

CITY OF MIAMI BEACH  
LANDSCAPE LEGEND

INFORMATION REQUIRED TO BE PERMANENTLY AFFIXED TO PLANS

Zoning District TC-1 Lot Area 53,776 s.f. Acres 1.23

**OPEN SPACE**

- A. Square feet of required Open Space as indicated on site plan:  
Lot Area = 53,776 s.f. x 20 % = 10,755 s.f.
- B. Square feet of parking lot open space required as indicated on site plan:  
Number of parking spaces N/A x 10 s.f. parking space =
- C. Total square feet of landscaped open space required: A+B=

REQUIRED/ ALLOWED	PROVIDED
<u>10,755 s.f.</u>	<u>2,010 s.f.</u>
<u>N/A</u>	<u>N/A</u>
<u>10,755 s.f.</u>	<u>2,010 s.f.</u>

**LAWN AREA CALCULATION**

- A. Square feet of landscaped open space required 10,755 s.f.
- B. Maximum lawn area (sod) permitted= 50 % x 10,755 s.f. = 5,378 s.f.

<u>10,755 s.f.</u>	<u>2,010 s.f.</u>
<u>5,378 s.f.</u>	

**TREES**

- A. Number of trees required per lot or net lot acre, less existing number of trees meeting minimum requirements=  
22 trees x 1.35 net lot acres - number of existing trees=
- B. % Natives required: Number of trees provided x 30% =
- C. % Low maintenance / drought and salt tolerant required:  
Number of trees provided x 50%=
- D. Street Trees (maximum average spacing of 20' o.c.)  
731 linear feet along street divided by 20' = 37
- E. Street tree species allowed directly beneath power lines:  
(maximum average spacing of 20' o.c.):  
       linear feet along street divided by 20' =

<u>30</u>	<u>5</u>
<u>9</u>	<u>5</u>
<u>15</u>	<u>5</u>
<u>37</u>	<u>23</u>

**NOTE: TREE DEFICIT SHORTFALL TO BE PAID TO CMB TREE TRUST FUND.**

**SHRUBS**

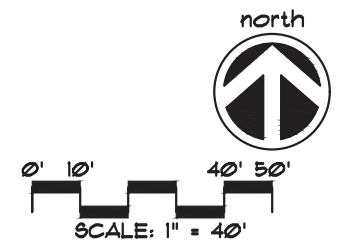
- A. Number of shrubs required: Sum of lot and street trees required x 12=
- B. % Native shrubs required: Number of shrubs provided x 50%=

<u>804</u>	<u>0</u>
<u>402</u>	<u>0</u>

**LARGE SHRUBS OR SMALL TREES**

- A. Number of large shrubs or small trees required: Number of required shrubs x 10%=
- B. % Native large shrubs or small trees required: Number of large shrubs or small trees provided x 50%=

<u>81</u>	<u>0</u>
<u>41</u>	<u>0</u>



**ARQUITECTONICA**

2900 Oak Avenue, Miami, FL 33133  
T 305.372.1812 F 305.372.1175

ALL DESIGNS INDICATED IN THESE DRAWINGS ARE PROPERTY OF ARQUITECTONICA INTERNATIONAL CORP. NO COPIES, TRANSMISSIONS, REPRODUCTIONS OR ELECTRONIC MANIPULATION OF ANY PORTION OF THESE DRAWINGS IN THE WHOLE OR IN PART ARE TO BE MADE WITHOUT THE EXPRESS WRITTEN AUTHORIZATION OF ARQUITECTONICA INTERNATIONAL CORP. DESIGN INTENT SHOWN IS SUBJECT TO REVIEW AND APPROVAL OF ALL APPLICABLE LOCAL AND GOVERNMENTAL AUTHORITIES HAVING JURISDICTION. ALL COPYRIGHTS RESERVED © 2019. THE DATA INCLUDED IN THIS STUDY IS CONCEPTUAL IN NATURE AND WILL CONTINUE TO BE MODIFIED THROUGHOUT THE COURSE OF THE PROJECT'S DEVELOPMENT WITH THE EVENTUAL INTEGRATION OF STRUCTURAL, MEP AND LIFE SAFETY SYSTEMS. AS THESE ARE FURTHER REFINED, THE NUMBERS WILL BE ADJUSTED ACCORDINGLY.

**JFS Design Inc.**  
LANDSCAPE ARCHITECTURE  
LC 000393

**FINAL SUBMITTAL**  
7140 ABBOTT AVE, MIAMI  
BEACH, FL 33141

**SITE LANDSCAPE PLAN**

SCALE: AS SHOWN



Digitally signed by James F. Socash  
DN: c=US, o=JFS DESIGN INC., ou=A01410D000, ou=0016E93E468BA0, ou=0001E9C, cn=James F. Socash  
Date: 2020.06.04 09:52:28 -0400

DATE:  
06/05/20

**L-1.1**

# PLANTLIST

SYM.	NATIVE	#	NAME	BOTANICAL NAME	SPECIFICATION
<b>PROPOSED TREES</b>					
BS	YES	12	GUMBO LIMBO	Bursera simaruba	16' X 7' spr., 4" D.B.H., 6' CLEAR TRUNK
QVS	YES	11	LIVE OAK SPECIMEN	Quercus virginiana	22' X 12'spr., 6" D.B.H., 8' CLEAR TRUNK
					FL. FANCY, CHARACTER
					SUBMIT PHOTO for APPROVAL
TD	YES	5	BALD CYPRESS	Taxodium distichum	16' x 7' spr., 4" DBH.
<b>GROUNDCOVERS</b>					
FG3		1,175	"GREEN ISLAND" FICUS	Ficus "Green Island"	3 gal., 18" x 18", 18" o.c., full
HYM	YES	200	SPIDER LILY	Hymenocallis latifolia	3 gal., 12" x 12" full, 14" o.c.
MUH	YES	150	MUHLY GRASS	Muhlenbergia capillaris	1 gal., 12" x 12", 18" o.c., full
FGG	YES	460	FLORIDA GAMA GRASS	Tripsacum floridana	1 gal., 12" x 12", 18" o.c., full
<b>TOPSOIL:</b>			TOPSOIL:SAND MIX	50:50 TOPSOIL:SAND MIX, SPREAD IN PLACE	
		24 C.Y.	TREES, PALMS, SHRUBS AND GROUNDCOVERS		
<b>MULCHING:</b>					
		42 C.Y.+/-	RECYCLED DRK BRUN MULCH	3" DEPTH, SPREAD IN PLACE, ATLAS FEAT AND SOIL	
				PROVIDE SAMPLE FOR APPROVAL PRIOR TO INSTALLATION	
		---		TOPSOIL, SOD AND MULCH QUANTITIES SHOWN ARE APPROXIMATE, CONTRACTOR	
				TO PROVIDE A UNIT PRICE PER UNIT AND WILL BE PAID ON THAT UNIT PRICE BASIS	
				UPON FINAL INSPECTION AND APPROVAL.	
<b>INSTALLATION WATERING:</b>					
				CONTRACTOR SHALL THOROUGHLY WATER-IN ALL PLANTINGS WHEN PLANTED,	
				AND SHALL CONTINUE WATERING UNTIL FINAL INSPECTION AND APPROVAL BY	
				THE LOCAL GOVERNING AGENCY AND THE OWNER.	

# STREET TREE TABULATIONS

	REQUIRED	PROVIDED
<b>BYRON AVE.</b> 197 L.F. , 1 TREE/ 20 L.F. = 10 TREES	<b>10</b>	<b>5</b> 5 BS
<b>72TH STREET</b> 239 L.F. , 1 TREE/ 20 L.F. = 12 TREES	<b>12</b>	<b>11</b> 11 QVS
<b>ABBOTT AVE.</b> 295 L.F. , 1 TREE/ 20 L.F. = 15 TREES	<b>15</b>	<b>7</b> 7 BS
NOTE: PROPOSED STREET TREE PLANTINGS ARE SHOWN TO BE INSIDE OF THE PROPERTY DUE TO SIGHT TRIANGLE RESTRICTIONS AS SHOWN ON THE PLAN.		
<b>TOTALS</b>	<b>37</b>	<b>23</b>

## ARQUITECTONICA

2900 Oak Avenue, Miami, FL 33133  
T 305.372.1812 F 305.372.1175

ALL DESIGNS INDICATED IN THESE DRAWINGS ARE PROPERTY OF ARQUITECTONICA INTERNATIONAL CORP. NO COPIES, TRANSMISSIONS, REPRODUCTIONS OR ELECTRONIC MANIPULATION OF ANY PORTION OF THESE DRAWINGS IN THE WHOLE OR IN PART ARE TO BE MADE WITHOUT THE EXPRESS WRITTEN AUTHORIZATION OF ARQUITECTONICA INTERNATIONAL CORP. DESIGN INTENT SHOWN IS SUBJECT TO REVIEW AND APPROVAL OF ALL APPLICABLE LOCAL AND GOVERNMENTAL AUTHORITIES HAVING JURISDICTION. ALL COPYRIGHTS RESERVED © 2019. THE DATA INCLUDED IN THIS STUDY IS CONCEPTUAL IN NATURE AND WILL CONTINUE TO BE MODIFIED THROUGHOUT THE COURSE OF THE PROJECT'S DEVELOPMENT WITH THE EVENTUAL INTEGRATION OF STRUCTURAL, MEP AND LIFE SAFETY SYSTEMS. AS THESE ARE FURTHER REFINED, THE NUMBERS WILL BE ADJUSTED ACCORDINGLY.

## JFS Design Inc.

LANDSCAPE ARCHITECTURE  
LC 000393

**FINAL SUBMITTAL**  
7140 ABBOTT AVE, MIAMI  
BEACH, FL 33141

PLANTLIST &  
STREET TREES TABULATION

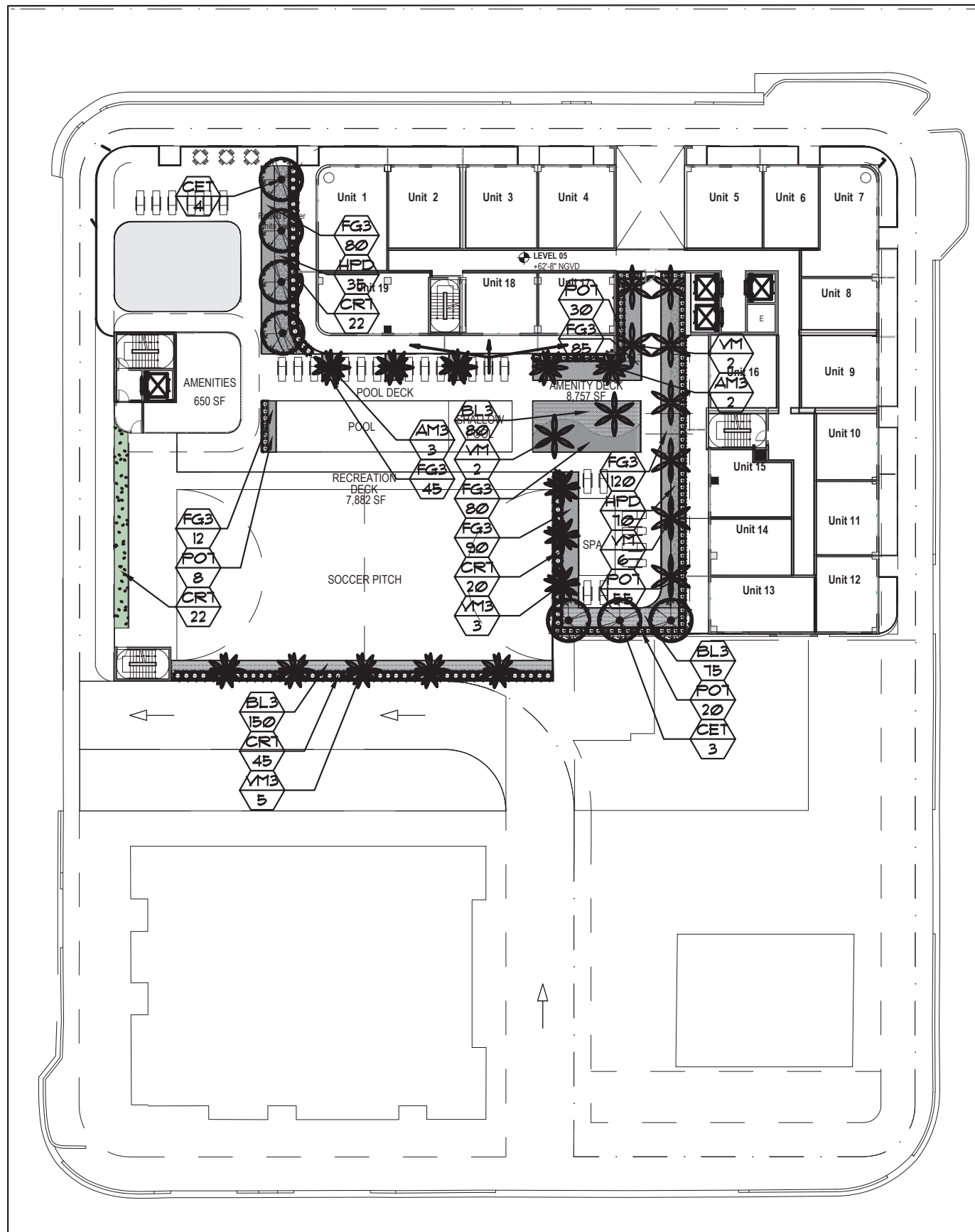
SCALE: AS SHOWN



Digitally signed  
by James F.  
Socash  
DN: c=US, o=JFS  
DESIGN INC.,  
ou=A01410D000  
0016E93E46BBA0  
0001E9C,  
cn=James F.  
Socash  
Date: 2020.06.04  
09:50:44 -0400

