

5.11 PIPE INLET PROTECTION

1. DESCRIPTION - A temporary sediment control barrier made of standard concrete block and filter stone or stone rip-rap and filter stone surrounding the inlet end of a storm drain pipe or inlet pipe headwall.

2. PURPOSE - To remove sediment from storm runoff before it enters into the storm drain system.

3. APPLICATIONS - Where existing or proposed storm drain pipes or culverts are to be used prior to final stabilization of the area draining to the pipe inlet. This method is used where the pipe inlet will collect relatively heavy stormwater flows and overflow capability is needed.

4. LIMITATIONS - Ponding will occur around the pipe inlet with possible localized flooding as the result. Excavation of a sediment storage area can make final channel stabilization difficult and may create a separate erosion problem if not properly constructed. Do not use Cinder Block Pipe Inlet Protection for pipes larger than 36" in diameter.

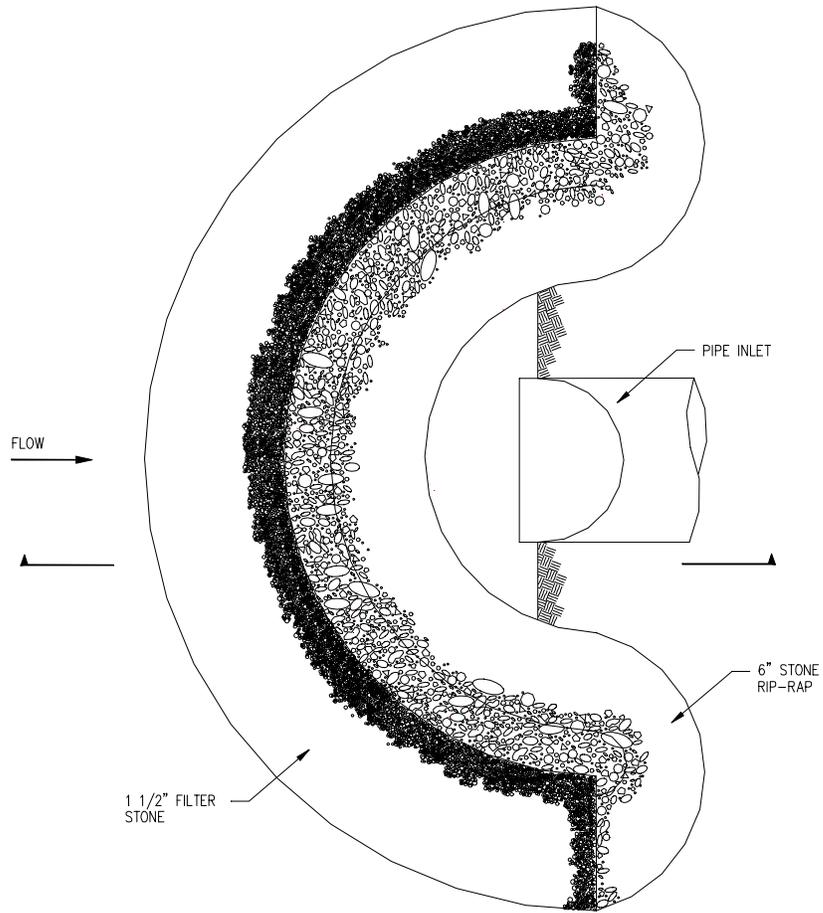
5. DESIGN CRITERIA -

- A.** Volume - 1800 cubic feet per acre of drainage area.
- B.** Side Slopes - 1.5H:1V or flatter.
- C.** Top of Stone and Sediment Storage - $\frac{1}{2}$ of inlet pipe diameter.

