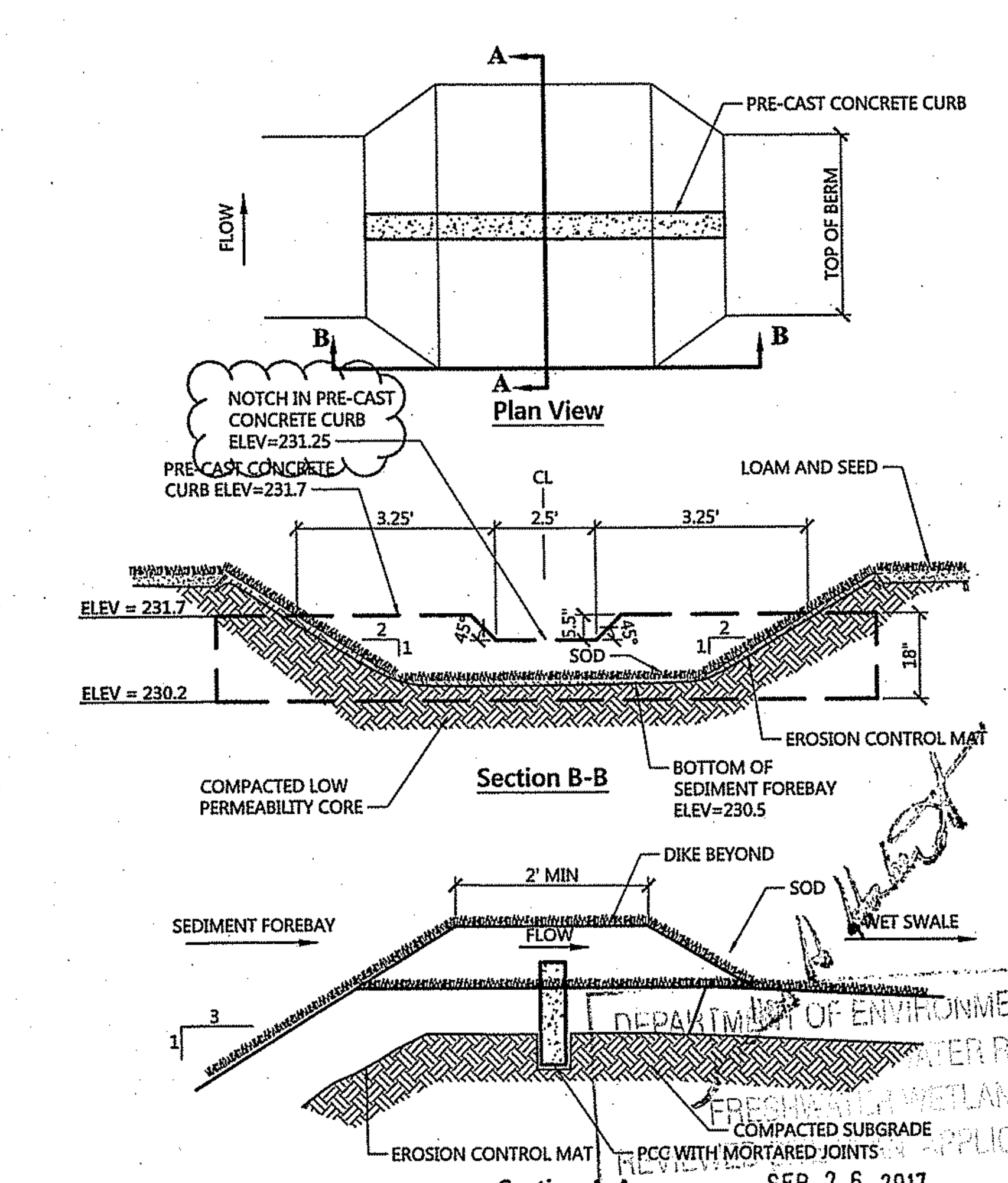
Biorention Basin BIO1 with Underdrain 3/17

N.T.S. Source: VHB



Wet Swale WS1 6/17

N.T.S. Source: VHB REV LD_171



Overflow Spillway 6/17

N.T.S. Source: VHB

vhb.com

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1 Cedar Street
Suite 400
Providence, RI 02903
401.272.8100

URI Briar Lane Entrance Improvements

Upper College Road
Kingston, Rhode Island

No.	Revision	Date	Appvd.
1	RIDEM Comments	08/31/2017	kc

Designed by Checked by

Issued for: RIDEM PDA

Date: July 11, 2017

Not Approved for Construction

Drawing Title: Site Details 1

Drawing Number: C-5.1

Sheet 5 of 8

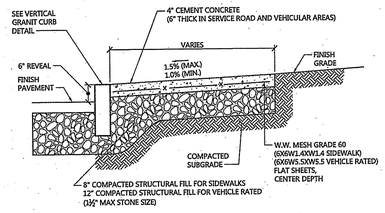
Project Number: 72772.00

Sheet 6 of 11

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
WATER RESOURCES
WETLANDS PROGRAM
APPLICATION NO.: 17-0167
DATED SEP 2 6 2017
SEE LETTER OF SAME DATE.

JONATHAN B. STABACH
No. 7794
REGISTERED PROFESSIONAL ENGINEER (CIVIL)

SEP 12 2017

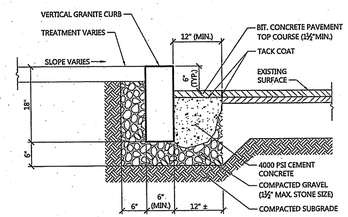


NOTES

1. SEE LANDSCAPE PLANS FOR ALL JOINTING PATTERNS AND JOINTING DETAILS.
2. PROVIDE BROOM FINISH TO ALL SIDEWALK AREAS. SEE LANDSCAPE PLANS FOR BROOM FINISH DIRECTION.
3. CONCRETE FOR SIDEWALKS TO BE 4000 PSI AND FOR DRIVEWAYS & SERVICE ROADS 5000 PSI. BOTH MIXES TO BE TYPE II, 6% (1.5±) AIR ENTRAINED.

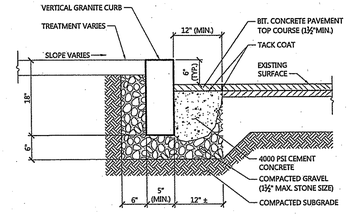
Concrete Sidewalk 1/16

N.T.S. Source: VHB LD_420



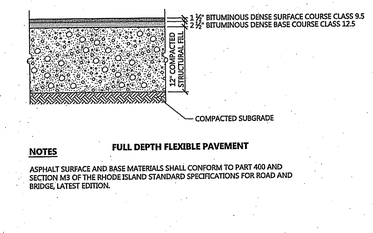
Vertical Granite Curb (VGC) 1/16

N.T.S. Source: VHB LD_403



Vertical Granite Curb (VGC) Set In Existing Pavement 1/16

N.T.S. Source: VHB LD_403



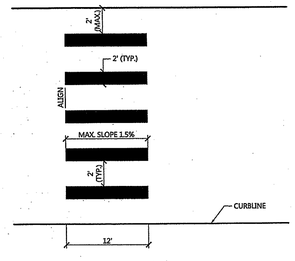
NOTES

ASPHALT SURFACE AND BASE MATERIALS SHALL CONFORM TO PART 400 AND SECTION M3 OF THE RHODE ISLAND STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE, LATEST EDITION.

FULL DEPTH FLEXIBLE PAVEMENT

Bituminous Concrete Pavement Sections 1/16

N.T.S. Source: VHB LD_430

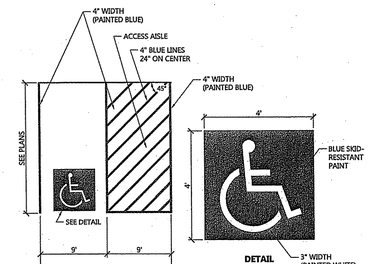


NOTES

1. LONGITUDINAL CROSSWALK LINES TO BE PARALLEL TO CURBLINE.
2. ALL LONGITUDINAL CROSSWALK LINES TO BE THE SAME LENGTH AND PROPERLY ALIGNED.
3. CROSS WALK SIDESLOPE SHALL NOT EXCEED 1.5%.
4. STRIPING SHALL BE WHITE.