DATE:  
06/05/20

**L-1.2**



# PLANTLIST

SYM.	NATIVE	#	NAME	BOTANICAL NAME	SPECIFICATION
<b>PROPOSED TREES</b>					
CET	YES	7	SILVER BUTTONWOOD	<i>Conocarpus erect.</i> "Sericeus"	12' x 6'spr., 2" D.B.H.
<b>PALMS</b>					
AM3		5	CHRISTMAS PALM	<i>Adonidia merrillii</i>	FG., 10' o.a., TPL., full head
VM		10	MONTGOMERY PALMS	<i>Veitchia montgomeryana</i>	SGL. TK, FG., 14' o.a., full hd.
VM3		8	MONTGOMERY PALMS	<i>Veitchia montgomeryana</i>	TPL. TK, FG., 14' o.a., full hd.
<b>SHRUBS</b>					
CRT	YES	109	SMALL-LEAVED CLUSIA	<i>Clusia guttifera</i>	7 GAL., 36" ht., 30" O.C., FTB.
HPD	YES	105	DWARF FIREBUSH	<i>Hamelia nodosa</i>	3 gal., 18" x 18", 24" o.c.
POT		103	PODOCARPUS HEDGE	<i>Podocarpus spp.</i>	1 gal., 30" x 24", full heavy
<b>GROUNDCOVERS</b>					
BL3		305	BLUEBERRY FLAX LILY	<i>Dianella tasmanica</i>	3 gal., 12" x 18", 18" o.c., full
FG3		512	"GREEN ISLAND" FICUS	<i>Ficus "Green Island"</i>	3 gal., 18" x 18", 18" o.c., full
<b>TOPSOIL:</b>					
		285 c.y.	"2100 MIX" FOR PLANTING-PER ATLAS PEAT AND SOIL FOR PLANTER BOXES BASED UPON 3,845 SF. X 2' DEPTH/21 CF. PER C.Y.		
<b>MULCHING:</b>					
		35 C.Y.+/-	RECYCLED DRK BRUN MULCH	3" DEPTH, SPREAD IN PLACE, ATLAS PEAT AND SOIL PROVIDE SAMPLE FOR APPROVAL PRIOR TO INSTALLATION	
		---	TOPSOIL, SOD AND MULCH QUANTITIES SHOWN ARE APPROXIMATE, CONTRACTOR TO PROVIDE A UNIT PRICE PER UNIT AND WILL BE PAID ON THAT UNIT PRICE BASIS UPON FINAL INSPECTION AND APPROVAL.		
<b>INSTALLATION WATERING:</b>					
CONTRACTOR SHALL THOROUGHLY WATER-IN ALL PLANTINGS WHEN PLANTED, AND SHALL CONTINUE WATERING UNTIL FINAL INSPECTION AND APPROVAL BY THE LOCAL GOVERNING AGENCY AND THE OWNER.					

## ARQUITECTONICA

2900 Oak Avenue, Miami, FL 33133  
T 305.372.1812 F 305.372.1175

ALL DESIGNS INDICATED IN THESE DRAWINGS ARE PROPERTY OF ARQUITECTONICA INTERNATIONAL CORP. NO COPIES, TRANSMISSIONS, REPRODUCTIONS OR ELECTRONIC MANIPULATION OF ANY PORTION OF THESE DRAWINGS IN THE WHOLE OR IN PART ARE TO BE MADE WITHOUT THE EXPRESS WRITTEN AUTHORIZATION OF ARQUITECTONICA INTERNATIONAL CORP. DESIGN INTENT SHOWN IS SUBJECT TO REVIEW AND APPROVAL OF ALL APPLICABLE LOCAL AND GOVERNMENTAL AUTHORITIES HAVING JURISDICTION. ALL COPYRIGHTS RESERVED © 2019. THE DATA INCLUDED IN THIS STUDY IS CONCEPTUAL IN NATURE AND WILL CONTINUE TO BE MODIFIED THROUGHOUT THE COURSE OF THE PROJECT'S DEVELOPMENT WITH THE EVENTUAL INTEGRATION OF STRUCTURAL, MEP AND LIFE SAFETY SYSTEMS. AS THESE ARE FURTHER REFINED, THE NUMBERS WILL BE ADJUSTED ACCORDINGLY.

## JFS Design Inc.

LANDSCAPE ARCHITECTURE  
LC 000393

FINAL SUBMITTAL  
7140 ABBOTT AVE, MIAMI  
BEACH, FL 33141

LEVEL 5  
LANDSCAPE PLAN

SCALE: AS SHOWN



Digitally signed  
by James F.  
Socash  
DN: c=US, o=JFS  
DESIGN INC.,  
ou=A01410D000  
0016E92E468BA0  
0001E9C,  
cn=James F.  
Socash  
Date: 2020.06.04  
09:50:14 -0400

DATE:  
06/05/20

L-1.3



0' 10' 40' 50'  
SCALE: 1" = 40'



## ■ FERTILIZATION:

ONE COMPLETE APPLICATION OF GRANULAR FERTILIZER SHALL BE APPLIED PRIOR TO FINAL ACCEPTANCE AND APPROVAL BY THE LANDSCAPE ARCHITECT. AN ADDITIONAL FERTILIZATION PROGRAM SHALL BE SUBMITTED TO THE PROJECT MANAGER FOR AN ANNUAL FERTILIZATION APPLICATION PROGRAM. FERTILIZERS SHALL BE PER ATLANTIC -AFEC FERTILIZER & CHEMICAL (AFEC) OR AN APPROVED EQUAL. CONTRACTOR SHALL SUBMIT FERTILIZATION AS A SEPARATE ITEM IN THE BID.

FERTILIZATION SHALL BE AS FOLLOWS: TREES: 12-06-08 (AFEC \* 5231) RATE: 1.5 LBS./ INCH OF DIA. @ DBH PALMS: 12-04-12 (AFEC \* 7216) RATE: 1.5 LBS./ INCH OF DIA. @ DBH SHRUBS AND GROUNDCOVERS: (12-06-08 AFEC \* 5231) RATE: 1.5 OZ./ FT. OF HEIGHT

## ■ ■ LANDSCAPE NOTES

1. ALL PLANT MATERIAL SHALL BE FLORIDA NO. 1 GRADE OR BETTER.
2. CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE LOCATION OF AND AVOID AND PROTECT UTILITY LINES, BURIED CABLES, AND OTHER UTILITIES.
3. TREE, PALM, ACCENT AND BED LINES ARE TO BE LOCATED IN THE FIELD AND APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
4. ALL PLANTING SOIL SHALL BE 50:50 TOPSOIL:SAND MIX, FREE OF CLAY, STONES, ROCKS, OR OTHER FOREIGN MATTER. THIS SPECIFICATION INCLUDES ALL BACKFILL FOR BERMS AND OTHER LANDSCAPE AREAS.  
**SODDED-LAWN AREAS**  
2" DEPTH PLANTING SOIL SPREAD IN PLACE- THROUGHOUT.  
**GROUND COVER PLANTING BEDS:**  
6" DEPTH PLANTING SOIL SPREAD IN PLACE- THROUGHOUT.  
**SHRUB AND HEDGE PLANTING AREAS:**  
12" DEPTH PLANTING SOIL SPREAD IN PLACE- THROUGHOUT.  
**TREES, PALMS, SPECIMEN PLANT MATERIAL:**  
24" DEPTH PLANTING SOIL SPREAD IN PLACE OR, TO THE DEPTH OF THE ROOTBALL OR CONTAINER WHICHEVER IS GREATEST.  
**LANDSCAPE ISLANDS AND BUILDING FOUNDATIONS:**  
EXCAVATE AND REMOVE ALL LIMEROCK, ROCKS, DEBRIS, ETC. TO A DEPTH OF 18" AND BACKFILL W/ 50:50 TOPSOIL:SAND MIX.  
BUILDING FOUNDATIONS SHALL BE THE SAME DEPTH TO A WIDTH OF 36" FROM THE BUILDING BASE.
5. THE SITE CONTRACTOR SHALL BE RESPONSIBLE TO BRING ALL GRADES TO WITHIN 2" OF FINAL GRADES. THIS SHALL INCLUDE A 2" APPLICATION OF 50:50 TOPSOIL:SAND MIX FOR ALL LANDSCAPE AND AREAS TO BE SODDED.
6. THE LANDSCAPE CONTRACTOR SHALL CALCULATE AND SUBMIT AN ITEMIZED PRICE FOR THE 2" APPLICATION OF 50:50 MIX FOR ALL SOD AREAS AS A REFERENCE IN THE CASE THAT THERE WOULD BE A DISCREPANCY BETWEEN SITE AND LANDSCAPE CONTRACTORS AND NOTIFY THE SITE CONTRACTOR OR PROJECT SUPERINTENDENT AS TO THIS DISCREPANCY. IT WILL THEN BE DETERMINED WHICH PARTY WILL PROVIDE THIS 2" TOPSOIL:SAND APPLICATION AND SUBSEQUENT PAYMENT.  
OTHER PLANTING SOIL MIXES TO BE ADDED, I.E. FOR TREES, PALMS, SPECIMEN PLANTS, SHRUBS AND GROUNDCOVERS SHALL BE THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR AND BE INCLUSIVE WITH THE LANDSCAPE BID.
7. CONTRACTOR SHALL COORDINATE WITH THE IRRIGATION CONTRACTOR AND LEAVE PROVISIONS FOR ALL, INCLUDING UNDERGROUND UTILITY LINE LOCATIONS DIAL 811 "NO CUTS" AS REQUIRED BY LAW.
8. ALL PLANTING BEDS SHALL BE MULCHED TO A DEPTH OF 3" WITH AN APPROVED RECYCLED MULCH BY THE PRESIDING GOVERNING AGENCY. NO HEAVY METALS, I.E. ARSENIC, LEAD, ETC. ARE TO BE CONTAINED IN THE MULCH AND THE CONTRACTOR SHALL PROVIDE CERTIFICATION OR PROOF THAT ALL MULCH IS FREE OF HEAVY METALS OR SIMILAR ENVIRONMENTAL CONTAMINANTS.
9. SOD SHALL BE ARGENTINE "BAHIA" OR ST. AUGUSTINE "FLORATAM" AS SHOWN ON THE PLANS, STRONGLY ROOTED, FREE FROM WEED, FUNGUS, INSECTS AND DISEASE. CONTRACTOR SHALL SOD ALL AREAS AS INDICATED ON THE PLAN OR AS DIRECTED. PAYMENT SHALL BE DETERMINED BY THE TOTAL MEASURED SODDED AREAS X THE UNIT PRICE SUBMITTED AND FIELD VERIFIED.
10. SOD SHALL BE INSTALLED IN ACCORDANCE WITH THE SPECIFICATIONS AS DEFINED BY FDOT. SOD SHALL CARRY A 5-MONTH WARRANTY.

## ■ ■ LANDSCAPE NOTES

11. ALL TREES, PALMS, SHRUBS AND GROUNDCOVERS SHALL CARRY A ONE-YEAR WARRANTY FROM THE DATE OF FINAL ACCEPTANCE.
12. ALL TREES AND PALMS SHALL BE STAKED PER ACCEPTED STANDARDS BY THE FLORIDA NURSERYMEN & GROWERS LANDSCAPE ASSOCIATION (FNGLA). THERE SHALL BE ONE FINAL INSPECTION FOR APPROVAL BY THE PRESIDING GOVERNING AGENCY. CONTRACTOR SHALL INSURE THAT THE PLANS, DETAILS, SPECIFICATIONS AND NOTES HAVE BEEN ADHERED TO AND THAT THE LANDSCAPE AND IRRIGATION INSTALLATION IS COMPLIANT TO ALL ITEMS AS DIRECTED ON THE PLANS PRIOR TO SCHEDULING OF THE FINAL INSPECTION.
13. THE PLANT LIST IS INTENDED ONLY AS AN AID TO BIDDING. ANY DISCREPANCIES FOUND BETWEEN THE QUANTITIES ON THE PLAN AND PLANT LIST, THE QUANTITIES ON THE PLAN SHALL BE HELD VALID.
14. IRRIGATION SHALL PROVIDE FOR A 100% COVERAGE WITH A 100% OVERLAP, AUTOMATIC SYSTEM W/ RAIN MOISTURE SENSOR ATTACHED TO CONTROLLER. ALL FLORIDA BUILDING CODE APPENDIX "F" IRRIGATION REQUIREMENTS SHALL BE STRICTLY ADHERED TO FOR INSTALLATION AND PREVAILING WATER MANAGEMENT DISTRICT RESTRICTIONS AND REGULATIONS SHALL BE IN COMPLIANCE FOR POST-INSTALLATION WATERING SCHEDULES.
15. EXISTING IRRIGATION SYSTEM (IF APPLICABLE) SHALL BE RETROFITTED TO COMPLY WITH THOSE SPECIFICATIONS AS OUTLINED ABOVE.
16. CONTRACTOR SHALL PROVIDE A WATER TRUCK DURING PLANTING TO INSURE PROPER WATERING-IN DURING INSTALLATION AND WILL BE RESPONSIBLE FOR CONTINUAL WATERING UNTIL FINAL ACCEPTANCE BY THE OWNER.
17. ALL EXISTING TREES, PALMS AND PLANT MATERIAL TO REMAIN SHALL BE PROTECTED DURING CONSTRUCTION. CONTRACTOR SHALL INSTALL PROTECTIVE BARRIERS SUCH AS "TENAX" PROTECTIVE FENCING OR AS SHOWN ON THE DETAILS TO BE INSTALLED AT THE BEGINNING OF THE PROJECT. BARRIERS SHALL BE LOCATED TO INCLUDE THE DRIPLINE OF THE TREES, PALMS AND PLANT MATERIAL WHERE POSSIBLE. THE CONTRACTOR SHALL TAKE EXTRA CAUTION TO PREVENT ANY DAMAGE TO THE TRUNK, BRANCHES, ROOTS, ROOT ZONE AREAS AND ADJACENT GRADES.
18. EXISTING TREES AND PALMS TO REMAIN SHALL BE TRIMMED PER ANSI-300 STANDARDS. SUPERVISION OF THE TRIMMING SHALL BE PERFORMED BY AN ISA-CERTIFIED ARBORIST.
19. ALL EXISTING TREES AND PALMS SHALL BE "LIFTED AND THINNED" TO PROVIDE FOR AN 8' MINIMUM CLEARANCE FOR SIDEWALKS AND PEDESTRIAN WALKWAYS AND A 14' MINIMUM CLEARANCE FOR ROADWAYS, DRIVEWAYS, AND ALL VEHICULAR USE AREAS.
20. REMOVAL OF ANY TREES OR PALMS WILL REQUIRE A WRITTEN "TREE REMOVAL PERMIT" FROM THE LOCAL GOVERNING AGENCY PRIOR TO REMOVAL.
21. ALL PLANTINGS IN NON-IRRIGATED AREAS, I.E. RIGHTS OF WAYS, SWALES, ETC. SHALL BE WATERED-IN THOROUGHLY AND CONTINUED TO BE WATERED THROUGHOUT UNTIL C.O. ACCEPTANCE. COORDINATE WITH OWNER AND PROJECT MANAGER TO PROVIDE POST C.O. WATERING TO INSURE PLANT ESTABLISHMENT FOR A MINIMUM OF ONE YEAR AFTER CERTIFICATE OF OCCUPANCY ACCEPTANCE.
22. THE LANDSCAPE CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION CONFERENCE WITH THE LOCAL GOVERNING AGENCY, GENERAL CONTRACTOR, LANDSCAPE ARCHITECT, AND IRRIGATION CONTRACTOR PRIOR TO COMMENCEMENT OF WORK.

