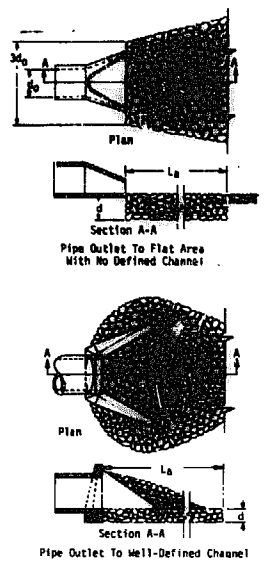


EROSION & SEDIMENT CONTROL DETAILS  
 for  
**PORT ANNE**  
 VIRGINIA  
**WILLIAMSBURG, VIRGINIA**

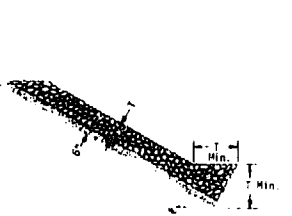
Designed N/A  
 Drawn T/A  
 Checked ABS  
 Scale N/A  
 Date 2-26-85  
 File No E-84019  
 Project No 84019  
 Sheet No 11  
 of 14 Sheets



- Notes**
- Apron lining may be riprap, grouted riprap, or concrete.
  - L<sub>a</sub> is the length of the riprap apron as calculated using Plates 1.36d and 1.36e.
  - d = 1.5 times the maximum stone diameter but not less than 6 inches.

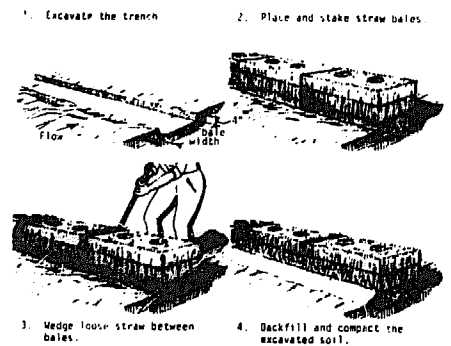
PIPE OUTLET CONDITIONS

**(OP) OUTLET PROTECTION**



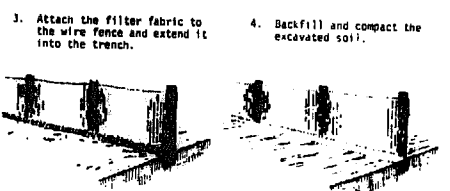
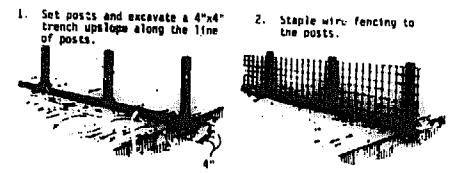
TOE REQUIREMENTS FOR RIPRAP BANK PROTECTION

**(RR) RIP RAP**



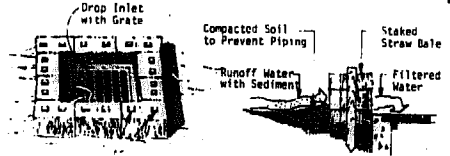
CONSTRUCTION OF A STRAW BALE BARRIER

**(STB) STRAW BALE**



CONSTRUCTION OF A SILT FENCE

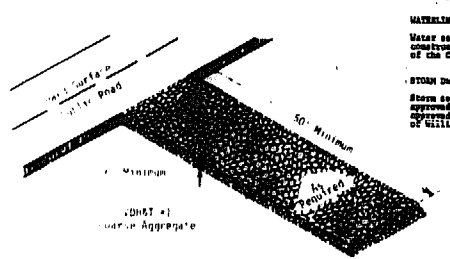
**(SF) SILT FENCE**



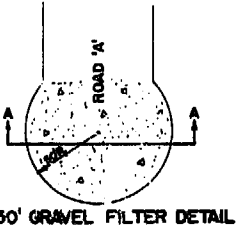
Specific Application

This method of inlet protection is applicable where the inlet drains a relatively flat area (slopes no greater than 5 percent) where sheet or overland flows (not exceeding 0.5 cfs) are typical. The method shall not apply to inlets receiving concentrated flows, such as in street or highway medians.