Crosswalk 1/16

N.T.S. Source: VHB LD_553

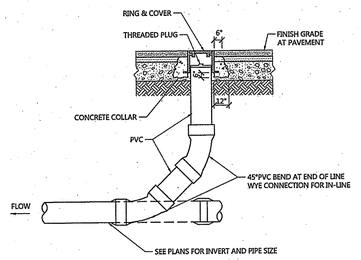


NOTES

1. ALL DIMENSIONS TO EDGES OF 4" PAVEMENT STRIPING.
2. 9' STALL WIDTH REFERS TO 8' CLEAR BETWEEN INSIDE EDGES OF PAVEMENT MARKINGS.
3. ALL SLOPES THROUGHOUT THE ACCESSIBLE PARKING AND AISLE AREAS SHALL NOT EXCEED 1.5%.

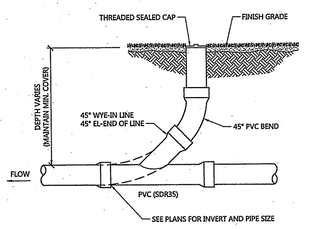
Accessible Parking Space 1/16

N.T.S. Source: VHB LD_552



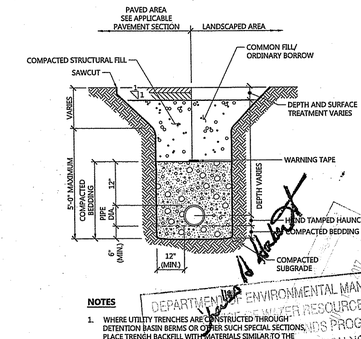
Cleanout - Paved Area 1/16

N.T.S. Source: VHB LD_303



Cleanout - Landscape Area 1/16

N.T.S. Source: VHB LD_302



NOTES

1. WHERE UTILITY TRENCHES ARE CONSTRUCTED THROUGH DETENTION BASIN BERMS OR OTHER SUCH SPECIAL SECTIONS, PLACE TRENCH BACKFILL WITH MATERIALS SIMILAR TO THE SPECIAL SECTION REQUIREMENTS.
2. USE METALLIC TRACING/WARNING TAPE OVER ALL PIPES.

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
WETLANDS PROGRAM
APPLICATION NO.: 17-0127
DATED SEP 2 6 2017
SEE LETTER OF SAME DATE.

Utility Trench 1/16

N.T.S. Source: VHB LD_300

vhb.com
vhb
1 Cedar Street
Suite 400
Providence, RI 02903
401.272.8100

URI Briar Lane Entrance Improvements

Upper College Road
Kingston, Rhode Island

No.	Revision	Date	Appvd.

Issued for Date

RIDEM PDA July 11, 2017

Not Approved for Construction

Drawing Title

Site Details 2

JONATHAN B. STABACH
STATE OF RHODE ISLAND
No. 7794
REGISTERED PROFESSIONAL ENGINEER (CIVIL)
7/11/17

Drawing Number

C-5.2

Sheet 6 of 8

Project Number

72772.00

Sheet 7 of 11

GENERAL

1. CONTRACTOR SHALL NOTIFY "DIG-SAFE" (1-888-344-7233) AT LEAST 72 HOURS BEFORE EXCAVATING.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR SITE SECURITY AND JOB SAFETY. CONSTRUCTION ACTIVITIES SHALL BE IN ACCORDANCE WITH OSHA STANDARDS AND LOCAL REQUIREMENTS.
3. UPON AWARD OF CONTRACT, CONTRACTOR SHALL MAKE NECESSARY CONSTRUCTION NOTIFICATIONS AND APPLY FOR AND OBTAIN NECESSARY PERMITS, PAY FEES, AND POST BONDS ASSOCIATED WITH THE WORK INDICATED ON THE DRAWINGS, IN THE SPECIFICATIONS, AND IN THE CONTRACT DOCUMENTS. DO NOT CLOSE OR OBSTRUCT ROADWAYS, SIDEWALKS, AND FIRE HYDRANTS, WITHOUT APPROPRIATE PERMITS.
4. AREAS OUTSIDE THE LIMITS OF PROPOSED WORK DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED BY THE CONTRACTOR TO THEIR ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE.
5. IN THE EVENT THAT SUSPECTED CONTAMINATED SOIL, GROUNDWATER, AND OTHER MEDIA ARE ENCOUNTERED DURING EXCAVATION AND CONSTRUCTION ACTIVITIES BASED ON VISUAL, OLFACTORY, OR OTHER EVIDENCE, THE CONTRACTOR SHALL STOP WORK IN THE VICINITY OF THE SUSPECT MATERIAL TO AVOID FURTHER SPREADING OF THE MATERIAL, AND SHALL NOTIFY THE OWNER IMMEDIATELY SO THAT THE APPROPRIATE TESTING AND SUBSEQUENT ACTION CAN BE TAKEN.
6. CONTRACTOR SHALL PREVENT DUST, SEDIMENT, AND DEBRIS FROM EXITING THE SITE AND SHALL BE RESPONSIBLE FOR CLEANUP, REPAIRS AND CORRECTIVE ACTION IF SUCH OCCURS.
7. CONTRACTOR SHALL CONTROL STORMWATER RUNOFF DURING CONSTRUCTION TO PREVENT ADVERSE IMPACTS TO OFF SITE AREAS, AND SHALL BE RESPONSIBLE TO REPAIR RESULTING DAMAGES, IF ANY, AT NO COST TO OWNER.
8. STAGING AND STOCKPILE AREAS SHALL NOT BE LOCATED WITHIN ANY WETLAND AND ABUTTING RESOURCE AREA AND SHALL BE LOCATED WITHIN THE LOD.
9. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING AND INSTALLING THE FOLLOWING ITEMS ON SITE AND REDLINING THE PLAN FOR RECORD KEEPING PURPOSES AS REQUIRED BY THE RIPDES GENERAL PERMIT FOR CONSTRUCTION ACTIVITIES:
   a. BUILDING MATERIALS STAGING AREAS
   b. STOCKPILE AREAS. EROSION CONTROLS SHALL BE PLACED AT THE BASE OF ALL STOCKPILES
   c. DESIGNATED WASHOUT AREAS.
   d. TEMPORARY DEWATERING BASIN AREAS.