### ARQUITECTONICA

2900 Oak Avenue, Miami, FL 33133  
T 305.372.1812 F 305.372.1175

ALL DESIGNS INDICATED IN THESE DRAWINGS ARE PROPERTY OF ARQUITECTONICA INTERNATIONAL CORP. NO COPIES, TRANSMISSIONS, REPRODUCTIONS OR ELECTRONIC MANIPULATION OF ANY PORTION OF THESE DRAWINGS IN THE WHOLE OR IN PART ARE TO BE MADE WITHOUT THE EXPRESS WRITTEN AUTHORIZATION OF ARQUITECTONICA INTERNATIONAL CORP. DESIGN INTENT SHOWN IS SUBJECT TO REVIEW AND APPROVAL OF ALL APPLICABLE LOCAL AND GOVERNMENTAL AUTHORITIES HAVING JURISDICTION. ALL COPYRIGHTS RESERVED © 2019. THE DATA INCLUDED IN THIS STUDY IS CONCEPTUAL IN NATURE AND WILL CONTINUE TO BE MODIFIED THROUGHOUT THE COURSE OF THE PROJECT'S DEVELOPMENT WITH THE EVENTUAL INTEGRATION OF STRUCTURAL, MEP AND LIFE SAFETY SYSTEMS. AS THESE ARE FURTHER REFINED, THE NUMBERS WILL BE ADJUSTED ACCORDINGLY.

### JFS Design Inc. LANDSCAPE ARCHITECTURE LC 000393

FINAL SUBMITTAL  
7140 ABBOTT AVE, MIAMI  
BEACH, FL 33141

### LANDSCAPE NOTES

SCALE: AS SHOWN

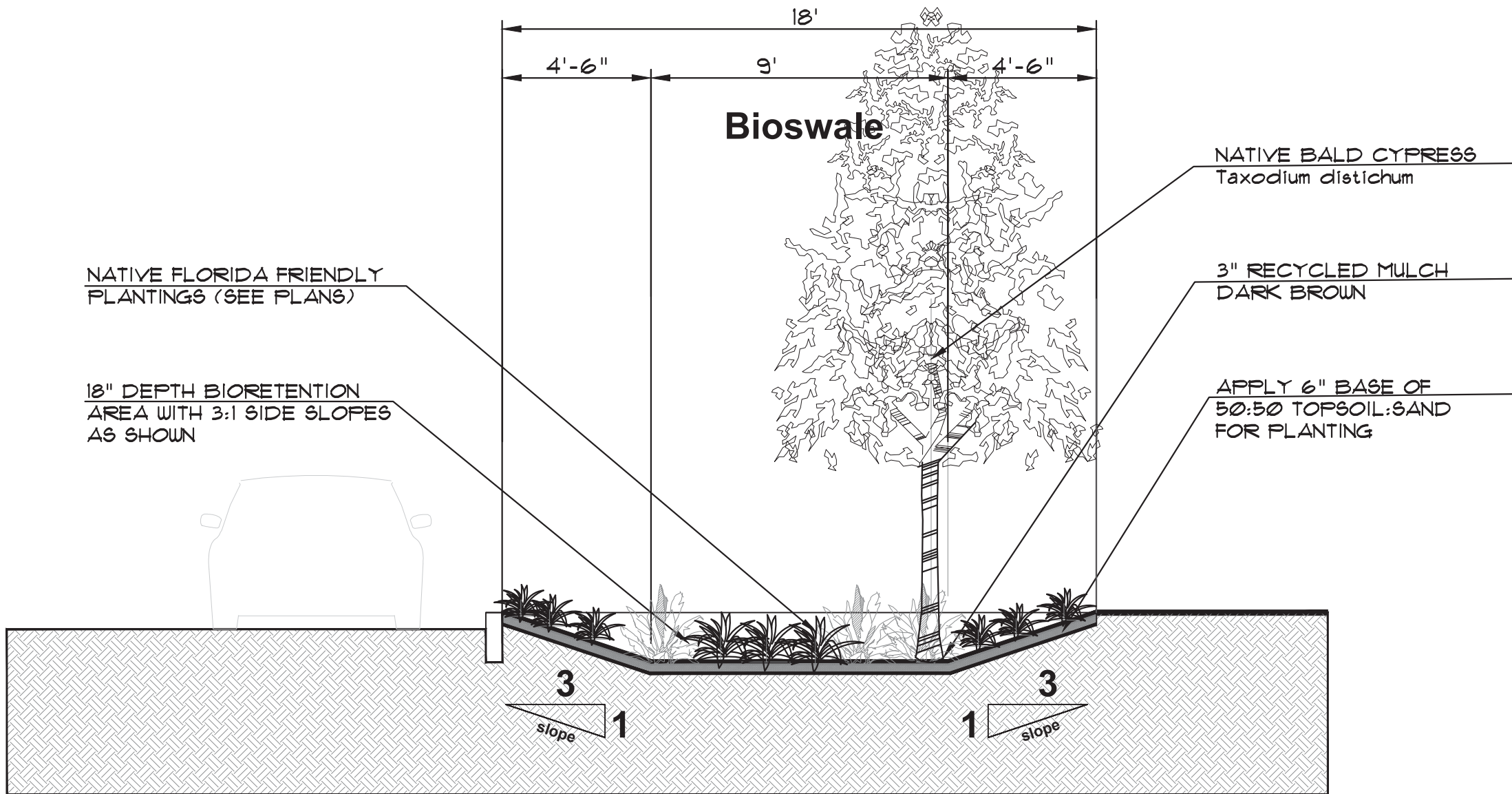


Digitally signed by James F. Socash  
DN: c=US, o=JFS DESIGN INC,  
ou=A01410D0000016E93E46BBA0  
0001E9C, cn=James F. Socash  
Date: 2020.06.04 09:49:40 -0400

DATE:  
06/05/20

L-1.4





**A**  
L-1.5

**CROSS SECTION A-A**

**BIOSWALE**

N.T.S.

**A**  
L-1.5

**ARQUITECTONICA**

2900 Oak Avenue, Miami, FL 33133  
T 305.372.1812 F 305.372.1175

ALL DESIGNS INDICATED IN THESE DRAWINGS ARE PROPERTY OF ARQUITECTONICA INTERNATIONAL CORP. NO COPIES, TRANSMISSIONS, REPRODUCTIONS OR ELECTRONIC MANIPULATION OF ANY PORTION OF THESE DRAWINGS IN THE WHOLE OR IN PART ARE TO BE MADE WITHOUT THE EXPRESS WRITTEN AUTHORIZATION OF ARQUITECTONICA INTERNATIONAL CORP. DESIGN INTENT SHOWN IS SUBJECT TO REVIEW AND APPROVAL OF ALL APPLICABLE LOCAL AND GOVERNMENTAL AUTHORITIES HAVING JURISDICTION. ALL COPYRIGHTS RESERVED © 2019. THE DATA INCLUDED IN THIS STUDY IS CONCEPTUAL IN NATURE AND WILL CONTINUE TO BE MODIFIED THROUGHOUT THE COURSE OF THE PROJECT'S DEVELOPMENT WITH THE EVENTUAL INTEGRATION OF STRUCTURAL, MEP AND LIFE SAFETY SYSTEMS. AS THESE ARE FURTHER REFINED, THE NUMBERS WILL BE ADJUSTED ACCORDINGLY.

**JFS Design Inc.**  
LANDSCAPE ARCHITECTURE  
LC 000393

**FINAL SUBMITTAL**  
7140 ABBOTT AVE, MIAMI  
BEACH, FL 33141

**BIOSWALE  
CROSS SECTION**

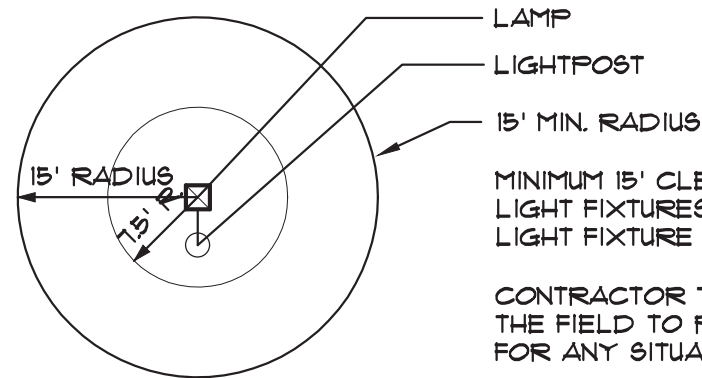
SCALE: AS SHOWN



Digitally signed by James F. Socash  
DN: c=US, o=JFS DESIGN INC., ou=A01410D0000016E93E46BB, A00001E9C, cn=James F. Socash  
Date: 2020.06.04 09:49:13 -0400

DATE:  
06/05/20

**L-1.5**



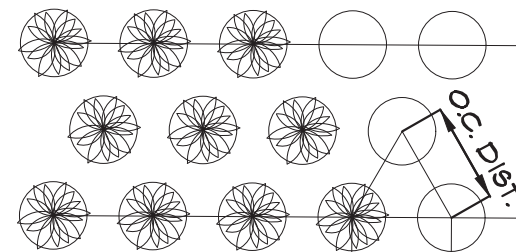
MINIMUM 15' CLEARANCE OF ALL TREES FROM ALL LIGHT FIXTURES. CLEARANCE TO BE FROM THE LIGHT FIXTURE OR LAMP, NOT THE LIGHT POST.

CONTRACTOR TO ADJUST ANY AND ALL TREES IN THE FIELD TO PROVIDE FOR MIN. 15' CLEARANCE FOR ANY SITUATIONS NOT PER PLAN.

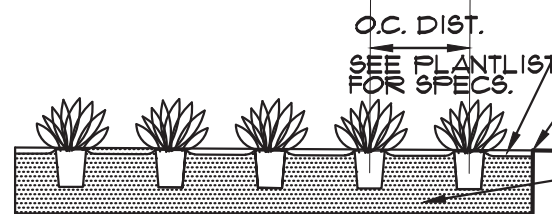
MINIMUM 7.5' CLEARANCE FROM ALL SMALL TREES AND PALMS

## MINIMUM TREE CLEARANCE FROM LIGHT FIXTURES

N.T.S.

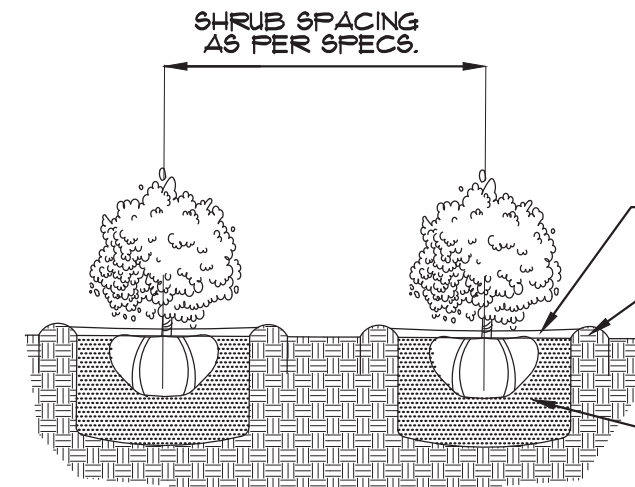


GROUNDCOVERS TO BE STAGGERED AS SHOWN - SPACING BETWEEN ROWS TO BE AT A 60 DEGREE ANGLE OF THE O.C. DISTANCE AS SHOWN



## GROUNDCOVER DETAIL

N.T.S.



