MITIGATION REQUIRED	
TREES	
Required Tree Mitigation (DBH Inches):	316.8 DBH Inches
Required Tree Mitigation (1:1 Replacement):	159 Trees
Trees Preserved:	5 Trees
Trees Relocated	1 Tree
PALMS	
Required Palm Mitigation (Overal Feet):	2079 Feet (97 Palms)
Required Palm Mitigation (1:1 Replacement):	9 Palms
Palms Preserved:	0 Palms
Palms Relocated:	0 Palms

MITIGATION PROVIDED

TREES RATING 50% OR GREATER

Required Tree Mitigation: 316.8 Cal.
Provided Tree Mitigation: 324 CAL *(See table below)*

Replacement Trees			
	Quantity	Caliper (CAL)	Calipers Provided (inch)
Gumbo Limbo (Common Area)	14	4	56
Brazilian Beautyleaf (Common Area)	36	3	108
Southern Live Oak (Common Area)	5	16	80
Bald Cypress (Common Area)	6	4	24
Southern Live Oak (Residential Lots)	14	4	56
		Total =	324 CAL

TREES RATING LESS THAN 50%

Required Tree Mitigation (1:1): 159
Provided Tree Mitigation (1:1): 159 *(See table below)*

Replacement Trees	
	Quantity
Green Buttonwood (Common Area)	44
Silver Buttonwood (Common Area)	42
Japanese Blueberry (Common Area)	6
Brazilian Beautyleaf (Residential Lots)	65
Total =	159

PALMS RATING 50% OR GREATER

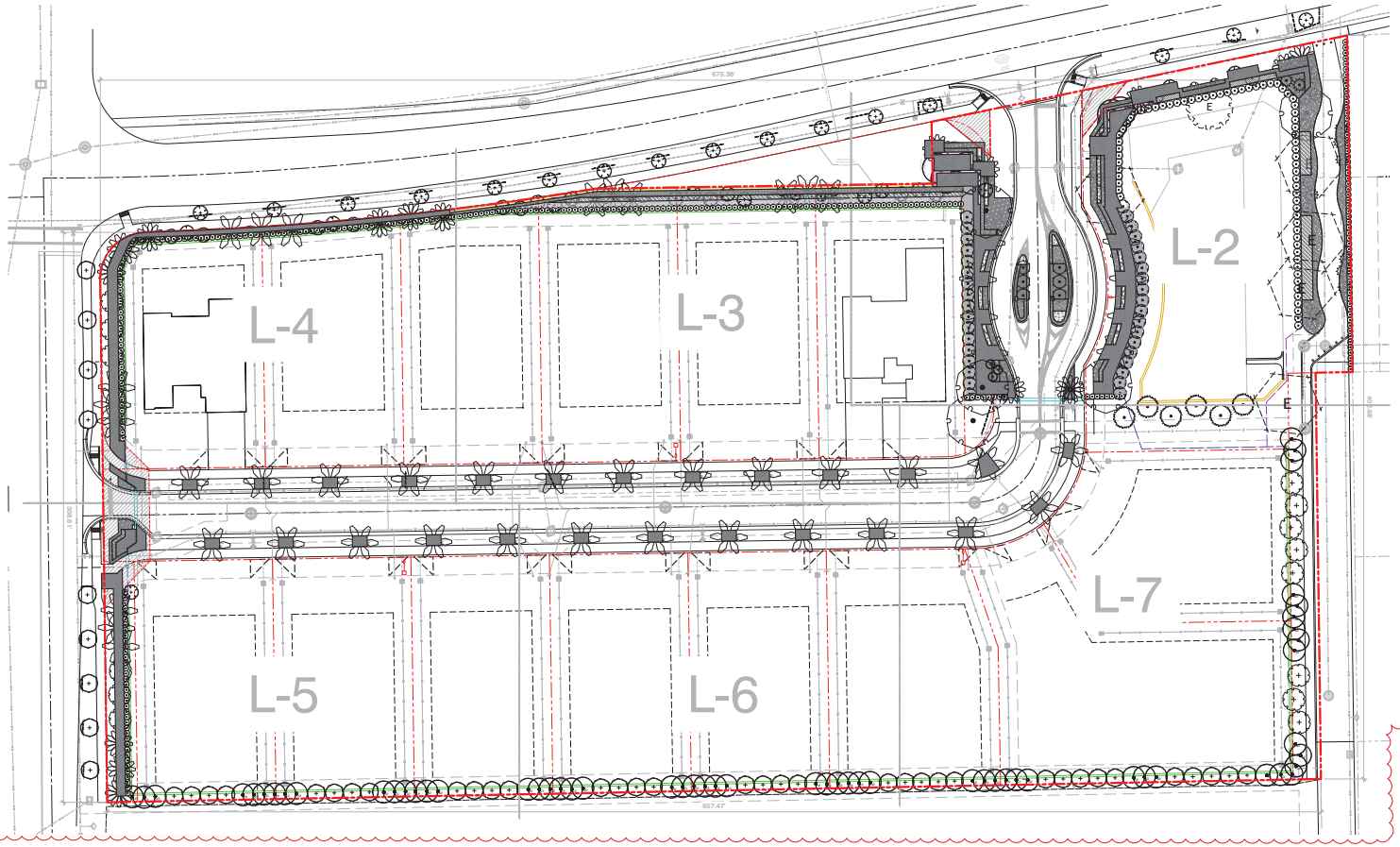
Required Palm Mitigation: 2079 Ft.
Provided Palm Mitigation: 2246 Ft. *(See table below)*

Replacement Palms			
	Quantity	Overall Height	Height Provided (feet)
Silver Bismark Palm (8' CT) (Common Area)	17	16	272
Silver Bismark Palm (12' CT) (Common Area)	1	20	20
Wild Date Palm (10' CT) (Common Area)	30	20	600
Wild Date Palm (13' CT) (Common Area)	18	22	396
Cabbage Palm (18' CT) (Common Area)	15	24	360
Cabbage Palm (20' CT) (Common Area)	23	26	598
		Total =	2246 Ft.

PALMS RATING LESS THAN 50%

Required Palm Mitigation (1:1): 9
Provided Palm Mitigation (1:1): 19 *(See table below)*

Replacement Trees	
	Quantity
Cabbage Palm (22' CT) (Common Area)	19
Total =	19



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Delray Ridge
Delray Beach, FL

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studio@plladesignstudio.com
561.318.5236

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Stephanie Portus FL Reg LA 6667215

project number
20-102

sheet name
LANDSCAPE COVER SHEET

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06/07/22

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1" = 30'-0"

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L-1

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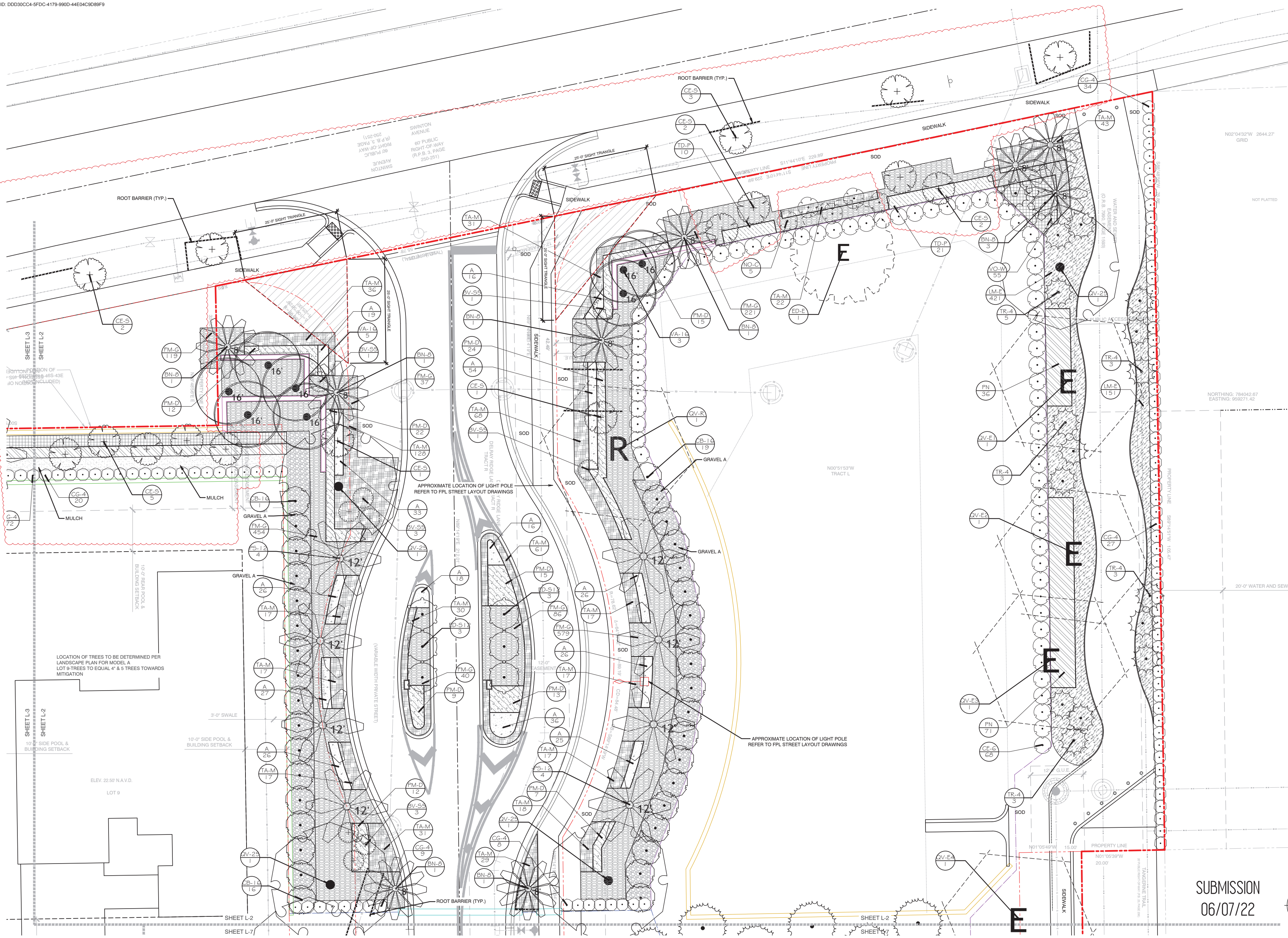

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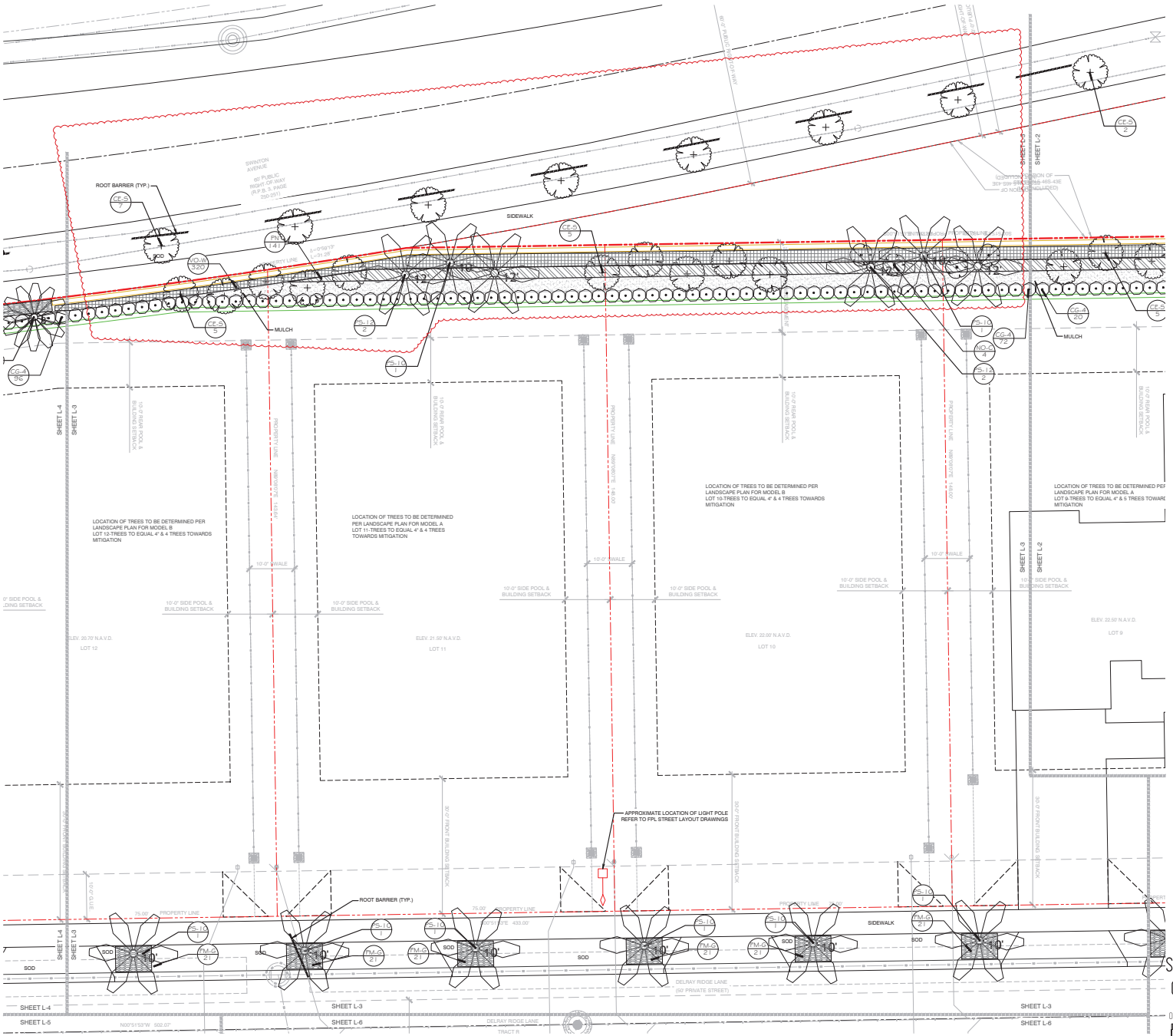

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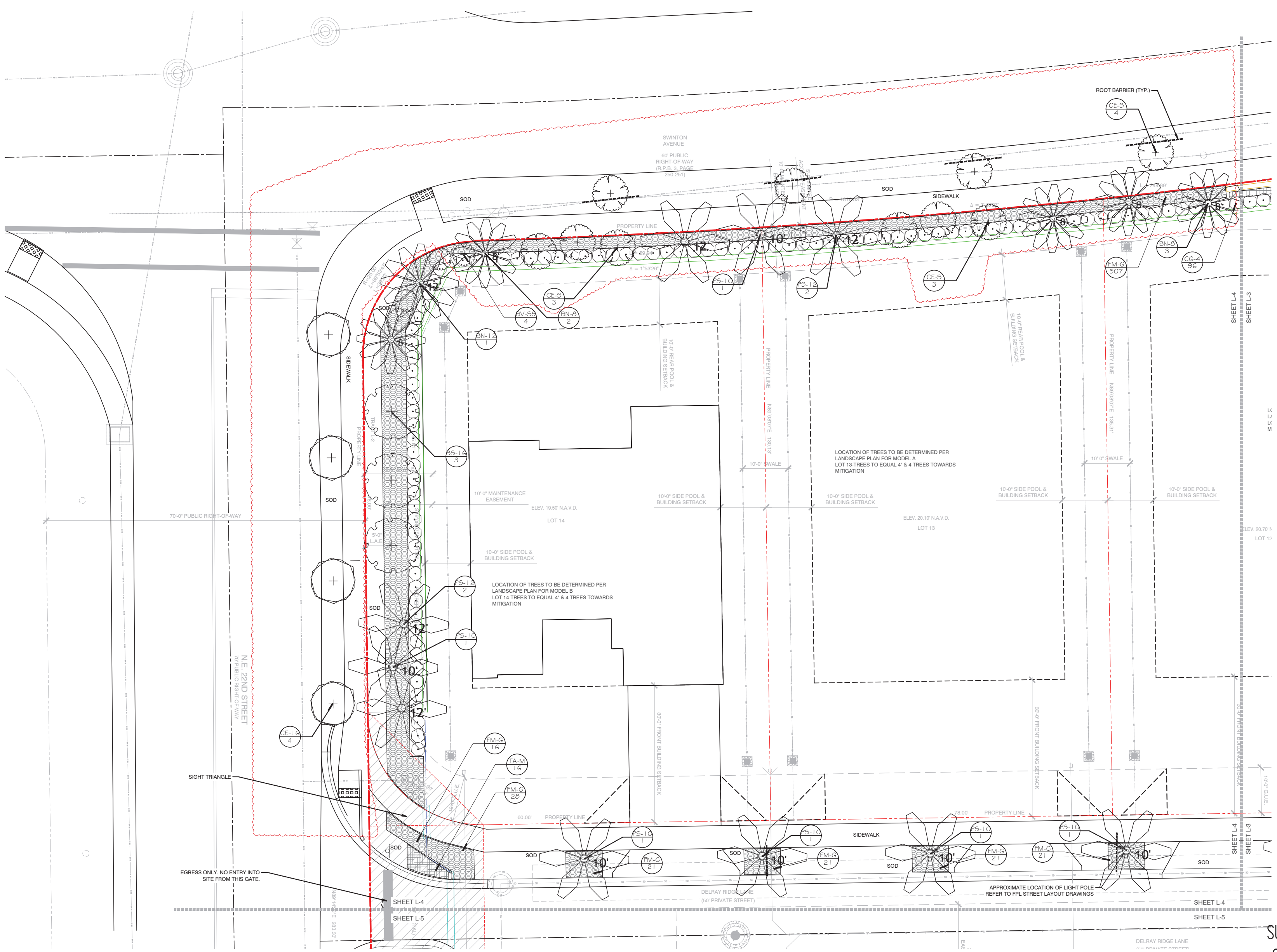

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STATE OF FLORIDA STEPHANIE M. PORTUS 6667215 REGISTERED LANDSCAPE ARCHITECT

seal
Stephanie Portus FL Reg LA 6667215

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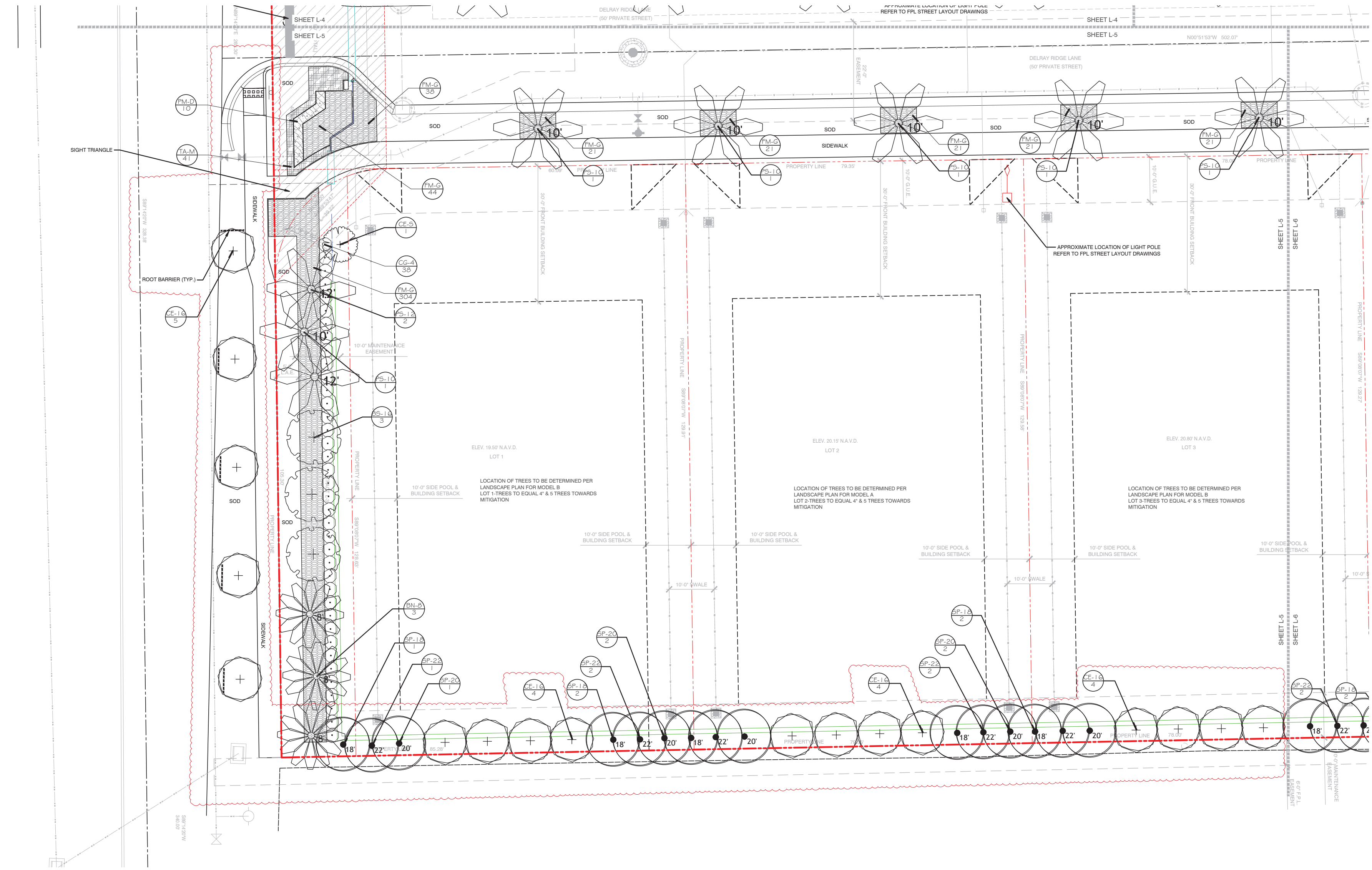

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STEPHANIE M. PORTUS
6667215
REGISTERED LANDSCAPE ARCHITECT

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Stephanie Portus FL Reg LA 6667215

