

## **SECTION 7300 - LANDSCAPING**

7301 SCOPE Furnish materials, labor and equipment necessary to install landscaping as specified and as indicated on the plans.

### 7302 QUALITY ASSURANCE

- A. Qualifications of Personnel: Provide at least one (1) person who shall be present at all times during execution of this work that is thoroughly familiar with all materials and installation procedures included in the operations as specified herein.
- B. Source Quality Control
  - 1. Ship landscape materials with certificates of inspection required by governing authorities. Comply with regulation applicable to landscape materials. All plants shall be No. 1 grade. Type, size, and grading standards shall conform to those of the American Standards for Nursery Stock as adopted by the American Association of Nurserymen, unless otherwise specified.
  - 2. No substitutions shall be accepted before the contract is let and then only with written permission of the Parks and Recreation.
  - 3. Within 5 working days after award of contract, and before any materials are delivered to the job site, submit to the City a complete list of all plants including the sizes ordered, the type of equipment to be used on this project along with the sources and suppliers of the following: Plant materials, Pesticides.

### 7303 MATERIALS AND PRODUCTS

- A. Plant Materials
  - 1. Nomenclature: Scientific and common names used for plants are generally in conformity with "Standardized Plant Names." The names of varieties are generally in conformity with the names accepted in nursery trade.
  - 2. Plant material size and measurements shall conform to the American Standard for Nursery Stock, ANSI Z60. 1-2004.
  - 3. Plants shall be container grown; vigorous stock, normally shaped, heavy and well branched foliage when in leaf, and shall have healthy, well-developed root systems.
  - 4. All plants furnished shall be free of any insect infestation, dead wood, bruises, or other root or branch injuries and shall have been grown under climatic conditions with temperature extremes similar to those of the project area for a minimum of two years prior to use on this project. All plants are to be naturalized to zone 5.
  - 5. Plants shall be measured when branches are in a normal position. The measurements specified are the minimum size acceptable. Plants that

meet the measurements specified, but do not possess a normal balance between height and spread will be rejected. Stock furnished shall be a fair average between the minimum and maximum size specified. All similar plants shall be matched in size and form.

6. All plant materials shall bear a tag providing full and legible identification of plant genus, species and variety.
- B. Mulch: Use medium-grade Pine Bark mulch. After planting has been approved apply mulch. The mulch should not come into contact with plants.
  - C. Pre-emergent treatment: Surflan XL. Provide MSDS sheet and application records. Follow City of Lawrence's policy of posting signs before treatment. Pesticides shall be applied only by a State Certified Applicator.
  - D. Topsoil. Topsoil shall be soil which is fertile, friable, natural loam, surface soil, reasonably free of subsoil, clay lumps, brush, weeds and other litter, and free of roots, stumps, stones larger than 1 1/2" in any dimension, and other extraneous or toxic matter harmful to plant growth.

## 7304 INSTALLATION

### A. Ground Cover Plant Bed Preparation

1. Loosen subgrade of planting bed areas to a minimum depth of 6 inches. Remove stones larger than 1½ inches in any dimension sticks, roots, rubbish, and other extraneous materials.
2. Till soil in beds to a minimum depth of 8 inches, mix with specified soil amendments and fertilizers. Place topsoil as indicated.
3. Apply specified commercial starter fertilizer at rates specified; thoroughly mix into upper 2 inches of topsoil. Delay application of fertilizer if planting will not follow within a few days. Fertilizer shall be of the grade, type, and form specified below and shall comply with the rules of the Kansas Department of Agriculture and the following requirements:
  - a. The grade of fertilizer will be identified according to the percent nitrogen (N), percent available phosphoric acid and percent water soluble potassium in that order and approval will be based on that identification.
  - b. Fertilizer shall be of a type that can be uniformly distributed either by hand or application equipment.
  - c. Fertilizer shall be furnished in a dry form.
  - d. Fertilizer may be either homogenized or natural organic with at least 25 percent of the total nitrogen (N) in a slow-release form.
  - e. Deliver fertilizer materials in original, unopened and undamaged containers showing weight, analysis, and name of manufacturer. Store in a manner to prevent wetting and deterioration.

4. Final grade plant beds to smooth, even surface with loose, uniformly, fine texture. Roll, rake, drag bed areas to remove ridges and fill depressions, as required to meet final grades. Limit final grading to areas which can be planted immediately after grading. No grading shall be done when the soil is in a muddy or frozen condition.

