

PLANTING SPECIFICATIONS

PART 1 - GENERAL

1.1 SUMMARY

A. Work under this section consists of furnishing all labor materials; equipment and services required to complete fine grading, planting, and necessary appearances as shown on drawings and described herein.

1.2 REFERENCES

- American Nursery Standards Institute Z60.1, Standards for Nursery Stock, May 1986.
- Harris Turf, 1976 - Cornell University. (Plant nomenclature)
- National Arborist Association Standards, National Arborist Association, latest edition.
- Federal Specification FS O-F-441 - Fertilizer, Mixed, Commercial.

1.3 SUBMITTALS

- Guarantee: Submit 3 copies of written guarantee, in the terms specified under guarantee provisions of these specifications, signed by the Contractor.
- Samples:
 - Submit samples of each plant for Owner's Representative approval.
 - When approved, tag and maintain as representative samples for finally installed plant materials. Samples may be used to complete installation, provided they remain tagged until final acceptance of entire installation. Samples are to be brought to the project for Owner's Representative approval.
 - Plants noted as "Specimen" on the plant schedule must be individually approved by the Owner's Representative.
 - Submit for approval sufficient representative quantities of topsoil, soil amendments, and product information on package materials and fertilizer.

Owner's Representative shall approve samples before use on the project.

- Certification: For information only, submit 2 copies of certificates of inspection to local city or governmental authorities to accompany shipments. Submit manufacturers or vendors certified analysis for soil amendments and fertilizer materials. Submit other data substantiating that materials comply with specified requirements.

1.4 QUALITY ASSURANCE

- Deliver packaged materials in containers showing weight, analysis and name of manufacturer. Protect materials from deterioration during delivery and while in use of equivalent material. When authorized, adjustment of contract amount will be made.
- Contractor shall have at least three years experience in installing projects of similar size and be able to furnish a list of previous jobs and references if requested by the Owner's Representative. Contractor shall employ only skilled personnel and provide adequate supervision.
- Do not make substitutions. If specified landscape material is not obtainable, submit to Owner's Representative proof of non-availability and proposal for use of equivalent material. When authorized, adjustment of contract amount will be made.

1.5 DELIVERIES, STORAGE AND HANDLING

- Deliver packaged materials in containers showing weight, analysis and name of manufacturer. Protect materials from deterioration during delivery and while in use of equivalent material. When authorized, adjustment of contract amount will be made.
- Plant Materials: Deliver trees and shrubs after preparations for planting have been completed and plant immediately. If planting is delayed more than 6 hours after delivery, set trees and shrubs in shade, protect from weather and mechanical damage, and keep roots moist as follows:
 - Set balled stock on ground and cover ball with soil,

peat moss, or other acceptable material.

- Do not remove container-grown stock from containers until planting time.
- Damage: Protect plant material in transit and at the site. Material not properly protected and which is damaged will be rejected.

1.7 PROJECT CONDITIONS

- Proceed with and complete the landscape work as rapidly as portions of the site become available, working within the seasonal limitations for each kind of landscape work required.
- Cooperate with other Contractor's and trades working in and adjacent to the landscape work areas. Examine drawings, which show the development of the entire site and become familiar with the scope of other work required.
- Excavation: When conditions detrimental to plant growth are encountered, such as rubble fill, adverse drainage conditions, or obstructions, notify Owner's Representative before planting.
- Site Utilities:
 - Determine locations of underground utilities, especially site lighting, and perform work in a manner, which will avoid possible damage. Do not permit heavy equipment such as trucks to damage utilities. Hand excavate, as required to minimize possibility of damage to underground utilities. Maintain grade stakes set by others until all parties concerned mutually agree upon removal.
 - Coordinate work with the Irrigation Contractor and Electrical Contractor to prevent damage to underground piping or conduit and similar obstruction work located in landscape areas.
 - Do not move any equipment over existing or newly placed concrete without approval of General Contractor. Provide necessary protections such as board rolling as required.

fertilizer to site in original unopened containers, each bearing manufacturer's guaranteed statement of analysis. Fertilizer shall contain 10% nitrogen, 10% phosphoric acid, 5% potash, unless otherwise specified or approved.

2.3 TREE STAKING MATERIALS

A. 2" x 2" x 8' pine stakes.

PART 3 - EXECUTION

3.1 INSPECTION

- Contractor must examine the sub grade upon which work is to be performed, verify sub grade elevations noted on the plans, observe the conditions under which work is to be performed, and notify the Owner's Representative of unsatisfactory conditions. Do not proceed with the work until unsatisfactory conditions have been corrected in a manner acceptable to the Contractor and Owner's Representative.