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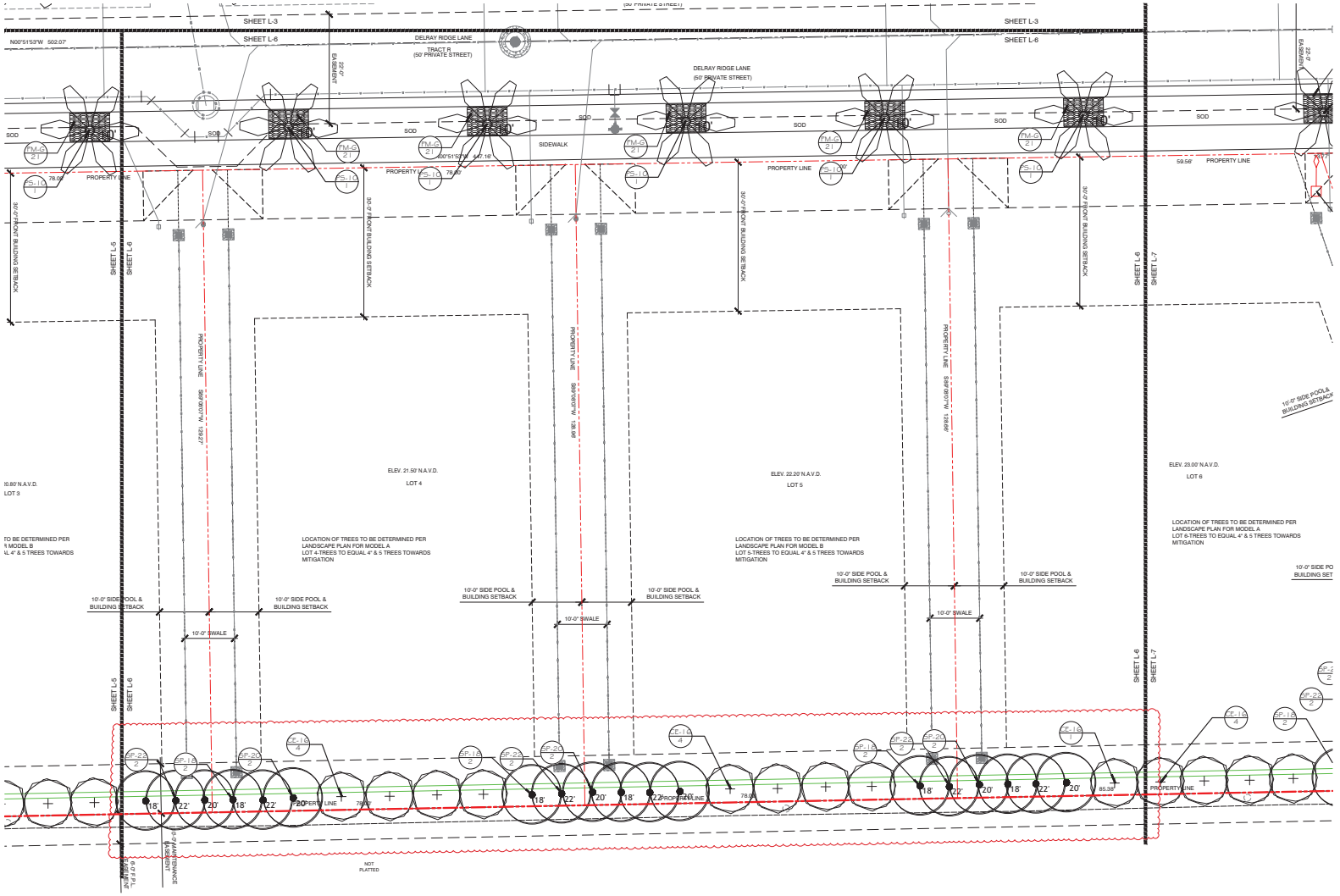

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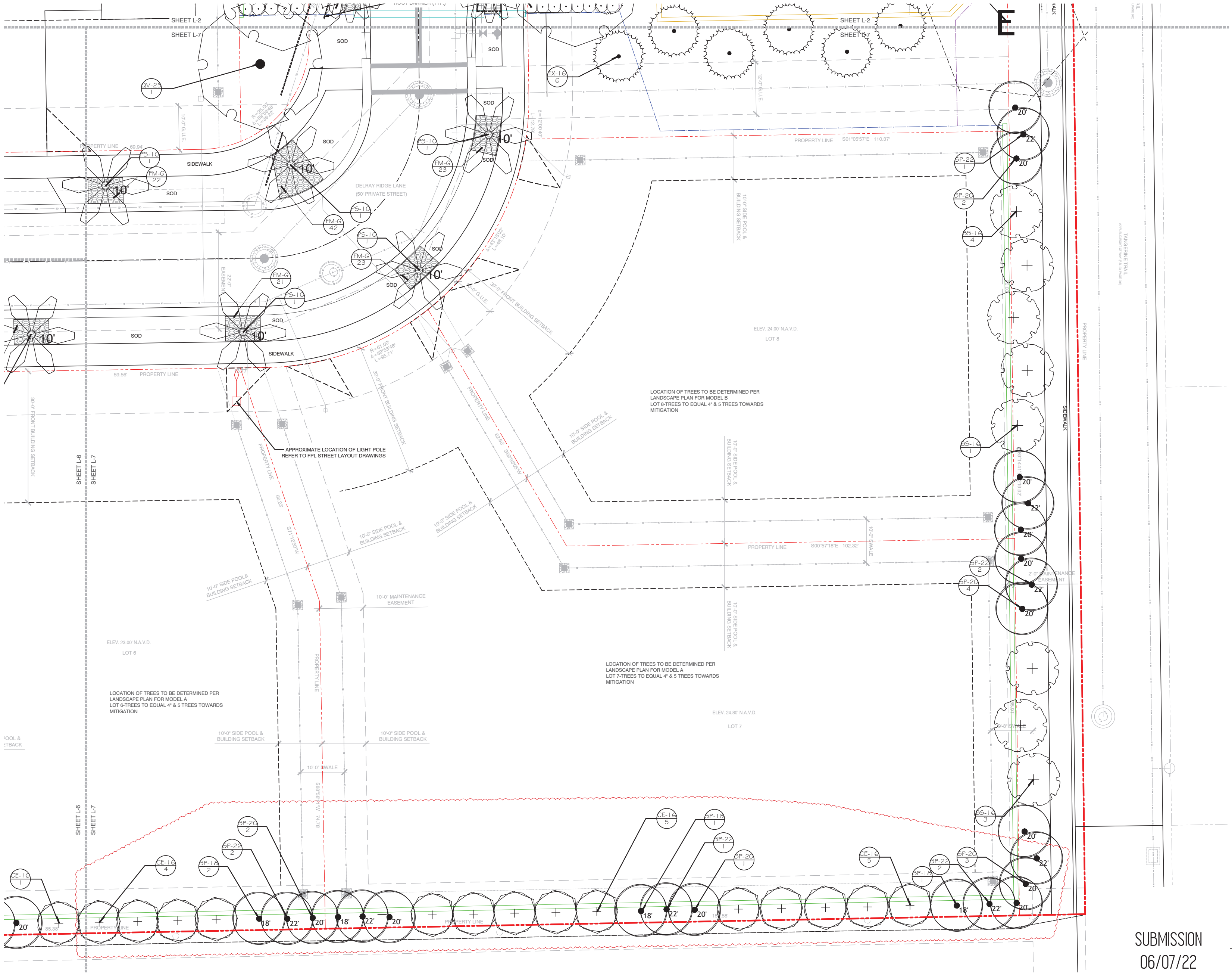

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PLANT SCHEDULE

TREES	BOTANICAL / COMMON NAME	CONT	CAL	HT	SPD	NATIVE	QTY	REMARKS
BS-16	Bursera simaruba / Gumbo Limbo	100G	4" CAL	16` HT	7` SPD	NATIVE	14	FULL, DENSE, SYMMETRICAL CANOPY WITH CHARACTER. 8' C.T. MIN./6' STRAIGHT TRUNK MIN.SUBMIT PHOTO TO LA FOR APPROVAL
CB-16	Calophyllum brasiliense / Brazilian Beautyleaf	B&B	3" CAL	16` HT	7`-8` SPD	NON-NATIVE	36	FLORIDA FANCY, SINGLE LEADER, FULL DENSE, SYMMETRICAL CANOPY.8' C.T. MIN./6' STRAIGHT TRUNK MIN. MATCHING-SUBMIT PHOTO TO LA FOR APPROVAL
CE-16	Conocarpus erectus / Green Buttonwood	100G	3" CAL	16` HT	7` SPD	NATIVE	44	Grade #1, SINGLE LEADER, FULL DENSE CANOPY, NO VOIDS. STRAIGHT, UNSCARRED TRUNK. 8' C.T. MIN./6' STRAIGHT TRUNK MIN.-MATCHING.
CE-S	Conocarpus erectus `Sericeus` / Silver Buttonwood	45G/28"	3" CAL	16` HT	7`-8` SPD	NATIVE	44	SINGLE TRUNK, DENSE, SYMMETRICAL CANOPY, 8' C.T. MIN./6' STRAIGHT TRUNK MIN.
ED-E	Eucalyptus deglupta / Eucalyptus Tree	N/A	22" CAL	40` HT		NON-NATIVE	1	EXISTING
QV-25	Quercus virginiana / Southern Live Oak	FIELD GROWN	16" CAL	25` HT	20`-25` SPD	NATIVE	5	25' OA, SINGLE, RANCH, 10' C.T. MIN./6' STRAIGHT TRUNK MIN.
QV-E4	Quercus virginiana / Southern Live Oak	N/A	15.25" CAL	35` HT		NATIVE	1	EXISTING
QV-E2	Quercus virginiana / Southern Live Oak	N/A	16.5" CAL	35` HT		NATIVE	1	EXISTING
QV-R	Quercus virginiana / Southern Live Oak	N/A	21" CAL	25` HT		NATIVE	1	RELOCATE
QV-E3	Quercus virginiana / Southern Live Oak	N/A	23" CAL	35` HT		NATIVE	1	EXISTING
QV-E1	Quercus virginiana / Southern Live Oak	N/A	23" CAL	35` HT		NATIVE	1	EXISTING
TX-16	Taxodium distichum / Bald Cypress	FIELD GROWN	4" CAL	16` HT	7` SPD	NATIVE	6	STANDARD-DENSE, SYMMETRICAL, DEEP GREEN FOLIAGE, NO VOIDS, STRAIGHT TRUNK, 8' C.T. MIN./6' STRAIGHT TRUNK MIN., MATCHING

ACCENT	BOTANICAL / COMMON NAME	CONT	CAL	HT	SPD	NATIVE	QTY	REMARKS
ED-S12	Elaeocarpus decipiens / Japanese Blueberry Tree	65G	2.5" CAL	12` HT	6` SPD	NON-NATIVE	6	STANDARD/TREE FORM, DENSE, SYMMETRICAL CROWN, STRAIGHT TRUNK, 6` CT, MATCHING-SUBMIT PHOTO
TR-4	Thrinax radiata / Florida Thatch Palm	25G		4` HT	3`-4` SPD	NATIVE	17	SINGLE, FULL, INTACT FRONDS, GOOD COLOR

PALM TREES	BOTANICAL / COMMON NAME	CONT	CAL	HT	SPD	NATIVE	QTY	REMARKS
BN-8	Bismarckia nobilis `Silver` / Silver Bismarck Palm	FIELD GROWN		16` HT	16` SPD	NON-NATIVE	17	FLORIDA FANCY, HEAVY, INTACT FRONDS, 8' C.T., MATCHING-SUBMIT PHOTO
BN-12	Bismarckia nobilis `Silver` / Silver Bismarck Palm	FIELD GROWN		20` HT	16` SPD	NON-NATIVE	1	FLORIDA FANCY, HEAVY, INTACT FRONDS, 12' C.T., MATCHING-SUBMIT PHOTO
PS-10	Phoenix sylvestris / Wild Date Palm	B&B		20` HT	16` SPD	NON-NATIVE	30	FULL HEAD, HEAVY CALIPER, STRAIGHT TRUNK, MATCHING, 10' C.T.
PS-12	Phoenix sylvestris / Wild Date Palm	B&B		22` HT	16` SPD	NON-NATIVE	18	FULL HEAD, HEAVY CALIPER, STRAIGHT TRUNK, MATCHING, 12' C.T.
SP-18	Sabal palmetto / Cabbage Palmetto	FIELD GROWN		24` HT		NATIVE	15	FLORIDA FANCY, SLICK-MATCHING. SUBMIT PHOTO TO LA FOR APPROVAL, 18' C.T.
SP-20	Sabal palmetto / Cabbage Palmetto	FIELD GROWN		26` HT		NATIVE	23	FLORIDA FANCY, SLICK-MATCHING. SUBMIT PHOTO TO LA FOR APPROVAL, 20' C.T.
SP-22	Sabal palmetto / Cabbage Palmetto	FIELD GROWN		28` HT		NATIVE	19	FLORIDA FANCY, SLICK-MATCHING. SUBMIT PHOTO TO LA FOR APPROVAL, 22' C.T.
VA-16	Veitchia arecina / Montgomery Palm	B&B		16` HT	16` SPD	NON-NATIVE	8	SINGLE, FULL HEAD, STRAIGHT UNSCARRED TRUNK, 8` CT MIN.

SHRUBS	BOTANICAL / COMMON NAME	CONT	HT	W	NATIVE	QTY	REMARKS
BV-S5	Bougainvillea x `Barbara Karst` / Barbara Karst Bougainvillea	25G/21"	5` HT	4`-5` W	NON-NATIVE	13	STANDARD, FULL, DENSE, SYMMETRICAL HEAD. MATCHING
CG-4	Clusia guttifera / Small-Leaf Clusia	7G/14"	4` HT	30" W	NON-NATIVE	304	FULL TO BASE, LOW BRANCHING, DENSE INTACT FOLIAGE, NO VOIDS
CE-6	Conocarpus erectus / Green Buttonwood	15G/17"	6` HT	36" W	NATIVE	68	FULL TO BASE, LOW BRANCHING, DENSE INTACT FOLIAGE, NO VOIDS
NO-C	Nerium oleander `Calypso` / Calypso Oleander	30G	6`-8` HT	36" W	NON-NATIVE	9	FULL TO BASE, PINK, FULL, DENSE FOLIAGE TO BASE.

SHRUB AREAS	BOTANICAL / COMMON NAME	CONTAINER	HEIGHT	WIDTH	NATIVE	QTY	REMARKS
PN	Psychotria nervosa / Wild Coffee	3G/10"	24"	24"	NATIVE	248	FULL, DENSE FOLIAGE TO BASE

GROUNDCOVERS	BOTANICAL / COMMON NAME	CONTAINER	HEIGHT	WIDTH	NATIVE	QTY	REMARKS
A	Annuals / Annuals TBS	4" POT	10"			348	FULL POTS, BLOOMING. TO BE SELECTED BY OWNER AT TIME OF INSTALL
FM-G	Ficus microcarpa `Green Island` / Green Island Ficus	3G/10"	16"	14"	NON-NATIVE	3,024	FULL, DENSE FOLIAGE, GOOD COLOR
LM-E	Liriope muscari `Emerald Goddess` / Liriope	1G/6"	12"	10"	NON-NATIVE	572	FULL, DENSE POTS. GOOD COLOR
PM-D	Podocarpus macrophyllus `Dwarf Pringles` / Dwarf Podocarpus	3G/10"	16"	14"	NON-NATIVE	139	FULL, DENSE, FOLIAGE TO BASE
TD-P	Tabernaemontana divaricata `Pinwheel Jasmine` / Pinwheel Jasmine	3G/10"	18"	18"	NON-NATIVE	31	FULL, DENSE FOLIAGE, FULL TO BASE, GOOD COLOR
TA-M	Trachelospermum asiaticum `Minima` / Minima Jasmine	1G/6"	6"	12"	NON-NATIVE	656	FULL POT, DENSE FOLIAGE
VO-W	Viburnum obovatum / Walter`s Viburnum	3G/10"	14"	14"	NATIVE	375	DENSE, SYMMETRICAL FOLIAGE. NO VOIDS

MISC	BOTANICAL NAME / COMMON NAME	QTY	REMARKS
BIO	Bio Barrier-'Typar' or equal	Verify LF in field	PROVIDE BIO BARRIER ROOT CONTROL AT ROOTBALLS AS REQUIRED BY UTILITIES
GRAVEL A	Selected by client	Verify quantity in field	PROVIDE MIN. 2" THICK APPLICATION PROVIDE OPTIONAL BLACK ALUMINUM EDGING ALONG LANDSCAPE BEDS-PERMALOC 'CLEAN LINE' OR EQUAL
MULCH	Grade B+ Cypress Mulch	Verify quantity in field	MINIMUM 3" DEPTH
SOD	'Empire' Zoysia	Verify SF in field	MINIMUM 16"X24" PIECES, GRADED #1 OR BETTER, SEE LANDSCAPE SPECIFICATIONS SHEET

PLEASE NOTE:

- ALL PROHIBITED PLANT SPECIES SHALL BE ERADICATED FROM THE SITE.
- ALL PLANT MATERIAL SHALL BE FLORIDA #1 GRADE OR BETTER, AS DESCRIBED IN GRADES AND STANDARDS FOR NURSERY PLANTS, STATE OF FLORIDA, DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES, TALLAHASSEE FLORIDA, LATEST EDITION.
- SHRUBS AND HEDGES. SHALL BE A MINIMUM OF TWO FEET IN HEIGHT WHEN MEASURED IMMEDIATELY AFTER PLANTING.
- MULCH SHALL BE APPLIED TO A MINIMUM DEPTH OF THREE (3) INCHES IN ALL PLANTING BEDS
- TREES OR PALMS PLANTED IN SOD SHALL HAVE MULCH RINGS TO PROTECT THEM FROM LAWN MAINTENANCE EQUIPMENT AND STRING TRIMMERS.
- THREE (3) PALMS ARE EQUIVALENT TO (1) SHADE TREE. NO MORE THAN 50 PERCENT OF THE REQUIRED TREES SHALL BE PALMS.
- TREES SHALL BE A SPECIES HAVING AN AVERAGE MATURE SPREAD OF CROWN GREATER THAN 20 FEET AND HAVING TRUNKS WHICH CAN BE MAINTAINED IN A CLEAN CONDITION WITH OVER SIX FEET OF CLEAR MATURE WOOD. TREES HAVING AN AVERAGE MATURE SPREAD OF CROWN LESS THAN 20 FEET MAY BE SUBSTITUTED BY GROUPING THE SAME SO AS TO CREATE THE EQUIVALENT OF A 20 FOOT SPREAD OF CROWN.
- TREE/PALM SPECIES REQUIRED FOR SINGLE FAMILY HOMES AND DUPLEXES SHALL BE A MINIMUM OF 12 FEET IN OVERALL HEIGHT AT THE TIME OF PLANTING, WITH A MINIMUM OF FOUR FEET OF SINGLE STRAIGHT TRUNK WITH SIX FEET OF CLEAR TRUNK, AND A SIX-FOOT SPREAD OF CANOPY.
- ANY TREES PLACED WITHIN THE WATER, SEWER OR DRAINAGE EASEMENTS SHALL CONFORM TO THE CITY OF DELRAY BEACH STANDARD DETAILS: LD 1.1 AND LD1.2
- TO PROTECT AGAINST GANODERMA PALM FUNGUS, ALWAYS REMOVE ALL PALM STUMPS FROM PROPERTY.
- ALL LANDSCAPE AREAS SHALL BE PROVIDED WITH A FULLY AUTOMATED IRRIGATION SYSTEM AND SHALL BE EQUIPPED WITH A RAIN SENSING DEVICE.
- ALL SYSTEMS SHALL BE DESIGNED TO ALLOW FOR HEAD-TO-HEAD COVERAGE (100 % COVERAGE WITH 100 % OVERLAP) OF ALL PLANT MATERIAL.
- SOD AND IRRIGATION SHALL BE PROVIDED WITHIN THE UNPAVED PORTION OF THE RIGHT-OF-WAY ADJACENT TO THE PROPERTY LINE.
- SPRINKLER HEADS SHALL BE INSTALLED TO MINIMIZE SPRAY UPON ANY PUBLIC ACCESS, SIDEWALK, STREET OR OTHER NON-PERVIOUS AREA.
- THE USE OF POP-UP SPRINKLER HEADS IS REQUIRED IN SWALE AREAS BETWEEN THE PROPERTY LINE AND THE PAVEMENT EDGE OF THE ADJACENT ROW TO MINIMIZE PEDESTRIAN HAZARD.
- ALL IRRIGATION, IRRIGATION EQUIPMENT AND IRRIGATION BOXES TO BE CONCEALED.

PLA DESIGN STUDIO TO APPROVE STAKED LAYOUT OF ALL TREES AND PLANTING LAYOUT PRIOR TO INSTALLATION.

