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### SILT FENCE INSTALLATION

**PLAN SYMBOL**

1.25 LB./LINEAR FT. STEEL POSTS

MAXIMUM SPACING = 6 FT.

BACKFILL TRENCH WITH COMPACTED EARTH

RUNOFF

HEAVY DUTY PLASTIC TIE FOR STEEL POSTS (RESTRICT TO TOP 6-INCHES OF FABRIC)

USE EITHER FLAT-BOTTOM OR V-BOTTOM TRENCH SEE DETAILS

BURY FABRIC

### FLAT-BOTTOM TRENCH DETAIL

18-IN. TO 24-IN.

24-IN. (MINIMUM)

6-IN.

6-IN.

6-IN.

HEAVY DUTY PLASTIC TIES

COMPACTED EARTH

RUNOFF

### V-SHAPED TRENCH DETAIL

18-IN. TO 24-IN.

24-IN. (MINIMUM)

6-IN.

6-IN.

6-IN.

HEAVY DUTY PLASTIC TIES

COMPACTED EARTH

RUNOFF

BURY FILTER FABRIC AT LEAST 12-INCHES

### SILT FENCE - GENERAL NOTES

- Do not place silt fence across channels or in other areas subject to concentrated flows. Silt fence should not be used as a velocity control BMP. Concentrated flows are any flows greater than 0.5 cfs.
- Maximum sheet or overlaid flow path length to the silt fence shall be 100-feet.
- Maximum slope steepness (normal [perpendicular] to the fence line) shall be 2:1.
- Silt fence joints, when necessary, shall be completed by one of the following options:
  - Wrap each fabric together at a support post with both ends fastened to the post, with a 1-foot minimum overlap.
  - Overlap all fence by installing 3-feet passed the support post to which the new silt fence roll is attached. Attach old roll to new roll with heavy-duty plastic ties, or
  - Overlap entire width of each silt fence roll from one support post to the next support post.
- Attach filter fabric to the steel posts using heavy-duty plastic ties that are evenly spaced within the top 6-inches of the fabric.
- Install the silt fence perpendicular to the direction of the stormwater flow and place the silt fence the proper distance from the toe of steep slopes to provide sediment storage and access for maintenance and cleanup.
- Install Silt Fence Checks (like-backs) every 20-100 feet, dependent on slope, along silt fence that is installed with slope and where concentrated flows are expected or are documented along the proposed/installed silt fence.

**DELINEATED AS SF SF ON PLANS**

### South Carolina Department of Health and Environmental Control

## SILT FENCE

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FEBRUARY 2014 DATE

### POST INSTALLATION DETAIL

1.25 LB./LINEAR FT. STEEL POSTS

24-IN. MIN.

3-FT. MAX. SPACING

ATTACH FILTER FABRIC TO POSTS WITH HEAVY DUTY PLASTIC TIES ALONG TOP 6-INCHES OF FABRIC

FOLD FABRIC TO OVERLAP 1 FOOT AND SECURE TO POSTS WITH HEAVY DUTY PLASTIC TIES

18-IN. TO 24-IN.

48-IN. MIN.

8-IN. MIN.

### WIRE MESH OF SUFFICIENT STRENGTH TO PROTECT FILTER FABRIC REQUIRED

BURY FABRIC (SEE DETAIL)

### PLAN SYMBOL

### South Carolina Department of Health and Environmental Control

## TYPE A FILTER FABRIC INLET PROTECTION

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## TYPE A FILTER FABRIC INLET PROTECTION

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### STRAW BALE BARRIER CONCRETE WASHOUT

PLAN TYPE "ABOVE GRADE" WITH STRAW BALES

NOTES:

- ACTUAL LAYOUT DETERMINED IN FIELD.
- INSTALL CONCRETE WASHOUT SIGN (24"x24", MINIMUM) WITHIN 50' OF THE TEMPORARY CONCRETE WASHOUT FACILITY.
- TEMPORARY WASHOUT AREA MUST BE AT LEAST 50' FROM A STORM DRAIN, CREEK BANK OR PERMETER CONTROL.
- CLEAN OUT CONCRETE WASHOUT AREA WHEN FULL.
- THE KEY TO FUNCTIONAL CONCRETE WASHOUTS WEEKLY INSPECTIONS, ROUTINE MAINTENANCE, AND REGULAR CLEAN OUT.
- SILT FENCE SHOULD BE INSTALLED AROUND PERIMETER OF CONCRETE WASHOUT AREA EXCEPT FOR THE SIDE UTILIZED FOR ACCESS TO WASHOUT.
- CONSTRUCTION ENTRANCE MAY BE ACCESSIBLE ALONG WITHIN 50' OF THE WASHOUT FROM TRUCK ACCESS.