EROSION CONTROL

1. PRIOR TO STARTING ANY OTHER WORK ON THE SITE, THE CONTRACTOR SHALL NOTIFY APPROPRIATE AGENCIES AND SHALL INSTALL EROSION CONTROL MEASURES AS SHOWN ON THE PLANS AND AS IDENTIFIED IN FEDERAL, STATE, AND LOCAL APPROVAL DOCUMENTS PERTAINING TO THIS PROJECT.
2. CONTRACTOR SHALL INSPECT AND MAINTAIN EROSION CONTROL MEASURES DAILY, AND REMOVE SEDIMENT THEREFROM ON A WEEKLY BASIS AND WITHIN TWELVE HOURS AFTER EACH STORM EVENT AND DISPOSE OF SEDIMENTS IN AN UPLAND AREA SUCH THAT THEY DO NOT ENCUMBER OTHER DRAINAGE STRUCTURES AND PROTECTED AREAS.
3. CONTRACTOR SHALL BE FULLY RESPONSIBLE TO CONTROL CONSTRUCTION SUCH THAT SEDIMENTATION SHALL NOT AFFECT REGULATORY PROTECTED AREAS, WHETHER SUCH SEDIMENTATION IS CAUSED BY WATER, WIND, OR DIRECT DEPOSIT.
4. CONTRACTOR SHALL PERFORM CONSTRUCTION SEQUENCING SUCH THAT EARTH MATERIALS ARE EXPOSED FOR A MINIMUM OF TIME BEFORE THEY ARE COVERED, SEEDED, OR OTHERWISE STABILIZED TO PREVENT EROSION.
5. UPON COMPLETION OF CONSTRUCTION AND ESTABLISHMENT OF PERMANENT GROUND COVER, CONTRACTOR SHALL REMOVE AND DISPOSE OF EROSION CONTROL MEASURES AND CLEAN SEDIMENT AND DEBRIS FROM ENTIRE DRAINAGE AND SEWER SYSTEMS.
6. STABILIZED CONSTRUCTION EXIT. A CROSS SLOPE WILL BE PLACED IN THE ENTRANCE TO DIRECT RUNOFF TO A PROTECTED SETTLING AREA. IF DEEMED NECESSARY AFTER CONSTRUCTION BEGINS, A WASH PAD MAY BE INCLUDED TO WASH OFF VEHICLE WHEELS BEFORE LEAVING THE PROJECT SITE.
7. VEGETATIVE SLOPE STABILIZATION WILL BE IMPLEMENTED WITHIN 14 DAYS AFTER GRADING OR CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED. VEGETATIVE SLOPE STABILIZATION WILL BE USED TO MINIMIZE EROSION ON SLOPES OF 3:1 OR STEEPER. ESTABLISHMENT OF TEMPORARY AND PERMANENT VEGETATIVE COVER MAY BE ESTABLISHED BY HYDRO-SEEDING OR SODDING. A SUITABLE TOPSOIL, GOOD SEEDBED PREPARATION, AND ADEQUATE LIME, FERTILIZER AND WATER WILL BE PROVIDED FOR EFFECTIVE ESTABLISHMENT OF THESE VEGETATIVE STABILIZATION METHODS. MULCH WILL ALSO BE USED AFTER PERMANENT SEEDING TO PROTECT SOIL FROM THE IMPACT OF FALLING RAIN AND TO INCREASE THE CAPACITY OF THE SOIL TO ABSORB WATER.

BIORETENTION BASIN PROTECTION DURING CONSTRUCTION

FOR THE LONG-TERM FUNCTION OF THE INFILTRATION SYSTEM CARE MUST BE TAKEN IN THIS AREA DURING CONSTRUCTION. THE CONTRACTOR SHALL EMPLOY THE FOLLOWING MINIMUM BEST MANAGEMENT PRACTICES (BMPS):

1. THESE AREAS SHALL NOT BE USED AS CONSTRUCTION SEDIMENTATION SYSTEMS.
2. INITIAL BASIN EXCAVATION SHOULD BE CARRIED TO WITHIN 1 FOOT OF THE FINAL ELEVATION OF THE BASIN FLOOR. FINAL EXCAVATION SHOULD BE DEFERRED UNTIL ALL DISTURBED AREAS CONTRIBUTING TO THE BASIN HAVE BEEN STABILIZED OR PROTECTED. PRIOR TO FINAL EXCAVATION, REMOVE ALL ACCUMULATED SEDIMENT.
3. CONSTRUCTION EQUIPMENT, VEHICULAR, AND STOCKPILING OF CONSTRUCTION AND EARTH MATERIALS SHALL BE OUTSIDE THE LIMITS OF THESE AREAS. THE SUBGRADE BENEATH SHALL NOT BE COMPACTED.
4. EXCAVATION FOR CONSTRUCTION OF THESE SYSTEMS SHALL BE PERFORMED MANUALLY OR BY LIGHT-TRACKED EQUIPMENT TO AVOID COMPACTION OF THE BASIN FLOOR.
5. THE CONTRACTOR SHALL INSTALL EROSION CONTROL BARRIER AROUND THE PERIMETER OF THE SYSTEMS TO PREVENT THE USE OF THESE AREAS FOR ALL ACTIVITIES THAT MIGHT DAMAGE THE INFILTRATION CAPABILITIES. THE FENCING MAY BE REMOVED FOR BACKFILLING AND FINAL CONSTRUCTION.

WET SWALE PROTECTION DURING CONSTRUCTION

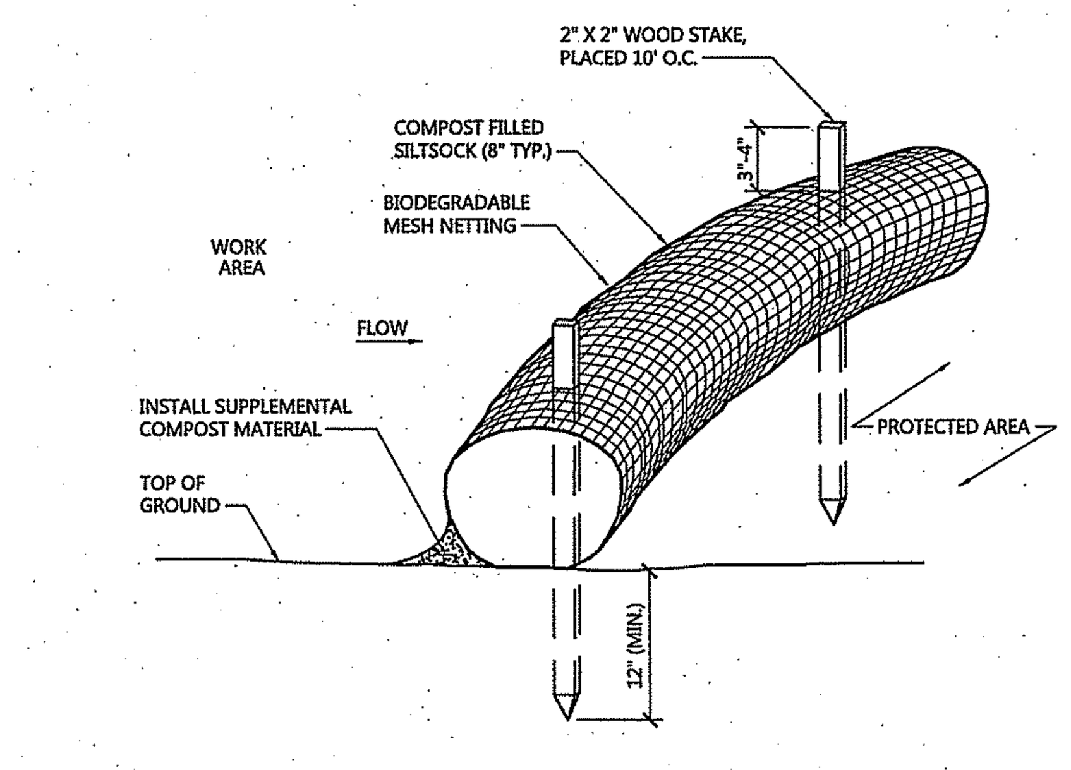
FOR THE LONG-TERM FUNCTION OF THE WET SWALE, CARE MUST BE TAKEN IN THIS AREA DURING CONSTRUCTION. THE CONTRACTOR SHALL EMPLOY THE FOLLOWING MINIMUM BEST MANAGEMENT PRACTICES (BMPS):

1. THESE AREAS SHALL NOT BE USED AS CONSTRUCTION SEDIMENTATION SYSTEMS.
2. ALL STORMWATER RUNOFF FROM EXPOSED SURFACES SHALL BE DIRECTED AWAY FROM THESE AREAS UNTIL STABILIZED.
3. CONSTRUCTION EQUIPMENT, VEHICULAR, AND STOCKPILING OF CONSTRUCTION AND EARTH MATERIALS SHALL BE OUTSIDE THE LIMITS OF THESE AREAS. THE SUBGRADE BENEATH SHALL NOT BE COMPACTED.
4. THE AREA SHALL BE PROTECTED WITH EROSION CONTROLS IMMEDIATELY UPON INSTALLATION.
5. EXCAVATION FOR CONSTRUCTION OF THESE SYSTEMS SHALL BE PERFORMED MANUALLY OR BY LIGHT-TRACKED EQUIPMENT TO AVOID COMPACTION OF THE BASIN FLOOR.

