TREE AND PALM RELOCATION - CONSTRUCTION.

(REV 1-14-19) (FA 1-18-19) (1-20)

The following new Section is added after Section 571.

581-1 Description.

Remove, relocate, and maintain trees and palms in accordance with the Contract Documents.

581-2 Materials.

581-2.1 Water: Meet the requirements of Section 983.

581-2.2 Fertilizer: Provide fertilizer as shown in the Plans.

581-2.3 Mulching: The use of cypress mulch is prohibited.

581-3 Reporting.

581-3.1 Tree and Palm Condition Report: Submit a Tree and Palm Condition Report at the preconstruction meeting. Document the existing condition of all trees and palms scheduled to be relocated. Include at a minimum:

- 1. Tree and Palm numbers
- 2. Description of any damage, disease, scars or infestation
- 3. Photographs of trees and palms

581-3.2 Relocation Work Plan: Provide a Relocation Work Plan prepared by an International Society of Arboriculture (ISA) Certified Arborist, or a Florida Licensed Landscape Architect, for a Certified Landscape Contractor in accordance with the Florida Nursery Growers and Landscape Association (FNGLA). Submit the Relocation Work Plan for approval at least one week prior to performing initial root pruning or initiating tree relocation operations. Include at a minimum:

- 1. A schedule for all relocation activities, including activities that occur prior to, and post relocation
 - 2. Proposed equipment
 - 3. Palm frond removal, bundling, splinting
 - 4. Root pruning procedures
 - 5. Watering procedures
 - 6. Anti-desiccation measures
 - 7. Proposed fertilizer
 - 8. Sample tree identification tag

581-4 Worksite Landscape Supervisor.

Provide a Worksite Landscape Supervisor to directly oversee all tree and palm relocation work. The Worksite Landscape Supervisor must be an ISA Certified Arborist, or a State of Florida Registered Landscape Architect, or a Certified Landscape Technician or Certified Landscape Contractor in accordance with FNGLA. Provide verification at the preconstruction meeting.

581-5 Relocation Requirements.

Attach plant identification tags as applicable in a manner that does not impact the health of the tree or palm. Do not use paint. Match the plant numbers indicated on the Plans.

Protect trees and palms from damage.

Install tree protection barrier around relocated trees and palms in accordance with Standard Plans Index 110-100.

Perform lifting using a tree spade or using nylon-metallic slings wrapped around the trunk.

Plant trees and palms to the same depth at which they were removed.

Install relocated trees and palms in their final location within 24 hours of removal.

Demonstrate that planting holes are free draining prior to planting. Notify the Engineer of drainage or percolation problems before plant installation.

Maintain trees and palms in an upright position at all times.

Remove leaf ties within 14 days of installation.

Brace relocated trees and palms in accordance Standard Plans Index 580-001.

New nursery stock or other material may not be substituted for a relocated tree or palm.

581-6 Post Installation Period Requirements.

`The post installation period is a period of one year from the date of final installation, or until the date of the Engineer's final acceptance of the project, whichever comes first. During the post installation period:

- 1. Maintain trees and palms to a condition equivalent to the health characteristics in the Tree and Palm Condition Report.
- 2. Remove dying or dead palms, including the root ball. Cut dying or dead trees flush with the ground surface and remove. Regrade and sod or mulch the site to match the adjacent condition and grade.
- 3. New nursery stock or other material may not be substituted for a dying or dead relocated tree or palm.
- 4. Remove bracing at the conclusion of the post installation period unless otherwise directed by the Engineer. Do not allow bracing or straps to damage or become embedded.

581-7 Method of Measurement.

The quantities to be paid for will be the number of each item removed, relocated and accepted. Multi-trunk or clustering trees or palms will be measured as a single plant.

581-8 Basis of Payment.

Price and payment will be full compensation for all work specified in this Section. For each plant successfully relocated, a payment of 85% is due. The remaining 15% is due after successful completion of the post installation period. For each plant that is dead or dying at the end of the post installation period, a 50% deduction in payment will be made if the relocation is in excess of 10% of the contract quantity. To qualify for a deduction, the following formula is used:

$$PD = [D - (0.1 * P)] * 0.5 * C$$

Where: PD = Payment Deduction (dollars)

D = Number of dying or dead relocated plants by pay item

P = Contract quantity of relocated plants by pay item

C = Contract unit price per relocated plant by pay item If $[D - (0.1 * P)] \le zero$, then no payment deduction will be assessed.