PLANT MATERIAL SHALL NOT BE PRUNED PRIOR TO INSTALLATION, AFTER PLANTS HAVE BEEN INSTALLED, EACH PLANT SHALL BE PRUNED FOR UNIFORMITY

MULCH - SEE SPECS. FOR DEPTH, TYPE, ETC.

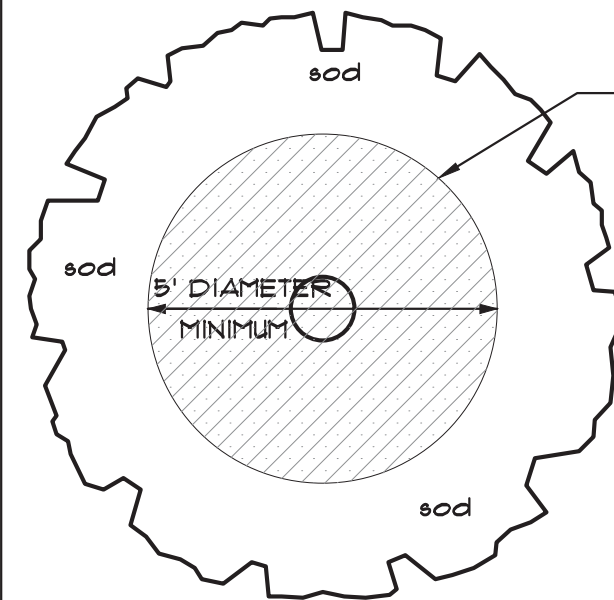
2" MIN. SAUCER COLLAR FOR WATER RETENTION

MULCH SHALL BE LEVEL WITH ALL EDGES OF PAVEMENT TYPICAL

PLANTING SOIL MIX - SEE NOTES FOR TYPE, DEPTH, ETC.

## SHRUB PLANTING DETAIL

N.T.S.



ALL FREE-STANDING TREES AND PALMS SHALL HAVE A MINIMUM 5' DIAMETER MULCH RING

8. ALL PLANTING BEDS SHALL BE MULCHED TO A DEPTH OF 3" WITH AN APPROVED RECYCLED MULCH BY THE PRESIDING GOVERNING AGENCY.

NO HEAVY METALS, I.E. ARSENIC, LEAD, ETC. ARE TO BE CONTAINED IN THE MULCH AND THE CONTRACTOR SHALL PROVIDE CERTIFICATION OR PROOF THAT ALL MULCH IS FREE OF HEAVY METALS OR SIMILAR ENVIRONMENTAL CONTAMINANTS.

## TYPICAL MULCH RING FOR FREE-STANDING TREES AND PALMS

N.T.S.

### ARQUITECTONICA

2900 Oak Avenue, Miami, FL 33133  
T 305.372.1812 F 305.372.1175

ALL DESIGNS INDICATED IN THESE DRAWINGS ARE PROPERTY OF ARQUITECTONICA INTERNATIONAL CORP. NO COPIES, TRANSMISSIONS, REPRODUCTIONS OR ELECTRONIC MANIPULATION OF ANY PORTION OF THESE DRAWINGS IN THE WHOLE OR IN PART ARE TO BE MADE WITHOUT THE EXPRESS WRITTEN AUTHORIZATION OF ARQUITECTONICA INTERNATIONAL CORP. DESIGN INTENT SHOWN IS SUBJECT TO REVIEW AND APPROVAL OF ALL APPLICABLE LOCAL AND GOVERNMENTAL AUTHORITIES HAVING JURISDICTION. ALL COPYRIGHTS RESERVED © 2019. THE DATA INCLUDED IN THIS STUDY IS CONCEPTUAL IN NATURE AND WILL CONTINUE TO BE MODIFIED THROUGHOUT THE COURSE OF THE PROJECT'S DEVELOPMENT WITH THE EVENTUAL INTEGRATION OF STRUCTURAL, MEP AND LIFE SAFETY SYSTEMS. AS THESE ARE FURTHER REFINED, THE NUMBERS WILL BE ADJUSTED ACCORDINGLY.

### JFS Design Inc. LANDSCAPE ARCHITECTURE LC 000393

FINAL SUBMITTAL  
7140 ABBOTT AVE, MIAMI  
BEACH, FL 33141

### LANDSCAPE DETAILS

SCALE: AS SHOWN



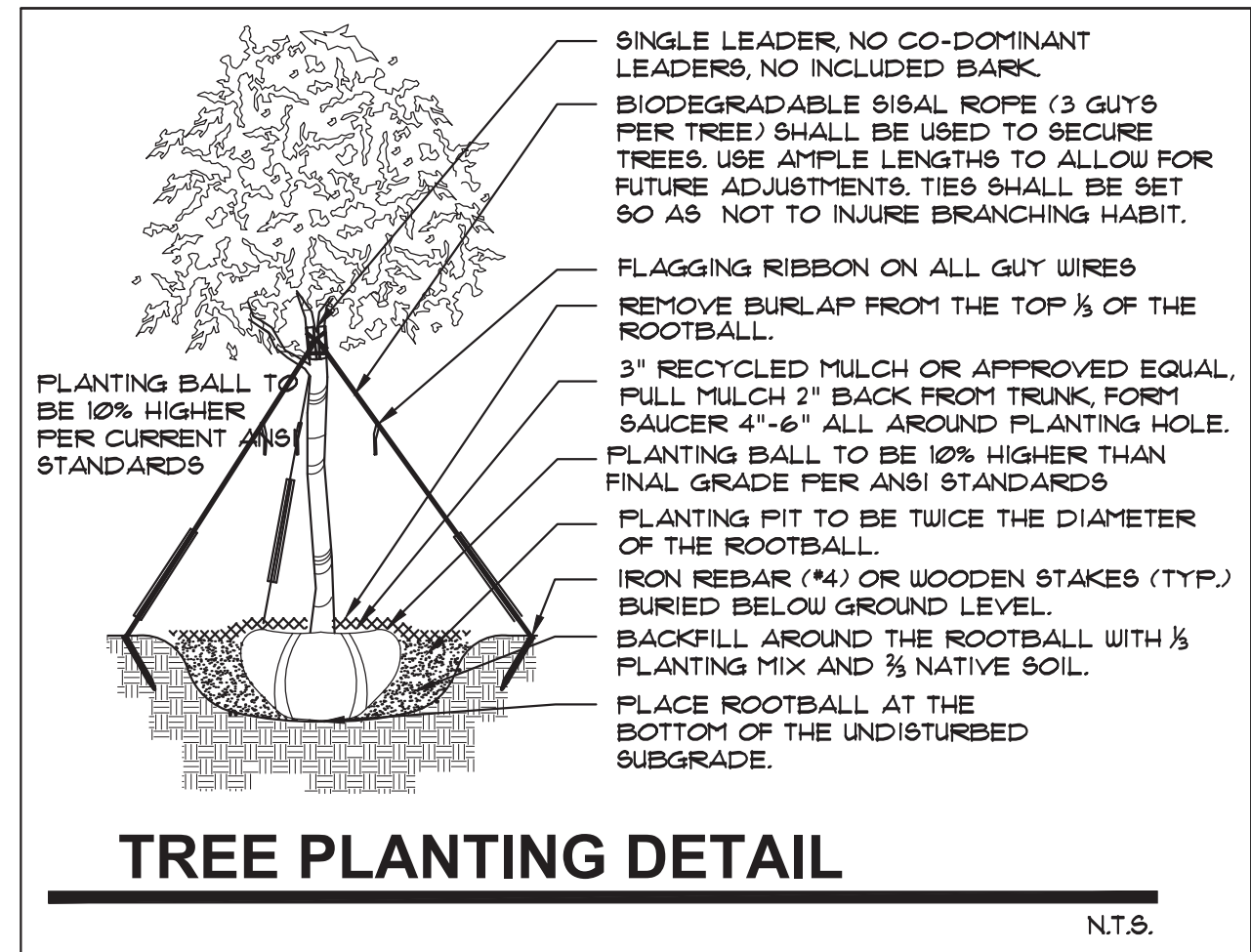
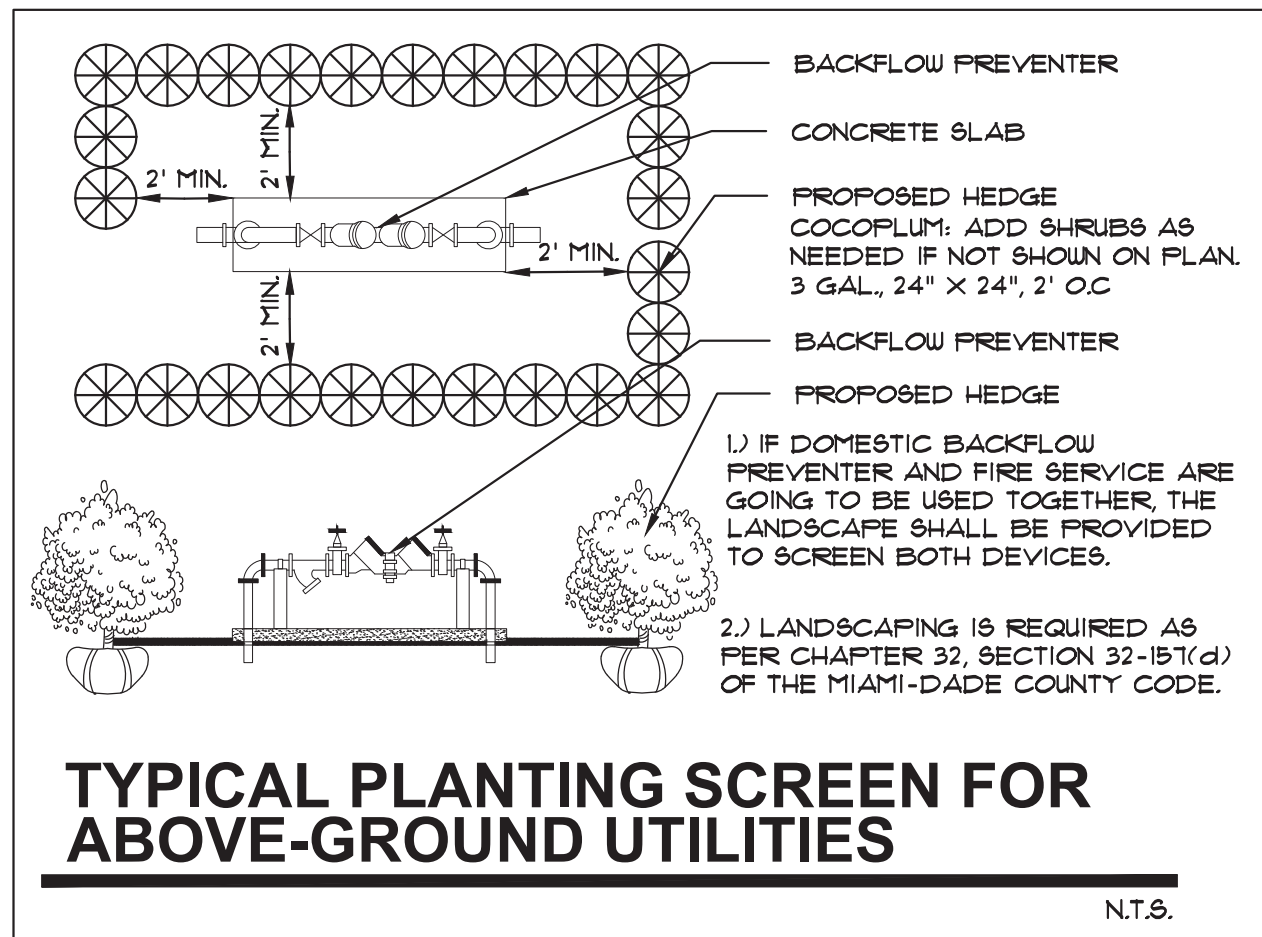
Digitally signed by  
James F Socash  
DN: c=US, o=JFS  
DESIGN INC.,  
ou=A01410D0000  
016E93E468BA000  
01E9C, cn=James F  
Socash  
Date: 2020.06.04  
09:48:41 -0400'

DATE:  
06/05/20

L-1.6







**ARQUITECTONICA**

2900 Oak Avenue, Miami, FL 33133  
T 305.372.1812 F 305.372.1175

ALL DESIGNS INDICATED IN THESE DRAWINGS ARE PROPERTY OF ARQUITECTONICA INTERNATIONAL CORP. NO COPIES, TRANSMISSIONS, REPRODUCTIONS OR ELECTRONIC MANIPULATION OF ANY PORTION OF THESE DRAWINGS IN THE WHOLE OR IN PART ARE TO BE MADE WITHOUT THE EXPRESS WRITTEN AUTHORIZATION OF ARQUITECTONICA INTERNATIONAL CORP. DESIGN INTENT SHOWN IS SUBJECT TO REVIEW AND APPROVAL OF ALL APPLICABLE LOCAL AND GOVERNMENTAL AUTHORITIES HAVING JURISDICTION. ALL COPYRIGHTS RESERVED © 2019. THE DATA INCLUDED IN THIS STUDY IS CONCEPTUAL IN NATURE AND WILL CONTINUE TO BE MODIFIED THROUGHOUT THE COURSE OF THE PROJECTS DEVELOPMENT WITH THE EVENTUAL INTEGRATION OF STRUCTURAL, MEP AND LIFE SAFETY SYSTEMS. AS THESE ARE FURTHER REFINED, THE NUMBERS WILL BE ADJUSTED ACCORDINGLY.

