The critical root zone (CRZ) is an area around a tree that is regulated for the purpose of protecting the roots and trunk of a protected tree or a specimen tree, both during and after construction. It is a circular area using a radius measured from the center of the tree. The radius is calculated as one (1) foot of radius for each one (1) inch of diameter at breast height (4.5 feet above grade). For any fraction of a foot over a whole foot, the diameter at breast height will be rounded up to the next whole number. Example: a tree has a diameter at breast height of twenty-one and one-quarter (21 1/4) inches; the CRZ is a circle, centered on the center of the tree, with a radius of twenty-two (22) feet.

In no event shall the CRZ be less than an area measured five (5) feet radially from the center of the tree at its base unless expressly determined by the environmental planner that a smaller specified CRZ may be established. A tree well design shall be required as appropriate in cases when the placement of fill threatens the viability of a protected tree or specimen tree to be

During periods of development and construction, the areas within the drip-line of preserved trees shall be maintained at their original grade with pervious landscape material. Within these areas, there shall be no trenching or cutting of roots; no fill,

empaction or removal of soil; and , no use of concrete, paint, chemicals or other foreign substances. All barricades must be maintained intact for the duration of construction.

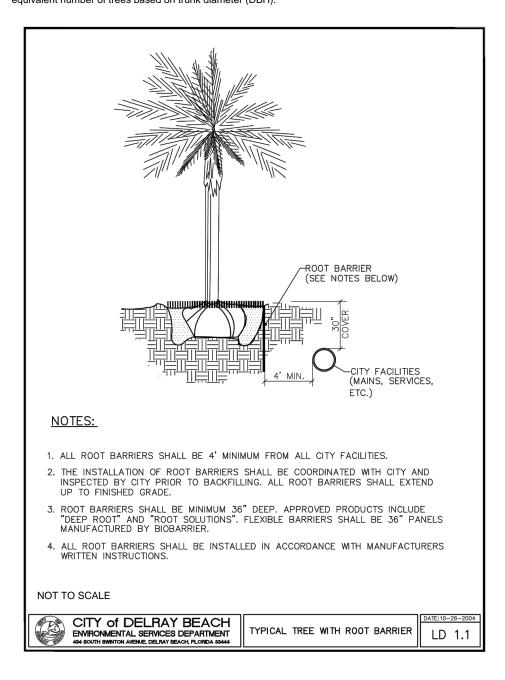
In areas where an existing curb/landscape island is to be removed, the barricade shall be installed at the back of curb and the curbing, asphalt, compacted sub-base and any other items shall be carefully removed, by hand if possible and once removed, the barricades shall be installed at the CRZ location or the drip line of the tree for the duration of the construction.

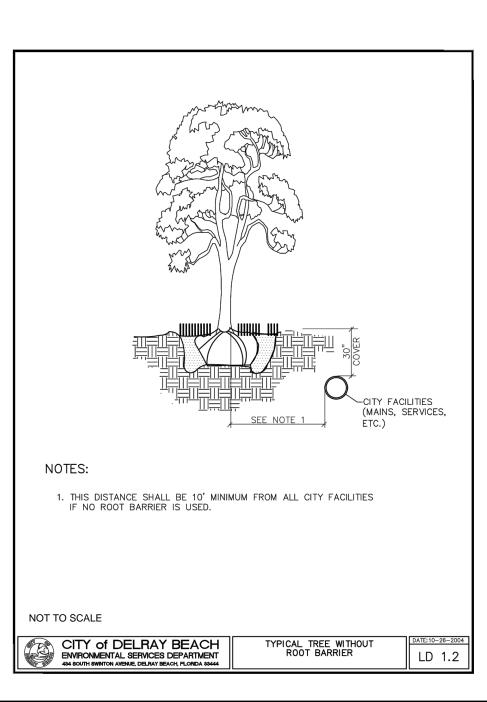
Existing Tree Protection Barricade Detail

Not to Scale

# Tree Replacement Note

All trees which are to be preserved and do not survive shall be replaced by a tree of equal size or an equivalent number of trees based on trunk diameter (DBH).





