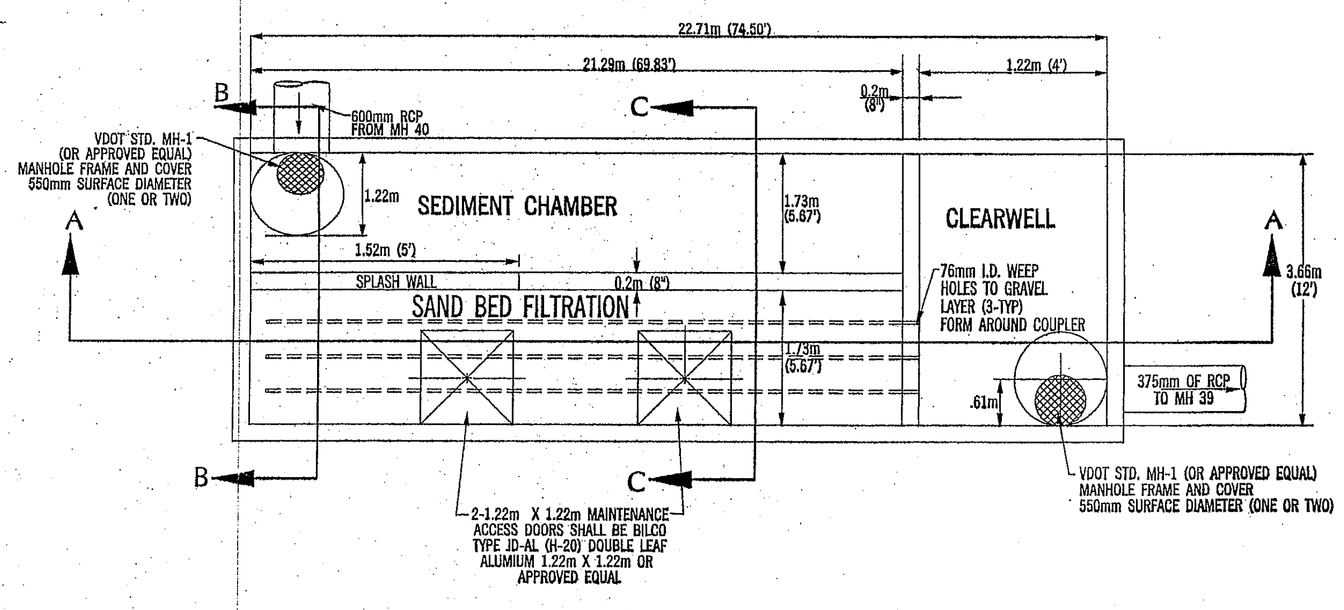
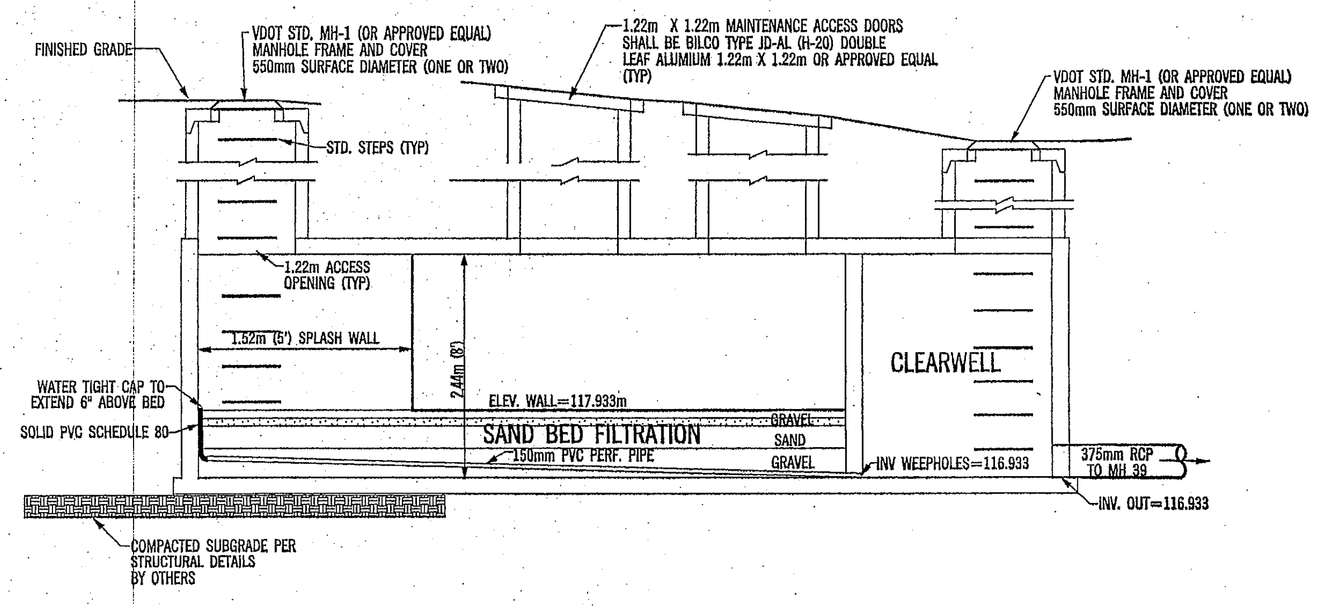
SAND FILTER DETAIL - PLAN VIEW
N.T.S.