**JFS Design Inc.**  
LANDSCAPE ARCHITECTURE  
LC 000393

**FINAL SUBMITTAL**  
7140 ABBOTT AVE, MIAMI  
BEACH, FL 33141

LANDSCAPE DETAILS

SCALE: AS SHOWN



Digitally signed by  
James F. Socash  
DN: c=US, o=JFS  
DESIGN INC.,  
ou=A01410D0000  
016E93E468BA000  
01E9C, cn=James F.  
Socash  
Date: 2020.06.04  
09:23:20 -04'00'

DATE:  
06/05/20

**L-1.8**

# MATERIALS LIST

SYM.	NATIVE #	NAME	BOTANICAL NAME	SPECIFICATION
<b>"DEEPROOT" SILVA CELLS</b>				
	224	SILVA CELLS	"2 X SILVA CELL 2" TO PROVIDE DEPTH AS SHOWN IN SECT.	PER MANUFACTURER'S SPECIFICATIONS.
	90 c.y.	"5050 MIX" FOR PLANTING-PER ATLAS PEAT AND SOIL		
<b>CONTRACTOR SHALL MAKE PROVISIONS FOR ALL EXISTING AND PROPOSED UTILITIES, (ABOVE AND BELOW GROUND) AND SHALL BE RESPONSIBLE TO PROTECT THROUGHOUT THE CONSTRUCTION PROCESS.</b>				

Copyright © 2012 DeepRoot Green Infrastructure, LLC

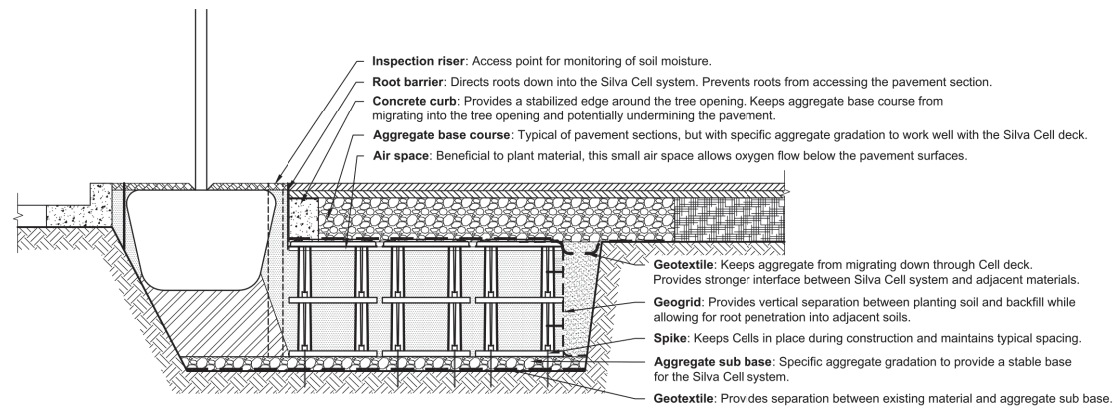
## SILVA CELLS FOR PLAZA APPLICATIONS

Numbers in detail titles (1.1, 2.1, 3.2, etc.) denote the number of layers of Silva Cell frames. Basic paving details are all available in one, two, and three layers.

These are a generic representation of a plaza and should be modified to depict actual project conditions.

- Concrete 1.0
- Concrete 2.0
- Concrete 3.0
- Pavers, Asphalt & Porous Pavements 1.0
- Pavers, Asphalt & Porous Pavements 2.0
- Pavers, Asphalt & Porous Pavements 3.0

## SILVA CELL SYSTEM COMPONENTS



- NOTES:**
1. Installation to be completed in accordance with manufacturer's specifications.
  2. Do not scale drawings.
- Disclaimer: Conditions that vary from drawings must be evaluated by a qualified Engineer and appropriate adjustments made.

## DeepRoot

DeepRoot Green Infrastructure, LLC  
230 Washington Street  
San Francisco, California 94111  
Tel: 415.781.9700  
www.deeproot.com

Urban Trees and Soils  
915 Creek Drive  
Annapolis, Maryland 21403  
Tel: 410.263.4834

The Kestrel Design Group  
3109 Olsen Lane  
Minneapolis, MN 55439  
652.928.9600  
Tel: 952.224.9860  
www.kestreldesigngroup.com

Project No.: 07337  
Drawn by: MDM  
Checked by: DR  
Date: 8/1/2012

Revisions:  
2012 Release

07337 DeepRootCAD09b TreeDetails.dwg

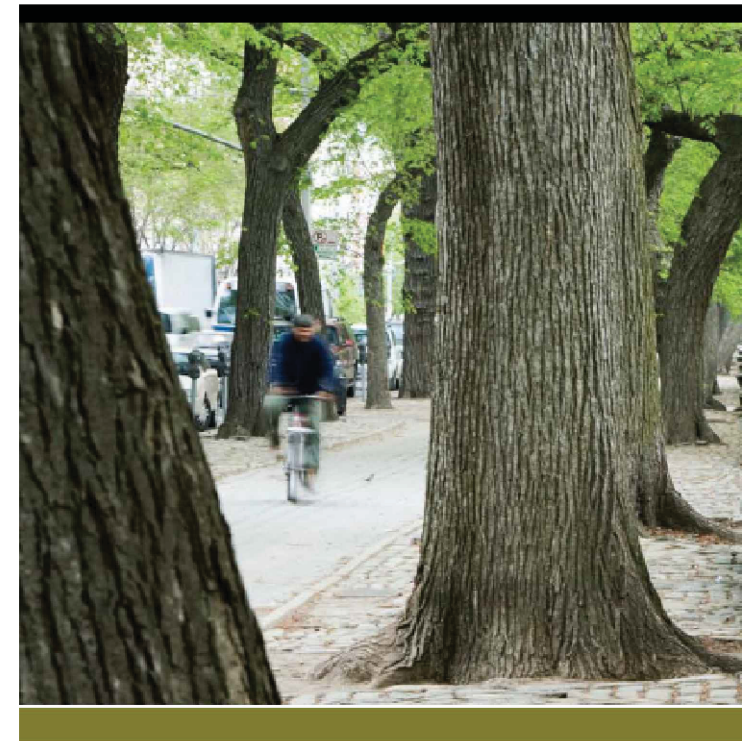
Silva Cells  
for  
PLAZA  
APPLICATIONS

INDEX

## DEEPROOT SILVA CELL

RESTORING ECOSYSTEM SERVICES TO THE URBAN ENVIRONMENT

## INTEGRATED TREE, SOIL AND STORMWATER SYSTEM



CONTRACTOR SHALL BE RESPONSIBLE TO PREPARE AND INSTALL ALL COMPONENTS FOR "DEEPROOT SILVA CELL" PER MANUFACTURERS STANDARDS WITH INSPECTION AND APPROVAL TO BE SECURED BY THE PROJECT LANDSCAPE ARCHITECT AND THE CITY THROUGHOUT THE PROCESS, TO INCLUDE INSPECTION AND APPROVAL DURING, PRIOR TO SOIL BACKFILLING, AND ALL PHASES AS DEEMED NECESSARY BY THE PROJECT LANDSCAPE ARCHITECT AND THE CITY OF MIAMI BEACH.

CONTRACTOR SHALL CALL THE CITY OF MIAMI BEACH FOR A PRE-CONSTRUCTION CONFERENCE REGARDING ALL LANDSCAPE RELATED ITEMS TO INCLUDE SITE PREPARATION, DEEPROOT SILVA CELL INSTALLATION, LANDSCAPE AND IRRIGATION INSTALLATION AND ANY OTHER ITEMS RELATED TO THE LANDSCAPE COMPONENTS.

## ARQUITECTONICA

2900 Oak Avenue, Miami, FL 33133  
T 305.372.1812 F 305.372.1175

ALL DESIGNS INDICATED IN THESE DRAWINGS ARE PROPERTY OF ARQUITECTONICA INTERNATIONAL CORP. NO COPIES, TRANSMISSIONS, REPRODUCTIONS OR ELECTRONIC MANIPULATION OF ANY PORTION OF THESE DRAWINGS IN THE WHOLE OR IN PART ARE TO BE MADE WITHOUT THE EXPRESS WRITTEN AUTHORIZATION OF ARQUITECTONICA INTERNATIONAL CORP. DESIGN INTENT SHOWN IS SUBJECT TO REVIEW AND APPROVAL OF ALL APPLICABLE LOCAL AND GOVERNMENTAL AUTHORITIES HAVING JURISDICTION. ALL COPYRIGHTS RESERVED © 2019. THE DATA INCLUDED IN THIS STUDY IS CONCEPTUAL IN NATURE AND WILL CONTINUE TO BE MODIFIED THROUGHOUT THE COURSE OF THE PROJECT'S DEVELOPMENT WITH THE EVENTUAL INTEGRATION OF STRUCTURAL, MEP AND LIFE SAFETY SYSTEMS. AS THESE ARE FURTHER REFINED, THE NUMBERS WILL BE ADJUSTED ACCORDINGLY.

## JFS Design Inc. LANDSCAPE ARCHITECTURE LC 000393

FINAL SUBMITTAL  
7140 ABBOTT AVE, MIAMI  
BEACH, FL 33141

DEEPROOT SILVA CELLS  
SPECIFICATIONS, ETC.

SCALE: AS SHOWN



Digitally signed  
by James F  
Socash  
DN: c=US, o=JFS  
DESIGN INC.,  
ou=A01410D000  
0016E93E468BA0  
0001E9C,  
cn=James F.  
Socash  
Date: 2020.06.04  
09:47:11 -0400

DATE:  
06/05/20

L-1.9



# SILVA CELL SYSTEM LAYOUT INSTRUCTIONS



Silva Cell system layout is not complicated, but it does require general product orientation. Accordingly, this document is divided into three sections - General Principles, Sizing a Silva Cell System, and Layout Guidelines. An understanding of each of these sections is critical for the successful integration of the Silva Cell into your site plans. Use these guidelines with the [Standard Silva Cell details](#).

## GENERAL PRINCIPLES

- The Silva Cell system is designed to be installed beneath paved areas such as sidewalks, plazas, and parking bays. Different pavement types (concrete, asphalt, or pavers) require different pavement profiles in order to meet H-20 loading requirements. The Silva Cell system is not designed to support high speed traffic loads. Consult our standard details for more information.
- Understand how utilities, soils, water table and structures might affect your Silva Cell layout. Silva Cells can often accommodate existing and proposed utilities and structures, but planning for this integration is critical for a successful layout and installation. Share your Silva Cell layout with the project Civil Engineer in order to work around site and utility conflicts early in the process.
- Silva Cells allow growth of large trees that, with adequate soil volumes, proper installation and care, will reach its true mature size. This tree will grow to have a large canopy and a significant trunk flare that your design should accommodate.

- Wherever possible, link Silva Cell soil volumes to each other or to existing nearby soil volumes such as parks or lawns.
- ## SIZING A SILVA CELL SYSTEM
1. Determine if the Silva Cell system will be used to grow big trees or grow big trees and treat stormwater.
    - Silva Cells are used to provide soil to grow large trees, but can also be used to treat stormwater. Determine your project goals for using Silva Cells and begin to think about how to size and design your system accordingly.
    - For large trees, consider how the Silva Cell system can use a passive irrigation system. If passive irrigation is not a possibility, make sure to include irrigation in your plans.
    - For large trees and stormwater, consider how to distribute the stormwater throughout the Silva Cell system and tie into overall site drainage.
    - See "Stormwater Schematics" for concepts for managing stormwater in the Silva Cells.