**(IP) INLET PROTECTION**



**(CE) CONSTRUCTION ENTRANCE**



50' GRAVEL FILTER DETAIL

**EROSION CONTROL NOTES**

- THE CONTRACTOR SHALL COMPLY WITH THE APPLICABLE REGULATIONS OF THE VIRGINIA BOARD AND DEPARTMENT OF ENVIRONMENTAL QUALITY AND THE CITY OF WILLIAMSBURG'S EROSION AND SEDIMENTATION CONTROL REQUIREMENTS.
- PRIOR TO ANY CLEARING, GRADING OR CONSTRUCTION OPERATIONS BARRIERS SHALL BE PLACED AROUND EXPOSED AREAS TO BE MAINTAINED ON THE SITE TO PREVENT THE DISRUPTION OF DAMAGING OF STREAMS. THESE SHALL BE LOCATED IN A CLEARLY MARKED AREA AND VISIBLE TO THE OWNER OF THE SITE OR LOWER REACH. BARRIERS SHALL NOT BE DISRUPTED UNLESS THIS DESIGN AREA AND VISIBLE TO THE OWNER OF THE SITE TO BE EXCLUDED TO AVOID SOIL CONTACT. THE ONLY EXCEPTION TO THIS REQUIREMENT WILL BE THOSE SPECIFICALLY ALLOWED BY THESE STANDARDS AND SPECIFICATIONS.
- AREAS OF EXPOSURE OF A NON-PROTECTIVE NATURE SHALL NOT BE MAINTAINED ATTACHED TO THE DRAINAGE SYSTEM.
- GRAVEL FILTERS SHALL BE PLACED AROUND EXPOSED AREAS TO BE MAINTAINED ON THE SITE TO PREVENT THE DISRUPTION OF DAMAGING OF STREAMS. THESE SHALL BE LOCATED IN A CLEARLY MARKED AREA AND VISIBLE TO THE OWNER OF THE SITE OR LOWER REACH. BARRIERS SHALL NOT BE DISRUPTED UNLESS THIS DESIGN AREA AND VISIBLE TO THE OWNER OF THE SITE TO BE EXCLUDED TO AVOID SOIL CONTACT. THE ONLY EXCEPTION TO THIS REQUIREMENT WILL BE THOSE SPECIFICALLY ALLOWED BY THESE STANDARDS AND SPECIFICATIONS.
- ALL EROSION CONTROL DEVICES SHALL BE INSTALLED WITH THE FIRST PHASE OF CONSTRUCTION AND SHALL REMAIN IN PLACE UNTIL FINAL GRADING AND PAVING.
- THE CONTRACTOR SHALL MAINTAIN AND MAINTAIN FILE THAT SPECIFIC TO PREVENT SOIL FROM BEING ERODED FROM THE SITE INTO ANY ADJACENT DRAINAGE SYSTEM, DITCH OR WATER COURSE. ANY ERODED MATERIAL SHALL BE PROMPTLY REMOVED.
- CONSTRUCTION OPERATIONS SHALL BE MANAGED TO THAT AS MUCH OF THE SITE AS POSSIBLE IS LEFT COVERED WITH VEGETATION AND VEGETATION.
- TEMPORARY SEEDING SHALL BE APPLIED PRIOR TO CONSTRUCTION IN AREAS INDICATED (SEE TEMPORARY SEEDING SCHEDULE AND SPECIFICATIONS).
- ALL GRADED AREA MUST BE PERMANENTLY STABILIZED IMMEDIATELY AFTER FINISH GRADING. SEE TEMPORARY SEEDING SCHEDULE AND SPECIFICATIONS.
- TEMPORARY STABILIZATION SHALL BE PROVIDED IN AREAS LEFT EXPOSED FROM CONSTRUCTION TO PREVENT SOIL FROM BEING ERODED FROM THE SITE INTO ANY ADJACENT DRAINAGE SYSTEM, DITCH OR WATER COURSE. ANY ERODED MATERIAL SHALL BE PROMPTLY REMOVED.
- TEMPORARY AND PERMANENT ENTRANCES TO THE SITE SHALL HAVE STABILIZED PAD PAVES AT ENTRANCES SHALL BE MAINTAINED TO PREVENT SOIL FROM BEING ERODED FROM THE SITE INTO ANY ADJACENT DRAINAGE SYSTEM, DITCH OR WATER COURSE.
