

Mayor Francis Suarez

Commission:

Chairman - D5 Commissioner Keon Hardemon

Vice Chairman - D2 Commissioner

Ken Russell

D1 Commissioner Wifredo (Willy) Gort

> D3 Commissioner Joe Carollo

D4 Commissioner Manolo Reyes

City Manager Emilio T. Gonzalez



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### CITY OF MIAMI OFFICE OF CAPITAL IMPROVEMENTS

### Steven C. Williamson, Director

### PBA FERN ISLE PARK REDEVELOPMENT CITY OF MIAMI PROJECT NO. B-40543

### 2304 N.W. 14TH STREET, MIAMI, FLORIDA 33125 PERMIT SET REV 02 - APRIL 2019



### SPACE RESERVED FOR CITY OF MIAMI APPROVAL STAM

### LANDSCAPE ARCHITECT GEORGE PUIG. P.L.A

KIMLEY-HORN AND ASSOCIATES, INC 355 ALHAMBRA CIRCLE, SUITE 1400 CORAL GABLES, FLORIDA 33134 (305) 673-2025

CIVIL ENGINEER ALBERTO HERRERA, P.E KIMLEY-HORN AND ASSOCIATES, INC 355 ALHAMBRA CIRCLE, SUITE 1400 CORAL GABLES, FLORIDA 33134 (305) 673-2025

ARCHITECT J GARY MCGRAW GILI-MCGRAW ARCHITECTS LLP (305) 663-1263

STRUCTURAL ENGINEER LUIS M. RODRIGUEZ, PE ARMANDO SALAS, PE BRILL RODRIGUEZ SALAS & ASSOCIATES 9360 SW 72 ST, SUITE 262 MIAMI FLORIDA 33173 (305) 273-4204

GEOTECHNICAL ENGINEER PROFESSIONAL SERVICES INDUSTRIES, INC. 7950 NW 64th STREET MIAMI, FLORIDA, 33166 (305) 471-7725 FAX (305) 593-1915

MEP ENGINEEF RENE I. BASULTO, PE **BASULTO & ASSOCIATES** 14160 PALMETTO FRONTAGE ROAD MIAMI LAKES, FLORIDA, 33016 (305) 698-3988

ROJECT

### PBA FERN ISLE PARK REDEVELOPMENT

No.	REVISIONS - SUBMITTALS	DATE
01	PERMIT SET REV 01	03/08/19
02	PERMIT SET REV 02	04/26/19

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY GEORGE E. PUIG, ON THE DATE ADJACENT TO THE SEAL

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

SHEET No. COVER PAGE No.

### BOUNDARY SURVEY of

2300 N.W. 14th STREET, MIAMI, MIAMI-DADE COUNTY, FLORIDA 33125 for CITY OF MIAMI

T36         OAK         36         35         40           T37         OAK         18         30         10           T38         TREE         72         60         80           T39         TREE         60         45         45           T46         TREE         48         35         20           T47         TREE         48         50         35           T48         TREE         96         65         55           T49         MAHOGANY         7.2         20         10           T50         MAHOGANY         7.2         25         12           T51         MAHOGANY         7.2         25         12           T52         OAK         6         18         8           T54         OAK         6         18         8           T55         TREE         7.2         30         18           T58         TREE         7.2         30         18           T58         TREE         18         30         15           T60         TREE         12         30         20           T63         TREE         12 <td< th=""><th>TREE No.</th><th>COMMON NAME</th><th>DIAMETER (INCHES)</th><th>HEIGHT(FT)</th><th>CANOPY(FT)</th></td<>	TREE No.	COMMON NAME	DIAMETER (INCHES)	HEIGHT(FT)	CANOPY(FT)
T37         OAK         18         30         10           T38         TREE         72         60         80           T39         TREE         60         45         45           T46         TREE         48         35         20           T47         TREE         48         50         35           T48         TREE         96         65         55           T49         MAHOGANY         7.2         20         10           T50         MAHOGANY         7.2         25         12           T51         MAHOGANY         7.2         25         12           T52         OAK         6         18         8           T54         OAK         6         18         8           T55         TREE         7.2         30         18           T54         OAK         6         18         8           T55         TREE         7.2         30         18           T58         TREE         12         30         20           T60         TREE         12         30         20           T61         TREE         12         2	T36	OAK	36	35	40
T38         TREE         72         60         80           T39         TREE         60         45         45           T46         TREE         48         35         20           T47         TREE         48         50         35           T48         TREE         96         65         55           T49         MAHOGANY         7.2         20         10           T50         MAHOGANY         7.2         25         12           T51         MAHOGANY         7.2         25         12           T52         OAK         6         18         8           T54         OAK         6         18         8           T55         TREE         7.2         30         18           T54         OAK         6         18         8           T55         TREE         7.2         30         18           T58         TREE         7.2         30         18           T59         TREE         12         30         20           T60         TREE         12         30         20           T63         TREE         12 <td< td=""><td>T37</td><td>OAK</td><td>18</td><td>30</td><td>10</td></td<>	T37	OAK	18	30	10
T39         TREE         60         45         45           T46         TREE         48         35         20           T47         TREE         48         50         35           T48         TREE         96         65         55           T49         MAHOGANY         7.2         20         10           T50         MAHOGANY         7.2         25         12           T51         MAHOGANY         7.2         25         12           T52         OAK         6         18         8           T54         OAK         6         18         8           T55         TREE         7.2         30         18           T54         OAK         6         18         8           T55         TREE         7.2         30         18           T58         TREE         3.6         18         8           T59         TREE         12         30         20           T60         TREE         12         30         20           T63         TREE         12         25         20           T64         TREE         12	T38	TREE	72	60	80
T46         TREE         48         35         20           T47         TREE         48         50         35           T48         TREE         96         65         55           T49         MAHOGANY         7.2         20         10           T50         MAHOGANY         7.2         25         12           T51         MAHOGANY         7.2         25         12           T52         OAK         6         18         8           T54         OAK         6         18         8           T55         TREE         7.2         30         18           T58         TREE         3.6         18         8           T59         TREE         18         30         15           T60         TREE         9.6         14         6           T61         TREE         12         30         20           T63         TREE         12         40         30           T64         TREE         12         25         15           T66         TREE         72         60         50           T67         PALM         18 <t< td=""><td>T39</td><td>TREE</td><td>60</td><td>45</td><td>45</td></t<>	T39	TREE	60	45	45
T47         TREE         48         50         35           T48         TREE         96         65         55           T49         MAHOGANY         7.2         20         10           T50         MAHOGANY         7.2         25         12           T51         MAHOGANY         7.2         25         12           T52         OAK         6         18         8           T54         OAK         6         18         8           T55         TREE         7.2         30         18           T55         TREE         7.2         30         18           T55         TREE         7.2         30         18           T58         TREE         3.6         18         8           T59         TREE         18         30         15           T60         TREE         12         30         20           T63         TREE         12         40         30           T64         TREE         12         25         15           T66         TREE         72         60         50           T67         PALM         18	T46	TREE	48	35	20
T48         TREE         96         65         55           T49         MAHOGANY         7.2         20         10           T50         MAHOGANY         7.2         25         12           T51         MAHOGANY         7.2         25         12           T52         OAK         6         18         8           T54         OAK         6         18         8           T55         TREE         7.2         30         18           T55         TREE         7.2         30         18           T55         TREE         3.6         18         8           T59         TREE         18         30         15           T60         TREE         12         30         20           T61         TREE         12         40         30           T64         TREE         12         25         20           T65         TREE         12         25         15           T66         TREE         72         60         50           T67         PALM         18         50         18           T69         TREE         12         <	T47	TREE	48	50	35
T49         MAHOGANY         7.2         20         10           T50         MAHOGANY         7.2         25         12           T51         MAHOGANY         7.2         25         12           T52         OAK         6         18         8           T54         OAK         6         18         8           T54         OAK         6         18         8           T55         TREE         7.2         30         18           T55         TREE         7.2         30         18           T58         TREE         3.6         18         8           T59         TREE         18         30         15           T60         TREE         12         30         20           T61         TREE         12         30         20           T63         TREE         12         25         20           T64         TREE         12         25         15           T66         TREE         72         60         50           T67         PALM         18         50         18           T69         TREE         12	T48	TREE	96	65	55
T50         MAHOGANY         7.2         25         12           T51         MAHOGANY         7.2         25         12           T52         OAK         6         18         8           T54         OAK         6         18         8           T54         OAK         6         18         8           T55         TREE         7.2         30         18           T55         TREE         7.2         30         18           T55         TREE         7.2         30         18           T58         TREE         3.6         18         8           T59         TREE         18         30         15           T60         TREE         12         30         20           T63         TREE         12         40         30           T64         TREE         12         25         15           T65         TREE         12         25         15           T66         TREE         72         60         50           T67         PALM         18         50         18           T69         TREE         12         28 </td <td>T49</td> <td>MAHOGANY</td> <td>7.2</td> <td>20</td> <td>10</td>	T49	MAHOGANY	7.2	20	10
T51         MAHOGANY         7.2         25         12           T52         OAK         6         18         8           T54         OAK         6         18         8           T55         TREE         7.2         30         18           T55         TREE         7.2         30         18           T55         TREE         3.6         18         8           T59         TREE         18         30         15           T60         TREE         9.6         14         6           T61         TREE         12         30         20           T63         TREE         12         40         30           T64         TREE         12         25         15           T66         TREE         12         25         15           T66         TREE         72         60         50           T67         PALM         18         50         18           T69         TREE         96         65         50           T104         TREE         12         28         23           T105         OAK         4.8         18 <td>T50</td> <td>MAHOGANY</td> <td>7.2</td> <td>25</td> <td>12</td>	T50	MAHOGANY	7.2	25	12
T52         OAK         6         18         8           T54         OAK         6         18         8           T55         TREE         7.2         30         18           T58         TREE         3.6         18         8           T59         TREE         18         30         15           T60         TREE         9.6         14         6           T61         TREE         12         30         20           T63         TREE         12         40         30           T64         TREE         12         25         20           T65         TREE         12         25         15           T66         TREE         72         60         50           T67         PALM         18         50         18           T69         TREE         96         65         50           T104         TREE         12         28         23           T105         OAK         4.8         18         8           T106         OAK         6         18         8           T107         MAHOGANY         9         26	T51	MAHOGANY	7.2	25	12
T54OAK6188T55TREE7.23018T58TREE3.6188T59TREE183015T60TREE9.6146T61TREE123020T63TREE124030T64TREE122520T65TREE122515T66TREE726050T67PALM185018T69TREE122823T105OAK4.8188T106OAK6188T107MAHOGANY92615	T52	OAK	6	18	8
T55TREE7.23018T58TREE3.6188T59TREE183015T60TREE9.6146T61TREE123020T63TREE124030T64TREE122520T65TREE122515T66TREE726050T67PALM185018T69TREE966550T104TREE122823T105OAK4.8188T106OAK6188T107MAHOGANY92615	T54	OAK	6	18	8
T58TREE3.6188T59TREE183015T60TREE9.6146T61TREE123020T63TREE124030T64TREE122520T65TREE122515T66TREE726050T67PALM185018T69TREE966550T104TREE122823T105OAK4.8188T106OAK6188T107MAHOGANY92615	T55	TREE	7.2	30	18
T59TREE183015T60TREE9.6146T61TREE123020T63TREE124030T64TREE122520T65TREE122515T66TREE726050T67PALM185018T69TREE122823T104TREE122823T105OAK4.8188T106OAK6188T107MAHOGANY92615	T58	TREE	3.6	18	8
T60TREE9.6146T61TREE123020T63TREE124030T64TREE122520T65TREE122515T66TREE726050T67PALM185018T69TREE966550T104TREE122823T105OAK4.8188T106OAK6188T107MAHOGANY92615T108TREE123030	T59	TREE	18	30	15
T61TREE123020T63TREE124030T64TREE122520T65TREE122515T66TREE726050T67PALM185018T69TREE966550T104TREE122823T105OAK4.8188T106OAK6188T107MAHOGANY92615T108TREE123030	T60	TREE	9.6	14	6
T63TREE124030T64TREE122520T65TREE122515T66TREE726050T67PALM185018T69TREE966550T104TREE122823T105OAK4.8188T106OAK6188T107MAHOGANY92615T108TREE123030	T61	TREE	12	30	20
T64TREE122520T65TREE122515T66TREE726050T67PALM185018T69TREE966550T104TREE122823T105OAK4.8188T106OAK6188T107MAHOGANY92615T108TREE123030	T63	TREE	12	40	30
T65TREE122515T66TREE726050T67PALM185018T69TREE966550T104TREE122823T105OAK4.8188T106OAK6188T107MAHOGANY92615T108TREE123030	T64	TREE	12	25	20
T66         TREE         72         60         50           T67         PALM         18         50         18           T69         TREE         96         65         50           T104         TREE         12         28         23           T105         OAK         4.8         18         8           T106         OAK         6         18         8           T107         MAHOGANY         9         26         15           T108         TREE         12         30         30	T65	TREE	12	25	15
T67PALM185018T69TREE966550T104TREE122823T105OAK4.8188T106OAK6188T107MAHOGANY92615T108TREE123030	T66	TREE	72	60	50
T69TREE966550T104TREE122823T105OAK4.8188T106OAK6188T107MAHOGANY92615T108TREE123030	T67	PALM	18	50	18
T104TREE122823T105OAK4.8188T106OAK6188T107MAHOGANY92615T108TREE123030	T69	TREE	96	65	50
T105         OAK         4.8         18         8           T106         OAK         6         18         8           T107         MAHOGANY         9         26         15           T108         TREE         12         30         30	T104	TREE	12	28	23
T106         OAK         6         18         8           T107         MAHOGANY         9         26         15           T108         TREE         12         30         30	T105	OAK	4.8	18	8
T107         MAHOGANY         9         26         15           T108         TREE         12         30         30	T106	OAK	6	18	8
T108 TREE 12 30 30	T107	MAHOGANY	9	26	15
	T108	TREE	12	30	30

TREE No.	COMMON NAME	DIAMETER (INCHES)	HEIGHT(FT)	CANOPY(FT)
T1	TREE	72	50	65
T2	TREE	45.6	50	40
Т3	TREE	60	50	50
T4	PINE TREE	36	45	45
T5	TREE	24	28	16
T6	TREE	18	40	28
T7	TREE	9.6	20	17
T8	TREE	4.8	10	8
Т9	TREE	3	8	4
T10	COCONUT PALM	9.6	20	15
T11	TREE	7.2	15	18
T12	COCONUT PALM	9.6	32	16
T13	OAK	30	38	26
T14	OAK	36	50	50
T15	ΟΑΚ	36	50	50
T16	OAK	48	50	50
T17	TREE	36	40	60
T19	OAK	30	60	45
T20	OAK	24	55	35
T21	TREE	24	40	40
T22	OAK	36	60	60
T23	OAK	30	45	30
T24	OAK	30	45	30
T27	OAK	36	60	30
T28	OAK	24	40	20
T31	TREE	60	60	50
T32	OAK	60	60	30
T33	OAK	21.6	25	15
T34	OAK	21.6	25	15
T35	OAK	21.6	25	10



NOT TO SCALE

### **SURVEYOR'S NOTES:**

### 1. MAP OF BOUNDARY SURVEY:

Field Survey was completed on: August 29th, 2018.

### 2. LEGAL DESCRIPTION:

All that Lot, piece or parcel of land, situate, lying in Section 34, Township 53 South, Range 41 East, City of Miami, Miami-Dade County, Florida, being a portion of Tract "A" of "POLICE BENEVOLENT ASSOCIATION", according to the Plat thereof, as recorded April 25, 1969 in Plat Book 86, at Page 15 of the Public Records of Dade County, (now Miami-Dade County), Florida, the same being particularly described by metes and bounds as follows, viz.:

Begin at the Northwest corner of said Tract "A", thence N87.54'32"E (the same line bearing West by Plat) along the North line of said Tract "A" and the South right of way of N.W. 14th Street for 231.06 feet; thence departing said North line of Tract "A" and the south right of way line of N.W. 14th Street, S00°49'34"E for 433.64 feet; thence S88°04'50"E for 42.63 feet; thence S01°55'10"E for 32.19 feet; thence N88°35'32"E for 208.03 feet to a point of intersection with the East line of said Tract "A", thence S01°24'28"E (the same line bearing S00°41'00"W by Plat) along said East line of Tract "A" for 354.86 feet to the Southeast corner of said Tract "A"; thence N87'51'35"W along the South line of said Tract "A" for 208.67 feet (the same line bearing S85\*46'07"E for a distance of 208.29 feet by Plat); thence N76°01'43"W along said South line of Tract "A" for 274.58 feet (the same line bearing S73°56'15"E for a distance of 275.00 feet by Plat) to the Southwest corner of said Tract "A"; thence N01°35'28"W (the same line bearing S00°30'00"W by Plat) along the West line of said Tract "A" for 734.60 feet to the Point of Beginning.

Containing 261,340 Square feet or 6.0 Acres, more or less, by calculation.

The above captioned property was surveyed based on the above Legal Description as per O.R.B 25532, Page 4543.

### 3. SOURCES OF DATA:

AS TO VERTICAL CONTROL:

By scaled determination the subject property lies in Flood Zone AE, Base Flood Elev. 9 feet, as per Federal Emergency Management Agency (FEMA) Community-Panel Number 120650, Map No. 12086C0311, Suffix L, Revised Date: 09-11-2009.

An accurate Zone determination should be made by the preparer of the map, the Federal Emergency Management Agency, or the Local Government Agency having jurisdiction over such matters prior to any judgments being made from the Zone as noted. The referenced Federal Emergency Management Agency Map states in the notes to the user that "this map is for insurance purposes only".

The vertical control element of this survey was derived from the City of Miami Datum.

Benchmarks used:

City of Miami Benchmark Elevation=8.35' Location: S.W. 14th Street & S.W. 23rd Avenue City of Miami Benchmark Elevation=7.77'

Location: SE corner of S.W. 14th Street & S.W. 23rd Court

### AS TO HORIZONTAL CONTROL:

North Arrow and Bearings refer to an assumed value of West along the North line of the Subject property, as per Plat Book 86, Page 15, Miami-Dade County, Florida. Said line is considered well established and monumented.