STREET TREES
LDR SEC. 4.6.16.(H)(6)

SWINTON AVE

REQUIRED: ONE STREET TREE FOR EVERY 40 LF	475' 12 TREES
PROVIDED:	16 SILVER BUTTONWOOD TREES

NE 22ND STREET

REQUIRED: ONE STREET TREE FOR EVERY 40 LF	309' 8 TREES
PROVIDED:	9 GREEN BUTTONWOOD TREES

DELRAY RIDGE LANE

REQUIRED: ONE STREET TREE FOR EVERY 40 LF	692' (x2) 17 TREES (x2) = 34 TREES
PROVIDED:	33 SYLVESTER DATE PALMS 2 SILVER BISMARK PALMS

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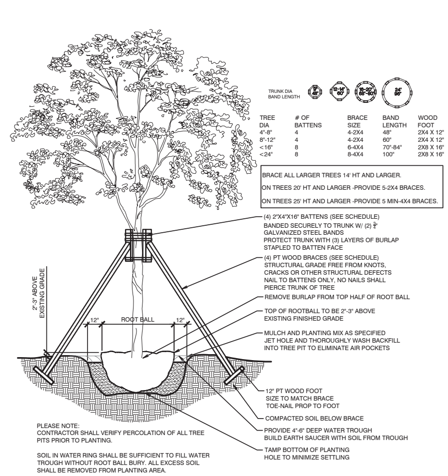
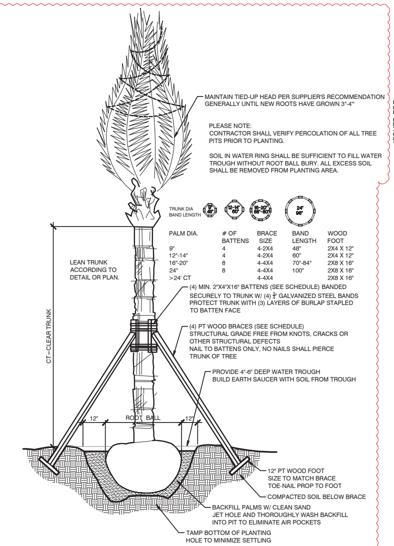
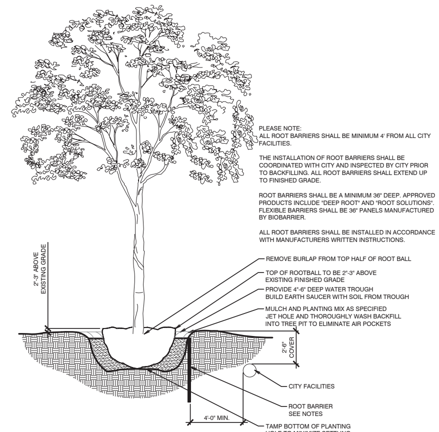


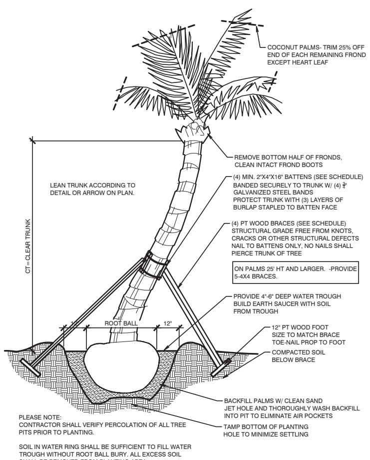
TREE PLANTING BRACING DETAIL



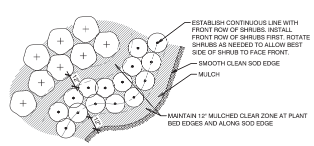
PALM PLANTING / BRACING DETAIL



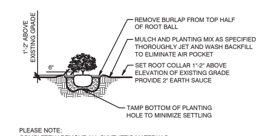
TYPICAL TREE WITH ROOT BARRIER



CURVED PALM PLANTING DETAIL



SHRUB/ GROUND COVER LAYOUT



PLEASE NOTE:
COMPLETELY REMOVE ALL SYNTHETIC MATERIALS

SHRUB/ GROUND COVER DETAIL

ISSUED FOR:	
1. SUBMISSION	07/14/21
2. REVISED	09/01/21
3. SUBMISSION	11/10/21
4. REVISED	12/01/21
5. REVISED	12/02/21
6. REVISED	12/13/21
7. SUBMISSION	12/23/21
8. SUBMISSION	01/14/22
9. REVISED	02/04/22
10. SUBMISSION	03/10/22
REVISED	04/13/22
REVISED	04/27/22

Delray Ridge
Delray Beach, FL

pla LANDSCAPE ARCHITECTURE
PLA DESIGN STUDIO, PLLC
2385 NW Executive Center Dr. Ste. 240
Boca Raton, Fl 33431
studio@pladesignstudio.com
561-318-5256

DocuSigned by:

STATE OF FLORIDA · 6667215 · REGISTERED LANDSCAPE ARCHITECT

seal
Stephanie Portus FL Reg LA 6667215

project number
20-102

sheet name
LANDSCAPE SCHEDULE

sheet number
L-8

LANDSCAPE CALCULATION FORM

SINGLE FAMILY HOME

CITY OF DELRAY BEACH
(561) 243-7040

A.	TOTAL LOT AREA		9,637 **S.F.**
B.	STRUCTURES, PARKING, WALKWAYS, DRIVES, ETC.		5,215 **S.F.**
C.	TOTAL PERVIOUS LOT AREA	C = (A - E)	4,422 **S.F.**
D.	MAX. REQUIRED AREA COVERED WITH SOD	D = (C x 80%)	3,538 **S.F.** or **%**
E.	AREA OF SHRUBS AND GROUND COVER **PROVIDED**		1,704 **S.F.**
F.	NATIVE PLANT MATERIAL **REQUIRED**	Min. 25% OF REQUIRED PLANT MATERIAL	**quantity** or **%**
G.	NATIVE VEGETATION **PROVIDED**	47%	**quantity** or **%**
H.	TOTAL NUMBER OF TREES EXISTING ON SITE		0 **TREES**
I.	TOTAL NUMBER OF TREES **REQUIRED**	I = (A/2500 SF)	4 **TREES**
J.	TOTAL NUMBER OF TREES ON PLAN **PROVIDED**		4 **TREES**
K.	TOTAL NUMBER OF NATIVE TREES	Min. 50% OF REQUIRED PLANT MATERIAL	2 **TREES** or **%**
L.	TOTAL NUMBER OF NATIVE TREES **PROVIDED**		3 **TREES**
M.	STREET TREES (LDR SEC. 4.6.16.(H)(6)) ONE TREE PER EVERY 40 LINEAR FEET OF STREET FRONTAGE WITH A MINIMUM OF ONE TREE PER LOT.		2 **TREES**

Notes and Requirements for Landscape Plans

- ALL PLANT MATERIAL SHALL BE FLORIDA #`1 GRADE OR BETTER.
- MULCH SHALL BE APPLIED TO A MINIMUM DEPTH OF THREE (3) INCHES IN ALL PLANTING BEDS.
- ALL PROHIBITED PLANT SPECIES SHALL BE ERADICATED FROM THE SITE.
- ALL LANDSCAPE AREAS SHALL BE PROVIDED WITH AN IRRIGATION SYSTEM, AUTOMA`TICALLY OPERATED, TO PROVIDE COMPLETE COVERAGE TO ALL PLANT MATERIALS AND GRASS (100% COVERAGE WITH 100% OVERLAP).
- SOD AND IRRIGATION SHALL BE PROVIDED WITHIN THE UNPAVED PORTION OF THE RIGHT-OF-WAY ADJACENT TO THE PROPETY LINE.
- THREE (3) PALMS ARE EQUIVALENT TO ONE (1) SHADE TREE.
- **SHRUBS SHALL BE PLANTED ALONG THE FOUNDATION FACING A STREET.**

PLEASE NOTE

AS EACH LOT IS SUBMITTED FOR PERMIT THE REQUIRED LOT AND MITIGATION PLANTINGS WILL BE ADJUSTED IN THEIR PLACEMENT (NOT QUANTITY) TO AVOID CONFLICT WITH EXISTING ADJACENT TREES.

NOTES

TREES OR PALMS PLANTED IN SOD SHALL HAVE MULCH RINGS TO PROTECT THEM FROM LAWN MAINTENANCE EQUIPMENT AND STRING TRIMMERS.

ALL PLANT MATERIAL SHALL BE FLORIDA #1 OR BETTER, AS DESCRIBED IN GRADES AND STANDARDS FOR NURSERY PLANTS, STATE OF FLORIDA, DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES, TALLAHASSEE FLORIDA, LATEST EDITION.

TO PROTECT AGAINST GANODERMA PALM FUNGUS, ALWAYS REMOVE ALL PALM STUMPS FROM PROPERTY.

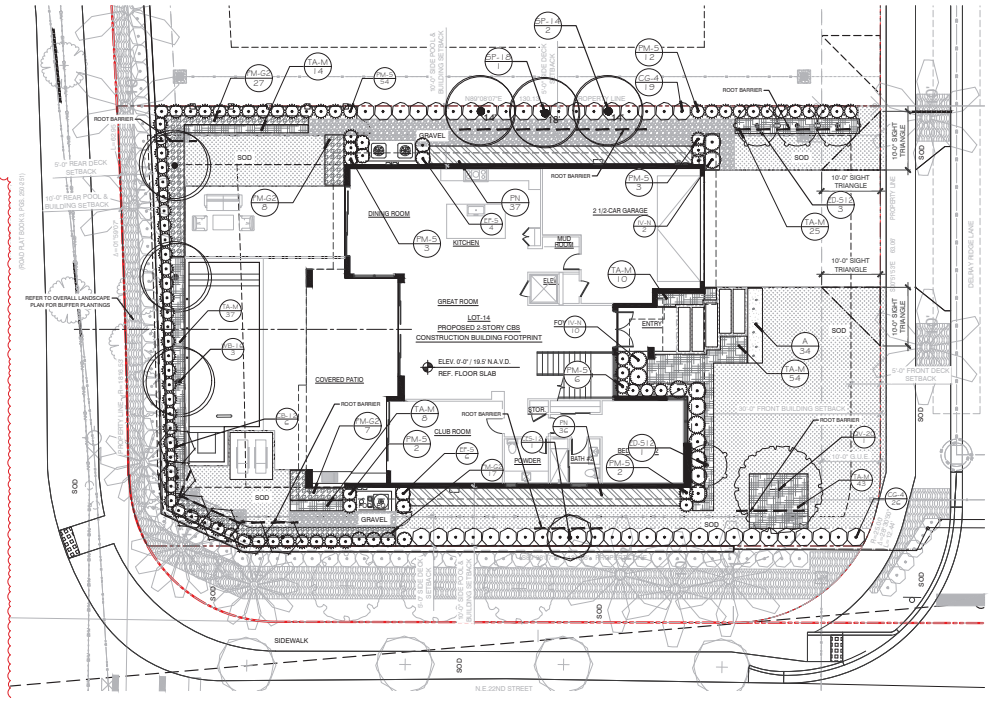
PLA DESIGN STUDIO TO APPROVE STAKED LAYOUT OF ALL TREES AND PLANTING LAYOUT PRIOR TO INSTALLATION.

ALL IRRIGATION, IRRIGATION EQUIPMENT AND IRRIGATION BOXES TO BE CONCEALED.

PLANT SCHEDULE

	TREES	BOTANICAL / COMMON NAME	CONT	CAL	HT	SPD	NATIVE	QTY	REMARKS
MITIGATION TREES	CB-12	Calophyllum brasiliense / Brazilian Beautyleaf	B&B	2.5" CAL	12` HT	6` SPD	NON-NATIVE	6	FLORIDA FANCY, SINGLE LEADER, FULL DENSE, SYMMETRICAL CANOPY, 6` CT, MATCHIN-SUBMIT PHOTO TO LA FOR APPROVAL
(1) REQUIRED TREES	CES-12	Conocarpus erectus 'Sericeus' / Silver Buttonwood	30G	2" CAL	12` HT	5`-6` SPD	NATIVE	1	DENSE, SYMMETRICAL CANOPY, STRAIGHT TRUNK-MATHCING
(1) REQUIRED TREES MITIGATION TREES	QV-20	Quercus virginiana / Southern Live Oak	100G	4" CAL	20` HT	10` SPD	NATIVE	1	STANDARD-DENSE, SYMMETRICAL, STRAIGHT TRUNK, 8` CT, MATCHING
(1) REQUIRED TREES (3 ACCENT TREES = 1 SHADE)	ACCENT ED-S12	BOTANICAL / COMMON NAME Elaeocarpus decipiens / Japanese Blueberry Tree	CONT 65G	CAL 2.5" CAL	HT 12` HT	SPD 6` SPD	NATIVE NON-NATIVE	QTY 4	REMARKS STANDARD/TREE FORM, DENSE, SYMMETRICAL CROWN, STRAIGHT TRUNK, 6` CT, MATCHING-SUBMIT PHOTO
	PALM TREES	BOTANICAL / COMMON NAME	CONT	CAL	HT	SPD	NATIVE	QTY	REMARKS
(1) REQUIRED TREE (3 PALMS = 1 SHADE)	SP-14	Sabal palmetto / Cabbage Palmetto	FIELD GROWN		20` HT		NATIVE	2	FLORIDA FANCY, SLICK-MATCHING. SUBMIT PHOTO TO LA FOR APPROVAL, 14` C.T.
	SP-18	Sabal palmetto / Cabbage Palmetto	FIELD GROWN		24` HT		NATIVE	1	FLORIDA FANCY, SLICK-MATCHING. SUBMIT PHOTO TO LA FOR APPROVAL, 18` C.T.
	WB-16	Wodyetia bifurcata / Foxtail Palm	B&B		16` HT	12` SPD	NON-NATIVE	3	SINGLE, FLORIDA FANCY, HEAVY CALIPER, STRAIGHT UNSCARRED TRUNK, GOOD COLOR. MATCHING, 8` C.T.
	SHRUBS	BOTANICAL / COMMON NAME	CONT	HT	W	NATIVE		QTY	
	CG-4	Clusia guttifera / Small-Leaf Clusia	7G/14"	4` HT	30" W	NON-NATIVE		45	FULL TO BASE, LOW BRANCHING, DENSE INTACT FOLIAGE, NO VOIDS
	EF-5	Eugenia foetida / Spanish Stopper	15G/17"	5`-6` HT	30" W	NATIVE		10	FULL, DENSE FOLIAGE TO BASE
	IV-N	Ilex vomitoria `Schillings` / Yaupon Holly	25G/21"	3` HT	36" W	NATIVE		12	TOPIARY SPHERE-FLORIDA FANCY-FULL DENSE FOLIAGE, NO VOIDS.MATCHING
	PM-5	Podocarpus macrophyllus maki / Shrubby Yew	15G/17"	5` HT	24" W	NON-NATIVE		82	FULL, DENSE FOLIAGE TO BASE, SHEAR TO 5` HT
	SHRUB AREAS	BOTANICAL / COMMON NAME	CONTAINER	HEIGHT	WIDTH	NATIVE	SPACING	QTY	
	FM-G2	Ficus microcarpa `Green Island` / Green Island Ficus	7G/14"	24"	24"	NON-NATIVE	24" o.c.	59	FULL, DENSE FOLIAGE, GOOD COLOR
	PN	Psychotria nervosa / Wild Coffee	3G/10"	24"	24"	NATIVE	24" o.c.	71	FULL, DENSE FOLIAGE TO BASE
	GROUNDCOVERS	BOTANICAL / COMMON NAME	CONTAINER	HEIGHT	WIDTH	NATIVE	SPACING	QTY	
	A	Annuals / Annuals TBS	4" POT	10"			12" o.c.	34	FULL POTS, BLOOMING. TO BE SELECTED BY OWNER AT TIME OF INSTALL

	MISC	BOTANICAL NAME / COMMON NAME	QTY	REMARKS
	TA-M	Trachelospermum asiaticum `Minima` / Minima Jasmine	1G/6"	6" 12" NON-NATIVE 18" o.c. 191 FULL POT, DENSE FOLIAGE
	BIO	Bio Barrier-'Typar' or equal	Verify LF in field	PROVIDE BIO BARRIER ROOT CONTROL AT ROOTBALLS AS REQUIRED BY UTILITIES
	GRAVEL	Selected by client	Verify quantity in field	PROVIDE MIN. 2" THICK APPLICATION PROVIDE OPTIONAL BLACK ALUMINUM EDGING ALONG LANDSCAPE BEDS-PERMALOC 'CLEAN LINE' OR EQUAL
	MULCH	Grade B+ Cypress Mulch	Verify quantity in field	MINIMUM 3" DEPTH
	SOD	'Empire' Zoysia	Verify SF in field	MINIMUM 16"X24" PIECES, GRADED #1 OR BETTER, SEE LANDSCAPE SPECIFICATIONS SHEET



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ISSUED FOR:

1. SUBMISSION	07/14/21
2. REVISED	09/01/21
3. SUBMISSION	11/15/21
4. REVISED	12/01/21
5. REVISED	12/03/21
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12. REVISED	05/25/22
13. REVISED	

SONOMA MODEL, Delray Ridge
Delray Beach, FL

PLA DESIGN STUDIO, PLLC
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2765 S.W. Executive Center Dr., Suite 240
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561.318.5236
studio@pladesignstudio.com

DocuSigned by:

seal
Stephanie Portus FL Reg LA 6667215

project number
20-102

sheet name
LANDSCAPE PLAN

SUBMISSION
06/07/22

N

0 5 10 20 30
1" = 10'-0"

sheet number
L-9

LANDSCAPE CALCULATION FORM

SINGLE FAMILY HOME

CITY OF DELRAY BEACH
(561) 243-7040

A.	TOTAL LOT AREA		11,687	**S.F.**
B.	STRUCTURES, PARKING, WALKWAYS, DRIVES, ETC.		5,455	**S.F.**
C.	TOTAL PERVIOUS LOT AREA	C = (A - B)	6,232	**S.F.**
D.	MAX. REQUIRED AREA COVERED WITH SOD	D = (C x 80%)	4,986	**S.F.** or **%**
E.	AREA OF SHRUBS AND GROUND COVER **PROVIDED**		1,792	**S.F.**
F.	NATIVE PLANT MATERIAL **REQUIRED**	Min. 25% OF REQUIRED PLANT MATERIAL		**quantity** or **%**
G.	NATIVE VEGETATION **PROVIDED**	34%		**quantity** or **%**
H.	TOTAL NUMBER OF TREES EXISTING ON SITE		0	**TREES**
I.	TOTAL NUMBER OF TREES **REQUIRED**	I = (A/2500 SF)	5	**TREES**
J.	TOTAL NUMBER OF TREES ON PLAN **PROVIDED**		5	**TREES**
K.	TOTAL NUMBER OF NATIVE TREES	Min. 50% OF REQUIRED PLANT MATERIAL	3	**TREES** or **%**
L.	TOTAL NUMBER OF NATIVE TREES **PROVIDED**		4	**TREES**
M.	STREET TREES (LDR SEC. 4.6.16.(H)(6)) ONE TREE PER EVERY 40 LINEAR FEET OF STREET FRONTAGE WITH A MINIMUM OF ONE TREE PER LOT.		2	**TREES**

Notes and Requirements for Landscape Plans

- ALL PLANT MATERIAL SHALL BE FLORIDA #`1 GRADE OR BETTER.
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- ALL PROHIBITED PLANT SPECIES SHALL BE ERADICATED FROM THE SITE.
- ALL LANCSCAPE AREAS SHALL BE PROVIDED WITH AN IRRIGATION SYSTEM, AUTOMA`ICALLY OPERATED, TO PROVIDE COMPLETE COVERAGE TO ALL PLANT MATERIALS AND GRASS (100% COVERAGE WITH 100% OVERLAP).
- SOD AND IRRIGATION SHALL BE PROVIDED WITHIN THE UNPAVED PORTION OF THE RIGHT-OF-WAY ADJACENT TO THE PROPERTY LINE.
- THREE (3) PALMS ARE EQUIVALENT TO ONE (1) SHADE TREE.
- **SHRUBS SHALL BE PLANTED ALONG THE FOUNDATION FACING A STREET.**

PLEASE NOTE

AS EACH LOT IS SUBMITTED FOR PERMIT THE REQUIRED LOT AND MITIGATION PLANTINGS WILL BE ADJUSTED IN THEIR PLACEMENT (NOT QUANTITY) TO AVOID CONFLICT WITH EXISTING ADJACENT TREES.

NOTES

TREES OR PALMS PLANTED IN SOD SHALL HAVE MULCH RINGS TO PROTECT THEM FROM LAWN MAINTENANCE EQUIPMENT AND STRING TRIMMERS.

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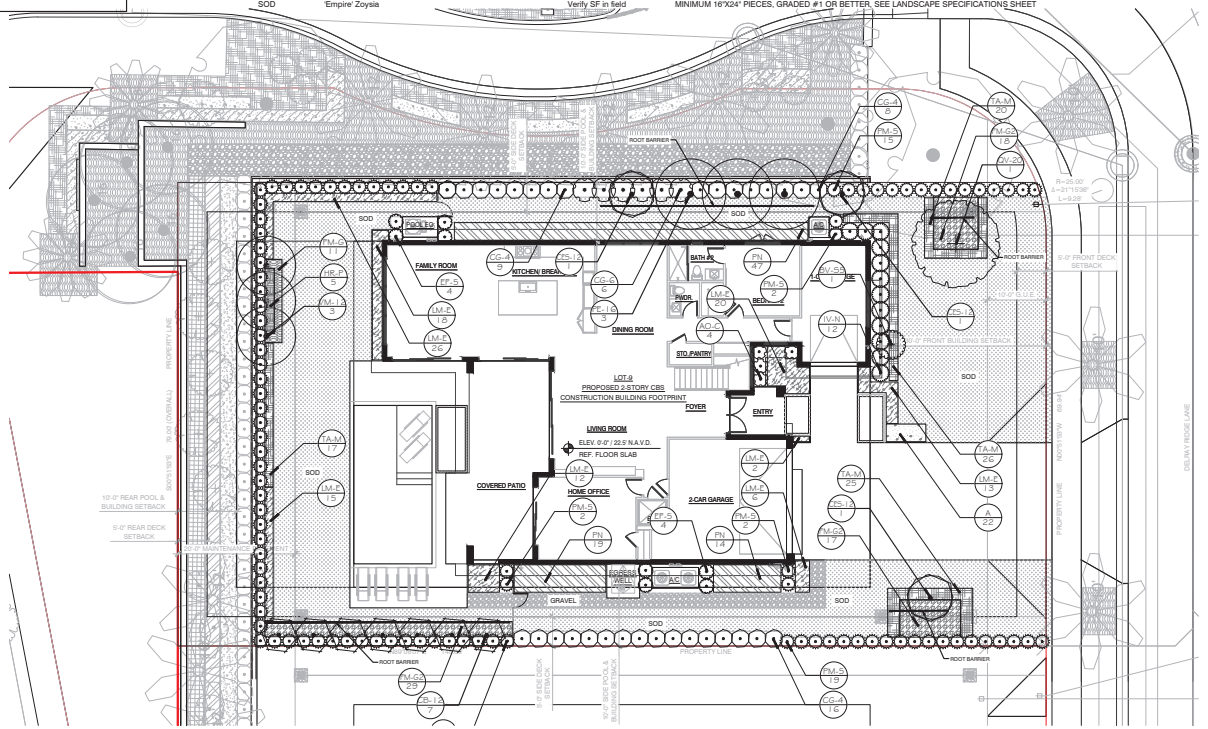
PLANT SCHEDULE

	TREES	BOTANICAL / COMMON NAME	CONT	CAL	HT	SPD	NATIVE	QTY	REMARKS
MITIGATION TREES	CB-12	Calophyllum brasiliense / Brazilian Beautyleaf	B&B	2.5" CAL	12` HT	6` SPD	NON-NATIVE	7	FLORIDA FANCY, SINGLE LEADER, FULL DENSE, SYMMETRICAL CANOPY. 6` CT. MATCHIN-SUBMIT PHOTO TO LA FOR APPROVAL
	CES-12	Conocarpus erectus 'Sericeus' / Silver Buttonwood	30G	2" CAL	12` HT	5`-6` SPD	NATIVE	3	DENSE, SYMMETRICAL CANOPY. STRAIGHT TRUNK-MATHCING
(1) REQUIRED TREE MITIGATION TREE	QV-20	Quercus virginiana / Southern Live Oak	100G	4" CAL	20` HT	10` SPD	NATIVE	1	STANDARD-DENSE, SYMMETRICAL, STRAIGHT TRUNK, 8` CT. MATCHING
(1) REQUIRED TREE (3 PALMS = 1 SHADE)	PALM TREES	BOTANICAL / COMMON NAME	CONT	CAL	HT	SPD	NATIVE	QTY	REMARKS
	PE-16	Ptychosperma elegans / Alexander Palm	B&B		16` HT	10` SPD	NON-NATIVE	3	SINGLE. FULL HEAD, STRAIGHT, UNSCARRED TRUNK. MATCHING, 10' C.T.
	VM-12	Veitchia merrillii / Christmas Palm	FIELD GROWN		12` HT		NON-NATIVE	3	TRIPLE, GRADE #1, HEAVY, GOOD COLOR
	SHRUBS	BOTANICAL / COMMON NAME	CONT	HT	W	NATIVE		QTY	
	BV-S5	Bougainvillea x `Barbara Karst` / Barbara Karst Bougainvillea	25G/21*	5`HT	4`-5` W	NON-NATIVE		1	STANDARD, FULL, DENSE, SYMMETRICAL HEAD. MATCHING
	CG-6	Clusia guttifera / Small-Leaf Clusia	25G/21*	6` HT	48" W	NON-NATIVE		6	FULL TO BASE, LOW BRANCHING, DENSE INTACT FOLIAGE, NO VOIDS
	CG-4	Clusia guttifera / Small-Leaf Clusia	7G/14"	4` HT	30" W	NON-NATIVE		33	FULL TO BASE, LOW BRANCHING, DENSE INTACT FOLIAGE, NO VOIDS
	EF-5	Eugenia foetida / Spanish Stopper	15G/17"	5`-6` HT	30" W	NATIVE		8	FULL, DENSE FOLIAGE TO BASE
	IV-N	Ilex vomitoria `Schillings` / Yaupon Holly	25G/21*	3` HT	36" W	NATIVE		12	TOPIARY SPHERE-FLORIDA FANCY-FULL DENSE FOLIAGE, NO VOIDS.MATCHING
	PM-5	Podocarpus macrophyllus maki / Shrubby Yew	15G/17"	5` HT	24" W	NON-NATIVE		101	FULL, DENSE FOLIAGE TO BASE, SHEAR TO 5` HT
	ACCENT	BOTANICAL / COMMON NAME	CONT	HT	W	NATIVE		QTY	
	AO-C	Alocasia odora `California` / Dwarf Elephant Ear	3G/10"	18" HT	24" W	NON-NATIVE		4	FULL DENSE FOLIAGE, INTACT LEAVES
	SHRUB AREAS	BOTANICAL / COMMON NAME	CONTAINER	HEIGHT	WIDTH	NATIVE	SPACING	QTY	
	FM-G2	Ficus microcarpa `Green Island` / Green Island Ficus	7G/14"	24"	24"	NON-NATIVE	24" o.c.	64	FULL, DENSE FOLIAGE, GOOD COLOR
	PN	Psychotria nervosa / Wild Coffee	3G/10"	24"	24"	NATIVE	24" o.c.	80	FULL, DENSE FOLIAGE TO BASE
	GROUNDCOVERS	BOTANICAL / COMMON NAME	CONTAINER	HEIGHT	WIDTH	NATIVE	SPACING	QTY	
	A	Annuals / Annuals TBS	4" POT	10"			12" o.c.	22	FULL POTS, BLOOMING. TO BE SELECTED BY OWNER AT TIME OF INSTALL
	FM-G	Ficus microcarpa `Green Island` / Green Island Ficus	3G/10"	16"	14"	NON-NATIVE	18" o.c.	11	FULL, DENSE FOLIAGE, GOOD COLOR
	HR-P	Hibiscus rosa-sinensis `Seminole Pink` / Seminole Pink Hibiscus	3G/10"	16"	14"	NON-NATIVE	24" o.c.	5	BUSH, FULL DENSE FOLIAGE, FULL TO BASE. GOOD COLOR.
	LM-E	Liriope muscari `Emerald Goddess` / Liriope	1G/6"	12"	10"	NON-NATIVE	18" o.c.	112	FULL, DENSE POTS. GOOD COLOR
	TA-M	Trachelospermum asiaticum `Minima` / Minima Jasmine	1G/6"	6"	12"	NON-NATIVE	18" o.c.	88	FULL POT, DENSE FOLIAGE