### CONCRETE WASHOUT SIGN DETAIL

LETTERS A MINIMUM OF 5" IN HEIGHT

### CONCRETE WASHOUT

NOT TO SCALE

0.C500

### South Carolina Department of Health and Environmental Control

## CONCRETE WASHOUT STRAW BALE BARRIER

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### SILT FENCE - INSPECTION & MAINTENANCE

- Silt fence posts must be 48-inch long steel posts that meet, at a minimum, the following physical characteristics:
  - Composed of a high strength steel with a minimum yield strength of 50,000 psi.
  - Include a standard "T" section with a nominal face width of 1.38-inches and a nominal "T" length of 1.48-inches.
  - Weight 1.25 pounds per foot (1.85).
- Posts shall be equipped with projections to aid in fastening of filter fabric.
- Steel posts may need to have a metal soil stabilization plate welded near the bottom when installed along steep slopes or installed in loose soils. The plate should have a minimum cross section of 17-square inches and be composed of 1/2 square steel, at a minimum. The metal soil stabilization plate should be completely buried.
- Install posts to a minimum of 24-inches. A minimum height of 1- to 2-inches above the fabric shall be maintained, and a maximum height of 3 feet shall be maintained above the ground.
- Post spacing shall be at a maximum of 6-feet on center.

### SILT FENCE - FABRIC REQUIREMENTS

- Silt fence must be composed of woven geotextile filter fabric that consists of the following requirements:
  - Composed of fibers consisting of long chain synthetic polymers of at least 85% by weight of polyethylene, polyesters, or polyamides that are formed into a network such that the filaments or yarns retain dimensional stability relative to each other.
  - Free of any treatment or coating which might adversely affect its physical properties after installation.
  - Free of any defects or flaws that significantly affect its physical and/or filtering properties; and
  - Have a minimum width of 36-inches.
- Use only fabric appearing on SC DOT's Qualified Products Listing (QPL), Approval Sheet #34, meeting the requirements of the most current edition of the SC DOT Standard Specifications for Highway Construction.
- 12-inches of the fabric should be placed within excavated trench and tamped in when the trench is backfilled.
- Filter fabric shall be purchased in continuous rolls and cut to the length of the barrier to avoid joints.
- Filter fabric shall be installed at a minimum of 24-inches above the ground.

### TYPICAL SILT FENCE

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0.C500

### South Carolina Department of Health and Environmental Control

## SILT FENCE

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GENERAL NOTES

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### TYPE A - FILTER FABRIC REQUIREMENTS

- Silt fence must be composed of woven geotextile filter fabric that consists of the following physical characteristics:
  - Composed of fibers consisting of long chain synthetic polymers of at least 85% by weight of polyethylene, polyesters, or polyamides that are formed into a network such that the filaments or yarns retain dimensional stability relative to each other.
  - Free of any treatment or coating which might adversely affect its physical properties after installation.
  - Free of any defects or flaws that significantly affect its physical and/or filtering properties; and
  - Have a minimum width of 36-inches.
- Use only fabric appearing on SC DOT's Qualified Products Listing (QPL), Approval Sheet #34, meeting the requirements of the most current edition of the SC DOT Standard Specifications for Highway Construction.
- 12-inches of the fabric should be placed within excavated trench and tamped in when the trench is backfilled.
- Filter fabric shall be purchased in continuous rolls and cut to the length of the barrier to avoid joints.
- Filter fabric shall be installed at a minimum of 24-inches above the ground.

