



CR-T2021-0156 -
PR-T2021-0157 -
T-T2021-0158 -

RECEIVED

MAY 18 2021

CITY MANAGER

Tree Permit Application

Please Clearly Print All Information unless indicated otherwise. Date: 5-18-21

Tree Address 100 Grinnell Street (KW Ferry Terminal)

Cross/Corner Street Caroline / Trumbo Rd

List Tree Name(s) and Quantity 5-Stopper, 1-Pigeon Plum, 1-Jamaican Caper, 1-Fl Boxwood

Species Type(s) check all that apply ☒ Palm () Flowering () Fruit () Shade () Unsure 5-Sabal Palms & 1-Royal Palm

Reason(s) for Application:

☒ Remove ☒ Tree Health () Safety () Other/Explain below

☒ Transplant () New Location () Same Property () Other/Explain below 2- Silver Thatch palms

() Heavy Maintenance Trim () Branch Removal () Crown Cleaning/Thinning () Crown Reduction

Additional Information and Explanation Landscape Improvements (see attached)

Property Owner Name City of Key West

Property Owner email Address

Property Owner Mailing Address PO Box 1409 KW FL 33041

Property Owner Phone Number

Property Owner Signature [Signature] 5/18/21

Representative Name Doug Bradshaw - Port Director

Representative email Address + Joseph Scarpelli - Architect

Representative Mailing Address + Ladd Roberts - Landscape Architect

Representative Phone Number

NOTE: A Tree Representation Authorization form must accompany this application if someone other than the owner will be representing the owner at a Tree Commission meeting or picking up an issued Tree Permit. Tree Representation Authorization form attached ()

Sketch location of tree in this area including cross/corner Street

Please identify tree(s) with colored tape

Removal: 6-1-21

2-Blolly

1-Jamaican Caper

2-Spanish stopper

5-Sabal palms

1-Royal palm

please return file to Karen Jerlania
x3768

Transplant:

2-Silver Thatch palms

Vibran Forestry Manager




Tree Permit Application

Please Clearly Print All Information unless indicated otherwise. Date: 5/18/21

Tree Address Key West Ferry Terminal - 100 Grinnell Street - 33040
Cross/Corner Street Mustin Street / Trumbo Road
List Tree Name(s) and Quantity see plan attached
Species Type(s) check all that apply ☒ Palm ☒ Flowering ☐ Fruit ☐ Shade ☐ Unsure
Reason(s) for Application:
☒ Remove ☒ Tree Health ☐ Safety ☒ Other/Explain below
☒ Transplant ☐ New Location ☒ Same Property ☐ Other/Explain below
☐ Heavy Maintenance Trim ☐ Branch Removal ☐ Crown Cleaning/Thinning ☐ Crown Reduction

Additional Information and Explanation Some trees to be removed due to health, some due to hardscape changes. The whole site landscaping is being improved for better aesthetics and long term survivability.

Property Owner Name City of Key West-Port Operations - Doug Bradshaw
Property Owner email Address dbradshaw@cityofkeywest-fl.gov
Property Owner Mailing Address 201 William Street, Key West, FL 33040
Property Owner Phone Number 305-809-3790
Property Owner Signature 

Representative Name Joseph Scarpelli, WP Horn Architects / Ladd Roberts, Landwise Design
Representative email Address joe@wphornarchitect.com / lroberts@landwisedesign.com
Representative Mailing Address 915 Eaton Street, Key West, FL 33040
Representative Phone Number 305-296-8302 (Joe) / 904-343-4194 (Ladd)

NOTE: A Tree Representation Authorization form must accompany this application if someone other than the owner will be representing the owner at a Tree Commission meeting or picking up an issued Tree Permit. Tree Representation Authorization form attached ☐

Sketch location of tree in this area including cross/corner Street

Please identify tree(s) with colored tape

see landscape drawings provided herewith.

If this process requires blocking of a City right-of-way, a separate ROW Permit is required. Please contact 305-809-3740.



Tree Representation Authorization

Attendance at the Tree Commission meeting on the date when your request will be discussed is necessary in order to expedite the resolution of your application. This Tree Representation Authorization form must accompany the application if the property owner is unable to attend or will have someone else pick up the Tree Permit once issued.

Please Clearly Print All Information unless indicated otherwise.

Date 5.18.21

Tree Address 100 Grinnell Street

Property Owner Name City of Key West Port Operations - Doug Bradshaw

Property Owner Mailing Address 201 William Street

Property Owner Mailing City, State, Zip Key West, FL 33040

Property Owner Phone Number 305-809-3790

Property Owner email Address dbradshaw@cityofkeywest-fl.gov

Property Owner Signature *Doug Bradshaw*

Representative Name Joseph Scarpelli, WP Horn Arch. / Ladd Roberts, Landwise Design

Representative Mailing Address 915 Eaton Street

Representative Mailing City, State, Zip Key West, FL 33040

Representative Phone Number 305-296-8302 (Joe) / 904-343-4194 (Ladd)

Representative email Address joe@wphornarchitect.com / lroberts@landwisedesign.com

I, Doug Bradshaw hereby authorize the above listed agent(s) to represent me in the matter of obtaining a Tree Permit from the City of Key West for my property at the tree address above listed. You may contact me at the telephone listed above is there is any questions or need access to my property.

Property Owner Signature *Doug Bradshaw*

The forgoing Instrument was acknowledged before me on this 18th day May.
By (Print name of Affiant) Doug Bradshaw who is personally known to me or has produced as identification and who did take an oath.

Notary Public

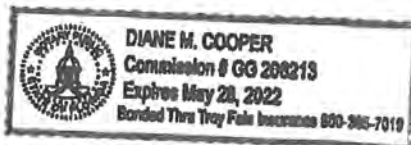
Sign name: *Diane M Cooper*

Print name: Diane M Cooper

My Commission expires: 5-28-22

Notary Public-State of Florida

(Seal)



Karen DeMaria

From: Ladd Roberts <lroberts@landwisedesign.com>
Sent: Tuesday, May 18, 2021 3:03 PM
To: Joseph Scarpelli; Doug Bradshaw
Cc: Karen DeMaria
Subject: Ferry Terminal Tree Commission Documents 5.18.21
Attachments: Key West Ferry Terminal - Tree Commission Application-and-Representation-Authorization 5.18.21.pdf; LWD - Landscape Plan 5.18.21 TC Submittal.pdf

Joe and Doug,

Please find the attached documents for your use to submit for Tree Commission.

Doug, I think I filled out the application correctly, please review and confirm and then execute where appropriate and forward to Karen De Maria by tomorrow morning if possible.

Any questions please let me know.

Kindly,

Ladd B. Roberts, RLA | 904-343-4194



1936 SAN MARCO BLVD – SUITE 101 – JACKSONVILLE - FL 32207

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Karen DeMaria

From: Ladd Roberts <lroberts@landwisedesign.com>
Sent: Thursday, June 3, 2021 3:25 PM
To: Karen DeMaria; Joseph Scarpelli
Subject: [EXTERNAL] RE: [EXTERNAL] 100 Grinnell tree map-KW Ferry Terminal

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The idea was to keep the gravel (mulch) in the narrow areas to allow people to continue to walk-thru to the parking area.

The fence will not be reinstalled.

Basically, trying to keep maximum flow-through to the parking spaces with minimal impact to landscape materials. Generally speaking, It seems like a lot of parking lot landscaping fails over time due to pedestrian traffic. This was an effort to find a better balance.

Ladd B. Roberts, RLA | 904-343-4194



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From: Karen DeMaria [mailto:kdemaria@cityofkeywest-fl.gov]
Sent: Thursday, June 03, 2021 2:15 PM
To: Ladd Roberts <lroberts@landwisedesign.com>; Joseph Scarpelli <joe@wphornarchitect.com>
Subject: RE: [EXTERNAL] 100 Grinnell tree map-KW Ferry Terminal

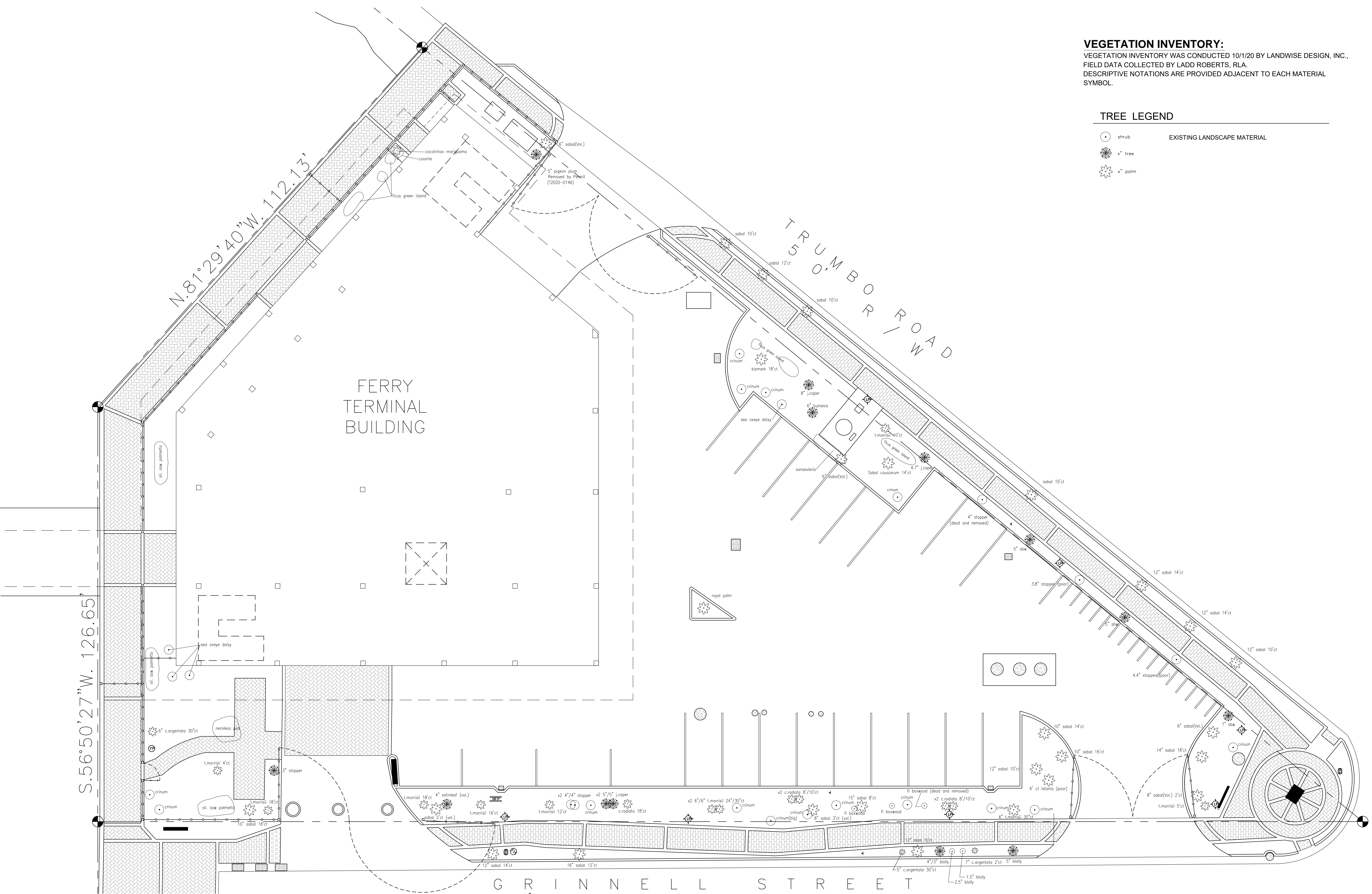
Was there any thought to adding shrubs to the rest of the perimeter parking areas? What about additional subcanopy trees especially along Trumbo Road? Is the fence going to be reinstalled around the property or is the area to remain open (except for the gate).