MISC	BOTANICAL NAME / COMMON NAME	QTY	REMARKS
BIO	Bio Barrier-'Typar' or equal	Verify LF in field	PROVIDE BIO BARRIER ROOT CONTROL AT ROOTBALLS AS REQUIRED BY UTILITIES
GRAVEL	Selected by client	Verify quantity in field	PROVIDE MIN. 2" THICK APPLICATION PROVIDE OPTIONAL BLACK ALUMINUM EDGING ALONG LANDSCAPE BEDS-PERMALOC 'CLEAN LINE' OR EQUAL
MULCH	Grade B+ Cypress Mulch	Verify quantity in field	MINIMUM 3" DEPTH
SOD	'Empire' Zoysia	Verify SF in field	MINIMUM 16"X24" PIECES, GRADED #1 OR BETTER, SEE LANDSCAPE SPECIFICATIONS SHEET



ISSUED FOR:

1. SUBMISSION	07/14/21
2. REVISED	09/01/21
3. SUBMISSION	11/10/21
4. REVISED	12/01/21
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10. SUBMISSION	04/13/22
11. REVISED	04/27/22
12. REVISED	05/25/22
13. REVISED	

NAPA MODEL, Delray Ridge
Delray Beach, FL

pla DESIGN STUDIO, PLLC
LANDSCAPE ARCHITECTURE
1615 N.W. Executive Center Dr., Ste. 240
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DocuSigned by:

seal
Stephanie Portus FL Reg LA 6667215

project number
20-102

sheet name
LANDSCAPE PLAN

SUBMISSION
06/07/22

N

0 5 10 20 30
1" = 10'-0"

sheet number
L-10

1.0 GENERAL

1.1 DESCRIPTION OF WORK:
A. Extent of landscape development work is shown on the Drawings and in the related 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 for 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 American Standard for Nursery Stock" (2004 edition).
D. American National Standards Institute-ANSI
- ANSI A300 and ANSI Z60.1-most recent edition.
E. Florida Friendly Best Management Practices for Protection of Water Resources by Green Industries, Florida Dept of Environmental Protection, Rev Dec 2008
F. IFAS -Institute of Food and Agricultural Sciences, University of Florida. http://hort.ufl.edu/woody/index.html
1.3 INSTALLER - CONTRACTOR QUALIFICATIONS:
A. The Contractor shall be State licensed and regularly engaged in the installation of living plant material. Labor crews shall be controlled and directed by a landscape foreman professionally trained and 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: Refer to schedule of submittals.
1.5 COORDINATION:
A. Coordinate and cooperate with other trades and contractors to enable the work to proceed as rapidly and efficiently as possible.
B. Irrigation work shall normally precede plant installation Install trees, large B&B material, shrubs and ground cover plants before lawns are installed.
C. 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: 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 return the object or area to its original condition at no additional charge.
C. Utility Locates - Regardless of utilities that may or may not be shown on the drawings, the Contractor shall be responsible to have utilities located in the area of work before the work commences. The Contractor shall also verify and comply with any requirements or clearances to plant materials that may be required of any Utility company.
1.8 CHANGES IN THE WORK: 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 approved by the Owner by a written Change Order, prior to execution. The Owner shall be given (2) week notice for the opportunity to review and approve all plant materials delivered to the job site prior to installation.When unit prices have been established, they shall prevail for all Contract Additions. For Contract Reductions, the Owner shall receive full credit, based on unit pricing, if changes are implemented prior to delivery of plant materials. If Owner changes are made prior to installation, Owner shall receive a credit for labor to install plants, less costs associated with purchase and delivery. The Landscape Architect assumes no financial or material responsibility for any changes made by, or on behalf of the the Owner.
1.9 OWNERS OBSERVATION:
A. The Landscape Architect or Owner assumes no responsibility for the Contractor's means and methods in the execution of this contract beyond the observation to ensure, to the Owner's satisfaction, that the Design Intent of the proposed Work related to the Contractor's Work including but not limited to: Civil engineering and Drainage Plans, Architectural layouts, project/ area access, contractor equipment access, existing and proposed utility locations, Irrigation Plans, Outdoor Lighting Plans, Paving Plans, Project Sequence and Timing plans, Town/HOA/ neighborhood requirements, etc.
B. 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 systems. Should such overhead or underground obstruction be encountered which interferes with planting, the Landscape Architect shall be consulted for consideration for alternate locations of plants to clear such obstructions. The Contractor shall be responsible for the immediate repair of any damage caused by his work.
C. After notice to proceed, the Contractor shall complete landscape work in a timely manner, as portions of site become available. Actual planting shall be performed only when weather and soil conditions are suitable in accordance with locally accepted practice.
D. Contractor shall coordinate landscape and planting work with other trades, such as, the irrigation (sprinkler) installer, electrician, lighting installer, paving installer, and sod installer; Landscape installer shall coordinate to ensure that no plantings will interfere with the proper functioning of the sprinkler system. The Contractor 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. The Location of specimen plant materials, trees, palms and large shrubs shall prevail over irrigation head placement.
1.11 ACCEPTANCE:
A. At the discretion of the Owner, early acceptance of the work may be obtained for progress payment of approved phases; or when the time between commencement of the work and substantial completion exceeds 90 days (at no fault of the contractor). Early acceptance shall be contingent upon a satisfactory inspection of the completed landscape work by the Landscape Architect and/or the Owner.
B. Substantial Completion of the Work is the point in construction when the Work is sufficiently complete; in accordance with the Contract Documents; all related clean-up has been performed; and the Landscape Architect's provide an opinion that the Owner can utilize the work as intended..
C. 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. The Warranty Period and Maintenance period shall commence upon Final Acceptance.
1.12 WARRANTY PERIOD and 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 (12) 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 that occurs during the plant replacement process at no cost to the Owner.
D. 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 this 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 cluster 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. Where symmetry is required, match plants used as nearly as possible to the satisfaction of the Landscape Architect.
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 - field grown plant "balled and burlapped".
Cal - caliper/diameter measured 6" (152.4 mm) above soil line. For trunks larger than 4" (88.4 mm) diameter, the caliper measurement shall be determined at 12" above soil line.
CT - clear trunk measurement from top of ball to first branching.
CW - clear wood, in palms the distance from soil line to lowest living frond leaf base.
DBH - caliper or diameter measured 4 feet (1.22 meters) above soil line
GW - Greywood, in palms, mature trunk from ground to base of the green crown shaft.
OA - overall height from top of ball to top of current season's growth or last open frond in normal position in palms.
Spd - spread or average distance across the average diameter of plant branching structure.
G. Root packaging and Containers: 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. All containers and root balls shall be kept moist at all times. All plants which cannot be planted immediately on delivery shall be kept moist and protected from drying winds and sun.
H. 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 latest edition of Florida Grade No. 1 for nursery plants. Plants grown in cans may have been grown in the container for a max. of 2 years prior to installation and shall exhibit a fully developed root system throughout when removed from container. There shall be no girdling or circling roots exceeding 50% of the pot circumference.
I. Substitution: Plant substitution by the Contractor will be considered by 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 owner approval.
2.3 PLANTING SOIL: Planting soil shall be free draining, sandy loam and shall contain a 5% minimum and a 10% maximum of well 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.
2.4 PEAT: 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. Clean Water for planting will be available at the site and shall be provided by the Owner unless special provision is determined in the Contract Documents.
B. Contractor shall determine the source and suitability of the Owner's water. In the event the water source is not suitable, the Owner shall be given written notice of such at least two weeks prior to the commencement of Work.
2.6 SOIL TESTING:
A. Landscape Contractor shall provide testing of existing soils on Site for all soil types, including imported soils, in the planting area. No less than 2 representative samples shall be submitted to and tested by an independent professional testing lab for analysis and fertility recommendations.
B. Soil Testing Lab - Call for info, testing number, and import permit.
Micro-Macro International P 706-548-4557 F 706-548-4891 Web: www.mmilabs.com
183 Paradise Blvd, Suite 108, Athens, Georgia, 30607
2.7 COMMERCIAL FERTILIZER and PLANTING AMENDMENTS:
A. Fertilizer and fertilization rates for the project shall be provided and applied based on the results of the soils test. Follow all Manufacturer's Label Rates and application recommendations.
B. Commercial fertilizer shall be slow-release organic formulation containing nitrogen, phosphorus and potassium, not to exceed an analysis of 6-6-6. Nitrogen shall be not less than 50% water insoluble., inorganic nitrogen and 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 2%. Fertilizers shall be delivered to the site unopened in original packages, each bearing the manufacturer's ingredients and guaranteed analysis. Submit a copy of the Manufacturer's guaranteed analysis and proof of delivery to the Landscape Architect. Any fertilizer that becomes caked or otherwise damaged is unacceptable.
C. Microbial Additives: Mycorrhizal and microbial additives shall provided as specified in the Schedule of Soil amendments.Contractor shall submit a copy of the manufacturer's label/ product use instructions that include all ingredients, guaranty analysis and application rates. All supplements shall be supplied in fresh, unopened packaging prior to product expiration. Product that becomes caked or damaged is unacceptable and shall not be used.
2.8 MISCELLANEOUS LANDSCAPE MATERIALS:
A. Mulch: Shredded hardwood mulch -grade "A" -verify color. Mulch shall not contain chunks larger than 1 inch (25.4 mm) in diameter, branches, stones or other foreign material that will prevent its eventual decay.
Alternate Mulches: Pine Bark Nuggets - Jumbo size, Pine Straw
B. Gravel Mulch: Provide samples of all gravels to Landscape Architect for approval prior to ordering. Gravel shall be used only where specifically indicated on the plans of the size and type shown. Unless otherwise specified, gravel shall be water-worn, 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. Stakes, Battens and Stakes-Provide braces, battens, stakes and deadman of sound new pressure-treated lumber, free of knot holes and other defects. Braces shall be pressure-treated 2x lumber (4x lumber where appropriate) and shall be secured to battens and stakes with a min of (2) -10D, bhd head galv. forming nails. Battens shall be 2x4 pressure treated lumber and padded with burlap. Battens shall be secured to tree trunks with 3/4" Stainless steel or galvanized banding. Stakes shall be pressure-treated 2x lumber and shall be driven to within 2" of the surrounding grade. All exposed wood stakes shall be painted with a high-visibility, contrasting, fluorescent paint until substantial completion. Braces and stakes shall be repainted a dark walnut brown stain unless otherwise noted. Stakes and braces shall be placed within mulch beads and oriented away from walking areas.
D. Guys and Anchors: Provide one of the following: 1) wire guys shall be 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.; 2) Woven Polyethylene Webbing -shall be min 2" wide. Trunks and stems shall be wrapped at least twice and secured with adjustable knots. Stakes per Sec C. above.
E. Soil Mix for Annual or seasonal color beds: 2 parts top soil,1 part fine pine bark mulch (1/2" (12.7 mm) pieces),1 part coarse sand and 50 pounds (1.8662 kg) composted cow manure per cubic yard (.76455 cubic meters). Mix in Osmocote fertilizer and micro-organisms at label rates, see 2.7C.
F. Planter Soil Mixture:a loose,friable blend consisting of:5 parts coarse sand,2 parts peat humus or bagged topsoil and 3 parts pinebark;Mix in Osmocote fertilizer and microorganisms at label rates,see 2.7C.

3.0 EXECUTION

3.1 PREPARATION, SITE WORK AND COORDINATION:
A. Grading: Contractor shall inspect the site to verify that finish grades (accurate within 2" (51 mm)), have been established in accordance with Civil Engineer's Drainage Plan and the Landscape Architect's shaping and grading Plan or other job requirements prior to beginning any planting operations. Coordinate with Landscape Architect and General Contractor for release of areas before planting operations begin.
B. Rough Grading and Shaping – Rough grading and bulk filling of site shall be the general responsibility of the General Contractor unless otherwise noted. Rough grade shall include placement and distribution of bulk fill material sufficient to generally be within -4" of finish grade for landscape and within -2" of final grade for sod areas. Rough grades shall conform with the general intent of the drainage and grading plans. Rough grades may be field adjusted to allow for fill as generated by planting activities.
C. Finish Grading - Finish and final grading shall be reviewed, approved and released by Landscape Architect or authorized Project Manager. Landscape Contractor shall notify LA/ Project Manager, in writing, 3 days before planting work in a given area is expected to commence. Finish Grades are the responsibility of the Landscape Contractor -including box blading and leveling of open sod areas
Finish grades of all planting areas shall be at 2" below pavement, after planting unless otherwise noted. Finish grades shall include any top soil and soil amendments as specified. If at any time the sub-grades are determined to be inadequate for proper design, the Project Manager should be given notification in writing.
D. Top soils -The supply, placement and grading of Top soils shall be the responsibility of the Landscape Contractor unless other determined in the Construction Documents.
E. Irrigation-The Landscape Contractor shall closely coordinate with the Irrigation installer. Irrigation system shall be installed according to Irrigation Plans and Specifications with any necessary field adjustments to complement the Landscaping Plans. Spray zones for sod and planted areas as described shall have 105% head to head coverage, matched precipitation rates and uniform water distribution with equipment as outlined. Drip emitters shall be installed per schedule. Drip and spray irrigation shall be fully operational and accepted before any mulch, stone, short ground covers or sod are installed. Irrigation zones shall be operating and accepted by Landscape Architect and/or irrigation designer before areas will be released for finish planting and/ or mulching as noted above. In the event of conflicts with landscaping and irrigation pipes or emitters, the location of trees, palms, large shrubs and specimens shall prevail. Pipes and emitters shall be relocated/adjusted to eliminate conflict and allow for the proper function of equipment.
F. Landscape Lighting – The Landscape Contractor shall closely coordinate with the Lighting installer. Outdoor and site lighting system shall be installed according to the Lighting Plans and Specifications with any necessary field adjustments to complement the Landscaping Plans. Landscape lighting conduit shall be coordinated and installed in conjunction with irrigation trenching where ever suitable. Lighting conduit shall be installed and/or adjust AFTER major trees and palms are installed and before shrubs/ground covers are installed. In-ground fixtures or other work requiring excavation, must be installed before sod, stone mulch and landscape mulch are installed. Lighting stub-ups/placements shall be reviewed approved and released by Landscape Architect before mulch, stone, ground covers or sod are installed.
G. Mulch, Edging and Stone Mulch-Before mulch of any kind is installed, Finish Grading, Operational Irrigation, Lighting conduit, in-ground fixtures and metal edging shall be in place and accepted and released by either Landscape Architect or General Contractor.
H. Sod - Before sod of any kind is installed, Finish Grading, Operational Irrigation, Lighting conduit, in-ground fixtures, metal edging and mulch shall be in place and accepted and accepted by Landscape Architect. As noted above, landscape contractor is responsible for all fine grading subject to review and acceptance by Landscape Architect before sod is installed.
I. Removal of Rubbish: Any objectionable materials, such as stones/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: All field grown trees, palms and plants shall be hand dug with sharp shovels or approved tree-spade. Backhoe dug trees shall not be accepted. Roots shall be cleanly cut with sharp instruments. Balled and burlapped plants -plants designated "B&B" shall be dug with firm, moist 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 materials and bound with twine,cord or wire mesh. All collected plants shall be "B&B" trees, palms and plants shall not be dug during periods of excessive heat or drought unless supplemental water is applied for at least 5-7 days in advance.
B. Handling -containerized plants shall be handled by their container w/ proper support given to all parts of plant to prevent damage.Trees and palms shall only be handled w/ padded slings rated for 10x the weight of carried load.Trunks shall be wrapped min.2X prior to cinch loop.No chain,rope or unpadded webbing shall be used to handle trees and palms.
C. Protection During: All plants shall be protected from possible injury or breakage of branches. Provide all necessary splints, stakes, kraft paper wrapping and sleeves to secure and protect roots, stems and foliage of plant materials during shipment. All plants transported by open trucks or sea-containers 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 kept moist at all times and provided protection from the drying of wind and sun. All plants shall be kept moist as necessary until planted. Storage period shall not exceed 72 hours. In plants cannot be installed within 48 hours, they shall be 'heeled-in" earth trench rows and maintained in healthy, moist condition until final installation.
E. Protection -Fronds: A minimum number of fronds shall be removed from the crown of palm trees to facilitate moving/handling. Remaining fronds shall be tied and braced if required.
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, padding, wood battens or other approved methods.
G. Plants that show symptoms of bark compression, girdling or bark slippage or other damage are unacceptable.
H. Special Treatment and Handling: Sabal Palms (Cabbage Palms) shall be "hurricane cut" in the field prior to transport. Clear trunk shall be as specified after the minimum nuber of fronds have been removed. Sabal Palms shall be taken from moist, "black" growing areas. All burn marks on Sabal Palm trunks shall be removed by Collected or Nursery Supplier.Sabal Palms -All field dug palms, (except-Adonidia,Cocos,Phoenix,Washingtonia,Ptychosperma,Hyophorbe sp.) palms shall be root pruned for 2 months in advance of being lifted and moved. All palms shall be watered for1week prior to digging in the field. Head size shall be the lower 50% of fronds removed or as otherwise determined by Supplier. Heads shall be securely tied and secured before transporting. Heads shall remain tied-up until new root growth is visible or as otherwise determined by Supplier. All Palms shall have adequate root ball and braced during shipping & handling. Canary Date Palms shall have heads securely stabilized with 4x4 bolt splints
3.3 PLANTING OPERATIONS:
A. LayoutThe location for plants and outlines of areas to be planted are indicated on the Drawings. All plant locations shall be laid out, painted/flagged in field by the Contractor to the satisfaction of the Landscape Architect before planting operations commence.In general,all trees,palms and accent plants shall be laid out, planted and approved by the Landscape Architect prior to the layout of shrubs/ground cover. Notify Landscape Architect and Owner for direction if site conditions requires the addition of soil over 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 - Any necessary adjustments will be directed by the Landscape Architect.
B. Clearances: Shrub/hedge material shall be planted a min. of 30" (0.75 m) away from wall or other obstructions (including parking stops). Groundcover (1 gal or less) material (except sod) shall be planted 16" (10.41 m) away from pavement or edging unless otherwise noted. Vines shall be attached with copper wire to brass screws in lead anchors to walls. Make minor adjustments as may be required.
C. 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 bottoms of planting holes shall be tamped to minimize settling.
D. Contractor shall confirm that all planting holes are free draining and percolate water.If hardpan,compacted soils,clay or rock are encountered,immediately notify Landscape Architect to determine remedial measures.
E. Backfill and Soil Amendments-Backfill shall be clean,fine,granular loamy soil unless otherwise noted. All palms shall be backfilled w/ clean, washed, salt-free sand. Clumpy or rocky soils shall be screened or replaced w/ appropriate material prior to backfilling. Refer to soil report recommendation for fertilizer type/rates. Additionally, Mycorrhizae and soil bacteria shall be added at the manufacturer's recommended rates (see 2.7C). The following minimum rates of soil mix apply; 1/2 cubic yard per tree and 1cubic yard per 50 shrubs.
F. All plants shall be handled and installed in accordance w/ the Construction Documents and best appropriate horticultural practice. Trees and shrubs, except as otherwise specified, shall be set in the proper size of planting pit so that the top surface of the Root Collar/root ball will be 1"-2" above the final grade. Verify adequate percolation of the planting hole. Set plants straight and plumb unless otherwise noted. Select trees, palms and accents shall be leaned, oriented or faced as determined by Landscape Architect on the site prior to planting.
G. B&B plants are set with bottom1/3 of planting pit backfilled w/ existing site soil. Remove burlap,rope,wires,etc. from any trunk and top surface of balls. Do not remove burlap from underneath.All remaining wrapping material shall be biodegradable. No material shall encircle the trunk. Complete backfilling w/ native soil (or specified soil mix) and water thoroughly to remove voids. After planting has been completed,form a trough around each plant extending to the limits of the pit. Some wire wrapping and bundling may remain to maintain the integrity of the root ball. Review removal requirements in advance with the Landscape Architect.
H. Container Grown Plants: Shall, when delivered, have sufficient root 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. Containers shall be removed carefully to prevent damage to plant or root system.

