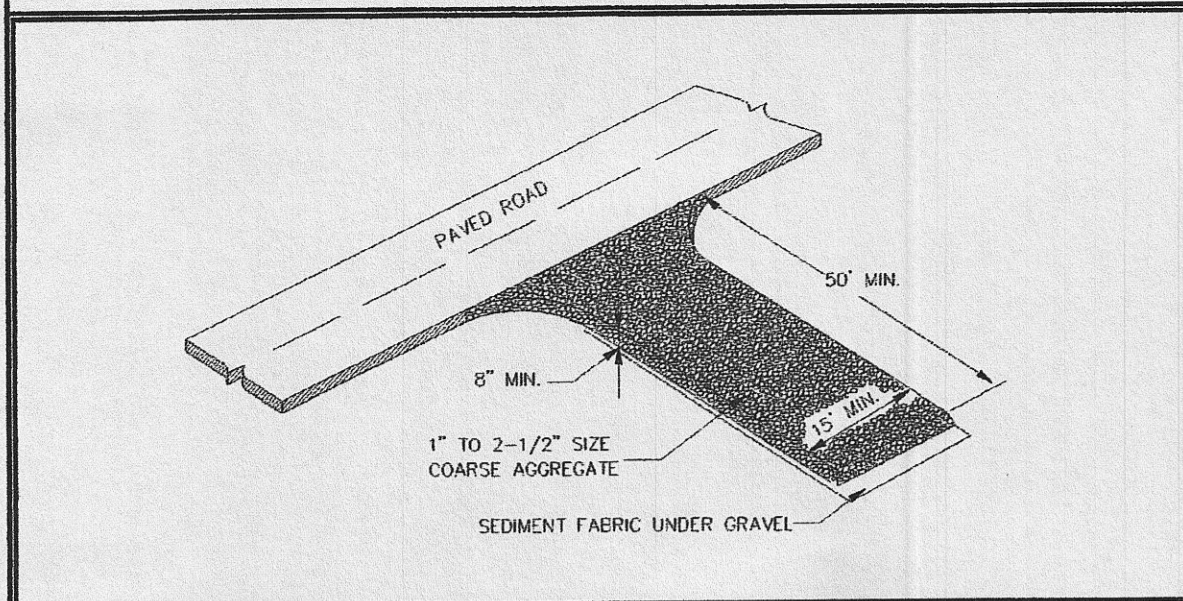


BMP: Stabilized Construction Entrance

SCE



OBJECTIVES

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

DESCRIPTION: A stabilized pad of crushed stone located where construction traffic enters or leaves the site from or to paved surface.

APPLICATIONS: At any point of ingress or egress at a construction site where adjacent traveled way is paved. Generally applies to sites over 2 acres unless special conditions exist.

INSTALLATION/APPLICATION CRITERIA: Clear and grub area and grade to provide maximum slope of 2%. Compact subgrade and place filter fabric if desired (recommended for entrances to remain for more than 3 months). Place coarse aggregate, 1 to 2 1/2 inches in size, to a minimum depth of 8 inches.

LIMITATIONS: Requires periodic top dressing with additional stones. Should be used in conjunction with street sweeping on adjacent public right-of-way.

MAINTENANCE: Inspect daily for loss of gravel or sediment buildup. Inspect adjacent roadway for sediment deposit and clean by sweeping or shoveling. Repair entrance and replace gravel as required to maintain control in good working condition. Expand stabilized area as required to accommodate traffic and prevent erosion at driveways.