B. Planting

1. Layout: Plantings shall be located where shown on the plan, or where locations have been flagged on site by the Parks and Recreation, except where overhead or below ground utilities are encountered and plants need to be relocated.
2. Setting Plants: No planting holes shall be dug until proposed location been staked in the ground. Each plant shall be planted in an individual hole as specified. All plants will be removed from their containers.
3. Backfilling Planting Beds: Existing topsoil is to be used as backfill. Soil amendments are not to be used. Planting pits shall be backfilled carefully to fill all voids and to avoid root injury. Following complete backfilling of the planting pit, plants shall be thoroughly irrigated by low volume, low pressure garden hose positioned at the bottom of the pit. After filling with water and soil settling has occurred planting mix shall be added to bring the pit to grade.
4. Shrubs: All shrubs and roses shall be planted in holes at least one foot (1') greater in diameter than their ball of earth or spread of roots. The depth of the hole shall be as is necessary to accommodate the roots so that when the shrub is placed therein it will not be necessary to raise or lower it to bring it to finished grade.
5. Watering: All plants shall be thoroughly deep watered within 24 hours of Pruning and Repair: planting and on a weekly basis during the growing season.
6. All plants shall be neatly pruned only to remove broken or badly bruised branches.
7. Apply pre-emergent chemicals to all areas to be mulched to control weeds and keep beds weed free during the growing season. Apply to the soil prior to mulching in accordance with the manufacturer's recommendations
8. Apply mulch around plants after planting has been approved. The mulch should not come into contact with plants.

- C. Special Utility Instructions: Any existing underground utility locations are to be determined by the contractor prior to any digging. Call "Dig Safe" (1-800-344-7233) 48 hours prior to any digging. Perform work in a manner, which will avoid possible damage. Hand excavate, as required. Should any buried utilities be encountered during planting, consult the utility owner and water treatment plant superintendent immediately for directions. Full cooperation would then be needed in keeping respective services in operation. Repair for any damaged utilities will be full responsibility of the contractor.

7305 INSPECTION: Inspection of the planting work to determine its completion for beginning of the guarantee period will be made by a Parks and Recreation representative. The Contractor shall provide request for inspection at least seven (7) days prior to the anticipated date. All plant material must be labeled, alive, healthy and planted properly in order to be considered complete. Excess fill and waste material shall be removed from the site. Roads and walkways shall be swept clean and the site shall be left in a clean condition.

7306 MAINTENANCE, INSPECTION, GUARANTEES AND REPLACEMENTS

A. Warranty on Plant Material, for a period of one year after date of Substantial Completion, against defects including death and unsatisfactory growth, except for defects resulting from neglect by Owner, abuse or damage by others, or unusual phenomena or incidents which are beyond the Landscape contractor's control. The contractor shall be responsible for resetting of any plants to an upright position or to proper grade, and for the removal and replacement of any dead plant material, during the guarantee period.

B. Replacement of Plant Material: The Contractor shall replace once, without cost to the Owner, and as soon as weather conditions permit, and within a specified planting period, all dead plants and all plants not in a vigorous, thriving condition as determined by the Owner during and at the end of the warranty period. The plants shall be free of dead or dying branches and branch tips, and shall bear foliage of a normal density, size and color.

Replacements shall closely match adjacent specimens of the same species. Replacements shall be subject to all requirements stated in the Specifications. The contractor shall make all necessary repairs to other site and project features due to plant replacements. Such repairs shall be done at no cost to the Owner.

C. Maintenance: Unless specified otherwise, the contractor shall provide weekly maintenance for landscape services for a period of one year following the completion and acceptance of the original planting.

New landscape plants should be watered weekly during the growing season or at an optimum rate depending on natural rainfall amounts, temperature, and demands of the plant materials to achieve an average of 1" rainfall per week. The contractor will be responsible for the weekly inspection of the landscape area to monitor watering, weeds, insects, and general plant health care. The landscape beds will be weeded once per week to be kept essentially weed free.

Roses shall be pruned as needed to remove dead blooms once every month during the growing season. Roses shall be dormant pruned in early spring to reduce growth by 30%.

When significant portions of work are completed, including maintenance, Parks and Recreation will, upon request, make an observation to determine acceptability for compliance with requirements.

- D. Final Inspection: Final inspection to determine acceptance will be made at the conclusion of the guarantee period by the Parks and Recreation Representative. No plants will be accepted unless they are alive and healthy. The Contractor shall replace any plants which are dead or, in the opinion of the Parks and Recreation representative, are in an unhealthy or unsightly condition. The cost of such replacement (s) shall be borne by the Contractor and shall be included in his bid price for the project.