### 4. ACCURACY:

The accuracy obtained by measurement and calculation of closed geometric figures was found to exceed

### 5. LIMITATIONS:

this requirement.

Since no other information other than what is cited in the Sources of Data was furnished, the Client is hereby advised that there may be legal restrictions on the Subject Property that are not shown on the Survey Map or contained within this Report that may be found in the Public Records of Miami-Dade County, or the records of any other public and private entities as their jurisdictions may appear. The Surveyor makes no representation as to ownership or possession of the Subject Property by any entity or individual who may appear in public records. No excavation or determination was made as to how the Subject Property is served by utilities. No improvements were located, other than those shown. No underground foundations, improvements and/or utilities were located or shown hereon. This notice is required by the "Standards of Practice for Land Surveying in the State of Florida," pursuant to Rule 5J-17 of the Florida Administrative Code.

Notice is hereby given that Sunshine State One Call of Florida, Inc.. must be contacted at 1-800-432-4770 at least 48 hours in advance of any construction, excavation or demolition activity within, upon, abutting or adjacent to the Subject Property. This Notice is given in compliance with the "Underground Facility Damage Prevention and Safety Act," pursuant to Chapter 556.101-111 of the Florida Statutes.

### CERTIFY TO:

### SURVEYOR'S CERTIFICATE:

I HEREBY CERTIFY: That the Boundary Survey of the above described property is true and correct to the best of my knowledge and belief as recently surveyed under my direction. Further, there are no above ground encroachments unless shown. This survey meets the Standards of Practice set forth by the Florida Board of Professional Surveyors and Mappers, in Chapter 5J-17, Florida Administrative Code, pursuant to section 472.027 Florida Statutes. Examination of the abstract of title will have to be made to determine recorded instruments, if any, affecting the property. Location and identification of utilities adjacent to the property were not secured as such information was not requested. Ownership is subject to opinion of title.

### J. Bonfill & Associates, Inc.

Florida Certificate of Authorization Number LB 3398

By: Oria Jannet Suarez, P.S.M.

Professional Surveyor and Mapper No. 6781 State of Florida

NOTICE: Not valid without the signature and original raised seal of a Florida Licensed Surveyor and Mapper. Additions or deletions to Survey Maps or reports by other than the signing party or parties is prohibited without the written consent of the signing party or parties.



& Associates, Inc. D SURVEYORS & MAPPERS te of Authorization LB3398 9th Avenue Suite 104 of Authorization L h Avenue Suite 1 33173 (305) 598ate of 99th A J. Bonfill & REGISTERED LAND S S ertific S.W. FJr Florida Ce 7100 Mia 25 -3 FREET, MIAMI, TY, FLORIDA 3 s m SURVE MIAMI BOUNDARY of 2300 N.W. 14th STR AMI-DADE COUNT for CITY OF N 2300 N. MI-DA MIA REVISIONS BY **REVISION 1** J.S. (TREES) 11-19-18 16-0023 Proj: 18-0219 08-29-2018 Date: G.P., J.S., C.B., Drawn: M.R., A.A., JB Checked: J.S. Scale: AS SHOWN Field Book: FILE SHEET 1 OF 4



### LEGEND

Ø	Diameter
	Air Cond
₫ <u></u>	Water Pu
CLP	Back Flo
MIP	Concrete
¢'''''	Metal Lig
7	Guy Wire
С Л	Utility Po
	Fire Hydi
	Water Me
	Electric
$\boxtimes$	Telephon
S	Sewer M
0UL	Overhead
¢LP	Light Pol
GV ⋈	Gas Valv
WV M	Water Va
<b>W</b>	Water Ma
Ū	Telephone
$\bigotimes$	Monitorin
Ø	Parking
MH	Unknown
s∨⊠	Sewer V
P ~	Mail Box
×10.00	Spot Ele
$\bigtriangleup$	Tempora
1.5'-15'-10'	Diameter
	Right-of
۲	Property
<del></del>	Traffic S
	Catch B
D	Drainage
	Irrigation
000	Iron Fen
<del></del>	C.B.S. W
٥	Clean Oi
GP ●	Guard P
x	Chain Li

### ditioning ump ow Preventer e Light Pole ight Pole ower Pole Irant Box ne Box lanhole Utility Lines alve lanhole ne Manhole ng Well Meter Manhole Valve levation ary Benchmark er-Height-Spread f—Way Lines Corner Sign Basin Manhole Control Valve Pole \_ink Fence

### ABBREVIATIONS

A A/C ASPH. B.M. C.B.S. C.C. C.G. C.L.F. CONC. C.S. D.C. DWY. E.T.P. F.R. I.D. F.R. I.D. I.NV. L.F.E. M/L P.B. P.C.P. PL. P.C.P. P.L. P.C.R.	Arc Length Air Conditioner Pad Asphalt Benchmark Concrete Block Structure Conc. Curb. Curb & Gutter Center Line Chain Link Fence Concrete Concrete Slab Depress Curb. Driveway Electric Transformer Pad Finished Floor Elevation Found Iron Pipe Found Nail & Disc Found Rebar Identification Inverts Lowest Floor Elevation Monument Line Plat Book Permanent Control Point Page Planter Property Line Permapent Reference
	Monument
R/W SWK. T.B.M. V.G. W.F. U.E. (C) (M)	Right—of—Way Line Sidewalk Temporary Benchmark Valley Gutter Wood Fence Utility Easement Calculated Measured

### TREE LEGEND

SYMBO	<u>)L COMMON NAME</u>
	Tree (Species unknown)
×	Palm Tree
₩	Mahogany
×	Coconut Palm
	Oak Tree
*	Pine Tree

 Tree types are determined to the best of our ability and should be confirmed by botanist or a trained specialist.



	3. 86, PG. 15	·						
0' 10' 2 GRAPHI	20' 40' C SCALE -			×6. ×6.	×**	••••	****	••••••••••••••••••••••••••••••••••••••
SCALE :	1" = 20'	∾₌ ⊖	00T		SOD ×8.1	* <sub>0</sub> .	<i>9</i> ,0 ×	
ABBREV	<u>IATIONS</u>	N II X O II O D I O	1100 <b> </b>	C.L.F.		×**		a <sup>5</sup>
A Arc L A/C Air C	ength onditioner Pad	49. BI	onr	ON A WALL		6 v	×	Ś.
ASPH. Aspho B.M. Bench C.B.S. Concr	alt hmark rete Block Structure	نام چې م	- יייי 	× <sup>\$5`</sup>	×eis	<i>d</i> .,,	×	
C.C. Conc. C.G. Curb C/I Cente	Curb. & Gutter r Line		- "חסח" 	×**			Q.*	× <sup>30</sup>
C.L.F. Chain CONC. Conci	Link Fence rete		। 0.1' <sup>ਡ</sup>	C.L.F	F	×°r	× \$.	
C.S. Conci D.C. Depre DWY. Driver	rete Slab - ess Curb. way				E.			
E.T.P. Electr F.F.E. Finish ELP Found	ric Transformer Pad ned Floor Elevation t Iron Pine	AI ~	- OUL	×1.1 ×	\$ <sup>3</sup> .	(t48)	SOD 	×°°
F.N.D. Foun F.R. Foun	d Nail & Disc d Rebar		OUL.				~	
I.D. Ident INV. Inver L.F.E. Lowe	ification ts st Floor Elevation		00L	6, W/	ING	×¢.	×	ь.
M/L Monu P.B. Plat P.C.P. Perm	iment Line Book ianent Control Point	ې م لک م		×1,8	CT A LSO BE CK 2	×¢1		
PG. Page PL. Plant P/I Prop	er arty Lina		6		DF TRA 15 AL DF BLO		-1	
P.R.M. Perm Monu	nanent Reference ment	<b>0</b> 11		×1 <sup>,1</sup>	LINE ( 86, PG LINE ( 49, PG	×°	×¢	×°°
R/W Right SWK. Sidew T.B.M. Temp	—of—Way Line				P.B. P.B. P.B.		SOD	
V.G. Valley W.F. Wood	/ Gutter Fence	AI -	₹ 4 7 8					
(C) Calcu (M) Meas	ured		EED)	× <sup>1,8</sup>			×°	ò
			<b>0</b> , (I	×1*	× <sub>√,9</sub>		e,×	
Ø Diar	<u>.ND</u> neter		1.60° 734.6		54)	\$	¢ <sup>k</sup>	×*` _*
Air D Wat	Conditioning er Pump		734	×	<u>51.2'</u>	* <b>`</b> -	×**	^
⊠+N+N Bac CLP	k Flow Preventer		P/L out -	×1.2	155	(108)-		_ <b>√</b> .9
MLP ¢ Met	al Light Pole -		0.4'	×1.3	ب» سي «ر		, , , , , , , , , , , , , , , , , , ,	1.° ×
Guy	Wire	<ul> <li></li> </ul>	5 <b>*28</b> " - ∘∿	(t107)	1.9°×			e to the total tot
Utili 🔆 Fire	ty Power Pole Hydrant		01.3	1.2× ₩~1.7	51.8' >	, <sup>№</sup>		2 × 50
₩M ⊠ Wat	er Meter		Z Q	<u> </u>		1.9	<u>////204//////</u> γ <sup>φ×</sup>	× <sup>1.0</sup> × <sup>8.0</sup>
⊠ Elec ™ ⊠ Tele	stric Box sphone Box		J	¢. C.LF	(* * *1 <sup>.</sup>			
S Sew	ver Manhole		ਠ ×	с ы	×J,¥	ላዮ	رم. ج	
OUL Ove	rhead Utility Lines		0.4'	GAT	r <sup>(t105)</sup>	×	~	>
GV 🖂 Gas	Valve -	F.I. (NC	P.ø1/2 <u>"</u>		× × × × × ×			
WV Wat	er Valve	(		UNI/L		×1,0	ہ ×	,o
(T) Tele	er mannole phone Manhole	_	Ino	×6.1	(j)	~		×
Mw Mon	itoring Well			× × ¢,	L(t5	2)		
🖾 Pari	king Meter known Manhole		- 100	×6.	°*	×6.3	×6.*	× <sup>6.</sup>
Sv ⊠ Sev	wer Valve				-(t5)			
Mai	il Box			6 <sup>°</sup> WA	₩		SOD	
∑ Spt	nporary Benchmark		out.	× <sup>6,*</sup>	-	× <sup>6.</sup>	×°	<sup>6</sup> ,
1.5'-15'-10' Dia	meter-Height-Spread		лг ——	×6.5 <b>*</b>				Ā
Rig     Pro	operty Corner							
Tra	ffic Sign	Tree (St	becies unki	nown)				
D Dra	inage Manhole	Palm Tr	ее	,				
icv K Irriq	gation Control Valve	💥 Mahogar	лу					
Iror	n Fence B.S. Wall	🐝 Coconut	Palm					
	an Out	Oak Tre	e					
Gr ● Guo	ard Pole	Pine Tr	ee	nod i ''	o h = - 1			
xx Cho	UNILINK PENCE	↑ Iree types an of our shills	e aetermi	ned to the	e pest			

by botanist or a trained specialist.



	P.B. 86, PG. 15
0' 10' 20	)' 40'
GRAPHIC SCALE :	SCALE 1" = 20'

### ABBREVIATIONS

A A A A C ASPH. B.M. C.B.S. C.C. C.G. C.C. C.C. C.C. C.S. D.C. DWY. E.T.P. F.I.P. F.N.D. F.R. I.D. INV. L.F.E. M/L P.B. P.C.P.	Arc Length Air Conditioner Pad Asphalt Benchmark Concrete Block Structure Conc. Curb. Curb & Gutter Center Line Chain Link Fence Concrete Concrete Slab Depress Curb. Driveway Electric Transformer Pad Finished Floor Elevation Found Iron Pipe Found Nail & Disc Found Rebar Identification Inverts Lowest Floor Elevation Monument Line Plat Book Permanent Control Point
PG.	Page
PL.	Planter
P/L	Property Line
P.R.M.	Permanent Reference
R/W	Right-of-Way Line
SWK.	Sidewalk
T.B.M.	Temporary Benchmark
V.G.	Valley Gutter
W.F.	Wood Fence
U.E.	Utility Easement
(C)	Calculated
(M)	Measured



### LECEND

LLOLIND		
Ø	Diameter	
	Air Conditioning	
ĿÞ	Water Pump	
	Back Flow Preventer	
	Concrete Light Pole	
¢ <sup>MLP</sup>	Metal Light Pole	
	Guy Wire	
G	Utility Power Pole	
ж.	Fire Hydrant	
WM 🖾	Water Meter	
E	Electric Box	
Ť	Telephone Box	
S	Sewer Manhole	
0UL	Overhead Utility Lines	
¢ LP	Light Pole	
GV ⋈	Gas Valve	
₩V	Water Valve	
	Water Manhole	
(Ť)	Telephone Manhole	
<b>WW</b>	Monitoring Well	
$\Theta$	Parking Meter	
MH	Unknown Manhole	
s∨ ⊠	Sewer Valve	
\$P ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	Mail Box	
×10.0	Spot Elevation	
$\bigtriangleup$	Temporary Benchmark	
1.5'-15'-10'	Diameter-Height-Spread	
	Right-of-Way Lines	
۲	Property Corner	
<del>-0-</del>	Traffic Sign	
	Catch Basin	
$\bigcirc$	Drainage Manhole	
	Irrigation Control Valve	
	Iron Fence	
<u></u>	C.B.S. Wall	
	Clean Out	
Gr ●	Guard Pole	
xx	Chain Link Fence	
	Wood Fence	

SYMBOL COMMON NAME

🔶 Palm Tree

🐝 Coconut Palm

🚫 Oak Tree 🗚 Pine Tree

### I. GENERAL NOTES AND SPECIFICATIONS

1. GENERAL NOTES ON THE PROJECT PLANS AND DRAWINGS ARE SOLELY TO AID AND ASSIST THE CONTRACTOR WITH THE FIELD OPERATIONS FOR THE PROJECT. GENERAL NOTES MAY NOT FULLY DESCRIBE ALL OF THE REQUIREMENTS FOR AN ITEM. THEREFORE, THE CONTRACTOR SHALL READ AND VERIFY THE CONTRACT DOCUMENTS, INCLUDING BUT NOT LIMITED TO PLANS, SPECIFICATIONS, GENERAL TERMS, AND CONDITIONS, AND THE SUPPLEMENTAL TERMS AND CONDITIONS, TO FULLY UNDERSTAND AND COMPLY WITH ALL REQUIREMENTS THEREIN.

2. ALL MATERIALS AND CONSTRUCTION UNDER THIS PROJECT SHALL BE IN STRICT ACCORDANCE WITH THE LATEST REQUIREMENTS OF THE CITY OF MIAMI PUBLIC WORKS MANUAL. THE FLORIDA BUILDING CODE, FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) DESIGN STANDARDS AND SPECIFICATIONS AND ALL OTHER LOCAL. STATE AND FEDERAL REQUIREMENTS.

3. LOCATIONS, SIZE AND MATERIAL OF EXISTING UTILITIES HAVE BEEN DETERMINED FROM AVAILABLE RECORDS. NEITHER THE DEVELOPER, CLIENT, OWNER NOR THE ENGINEER OF RECORD GUARANTEES THE ACCURACY OF THIS DATA. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO HORIZONTALLY AND VERTICALLY LOCATE AND PROTECT ALL EXISTING UTILITIES AND STRUCTURES ENCOUNTERED DURING CONSTRUCTION. THE CONTRACTOR SHALL PHYSICALLY FIELD VERIFY BOTH THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL EXISTING UNDERGROUND AND ABOVE GROUND UTILITIES PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL BEAR ALL COSTS FOR THIS WORK.

4. ALL EXISTING UNDERGROUND OR ABOVEGROUND UTILITY PIPES, CABLES, DUCTS, EQUIPMENT, DEVICES, ETC. WITHIN OR OUTSIDE THE PROJECT CONSTRUCTION LIMITS WHICH ARE DAMAGED OR DISRUPTED AS A RESULT OF THE CONTRACTOR'S OPERATION. SHALL BE IMMEDIATELY REPAIRED AT THE CONTRACTOR'S EXPENSE AND TO THE SATISFACTION OF THE UTILITY OWNER. REGARDLESS OF WHETHER THEY WERE SHOWN OR NOT SHOWN ON THE PLANS OR LOCATED OR NOT BY THE OWNER'S REPRESENTATIVE, THE UTILITY COMPANY, SUNSHINE STATE ONE-CALL OF FLORIDA, ETC.

5. ANY DISCREPANCIES BETWEEN THE PLANS AND ACTUAL FIELD CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER OF RECORD PRIOR TO COMMENCING ANY CONSTRUCTION WORK.

6. NO FIELD CHANGES OR DEVIATIONS FROM THE DESIGN ARE TO BE MADE WITHOUT PRIOR WRITTEN APPROVAL OF THE ENGINEER OF RECORD.

7. ALL DEFECTIVE WORK NOT ACCEPTED BY THE ENGINEER OF RECORD, BY THE OWNER'S REPRESENTATIVE, OR BY ANY GOVERNMENTAL PERMITTING REGULATORY AGENCY SHALL BE IMMEDIATELY REPAIRED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.

8. ALL STAGING AREAS SHALL BE PROPERLY FENCED AND SECURED BY THE CONTRACTOR.

9. ALL AREAS WHICH ARE BEING EXCAVATED SHALL BE PROPERLY PROTECTED AND BARRICADED BY THE CONTRACTOR. ALL TRENCH WORK SHALL COMPLY WITH THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION EXCAVATION SAFETY STANDARDS, 29 C.F.R.S. 1926.650 SUBPART P AND THE FLORIDA TRENCH SAFETY ACT.

10. ALL EXISTING CONCRETE AND/OR ASPHALT PAVEMENT, CURB AND GUTTERS, CURBS AND WALKS, SOD, LANDSCAPING, FENCE, ETC. DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO ITS ORIGINAL CONDITIONS, AT NO ADDITIONAL COST TO THE OWNER OR CLIENT.

11. TEMPORARY ASPHALT PAVEMENT SHALL BE APPLIED TO ALL TRENCHES, WITHIN AN EXISTING PAVED RIGHT 0F WAY, AT THE END OF EACH WORKDAY. PLATING MAY BE USED WITH THE RIGHT-OF-WAY OWNER'S PRIOR CONSENT.

