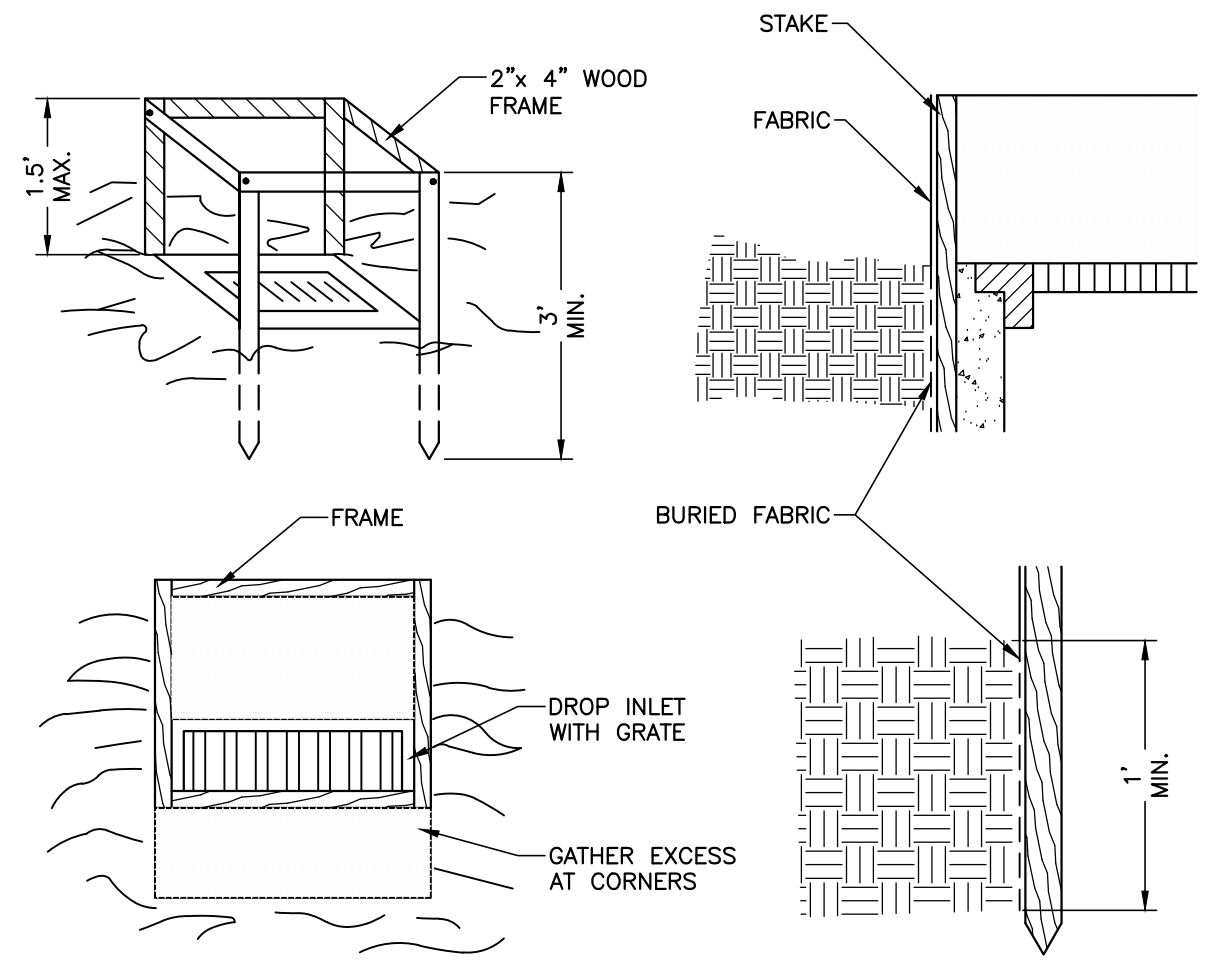


- NOTES:**
- CONTRACTOR TO VERIFY SIZE REQUIREMENTS BASED ON ANTICIPATED VOLUMES OF CONCRETE WASHOUT.
  - CONCRETE WASHOUT SHOULD BE PLACED TO NOT ACCEPT SURFACE RUNOFF.
  - IF WATER DOES NOT EVAPORATE AND IS GREATER THAN 75% FULL CONTRACTOR SHALL REMOVE LIQUIDS AS REQUIRED BY THE LOCAL AUTHORITY (SAY SEALER OF VAC TRUCK)
  - PROVIDE MINIMUM AGGREGATE OF 10 MIL PLASTIC AS LINER. SECURE LINER TO PREVENT INFILTRATION & REPLACE AS NECESSARY FOR TEARS.