EROSION CONTROL MAINTENANCE REQUIREMENTS

SITE OWNERS AND OPERATORS MUST ENSURE THAT ALL EROSION, RUNOFF, SEDIMENT, AND POLLUTION PREVENTION CONTROLS REMAIN IN EFFECTIVE OPERATING CONDITION AND ARE PROTECTED FROM ACTIVITIES THAT WOULD REDUCE THEIR EFFECTIVENESS. SITE OWNERS AND OPERATORS MUST ALSO ENSURE THAT ALL EROSION, RUNOFF, SEDIMENT, AND POLLUTION PREVENTION CONTROLS ARE INSPECTED AT THE REQUIRED FREQUENCY REQUIREMENTS LISTED BELOW. IF THE DESIGNATED SITE INSPECTOR FINDS A PROBLEM (I.E. EROSION, RUNOFF, SEDIMENT OR POLLUTION PREVENTION CONTROLS REQUIRE REPLACEMENT, REPAIR, OR MAINTENANCE), THE OWNER AND OPERATOR MUST ENSURE THAT THE NECESSARY REPAIRS OR MODIFICATIONS ARE MADE IN ACCORDANCE WITH THE FOLLOWING:

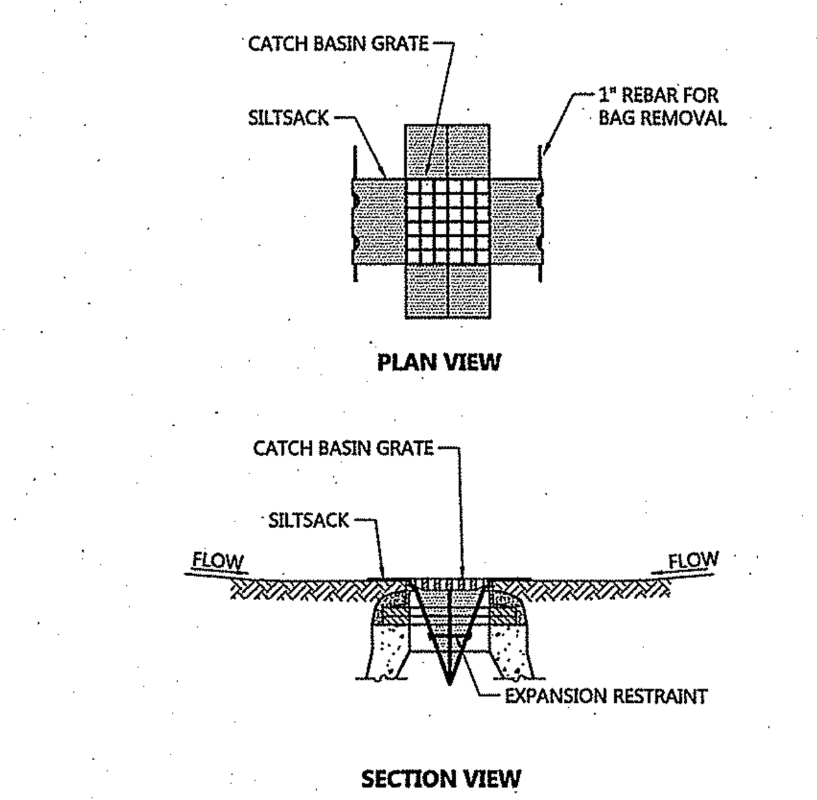
4. INITIATE WORK TO FIX THE PROBLEM IMMEDIATELY AFTER DISCOVERING THE PROBLEM, AND COMPLETE SUCH WORK BY THE CLOSE OF THE NEXT WORK DAY, IF THE PROBLEM DOES NOT REQUIRE SIGNIFICANT REPAIR OR REPLACEMENT, OR IF THE PROBLEM CAN BE CORRECTED THROUGH ROUTINE MAINTENANCE.
5. WHEN INSTALLATION OF A NEW CONTROL OR A SIGNIFICANT REPAIR IS NEEDED, SITE OWNERS AND OPERATORS MUST ENSURE THAT THE NEW OR MODIFIED CONTROL PRACTICE IS INSTALLED AND MADE OPERATIONAL BY NO LATER THAN SEVEN (7) CALENDAR DAYS FROM THE TIME OF DISCOVERY WHERE FEASIBLE. IF IT IS INFEASIBLE TO COMPLETE THE INSTALLATION OR REPAIR WITHIN SEVEN (7) CALENDAR DAYS, THE REASONS WHY IT IS INFEASIBLE MUST BE DOCUMENTED IN THE SESC PLAN ALONG WITH THE SCHEDULE FOR INSTALLING THE STORMWATER CONTROL(S) AND MAKING IT OPERATIONAL AS SOON AS PRACTICABLE AFTER THE 7-DAY TIMEFRAME. WHERE THESE ACTIONS RESULT IN CHANGES TO ANY OF THE STORMWATER CONTROL MEASURES OUTLINED IN THE SESC PLAN, SITE OWNERS AND OPERATORS MUST MODIFY THE SESC PLAN ACCORDINGLY WITHIN SEVEN (7) CALENDAR DAYS OF COMPLETING THIS WORK IN ACCORDANCE WITH THE FOLLOWING:
   a. THE OWNER AND OPERATOR SHALL AMEND THE SESC PLAN WITHIN SEVEN (7) DAYS WHENEVER THERE IS A CHANGE IN DESIGN, CONSTRUCTION, OPERATION, MAINTENANCE OR OTHER PROCEDURE WHICH HAS A SIGNIFICANT EFFECT ON THE POTENTIAL FOR THE DISCHARGE OF POLLUTANTS, OR IF THE SESC PLAN PROVES TO BE INEFFECTIVE IN ACHIEVING ITS OBJECTIVES. IN ADDITION, THE SESC PLAN SHALL BE AMENDED TO IDENTIFY ANY NEW OPERATOR THAT WILL IMPLEMENT A COMPONENT OF THE SESC PLAN. THE AMENDED SESC PLAN MUST BE KEPT ON FILE AT THE CONSTRUCTION SITE AND ANY SESC PLAN MODIFICATIONS MUST BE DOCUMENTED. ANY AMENDMENTS TO CONTROL MEASURES WHICH INVOLVED THE PRACTICE OF ENGINEERING, MUST FIRST BE REVIEWED, SIGNED, AND STAMPED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF RHODE ISLAND.
3. IF CORRECTIVE ACTIONS ARE REQUIRED, THE SITE OWNER AND OPERATOR MUST ENSURE THAT ALL CORRECTIVE ACTIONS ARE DOCUMENTED ON THE INSPECTION REPORT IN WHICH THE PROBLEM WAS FIRST DISCOVERED. THESE CORRECTIVE ACTIONS MUST BE DOCUMENTED, SIGNED, AND DATED BY THE SITE OPERATOR ONCE ALL NECESSARY REPAIRS HAVE BEEN COMPLETED.
4. SOIL EROSION AND SEDIMENT CONTROL INSPECTION REQUIREMENTS
   MINIMUM FREQUENCY - EACH OF THE FOLLOWING AREAS MUST BE INSPECTED BY OR UNDER THE SUPERVISION OF THE OWNER AND OPERATOR AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN TWENTY FOUR (24) HOURS AFTER ANY STORM EVENT WHICH GENERATES AT LEAST 0.25 INCHES OF RAINFALL PER TWENTY-FOUR (24) HOUR PERIOD AND/OR AFTER A SIGNIFICANT AMOUNT OF RUNOFF:
   a. ALL AREAS THAT HAVE BEEN CLEARED, GRADED, OR EXCAVATED AND THAT HAVE NOT YET COMPLETED STABILIZATION;
   b. ALL STORMWATER EROSION, RUNOFF, AND SEDIMENT CONTROL MEASURES (INCLUDING POLLUTION PREVENTION PRACTICES) INSTALLED AT THE SITE TO COMPLY WITH THIS PERMIT;
   c. CONSTRUCTION MATERIAL, UNSTABILIZED SOIL STOCKPILES, WASTE, BORROW, OR EQUIPMENT STORAGE, AND MAINTENANCE AREAS THAT ARE COVERED BY THIS PERMIT AND ARE EXPOSED TO PRECIPITATION;
   d. ALL AREAS WHERE STORMWATER TYPICALLY FLOWS WITHIN THE SITE, INCLUDING TEMPORARY DRAINAGE WAYS DESIGNED TO DIVERT, CONVEY, AND/OR TREAT STORMWATER;
   e. ALL POINTS OF DISCHARGE FROM THE SITE;
   f. ALL LOCATIONS WHERE TEMPORARY OR PERMANENT SOIL STABILIZATION MEASURES HAVE BEEN IMPLEMENTED.
   g. ALL LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE.