12. PROVIDE FILL TO ENSURE THAT THE FINISH GRADE (INCLUDING SOD) IN LANDSCAPE AREAS ARE AT LEVEL OF CURBS AND/OR EDGE OF SIDEWALKS

13. WHERE NEW GRADES BLEND INTO EXISTING GRADES IN LANDSCAPE AREAS PROVIDE A UNIFORM TRANSITION. PROTECT ALL EXISTING PAVEMENT AND LANDSCAPE AREAS THAT ARE TO REMAIN.

14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING UNINTERRUPTED WATER AND SEWER SERVICE DURING THE CONSTRUCTION OF THE TIE-IN CONNECTION OF ALL PROPOSED WATER OR SANITARY SEWER SYSTEMS, TO ANY EXISTING WATER OR SANITARY MAINS AND SERVICE LINES. ABANDONMENT SHALL NOT OCCUR UNTIL THE PROPOSED WORK HAS BEEN APPROVED AND ACCEPTED FOR OPERATION BY THE ENGINEER OF RECORD AND CITY OF MIAMI PUBLIC WORKS DEPARTMENT. ALL EXISTING FIRE HYDRANTS SHALL BE RECONNECTED TO THE PROPOSED WATER MAIN. CITY OF MIAMI PUBLIC WORKS DEPARTMENT FIELD OPERATIONS SECTION WILL COORDINATE IN THE FIELD WITH THE WATER DISTRIBUTION DIVISION TO DETERMINE IF AN EXISTING FIRE HYDRANT SHALL BE REPLACED AS NEEDED OR REQUIRED.

15. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE PUBLIC HEALTH AND ENSURE JOB SAFETY. THE CONTRACTOR SHALL CONFORM TO ALL APPLICABLE OCCUPATIONAL SAFETY & HEALTH AGENCY (OSHA) STANDARDS AND FEDERAL, STATE AND LOCAL GOVERNMENT SAFETY REQUIREMENTS.

16. THE CONTRACTOR SHALL ENSURE THAT OVERFLOWS OR RAW SEWAGE SPILLS DO NOT OCCUR DURING CONSTRUCTION OF PROPOSED SANITARY SEWER TIE-IN CONNECTIONS.

17. IT IS THE CONTRACTOR'S RESPONSIBILITY TO IMPLEMENT STORM WATER POLLUTION PREVENTION AND EROSION CONTROL MEASURES AND PRACTICES DURING CONSTRUCTION IN ACCORDANCE WITH THE EROSION CONTROL PLAN/DETAILS AND THE CURRENT FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (N.P.D.E.S.) PERMIT FOR CONSTRUCTION ACTIVITIES REQUIREMENTS.

18. CONTRACTOR SHALL ENSURE THAT ALL STORM WATER RUN-OFF WITHIN THE CONSTRUCTION AREA IS CONTAINED ON-SITE.

19. WHEN POWER POLES ARE ADJACENT TO ANY PROPOSED UTILITY. THE CONTRACTOR SHALL PROVIDE PROPER SHORING OR OTHER SUITABLE SUPPORT DURING CONSTRUCTION. THE SHORING AND SUPPORT METHODS SHALL BE APPROVED BY THE UTILITY COMPANY'S ENGINEERING DEPARTMENT.

20. DUE TO FEDERAL REGULATIONS, THE CONTRACTOR MUST MAINTAIN ACCESS TO GAS VALVES AT ALL TIMES AND MUST PROTECT AND WORK AROUND ANY GAS VALVES THAT ARE WITHIN THE PROJECT AREA.

21. LOCATIONS, ELEVATIONS AND DIMENSIONS OF EXISTING UTILITIES, STRUCTURES AND OTHER EXISTING SITE IMPROVEMENTS, FEATURES AND CONDITIONS SHOWN ON THE DRAWINGS WERE OBTAINED FROM THE FOLLOWING TOPOGRAPHIC BOUNDARY SURVEY SPECIFICALLY PREPARED FOR THIS PROJECT:

TITLE:	BOUNDARY SURVEY
DATE:	8/29/2018
BY:	J. BONFILL & ASSOCIATES, INC.
	7100 SW 99TH AVE, STE 104
	MIAMI, FL 33173

TE 104 (305) 598-8383 PHONE

22. ALL UTILITY CONNECTIONS TO THE BLDG. SHALL BE CONSTRUCTED AND CAPPED OR PLUGGED FIVE FEET FROM THE PROPOSED BUILDING. CONTRACTOR SHALL PERFORM TIE-INS TO THE BUILDING. THE COST ASSOCIATED WITH THE TAPPING/PLUGGING OF THE UTILITIES SHALL BE INCLUDED IN THE CONTRACTOR'S BID PRICE.

23. CONTRACTOR SHALL COORDINATE WORK WITH OTHER UTILITY AND BUILDING TRADES WORKING ON THIS OR ADJACENT PROJECTS.

24. THE CONTRACTOR SHALL TAKE SPECIAL NOTE OF THE EXISTING SOIL CONDITIONS THROUGHOUT THIS PROJECT ANY SPECIAL SHORING, SHEETING AND/OR OTHER PROCEDURES NECESSARY TO PROTECT ADJACENT PROPERTY EITHER PUBLIC OR PRIVATE, DURING CONSTRUCTION ACTIVITIES. ALL COST ASSOCIATED WITH SUCH WORK SHALL BE AT THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

25. AFTER LOCATING AND VERIFYING EXISTING UTILITY TIE IN POINTS, CONTRACTOR IS TO VERIFY THAT DESIGN COMPONENTS SUCH AS, BUT NOT LIMITED TO, PERCENT SLOPE, INVERT, TAP LOCATIONS, PIPE RUNS, INFRASTRUCTURE DEPTH, ETC. WILL STILL BE IN ACCORDANCE WITH THE ENGINEERING PLANS.

26. IF IT SHOULD BECOME NECESSARY TO STOP WORK FOR INDEFINITE PERIODS, THE CONTRACTOR SHALL TAKE EVERY PRECAUTION TO PREVENT DAMAGE OR DETERIORATION OF THE WORK ALREADY PERFORMED.

27. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL UTILITY MARKINGS ONCE THE WORK IS COMPLETED. CONTRACTOR SHALL USE SPECIAL CARE WHEN REMOVING THE UTILITY MARKINGS. THE REMOVAL METHOD NEEDS TO BE SUCH THAT IT DOES NOT DAMAGE THE SURFACE OF THE EXISTING WORK ALREADY IN PLACE. IF WATER-BLASTING OLDER ASPHALT PAVEMENT, CARE NEEDS TO BE TAKEN TO NOT DISCOLOR THE ASPHALT OR POLISH THE AGGREGATE. IF THE REMOVALS ARE AN OLDER CONCRETE SURFACES, THE ENTIRE SURFACE OF A PANEL OR SECTION NEEDS TO BE BLASTED TO SHOW UNIFORM COLOR THROUGHOUT THE SAME PANEL OR SECTION. IN ANY CASE (ASPHALT OR CONCRETE SURFACE), THE METHOD NEEDS TO BE SUCH THAT A SLICK

### NOT PART OF MD-WASD NOTES OR APPROVAL

### **II. PRE-CONSTRUCTION RESPONSIBILITIES**

1. THE INFORMATION PROVIDED IN THESE PLANS IS TO ASSIST THE CONTRACTOR IN ASSESSING THE NATURE AND EXTENT OF THE CONDITIONS WHICH MAY BE ENCOUNTERED DURING THE COURSE OF THE WORK. ALL CONTRACTORS ARE DIRECTED, PRIOR TO BIDDING, TO CONDUCT ANY INVESTIGATIONS THEY DEEM NECESSARY TO ARRIVE AT THEIR OWN CONCLUSIONS REGARDING THE ACTUAL CONDITIONS THAT WILL BE ENCOUNTERED AND UPON WHICH THEIR BIDS WILL BE BASED.

2. THE CONTRACTOR SHALL CONTACT SUNSHINE STATE ONE-CALL OF FLORIDA (1-800-432-4770) AND ALL KNOWN EXISTING UTILITY OWNERS AT LEAST 2 BUSINESS DAYS BEFORE DIGGING TO ALLOW FOR FIELD LOCATION OF UNDERGROUND UTILITIES. CONTRACTOR SHALL ASSIST THE UTILITY COMPANIES IN THEIR EFFORTS TO FIELD VERIFY UNDERGROUND UTILITIES. THE CONTRACTOR SHALL BEAR ALL COSTS FOR THIS WORK.

3. THE CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANIES TO ARRANGE FOR ANY REMOVAL, RELOCATION AND TEMPORARY SUPPORT OF UTILITY FEATURES, ETC. AS NECESSARY TO COMPLETE THE WORK, IF APPLICABLE.

### **III. OBSERVATIONS AND TESTING**

- 1. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD AT LEAST 2 BUSINESS DAYS IN ADVANCE OF PERFORMING ALL CIVIL RELATED TESTS. UNLESS AUTHORIZED BY THE ENGINEER OF RECORD, THE CONTRACTOR SHALL NOT PROCEED WITH TESTING UNLESS THE ENGINEER OR A DESIGNATED REPRESENTATIVE IS PRESENT TO WITNESS THE TESTS.
- 2. THE ENGINEER OF RECORD WILL REQUIRE THAT THE FOLLOWING TESTS BE PERFORMED WITH ACCEPTABLE RESULTS:
- A. SANITARY SEWAGE COLLECTION SYSTEM:
- I. LAMPING TEST FROM MANHOLE TO MANHOLE, INCLUDING CONNECTING MANHOLE II. INFILTRATION/EXFILTRATION TEST UP TO THE CONNECTING MANHOLE
- **III. PRESSURE TEST AS REQUIRED BY DRER**
- B. STORM DRAINAGE-(EXFILTRATION TRENCH DEPTH)
- I. EXFILTRATION TRENCH DEPTH II. LAMPING TEST FROM MANHOLE TO MANHOLE, INCLUDING CONNECTING MANHOLE (IF APPLICABLE) C. DRAINAGE WELL SPECIFIC CAPACITY TEST.
- WATER SYSTEM-(PRESSURE TEST AND BACTERIOLOGICAL TEST) D
- SUBGRADE SUBMIT AND HAVE APPROVED DENSITIES PRIOR TO PLACEMENT OF ROCK. LIME ROCK BASE - SUBMIT AND HAVE APPROVED DENSITIES AND AS-BUILTS PRIOR TO THE PLACEMENT OF ANY ASPHALT. (FLAT BOARDING ALSO REQUIRED.)
- G. ASPHALT PAVEMENT
- FINAL WALK-THROUGH INSPECTION IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT ALL Н. APPLICABLE REGULATORY AGENCIES FOR INSPECTION REQUIREMENTS. CONCRETE FORMWORK AND ADA SLOPE VERIFICATIONS.
- 3. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD AT LEAST 2 BUSINESS DAYS IN ADVANCE
- OF THE FOLLOWING EVENTS: PRIOR TO PLACING BALLAST ROCK WITHIN EXFILTRATION TRENCH AND PIPE RUNS TO MEASURE DEPTH AND WIDTH, AS WELL AS DIRECTIONS RESPECTIVELY.
- PRIOR TO BACKFILLING WATER MAINS AND SERVICES
- PRIOR TO BACKFILLING SANITARY SEWER MAINS AND SERVICES
- AFTER COMPACTION OF LIMEROCK BASE AND PRIOR TO PLACEMENT OF FIRST LIFT OF ASPHALT
- AFTER 2ND LIFT AND CONCRETE PLACEMENT OF PEDESTRIAN PATHWAYS INSTALLING CONNECTIONS TO EXISTING WATER AND SEWER MAINS/SERVICES AFTER SECOND LIFT AND CONCRETE PLACEMENT OF PEDESTRIAN PATHWAYS.
- AT SUBSTANTIAL COMPLETION FINAL INSPECTION H.

UNLESS AUTHORIZED BY THE ENGINEER OF RECORD, THE CONTRACTOR SHALL NOT PROCEED WITH THESE

ACTIVITIES, UNLESS THE ENGINEER OR A DESIGNATED REPRESENTATIVE IS PRESENT TO PERFORM AN INSPECTION. 4. SHOULD THE CONTRACTOR FAIL TO GIVE THE ENGINEER OF RECORD ADVANCE NOTICE OF TESTING AND INSPECTIONS AS SPECIFIED ABOVE, THE ENGINEER SHALL RESERVE THE RIGHT TO REFUSE ISSUANCE OF ANY

CERTIFICATIONS OF COMPLETION AND FINAL INSPECTIONS, AND RESERVES THE RIGHT TO RECOMMEND THAT ANY CONTRACT AMOUNTS STILL HELD IN RETAINAGE NOT BE RELEASED. CITY INSPECTOR REPORTS SHALL NOT BE ACCEPTED AS A SUBSTITUTE FOR THE ENGINEER'S PRESENCE AT THE TESTING AND INSPECTION INTERVALS SPECIFIED ABOVE.

### **IV. SHOP DRAWINGS**

1. PRIOR TO CONSTRUCTION OR INSTALLATION, SHOP DRAWINGS SHALL BE SUBMITTED TO AND APPROVED BY THE ENGINEER OF RECORD FOR THE FOLLOWING ITEMS:

- A. DRAINAGE STRUCTURES, INCLUDING CATCH BASINS, WELL BOXES, PUMPS,
- MANHOLES/INLET FRAMES/GRATES, BAFFLES, ETC.
- B. ALL DRAINAGE PIPES. C. TRENCH DRAINS.
- D. EXFILTRATION FILTER FABRIC
- E. ALL WATER AND SEWER SYSTEM COMPONENTS
- F. ASPHALT PAVEMENT MIX DESIGN
- G. LIMEROCK MATERIAL H. CONCRETE MIX FOR PAVEMENT
- I. MATERIAL SUBSTITUTION REQUESTS
- J. EROSION CONTROL MATERIALS K. FILL MATERIAL

ENGINEER.

2. ALL PRECAST STRUCTURAL DRAWINGS MUST BE SIGNED AND SEALED BY A STATE OF FLORIDA LICENSED ENGINEER OF RECORD STATING THAT THE STRUCTURE(S) MEETS THE H20 LOAD RATING REQUIREMENTS.

IN ADDITION, SOME CITIES, COUNTIES, STATE AND/OR NATIONAL REGULATORY AGENCIES REQUIRE THEIR OWN INDIVIDUAL REVIEW AND APPROVAL. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ALL OTHER AGENCY SHOP DRAWING APPROVALS AS REQUIRED.

STRUCTURAL SHOP DRAWINGS WILL BE REJECTED AND NOT REVIEWED IF NOT SEALED BY A FLORIDA LICENSED

### V. TEMPORARY FACILITIES

**1. TEMPORARY FACILITIES** 

A. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ARRANGE FOR OR SUPPLY TEMPORARY WATER SERVICE, SANITARY FACILITIES, AND ELECTRICITY, DURING CONSTRUCTION.

B. THE CONTRACTOR SHALL MAINTAIN A CLEAR PATH FOR ALL SURFACE WATER DRAINAGE STRUCTURES AND DITCHES DURING ALL PHASES OF CONSTRUCTION, IF APPLICABLE.

C. CONTRACTOR SHALL OBTAIN THE ENGINEERING DESIGN AND PERMIT FOR SUCH FACILITIES AT THE CONTRACTOR'S SOLE COST.

2. TRAFFIC REGULATION

A. THE CONTRACTOR SHALL PROVIDE ALL MAINTENANCE OF TRAFFIC DURING CONSTRUCTION. TO INCLUDE BUT IS NOT LIMITED TO WARNING SIGNALS, SIGNS, LIGHTS AND FLAG PERSONS AS NECESSARY WITHIN PUBLIC RIGHT-OF-WAYS IN ACCORDANCE WITH M.U.T.C.D. AND CITY OF MIAMI PUBLIC WORKS DEPARTMENT.

B. ALL OPEN TRENCHES AND HOLES ADJACENT TO ROADWAYS OR WALKWAYS SHALL BE PROPERLY MARKED AND BARRICADED TO ASSURE THE SAFETY OF BOTH VEHICULAR AND PEDESTRIAN TRAFFIC AT ALL TIMES. SPECIAL PRECAUTION IS TO BE TAKEN IN PATHS OF EGRESS.

C. NO TRENCHES OR HOLES NEAR WALKWAYS, IN ROADWAYS OR THEIR SHOULDERS ARE TO BE LEFT OPEN DURING NIGHTTIME HOURS WITHOUT THE EXPRESS WRITTEN PERMISSION OF THE CITY OF MIAMI PUBLIC WORKS DEPARTMENT.

### VI. PROJECT CLOSE OUT:

1. CLEANING UP

AND PRESSURE CLEANED.

B. THE CONTRACTOR SHALL RESTORE OR REPLACE. WHEN AND AS DIRECTED. ANY PUBLIC OR PRIVATE PROPERTY DAMAGED BY HIS/HER WORK. EQUIPMENT AND/OR EMPLOYEES TO A CONDITION AT LEAST EQUAL TO THAT EXISTING IMMEDIATELY PRIOR TO THE COMMENCEMENT OF OPERATIONS AND TO THE OWNER'S SATISFACTION.

C. THE CONTRACTOR SHALL REPLACE ALL PAVING, STABILIZED EARTH, CURBS, DRIVEWAYS, SIDEWALKS, FENCES, MAILBOXES. SIGNS AND ANY OTHER IMPROVEMENTS REMOVED DURING CONSTRUCTION WITH THE SAME TYPE OF MATERIAL AND TO THE CONDITION WHICH EXISTED PRIOR TO THE COMMENCEMENT OF OPERATIONS AND TO THE OWNER'S SATISFACTION.

