Specifications for Plant Installation

LANDSCAPE SPECIFICATIONS
Specifications for: _____
Job Location: _____
Revision May 18, 2005

1.0 GENERAL:

1.1 DESCRIPTION OF WORK:

A. Extent of landscape development work is shown on the Drawings and in the Schedules.

B. The work consists of furnishing all plants, materials, equipment, necessary specialties and labor required for the installation of plant and other materials as shown on the Drawings and/or in the Specifications.

C. Excavation, filling and grading required to establish elevations shown on the Drawings are not specified in this Section. Refer to earthwork Section.

1.2 REFERENCE PUBLICATIONS: The following standards form a part of the Specifications:

A. Florida Department of Agriculture "Grades and Standards for Nursery Plants", most recent edition.

B. American Joint Committee on Horticultural Nomenclature "Standardized Plant Names Dictionary"

C. "The Manual of Cultivated Plants" (L.H. Bailey 1949 edition).

D. The American Standard for Nursery Stock" (1973 edition).

1.3 INSTALLER QUALIFICATIONS:

A. The Contractor shall be regularly engaged in the installation of living plant material. Labor crews shall be controlled and directed by a landscape foreman well versed in landscape installation, plant materials, reading blueprints and coordination between the job and nursery and shall be able to communicate with the Owner and the Landscape Architect.

B. The Contractor shall be licensed and shall carry any necessary insurance and shall protect the Landscape Architect and Owner against all liabilities, claims or demands for injuries or damage to any person or property growing out of the performance of the work under this contract. All workers shall be covered by Workmen's Compensation Insurance.

1.4 SUBMITTALS:

A. Provide Certificate of Inspection of plant material as required by governing authorities. Comply with regulations applicable to landscape materials.

B. Before starting work, provide itemized price schedule of the work to be performed, availability issues and certificates of insurance to the Landscape Architect for transmittal to the Owner.

C. Label at least one tree and one shrub of each variety with a securely attached waterproof tag bearing legible identification of the botanical and common name.

D. Maintenance Instructions: Prior to end of the maintenance period, furnish three copies of written maintenance instructions to the Landscape Architect for transmittal to the Owner for maintenance and care of installed plants through their full growing season.

1.5 COORDINATION:
A. Coordinate and cooperate with other trades and contractors to enable the work to proceed as rapidly and efficiently as possible. NOTE: a rust free, automatic underground irrigation system installed in accordance with requirements of the Building Code, include a rain-sensing cutoff device, providing 100% coverage with 50% overlap.

B. Irrigation work shall normally precede plant installation. Install trees, large B&B material, shrubs and ground cover plants before lawns are installed.

B. Commencement of Work: Landscape Contractor shall notify Landscape Architect at least 7 days in advance of scheduled commencement of work. Landscape Contractor shall review plans and/or field layouts with Landscape Architect at least 2 days prior to installation or on the site as needed.

1.6 INSPECTION OF SITE:

A. Prior to the award of the contract, the Contractor shall acquaint himself with all site conditions. Should utilities or other improvements not shown on the Drawings be found during excavations, Contractor shall promptly notify the Landscape Architect or Owner for instructions as to further action. Failure to do so will make Contractor liable for any and all damage arising from his operations subsequent to discovery of such utilities not shown on Drawings.

1.7 PROTECTION OF EXISTING PLANTS AND SITE CONDITIONS:

A. The Contractor shall provide, install and maintain the of necessary precautions to protect all persons and property, including the general public from harm or injury due to the work.

B. The Contractor shall take precautions to protect existing site conditions. Should damage be incurred, the Contractor shall repair the damage to its original condition at no additional charge.

1.8 CHANGES IN THE WORK:

A. The Owner reserves the right to substitute, add or delete any material or work as the work progresses. Adjustment to the Contract Sum shall be negotiated prior to execution. When unit prices have been established, they shall prevail.

1.9 OWNER'S OBSERVATION:

A. The Landscape Architect or Owner assumes no responsibility in the supervision or inspection of the work involved in the execution of this contract beyond observation to insure, to the Owner's satisfaction, that the Drawings and Specifications are being properly interpreted. This observation and checking will not relieve the Contractor of any responsibility for the performance of his work in accordance with the Drawings and the Specifications (including planting depth or other deficiencies).