Sincerely,

Karen

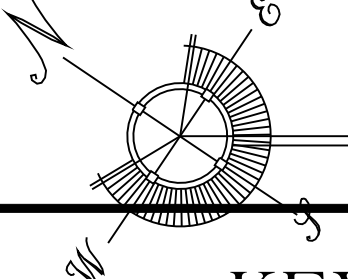
From: Ladd Roberts <lroberts@landwisedesign.com>
Sent: Wednesday, June 2, 2021 9:04 PM
To: Karen DeMaria <kdemaria@cityofkeywest-fl.gov>; Joseph Scarpelli <joe@wphornarchitect.com>
Subject: [EXTERNAL] 100 Grinnell tree map-KW Ferry Terminal

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VEGETATION INVENTORY:
VEGETATION INVENTORY WAS CONDUCTED 10/1/20 BY LANDWISE DESIGN, INC.,
FIELD DATA COLLECTED BY LADD ROBERTS, RLA.
DESCRIPTIVE NOTATIONS ARE PROVIDED ADJACENT TO EACH MATERIAL
SYMBOL.

- TREE LEGEND**
- shrub
 - x" tree
 - x" palm
- EXISTING LANDSCAPE MATERIAL**



EXISTING VEGETATION INVENTORY

SCALE: 3/32"=1'-0"

KEY WEST BIGHT FERRY TERMINAL
100 Grinnell Street
KEY WEST, FLORIDA

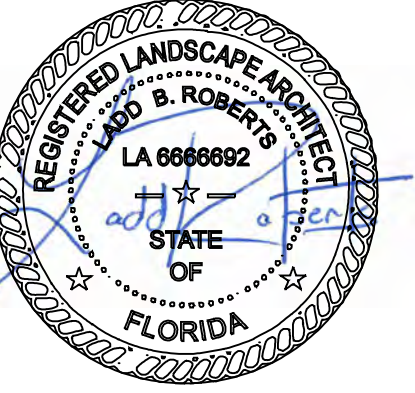
WILLIAM P. HORN
ARCHITECT, P.A.

915 EATON ST.
KEY WEST,
FLORIDA
33040

TEL. (305) 296-8302
FAX (305) 296-1033

LICENSE NO.
AA 0003040

**KEY WEST BIGHT
FERRY TERMINAL**
100 Grinnell Street
KEY WEST, FLORIDA.



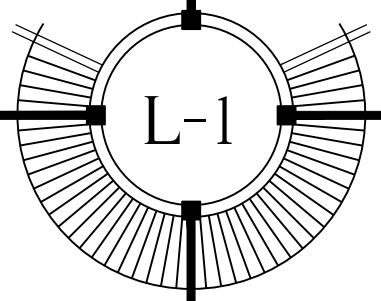
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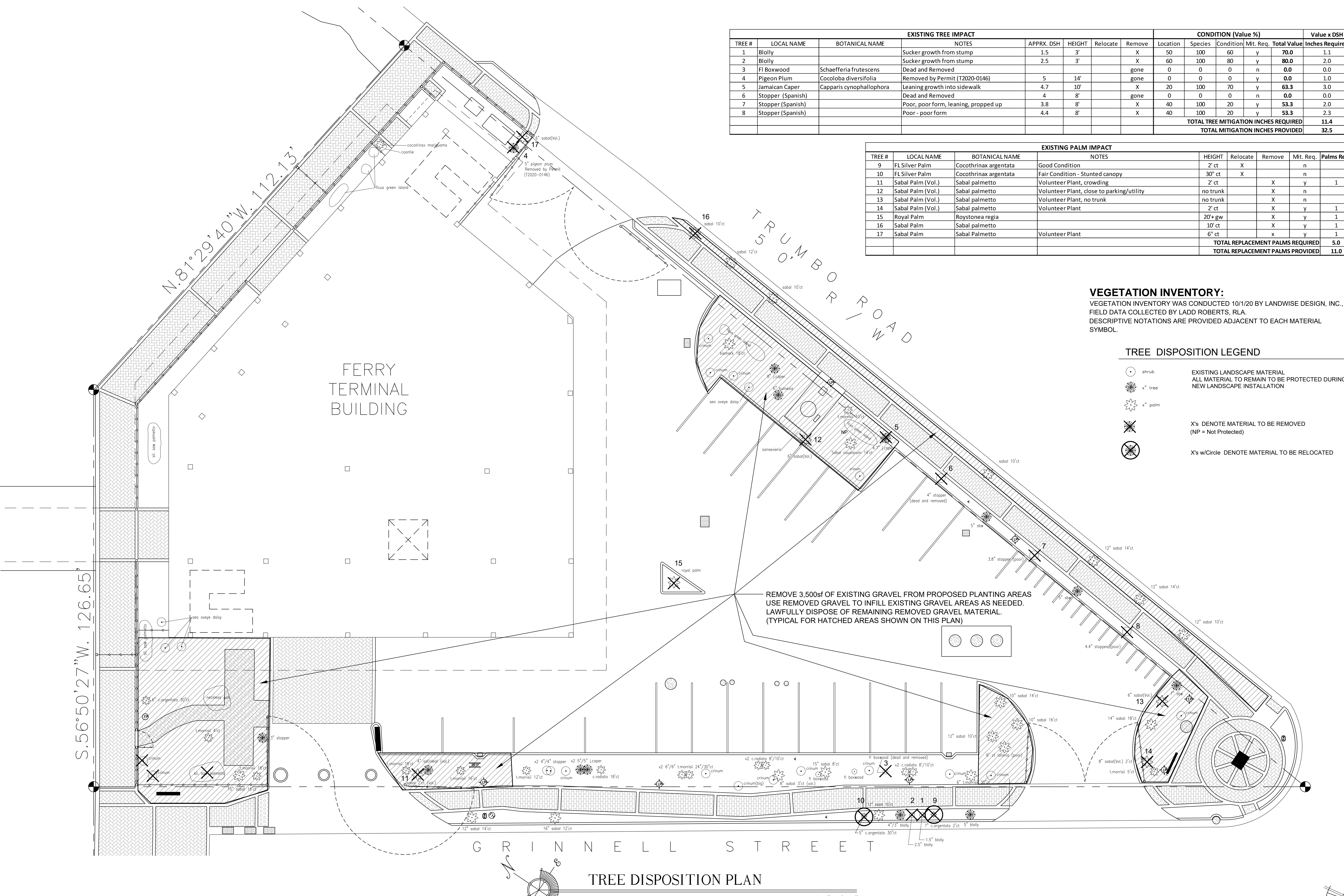
DATE
11-03-20 HARC SUBMITTAL
04-06-21 TREE COMM.
06-02-21 TREE COMM.

REVISIONS

DRAWN BY
JW

**PROJECT
NUMBER**
2014





EXISTING TREE IMPACT								CONDITION (Value %)				Value x DSH	
TREE #	LOCAL NAME	BOTANICAL NAME	NOTES	APPRX. DSH	HEIGHT	Relocate	Remove	Location	Species	Condition	Mit. Req.	Total Value	Inches Required
1	Blolly		Sucker growth from stump	1.5	3'		X	50	100	60	y	70.0	1.1
2	Blolly		Sucker growth from stump	2.5	3'		X	60	100	80	y	80.0	2.0
3	Fl Boxwood	Schaefferia frutescens	Dead and Removed				gone	0	0	0	n	0.0	0.0
4	Pigeon Plum	Coccoloba diversifolia	Removed by Permit (T2020-0146)	5	14'		gone	0	0	0	y	0.0	1.0
5	Jamaican Caper	Capparis cynophallophora	Leaning growth into sidewalk	4.7	10'		X	20	100	70	y	63.3	3.0
6	Stopper (Spanish)		Dead and Removed	4	8'		gone	0	0	0	n	0.0	0.0
7	Stopper (Spanish)		Poor, poor form, leaning, propped up	3.8	8'		X	40	100	20	y	53.3	2.0
8	Stopper (Spanish)		Poor - poor form	4.4	8'		X	40	100	20	y	53.3	2.3
TOTAL TREE MITIGATION INCHES REQUIRED												11.4	
TOTAL MITIGATION INCHES PROVIDED												32.5	

EXISTING PALM IMPACT											HEIGHT	Relocate	Remove	Mit. Req.	Palms Req.
9	FL Silver Palm	Coccothrinax argentata	Good Condition								2' ct	X		n	
10	FL Silver Palm	Coccothrinax argentata	Fair Condition - Stunted canopy								30" ct	X		n	
11	Sabal Palm (Vol.)	Sabal palmetto	Volunteer Plant, crowding								2' ct		X	y	1
12	Sabal Palm (Vol.)	Sabal palmetto	Volunteer Plant, close to parking/utility								no trunk		X	n	
13	Sabal Palm (Vol.)	Sabal palmetto	Volunteer Plant, no trunk								no trunk		X	n	
14	Sabal Palm (Vol.)	Sabal palmetto	Volunteer Plant								2' ct		X	y	1
15	Royal Palm	Roystonea regia									20'+ gw		X	y	1
16	Sabal Palm	Sabal palmetto									10' ct		X	y	1
17	Sabal Palm	Sabal Palmetto	Volunteer Plant								6" ct		x	y	1
TOTAL REPLACEMENT PALMS REQUIRED															5.0
TOTAL REPLACEMENT PALMS PROVIDED															11.0

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FIELD DATA COLLECTED BY LADD ROBERTS, RLA.
DESCRIPTIVE NOTATIONS ARE PROVIDED ADJACENT TO EACH MATERIAL SYMBOL.