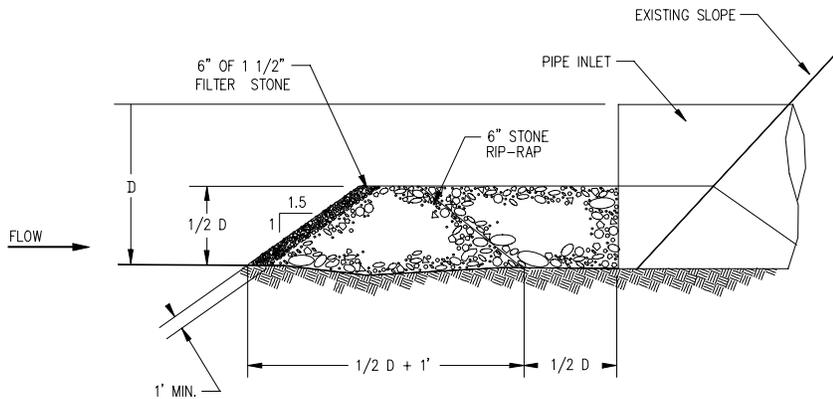
6. MATERIAL SPECIFICATIONS -

- A.** Concrete Block - ASTM C 139, Concrete Masonry Unit for Construction.
- B.** Wire Fabric - Standard galvanized hardware fabric with $\frac{1}{2}$ " by $\frac{1}{2}$ " openings.
- C.** Filter Stone - NCTCOG Specification 2.1.8.(e).
- D.** Stone Rip-Rap - NCTCOG Specification 2.1.6.(b)(2), Type A.

7. MAINTENANCE REQUIREMENTS - Pipe inlet protection should be inspected weekly and after major rain events to ensure that the device is functioning properly. Remove sediment from the sediment storage area when the depth of sediment has built up to one-half of the design depth. If de-watering of the storage volume is not occurring, clean or replace the filter stone surrounding the pipe inlet. Clean the stone surface the first few times by raking. Repeated sediment build-up will require filter stone replacement.



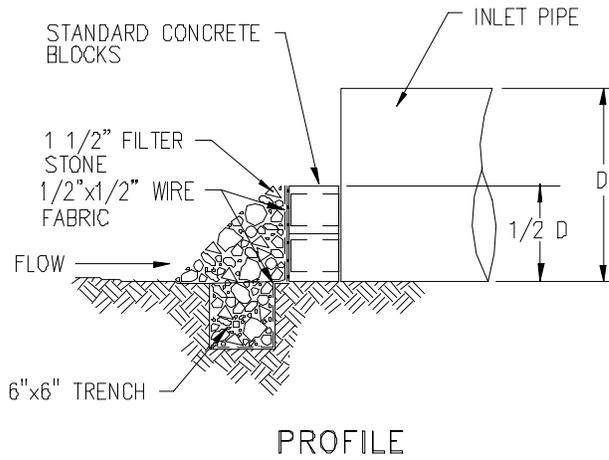
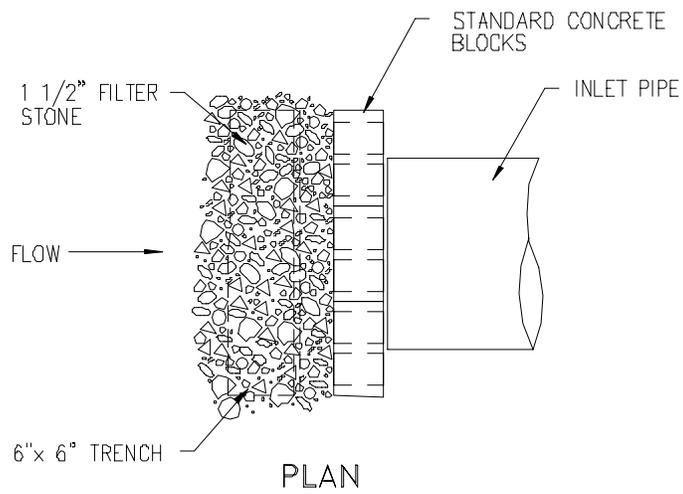
PLAN



SECTION

RIP-RAP PIPE INLET PROTECTION

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CINDER BLOCK PIPE INLET PROTECTION

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