



To: <b>SUPERSEDED BY</b> <u>EB 06-057</u> <b>EFFECTIVE</b> <u>5/3/07</u>		New York State Department of Transportation <b>ENGINEERING          INSTRUCTION</b>	<b>EI</b> <b>03-021</b>
Title: <b>REVISIONS TO STANDARD SPECIFICATIONS SECTION 713-06 TREES, SHRUBS, AND VINES</b>			
Distribution: <input type="checkbox"/> Manufacturers (18) <input type="checkbox"/> Surveyors (33) <input checked="" type="checkbox"/> Main Office (30) <input checked="" type="checkbox"/> Consultants (34) <input type="checkbox"/> Local Govt. (31) <input type="checkbox"/> Contractors (39) <input checked="" type="checkbox"/> Regions/Agencies (32) <input type="checkbox"/> ( )		Approved:  Philip J. Clark Deputy Chief Engineer, Design Date: <u>07/21/03</u>	

**ADMINISTRATIVE INFORMATION:**

**Effective Date.** This Engineering Instruction (EI) is effective with projects submitted for letting of January 15, 2004.

**Superseded Issuances.** Does not supersede any other issuances.

**Disposition of Issued Materials.** The revised specification will be incorporated into the next update to the Standard Specifications.

**PURPOSE:**

This EI issues revisions to the Standard Specifications of January 2, 2002, Section 713-06 Trees, Shrubs, and Vines.

**TECHNICAL INFORMATION:**

**Details.** The Department will no longer conduct nursery inspections upon contractors' requests as currently provided in Section 713-06 Basis of Acceptance. Henceforth, all nursery inspections will be at the Department's discretion and only when nursery inspections are specified in the contract documents. In such instances, the need for Department personnel to conduct nursery inspection before plants are dug out of the ground or otherwise selected and prepared for shipment, should be considered based upon their importance in the landscape, and any such inspections, will be conducted at the Department's expense under the provisions of Section 106 of the Standard Specifications.

**Designers.** Designers should include a Special Note in the proposal identifying which, if any, plants they intend to inspect in nurseries. The Special Note should state how much notice the Contractor must provide in order to assure adequate time for inspections to be arranged if that time exceeds the fifteen days required under Section 713-06 BASIS OF ACCEPTANCE.

**Cost Impact.** Compliance with the contents of these guidelines is already required by existing MAP 2.8-3 Travel Policy. Implementation of this EI may entail some additional costs. The annual number of nursery inspections is small and these costs have already been encumbered.

**IMPLEMENTATION:**

**Actions of Design Quality Assurance Bureau (DQAB).**

- ◆ Beginning with project submitted for letting of January 15, 2004, DQAB will Insert the attached shelf note into contract proposals.

**TRANSMITTED MATERIALS:**

This EI transmits the revisions to Standard Specifications Section 713-06 Trees, Shrubs, and Vines.

**BACKGROUND:**

The Standard Materials Specification for trees, shrubs, and vines (Section 713-06) historically has provided contractors the opportunity to request Department staff to inspect plants in nurseries before they are dug out of the ground and delivered to projects. The specification required contractors to pay the expenses associated with any nursery inspections they requested. Questions arose about the propriety of continuing this practice, particularly in view of M. A. P. 2.8-3 Travel Policy. As a result, Section 713-06 is being revised to delete the Basis of Acceptance sentence regarding inspections desired by the contractor. The revision will require designers to specify in the contract documents which plants they have determined are necessary to inspect in nurseries.

The specification revision stipulates that inspections will be conducted at the Department's expense under the provisions of Section 106 of the Standard Specifications.

Contractors are no longer required to pay for nursery inspections conducted by the Department.

**CONTACT PERSON:**

Questions and comments should be directed to Gary Glath at (518) 457-4460, or e-mail [Gglath@dot.state.ny.us](mailto:Gglath@dot.state.ny.us)

Make the following changes to Volume 3 of 3 of the Standard Specifications of January 2, 2002.

Section 713-06, page 7-148, line 13 through page 7-150, line 48, delete and replace with the following:

### **§713-06 TREES, SHRUBS AND VINES**

**Nomenclature.** The common and scientific nomenclature for plants shall be in conformity with the American Association of Nurserymen's currently recognized authorities on botanical nomenclature.

**Quality and Size.** Plants, including root spread and ball size, shall be in accordance with the current edition of "American Standard for Nursery Stock (ANSI Z60.1)," unless otherwise specified in the contract documents. All plants shall have a normal habit of growth and be typically characteristic of their respective kinds. The specified plant sizes shall be the minimum size allowed and shall include plants from that size up to but not including the next larger size. Plants shall not be pruned at the time of digging or before delivery and no plants shall be cut back from larger sizes to meet the sizes specified. Plants shall be free from injury, insect damage, infestation and disease. Plants shall be nursery grown unless otherwise specified and bear evidence of proper nursery care, including adequate transplanting and root pruning. Plants specified from collected sources shall be clean, sound stock, free from decayed stumps and from fire injury.

Container grown material, including container sizes and soil, shall be as specified in the Contract Documents.