TREE DISPOSITION LEGEND

- shrub

x" tree

x" palm

X's DENOTE MATERIAL TO BE REMOVED
(NP = Not Protected)

X's w/Circle DENOTE MATERIAL TO BE RELOCATED
- EXISTING LANDSCAPE MATERIAL
ALL MATERIAL TO REMAIN TO BE PROTECTED DURING
NEW LANDSCAPE INSTALLATION

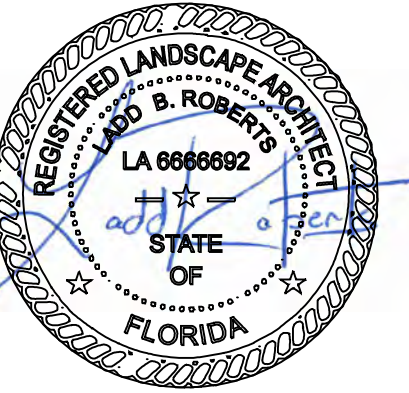
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KEY WEST BIGHT
FERRY TERMINAL
100 Grinnell Street
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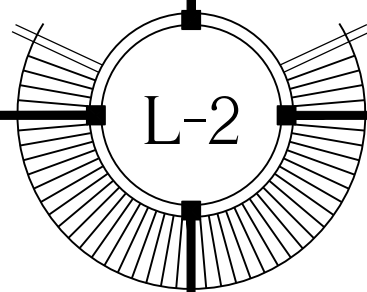
DATE
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04-06-21 TREE COMM.
06-02-21 TREE COMM.

REVISIONS

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PROJECT
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2014

TREE DISPOSITION PLAN
SCALE: 3/32"=1'-0"
KEY WEST BIGHT FERRY TERMINAL
100 Grinnell Street
KEY WEST, FLORIDA



WILLIAM P. HORN
ARCHITECT, P.A.

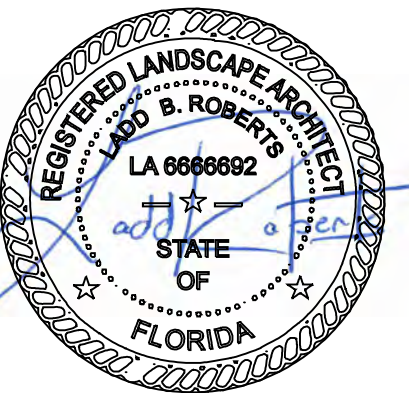
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KEY WEST BIGHT
FERRY TERMINAL
100 Grinnell Street
KEY WEST, FLORIDA.

SEAL
LANDWISE
DESIGN



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WILLIAM P. HORN

DATE
11-03-20 HARC SUBMITTAL
04-06-21 TREE COMM.
06-02-21 TREE COMM.

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PROJECT
NUMBER
2014

L-3

GRAVEL TO REMAIN
(TRIM AND SHAPE EXISTING MATERIALS
AND REMOVE NON-PROTECTED WEEDS)

GRAVEL TO REMAIN

add 12 s.f. 2"-3" GRAVEL (MATCH EXISTING)

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FIELD DATA COLLECTED BY LADD ROBERTS, R.L.A.
DESCRIPTIVE NOTATIONS ARE PROVIDED ADJACENT TO EACH MATERIAL
SYMBOL.

45-GOLDEN CREEPER 24" o.c.
70-PERENNIAL PEANUT 18" o.c.
4-PURPLE CRINUM
7-SILVER BUTTONWOOD 3' o.c.

7-SILVER BUTTONWOOD 3' o.c.
70-PERENNIAL PEANUT 18" o.c.
3-PURPLE CRINUM

400sf ZOYSIA SOD
(REPLACE ZOYSIA BETWEEN SIDEWALK AND B.O.C.)

GRAVEL TO REMAIN
5-GREEN THATCH PALM (8" ct)

12-SILVER BUTTONWOOD 3' o.c.
26-GOLDEN CREEPER 24" o.c.
2-GREEN CRINUM

34-GOLDEN CREEPER 24" o.c.
3-PURPLE CRINUM

40-PERENNIAL PEANUT 18" o.c.
4-HORIZONTAL COCOPLUM 3' o.c.
SABAL PALM (10' ct)
2-PIGEON PLUM

18-PERENNIAL PEANUT 18" o.c.
SABAL PALM (10' ct)

INFILL PAVERS
(MATCH EXISTING)

9-SPANISH STOPPER (Pot-to-Pot) 25g
(full to ground stoppers for opaque hedge)

10-COONTIE 30" o.c.
RELOCATED PALMS (TYP.)
PRUNE AND SHAPE NECKLACE POD
15-SILVER BUTTONWOOD 3' o.c.
8-PERENNIAL PEANUT 18" o.c.

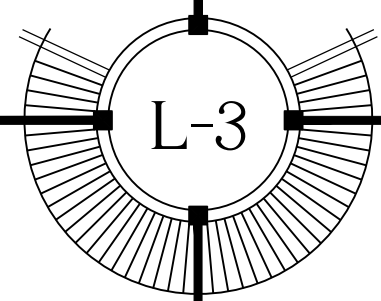
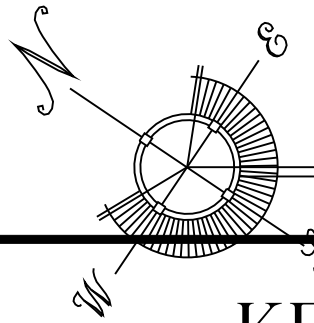
100-PERENNIAL PEANUT 18" o.c.
4-HORIZONTAL COCOPLUM 3' o.c.

