

**SECTION 329300
LANDSCAPING**

PART 1 - GENERAL

1.01 SUMMARY:

- A. The work includes all services, labor, materials, transportation and equipment necessary to perform the work indicated on the Drawings and as specified. The conditions of the Contract and Division 1 apply to this section as fully as if repeated herein.

1.02 RELATED REQUIREMENTS:

- A. Section 328400 Irrigation System
- B. Section 328400-R Recycled Water Irrigation System
- C. Section 320533 Landscape Maintenance

1.03 SUBMITTALS:

- A. Submit certificates of compliance and invoices for soil amendments, fertilizers, and plant materials, with quantities of each.
- B. Tree Samples: Deliver to the site, a minimum of one sample of each tree variety and size indicated, 15 gallons in size and larger, a minimum of 15 days before planting operations. At the Contractor's option and expense, he may retain the services of the Landscape Architect to review trees 15 gallon and larger tagged at the nursery or at its place of growth, or as otherwise indicated.
- C. Shrub and Tree Samples: Submit 3 samples of each variety and size of plant materials at the site a minimum of 15 days before planting operations. Accepted samples shall remain on the site and shall be maintained as standards of comparison for plant materials to be furnished. Samples may be incorporated into the work.
- D. A sample of the soil amendments and proposed mulch material(s), including manufacturer or supplier certificate or invoice, shall be delivered to the Landscape Architect within thirty-five (35) days after recording of the Contract.

1.04 GUARANTEES AND REPLACEMENTS:

- A. Shrubs, vines and groundcovers shall be guaranteed to remain healthy and vigorously growing for a period of ninety (90) days from date of final acceptance of Maintenance Period of project.
- B. Trees shall be guaranteed to live in a healthy condition for a period of one (1) year from date of final acceptance of Maintenance Period of project.
- C. Plants found to be dead or not in a vigorous condition within the Maintenance and Guarantee Periods shall be replaced within fourteen (14) days at Contractor's expense.

- D. Plants used for replacement shall be the same kind and size as specified in the plant list. They shall be furnished, planted and fertilized as originally specified. The expense of all repair work on existing improvements damaged during replacement shall be borne by the Contractor.

1.05 QUALITY ASSURANCE:

- A. Reviews herein specified shall be made by the Landscape Architect or Landscape Inspector. The Contractor shall request review in writing a minimum of 48 hours in advance, for the following parts of work:
 - 1. Pre-job meeting to introduce Landscape Architect, Landscape Inspector, Contractor, job project manager and job superintendent and to discuss the particular requirements of the job.
 - 2. Incorporation of soil conditioning and fertilizing into the soil. Observation shall begin prior to amendments being rototilled into the soil. Amendment materials shall be distributed in piles around the site in quantities corresponding to the soils analysis recommendations "per 1,000 sq. ft.". Invoices showing materials and quantities purchased shall be available for review.
 - 3. Upon completion of grading prior to planting. Review of plant materials is to coincide with this review.
 - 4. When trees, shrubs and vines are spotted in place for planting, but before planting holes are excavated.
 - 5. Upon completion of finish grades and planting. Application of pre-emergent herbicide is to coincide with this review.
 - 6. When planting, and all other indicated and specified work, except the Maintenance Period, has been completed. Acceptance, in writing, shall establish beginning of the Maintenance Period.
 - 7. Final review at the completion of the Maintenance Period. Contingent on acceptance, this review shall establish the beginning date for the Guarantee Period.

1.06 MAINTENANCE:

- A. The Contractor shall continuously maintain all involved areas during the progress of the work and during the maintenance period until the final acceptance of the work.
- B. The Maintenance Period begins on the first day after written acceptance of planting operations is received from the Landscape Architect, and shall continue thereafter for no less than ninety (90) continuous calendar days.
- C. The contract completion date of the contract maintenance period will be extended, when in the opinion of the Landscape Architect, improper maintenance or possible poor or unhealthy condition of planted material or poorly established non-covering turf areas are evident at the termination of the scheduled maintenance period. The

Contractor shall be responsible for additional maintenance of the work until work is completed and acceptable.

- D. See Section 320533 for specific Maintenance Requirements.