### LANDSCAPE NOTES

1. All tree and plant material to be Florida No. 1 or better, as classified in "Grades and Standards for Nursery Plants", Part 1 and Part II, State of Florida, Dept. of Agriculture, Tallahassee. All plants not listed in "Grades and Standards for Nursery Plants" shall conform to a Florida No. 1 as to: (1) health and vitality, (2) condition of foliage, (3) root system, (4) freedom from pest or mechanical damage, (5) heavily

branched and densely foliated according to the accepted normal shape of the species. 2. Undersizing or substitution of one species or cultivar for another species is a breach of contract and will be "Rejected" at the time of final landscape inspection unless approved by Landscape Architect.

3. Project Warranty: All plant material shall be warranted for a period of one (1) year after date of substantial completion against defects, including death and unsatisfactory growth, except for defects resulting from abuse or damage by others or unusual phenomena or incidents which are beyond the contractor's control.

4. Any and all conditions which the contractor feels will be detrimental to the success of the planting shall be brought to the owner or representative's attention.

6. Mulch planting areas with 3" layer of approved organic heat treated Melaleuca, Eucalyptus, or Environmulch. Cypress Mulch is NOT ACCEPTABLE. Planting beds to receive mulch throughout entire bed area. Mulch shall be kept a minimum of six (6) inches from the trunk of any tree.

7. All plants to be set to ultimate grade. No filling will be permitted around trunks or stems. Mulch to be kept a minimum of 2" away from trunks and stems. 8. Planting trees and shrubs: Excavate hole per planting detail. When plant is set, place additional backfill consisting of a 50% mixture of Peat humus and natural soil around the base and sides of ball, and

work each layer to settle backfill and eliminate voids and air pockets. When excavation is approximately 2/3 full, water thoroughly before placing remainder of backfill. Water again after placing final layer of

9. Guy and stake trees in 3 directions with galvanized wire, through flexible hose chafing guards, with wooden stake anchors immediately after planting. (See Detail) 10. Trees and shrubs shall be fertilized with a complete natural organic fertilizer with a ratio of approximately 3:1:2 or 3:1:3 (e.g. one labeled 12-4-8). Similar analysis such as 16-4-8 (4:1:2) can also be used. Fertilizers that are slow release, controlled release, sulphur coated or with nitrogen as IBDU or ureaformaldehyde have extended release period. Thirty to fifty percent of the nitrogen should be water

Palms should receive a complete granular fertilizer formulated for palms ("Palm Special") at a rate of 5 to 8 lbs. per palm.

5. The contractor shall verify the location of underground utilities prior to commencing work on any project area.

Agriform 20-10-5 twenty-one gram planting tablets may be substituted for granular fertilizer. If utilized, the following rates shall be utilized: Position plant in hole. Backfill halfway up the rootball. Place tablet(s) beside rootball about 1" from root tips. Do not place tablet(s) in bottom of hole.

3 Gallon 2 Tablets

15. Drainage Testing

25 Gallon & B&B Trees 2 per 1" calipe

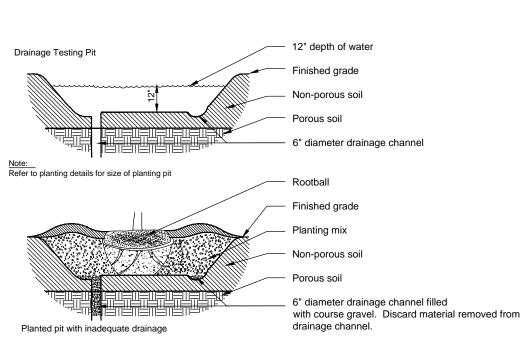
11. Maintain trees, shrubs, and other plants by watering, cultivating, and weeding as required for healthy growth. Restore planting saucers and mulch. Tighten and repair stake and guying and reset trees and shrubs to proper grade or vertical position as required. Spray as necessary to keep trees and shrubs free of insects and disease. The contractor shall begin maintenance immediately after planting and shall continue maintenance through final acceptance when Certificate of Occupancy is issued to the General Contractor by the governing agency and project is released by the General Contractor to Client. 12. Prune trees and shrubs only to remove damaged branches.