Containers shall be sufficiently rigid to hold the ball shapes and protect the root balls during handling and shipping. Container grown plants shall have been grown in the container long enough for new fibrous roots to have developed so that the root ball is firm and will retain its shape and hold together when removed from the container. The plants shall be in a healthy growing condition with tops which are of good quality, and shall have been adequately hardened off before shipment.

Specimen plants shall be as specified in the Contract Documents.

**Digging Plants.** Plants shall be dug with care and skill immediately before shipment. Digging shall avoid all possible injury to, or loss of roots, but when required, roots cut shall be cleanly cut. No cold storage plants will be accepted unless approved in writing prior to delivery. Plants stored temporarily shall be properly heeled in or otherwise protected from injury.

**Root Protection.** After plants are dug, their roots shall be protected from injury such as caused by heat, sun, wind and freezing temperatures. All bare roots of trees, shrubs and vines shall be puddled at the time of digging unless otherwise approved. Puddling shall be done in a wet clay mixture, of a quality to adhere to all parts of the root system. Roots of bare root plants which have been thoroughly covered at the time of digging with an anti-desiccant as specified under §713-08 will not require puddling. Bare roots shall be further protected by wrapping in wet straw, moss, burlap or other suitable material.

**Transportation.** Tarpaulins or other covers shall be placed over plants transported by open trucks or by open freight cars. Closed trucks and closed railroad cars shall be ventilated to avoid overheating and the doors shall be kept closed during shipment to prevent plants from drying. The heads of trees shall be tied-in carefully to prevent fracturing or breaking the branches. Trunks and branches shall be adequately supported and padded to avoid scraping or bruising.

### **GENERAL.**

**Trees.** Nursery grown trees shall have no pruning cuts which are not healing and no cuts over 20 mm which have not completely calloused over, no cut back crowns or leaders and no abrasions of the bark. Trees must have good fibrous root systems characteristic of the kind. Deciduous trees shall have normal spread of crowns unless otherwise specified.

Bare root trees shall not require earth adhering to the roots except as required for puddling as

specified. Any trees specified as bare root will be accepted balled and burlapped at the unit price bid for bare root trees.

Balled and burlapped trees shall be properly dug and protected to preserve the natural earth in contact with the roots. No manufactured balls will be accepted. The balls shall be of the required size, firmly wrapped and tied with approved materials. No balled plants will be acceptable if the ball is cracked or broken.

Balled and platformed trees shall be balled as specified for balled and burlapped trees. Platforms shall be square or octagonal shaped in a size slightly larger than the diameter of the bottom of the soil mass, inserted under each ball and securely lashed to the ball by means of ties from the platform corners to the rope collar on top of the ball.

Container grown trees shall be as specified in the contract documents.

The tops of trees shall be well formed structurally, but they are not required to have more than reasonably straight trunks, nor better than average well balanced crowns, nor be of specimen quality unless the requirements for "specimen" trees are specified on the plans.

When "street trees" are specified, they shall be consistent with the current American Standard For Nursery Stock standards for street trees, and the branching heights shall be as specified in the contract documents.

**Shrubs.** Shrubs shall have good fibrous root systems. The quality of balled and burlapped and balled and platformed shrubs shall be as specified for balled and burlapped and balled and platform trees herein. Container grown shrubs shall be as specified in the contract documents.

Plants specified as sods or clumps shall be dug from good soil which has produced a fibrous root system typical of the nature of the plant. The sods shall be dug with earth and incidental vegetation adhering to the roots. If the soil or habit of the root growth is such that the roots are not adequately protected, the sods shall be wrapped in burlap or other suitable material.

**Vines.** Vines shall be vigorous, well-furnished plants with good vigorous root systems. Vines shall be field grown unless otherwise specified. Pot grown plants shall be vigorous, well-developed plants, well established in pots with sufficient roots to hold the earth intact after removal from containers but they shall not be rootbound.

**Substitutions.** No change of size, kind or quality of plants as specified will be accepted except upon written approval of the engineer.

**Labeling.** Labeling shall be in accordance with currently accepted nursery labeling practice except that the Contractor may be required at any time to supply positive identification of any plant.

**Inspection.** The Contractor shall be responsible for all certificates of inspection of plant materials which may be required by federal, state, provincial or other authority to accompany shipments of plants. When nursery inspections are specified in the contract documents, they shall be limited to inspections of plants specified elsewhere in the contract documents. Unless otherwise specified in the contract documents, the Contractor shall provide at least 15 days notice to the Engineer stating the date, time and place where specified nursery inspections may be conducted. The Contractor shall be represented at all inspections. The Department's expenses associated with inspections, will be paid for by the Department under the provisions of Section 106 *Control of Material* of the Standard Specifications. The Department reserves the right and option to place Department seals on any or all materials selected. Selection and/or tagging of material shall cover the type and body quality of the plant only, but shall not constitute acceptance nor preclude the right of rejecting plants not fully meeting the requirements of the specifications.

The Department reserves the right to identify by suitable non-injurious means such as painting, marking by various methods, etc. all plant material rejected upon delivery to the contract site.

**BASIS OF ACCEPTANCE.** Acceptance shall be based on inspection, upon delivery, by the Engineer for compliance with the materials requirements.