TARGETED POLLUTANTS

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

- High Impact
Medium Impact
Low or Unknown Impact

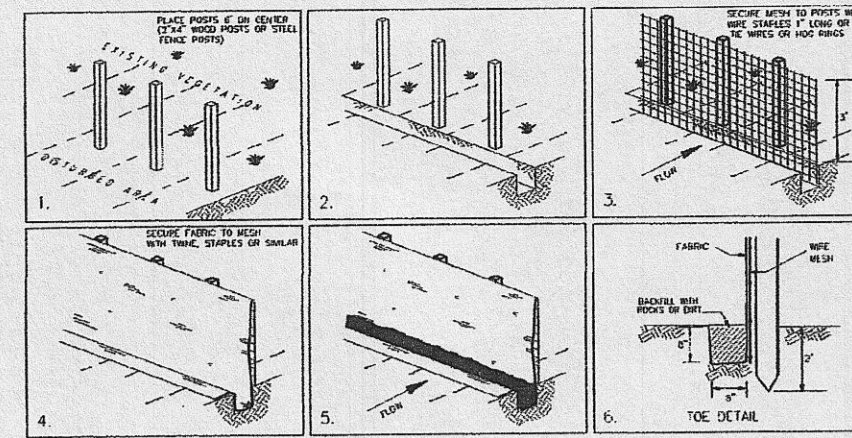
IMPLEMENTATION REQUIREMENTS

- Capital Costs
O&M Costs
Maintenance
Training

- High
Medium
Low

BMP: Silt Fence

SF



OBJECTIVES

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

DESCRIPTION: A temporary sediment barrier consisting of entrenched filter fabric stretched across and secured to supporting posts.

APPLICATION: Perimeter control; place barrier at downgradient limits of disturbance. Sediment barrier; place barrier at toe of slope or soil stockpile. Protection of existing waterways; place barrier at top of stream bank. Inlet protection; place fence surrounding catchbasins.

INSTALLATION/APPLICATION CRITERIA: Place posts 6 feet apart on center along contour (or use preassembled unit) and drive 2 feet minimum into ground. Excavate an anchor trench immediately upgradient of posts. Secure wire mesh (14 gage min. With 6 inch openings) to upslope side of posts. Attach with heavy duty 1 inch long wire staples, tie wires or hog rings. Cut fabric to required width, unroll along length of barrier and drape over barrier. Secure fabric to mesh with twine, staples, or similar, with trailing edge extending into anchor trench. Backfill trench over filter fabric to anchor.

LIMITATIONS: Recommended maximum drainage area of 0.5 acre per 100 feet of fence. Recommended maximum upgradient slope length of 150 feet. Recommended maximum uphill grade of 2:1 (50%). Recommended maximum flow rate of 0.5 cfs. Ponding should not be allowed behind fence.

MAINTENANCE: Inspect immediately after any rainfall and at least daily during prolonged rainfall. Look for runoff bypassing ends of barriers or undercutting barriers. Repair or replace damaged areas of the barrier and remove accumulated sediment. Reanchor fence as necessary to prevent shortcutting. Remove accumulated sediment when it reaches 1/2 the height of the fence.

TARGETED POLLUTANTS

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

- High Impact
Medium Impact
Low or Unknown Impact

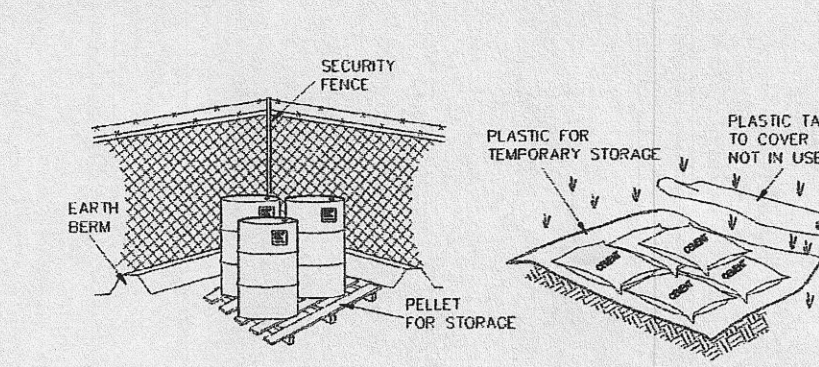
IMPLEMENTATION REQUIREMENTS

- Capital Costs
O&M Costs
Maintenance
Training

- High
Medium
Low

BMP: Materials Storage

MS



OBJECTIVES

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

DESCRIPTION: Controlled storage of on-site materials.