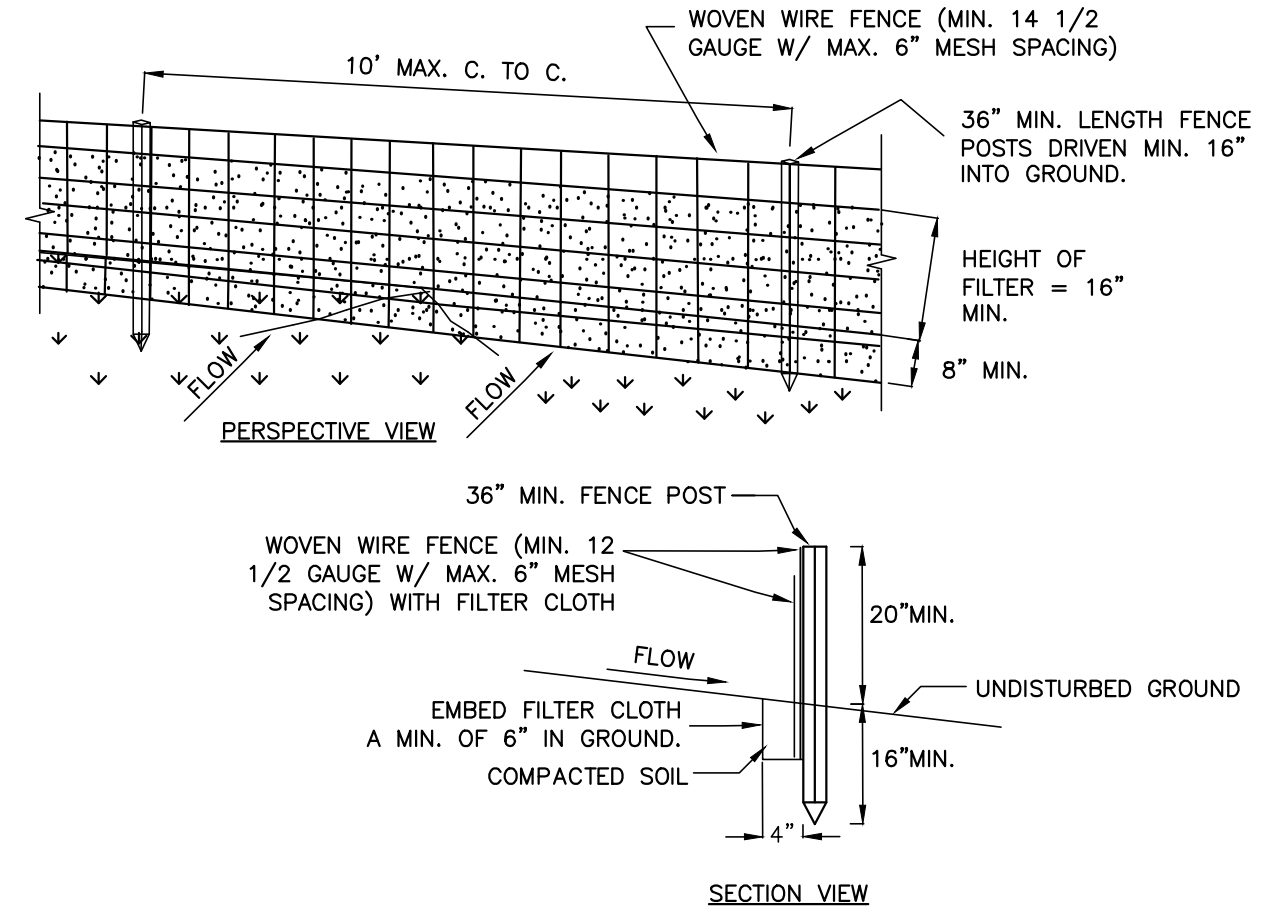
**1 CONCRETE WASHOUT AREA**



**CONSTRUCTION SPECIFICATIONS**

- FILTER FABRIC SHALL HAVE AN EOS OF 40-85. BURLAP MAY BE USED FOR SHORT TERM APPLICATIONS.
- CUT FABRIC FROM A CONTINUOUS ROLL TO ELIMINATE JOINTS. IF JOINTS ARE NEEDED THEY WILL BE OVERLAPPED TO THE NEXT STAKE.
- STAKE MATERIALS WILL BE STANDARD 2" x 4" WOOD OR EQUIVALENT METAL WITH A MINIMUM LENGTH OF 3 FEET.