13. Planting Lawns: Provide clean, strongly rooted, uniformly sized strips of Stenotaphrom secundatus - St. Augustine "Floritam" sod (unless otherwise noted in Plant List), machine stripped not more than 24 hours prior to laying. Grade and roll prepared lawn surface. Water thoroughly but not to create muddy soil conditions. Lay sod strips with tight joints, roll or tamp lightly, and water thoroughly. 14. Maintain positive drainage, no planting is to block drainage.

Prior to planting of trees, palms, and specimen material, each planting pit shall be tested in the following manner to verify adequate drainage.

A) Dig each planting pit to the minimum specified size. B) Fill the planting pit with (12") twelve inches of water. If the water level in the planting pit drops (4") four or more inches within (4) four hours, the drainage is sufficient and a drainage channel is not required. If the water level drops less than (4") four inches within the (4) four hour period, then a drainage channel is required. C) When a drainage channel is required, the drainage channel must extend down through the non porous soil and into porous soil. (See Drainage Testing Detail)

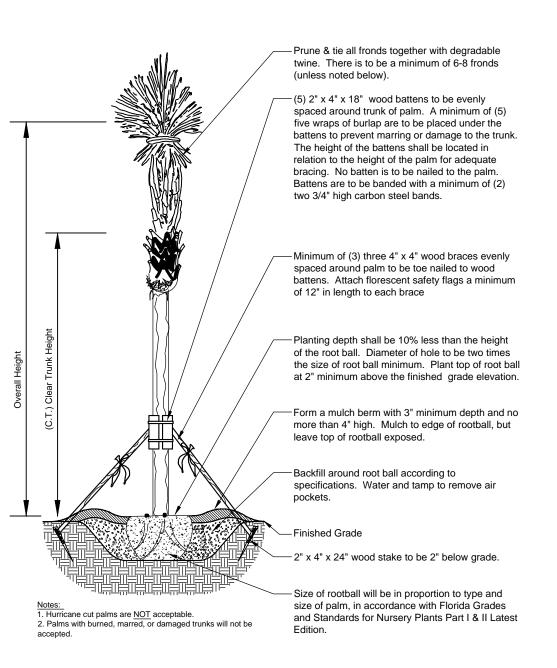
D) Discard all material removed from the drainage channel. E) When backfilling the planting pit, add course gravel to the drainage channel. Also, care must be taken to keep the consistency of the soil mix the same throughout the planting pit.



16. All fertilizers shall meet any governing agencies (local / County, etc.) ordinances and/or requirements.

## **Drainage Testing Detail**

Palm Planting Detail



#### Place 1/2" diameter black rubber hose on all guy wires at all points of contact with tree. Place 3 galvanized steel double strand #12 gauge twisted guy wires with one galvanized turnbuckle per guy wire spaced at equal distance around tree. Attach florescent safety flags a min. of 12" in length to each guy wire. Planting depth shall be 10% less than the height of the root ball from the Flair Root. Diameter of hole to be three times the size of root ball minimum. Plant top of root ball at 2" minimum above the finished grade elevation. - Form a mulch berm with 3" minimum depth and no more than 4" high. Mulch to edge of rootball, but leave top of rootball exposed. Remove burlap or steel cage from top 1/3 of root ball (If applicable). Drive 2" x 4" x 24" wood stake a min. of 3" below 3 times diameter Backfill around root ball according to of rootball (Min.) specifications. Water and tamp to remove air Notes: 1. All pruning shall be completed at the direction of the Landscape Architect. 2. No nails shall be driven into tree

3" minimum depth of mulch. Keep mulch away from base of stem (See specifications) Planting depth shall equal depth of root ball. Diameter of hole to be twice the size of root ball. For root balls larger than 2' in diameter, the hole should be 2' wider than root ball on all sides. Plant

top of root ball at same elevation as finished

Form 3" continuous earthen rim around planting

specifications. Water and tamp to remove air

Place root ball at bottom of undisturbed subgrade

- Backfill around root ball according to

of planting pit.