D. WHERE MATERIAL OR DEBRIS HAVE WASHED OR FLOWED INTO, OR HAVE BEEN PLACED IN WATER COURSES, DITCHES, DRAINS, CATCH BASINS, OR ELSEWHERE AS A RESULT OF THE CONTRACTOR'S OPERATIONS, SUCH MATERIAL OR DEBRIS SHALL BE REMOVED AND SATISFACTORILY DISPOSED OF DURING THE PROGRESS OF THE WORK, AND THE AREA KEPT IN A CLEAN AND NEAT CONDITION. ANY ADVERSE EFFECTS OR BUILDUP IN PUBLIC INFRASTRUCTURE WILL BE CLEANED AND REDUCED BY THE CONTRACTOR AT CONTRACTOR'S EXPENSE.

E. ALL DISPOSAL OF EXCESS AND UNSUITABLE EXCAVATED MATERIAL, DEMOLITION, VEGETATION, RUBBISH AND DEBRIS SHALL BE MADE OUTSIDE THE LIMITS OF CONSTRUCTION AT A LEGAL DISPOSAL SITE PROVIDED BY THE CONTRACTOR AT HIS/HER OWN EXPENSE. WITH THE PRIOR APPROVAL OF THE ENGINEER OF RECORD. MATERIAL CLEARED FROM THE SITE SHALL NOT BE DEPOSITED ON ADJACENT AND/OR NEARBY PROPERTY.

2. ALL PROPERTY MONUMENTS OR PERMANENT SURVEY REFERENCES, REMOVED OR DESTROYED BY THE CONTRACTOR DURING CONSTRUCTION SHALL BE RESTORED BY A STATE OF FLORIDA REGISTERED LAND SURVEYOR AT THE CONTRACTOR'S EXPENSE.

3. PROJECT RECORD DOCUMENTS

A. DURING THE DAILY PROGRESS OF THE JOB, THE CONTRACTOR SHALL RECORD ON HIS SET OF CONSTRUCTION DRAWINGS THE EXACT LOCATION, LENGTH AND ELEVATION OF ANY FACILITY NOT BUILT EXACTLY ACCORDING TO PLANS. PRIOR APPROVAL FROM THE ENGINEER OF RCORD IS REQUIRED FOR SAID FACILITIES.

B. AT THE COMPLETION OF THIS PROJECT, THE CONTRACTOR SHALL SUBMIT THREE (3) SIGNED & SEALED AS-BUILT DRAWINGS, SIGNED & SEALED BY A REGISTERED LAND SURVEYOR LICENSED IN THE STATE OF FLORIDA. ADDITIONAL AS-BUILT DRAWINGS REQUIRED BY THE CITY, COUNTY, STATE AND/OR FEDERAL REGULATORY AGENCIES SHALL ALSO BE SUBMITTED ONCE REQUIRED. THE AS-BUILT DRAWINGS SHALL INDICATE LOCATION, SIZE, ELEVATION, MATERIAL, ETC., OF ALL WORK COMPLETED UNDER THIS CONTRACT AND OF ALL UTILITIES ENCOUNTERED DURING CONSTRUCTION.

### **VII. STORM DRAINAGE**

1. WHEN EXISTING MANHOLE RINGS, CATCH BASIN GRATE AND FRAMES, VALVE BOXES, PULL BOXES OR OTHER UTILITY CASTINGS ARE ENCOUNTERED WITHIN THE PROPOSED LIMITS OF WORK THE CONTRACTOR SHALL FIELD ADJUST THE EXISTING RING AND FRAME, GRATE AND FRAME, VALVE BOXES OR PULL BOXES TO MATCH THE PROPOSED ELEVATION. SUCH WORK SHALL BE INCLUDED IN THE BID PRICE.

2. ALL CONCRETE SHALL DEVELOP A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS, UNLESS OTHERWISE INDICATED.

3. UNLESS OTHERWISE SPECIFIED ON THE PLANS, ALL DRAINAGE PIPE SHALL BE HDPE DOUBLE WALLED SMOOTH INTERIOR PIPE AND SHALL MEET THE REQUIREMENTS OF AASHTO M294 TYPE S, MPT AND ASTM D2321, D3212, F1417, F477, F667 OR AS NOTED ON THE CONSTRUCTION DRAWINGS.

4. CONTRACTOR SHALL VACUUM CLEAN AND REMOVE ALL SILT, SEDIMENT AND DEBRIS FROM ALL OF THE EXISTING AND PROPOSED DRAINAGE STRUCTURES AND PIPE NETWORK WITHIN THE PROJECT LIMITS PRIOR TO FINAL ACCEPTANCE OF DRAINAGE SYSTEM. ALL COST OF SUCH WORK SHALL BE INCLUDED IN THE BID PRICE.

5. ALL DRAINAGE WORK SHALL CONFORM TO THE GOVERNING JURISDICTIONAL AGENCY REGULATIONS AND STANDARDS

6. UNLESS OTHERWISE SPECIFIED ON THE PLANS, MINIMUM COVER OVER ALL STORM DRAINAGE PIPE SHALL BE 36-INCHES. CONTRACTOR SHALL AVOID ALL UNNECESSARY CROSSINGS BY HEAVY CONSTRUCTION EQUIPMENT DURING CONSTRUCTION.

7. UNLESS OTHERWISE SPECIFIED ON THE PLANS, ALL CATCH BASINS, MANHOLES, FRAMES AND GRATES, RINGS AND COVERS, WITHIN PRIVATE PROPERTY, SHALL BE DESIGNED TO WITHSTAND AN AASHTO AND FDOT H20 LOAD RATING AND SHALL BE OBTAINED FROM PLAN SPECIFIED MANUFACTURERS OR APPROVED EQUIVALENT MANUFACTURER.

### VIII. EARTHWORK AND PAVING

- CONTRACTOR'S EXPENSE.
- PAVEMENT.
- CONCRETE PAVEMENT, CURB AND GUTTERS AT NEAREST EXISTING JOINT

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### A. DURING CONSTRUCTION, THE PROJECT SITE AND ALL ADJACENT AREAS SHALL BE MAINTAINED IN A NEAT AND CLEAN MANNER AND THE PAVED AREAS SHALL BE SWEPT BROOM CLEAN. UPON FINAL CLEANUP, THE PROJECT SITE SHALL BE LEFT CLEAR OF ALL SURPLUS MATERIAL OR TRASH, AND THE PAVED AREAS SHALL BE BROOMED

1. ALL UNDERGROUND UTILITY WORK SHALL BE COMPLETED PRIOR TO CONSTRUCTION OF SUB BASE. ANY SUBGRADE RE-WORK DUE TO UNDERGROUND INFRASTRUCTURE INCONSISTENCIES WILL BE DONE AT THE

2. PROPOSED ASPHALT PAVEMENT SHALL BE CONNECTED TO EXISTING AS CITY OF MIAMI PUBLIC WORKS STANDARD DETAILS. CONTRACTOR SHALL MATCH EXISTING ELEVATIONS ON NEW SIDEWALK OR NEW

3. SAW CUT EXISTING CONCRETE WALKS, CURB AND GUTTERS, AND ASPHALT OR CONCRETE PAVEMENT CAREFULLY AND IN A STRAIGHT LINE WHERE UNDERGROUND WORK IS REQUIRED. WHERE PROPOSED ASPHALT OR CONCRETE PAVEMENT, CURB, SIDEWALK, ETC. WILL MEET AN EXISTING LOCATION CUT CONCRETE WALKS,

ADJACENT O THE SEAL

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### **DEMOLITION NOTES AND SPECIFICATIONS:**

SHOULD ANY SECTION OF THESE DEMOLITION NOTES BE IN DIRECT CONFLICT WITH THE PROVISIONS OR TECHNICAL SPECIFICATIONS CONTAINED IN THE CONTRACT DOCUMENTS FOR THIS PROJECT, THE MORE STRINGENT OF THE TWO SHALL GOVERN.

### I. GENERAL

- FOR THIS PROJECT, "OWNER" SHALL MEAN 2300 NW 14TH ST "SURVEY" SHALL MEAN THE BOUNDARY SURVEY PREPARED BY J. BONFILL & ASSOCIATES, INC. AND "ENGINEER" SHALL MEAN THE ENGINEER OF RECORD.
- EXISTING CONDITIONS, UTILITIES, STRUCTURES AND OTHER IMPROVEMENTS, AS SHOWN ON THE DEMOLITION 2 DRAWINGS, WERE TAKEN FROM THE SURVEY (PREPARED BY J. BONFILL & ASSOCIATES, INC. LAST AMENDED ON 8/29/18), AND FROM INFORMATION PROVIDED BY UTILITY COMPANIES. AN ATTEMPT HAS BEEN MADE TO SHOW ALL EXISTING STRUCTURES, UTILITIES, DRIVES, WALKS, ETC., IN THEIR APPROXIMATE LOCATION. OTHERS MAY EXIST AND MAY BE FOUND UPON VISITING THE SITE. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ACCURATELY LOCATE ALL FACILITIES AND TO DETERMINE THEIR EXTENT. IF SUCH FACILITIES OBSTRUCT THE PROGRESS OF THE WORK AND ARE NOT INDICATED TO BE REMOVED OR RELOCATED. THEY SHALL BE REMOVED OR RELOCATED ONLY AS DIRECTED BY THE OWNER, ARCHITECT, OR ENGINEER OF RECORD, AT NO ADDITIONAL COST TO THE OWNER.
- ORGANIZE AND PERFORM DEMOLITION WORK TO AVOID DAMAGE TO CONSTRUCTION INTENDED TO REMAIN. ANY COMPONENTS INTENDED TO REMAIN BUT DAMAGED DURING DEMOLITION WILL BE REPLACED, NEW, BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE
- DEMOLITION AND REMOVAL OPERATIONS SHALL BE CONDUCTED IN AN EXPEDIENT MANNER, WITH PRECAUTIONS TAKEN TO PREVENT THE DEMOLITION SITE FROM BEING A NUISANCE.
- PERFORM REMOVAL AND DEMOLITION IN ACCORDANCE WITH DEMOLITION SCHEDULE (REFER TO SECTION IV.) AND TAKE NECESSARY PRECAUTIONS TO PROTECT EXISTING ADJACENT BUILDINGS, FURNISHINGS, AND EQUIPMENT. NOTIFY THE ENGINEER OF ANY CONDITIONS THAT MAY AFFECT THE SAFETY OF OCCUPANTS OF ADJACENT BUILDINGS, THE NORMAL USE OF THESE FACILITIES, OR THE PHYSICAL CONDITION OF THE STRUCTURES.
- ALL EXISTING UTILITIES OUTSIDE THE PROPERTY BOUNDARIES ARE TO REMAIN, UNLESS OTHERWISE NOTED. ALL DEMOLITION WORK SHALL BE VERIFIED AGAINST PROPOSED WORK.
- 7. PRIOR TO DEMOLITION ACTIVITIES, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONTACT ALL AFFECTED UTILITY COMPANIES IN ORDER TO COORDINATE THE DEACTIVATION OF ALL EXISTING UTILITY LINES WITHIN THE PROPERTY. ONCE ALL ONSITE UTILITIES HAVE BEEN DEACTIVATED, ALL LINES SHALL BE CUT AND CAPPED INSIDE THE PROPERTY LINE, AND REMOVED (UNLESS OTHERWISE INDICATED).
- THE CONTRACTOR SHALL USE EXTREME CAUTION IN REMOVING ANY STRUCTURES AND UTILITIES ABOVE AND BELOW GRADE TO PREVENT DAMAGE TO EXISTING UTILITIES WHICH ARE TO REMAIN IN SERVICE. ANY DAMAGE TO EXISTING PIPELINES, UTILITIES, ETC., CAUSED BY THE CONTRACTOR SHALL BE REPAIRED. AT THE CONTRACTOR'S EXPENSE, IN A MANNER ACCEPTABLE TO THE PARTY IN OWNERSHIP OF THE DAMAGED PROPERTY. THE CONTRACTOR SHALL REPORT ANY EXISTING DAMAGE PRIOR TO BEGINNING WORK. IN THE EVENT OF ACCIDENTAL DISRUPTION OF UTILITIES OR THE DISCOVERY OF PREVIOUSLY UNKNOWN UTILITIES. CONTRACTOR MUST NOTIFY THE AFFECTED UTILITY COMPANY AND THE ENGINEER. THE UTILITY COMPANY, ENGINEER, AND CONTRACTOR MUST FIRST AGREE ON A PLAN TO CORRECT THE SITUATION OR IDENTIFY THE UTILITY SERVICE LINE. ALL ASSOCIATED COSTS SHALL BE INCURRED AT THE CONTRACTOR'S EXPENSE.
- NO LIGHTING MAY BE REMOVED FROM PUBLIC STREETS UNTIL PROPOSED LIGHTING IS FULLY IN PLACE. OTHERWISE CONTRACTOR SHALL INSTALL A TEMPORARY LIGHTING SYSTEM, SO THAT NO AREA USED BY THE PUBLIC WILL HAVE LESS LIGHTING THAN CURRENTLY EXISTS.
- 10. EXISTING WORK NOT SPECIFIED FOR REMOVAL WHICH IS TEMPORARILY REMOVED, DAMAGED, EXPOSED, OR IN ANY WAY DISTURBED OR ALTERED BY REMOVAL WORK SHALL BE REPAIRED, PATCHED OR REPLACED, AT THE CONTRACTOR'S EXPENSE, TO THE ENGINEER'S SATISFACTION.
- 11. TITLE AND RESPONSIBILITY OF MATERIALS AND EQUIPMENT TO BE REMOVED. EXCEPT SALVAGEABLE EQUIPMENT TO BE RETAINED BY THE OWNER, IS VESTED TO THE CONTRACTOR UPON RECEIPT OF NOTICE TO PROCEED. THE OWNER WILL NOT BE RESPONSIBLE FOR THE CONDITION, LOSS OR DAMAGE TO SUCH MATERIALS AND EQUIPMENT AFTER NOTICE TO PROCEED.

12. IT IS THE CONTRACTOR'S RESPONSIBILITY TO:

- A. PROTECT ALL EXISTING STRUCTURAL ELEMENTS TO REMAIN DURING DEMOLITION
- B. IF APPLICABLE, PROVIDE A TEMPORARY PATCH AND REPAIR TO ALL SURFACES AFFECTED BY DEMOLITION WHICH ARE TO BE RECONSTRUCTED AS PART OF THIS PROJECT.
- C. EXIST. CONC. OR ASPHALT PAVEMENT TO BE REMOVED SHALL BE SAW-CUT IN NEAT, STRAIGHT LINES. D. EXIST. IRRIGATION LINES WITHIN THE LIMITS OF DEMOLITION TO BE REMOVED.
- E. ALL EXISTING WIRE, IRON, CHAIN LINK, WOOD FENCES ARE TO REMAIN UNLESS OTHERWISE SPECIFIED. F. NO ELECTRIC POLE, STREET LIGHT, WATER METER/VALVE, FIRE HYDRANT ETC. WILL BE REMOVED WITHIN
- THE ROADWAY RIGHT OF WAY LINES.
- G. REFER TO LANDSCAPE PLANS FOR ALL EXIST. TREES.
- H. EXIST. MONITORING WELLS TO REMAIN AND BE PROTECTED AT ALL TIMES. I. ALL EXISTING SURVEY REFERENCES AND MARKERS SHALL REMAIN IN PLACE OR BE REPLACED AT NO ADDITIONAL COST TO THE OWNER.

### **II. DESCRIPTION**

- 1. PROVIDE ALL LABOR, MATERIALS, EQUIPMENT, SERVICES, ETC., NECESSARY AND INCIDENTAL TO THE COMPLETION OF ALL SITE DEMOLITION AND CLEARING WORK AS SHOWN ON THE DRAWINGS AND SPECIFIED HEREIN, INCLUDING THE LEGAL TRANSPORT AND OFF-SITE DISPOSAL OF DEMOLITION DEBRIS.
- 2. ALL ONSITE WORK INCLUDED CONSISTS OF, BUT IS NOT LIMITED TO, THE FOLLOWING:
- A. FULL-DEPTH REMOVAL OF EXISTING SIDEWALKS, DRIVES, CURBS, PAVEMENT, ETC. B. CLEARING SITE OF DEMOLITION DEBRIS.
- C. REMOVAL FROM SITE AND DISPOSAL OF ALL EXCESS AND UNUSABLE MATERIAL. D. COORDINATION WITH ALL UTILITY COMPANIES/OWNERS PRIOR TO DEACTIVATION.

### **III. APPLICABLE CODES**

- 1. DEMOLITION AND TRANSPORTATION OF DEBRIS SHALL COMPLY WITH APPLICABLE LOCAL, STATE, AND FEDERAL CODES AND REGULATIONS GOVERNING THESE OPERATIONS. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ANY PERMITS, BONDS, LICENSES, ETC., REQUIRED FOR DEMOLITION AND CLEARING WORK.
- 2. ANY WORK WITHIN PUBLIC RIGHT-OF-WAY SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY OF MIAMI PUBLIC WORKS DEPARTMENT, FLORIDA DEPARTMENT OF TRANSPORTATION, AND OTHER GOVERNMENTAL AGENCIES HAVING JURISDICTION, AND SHALL NOT BEGIN UNTIL THE CONTRACTOR HAS NOTIFIED, AND ALL REQUIRED PERMITS HAVE BEEN OBTAINED FROM, THESE GOVERNING AUTHORITIES.

### **IV. SEQUENCING AND SCHEDULING**

- 1. AREAS ADJACENT TO DEMOLITION AND REMOVAL WORK MAY BE OCCUPIED BUT THE ACTIVITIES IN THOSE AREAS CANNOT BE INTERRUPTED OR DISTURBED DURING NORMAL WORKING HOURS. DEMOLITION SCHEDULE SHALL BE COORDINATED WITH ALL ADJACENT PROPERTY OWNERS AND ANY OTHER PARTIES WHOSE DAILY ACTIVITIES WOULD BE AFFECTED BY THE DEMOLITION WORK.
- 2. COORDINATE WITH APPLICABLE UTILITY COMPANIES FOR UTILITY LINE REMOVAL, CAPPING AND UTILITY SHUTDOWNS NECESSITATED BY REMOVAL WORK.

