SPECIFICATION
COMPOST AS A SOIL BLANKET FOR EROSION CONTROL

Section _____,

Description:

This work shall consist of applying compost to a sloped soil surface to reduce erosion for long term stabilization and to enhance riparian buffer areas.

Materials:

Soil blanket media shall be a composted, weed free organic matter source derived from: agricultural, food, or industrial residuals; biosolids (treated sewage sludge); yard trimmings; source-separated or mixed solid waste. Particle size shall be as described below in the product parameters table. The compost shall possess no objectionable odors, will be reasonably free (< 1% by dry weight) of man-made foreign matter and will meet the product parameters outlined below. The product shall be certified through the U.S. Composting Council's (USCC) Seal of Testing Assurance (STA) Program.

Product Parameters*:

Parameters[1,4]	**Reported as (units of measure)**	**Blanket Media to be Vegetated**	**Blanket Media to be left Un-vegetated**
pH[2]	pH units	6.0 - 8.5	N/A
Soluble Salt Concentration[2] (electrical conductivity)	dS/m (mmhos/cm)	Maximum 5	Maximum 5
Moisture Content	%, wet weight basis	30 – 60	30 – 60
Organic Matter Content	%, dry weight basis	25 – 65	25-100
Particle Size	% passing a selected mesh size, dry weight basis	• 3" (75 mm), 100% passing • 1" (25mm), 90% to 100% passing • 3/4" (19mm), 65% to 100%passing • 1/4" (6.4 mm), 0% to 75% passing • Maximum particle length of 6" (152mm)	• 3" (75 mm), 100% passing • 1" (25mm), 90% to 100% passing • 3/4" (19mm), 65% to 100%passing • 1/4" (6.4 mm), 0% to 75% passing • Maximum particle length of 6" (152mm)
Stability[3] Carbon Dioxide Evolution Rate	mg CO_2-C per g OM per day	< 8	N/A
Physical Contaminants (man-made inerts)	%, dry weight basis	< 1	< 1

[1] Recommended test methodologies are provided in Test Methods for the Examination of Composting and Compost (TMECC, The US Composting Council)

[2] Each specific plant species requires a specific pH range. Each plant also has a salinity tolerance rating, and maximum tolerable quantities are known. When specifying the establishment of any plant or turf species, it is important to understand their pH and soluble salt requirements, and how they relate to the compost in use.

[3] Stability/Maturity rating is an area of compost science that is still evolving, and as such, other various test methods could be considered. Also, never base compost quality conclusions on the result of a single stability/maturity test.

[4] Landscape architects and project (field) engineers may modify the allowable compost specification ranges based on specific field conditions and plant requirements.

*Before delivery of the compost, supplier must provide a copy of the lab analysis, performed by a STA Program certified lab, verifying that the compost meets the product parameters listed above. The lab analysis should not be more than 90 days old.

Verifying current participation in the STA Program can also be achieved by logging onto the USCC website at www.compostingcouncil.org.

Use only a well-composted product that contains no substances toxic to plants where planting; immediate grass, wildflower, legume seeding or ornamental planting. Very coarse composts may need to be avoided if the slope is to be landscaped or seeded, as it will make planting and crop establishment more difficult. Composts containing fibrous particles that range in size produce a more stable mat.

Construction Requirements:

Compost mulch shall be uniformly applied to a depth described below. Areas receiving greater precipitation, possessing a higher erosivity index, or which will remain unvegetated, will require greater application rates.

Annual Rainfall/Flow Rate	**Total Precipitation & Rainfall Erosivity Index**	**Application Rate For <u>Vegetated*</u> Compost Surface Mulch**	**Application Rate For <u>Unvegetated</u> Compost Surface Mulch**
Low	1-25”, 20-90	½ - ¾ ” (12.5 mm – 19 mm)	1” – 1 ½” (25 mm – 37.5mm)
Average	26-50”, 91-200	¾ - 1” (19 mm – 25 mm)	1 ½” – 2” (37 mm – 50 mm)
High	51” and above, 201 and above	1-2” (25 mm – 50 mm)	2-4” (50mm – 100mm)

*These lower application rates should only be used in conjunction with seeding, and for compost blankets applied during the prescribed planting season for the particular region.

Spread the compost uniformly on up to 1:2 slopes, then track (compact) the compost layer using a bulldozer or other appropriate equipment, if possible. Alternatively, apply compost using a pneumatic (blower) or slinger type spreader unit. Project compost directly at soil surface, thereby preventing water from moving between the soil-compost interface. Apply compost layer approximately 3 feet beyond the top of the slope or overlap it into existing vegetation. On highly unstable soils, use compost in conjunction with appropriate structural and diversion measures. Follow by seeding or ornamental planting if desired.

Method of Measurement:

Compost will be measured by the cubic yard or the ton at the point of loading.

The Landscape Architect/Designer shall specify the compost application rate depending upon specific site (e.g., soil characteristics, existing vegetation) and climatic conditions, as well as particular project related requirements. The severity of slope grade, as well as slope length, will also influence compost application.