APPLICATION: Storage of hazardous, toxic, and all chemical substances. Any construction site with outside storage of materials.

INSTALLATION/APPLICATION CRITERIA: Designate a secured area with limited access as the storage location. Ensure no waterways or drainage paths are nearby. Construct compacted earthen berm (See Earth Berm Barrier Information Sheet), or similar perimeter containment around storage location for impoundment in the case of spills. Ensure all on-site personnel utilize designated storage area. Do not store excessive amounts of material that will not be utilized on site. For active use of materials away from the storage area ensure materials are not set directly on the ground and are covered when not in use. Protect storm drainage during use.

LIMITATIONS: Does not prevent contamination due to mishandling of products. Spill Prevention and Response Plan still required. Only effective if materials are actively stored in controlled location.

MAINTENANCE: Inspect daily and repair any damage to perimeter impoundment or security fencing. Check materials are being correctly stored (i.e. standing upright, in labeled containers, lightly capped) and that no materials are being stored away from the designated location.

TARGETED POLLUTANTS

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

- High Impact
Medium Impact
Low or Unknown Impact

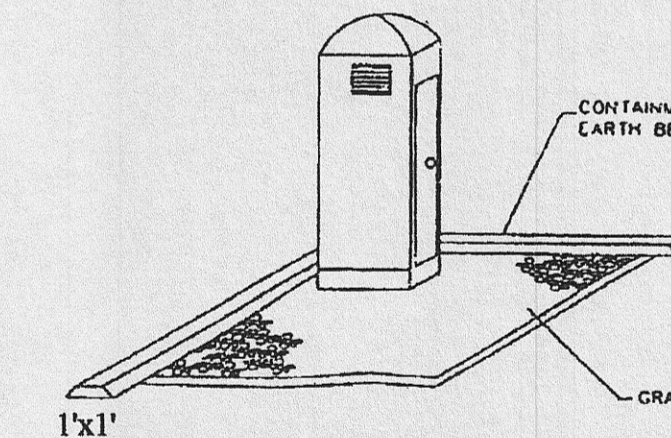
IMPLEMENTATION REQUIREMENTS

- Capital Costs
O&M Costs
Maintenance
Training

- High
Medium
Low

BMP: Portable Toilets

PT



OBJECTIVES

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

DESCRIPTION: Temporary on-site sanitary facilities for construction personnel.

APPLICATION: All sites with no permanent sanitary facilities or where permanent facility is too far from activities.

INSTALLATION/APPLICATION CRITERIA: Locate portable toilets in convenient locations throughout the site. Prepare level, gravel surface and provide clear access to the toilets for servicing and for on-site personnel. Construct earth berm perimeter (See Earth Berm Barrier Information Sheet), control for spill/protection leak.

LIMITATIONS: No limitations.

MAINTENANCE: Portable toilets should be maintained in good working order by licensed service with daily observation for leak detection. Regular waste collection should be arranged with licensed service. All waste should be deposited in sanitary sewer system for treatment with appropriate agency approval.

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

FILTERSOCK SPECIFICATION:

FILTREXX FILTERSOCK INSTALLATION AND MAINTENANCE

1.0 DESCRIPTION: THIS WORK SHALL CONSIST OF FURNISHING, INSTALLING, MAINTAINING AND DISPERSING (IF NEEDED) A WATER PERMEABLE COMPOST FILTER SOCK (FILTREXX FILTERSOCK) TO CONTAIN SOIL EROSION AND SEDIMENT BY REMOVING SOIL PARTICLES FROM WATER MOVING OFF SITE INTO ADJACENT WATERWAYS OR STORM WATER DRAINAGE SYSTEMS. FILTERSOCKS WILL BE USED AS A FORM OF INLET PROTECTION FOR OPERATIONAL STORM DRAINAGE SYSTEMS.

