



Note to Specifier (NTS): This is an example Landscape Soil Materials & Methods specification adapted from King County WTD Guide Spec. To be tailored for each specific project.

(NTS): For any questions, please contact King County SWD Organics Circular Economy PM at compost@kingcounty.gov

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SECTION 02920

LANDSCAPE SOIL MATERIALS AND METHODS

PART 2. MATERIALS

2.07 COMPOSTED ORGANIC AMENDMENT

A. Compost

1. Quality. Compost production and quality shall comply with Chapter 173-350 WAC, be certified by the US Composting Council Seal of Testing Assurance (STA) Program, and meet the criteria in the following sections:
2. Regulatory Standards. Compost products shall be the result of the biological degradation and transformation of feedstocks as specified below, under controlled conditions designed to promote aerobic decomposition, per WAC 173-350-220, <https://apps.leg.wa.gov/WAC/default.aspx?cite=173-350-220>
3. Submittals. The Contractor shall submit the following information for approval:
 - a. A copy of the Solid Waste Handling Permit issued to the supplier by the Jurisdictional Health Department as per WAC 173-350 (Minimum Functional Standards for Solid Waste Handling), or for Biosolids composts a copy of the Coverage Under the General Permit for Biosolids Management issued to the manufacturer by the Department of Ecology in accordance with WAC 173-308 (Biosolids Management).
 - b. Lab analyses demonstrating that the Materials comply with the processes, testing, and standards specified in WAC 173-350 and these Specifications. An independent STA Program certified laboratory shall perform the analysis.
 - c. A list of the feedstocks by percentage present in the final compost product.
 - d. A copy of the producer's current STA certification as issued by the U.S. Composting Council.
4. Testing Requirements. The compost supplier shall test all compost products within 60 Calendar Days prior to application for the parameters listed in the following sections, at the supplier's expense.
 - a. Samples shall be collected using the Seal of Testing Assurance (STA) sample collection protocol.
 - b. The sample shall be tested by an independent STA Program certified laboratory.
5. Gradation. Compost shall meet the particle size gradations specified for Fine Compost, Medium Compost Blend, or Coarse Compost Blend, as directed on project drawings.

- a. **Fine Compost.** Fine Compost is typically used for soil amendment.

Fine Compost shall meet the following gradation by dry weight:

	Min.	Max.
Percent passing	2"	100%



Percent passing 1"	99%	100%
Percent passing 5/8"	90%	100%
Percent passing 1/4"	75%	100%
Maximum particle length		4"

- b. **Medium Compost Blend.** Medium Compost Blend is typically used for amending clay soils, for amending soils where predominantly native species of the Pacific Northwest will be planted, or surface mulching.

Medium Compost shall be a blend of 60-100% approved Compost and 0-40% clean ground Wood Chip, or Bark. The Medium Compost Blend shall meet the following gradation by dry weight:

	Min.	Max.
Percent passing 2"	100%	
Percent passing 1"	90%	100%
Percent passing 5/8"	75%	100%
Percent passing 1/4"	50%	80%
Maximum particle length		6"

- c. **Coarse Compost Blend.** Coarse Compost Blend, typically used for erosion control or surface mulching, shall be a blend of 60-100% approved Compost and 0-40% clean ground Wood Chip or Bark. The Coarse Compost Blend shall meet the following gradation by dry weight:

	Min.	Max.
Percent passing 3"	100%	
Percent passing 1"	70%	100%
Percent passing 1/4"	40%	60%
Maximum particle length		6"

6. pH. The pH shall be between 6.0 and 8.5.
7. Physical Contaminants. Manufactured inert material (concrete, ceramics, metal, etc.) shall be less than 0.5 percent by weight.
8. Weeds. Compost shall be free of seeds and propagules of Noxious Weeds listed on the King county Noxious Weed List: <https://kingcounty.gov/services/environment/animals-and-plants/noxious-weeds/laws/list.aspx>
9. Organic Content. Organic matter content shall be 40-65 percent by dry weight basis, as determined by "Loss-On-Ignition Organic Matter Method".
10. Salinity. Soluble salt contents shall be less than 5.0 mmhos/cm.
11. Maturity. Maturity shall be greater than 80% in accordance with TMECC 05.05-A, "Germination and Vigor".
12. Stability. Stability shall be 7 or below in accordance with TMECC 05.08-B, "Carbon Dioxide Evolution Rate".
13. Feedstocks.
 - a. The compost product must originate a minimum of 65 percent by volume from recycled plant waste as defined in WAC 173-350-100 as "Yard waste", "Crop residues", and "bulking agents". A maximum of 35 percent by volume of "post-consumer food waste" as defined in WAC 173-350-100 may be substituted for recycled plant waste. The Engineer may approve compost products containing biosolids or manure feedstocks for specific projects or soil blends, but these feedstocks are not allowed unless specified, and not allowed in compost used for Bioretention Soils.



- b. A minimum of 51% by volume of the feedstock shall originate from an organic waste system within King County, which includes organic waste originating from all cities and unincorporated areas within King County.
- 14. C:N. Fine Compost shall have a carbon to nitrogen ratio of less than 25:1. The Engineer may specify a C:N ratio up to 35:1 for projects where the plants selected are entirely Puget Sound native species. Medium Compost shall have a carbon to nitrogen ratio between 17:1 and 35:1. Coarse Compost shall have a carbon to nitrogen ration of 25-35:1.