B. The Landscape Architect and Owner reserve the right to reject any portion of the work, material or workmanship which does not conform to the Contract Documents. Rejected work shall be removed and/or corrected at the earliest possible time and prior to final payment.

1.10 JOB CONDITIONS:

A. Obstructions: The Contractor shall exercise care in digging and other work so as not to damage existing work, including underground pipes, sprinklers, control cables and hydrants of watering system. Should such overhead or underground obstruction be encountered which interferes with planting, the Landscape Architect shall be consulted and will adjust the location of plants to clear such obstructions. The Contractor shall be responsible for the immediate repair of any damage caused by his work.

B. After notice to proceed the contractor shall complete landscape work as rapidly as portions of site become available. Perform actual planting only when weather and soil conditions are suitable in accordance with locally accepted practice.

C. Coordinate landscape and planting work with the irrigation (sprinkler) system and sod installers landscape installer shall insure that no plantings will interfere with the proper functioning of the sprinkler system. Where circumstances seem to justify his doing so, the landscape installer shall point out to the irrigation installer situations where minor adjustment or relocation or addition of sprinkler heads may be most beneficial for the planting as a whole.

D. Irrigation- the Landscape contractor shall verify the installation of an automatic sprinkler system to cover 100% of the specified landscape areas including all planting islands, isolated beds and sodded areas.

E. Sight triangles: Check an adhere to local codes as a minimum all plant material located within a triangle (15'x15'x12' meters) on 2 sides) formed by traffic intersection points shall be trimmed and maintained to provide a visual opening between 3' (.9144m) and 6' (1.828m).

1.11 ACCEPTANCE:

A. Early acceptance of the work may be obtained for approved phases or when the time between commencement of the work and substantial completion exceeds 180 days (at no fault of the contractor). Early acceptance of work requiring an inspection of the completed landscape work by the Landscape Architect and/or the Owner. Maintenance and guarantee periods for the phase or area shall commence with such early acceptance

C. Substantial Completion of the Work is the point in construction is sufficiently complete, in accordance with the Contract Documents and the Landscape Architects certification that the Owner can utilize the work as intended.

D. Final Completion is the completion of all work included in the Contract Documents except the Contractors responsibility to correct the work to the satisfaction of the Owner and the Landscape Architect.

1.12 CORRECTION OF THE WORK:

A. For a period of twelve months from the date of acceptance, all new plant materials except grass shall be alive and healthy, upright and in satisfactory growth for each specific kind of plant. There shall be no signs of nutrient deficiency, disease or insect infestations.

B. Plants which are rejected shall be replaced or corrected within two weeks of rejection. Replacement material shall be the same species, size and quality as called for in the Contract. A new correction of the work period of twelve months shall begin upon replacement and acceptance by the Landscape Architect of all replacement plants, this includes plants which are discovered at any time to have been planted at an improper depth.

C. The Installer shall repair damage to other plants or lawns during plant replacement at no cost to the Owner.

D. Plants which have been approved and subsequently die or are damaged by washout, wind storm, traffic, vandalism, or demonstrable failure of the Owner to maintain after Substantial Completion of the Work is not covered in the correction of the work provision

2.0 PRODUCTS

2.1 MATERIALS LIST:

A. Plant species and size shall conform with the Plant List and information noted on the Drawings.

B. The quantities given in the Plant List are intended for the convenience and as a guide for the bidder and does not relieve the bidder of his responsibility to do a comprehensive plant take off from the Drawings. Information on the drawings control.

2.2 PLANT MATERIALS:

A. All plant material shall be nursery grown unless otherwise noted. Plants shall be graded Florida No. 1 or better and shall be sized as outlined under Grades & Standards for Nursery Plants, State Plant Board of Florida. Coconut Palms shall be grown from certified seed

B. Collected material when specified or approved shall be in good health, free from disease, insect or weed infestation. Testing may be required at the discretion of the Landscape Architect and/or the Owner and shall be provided at no additional cost.