- MINIMUM FILL STONE - 3/4" DIAMETER
- THICKNESS - NOT LESS THAN 6"
- LENGTH - NOT LESS THAN 5'
- WIDTH - NOT LESS THAN FULL WIDTH OF ALL POINTS OF INGRESS OR EGRESS OR AS SPECIFIED ON THE PLANS
- MAINTENANCE REQUIREMENTS - AS NECESSARY TO PREVENT TRACKING OF SOIL INTO PUBLIC RIGHTS-OF-WAY OR PARKING AREAS.
- THE CONTRACTOR SHALL CONSTRUCT AND MAINTAIN SILT TRAPS SUFFICIENT TO PREVENT SOIL FROM BEING ERODED FROM THE SITE INTO ANY ADJACENT DRAINAGE SYSTEM, DITCH OR WATER COURSE.
- SEEDING SHALL BE REMOVED FROM EROSION AND SEDIMENT CONTROL STRUCTURES WHEN IT ACCUMULATES TO SUCH AN EXTENT AS TO IMPAIR THE NORMAL FUNCTION OF SUCH STRUCTURES.
- EROSION AND SEDIMENT CONTROL STRUCTURES SHALL BE INSPECTED AFTER EACH RAINFALL. STRUCTURES FOUND TO BE DAMAGED SHALL BE PROMPTLY REPAIRED.
- TEMPORARY SEEDING:
  - LINE & FERTILIZER:
    - A LINE - 1 TON OF AGRICULTURAL GRAIN LIMESTONE OR EQUIVALENT PER ACRES
    - B FERTILIZER - 100 LBS PER ACRES OR EQUIVALENT PER ACRES
  - WORK LINE AND FERTILIZER INTO THE SOIL IMMEDIATELY FOLLOWING FINISH GRADING OPERATIONS. USING A 2" - 4" PLUG WITH 1/2" - 3/4" SURFACE SOIL SHALL BE WORKED TO DEPTH OF 1 1/2" - 2" INCHES.
  - THE ABOVE NOTES APPLY TO AREAS WITHIN THE BOUNDARY OF A SOIL TEST IS AVAILABLE. SPECIFIC RECOMMENDATIONS FOR LINE AND FERTILIZER WILL BE PROVIDED BY THE VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY EXTENSION SERVICE FOR EACH SITE.
- CONSTRUCTION REQUIREMENTS:
  - All construction to be in accordance with the City of Williamsburg standards and specifications. The contractor is responsible to obtain copies of same.
  - Water line construction to be in accordance with City of Williamsburg, Department of Public Utilities Standards and Specifications. The contractor is responsible to contact the Director prior to construction for standards and any permits that should be required.

**SPECIAL SEEDING & MULCHING NOTE:**

The above seeding and mulching notes should conform to Virginia Soil and Erosion Handbook (the pages are Section III, Seeding pp. 211-213; Mulching - Section III pp. 250) or as directed by the City of Williamsburg.

NO.	DESCRIPTION	DATE
1	AREA - REVISED AS PER CITY COMMENTS	
2	AREA - REVISED AS PER CITY COMMENTS	
3	AREA - REVISED AS PER CITY COMMENTS	
4	AREA - REVISED AS PER CITY COMMENTS	
5	AREA - REVISED AS PER CITY COMMENTS	
6	AREA - REVISED AS PER CITY COMMENTS	
7	AREA - REVISED AS PER CITY COMMENTS	
8	AREA - REVISED AS PER CITY COMMENTS	
9	AREA - REVISED AS PER CITY COMMENTS	
10	AREA - REVISED AS PER CITY COMMENTS	