3.0 EXECUTION CONT.

I. Remediation of Root defects - The Contractor shall inspect all plant material for root defects including but not limited to: root-bound containers; circling roots; girdling roots; sub grade, embedded root collars; adventitious roots; etc. All Root Collars shall be exposed and visible at the time of planting. Plants with two (2) or more girdling roots; plants from root-bound containers; or plants with circling roots greater than 75% of the pot circumference shall be rejected and replaced at the Contractor's expense. Plants with minor root defects shall be trimmed with clean, sanitized, sharp tools according to proper horticultural practice prior to planting. Plants shall be well watered prior to, and after, root trimming procedures. Plants that die as a result of root pruning are considered excessively defective and shall be replaced at Contractor's expense.
External Circling Roots - shear off outer 1"-2" of football circumference
Internal Circling Roots - radial cuts to interrupt circle, remove 2" min section of root.
Girdling Roots-cut and remove 2" min section of the girdling root at the surface.
Root Knots - trim or remove.For more information- refer to University of Florida- IFAS Website http://hort.ufl.edu/woody/index.html
For Root management -Refer to http://hort.ufl.edu/woody/roots.html
J. Setting Trees and Shrubs: Unless otherwise specified, all trees and shrubs shall be planted in pits, centered to such depths that the finished grade level of the Root Collar, after settlement, shall be the same as, or slightly above, that at which the plant was originally grown. They shall be planted upright and faced to give the best appearance or relationship to adjacent structures. The Contractor shall be responsible to raise and re-set all plant materials where root collars are found below finish grade at their own expense.
Along slopes, a soil terrace shall be formed so that the top of the Root Collar is level with existing grade on the up-slope side. No burlap shall be pulled out from under the balls. Tree bows, platforms, wire, lifting loops and surplus binding from top and sides of the balls, shall be removed. Some wire or binding may remain if tight and necessary for rootball integrity. Any broken and frayed roots shall be cut off cleanly. Backfill soil shall be placed and tamped thoroughly and shall be settled by watering. No filling around trunks or on top of root balls will be permitted. After the backfill settles, additional soil shall be filled in to the level of the finished grade allowing for 2" (44.1 mm) of mulch. Form a shallow saucer around each plant by digging a trough of soil along the edge of the plant pit. This trough shall be 3"-4" (75 mm) deep. Specimen trees and Palms shall be equipped with supplemental irrigation (bubblers).
K. 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.
L. Backfilling: When the plant pit has been excavated as specified above and the plant has been set, the pit shall be backfilled with clean soil mix. All backfill shall be watered thoroughly to settle and consolidate soil and eliminate voids. Provide a shall trough around the outside of the rootball for water retention. Tops of all rootballs shall be left exposed and free of soil backfill materials. Do not distribute any excess soil in any existing planted bed.
M. Pruning: Remove dead/broken branches from all plant material. Thin out internal branching and prune to retain typ. growth habit of individual species with as much height and spread as is practicable. Make all cuts with sharp, clean pruning instrument next to branch collar to ensure elimination of stubs.Headback" or "Hat Rack" cuts, right angle to line of growth, will not be permitted.
N. Guying and Staking: Guy and stake all trees, including palms, immediately after planting.
Stakes shall be 1"-2" (38.1 mm) in caliper shall be staked with vertical wood or metal stakes along the trunk. Stake shall be driven through the root ball and embed 12" min. into sub-grade. Attach tree trunk to the stake with 3/4" width elastic pruning tape. Double wrap trunk to avoid chaffing. Tie firmly, but not tightly to the stake. Stake shall be cut off at least 12" below the top of the plant. Trees 1 1/2" (38.1 mm) in caliper and greater but less than 12' OA shall be guyed in 3 directions with double strands of No.12" galvanized wire (or rated woven polyethylene webbing) attached to approved stakes or anchors driven flush with grade. When securing wires to trees, cover all wires which may come in contact with any part of the trunk with hose for protection. Tie wires and braces not less than 1/3 of the height of tree above finished grade and above substantial limbs1 inch (25.4 mm) in diameter or more. Ground Stakes shall be clearly marked with high contrast fluorescent paint. Trees over 12' OA shall be braced with new lumber guy detail. Ground Stakes shall be clearly marked with high contrast fluorescent paint.
O. Staking and Bracing: When stakes guys and broadleaf trees, no nails or fasteners shall directly penetrate the trunks. Wood battens: 12" -16" min(304-406 mm) min. length; separated from trunk by min.two thicknesses of hose. Wood battens shall be pulled out from under the bails. Tree bows, platforms, wire, lifting loops and surplus binding from top and sides of the balls, shall be removed. Some wire or binding may remain if tight and necessary for rootball integrity. Any broken and frayed roots shall be cut off cleanly. Backfill soil shall be placed and tamped thoroughly and shall be settled by watering. No filling around trunks or on top of root balls will be permitted. After the backfill settles, additional soil shall be filled in to the level of the finished grade allowing for 2" (44.1 mm) of mulch. Form a shallow saucer around each plant by digging a trough of soil along the edge of the plant pit. This trough shall be 3"-4" (75 mm) deep. Specimen trees and Palms shall be equipped with supplemental irrigation (bubblers).
P. Mulching: All trees and shrub beds shall be mulched immediately after acceptance of the planting bed by the Landscape Architect. Mulch shall be applied to a 3" (76.2 mm) depth, with a mulch as specified. Prevent wind displacement of mulch by thoroughly wetting down. Do not apply any mulch against stems and trunks of plants.
Q. Annual/seasonal color beds: Remove 8" to 10" (254 mm) of soil and replace with planting soil mixture consisting of Annual Planting Soil Mix per Section 2.8.E. Install annuals in fresh mix.
R. Planter Installation: Provide weep holes and built-in architectural planters. Verify waterproofing and drainage to suitable outfall. Place filtration/ separation fabric over 4" drain gravel in the bottom of the pot. Add planting soil mix per Section 2.8.F. Place soil around plant materials in lightly compacted layers to an elevation 2" (50.8 mm) below top of planters allowing for natural settlement. Recommend 6"-8" min depth of soil below rootball.
S. Disposal of Excess Excavated Soil: Excess soil, raked debris and rocks shall be removed and disposed by the Contractor to a suitable and legal disposal location off-site, at no additional expense to the Owner.
T. Relocation of Existing Material: 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 shall receive adequate supplemental irrigation to the remaining leaf surface. Coordinate with Landscape Architect for relocation requirements.
3.4 SOD
A. Sod shall be as spec'd on Dwgs. Sodded area shall be all areas not otherwise noted and include adjacent public yards beyond the property line to edge of pavement and/or edge of water.
B. Fine Grading & Drainage: The Contractor shall verify drainage surface drainage flows and shaping in accordance with the Civil Drawings and the Grading plans. Contractor shall be responsible for providing the maximum positive drainage flows away from all building and pavements to the appropriate discharge or collection points.
C. Topsoil shall be leveled and spread to a depth of 3"-4" min. No sod shall be laid until the depth of the soil has been approved. Grade shall be adjusted to create a smooth transition between new and existing sod areas.
D. All sod areas shall be fine graded and raked,eliminating bumps, depressions,sticks,stones and other debris greater than 2" dia, from the surface.Contact the Landscape Architect, prior to the installation of sod.
E. Sod 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 quantity take off (measurement) from the Drawings or in the field**.** Contractor shall be responsible for sodding all areas shown on the drawings and shall verify all sod quantities in the field prior to ordering, including any necessary adjustments for shrinkage/coverage variables.
F. Sod Quality: Sod shall be graded #1 or better**.** Sod shall be loam-grown w/ a firm, full texture and good root development.Sod shall be free of weeds and shall be of uniform thick, healthy and be free from defects and debris including but not limited to dead thatch, insects, fungus,diseases and contamination by weeds,other grass varieties or objectionable plant material**.**
G. Sod pieces shall be 16" x 24" min. size in unbroken, cohesive sections or furnished in an otherwise approved manner.
H. Before being cut and lifted,sod shall have been regularly watered and mown at least 3 times w/ a lawn mower, w/ final mowing not more than 7 days before sod is cut.
I. Sod shall be delivered and installed in green, healthy, viable condition**.** Yellow, Brown or excessively wilted sod shall not be accepted.
J. Sod shall be laid w/closely abutting joints w/a tamped or rolled, even surface**.**The Contractor shall bring the sod edge in a neat, clean manner to edge of all paving and shrub areas**.** Clear circular areas shall be provided around all tree-standing trees in open sodded areas**.**If in the opinion of the Landscape Architect, top-dressing is necessary after rolling, clean sand will be evenly applied over entire surface and thoroughly washed in w/o additional charge**.**
K. Sod along slopes shall be pegged to hold sod in place along slopes/banks**.** A wood peg acceptable to the Landscape Architect shall be used at no additional cost to Owner**.**
3.5 CLEAN UP:
A. Sweep and wash all walks and paved surfaces**.**
B. Remove planting debris from project site daily**.** Ensure all plant material is free of damaged branches, flagging tape and other temporary materials**.**
C. Lawn areas damaged by planting operations shall be resodded to original condition**.**
D. Walks, drainage pipes or other structures damaged by the Contractor shall be repaired to original condition**.**
E. Remove soil ridges around watering basins prior to end of maintenance period**.**
3.6 MAINTENANCE DURING CONTRACT PERIOD
A. The Contractor's maintenance shall include watering, pruning, spraying, weeding, mowing, insect treatment, disease treatment, micro organisms applications and other necessary maintenance operations to create a healthy, vigorous landscape**.**
B. The Contractor assumes responsibility for all maintenance during the construction period, beginning immediately after each item is planted and to 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 90 days or until final acceptance of work,which ever occurs first**.**
C. The Contractor shall replace unhealthy, damaged or dead plants promptly**.** Contractor shall be responsible for costs to provide access to unacceptable plants identified during the Contract period**.**
D. The Contractor shall inspect plants at least once a week and perform maintenance promptly**.** Keep planting saucers and beds free of weeds, grass, and other undesirable vegetation growth**.**

ISSUED FOR:	
1. SUBMISSION	07/14/21
2. REVISED	09/01/21
3. SUBMISSION	10/01/21
4. REVISED	12/01/21
5. REVISED	12/03/21
6. REVISED	12/13/21
7. SUBMISSION	01/22/22
8. SUBMISSION	02/04/22
9. REVISED	02/04/22
10. SUBMISSION	03/10/22
REVISED	04/13/22
REVISED	04/27/22

Delray Ridge
Delray Beach, FL

PLA DESIGN STUDIO, PLLC
LANDSCAPE ARCHITECTURE
1515 N.W. 167th Street, Suite 215 Miami, Florida 33169
Corey Mann, FLA [1343]
cmann@planetdesignstudio.com
561.318.5236

DocuSigned by:
seal
Stephanie Portus FL Reg LA 6667215
project number
20-102
sheet name
LANDSCAPE SPECIFICATIONS
sheet number
L-11

MITIGATION PROVIDED

TREES RATING 50% OR GREATER

Required Tree Mitigation: 316.8 Cal.
Provided Tree Mitigation: 324 CAL *(See table below)*

Replacement Trees			
	Quantity	Caliper (CAL)	Calipers Provided (inch)
Gumbo Limbo (Common Area)	14	4	56
Brazilian Beautyleaf (Common Area)	36	3	108
Southern Live Oak (Common Area)	5	16	80
Bald Cypress (Common Area)	6	4	24
Southern Live Oak (Residential Lots)	14	4	56
		Total =	324 CAL

TREES RATING LESS THAN 50%

Required Tree Mitigation (1:1): 159
Provided Tree Mitigation (1:1): 159 *(See table below)*

Replacement Trees	
	Quantity
Green Buttonwood (Common Area)	44
Silver Buttonwood (Common Area)	44
Japanese Blueberry (Common Area)	6
Brazilian Beautyleaf (Residential Lots)	65
Total =	159

PALMS RATING 50% OR GREATER

Required Palm Mitigation: 2079 Ft.
Provided Palm Mitigation: 2246 Ft. *(See table below)*

Replacement Palms			
	Quantity	Overall Height	Height Provided (feet)
Silver Bismark Palm (8' CT) (Common Area)	17	16	272
Silver Bismark Palm (12' CT) (Common Area)	1	20	20
Wild Date Palm (10' CT) (Common Area)	30	20	600
Wild Date Palm (12' CT) (Common Area)	18	22	396
Cabbage Palm (18' CT) (Common Area)	15	24	360
Cabbage Palm (20' CT) (Common Area)	23	26	598
		Total =	2246 Ft.

PALMS RATING LESS THAN 50%

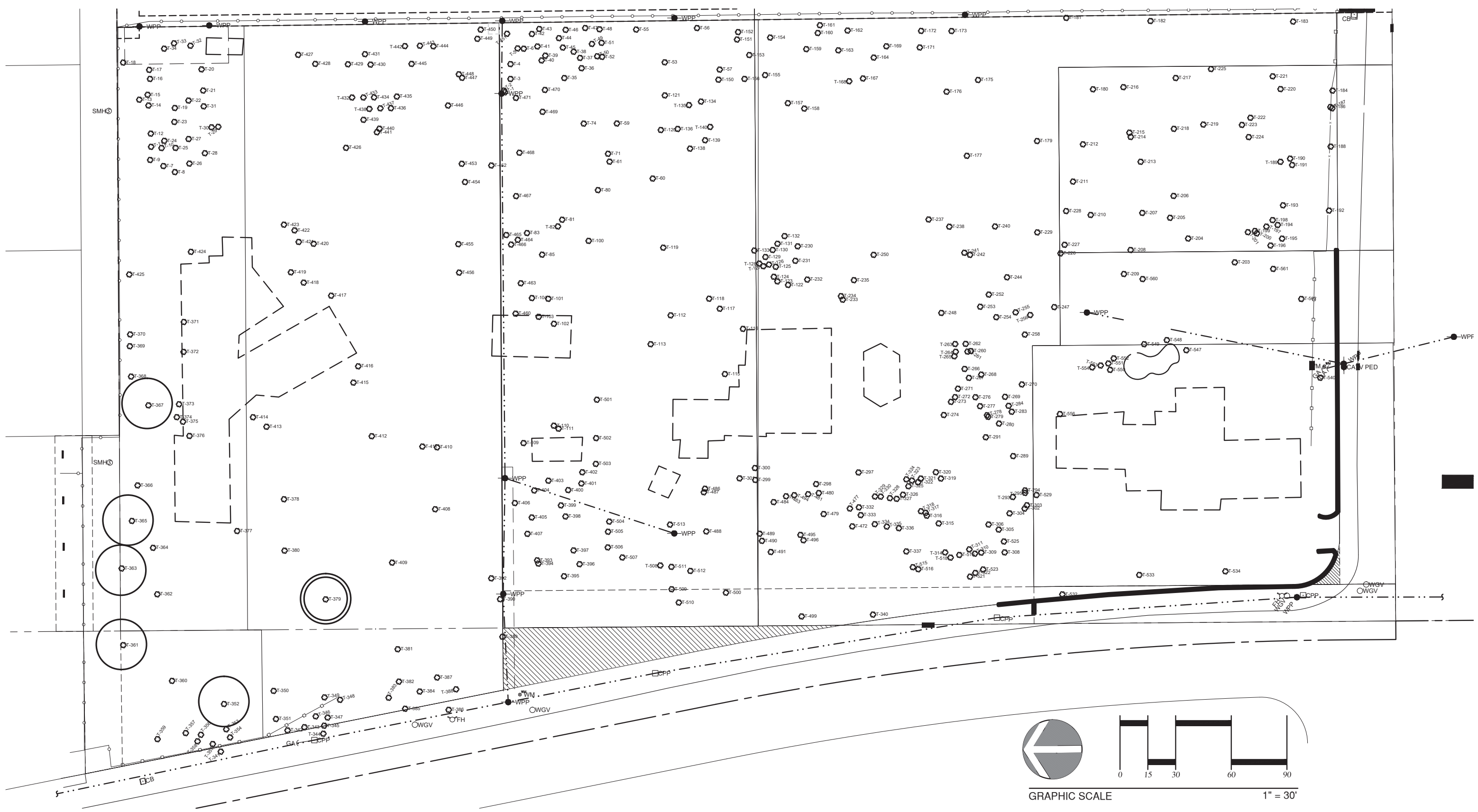
Required Palm Mitigation (1:1): 9
Provided Palm Mitigation (1:1): 19

Replacement Trees	
	Quantity
Cabbage Palm (22' CT) (Common Area)	19
Total =	19

MITIGATION REQUIRED	
TREES	
Required Tree Mitigation (DBH Inches):	316.8 DBH Inches
Required Tree Mitigation (1:1 Replacement):	159 Trees
Trees Preserved:	5 Trees
Trees Relocated	1 Tree
PALMS	
Required Palm Mitigation (Overal Feet):	2079 Feet (97 Palms)
Required Palm Mitigation (1:1 Replacement):	9 Palms
Palms Preserved:	0 Palms
Palms Relocated:	0 Palms

LOCATION MAP
N.T.S.

NORTH



REVISIONS	DATE	BY
REVISIONS PER PNZ COMMENTS	11/10/21	GAH

FILE NAME 8577TREE

CAULFIELD & WHEELER, INC.
CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE – SURVEYING
7900 GLADES ROAD – SUITE 100
BOCA RATON, FLORIDA 33434
PHONE (561)-392-1991 / FAX (561)-750-1452

TREE PRESERVATION SURVEY
DELRAY RIDGE
DELRAY BEACH FLORIDA

DATE 03/16/21
DRAWN BY GAH
F.B./ PG. --
SCALE 1"=30'

SUBMITTED BY
Gaylord Allan Hendricks
G. ALLAN HENDRICKS
LANDSCAPE ARCHITECT
No. LA6666974
STATE OF FLORIDA
–FOR THE FIRM–
DATE May 31, 2022

JOB # 8577
SHT.NO. TP-1
OF 3 SHEETS

Tree Disposition and Mitigation

This Table is available in Excel. Please contact Jae Eun Kim by KimJ@mydelraybeach.com

Project Address: Delray Ridge **Parcel ID** (for multiple IDs, use one for the common area):

Preserve

Tree #	Common Name	Scientific Name	Height	DBH	Condition Rating	Comments
352	Eucalyptus	Eucalyptus deglupta		22	70	Vine
361	Live Oak	Quercus virginiana		23	40	Severe co-dom with inclusion
363	Live Oak	Quercus virginiana		16.5	70	Co-canopy
365	Live Oak	Quercus virginiana		23	70	Co-canopy
367	Live Oak	Quercus virginiana		15.25	60	

Relocation

Tree #	Common Name	Scientific Name	Height	DBH	Condition Rating	Comments
379	Live Oak	Quercus virginiana		21	80	

Removal

Tree #	Common Name	Scientific Name	Height	DBH	Condition Rating < 50%	Comments
6	Mango	Mangifera indica		7.5	30	Co-canopy
18	Gumbo Limbo	Bursera simaruba		10.75	20	Co-canopy, vine
38	Mango	Mangifera indica		7.75	10	Co-canopy
48	Mango	Mangifera indica		13.5	20	Co-canopy, power lines, trunk decay
55	Mango	Mangifera indica		13	10	Major trunk decay
56	Mango	Mangifera indica		35	10	Major trunk decay, major storm damage
57	Mango	Mangifera indica		19	20	Major trunk decay, major storm damage
59	Mango	Mangifera indica		17	10	Trunk decay, storm damage
60	Mango	Mangifera indica		25	20	Major decay in scaffolds, major storm damage
61	Mango	Mangifera indica		13	5	Tall stump
80	Surinam Cherry	Eugenia uniflora		6.5	10	Cat 1, FLEPPC 2019 Invasive Plant List
81	Mango	Mangifera indica		21	20	Major decay throughout
82	Mango	Mangifera indica		7	30	
83	Mango	Mangifera indica		8	20	
85	Mango	Mangifera indica		6	20	
100	Loquat	Eriobotrya japonica		9	40	Sub-canopy
104	Mango	Mangifera indica		6.5	20	
111	Avocado	Persia americana		13	20	Decay in scaffold, co-canopy, hollow trunk
113	Golden Rain	Koelreuteria paniculata		20	10	Hat-racked, stump sprouts
119	Black Sapote	Diospyros nigra		11	20	Tip dieback, sparse foliage, heaved
120	Mango	Mangifera indica		24	20	
121	Mango	Mangifera indica		26	20	Multi trunk. 1 trunk split off, co-canopy
122	Ficus	Ficus microcarpa		100	30	Cat 1, FLEPPC 2019 Invasive Plant List, dying
123	Ficus	Ficus microcarpa		100	30	Cat 1, FLEPPC 2019 Invasive Plant List, dying
124	Ficus	Ficus microcarpa		100	30	Cat 1, FLEPPC 2019 Invasive Plant List, dying
125	Ficus	Ficus microcarpa		100	30	Cat 1, FLEPPC 2019 Invasive Plant List, dying
126	Ficus	Ficus microcarpa		100	30	Cat 1, FLEPPC 2019 Invasive Plant List, dying
127	Ficus	Ficus microcarpa		100	30	Cat 1, FLEPPC 2019 Invasive Plant List, dying
128	Ficus	Ficus microcarpa		100	30	Cat 1, FLEPPC 2019 Invasive Plant List, dying
129	Ficus	Ficus microcarpa		100	30	Cat 1, FLEPPC 2019 Invasive Plant List, dying
130	Ficus	Ficus microcarpa		100	30	Cat 1, FLEPPC 2019 Invasive Plant List, dying
131	Ficus	Ficus microcarpa		100	30	Cat 1, FLEPPC 2019 Invasive Plant List, dying
132	Ficus	Ficus microcarpa		100	30	Cat 1, FLEPPC 2019 Invasive Plant List, dying
134	Mango	Mangifera indica		14	20	Major decay in scaffold, co-canopy, storm damage
139	Mango	Mangifera indica		13.5	20	Decay in scaffold and trunk, co-canopy
140	Mango	Mangifera indica		6	15	Sub-canopy
152	Mango	Mangifera indica		20	20	Co-canopy, decay in scaffold, barbed wire
153	Mango	Mangifera indica		11	5	Major storm damage, tall stump
154	Sausage	Kigelia africana		18	30	Co-canopy, leans
155	Mango	Mangifera indica		14	5	Top is dead
156	Mango	Mangifera indica		8	20	
158	Mango	Mangifera indica		48	20	Major storm damage, major decay throughout
159	Gumbo Limbo	Bursera simaruba		13	30	
161	Mango	Mangifera indica		10.5	30	
163	Mango	Mangifera indica		13.5	30	co-canopy
164	Gumbo Limbo	Bursera simaruba		9	15	Sub-canopy
167	Mango	Mangifera indica		24	40	Co-canopy, girdling root
168	Strawberry Guava	Psidium cattleyanum		9	10	Cat 1, FLEPPC 2019 Invasive Plant List, Sub canopy, dead wood, severe co-dom
171	Mango	Mangifera indica		8	30	
172	Mango	Mangifera indica		15	20	
173	Mimosa	Albizia julibrissin		16.5	20	Cat 1, FLEPPC 2019 Invasive Plant List, Co-dom inclusion, co canopy, storm damage, major dead wood
180	Royal Poinciana	Delonix regia		13	30	
181	Pond Apple	Annona glabra		21	20	Decay in trunk, ganoderma, storm damage
189	Mango	Mangifera indica		15	20	Severe decay in canopy
191	Sea Grape	Coccoloba uvifera		15	20	Dbl trunk, sub-canopy
194	Mango	Mangifera indica		27	20	Dying
196	Mango	Mangifera indica		6	20	Sub-canopy
199	Sea Grape	Coccoloba uvifera		9	20	Multi trunk, part of # 201, tree is branches from tree that uprooted and kept growing
200	Sea Grape	Coccoloba uvifera		12	20	Co-canopy
201	Sea Grape	Coccoloba uvifera		26	30	Multi trunk, part of # 199, tree is branches from tree that uprooted and kept growing
209	Hong Kong Orchid	Bauhinia variegata		6	20	Cat 1, FLEPPC 2019 Invasive Plant List
210	Mango	Mangifera indica		11.5	20	Co-canopy
211	Mango	Mangifera indica		26	40	Co-canopy, decay in trunk
215	Mango	Mangifera indica		23	20	Major decay in trunk
219	Mango	Mangifera indica		18	10	Major decay in trunk
223	Mango	Mangifera indica		32	40	Major decay in trunk
226	Mango	Mangifera indica		30.5	20	Co-canopy, major decay in trunk
227	Mango	Mangifera indica		5.75	10	Sub-canopy
228	Mango	Mangifera indica		11	10	Co-canopy, major decay in trunk
230	Ficus	Ficus microcarpa		100	30	Cat 1, FLEPPC 2019 Invasive Plant List, dying
231	Ficus	Ficus microcarpa		100	30	Cat 1, FLEPPC 2019 Invasive Plant List, dying
232	Ficus	Ficus microcarpa		100	30	Cat 1, FLEPPC 2019 Invasive Plant List, dying
238	Live Oak	Quercus virginiana		12	20	Sub-canopy
240	Mango	Mangifera indica		12	20	
250	Queen's Crape Myrtle	Lagerstroemia speciosa		12.5	20	Co canopy, major storm damage
256	Sea Grape	Coccoloba uvifera		18	20	Sub-canopy, multi trunk
260	Elephant Apple	Dillenia indica		8	20	
270	Carambola	Averrhoa carambola		12	30	Major decay in trunk
272	Black Sapote	Diospyros nigra		8	20	Co-canopy
276	Jacaranda	Jacaranda mimosifolia		14	20	
280	Mango	Mangifera indica		13	20	Co-canopy
283	Yellow Tabebuia	Tabebuia chrysotricha		9	10	
289	Black Sapote	Diospyros nigra		6.5	15	Co-canopy, storm damage
293	Black Sapote	Diospyros nigra		20	20	Severe co-dom, storm damage, sub-canopy
302	Mastic	Pistacia lentiscus		16	20	Co-canopy, major trunk damage, decay in trunk
303	Salamander Tree	Antidesma bunis		6	20	Sub-canopy
304	Salamander Tree	Antidesma bunis		20.5	10	Major storm damage, major decay in trunk scaffolds
305	Avocado	Persia americana		19	10	Decay in scaffolds, decay in trunk
306	Mango	Mangifera indica		9.75	20	Sub-canopy
308	Salamander Tree	Antidesma bunis		7	10	Major storm damage
309	Lychee Nut	Litchi chinensis		36	40	Decay in scaffold
310	Mango	Mangifera indica		12	20	Severe co-dom with inclusion
311	Ficus	Ficus microcarpa		6.5	5	Cat 1, FLEPPC 2019 Invasive Plant List
314	Mango	Mangifera indica		6.5	15	

