

CONSTRUCTION SPECIFICATION

721. TREE PLANTING

1. SCOPE

The work shall consist of preparing the area for treatment, furnishing and applying fertilizer, furnishing and planting trees, and implementing weed control as specified. The area(s) to be planted is (are) as shown on the drawings. The limits of the area will be marked on the ground.

2. MATERIALS

Woody Stemmed Plants – All woody plants shall comply with State and Federal laws applicable to inspection for plant disease and insect infestations. All woody plants shall conform to the National Standards Institute (ANSI) Z60.1, American Standard for Nursery Stock, latest edition. Copies of invoices and certifications for all woody stemmed plants shall be furnished to the Contracting Officer at time of delivery to the site.

Furnished plant material shall carry a written warranty that it is in vigorous growing condition for at least 12 months. All unhealthy plant material shall be replaced under this warranty at no additional cost to the Government.

Woody plants will be living, vigorous, free of mold, insects, diseases, defects and deformities, with well developed root systems. Only plants approved for planting by the Contracting Officer shall be stored or planted. Contracting Officer reserves the right to refuse any plant material deemed unacceptable. All rejected plant materials shall be removed from the job site on the day of rejection. Each plant shall be labeled by the grower or manufacturer as separate items. Plant identification labels shall be durable, waterproof with water-resistant ink. Labels shall be securely attached to plants, bundles, or containers of plants and shall state the correct botanical name and size. Plants shall have been grown under climatic conditions similar to those in the locality of the project.

All woody planting stock shall be as specified in Section 6, Items of Work.

Woody plants shall be watered no later than one hour after delivery from the nursery to the storage site and watered daily and kept moist to prevent desiccation until final completion and final acceptance of work. Plants not installed on the day of arrival at the site shall be stored and protected. Outside storage locations shall be continually shaded and protected from the wind. Plants stored on the project site shall be protected from drying at all times, covering the balls or roots with moist sawdust, wood chips, shredded bark, or other similar mulching material. All plants, including those in containers, shall be kept in a moist condition until planted. A recommended watering schedule shall be submitted to the Contracting Officer for each specific woody species covering a period of one year after the final completion and final acceptance of the planting.

Woody species to be planted are as scheduled on the drawings for each specific area. The Contractor may substitute species that are unavailable with prior approval of the Contracting Officer. Substituted species shall be the same size, type and quality as those originally specified.

Fertilizer - The fertilizer shall be a commercial grade fertilizer. The fertilizer shall meet the standard for grade and quality specified by state law. Where fertilizer is furnished from bulk storage, the contractor shall furnish a supplier's certification of analysis and weight. When required by the contract, a representative sample of the fertilizer shall be furnished to the Contracting Officer for chemical analysis.

Weed Control Materials – Mulch shall consist of clean wood chip mulch as approved by the Contracting Officer's Technical Representative. The mulch material shall be air dry, reasonably light in color, and shall not be musty, moldy, caked, or otherwise of low quality.

Weed barrier fabric must be woven polypropylene fabric mulch with a minimum weight of 3.0 ounces per square yard, a minimum percolation rate of 0.04 inch per second, and 16 mils thickness. Installed fabric pieces must be a minimum of 4 feet by 4 feet in dimension with a split from the outside edge to the middle. Edges and corners of the fabric must be securely anchored with 11 gauge wire staples 6 inches in length.

Herbicides used for weed control shall be labeled for the species and site conditions present or anticipated. Follow all label directions and precautions.

Root Dips - Use beneficial mycorrhizal and absorbent polymer-gel root dips to enhance the seedling survival if planting in low fertility soils or in droughty soil or when moisture conditions are limiting. Seedling roots should be dipped at the time of planting.

3. **SEEDBED PREPARATION AND TREATMENT**

No plant pits shall be excavated until layout is approved by the Contracting Officer's Technical Representative.

All ground cover within a 2-foot radius around each tree planting will be either mechanically or chemically destroyed.

The size of the openings or pits where woody plants are to be installed shall be as specified in Section 6, Items of work. Excavation of these pits may either be done by hand or auger. Sides of pits excavated with an auger shall be scarified.

Areas to be seeded shall be dressed to a reasonably smooth, firm surface.

Rocks larger than 6 inches in diameter, trash, weeds and other debris that will interfere with planting or maintenance shall be removed or disposed of as directed by the Contracting Officer's Technical Representative.

4. **PLANTING AND WEED CONTROL**

Container plants: All planting shall occur between October 1 through December 12 and/or March 1 through May 15.

Bare root plants: All planting shall occur between:

1. North of the Missouri River: *March 1 - June 1;*
2. South of the Missouri River: *February 15 - May 15;*
3. Dunklin, Pemiscot, Stoddard, New Madrid, Mississippi, Scott, Butler, Ripley, Carter, Oregon, Howell, Ozark, Douglas, Taney, Christian, Stone, Barry, Newton, and McDonald counties: *December 1 - May 1.*

The Contracting Officer shall be notified no less than 15 days before plants are delivered to the site.

Woody stemmed plants shall be installed according to Section 6, Items of Work.

Plantings will be inspected at the start of the operation and at intervals deemed necessary by the Contracting Officer's Technical Representative to insure proper installation. All plantings will receive a final inspection within 15 days after the completion of the last tree planting.

Weed control methods shall be applied to the planting areas immediately after planting. Weed control shall comply with one of the following options:

- a) Apply mulch within a 2 feet radius of each plant. Mulch shall not come into contact with tree trunk. A 1-inch gap shall be left near the stem of the woody plant. Mulch shall be a minimum of 3 inches deep.
- b) Weed barrier fabric shall be anchored with staples as specified in section 2. Staples shall be placed at a maximum interval of 1 foot around the perimeter of the fabric and the length of the split to the center of the fabric.
- c) Apply an approved herbicide within a 2 feet radius of each plant. Follow all label directions and precautions.

Efforts shall be made to protect existing trees, shrubs and turf areas outside the planting area from damage during the work. Any tree, shrub or grass area outside the planting areas damaged or scarred during planting shall be repaired and restored to their original condition as approved by the Contracting Officer's Technical Representative at no additional cost to the government.

5. MEASUREMENT AND PAYMENT

Payment for each type of woody plant will be made at the contract unit price for that type of woody plant. Such payment will constitute full compensation for all labor, materials, equipment, and all other items necessary and incidental to the performance of work.

The following provisions apply to all methods of measurement and payment. Compensation for any item of work described in the contract but not listed in the bid schedule will be included in the payment for the item of work which it is made subsidiary.