- SPACE STAKES EVENLY AROUND INLET 3 FEET APART AND DRIVE A MINIMUM OF 18 INCHES DEEP. SPANS GREATER THAN 3 FEET MAY BE BRIDGED WITH THE USE OF WIRE MESH BEHIND THE FILTER FABRIC FOR SUPPORT.
- FABRIC SHALL BE EMBEDDED 1 FOOT MINIMUM BELOW GROUND AND BACKFILLED. IT SHALL BE SECURELY FASTENED TO THE STAKES AND FRAME.
- A 2" x 4" WOOD FRAME SHALL BE COMPLETED AROUND THE CREST OF THE FABRIC FOR OVER FLOW STABILITY.

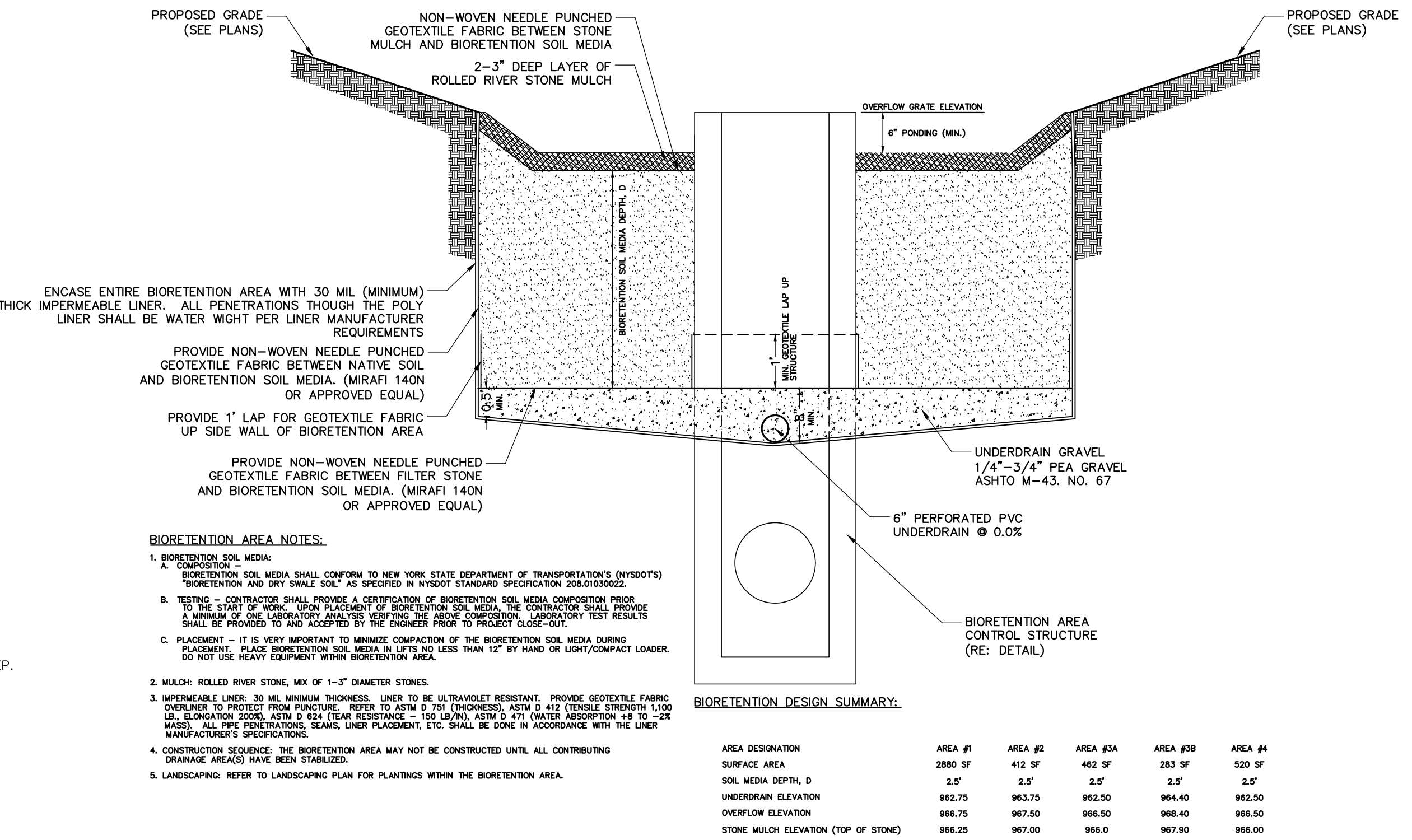
**2 DROP INLET PROTECTION**  
SCALE: N.T.S.