# Tree Planting Detail

Notes:

1. All pruning shall be completed at the direction of the

3. Plant as hedge row with O.C. (on center) spacing as

specified in plant list, or with triangular spacing as a

2. Remove any container from around rootbal

Shrub Detail

Not to Scale

# Landscape Architecture - Site Plannina

900 East Ocean Boulevard, Suite 130d Stuart, Florida 34994

(772) 344-2340

LC: 26000198

These drawings are the property of the landscape architect and are not to be used for other projects except by written permission from the landscape architect. Report any discrepancies immediately to the landscape architect.



#### EXISTING TREE & PALM DATA

		UNDER 3"	4"-8"	OVER 8"
TOTAL EXISTING TREES = 60	1,010"	3	7	50
TOTAL EXISTING TREES TO REMAIN = 6	77"		2	4
TOTAL EXISTING TREES TO BE REMOVED = 54 - 3 TREES UNDER 3" = 51	924"		5 (36")	46 (888")
TOTAL EXISTING TREES TO BE REMOVED THAT ARE CARROTWOODS = 20	407"	1(2")		19 (405")
TOTAL EXISTING TREES TO BE REMOVED LESS CARROTWOODS = 31	517"		5 (36")	26 (481")
TOTAL TREE MITIGATION IN INCHES REQUIRED = 517"				
TOTAL TREE OF ANTER WITH ON CAL. 450	_	ISTING PALMS	_	
TOTAL TREES PLANTED WITH 3" CAL = 150	_	ISTING PALMS	_	
TOTAL TREES PLANTED WITH 1" CAL = 8	TOTAL EX	ISTING PALMS	TO BE REI	_OCATED = 1
TOTAL INCHES PLANTED = 458"	TOTAL PA	LMS DEAD = 2		
	TOTAL PA	LMS TO BE REM	MOVED = 2	21
TOTAL MITIGATION INCHES REQUIRED = 59" (517" - 458" = 59")	TOTAL PA	LMS TO BE PLA	NTED = 68	3
TOTAL TREES BEING REMOVED THAT ARE BELOW 50% (RATED 4-6) = 18 (209")				
NO MITIGATION IS REQUIRED BECAUSE THE AMOUNT OF TREES RATED				
BELOW 50% EXCEEDS THE MITIGATION REQUIREMENT OF 59".				