NOTES

1. SILTSOCK SHALL BE FILTREXX SILTSOXX, OR APPROVED EQUAL.
2. SILTSOCKS SHALL OVERLAP A MINIMUM OF 12 INCHES.
3. SILTSOCK SHALL BE INSPECTED PERIODICALLY AND AFTER ALL STORM EVENTS, AND REPAIR OR REPLACEMENT SHALL BE PERFORMED PROMPTLY AS NEEDED.
4. COMPOST MATERIAL SHALL BE DISPERSED ON SITE, AS DETERMINED BY THE ENGINEER.
5. IF NON BIODEGRADABLE NETTING IS USED THE NETTING SHALL BE COLLECTED AND DISPOSED OF OFFSITE.
6. NO STAKING NECESSARY WHERE INSTALLED ON EXISTING PAVEMENT.

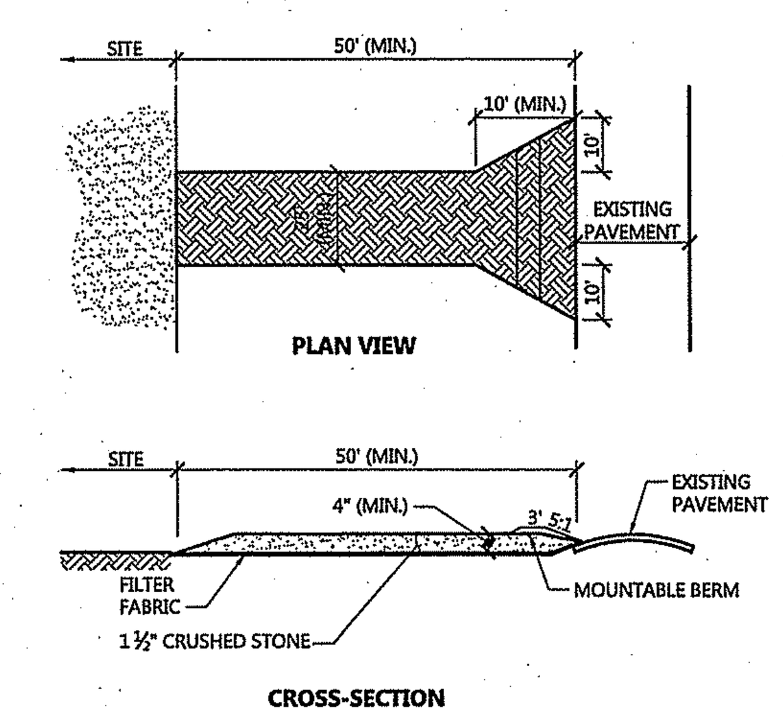
Siltsock - Erosion Control Barrier 1/16
N.T.S. Source: VHB LD_658



NOTES

1. INSTALL SILTSACK IN ALL CATCH BASINS WHERE INDICATED ON THE PLAN BEFORE COMMENCING WORK OR IN PAVED AREAS AFTER BINDER COURSE IS PLACED AND HAY BALES HAVE BEEN REMOVED.
2. GRATE TO BE PLACED OVER SILTSACK.
3. SILTSACK SHALL BE INSPECTED PERIODICALLY AND AFTER ALL STORM EVENTS AND CLEANING OR REPLACEMENT SHALL BE PERFORMED PROMPTLY AS NEEDED. MAINTAIN UNTIL UPSTREAM AREAS HAVE BEEN PERMANENTLY STABILIZED

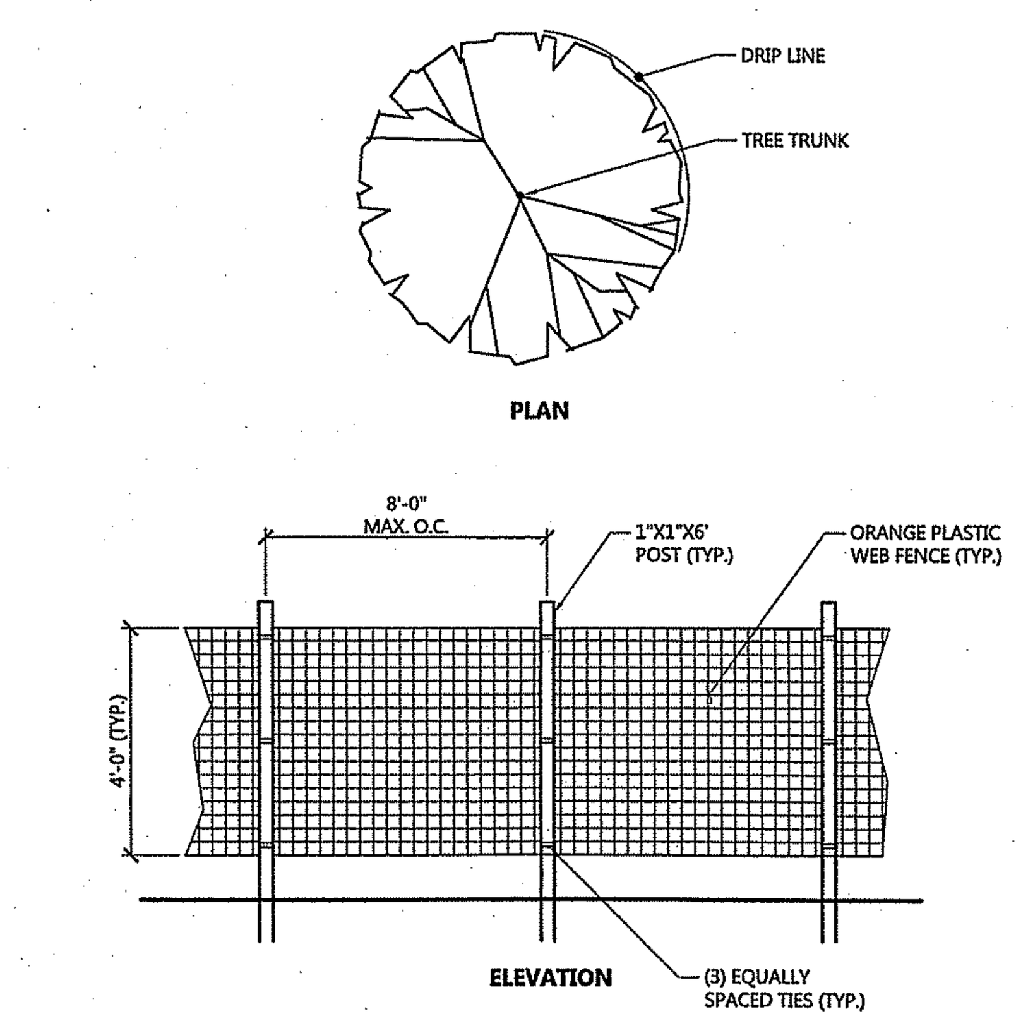
Siltsack Sediment Trap 1/16
N.T.S. Source: VHB LD_674



NOTES

1. EXIT WIDTH SHALL BE A TWENTY-FIVE (25) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
2. THE EXIT SHALL BE MAINTAINED IN A CONDITION WHICH SHALL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY. BERM SHALL BE PERMITTED. PERIODIC INSPECTION AND MAINTENANCE SHALL BE PROVIDED AS NEEDED.
3. STABILIZED CONSTRUCTION EXIT SHALL BE REMOVED PRIOR TO FINAL FINISH MATERIALS BEING INSTALLED.