1.07 GENERAL REQUIREMENTS:

- A. The term "Planting Area" shall mean all areas to be planted with trees, shrubs, groundcovers, sod and seed.
- B. Actual planting shall be performed during those periods when weather and soil conditions are suitable in accordance with locally accepted horticultural practice.
- C. All rock and other growth or debris accumulated during the duration of the project shall be removed from the site.
- D. Prior to excavation for planting or placing of plant materials, locate all underground improvements, utility lines, etc. and take proper precautions to avoid damage. In the event of a conflict between such lines and plant locations, notify Landscape Architect and receive direction prior to proceeding. The Contractor assumes responsibility for making repairs for damages resulting from work as herein specified.
- E. Grading and soil preparation work shall be performed only during the period when beneficial and optimum results may be obtained. If the moisture content of the soil should reach such a level that working it would destroy soil structure, spreading and grading operations shall be suspended until the moisture content is increased or reduced to acceptable levels and the desired results are likely to be obtained.
- F. Scaled dimensions are approximate. Before proceeding with work, carefully check and verify dimensions and immediately inform the Landscape Architect of discrepancies between the drawings and specifications and actual conditions.
- G. Quantities for plant materials are shown for convenience only, and not guaranteed. Check and verify count and supply sufficient number to fulfill intent of drawings.
- H. Adequately stake, barricade, and protect irrigation equipment, manholes, utility lines, and other existing property during all phases of the soil amending and grading operations.
- I. Rejection and Substitution: Plants not conforming to the requirements herein specified shall be considered defective, and such plants, whether in place or not, shall be marked as rejected and be immediately removed from the site of the work and replaced with acceptable plant materials. The plant materials shall meet all applicable inspections required by law. Plants shall be of the species, variety, size, age, flower color and condition as specified herein and/or as indicated on the drawings. Under no condition will there be any substitution of plant specie, variety, or reduced sizes for those listed on the accompanying drawings, except with the expressed written consent of the Landscape Architect.
- J. All utilities (water and electricity) used during the installation and maintenance of the landscaping and irrigation systems for this project shall be paid for by the Owner.

1.08 FINAL SOIL AMENDMENT QUANTITIES:

- A. Upon completion of all backfill and/or rough grading of planted areas, a minimum of six (6) representative samples of existing soil found in the planting areas shall be taken by the Contractor and at his/her expense sent to an independent soil testing laboratory for an agricultural suitability analysis and recommendations for quantity and application rate of amendments and include any corrective measures required to adjust pH or salt to acceptable levels. These recommendations shall then be compared with those listed in Paragraphs 2.02 and 3.01 and the contract modified accordingly.

1.09 SOIL PREPARATION CONFORMANCE

- A. Amendment materials shall be distributed in piles around the site in quantities corresponding to the soils analysis “per 1,000 sq. ft.” recommendations. Invoices showing materials and quantities purchased shall be available for review. The Landscape Architect will compare the distribution piles and total quantities of each material furnished against the soils analysis recommendations. If the minimum rates of application have not been met, the Landscape Architect will require the distribution of additional quantities of these materials to fulfill the minimum application requirements specified. After approval by the Landscape Architect of the distribution and quantities of soil amendments, the Contractor will then commence with soil conditioning operations per section 3.01.

1.10 PLANT MATERIAL QUANTITY CONFORMANCE

- A. After installation of plant materials, and coinciding with the pre-maintenance observation, the Landscape Architect, with the heretofore specified signed copies of the required certificates, trip slips and invoices for the plant materials and related items, will inventory such material, comparing the total area and/or the amounts specified. If the minimum amounts have not been furnished, the Landscape Architect may require the installation of additional materials to fulfill the minimum requirements specified or require that the Contractor provide credit(s) to the Owner.