3.2 SOIL PREPARATION

- 1 part is Compost. 4 part select native topsoil
- Soil is at final grade. Contractor is responsible for removing excess topsoil. Excess topsoil may be distributed on site.

3.3 TREE PLANTING

- Location: Refer to planting plans for location of trees. Stake position of trees before pits are dug and label each position. Receive approval from Owner's Representative before proceeding.
- General: Excavate pit. During pit excavation, if pit walls are glazed, roughen sides to allow for good bond with backfill. Center trees, with root flare at or above finish grade and with trunk plumb. Position trees and receives approval from Owner's Representative before removing burlap or backfilling. Remove top 1/3 of ball burlap immediately prior to backfilling pit (2 hour

maximum) and gently roughen exposed soil around ball, being careful not to damage feeder roots.

- Size of tree pits: Plant in tree pits twice the diameter of the root balls and no deeper. Root ball shall rest on undisturbed soil. Carefully settle by watering to prevent air pockets.
- Do not lift trees by the trunk. Lift trees by the root ball only. If the contractor is observed lifting trees by the trunk, the tree will be rejected.

3.4 STAKING

- Refer to planting details for placement of stakes.

3.5 SPACING AND PLANTING SHRUBS AND GROUND COVER

- Place plants in position on bed areas before containers or burlap have been removed. Obtain approval from Owner's Representative. Remove cans, remove top 1/3 burlap from balled and burlapped plants. Plant where located and approved, setting plants with root flares or surface of soil in container at or slightly above finish grade, and compact soil carefully around each plant ball. Water each plant thoroughly with hoses to eliminate air pockets. Carefully prune plants to remove dead or broken branches and hand-rake bed areas to smooth, even surfaces. Owner's Representative reserves the right to interchange or shift locations of plants prior to planting.

3.6 PREPARING SOIL AND FINE GRADING FOR SOD

- Note: During hauling operations, keep walkway and roadway surfaces clean. Promptly remove sandy loam or other material.
- After completion of construction work in the area, prepare surface of subsoil. Finish to lines shown and parallel to proposed finished grade as approved.
- Remove rocks and other foreign materials 1/2 inches or greater in any dimension.

C. Weed removal:

- If site has been freshly graded, water site for minimum two weeks to encourage weed germination and growth.
- Area scheduled for wildflowers, native grasses and buffalo grass: Totally remove all grasses and weeds, unless directed otherwise by Owner's Representative. Apply a non-selective herbicide (e.g. "Roundup" or approved equal) to thoroughly exterminate existing grasses, weeds, or other vegetation (unless noted on the drawing for protection) in area scheduled to receive seeding or hydromulching for grasses or wildflowers.
- Area scheduled for native grasses: Use a selective herbicide or post-emergent herbicide for spot application to remove dallisgrass, crabgrass, Johnson grass, nutgrass, dandelion and other noxious weeds identified in the field by Owner's Representative. If native grasses exist on the site, verify with Owner's Representative if they are to remain or to be eliminated.
- Soil shall be loosened and pulverized to prepare an acceptable bed for soil. Pulverize soil with disc, chisel plow, tiller or other method approved by Contracting Officer, making minimum of one pass to break up clods. Do not till if soil is wet. Do not penetrate soil deeper than two inches so as not to encourage weed growth.
- Fine grade, level and scarify with a weighted spike harrow, spike foot drag, or by hand raking. Leave no depressions, ruts, soft spots or humps. Finish to lines or elevations shown and parallel to proposed finished grade, as approved. Maintain positive drainage on site. Remove rocks, clods, weed, trash or debris from area to be sodded. Legally dispose off site.
- If weeds should germinate prior to seeding, re-apply herbicide to eradicate weeds.

3.7 SOD PLANTING

- Preparing soil: Remove rocks, weeds, and debris from area to be sodded. Work up soil to a depth of 4 inches and break up top 1/2 clods. Prepare soil for all areas as noted

- Refer to individual Sections 02911 - 02940 for specific installation requirements.

3.11 PROTECTION

- All items required to complete this contract remain the property and responsibility of the Contractor until final acceptance. Take adequate precautions to protect all work and materials against damage. Cooperate fully with other trades to insure a satisfactory completion.