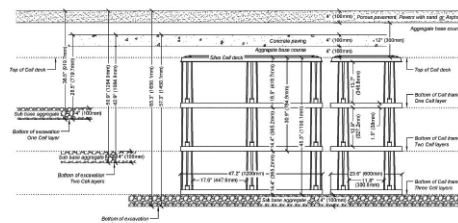
01

02

2. Determine the optimal tree size that you would like to achieve on your site.
  - See "How Much Soil to Grow a Big Tree" to find a target soil volume for your ideal tree size.
  - A simple rule of thumb for target soil volume is to provide 1,000 ft<sup>3</sup> (28m<sup>3</sup>) of soil for a canopy tree and 600 ft<sup>3</sup> (17m<sup>3</sup>) of soil for an understory tree. You can also use a general 2:1 ratio of Soil Volume: Canopy Size. Trees can also share soil volumes, an efficient way to provide roofing volume is to connect planters together. Shared soil volume targets are typically around 600 ft<sup>3</sup> (17m<sup>3</sup>) per overstory tree.
  - Wherever possible, link Silva Cell soil volumes to each other or to existing nearby soil volumes, such as parks or lawns.
  - Calculate the Available Soil Volume in the area of work, including available soil in the tree openings themselves, as well as adjacent open space that the Silva Cells can link to like parks, lawns, etc.
4. Determine how many Silva Cells are needed to meet the target soil volume.
  - Each Silva Cell holds approximately 10 ft<sup>3</sup> (0.28 m<sup>3</sup>) of soil.
  - Target Soil Volume ÷ (Available Soil Volume ÷ Soil in Silva Cells)
  - For example: The target soil volume is 1,000 ft<sup>3</sup> (28m<sup>3</sup>). Each tree has a 4'x4' tree opening, and the Silva Cell system will be 3-frames deep. The depth of planting media in the Cells (and adjacent tree opening) would be approximately 3.75'.  
3.75'x4'x4' = 60 ft<sup>3</sup> (1.7m<sup>3</sup>) in the tree opening  
1,000 ft<sup>3</sup> ÷ 60 ft<sup>3</sup> = 940 ft<sup>3</sup> needed in Silva Cells  
940 ft<sup>3</sup> / 10ft<sup>3</sup> per frame = 94 Cell frames  
Since we're using 3-frames deep, 94/3 = 31.3 decks.  
Obviously, we can't have 0.3 Cell decks. So bump this up to:  
32 decks x 3 frames deep = 96 Cell frames = 960 ft<sup>3</sup> + 60 ft<sup>3</sup> = 1,020 ft<sup>3</sup> soil provided  
32 decks x 3 frames deep = 96 Cell frames = 26.9 m<sup>3</sup> + 1.7 m<sup>3</sup> = 28.6 m<sup>3</sup> soil provided

03

04



- The static storage of water within the Silva Cells will be roughly equivalent to 20% of the total bioretention soil volume (2 ft<sup>3</sup>/0.05 m<sup>3</sup> per frame).
  - There are many ways for stormwater to be brought into and out of the Silva Cell system. This is highly project-specific, but we would be happy to discuss your project to help you find the best fit. Please consult with DeepRoot if you have stormwater specific questions.
- ### CREATING YOUR SILVA CELL PLAN
- Standard Silva Cell dimensions are approximately 2' (0.6 m) wide x 4' (1.2 m) long.
- 1-frame stack = 16.5" (419.7 mm) deep
  - 2-frame stack = 30.9" (784.9 mm) deep
  - 3-frame stack = 45.3" (1,156.6 mm) deep
- The standard spacing required between Silva Cells is 1-3" (25 mm x 75 mm). These dimensions should be used for all standard Silva Cell Layouts. As long as you maintain a 1-3" (25 mm x 75 mm) gap between each stack they can be oriented in a layout that best accommodates your site needs.
1. Determine the available area for Silva Cell placement based on existing and proposed site conditions.
  2. Determine the available area for Silva Cell placement based on setbacks from proposed or existing curbs.



- Use current site base data, including (but not limited to) structures, utilities, roads and landscape plans to evaluate all potential conflicts with the Silva Cell system.
  - Determine the depth of your Silva Cell system. This will depend on available space, target soil volume, and budget.
  - Silva Cells can be stacked 1-, 2-, or 3-frames deep. Once you determine the maximum depth that can be accommodated, refer to "Construction Depths for Silva Cells" to calculate how the Silva Cell system will fit into your site cross-section. Note the pavement profile required to meet H-20 loading and required sub base depth. Account for these materials when calculating the total Silva Cell system depth.
  - Project sites do not have to be of uniform depth to use the Silva Cell.
  - Stacks of Silva Cells 1-, 2- and 3-frames deep can be positioned adjacent to one another in one-frame increments. Altering the depth of the system is a useful way to transition between site depths to accommodate utilities or other features that pass through your area of work.
  - For use on sites with slopes greater than 5%, please contact DeepRoot directly (415 781 9700 or info@deeproot.com).
3. Evaluate the design of the tree openings.
    - Consider the dimensions of the tree openings and how easily they will work with the 2' x 4' (0.6 m x 1.2 m) basic Silva Cell size. If tree grates are part of the tree opening design, take into consideration how the Silva Cells can be arranged to provide support to the grate. Tree grate support shall be placed directly above the Silva Cell posts. Remember to plan for the trunk flare of a mature tree when designing the tree opening and choosing an appropriate tree grate.
    - Create a Silva Cell in your landscape plan or use the supplied CAD file.
    - Insert the appropriate DeepRoot Silva Cell block into your project Landscape Plan. This



- Draw in the curb setback.
    - The standard setback from face of curb is 18" (45.72 cm). This setback can be used as a general guideline, but project-specific setbacks may vary.
    - In many cases, the Silva Cell system can be installed immediately adjacent to walls, footings, or other site structures that extend below the Silva Cell System. The maximum distance should be 3" (75 mm) from these structures in order to eliminate additional support measures. This circumstance should always be evaluated by a DeepRoot consultant prior to construction. Please see the "Gap Bridging" details in our [Modified Details](#) package for more information.
  - 4. Create a Silva Cell in your landscape plan or use the supplied CAD file.
    - Insert the appropriate DeepRoot Silva Cell block into your project Landscape Plan. This
- block has been created to scale and includes required Silva Cell spacing for ease of layout. Verify the size of the Silva Cell after insertion into your drawing for compliance with standard Silva Cell dimensions.
- Silva Cell frames must be placed between 1" and 3" (2.5 cm and 7.6 cm) apart. Spacing between frames does not need to be uniform across the entire site as long as it stays within the 1" to 3" parameters. If Cells need to be placed more than 3" apart for any reason, please refer to our [Modified Details](#) for information about gap bridging.
  - 5. Place Silva Cells on your site starting with the most restrictive areas.
    - Copy the Silva Cell block to fill the approximate Silva Cell area, starting along the curb setback and around tree openings and/or other site obstacles and utilities.
    - Copy the Silva Cell block to fill the approximate Silva Cell area, starting along the curb setback and around tree openings and/or other site obstacles and utilities.
    - All structures such as tree grates, curbs, and footings designed to be supported by Silva Cell structures must be placed directly above the Silva Cell posts. Silva Cell posts are located around the perimeter of the Silva Cell frames.
    - Link soil volumes wherever possible between trees so that they can share soil.
  - 6. Silva Cells should always be placed parallel or perpendicular to each other.
    - Gaps larger than 3" (75 mm) should be avoided if possible. See "Gap Bridging" details for further information.
  - 7. After the Silva Cells are laid out, finalize all volume calculations and Silva Cell counts.
    - Verify that the designed system meets the target soil volume for the intended tree(s), and if used in a stormwater application, meets the target stormwater treatment volumes.
    - Determine the number of Silva Cell frames and Silva Cell decks required for your design (i.e., a 3-layer system requires 3 Silva Cell frames and 1 Silva Cell deck).
- All Silva Cell layouts and details must be reviewed by a DeepRoot consultant prior to construction to ensure proper application of the Silva Cell technology. Please contact DeepRoot if you run into any difficulties; we will help find solutions for your site.
- USA: (800) 458 7558  
Canada: (800) 561 3883  
United Kingdom: +44 (0) 207 969 2739  
info@deeproot.com



## ARQUITECTONICA

2900 Oak Avenue, Miami, FL 33133  
T 305.372.1812 F 305.372.1175

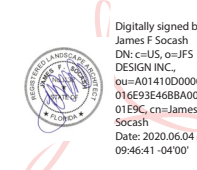
ALL DESIGNS INDICATED IN THESE DRAWINGS ARE PROPERTY OF ARQUITECTONICA INTERNATIONAL CORP. NO COPIES, TRANSMISSIONS, REPRODUCTIONS OR ELECTRONIC MANIPULATION OF ANY PORTION OF THESE DRAWINGS IN THE WHOLE OR IN PART ARE TO BE MADE WITHOUT THE EXPRESS OF WRITTEN AUTHORIZATION OF ARQUITECTONICA INTERNATIONAL CORP. DESIGN INTENT SHOWN IS SUBJECT TO REVIEW AND APPROVAL OF ALL APPLICABLE LOCAL AND GOVERNMENTAL AUTHORITIES HAVING JURISDICTION. ALL COPYRIGHTS RESERVED © 2019. THE DATA INCLUDED IN THIS STUDY IS CONCEPTUAL IN NATURE AND WILL CONTINUE TO BE MODIFIED THROUGHOUT THE COURSE OF THE PROJECT'S DEVELOPMENT WITH THE EVENTUAL INTEGRATION OF STRUCTURAL, MEP AND LIFE SAFETY SYSTEMS. AS THESE ARE FURTHER REFINED, THE NUMBERS WILL BE ADJUSTED ACCORDINGLY.

## JFS Design Inc. LANDSCAPE ARCHITECTURE LC 000393

FINAL SUBMITTAL  
7140 ABBOTT AVE, MIAMI  
BEACH, FL 33141

## DEEPROOT SILVA CELLS SPECIFICATIONS, ETC.

SCALE: AS SHOWN

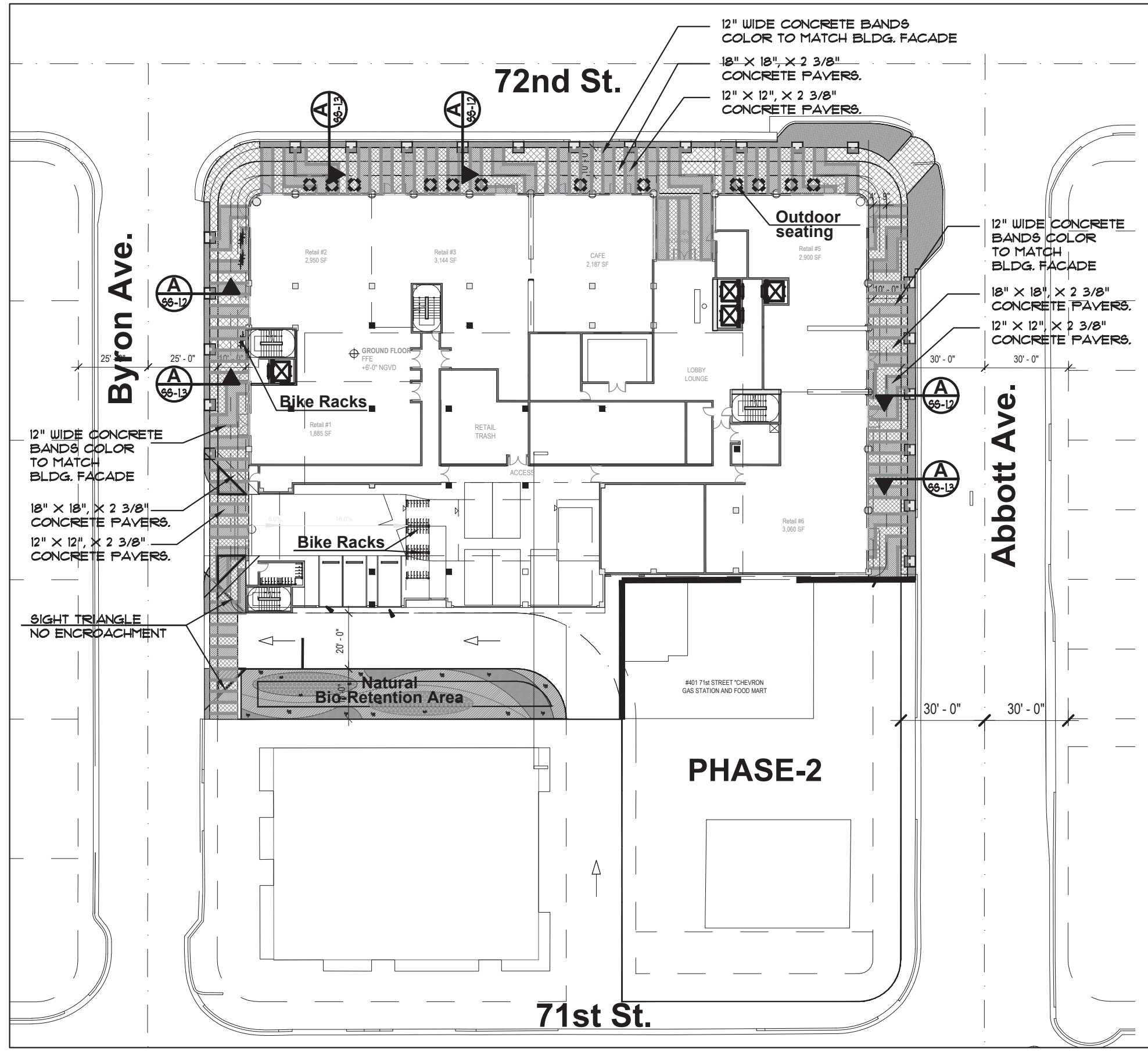


Digitally signed by  
James F Sochash  
DN: c=US, o=JFS  
DESIGN INC.,  
ou=A01410D0000  
016934E468BA0000  
01E9C, cn=James F  
Sochash  
Date: 2020.06.04  
09:46:41 -0400

DATE:  
06/05/20

L-1.10





SEE RESPECTIVE SHEETS 66-12 AND 66-13 FOR TYPICAL SECTION AND DETAIL.

north

0' 10' 40' 50'

SCALE: 1" = 40'

**ARQUITECTONICA**

2900 Oak Avenue, Miami, FL 33133  
T 305.372.1812 F 305.372.1175

ALL DESIGNS INDICATED IN THESE DRAWINGS ARE PROPERTY OF ARQUITECTONICA INTERNATIONAL CORP. NO COPIES, TRANSMISSIONS, REPRODUCTIONS OR ELECTRONIC MANIPULATION OF ANY PORTION OF THESE DRAWINGS IN THE WHOLE OR IN PART ARE TO BE MADE WITHOUT THE EXPRESS WRITTEN AUTHORIZATION OF ARQUITECTONICA INTERNATIONAL CORP. DESIGN INTENT SHOWN IS SUBJECT TO REVIEW AND APPROVAL OF ALL APPLICABLE LOCAL AND GOVERNMENTAL AUTHORITIES HAVING JURISDICTION. ALL COPYRIGHTS RESERVED © 2019. THE DATA INCLUDED IN THIS STUDY IS CONCEPTUAL IN NATURE AND WILL CONTINUE TO BE MODIFIED THROUGHOUT THE COURSE OF THE PROJECT'S DEVELOPMENT WITH THE EVENTUAL INTEGRATION OF STRUCTURAL, MEP AND LIFE SAFETY SYSTEMS. AS THESE ARE FURTHER REFINED, THE NUMBERS WILL BE ADJUSTED ACCORDINGLY.