PART 2 - PRODUCTS

2.01 SOIL AMENDMENT AND FERTILIZER:

- A. Provide singly or in combination as required to meet specified requirements for topsoil. Soil conditioners shall be nontoxic to plants.
 - 1. Composted Derivatives: Ground bark, nitrolized sawdust, humus, or other wood green waste material free of stones, sticks, and soil stabilized with nitrogen and having the following properties:
 - 2. Particle Size: Minimum percent by weight passing:
 - a. No. 4 mesh screen 95
 - b. No. 8 mesh screen 80

3. Nitrogen Content: Minimum percent based on dry weight:

- a. Fir Sawdust 0.7
- b. Fir or Pine Bark 1.0

- B. Gypsum shall be a commercially processed and packaged gypsum (CaSo, 2H 0) with minimum 80% grade containing 14% minimum combined sulfur.
- C. Iron Sulphate: Ferric or ferrous sulphate in pelleted or granular form containing not less then 18 percent metallic iron. Material shall conform to the Agricultural Code of the State of California.
- D. Pre-plant fertilizer for incorporation with rototilling or plant pit backfill mix shall be of a uniform 'beaded' homogeneous granular composition suitable for application with approved equipment and shall contain the following minimum available percentages by weight of plant food:

Nitrogen	5% minimum
Phosphoric acid	3% minimum
Potash	1% minimum
Iron	1%
Manganese	.05%
Zinc	.05%
Humic Acids (derived from compost)	15%
Soil Penetrant (alkyl naphthalene sodium sulfonate)	15%

- E. Post-planting Fertilizer for Maintenance Period Fertilization: Organic base, long lasting, nonburning, controlled slow release, free flowing, uniform in composition, suitable for application with approved equipment, and shall contain the following minimum available percentages of weight of plant food :

Nitrogen	12% minimum
Phosphoric acid	8% minimum
Potash	8% minimum
Sulphur	7%
Iron	2%
Manganese	.05%
Zinc	.05%
Humic Acids (derived from compost)	5%

WARNING: Some fertilizers contain chelated iron which has caused staining of concrete surfaces in other projects. Contractor shall be responsible for removing all iron stains from concrete by sandblasting, or as directed by architect, at no additional cost to the Owner.

- F. Planting Tablets: Tightly compressed chip type commercial grade planting tablets of varying weighted sizes with the following available percentages by weight of plant food:

Nitrogen	20% minimum
Phosphoric acid	10% minimum
Potash	5% minimum

- G. Post-planting Fertilizer for Palms: Organic base, long lasting, nonburning, controlled slow release, free flowing, uniform in composition, suitable for application with approved equipment, and shall contain the following minimum available percentages of weight of plant food :

Nitrogen	3% minimum
Phosphoric acid	1% minimum
Potash	3% minimum

A micro-nutrient foliar spray for palm fronds is recommended to avoid micro-nutrient deficiencies.

2.02 PLANTING BACKFILL:

- A. Planting backfill shall be a thoroughly blended mixture of topsoil amendments at the following mixture:

Soil Conditioner	1 part
Stock-piled on site soil	3 parts
Iron sulphate	2 lbs/per cu. yd. of mix
Gypsum	10 lbs/per cu. yd. of mix
Pre-plant fertilizer	4 lbs/per cu. yd. of mix

Soil to be used as planting medium for the project shall be fertile, well-drained, of uniform quality, free of stones over 1 inch diameter, sticks, oils, chemicals, plaster, concrete and other deleterious materials. On-site soil may be stockpiled for re-use provided it meets all requirements.

- B. Planting Backfill for Date Palms:

Pure, washed plaster sand only. Do not incorporate fertilizer into backfill mix. Apply post-planting fertilizer only.

2.03 PLANT MATERIALS:

- A. Nomenclature: The scientific and common names of plants herein specified conform with the approved names given in "Sunset Western Garden Book ", published by Lane Publishing Company, Menlo Park, California, latest edition. See list of plant material on drawings.
- B. Quality and size of all plants shall be No. 1, of Pinto Tag stock. They shall be vigorous, of normal growth, free from disease, insects, insect eggs, and/or exceed the measurements specified or the American standards for nursery stock. Pinto Tags shall be submitted to the landscape architect.