2.0 COMPOST PRODUCTS USED TO FILL FILTREXX FILTERSOCKS

1. COMPOST: COMPOST USED FOR FILTREXX FILTERSOCKS SHALL BE WEED FREE AND DERIVED FROM A WELL-DECOMPOSED SOURCE OF ORGANIC MATTER. THE COMPOST SHALL BE PRODUCED USING AN AEROBIC COMPOSTING PROCESS MEETING CFR 503 REGULATIONS, INCLUDING TIME AND TEMPERATURE DATA INDICATING EFFECTIVE WEED SEED, PATHOGEN AND INSECT LARVAE KILL. THE COMPOST SHALL BE FREE OF ANY REFUSE, CONTAMINANTS OR OTHER MATERIALS TOXIC TO PLANT GROWTH. NON-COMPOSTED PRODUCTS WILL NOT BE ACCEPTED. TEST METHODS FOR THE ITEMS BELOW SHOULD FOLLOW USOC TMECC GUIDELINES FOR LABORATORY PROCEDURES:

- A. PH - 5.0-8.0 IN ACCORDANCE WITH TMECC 04.11-A, "ELECTROMETRIC PH DETERMINATIONS FOR COMPOST"
B. PARTICLE SIZE - 98% PASSING A 1" SIEVE, 90% PASSING A 1/2" SIEVE AND A MINIMUM OF 70% GREATER THAN THE 3/8" SIEVE. A TOTAL OF 98% SHALL NOT EXCEED 3 INCHES IN LENGTH, IN ACCORDANCE WITH TMECC 02.02-B, "SAMPLE SIEVING FOR AGGREGATE SIZE CLASSIFICATION"
C. MOISTURE CONTENT OF LESS THAN 60% IN ACCORDANCE WITH STANDARDIZED TEST METHODS FOR MOISTURE DETERMINATION
D. MATERIAL SHALL BE RELATIVELY FREE (<1% BY DRY WEIGHT) OF INERT OR FOREIGN MAN MADE MATERIALS. E. A SAMPLE SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO BEING USED AND MUST COMPLY WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS.

3.0 CONSTRUCTION AND INSTALLATION OF FILTREXX FILTERSOCKS:

- 1. FILTREXX FILTERSOCKS WILL BE USED AS A FORM OF INLET PROTECTION ON CONSTRUCTION SITES WHICH REQUIRE PROTECTION AGAINST SEDIMENT LOADED WATER AFTER STORM DRAINS BECOME OPERATIONAL.
2. FILTREXX FILTERSOCKS WILL BE PLACED AT LOCATIONS INDICATED ON PLANS AS DIRECTED BY THE ENGINEER. FILTERSOCKS SHOULD BE INSTALLED IN A PATTERN THAT ALLOWS COMPLETE PROTECTION OF THE INLET AREA.
3. INSTALLATION OF FILTREXX FILTERSOCKS WILL ENSURE A MINIMAL OVERLAP OF AT LEAST ONE FOOT ON EITHER SIDE OF THE OPENING BEING PROTECTED. THE FILTERSOCKS WILL BE ANCHORED TO THE SOIL BEHIND THE CURB USING STAPLES, STAKES OR OTHER DEVICES CAPABLE OF HOLDING THE FILTERSOCK IN PLACE.
4. STANDARD SIZES OF FILTERSOCKS FOR INLET PROTECTION WILL BE 8' DIAMETER PRODUCTS. IN SEVERE FLOW SITUATIONS, LARGER FILTERSOCKS MAY BE RECOMMENDED BY THE ENGINEER.
5. FILTERSOCKS SHALL BE CONSTRUCTED OF A WOVEN MATERIAL AND FILLED WITH A COMPOST PRODUCT THAT PASSES THE CRITERIA LISTED IN SECTION 2.
6. IF THE FILTERSOCKS BECOME CLOGGED WITH DEBRIS AND SEDIMENT, THEY SHALL BE MAINTAINED SO AS TO ASSURE A PROPER DRAINAGE AND WATER FLOW INTO THE STORM DRAIN. IN SEVERE STORM EVENTS, OVERFLOW OF THE FILTERSOCK MAY BE ACCEPTABLE IN ORDER TO KEEP THE AREA FROM FLOODING.
7. THE FILTERSOCKS SHALL BE POSITIONED SO AS TO PROVIDE COMPLETE PHYSICAL BARRIER TO THE DRAIN ITSELF, ALLOWING SEDIMENT TO COLLECT ON THE OUTSIDE OF THE FILTERSOCKS. SEE ATTACHED SCHEMATIC FOR FILTERSOCK INSTALLATION.