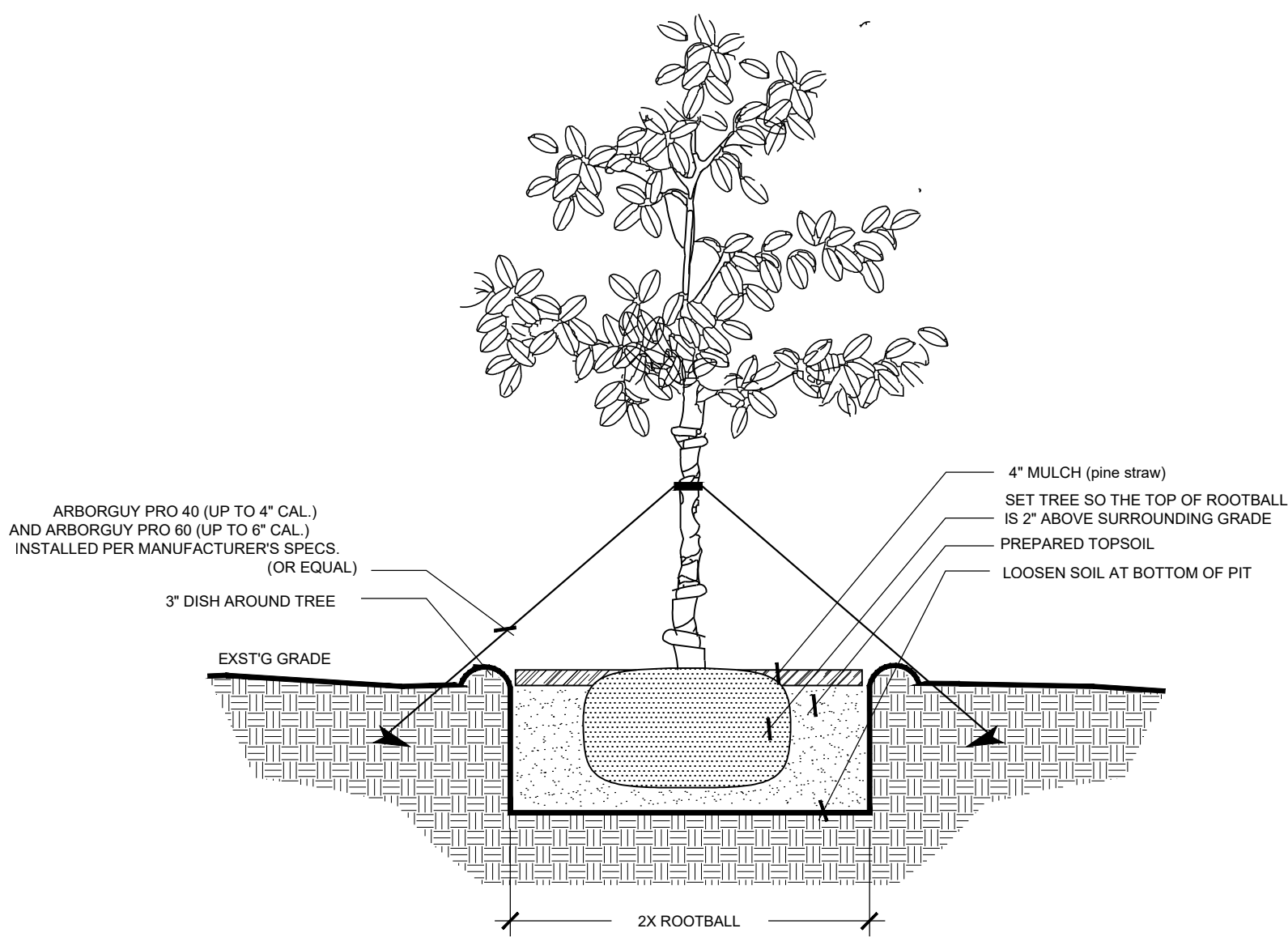
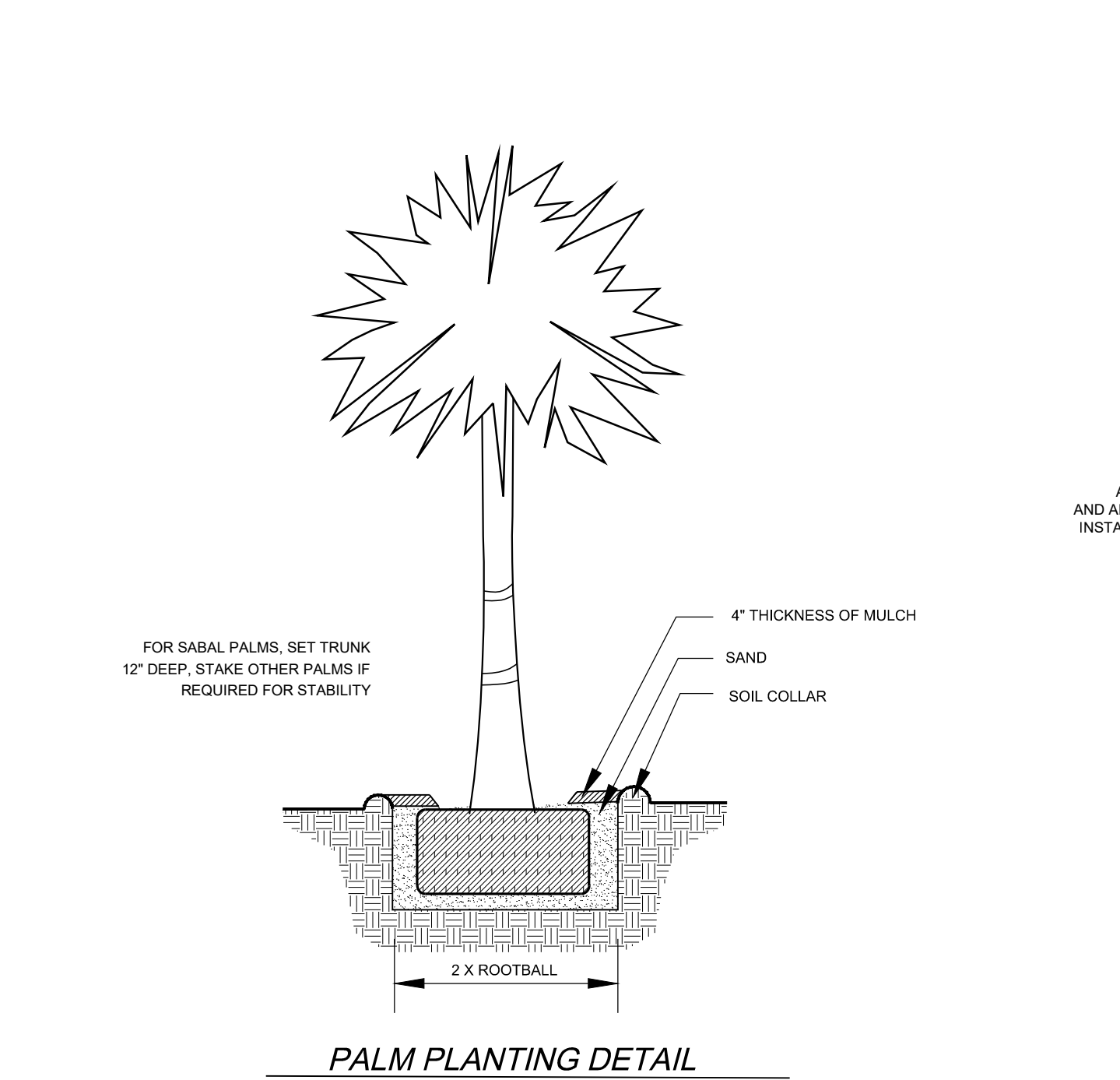
310sf ZOYSIA SOD
(REPLACE BETWEEN SIDEWALK AND B.O.C.)

LANDSCAPE PLAN

SCALE: 3/32"=1'-0"

KEY WEST BIGHT FERRY TERMINAL
100 Grinnell Street
KEY WEST, FLORIDA

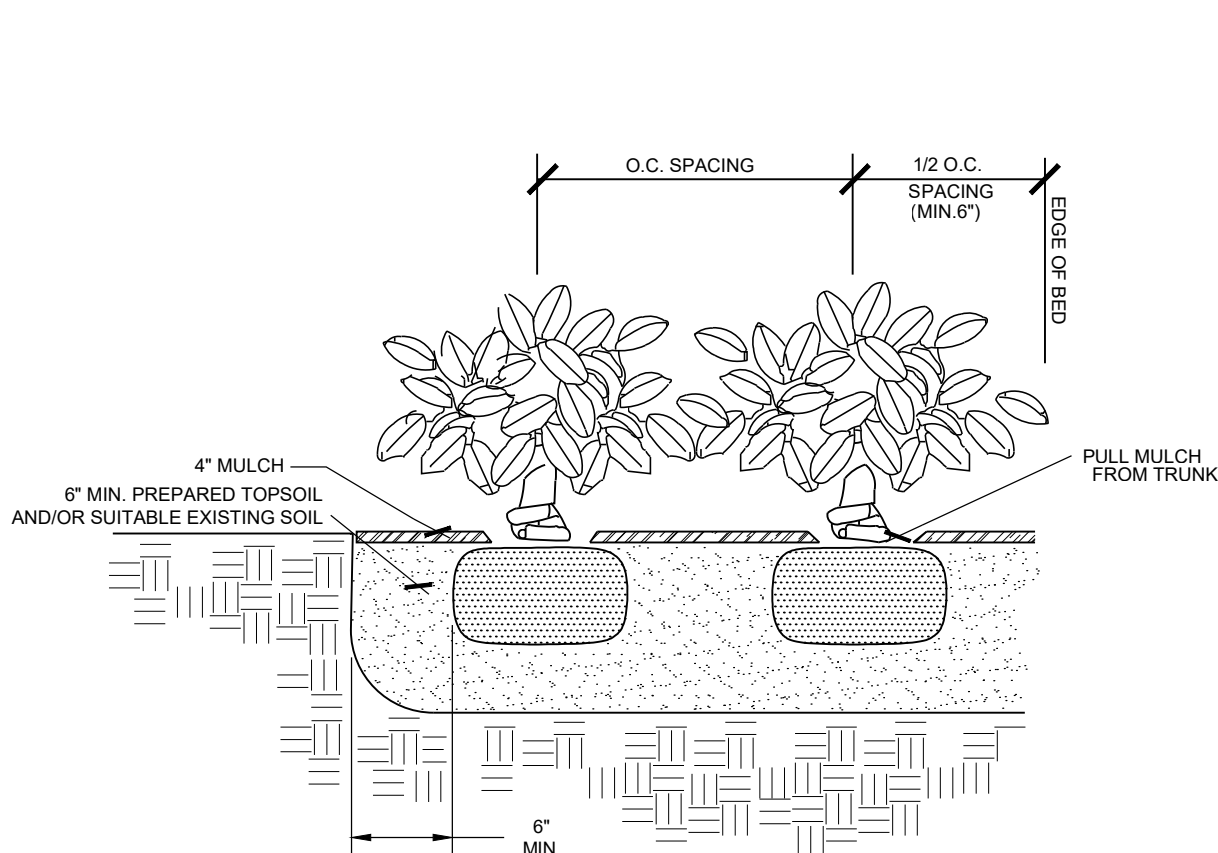




TREE PLANTING DETAIL

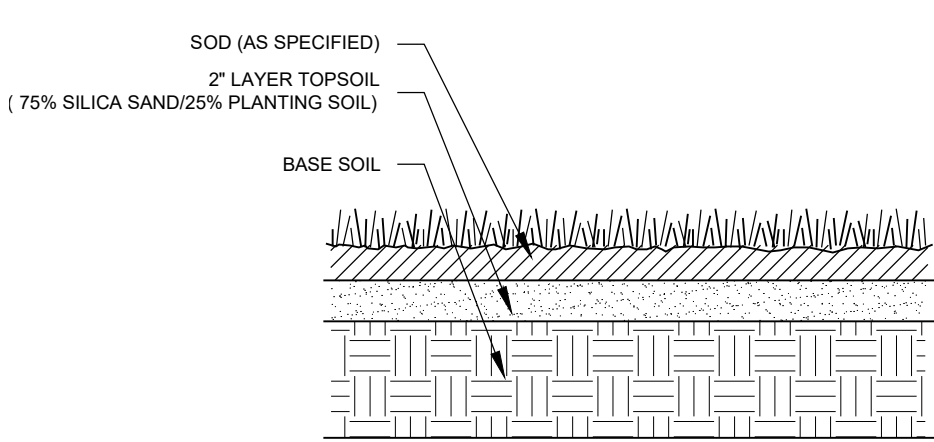
ALL TREES ARE TO BE POSITIONED VERTICALLY REGARDLESS OF THE SLOPE OF THE GROUND IN WHICH THEY ARE PLANTED. WATER RINGS ARE TO BE CONSTRUCTED AT RIGHT ANGLES TO THE TREE OR SHRUB OR IN A MANNER IN WHICH THEY WILL MOST EFFECTIVELY SERVE THE PURPOSE OF RETAINING WATER AT THE BASE OF THE PLANT.

THE ROOTBALL OF THE TREE SHOULD BE POSITIONED IN THE HOLE SO THAT THE FINISH GRADE OF THE BACKFILL SOIL AND LANDSCAPE SOIL IS 2" LOWER THAN THE TOP OF THE ROOTBALL. MULCH SHOULD COVER THE EDGE OF THE ROOTBALL, DO NOT MULCH ON TOP OF ROOTBALL.