- D. Container stock (1 gal., 5 gal., and 15 gal.) shall have grown in containers for at least six months, but not over two years. No container plants that have cracked or broken balls of earth, when taken from the container, shall be planted, except upon special approval. No trees with damaged roots or broken balls shall be planted and no shrubs, vines or groundcovers shall be planted that are “pot-bound” or that have damaged roots.
 - E. Pruning shall not be done, prior to delivery, except by written approval.
 - F. Observation of Plant Materials, required by County authorities, shall be a responsibility of the contractor, and where necessary, the contractor shall have secured permits or certificates prior to delivery of plants to site.
 - G. Plants shall be subject to observation and approval or rejection, at the project site at any time before or during progress of work, for size, variety, condition, latent defects and injuries. Rejected plants shall be removed from the project site immediately.
 - H. Substitutions will not be permitted except that if proof is submitted that any plant specified is not obtainable, a proposal will be considered for use of the nearest equivalent size, variety and cost.
 - I. Quantities shall be furnished as needed to complete work as shown on drawings.
 - J. The landscape architect reserves the right to observe root condition of any species, particularly those grown from seed, and if found defective, to reject the plants represented by the defective sample.
 - K. Identify plant species or varieties correctly on legible, weather-proof labels attached securely at the job site. There shall be a minimum of one labeled plant for each 5 plants in a lot.
 - L. Groundcover plants shall be healthy vigorous rooted cuttings grown in flats until transplanting.
- 2.04 HERBICIDE:
- A. Weed Contact Spray, post emergent, systemic product with no soil residual activity formulated as a water soluble liquid containing 50% glyphosate and 14.5% surfactant with surflan additive.
- 2.05 RODENT REPELLENT:
- A. Rodent Repellent: Repellent X or approved equal.
- 2.06 HYDROSEED:
- A. See drawings for hydroseed schedules.

2.07 MULCHING MATERIAL:

- A. Mulching material shall be 3/8" - 1/2" dia. screened fir bark or approved equal, approved in writing, by the landscape architect.

2.08 STAKING MATERIALS FOR TREES:

- A. Double Staking (Triple Staking for High Wind Areas) for Trees from up to 36" Box Size:

- 1. Stakes shall be of lodgepole pine. These shall be straight shafts, shaved and cut clean and bare of branches and stubs, of uniform thickness with a minimum diameter of 2 inches (3 inches in high wind exposure areas), free of loose knots, splits or bends. Stakes shall be no less than eight (8) feet in length.

- B. Tree Tie Materials shall be one of the following:

- 1. Hose wires used for stabilizing trees with stakes, shall be 12 gauge galvanized wire with ultra-violet resistant precut hoses to 10 1/2" and wire precut to 27" or 36" the length necessary per details.
- 2. Twist Braces shall be used in areas with high wind exposure, utilizing twist brace stability bars with the following criteria:

4 1/2" loop diameter by 24" length for 24" box trees

4 1/2" loop diameter by 36" length for 36" box trees

2.09 GUYING MATERIALS FOR TREES 48" BOX SIZE AND GREATER:

- A. Guy wires shall be of pliable, zinc-coated steel of No. 12 gauge.
- B. Anchors (deadman) for holding guy wires shall be of 4 inch by 4 inch (4" x 4") solid lumber, 1'-6" in length, or "duckbill" style anchor materials as shown on the details on the drawings.
- C. Hose for covering wire shall be of 2-ply reinforced rubber, used or new, garden hose type of at least 1/2 inch in diameter.
- D. Warning indicators, to be attached to guys, shall be of 1/2" PVC pipe and four feet long.
- E. Tree ties shall be as stated in section 2.08 above.

2.10 TRIM GUARDS FOR TREES:

- A. Trim Guards shall be made from quality polyethylene with ultra violet inhibitors and ratcheting latching device.

2.11 ROOT BARRIERS FOR TREES:

- A. #UB-24-2 root barriers as manufactured by Deep Root Corp. or approved equal.

PART 3 - EXECUTION

3.01 LEACHING, SOIL CONDITIONING, ROTOTILLING AND FERTILIZING:

A. Deep Water Leaching:

1. After complete installation and testing of the irrigation system, all areas shall be deep water leached and compacted and settled by continuous application of irrigation water until the soil has received a minimum of 12" of water.