TREE #	COMMON NAME	SCIENTIFIC NAME	HEIGHT	DBH	Condition Rating	Comments
315	Florida Apricot	Prunus armeniaca		20	20	DBH total all trunks, stump sprout
319	Salamander Tree	Antidesma bunis		17	10	Sub-canopy, severe co-dom
320	Salamander Tree	Antidesma bunis		13	30	Co-canopy
321	Jamaican Allspice	Pimenta dioica		6.5	10	Severe co-dom
322	Elephant Apple	Dillenia indica		6	20	
324	Elephant Apple	Dillenia indica		6.5	10	
325	Elephant Apple	Dillenia indica		29	30	Severe co-dom with inclusion
334	Loquat	Eriobotrya japonica		6.5	30	Co-canopy
337	Hawaiian Mountain Apple	Syzygium malaccense		8	20	
340	Broom Cluster Fig	Ficus sur		80	20	Major decay throughout, power lines
355	Sea Grape	Coccoloba uvifera		8	20	Multi leader, storm damage, power lines
360	Live Oak	Quercus virginiana		14	30	Co-dom, multi trunk
364	Live Oak	Quercus virginiana		17.5	30	Co-canopy
369	Gumbo Limbo	Bursera simaruba		6.75	30	Co-canopy
370	Gumbo Limbo	Bursera simaruba		7.75	30	Co-canopy
378	Laurel Oak	Quercus laurifolia		22.5	30	Co-dom with inclusion, Poor structure, girdling root,
380	Tropic Almond	Terminalia catappa		18	5	Cat 2, FLEPPC 2019 Invasive Plant List, hat-racked, sprouted stump, severe co-dom
381	Sea Grape	Coccoloba uvifera		30	10	DBH total all trunks, multipule hat-racked events, major decay
384	Sea Grape	Coccoloba uvifera		60	20	DBH total all trunks, tall stump sprouted, major decay
388	Sea Grape	Coccoloba uvifera		60	20	DBH total all trunks, tall stump sprouted, major decay
389	Royal Poinciana	Delonix regia		14.5	30	Co-canopy, vine
393	Royal Poinciana	Delonix regia		14	20	
394	Mango	Mangifera indica		16	20	Major decay in trunk
395	Mango	Mangifera indica		12.5	20	Sub-canopy, major storm damage, uprooted
396	Mango	Mangifera indica		16.5	10	Sub-canopy, major storm damage, uprooted
397	Governor's Plum	Flacourtia indica		10.5	40	Cat 2, FLEPPC 2019 Invasive Plan List
398	Hawaiian Mountain Apple	Syzygium malaccense		6	20	DBH total both trunks
399	Mango	Mangifera indica		14.5	30	
400	Avocado	Persia americana		7.5	10	
401	Mango	Mangifera indica		11.5	30	
403	Avocado	Persia americana		9	20	
404	Strangler Fig	Ficus aurea		14	30	
405	Sausage	Kigelia africana		17.5	20	Sub-canopy
406	Mango	Mangifera indica		27	20	DBH total both trunks, Severe co-dom
407	Sausage	Kigelia africana		17	20	Sub-canopy, severe co-dom
412	Tropic Almond	Terminalia catappa		44	30	Cat 2, FLEPPC 2019 Invasive Plant List, Hollow, ganoderma in trunk
425	Gumbo Limbo	Bursera simaruba		17	30	Co-canopy, severe co-dom
426	Gumbo Limbo	Bursera simaruba		9	30	Sever co-dom, storm damage
440	African Tulip	Spathodea campanulata		8.75	20	
441	African Tulip	Spathodea campanulata		24	20	DBH total all trunks, multi leader
450	Ficus	Ficus microcarpa		11.5	20	Cat 1, FLEPPC 2019 Invasive Plant List, powerlines, co canopy
451	Mango	Mangifera indica		11	20	Co-canopy, severe decay in trunk
455	Gumbo Limbo	Bursera simaruba		5	15	
463	Mango	Mangifera indica		9.5	30	Co-canopy
464	Mango	Mangifera indica		15	20	Co-canopy, storm damage
465	Loquat	Eriobotrya japonica		7.5	20	Co-canopy
466	Ficus	Ficus microcarpa		18	30	Cat 1, FLEPPC 2019 Invasive Plant list, sub canopy
467	Mango	Mangifera indica		17	20	Co-canopy, major storm damage, decay in scaffold
468	Mango	Mangifera indica		17	30	Co-canopy, decay in scaffold
470	Mango	Mangifera indica		10	10	Major storm damage
479	Queen's Crape Myrtle	Lagerstroemia speciosa		5	20	Sub-canopy
486	Mimosa	Albizia julibrissin		12	30	Cat 1, FLEPPC 2019 Invasive Plant List
499	Broom Cluster Fig	Ficus sur		100	20	Co-canopy, storm damage
502	Pond Apple	Annona glabra		8	10	Major deadwood, dying
503	Mango	Mangifera indica		10	20	Co-canopy
505	Mango	Mangifera indica		9	10	Sub-canopy
507	Avocado	Persia americana		5	20	Sub-canopy
509	Broom Cluster Fig	Ficus sur		100	20	Major decay throughout,
518	Mango	Mangifera indica		6	10	Co-canopy
522	Sapodilla	Manilkara zapota		4	30	Cat 1, FLEPPC 2019 Invasive Plant List, co canopy
529	Hawaiian Mountain Apple	Syzygium malaccense		5.5	30	Sub-canopy
533	Autograph	Clusia rosa		15	40	Major decay in scaffolds, severe co-dom, powerlines
534	Autograph	Clusia rosa		32	20	Major decay throughout, power lines, very poor structure
561	Sea Grape	Coccoloba uvifera		60	30	DBH total all trunks, co-canopy, multi trunk, very poor structure
562	Sausage	Kigelia africana		26	30	Co-canopy, severe co-dom
					Condition Rating ≥ 50%	
32	Gumbo Limbo	Bursera simaruba		11	60	
103	Mango	Mangifera indica		23	60	
118	Rosewood	Dalbergia nigra		30	60	Cat 2, FLEPPC 2019 Invasive Plant List, storm damage, girdling root
169	Mango	Mangifera indica		20	50	
177	Lychee Nut	Litchi chinensis		14	70	
179	Mango	Mangifera indica		31	50	Severe co-dom with inclusion
204	Elephant Apple	Dillenia indica		13	60	
212	Manao	Mangifera indica		10.5	50	
217	Soursop	Annona muricata		17	70	
267	Jacaranda	Jacaranda mimosifolia		17	50	
342	Gumbo Limbo	Bursera simaruba		15	50	
362	Live Oak	Quercus virginiana		16	70	Co-canopy
366	Slash Pine	Pinus elliottii		8	50	Co-canopy
408	Royal Poinciana	Delonix regia		26	70	Honey bee hive
446	Live Oak	Quercus virginiana		18.5	50	Sparse foliage
456	Gumbo Limbo	Bursera simaruba		6.25	60	
500	Mango	Mangifera indica		12	50	Co-canopy
501	Allspice	Pimenta dioica		7.5	70	
504	Strangler Fig	Ficus aurea		21	50	Storm damage
					Invasive Species	
1	Australian Pine	Casuarina equisetifolia		N/A	N/A	Cat 1, FLEPPC 2019 Invasive Plant List
2	Australian Pine	Casuarina equisetifolia		N/A	N/A	Cat 1, FLEPPC 2019 Invasive Plant List
3	Australian Pine	Casuarina equisetifolia		N/A	N/A	Cat 1, FLEPPC 2019 Invasive Plant List
4	Australian Pine	Casuarina equisetifolia		N/A	N/A	Cat 1, FLEPPC 2019 Invasive Plant List
5	Australian Pine	Casuarina equisetifolia		N/A	N/A	Cat 1, FLEPPC 2019 Invasive Plant List
35	Australian Pine	Casuarina equisetifolia		N/A	N/A	Cat 1, FLEPPC 2019 Invasive Plant List
36	Australian Pine	Casuarina equisetifolia		N/A	N/A	Cat 1, FLEPPC 2019 Invasive Plant List
37	Australian Pine	Casuarina equisetifolia		N/A	N/A	Cat 1, FLEPPC 2019 Invasive Plant List
39	Australian Pine	Casuarina equisetifolia		N/A	N/A	Cat 1, FLEPPC 2019 Invasive Plant List
40	Australian Pine	Casuarina equisetifolia		N/A	N/A	Cat 1, FLEPPC 2019 Invasive Plant List
41	Australian Pine	Casuarina equisetifolia		N/A	N/A	Cat 1, FLEPPC 2019 Invasive Plant List
42	Australian Pine	Casuarina equisetifolia		N/A	N/A	Cat 1, FLEPPC 2019 Invasive Plant List
43	Australian Pine	Casuarina equisetifolia		N/A	N/A	Cat 1, FLEPPC 2019 Invasive Plant List
44	Australian Pine	Casuarina equisetifolia		N/A	N/A	Cat 1, FLEPPC 2019 Invasive Plant List
45	Australian Pine	Casuarina equisetifolia		N/A	N/A	Cat 1, FLEPPC 2019 Invasive Plant List
46	Australian Pine	Casuarina equisetifolia		N/A	N/A	Cat 1, FLEPPC 2019 Invasive Plant List
47	Australian Pine	Casuarina equisetifolia		N/A	N/A	Cat 1, FLEPPC 2019 Invasive Plant List
49	Australian Pine	Casuarina equisetifolia		N/A	N/A	Cat 1, FLEPPC 2019 Invasive Plant List
50	Australian Pine	Casuarina equisetifolia		N/A	N/A	Cat 1, FLEPPC 2019 Invasive Plant List
51	Australian Pine	Casuarina equisetifolia		N/A	N/A	Cat 1, FLEPPC 2019 Invasive Plant List
52	Australian Pine	Casuarina equisetifolia		N/A	N/A	Cat 1, FLEPPC 2019 Invasive Plant List
53	Australian Pine	Casuarina equisetifolia		N/A	N/A	Cat 1, FLEPPC 2019 Invasive Plant List
135	Australian Pine	Casuarina equisetifolia		N/A	N/A	Cat 1, FLEPPC 2019 Invasive Plant List
136	Australian Pine	Casuarina equisetifolia		N/A	N/A	Cat 1, FLEPPC 2019 Invasive Plant List
138	Australian Pine	Casuarina equisetifolia		N/A	N/A	Cat 1, FLEPPC 2019 Invasive Plant List
150	Schefflera	Brassaia actinophylla		N/A	N/A	Cat 1, FLEPPC 2019 Invasive Plant List

continued on sheet TP-3

BY	DATE	REVISIONS
GAH	11/19/21	REVISIONS PER PRE-CONMENTS

FILE NAME: 8577TREE

CAULFIELD & WHEELER, INC.
CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE • SURVEYING
7900 GLADES ROAD, SUITE 100
BOCA RATON, FLORIDA 33434
PHONE (561)-392-1991 / FAX (561)-750-1452

TREE PRESERVATION SURVEY
DELRAY RIDGE
DELRAY BEACH FLORIDA

DATE 03/16/21
DRAWN BY GAH
F.B./ PG. --
SCALE 1"=30'

SUBMITTED BY—
Gaylord Allan Hendricks

G. ALLAN HENDRICKS
LANDSCAPE ARCHITECT
No. LA6666974
STATE OF FLORIDA
—FOR THE FIRM—
DATE May 26, 2022

JOB # 8577
SHT.NO. TP-2
OF 3 SHEETS

TREE #	COMMON NAME	SCIENTIFIC NAME	HEIGHT	Clear Trunk	Condition Rating	Comments
151	Schefflera	Brassaia actinophylla		N/A	N/A	Cat 1, FLEPPC 2019 Invasive Plant List
160	Schefflera	Brassaia actinophylla		N/A	N/A	Cat 1, FLEPPC 2019 Invasive Plant List
162	Schefflera	Brassaia actinophylla		N/A	N/A	Cat 1, FLEPPC 2019 Invasive Plant List
184	Bischofia	Bischofia javanica		N/A	N/A	Cat 1, FLEPPC 2019 Invasive Plant List
186	Bischofia	Bischofia javanica		N/A	N/A	Cat 1, FLEPPC 2019 Invasive Plant List
187	Bischofia	Bischofia javanica		N/A	N/A	Cat 1, FLEPPC 2019 Invasive Plant List
188	Bischofia	Bischofia javanica		N/A	N/A	Cat 1, FLEPPC 2019 Invasive Plant List
192	Bischofia	Bischofia javanica		N/A	N/A	Cat 1, FLEPPC 2019 Invasive Plant List
203	Schefflera	Brassaia actinophylla		N/A	N/A	Cat 1, FLEPPC 2019 Invasive Plant List
229	Schefflera	Brassaia actinophylla		N/A	N/A	Cat 1, FLEPPC 2019 Invasive Plant List
241	Schefflera	Brassaia actinophylla		N/A	N/A	Cat 1, FLEPPC 2019 Invasive Plant List
247	Schefflera	Brassaia actinophylla		N/A	N/A	Cat 1, FLEPPC 2019 Invasive Plant List
268	Schefflera	Brassaia actinophylla		N/A	N/A	Cat 1, FLEPPC 2019 Invasive Plant List
284	Schefflera	Brassaia actinophylla		N/A	N/A	Cat 1, FLEPPC 2019 Invasive Plant List
330	Schefflera	Brassaia actinophylla		N/A	N/A	Cat 1, FLEPPC 2019 Invasive Plant List
449	Australian Pine	Casuarina equisetifolia		N/A	N/A	Cat 1, FLEPPC 2019 Invasive Plant List
469	Australian Pine	Casuarina equisetifolia		N/A	N/A	Cat 1, FLEPPC 2019 Invasive Plant List
471	Australian Pine	Casuarina equisetifolia		N/A	N/A	Cat 1, FLEPPC 2019 Invasive Plant List
477	Schefflera	Brassaia actinophylla		N/A	N/A	Cat 1, FLEPPC 2019 Invasive Plant List
488	Schefflera	Brassaia actinophylla		N/A	N/A	Cat 1, FLEPPC 2019 Invasive Plant List
523	Schefflera	Brassaia actinophylla		N/A	N/A	Cat 1, FLEPPC 2019 Invasive Plant List
540	Schefflera	Brassaia actinophylla		N/A	N/A	Cat 1, FLEPPC 2019 Invasive Plant List
556	Schefflera	Brassaia actinophylla		N/A	N/A	Cat 1, FLEPPC 2019 Invasive Plant List

Trees with Condition Rating < 50% to be Removed: 159 trees

Total DBHs of Trees with Condition Rating > 50% to be Removed: 316.8 DBH inches

Palm #	Common Name	Scientific Name	Height	Clear Trunk	Condition Rating < 50%	Comments
133	Royal Palm	Roystonea regia	21	9	40	
252	Adonidia Palm	Adonidia merrilli	18	12	20	Decay in trunk
258	Foxtail Palm	Wodyetia bifurcata	16	8	30	
261	Adonidia Palm	Adonidia merrilli	23	17	40	
267	Adonidia Palm	Adonidia merrilli	23	17	40	
279	Adonidia Palm	Adonidia merrilli	25	19	30	
372	Foxtail Palm	Wodyetia bifurcata	16	8	40	
402	Adonidia Palm	Adonidia merrilli	20	14	40	5 trunks
513	Royal Palm	Roystonea regia	30	28	30	Nutritional deficiency
					Condition Rating ≥ 50%	
10	Coconut Palm	Cocos nucifera	20	10	70	Cat 2, FLEPPC 2019 Invasive Plant List
12	Coconut Palm	Cocos nucifera	22	12	70	Cat 2, FLEPPC 2019 Invasive Plant List
13	Coconut Palm	Cocos nucifera	23	13	70	Cat 2, FLEPPC 2019 Invasive Plant List
14	Coconut Palm	Cocos nucifera	25	15	70	Cat 2, FLEPPC 2019 Invasive Plant List
15	Coconut Palm	Cocos nucifera	25	15	70	Cat 2, FLEPPC 2019 Invasive Plant List, 45 degree lean
16	Coconut Palm	Cocos nucifera	20	10	70	Cat 2, FLEPPC 2019 Invasive Plant List
17	Coconut Palm	Cocos nucifera	25	15	70	Cat 2, FLEPPC 2019 Invasive Plant List
24	Coconut Palm	Cocos nucifera	26	16	80	Cat 2, FLEPPC 2019 Invasive Plant List
33	Coconut Palm	Cocos nucifera	25	15	70	Cat 2, FLEPPC 2019 Invasive Plant List
74	Sabal Palm	Sabal palmetto	20	14	70	Cactus, 45 degree lean, no tag
102	Royal Palm	Roystonea regia	20	8	70	
110	Royal Palm	Roystonea regia	27	15	80	
115	Adonidia Palm	Adonidia merrilli	14	8	60	Curved trunk
116	Adonidia Palm	Adonidia merrilli	20	14	50	
117	Adonidia Palm	Adonidia merrilli	22	16	60	
182	Latania Palm	Latania lontaroides	14	8	70	
190	Sabal Palm	Sabal palmetto	14	8	70	No tag
193	Sabal Palm	Sabal palmetto	16	10	70	
205	Sabal Palm	Sabal palmetto	18	12	70	
206	Sabal Palm	Sabal palmetto	18	12	70	
207	Dypsis leptochellos	Teddy Bear Palm	18	10	70	
208	Sabal Palm	Sabal palmetto	22	16	70	
213	Sabal Palm	Sabal palmetto	14	8	70	
214	Sabal Palm	Sabal palmetto	16	10	70	
216	Sabal Palm	Sabal palmetto	15	9	70	
219	Sabal Palm	Sabal palmetto	14	8	70	
220	Sabal Palm	Sabal palmetto	14	8	70	
224	Sabal Palm	Sabal palmetto	16	10	70	
233	Adonidia Palm	Adonidia merrilli	18	10	60	
234	Adonidia Palm	Adonidia merrilli	16	10	60	
235	Adonidia Palm	Adonidia merrilli	21	15	60	
247	Adonidia Palm	Adonidia merrilli	17	11	70	
254	Royal Palm	Roystonea regia	22	12	50	
255	Adonidia Palm	Adonidia merrilli	20	14	60	
263	Adonidia Palm	Adonidia merrilli	14	8	70	
264	Royal Palm	Roystonea regia	26	16	80	
265	Adonidia Palm	Adonidia merrilli	14	8	70	
266	Adonidia Palm	Adonidia merrilli	25	19	50	
269	Royal Palm	Roystonea regia	30	28	70	
271	Adonidia Palm	Adonidia merrilli	25	19	60	
273	Adonidia Palm	Adonidia merrilli	25	19	60	
274	Adonidia Palm	Adonidia merrilli	20	14	60	
291	Adonidia Palm	Adonidia merrilli	25	19	60	
294	Adonidia Palm	Adonidia merrilli	20	14	60	
295	Adonidia Palm	Adonidia merrilli	20	14	60	
297	Royal Palm	Roystonea regia	25	13	80	
300	Sabal Palm	Sabal palmetto	21	15	70	
301	Sabal Palm	Sabal palmetto	18	12	70	
316	Carpentaria Palm	Carpentaria acuminata	40	32	70	
317	Carpentaria Palm	Carpentaria acuminata	40	32	60	
323	Adonidia Palm	Adonidia merrilli	20	14	70	
326	Adonidia Palm	Adonidia merrilli	25	19	60	
327	Adonidia Palm	Adonidia merrilli	20	14	70	
328	Adonidia Palm	Adonidia merrilli	25	19	60	
329	Adonidia Palm	Adonidia merrilli	20	14	60	
332	Adonidia Palm	Adonidia merrilli	14	8	50	
333	Adonidia Palm	Adonidia merrilli	25	19	60	
335	Adonidia Palm	Adonidia merrilli	20	14	60	
336	Adonidia Palm	Adonidia merrilli	25	19	60	
343	Adonidia Palm	Adonidia merrilli	14	8	70	
350	Carpentaria Palm	Carpentaria acuminata	18	12	80	
353	Sabal Palm	Sabal palmetto	15	9	70	No tag
354	Sabal Palm	Sabal palmetto	15	9	70	No tag
356	Sabal Palm	Sabal palmetto	15	9	70	No tag
357	Sabal Palm	Sabal palmetto	15	9	70	No tag
373	Adonidia Palm	Adonidia merrilli	20	14	70	
374	Adonidia Palm	Adonidia merrilli	16	10	60	
377	Bismarck Palm	Bismarckia nobilis	20	12	80	
382	Washingtonia Palm	Washingtonia robusta	25	18	70	Cat 2, FLEPPC 2019 Invasive Plant List
387	Washingtonia Palm	Washingtonia robusta	25	18	70	Cat 2, FLEPPC 2019 Invasive Plant List
390	Coconut Palm	Cocos nucifera	21	11	80	Cat 2, FLEPPC 2019 Invasive Plant List
392	Coconut Palm	Cocos nucifera	26	16	80	Cat 2, FLEPPC 2019 Invasive Plant List
417	Coconut Palm	Cocos nucifera	25	15	80	Cat 2, FLEPPC 2019 Invasive Plant List

TREE RELOCATION NOTES

RELOCATION.

