

MATERIAL SPECIFICATION

804. MATERIAL FOR TOPSOILING

1. SCOPE

This specification covers the quality of material for use in topsoiling.

The site shall be explored to determine if sufficient surface soil of good quality exists to justify stripping. Stripping of topsoil from areas where it will later be reapplied is not recommended if bedrock or other root limiting layer is within a depth of 20 inches.

2. QUALITY

Topsoil shall be friable and loamy (loam, sandy loam, silt loam, sandy clay loam, or clay loam). Sand content shall generally be less than 70% by weight, and clay content shall generally be less than 35% by weight.

Organic soils, such as peat or muck, shall not be used as topsoil material.

Organic matter content shall be not less than 1.5% by weight.

pH shall be within the range 6.0 to 7.5. If pH is less than 6.0, lime shall be added in accordance with soil test results or in accordance with the recommendations of the vegetative establishment practice being used.

Soluble salts shall not exceed 500 ppm. (Natural soils in Illinois rarely exceed this parameter.)

Sodium adsorption ratio shall be less than 12. (Natural soils in the northern one-half of Illinois rarely exceed this parameter.)

It shall be free of debris, trash, stumps, rocks, and noxious weeds, and shall give evidence of being able to support healthy vegetation. It shall contain no substance that is potentially toxic to plant growth.

The material meeting the above qualifications should be at least 2 inches thick. Soil factors such as rock fragments, slope, depth to water table, and layer thickness affect the ease of excavation and spreading of topsoil.

Generally, the upper part of the soil profile, which is richest in organic matter, is most desirable; however, material excavated from deeper layers may be worth storing if it meets the other criteria listed above.