### I ANDSCAPE DATA

LANDSCAPE DATA					
TOTAL SITE AREA: TOTAL SITE AREA = 273,553 S.F. / 6.28 ACRES		TOTAL TREES: REQUIRED = 200			
NTERIOR GREEN SPACE: TOTAL PAVEMENT AREA = 141,466 S.F. REQUIRED INTERIOR GREEN SPACE (10%) = 14,147 S.F. PROVIDED = 33,136 S.F. (23%)		PROVIDED = 220 15 EXISTING ROYALS + 159 PLANTED TREES + 19 PALMS @ 1:1 + 27 PALMS @ 3:1 (9) = 220 TREES			
TOTAL INTERIOR TREES REQUIRED (1/125 S.F.) = 113 TREES PROVIDED = 113 TREES (79 TREES + 34 PALMS) MAXIMUM USE OF PALMS IN INTERIOR GREEN SPACE AREA = 25% MAXIMUM ALLOWED = 113 TREES X 25% = 28 X 3:1 = 84 PALMS @ 3:1 PROVIDED = 34 PALMS 19 PALMS @1:1 + 45 PALMS @ 3:1 (15) = 34 PALMS		TREE SPECIES MIX: MINIMUM TREE SPECIES MIX WHEN OVER 41 TREES ARE REQUIRED = 5 REQUIRED = 5 PROVIDED = 6			
USE OF PALMS: MAXIMUM USE OF PALMS = 50% REQUIRED = NO MORE THAN 50% OF REQUIRED TREES SHALL BE PALMS FOTAL TREES REQUIRED = 200 FOTAL PALMS PROVIDED = 80 15 EXISTING+3+3+3+10+46= 80/200 = 40°	TOTAL NATIVE TREES PROVIDED = 155 155 / 159 = 97%.	NATIVE SHRUBS: MINIMUM USE OF NATIVE SHRUBS = 25% TOTAL SHRUBS REQUIRED = 4,105 TOTAL NATIVE SHRUBS PROVIDED = 2,839 / 4,105 = 69%.			
WEST LANDSCAPE BUFFER: LENGTH = 575' AREA REQUIRED: 5' X 575' = 2,875 S.F. AREA PROVIDED: 13,773 S.F.	NORTH LANDSCAPE BUFFER: LENGTH = 420'	SOUTH LANDSCAPE BUFFER: LENGTH = 532' AREA REQUIRED: 5' X 532' = 2,660 S.F. AREA PROVIDED: 5,153 S.F.			
TREES: REQUIRED = 1 TREE / 30 L.F. 575' / 30' = 19 TREES PROVIDED = 19 TREES 19 ROYAL PALMS @ 1:1	TREES: SEE NOTE #1 BELOW REQUIRED = 1 TREE / 30 L.F. 420' / 30' = 14 TREES PROVIDED = 14 TREES	TREES: SEE NOTE #1 BELOW REQUIRED = 1 TREE / 30 L.F. 532' / 30' = 18 TREES PROVIDED = 18 TREES			
SHRUBS: REQUIRED = 575 / 2 = 288 PROVIDED = 288	SHRUBS: REQUIRED = 420 / 2 = 210 PROVIDED = 210	SHRUBS: REQUIRED = 532 / 2 = 266 PROVIDED = 266			
EAST LANDSCAPE BUFFER: LENGTH = 575' AREA REQUIRED: 5' X 575' = 2,875 S.F. AREA PROVIDED: 14,445 S.F.	BUILDING FACADE (PRIMARY FRONTAGE): LENGTH = 234' REQUIRED = 1 TREE / 25' = 9 TREES PROVIDED = 9 TREES	PARKING LOT ISLANDS: TOTAL ISLANDS = 41  TREES: REQUIRED = 1 TREE PER ISLAND			
IDEEO.		DDOVIDED A TREE DED IOLAND			

REQUIRED = 1 TREE / 25 L.F.

575' / 25' = 23 TREES

REQUIRED = 575 / 2 = 288

NOTES:

1. DESIGNED TO MEET REQUIREMENTS OF FPL 'PLANT THE RIGHT TREE IN THE RIGHT PLACE'.

PROVIDED = 288

PROVIDED = 23 TREES

PROVIDED = 1 TREE PER ISLAND

PROVIDED = 75 S.F. MINIMUM / ISLAND

REQUIRED = 70% MAXIMUM USE OF SOD

TOTAL OPEN SPACE AREA = 60,652

REQUIRED = 75 S.F. / ISLAND

SHRUBS:

TOTAL SOD AREA:

 $60,652 \times 70\% = 42,456$ 

PROVIDED = 42,398 S.F.

 $\overline{\mathbf{m}}$ 

PROJECTNO CITY PROJECT NUMBER

Seal :

Prepared, Reviewed & Supervised By: Conceptual Design Group, Inc. 900 East Ocean Boulevard, Suite 130d, Stuart, Florida 34994 (772) 344-2340 LC: 26000198

Name: Jeffrey W. Smith, RLA License # : LA0001635

PLAN STATUS 12-23-2016 | 11-21-16 City Comments 1–17–2017 | 12–29–16 City Comments 8-11-2017 New Building & Layout 9-27-2017 New Building & Layout 1-19-2018 | City Comments & New Bo

2-6-2018 New Base 2-26-2019 New Base 3-20-2019 | City Comments & New Bas

DATE DESCRIPTION DESIGN | DRAWN | CHKD

JOB No. CDG 16-1003 BOWMAN 010463-01 DATE: 11/8/2016