Standards for relocation.

Any Tree being relocated shall not be damaged during removal, transport, or replanting of that Tree.

If the species has a dormant period, the Tree shall be relocated during that time.

Adequate space for root and crown development shall be provided.

An inspection is required prior to root Pruning and relocation. In addition, a final inspection is required after installation and/or relocation.

Trees shall be root Pruned according to sound arboricultural standards prior to relocation. Root Pruning utilizing mechanical methods such as backhoes or trenchers is prohibited, and shall constitute a violation of this Chapter. Root Pruning shall extend to the Dripline of the Tree to the maximum extent possible. Root Pruned Trees shall remain in place for a minimum of eight weeks prior to relocation. Manual watering shall be required during and following the root Pruning process until re-established. The root ball must be kept moist at all times.

All crown Pruning shall be minimized and done in accordance with standards set by the American National Standards Institute.

Trees and vegetation to be relocated during Construction or other Development activities shall be stored, staked, and irrigated in a suitable area with the granting of a Tree Permit. One-time relocation is preferred.

During and following relocation, the root ball and trunk shall be protected. The root ball shall be kept moist at all times.

Relocated Trees shall be braced for at least one Year or until establishment.

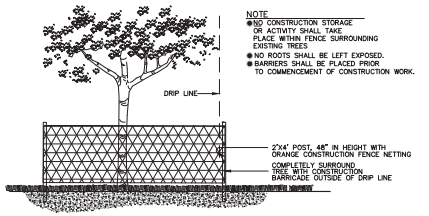
Relocated Trees shall be watered sufficiently and fertilized until the Tree growth is reestablished. All relocated Trees shall have Terrasorb and appropriate fertilizer applied to the planting soil at the time of relocation per the manufacturer's specifications.

Relocated Trees must be set in a clean soil mixture of 50% sand and 50% muck. All palms must be set in a clean soil mixture of 80% sand and 20% muck.

All trees to be relocated shall be relocated by a licensed tree mover, registered with the City of Delray Beach, Florida.

Daily watering within the first 30 days shall be provided by water mule truck and administered by contractor.

Tree protection barricade to remain in place during development of site, see detail this sheet.



TEMPORARY CONSTRUCTION BARRICADE

NOT TO SCALE

TREE #	COMMON NAME	SCIENTIFIC NAME	HEIGHT	Clear Trunk	Condition Rating	Comments
418	Royal Palm	Roystonea regia	26	14	60	
419	Royal Palm	Roystonea regia	25	13	60	
442	Washingtonia Palm	Washingtonia robusta	40	33	70	Cat 2, FLEPPC 2019 Invasive Plant List
443	Washingtonia Palm	Washingtonia robusta	40	33	70	Cat 2, FLEPPC 2019 Invasive Plant List
444	Washingtonia Palm	Washingtonia robusta	16	8	70	Cat 2, FLEPPC 2019 Invasive Plant List
445	Sabal Palm	Sabal palmetto	16	10	70	
447	Queen Palm	Syagrus romanzoffiana	28	18	80	Cat 2, FLEPPC 2019 Invasive Plant List
448	Washingtonia Palm	Washingtonia robusta	40	33	70	Cat 2, FLEPPC 2019 Invasive Plant List
452	Sabal Palm	Sabal palmetto	22	16	70	
472	Foxtail Palm	Wodyetia bifurcata	20	12	60	
480	Royal Palm	Roystonea regia	40	28	70	
481	Sabal Palm	Sabal palmetto	15	9	70	
483	Sabal Palm	Sabal palmetto	14	8	70	
484	Sabal Palm	Sabal palmetto	21	15	80	
487	Queen Palm	Syagrus romanzoffiana	23	13	70	Cat 2, FLEPPC 2019 Invasive Plant List
490	Sabal Palm	Sabal palmetto	16	10	70	
491	Sabal Palm	Sabal palmetto	22	16	70	
495	Adonidia Palm	Adonidia merrilli	16	10	70	
496	Adonidia Palm	Adonidia merrilli	16	10	70	
508	Adonidia Palm	Adonidia merrilli	16	10	70	
510	Sabal Palm	Sabal palmetto	25	19	70	
511	Adonidia Palm	Adonidia merrilli	25	19	70	
513	Adonidia Palm	Adonidia merrilli	25	19	70	
525	Adonidia Palm	Adonidia merrilli	25	19	60	

Total Numbers of Palms with Condition Rating < 50% to be Removed: 9 Palms

Total Heights of Palms with Condition Rating ≥ 50% to be Removed: 2079 feet in height (97 Palms)

PALMS UNDER 8' C.T., No Mitigation Required.

Tree #	*Botanical Name*	Common Name	CT (feet)
T-7	*Wodyetia bifurcata*	Foxtail Palm	2
T-8	*Wodyetia bifurcata*	Foxtail Palm	1
T-9	*Cocos nucifera*	Coconut Palm	1
T-11	*Cocos nucifera*	Coconut Palm	5
T-19	*Cocos nucifera*	Coconut Palm	2
T-20	*Roystonea regia*	Royal Palm	2
T-21	*Cocos nucifera*	Coconut Palm	3
T-22	*Roystonea regia*	Royal Palm	1
T-23	*Cocos nucifera*	Coconut Palm	2
T-25	*Cocos nucifera*	Coconut Palm	1
T-26	*Cocos nucifera*	Coconut Palm	3
T-27	*Cocos nucifera*	Coconut Palm	3
T-28	*Cocos nucifera*	Coconut Palm	2
T-29	*Roystonea regia*	Royal Palm	3
T-30	*Cocos nucifera*	Coconut Palm	3
T-31	*Cocos nucifera*	Coconut Palm	3
T-34	*Cocos nucifera*	Coconut Palm	1
T-112	*Hyophorbe verschaffeltii*	Spindle palm	2
T-157	*Syagrus romanzoffiana*	Queen Palm	1
T-175	*Sabal palmetto*	Sabal Palm	3
T-195	*Sabal palmetto*	Sabal Palm	1
T-197	*Sabal palmetto*	Sabal Palm	1
T-198	*Sabal palmetto*	Sabal Palm	0
T-221	*Sabal palmetto*	Sabal Palm	4
T-222	*Sabal palmetto*	Sabal Palm	4
T-225	*Sabal palmetto*	Sabal Palm	2
T-237	*Syagrus romanzoffiana*	Queen Palm	7
T-248	*Dypsis decaryi*	Triangle Palm	2
T-253	*Roystonea regia*	Royal Palm	1
T-298	*Roystonea regia*	Royal Palm	4
T-318	*Wodyetia bifurcata*	Foxtail palm	7
T-344	*Adonidia merrilli*	Adonidia Palm	3
T-345	*Adonidia merrilli*	Adonidia Palm	5
T-358	*Latania lontaroides*	Latania palm	2
T-366	*Roystonea regia*	Royal Palm	2
T-371	*Wodyetia bifurcata*	Foxtail Palm	5
T-375	*Adonidia merrilli*	Adonidia Palm	7
T-376	*Adonidia merrilli*	Adonidia Palm	7
T-409	*Phoenix canariensis*	Canary Date Palm	4
T-410	*Livistona chinensis*	Chinese Fan Palm	1
T-411	*Livistona chinensis*	Chinese Fan Palm	0
T-413	*Wodyetia bifurcata*	Foxtail Palm	1
T-414	*Wodyetia bifurcata*	Foxtail Palm	6
T-421	*Cocos nucifera*	Coconut Palm	7
T-422	*Cocos nucifera*	Coconut Palm	2
T-423	*Cocos nucifera*	Coconut Palm	6
T-424	*Cocos nucifera*	Coconut Palm	4
T-427	*Wodyetia bifurcata*	Foxtail Palm	2
T-428	*Wodyetia bifurcata*	Foxtail Palm	1
T-429	*Wodyetia bifurcata*	Foxtail Palm	0
T-430	*Wodyetia bifurcata*	Foxtail Palm	2
T-431	*Wodyetia bifurcata*	Foxtail Palm	2
T-432	*Adonidia merrilli*	Adonidia Palm	3
T-433	*Wodyetia bifurcata*	Foxtail Palm	2
T-434	*Wodyetia bifurcata*	Foxtail Palm	2
T-435	*Wodyetia bifurcata*	Foxtail Palm	2
T-436	*Wodyetia bifurcata*	Foxtail Palm	2
T-437	*Wodyetia bifurcata*	Foxtail Palm	2
T-438	*Wodyetia bifurcata*	Foxtail Palm	3
T-439	*Wodyetia bifurcata*	Foxtail Palm	3
T-489	*Roystonea regia*	Royal Palm	1
T-521	*Roystonea regia*	Royal Palm	1
T-532	*Sabal palmetto*	Sabal Palm	3
T-547	*Sabal palmetto*	Sabal Palm	2
T-548	*Adonidia merrilli*	Adonidia Palm	4
T-549	*Sabal palmetto*	Sabal Palm	1
T-550	*Sabal palmetto*	Sabal Palm	3
T-551	*Adonidia merrilli*	Adonidia Palm	4
T-552	*Adonidia merrilli*	Adonidia Palm	2
T-553	*Adonidia merrilli*	Adonidia Palm (Double)	3
T-554	*Adonidia merrilli*	Adonidia Palm (Triple)	5
T-560	*Syagrus romanzoffiana*	Queen Palm	0

BY	DATE	REVISIONS
GAH	5/19/21	RESPONSE FOR PZ/COMMENTS

FILE NAME: 8577TREE

CAULFIELD & WHEELER, INC.
CIVIL ENGINEERING • LANDSCAPE ARCHITECTURE • SURVEYING
7900 GLADES ROAD, SUITE 100
BOCA RATON, FLORIDA 33434
PHONE (561)-392-1991 / FAX (561)-750-1452

TREE PRESERVATION SURVEY

DELRAY RIDGE

DELRAY BEACH FLORIDA

DATE 03/16/21

DRAWN BY GAH

F.B./ PG. --

SCALE --

SUBMITTED BY–
Gaylord Allan Hendricks

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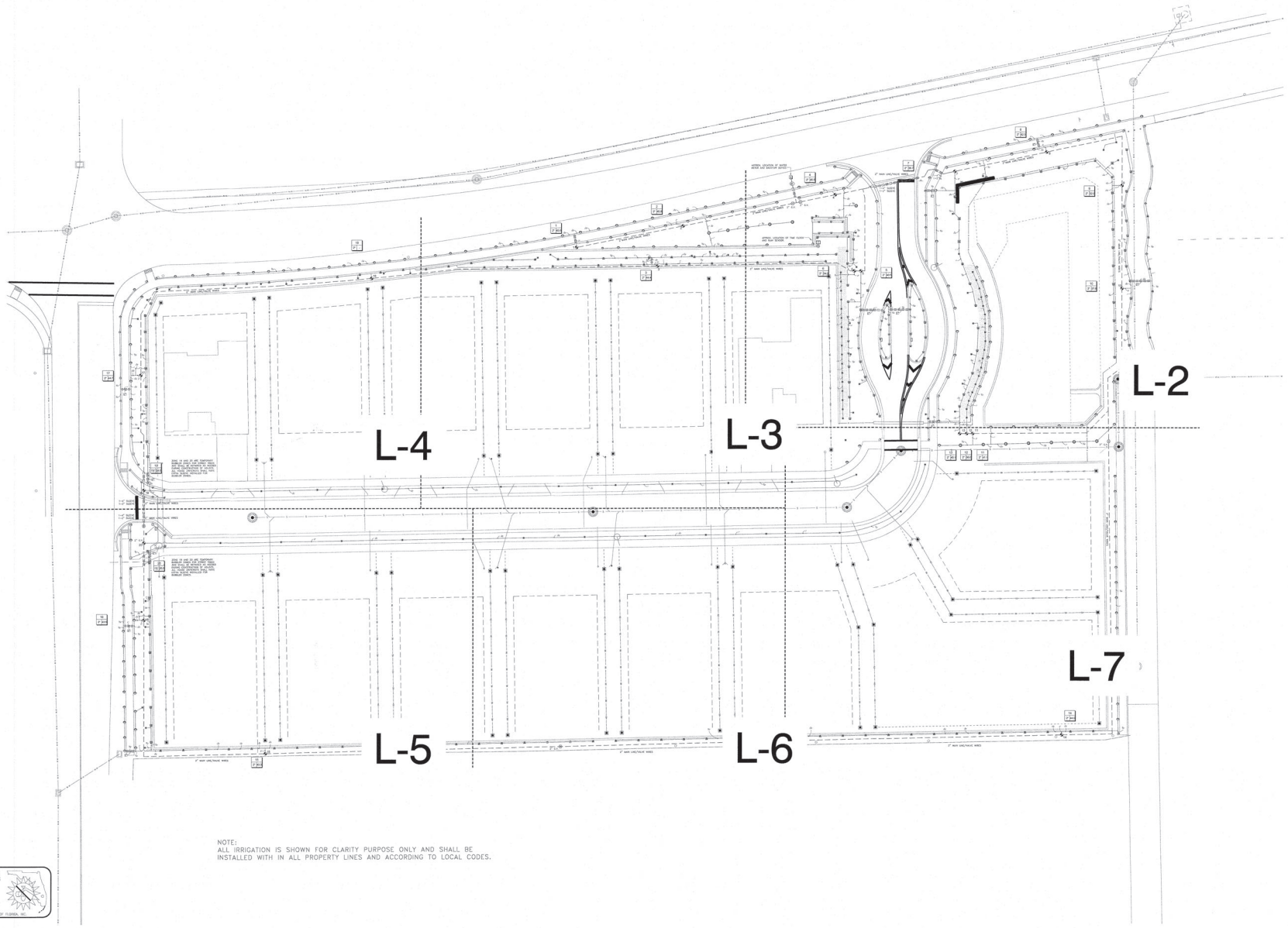
LANDSCAPE ARCHITECT
No. LA6666974
STATE OF FLORIDA
–FOR THE FIRM–
DATE May 26, 2022

JOB # 8577

SHT.NO. TP–3

OF 3 SHEETS



NOTE:
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SUNSHINE STATE ONE CALL OF FLORIDA, INC.

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Mac Irrigation Inc.
15200 U.S.1
Delry Beach, Florida 33446
Phone: 561.498.1611

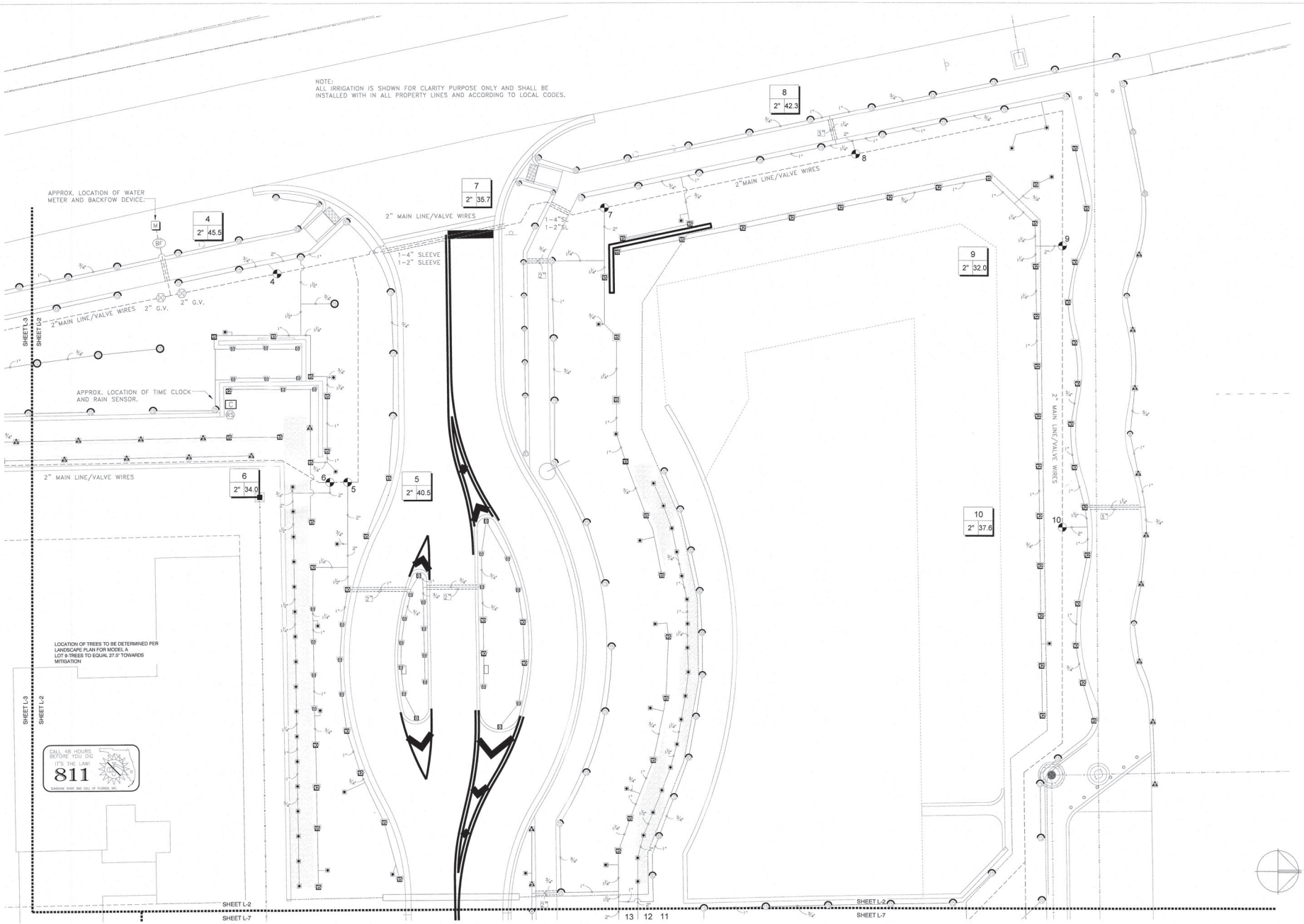
Sheet Description:
Irrigation Design

SEAL:

Project:
Delray Ridge
Delray Beach
Florida

REVISIONS:

DATE: 05-06-22
DWG: Ridge
DRAWN BY: DSD
CHECKED BY: B.B.
SCALE: 1"=30'
SHEET: IR-1
OF-8



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Sheet Description:
Irrigation Design

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Project:
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Florida

REVISIONS:

DATE: 05-06-22
DWG: Ridge
DRAWN BY: DSD
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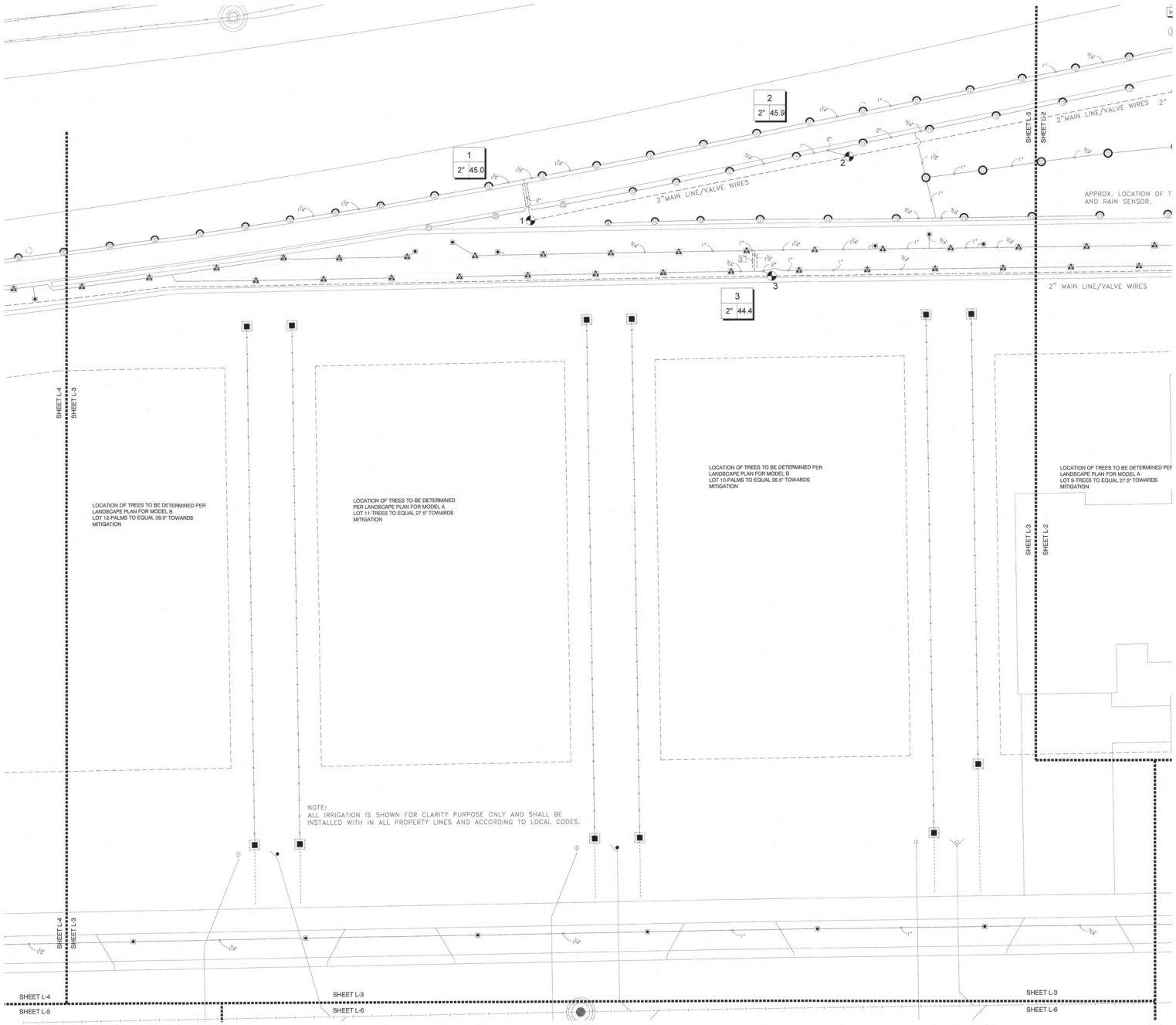
SCALE: 1"=10'
SHEET: IR-2