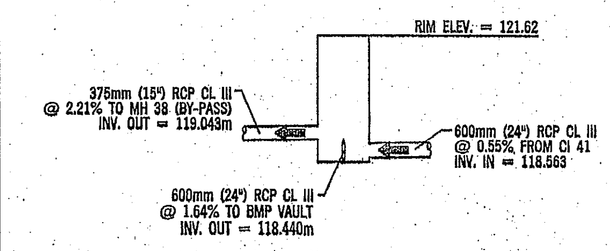
SAND FILTER DETAIL - SECTION A-A
N.T.S.



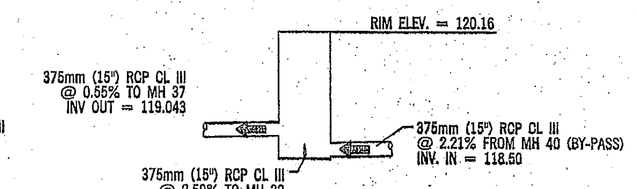
NOTE:

1. VAULT SHALL BE WATER TIGHT. ALL INSIDE AND OUTSIDE SEAMS OR JOINTS SHALL BE SEALED WITH AN ELASTOMERIC SEALANT.
2. SHOP DRAWINGS SIGNED BY A VA. PROFESSIONAL ENGINEER ARE REQUIRED.

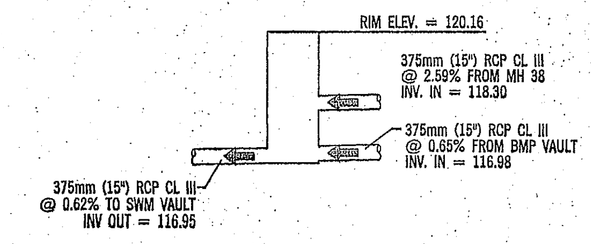
SCHEMATIC STORM STRUCTURE ELEVATION DETAILS



CURB INLET 40
N.T.S.

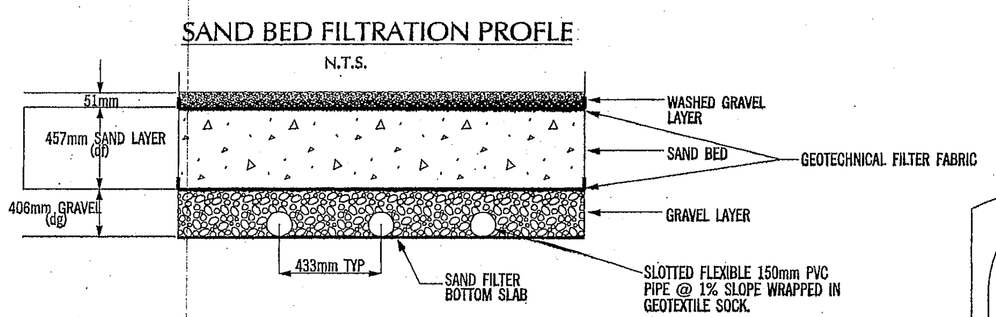


CURB INLET 38
N.T.S.



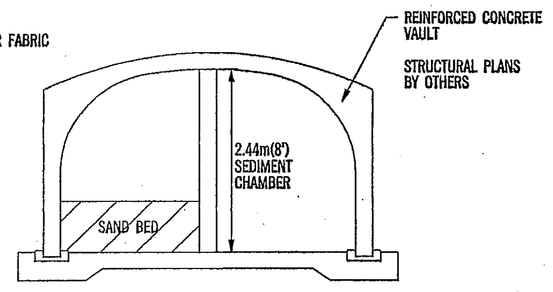
MANHOLE 39
N.T.S.

SAND BED FILTRATION PROFLE
N.T.S.

