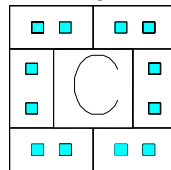


### Type C - Block and Gravel Inlet Protection

#### Plan Symbol



Block and gravel filters are used where heavy flows and higher velocities are expected and where an overflow capacity is necessary to prevent excessive ponding around the structure.

#### Materials

Use masonry blocks ranging from 8 to 12 inches wide.

Use hardware fabric or comparable wire mesh with maximum openings of ½-inches x ½-inches as the supporting material.

Use 1-inch D<sub>50</sub> washed stone gravel.

#### Installation

Place the bottom row of the concrete blocks lengthwise on their side so that the open end faces outward, not upward.

The height of the barrier is varied, depending upon design needs by stacking a combination of blocks that are 8- and 12-inches wide.

Place wire mesh over the outside vertical face of the concrete blocks to prevent stones from being washed through the holes in the blocks. Use hardware cloth or comparable wire mesh with ½-inch x ½-inch openings.

Install 1-inch D<sub>50</sub> washed stone to a height equal to the elevation of the top of the blocks.

#### Inspection and Maintenance

- Inspect every 7 calendar days and within 24-hours after each storm that produces ½-inches or more of rain. Any needed repairs should be handled immediately.
- Remove sediment when it reaches 1/3 the height of the blocks. If a sump is used, remove sediment when it fills 1/3 the depth of the hole.
- If the stone filter becomes clogged with sediment, the stones must be pulled away from the inlet and cleaned or replaced. Since cleaning of gravel at a construction site may be difficult, an alternative approach would be to use the clogged stone as fill and put fresh stone around the inlet.
- Remove inlet protection structures after the disturbed areas are permanently stabilized. Remove all construction material and sediment, and dispose of them properly.
- Grade the disturbed area to the elevation of the drop inlet structure crest.
- Stabilize all bare areas immediately.



Block and Gravel Inlet Protection



Block and Gravel Inlet Protection

**Preventive Measures and Troubleshooting Guide**

Field Condition	Common Solutions
Excessive sediment is entering the inlet.	Ensure that soil stabilization and sediment control devices are installed upstream of inlets. Ensure that the block and gravel inlet protection is installed correctly.
Sediment reaches 1/3 the height of the blocks.	Remove sediment.
Stone filter material becomes clogged with sediment.	Pull stones away from inlet and clean them, or replace them with new stones.
Ponded water causes a traffic concern.	Use alternate BMPs upstream. Remove inlet protection if necessary.