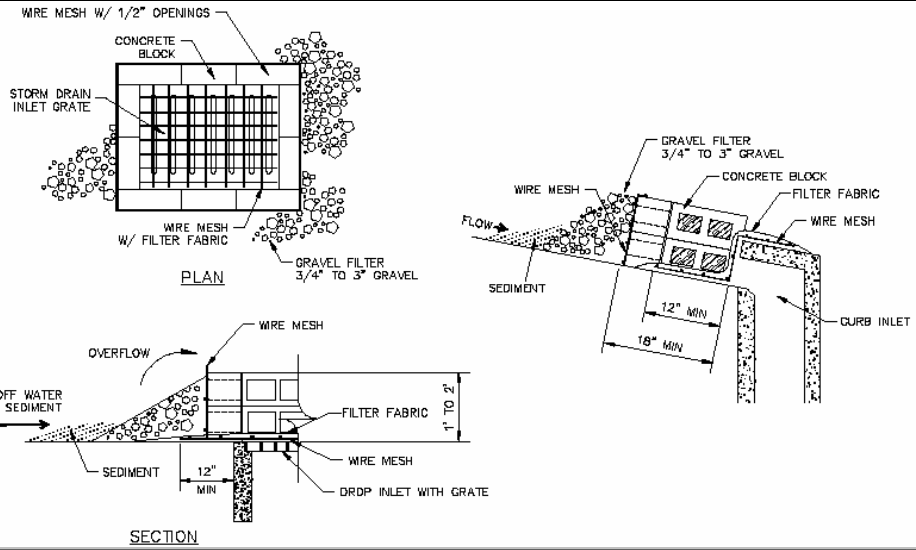


# 918A BMP: Inlet Protection - Concrete Block



## OBJECTIVES

- Housekeeping Practices
- Contain Waste
- Minimize Disturbed Areas
- Stabilize Disturbed Areas
- Protect Slopes/Channels
- Control Site Perimeter
- Control Internal Erosion



## DESCRIPTION:

Concrete block and gravel filter placed over inlet to storm drain system.

## APPLICATION:

Construct at inlets in paved or unpaved areas where upgradient area is to be disturbed by construction activities.

## INSTALLATION/APPLICATION CRITERIA:

- Place wire mesh (with 1/2 inch openings) over the inlet grate extending one foot past the grate in all directions.
- Place concrete blocks around the inlet with openings facing outward. Stack blocks to minimum height of 12-inches and maximum height of 24-inches.
- Place wire mesh around outside of blocks.
- Place gravel (3/4" to 3") around blocks.

## LIMITATIONS:

- Recommended for maximum drainage area of one acre.
- Excess flows may bypass the inlet requiring down gradient controls.
- Ponding will occur at inlet.

## MAINTENANCE:

- Inspect inlet protection after every large storm event and at a minimum of once monthly.
- Remove sediment accumulated when it reaches 4-inches in depth.
- Replace filter fabric and clean or replace gravel if clogging is apparent.

## TARGETED POLLUTANTS

- Sediment
- Nutrients
- Toxic Materials
- Oil & Grease
- Floatable Materials
- Other Waste

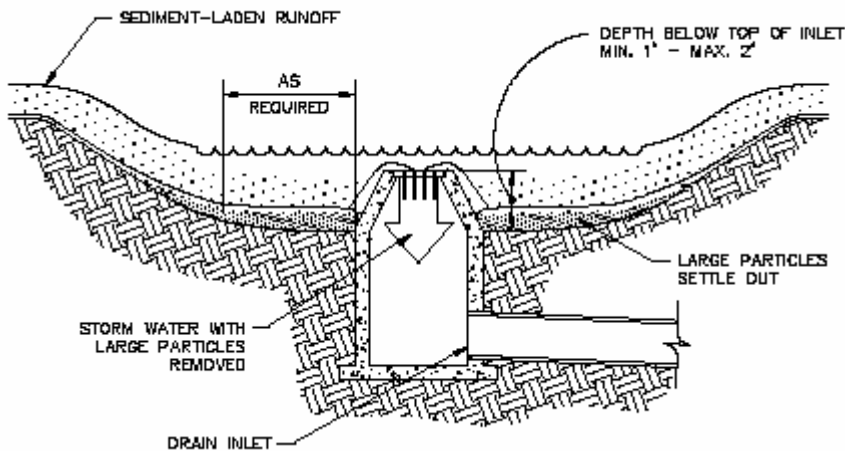
<ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> High Impact</li> <li><input checked="" type="checkbox"/> Medium Impact</li> <li><input type="checkbox"/> Low or Unknown Impact</li> </ul>
--

## IMPLEMENTATION REQUIREMENTS

- Capital Costs
- O&M Costs
- Maintenance
- Training

<ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> High <input checked="" type="checkbox"/> Medium <input type="checkbox"/> Low</li> </ul>
--

# 918B BMP: Inlet Protection - Excavated



**DESCRIPTION:**

An area excavated around a storm drain inlet to impound water below the inlet.