### **V. ENVIRONMENTAL PROTECTION**

- 1. CONTROL AMOUNT OF DUST RESULTING FROM CONSTRUCTION OR DEMOLITION TO PREVENT SPREAD OF DUST TO OTHER BUILDINGS AND TO AVOID CREATION OF A NUISANCE IN SURROUNDING AREAS. USE OF WATER TO CONTROL DUST WILL NOT BE PERMITTED WHEN IT WILL RESULT IN. OR CREATE, HAZARDOUS OR OBJECTIONABLE CONDITIONS SUCH AS FLOODING.
- 2. NOISE PRODUCING ACTIVITIES SHALL BE HELD TO A MINIMUM. INTERNAL COMBUSTION ENGINES AND COMPRESSORS, ETC., SHALL BE EQUIPPED WITH MUFFLERS TO REDUCE NOISE TO A MINIMUM. COMPLY WITH ALL NOISE ABATEMENT ORDINANCES.
- 3. THE USE OF EXPLOSIVES WILL NOT BE PERMITTED.
- 4. DISPOSITION OF DEMOLISHED MATERIALS BY BURNING IS NOT PERMITTED.
- 5. ALL CLEARING SHALL BE PERFORMED IN A MANNER SUCH AS TO PREVENT ANY WASH-OFF OF SOILS AND DEBRIS FROM THE SITE INTO PUBLIC RIGHT-OF-WAY STREAMS, AND/OR STORM DRAINAGE SYSTEMS. APPROPRIATE SEDIMENTATION PONDS, DIKES, COLLARS, AND FILTER MEDIA SHALL BE EMPLOYED IN ACORDANCE WITH THE EROSION CONTROL PLANS TO INSURE COMPLIANCE WITH THESE REQUIREMENTS. WHERE A SPECIFIC STATUTE GOVERNS THESE PROCEDURES, SUCH STATUTE SHALL BE COMPLIED WITH IN ITS ENTIRETY.
- 6. DURING THE ENTIRE COURSE OF OPERATIONS, ALL EXISTING DRAINAGE WAYS, BOTH INTO AND FROM THE PROJECT AREA SHALL BE MAINTAINED IN A FUNCTIONAL CONDITION, AND BE CLEANED AS NECESSARY.
- 7. AT ALL TIMES DURING THE CLEARING OPERATION, THE EXPOSED AREAS OF SUBGRADE SHALL BE MAINTAINED IN A CONDITION COMPATIBLE WITH POSITIVE DRAINAGE OF THE WORK AREA. NO WATER WILL BE PERMITTED TO STAND IN OPEN EXCAVATIONS, ALL STORMWATER RUNOFF SHALL BE CONTAINED WITHIN THE SITE, FAILURE TO MAINTAIN SUCH DRAINAGE SHALL BE CONSIDERED ADEQUATE CAUSE FOR THE ENGINEER, OWNER, OR INSPECTOR TO ORDER TEMPORARY SUSPENSION OF THE WORK. ALL ASSOCIATED COSTS SHALL BE INCURRED AT THE CONTRACTOR'S EXPENSE.
- 8. PROVIDE SUITABLE AND FUNCTIONAL DRAINAGE BY OPENING DITCHES, FILTER DRAINS, TEMPORARY CUT-OFF LINES, ETC., AND ERECT TEMPORARY PROTECTIVE STRUCTURES WHERE NECESSARY. ALL EMBANKMENTS SHALL BE BACK-BLADED AND SUITABLY SEALED TO PROTECT AGAINST ADVERSE WEATHER CONDITIONS.
- 9. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS WHEN REMOVING ABANDONED AND DE-ENERGIZED MATERIALS. IF ASBESTOS PIPES ARE ENCOUNTERED, THE CONTRACTOR WILL TAKE ALL NECESSARY ABATEMENT STEPS AS REQUIRED BY GOVERNING REGULATIONS TO SAFELY REMOVE AND DISPOSE OF SAID FACILITIES. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY UPON DISCOVERY OF SAID MATERIALS.

### **VI. TRAFFIC MAINTENANCE**

1. CONTRACTOR SHALL FOLLOW THE MORE STRINGENT AND APPLICABLE PROCEDURE OUT OF THE FLORIDA DEPARTMENT OF TRANSPORTATION AND/OR THE CITY OF MIAMI PUBLIC WORKS MAINTENANCE OF TRAFFIC PROCEDURES DURING DEMOLITION IN PUBLIC RIGHT-OF-WAYS AND PRIVATE DRIVEWAYS, PEDESTRIANS PATHS. AND ROADWAYS (FDOT INDEX 600 SERIES).

2. THE CONTRACTOR SHALL PROVIDE ADEQUATE BRACING, SHORING, TEMPORARY CROSSOVER FOR PEDESTRIAN AND VEHICULAR TRAFFIC INCLUDING PLATING, GUARDRAILS, LAMPS, WARNING SIGNS, FLAGS, ETC. AS REQUIRED B AGENCIES HAVING JURISDICTION, AND SHALL NOT REMOVE THESE UNTIL THE NEED FOR PROTECTION CEASES.

3. THE CONTRACTOR MAY NOT CLOSE ANY SIDEWALKS WITHOUT PROVIDING ALTERNATE ROUTES IN ACCORDANCE WITH FDOT INDEX 660 AND AUTHORIZATION FROM AGENCIES HAVING JURISDICTION.

4. CONDUCT REMOVAL OPERATIONS SO THAT TRAFFIC IS MAINTAINED ALONG EXISTING STREETS AND WALKS. KEE PAVED STREETS AND WALKWAYS CLEAN AND FREE OF DEBRIS. REMOVE MATERIAL AND OTHER MATTER TRACKED OR FALLEN ONTO TRAFFIC SURFACES.

### VII. CLEAN UP

1. REMOVE DEMOLISHED CONSTRUCTION MATERIALS AND RELATED DEBRIS FROM THE SITE ON A REGULAR BASIS. ACCUMULATION OF DEBRIS ON THE SITE WILL NOT BE PERMITTED. SELLING OF SALVAGEABLE MATERIALS IS NOT PERMITTED AT THE SITE. LEED RELATED SALVAGEABLE MATERIALS MUST BE DOCUMENTED BY THE CONTRACTOR.

2. REMOVE MATERIALS, INCLUDING DEBRIS AND DUST, AND DISPOSE OF LEGALLY OFF SITE. NO DEBRIS SHALL BE BURNED OR BURIED ON THE SITE AS A MEANS OF DISPOSAL. USE METHODS APPROVED BY THE REGULATORY AGENCIES PRIOR TO BEGINNING CLEANUP OPERATIONS. USE OF BLOWERS TO DISTRIBUTE DUST WILL NOT BE PERMITTED.

3. MATERIAL DESIGNATED FOR REMOVAL SHALL BECOME THE PROPERTY OF THE CONTRACTOR.



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### LEGEND:



### NOTES:

- PERFORMING WORK.

- PROPERTY.
- SAVAGE.

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1. ONSITE LIGHT POLES TO BE REMOVED MUST HAVE THEIR SOURCE OF POWER TERMINATED AT THE SITE. CONTRACTOR TO CONFIRM NO POWER/LIGHTNING INTERRUPTIONS TO THE SURROUNDING PROPERTIES/PARCELS PRIOR TO

2. THE INTENT OF THE DEMOLITION PLAN IS TO DEPICT ALL EXISTING FEATURES THAT ENCUMBER THE PROPOSED CONSTRUCTION AREA AND ARE SCHEDULED FOR REMOVAL SOME INCIDENTAL ITEMS MAY HAVE BEEN INADVERTENTLY OMITTED FROM THE PLAN. THE CONTRACTOR IS ENCOURAGED TO THOROUGHLY INSPECT THE SITE AS WELL AS REVIEW THE PLANS AND SPECIFICATIONS PRIOR TO SUBMITTING PRICING. CONTRACTOR WILL NOT RECEIVE ADDITIONAL COMPENSATION FOR INCIDENTAL ITEMS NOT SHOWN ON THIS DEMOLITION PLAN.

3. DEWATERING SHOULD BE ANTICIPATED AND INCLUDED IN THE CONTRACTOR'S BID. 4. SEE SHEET C-301 FOR INLET PROTECTION AND EROSION AND SEDIMENT CONTROL. 5. CONTRACTOR IS RESPONSIBLE FOR REPAIRS TO EXISTING CONCRETE OR ASPHALT TO REMAIN IF DAMAGED DURING CONSTRUCTION.

6. ALL UTILITIES AND ABOVE GROUND FEATURES WITHIN THE RIGHT-OF-WAY ARE TO REMAIN OR BE RELOCATED UNLESS SPECIFICALLY SPECIFIED OTHERWISE. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGES CAUSED TO THESE ITEMS. 7. CONTRACTOR TO COORDINATE WITH CITY OF MIAMI AND MIAMI-DADE COUNTY AS NEEDED/ REQUIRED.

8. CONTRACTOR TO REFER TO LANDSCAPE PLANS FOR TREE REMOVAL/RELOCATION. CONTRACTOR TO SECURE TREE REMOVAL PERMIT PRIOR TO WORK COMMENCING.

9. CONTRACTOR TO SAWCUT IN NEAT, STRAIGHT LINES WHEN REMOVING EXISTING PAVEMENT/CONCRETE THAT IS ADJACENT TO EXISTING PAVEMENT/CONCRETE THAT IS TO REMAIN. CONTRACTOR IS RESPONSIBLE FOR REPAIRS TO EXISTING CONCRETE OR ASPHALT IF DAMAGED DURING CONSTRUCTION.

10. CONTRACTOR TO COORDINATE EXISTING UTILITY POLE RELOCATION/REMOVAL WITH RESPECTIVE UTILITY OWNER.

11. CONTRACTOR TO SECURE ALL NECESSARY PERMITS/APPROVALS FOR ONSITE DEMOLITION AND/OR DEMOLITION WITHIN PUBLIC RIGHT OF WAY AND PRIVATE

12. CONTRACTOR TO NOTIFY FDEP AND OBTAIN NECESSARY WELL CLOSURE PERMITS PRIOR TO CLOSURE/ ABANDONMENT OF EXIST. DRAINAGE WELLS. 13. ALL IPE DECKING RELATED TO THE BRIDGE REMOVAL IS TO BE BUNDLED AND

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### **BEST MANAGEMENT PRACTICES (BMPS)**

THIS PLAN HAS BEEN PREPARED TO ENSURE COMPLIANCE WITH APPROPRIATE CONDITIONS OF THE MIAMI-DADE COUNTY LAND DEVELOPMENT REGULATIONS, THE RULES OF THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP), CHAPTER 17-25, F.A.C., THE SOUTH FLORIDA WATER MANAGEMENT DISTRICT (SFWMD), CHAPTER 40D-4, F.A.C. AND THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY (EPA) DOCUMENT NO. EPA 832/R-92-005 (SEPTEMBER 1992). THE PLAN ADDRESSES THE FOLLOWING:

A. PREVENT LOSS OF SOIL DURING CONSTRUCTION BY STORMWATER RUNOFF AND/OR WIND EROSION, INCLUDING PROTECTING TOPSOIL BY STOCKPILING FOR REUSE.

B. SEDIMENTION PROTECTION OF STORM SEWER OR RECEIVING STREAM.

C. PREVENT POLLUTING THE AIR WITH DUST AND PARTICULATE MATTER. THE VARIOUS TECHNIQUES OR ACTIONS IDENTIFIED UNDER EACH SECTION INDICATE THE APPROPRIATE SITUATION WHEN THE TECHNIQUES SHOULD BE EMPLOYED. ALSO IDENTIFIED IS A CROSS-REFERENCE TO A DIAGRAM OR FIGURE REPRESENTING THE TECHNIQUE. IT SHOULD BE NOTED THAT THE MEASURES IDENTIFIED ON THIS PLAN ARE ONLY SUGGESTED BMP(S). THE CONTRACTOR SHALL PROVIDE POLLUTION PREVENTION AND EROSION CONTROL MEASURES AS SPECIFIED IN ACCORDANCE WITH THE CURRENT FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) REQUIREMENTS. CONTRACTOR SHALL PREPARE REQUIRED NPDES DOCUMENTATION AND OBTAIN PERMIT PRIOR TO COMMENCEMENT OF CONSTRUCTION. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO PREPARE THE REQUIRED NPDES DOCUMENT AND OBTAIN THE NPDES PERMIT. ALL COST ASSOCIATED WITH SUCH WORK SHALL BE DEEMED INCIDENTAL TO THE PROJECT LUMP SUM COST.

### GENERAL EROSION CONTROL NOTES:

A. THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) IS COMPRISED OF THIS DRAWING. THE STANDARD DETAILS, THE NPDES PERMIT (TO BE OBTAINED BY CONTRACTOR) AND ALL SUBSEQUENT REPORTS AND RELATED DOCUMENTS.

B. ALL CONTRACTORS AND SUBCONTRACTORS INVOLVED WITH STORM WATER POLLUTION PREVENTION SHALL OBTAIN A COPY OF THIS DRAWING AND THE STATE OF FLORIDA NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM GENERAL PERMIT (NPDES PERMIT) AND BECOME FAMILIAR WITH THEIR CONTENTS

C. CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES (BMP) IN ALL CONSTRUCTION ACTIVITIES INCLUDING BUT NOT LIMITED TO THE FOLLOWING:

- FUEL SPILLS AND LEAKS PREVENTION PREVENT/REDUCE VEHICLE AND EQUIPTMENT WASHING AND STEAM CLEANING
- VEHICLE AND EQUIPTMENT MAINTENANCE AND REPAIR
- PROPER OUTDOOR LOADING/UNLOADING OF MATERIALS PREVENT/REDUCE OUTDOOR STORAGE OF RAW MATERIALS, PRODUCTS, AND BY-PRODUCTS
- SOLID WASTE MANAGEMENT HAZARDOUS WASTE MANAGEMENT
- CONCRETE WASTE MANAGEMENT
- SANDBI ASTING WASTE MANAGEMENT STRUCTURE CONSTRUCTION AND PAINTING
- SPILL PREVENTION AND CONTROL
- CONTAMINATED SOIL MANAGEMENT 13 SANITARY/SEPTIC WASTE MANAGEMENT
- 14. SOIL EROSION CONTROL 15. STORM WATER TURBIDITY MANAGEMENT

ADDITIONAL BEST MANAGEMENT PRACTICES SHALL BE IMPLEMENTED AS DICTATED BY CONDITIONS AT NO ADDITIONAL COST TO THE OWNER THROUGHOUT ALL PHASES OF CONSTRUCTION.

D. BEST MANAGEMENT PRACTICES (BMPS) AND CONTROLS SHALL CONFORM TO FEDERAL, STATE, OR LOCAL REQUIREMENTS OR MANUAL OF PRACTICE, AS APPLICABLE. CONTRACTOR SHALL IMPLEMENT ADDITIONAL CONTROLS AS DIRECTED BY PERMITTING AGENCY OR OWNER.

E. SITE MAP MUST CLEARLY DELINEATE ALL STATE WATERS. CONTRACTOR MUST MAINTAIN ALL PERMITS FOR ANY CONSTRUCTION ACTIVITY IMPACTING STATE WATERS OR REGULATED WETLANDS ON SITE AT ALL TIMES.

. CONTRACTOR SHALL MINIMIZE CLEARING TO THE MAXIMUM EXTENT PRACTICAL OR AS REQUIRED BY THE GENERAL PERMIT.

G. CONTRACTOR SHALL BEGIN CLEARING AND GRUBBING THOSE PORTIONS OF THE SITE NECESSARY TO IMPLEMENT PERIMETER CONTROL MEASURES. CLEARING AND GRUBBING FOR THE REMAINING PORTIONS OF THE PROPOSED SITE SHALL COMMENCE ONCE PERIMETER CONTROLS ARE IN PLACE. PERIMETER CONTROLS SHALL BE ACTIVELY MAINTAINED UNTIL SAID AREAS HAVE BEEN STABILIZED AND SHALL BE REMOVED ONCE FINAL STABILIZATION IS COMPLETE.

H. GENERAL EROSION CONTROL BMPS SHALL BE EMPLOYED TO MINIMIZE SOIL EROSION AND POTENTIAL SLOPE CAVE-INS. WHILE THE VARIOUS TECHNIQUES REQUIRED WILL BE SITE AND PLAN SPECIFIC, THEY SHOULD BE EMPLOYED AS SOON AS POSSIBLE DURING CONSTRUCTION.

ON-SITE & OFF-SITE SOIL STOCKPILE AND BORROW AREAS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION THROUGH IMPLEMENTATION OF BEST MANAGEMENT PRACTICES. STOCKPILE AND BORROW AREA LOCATIONS SHALL BE NOTED ON THE SITE MAP AND PERMITTED IN ACCORDANCE WITH GENERAL PERMIT REQUIREMENTS.

J. TOPSOIL CANNOT BE STOCKPILED INSIDE THE PROPERTY FOR REFUSE.

K. SURFACE WATER QUALITY SHALL BE MAINTAINED BY EMPLOYING THE FOLLOWING BMP'S IN THE CONSTRUCTION PLANNING AND CONSTRUCTION OF ALL IMPROVEMENTS.

### STORM WATER EROSION CONTROL PRACTICES:

CONTRACTORS OR SUBCONTRACTORS WILL BE RESPONSIBLE FOR REMOVING SEDIMENT IN THE DETENTION POND AND ANY SEDIMENT THAT MAY HAVE COLLECTED IN THE STORM SEWER DRAINAGE SYSTEMS IN CONJUNCTION WITH THE STABILIZATION OF THE SITE.

B. SLOPES SHALL BE LEFT IN A ROUGHENED CONDITION DURING THE GRADING PHASE TO REDUCE RUNOFF VELOCITIES AND EROSION.

C. DUE TO THE GRADE CHANGES DURING THE DEVELOPMENT OF THE PROJECT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING THE EROSION CONTROL MEASURES (SILT FENCES, ETC.) TO PREVENT EROSION.

D. WHERE PRACTICAL, STORMWATER SHALL BE CONVEYED BY SWALES.

EROSION CONTROL MEASURES SHALL BE EMPLOYED TO MINIMIZE TURBIDITY OF SURFACE WATERS LOCATED DOWNSTREAM OF ANY CONSTRUCTION ACTIVITY. WHILE THE VARIOUS MEASURES REQUIRED WILL BE SITE SPECIFIC, THEY SHALL BE EMPLOYED AS NEEDED IN ACCORDANCE WITH THE FOLLOWING:

1. IN GENERAL, EROSION SHALL BE CONTROLLED AT THE FURTHEST PRACTICAL UPSTREAM LOCATION. STORMWATER INLETS SHALL BE PROTECTED DURING CONSTRUCTION. PROTECTION MEASURES SHALL BE EMPLOYED AS SOON AS PRACTICAL DURING THE VARIOUS STAGES OF INLET CONSTRUCTION. SILT BARRIERS SHALL REMAIN IN PLACE UNTIL SODDING AROUND INLETS IS COMPLETE.