2. After leaching operation, soil samples shall be taken by contractor per landscape architect's direction and given to the Owner's soil laboratory for testing. Soil test shall meet the following requirements:

ECe	- Maximum 3.0
pH	- Maximum 7.50
	- Minimum 6.00

3. Deep water leaching shall be done prior to the application of the commercial fertilizer.
4. Care shall be taken that the rate of application of water does not cause erosion or sluffing of soils. Do not undertake leaching operations in expansive soils.
5. All depressions, voids, erosion scars and settled trenches generated by the deep watering shall be filled with conditioned topsoil and brought to finish grade prior to digging planting pits.

- B. After leaching operations and after the areas have been graded, follow the Soil Preparation Conformance procedures per section 1.09. After approval by the Landscape Architect of the requirements in section 1.09, the soil conditioning and amendment materials shall be evenly spread over all planting areas and shall be thoroughly scarified to an average depth of six (6) inches by rototilling a minimum of two (2) alternating passes:

The following materials and quantities are to be used as a basis for bidding, and may be modified based on soil analysis results.

Soil conditioner:	4 cu. yd. per 1,000 sq. ft.
Soil sulphur:	20 lbs/per 1,000 sq. ft.
Iron sulphate:	20 lbs/per 1,000 sq. ft.
Gypsum:	100 lbs/per 1,000 sq. ft.
Pre-plant fertilizer:	20 lbs/per 1,000 sq. ft.

1. Fertilizer shall be incorporated into the top six (6) inches of finish grade. Fertilizer shall be applied after leaching operation.
2. The thoroughness and completeness of the rototilling and incorporation of the soil conditioners/amendments shall be accepted by the landscape architect in writing, prior to digging planting pits. For slopes 2:1 and steeper, or as per the drawings, omit soil conditioner application and rototilling.

3.02 FINISH GRADING:

- A. Finish grades shall be as indicated on landscape and civil drawings. Contractor shall notify landscape architect for a decision should any discrepancies exist between the drawings and site conditions.
- B. Finish grades shall be measured as the final water compacted and settled surface grades and shall be within ± 0.1 foot of the spot elevations and grade lines indicated. Grades adjacent to hardscape shall be within ± 0.01 feet of the grades indicated on the drawings.
- C. Molding and rounding of the grades shall be provided at all changes in slope.
- D. All undulations and irregularities in the planting surfaces resulting from tillage, rototilling and all other operations shall be leveled and floated out before planting operations are initiated.
- E. Take every precaution to protect and avoid damage to erosion control materials, sprinkler heads, irrigation lines, and other underground utilities during grading and conditioning operations.
- F. Final finish grades shall insure positive drainage of the site with all surface drainage away from buildings, walls, and toward roadways, drains and catch basins.
- G. Final grades shall be accepted by the landscape architect/Owner's representative in writing on company letterhead prior to digging planting pits and/or before planting operations will be allowed to begin.
- H. Planting surfaces shall be graded with no less than 2 percent surface slope for positive drainage.

3.03 PLANTING:

- A. The layout of locations for plants and outlines of groundcover beds to be planted shall be accepted by the landscape architect in writing prior to digging plant pits for planting. All such locations shall be checked by the contractor for possible interference with existing underground piping prior to excavation of holes. If underground construction or utility lines are encountered in the excavation of planting areas, other locations for the planting may be selected by the landscape architect at no additional cost to the owner. Damage to existing utilities shall be the responsibility of the contractor.

