



*Florida Department of Transportation*

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January 25, 2017

Khoa Nguyen  
Director, Office of Technical Services  
Federal Highway Administration  
3500 Financial Plaza, Suite 400  
Tallahassee, Florida 32312

Re: State Specifications Office  
Section: 987  
Proposed Specification: **9870000 Soil Layer Materials.**

Dear Mr. Nguyen:

We are submitting, for your approval, two copies of the above referenced Supplemental Specification.

The changes are proposed by Jeff Caster of the State Production Support Office to provide soil requirements to support growth for landscape and trees.

Please review and transmit your comments, if any, within two weeks. Comments should be sent via email to [dan.hurtado@dot.state.fl.us](mailto:dan.hurtado@dot.state.fl.us).

If you have any questions relating to this specification change, please call me at 414-4130.

Sincerely,

Signature on File

Dan Hurtado, P.E.  
State Specifications Engineer

DH/rf

Attachment

cc: Florida Transportation Builders' Assoc.  
State Construction Engineer

**SOIL LAYER MATERIALS.**(REV ~~10-6-16~~~~10-11-16~~~~10-17-16~~~~1-25-17~~)

SECTION 987 is deleted and replaced by the following:

**SECTION 987  
~~PREPARED~~ SOIL LAYER MATERIALS****987-1 Description.**

All material shall be suitable for plant growth. The organic matter content of the ~~prepared~~ soil layer after mixing shall be a minimum of 2.5%, a maximum of 10%, in accordance with FM 1-T-267 and have a pH value of ~~4.5-5.5~~ or greater and less than or equal to ~~8.5-7.0~~ as determined in accordance with FM 5-550. The organic matter content shall be created using any of the following materials.

**987-2 Materials.**

~~Prepared-s~~ Soil layer materials may be obtained from either, or a combination of, the following sources:

1. Excavation within the limits of construction on the project. Such material may be stockpiled or windrowed on the project in areas approved by the Engineer.
2. Designated borrow pits for the project.
3. From other sources of organic soil materials provided by the Contractor.

**987-2.1 Organic Soil:** This may consist of muck, mucky peat and peat and shall have an organic matter content of 30% or more if the mineral fraction is more than 50% clay, or more than 20% organic matter if the mineral fraction has no clay.

**987-2.2 Blanket Material:** Meet the material classification shown on the ~~plans~~ Plans and Design Standards, Index No. 505.

**987-2.3 Compost:** Meet the requirements of Florida Department of Environmental Protection Rule 62.709.550 Type Y (yard waste), Type YM (yard waste and manure), Type A (municipal solid waste compost) or Rule 62.640.850 Type AA (composted biosolids) and have unrestricted distribution.

**987-2.3.1 Compost for use as a Soil Amendment:** If the electrical conductivity (EC) value of the compost exceeds 4.0dS (mmhos/cm) based on the saturated paste extract method, the compost shall be leached with water prior to application.

**987-2.3.2 Compost for use as a Mulch:** The compost shall contain no foreign matter, such as glass, plastic or metal shards. The compost shall be slightly coarse to coarse in nature (over half of the solids shall be from particles 1/2 inches in size and no greater than 6 inches). Preference shall be given to compost or mulch made from uncontaminated woody waste materials.

**987-2.4 Landscape Soil:** Landscape soil must be sandy loam or loamy sand with properties of AASHTO classification A-2-4 or A-4. The soil must have an organic matter content of 5 to 10% using the loss on ignition (LOI) test in accordance with FM 1-T267 from a soil testing laboratory approved in accordance with 105-7. Soil must, ~~and be~~ be free of litter, and deleterious substance such as cans, debris, particles greater than 0.50 inches, and rinsate containing lime or toxic materials.

Soil must be free of noxious plant or propagules of plants listed in Florida Rule 5B-57.007, and invasive exotic plants listed under Category I Florida Exotic Plant Pest Council.

Where shown in the pPlans or when approved by the Engineer, existing soil may be amended with compost or biosolids to meet the requirements of this section. Use compost in accordance with FDEP Rule 62.709.550 and 62.709.600. Use biosolids in accordance with Florida Rule 62.640.850. ~~Prior to placement, provide the Engineer the source location of the replacement soil, compost, or biosolids.~~

**SOIL LAYER MATERIALS.****(REV 1-25-17)**

SECTION 987 is deleted and replaced by the following:

**SECTION 987  
SOIL LAYER MATERIALS**

**987-1 Description.**

All material shall be suitable for plant growth. The organic matter content of the soil layer after mixing shall be a minimum of 2.5%, a maximum of 10%, in accordance with FM 1-T-267 and have a pH value of 5.5 or greater and less than or equal to 7.0 as determined in accordance with FM 5-550. The organic matter content shall be created using any of the following materials.

**987-2 Materials.**

Soil layer materials may be obtained from either, or a combination of, the following sources:

1. Excavation within the limits of construction on the project. Such material may be stockpiled or windrowed on the project in areas approved by the Engineer.
2. Designated borrow pits for the project.
3. From other sources of organic soil materials provided by the Contractor.

**987-2.1 Organic Soil:** This may consist of muck, mucky peat and peat and shall have an organic matter content of 30% or more if the mineral fraction is more than 50% clay, or more than 20% organic matter if the mineral fraction has no clay.

**987-2.2 Blanket Material:** Meet the material classification shown on the Plans and Design Standards, Index No. 505.

**987-2.3 Compost:** Meet the requirements of Florida Department of Environmental Protection Rule 62.709.550 Type Y (yard waste), Type YM (yard waste and manure), Type A (municipal solid waste compost) or Rule 62.640.850 Type AA (composted biosolids) and have unrestricted distribution.

**987-2.3.1 Compost for use as a Soil Amendment:** If the electrical conductivity (EC) value of the compost exceeds 4.0dS (mmhos/cm) based on the saturated paste extract method, the compost shall be leached with water prior to application.

**987-2.3.2 Compost for use as a Mulch:** The compost shall contain no foreign matter, such as glass, plastic or metal shards. The compost shall be slightly coarse to coarse in nature (over half of the solids shall be from particles 1/2 inches in size and no greater than 6 inches). Preference shall be given to compost or mulch made from uncontaminated woody waste materials.

**987-2.4 Landscape Soil:** Landscape soil must be sandy loam or loamy sand with properties of AASHTO classification A-2-4 or A-4. The soil must have an organic matter content of 5 to 10% using the loss on ignition (LOI) test in accordance with FM 1-T-267 from a soil testing laboratory approved in accordance with 105-7. Soil must be free of litter, and deleterious substance such as cans, debris, particles greater than 0.50 inches, and rinsate containing lime or toxic materials.

Soil must be free of noxious plant or propagules of plants listed in Florida Rule 5B-57.007, and invasive exotic plants listed under Category I Florida Exotic Plant Pest Council.

Where shown in the Plans or when approved by the Engineer, existing soil may be amended with compost or biosolids to meet the requirements of this section. Use compost in accordance with FDEP Rule 62.709.550 and 62.709.600. Use biosolids in accordance with Florida Rule 62.640.850.