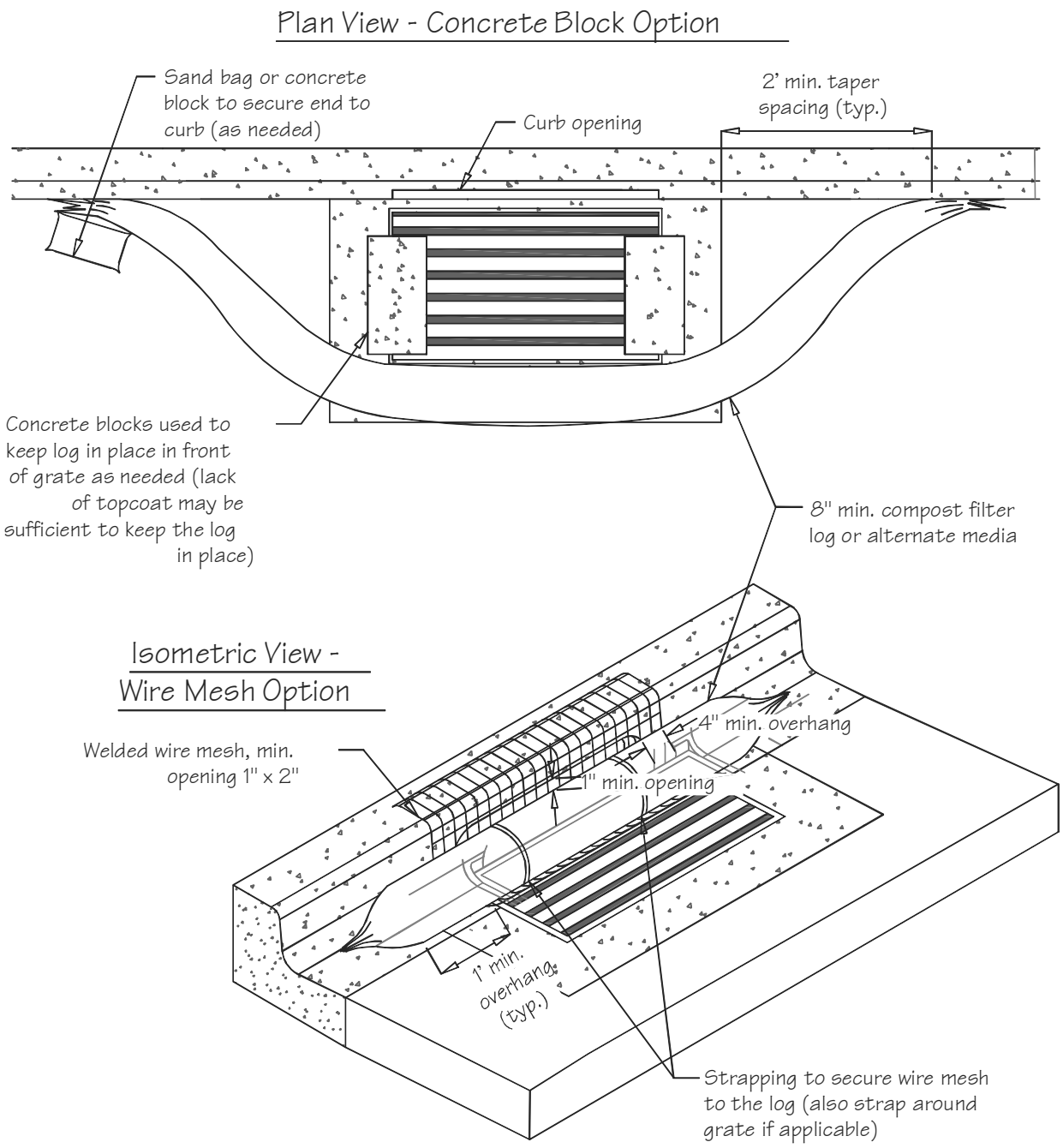
Standard Detail & Specifications

Inlet Protection - Type 3



Source:	Symbol:	Detail No.
Adapted from Filtrexx™ International	IP-3	DE-ESC-3.1.5.3 Sheet 1 of 3 Effective July 2023

Inlet Protection - Type 3

Notes:

1. This practice shall only be used in situations in which Inlet Protection – Type 1 cannot be used due to site constraints. These include, but are not limited to partially complete parking areas, streets, roads, etc., having a throat or curb opening. It should be used in conjunction with Type 2 Inlet Protection when a grate is also present.