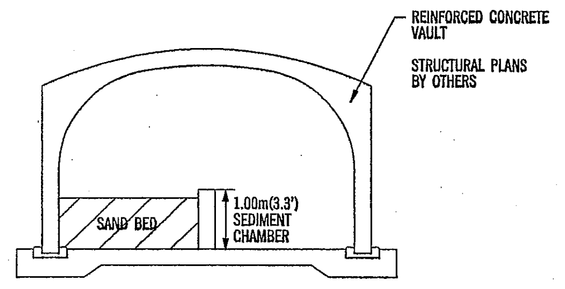


SAND: CONCRETE SAND (AASHTO M6 OR EQUAL)
GRAVEL: WASHED #57 OR #8
GEOTEXTILE: WOVEN DRAINAGE FABRIC MIRAFI-700XG, AMOCO 1198, OR EQUAL
LAP ALL JOINTS 18"
PIPE: SLOTTED CORRUGATED HIGH DENSITY POLYETHYLENE

SECTION B - B
N.T.S.



SECTION C - C
N.T.S.



SAND FILTER CONSTRUCTION SPECIFICATIONS
(D.C. and Delaware Filters)

The site erosion and sediment control plan must be configured to permit construction of the filter system while maintaining erosion and sediment control.

No runoff is to enter the sand filtration system prior to completion of all construction and site revegetation. Construction runoff shall be treated and routed to by-pass the filter system. Should construction runoff enter the filter system prior to site re vegetation. all contaminated materials must be removed and replaced with new clean materials.

The top of the sand filter must be completely level. No grade is allowable.

Access manholes to the filtration system shall conform to Fairfax County standards.

After completion of the filter shell but before placement of the filter layers, entrances to the structure shall be plugged and the shell completely filled with water to demonstrate water tightness. Should the structure fail this test, it shall be made watertight and successfully retested prior to placement of the filter layers.

SAND FILTER MAINTENANCE SPECIFICATIONS
(D.C and Delaware Filters)

1. Sand filter(s) and appurtenances shall be maintained in good working condition acceptable to the County.
2. The sand filter(s) and appurtenance shall be privately owned and maintained.
3. The Landowner shall enter into an agreement with a responsible third party to clean the sand filter(s) in accordance with the following specification:
   a) The water level in the filter chamber shall be monitored by the owner on a quarterly basis and after every large storm for the first year after completion of construction. A log shall be maintained of the results indicating the rate of the dewatering after each storm and the water depth for each observation. Once County staff indicates that satisfactory performance of the structure has been demonstrated, the monitoring schedule can be reduced to a semiannual basis.
   b) The sand filter(s) shall be inspected semiannually by a representative of the owner and the contactor.
   c) The sediment chamber must be pumped out after each semiannual Inspection. If the chamber contains an oil skim, it should be removed by a firm specializing in oil recovery and recycling. The remaining material may then be removed by vacuum pump and disposed of in an appropriate landfill. After each cleaning, refill the first chamber to depth of the feet with clean water to establish the water seal.
   d) When the filter will no longer draw down within the required 40 hour period, the top layer of filter cloth and ballast gravel must be removed and replaced with new materials conforming to the most current specificatons. Any discolored or sediment contaminated sand shall also be removed and replaced with new material meeting the most current specifications.
   e) Monitoring manholess, flumes, and other facilities shall be kept clean and ready for use.
4. The Landowner shall maintain a copy of a valid current agreement on file with DEM at all times.
5. The qualifications of the maintenance operator are subject to review and approval by DEM.
6. Sand filter maintenance records shall be kept on-site and shall be made available to County officials upon request.

COMMONWEALTH OF VIRGINIA
EDWARD C. VENDITTI
No. 16395
6/22/00
PROFESSIONAL ENGINEER

No.	REVISION	DATE	BY

PLANNING • SITE ENGINEERING • TRANSPORTATION • ENVIRONMENTAL • SURVEYING/MAPPING
Greenhorne & O'Mara, Inc.
11211 WAPLES MILL ROAD
FAIRFAX, VIRGINIA 22030
(703)385-9800
ANNAPOLIS, MD • ATLANTA, GA • FAIRFAX, VA • FREDERICKSBURG, VA • GREENBELT, MD
MECHANICSBURG, PA • RALEIGH, NC • ROCKVILLE, MD • TAMPA, FL • WEST PALM BEACH, FL

©LATEST DATE HEREON

BMP/SAND FILTER DETAILS & SPECIFICATIONS
METRO PLACE AT DUNN LORING
PARCEL L (PREVIOUSLY PARCEL C-1)
PROVIDENCE DISTRICT
FAIRFAX COUNTY, VIRGINIA

CEH DESIGN	SCALE AS NOTED	
SLH DRAWN	18 OF 35	
MP CHECKED	SHEET	
8/99 DATE	5169JADE PROJ No.	PP-805 FILE No.