8. FOR AREAS WHERE FILTERSOCKS ARE TO BE LEFT AS A PERMANENT PART OF THE LANDSCAPE, FILTERSOCKS MAY BE SEEDED DURING TIME OF MANUFACTURE TO CREATE A LIVING SOCK. FOR SEEDING OPTIONS, THE ENGINEER MAY SIMPLY REPLACE ALL LANGUAGE ABOVE WITH "LIVING FILTREXX FILTERSOCKS"

4.0 MAINTENANCE:

- 1. THE CONTRACTOR SHALL MAINTAIN FILTREXX FILTERSOCKS IN A FUNCTIONAL CONDITION AT ALL TIMES AND IT SHALL BE ROUTINELY INSPECTED.
2. WHERE THE FILTERSOCK REQUIRES REPAIR, IT WILL BE ROUTINELY REPAIRED.
3. THE CONTRACTOR SHALL REMOVE SEDIMENTS COLLECTED AT THE BASE OF THE FILTERSOCK WHEN THEY REACH 1/3 OF THE EXPOSED HEIGHT OF THE FILTERSOCK, OR AS DIRECTED BY THE ENGINEER.
4. THE FILTREXX FILTERSOCK WILL BE DISPERSED ON SITE WHEN NO LONGER REQUIRED, AS DETERMINED BY THE ENGINEER. THE NETTING MATERIAL WILL BE DISPOSED OF IN NORMAL TRASH CONTAINERS OR REMOVED BY THE CONTRACTOR.
5. REGULAR MAINTENANCE INCLUDES LIFTING THE FILTREXX FILTERSOCKS AND CLEANING UNDER THEM AS SEDIMENT COLLECTS.

5.0 METHOD OF MEASUREMENT: BID ITEMS SHALL SHOW MEASUREMENT AS "FILTREXX FILTERSOCK" PER LINEAR FOOT, INSTALLED OR PER INLET, AS SPECIFIED BY THE ENGINEER.