**CONSTRUCTION SPECIFICATIONS**

- WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES. POSTS SHALL BE STEEL "T" OF "U" TYPE OF HARDWOOD.
- FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION. FENCE SHALL BE WOVEN WIRE, 12 1/2" GAUGE, 6" MAXIMUM MESH OPENING.
- WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABLINKKA T140N, OR APPROVED EQUIVALENT.
- PREFABRICATED UNITS SHALL BE GEOFAB, ENVIROFENCE, OR APPROVED EQUIVALENT.
- MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.
- ENVIRO-FENCE WITH INTEGRAL MESH IS ACCEPTABLE SUBSTITUTE.

**3 SILT FENCE**  
SCALE: N.T.S.



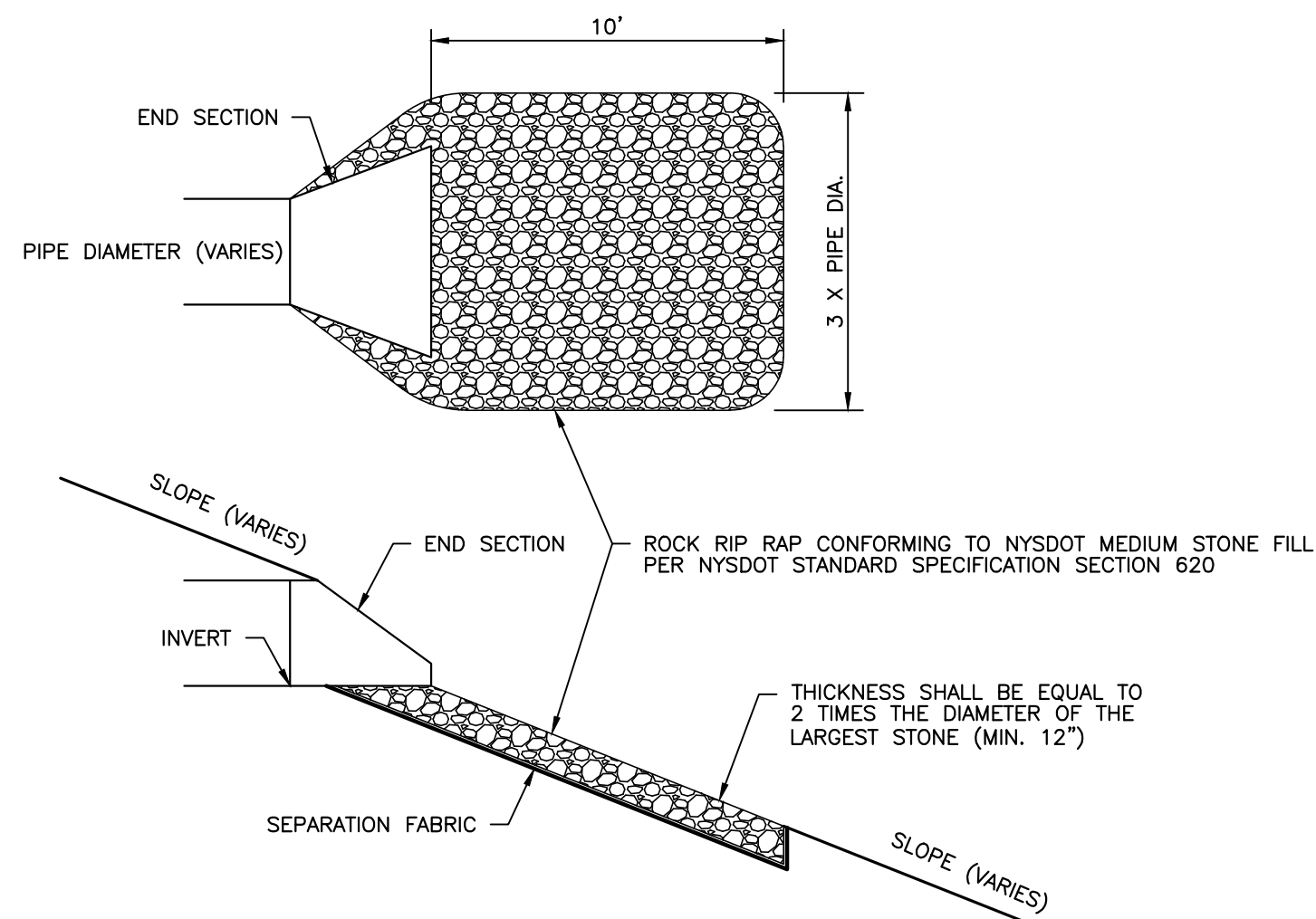
- ENCASE ENTIRE BIORETENTION AREA WITH 30 MIL (MINIMUM) THICK IMPERMEABLE LINER. ALL PENETRATIONS THROUGH THE POLY LINER SHALL BE WATER TIGHT PER LINER MANUFACTURER REQUIREMENTS
- PROVIDE NON-WOVEN NEEDLE PUNCHED GEOTEXTILE FABRIC BETWEEN NATIVE SOIL AND BIORETENTION SOIL MEDIA. (MIRAFI 140N OR APPROVED EQUAL)
- PROVIDE 1" LAP FOR GEOTEXTILE FABRIC UP SIDE WALL OF BIORETENTION AREA
- PROVIDE NON-WOVEN NEEDLE PUNCHED GEOTEXTILE FABRIC BETWEEN FILTER STONE AND BIORETENTION SOIL MEDIA. (MIRAFI 140N OR APPROVED EQUAL)