3. A TEMPORARY SEDIMENT TRAP SHOLD BE CONSTRUCTED TO DETAIN SEDIMENT-LADEN RUNOFF FROM DISTURBED AREAS.

F. SILT BARRIERS, ANY SILT WHICH ACCUMULATES BEHIND THE BARRIERS, AND ANY FILL USED TO ANCHOR THE BARRIERS SHALL BE REMOVED PROMPTLY AFTER THE END OF THE MAINTENANCE PERIOD SPECIFIED FOR THE BARRIERS.

G. SLOPES OF BANKS OF RETENTION/DETENTION PONDS SHALL BE CONSTRUCTED NOT STEEPER THAN 3H:1V FROM TOP OF BANK TO TWO FEET BELOW NORMAL WATER LEVEL, AS APPLICABLE. H. SOD SHALL BE PLACED FOR A 2-FOOT WIDE STRIP ADJOINING ALL CURBING AND AROUND ALL

INLETS. SOD SHALL BE PLACED BEFORE SILT BARRIERS ARE REMOVED. I. WHERE REQUIRED TO PREVENT EROSION FROM SHEET FLOW ACROSS BARE GROUND FROM ENTERING A LAKE OR SWALE, A TEMPORARY SEDIMENT SUMP SHALL BE CONSTRUCTED.

J. FILTER FABRIC SHOULD BE USED FOR STORM DRAIN INLET PROTECTION BEFORE FINAL STABILIZATION.

### WIND EROSION CONTROL PRACTICES:

A. WIND EROSION SHALL BE CONTROLLED BY EMPLOYING THE FOLLOWING METHODS AS NECESSARY AND APPROPRIATE

. BARE EARTH AREAS SHALL BE WATERED DURING CONSTRUCTION AS NECESSARY TO MINIMIZE THE TRANSPORT OF FUGITIVE DUST. IT MAY BE NECESSARY TO LIMIT CONSTRUCTION VEHICLE SPEED IF BARE EARTH HAS NOT BEEN EFFECTIVELY WATERED. IN NO CASE SHALL FUGITIVE DUST BE ALLOWED TO LEAVE THE SITE UNDER CONSTRUCTION.

2. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS PERMANENTLY STOPPED SHALL BE PERMANENTLY SEEDED (SEE PERMANENT STABALIZATION PRACTICES FOR DETAILS). THESE AREAS SHALL BE SEEDED NO LATER THAN 14 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY OCCURRING IN THESE AREAS. REFER TO THE GRADING PLAN AND/OR LANDSCAPE PLAN. CLEARED SITE DEVELOPMENT AREAS NOT CONTINUALLY SCHEDULED FOR CONSTRUCTION ACTIVITIES SHALL BE COVERED WITH HAY OR OVERSEEDED AND PERIODICALLY WATERED SUFFICIENTLY TO STABILIZE THE TEMPORARY GROUNDCOVER (SEE TEMPORARY STABALIZATION PRACTICES FOR DETAILS).

3. AT ANY TIME BOTH DURING AND AFTER SITE CONSTRUCTION THAT WATERING AND/OR VEGETATION ARE NOT EFFECTIVE IN CONTROLLING WIND EROSION AND/OR TRANSPORT OF FUGITIVE DUST, OTHER METHODS AS ARE NECESSARY FOR SUCH CONTROL SHALL BE EMPLOYED. THESE METHODS SHOULD INCLUDE ERECTION OF DUST CONTROL FENCES. A 6-FT GEOTEXTILE FILTER FIBER SHOULD BE HANGING AGAINST THE EXISTING CHAIN LINK FENCE AND GATE.

B. ALL DUST ON THE SITE SHALL BE CONTROLLED. THE USE OF MOTOR OILS AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION OPERATIONS IS PROHIBITED.

### SPILL CONTROL PRACTICES:

IN ADDITION TO THE GOOD HOUSEKEEPING AND MATERIAL MANAGEMENT PRACTICES DISCUSSED IN THE PREVIOUS SECTIONS OF THIS PLAN, THE FOLLOWING PRACTICES SHALL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP:

PROCEDURES AND RESOURCES.

B. THE FOLLOWING CLEAN-UP EQUIPMENT MUST BE KEPT ON-SITE NEAR THE MATERIAL STORAGE AREA: GLOVES, MOPS, RAGS, BROOMS, DUST PANS, SAND, SAWDUST, LIQUID ABSORBER, GOGGLES, AND TRASH CONTAINERS

C. SUFFICIENT OIL AND GREASE ABSORBING MATERIALS AND FLOTATION BOOMS SHALL BE MAINTAINED ONSITE AND READILY AVAILABLE TO CONTAIN AND CLEAN-UP FUEL OR CHEMICAL SPILLS AND LEAKS.

D. ALL SPILLS SHALL BE CLEANED UP AS SOON AS POSSIBLE. WHEN CLEANING A SPILL, THE AREA SHOULD BE WELL VENTILATED AND THE EMPLOYEE SHALL WEAR PROPER PROTECTIVE COVERING TO PREVENT INJURY. F. TOXIC SPILLS MUST BE REPORTED TO THE PROPER AUTHORITY REGARDLESS OF THE SIZE OF THE SPILL.

G. AFTER A SPILL, THE PREVENTION PLAN SHALL BE REVIEWED AND CHANGED TO PREVENT FURTHER SIMILAR SPILLS FROM OCCURRING. THE CAUSE OF THE SPILL, MEASURES TO PREVENT IT, AND HOW TO CLEAN THE SPILL UP SHALL BE RECORDED.

H. THE SUPERINTENDENT SHALL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR AND IS RESPONSIBLE FOR THE DAY TO DAY SITE OPERATIONS. THE SUPERINTENDENT ALSO OVERSEES THE SPILL PREVENTION PLAN AND SHALL BE RESPONSIBLE FOR EDUCATING THE EMPLOYEES ABOUT SPILL PREVENTION AND CLEANUP PROCEDURES.

### STABILIZATION PRACTICES:

A. TEMPORARY STABILIZATION - TOPSOIL STOCK PILES AND DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY TEMPORARILY CEASE FOR AT LEAST 21 DAYS, SHALL BE STABILIZED WITH TEMPORARY SEED AND MULCH WITHIN 14 DAYS OF THE LAST CONSTRUCTION ACTIVITY IN THAT AREA. THE TEMPORARY SEED REQUIRED CAN BE FOUND IN TABLE 1.65 A OF THE FLORIDA DEVELOPMENT MANUAL. PRIOR TO SEEDING, WHERE SOILS ARE ACIDIC 2 TONS OF PULVERIZED AGRICULTURAL LIMESTONE SHOULD BE ADDED PER ACRE AND 450 POUNDS OF 10-20-20 FERTILIZER SHALL BE APPLIED TO EACH ACRE. AFTER SEEDING, EACH AREA SHALL BE IMMEDIATELY MULCHED WITH STRAW OR EQUIVALENT EQUAL. AREAS OF THE SITE WHICH ARE TO BE PAVED SHALL BE TEMPORARILY STABILIZED BY APPLYING GEOTEXTILE AND STONE SUB-BASE UNTIL BITUMINOUS PAVEMENT CAN BE APPI IFD

B. PERMANENT STABILIZATION - DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES PERMANENTLY CEASES SHALL BE STABILIZED WITH PERMANENT SEED NO LATER THAN 14 DAYS AFTER TABLES 1.66A, 1.66B AND 1.66C OF THE FLORIDA DEVELOPMENT MANUAL. PRIOR TO SEEDING, 2 TONS/ACRE OF FINELY GROUND AGRICULTURAL LIMESTONE AND THE PROPER FERTILIZER BASED ON THE TYPE OF SEEDING SHALL BE APPLIED TO EACH ACRE TO PROVIDE PLANT NUTRIENTS. AFTER SEEDING, EACH AREA SHALL BE MULCHED IMMEDIATELY.

C. STABILIZATION WILL BE INITIATED ON ALL DISTURBED AREAS WITHIN 14 DAYS OF WORK CEASING, UNLESS CONSTRUCTION ACTIVITY WILL RESUME IN THAT AREA WITHIN 21 DAYS AFTER WORK STOPPAGE. THE TEMPORARY SEDIMENT SUMP SHALL REMAIN IN PLACE UNTIL VEGETATION IS ESTABLISHED ON THE GROUND DRAINING TO THE SUMP.

D. CONTRACTOR TO ENSURE THAT EXISTING VEGETATION ON OR ADJACENT TO THE PROPOSED SITE IS PRESERVED AND DISTURBED PORTIONS OF THE SITE ARE STABILIZED. STABILIZATION PRACTICES SHOULD BE INITIATED AS SOON AS PRACTICAL, BUT IN NO CASE MORE THAN 7 DAYS WHERE CONSTRUCTION HAS TEMPORARILY CEASED.

E. ALL CONSTRUCTION SHALL BE STABILIZED AT THE END OF EACH WORKING DAY, THIS INCLUDES BACKFILLING OF TRENCHES FOR UTILITY CONSTRUCTION AND PLACEMENT OF GRAVEL OR BITUMINOUS PAVING FOR ROAD CONSTRUCTION.

F. SHALL BE IN ACCORDANCE WITH DEP DOCUMENT NO. 62-621.300(4)(a) STRUCTURAL PRACTICES:

A. EARTH DIKE - IF REQUIRED, AN EARTH DIKE SHALL BE CONSTRUCTED ALONG THE SITE PERIMETER. A PORTION OF THE DIKE SHALL DIVERT RUN-ON AROUND THE CONSTRUCTION SITE. THE REMAINING PORTION OF THE DIKE SHALL COLLECT RUNOFF FROM THE DISTURBED AREA AND DIRECT THE RUNOFF TO THE SEDIMENT BASIN.

B. SEDIMENT BASIN - A SEDIMENT BASIN SHALL BE CONSTRUCTED IN THE COMMON DRAINAGE AREA FOR THE SITE. ALL SEDIMENT COLLECTED IN THE BASIN MUST BE REMOVED FROM THE BASIN UPON COMPLETION OF CONSTRUCTION. SEDIMENT FROM THE BASIN MAY BE USED AS FILL ON THE SITE IF IT IS SUITABLE SOIL.

C. SHALL BE IN ACCORDANCE WITH DEP DOCUMENT NO. 62-621.300(4)(a) WASTE DISPOSAL:

A. WASTE MATERIALS - ALL WASTE MATERIALS SHALL BE COLLECTED AND STORED IN A METAL DUMPSTER WITH A SECURE LID IN ACCORDANCE WITH ALL LOCAL AND STATE LAWS. ALL TRASH AND CONSTRUCTION DEBRIS FROM THE SITE SHALL BE DEPOSITED IN THE DUMPSTER. THE SUPERINTENDENT SHALL COORDINATE WITH THE LOCAL UTILITIES TO HAVE THE DUMPSTER EMPTIED AT LEAST TWICE A WEEK AND THE WASTE TAKEN TO AN APPROPRIATE LANDFILL. NO CONSTRUCTION WASTE MATERIALS SHALL BE BURIED ON SITE. THE SUPERINTENDENT SHALL ORGANIZE TRAINING FOR THE EMPLOYEES IN THE PROPER PRACTICES WHEN DEALING WITH WASTE MATERIALS. THE SUPERINTENDENT SHALL BE RESPONSIBLE FOR POSTING AND ENFORCING WASTE MATERIAL PROCEDURES.

B. HAZARDOUS WASTE - HAZARDOUS WASTE MATERIALS SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL LOCAL AND STATE LAWS OR AS DIRECTED BY THE MANUFACTURER. THE SUPERINTENDENT SHALL ORGANIZE THE PROPER TRAINING FOR EMPLOYEES IN THE PROPER PRACTICES WHEN DEALING WITH HAZARDOUS WASTE MATERIALS. THESE PROCEDURES SHALL BE POSTED ON THE SITE. THE PERSON WHO MANAGES THE SITE SHALL BE RESPONSIBLE FOR ENFORCING THE PROCEDURES.

C. SANITARY WASTE - SANITARY WASTE SHALL BE COLLECTED AND DISPOSED OF IN ACCORDANCE WITH ALL LOCAL AND STATE LAWS. THE SUPERINTENDENT SHALL COORDINATE WITH THE LOCAL UTILITY FOR COLLECTION OF THE SANITARY WASTE AT LEAST THREE TIMES A WEEK TO PREVENT SPILLAGE ONTO THE SITE.

D. RUBBISH, TRASH, GARBAGE, LITTER, OR OTHER SUCH MATERIALS SHALL BE DEPOSITED INTO SEALED CONTAINERS. MATERIALS SHALL BE PREVENTED FROM LEAVING THE PREMISES THROUGH THE ACTION OF WIND OR STORM WATER DISCHARGE INTO DRAINAGE DITCHES OR WATERS OF THE STATE.

E. ANY CONSTRUCTION DEBRIS GENERATED AS A RESULT OF THIS PROJECT WILL BE DISPOSED OF OFF-SITE AN AT APPROPRIATE WASTE FACILITY.

F. CONCRETE WASHOUT LOCATIONS WILL BE PROVIDED IN AREAS WHERE THE DISPOSAL MATERIALS WILL BE CONTAINED TO PREVENT DISCHARGE OUTSIDE OF THE PROJECT LIMITS AND INTO THE WATERWAYS.

A. SPILL CLEANUP INFORMATION SHALL BE POSTED ON SITE TO INFORM EMPLOYEES ABOUT CLEANUP

### **OFFSITE TRACKING:**

A. STABILIZED CONSTRUCTION ENTRANCE SHALL BE PROVIDED TO REDUCE SEDIMENT TRACKING OFFSITE. THE MAJOR ROAD CONNECTED TO THE PROJECT SHALL BE CLEANED ONCE A DAY TO REMOVE ANY EXCESS MUD, DIRT OR ROCK RESULTING FROM CONSTRUCTION TRAFFIC. ALL TRUCKS HAULING MATERIALS OFFSITE SHALL BE COVERED WITH A TARPAULIN.

B. GENERAL CONTRACTOR SHALL DENOTE ON PLAN THE TEMPORARY PARKING AND STORAGE AREA WHICH SHALL ALSO BE USED AS THE EQUIPMENT MAINTENANCE AND CLEANING AREA, EMPLOYEE PARKING AREA, AND AREA FOR LOCATION PORTABLE FACILITIES, OFFICE TRAILERS, AND TOILET FACILITIES. HEAVY CONSTRUCTION EQUIPMENT PARKING AND MAINTENANCE AREAS SHALL BE DESIGNED TO PREVENT OIL, GREASE, AND LUBRICANTS FROM ENTERING SITE DRAINAGE FEATURES INCLUDING STORMWATER COLLECTION AND TREATMENT SYSTEMS. CONTRACTORS SHALL PROVIDE BROAD DIKES. HAY BALES OR SILT SCREENS AROUND, AND SEDIMENT SUMPS WITHIN. SUCH AREAS AS REQUIRED TO CONTAIN SPILLS OF OIL, GREASE OR LUBRICANTS. CONTRACTORS SHALL HAVE AVAILABLE, AND SHALL USE, ABSORBENT FILTER PADS TO CLEAN UP SPILLS AS SOON AS POSSIBLE AFTER OCCURRENCE.

C. ALL WASH WATER FROM CONCRETE TRUCKS, VEHICLE CLEANING, EQUIPMENT CLEANING, ETC. SHALL BE DETAINED ON SITE AND SHALL BE PROPERLY TREATED OR DISPOSED.

D. IF THE ACTION OF VEHICLES TRAVELING OVER THE GRAVEL CONSTRUCTION ENTRANCES IS NOT SUFFICIENT TO REMOVE THE MAJORITY OF DIRT OR MUD, THEN THE TIRES MUST BE WASHED BEFORE THE VEHICLES ENTER A PUBLIC ROAD. IF WASHING IS USED, PROVISIONS MUST BE MADE TO INTERCEPT THE WASH WATER AND TRAP THE SEDIMENT BEFORE IT IS CARRIED OFF THE SITE.

E. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.

### INSPECTION AND MAINTENANCE:

ALL MEASURES STATED ON THIS EROSION AND SEDIMENT CONTROL PLAN. AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION UNTIL NO LONGER REQUIRED FOR A COMPLETED PHASE OF WORK OR FINAL STABILIZATION OF THE SITE. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CHECKED BY A QUALIFIED PERSON AT LEAST ONCE EVERY SEVEN CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A 0.5" RAINFALL EVENT, AND CLEANED AND REPAIRED IN ACCORDANCE WITH THE FOLLOWING:

A. INLET PROTECTION DEVICES AND BARRIERS SHALL BE REPAIRED OR REPLACED IF THEY SHOW SIGNS OF UNDERMINING, OR DETERIORATION.

B. ALL SEEDED AREAS SHALL BE CHECKED REGULARLY TO SEE THAT A GOOD STAND IS MAINTAINED. AREAS SHOULD BE FERTILIZED, WATERED, AND RESEEDED AS NEEDED. THE SILT FENCE SHALL BE INSPECTED PERIODICALLY FOR HEIGHT OF SEDIMENT AND CONDITION OF

FENCE. SILT FENCES SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS IF DAMAGED. SEDIMENT SHALL BE REMOVED FROM THE SILT FENCES WHEN IT REACHES ONE-THIRD THE HEIGHT OF THE SILT

D. THE CONSTRUCTION ENTRANCES SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE CONSTRUCTION ENTRANCES AS CONDITIONS DEMAND.

E. THE TEMPORARY PARKING AND STORAGE AREA SHALL BE KEPT IN GOOD CONDITION (SUITABLE FOR PARKING AND STORAGE). THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE TEMPORARY PARKING AS CONDITIONS DEMAND.