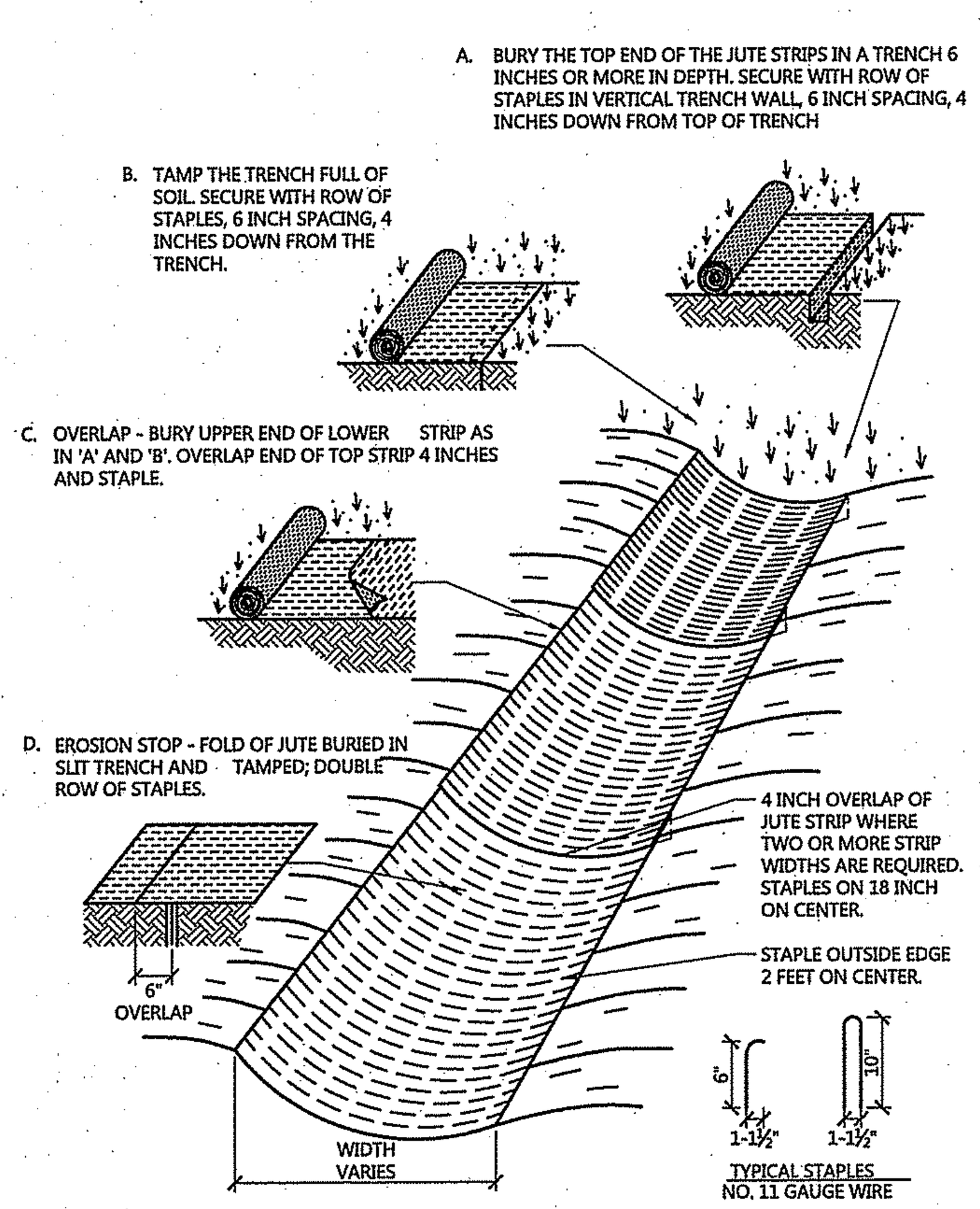
Stabilized Construction Exit 1/16
N.T.S. Source: VHB LD_682



NOTES

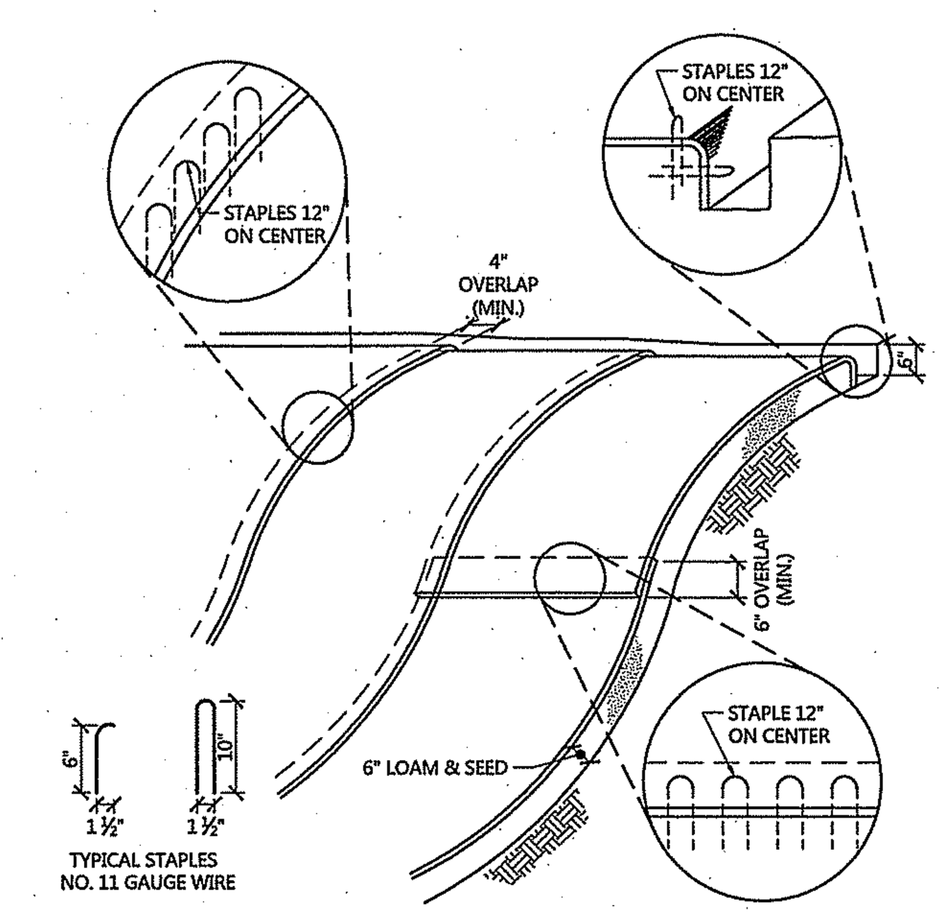
1. INSTALL TREE PROTECTION FENCE AT THE DRIP LINE OF EXISTING TREES TO REMAIN.

