

CINDER BLOCK PIPE INLET PROTECTION

5.11 PIPE INLET PROTECTION

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

DESIGN CRITERIA -

- Volume 1800 cubic feet per acre of drainage area.
- Side Slopes 1.5H:1V or flatter.
- Top of Stone and Sediment Storage ½ of inlet pipe diameter.

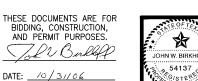
MATERIAL SPECIFICATIONS -

- Concrete Block ASTM C 139, Concrete Masonry Unit for Construction.
- Wire Fabric Standard galvanized hardware fabric with ½" by ½" openings.
- Filter Stone NCTCOG Specification 2.1.8.(e).
- Stone Rip-Rap NCTCOG Specification 2.1.6.(b)(2), Type A.
- 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.

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This record drawing is a compilation of the sealed engineering drawing for this project; modified by addenda, change orders and information furnished by the contractor. The information shown on the record drawings that was provided by the contractor or others not associated with the design engineer cannot be verified for accuracy or completeness. This original sealed drawings are on file at the offices of Birkhoff, Hendricks & Carter, L.L.P.

BY J.W.B. DATE 05/04/2010





TOWN OF ADDISON, TEXAS

ADDISON ROAD IMPROVEMENTS BELT LINE ROAD TO ARAPAHO ROAD PHASE STORM WATER POLLUTION PREVENTION PLAN DETAILS

BIRKHOFF, HENDRICKS & CONWAY L. L. P.

CONSULTING ENGINEERS

DESIGNED BY: J.W.B. PROJECT: 2002 102 DATE: SEPTEMBER 2006