SHRUB PLANTING DETAIL

ALL SHRUBS ARE TO BE POSITIONED VERTICALLY REGARDLESS OF THE SLOPE OF THE GROUND IN WHICH THEY ARE PLANTED. WATER RINGS ARE TO BE CONSTRUCTED AT RIGHT ANGLES TO THE TREE OR SHRUB OR IN A MANNER IN WHICH THEY WILL MOST EFFECTIVELY SERVE THE PURPOSE OF RETAINING WATER AT THE BASE OF THE PLANT.



SODDING DETAIL

ALL AREAS TO BE SODDED TO RECEIVE 2" TOP LAYER OF SILICA SAND (75%) /PLANTING SOIL (25%) AS INDICATED.

GENERAL LANDSCAPE NOTES:

- CHANGES MAY OCCUR DURING THE NORMAL COURSE OF IMPLEMENTATION. VERBAL CHANGE ORDERS WILL NOT BE HONORED. ANY CHANGES MUST BE SUBMITTED TO LANDSCAPE ARCHITECT IN WRITING AS A CHANGE ORDER TO BE REVIEWED AND APPROVED IN WRITING BY OWNER/CLIENT.
- ALL NEWLY PLANTED AREAS TO RECEIVE 100% COVERAGE BY AUTOMATIC IRRIGATION SYSTEM. LANDSCAPE CONTRACTOR TO COORDINATE INSTALLATION OF IRRIGATION SYSTEM WITH IRRIGATION CONTRACTOR. IRRIGATION TIME CLOCK TO BE HARD WIRED ON COMPLETION - RESPONSIBILITY OF IRRIGATION CONTRACTOR. LANDSCAPE CONTRACTOR TO HAND WATER OR ARRANGE FOR WATERING DURING PLANTING UNTIL IRRIGATION SYSTEM IS 100% OPERABLE. THIS IS THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR.
- LANDSCAPE CONTRACTOR TO BECOME FAMILIAR WITH THE SCOPE OF WORK AS WELL AS THE SITE, DIGGING CONDITIONS, AND ANY OBSTACLES PRIOR TO BIDDING.
- LANDSCAPE CONTRACTOR SHALL LOCATE AND VERIFY ALL UNDERGROUND UTILITIES PRIOR TO DIGGING.
- ALL PLANT MATERIAL IS TO BE FLORIDA NO. 1 OR BETTER. FLORIDA DEPARTMENT OF AGRICULTURE GRADES AND STANDARDS, PARTS I & II, 1975, RESPECTIVELY.
- ALL TREES TO BE STAKED IN A GOOD WORKMAN LIKE MANNER. NO NAIL STAKING PERMITTED.
- LANDSCAPE PLAN SHALL BE INSTALLED IN COMPLIANCE WITH ALL LOCAL CODES.
- ALL TREE HOLES TO BE BACK FILLED AROUND AND UNDER ROOT BALL WITH WASHED BEACH SAND AND PLANTING MIX. ALL SHRUB BEDS TO BE INSTALLED WITH WASHED BEACH SAND AND PLANTING MIX.
- ALL TREES, SHRUBS AND GROUND COVERS SHALL BE GUARANTEED FOR ONE YEAR FROM DATE OF FINAL ACCEPTANCE. ALL PALMS ARE TO GUARANTEED FOR ONE YEAR.
- ALL PLANTING BEDS SHALL BE WEED AND GRASS FREE.
- ALL TREES, PALMS, SHRUBS AND GROUND COVER PLANTS SHALL BE FERTILIZED AT INSTALLATION ACCORDING TO MANUFACTURERS' RECOMMENDATIONS. TYPE AND AMOUNT OF FERTILIZER IS UP TO DISCRETION OF LANDSCAPE CONTRACTOR IN ORDER TO AVOID "BURN" ON PLANTS THAT MAY ALREADY CONTAIN FERTILIZER FROM NURSERY AND ENSURE PROPER ESTABLISHMENT TO MAINTAIN CONTRACTORS WARRANTY.
- PLANTING PLAN SHALL TAKE PRECEDENCE OVER PLANT LIST IN CASE OF DISCREPANCIES.
- NO CHANGE SHALL BE MADE WITHOUT PRIOR CONSENT OF LANDSCAPE ARCHITECT.
- ALL MATERIAL SHALL BE SUBJECT TO AVAILABILITY AT TIME OF INSTALLATION. SUBSTITUTIONS MAY BE MADE AFTER CONSULTATION WITH LANDSCAPE ARCHITECT.
- LANDSCAPE CONTRACTOR TO COORDINATE HIS WORK WITH GENERAL CONTRACTOR, IRRIGATION CONTRACTOR, AND THE ELECTRICAL CONTRACTOR.
- ALL EXISTING PLANT MATERIAL TO REMAIN SHALL BE PROTECTED.
- ALL TREES TO BE RELOCATED WILL BE ROOT PRUNED 30 DAYS MINIMUM (OR MORE IF REQUIRED BY SPECIES). UPON RELOCATION, THIN OUT 30% OF THE RELOCATED TREES' CANOPY.
- AFTER REMOVAL OR RELOCATION OF EXISTING TREES AND PALMS, BACKFILL TREE PIT WITH WASHED BEACH SAND, AND SOD DISTURBED AREA, IF REQUIRED.
- ALL TREES ON SOD AREA SHALL RECEIVE A MULCH RING 2" IN DIAMETER TYPICAL.
- ALL TREES SHALL HAVE 2" CALIPER AT D.B.H. MINIMUM FOR A 10' HEIGHT TREE.
- ALL 1 GALLON MATERIAL TO HAVE 12" SPREAD MINIMUM. ALL 3 GALLON MATERIAL TO HAVE 20-24" SPREAD MINIMUM.
- LANDSCAPE CONTRACTOR TO BE COUNTY OR CITY LICENSED WHERE WORK IS TO BE PERFORMED. LIABILITY AND WORKMANS COMP INSURANCE IS REQUIRED FOR EACH AND EVERY EMPLOYEE TO BE ON SITE AT ANY TIME DURING IMPLEMENTATION. PAPERWORK TO THIS EFFECT TO BE PROVIDED ON REQUEST WITHIN 2 BUSINESS DAYS.

END

IRRIGATION NOTES: (EXISTING IRRIGATION SYSTEM TO BE REPAIRED FOR 100% COVERAGE TO ALL PLANTING AREAS).

- ALL MAJOR PALMS TO HAVE TWO BUBBLERS ON OPPOSING SIDES OF ROOT BALL. BUBBLERS TO BE HIDDEN FROM VIEW.
- IRRIGATION CONTRACTOR TO COORDINATE LOCATION OF MAIN LINES WITH LANDSCAPE CONTRACTOR PRIOR TO IMPLEMENTATION. AVOID ROOT BALLS OF TREES AND LARGE PLANT MATERIALS. REFER TO LANDSCAPE DRAWINGS.
- ALL PIPE TO BE PVC SCHEDULE 40, 8" MINIMUM COVER.
- ALL HEADS INSTALLED ON FLEXIBLE PVC PIPE AND FITTINGS.
- PRESSURIZED BACKFLOW, RAIN SWITCH, AND MULTI-PROGRAMMABLE CONTROLLER WITH BATTERY BACKUP REQUIRED.
- ALL CROSSINGS UNDER PERMANENT CONCRETE TO BE SLEEVED TWO TIMES THE SPRINKLER PIPE SIZE WITH SCHEDULE 40 PVC.
- ALL VALVES TO HAVE FLOW CONTROL AND BE INSTALLED IN GREEN VALVE BOXES WITH ROOM TO WORK IN FUTURE.
- ALL VALVE BOXES TO BE LOCATED AWAY FROM WALKWAYS, GARDEN PATHS, AND GROUNDCOVERS - KEEP TO BACK OF BEDS.

TREE BRACING NOTES:

2" AND LARGER CALIPER TREES BRACED BY GUYING:

- CHOOSE THE CORRECT SIZE AND NUMBER OF STAKES AND SIZE OF HOSE AND WIRE. GUYING SHALL BE COMPLETED WITHIN 48 HOURS OF PLANTING THE TREE.
- CUT LENGTHS OF STAKING HOSE TO EXTEND 2 INCHES PAST TREE TRUNK WHEN WRAPPING AROUND.
- SPACE STAKES EVENLY ON OUTSIDE OF WATER RING AND DRIVE EACH FIRMLY INTO GROUND. STAKES SHOULD BE DRIVEN AT A 30 DEGREE ANGLE WITH THE POINT OF THE STAKE TOWARD THE TREE UNTIL 4 TO 5 INCHES ARE LEFT SHOWING.
- PLACE THE HOSE AROUND THE TRUNK JUST ABOVE THE LOWEST BRANCH.
- THREAD THE WIRE THROUGH THE HOSE AND PAST THE STAKE, ALLOWING APPROXIMATELY 2 FEET OF EACH OF THE TWO ENDS BEYOND THE STAKE BEFORE CUTTING THE WIRE.
- TWIST WIRE AT RUBBER HOSE TO KEEP IT IN PLACE.
- PULL WIRE DOWN AND WIND BOTH ENDS AROUND STAKE TWICE. TWIST WIRE BACK ONTO ITSELF TO SECURE IT BEFORE CUTTING OFF THE EXCESS.
- THE ABOVE PROCEDURES ARE TO BE FOLLOWED FOR EACH STAKE, KEEPING THE TREE STRAIGHT AT ALL TIMES. THERE SHOULD BE A 1 TO 3 INCH SWAY IN THE TREE (THE WIRES SHOULD NOT BE PULLED TIGHT) FOR BEST ESTABLISHMENT.
- FLAG THE GUY WIRES WITH SURVEYORS FLAGGING OR APPROVED EQUAL FOR SAFETY.
- GUY'S ARE NOT TO BE REMOVED UNTIL APPROVED BY LANDSCAPE CONTRACTOR.