Tree Protection Fence 1/16
N.T.S. Source: VHB LD_610



* INSTALLATION SHALL BE AS PER MANUFACTURER'S RECOMMENDATIONS

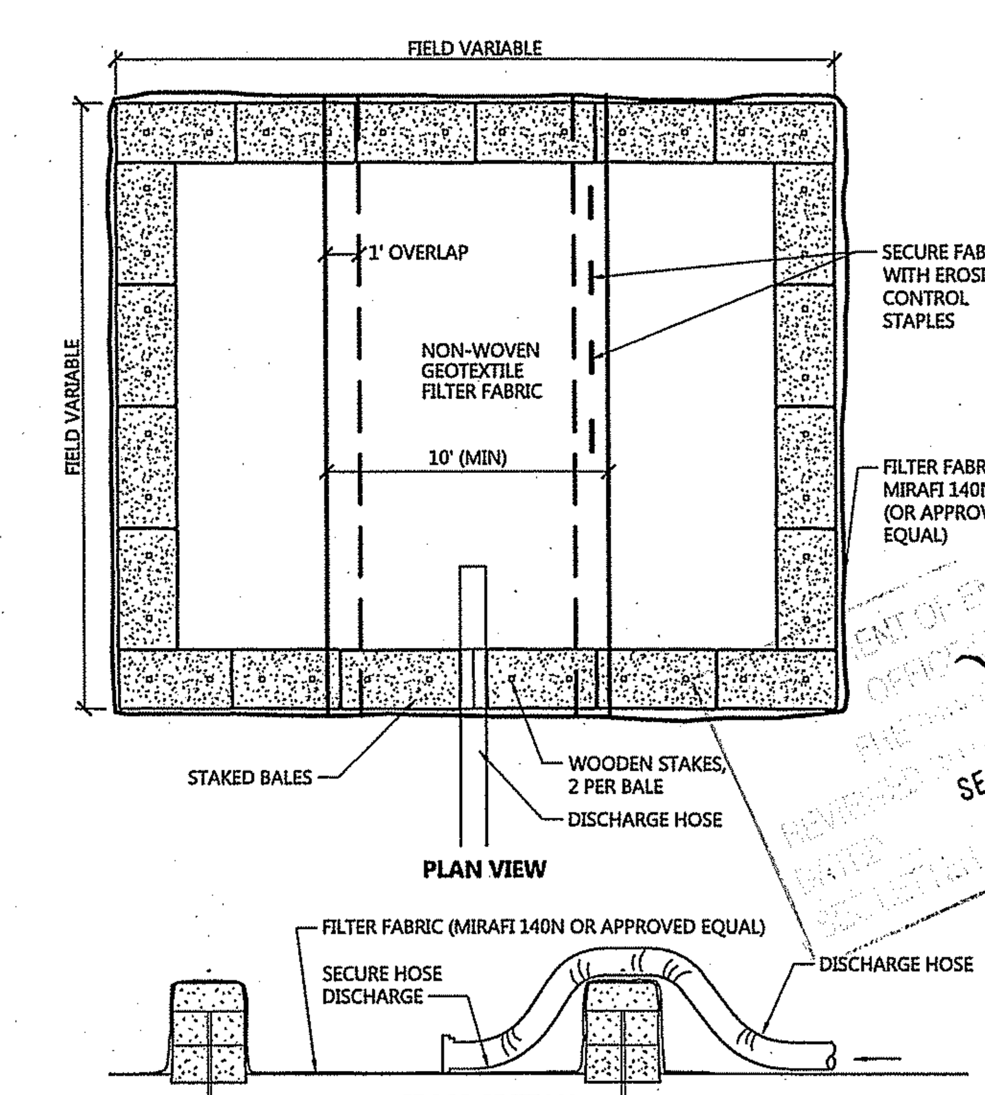
Erosion Control Blanket Swale Installation 1/16
N.T.S. Source: VHB LD_681



NOTES

1. BEGIN AT THE TOP OF BLANKET INSTALLATION AREA BY ANCHORING BLANKET IN A 6" DEEP TRENCH BACKFILL AND COMPACT TRENCH AFTER STAPLING.
2. ROLL THE BLANKET DOWN THE SWALE IN THE DIRECTION OF THE WATER FLOW.
3. THE EDGES OF BLANKETS MUST BE STAPLED WITH APPROX. 4 INCH OVERLAP WHERE 2 OR MORE STRIP WIDTHS ARE REQUIRED.
4. WHEN BLANKETS MUST BE SPLICED DOWN THE SWALE, PLACE UPPER BLANKET END OVER LOWER END WITH 6 INCH (MIN.) OVERLAP AND STAPLE BOTH TOGETHER.
5. METHOD OF INSTALLATION SHALL BE AS PER MANUFACTURER'S RECOMMENDATIONS.
6. EROSION CONTROL BLANKETS SHALL BE USED IN ALL AREAS WHERE SLOPES EXCEED 3:1.

Erosion Control Blanket Slope Installation 1/16
N.T.S. Source: VHB LD_680



NOTES

1. NUMBER OF BALES MAY VARY DEPENDING ON SITE CONDITIONS.
2. THE BASIN TO BE SIZED TO PREVENT DISCHARGE WATER FROM OVERTOPPING BASIN.

Dewatering Straw Bale Basin 1/16
N.T.S. Source: VHB LD_690

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Providence, RI 02903
401.272.8100

URI Briar Lane Entrance Improvements

Upper College Road
Kingston, Rhode Island

No.	Revision	Date	Appvd.

Designed by Checked by

Issued for: RIDEM PDA
Date: July 11, 2017

Not Approved for Construction

Drawing Title: Soil Erosion and Sediment Control - General Notes and Details

SEP 2 6 2017

JUL 1 4 2017

Drawing Number: SESC-1.1

JONATHAN B. STABACH
STATE OF RHODE ISLAND
No. 7794
REGISTERED PROFESSIONAL ENGINEER (CIVIL) 7/11/17

Sheet 7 of 8

Project Number 72772.00

Notes

1. REFER TO SOIL EROSION AND SOIL CONTROL PLAN REPORT FOR ADDITIONAL INFORMATION AND GUIDELINES.
2. TOTAL SITE AREA = 3.95 ACRES.
   TOTAL SITE DISTURBANCE = 0.61 ACRES.
3. NO PORTION OF THE SITE FALLS WITHIN OR DIRECTLY DISCHARGES TO A NATURAL HERITAGE AREA (NHA), OR OTHERWISE IMPACTS THREATENED SPECIES OR HABITATS.
4. STOCKPILING MUST BE WITHIN PROJECT LIMIT OF WORK BUT OUTSIDE THE BMP AREAS LISTED BELOW AND SHOWN ON THE PLANS AND SUCH THAT CONSTRUCTION VEHICLES DO NOT DRIVE OVER THESE AREAS TO ACCESS THE STOCKPILES.
5. WASHOUT AND REFUELING AREAS MUST BE WITHIN PROJECT LIMITS BUT OUTSIDE THE BMP AREAS LISTED BELOW AND SHOWN ON THE PLANS.

Legend

- BIO — BIOFILTRATION BASIN
- SD — STONE DIAPHRAM
- SFB — SEDIMENT FOREBAY
- WS — WET SWALE
- PROPOSED RUNOFF FLOW DIRECTION
- HAY BALE
- SILTFENCE
- SILTSOCK/COMPOST FILTER SOCK
- TREE PROTECTION FENCE
- STABILIZED CONTRUCTION ENTRANCE
- EROSION CONTROL BLANKET
- SILTSACK SEDIMENT TRAP

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URI Briar Lane Entrance Improvements

Upper College Road
Kingston, Rhode Island

No.	Revision	Date	Appvd.

