

COMPOST SEEDING:

Description

Compost seeding will be an allowable alternative to erosion control matting along 2:1 and flatter slopes where approved by the Engineer. This work is the furnishing and placement of a 1 inch thick (minimum) compost blanket including the application of seed as outlined in the contract special provision *Seeding and Mulching*.

Materials

Compost

Compost material shall be well de-composed stable, weed free, organic compost meeting AASHTO MP-10, Standard for Standard Specification for Compost for Erosion/Sediment Control (Compost Blankets) derived from a variety of feedstocks including forestry, food, or industrial residuals; bio-solids (treated sewage sludge); leaf and yard trimmings; or tree wood with no objectionable odors or substances toxic to plants. It should meet the following US Composting Council Seal of Testing Assurance (STA) Guidelines as derived using Test Methods for Examining Composting and Compost (TMECC):

Parameters	Reported as (units of measure)	Compost material to be vegetated
pH	pH units	5.0 - 8.5
Soluble Salt Concentration (electrical conductivity)	dS/m (mmhos/cm)	Maximum 5
Moisture Content	%, wet weight basis	30 – 60
Organic Matter Content	%, dry weight basis	25 – 65
Particle Size (aggregate size)	% passing a selected mesh size, dry weight basis	Pass through a 1 inch screen or smaller
Nutrient Content	% Nitrogen % Phosphorus % Potassium	.5 – 2.5 .2 – 2.0 .3 – 1.5
Stability Carbon Dioxide Evolution Rate	mg CO ₂ -C per g OM per day	< 8
Maturity Indicator - (Bioassay) Percent Emergence Relative Seedling Vigor	% (average) % (average)	100% 100%
Trace Elements/Heavy Metals	Meets US EPA Part 503 Regulations	Meets US EPA Part 503 Regulations

Before compost application, provide the Engineer with a copy of the compost producer's compost technical data sheet, a copy of the compost producers Seal of Testing Assurance certification, and appropriate documentation assuring that the source of compost material has been properly permitted by the North Carolina Department of Environment and Natural Resources.

The compost technical data sheet should include:

1. Laboratory analytical test results.
2. Directions for product use.
3. List of product ingredients.

Seed

Seed shall meet the standard mix and rate as outlined in the Special Provision *Seeding and Mulching*

Compost Enhancing Additive

Should contractor desire to enhance the compost seeding application, Polyacrylamide (PAM) may be applied once compost seeding has been completed. The PAM must be applied in granular form and it shall be anionic or neutrally charged. **The rate of PAM should be applied in accordance with manufacturers recommendation.**

Construction Methods

Slopes to be compost seeded shall be brought to final grade prior to application. The area shall be dressed, firm, stable and free of rocks and other debris. The appropriate seed as specified in the contract shall be mixed in the pneumatic (blower) truck as the compost material is actively being loaded to allow for adequate distribution of seed within the compost material to be applied. All seed identification tags shall be provided to the Engineer or his representative. A uniform minimum coverage of 1 inch thick compost seeding shall be applied on approved areas from a pneumatic (blower) truck delivery hose. Should the contractor elect to apply polyacrylamide (PAM) as an enhancing agent, it must be applied after the compost seeding application. The application of fertilizer, limestone, grain straw or erosion control matting is not required for compost seeded areas.

Measurement and Payment

Compost seeding will be measured and paid for as the actual number of square yards measured along the surface of the ground where compost seeding has been applied and accepted. Such payment shall be full compensation for furnishing and applying seed, compost material, and compost enhancing additive (if applicable). The contractor shall be responsible for location of any staging areas necessary for bulk delivery of compost material. The Reclamation procedures for borrow and waste sites shall be followed where applicable.

Payment will be made under:

Pay Item
Compost Seeding

Pay Unit
Square Yard