SECTION 32 01 90 – OPERATION AND MAINTENANCE OF PLANTING

PART 1 - GENERAL

1.1 SUMMARY

A. Description

1. Work included: Provide labor, materials, and installation necessary to provide a one (1)-year warranty period for trees, shrubs, ground covers, and lawn areas from date of acceptance of installation. Provide labor, materials, and installation necessary to provide a (1)-year maintenance period from date of acceptance of substantial completion. Unless it is determined to reduce the maintenance period to 90 days, by UT Landscape Services.

2. Related Sections described elsewhere:
   a. Section 32 93 00 – Planting
   b. Section 32 92 00 – Turf and Grasses
   c. Section 32 XX XX – Trees

PART 2 - PRODUCTS

2.1 FERTILIZER

A. TBD, Fertilizer at the rate indicated, if recommended by soil test (Texas Soil and Plant Lab recommendations).

2.2 INSECTICIDE

A. Submit for approval by UT Landscape Services labels for all proposed insecticides to be used on-site, if needed. Specify what pests they will be used to control and application rates. Maintain accurate application/spray records and submit copies to UT Landscape Services.

2.3 HERBICIDE

A. Submit for approval by UT Landscape Services labels for proposed herbicide to be used on-site. Specify what weeds they will be used to control and application rates. Provide names and license of applicator. Maintain accurate application/spray records and submit copies to UT Landscape Services.

PART 3 - EXECUTION

3.1 ACCEPTANCE OF INSTALLATION

A. At the completion of all landscape installation, the Contractor shall request in writing an inspection for substantial completion in which the Contractor and Owner's Representative shall be present. After this inspection, the Contractor shall prepare a “Punch List”. Upon completion of all punch list items, the Owner's Representative shall re-inspect the project and issue a written statement of final acceptance and establish the beginning of the project warranty period.

B. Landscape work may be inspected for acceptance in a limited number of phases agreeable to UT Landscape Services provided work offered for inspection is completed, including maintenance as required.
C. For work to be inspected for partial or phased acceptance, the contractor shall provide a drawing outlining work completed and supply a written statement-requesting acceptance of the work completed to date.

3.2 PROJECT WARRANTY

A. The project warranty period shall begin upon written final acceptance of the landscape installation by the UT Representative.

B. Tree Warranty:

1. The Contractor shall warrant that all trees will be alive and in good health for a period of one (1) year after final acceptance except for defects resulting from neglect by the Owner, abuse, or damage by others.

2. If the contractor is not performing a one-year maintenance period, the Contractor shall be responsible to monitor UT Landscape Service’s care and report any maintenance issues before problems occur.

3. The Contractor shall remove and replace dead, unhealthy or girdled trees or those that lose original form and size during the warranty period with material equal to that specified at no additional cost to UT Austin. The Contractor shall replace any material that does not meet requirements within ten (10) days.

4. All replacement trees shall be subject to an additional one (1)-year warranty period.

C. Shrubs and Other Plantings Warranty:

1. The Contractor shall warrant all other planting to be alive and in satisfactory condition for a period of one (1) year from date of final acceptance except for defects resulting from neglect by the Owner, abuse, or damage by others.

2. The Contractor shall maintain all plant material in a healthy, sturdy condition during the warranty period.

3. The Contractor shall remove and replace dead or unhealthy shrubs, ground covers, vines and turf areas or those that lose original form and size during the warranty period with material equal to that specified at no additional cost to the Owner. The Contractor shall replace any material that does not meet requirements within ten (10) days.

4. All replacement plants, including shrubs, groundcovers, vines and perennials, shall be subject to an additional one (1)-year warranty period.

3.3 MAINTENANCE PERIOD

A. Maintenance shall begin immediately with the planting of each plant and continue (1)-year after substantial completion.

1. Contractor shall take every precaution to protect finished exterior surfaces from damage as result of his maintenance work and shall promptly report and repair any damage to the satisfaction of the Owner’s Representative.
B. Replacements must meet specifications, i.e., quality, size, form, species of plant material and planting procedures, to receive approval of replacement.

C. To ensure warranty standards, the following maintenance procedures shall be executed during construction and for the full project maintenance period.