SPECIMEN TREES AND TALL PALMS BRACED WITH PROPS:

- CHOOSE THE CORRECT SIZE, LENGTH, AND NUMBER OF PROPS TO BE USED (PRESSURE TREATED (PT) 2"x4", 4"x4").
- WRAP AT LEAST 5 LAYERS OF BURLAP AROUND TRUNK OF THE PALM AT LEAST 4 INCHES WIDER THAN THE BATTENS BEING USED. BATTENS SHOULD BE MOUNTED AT A POINT 1/3 OF THE DISTANCE FROM GROUND TO THE CLEAR TRUNK OF THE TREE OR PALM, BUT NOT LESS THAN 4 FEET, WHICHEVER IS GREATER.
- SELECT THE PROPER LENGTH AND SIZE OF BATTENS (PT 2"x4"x12'-16").
- USE THE SAME NUMBER OF BATTENS AS PROPS BEING USED.
- PLACE THE BATTENS VERTICALLY AND EVENLY SPACED AGAINST THE BURLAP.
- PLACE THE BATTENS IN PLACE WITH METAL OR PLASTIC BANDING STRAPS. DO NOT NAIL INTO TREE.
- WEDGE LOWER END OF PROP INTO SOIL AND SECURE WITH A 2"x4"x30" STAKES. PROPS SHOULD BE INSTALLED AT A 30 TO 40 DEGREE ANGLE FROM THE BATTENS AND OF SUFFICIENT LENGTH TO REACH THE GROUND. NOTE: ON STRAIGHT TREES OR PALMS, SPACE PROPS EQUAL DISTANCE AROUND TREE OR PALM. ON CURVED PALMS OR TREES, SPACE PROPS AGAINST THE FRONT OF THE CURVE OF THE PALM OR TREE.
- CUT A SMOOTH ANGLE AT THE END OF THE PROPS. ALIGN WITH AND NAIL INTO BATTENS. DO NOT PENETRATE TREE OR PALM WITH NAILS.
- IF IT APPEARS THAT ADDITIONAL CONSTRUCTION WORK WILL TAKE PLACE NEAR TO OR IN VICINITY OF THE NEWLY BRACED TREES OR PALMS, THEN PROPS ARE TO BE CLEARED LABELED WITH THE STATEMENT "DO NOT REMOVE".
- PROPS ARE NOT TO BE REMOVED UNTIL APPROVED BY THE LANDSCAPE CONTRACTOR.

END

PLANT SCHEDULE - KEY WEST BIGHT FERRY TERMINAL PARKING AREA									
QTY.	COMMON NAME	BOTANICAL NAME	SIZE	NOTE	NATIVE	MIT. RATIO	MIT. CREDIT		
TREES				or Better					
Canopy 5	PIGEON PLUM	<i>Coccoloba diversifolia</i>	3' cal., 12'-14' ph	FL #1	NATIVE	1:1	15		
							Total Canopy Inches		15
Understory 9	SPANISH STOPPER	<i>Eugenia foetida</i>	2.5" cal., 25g, multi, 7'-8'ph, full to grnd. Plant Pot-to-Pot.	FL #1	NATIVE	1:1	22.5		
							Total Understory Inches		22.5
							Total Combined Inches		32.5
PALMS									
5 6	SABAL PALM GREEN THATCH PALM	<i>Sabal palmetto</i> <i>Thrinax radiata</i>	(1) 18' ct, (3) 10' ct, (1) 12' ct, regens, slick-skinny (0) 2', (1) 4', (0) 6' ct, (5) 8' ct	FL #1 FL #1	NATIVE NATIVE		Total Palms Provided		
							11		
SHRUBS and GROUNDCOVERS									
53 2 10 10 310 8 105 314	SILVER BUTTONWOOD GREEN CRINUM LILY PURPLE CRINUM LILY COONTIE DWF. PORTERWEED HORIZONTAL COCOPLUM GOLDEN CREEPER PERENNIAL PEANUT	<i>Conocarpus erectus var. sericeus</i> <i>Crinum spp. 'Green'</i> <i>Crinum spp. 'Purple - Queen Emma'</i> <i>Zamia pumilia</i> <i>Stachytarpheta jamaicensis (blue)</i> <i>Chrysobalanus icaco 'Horizontal'</i> <i>Ernodea littoralis</i> <i>Arachis glabrata 'NEEDLEPOINT'</i>	7 gal., 30"x36" sprd./hgt. 15 gal., Full 15 gal., Full 7 gal., 24"-30" sprd./hgt. 3 gal., full 7 gal., full 3 gal., full 1 gal., full - apply FREEHAND 1.75 Pre-Emergent per spec. to all Groundcover Beds	FL #1 FL #1 FL #1 FL #1 FL #1 FL #1 FL #1 FL #1	NATIVE NATIVE NATIVE NATIVE				
SOD & SUNDRY ITEMS									
710 SF	ZOYSIA	CONTRACTOR TO VERIFY QUANTITY			FL#1				
3,500 sf	Remove existing gravel (mulch) in preparation for new planting. Typical for all new planting areas. Infill remaining gravel areas as needed. Lawfully dispose of remaining gravel waste.								
3,000 SF	CYPRESS MULCH	COLOR: BLACK CYPRESS MULCH							

EXISTING IRRIGATION SYSTEM TO BE REPAIRED TO BRING IT BACK TO 100% FUNCTIONALITY.
ALL PLANTING AREAS TO RECIEVE 100% IRRIGATION COVERAGE

WILLIAM P. HORN
ARCHITECT , P.A.

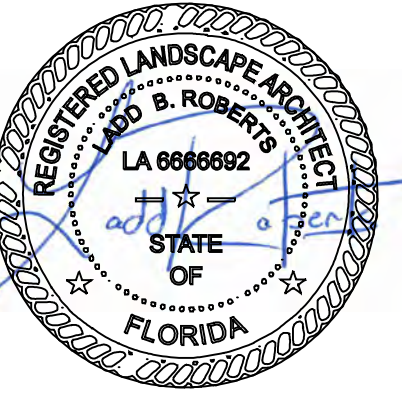
915 EATON ST.
KEY WEST,
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LICENSE NO.
AA 0003040

KEY WEST BIGHT
FERRY TERMINAL
100 Grinnell Street
KEY WEST, FLORIDA.

SEAL
LANDWISE
DESIGN



THESE DRAWINGS MAY
NOT BE REPRODUCED
WITHOUT WRITTEN
AUTHORIZATION BY
WILLIAM P. HORN

DATE

11-03-20 HARC SUBMITTAL
04-06-21 TREE COMM.
06-02-21 TREE COMM.

REVISIONS

DRAWN BY
JW

PROJECT
NUMBER
2014

SECTION 02950

TREES, PLANTS AND GROUND COVERS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Extent of landscape development work is shown on drawings and in schedules.
- B. Sodding of areas disturbed during construction exclusive of paved areas.
- C. Transplanting of existing trees, palms and plant material. (thatch palms are currently proposed for this project)
- D. Prior to construction activities, all trees, palms and plant material to be relocated.
- E. Watering of planted materials

1.02 RELATED SECTIONS

- A. Section 02810-Underground Irrigation Specifications
- B. Section 02935 Sodding

1.03 SUBMITTALS

- A. Comply with provisions of General Conditions
- B. Certificates of inspection as required by governmental authorities and manufacturer's or vendor's certified analysis for soil amendments and fertilizer materials. Submit other data substantiating that materials comply with specified requirements.
- C. Vendor's certified statement for each grass seed mixture required, stating botanical and common name, percentage by weight, and percentages of purity, germination, and weed seed for each grass seed species.
- D. Soil test reports.
- E. Maintenance Instructions: Typewritten instructions recommending procedures to be established by Owner for maintenance of landscape work for one full year. Submit prior to expiration of required maintenance periods.
- F. Provide reproducible As-Built drawing after final acceptance by owner.

1.04 QUALITY ASSURANCE

- A. Landscape work shall be performed by a single firm specializing in landscape work.
- B. Obtain agronomic soils tests for all planting areas. Tests shall be performed by an approved agronomic soils testing laboratory and shall include fertility and suitability analysis with written recommendations for soil amendments, fertilizer, and chemical conditioner application rates for soil preparation, planting backfill mix, and post maintenance fertilization program. Submit a copy of soils test to Architect.
- C. Obtain soil test from existing stockpiled topsoil, if any, to determine type and amount of amendments needed for areas that are to receive stockpiled topsoil.
- D. Ship landscape materials with certificates of inspection as required by governmental authorities. Comply with governing regulations applicable to landscape materials.
- E. Substitutions: Do not make substitutions. If specified landscape material is not obtainable, submit proof of non-availability and proposal for use of equivalent material to Architect. When authorized, adjustment of contract amount will be made.
- F. Analysis and Standards: Package standard products with manufacturer's certified analysis. For other materials, provide analysis by recognized laboratory made in accordance with methods established by the Association of Official Agricultural Chemists, wherever applicable or as further specified.
- G. Topsoil: Fine sand or loamy fine sand indigenous to the area suitable for plant growth that is free of weeds, roots, stumps, rocks larger than 1/2 inch diameter, organic muck, hard pan, toxic substances detrimental to plant growth, and construction debris such as lime rock, concrete, and asphalt pieces. Deliver in normally moist condition, neither muddy nor wet.
- H. Trees and Shrubs: Plant names indicated are to comply with "Standard Plant Names" as adopted by latest edition of American Joint Committee of Horticultural Nomenclature. Names of varieties not listed conform generally with names accepted by the nursery trade. Provide stock true to botanical name and legibly tagged. Provide healthy, vigorous stock grown under climatic conditions similar to conditions in locality of project; free of disease, insects, eggs, larvae and defects such as knots, sun-scald, injuries, abrasions or disfigurement. ALL PLANTS TO BE FLORIDA #1 OR BETTER
- I. Sizes: Comply with sizing and grading standards of latest edition of American Standard for Nursery Stock. A plant shall be dimensional as it stands in its natural position. Stock furnished shall be at least minimum size indicated. Larger stock is acceptable at no additional cost unless a written change order is issued.
- J. Inspection: Landscape Architect reserves the right to inspect trees and shrubs either at place of growth or at site before planting for compliance with requirements for name, variety, size and quality.
1. Such approval shall not impair the right of inspection and rejection upon delivery at the site during the progress of work.