**JFS Design Inc.**  
LANDSCAPE ARCHITECTURE  
LC 000393

**FINAL SUBMITTAL**  
7140 ABBOTT AVE, MIAMI  
BEACH, FL 33141

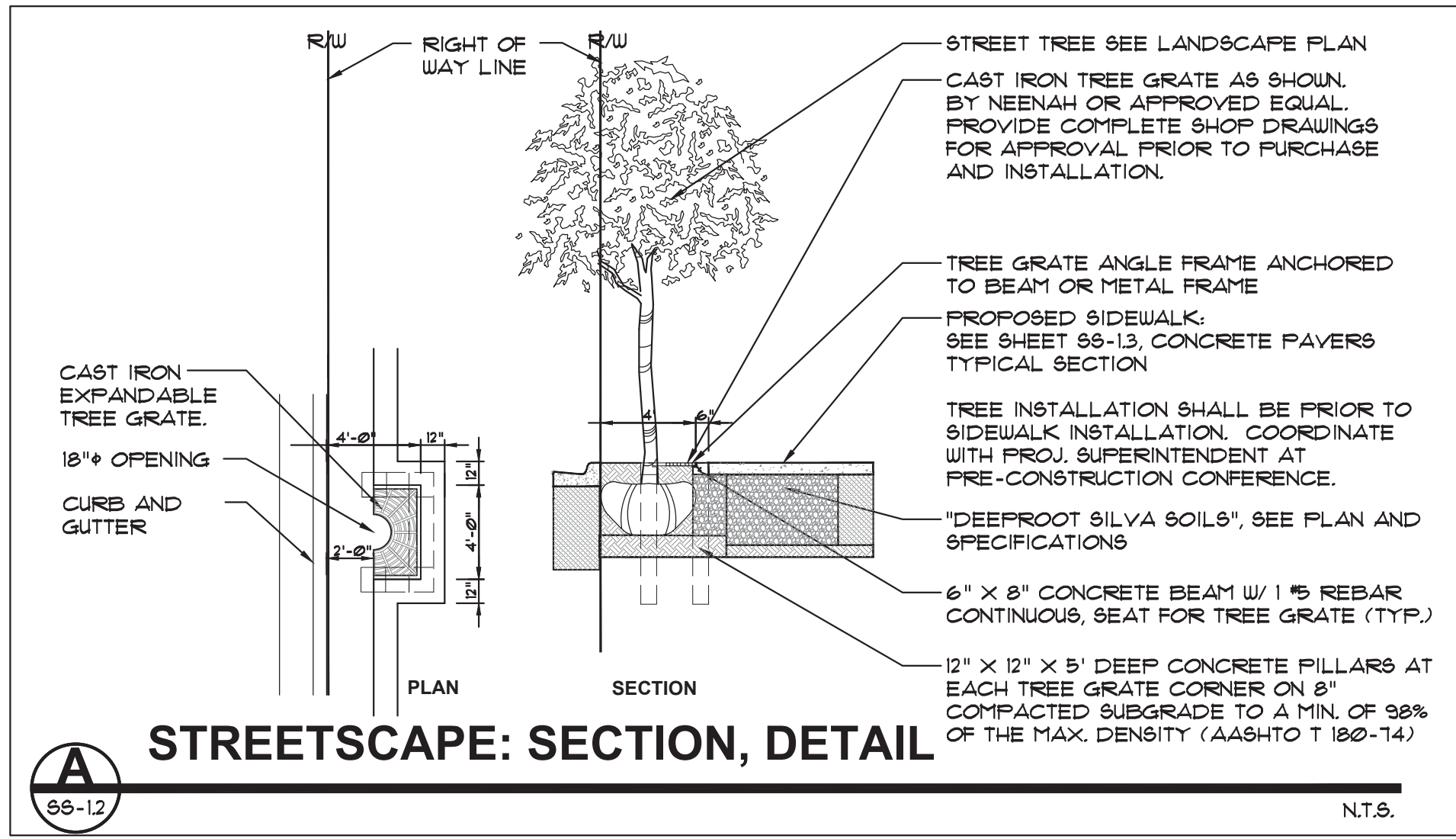
**SITE STREETSCAPE PLAN**

SCALE: AS SHOWN



DATE:  
06/05/20

**SS-1.1**



**ARQUITECTONICA**

2900 Oak Avenue, Miami, FL 33133  
 T 305.372.1812 F 305.372.1175

ALL DESIGNS INDICATED IN THESE DRAWINGS ARE PROPERTY OF ARQUITECTONICA INTERNATIONAL CORP. NO COPIES, TRANSMISSIONS, REPRODUCTIONS OR ELECTRONIC MANIPULATION OF ANY PORTION OF THESE DRAWINGS IN THE WHOLE OR IN PART ARE TO BE MADE WITHOUT THE EXPRESS WRITTEN AUTHORIZATION OF ARQUITECTONICA INTERNATIONAL CORP. DESIGN INTENT SHOWN IS SUBJECT TO REVIEW AND APPROVAL OF ALL APPLICABLE LOCAL AND GOVERNMENTAL AUTHORITIES HAVING JURISDICTION. ALL COPYRIGHTS RESERVED © 2019. THE DATA INCLUDED IN THIS STUDY IS CONCEPTUAL IN NATURE AND WILL CONTINUE TO BE MODIFIED THROUGHOUT THE COURSE OF THE PROJECT'S DEVELOPMENT WITH THE EVENTUAL INTEGRATION OF STRUCTURAL, MEP AND LIFE SAFETY SYSTEMS. AS THESE ARE FURTHER REFINED, THE NUMBERS WILL BE ADJUSTED ACCORDINGLY.

**JFS Design Inc.**  
 LANDSCAPE ARCHITECTURE  
 LC 000393

**FINAL SUBMITTAL**  
 7140 ABBOTT AVE, MIAMI  
 BEACH, FL 33141

**STREETSCAPE:  
 SECTION, DETAIL**

SCALE: AS SHOWN

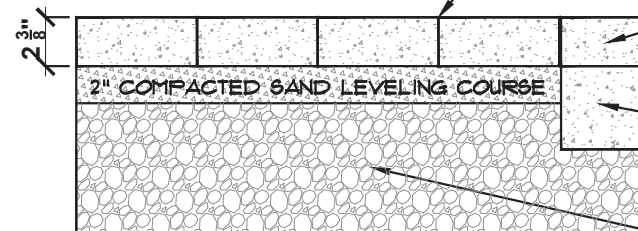


Digitally signed  
 by James F.  
 Socash  
 DN: c=US, o=JFS  
 DESIGN INC.,  
 ou=A01410D000  
 0016E93E468BA0  
 0001E9C,  
 cn=James F.  
 Socash  
 Date: 2020.06.04  
 09:45:43 -04'00'

DATE:  
 06/05/20

**SS-1.2**

- INSTALLATION PER MANUFACTURERS SPECIFICATIONS
- SLOPE TO DRAIN OR PER CIVIL DRAWINGS
- INSTALLATION PER MANUFACTURERS SPECIFICATIONS



**FIELD:**  
12" WIDE CONCRETE BANDING, AT 4' O.C.  
W/ COLOR, TEXTURE TO MATCH BUILDING  
FACADE.

ALTERNATING 12" X 12" X 2/3/8" AND  
18", X 18" X 2/3/8" CONCRETE PAVERS SET  
ON 2" COMPACTED SAND LEVELING  
COURSE, DIAMOND PATTERN,  
COLOR, TEXTURE TO BE SELECTED.  
PROVIDE SAMPLE TO OWNER/ARCHITECT  
PRIOR TO PURCHASE AND INSTALLATION.

**BORDER:** CONCRETE PAVERS SET IN  
CONCRETE BASE AS SHOWN.  
COLOR, PATTERN TO BE SELECTED.  
PROVIDE SAMPLE TO OWNER/ARCHITECT  
PRIOR TO PURCHASE AND INSTALLATION.

CAST -IN PLACE CONCRETE BASE  
12" WIDE MORTAR -ADHERE PAVERS  
TO CONCRETE

SUBGRADE FOR PAVEMENT AREAS SHALL  
BE COMPACTED TO A MIN. OF 98% OF THE  
MAX. DENSITY (AASHTO T 180-74) AND  
SHALL HAVE A MIN. LBR 40.  
BASE COURSE MIN. THICKNESS (8")  
INSTALLED IN TWO EQUAL LIFTS.  
REFER TO CIVIL PLANS FOR EXACT  
CONSTRUCTION SPECIFICATIONS.

## CONCRETE PAVERS TYPICAL SECTION



N.T.S.

### ARQUITECTONICA

2900 Oak Avenue, Miami, FL 33133  
T 305.372.1812 F 305.372.1175

ALL DESIGNS INDICATED IN THESE DRAWINGS ARE PROPERTY OF ARQUITECTONICA INTERNATIONAL CORP. NO COPIES, TRANSMISSIONS, REPRODUCTIONS OR ELECTRONIC MANIPULATION OF ANY PORTION OF THESE DRAWINGS IN THE WHOLE OR IN PART ARE TO BE MADE WITHOUT THE EXPRESS WRITTEN AUTHORIZATION OF ARQUITECTONICA INTERNATIONAL CORP. DESIGN INTENT SHOWN IS SUBJECT TO REVIEW AND APPROVAL OF ALL APPLICABLE LOCAL AND GOVERNMENTAL AUTHORITIES HAVING JURISDICTION. ALL COPYRIGHTS RESERVED © 2019. THE DATA INCLUDED IN THIS STUDY IS CONCEPTUAL IN NATURE AND WILL CONTINUE TO BE MODIFIED THROUGHOUT THE COURSE OF THE PROJECT'S DEVELOPMENT WITH THE EVENTUAL INTEGRATION OF STRUCTURAL, MEP AND LIFE SAFETY SYSTEMS. AS THESE ARE FURTHER REFINED, THE NUMBERS WILL BE ADJUSTED ACCORDINGLY.

**JFS Design Inc.**  
LANDSCAPE ARCHITECTURE  
LC 000393

FINAL SUBMITTAL  
7140 ABBOTT AVE, MIAMI  
BEACH, FL 33141

CONCRETE PAVERS  
TYPICAL SECTION

SCALE: AS SHOWN

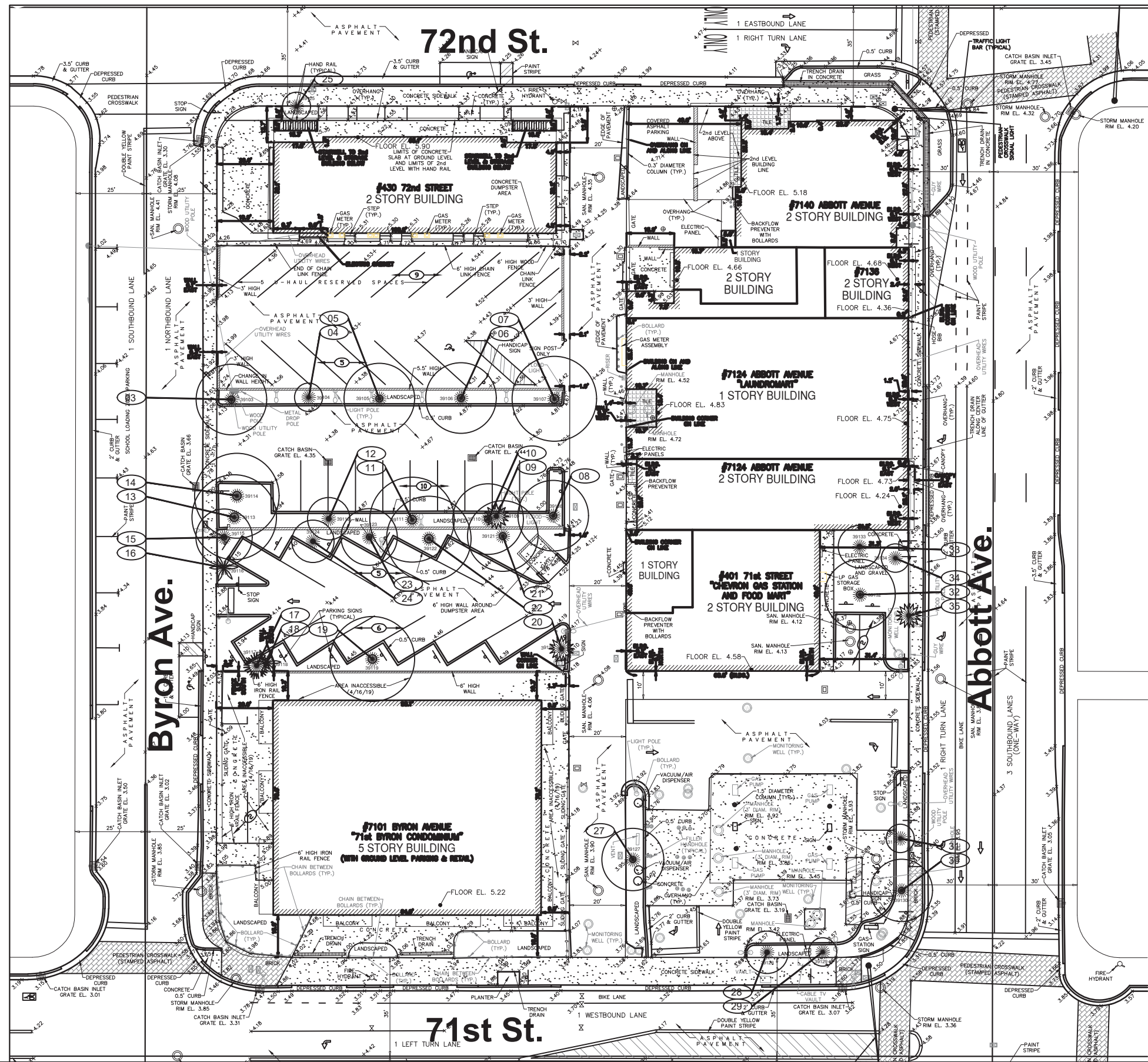


Digitally signed by James F.  
Socash  
DN: c=US, o=JFS DESIGN INC,  
ou=A01410D0000016E93E468BA  
00001E9C, cn=James F Socash  
Date: 2020.06.04 09:46:10 -0400

