

SECTION 329510 - PLANTING MAINTENANCE

PART 1 - GENERAL

1.1. SECTION INCLUDES

- A. Landscape Maintenance Contractor shall furnish all labor, equipment, chemicals and fertilizer necessary to maintain newly planted landscaping leaving plants in a vigorous, healthy state through the end of the stated maintenance period. Maintenance shall consist of mowing, watering, weeding, fertilizing, disease and insect pest control, pruning, aerating, protective spraying and any other procedures consistent with good horticultural practice necessary to insure normal, vigorous and healthy growth of all landscape materials under this contract. Trash and debris will be removed from the project during each regular site visit. Maintenance shall begin following final acceptance of the landscape installation.
- B. The Landscape Maintenance Contractor shall be responsible for the use of all his/her materials, labor and equipment. Injury to plant material caused by such maintenance, labor and equipment shall be corrected and repaired by the Landscape Maintenance Contractor at his/her expense. This includes both reseeding areas damaged by tractor treads when mowing is conducted at an inappropriate time, as determined by the Owner or his/her agent, and replacement of any plants, hardscape, or other amenities on the site when damaged by the Contractor's equipment, materials or agent(s).

1.2. INSURANCE

- A. Contractor shall provide to the Owner, at his own expense, evidence of adequate Workman's Compensation, General Liability and Property Damage Liability, subject to approval of the Owner.

1.3. MAINTENANCE PERIOD

- A. The Maintenance period shall begin on the date of Final Acceptance and shall end one calendar year after date of Final Acceptance.

1.4. CLEAN UP

- A. All debris, tools, surplus materials, equipment, etc. shall be removed after each regular visit from the maintenance crew. The site shall be left in a neat, acceptable condition such as to meet the approval of the Owner.

1.5. LICENSE REQUIREMENTS

- A. Pesticide: The Contractor shall be a licensed pesticide applicator or employ a licensed certified pesticide applicator for the treatment of insects and diseases as required by the Texas Pesticide Laws and Regulations of the Texas Department of Agriculture. The Owner may require documentation of such certification as necessary for his records.
- B. Herbicide: The Contractor shall possess a permit or employ a person who possesses a permit to apply herbicide as required by the Illinois Herbicide Law of the Illinois Department of Agriculture. The Owner may require documentation of such certification as necessary for his records.
- C. Irrigation: The Contractor shall possess an irrigator's license issued by the State of Texas or employ such a licensed irrigator to perform the irrigation system maintenance. The irrigation system shall be maintained under the supervision of the licensed irrigator who shall be on the site at all times during this

work. The Owner may require documentation of such license for his records. The Contractor shall verify and adhere to the requirements and codes of any controlling utility authorities.

PART 2 - PRODUCTS

2.1. COMMERCIAL FERTILIZER

- A. Complete fertilizer, uniform with composition, dry and free flowing, delivered to site in original unopened containers, each bearing manufacturer's guaranteed statement of analysis.
 - 1. Shrubs & groundcover at 10-20-10 analysis.
 - 2. Turf at 15-5-10 analysis.
 - 3. Turf at 21-0-0 analysis.
 - 4. Trees at 32-7-7 analysis (Injecto-Feed).
 - 5. Trees at 0-4-4 analysis (Agri-Plex).

2.2. TOPSOIL SOIL FERTILITY TEST

- A. Refer to Topsoil – Section 329119.16

2.3. MULCH

- A. Mulch: Super Fine Hardwood Mulch
 - 1. 100% organic materials
 - 2. Ph: 6.5-8.5
 - 3. Particle Size:
 - a. 99% + will pass through a 3/4" screen
 - b. 80% + will pass through a 3/8" screen
 - c. All material does not exceed 1.5" in length
 - d. Free of man-made foreign matter, treated lumber, pallets, trash, grass and/or leaves.
- B. Supplier: Soil Building Systems; www.soilbuildingsystems.com; (972) 831.8181

2.4. WATER

- A. The Owner will supply water.

2.5. PLANT REPLACEMENT

- A. It will be the responsibility of the Landscape Maintenance Contractor to replace any and all plant material that is dead or damaged due to non-performance of the contracted scope of work, un-supervised personnel or un-supervised subcontractors.

2.6. PESTICIDES AND HERBICIDES

- A. Pesticides and herbicides shall be of the type that is commercially available.