- BIORETENTION AREA NOTES:**
- BIORETENTION SOIL MEDIA:**
    - COMPOSITION - BIORETENTION SOIL MEDIA SHALL CONFORM TO NEW YORK STATE DEPARTMENT OF TRANSPORTATION'S (NYSDOT'S) "BIORETENTION AND DRY SHALE SOIL" AS SPECIFIED IN NYSDOT STANDARD SPECIFICATION 308.01(02)(2)
    - TESTING - CONTRACTOR SHALL PROVIDE A CERTIFICATION OF BIORETENTION SOIL MEDIA COMPOSITION PRIOR TO THE START OF WORK. UPON PLACEMENT OF BIORETENTION SOIL MEDIA, THE CONTRACTOR SHALL PROVIDE A MINIMUM OF ONE LABORATORY ANALYSIS DETERMINING THE ABOVE COMPOSITION. LABORATORY TEST RESULTS SHALL BE PROVIDED TO AND ACCEPTED BY THE ENGINEER PRIOR TO PROJECT CLOSE-OUT.
    - PLACEMENT - IT IS VERY IMPORTANT TO MINIMIZE COMPACTION OF THE BIORETENTION SOIL MEDIA DURING PLACEMENT. PLACE BIORETENTION SOIL MEDIA IN LIFTS NO LESS THAN 12" BY HAND OR LIGHT/COMPACT LOADERS. DO NOT USE HEAVY EQUIPMENT WITHIN BIORETENTION AREA.
  - MULCH: ROLLED RIVER STONE, MIX OF 1-3" DIAMETER STONES.
  - IMPERMEABLE LINER: 30 MIL MINIMUM THICKNESS. LINER TO BE ULTRAVIOLET RESISTANT. PROVIDE GEOTEXTILE FABRIC OVERLAP TO PROTECT FROM PUNCTURE. REFER TO ASTM D 301 (THICKNESS), ASTM D 412 (TENSILE STRENGTH), ASTM D 412 (ELONGATION 200%), ASTM D 624 (TEAR RESISTANCE - 150 LB/IN), ASTM D 471 (WATER ABSORPTION +8 TO -2% MASS). ALL PORE PENETRATIONS, STAPLES, LINER PLACEMENT, ETC. SHALL BE DONE IN ACCORDANCE WITH THE LINER MANUFACTURER'S SPECIFICATIONS.
  - CONSTRUCTION SEQUENCE: THE BIORETENTION AREA MAY NOT BE CONSTRUCTED UNTIL ALL CONTRIBUTING DRAINAGE AREAS HAVE BEEN STABILIZED.
  - LANDSCAPING: REFER TO LANDSCAPING PLAN FOR PLANTINGS WITHIN THE BIORETENTION AREA.