Designed by — Checked by

Issued for — Date

RIDEM PDA — July 11, 2017

Not Approved for Construction

Drawing Title

Soil Erosion and Sediment Control - Site Plan

Drawing Number

SESC-2.1

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
REVIEWED SITE PLAN APPLICATION NO.: 17-0424
DATED SEP 26 2017
SEE LETTER OF SAME DATE

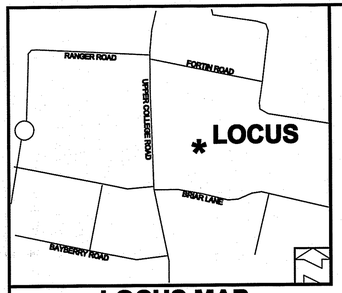
JONATHAN B. STABACH
No. 7794
REGISTERED PROFESSIONAL ENGINEER (CIVIL)

Sheet 8 of 8

Project Number 72772.00

Sheet 9 of 11

0 10 20 40 Feet



LOCUS MAP
NOT TO SCALE

1-888-DIG-SAFE
PROTECT YOURSELF, GIVE TWO WORKING DAYS NOTICE

NO.	DATE	DESCRIPTION	BY

LEGEND
NOT TO SCALE

- BOUNDARY
- ABUTTER
- MAJOR CONTOUR
- MINOR CONTOUR
- STONEWALL
- G — GAS LINE
- D — DRIANAGE LINE
- S — SEWER LINE
- W — WATER LINE
- TC — TELECOMMUNICATION LINE
- E — UNDERGROUND ELECTRIC LINE
- OHW — OVER-HEAD ELECTRIC LINE
- UTILITY POLE
- WATER VALVE
- GAS VALVE
- HYDRANT
- BOLLARDS
- IRON PIN
- BOUND
- DRILL HOLE
- BOULDERS

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

GENERAL NOTES:

1. THE LOCATION AND DEPTH OF EXISTING UTILITIES ARE APPROXIMATE AND HAVE BEEN PLOTTED FROM THE LATEST AVAILABLE INFORMATION. THE UTILITY LOCATIONS ARE APPROXIMATE AND MAY NOT BE ALL INCLUSIVE. THE CONTRACTOR SHALL CHECK AND VERIFY THE LOCATIONS OF ALL EXISTING UTILITIES, BOTH OVERHEAD AND UNDERGROUND, AND "DIG-SAFE" MUST BE NOTIFIED PRIOR TO COMMENCING ANY CONSTRUCTION OPERATIONS. RESTORATION AND REPAIR OF DAMAGE TO EXISTING UTILITIES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR WITH NO ADDITIONAL COST TO THE OWNER. NO EXCAVATION SHALL COMMENCE UNTIL ALL INVOLVED UTILITY COMPANIES AND/OR TOWN WHOSE FACILITIES MIGHT BE AFFECTED BY ANY WORK TO BE PERFORMED BY THE CONTRACTOR ARE NOTIFIED AT LEAST 72 HOURS IN ADVANCE.

2. THIS SITE IS OUTSIDE ANY FLOOD PLAIN ZONE AS SHOWN ON FIRM MAP NO. 44009C0185H PANEL 185H EFFECTIVE DATE OCTOBER 19, 2010

3. THE CONTOURS AND ELEVATIONS SHOWN ARE BASED ON NAVD-88 VERTICAL DATUM

4. HORIZONTAL DATUM AND CONTROL BASED ON NAD-83 RHODE ISLAND STATE PLANE COORDINATE SYSTEM.

REFERENCES:

1. PLAN ENTITLED: RECORD PLAN FOR CUMMISKEY ESTATES LOCATED AT 39 BRIAR LANE SOUTH KINGSTOWN RHODE ISLAND SCALE 1"=20' DATED : NOVEMBER 16 2015 BY AMERICAN ENGINEERING INC. AND RECORDED IN THE SOUTH KINGSTOWN REGISTRY OF DEEDS AS LAND EVIDENCE MAP 2015-31.

2. PLAN ENTITLED: ADMINISTRATIVE SUBDIVISION UNIVERSITY OF RHODE ISLAND UPPER COLLEGE ROAD SOUTH KINGSTOWN RHODE ISLAND LOT 5 & 6 ON A.P. 23-2 SCALE 1"=50' DATED AUGUST 27, 2002 BY DAVID D. GARDNER & ASSOCIATES INC.

3. PLAN ENTITLED: PLAT OF LAND OF OMER FORTIN KINGSTOWN RHODE ISLAND SCALE 1"=100' DATED AUGUST 14 1922 BY S.H. WEBSTER AND RECORDED IN THE SOUTH KINGSTOWN REGISTRY OF DEEDS IN LAND EVIDENCE BOOK 41 PAGE 597.

4. PLAN ENTITLED: PLAT OF LAND OF OMER FORTIN SHOWING CHANGES IN LOTS 7, 9 & 18 KINGSTOWN RHODE ISLAND SCALE 1"=100' DATED DECEMBER 6, 1929 BY S.H. WEBSTER AND RECORDED IN THE SOUTH KINGSTOWN REGISTRY OF DEEDS IN LAND EVIDENCE BOOK 4 PAGE 274.

5. PLAN ENTITLED: MAP OF FORTIN ROAD TOWN OF SOUTH KINGSTOWN RHODE ISLAND SCALE 1"=50' DATED AUGUST 1948 SHEET 1 OF 2 AND RECORDED IN THE SOUTH KINGSTOWN REGISTRY OF DEEDS.

NATIONAL
Surveyors-Developers Inc.
42 Hamlet Ave., Woonsocket, R.I.
(401) 769-7779

NORBERT A. THERIEN
No. 1739
PROFESSIONAL LAND SURVEYOR

* I CERTIFY THAT THE INFORMATION SHOWN HEREON HAS BEEN OBTAINED BY AN ACTUAL SURVEY ON THE GROUND, THAT IT IS CORRECT AND THIS SURVEY AND PLAN CONFORM TO A CLASS _____ STANDARD AS ADOPTED BY THE RHODE ISLAND BOARD OF REGISTRATION FOR PROFESSIONAL LAND SURVEYORS.

BY: _____
NORBERT A. THERIEN P.L.S.

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
WETLANDS PROGRAM
APPROVED SWP PLAN / APPLICATION NO.: 17-0167
DATED: SEP 26 2017
SEE LETTER OF SAME DATE.

JUL 14 2017

UNIVERSITY OF RHODE ISLAND
ASSESSORS PLAT 23-2 LOTS 5 & 18
ASSESSORS PLAT 23-3 LOTS110 & 121
FORTIN ROAD & BRIAR LANE
SOUTH KINGSTOWN, RHODE ISLAND
BOUNDARY SURVEY & EXISTING CONDITIONS PLAN

DRAWN BY: W.C.R.	CHECKED BY: N.A.T.	FIELD BY: J.N.&R.C.
MARCH 2017	JOB No. 2017-46	SHEET 1 OF 2

Sheet 10 of 11

\\Plot\C\NATIONAL 2017\2017-46\dwg\2017-46.dwg, SHEET 1, 1:1

" I CERTIFY THAT THE INFORMATION SHOWN HEREON HAS BEEN OBTAINED BY AN ACTUAL SURVEY ON THE GROUND, THAT IT IS CORRECT AND THIS SURVEY AND PLAN CONFORM TO A CLASS ________ STANDARD AS ADOPTED BY THE RHODE ISLAND BOARD OF REGISTRATION FOR PROFESSIONAL LAND SURVEYORS.

BY: ____________________
NORBERT A. THERIEN P.L.S.

UNIVERSITY OF RHODE ISLAND
ASSESSORS PLAT 23-2 LOTS 5 & 18
ASSESSORS PLAT 23-3 LOTS110 & 121
FORTIN ROAD & BRIAR LANE
SOUTH KINGSTOWN, RHODE ISLAND

BOUNDARY SURVEY & EXISTING CONDITIONS PLAN

DRAWN BY: W.C.R.	CHECKED BY: N.A.T.	FIELD BY: J.N.&R.C.
MARCH 2017	JOB No. 2017-46	SHEET 2 OF 2

\\Plot\C\NATIONAL 2017\2017-46\dwg\2017-46.dwg. SHEET 2. 1:1