DATE:  
06/05/20

**SS-1.3**





LIST OF LANDSCAPE DRAWINGS	
TD-1.1	TREE DISPOSITION PLAN
TD-1.2	TREE INVENTORY - TREE MITIGATION TABLE
L-1.1	SITE LANDSCAPE PLAN
L-1.2	PLANTLIST & STREET TREES TABULATION
L-1.3	LEVEL 5 LANDSCAPE PLAN
L-1.4	LANDSCAPE NOTES
L-1.5	BIOSWALE CROSS SECTION
L-1.6	LANDSCAPE DETAILS
L-1.7	LANDSCAPE DETAILS
L-1.8	LANDSCAPE DETAILS
L-1.9	DEEP ROOT SILVA CELLS SPECIFICATIONS, ETC.
L-1.10	DEEP ROOT SILVA CELLS SPECIFICATIONS, ETC.
SS-1.1	SITE STREETSCAPE PLAN
SS-1.2	STREETSCAPE: SECTION, DETAIL
SS-1.3	CONCRETE PAVERS TYPICAL SECTION

A WRITTEN TREE REMOVAL PERMIT IS REQUIRED FROM THE CITY OF MIAMI BEACH PRIOR TO REMOVAL OF ANY TREES FROM THIS SITE.



**ARQUITECTONICA**  
 2900 Oak Avenue, Miami, FL 33133  
 T 305.372.1812 F 305.372.1175

ALL DESIGNS INDICATED IN THESE DRAWINGS ARE PROPERTY OF ARQUITECTONICA INTERNATIONAL CORP. NO COPIES, TRANSMISSIONS, REPRODUCTIONS OR ELECTRONIC MANIPULATION OF ANY PORTION OF THESE DRAWINGS IN THE WHOLE OR IN PART ARE TO BE MADE WITHOUT THE EXPRESS WRITTEN AUTHORIZATION OF ARQUITECTONICA INTERNATIONAL CORP. DESIGN INTENT SHOWN IS SUBJECT TO REVIEW AND APPROVAL OF ALL APPLICABLE LOCAL AND GOVERNMENTAL AUTHORITIES HAVING JURISDICTION. ALL COPYRIGHTS RESERVED © 2019. THE DATA INCLUDED IN THIS STUDY IS CONCEPTUAL IN NATURE AND WILL CONTINUE TO BE MODIFIED THROUGHOUT THE COURSE OF THE PROJECT'S DEVELOPMENT WITH THE EVENTUAL INTEGRATION OF STRUCTURAL, MEP AND LIFE SAFETY SYSTEMS. AS THESE ARE FURTHER REFINED, THE NUMBERS WILL BE ADJUSTED ACCORDINGLY.

**JFS Design Inc.**  
 LANDSCAPE ARCHITECTURE  
 LC 000393

**FINAL SUBMITTAL**  
 7140 ABBOTT AVE, MIAMI  
 BEACH, FL 33141

**TREE DISPOSITION PLAN**

SCALE: AS SHOWN



Digitally signed by James F. Sochash  
 DN: cn=US, o=JFS DESIGN INC., ou=A01410D0000  
 016693468B, email=James.F.Sochash@jfsdesign.com  
 Date: 2020.06.04 09:13:22 -0400

DATE:  
 06/05/20

**TD-1.1**



# TREE MITIGATION-REPLACEMENT PLANTLIST

SYM.	NATIVE *	NAME	BOTANICAL NAME	SPECIFICATION
<b>REMOVAL OF 279" D.B.H. OF EXISTING TREES</b>				
<b>MITIGATION REQUIREMENT: 94 TREES @ 12' HT., 2" DBH OR 47 TREES @ 16' HT., 4" DBH</b>				
<b>SEE TREE DISPOSITION PLAN FOR EXISTING TREE INVENTORY AND STATUS</b>				
<b>PROVIDED MITIGATION: 67 trees @ 12' ht. (equivalency of 17 trees @ 16' ht, 4" dbh and 11 @22', 6"dbh)</b>				
BS	YES	12	GUMBO LIMBO	Bursera simaruba 16' x 1' epr., 4" DBH, 6' CLEAR TRUNK
QVS	YES	11	LIVE OAK SPECIMEN	Quercus virginiana 22' x 12' epr., 6" DBH, 8' CLEAR TRUNK FL. FANCY, CHARACTER SUBMIT PHOTO for APPROVAL
TD	YES	5	BALD CYPRESS	Taxodium distichum 16' x 1' epr., 4" DBH.
<b>TREES WITHIN THE RIGHT OF WAY SHALL BE STANDARD, SINGLE-LEADER WITH 4' OF CLEAR TRUNK AT TIME OF PLANTING</b>				
<b>MITIGATION DEFICIT: 27 TREES @ 12' HT., 2" DBH</b>				
<b>TOTAL: \$27,000 ( 27 TREES @ \$1,000 EACH)</b>				
<b>REMOVAL OF 3 EXISTING PALMS: MITIGATION REQUIREMENT @ 2:1 = 6 PALMS</b>				
<b>PROVIDED MITIGATION: 0 PALMS</b>				
<b>MITIGATION DEFICIT: 6 PALMS = 3 TREES @ 12' HT., 2" DBH</b>				
<b>TOTAL MITIGATION DEFICIT: 19 TREES + 3 TREES = \$22,000</b>				
<b>MITIGATION DEFICIT TO BE A PAYMENT TO THE CITY OF MIAMI BEACH TREE TRUST FUND.</b>				

## NOTES:

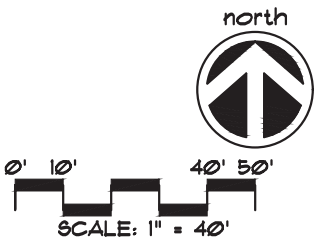
- SEE LANDSCAPE PLANS FOR PROPOSED LANDSCAPE PLANTINGS, LANDSCAPE LEGEND, PLANTLIST, SPECIFICATIONS, DETAILS, ETC.
- THE CONTRACTOR SHALL REMOVE ALL TREES AND HEDGES AS PER PLANS AND AS APPROVED BY THE LOCAL GOVERNING AGENCIES (CITY OF MIAMI BEACH). TREE, PALM AND HEDGE MATERIAL SHALL INCLUDE ALL TRUNKS, STUMPS AND ROOTS. ALL EXCESS DEBRIS SHALL BE REMOVED FROM THE SITE AND DISPOSED OF AT AN APPROVED SITE. ALL HOLES AND DEPRESSIONS SHALL BE BACKFILLED WITH CLEAN, APPROVED BACKFILL.
- ALL INVASIVE EXOTIC VEGETATION AND ANY ANY OTHER PLANTS LISTED AS CATEGORY I, ON THE FLORIDA EXOTIC PEST PLANT COUNCIL'S LIST OF FLORIDA'S MOST INVASIVE SPECIES SHALL BE REMOVED FROM THE SITE AND MAINTENANCE SHALL GUARANTEE CONTROL OF RE-INVASION.

## 19-66-7140 ABBOTT AVE., MIAMI BEACH, FL. 33140

1/14/2020

TREE NUM	SYM	COMMON NAME	BOTANICAL NAME	HEIGHT	SPRE/	DBH inches	STATUS	DBH LOSS	PALM LOSS
39103	3	QV	LIVE OAK	Quercus virginiana	18	25	10	REMOVE	10
39104	4	QV	LIVE OAK	Quercus virginiana	15	10	4	REMOVE	4
39105	5	QV	LIVE OAK	Quercus virginiana	24	28	10	REMOVE	10
39106	6	QV	LIVE OAK	Quercus virginiana	28	25	12	REMOVE	12
39107	7	QV	LIVE OAK	Quercus virginiana	35	33	12	REMOVE	12
39108	8	QV	LIVE OAK	Quercus virginiana	35	27	12	REMOVE	12
39109	9	WR	WASHINGTONIA PALM	Washingtonia robusta	10	10	14	REMOVE	
39110	10	QV	LIVE OAK	Quercus virginiana	30	25	12	REMOVE	12
39111	11	QV	LIVE OAK	Quercus virginiana	35	33	12	REMOVE	12
39112	12	QV	LIVE OAK	Quercus virginiana	18	15	5	REMOVE	5
39113	13	QV	LIVE OAK	Quercus virginiana	30	35	12	REMOVE	12
39114	14	QV	LIVE OAK	Quercus virginiana	30	35	12	REMOVE	12
39115	15	CU	SEAGRAPE	Coccoloba uvifera	25	20	12	REMOVE	12
39116	16	AM	CHRISTMAS PALM	Adonidia merillii	18	16	4,4	REMOVE	1
39117	17	SP	SABAL PALM	Sabal palmetto	14	10	12	REMOVE	
39118	18		PALM		16	10	4	REMOVE	1
39119	19	SM	MAHOGANY	Swetenia mahogani	35	33	14	REMOVE	14
39120	20	WR	WASHINGTONIA PALM	Washingtonia robusta	40	10	16	REMOVE	1
39121	21	CU	SEAGRAPE	Coccoloba uvifera	30	25	12	REMOVE	12
39122	22	SM	MAHOGANY	Swetenia mahogani	40	30	18	REMOVE	18
39123	23	SM	MAHOGANY	Swetenia mahogani	35	20	10	REMOVE	10
39124	24	SM	MAHOGANY	Swetenia mahogani	20	15	4	REMOVE	4
39125	25		FAN PALM CLUSTER		12	9	36	REMOVE	
39127	27	SM	MAHOGANY	Swetenia mahogani	32	22	14	REMOVE	14
39128	28	SM	MAHOGANY	Swetenia mahogani	25	15	12	REMOVE	12
39129	29	SM	MAHOGANY	Swetenia mahogani	25	10	12	REMOVE	12
39130	30	SM	MAHOGANY	Swetenia mahogani	30	22	14	REMOVE	14
39131	31	SM	MAHOGANY	Swetenia mahogani	30	10	10	REMOVE	10
39132	32	SM	MAHOGANY	Swetenia mahogani	40	25	14	REMOVE	14
39133	33	CE	GREEN BUTTONWOOD	Conocarpus erectus	25	15	14	REMOVE	14
39134	34	CE	GREEN BUTTONWOOD	Conocarpus erectus	20	8	16	REMOVE	16
39135	35	WR	WASHINGTONIA PALM	Washingtonia robusta	4	8	12	REMOVE	
<b>TOTALS</b>								279	3
<b>FIELD INVENTORY CONDUCTED BY JFS DESIGN INC. ON NOVEMBER 15, 2019</b>									

A WRITTEN TREE REMOVAL PERMIT IS REQUIRED FROM THE CITY OF MIAMI BEACH PRIOR TO REMOVAL OF ANY TREES FROM THIS SITE.



### ARQUITECTONICA

2900 Oak Avenue, Miami, FL 33133  
T 305.372.1812 F 305.372.1175

ALL DESIGNS INDICATED IN THESE DRAWINGS ARE PROPERTY OF ARQUITECTONICA INTERNATIONAL CORP. NO COPIES, TRANSMISSIONS, REPRODUCTIONS OR ELECTRONIC MANIPULATION OF ANY PORTION OF THESE DRAWINGS IN THE WHOLE OR IN PART ARE TO BE MADE WITHOUT THE EXPRESS WRITTEN AUTHORIZATION OF ARQUITECTONICA INTERNATIONAL CORP. DESIGN INTENT SHOWN IS SUBJECT TO REVIEW AND APPROVAL OF ALL APPLICABLE LOCAL AND GOVERNMENTAL AUTHORITIES HAVING JURISDICTION. ALL COPYRIGHTS RESERVED © 2019. THE DATA INCLUDED IN THIS STUDY IS CONCEPTUAL IN NATURE AND WILL CONTINUE TO BE MODIFIED THROUGHOUT THE COURSE OF THE PROJECT'S DEVELOPMENT WITH THE EVENTUAL INTEGRATION OF STRUCTURAL, MEP AND LIFE SAFETY SYSTEMS. AS THESE ARE FURTHER REFINED, THE NUMBERS WILL BE ADJUSTED ACCORDINGLY.

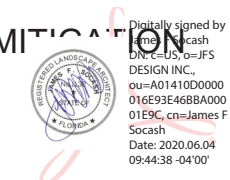
### JFS Design Inc.

LANDSCAPE ARCHITECTURE  
LC 000393

FINAL SUBMITTAL  
7140 ABBOTT AVE, MIAMI  
BEACH, FL 33141

TREE INVENTORY- TREE MITIGATION  
TABLE

SCALE: AS SHOWN



DATE:  
06/05/20

TD-1.2