

## PART 1 - GENERAL

### 1.1 SUMMARY

- A. Furnish all labor, material, equipment, and services required to maintain the landscape in an attractive condition as specified herein for a period of 90 calendar days.

### 1.2 90 CALENDAR DAY MAINTENANCE PERIOD

- A. The Maintenance Period continues for 90 calendar days until final acceptance of the work by the University. Improper maintenance or poor condition of any planting at the termination of the scheduled maintenance period may cause postponement of the final completion date of the Contract.

### 1.3 OBSERVATION VISITS

- A. Normal observation visits are as follows:
  1. Immediately prior to the commencement of the work in this section.
  2. Completion of first 90 days of maintenance.
  3. Final acceptance.
  4. Check-in with Facilities Services is required during maintenance visits.

## PART 2 - PRODUCTS

### 2.1 MATERIALS

- A. All materials used shall either conform to landscape specifications in other sections or shall otherwise be acceptable to the University.
- B. Provide a monthly record of all herbicides, insecticides, and disease control chemicals used. Failure to provide such a record will continue maintenance period until compliance occurs.

## PART 3 - EXECUTION

### 3.1 MAINTENANCE

- A. Maintenance shall be performed according to the following standards:
  1. All areas shall be weeded and cultivated at intervals of not more than ten days.
  2. Watering, mowing, rolling, edging, trimming, fertilization, spraying, and pest control, as may be required, shall be included in the maintenance period.
  3. Street gutters shall be included within the debris/siltation removal program.
  4. The Design/Builder shall be responsible for maintaining adequate protection of the area.
    - a. Damaged areas shall be repaired at the Design/Builder's expense.
  5. Between the 15th day and the 20th day of the maintenance period, the Design/Builder shall reseed and re-sod all spots or areas within the lawn where normal turf growth is not evident.
- B. The Design/Builder shall be responsible for reporting to the University any conditions beyond his control that prevent or have negative impact on the work required herein.

### 3.2 TREE AND SHRUB CARE

#### A. Watering

1. Apply enough irrigation water so that moisture penetrates throughout root zone and only as frequently as necessary to maintain healthy growth.
  - a. It is not necessary to maintain soils in a constantly wet condition.
  - b. Design/Builder shall be responsible for familiarizing himself with the particular water requirements for the various plantings and shall be responsible for setting and maintaining the automatic controller to optimum minimum levels.
  - c. Any damage to the plantings caused by over-watering or under-watering shall be the responsibility of the Design/Builder to replace at no cost to the University.
2. Maintain a water basin around newly planted plants so that water can be applied to moisturize throughout the root zone. At the end of the maintenance period these basins shall be flattened out to match surrounding grades.
3. If hand-watering, use a fan spray nozzle to break the water force.

#### B. Tree Pruning

1. Nursery grown trees will not normally require any pruning for the first year. Prune trees only if directed by the University, and only for these purposes:
  - a. Selection and development of permanent scaffold branches that have a vertical spacing of from 18" to 48" and radial orientation so as not to cross each other,
  - b. Elimination of diseased or damaged growth,
  - c. Elimination of narrow v-shaped branch forks that lack strength,
  - d. Reduction of toppling and wind damage by thinning out crowns,
  - e. Maintenance of growth within space limitations,
  - f. Maintenance of natural appearance,
  - g. Balancing of crown-to-root ratio.
2. Under no circumstances will stripping of lower branches ("rising up") of young trees be permitted.
  - a. Lower branches shall be retained in a "tipped-back" or pinched condition with as much foliage as possible to promote caliper trunk growth (tapered trunk).
  - b. Lower branches can be cut flush with trunk only after the tree is able to stand erect without staking or other support.
3. Evergreen trees shall be thinned out and shaped when necessary to prevent wind and storm damage. The primary pruning of deciduous trees shall be done during the dormant season. Damaged trees or those that constitute health or safety hazards shall be pruned at any time of the year as required.

#### C. Shrub Pruning

1. The objectives of shrub pruning are the same as for trees. Shrubs shall not be clipped into balled or boxed forms unless such is required by the design.
2. All pruning cuts shall be made to lateral branches or buds or flush with the trunk. "Stubbing" will not be permitted.

#### D. Staking and Guying: Stakes and guys shall remain in place until final acceptance and are to be continuously inspected and adjusted to prevent girdling of trunks or branches and to prevent rubbing that causes bark wounds and to allow trees to sway freely. Stakes and guys are to be removed when trees become sufficiently well rooted or after one year. When stakes or guys are removed, tree heads may be thinned to reduce wind load.

#### E. Weed Control: Keep all areas, including basins and areas between plants, free of weeds.

1. Use recommended legally approved herbicides only when mechanical removal methods are not feasible.
  2. Avoid frequent soil cultivation next to trees or shrubs that destroys shallow roots.
  3. Use mulches to help prevent weed seed germination.
- F. Insect and Disease Control: Maintain control of insect infestations. The preferred method of control shall be biological control, or with non-toxic, biodegradable, organic materials. If stronger materials are needed, only materials that are recommended by a licensed Pest Control Advisor and are EPA approved and regulated shall be used. Only registered and licensed Pest Control Operators shall apply insecticide or chemical applications. Notify the University a minimum of five (5) working days before any chemical applications.
- G. Fertilization
1. Fertilize all planting areas as follows:
    - a. Fertilize per recommendations of Soils Report.
    - b. Avoid applying fertilizer to root balls and bases of main stems; rather, spread fertilizer evenly around plants to drip line. Distribute fertilizer evenly over turf or groundcover areas to avoid patchy coloration.

### 3.3 GROUND COVER CARE

- A. Weed Control: Control weeds preferably with mechanical methods, and also with preemergent herbicides and selective systemic herbicides. Hoe weeds as little as possible since this may result in plant damage. Foot traffic in planted areas shall be minimized, and any soil compaction shall be loosened immediately.
- B. Watering: Water enough so that moisture penetrates throughout root zone and only as frequently as necessary to maintain healthy growth.
1. It is not necessary to maintain soils in a constantly wet condition.
  2. Design/Builder shall familiarize himself with the particular water requirements for the planting and shall be responsible for setting and maintaining the automatic controller to optimum minimum levels.
  3. Any damage to the planting caused by over-watering or under-watering shall be the responsibility of the Design/Builder to replace.
- C. Trash: Remove trash weekly. Remove any debris, clippings or branches produced by maintenance activities within 8 hours.
- D. Edging and Trimming: Edge ground cover to keep in bounds and trim top growth as necessary to achieve an overall even appearance.

### 3.4 IRRIGATION SYSTEM

- A. System Inspection: Design/Builder shall continuously check all systems for proper operation. Lateral lines shall be flushed out after removing the last sprinkler head or two at each of the lateral. All heads are to be continuously adjusted as necessary for proper coverage and to eliminate over-spray on buildings or paving. Design/Builder's regular maintenance personnel shall test, observe, and adjust each sprinkler system no less than once per month.
- B. Controllers: Set and program automatic controllers for seasonal water requirements and minimum optimum water use. Give the University a key to controllers and instructions on how to turn off system in case of emergency.

- C. Repairs: Repair all damage to irrigation system at Design/Builder's expense. Repairs shall be made within one watering period.

END OF SECTION