B. Planting Trees, Shrubs and Vines:

1. All excavated holes shall have vertical sides with roughened surfaces and shall be of the minimum sizes indicated on drawings. Holes shall be, in all cases, large enough to permit handling and planting without injury or breakage of root balls or roots.
2. Excavation shall include the stripping and stacking of all acceptable soil encountered within the areas to be excavated for plant pits and planting beds. Protect all areas that are to be trucked over and upon which soil is to be temporarily stacked pending its re-use for the filling of holes, pits and beds.
3. Excess soil, generated from the planting holes shall be spread evenly on the site within the tolerances indicated in section 3.02, or as directed by the landscape architect.
4. The plants shall be planted at approved locations with the heretofore specified plant pit fertilizer and soil planting backfill. Place plant pit fertilizer after two thirds of backfill material is installed at the rates specified by the manufacturer and soils report.
5. The plants shall be placed in the planting pits, which have been hand-tamped, and water settled to the rootball base levels prior to the placement of the plants. After setting the plants, the remaining backfill material shall be carefully tamped and settled around each rootball to fill all voids.
6. Each tree and shrub shall be placed in the center of the hole and shall be set plumb and held rigidly in position until the planting backfill has been tamped around each rootball.
7. All plants shall be set at such a level that after settling they bear the same relationship to the surrounding finish grade as they bore to the soil line grade in the container, unless otherwise noted.
8. No plant will be accepted if the rootball is broken or cracked, either before, during, or after the process of installation.
9. Plants shall be thoroughly watered into the full depth of each planting hole immediately after planting.
10. Install shrubs and vines as shown on the drawings.
11. For 1 gallon trees, utilize pre-installed nursery stakes if stakes are in good condition as described above. Broken, cracked and/or unsecured nursery stakes will not be allowed. If new stakes are required, install stakes with materials as specified as shown on the drawings.

12. For trees up to 36" Box size, install tree stakes with materials specified and as shown on the drawings. The stakes shall be driven in plumb and secure. Special care shall be taken that the driving in of the stake does not damage the tree roots or rootball. Tree ties shall be fastened to each stake by tacking the wire tie to the stake. Protective hoses shall be in contact with all tree trunk or branch areas per the details on the drawings.
13. For trees 48" Box size and greater guy all trees with the materials specified and as shown on the drawings.
14. The staking and guying shall be accomplished in such a manner as to insure the proper and healthy growth and the safety of the plants, property, and the public.
15. The contractor shall be responsible for all surface and subsurface drainage required which may affect his guarantee of the trees, shrubs, and vines.
16. Pruning after planting shall be required on all trees, shrubs, and vines when necessary to provide the specified or approved standard shapes, form and/or sizes characteristic to each plant. Pruning may include thinning, and/or cutting and shall be under the direction of the landscape architect or certified arborist.
17. Install tree guards on all trees within turf areas.

C. Planting Groundcovers:

1. Groundcovers shall be planted in the areas indicated on the drawings. The groundcover plants shall be rooted cuttings grown in flats and shall remain in those flats until transplanting.
2. All groundcover plants shall be planted with soil around roots in staggered row, evenly spaced at the intervals called out on the drawings.
3. The groundcover plants shall be planted sufficiently deep to cover all roots.
4. The groundcover planting area shall be hand smoothed after planting to provide an even, smooth final finish grade.

3.04 HYDROSEEDING:

- A. Hydroseeding shall be applied in the areas indicated on the drawings in accordance with the mix specified on the drawings.
- B. Hydroseeding Equipment: Hydraulic equipment used for the application of fertilizer, seed, and slurry of prepared wood pulp or fiber with tackifiers as specified on the drawings. This equipment shall have a built-in agitation system with an operating capacity sufficient to agitate, suspend, and homogeneously mix a slurry containing 1,200 pounds of mulch and seed. The slurry distribution lines

shall be large enough to prevent stoppage and shall provide even distribution of the slurry. The slurry tank shall have a minimum capacity of 1,350 gallons and shall be mounted on a traveling unit, which will place the slurry tank and spray nozzles within sufficient proximity to the areas to be sprayed so as to provide uniform distribution without waste.

