

## **BMP 05.00. Compost Sock**

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### DESIGN CONSIDERATIONS

#### *Objectives*

Compost Socks are intended to intercept and slow sheet flow runoff, allowing suspended sediments to settle or be filtered out by the compost material.

#### *Description*

Compost Socks are biodegradable (or photodegradable) mesh tubes/socks filled with compost. The socks can be temporary or permanent installations.

#### *Other Names*

Filter Socks

#### *Applicability*

Compost Socks can be used in place of sediment (silt) fences and fiber rolls. They can sometimes be the most economical solution because compost does not require any special trenching or construction. This is especially important near streams since compost is an organic, biodegradable, renewable material and is not required to be removed at the end of a project. Removal of other types of best management practices (BMPs) can disturb soil by dislodging vegetation and exposing soil. Compost Socks can also be easily repaired if they become damaged. Compost Socks are not intended to be installed in areas with concentrated flow.

#### *Selection Considerations*

Compost used in socks needs to be stable and mature. It should consist of both small and larger particle sizes, which will affect the filtration performance and longevity. Coarser grade compost is better for filtration and is less likely to be disturbed by rainfall or runoff. Finer grade compost is better for vegetation establishment. For socks, the ratio of coarse to fine grades should be 1:1. No compost should have particle sizes larger than 3 inches. All compost used should conform to U.S. Composting Council (USCC) standards

#### *Design*

Compost Socks should be constructed of 8-inch to 12-inch diameter, or larger, biodegradable (or photodegradable) mesh tubes/socks. Compost Socks can be placed on any slope but they need to be anchored appropriately. Compost Socks should be

placed no closer than 5 feet from the toe of slopes to allow runoff to pool. They should be installed parallel with the contours of the slope with the ends of the socks pointed towards the upslope. This enables runoff to pond within the extent of the sock and allows suspended sediments to settle.

For long-run applications, the ends of Compost Socks should be laced together or be overlapped to form a continuous length. Wood stakes should be used to secure compost socks in place if installed on slopes. The drawing says to stake per the manufacturer's recommendations, but generally stakes are needed if 3:1 or steeper. To provide extra support for staked Compost Socks, rope can be used to lash the stakes together. However, if stakes and rope are used they are required to be removed after a project is completed. The contents of Compost Socks can remain after a project is completed but the all netting (or mesh) is required to be removed after a project is completed.

#### *Relationship to Other Erosion and Sediment Control Measures*

Compost Socks can be used in place of sediment fences, and fiber rolls. Compost filters sediment and allows the runoff to pass through relatively more easily than silt fence, which acts as a dam to create ponding and settling. Tackifiers can be applied to compost installations to enhance performance if needed.

#### *Common Failures or Misuses*

Common failures are generally due to faulty application and maintenance. These failures include:

- Non-certified compost used.
- Non-biodegradable mesh tubes used.
- Can become plugged with fines and sediments.
- Used in highly concentrated flow areas.
- Damaged by construction-related activities.
- Ends of socks are not pointed upwards towards the top of the slope.
- Socks must be in uniform contact with the ground for maximum effectiveness.

- 12-inch diameter socks can become heavy and sag when installed on slopes steeper than 3:1