**APPLICATION:**

Construct at storm drainage inlets located downgradient of areas to be disturbed by construction (for inlets in paved areas see other information sheets for inlet protection).

**INSTALLATION/APPLICATION CRITERIA:**

- Provide upgradient sediment controls, such as silt fence during construction of inlet.
- When construction of inlet is complete, excavate adjacent area 1 to 2 feet lower than the grate elevation. Size of excavated area should be based on soil type and contributing acreage.

**LIMITATIONS:**

- Recommended maximum contributing drainage area of one acre.
- Limited to inlets located in open unpaved areas.
- Requires flat area adjacent to inlet.

**MAINTENANCE:**

- Inspect inlet protection following storm event and at a minimum of once monthly.
- Remove accumulated sediment when it reaches one half of the excavated sump below the grate.
- Repair side slopes as required.

**OBJECTIVES**

- Housekeeping Practices
- Contain Waste
- Minimize Disturbed Areas
- Stabilize Disturbed Areas
- Protect Slopes/Channels
- Control Site Perimeter
- Control Internal Erosion



**TARGETED POLLUTANTS**

- Sediment
- Nutrients
- Toxic Materials
- Oil & Grease
- Floatable Materials
- Other Waste

<ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> High Impact</li> <li><input checked="" type="checkbox"/> Medium Impact</li> <li><input type="checkbox"/> Low or Unknown Impact</li> </ul>
--

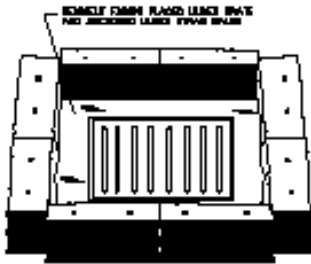
**IMPLEMENTATION REQUIREMENTS**

- Capital Costs
- O&M Costs
- Maintenance
- Training

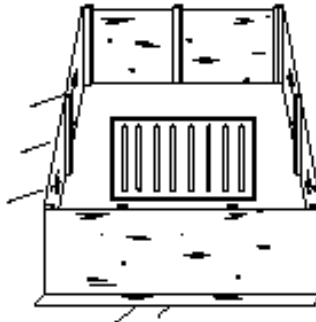
<ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> High <input checked="" type="checkbox"/> Medium <input type="checkbox"/> Low</li> </ul>
--

# 918C BMP: Inlet Protection - Silt Fence or Straw Bale

## INLET PROTECTION



STRAW BALE BARRIER



SILT FENCE

SEE INDIVIDUAL BMP INFORMATION SHEETS FOR INSTRUCTIONS FOR CONSTRUCTION OF STRAW BALE BARRIER AND SILT FENCE..

### DESCRIPTION:

Sediment barrier erected around storm drain inlet.

### APPLICATION:

Construct at storm drainage inlets located downgradient of areas to be disturbed by construction (for inlets in paved areas see other information sheets for inlet protection).

### INSTALLATION/APPLICATION CRITERIA:

- Provide upgradient sediment controls, such as silt fence during construction of inlet.
- When construction of inlet is complete, erect straw bale barrier or silt fence surrounding perimeter of inlet. Follow instructions and guidelines on individual
- BMP information sheets for straw bale barrier and silt fence construction.

### LIMITATIONS:

- Recommended maximum contributing drainage area of one acre.
- Limited to inlets located in open unpaved areas.
- Requires shallow slopes adjacent to inlet.

### MAINTENANCE:

- Inspect inlet protection following storm event and at a minimum of once monthly.
- Remove accumulated sediment when it reaches 4-inches in depth.
- Repair or realign barrier/fence as needed.
- Look for bypassing or undercutting and recompact soil around barrier/fence as required.

### OBJECTIVES

- Housekeeping Practices
- Contain Waste
- Minimize Disturbed Areas
- Stabilize Disturbed Areas
- Protect Slopes/Channels
- Control Site Perimeter
- Control Internal Erosion



### TARGETED POLLUTANTS

- Sediment
- Nutrients
- Toxic Materials
- Oil & Grease
- Floatable Materials
- Other Waste

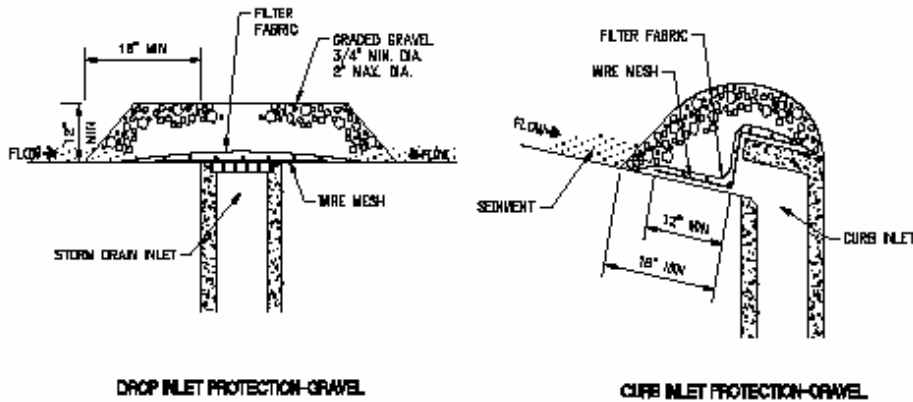
- High Impact
- Medium Impact
- Low or Unknown Impact