- C. Application Method: Using the wood pulp as a guide, spray the soil with a uniform visible coat of slurry. The slurry shall be applied in a sweeping motion, in an arched stream, so as to fall like rain allowing the wood fibers and tackifiers to build upon each other, until a complete, even coverage coat is achieved.
 - D. Hydroseeded areas shall be kept moist at all times 20-24 days after planting or until the new growth of the plants are sufficiently well established.
 - E. Hydroseeded areas shall be protected against foot traffic and other use immediately after hydroseeding is completed by placing warning signs and temporary twine and flagging around the areas.
 - F. Re-hydroseeding of bare areas shall be done 30 days after initial application at no additional cost to the owner.
- 3.05 HERBICIDE APPLICATION:
- A. Herbicide or pesticide applications shall be performed only by personnel licensed for such work by the State of California.
- 3.06 RODENT REPELLENT:
- A. Once plants have been planted and watered in, apply rodent repellent for plants indicated on plant legends on the drawings around the entire perimeter of the planting area at application rates and with methods as specified by the manufacturer.
- 3.07 MULCHING:
- A. Landscape areas other than those hydroseeded or planted with turf shall be covered with the specified mulching material to the minimum depth indicated on the drawings.
- 3.08 CLEAN-UP:
- A. As the project progresses on a daily basis, the contractor shall maintain all areas in a neat manner and remove unsightly debris as necessary, remove all debris and containers used in accomplishing work and sweep and clean all sidewalks, asphalt, and concrete areas adjacent to plantings.
- 3.09 SITE OBSERVATION & WALK-THROUGHS FOR SUBSTANTIAL COMPLETION:
- A. General Observation: The landscape architect will visit the construction site at interim times during the construction process to access construction progress regarding installation of landscape material to be in compliance with the

drawings, details, specifications and site conditions. The landscape architect will prepare a site report after each visit noting progress of installation, verbal communication with the contractor and identifying any field adjustments necessary that require modifications to the designed landscape. A copy of this site report will be delivered to both the owner and the contractor. The contractor is responsible to immediately address each item on the site report before proceeding with further construction.

B. Walk Through For Substantial Completion (Punch List #1):

1. Before requesting a walk through for substantial completion the following requirements must be entirely satisfied:
 - a. The entire planting area is completely installed, and when letters of acceptance as described above have been obtained from the landscape architect and/or owner's representative. If the contractor failed to notify the landscape architect for any of the above items as listed above then the contractor assumes full responsibility for any design modifications directed by the landscape architect during the walk through for substantial completion any of these issues at no additional cost to the owner.
 - b. All invoices, pinto tags and receipts have been delivered to the landscape architect and/or owner's representative.
2. Once the above requirements have been met a walk through for substantial completion may be requested. The following procedures will be used during the walk through:
 - a. Contractor must have (2) two personnel available with radio communication for the entire length of the walk through.
 - b. A visual walk through of the entire site will take place consisting of an examination of planting areas as compared to the drawings, and installation procedures as shown on the details and specifications. A punch list will be established of deficiencies in the construction and workmanship of the landscaped area as compared to the construction drawings, details, and specifications.
3. Once the Walk Through for Substantial Completion has been completed the landscape architect will provide a copy of all punch list items to the owner for review and distribution to the contractor. It is the contractor's responsibility to repair, replace, and adjust all items on the punch prior to requesting a final walk through.

C. Final Walk Through:

1. Before commencement of a final walk through is requested, each item on the walk through for substantial completion (punch list #1) must be thoroughly satisfied, addressed, and resolved by the contractor.

2. Once the above requirement has been met a final walk through may be requested. The following procedures will be used:
 - a. Contractor must have (2) two personnel available with radio communication for the entire length of the walk through.
 - b. Unless new issues arise between walk throughs, only those items as indicated on the walk through for substantial completion punch list will be addressed. This visual walk through will consist of walking through the punch list items created at the time of the walk through for substantial completion, and examining outstanding items. Any remaining deficiencies in the construction and workmanship of the landscape as compared to the punch list generated at the time of the walk through for substantial completion, construction drawings, details and specifications will be noted.
3. Once the Final Walk Through is completed and all items created on the final punch list have been addressed, the Maintenance Period may begin. Any additional walk throughs required due to contractors' inability to address all issues on the punch lists described above will be provided at the contractor's expense.

3.10 MAINTENANCE PERIOD:

- A. The Maintenance Period shall last for ninety (90) days after notification from the landscape architect of a successful final walk through and will begin once all items on the final walk through punch list have been satisfactorily addressed by a written statement indicating such from the landscape architect to the owner.
 1. The contractor is responsible for obtaining and following any maintenance manuals created specifically for the project from the owner at the beginning of the maintenance period.
 2. Once the contractor has fulfilled all maintenance agreement obligations the maintenance period will end see section 320533 Landscape Maintenance, for maintenance responsibilities.

END OF SECTION 329300