6.0 PERFORMANCE:

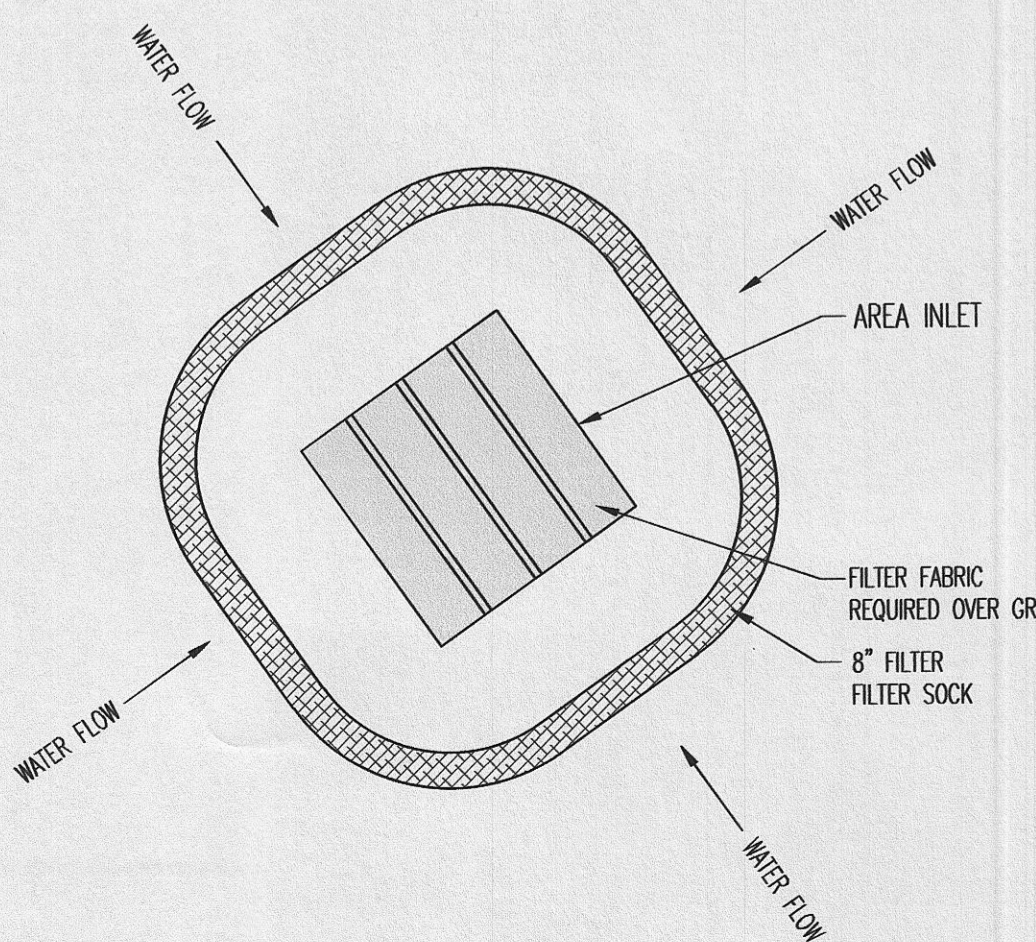
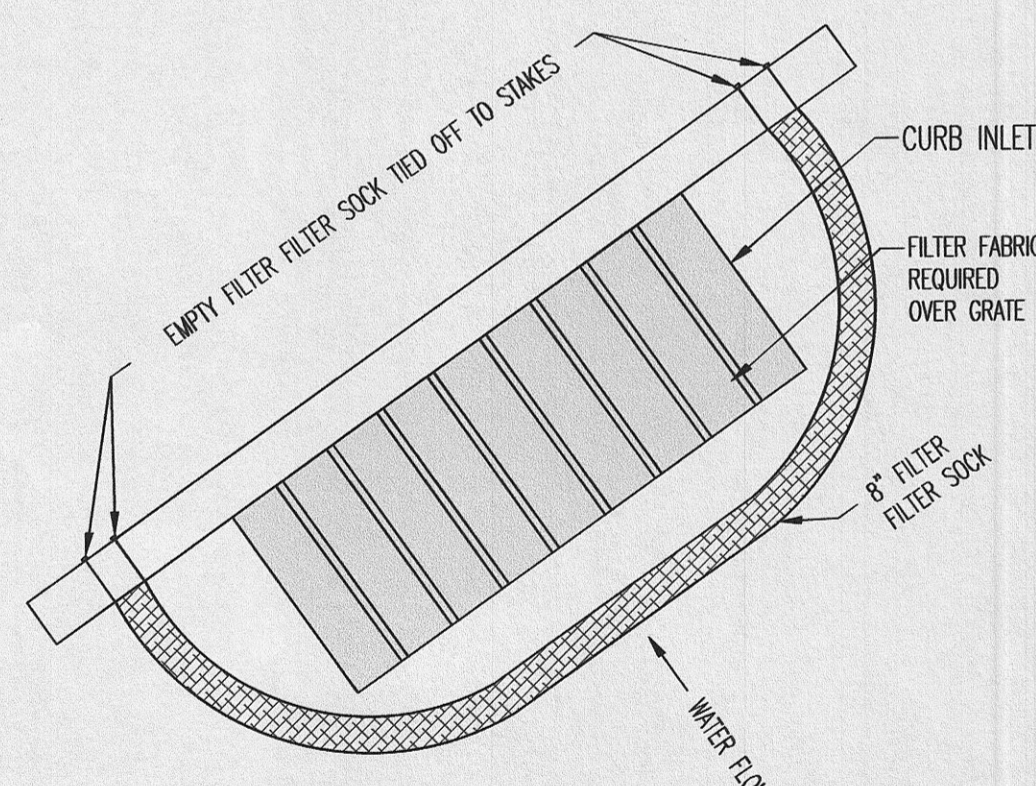
- 1. CONTRACTOR IS RESPONSIBLE FOR ESTABLISHING A WORKING EROSION CONTROL SYSTEM AND MAY, WITH APPROVAL OF THE ENGINEER, WORK OUTSIDE THE MINIMUM CONSTRUCTION REQUIREMENTS AS NEEDED.
2. WHERE THE FILTERSOCK DETERIORATES OR FAILS, IT WILL BE REPAIRED OR REPLACED WITH A MORE EFFECTIVE ALTERNATIVE.
3. CONTRACTOR IS REQUIRED TO BE A CERTIFIED FILTREXX INSTALLER AS DETERMINED BY FILTREXX INTERNATIONAL, LLC (440-926-8041 OR VISIT WEBSITE AT FILTREXX.COM). CERTIFICATION SHALL BE CONSIDERED CURRENT IF APPROPRIATE IDENTIFICATION IS SHOWN DURING TIME OF BID OR AT TIME OF APPLICATION.