C. Plants materials must equal or exceed the measurements specified in the plant list, which are the minimum acceptable sizes. Those plants specified as specimens are to be approved by the Landscape Architect before being brought to the site. Unless otherwise noted on the drawings, these plants shall be Florida Fancy.

D. Height of plant materials shall be measured from the top of the ball to the top of the plant with branches (or fronds) in normal position. Their width shall be measured across the normal spread of the branches (or fronds). In the case of type palms, the main trunk shall meet the height requirement and all other trunks shall be 3/4 or more of the required height unless otherwise noted on the drawings.

E. Plants that meet the height requirements, specified, but do not have the normal balance of height and spread typical for the respective plant, shall not be accepted.

F. Abbreviations on the Drawings are as follows:

B&B - Indicates field grown plant "balled and burlapped".
Cal - Indicates the caliper or diameter measured 6" (152.4 mm) above the soil line until 4" (88.4 mm) diameter then at 12" above the soil line.
CT - Indicates clear trunk measurement from top of ball to first branching.
CU - Indicates clear wood, in palms the distance from the soil line to the lowest living frond leaflobate.
DBH - Indicates the caliper or diameter measured 4 feet (122 meters) above the soil line
GU - Grey Wood, in palms, mature trunk from the ground to the base of the crown shaft.
OA - Indicates overall height from top of ball to the top of current season's growth or the last open frond in normal position in palms.
Spr. - Indicates spread or the average distance across the average diameter of the plant branching.

G. Plant materials in containers shall have a well established root system and shall not be root bound. All plant materials not in containers shall be balled and burlapped and dug with a firm natural ball of earth. Balls shall be firmly wrapped with burlap or similar biodegradable materials and bound with twine, cord or wire mesh. The minimum ball sizes will be in accordance with "Grades & Standards for Nursery Plants". No plant shall be accepted if the root ball has been cracked or broken. The balls of balled and burlapped plants which cannot be planted immediately on delivery shall be protected from drying winds and sun. Where symetry is required, match plants used as nearly as possible to the satisfaction of the Landscape Architect.

F. Substitution: Plant substitution requests by the Contractor will be considered by the Landscape Architect only upon submission of proof that the plant is not obtainable in the type and size specified. Should the specified plant indeed not be available, the Landscape Architect shall determine the nearest equivalent replacement in an obtainable size and variety. The unit price of the substitute item shall not exceed the bid item replaced, without approval of the Owner.

2.3 PLANTING SOIL:
A. Planting soil for trees and shrubs shall be sandy loam and shall contain a 25% minimum amount of decomposed organic matter. Planting soil shall be free of clay, stones, plants, roots, and other foreign materials which might be a hindrance to planting operations or be detrimental to good plant growth. It shall have a pH between 6.0 and 7.0. Soil shall be delivered in a loose friable condition and applied in accordance with the planting specifications.

B. Palm planting soil shall consist of clean sand and back fill.

2.4 PEAT:
A. Peat shall be horticultural peat composed of not less than 60% decomposed organic matter by weight, on an oven dried basis. Peat shall be delivered to the site in a workable condition free from lumps.

2.5 WATER:
A. Water for planting will be available at the site and shall be provided by the Owner.

2.6 COMMERCIAL FERTILIZER:
A. Commercial fertilizer shall be an organic (8-4-12) fertilizer containing nitrogen, phosphoric acid and potash. Nitrogen shall be not less than 50% water insoluble. Inorganic chemical nitrogen shall not be derived from the sodium form of nitrate. Iron shall be in the chelated form, not be less than 2% and magnesium shall not be less than 4%. Fertilizers shall be delivered to the site unopened in original containers, each bearing the manufacturer's guaranteed analysis. Submit a copy of the manufacturer's guaranteed analysis and proof of delivery. Any fertilizer that becomes caked or otherwise damaged is unacceptable.

2.7 MISCELLANEOUS LANDSCAPE MATERIALS:
A. Mulch: Except as otherwise specified, mulch shall be shredded cypress bark mulch -grade "A", it shall not contain sticks larger than 1 inch (25.4 mm) in diameter, stones or other foreign material that will prevent its eventual decay. This shall be applied to all planted areas where indicated so that, after installation, the mulch thickness will not be less than 3" (76.2 mm).

B. Gravel Mulch: Use only where specifically indicated on the plans of the size and type shown. Unless otherwise specified it shall be water-worn, hard, durable gravel, washed free of loam, sand, clay and other foreign substances. It shall be a minimum of 2" (44.2 mm) deep and shall be contained with gravel stops. It shall be a maximum of 1-1/2" (38.1 mm), a minimum of 3/4" (19 mm) and of a readily-available natural gravel color range.

C. Braces, Stakes and Guys: Provide braces, stakes and deadman of sound new hardwood or treated softwood, free of knot holes and other defects. Provide wire ties and guys of two-strand, twisted, pliable galvanized iron wire not lighter than 12 gauge. Provide new hose cut to required lengths to protect tree trunks from damage by wires. Hose shall be not less than 1/2" (12.7 mm) dia. Rebar stakes shall not be used.

D. Microbial Additives: An approved inoculate blend containing a minimum of eight strains of endo and ecto mycorrhizae with a minimum of 1000/2000 and 100 million spores per pound respectively such as Mycostim by Organic Laboratories, Inc. and an approved inoculate blend containing a minimum of 45 beneficial soil bacteria including Trichoderm and Gliocladium with a minimum concentration of 1000 billion CFU per pound such as PGA Plus by Organica, Inc. Apply at manufacturers recommended rates. Material shall be delivered to the site unopened in original containers, each bearing the manufacturer's guaranteed analysis. Submit a copy of the manufacturer's guaranteed analysis and proof of delivery. Any inoculants that becomes caked or otherwise damaged is unacceptable and shall not be used.

3.0 EXECUTION

3.1 SITE PREPARATION:
A. Erosion Control: All erosion control measures are to be constructed to meet field conditions at the time of construction and prior to any grading or disturbances of existing surface material on site. All sediment will be prevented from entering any storm drainage system through the use of silt fences, straw bales, gravel berms or other applicable methods. The Contractor shall be responsible for mitigating all sediment leaving the site and taking appropriate corrective measures. Sediment control measures shall be in working order after each day.

B. Rough Grading & Drainage: The Contractor shall verify all existing grades in the field and report any discrepancies immediately to the Landscape Architect. The Contractor shall be responsible for providing positive site drainage away from all structures including but not limited to planters, courtyard planting areas, hardscape surfaces and architectural elements. It shall be the General Contractors responsibility to provide drainage, proper sealing, downspouts and all water retention areas as required by applicable codes. Once grading operations are completed, all disturbed areas within or outside the limits of work shall be stabilized by fine grading and seeding or mulching as directed by the Landscape Architect.

C. Fine Grading & Drainage. It shall be the responsibility of the Contractor to finish grade (min. 6" below adjacent FFE.). Finish grades in planting areas shall be one inch lower than adjacent paving and are to include two inches of mulching and four inches of planting soil. Neu earthwork shall blend smoothly into existing earthwork, and grades shall pitch evenly between spot grades. All planted areas must pitch to drain at a minimum slope of 1/4" per foot. Any discrepancies not allowing this to occur shall be reported to the Landscape Architect prior to continuing work.

D. Berming. Berming shall not be placed within 10' of any existing tree nor will it be allowed to encroach upon any utility, drainage, or maintenance easement. Berming shall not impede or obstruct any necessary swales needed to drain other areas for the property.

E. Removal of Rubbish: Should any objectionable materials such as stones or construction debris be encountered during planting operations, they shall be promptly removed from the site by the landscape installer.

3.2 PROTECTION OF PLANTS:
A. Root Protection: Balled and burlapped plants: plants designated "B&B" (balled and burlapped) shall be dug with firm natural balls of earth of sufficient diameter and depth to encompass the fibrous and feeding root system, necessary for full recovery of plant. Balls shall be firmly wrapped with burlap or similar Biodegradable materials and bound with twine, cord, or wire mesh. All collected plants other than Cabbage Palms (Sabal palmetto) shall be balled and burlapped.

B. Container Grown Plants: Plants grown in containers will be accepted as "B&B", providing that all other specified requirements are met. Container grown plants shall meet plant sizes as specified on the plant list and on the Drawings, and shall not be governed by container sizes. Minimum root balls of container grown material shall be no more than 25% less proportionately than that stated in "Grades & Standards" for nursery plants. These plants shall have been grown in the container for a minimum of two years prior to installation and shall exhibit a fully developed root system throughout when removed from the container. There shall be no circling roots.

C. Protection During Transporting: All plant material shall be protected from possible bark injury or breakage of branches. All plants transported by open trucks shall be adequately covered to prevent windburn, drying or damage to plants.

D. Protection After Delivery: Plants which cannot be planted immediately on delivery to the site shall be covered with moist soil, mulch, or other protection from the drying of wind and sun. All plants shall be watered as necessary until planted. Storage period shall not exceed 72 hours.

E. Protection of Palms (If Applicable): Only a minimum of fronds shall be removed from the crown of the palm trees to facilitate moving and handling. Cabbage Palms shall be "Hurricane Cut". Clear trunk shall be as specified after the minimum of fronds have been removed. Cabbage Palms shall be taken from moist, "black" growing areas. All burn marks on Cabbage Palm trunks shall be removed, however excessive grinding will not be accepted.

F. Protection During Planting: Trees moved by winch or crane shall be thoroughly protected from chain marks, girdling or bark slippage by means of burlap, wood battens or other approved methods.

G. Plants that show girdling or bark slippage or other damage are unacceptable.

3.3 PLANTING OPERATIONS:

A. Layout: Location for plants and outlines of areas to be planted are indicated on the Drawings. All plant locations shall be staked in the field by the Contractor, to the satisfaction of the Landscape Architect. Notify Landscape Architect and Owner for directions if installation requires the addition of soil over root balls or existing roots, or where construction or utilities below ground or overhead are encountered, or where changes have been made in the construction - DO NOT PROCEED - Necessary adjustments will be directed by the Landscape Architect.

B. All planting holes shall have straight, vertical sides and flat horizontal bottoms. The diameter of a hole shall not be less than twice the diameter of the root ball or 24 inches (609.6 mm) greater than the root ball whichever is smaller. The depth of a hole shall not be deeper than the root ball. The space around the root ball, within the hole, shall be filled with the specified planting soil. Air pockets shall be eliminated and the soil compacted by watering, insure that planting soil is thoroughly mixed with native soil.

C. All plants shall be installed in accordance with the best horticultural practice. Trees and shrubs, except as otherwise specified, shall be set in the proper amount of planting soil in the proper size of planting pit as specified above so that the top surface of the root ball will be flush with the final grade grade allowing for 2" (44.1 mm) of mulch. Insure adequate percolation. Set plants straight or plumb 4 faced, in locations shown on the Drawings. Do not distribute excess soil in the planting beds after bed plants have been installed.

D. Balled and burlapped plants are set with the bottom 1/3 of the planting pit backfilled with existing soil. Remove burlap, rope, wires, etc. from the top of the balls, but do not remove burlap from underneath. All material shall be biodegradable and no material shall encircle the trunk. Complete backfilling with planting soil, then thoroughly mix with native soil and water to remove voids. After planting has been completed, form a wall around each plant extending to the limits of the pit.

E. Container Grown Plants: Container grown plants shall when delivered, have sufficient growth to hold earth intact when removed from container and shall not be root bound. Plant pits for container materials shall be formed flat on the bottom to avoid air pockets at the bottom of root balls and containers shall be removed carefully to prevent damage to plant or root system.

F. Backfilling: When the plant pit has been excavated as specified above and the plant has been set, the pit shall be backfilled with soil mix to which mycorrhizae and soil bacteria have been added at the manufactures recommended rates (see 2.7d). The following minimum rates of soil mix applyt one-half cubic yard per tree and one cubic yard per fifty shrubs or 2@0 sf. of planting bed area.

G. Setting Trees and Shrubs: Unless otherwise specified, all trees and shrubs shall be planted in pits, centered and set plumb with the best face turned to the finished grade level of the plant and shall be the same as that at which the plant was grown. They shall be planted upright, and faced to give the best appearance or relationship to adjacent structures. Along slopes a set shall be formed so that the root ball is level. No burlap shall be pulled out from under the balls. Platform, wire and surplus binding from top and sides of the balls, shall be removed. All broken and frayed roots shall be cut off cleanly. Soil shall be placed and compacted thoroughly, avoiding injury and shall be settled by watering. No filling around trunks or on top of root balls will be permitted. After the ground settles, additional soil shall be added in to the level of the finished grade allowing for 2" (44.1 mm) of mulch. Form a shallow saucer around each plant by placing a ridge of soil along the edge of the plant pit. This ridge shall be 1" (22 mm) high for each 1" (22 mm) caliper of trunk to a maximum of 4" (88.2 mm). Specimen trees and Palms shall be equipped with temporary (supplemental) irrigation (bubblers) as required.

H. Setting Palms: All palms shall be planted in sand thoroughly washed in during planting operations and with a shallow saucer depression left at the soil line for future watering. Saucer areas shall be top dressed 2" (44.1 mm) deep with topsoil raked and left in a neat clean manner.

I. Pruning: Remove dead and broken branches from all plant material. Prune to retain typical growth habit of individual species with as much height and spread as is practicable. "Head back" or "Hat Rack" cuts, right angle to line of growth, will not be permitted and trees will not be poled or topped.

J. Guying and Staking: Guy and stake all trees, including palms, immediately after planting. Trees less than 1 1/2" (38.1 mm) in caliper shall be staked. Stakes shall be clearly marked. Guy all trees 1 1/2" (38.1 mm) in caliper and greater but less than 12' OA in 4 directions with double strands of No. 12 galvanized wire attached to approved anchors driven below grade. Trees over 12' OA shall be braced with neu lumber stained walnut brown. When securing wires to trees, cover all wires which may come in contact with any part of tree with neu rubber hose. Place guys and braces not less than 1/3 of the height of tree above finished grade and above substantial limbs 1 inch (25.4 mm) in diameter or more, if possible. All hoses shall be installed before the tree trunk. Guy wires shall be placed in white PVC 5/8" OD sleeves 2/3's of their length. Place anchors so that guys are equally spaced and at 45 degree angles to horizontal. Keep guys tight until Substantial Completion. Guying, bracing, staking shall not interfere with use of paved areas.

K. In staking palms and broadleaf trees, no nails or other fasteners shall directly penetrate the trunk. Wood battens 12 inches (304.8 mm) long, separated from trunk by burlap attached to the trunk of the trees with metal banding. Stakes and braces shall be clearly marked and can only be nailed to the wooden battens. Alternate methods of guying or staking may be employed with the prior approval of the Landscape Architect.

L. Mulching: All trees and shrub beds shall be mulched immediately after planting, to a 3 inch (76.2 mm) depth, with a mulch approved by the Landscape Architect. Prevent uind displacement of mulch by thoroughly settling down.

M. Planters: Place filtration/separation fabric over 4" drain gravel and fill with a minimum of 16" deep planting soil mixture consisting of 5 parts course sand, 2 parts peat humus, and 3 parts pine bark with micro organisms, see 2.7D. Place soil in lightly compacted layers to an elevation 1 1/2 inches (38.1 mm) below top of planters allowing for natural settlement.

N. Annual or seasonal color beds: Remove 8" to 10" (254 mm) of soil and replace with planting soil mixture consisting of 2 parts top soil, 1 part pine bark mulch (1/2" (12.1 mm) places), 1 part course sand and 5 pounds (18662 kg) composted cou nanure per cubic yard (.76459 cubic meters).

O. Excess Excavated Soil: Excess excavated soil generated by planting operations shall be removed from the site by the Contractor and off of the owner's property unless directed by the Owner.

P. Relocation of Existing Materials: Landscape contractor shall root prune trees which are to be relocated in accordance with approved horticultural practices. The relocated plant shall have foliage reduced and be provided with supplemental irrigation to the remaining leaf surface. Coordinate and get Project Architects approval of exact neu location

3.4 SOD (When Applicable)

A. Unless otherwise specified on the Drawings, sod shall be St. Augustine grass - Floritan. The sod area shall be all areas not otherwise identified and shall include the area beyond the property line to the edge of pavement and/or the edge of water.

C. Fine Grading & Drainage: It shall be the responsibility of the Contractor to finish (fine) grade all landscaped areas, eliminating all bumps, depressions, sticks, stones and other debris to the satisfaction of the Landscape Architect, prior to the application of sod.

D. Contractor shall be responsible for providing and maintaining positive drainage flows away from all building and pavements to the appropriate discharge or collection points. If supplemental topsoil is to be spread, it shall not exceed 4" (101.6 mm) unless specified otherwise. Grade shall be adjusted to create a smooth transition between neu and existing sod areas.

E. Quantities: Any quantities shown on the Drawings or given in the Plant List are intended for the convenience and as a guide for the bidder and does not relieve the bidder of his responsibility to do a comprehensive plant take off (measurement) from the Drawings or in the field. Contractor shall be responsible for sodding all areas as noted on drawings. Contractor shall verify all final sod quantities in the field prior to ordering, including any necessary adjustments for shrinkage/coverage variables.

F. Quantity: Sod shall be graded #1 or better. Sod shall be loam or muck grown with a firm, full texture and good root development. Sod shall be thick, healthy and free from defects and debris including but not limited to weed types, insects, fungus, diseases and contamination by weeds, other grass varieties or objectionable plant material.

G. Sod places shall be 18" x 24" minimum size in unbroken, cohesive sections.

H. Before being cut and lifted, the sod shall have been moued at least three times with a lawn mower, with the final moving not more than 1 days before the sod is cut.

I. Solid sod shall be laid with closely abutting joints with a tamped or rolled, even surface. It shall be the responsibility of the Contractor to bring the sod edge in a neat, clean manner to the edge of all paving and drive areas. If, in the opinion of the Landscape Architect, top-dressing is necessary after rolling, clean sand will be evenly applied over the entire surface and thoroughly washed in without additional charge.

J. Sod along slopes shall be pegged to hold sod in place along slopes or banks a wood peg acceptable to the Landscape Architect shall be used at no additional cost to the Owner.

3.5 CLEAN UP:

A. Sweep and wash paved surfaces.

B. Remove planting debris from project site. Insure all plant material is free of damaged branches, flagging tape and other temporary materials.

C. Lawn areas damaged by planting operations shall be repaired at once by proper seed bed preparation, fertilizing and seeding or sodding in accordance with these specifications.

D. Walks, drainage pipes or other structures damaged by this Contractor shall be repaired with comparable materials and workmanship as the original.

3.6 MAINTENANCE:

A. Begin maintenance immediately after each item is planted and continue until final inspection and acceptance. Areas completed under "Early Acceptance" of the work or approved phases of the work shall be maintained for an additional 180 days or until final acceptance of the work which ever occurs first.

B. Maintain a healthy growing condition by watering, pruning, spraying, weeding, mowing, insect treatment, disease treatment, micro organisms applications and other necessary maintenance operations.

C. All trees shall be deep-watered for a period of ninety days after installation.

D. Replace inpaired or dead plants promptly. Do not wait until near the end of the correction of the work period to make replacements of plants which have become undesirable.

E. Inspect plants at least once a week and perform maintenance promptly with no additional cost to the owner.

F. Keep planting saucers and beds free of weeds, grass, and other undesirable vegetation growth.
G. Remove soil ridges from around watering basins prior to end of maintenance period as directed by Lands

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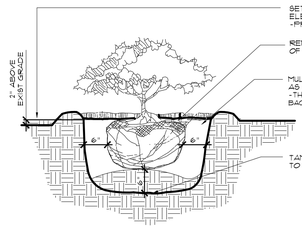
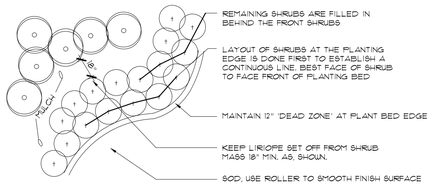


A Shrub Planting
n.t.s.



B Shrub / Groundcover Layout
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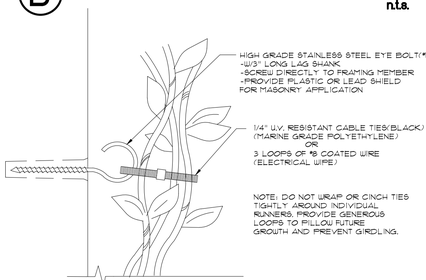
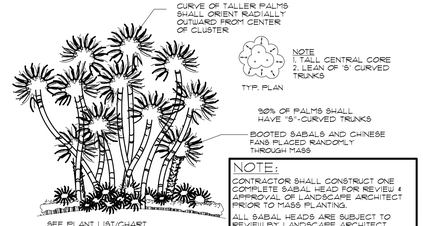
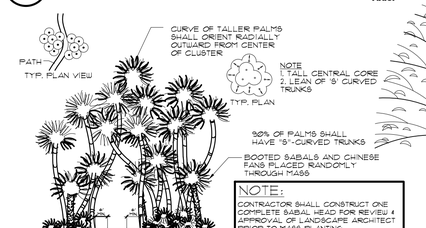


C Vine Attachment
n.t.s.



SEE PLANT LIST/CHART FOR SABAL HEAD COMPOSITION.
NOTE: SABALS SHALL NOT BE LEANED TOWARD HOMES OR STRUCTURES

D Sabal Head
n.t.s.



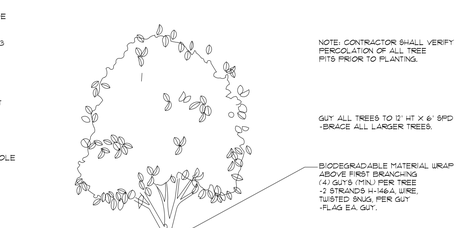
SEE PLANT LIST/CHART FOR SABAL HEAD COMPOSITION

E Sabal Head w/ Path
n.t.s.

CAUTION: PLEASE NOTE

Contractor shall secure all permits required for the work from any state or local departments, utility companies or jurisdiction affected by the work. The Contractor shall have permits "in hand" prior to starting work. The Landscape Architect and/or Owner shall bear no responsibility for work performed without permitted drawings. The Contractor shall be responsible for all changes to work, at no additional cost to Owner, as a result of unauthorized work prior to receipt of permit.

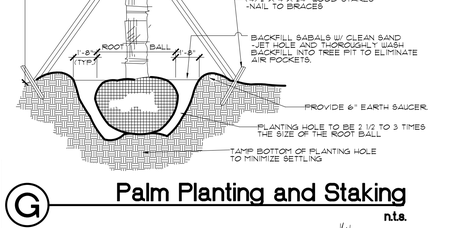
TEST AND AMEND ALL SOILS AS NEEDED FOR OPTIMUM PLANT HEALTH



F Tree Planting and Guying
n.t.s.

NOTE:
- VERIFY PLANTING DEPTHS IN ALL AREAS ADJACENT TO PAVING
- PLANTING HOLE TO BE 2 1/2 TO 3 TIMES THE SIZE OF ROOT BALL

G Palm Planting and Staking
n.t.s.



H Path Planting
n.t.s.

SUBMISSION
05/20/26
NOT FOR CONSTRUCTION

KWD
LANDSCAPE ARCHITECTURE
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Krent L. Wieland, FL. Reg LA 1039
Cert. of Authorization LC26000275

Bonsal Turn Lane
1200 NW 18th St.
Pompano Beach, Fl 33069

LANDSCAPE ARCHITECT KRENT L. WIELAND NO. 1039 STATE OF FLORIDA

Krent L Wieland
2026.05.20
17:22:05 -04'00'

02/11/26 City Comments
12/11/24 City Comments
09/26/24 City Comments
05/17/24 City Comments
ISSUE HISTORY

PROJ NO:	23034A
PROJ MGR:	DC
DRAWN BY:	DC
CHECKED BY:	KW

DRAWING TITLE:
LANDSCAPE SPECIFICATIONS

SHEET:
009.9.1 L-10