DocuSign Envelope ID: B731FA39-534C-4860-BB04-D39CD6FBDA76

Dewberry
2610 WYCLIFF ROAD
SUITE 410
RALEIGH, NC 27607
PHONE: 919.881.9939
NCBELS #: F-0929

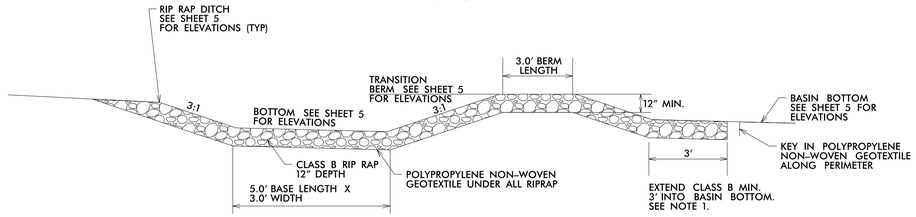
PROJECT REFERENCE NO.	SHEET NO.
R-4436EK	2D-1
R/W SHEET NO.	

HYDRAULICS ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 12786 ENGINEER STEVEN M. BONDOR

DocuSigned by: Steve Bondor 3/21/2017
5FD5829941494B9...

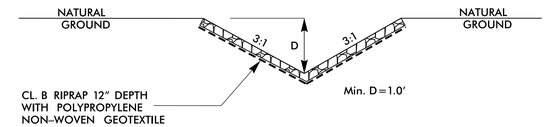
DETAIL A
FILTRATION BASIN FOREBAY
N.T.S.



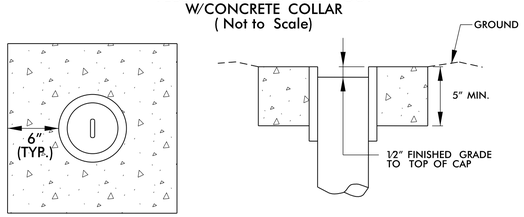
NOTE:

1. DO NOT PLACE ENGINEERED SOIL MEDIA UNDERNEATH RIPRAP.
2. ELEVATIONS INDICATE TOP OF RIPRAP.

DETAIL B
RIP RAP DITCH
(Not to Scale)



DETAIL C
FLUSH MOUNTED CLEANOUT
W/CONCRETE COLLAR
(Not to Scale)

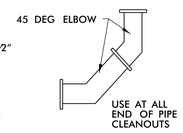


TOP VIEW

SIDE VIEW

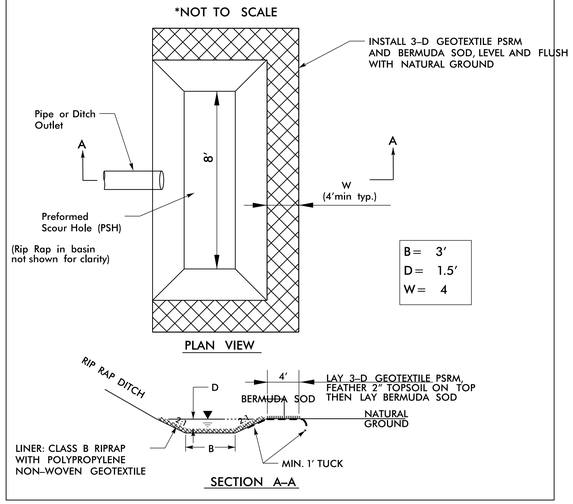
NOTES:

1. CONCRETE SHALL BE FLUSH WITH FINISHED GRADE. TOP OF CONCRETE CAP SHALL BE A MINIMUM OF 1/2" BELOW TOP OF CONCRETE COLLAR AND SHALL BE REMOVABLE, WATER TIGHT, AND CLOSED UNDER NORMAL CONDITIONS
2. CONCRETE SHALL BE 3,000 PSI
3. THIS CONCRETE COLLAR DETAIL SHALL BE APPLIED TO ALL CLEANOUTS ON PROJECT.
4. USE 45 DEG ELBOWS AT ALL BENDS IN PIPE CLEANOUTS