7.0 APPLICATION GUIDELINES:

- 1. FILTREXX FILTERSOCKS SHALL EITHER BE MADE ON SITE OR DELIVERED TO THE JOBSITE USING A 3 MIL TUBULAR HOPE KNITTED MESH NETTING MATERIAL FILLED WITH COMPOST PASSING THE ABOVE SPECIFICATIONS FOR COMPOST PRODUCTS AS OUTLINED IN 2.0.
2. FILTREXX FILTERSOCKS NETTING MATERIALS ARE AVAILABLE ONLY FROM FILTREXX INTERNATIONAL, LLC AND ARE THE ONLY CERTIFIED MESH MATERIALS ACCEPTED IN CREATING FILTREXX PRODUCTS ON SITE OR AS DELIVERED TO THE JOB SITE. STANDARD FILTREXX COLOR CODING SYSTEMS INCLUDE YELLOW AND BLACK STRIPED MESH NETTING WITH 3/8" MESH OPENINGS FOR INLET PROTECTION. OTHER COLORS ARE ONLY ACCEPTABLE AS APPROVED BY BOTH THE ENGINEER AND FILTREXX INTERNATIONAL, LLC.
3. CONTRACTOR IS REQUIRED TO BE A CERTIFIED FILTREXX INSTALLER AS DETERMINED BY FILTREXX INTERNATIONAL, LLC (440-926-8041 OR VISIT WEBSITE AT FILTREXX.COM). CERTIFICATION SHALL BE CONSIDERED CURRENT IF APPROPRIATE IDENTIFICATION IS SHOWN DURING TIME OF BID OR AT TIME OF APPLICATION.

8.0 AVAILABLE VENDORS FILTREXX FILTERSOCKS MAY BE PURCHASED FROM THE FOLLOWING CERTIFIED FILTREXX INSTALLERS:

WINDSWEEP ORGANIX INC.
WORK: 480-963-4638
FAX: 408-940-4261
850 SOUTH BOULE AV. SUITE 2
CHANDLER, AZ 85225



SEDIMENT BARRIER / FILTER SOCK PROTECTION

SCALE: N.T.S.

REPLENISH



McNEIL GROUP logo and contact information: Designing for the Future Since 1983, 8610 So. Sandy Parkway, Suite 200 Sandy, Utah 84070.

Professional Engineer seal for Scott A. Schoonover, State of Utah, License No. 349757.

Church information: WEST WEBER 1, 2, 3, & The Church of JESUS CHRIST of Latter-Day Saints, OGDEN UTAH WEBER NORTH STAKE, 4080 WEST 900 SOUTH WEST WEBER, UTAH.

Project details table including revisions, project number (11358), drawing title (SWPPP DETAILS), and sheet number (9 of 17).