PART 3 - EXECUTION

3.1. TREE, SHRUB AND GROUNDCOVER MAINTENANCE

- A. The Scope of Work for plant maintenance includes all possible means required to preserve the plants and vegetative material existing within the site in a healthy and vigorous growing condition to insure their successful establishment. Plant maintenance shall include, as a minimum, the following items.
 - 1. Pruning: the Contractor to the satisfaction of the Owner shall prune all trees and shrubs, within the limits of landscape maintenance. Pruning shall be done in accordance with accepted pruning

practices as set forth by the National Arborist Association in Pruning Standards for Shade Trees (current edition). Dead or damaged limbs on trees and shrubs, including sucker-growth on trunks of trees, are to be removed. All Dogwoods and ornamental grasses shall be cut back to 6" above finish grade between the winter and spring seasons annually. All pruned materials shall become the property of the Contractor and shall be disposed of in a manner acceptable to the Owner. Unless directed differently in the contract documents, pruning shall be accomplished once during the term of this contract.

2. Insect, Disease, and Animal Control: The Contractor shall inspect the plants and planted areas once each two (2) weeks or as approved by the Owner. The Contractor shall be required to notify the Owner in writing of problems with insects, diseases, or animals as such problems arises. The Contractor also shall recommend corrective measures in writing.
3. The Contractor shall treat the plants and/or the planted areas in accordance with accepted methods of horticultural practices and the Texas Department of Agriculture guidelines regarding the use of pesticides. The Contractor also shall follow the manufacturer's instructions for the use and application of any pesticides.
4. Turf Maintenance:
 - a. Mowing: Bermuda Grass Sod: Mow newly planted grass areas weekly after initial growth reaches 1.5 to 2 inches.
 - b. Weeding: Remove weeds and foreign grass over lawn and grass areas at least once a week. Herbicides may be used only when approved by the Owner and Architect.
5. Bed Maintenance: The Contractor shall maintain the plant basins and beds free of weeds and grass or other material detrimental to the growth of the plants or appearance at the site. Herbicides, when used by the Contractor, will under no circumstances be used on days where the wind could cause drift hazard to desirable plants. The Contractor shall also follow the manufacturer's instructions for the use and application of any herbicide. Two pre-emergent herbicide applications will be made per year along with manual weeding and post emergent herbicide applications as required. All shrub and groundcover beds shall be fertilized two (2) times per year at a rate of 2 lbs. Per 1,000 square feet. Hardwood mulch shall be maintained to a minimum depth of two (2) inches, in all bed areas.
6. Re-staking, re-guying, and re-bracing of Plants: Any damaged or destroyed stakes; the Contractor shall replace guys or braces. This shall include any adjustment to the staking or guying to prevent girdling of plants. Adjustment will be made to tighten wires and cables as required.
7. Tree Fertilization:
 - a. Deep root fertilize all trees with a combination of Injecto-Feed 32-7-7 and Agri-Plex 0-4-4 with 2 percent magnesium, 2 percent water-soluble magnesium, 3 percent sulfur, .02 percent boron, 5 percent iron, .5 percent manganese and .5 percent zinc. Mix 20 pounds of Injecto-Feed and 1 gallon of Agri-Plex in 100 gallons of water. Apply this solution at the rate of 5 gallons per inch trunk diameter measured at breast height. Space injection points at 2.5-foot intervals starting 2 feet beyond the drip line. Apply .5 gallon of solution per injection site. Soil injections should be made 6 to 8 inches deep using an injector probe at 150 to 200 PSI. Keep fertilizer solution agitated during application. Where trees are closely spaced and have overlapping treatment areas, inject only once in those areas. Do not double inject these areas. For trees growing in wells surrounded by concrete, water or other hard surfaces, drench the top of the root ball with 10 to 15 gallons of fertilizer solution.

3.2 IRRIGATION SYSTEM OPERATION AND MAINTENANCE

- A. The scope of work for the operation and maintenance of the permanent irrigation system shall consist of the monitoring, adjustment, repair and proper operation of the existing irrigation system as required insuring adequate moisture to the plant material existing on the project. The existing condition of the system and any known deficiencies will be corrected by the Contractor upon approval by the Owner. The Contractor shall insure that all irrigation zones, rain sensors and freeze sensors are operating correctly. Include seasonal draining and winterizing of irrigation system when required.
- B. System repairs will include monitoring of the system on a year-round bi-weekly basis and reporting of all damaged or trouble areas to the Owner. The Contractors personnel shall repair any damage that may have occurred during the mowing cycle and set automatic systems to correct time requirements. Any damage not the fault of the Landscape Maintenance Contractor shall be assessed and brought to the attention of the Owner with an estimate of the subsequent costs to make the repairs. In the event the irrigation system fails due to the Contractor's actions or neglect, the Contractor shall furnish plant irrigation by a method and quantity approved by the Owner.

END OF SECTION