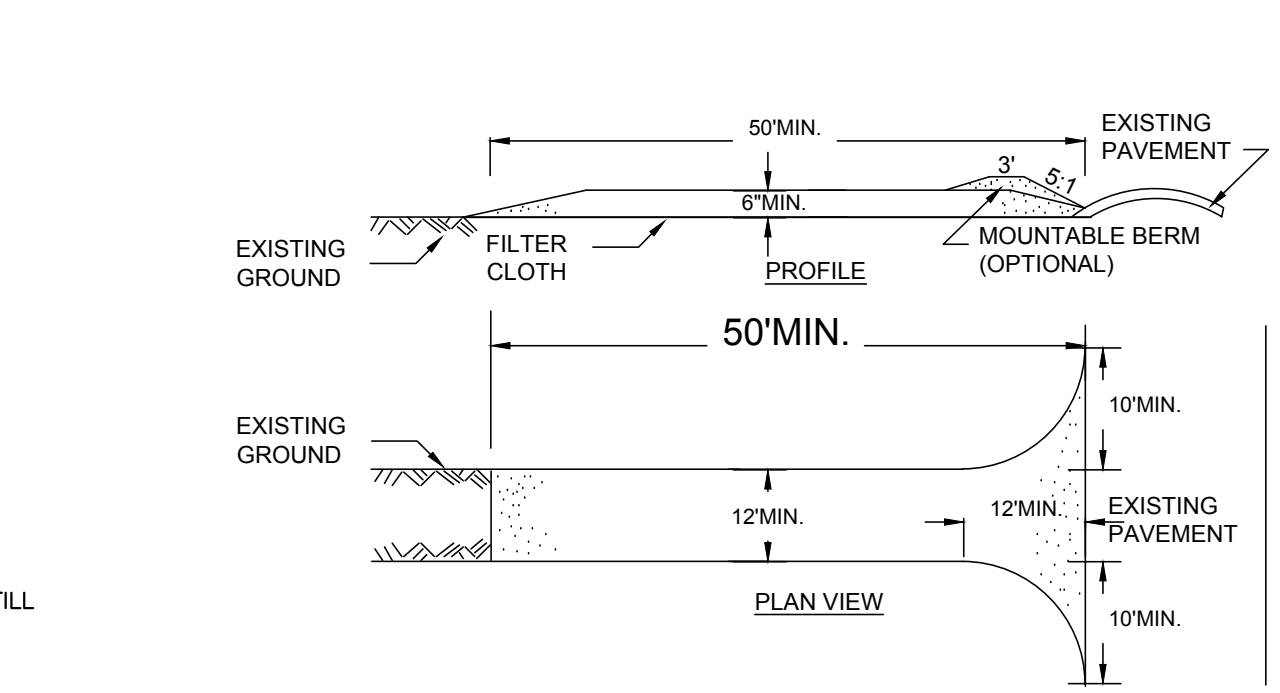
**BIORETENTION DESIGN SUMMARY:**

AREA DESIGNATION	AREA #1	AREA #2	AREA #3A	AREA #3B	AREA #4
SURFACE AREA	2890 SF	412 SF	462 SF	253 SF	520 SF
SOIL MEDIA DEPTH, D	2.5'	2.5'	2.5'	2.5'	2.5'
UNDERDRAIN ELEVATION	962.75	963.75	962.50	964.40	962.50
OVERFLOW ELEVATION	966.75	967.00	966.50	968.40	966.00
STONE MULCH ELEVATION (TOP OF STONE)	966.25	967.00	966.0	967.90	966.00

**4 BIORETENTION AREA**  
SCALE: N.T.S.



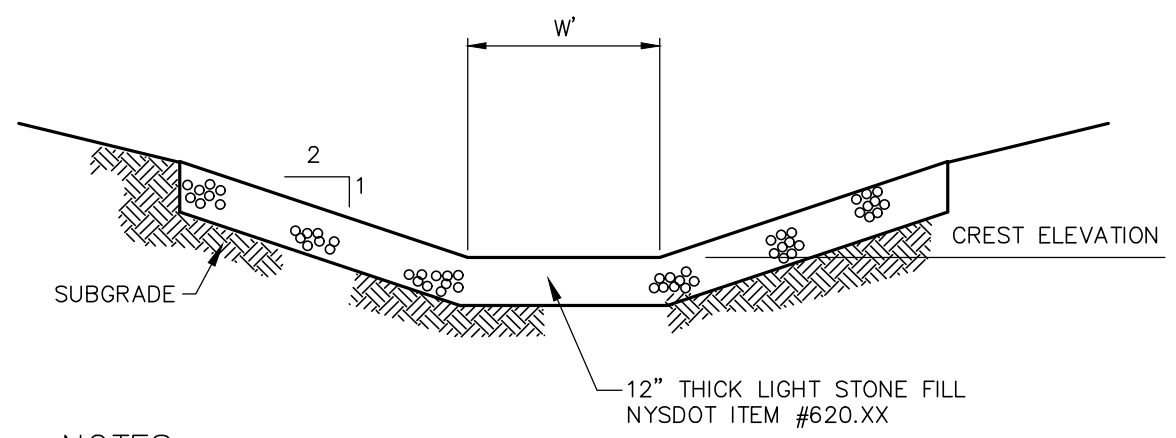
**5 PIPE OUTLET PROTECTION**  
SCALE: N.T.S.



**CONSTRUCTION SPECIFICATIONS**

- STONE SIZE - USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
- LENGTH - NOT LESS THAN 50 FEET (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY).
- THICKNESS - NOT LESS THAN SIX (6) INCHES.
- WIDTH - TWELVE (12) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. TWENTY-FOUR (24) FOOT IF SINGLE ENTRANCE TO SITE.
- FILTER CLOTH - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
- SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
- MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACTED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
- WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON A AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
- PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

