SP-150735
(New)

SPECIAL PROVISIONS
FOR
SOIL QUALITY RESTORATION, 2 INCH COMPOST AMENDMENT

Polk County
NHSX-006-4(189)--3H-77

Effective Date
February 16, 2021

THE STANDARD SPECIFICATIONS, SERIES OF 2015, ARE AMENDED BY THE FOLLOWING MODIFICATIONS AND ADDITIONS. THESE ARE SPECIAL PROVISIONS AND THEY SHALL PREVAIL OVER THOSE PUBLISHED IN THE STANDARD SPECIFICATIONS.

150735.01 DESCRIPTION.

A. The purpose of this specification is to describe the materials, equipment, and methods used for soil quality restoration on previously disturbed soils that have been heavily compacted and lack adequate organic matter. These soils are highly impermeable leading to decreased infiltration and high levels of stormwater runoff.

B. Soil quality restoration utilizes deep tillage to loosen heavily compacted soils; restoring the ability of the soil to infiltrate water and reduce runoff. Organic content is increased through the addition of compost which is incorporated into the soil during tillage.

150735.02 MATERIALS.

A. Provide suitable organic material composed of products from plant material such as:

1. Compost complying with the following requirements:
- **a.** Derived from a well-decomposed source of organic matter.
- **b.** Produced using an aerobic composting process, meeting Code of Federal Regulations (CFR) 503 for time, temperature, and heavy metal concentrations.
- **c.** No visible admixture of refuse or other physical contaminants, nor any material toxic to plant growth.
- **d.** Certified by the U.S. Composting Council's Seal of Testing Assurance (STA) program.
- **e.** Conforms to chemical, physical, and biological parameters of AASHTO MP 10-03, with the following additional requirements:
  - i. Follow U.S. Composting Council's TMECC guidelines for all testing.
  - ii. Organic Matter Content: 30% minimum.
  - iii. pH: between 6.0 and 8.0.
  - iv. Maturity (growth screening): Minimum 90% emergence for all compost to be vegetated.
  - v. Particle Size:

Sieve Size	Percent Passing
2”	100
1”	90-100
3/4”	65-100
3/8”	0-75

2. Finely chipped bark (3/8 inch diameter or less).

3. Finely shredded, partially decomposed mulch.

4. Peat and sphagnum peat moss.

B. Other organic material specified by the Engineer provided it has no detrimental chemical compounds, does not have high nutrient content that would increase nutrient loading in leachate, will increase the water holding capacity of the soil media and will enhance the ability of the media to capture and hold pollutants to facilitate breakdown is also acceptable.

150735.03 CONSTRUCTION.

A. Upon completion of all grading, trenching, and construction activities, till or scarify the upper surface of the existing soil to a depth of 6 inches. Do not till wet soils.

B. Evenly spread 2 inches of compost over the tilled subsoil.

C. Perform tillage to a depth of 6 inches, from multiple directions, to incorporate the compost. Do not till wet soils.

D. Remove large clods, roots, litter, stones larger than 1 inch (1/2 inch for residential lawns) and other undesirable material. Remove smaller rocks or gravel if they densely cover the surface in a given area.

E. Smooth completed surface to remove ruts.

F. Utilize low-ground pressure equipment for spreading compost, tilling in compost, and smoothing surface to avoid re-compaction of ground surface after initial tilling operations.

150735.04 METHOD OF MEASUREMENT.
The area of soil quality restoration will be measured and calculated to the nearest square yard.

150735.05 BASIS OF PAYMENT.

A. Payment for soil quality restoration will be made at the contract unit price per square yard.

B. Payment is full compensation for furnishing, hauling and placing compost material, tilling, and removing debris.