D. Response Time: When environment dictates, work may require weekend, after hours or holiday schedules. The Contractor agrees to respond to a call per the following schedule:

1. General Maintenance- Three (3) business days.
2. Irrigation Issues- 24 hours or less depending on severity.
3. Safety Issues (obstructions, etc.)- Immediately

E. Maintenance of Trees, Shrubs, Vines and Groundcovers:

1. Contractor shall be responsible for any and all replacement of any plant materials that are dead, are in an unhealthy or unsightly condition, or that have lost natural shape resulting from dieback, excessive pruning or inadequate or improper maintenance.

2. Replacements must meet specifications, i.e., quality, size, form, species of plant material and planting procedures, to receive approval of replacement.

3. Costs for replacements are assumed part of bid quotations and therefore will not result in an additional cost to UT Austin.

4. The Contractor shall be responsible for watering all plantings and shall keep guy wires taut, raise tree rootballs that settle, and furnish chemicals and pesticides as necessary to keep the plantings free of disease and insects until the end of the maintenance period.

5. Chemical Application: Furnish and apply chemicals and pesticides if necessary to keep the plantings free of disease and insects throughout the maintenance period. Must be approved by UT Landscape Services prior to application.

6. Fertilization: TBD, Fertilizer at the rate indicated, based on soil analysis recommendations from Texas Plant & Soil Lab (Texas Plant and Soils Lab, Edinburg, TX (936-383-0739)

7. Weed Control: Project Area is to be maintained in a weed-free condition. All planting areas shall be kept clean bi-weekly of all noxious weeds and grasses.

8. Remove and replace trees, shrubs, ground covers, vines, turf areas or other plants found to be dead or in an unhealthy condition. Remove rejected plants and materials promptly. Make replacements during the normal planting schedule. Replace all trees and shrubs where their health is in doubt, unless, in the opinion of UT Landscape Services, it is advisable to extend warranty period. Remove all tree wrap paper, dead twigs and branches from tree and plant material at the end of the maintenance period. Keep planting beds free of weeds during maintenance period.

9. Pruning:
   a. Trees: The objective in tree pruning shall be to preserve the structural integrity, design purpose and natural beauty of trees. Branch collars shall not be removed. Stubs shall not be allowed to remain. All pruning shall be done in accordance with the guidelines of the Western Chapter of the International Society of Arboriculture, ANSI Standards.
b. Shrubs: Pruning shall be done with hand pruners or lopping shears. Shrubs shall be selectively pruned to remove old seed heads and stems, and pruned on a very limited basis, only to maintain natural appearance. Shrubs shall not be pruned into ball or geometric shapes. Shrubs and groundcovers shall be pruned to remove all frost-damaged foliage and branches as soon as new buds appear. Shrubs shall be trimmed to prevent overhang at sidewalks and curbs.

a. Staking and Planting (IF NECESSARY):

   a. Staking shall be inspected monthly. The goal is to wean trees from stakes. As trees are strong enough to stand on their own, stakes shall be removed.

   b. Stakes that are not judged to be ready for removal shall be maintained according to the detail. Rubber hose and wire encircling trunks shall be maintained so as not to cause girdling. Stakes and wire shall be maintained to prevent rubbing against trunks or branches. Materials for staking and/or restaking shall match original specification. The need for the stakes and guys to remain beyond the warranty period is to be determined at the end of the warranty period. Approval to remove the stakes and guys at that time will be determined by UT Landscape Services.

b. Maintenance of Turf Areas: Maintain turf per overall landscape maintenance and warranty specifications. Partial acceptance will not be considered. At end of maintenance period, turf shall have 100% coverage and be vigorously growing, healthy, uniform in color and capable of supporting daily use. Roots shall have minimum depth of 8-inches.

F. Maintenance Acceptance.

1. If the Contractor's maintenance is unsatisfactory, the maintenance period shall be extended, at the Contractor's expense, until such time as all corrections are made and the work is inspected and approved by the UT Representative.

2. Arrange with UT Representative to walk the site monthly during warranty period to review maintenance standards, and correct deficiencies/problems. Must be completed within 3 business days.

3. The Landscape Contractor shall notify UT Representative five (5)-days prior to end of the maintenance period that a final inspection is requested. UT Representative shall make notations of any items not acceptable or requiring corrections and will notify the Landscape Contractor for immediate action. All corrections must be completed before the Subcontractor is released from the above maintenance requirement.

END OF SECTION 32 01 90