OF-8



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REVISIONS:

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DRAWN BY: DSD
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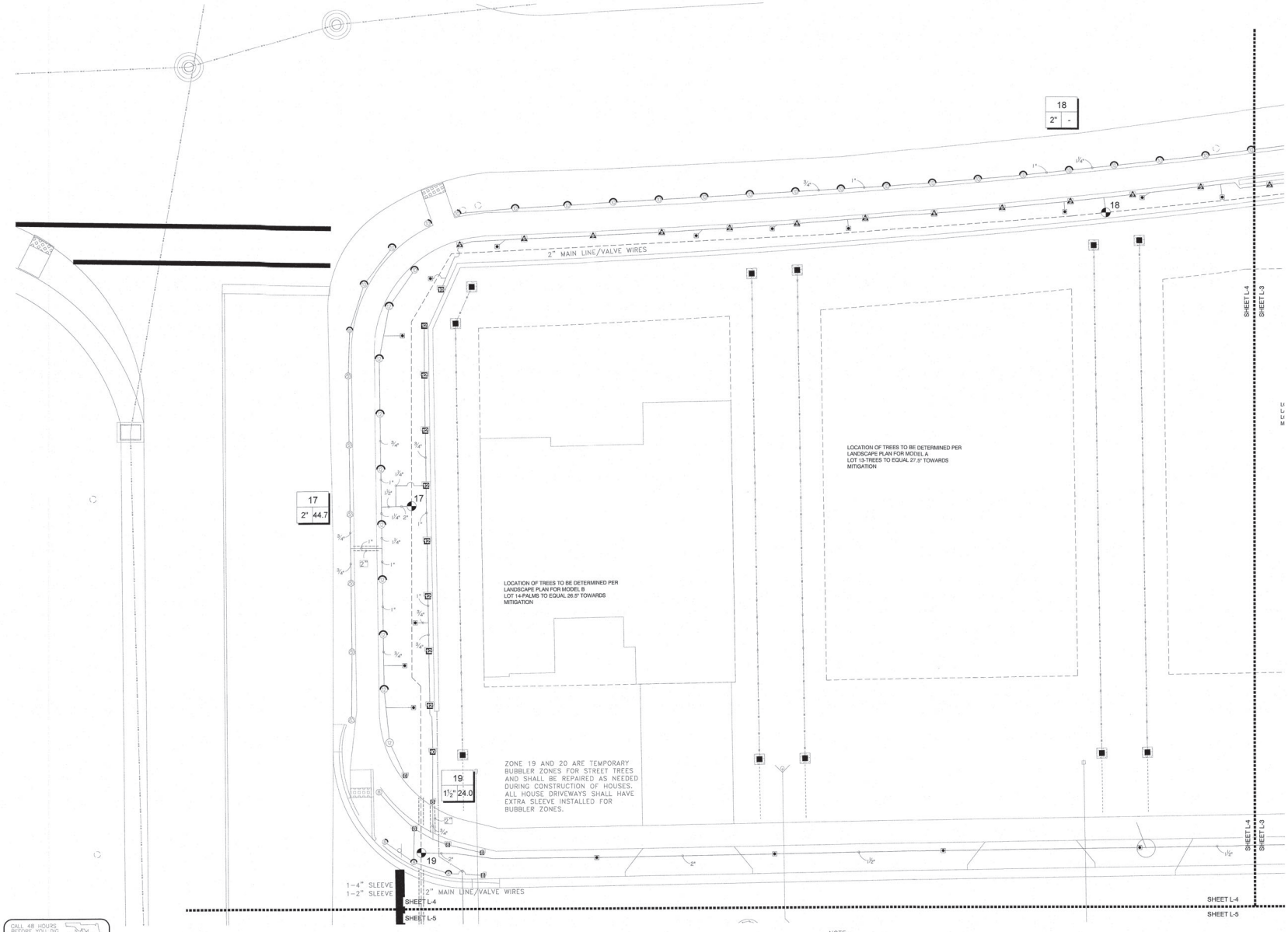
SCALE: 1"-10'
SHEET: IR-3

OF-8



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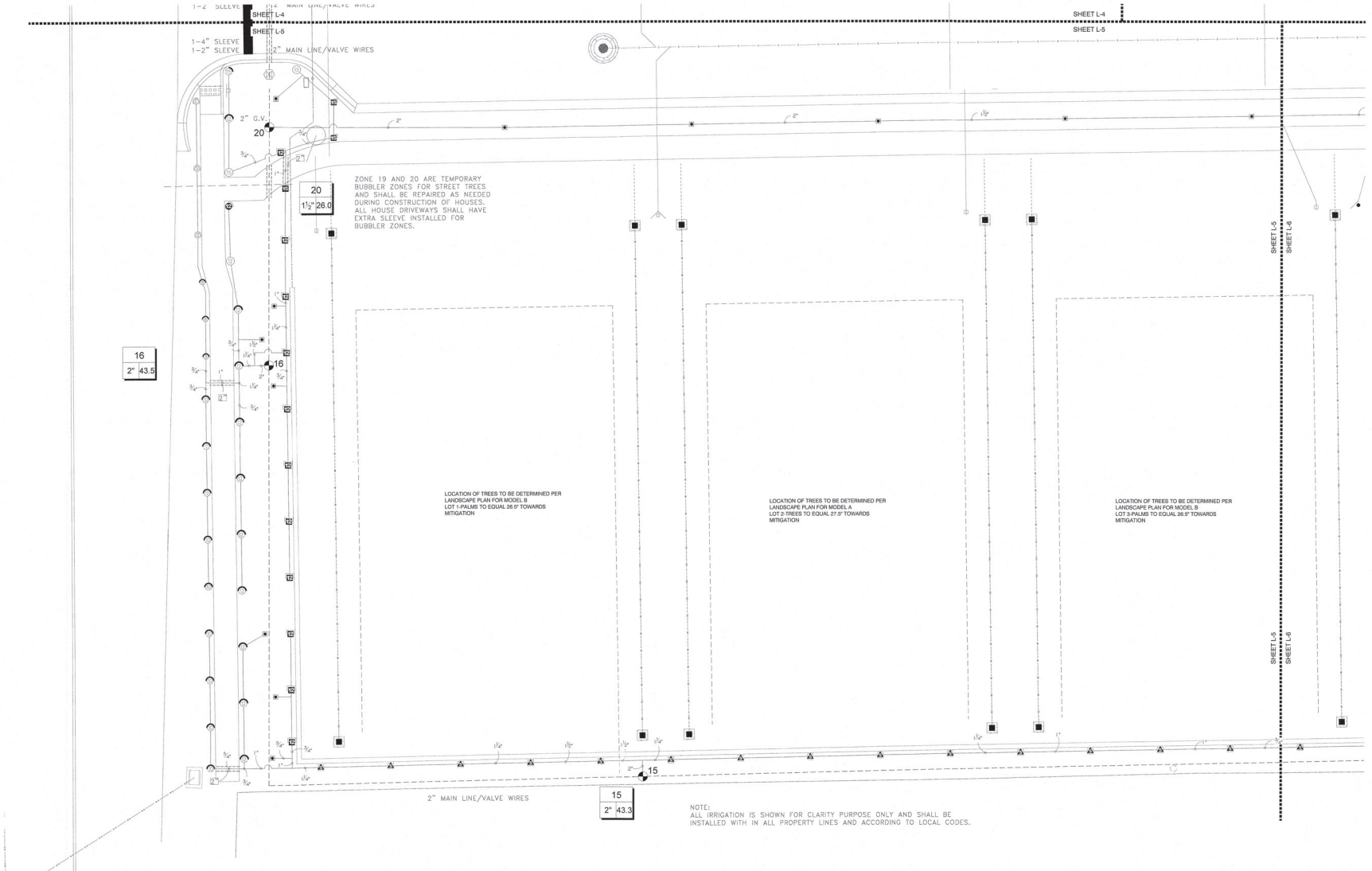
SCALE: 1"=10'
SHEET: IR-4

OF-8



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Project:
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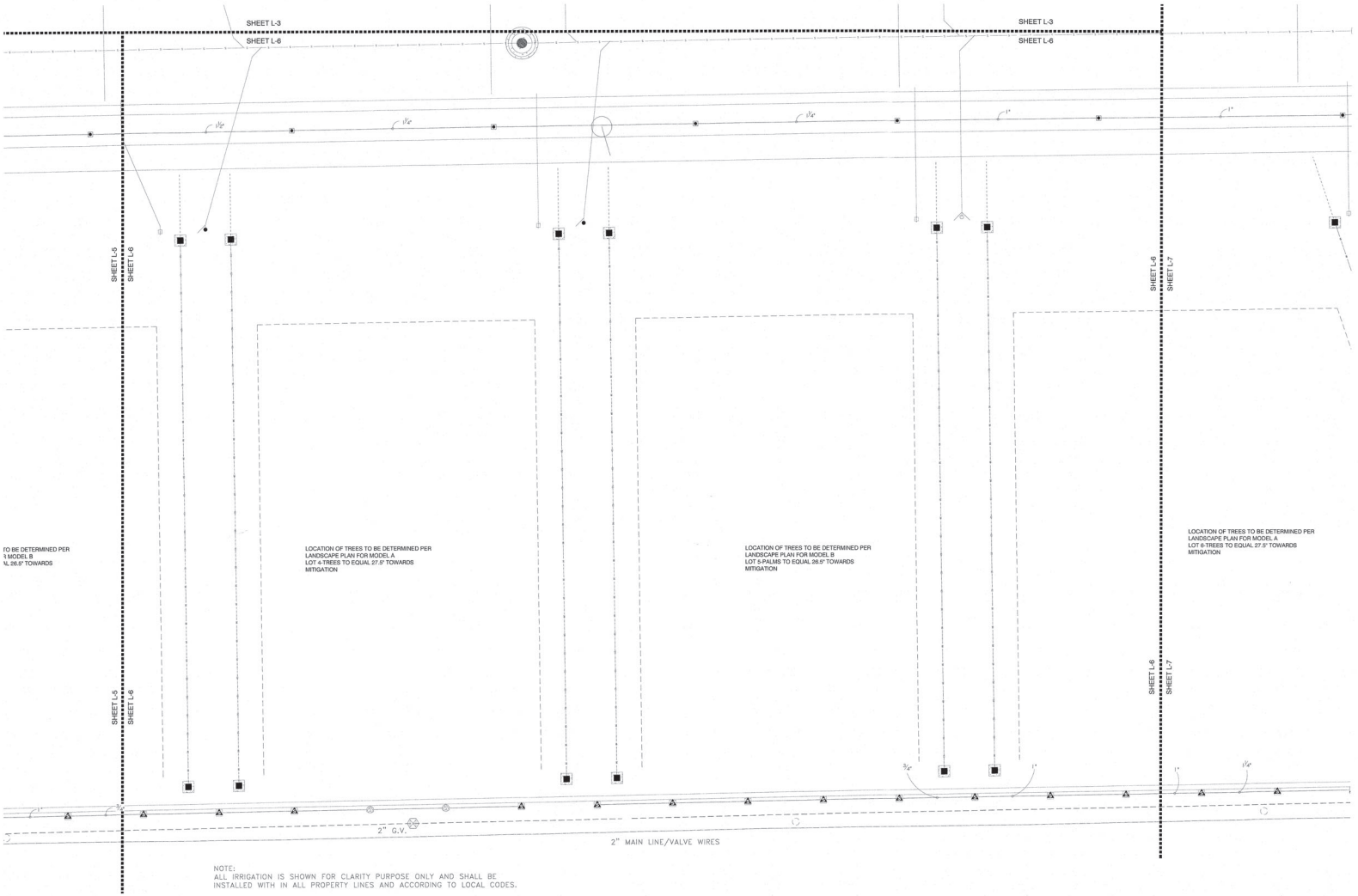
Delray Beach
Florida

REVISIONS:

DATE: 05-06-22
DWG: Ridge
DRAWN BY: DSD
CHECKED BY: B.B.
SCALE: 1"=10'
SHEET: IR-5

OF-8



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DRAWN BY: DSD
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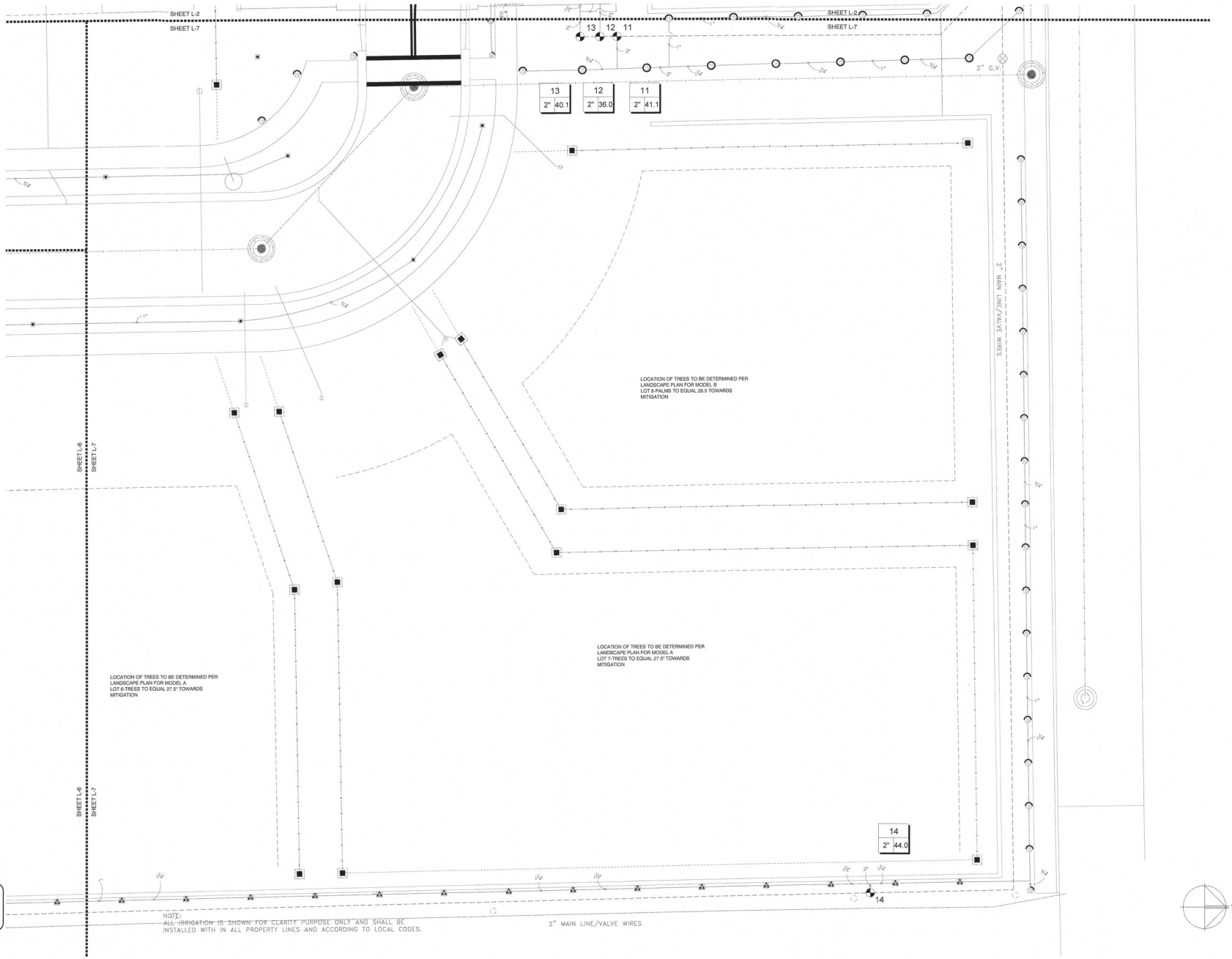
SCALE: 1"=10'
SHEET: IR-6

OF-8



Mac Irrigation Inc.
15200 U.S.1
Delry Beach, Florida 33446
Phone: 561.498.1611

Sheet Description:
Irrigation Design

SEAL:

Project:
Delray Ridge
Delray Beach
Florida

REVISIONS:

DATE: 05-06-22
DWG: Ridge
DRAWN BY: DSD
CHECKED BY: B.B.
SCALE: 1"=10'
SHEET: IR-2

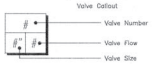
OF-8

IRRIGATION SCHEDULE

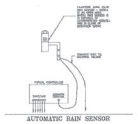
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION
ES LCS RCS CS SS	Hunter PROS-06 5` strip spray Turf Spray, 6.0" Pop-Up. Co-molded wiper seal with UV Resistant Material.
Q T H F	Hunter PROS-06 8` radius Turf Spray, 6.0" Pop-Up. Co-molded wiper seal with UV Resistant Material.
Q T H F	Hunter PROS-06 10` radius Turf Spray, 6.0" Pop-Up. Co-molded wiper seal with UV Resistant Material.
Q T H TT TQ F	Hunter PROS-06 12` radius Turf Spray, 6.0" Pop-Up. Co-molded wiper seal with UV Resistant Material.
Q T H TT TQ F	Hunter PROS-06 15` radius Turf Spray, 6.0" Pop-Up. Co-molded wiper seal with UV Resistant Material.
	Hunter PROS-06 adjustable arc Turf Spray, 6.0" Pop-Up. Co-molded wiper seal with UV Resistant Material.
ES LCS RCS CS SS	Hunter PROS-12 5` strip spray Shrub Spray, 12.0" Pop-Up. Co-molded wiper seal with UV Resistant Material.
Q T H TT TQ F	Hunter PROS-12 12` radius Shrub Spray, 12.0" Pop-Up. Co-molded wiper seal with UV Resistant Material.
ES LCS RCS CS SS	Hunter PROS-00 5` strip spray Shrub Spray, Fixed Riser. Co-molded wiper seal with UV Resistant Material.
Q T H F	Hunter PROS-00 8` radius Shrub Spray, Fixed Riser. Co-molded wiper seal with UV Resistant Material.
Q T H F	Hunter PROS-00 10` radius Shrub Spray, Fixed Riser. Co-molded wiper seal with UV Resistant Material.
Q T H TT TQ F	Hunter PROS-00 12` radius Shrub Spray, Fixed Riser. Co-molded wiper seal with UV Resistant Material.
Q T H TT TQ F	Hunter PROS-00 15` radius Shrub Spray, Fixed Riser. Co-molded wiper seal with UV Resistant Material.
	Hunter PROS-00 Adjustable Arc Shrub Spray, Fixed Riser. Co-molded wiper seal with UV Resistant Material.
25 50 10 20	Hunter PCB 10 Flood Bubbler, 1/2" FIPT.

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION
	Hunter ICV-G 1", 1-1/2", 2", and 3" Plastic Electric Remote Control Valves, Globe Configuration, with NPT Threaded Inlet/Outlet, for Commercial/Municipal Use.
	Nibco T-113 Class 125 bronze gate manual control valve with wheel handle, same size as mainline pipe diameter at valve location. Size Range - 1" - 3"
BF	Febco 825Y 2" Reduced Pressure Backflow Preventer
C	Hunter I2C-2400-PL 24 Station Outdoor Modular Controller. With two ICM-800 Module. Commercial Use. Plastic Cabinet.
RS	Hunter MINI-CLIK Rain Sensor, mount as noted
M	Water Meter 1-1/2"
	Irrigation Lateral Line: PVC Schedule 40
	Irrigation Mainline: PVC Schedule 40
	Pipe Sleeve: PVC Schedule 40

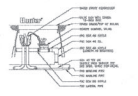
Valve Callout



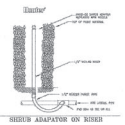
SPRAY HEAD


AUTOMATIC RAIN SENSOR

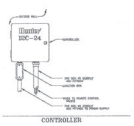

BRASS THREADED GATE VALVE



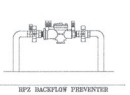
HUNTER ICV VALVE

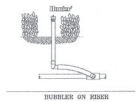


SHRUB ADAPATOR ON RISER



CONTROLLER


HPZ BACKFLOW PREVENTER



BUBBLER ON RISER

GENERAL NOTES

1. Pipe sizes shall conform to those shown on the drawings. No substitutions of smaller pipe sizes shall be permitted, but substitutions of larger sizes may be approved. All damaged and rejected pipe shall be removed from the site at the time of said rejection.
2. All mainline, lateral line and control wire conduit under paving shall be installed in separate sleeves. Sleeves shall be a minimum of twice (2X) the diameter of the pipe to be sleeved.
3. Install all backflow prevention devices and all piping between the point of connection and the backflow preventer as per local codes.
4. Final location of the backflow preventer and automatic controller shall be approved by the owner's authorized representative.
5. 120 VAC electrical power source at controller location shall be provided by others. The electrical contractor shall make the final connection from the electrical source to the controller.
6. All sprinkler heads shall be set perpendicular to finish grade unless otherwise specified.
7. The irrigation contractor shall flush and adjust all sprinkler heads and valves for optimum spray with minimal overspray onto walks, streets, walls, etc.
8. This design is diagrammatic. All piping, valves, etc., shown within paved areas is for design clarification only and shall be installed in planting areas wherever possible. The contractor shall locate all valves in shrub areas where possible.
9. It is the responsibility of the irrigation contractor to familiarize himself with all grade differences, location of walls, retaining walls, structures and utilities. The irrigation contractor shall repair or replace all items damaged by his work. He shall coordinate his work with other contractors for the location and installation of pipe sleeves through walls, under roadways and paving, etc.
10. Do not willingly install the sprinkler system as shown on the drawings when it is obvious in the field that unknown obstructions, grade differences or differences in the area dimensions exist that might not have been considered in the engineering. Such obstructions or differences should be brought to the attention of the owner's authorized representative. In the event this notification is not performed, the irrigation contractor shall assume full responsibility for any revisions necessary.
11. All sprinkler equipment not otherwise detailed or specified shall be installed as per manufacturer's recommendations and specifications.
12. The irrigation contractor shall install check valves on all heads in areas where finish grade exceeds 4:1, where post valve shut-off draining, of the irrigation head occurs or as directed by the owner's authorized representative.
13. The contractor shall provide 1800 PCS (pressure compensating screens) as necessary to reduce or eliminate overspray onto streets, walks or other areas as directed by the owner's authorized representative.
14. All control wires shall be installed in PVC conduit.
15. All remote control valves, gate valves, quick couplers, control wire and computer cable pull points shall be installed in approved valves boxes with covers.
16. The installation devices are to be guaranteed for the period of (1) year from the date of final acceptance.

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Sheet Description: Irrigation Details

SEAL:

Project: Delray Ridge Delray Beach Florida

REVISIONS:

DATE: 05-06-22
DWG: Ridge
DRAWN BY: DSD
CHECKED BY: B.B.
SCALE: N.T.S.
SHEET: IR-2

GF-8