

## **Storm Drain Inlet Protection**

### **PURPOSE:**

Storm drain inlet protection prevents sediment from entering a storm drain system. Inlet protection can be achieved by the use of filters or impounding an area around or upstream of an inlet to allow sediment to settle. Storm Drain Inlet Protection is a secondary BMP and is to be used in conjunction with erosion control BMPs.

### **IMPLEMENTATION:**

- Every storm drain inlet receiving or having the potential of receiving sediment-laden runoff from a construction site must be protected.
- Care is to be taken to not allow ponded water to encroach on the roadway.
- If the area draining into the inlet is greater than 1 acre, a sediment basin or sediment trap may have to be constructed.

### **DESIGN:**

- Two types of Storm Drain Inlet Protection:
  - Inlet Filters
    - A frame and filter basket installed directly into a storm drain drop inlet structure.
  - External Application
    - A barrier constructed of silt filter fence, hay bales or straw bales.

### **INLET FILTERS:**

- Shall be installed either directly on the drainage structure or under the grate of the drainage structure resting on the lip of the frame. The fabric bag shall hang down into the structure.
- Sediment must be removed from each inlet filter basket when it reaches 25% full or if upon inspection, more than 50% of the fabric pores are covered over with silt.

### **SILT FILTER FENCE:**

- Silt filter fence is to be trenched into the earth 6 inches.
- Cross bracing is to be used to support the inlet protection.
- There are to be no tears in the fabric and it must remain taut.
- Must be cleaned or replaced when sediment accumulates to one-third the height of the fabric.

### **HAY OR STRAW BALES:**

- Bales are to be trenched into the earth 6 inches.
- Bales are to be placed on their sides so the twine or wire does not come into contact with the soil.
- There are to be no gaps where the bales join as to not allow any storm water to flow into the inlet unfiltered.

- A minimum of two stakes are to be used to tie down each bale.
- Must be cleaned or replaced when sediment accumulates to one-third the height of the bale.

INSPECTION:

- Storm Drain Inlet Protections are to be inspected by the resident engineer and contractor every 7 calendar days and after a storm event of ½" or greater (including snowfall).