F. OUTLET STRUCTURES IN THE SEDIMENTATION BASINS SHALL BE MAINTAINED IN OPERATIONAL CONDITIONS AT ALL TIMES. THE SEDIMENT BASINS/DITCHES SHALL BE CHECKED MONTHLY FOR DEPTH OF SEDIMENT. SEDIMENT SHALL BE REMOVED FROM SEDIMENT BASINS OR TRAPS WHEN THE DESIGN CAPACITY HAS BEEN REDUCED BY 10% AND AFTER CONSTRUCTION IS COMPLETE.

G. ALL MAINTENANCE OPERATIONS SHALL BE DONE IN A TIMELY MANNER BUT IN NO CASE LATER THAN SEVEN CALENDAR DAYS FOLLOWING THE INSPECTION.

H. DIVERSION DIKES SHALL BE INSPECTED MONTHLY. ANY BREACHES SHALL BE PROMPTLY REPAIRED

I. A MAINTENANCE REPORT SHALL BE COMPLETED DAILY AFTER EACH INSPECTION OF THE SEDIMENT AND EROSION CONTROL METHODS. THE REPORTS SHALL BE FILED IN AN ORGANIZED MANNER AND RETAINED ON-SITE DURING CONSTRUCTION. AFTER CONSTRUCTION IS COMPLETED. THE REPORTS SHALL BE SAVED FOR AT LEAST THREE YEARS. THE REPORTS SHALL BE AVAILABLE FOR ANY AGENCY THAT HAS JURISDICTION OVER EROSION CONTROL.

J. ALL REPAIRS MUST BE MADE WITHIN 24 HOURS OF REPORT.

K. THE SUPERINTENDENT SHALL ORGANIZE THE TRAINING FOR INSPECTION PROCEDURES AND PROPER EROSION CONTROL METHODS FOR EMPLOYEES THAT COMPLETE INSPECTIONS AND REPORTS.

### SPILL PREVENTION AND CONTROL:

A. GOOD HOUSEKEEPING

THE FOLLOWING ARE THE MATERIAL MANAGEMENT PRACTICES THAT WILL BE USED TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURE OF MATERIALS AND SUBSTANCES TO STORM WATER RUNOFF

SUPERINTENDENT SHALL INSPECT PROJECT AREA DAILY FOR PROPER STORAGE, USE, AND DISPOSAL OF CONSTRUCTION MATERIALS.

2. STORE ONLY ENOUGH MATERIAL ON SITE FOR PROJECT COMPLETION. 3. ALL SUBSTANCES SHOULD BE USED BEFORE DISPOSAL OF CONTAINER.

4. ALL CONSTRUCTION MATERIALS STORED SHALL BE ORGANIZED AND IN THE PROPER CONTAINER AND IF POSSIBLE, STORED UNDER A ROOF OR PROTECTIVE COVER.

5. PRODUCTS SHALL NOT BE MIXED UNLESS DIRECTED BY THE MANUFACTURER.

6. ALL PRODUCTS SHALL BE USED AND DISPOSED OF ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS. **B. HAZARDOUS PRODUCTS** 

MATERIALS SHOULD BE KEPT IN ORIGINAL CONTAINER WITH LABELS UNLESS THE ORIGINAL CONTAINERS CANNOT BE RESEALED. IF ORIGINAL CONTAINERS CANNOT BE USED, LABELS AND PRODUCT INFORMATION SHALL BE SAVED.

2. PROPER DISPOSAL PRACTICES SHALL ALWAYS BE FOLLOWED IN ACCORDANCE WITH MANUFACTURER AND LOCAL/STATE REGULATIONS.

C. PRODUCT SPECIFIC PRACTICES PETROLEUM PRODUCTS MUST BE STORED IN PROPER CONTAINERS AND CLEARLY LABELED. VEHICLES CONTAINING PETROLEUM PRODUCTS SHALL BE PERIODICALLY INSPECTED FOR LEAKS. PRECAUTIONS SHALL BE TAKEN TO AVOID LEAKAGE OF PETROLEUM PRODUCTS ON SITE.

2. THE MINIMUM AMOUNT OF FERTILIZER SHALL BE USED AND MIXED INTO THE SOIL IN ORDER TO LIMIT EXPOSURE TO STORM WATER. FERTILIZERS SHALL BE STORED IN A COVERED SHED. THE CONTENTS OF ANY PARTIALLY USED BAGS OF FERTILIZER SHALL BE TRANSFERRED TO A SEALABLE PLASTIC BIN TO AVOID SPILLS.

3. PAINT CONTAINERS SHALL BE SEALED AND STORED WHEN NOT IN USE. EXCESS PAINT MUST BE DISPOSED OF IN AN APPROVED MANNER.

4. CONCRETE TRUCKS SHALL NOT BE ALLOWED TO WASH OUT OR DISCHARGE SURPLUS CONCRETE OR DRUM WASH WATER ON THE SITE.

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6. CURB INLETS SHALL BE PROTECTED FROM SEDIMENT INTAKE UNTIL THE PROJECT IS COMPETE. ALL EXPOSED SLOPED MATERIAL ADJACENT TO INLETS SHALL BE COVERED WITH EROSION CONTROL MATTING WITH OUTER LIMITS PROTECTED BY ROCK BAGS. ANY DAMAGED OR INEFFECTIVE ROCK BAGS ARE TO BY REPLACED WITH NEW ONES. 7. STOCKPILED MATERIAL SHALL NOTE BE LEFT IN EROSION PRONE AREAS UNLESS PROTECTED BY COVER OR ROCK BAGS.

8. INSPECTION OF EROSION CONTROL MEASURES AND CONDITION OF ADJACENT PROPERTIES SHALL BE PERFORMED DAILY BY THE CONTRACTOR'S REPRESENTATIVE AND THE PROJECT ENGINEER. DEFICIENCIES SHALL BY NOTED AND CORRECTED.

STANDARD FOR DESIGN AND CONSTRUCTION MANUAL. 2. BEGIN CLEARING AND GRUBBING. 3. INSTALL DRAINAGE SYSTEM, INCLUDING: CONCRETE INLETS, DRAIN BASINS, DRAINAGE PIPES, AND EXFILTRATION TRENCHES.

4. INSTALL INLET PROTECTION AND ROCK BAGS ON ALL INLETS AND MANHOLES IN THE LOCATIONS SHOWN ON THE PLANS AND PER THE STANDARD DETAILS PROVIDED AND THE CITY OF MIAMI PUBLIC WORKS ENGINEERING STANDARD FOR DESIGN AND CONSTRUCTION MANUAL.

5. PREPARE SUBBASE MATERIAL

8. ONCE SITE STABILIZATION IS COMPLETE, CONTRACTOR TO CLEAN ALL CONSTRUCTION DEBRIS FROM CONSTRUCTION SITE.

### STORMWATER POLLUTION PREVENTION PRACTICES:(FOR **PROJECTS OF 0.5 ACRES OR MORE CITY ORDINANCE**

TREE PROTECTION AND PRUNING SHALL BE ACCOMPLISHED AS DETAILED IN SPECIAL PROVISIONS, THE CONSTRUCTION PLANS, AND/OR PER TREE ORDINANCE 12636.

2. ENVIRONMENTAL CONTROL FEATURES AS PROVIDED IN THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP), ARE TO BE INSTALLED AT ALL AREAS OF EXCAVATION OR FILL FOR DRAINAGE SYSTEM, OR STRUCTURE CONSTRUCTION PRIOR TO SUCH EXCAVATION OR FILL. INLET ENTRANCES ARE ALSO TO BE PROTECTED FROM SILTATION AS DETAILED ON SHEET 2 OF 4 OF THE MISC. 35-89-5 OF THE CITY OF MIAMI PUBLIC WORKS ENGINEERING STANDARD FOR DESIGN AND CONSTRUCTION MANUAL.

3. ALL ENVIRONMENTAL CONTROL FEATURES ARE TO BE MAINTAINED THROUGHOUT THE LIFE OF THE PROJECT IN ACCORDANCE WITH NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) REQUIREMENTS. THE CONTRACTOR MUST ENSURE THAT ALL EROSION CONTROL FEATURES FUNCTION PROPERLY AT ALL TIMES.

4. ALL EROSION AND MATERIAL DEPOSITS MUST BE CONTAINED WITHIN THE PROJECT LIMITS. 5. DITCH BOTTOM INLETS SHALL BE PROTECTED FROM SEDIMENT INTAKE UNTIL THE PROJECT IS COMPLETE. ELEVATION OF GROUND OUTSIDE OF INLET TOP SHALL NOT BE HIGHER THAT INLET TOP. ROCK BAGS SHALL BE INSTALLED AROUND INLET TOP. COMPLETED INLETS IN PAVED AREAS SHALL ALSO BE PROTECTED WITH ROCK BAGS TO PREVENT SEDIMENT INTAKE

9. ANY OFFSITE SEDIMENT DISCHARGE TO A MUNICIPAL SEPARATE STORMWATER SYSTEM ARISING FROM THE CONTRACTOR'S ACTIVITIES IS NOT ALLOWED. REFER TO PUBLIC WORKS BULLETIN NO. 25.

10. THE USE OF SANITARY SEWERS, FRENCH DRAINS, COVER DITCHES AND/OR ROCK DRAINS FOR THE DISPOSAL OF WASTEWATER IS EXPRESSLY PROHIBITED. REFER TO PUBLIC WORKS BULLETIN NO. 25.

### **PROJECT DESCRIPTION**

11. PROJECT LOCATION: 2300 NW 14TH ST, MIAMI FL, 33125

12. PROJECT LIMITS: TOTAL PROJECT AREA IS APPROXIMATELY 6 ACRES.

13. CONSTRUCTION ACTIVITY: CONSTRUCTION OF PROPOSED UTILITY IMPROVEMENTS.

14. MAJOR SOIL DISTURBING ACTIVITIES: CLEARING AND GRUBBING, INSTALLATION OF UTILITIES.

15. DEWATERING ACTIVITIES: DEWATERING IS NOT ANTICIPATED FOR THIS SITE.

16. SOIL CHARACTERISTICS: THE SOIL TYPE WITHIN THE PROJECT'S LIMIT OF DISTURBANCE IS CLASSIFIED AS URBAN SOIL AND IS NOT HIGHLY ERODIBLE.

17. RUNOFF COEFFICIENTS: EXISTING: DURING CONSTRUCTION: 0.90 PROPOSED: 0.90

### SEQUENCE OF CONSTRUCTION:

SEQUENCE OF SOIL DISTURBING ACTIVITIES AND IMPLEMENTATION OF CONTROLS:

PRIOR TO COMMENCEMENT OF ANY EARTH DISTURBING ACTIVITIES, INCLUDING CLEARING AND GRUBBING, INSTALL EROSION CONTROL MEASURES IN ACCORDANCE WITH THE EROSION CONTROL PLAN, STANDARD DETAILS, NPDES REQUIREMENTS, AND THE CITY OF MIAMI PUBLIC WORKS ENGINEERING

6. BEGIN ASPHALT AND CONCRETE INSTALLATION.

7. AFTER COMPLETION OF SITE WORK, BEGIN SITE STABILIZATION AND PERMANENT SEEDING.

9. ONCE A UNIFORM 70% VEGETATIVE COVER OF PERENNIAL VEGETATION IS ACHIEVED ACROSS THE ENTIRE DISTURBED AREA THE REMOVAL OF TEMPORARY EROSION CONTROL MEASURES MAY BEGIN.

CITY OF MIAM OFFICE OF CAPITAL IMPROVEMENTS

444 S.W. 2nd Avenue, 8th Floor

Miami, FL 33130

SPACE RESERVED FOR CITY OF MIAMI APPROVAL STAMP

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PAGE No.

SHEET No. C-300



	SPACE RESERVED FOR CITY	OF MIAMI APPROVAL STAMP FY OF MIAMI APPROVAL STAMP E OF CAPITAL IMPROVEMENTS S.W. 2nd Avenue, 8th Floor Miami, FL 33130
South Fork Middle River	PBA FERN ISLE PARK REDEVELOPMENT CITY OF MIAMI, PROJECT NO. B-40543 2304 N.W. 14TH STREET, MIAMI, FL 33125	SHEET TITLE: EROSION AND SEDIMENT CONTROL PLAN
		LICENSED PROFESSIONAL ALBERTO HERRERA, P.E. FLORIDA LICENSE NUMBER 59357 DATE:
4/24/2019	No. REVISIONS - SU	JBMITTALS DATE
NIN P. HERONI		
Image: Construction of the second		
Call & FF or WWW.Sunshine&11.com two full business days before digging to have utilities located and marked. <i>Check positive response codes before you dig!</i>	PAGE No.	SHEET No. <b>C-301</b>







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DR: EU DEFARIMENT	JF PU
K: CITY OF M	IAMI,



OVERALL	SITE	IMPACT	TABLE

COVERAGE	EXISTING	CHANGE
Lot Coverage (SF)	19,534	+8,631
PARKING REQUIREMENTS	EXISTING	CHANGE
Parking Spaces	35	+18
Handicap Parkina Spaces	1	+2

ALL THAT LOT, PIECE OR PARCEL OF LAND, SITUATED, LYING IN SECTION 34, TOWNSHIP 53 SOUTH, RANGE 41 EAST, CITY OF MIAMI, MIAMI-DADE COUNTY, FLORIDA, BEING A PORTION OF TRACK "A" OF "POLICE BENEVOLENT ASSOCIATION", ACCORDING TO THE PLAT THEREOF, AS RECORDED APRIL 25, 1969 IN PLAT BOOK 86, AT PAGE 15 OF THE PUBLIC RECORDS OF DADE COUNTY, (NOW MIAMI-DADE COUNTY), FLORIDA, THE SAME BEING PARTICULARLY DESCRIBED BY METES AND COUNDS AS FOLLOWS,

BEING AT NORTHWEST CORNER OF SAID TRACK "A", THENCE N87°54'32"E (THE SAME LINE BEARING WEST BY PLAT) ALONG THE NORTH LINE OF SAID TRACT "A" AND THE SOUTH RIGHT OF WAY OF N.W. 14TH STREET FOR 231.06 FEET; THENCE DEPARTING SAID NORTH LINE OF TRACT "A" AND THE SOUTH RIGHT OF WAY LINE OF N.W. 14TH STREET, SO0'55'10"E FOR 32.19 FEET; THENCE N88'35'32"E FOR 208.03 FEET TO A POINT OF INTERSECTION WITH THE EAST LINE OF SAID TRACK "A", THENCE S01\*24'28"E (THE SAME LINE BEARING S00\*41'00"W BY PLAT) ALONG SAID EAST LINE OF TRACT "A" FOR 354.86 FEET TO THE SOUTHEAST CORNER OF SAID TRACT "A"; THENCE N87'51'35"W ALONG THE SOUTH LINE OF SAID TRACT "A" FOR 208.67 FEET (THE SAME LINE BEARING S85'46'07"E FOR A DISTANCE OF 208.29 FEET BY PLAT); THENCE N76'01'43"W ALONG SAID SOUTH LINE OF TRACT "A" FOR 274.588 FEET (THE SAME LINE BEARING S73'56'15"E FOR A DISTANCE OF 275.00 FEET BY PLAT) TO THE SOUTHWEST CORNER OF SAID TRACT "A"; THENCE NO1.35'28"W (THE SAME LINE BEARING S00'30'00" W BY PLAT) ALONG THE WEST LINE OF SAID TRACT "A" FOR 734.60 FEET TO THE POINT

2. DIMENSIONS BASED ON TOPOGRAPHIC SURVEY BY PULICE LAND SURVEYORS, INC. DATED 07-02-12 4. ALL PAVEMENT MARKINGS, WITH THE EXCEPTION OF PARKING SPACE LINES AND HANDICAP SYMBOLS, SHALL BE THERMOPLASTIC. PARKING SPACE STRIPES AND HANDICAP SYMBOLS MAY BE PAINTED (SEE 5. SIGNAGE WILL BE IN COMPLIANCE WITH MIAMI-DADE COUNTY CODE OF ORDINANCE SEC. 33-86





PROPOSED	
28,165	
PROPOSED	REQUIRED
53	-
3	2

	PROPOSED 28,165 PROPOSED 53 3 3	REQUIRED — 2		SP	ACE RESE	RVED FOR CIT	Y OF MIAMI APPROVAL STAMP TY OF CAPITAL IMPROVEMENTS 1 S.W. 2nd Avenue, 8th Floor Miami, FL 33130		
	EXIST. RIPRAP				PBA FERN ISLE PARK REDEVELOPMENT	CITY OF MIAMI, PROJECT NO. B-40543 2304 N.W. 14TH STREET, MIAMI, FL 33125	SHEET TITLE:	SITE PLAN	
							LICENSED PROFESSIONAL	<u>ALBERTO HERRERA, P.E.</u> FLORIDA LICENSE NUMBER	59357 date:
					lo.	REVISIONS - 3	SUBMITTA	LS	DATE
4/2	4/2019			╢╞					
	OP. HO CICENSE No 59357 * STATE OF COR IDA ONAL	THIS ITEM HAS BEEN BY ALBERTO P. HER ADJACENT O THE SE PRINTED COPIES OF CONSIDERED SIGNED SIGNATURE MUST BE COPIES.	N DIGITALLY SIGNED AND SEALED RERA, P.E., ON THE DATE EAL THIS DOCUMENT ARE NOT AND SEALED AND THE E VERIFIED ON ANY ELECTRONIC						
		Call 81 busines <i>Ch</i> e	Sunshine 1 or www.sunshine s days before digging to have utilitie located and marked. eck positive response codes before you dig!	s PA	GE No.		SHEET	<sup>No.</sup>	)







### NOTES:

- 1. ALL CATCH BASIN CONNECTED TO MUST HAVE 42 INCH SUMP WHEN A BAFFLE IS REQUIRED.

4/25/2019

CENS

No 59357

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STATE OF

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COPIES.