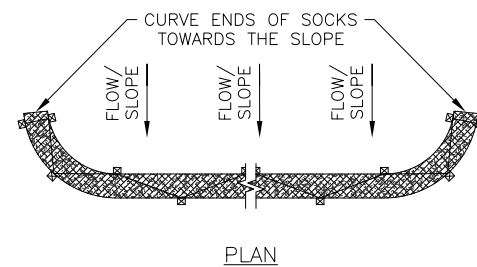
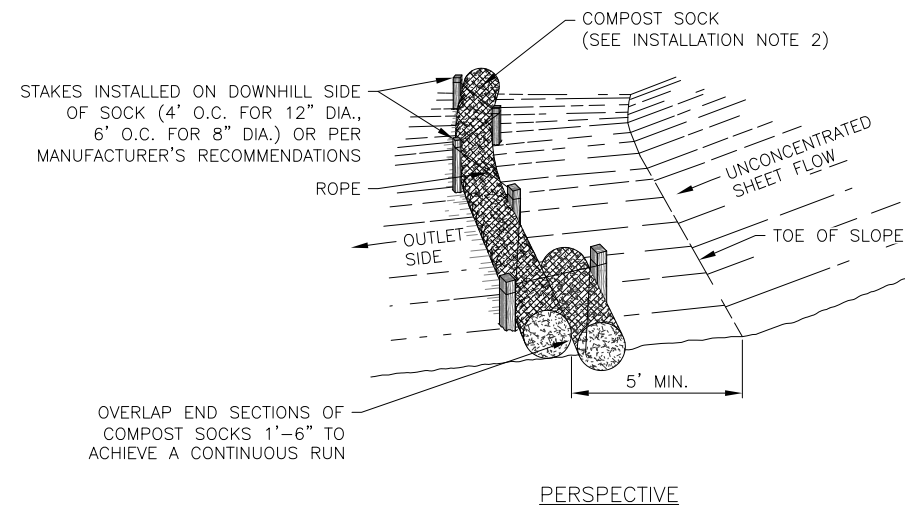
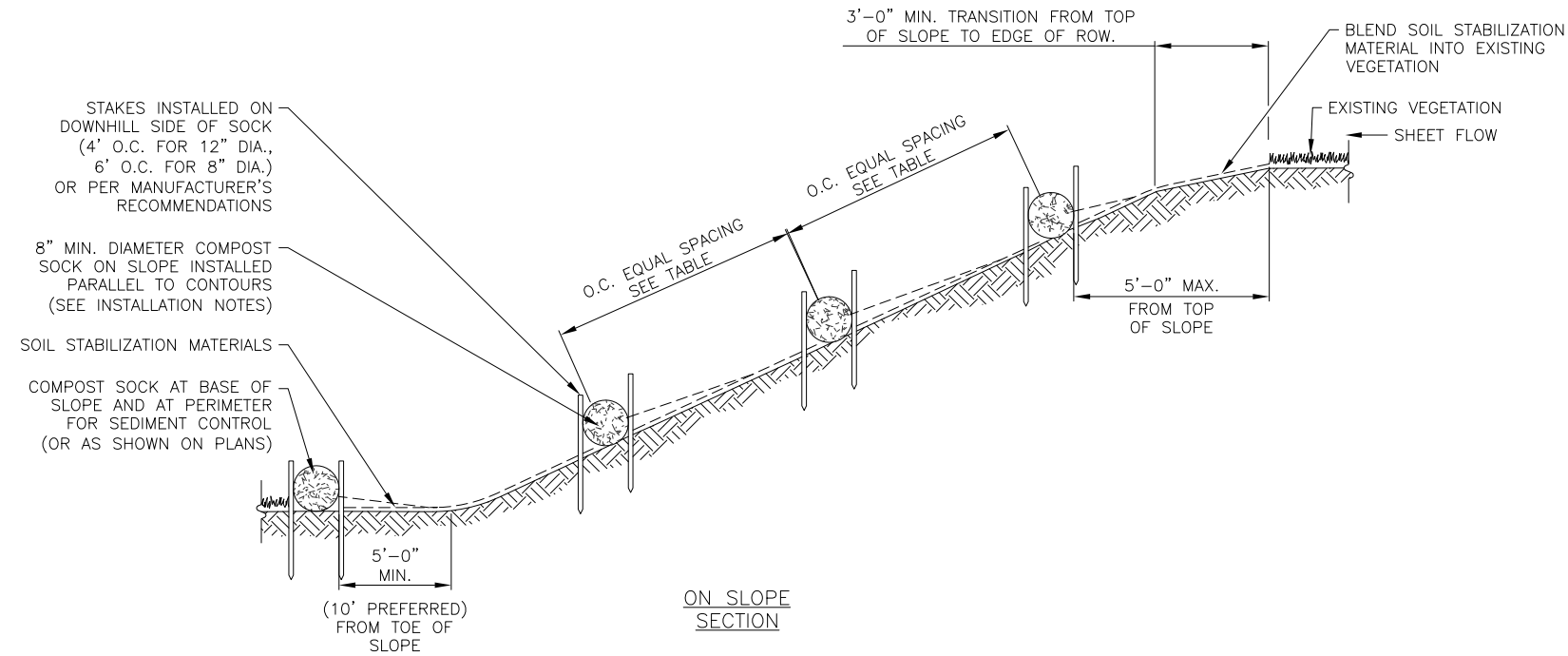
### SPECIFICATIONS

#### Drawing

- BMP-05.00 -- Compost Sock

#### Standard Specification

- 664 – Compost Sock
- 750 – Compost



**COMPOST SOCK**  
NOT TO SCALE

**COMPOST SOCK NOTES:**

**MATERIALS**  
COMPOST PER SECTION 750  
COMPOST SOCKS: 8", 12", 18", 24" NOMINAL  
STAKES: NON-TREATED WOOD.

**INSTALLATION**

1. INSTALL STAKES PER MANUFACTURER'S RECOMMENDATIONS.
2. PLACE COMPOST SOCKS NO CLOSER THAN 5 FEET FROM THE TOE OF SLOPES TO ALLOW RUNOFF TO POOL.
3. INSTALL PARALLEL WITH THE CONTOURS OF THE SLOPE WITH THE ENDS OF THE SOCKS POINTED TOWARDS THE UPSLOPE.
4. LACE TOGETHER AND OR OVERLAP FOR LONG-RUN APPLICATIONS TO FORM A CONTINUOUS LENGTH.
5. USE WOOD STAKES TO SECURE COMPOST SOCKS IN PLACE IF INSTALLED ON SLOPES.
6. SOIL STABILIZATION MATERIALS INCLUDE ROLLED EROSION CONTROL PRODUCTS, MULCH, OR OTHER TEMPORARY GROUND COVER TO STABILIZE UNTIL VEGETATION IS ESTABLISHED.

**INSPECTION**

1. INSPECT FOR DAMAGE, DISPLACEMENT, SEDIMENT DEPTH, UNDERMINING, AND/OR OVERTOPPING.

**MAINTENANCE**

1. REPAIR OR REPLACE DAMAGED OR DISPLACED COMPOST SOCKS.
2. REMOVE ACCUMULATED SEDIMENT BEFORE IT REACHES ONE-HALF OF THE SOCK HEIGHT OR ONE-THIRD OF THE AVAILABLE STORAGE IF PROTECTING A WATER BODY OR STORM DRAIN INLET.

**REMOVAL**

1. REMOVE MESH/TUBES FOR PERMANENT COMPOST SOCKS AND THE CONTENTS MAY REMAIN. ALL STAKES AND ROPE, IF USED, SHOULD BE REMOVED FROM THE PROJECT AND DISCARDED.

**COMPOST SOCK SPACING BASED ON SLOPE**

SLOPE (H:V)	SOCK O.C. SPACING
5:1 - 2:1	50 FT
> 2:1	25 FT

REVISIONS		
Date	Description	By

State of Alaska DOT&PF

**COMPOST SOCK**

A  
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O  
V  
E  
D

Date **12/2015** X/XX/XX