### TYPE A - INSPECTION & MAINTENANCE

- The key to functional inlet protection is weekly inspections, routine maintenance, and regular sediment removal.
- Regular inspections of inlet protection shall be conducted once every calendar week and, as recommended, within 24-hours after each rainfall event that produces 1/2-inch or more of precipitation.
- Attention to sediment accumulations along the filter fabric is extremely important. Accumulated sediment should be continually monitored and removed when necessary.
- Remove accumulated sediment when it reaches 1/3 the height of the filter fabric. When a storm is included in front of the filter fabric, it should be removed when it has accumulated approximately 1/2 the depth of the filter fabric.
- Removed sediment shall be placed in a designated storage area and not spread across disturbed area. Stabilize the removed sediment after it is relocated.
- Check for areas where stormwater runoff has eroded a channel beneath the silt fence, or where the fence has sagged or collapsed due to runoff overtopping the silt fence. Install check/dike-blocks and/or reinstall silt fence, as necessary.
- Check for tears within the silt fence, areas where silt fence has begun to decompose, and for any other circumstance that may render the silt fence ineffective. Removed damaged silt fence and reinstall new silt fence immediately.
- Silt fence should be removed within 30 days after final stabilization is achieved and once it is removed, the resulting disturbed area shall be permanently stabilized.

### TYPE A - POST REQUIREMENTS

- Silt fence posts must be 48-inch long steel posts that meet, at a minimum, the following physical characteristics:
  - Composed of a high strength steel with a minimum yield strength of 50,000 psi.
  - Include a standard "T" section with a nominal face width of 1.38-inches and a nominal "T" length of 1.48-inches.
  - Weight 1.25 pounds per foot (1.85).
- Posts shall be equipped with projections to aid in fastening of filter fabric.
- Install posts to a minimum of 24-inches. A minimum height of 1- to 2-inches above the fabric shall be maintained, and a maximum height of 3 feet shall be maintained above the ground.
- Post spacing shall be at a maximum of 3-feet on center.

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## TYPE A FILTER FABRIC INLET PROTECTION

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## TYPE A FILTER FABRIC INLET PROTECTION

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### 4" HIGH ORANGE POLYETHYLENE LAMINAR SAFETY NETTING SECURED TO POST AND CROSS BAR WITH WIRE.

6 IN. (SEE NOTE)

1" DIA. METAL CROSS BAR SECURED WITH POST CAPS

4" MIN.

2" MIN.

ROOT ZONE TO BE PROTECTED

NOTES:

- ALL TREE PROTECTION BARRICADES MUST HAVE TWO HORIZONTAL CROSS BARS.
- BARRICADES SHALL BE ERECTED AT A MINIMUM DISTANCE FROM THE BASE OF PROTECTED TREES AND GRAND TREES ACCORDING TO THE FOLLOWING STANDARDS:
  - A. FOR PROTECTED TREES TWENTY-THREE INCHES (23"-17") D.B.H. PROTECTIVE BARRICADES SHALL BE PLACED A MINIMUM DISTANCE OF TEN FEET (10') FROM THE BASE OF EACH PROTECTED TREE. 10" D.B.H. AND LESS REQUIRE EIGHT FEET (8').
  - B. FOR PROTECTED TREES GREATER THAN TWENTY-THREE INCHES (23") D.B.H. AND GRAND TREES: PROTECTIVE BARRICADES SHALL PROVIDE A DIAMETER OF PROTECTION AROUND THE TREE EQUAL IN FEET TO THE DIAMETER BREST HEIGHT TO THE TREE (i.e., A 24" DIAMETER TREE WOULD REQUIRE A 24-FOOT DIAMETER PROTECTIVE BARRICADE).

SEE CITY OF CHARLESTON ZONING ORDINANCE SEC. 54-330 TREE PROTECTION FOR ADDITIONAL REQUIREMENTS.