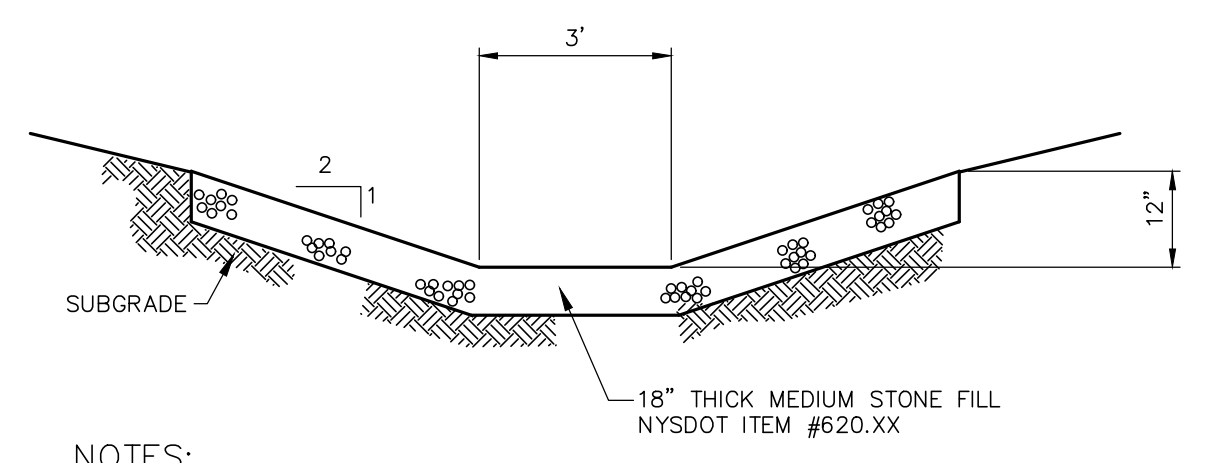
**6 STABILIZED CONSTRUCTION ENTRANCE**



- NOTES:**
- GRADE SUBGRADE BELOW RIP-RAP PAD SMOOTHLY BEFORE PLACING THE STONES.
  - PLACE SEPARATION FABRIC UPON SUITABLE SUBGRADE PRIOR TO PLACEMENT OF STONES.
  - ALL STONES TO BE SPACED 1"-3" APART AND PLACED BY HAND.
  - RIP-RAP SHALL BE GROUTED WITH LEAN GROUT SUCH THAT NO CAVITY OR VOID SHALL EXIST UNDER THE STONES.
  - EXTEND GROUTED SPILLWAY DOWN THE INSIDE AND OUTSIDE OF THE POND.
  - CREST ELEVATION NOTED IN THIS DETAIL SHALL BE TOP OF STONE.

SPILLWAY ID	WIDTH W	CREST ELEVATION
DETENTION POND #1	5.0 FT	±965.50
DETENTION POND #1	5.0 FT	±965.50

**7 EMERGENCY SPILLWAY OUTLET**



- NOTES:**
- GRADE SUBGRADE BELOW RIP-RAP PAD SMOOTHLY BEFORE PLACING THE STONES.
  - PLACE SEPARATION FABRIC UPON SUITABLE SUBGRADE PRIOR TO PLACEMENT OF STONES.

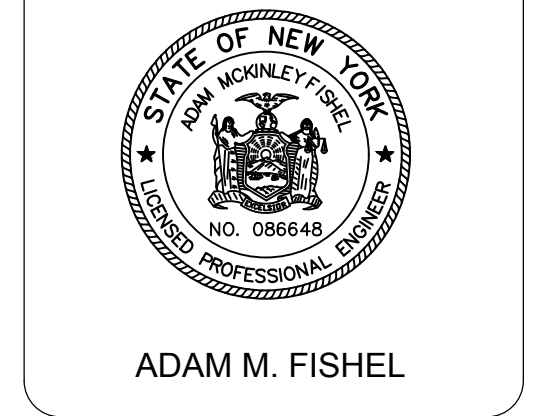
**8 STONE OUTLET PROTECTION**

JOB NO: 0841-17  
SCALE: NA  
DRAWN: AMF  
DESIGNED: AMF  
DATE: 06/13/17

**REVISIONS**

DATE	BY	REVISION
09/13/17	AF	REVISED PER TOWN COMMENTS

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DRAWING TITLE:  
**Detail Sheet**  
(1 of 5)

9 of 13 SHEET No:	<b>C-7.0</b>
0841-17 JOB No:	DRAWING No: