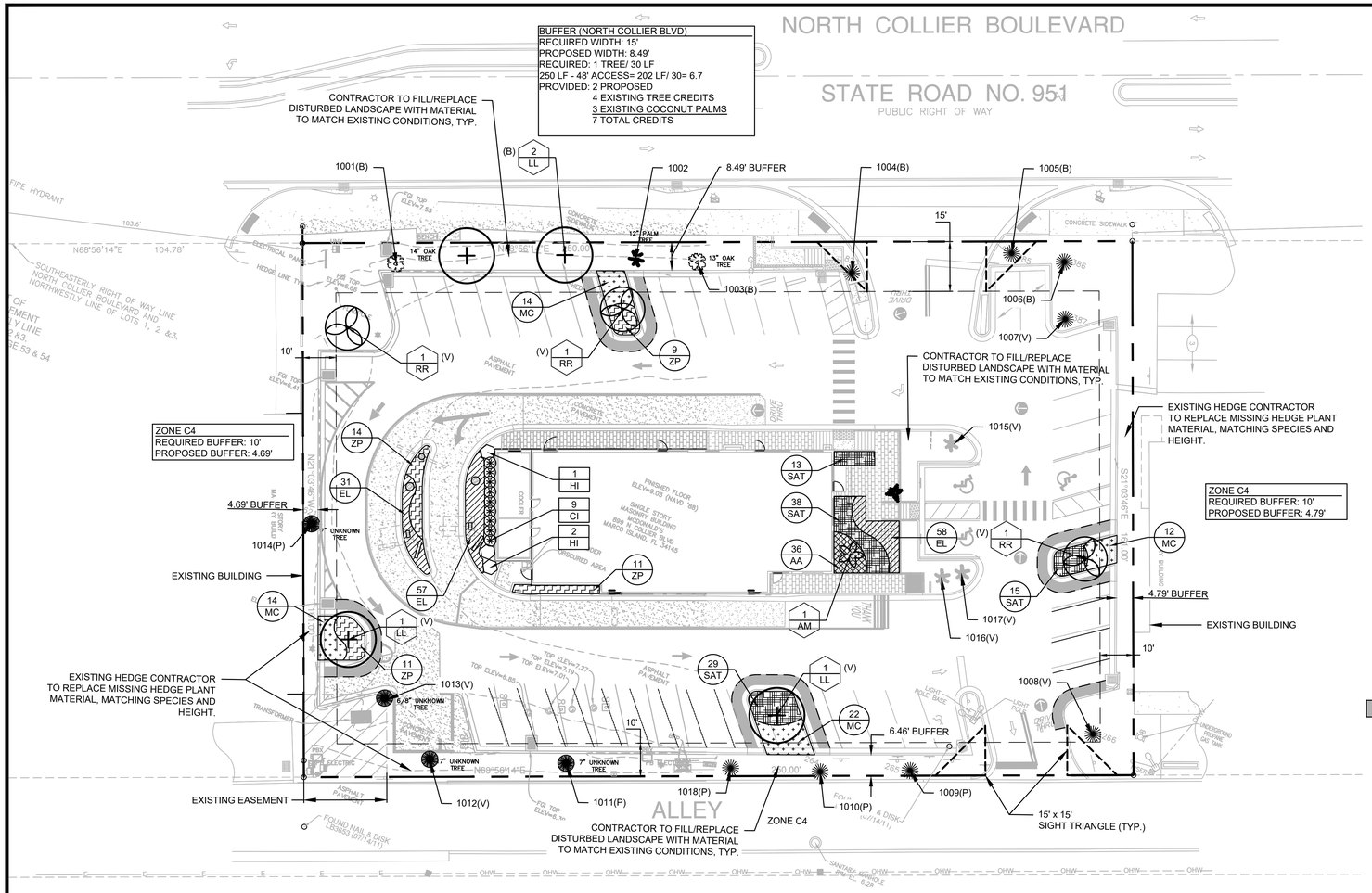

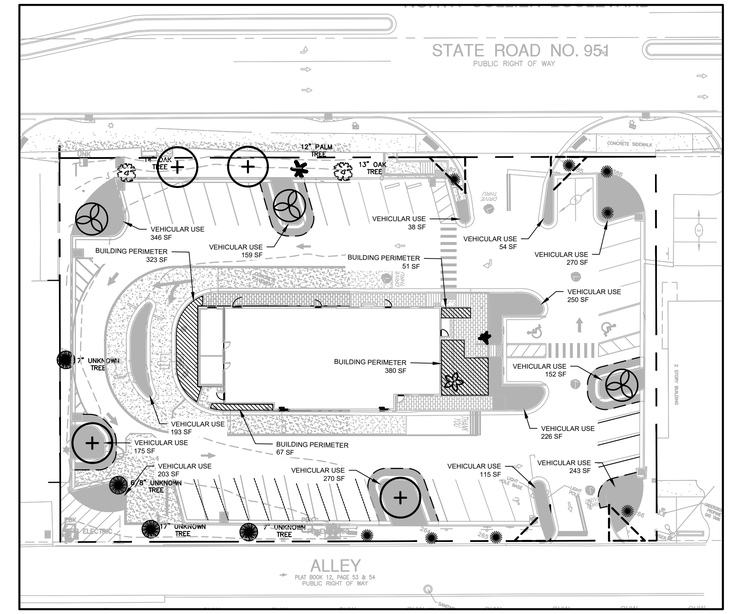

SEC. 30-439 - VEHICULAR USE CALCULATIONS

VEHICULAR USE AREA	25,721 SF
REQUIRED LANDSCAPE AREA	2,572 SF (10%)
PROPOSED LANDSCAPE AREA	2,694 SF (10.5%)
REQUIRED VUA TREES	10.29 TREES (2,572 / 250 = 10.29)
PROPOSED VUA TREES (V)	6 TREES 4 TREE CREDITS 10

SEC. 30-440 - BUILDING PERIMETER CALCULATIONS

BUILDING PERIMETER AREA	4,152 SF
REQUIRED LANDSCAPE AREA	415 SF (10%)
PROPOSED LANDSCAPE AREA	821 SF (19.7%)

SEC. 30-435 - TREE DATA

REQUIRED NATIVE/DROUGHT TOLERANT	50%
PROPOSED NATIVE/DROUGHT TOL. TREES	87.5% (7 DT / 8 TOT)
PROPOSED NATIVE/DROUGHT TOL. SHRUBS	55% (181 DT / 328 TOT)
PROPOSED NATIVE/DROUGHT TOLERANT	2,572 SF (10%)
PROPOSED LANDSCAPE AREA	2,713 SF (10.5%)
REQUIRED VUA TREES	10.29 TREES (2,572 / 250 = 10.29)
PROPOSED VUA TREES (V)	10 TREES

SEC. 30-440 - PERVIOUS AREA CALCULATIONS

TOTAL PERVIOUS AREA	6,912 SF
REQUIRED CANOPY TREES	2.3 TREES (6,912 / 3000 = 2.3)
PROPOSED CANOPY TREES (P)	4 TREES

SEC. 30-437 - TREE PRESERVATION CREDITS

EXISTING TREE TABLE

Tree#	Common Name	DBH	Native Tree Credit
1001	Live Oak	14"	2
1002	Coconut Palm		
1003	Live Oak	13"	2
1004	Coconut Palm		
1005	Coconut Palm		
1006	Coconut Palm		
1007	Coconut Palm		
1008	Pygmy Date Palm		
1009	Mahogany	16"	
1010	Mahogany	16"	
1011	Agacia		
1012	Gumbo Limbo	17"	2
1013	Gumbo Limbo	14"	2
1014	Holly		
1015	Coconut Palm		
1016	Coconut Palm		
1017	Coconut Palm		
1018	Mahogany	16"	
Total tree credits: 8			

PLANT LIST

SYM.	COMMON NAME	BOTANICAL NAME	DESCRIPTION	QTY
TREES				
LL	WILD TAMARIND (N)	LYSILOMA LATISILIQUUM	4" CAL.,16' MIN. HT., 7' MIN. SPRD., 7' CLEAR TRUNK	4
RR	ROYAL PALM (N)	ROYSTONEA REGIA	12' OA GREYWOOD, CLEAN STRAIGHT TRUNK, MATCHED HTS.	3
AM	CHRISTMAS PALM	ADONIDIA MERRILLII	7' MIN. OA HT, 3 TRUNKS	1
	EXISTING TREES		REFER TO TREE TABLE	-
SHRUBS				
CI	HORIZONTAL COCOPLUM (N,DT)	CHRYSOBALANUS ICACO 'HORIZONTAL'	3 GAL., 36" MIN. HT., 24" MIN. SPRD., 36" O.C.	9
HI	SNOW QUEEN HIBISCUS	HIBISCUS 'SNOW QUEEN'	3 GAL., 36" MIN. HT., 24" MIN. SPRD., 48" O.C.	3
GROUNDCOVER				
AA	LILY OF THE NILE (DT)	AGAPANTHUS AFRICANUS	1 GAL., 3 BIBS PER POT, 18" O.C.	36
EL	GOLDEN CREEPER (N,DT)	ERNODEA LITTORALIS	1 GAL., FULL, 18" O.C.	146
ZP	COONITE (N, DT)	ZAMIA PUMILA	3 GAL., 15" HT., 10" MIN. SPRD., 30" O.C.	45
SAT	VARIEGATED SCHEFFLERA	SCHEFFLERA ARBORICOLA 'TRINETTE'	3 GAL., 12" HT., 12" MIN. SPRD., 24" O.C.	95
MC	MUHLY GRASS (N, DT)	MUHLENBERGIA CAPILLARIS	3 GAL., 15" HT., 10" MIN. SPRD., 30" O.C.	62

NOTE:

1. PLANT DESCRIPTIONS ARE FOR MINIMUM ACCEPTABLE SPECIFICATIONS. ALL CRITERIA LISTED FOR CONTAINER SIZE, CALIPER, HEIGHT, SPREAD, ETC. MUST BE MET FOR PLANT MATERIAL ACCEPTANCE. FOR EXAMPLE, IF A THREE GALLON SHRUB DOES NOT MEET THE HEIGHT OR SPREAD SPECIFICATION, IT WILL NOT BE ACCEPTED.
2. IF SPECIFIED PLANTS ARE UNAVAILABLE AT TIME OF CONSTRUCTION, CONTRACTOR MAY REPLACE SPECIFIED PLANTS WITH PLANTS APPROVED BY LANDSCAPE ARCHITECT AND CITY STAFF.
3. ALL OPEN SPACE AREAS WITHIN THE PROPERTY SHALL BE SODDED UNLESS PAVED, SEEDED AND MULCHED OR PLANTED WITH SHRUBS AND GROUND COVER.
4. ALL LANDSCAPED AREAS WILL BE 100% IRRIGATED WITH A CENTRAL AUTOMATIC IRRIGATION SYSTEM INCLUDING A RAIN SENSOR.
5. CONTRACTOR TO MODIFY EXISTING IRRIGATION SYSTEM TO ENSURE ADEQUATE IRRIGATION FOR ALL NEW PLANT MATERIAL.
6. CONTRACTOR SHALL REPLACE ANY EXISTING SOD OR OTHER PLANT MATERIALS DAMAGED DURING CONSTRUCTION IN AREAS THAT ARE OUTSIDE PROPOSED LANDSCAPE AS SHOWN ON THE PLAN.

DENOTES: (V- VUA) (P- PARKING AREA) (B- BUFFER) (N- NATIVE) (DT- DROUGHT TOLERANT)

GRAPHIC SCALE

0 10 20 40

1 INCH = 20 FEET

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Landscape No. LC0000296

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No.	Date	Revision

Designed: D. Bryant
Drawn: A. Almond
Checked: D. Bryant
Job No.: M29627.1
Date: 8/19
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LANDSCAPE PLAN

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Sheet No.
L-1

LANDSCAPE NOTES:

1. The landscape Contractor shall be responsible for all materials and all work as called for on the Landscape Plans and in the Landscape Specifications. In the event of variation between quantities shown on plant list and the plans, the plans shall control. The Landscape Contractor shall verify all quantities and report any discrepancies at the time of bidding.

2. The Landscape Contractor shall review architectural/engineering plans and become thoroughly familiar with surface and subsurface utilities.

3. Prior to construction, the contractor shall be responsible for locating all underground utilities and shall avoid damage to all utilities during the course of the work. Locations of existing buried utility lines shown on the plans are based upon best available information and are considered to be approximate. It shall be the responsibility of the contractor 1) to verify the locations of utility lines within and adjacent to the work area 2) to protect all utility lines during the construction period 3) to repair any and all damage to utilities, structures, site appurtenances, etc. which occurs as a result of the construction 4) To field adjust the location of proposed trees and palms 10' off the center of the utility lines. Notify the Landscape Architect if a 10' offset does not function.

4. The work shall be coordinated with other trades to prevent conflicts. Coordinate the planting with the irrigation work to assure availability and proper location of irrigation items and plants.

5. Contractor shall ensure that there are no visual obstructions to vehicle lines of sight and traffic controls. Contractor shall field adjust tree and/or large shrub locations to avoid any such obstructions.

6. Trees shall be maintained by the owner to avoid future such obstructions by pruning trees and/or shrubs as necessary utilizing horticulturally sound techniques.

7. All planting shall be performed by personnel familiar with planting procedure and under the supervision of a qualified planting foreman.

8. All plant material shall be graded Florida No. 1 or better as outlined under Grades and Standards for Nursery Stock, Part I and II, published by the Florida Department of Agriculture and Consumer Services.

9. The minimum acceptable size of all plants, measured after pruning, with branches in normal positions, shall conform to the measurements specified on the plant list or as indicated on the landscape drawing. Height and spread dimensions refer to main body of the plant and not extreme branch tip to tip. Trunk caliper (trunk diameter) is measured 6 inches from the ground on trees up to and including 4 inches in caliper, and 12 inches from the ground for larger trees. Since trunks are seldom round, the average of the largest diameter and that perpendicular to it is referred to as caliper. When the plant list description calls out DBH or caliper at DBH, it shall govern over the caliper definition in this note.

10. The Landscape Architect or Owner shall have the right, at any stage of the operations, to reject any and all work and materials which, in his opinion, do not meet with the requirements of these specifications.

11. Except as otherwise specified, the Landscape Contractor's work shall conform to accepted horticultural practices as used in the trade.

12. Plants shall be protected upon arrival at the site, by being thoroughly watered and properly maintained until planted.

13. TOPSOIL

    Topsoil shall be natural, friable, fertile, fine loamy soil possessing characteristics of representative topsoil in the vicinity that produces heavy growth. Topsoil shall have a pH range of 5.5 to 7.4, free from subsoil, objectionable weeds, litter, sods, stiff clay, stones larger than 1-inch in diameter, stumps, roots, trash, toxic substances, or any other material which may be harmful to plant growth or hinder planting operations. Top soil shall contain a minimum of three percent organic material. 6" Top Soil shall be placed in all turf & landscape areas.

14. All tree pits shall be excavated to size and depth in accordance with the Florida Grades & Standards for Nursery Stock, unless shown otherwise on the drawings, and backfilled with the specified planting soil. The Landscape Contractor shall test fill all tree pits with water before planting to assure proper drainage percolation is available.

15. The Landscape Contractor shall be responsible for proper watering of all plants. All plants shall be thoroughly watered at time of planting and kept adequately watered for plants to thrive as defined by Florida Grades and Standards for Nursery stock until time of acceptance. It shall be the Landscape Contractor's responsibility to assure that plants are not over watered.

16. It shall be the Landscape Contractor's responsibility to prevent plants from falling or being blown over, to re-straighten and replant all plants which lean or fall and to replace all plants which are damaged due to lack of proper guying or staking. The Landscape Contractor shall be legally liable for any damage caused by instability of any plant material.

17. All Palms to be staked as indicated per Palm staking details. All other trees to be stabilized utilizing 8' lodge poles per tree planting details.

18. Plants blown over by high winds, within the guaranteed period, shall not be cause for additional expense to the Owner, but shall be the responsibility of the Landscape Contractor. Damaged plants shall be replaced by the Landscape Contractor at no additional cost to the Owner.

19. Sod shall be of a species specified on the drawings and originate from a commercial turf grower. It shall be a dense stand of live turf, reasonably free of weeds, well matted with grass roots in rectangles 12 inch by 24 inch or in 12 inch wide rolls in a length consistent with the equipment and methods used to handle the rolls and place the sod. Any netting contained within the sod shall be certified by the manufacturer to be bio-degradable. The soil and root mat shall be a minimum of 1-1/2 inch thick and must hold together during placement. Sod shall be place adjacent to one another to avoid gaps and overlaps. Joints shall be staggered between the rows. Sod placed on slopes exceeding 3:1 shall be pinned with turf staples. Sod turf, shall have been mowed a minimum of one week prior to cutting and delivery, so that the length of the turf is no longer than 4 inches at time of delivery. Place sod within 48 hours of cutting the sod. The sod shall be kept moist throughout the 48 hour period to maintain the health and viability of the sod. Submit a letter of certification to the Owner's CEI Representative, at time of delivery, as to the source of the sod, the time it was cut, the species and cultivars provided, last mowing date, and that the sod is free of fire ants. Sod which has been cut for longer than 48 hours after being cut shall not be used unless specifically authorized by Owner's CEI Representative.

20. It shall be the Contractor's responsibility to measure and determine the exact quantity of sod required for a complete job at the time of bidding or providing a price quote. The Owner shall not be responsible for additional cost due to the Contractor's under estimating of the quantity of sod for the original bid area.

21. The Landscape Contractor shall insure adequate vertical drainage in all plant beds, planters, and sod areas. Vertical drilling through any compacted fill to native soil shall be accomplished to insure drainage. If well drained fill is necessary to assure positive drainage, this issue shall be brought up by the Landscape Contractor at time of bidding.

22. UNSUITABLE SUBSOILS
    Locations containing unsuitable subsoil shall be treated by one or more of the following:

    A. Where unsuitability is deemed by Owner or Owner's Representative to be due to excessive compaction caused by heavy equipment and where natural subsoil is other than AASHTO classification of A6 or A7, loosen such areas with spikes, discing, or other means to loosen soil to condition acceptable to Owner. Loosen soil to minimum depth of 12 inches with additional loosening as required to obtain adequate drainage. Contractor may introduce peat moss, sand, or organic matter into the subsoil to obtain adequate measures shall be considered as incidental, without additional cost to Owner.

    B. Where unsuitability is deemed by Owner or Owner's Representative to be due to presence of boards, mortar, concrete, graded aggregate base, or other construction materials in sub grade and where natural subsoil is other than AASHTO classification of A6 or A7, remove debris and objectionable material. Such remedial measures shall be considered as incidental, without additional cost to Owner.

    C. Where unsuitability is deemed by Owner to be because natural subsoil falls into AASHTO classification of A6 or A7 and contains moisture in excess of 30 percent, then installation of sub drainage system or other means described elsewhere in Specifications shall be used. Where such conditions have not been known or revealed prior to planting time and they have not been recognized in preparation of The Drawings and Specifications, then Owner shall issue pricing order to install proper remedial measures.

    D. Planting beds where existing subsoil is determined by Owner to be unsuitable for plant growth in accordance paragraph Unsuitable Subsoil herein shall be excavated to a depth of 12 inches or as needed to provide adequate drainage. Replace excavated soil with planting soil.

23. The Landscape Contractor shall insure that his work does not interrupt established or projected drainage patterns.

24. The Landscape Contractor shall prune, shape and remove dead foliage/limbs from existing plant material to remain. Confirm with the Landscape Architect or Owner the extent of work required at time of Bidding.

25. Mulch - All plant beds shall be top dressed with 3" shredded hardwood mulch (or approved equal). Cypress mulch not permitted. A 5' diameter mulch ring is to be placed around trees located in sod areas or outside of planting beds.

26. Transplanted Material - The Landscape Contractor shall be responsible for determining and evaluating which plant materials are suitable for transplanting and shall verify this with the Landscape Architect or Owner. The Landscape Contractor shall take all reasonable, horticulturally acceptable measures to assure the successful transplanting of determined plant materials. The Landscape Contractor shall be responsible for replacing any relocated plant materials which die if such measures are not taken, as determined by the Landscape Architect or Owner. Replacement plants shall be of identical species and size if required.

27. MAINTENANCE PRIOR TO FINAL INSPECTION AND ACCEPTANCE:

    Maintenance shall commence after each plant is planted and the maintenance period shall continue until the job or specific phase of the job is accepted by the Landscape Architect or Owner. Extreme care shall be taken to instruct the Owner or his representatives in general maintenance procedures.

    Plant maintenance shall include watering, pruning, weeding, cultivating, mulching, tightening, and repairing of guys, replacement of sick or dead plants, resetting plants to proper grades or upright positions and restoration of the planting saucer and all other care needed for proper growth of the plants.

    During the maintenance period and up to the date of final acceptance, the Landscape Contractor shall do all seasonal spraying and/or dusting of trees and shrubs. Upon completion of all planting, an inspection for acceptance of work will be held. The Landscape Contractor shall notify the Landscape Architect or Owner for scheduling of the inspection 10 days prior to the anticipated date.

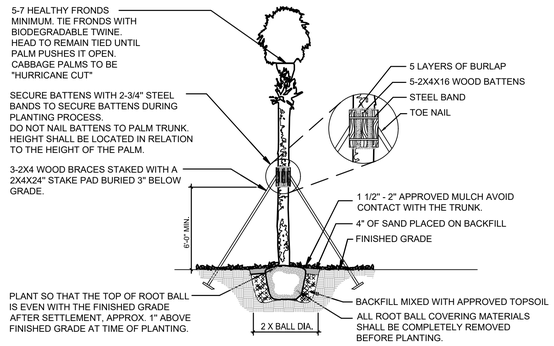
    At the time of the inspection, if all of the materials are acceptable, a written notice will be given by the Landscape Architect or Owner to the Landscape Contractor Stating the date when the Maintenance Period ends.

GUARANTEE AND REPLACEMENT:

All plant materials shall be guaranteed for one (1) year from the time of final inspection and interim acceptance shall be alive and in satisfactory growth for each specific kind of plant at the end of the guaranteed period.

At the end of the guarantee period, any plant required under this contract that is dead or not in satisfactory growth, as determined by the Owner or the Landscape Architect, shall be removed and replaced. Replacement plants shall have an extended guarantee, as noted above, from time of replacement.

All replacements shall be planted of the same kind and size as specified on the plant list. They shall be the responsibility of the Landscape Contractor.



PALM STAKING DETAIL

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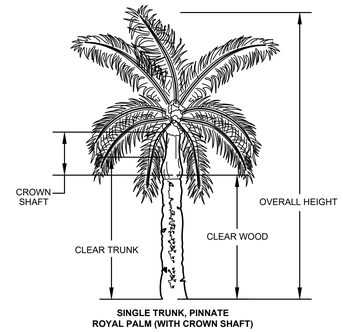


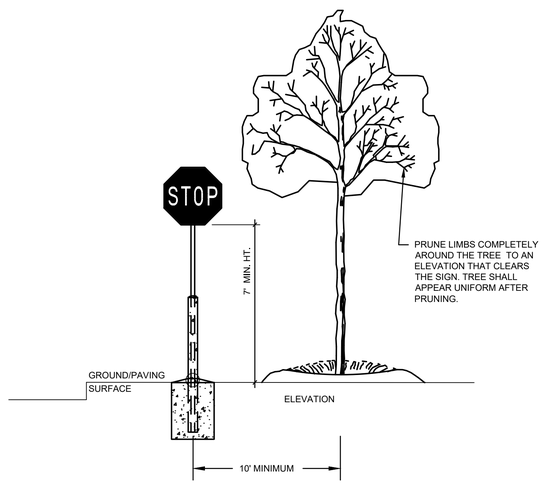
PALM MATRIX A

PALM HEIGHT/TRUNK SPECIFICATIONS

OVERALL HEIGHT(OA):
HIGHEST POINT IN THE CANOPY MEASURED FROM THE SOIL LINE TO THE NATURAL POSITION OF THE LAST FULLY EXPANDED LEAF. UNLESS SPECIFIED DIFFERENTLY, THE TERM HEIGHT, OR HEIGHT MEASUREMENTS SPECIFIED, WILL BE CONSIDERED OVERALL HEIGHT.

CLEAR TRUNK(CT):
A MEASUREMENT FROM THE SOIL LINE TO A POINT IN THE CANOPY WHERE THE TRUNK CALIPER BEGINS TO TAPER ABRUPTLY. ON MANY PALMS, THIS POINT WILL LIE AT THE BASE OF THE PETIOLE OF THE THIRD OR FOURTH YOUNGEST BUT FULLY EXPANDED LEAF.

CLEAR WOOD(CW):
A MEASUREMENT FROM THE SOIL LINE TO THE HIGHEST POINT OF THE TRUNK FREE OF PERSISTENT LEAF BASES. ON PALMS WITH A CROWN SHAFT, THE MEASURE WILL BE FROM THE SOIL LINE TO THE BASE OF THE CROWN SHAFT. IT SHOULD BE NOTED THAT PALMS WITH VERY PERSISTENT LEAF BASES MAY NOT HAVE CLEAR WOOD.



ALL TREES TO BE PLANTED NO CLOSER THAN 10' IN ALL DIRECTIONS FROM ANY TRAFFIC SIGNS

TREE PLANTING AT TYPICAL SIGN

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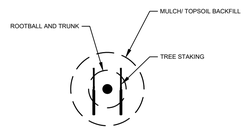

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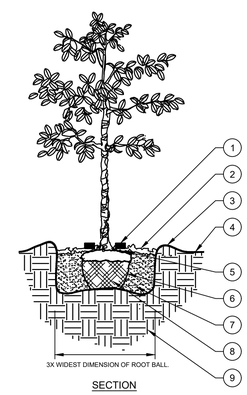


SECTION

NOTES:

A. FINAL TREE STAKING DETAILS AND PLACEMENT TO BE APPROVED BY OWNER.

B. REMOVE BURLAP, WIRE AND STRAPS (ANYTHING THAT COULD GIRDLE TREE OR RESTRICT ROOT GROWTH) ON UPPER 1/3 OF ROOTBALL.

C. REFER TO LANDSCAPE NOTES OR PLANTING SPECIFICATIONS SECTION 32 9100 FOR THE TYPE OF MULCH MATERIAL TO USE.

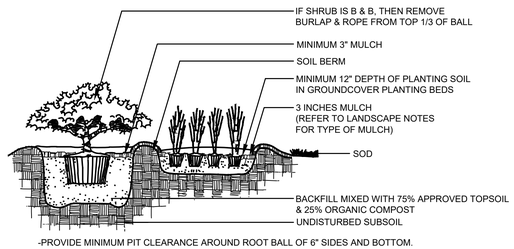
D. PRUNE TREE AS DIRECTED BY LANDSCAPE ARCHITECT.

E. BRANCHING HEIGHT AS SPECIFIED ON THE PLANT LIST AND PRUNING PER ANSI A300 (PART I) LATEST UPDATE.

1. **Tree Frog® RBK40pt** FOR UP TO 4" TREE CALIPER OR **Tree Frog® RBK60pt** FOR GREATER THAN 4" AND UP TO 6" TREE CALIPER. REFER TO SITEWORK SPECIFICATIONS FOR APPROVED MATERIALS AND INSTALLATION REQUIREMENTS.
2. ROOT BALL MODIFIED AS REQUIRED. 3" LAYER OF MULCH. NO MORE THAN 1" OF MULCH ON TOP OF ROOT BALL. (REFER TO SPECIFICATIONS FOR MULCH).
3. ROUND-TOPPED SOIL BERM 4" HIGH X 8" WIDE ABOVE ROOT BALL SURFACE SHALL BE CONSTRUCTED AROUND THE ROOT BALL. BERM SHALL BEGIN AT ROOT BALL PERIPHERY.
4. FINISHED GRADE.
5. TOP OF ROOT BALL SHALL BE FLUSH WITH FINISHED GRADE.
6. PRIOR TO MULCHING, LIGHTLY TAMP SOIL AROUND THE ROOT BALL IN 6" LIFTS TO BRACE TREE. DO NOT OVER COMPACT. WHEN THE PLANTING HOLE HAS BEEN BACKFILLED, POUR WATER AROUND THE ROOT BALL TO SETTLE THE SOIL.
7. LOOSENED SOIL, DIG AND TURN THE SOIL TO REDUCE COMPACTION TO THE AREA AND DEPTH SHOWN. BACKFILL MIX: TOPSOIL 75% AND COMPOST 25%.
8. BOTTOM OF ROOT BALL RESTS ON EXISTING OR RECOMPACTED SOIL.
9. UNDISTURBED SUBSOIL.

LARGE TREE PLANTING
(14' OR GREATER)

N.T.S.



-PROVIDE MINIMUM PIT CLEARANCE AROUND ROOT BALL OF 6" SIDES AND BOTTOM.
-MAINTAIN 3"-4" MULCH FREE ZONE AROUND BASE OF PLANT.

SHRUB AND GROUNDCOVER PLANTING DETAIL

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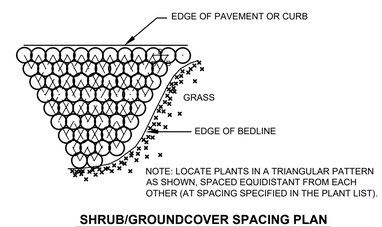

SHRUB/GROUNDCOVER SPACING PLAN

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Surveyor No. LB7143
Architect. No. AA26000926
Landscape No. LC000296

LICENSED LANDSCAPE ARCHITECT DANITA R. ROBERTS BRYANT LA0667318 STATE OF FLORIDA

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Mar 16, 2020

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Drawn: A. Almond
Checked: D. Bryant
Job No.: M29627.1
Date: 8/19
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