### TREE BARRICADE/PROTECTION DETAIL

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0.C500

### South Carolina Department of Health and Environmental Control

## TYPE A FILTER FABRIC INLET PROTECTION

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### CONSTR. ENTRANCE INSPECTION & MAINTENANCE

- The key to functional construction entrances is weekly inspections, routine maintenance, and regular sediment removal.
- Regular inspections of construction entrances shall be conducted once every calendar week and, as recommended, within 24-hours after each rainfall event that produces 1/2-inch or more of precipitation.
- During regular inspections, check for mud and sediment buildup and/or debris. Inspection frequency may need to be more frequent during long periods of wet weather.
- Install a non-woven geotextile fabric prior to placing any stones.
- Install a culvert pipe across the entrance when needed to provide positive drainage.
- The entrance shall consist of 2-inch to 3-inch D50 stones placed at a minimum depth of 8-inches.
- Minimum dimensions of the entrance shall be 24-feet wide by 100-feet long, and may be modified as necessary to accommodate site constraints.
- The edges of the entrance shall be tapered out, towards the road to prevent trucking at the edge of the entrance.
- Divert all surface runoff and drainage from the stone pad to a sediment trap or basin or other sediment trapping structure.
- Limestone may not be used for the stone pad.

### CONSTRUCTION ENTRANCE - GENERAL NOTES

- Stabilized construction entrances should be used at all points where traffic will enter/leave a construction site onto a public road or any impervious surfaces, such as parking lots.
- Install a non-woven geotextile fabric prior to placing any stones.
- Install a culvert pipe across the entrance when needed to provide positive drainage.
- The entrance shall consist of 2-inch to 3-inch D50 stones placed at a minimum depth of 8-inches.
- Minimum dimensions of the entrance shall be 24-feet wide by 100-feet long, and may be modified as necessary to accommodate site constraints.
- The edges of the entrance shall be tapered out, towards the road to prevent trucking at the edge of the entrance.
- Divert all surface runoff and drainage from the stone pad to a sediment trap or basin or other sediment trapping structure.
- Limestone may not be used for the stone pad.

### CONSTRUCTION ENTRANCE DETAIL

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0.C500

### CONSTRUCTION ENTRANCE

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## CONSTRUCTION ENTRANCE

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GENERAL NOTES

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### INLET SILT PROTECTION (SILT SACK)

Optional Overflow

12.166

Silt Sack

Insert 1" Rebar For Bag Removal from Inlet (Rebar Not Included)

Dump Loops (Rebar Not Included)

SEE SITE

Expansion Restraint

NOTE: ACF ENVIRONMENTAL SILT SACK (TYPE B). SEE WEBSITE WWW.ACFENVIRONMENTAL.COM FOR DETAILS AND SPECIFICATIONS. CONTRACTOR MAY SUBSTITUTE WITH ENGINEER APPROVED EQUAL.

INSPECT EVERY 14 CALENDAR DAYS AND WITHIN 24-HRS. AFTER EACH RAINFALL EVENT THAT PRODUCES 1/2" OR MORE OF PRECIPITATION. CHECK FOR SEDIMENT BUILDUP. IF THE FABRIC TEARS, BEGINS TO DECOMPOSE, OR IN ANY WAY BECOMES INEFFECTIVE, REPLACE THE SECTION IMMEDIATELY. REMOVE SEDIMENT ACCUMULATED IN THE SACK WHEN IT REACHES 1/3 THE HEIGHT OF THE SACK, ESPECIALLY IF HEAVY RAINS ARE EXPECTED. REMOVE TRAPPED SEDIMENT FROM THE SITE OR STABILIZE IT ON SITE. REMOVE WITHIN 30 DAYS AFTER FINAL STABILIZATION IS ACHIEVED OR AFTER BEST MANAGEMENT PRACTICES(BMP'S) ARE NO LONGER NEEDED.

### INLET SILT PROTECTION (SILT SACK)

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\*\*\*FOR PAVED AREAS\*\*\*

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## CONSTRUCTION ENTRANCE

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DESCRIPTION	SIZE
ROCK PAD THICKNESS	6 INCHES
ROCK PAD WIDTH	24 FEET
ROCK PAD LENGTH	100 FEET
ROCK PAD STONE SIZE	D = 2-3 INCHES

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## CONSTRUCTION ENTRANCE

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05/03/2018

BOATING CENTER REDEVELOPMENT  
SWAIN BOATING CENTER  
H09-9617-PG-C

11 HAMMOND AVENUE  
CHARLESTON, SC

CITADEL

THE UNIVERSITY COLLEGE OF SCIENCE, CAROLINA

Revisions	
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