1.05 DELIVERY, STORAGE AND HANDLING

- A. Packaged Materials: Deliver packaged materials in containers showing weight, analysis and name of manufacturer. Protect materials from deterioration during delivery and while stored at site.
- B. Trees and Shrubs: Provide container grown or balled and burlapped trees and shrubs. Do not use trees or shrubs which have been in cold storage or heeled-in. Do not prune prior to delivery. Do not bend or bind-tie trees or shrubs in such manner as to damage bark, break branches or destroy natural shape. Provide protective covering during delivery.
- C. Deliver trees and shrubs after preparations for planting have been completed and plant immediately. Cover plants transported on open vehicles with a protective covering to prevent wind burn. If planting is delayed more than six hours after delivery, set trees and shrubs in shade, protect from weather and mechanical damage, and keep roots moist.
- D. Do not remove container grown stock from containers until planting time.
- E. Label at least one tree and one shrub of each variety with a securely attached waterproof tag bearing legible designation of botanical and common name.

1.06 PROJECT REQUIREMENTS

- A. Proceed with and complete landscape work as rapidly as portions of site become available, working within seasonal limitations for each kind of landscape work required.
- B. Utilities: Determine location of underground and above ground utilities and perform work in manner which will avoid possible damage. Hand excavate, as required, to minimize possibility of damage to underground utilities. Maintain grade stakes set by others until removal is mutually agreed upon by all parties concerned.
- C. Excavation: When conditions detrimental to plant growth are encountered, such as rubble fill, adverse drainage conditions or obstructions, notify Architect before planting.
- D. Planting Schedule: Prepare a proposed planting schedule. Schedule dates for each type of landscape work during normal seasons for such work in area of site. Correlate with specified maintenance periods to provide maintenance until final completion of work under contract.
- E. Coordination with Lawns: Plant trees and shrubs after final grades are established and prior to planting of lawns, unless otherwise acceptable to Landscape Architect. If planting of trees and shrubs occurs after lawn work, protect lawn areas and promptly repair damage to lawns resulting from planting operations.

1.07 WARRANTY

- A. Warranty trees and shrubs, for a period of one year after date of acceptance, against defects including death and unsatisfactory growth except for defects resulting from neglect by Owner, abuse or damage by others, or unusual phenomena or incidents which are beyond Contractor's control.
- B. Warranty shall not include damage or loss of trees, plants or ground covers caused by fires, floods, severe freezes not typical to the region, winds over 75 mph or acts of vandalism.
- C. Remove and replace trees, shrubs, or other plants found to be dead or in unhealthy condition during warranty period. Plant missing trees, shrubs and ground covers. Make replacements during growth season following end of warranty period. Furnish and plant replacements which comply with requirements shown and specified. Also, replace trees and shrubs which are in doubtful condition at end of warranty period. Only one replacement shall be required at end of warranty period, except for losses or replacements due to failure to comply with specified requirements.

PART 2 PRODUCTS

2.08 TOPSOIL

- A. Topsoil for landscape work is not available at site and shall be furnished as specified.
- B. Provide new topsoil which is fertile, friable, natural loam, surface soil, reasonably free of subsoil, clay lumps, brush, weeds and other litter and free of roots, stumps, stones larger than 1/2 inches in any dimension, and other extraneous or toxic matter harmful to plant growth.
1. Obtain topsoil from local sources or from areas having similar soil characteristics to that found at project site.
2. Obtain topsoil only from naturally well-drained sites where topsoil occurs in a depth of not less than four inches; do not obtain from bogs or marshes.

2.09 SOIL AMENDMENTS

- A. Lime: Natural limestone containing not less than 85 percent of total carbonates, ground so that not less than 90 percent passes a 10 mesh sieve and not less than 50 percent passes a 100 mesh sieve.
- B. Peat Humus: FS Q-P-166 and with texture and pH range suitable for intended use, or Florida muck.
- C. Bone Meal: Commercial, raw, finely ground; 4 percent nitrogen and 20 percent phosphoric acid.
- D. Superphosphate: Soluble mixture of treated minerals; 20 percent available phosphoric acid.
- E. Commercial Fertilizer: Complete fertilizer of neutral character with some elements derived from organic sources and containing following percentages of available plant nutrients:
1. Trees and Shrubs: Minimum 10 percent available phosphoric acid, from 3 percent to 5 percent total nitrogen, and from 3 percent to 5 percent soluble potash.
2. Lawns: Minimum 4 percent phosphoric acid, minimum 2 percent potassium, and percentage of nitrogen required to provide not less than one pound of actual nitrogen per 1,000 sq.ft. of lawn area. Provide nitrogen in a form that will be available to lawn during initial period of growth.
3. Palm Fertilizer - Slow release "Palm Special" granular fertilizer which includes trace elements of iron, magnesium and manganese.
- F. Sand: Clean, washed builders sand free of salt, weeds, sticks and other debris.

- G. Organic Soil Amendment: Pinebark chunks smaller in size but not greater than 3/4 inches in diameter.

2.10 PLANT MATERIALS - GENERAL

- A. Name and Variety: Provide plant materials true to name and variety established by American Joint Committee on Horticultural Nomenclature "Standardized Plant Names".
- B. Quality: Provide trees, shrubs and other plants complying with recommendations and requirements of ANSI Z60.1 "Standard for Nursery Stock" and as further specified.
- C. Provide plants typical of their species or variety with normal, densely developed branches and vigorous, fibrous root systems. Provide only sound, healthy, vigorous plants free from defects, disfiguring knots, sunscald injuries, frost cracks, abrasions of the bark, plant diseases, insect eggs, borers and all other forms of infestation. Plants shall have a fully developed form without voids and open spaces.
- D. Dig balled and burlapped plants with firm, natural balls of earth sufficient in diameter and depth to encompass the fibrous and feeding root system necessary for full recovery of plant. Provide ball sizes complying with latest edition of American Standard for Nursery Stock. Cracked or loose balls are not acceptable.
- E. Provide tree species true to normal species, character and habit. Single trunk trees will not be acceptable with "Y" shape trunk in the main leader. Culls will not be acceptable.
- F. Plants planted in rows shall be matched in form.
- G. Plants larger than those specified in the plant list may be used and are acceptable in most instances, but should be verified by Owner.
- H. The height of trees, measured from the crown of the ball to the top of the top branch, shall not be less than the minimum size designated in the plant list prior to topping and pruning.
- I. Coniferous trees shall be branched to the ground.

2.11 CONTAINER GROWN STOCK

- A. Stock shall be grown in container for sufficient length of time for root system to have developed to hold its soil together, firm and whole.
- B. No plants shall be loose in the container.
- C. Container stock shall not be pot bound.

2.12 SHRUBS AND SMALL PLANTS

- A. Requirements for spread and height are indicated in plant list.
- B. Measurements for height shall be taken from ground level to the average height of top of plant and not the longest branch.
- C. Single stemmed or thin plants will not be acceptable.
- D. Side branches shall be generous, well-twigged and, the plant as a whole, well-bushed to ground.
- E. Plants shall be in moist, vigorous condition, free from dead wood, bruises or other root or branch injuries.
- F. Provide plants established and well-rooted in removable containers or integral peat pots and with less than minimum number and length of runners required by ANSI Z60.1 for post size shown or listed.

2.13 FERTILIZER

- A. Plant fertilizer Type A, commercial type, containing at least 12 percent nitrogen, 12 percent phosphoric acid, and 12 percent potash and whose composition is at least 50 percent organic so as to provide a continuous time released character.
1. Preferred Type: Pelletized or briquette form, such as Agriform tablets for use in planting shrubs and trees on an individual basis.
2. Granular Type A to be incorporated into topsoil of planting beds, annual beds and ground cover beds.

2.14 MULCH

- A. For Use in Backfill Mixtures: Well-shredded pine bark or native hardwood not larger than 1/2 inch in width.

- B. Bed and Tree Dressing Mulch:
1. Premium pine straw; furnish in bales free of sticks and rubbish.

2.15 ACCESSORIES

- A. Topsoil: Fertile, friable, natural, of loamy character, without a mixture of subsoil material, shall be obtained from a well-drained arable site, or from on-site stockpile, being reasonably free from clay, lumps, coarse sands, stones, roots, sticks and other foreign materials, with a acidity range of between Ph 6.0 and 6.8.
- B. Peat Moss: Brown to black in color, weed and seed free, granulated, raw peat or baled peat, containing not more than 9 percent mineral on a dry basis.
- C. Water: Free of substances harmful to plant growth.
- D. Stakes for Tree Staking: Common and acceptable in region of project.
- E. Guying Wire: 10 or 12 gage galvanized wire.
- F. Turnbuckles: Galvanized steel or aluminum of size and gage required to provide tensile strength equal to that of guying wire. Turnbuckles opening shall be at least 3 inches to allow for periodic adjustments.
- G. Staking and Guying Hose: Two-ply reinforced garden hose not less than 1/2 inch inside diameter.
- H. Erosion Control Fabric: Supergro or equal.
- I. Twine: Two-ply jute material.
- J. Soil Separator: Heat resistant filter fabric, water permeable and unaffected by freezing and thawing.
- K. Drainage Fill: AASHTO M43#6; 3/8 inch to 3/4 inch clean, uniformly graded stone.
- L. Erosion Control Fabric: Dewit Weed Barrier or equal.

2.16 ANTI-DESICCANT

- A. Emulsion type, film-forming agent designed to permit transpiration but retard excessive loss of moisture from plants.
- B. Deliver in manufacturer's fully identified containers and mix in accordance with manufacturer's instructions.
- C. Acceptable Manufacturers:
1. Dow Chemical Company: Dowax.
2. Nursery Specialty Products, Inc.; Wilt-Proof.

