PART 1 - GENERAL

1.01 WORK INCLUDED
A. Digging and replanting trees.
B. Temporary support.
C. Mulch.
D. Anti-desiccant.
E. Fertilizer.

1.02 RELATED SECTIONS AND DOCUMENTS
A. Section 32 90 00: Plantings
B. Drawings and general provisions of the Construction Contract, and Division-01 Specification sections apply to work of this section.

1.03 PROJECT CONDITIONS
A. Inspection: Inspect site prior to start of work to determine proper access to tree locations.

1.04 WARRANTY
A. For a period of one year from Date of Substantial Completion, and at no additional cost to the Owner, replace any dead or dying transplanted trees with same species trees per sizes below:
   1. Deciduous spaded trees replaced with 2" caliper, B&B.
   2. Coniferous spaded trees replaced with 6', B&B.

PART 2 - PRODUCTS

2.01 MATERIALS
A. Anti-desiccant spray: Pro-Tec 400 W anti-desiccant spray.
B. Wood Chip Mulch: Chips made from tree and brush trimmings that have been run through mechanical chipper. Submit sample to Owner's Representative prior to delivery to site.
C. Stakes and Guys: Provide wood stakes where indicated on details. Provide wire ties and guys of 2-strand, twisted, pliable metal from toe wire not lighter than 12 gauge. Provide grommet-laced nylon strap cut to required lengths (18" minimum), to protect tree trunks from damage by wires.
D. Root Stimulator: Apply according to manufacturer's instructions to all transplanted trees and all trees affected by grading operations.
E. Omit fertilizer: Trees should not be fertilized at the time of planting, even with so-called 'slow release' tablets.

PART 3 - EXECUTION

3.01 INSPECTION
A. Utilities: Verify locations of underground utilities in areas of digging prior to beginning operations. Notify Owner's Representative of potential conflicts between utilities and proposed digging. Obtain Owner's Representative's acceptance of precise locations of trees prior to pit excavation and installation.

3.02 PREPARATION
A. Layout: Stake locations for transplanted trees as indicated and obtain Owner's Representative's acceptance before planting holes are prepared. Place trees according to Drawings or as directed.
B. Provide protection for existing trees threatened by construction operations.

3.03 EXCAVATION FOR PLANTING
A. Planting Pits:
   1. Dig pits with same size mechanical spade as will be used to dig tree to be placed in pit.
   2. Glazing inevitably will occur; therefore scarification should be done for all pits.

B. Digging:
   1. Mechanical Spade Size: As recommended by spade manufacturer for size of tree to be dug. Generally use a spade that is 9"-10" in diameter per 1" of trunk caliper. Spades to be sharp to ensure clean cut. Place trunk protector around tree trunk to prevent mechanical damage to bark.
      a. If tree is located in a low spot or has excess topsoil around crown of roots, shave topsoil back to diameter of spade to facilitate deep rootball spading.
      b. Do not spade unless moisture conditions are adequate to prevent crumbling of rootball.
      c. Tree to be centered in ball.
   2. After removing tree, backfill pit with similar soil material as that which was removed, and return to previous grade. Only mulch should be added in disturbed area to match surroundings.

3.04 STORAGE

A. If trees are to be stored, locate storage yard away from construction activities in protected location.
B. After spading, place a wire basket around ball for trees to be stored. Top ring of basket to be secured to trunk by wrapping around trunk and through rings. Basket to be crimped to ensure snug fit around ball.
C. Apply burlap sock or strips around rootball completely covering ball. Use untreated burlap. Secure to ball with pinning newls and tie. Burlap to be snug around ball.
D. Immediately move to storage yard and heel in with bark mulch per nursery standards. Monitor soil moisture and attach temporary drip system as needed to maintain soil moisture at optimal levels throughout storage period.
E. Use shade cloth for coniferous trees and leafed deciduous trees.
F. If trees are to be stored for a prolonged period, move trees within storage yard at least once per 45 days to prevent rooting into mulch materials.

3.05 PLANTING

A. General: Follow nursery industry's highest standards for tree spading operation.
   1. Center plant in pit.
   2. Face for best effect.
   3. Set plant plumb.
   4. Backfill as needed to fill air gaps between root ball and planting pit.
   5. Apply root stimulator.
   6. Stake as required.
   7. Water plant thoroughly with root watering wand.
   8. Spray tree with anti-desiccant immediately after transplanting.
B. Watering: Water thoroughly immediately after transplanting.
C. Wood Chip Mulching: Mulch tree root balls immediately after transplanting. Mulch shall cover the planting pit diameter around each tree to depth of 4". Mulch shall form a circle, 2"-6" diameter for single trees.

3.06 GUYING OF TREES

A. General: Guy all transplanted trees and all trees subject to damage during construction.
B. Stake Installation:
   1. Guying: Guy and stake trees immediately after planting as indicated.
A. Transplanted Trees: Prune after transplanting as directed by Owner's Representative to remove any damaged branches and offset root loss. All pruning shall be performed in accordance with the following recognized standard:

1. ANSI A300 (latest version)
3. American National Standards Institute, New York, NY.

END OF SECTION 32 96 43