2. The filter log sock fabric shall be high durability netting material to resist puncture and wear in the traffic areas. If compost media is used to fill the sock it must meet the Standards and Specifications for Compost Material in the Appendix, except that the maximum pass through for a 3/8" screen shall be 20% to allow for higher flow through. Additives, such as soluble phosphorus and petroleum hydrocarbons, can be mixed with the compost media to aid in pollutant removal, if desired. Reference the Compost Filter Log design guidelines for additional requirements on the high durability netting material, compost media, and sock filling and installation procedures. Reference the design alternatives below for additional log media options.

3. The maximum contributing drainage area shall be 3 acres, or as recommended by the manufacturer. 8" diameter socks shall be used for standard roadway applications. If in a highly disturbed area, the Engineer or Site Reviewer may opt for larger socks, either 12" or 18" depending on the need. (If used as a replacement for Type 1 Inlet Protection with special approval, minimum 12" diameter socks shall be used.) The top of the log may need to be flattened so that it is always below the top of curb elevation with a minimum 1" opening in order to prevent localized flooding.

4. Concrete blocks shall be used to aid in the log shape and prevent it from entering into the throat. They should be placed between the log and the throat opening, and used to secure the ends of the log against the curb if needed. The end of the log shall extend a minimum of 2 feet past the end of the throat opening. If a grate is also present in addition to the throat opening, the concrete blocks can either be laid perpendicular to the curb (recommended) so that the log lies on the outside of the grate, or parallel to the curb so that the log lies on top of the grate (note, Type 2 Inlet Protection is also used in conjunction with Type 3 if a grate is present). Sand bags can be used as an alternate to the concrete blocks at the end of the log to secure the log against the curb.

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5. If concrete blocks are not desired due to high traffic volumes, a welded wire screen in an “S” shape can be fitted over the length of the opening and secured to the log with straps, such as zip-ties. This will prevent the sock from falling into the opening. In this case, the log only needs to extend past the curb opening a minimum of 1 foot.

6. In all cases, the log shall provide a physical barrier to the catchbasin to allow for ponding and sedimentation along the upstream side of the log. The logs shall be placed on flat surfaces and maintain constant contact with the paved surface. Any daylight will allow for untreated discharge and is not permitted.

7. All structures must be inspected frequently (24 hours after a storm event and weekly) for proper function. Accumulated sediment shall be removed to avoid future failure, and must not exceed half of the effective height of the log. Reference manufacturer’s recommendations for additional maintenance.

Alternatives:

1. In lieu of the compost filter log, crushed DE #3 stone with a fractured face on all sides that is double wrapped in 1" chicken wire made from 10 gauge wire may be used. The wire should be secured using hog rings or wire ties on 6" centers along the length of the joint, and on 1" center on the ends of the rock sock. All installation and maintenance criteria are the same as the compost log above.

2. In lieu of the compost filter media, 100% shredded rubber (typically from tires) can be used.

3. For applications that have a grate and a throat inlet, some Type 2 Inlet Protection manufacturers have developed a catchbasin sack insert that also have a tubular attachment which rests above the grate and against the throat. As long as the sack meets the requirements of Type 2 Inlet Protection, and the provided throat protection extends a minimum of 1’ past the limits of the curb opening, without any daylight along the edges, these combination Type 2 and Type 3 devices may be used upon approval of the Department or Delegated Agency.