### IMPLEMENTATION REQUIREMENTS

- Capital Costs
- O&M Costs
- Maintenance
- Training

- High  Medium  Low

# 918D BMP: Inlet Protection - Gravel



## OBJECTIVES

- Housekeeping Practices
- Contain Waste
- Minimize Disturbed Areas
- Stabilize Disturbed Areas
- Protect Slopes/Channels
- Control Site Perimeter
- Control Internal Erosion



## DESCRIPTION:

Placement of gravel filter over inlet to storm drain to filter storm water runoff.

## APPLICATION:

Construct at inlets in paved or unpaved areas where upgradient area is to be disturbed by construction activities.

## INSTALLATION/APPLICATION CRITERIA:

- Place wire mesh (with 1/2 inch openings) over the inlet grate extending one foot past the grate in all directions.
- Place filter fabric over the mesh. Filter fabric should be selected based on soil type.
- Place graded gravel, to a minimum depth of 12-inches, over the filter fabric and extending 18-inches past the grate in all directions.

## LIMITATIONS:

Recommended for maximum drainage area of one acre.  
 Excess flows may bypass the inlet requiring down gradient controls.  
 Ponding will occur at inlet.

## MAINTENANCE:

Inspect inlet protection after every large storm event and at a minimum of once monthly.  
 Remove sediment accumulated when it reaches 4-inches in depth.  
 Replace filter fabric and clean or replace gravel if clogging is apparent.

## TARGETED POLLUTANTS

- Sediment
- Nutrients
- Toxic Materials
- Oil & Grease
- Floatable Materials
- Other Waste

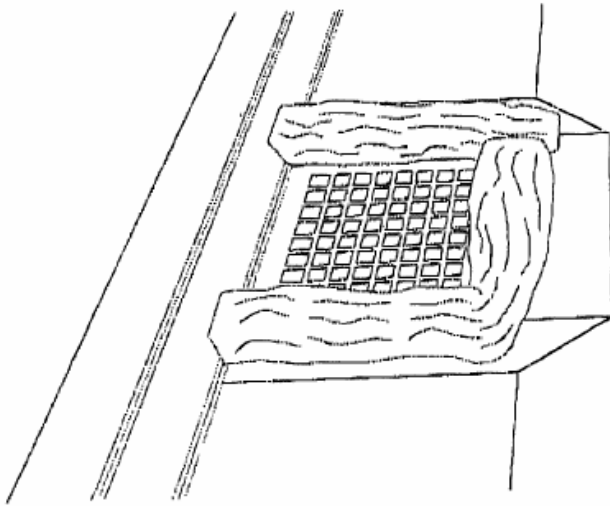
- |  |
|--|
| <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> High Impact</li> <li><input checked="" type="checkbox"/> Medium Impact</li> <li><input type="checkbox"/> Low or Unknown Impact</li> </ul> |
|--|

## IMPLEMENTATION REQUIREMENTS

- Capital Costs
- O&M Costs
- Maintenance
- Training

- High Impact
- Medium Impact
- Low or Unknown Impact
- High  Medium  Low

**918E BMP: Inlet Protection - Wattle**



**DESCRIPTION:**

Sediment barrier erected around storm drain inlet.

**APPLICATION:**

Construct at storm drainage inlets located down-gradient of areas to be disturbed by construction.

**INSTALLATION/APPLICATION CRITERIA:**

- Provide up-gradient sediment controls, such as silt fencing during construction of inlet.
- When construction of curb and gutter and roadway is complete, install gravel filled or straw wattles around perimeter of inlet

**LIMITATIONS:**

Recommended for maximum drainage area of one acre.  
 Required shallow slopes adjacent to inlet.  
 Excess flows may bypass the inlet requiring down gradient controls.  
 Ponding will occur at inlet.

**MAINTENANCE:**

Inspect inlet protection after every large storm event and at a minimum of once monthly.  
 Remove sediment accumulated when it reaches 4-inches in depth.  
 Look for bypassing or undercutting and repair or realign as needed.

**OBJECTIVES**

- Housekeeping Practices
- Contain Waste
- Minimize Disturbed Areas
- Stabilize Disturbed Areas
- Protect Slopes/Channels
- Control Site Perimeter
- Control Internal Erosion



**TARGETED POLLUTANTS**

- Sediment
- Nutrients
- Toxic Materials
- Oil & Grease
- Floatable Materials
- Other Waste

- |  |
|--|
| <ul style="list-style-type: none"> <li>■ High Impact</li> <li><input checked="" type="checkbox"/> Medium Impact</li> <li><input type="checkbox"/> Low or Unknown Impact</li> </ul> |
|--|

**IMPLEMENTATION REQUIREMENTS**

- Capital Costs
- O&M Costs
- Maintenance
- Training

- High Impact
- Medium Impact
- Low or Unknown Impact
- High  Medium  Low