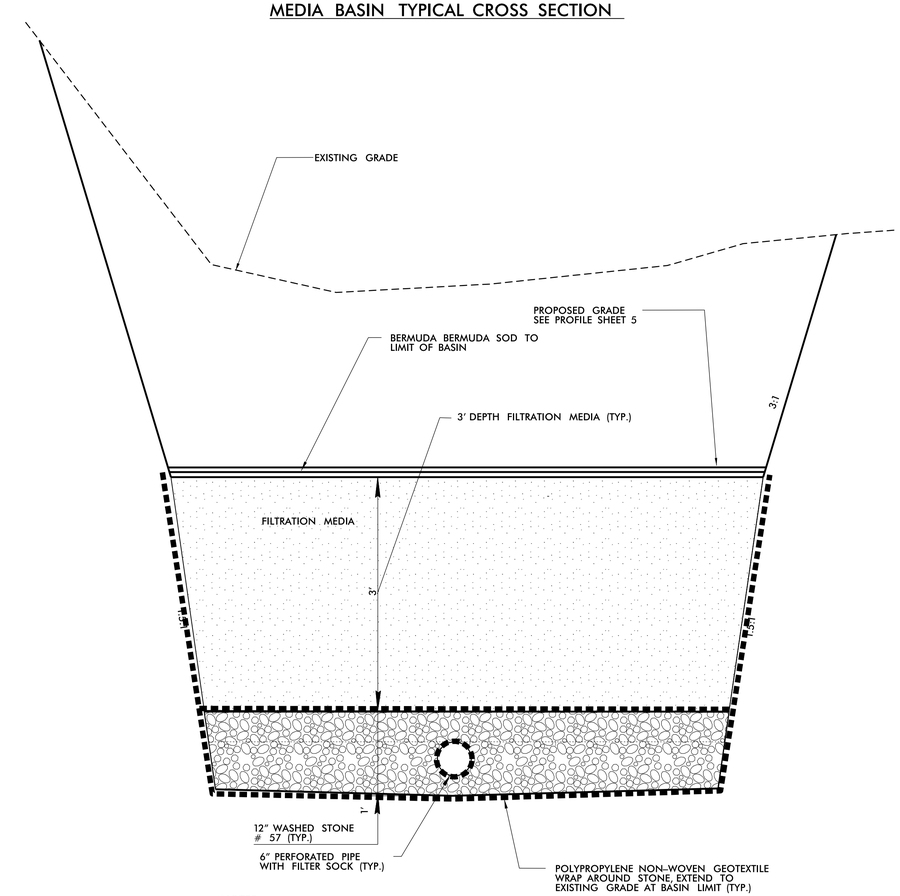


SIDE VIEW

DETAIL D
PREFORMED SCOUR HOLE
*NOT TO SCALE



DETAIL E
MEDIA BASIN TYPICAL CROSS SECTION



NOTES:

1. PERFORATED, NON-PERFORATED, AND CLEANOUT PIPE MATERIAL SHALL MEET THE AASHTO SPECIFICATIONS FOR EITHER HDPE (SECT. 1032-7 AASHTO M294 FOR TYPE S OR FOR TYPE D – SECT. 1044-7 AASHTO M252) OR PVC (SECT. 1032-8 AASHTO M304, SECT. 1044-6, ASTM D1785).
2. PERFORATED UNDERDRAIN PIPES SHALL HAVE A MINIMUM OF 4 ROWS OF PERFORATIONS AT 3/8-IN DIAMETER PLACED 6-INCHES ON CENTER WITHIN EACH ROW. WRAP WITH FILTER SOCK.
3. USE ONLY NON-SHRINK GROUT FOR SEALING PIPE CONNECTIONS TO STRUCTURES.

REVISIONS

8/17/99

3/20/2017 12:08:11 PM
R-4436_PSH2D-1.dgn
USER: cpopes