2.17 PLANTING SOIL MIXTURE

- A. Mix: 1/3 parts organic soil amendment to 1/3 parts "Florida Muck" or equivalent to 1/3 parts clean, washed builders sand.
- B. Add soil amendments as recommended by soil test in quantities necessary to bring soil mixture to pH rating of between 6.5 and 6.8. Minerals used for pH correction shall be commercially produced for this purpose.
- C. For pit and trench type backfill, mix planting soil prior to backfilling and stockpile at site.
- D. For ground cover and other planting beds, mix planting soil mixture either prior to planting or apply on surface of topsoil and mix thoroughly before planting.
1. Mix time with dry soil prior to mixing of fertilizer.
2. Prevent time from contacting roots of acid-loving plants.
3. Apply phosphoric acid fertilizer, other than that constituting a portion of complete fertilizers, directly to subgrade before applying planting soil and tilling.
- E. For palms, plant in existing suitable soil or a mixture of 75% sand and 25% perlite.

PART 3 EXECUTION

3.18 EXAMINATION

- A. Examine subgrade, verify elevations, observe conditions under which work is to be performed, and correct unsatisfactory conditions before proceeding with the work or notify Landscape Architect if adverse conditions are discovered which will inhibit plant growth.

3.19 PREPARATION

- A. Lay out individual tree and shrub locations and areas for multiple plantings. Stake locations and outline areas and secure Landscape Architect's acceptance before start of planting work. Make minor adjustments as may be requested.
- B. In planting beds, where plants are spaced 3 feet on center or less, work soil amendments as required by soils test. Remove stones over 1-1/2 inches in any dimension, stick, rubbish and other extraneous matter. Use a cultimulcher or other similar equipment to work amendments into soil.
- C. 20 PLANTERS
- A. Place minimum 4 inch layer of gravel in bottom of planters and fill with planting soil mixture. Place soil in lightly compacted layers to an elevation 1-1/2 inches below top of planter allowing for natural settlement. For interior planters, soil mixture shall be a sterile mixture used for interior plantings such as Metromix or equal.

3.21 EXCAVATION - TREES AND SHRUBS

- A. Excavate pits, beds, and trenches with vertical sides and with bottom of excavation slightly raised at center to provide proper drainage. Loosen hard subsoil in bottom of excavation.
- B. Bare Root Trees and Shrubs: Make excavations minimum 1'-0" wider than root spread and deep enough to allow for setting of roots on a layer of compacted planting soil mixture and with collar set at same grade as in nursery but 2 inches below finished grade at site. Allow for 9 inch setting layer of planting soil mixture.
- C. Balled and Burlapped (B&B) Trees and Shrubs: Make excavations minimum twice as wide as ball diameter and equal to ball depth.
- D. Container Grown Stock: Excavate as specified for balled and burlapped stock, adjusted to size of container width and depth.
- E. Ground Cover Beds: Provide a minimum 10 inches depth, 2 inches of which will be higher than surrounding grade.
- F. Annual Beds: Provide minimum of 8 inches in depth, 2 to 5 inches of which shall be higher than surrounding grade.
- G. Dispose of subsoil removed from landscape excavations. Do not mix with planting soil or use as backfill.
- H. Fill excavations for trees and shrubs with water and allow to percolate out before planting.

3.22 PLANTING TREES AND SHRUBS

- A. Set balled and burlapped (B&B) stock on layer of compacted planting soil mixture, plumb and in center of pit or trench with top of ball at same elevation as adjacent finished landscape grades. When set, place additional planting soil mixture around sides and base and eliminate voids and air pockets. Lay back burlap to expose top of root ball to soil mixture. When excavation is approximately 2/3 full, water thoroughly before placing remainder of backfill. Repeat watering until no more is absorbed. Water again after placing final layer of backfill. Remove burlap from sides of balls; retain on bottoms.
- B. Set bare root stock on cushion of planting soil mixture. Spread roots, carefully work backfill around roots by hand, and puddle with water until backfill layers are completely saturated. Plumb before backfilling and maintain plumb while working backfill around roots and placing layers above roots. Set collar one inch to two inches below adjacent finish landscape grades. Spread cut roots without tangling or turning up to surface. Cut injured roots clean, do not break.

- C. Set container grown stock as specified for balled and burlapped stock, except cut cans on two sides with an approved can cutter. Remove sides of wooden boxes after partial backfilling so as not to damage root balls.
- D. Dish top of planting soil mixture to allow for mulching.
1. For spring planting, provide additional backfill berm around edge of excavations to form shallow saucer to collect water.
- E. Mulch pits, trenches and planted areas. Provide not less than the following thickness of mulch and work into top of planting soil mixture and finish level with adjacent.
1. Provide 3 inch thickness of mulch.
- F. Apply anti-desiccant using power spray to provide an adequate film overtrunks, branches, stems, twigs and foliage.
1. If deciduous trees or shrubs are moved in full-leaf, spray with anti-desiccant at nursery before moving and again two weeks after planting.
- G. Do not prune except to remove damaged branches or as directed by landscape architect.
- H. Remove and replace excessively pruned or misformed stock resulting from improper pruning.
- I. Paint cuts over 1/2 inch in size with standard tree paint or compound covering exposed, living tissue. Use paint which is waterproof, antiseptic, adhesive, elastic and free of kerosene, coal tar, creosote, and other substances harmful to plants. Do not use shellac.
- J. Guy and stake trees immediately after planting, as indicated.

3.23 PLANTING PALMS

- A. Set stock as indicated in bed. Stake palms as necessary to maintain plumb or at angle shown. Brace with three 2" x 4" wood braces toenailed to three 2" x 4" x 24" battens which are securely banded at two points to palm at a point 2/3 trunk height. Pad trunk with 20 layers of burlap under battens. Place braces 120 degrees apart and secure underground by 2" x 4" x 24" stakes.
- B. Water palm thoroughly immediately after planting.
- C. Set Date palms a minimum of 4' in the ground. Aerial roots may not extend more than 6 inches above the final finished grade of the palm.

3.24 PLANTING GROUND COVER

- A. Space plants as shown or scheduled.
- B. Work planting soil mixture around roots to eliminate air pockets and leave a slight saucer indentation around plants to hold water. Water thoroughly after planting, taking care not to cover crowns of plants with wet soil.
- C. Mulch areas between ground cover plants; place not less than 2 inches thick.

3.25 TRANSPLANTING EXISTING TREES, PALMS AND SHRUBS

- A. Refer to Article entitled, Planting Trees and Shrubs.
- B. Pruning: Prior to transplanting operations, prune existing branches back 1/3 on trees and shrubs. On existing palms, prune back existing fronds and tie a minimum of four fronds around central growth heart area.
- C. Handle plants so that roots are adequately protected at all times.
- D. Plant shall not be bound with rope or wire, at any time, that would damage bark, break branches, or destroy its natural shape.
- E. Plant transplanted plants immediately after digging.
- F. Plants shall be moved with firm, natural balls of soil with minimum ball size conforming to requirements of ANSI Z60.1 Standard for Nursery Stock.
- G. Underground Obstruction: If underground construction, utilities or obstructions are encountered in excavation of planting areas or pits, other locations for plant material will be selected by Architect. Changes in locations shall be made without additional cost to Owner.

3.26 MAINTENANCE

- A. Begin maintenance immediately after planting. Maintain trees, shrubs and other plants until final acceptance but in no case less than 30 days after planting.
- B. Maintain trees, shrubs and other plants by pruning, cultivating and weeding as required for healthy growth. Restore planting saucers. Tighten and repair stake and guy supports and reset trees and shrubs to proper grades or vertical position as required. Restore or replace damaged wrappings. Spray as required to keep trees and shrubs free of insects and disease.
- C. Verify watering of trees, plants and ground cover beds within the first 24 hours of initial planting and not less than twice per week until final acceptance.
- D. For Date Palms, drench the root zone 2-4 times for the first 4 months after planting with a fungicide labeled for landscape use on soil borne root fungal pathogens. Apply a light surface application of a slow-release "palm special" granular fertilizer at the margins of the root ball 3 months after planting. Apply a foliar spray of soluble micronutrients. When new leaves are evident from the crown, begin a maintenance program for fertilization 3 times a year.

3.27 CLEANING AND PROTECTION

- A. During landscape work, store materials and equipment where directed.
- B. Keep pavements clean and work area in an orderly condition.
- C. Protect landscape work and materials from damage due to landscape operations, operations by other contractors, trades and trespassers. Maintain protection during installation and maintenance periods. Treat, repair or replace damaged landscape work.

3.28 INSPECTION AND ACCEPTANCE

- A. When landscape work is completed, including maintenance, upon request Architect will make an inspection to determine acceptability.
- B. Landscape work may be inspected for acceptance in parts agreeable to Architect, provided work offered for inspection is complete including maintenance and area comprises one complete unit or area of substantial size.
- C. Where inspected landscape work does not comply with requirements, replace rejected work and continue specified maintenance until reinspected by Architect and found to be acceptable. Remove rejected plants and materials promptly from project site.

END OF SECTION

WILLIAM P. HORN
ARCHITECT , P.A.

915 EATON ST.

KEY WEST,

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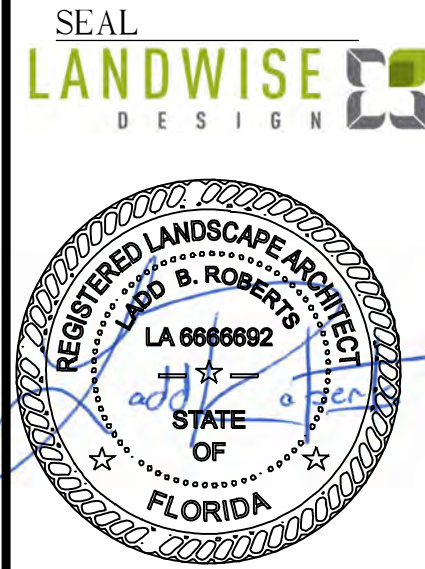
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KEY WEST BIGHT
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100 Grinnell Street

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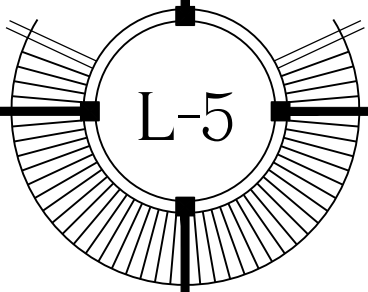
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