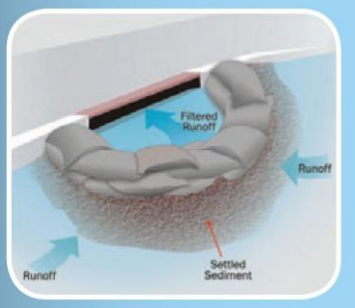
INLET CONTROLS



Typical inlet protection that allows sediment to settle out before stormwater is discharged to the storm drain.

Photo credit: Barry Tonning, Tetra Tech

Typical filter bag inlet protection installation.

Photo credit: Barry Tonning, Tetra Tech

Typical rock bag inlet protection installation.

Provided to you by Calcasieu Parish Police Jury Environmental Department

USE: Prevent soil and debris from entering storm drain inlets.

DESIGN CRITERIA: To function effectively, inlet protection measures must be installed to ensure that flows do not bypass inlet protection and enter the storm drain without treatment. However, designs must also enable the inlet to function without completely blocking flows in a manner that causes localized flooding. There are several types of effective inlet protection:

- *Block and gravel barrier:* Place two concrete blocks on their sides perpendicular to the curb at either end of the inlet opening. These will serve as spacer blocks. Place concrete blocks on their sides across the front of the inlet and abutting the spacer blocks. The openings in the blocks should face outward, not upward. Cut a 2-by-4 inch stud the length of the curb inlet plus the width of the two spacer blocks. Place the stud through the outer hole of each spacer block to help keep the front blocks in place. Place wire mesh over the outside vertical face (open ends) of the concrete blocks to prevent stone from being washed through the blocks. Use chicken wire, hardware cloth with 1/2 inch openings, or filter fabric. Place 3/4 -1 1/3 inch gravel against the wire to the top of the barrier.
- *Sand or rock bags:* Place these barriers on gently sloping streets where water can pond. Bag should be of woven-type or mesh geotextile fabric since burlap bags deteriorate rapidly. Fill the bags with 3/4 inch drain rock or 1/4 inch pea gravel. Do not fill bags completely, so they will form a tight seal when packed in a row. Place the bags in a curved row from the top of curb at least 3 feet into the street. The row should be curved at the ends, pointing uphill. Several layers of bags should be overlapped and packed tightly. Leave a one-bag gap in the top row to act as a spillway. Once the small catchment areas behind the bags, or block and gravel, fill with sediment, future sediment-laden runoff will enter the storm drain without being de-silted. Therefore, sediment must be removed from these structures during or after each storm. Additional storage can be obtained by constructing a series of bag barriers along the gutter so that each barrier traps small amounts of sediment.
- *Sediment control logs:* There are a variety of proprietary products available for “curb sock” or sediment control bag inlet protection. If proprietary products are used, design details and installation procedures from the manufacturer must be followed.
- *Filter bag inlet protection:* Wherever filter bags are used they should be installed according to manufacturer’s specifications. Ensure that the accompanying sand bag, filter log, or compost sock extends beyond the inlet opening. Filter bags should be cleaned and/ or replaced when the bag is half full or when flow capacity has been reduced so as to prevent flooding or bypassing of the inlet. Needed repairs should be initiated immediately after the inspection, and a supply of replacement filter bags should be kept on site.

MAINTENANCE:

- To prevent clogging, storm drain control structures must be maintained frequently.
- Check all temporary inlet control measures on a weekly basis and after each storm event.
- Clean, or remove and replace, the inlet control as sediment accumulates, the filter becomes clogged, or performance is compromised. Where there is evidence of sediment accumulation adjacent to the inlet control, the control shall be removed by the end of the same work day in which it was found or by the end of the following work day if removal by the same work day is not feasible.

TIPS:

- For best results, stabilize areas draining to the inlet as soon as feasible, to reduce the amount of sediment flowing toward the inlet.
- Inlet protection measures may be removed in flood conditions where a clogged inlet may result in endangerment to public safety.