DRAINAGE STRUCTURE	e table	
STRUCTURE TYPE	RIM ELEVATION	INVERT ELEVATION
FDOT TYPE C INLET USP 3–3.0 TYPE "C" USF 4155 FRAME – 6210 GRATE W/ BAFFLE (OR APPROVED EQUAL)	RIM = 8.25	(18") 5.00 (N)
FDOT TYPE C INLET USP 3–3.0 TYPE "C" USF 4155 FRAME – 6210 GRATE W/ BAFFLE (OR APPROVED EQUAL)	RIM = 8.25	(18") 5.00 (E) (18") 5.00 (S)
FDOT TYPE C INLET USP 3–3.0 TYPE "C" USF 4155 FRAME – 6210 GRATE W/ BAFFLE (OR APPROVED EQUAL)	RIM = 8.25	(18") 5.00 (W) (18") 5.00 (S)
FDOT TYPE C INLET USP 3–3.0 TYPE "C" USF 4155 FRAME – 6210 GRATE W/ BAFFLE (OR APPROVED EQUAL)	RIM = 8.25	(18") 5.00 (N) (18") 5.00 (S)
FDOT TYPE C INLET USP 3–3.0 TYPE "C" USF 4155 FRAME – 6210 GRATE W/ BAFFLE (OR APPROVED EQUAL)	RIM = 8.00	(18") 5.00 (N)

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY ALBERTO P. HERRERA, P.E., ON THE DATE ADJACENT O THE SEAL

SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC

Check positive response codes before you dig!

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE

2. ALL PRB BAFFLES MUST HAVE 24" FROM THE BOTTOM OF THE BAFFLE TO THE BOTTOM OF THE STRUCTURE.

.25	(18") 5.00 (N)								
.25	(18") 5.00 (E) (18") 5.00 (S)								
.25	(18") 5.00 (W) (18") 5.00 (S)								
.25	(18") 5.00 (N) (18") 5.00 (S)		SPACE		) FOR CITY	OF MIA	MI APP	Roval	_ STAMP
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A BA	AFFLE IS D THE			PBA FERN ISLE PARK REDEVELOPMENT CITY OF MIAMI, PROJECT NO. B-40543	2304 N.W. 14TH STREET, MIAMI, FL 33125	SHEET TITLE:	PAVING, GRADING,	AND DRAINAGE PLAN	
						LICENSED PROFESSIONAL	ALBERTO HERRERA, P.E.	FLORIDA LICENSE NUMBER	DATE:
			No.	RE	VISIONS - SI	UBMITTA	LS		DATE
HAS 0 P. 0 TH	BEEN DIGITALLY S HERRERA, P.E., C IE SEAL	GIGNED AND SEALED ON THE DATE							
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STRUCTURE NUMBER         STRUCTURE TYPE         RIM ELEVATION         INVERT ELEVATION           S-6         PROP. NYLOPLAST 18" DRAIN BASIN (OR APROV. EQUAL)         RIM = 7.80         [15"] 5.00 (S) (12"] 4.50 (NW) (15"] 5.00 (E)           S-7         PROP. NYLOPLAST 18" DRAIN BASIN (OR APROV. EQUAL)         RIM = 7.80         [15"] 5.00 (W) (12"] 4.50 (NE)           S-8         PROP. NYLOPLAST 30" DRAIN BASIN W/ IRONSMITH DRAIN GRATE         RIM = 7.80         [15"] 5.00 (W) (15"] 5.00 (N)           S-9         PROP. NYLOPLAST 18" DRAIN BASIN W/ IRONSMITH DRAIN GRATE         RIM = 7.80         [15"] 5.00 (W) (15"] 5.00 (NE)           S-9         PROP. NYLOPLAST 18" DRAIN BASIN W/ IRONSMITH DRAIN GRATE         RIM = 7.30         [15"] 5.00 (W) (12"] 5.00 (E)           S-10         PROP. NYLOPLAST 18" DRAIN BASIN W/ IRONSMITH DRAIN GRATE         RIM = 7.35         [15"] 5.00 (W) (12"] 5.00 (S)           S-11         PROP. NYLOPLAST 18" DRAIN BASIN W/ IRONSMITH DRAIN GRATE         RIM = 7.35         [15"] 5.00 (W) (12"] 4.50 (SE)           S-12         PROP. NYLOPLAST 18" DRAIN BASIN W/ IRONSMITH DRAIN GRATE         RIM = 7.30         [12"] 4.50 (SE)           S-13         PROP. NYLOPLAST 15" DRAIN BASIN W/ IRONSMITH DRAIN GRATE         RIM = 7.00         [12"] 4.50 (SE)           S-14         PROP. NYLOPLAST 15" DRAIN BASIN W/ IRONSMITH DRAIN GRATE         RIM = 7.08         [12"] 4.50 (W)           S-16
S-6PROP. NYLOPLAST 18" DRAIN BASIN W/ IRONSMITH DRAIN GRATE (OR APROV. EQUAL)RIM = 7.80 $\begin{pmatrix} 15^{**} \\ 12^{**} \\ 4.50 \\ 12^{**} \\ 4.50 \\ 12^{**} \\ 5.00 \\ 15^{**} \\ 5.00 \\ 15^{**} \\ 15^{**} \\ 5.00 \\ 15^{**} \\ 15^{*$
S-7PROP. NYLOPLAST 18" DRAIN BASIN W/ IRONSMITH DRAIN GRATE (OR APROV. EQUAL)RIM = 7.80 $(15")$ 5.00 (W) $(12")$ 4.50 (NE) $S-8$ PROP. NYLOPLAST 30" DRAIN BASIN W/ IRONSMITH DRAIN GRATERIM = 7.80 $(15")$ 5.00 (SW) $S-9$ PROP. NYLOPLAST 15" DRAIN BASIN W/ IRONSMITH DRAIN GRATERIM = 7.30 $(15")$ 5.00 (W) $(15")$ 5.00 (SW) $S-10$ PROP. NYLOPLAST 18" DRAIN BASIN W/ IRONSMITH DRAIN GRATERIM = 7.37 $(15")$ 5.00 (W) $(12")$ 5.00 (E) $S-10$ PROP. NYLOPLAST 18" DRAIN BASIN W/ IRONSMITH DRAIN GRATERIM = 7.37 $(15")$ 5.00 (E) $(12")$ 5.00 (E) $S-11$ PROP. NYLOPLAST 18" DRAIN BASIN W/ IRONSMITH DRAIN GRATERIM = 7.35 $(15")$ 5.00 (W) $(12")$ 5.00 (S) $S-12$ PROP. NYLOPLAST 18" DRAIN BASIN W/ IRONSMITH DRAIN GRATERIM = 7.30 $(15")$ 5.00 (W) $(12")$ 4.50 (SE) $S-13$ PROP. NYLOPLAST 15" DRAIN BASIN W/ IRONSMITH DRAIN GRATERIM = 7.30 $(12")$ 4.50 (SE) $S-14$ PROP. NYLOPLAST 15" DRAIN BASIN W/ IRONSMITH DRAIN GRATERIM = 7.00 $(12")$ 4.50 (SE) $S-14$ PROP. NYLOPLAST 15" DRAIN BASIN W/ IRONSMITH DRAIN GRATERIM = 7.00 $(12")$ 4.50 (SW) $S-15$ PROP. NYLOPLAST 15" DRAIN BASIN W/ IRONSMITH DRAIN GRATERIM = 7.08 $(12")$ 4.50 (SW) $S-16$ PROP. NYLOPLAST 15" DRAIN BASIN W/ IRONSMITH DRAIN GRATERIM = 7.04 $(12")$ 4.50 (W) $S-17$ PROP. NYLOPLAST 15" DRAIN BASIN W/ IRONSMITH DRAIN GRATERIM = 7.04 $(12")$ 4.50 (W) $S-17$ PROP. NYLOPLAST 15" DRAI
S-8PROP. NYLOPLAST 30" DRAIN BASIN W/ IRONSMITH DRAIN GRATERIM = 7.80 $\binom{(15")}{(15")} 5.00$ (K) $(15") 5.00$ (SW)S-9PROP. NYLOPLAST 15" DRAIN BASIN W/ IRONSMITH DRAIN GRATERIM = 7.30 $(15") 5.00$ (W) $(15") 5.00$ (NE)S-10PROP. NYLOPLAST 18" DRAIN BASIN W/ IRONSMITH DRAIN GRATERIM = 7.97 $\binom{(15")}{(12")} 5.00$ (W) $(12") 5.00$ (E)S-10PROP. NYLOPLAST 18" DRAIN BASIN W/ IRONSMITH DRAIN GRATERIM = 7.97 $\binom{(15")}{(12")} 5.00$ (E)S-11PROP. NYLOPLAST 18" DRAIN BASIN W/ IRONSMITH DRAIN GRATERIM = 7.35 $\binom{(15")}{(12")} 5.00$ (E)S-12PROP. NYLOPLAST 18" DRAIN BASIN W/ IRONSMITH DRAIN GRATERIM = 7.30 $\binom{(15")}{(12")} 5.00$ (W) $(12") 4.50$ (SE)S-12PROP. NYLOPLAST 15" DRAIN BASIN W/ IRONSMITH DRAIN GRATERIM = 7.30 $\binom{(12")}{(12")} 4.50$ (SE)S-13PROP. NYLOPLAST 15" DRAIN BASIN W/ IRONSMITH DRAIN GRATERIM = 7.00 $\binom{(12")}{(12")} 4.50$ (SE)S-14PROP. NYLOPLAST 15" DRAIN BASIN W/ IRONSMITH DRAIN GRATERIM = 7.00 $\binom{(12")}{(12")} 4.50$ (SE)S-15PROP. NYLOPLAST 15" DRAIN BASIN W/ IRONSMITH DRAIN GRATERIM = 7.08 $\binom{(12")}{(12")} 4.50$ (SW)S-16PROP. NYLOPLAST 15" DRAIN BASIN W/ IRONSMITH DRAIN GRATERIM = 7.04 $\binom{(12")}{(12")} 4.50$ (W)S-16PROP. NYLOPLAST 15" DRAIN BASIN W/ IRONSMITH DRAIN GRATERIM = 7.04 $\binom{(12")}{(12")} 5.00$ (NW)S-17PROP. NYLOPLAST 15" DRAIN BASIN W/ IRONSMITH DRAIN GRATERIM = 7.04 $\binom{(12")}{(12")} 5.00$ (NW)
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S-15 $\stackrel{\text{PROP. NYLOPLAST 15"}}{\stackrel{\text{DRAIN BASIN}}{\stackrel{\text{W/ IRONSMITH DRAIN GRATE}}}$ $\text{RIM} = 7.00$ $(12")$ 4.50 (SW)S-16 $\stackrel{\text{PROP. NYLOPLAST 15"}}{\stackrel{\text{DRAIN BASIN}}{\stackrel{\text{W/ IRONSMITH DRAIN GRATE}}}$ $\text{RIM} = 7.08$ $(12")$ 4.50 (W)S-16 $\stackrel{\text{PROP. NYLOPLAST 15"}}{\stackrel{\text{DRAIN BASIN}}{\stackrel{\text{W/ IRONSMITH DRAIN GRATE}}}$ $\text{RIM} = 7.08$ $(12")$ 4.50 (W)S-17 $\stackrel{\text{PROP. NYLOPLAST 15"}}{\stackrel{\text{DRAIN BASIN}}{\stackrel{\text{W/ IRONSMITH DRAIN GRATE}}}$ $\text{RIM} = 7.04$ $(12")$ 5.00 (NW)S-17 $\stackrel{\text{PROP. NYLOPLAST 15"}}{\stackrel{\text{DRAIN BASIN}}{\stackrel{\text{W/ IRONSMITH DRAIN GRATE}}}$ $\text{RIM} = 7.04$ $(12")$ 5.00 (NW)
S-16 $\stackrel{\text{PROP. NYLOPLAST 15"}}{\stackrel{\text{DRAIN BASIN}}{\stackrel{\text{W/ IRONSMITH DRAIN GRATE}}}$ $\text{RIM} = 7.08$ $(12")$ 4.50 (W)S-17 $\stackrel{\text{PROP. NYLOPLAST 15"}}{\stackrel{\text{DRAIN BASIN}}{\stackrel{\text{W/ IRONSMITH DRAIN GRATE}}}$ $\text{RIM} = 7.04$ $(12")$ 5.00 (NW)S-17 $\stackrel{\text{PROP. NYLOPLAST 15"}}{\stackrel{\text{DRAIN BASIN}}{\stackrel{\text{W/ IRONSMITH DRAIN GRATE}}}$ $\text{RIM} = 7.04$ $(12")$ 5.00 (NW)
S-17 PROP. NYLOPLAST 15" DRAIN BASIN W/ IRONSMITH DRAIN GRATE AND ENVIROHOOD $RIM = 7.04$ (12") 5.00 (NW) $PROP. NYLOPLAST 18"$ (12") 5.00 (NW)
PROP. NYLOPLAST 18"
S-18   UKAIN BASIN W/ IRONSMITH DRAIN GRATE   RIM = 7.66 (12") 5.00 (E)
S-19 $\begin{array}{c} PROP. NYLOPLAST 12" \\ DRAIN BASIN \\ W/ IRONSMITH DRAIN GRATE \end{array} RIM = 7.46 \begin{array}{c} (12") 5.00 (N) \\ (12") 5.00 (S) \end{array}$
$S-20 \qquad \begin{array}{c} PROP. \ NYLOPLAST \ 12'' \\ DRAIN \ BASIN \\ W/ \ IRONSMITH \ DRAIN \ GRATE \end{array} \qquad RIM = \ 7.62 \qquad \begin{array}{c} (12'') \ 5.00 \ (N) \\ (12'') \ 5.00 \ (W) \end{array}$
$S-21 \qquad \begin{array}{c} PROP. \ NYLOPLAST \ 15'' \\ DRAIN \ BASIN \\ W/ \ IRONSMITH \ DRAIN \ GRATE \end{array} \qquad RIM = \ 6.58 \qquad \begin{array}{c} (15'') \ 5.00 \ (N) \\ (15'') \ 5.00 \ (E) \end{array}$

### NOTES

- 1. ALL CATCH E REQUIRED.
- 2. ALL PRB BAR BOTTOM OF

4/25/2019

![](_page_15_Picture_8.jpeg)

![](_page_15_Picture_9.jpeg)

No 59357 \* STATE OF

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### Sunshine

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![](_page_16_Figure_0.jpeg)

	SPACE RESERVED FOR CITY O	F MIAMI APPROVAL STAMP		
Image: Water Fountain         Image: Water Fountain <td< th=""><th>PBA FERN ISLE PARK REDEVELOPMENT CITY OF MIAMI, PROJECT NO. B-40543 2304 N.W. 14TH STREET, MIAMI, FL 33125</th><th colspan="3">HET TILE: PAVING, GRADING, AND DRAINAGE DETAILS</th></td<>	PBA FERN ISLE PARK REDEVELOPMENT CITY OF MIAMI, PROJECT NO. B-40543 2304 N.W. 14TH STREET, MIAMI, FL 33125	HET TILE: PAVING, GRADING, AND DRAINAGE DETAILS		
		LICENSED PROFESSIONAL ALBERTO HERRERA, P.E. FLORIDA LICENSE NUMBER 59357 DATE:		
	No. REVISIONS - SUB	MITTALS DATE		
NO 59357				
* STATE OF PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.				
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Call 811 or www.sunshine811.com two full business days before digging to have utilities located and marked. <i>Check positive response codes before you dig!</i>	PAGE No. St	HEET No. <b>C-502</b>		

![](_page_17_Figure_0.jpeg)

© 2012 KIMLEY-HORN AND ASSOCIATES, INC.

CURB AND GUTTER

0.5' 1.5' L L

0.5'

∕\_\_\_R\_2'

2.0" TYPE SP-9.5 FINE MIX ASPHALTIC CONCRETE PER FDOT SPEC SECTION 334 (1" TOP LIFT AND 1" BOTTOM LIFT)

6" LIMEROCK BASE COURSE (PRIMED) COMPACTED TO 98% MIN OF MAX DENSITY PER AASHTO T-180 WITH A LBR VALUE OF 100

— 10" STABILIZED SUBGRADE COMPACTED AT 98% MIN OF MAX DENSITY PER AASHTO T-180 WITH A LBR VALUE OF 40

PROP. PROP. 13.0' EXIST. SIDEWALK LANDSCAPE RIPRAP (VARIES)

MAX 7.88 MIN 7.06

PROP. BERM

8.29

SECTION B-B

N.T.S.

(VARIES)

7.00

N.T.S.

![](_page_17_Figure_4.jpeg)

![](_page_17_Figure_5.jpeg)

4/24/2019

\* PROFES

				SPACE RESI	RVED FOR CIT	TY OF MIAM	<b>I APPROV</b> <b>DF M</b> PITAL IMPR( Avenue, & , FL 3313(	AL STAMP
				PBA FERN ISLE PARK REDEVELOPMENT	CITY OF MIAMI, PROJECT NO. B-40543 2304 N.W. 14TH STREET, MIAMI, FL 33125	SHEET TITLE: DAVING CDADING	AND DRAINAGE	DETAILS
						LICENSED PROFESSIONAL	ALBERTO HERRERA, P.E. FLORIDA LICENSE NUMBER	59357 date:
				No.	REVISIONS -	SUBMITTALS	3 	DATE
No 59357	THIS ITEM BY ALBERT ADJACENT	HAS BEEN DIGITALLY SIGNED AND SEA O P. HERRERA, P.E., ON THE DATE O THE SEAL	_ED					
STATE OF	PRINTED CONSIDERE SIGNATURE COPIES.	OPIES OF THIS DOCUMENT ARE NOT D SIGNED AND SEALED AND THE MUST BE VERIFIED ON ANY ELECTRON						
		Call 811 or www.sunshine811.com tw business days before digging to have	vo full utilities	PAGE No.		SHEET NO	 ɔ.	
		located and marked. Check positive response codes before you d	ig!				2-503	3

### REQUIREMENTS PER DEPARTMENT OF HEALTH (NOT A PART OF M-DWASD REVIEW NOR APPROVAL)

WATER MAIN HORIZONTAL SEPARATIONS

- SEPARATIONS SHALL BE MEASURED OUTSIDE EDGE TO OUTSIDE EDGE.
- BETWEEN WATER MAINS AND, STORM SEWERS, STORMWATER FORCE MAINS, OR RECLAIMED WATER LINES, SHALL BE 3 FT. MINIMUM. 3. BETWEEN WATER MAINS AND VACUUM TYPE SEWER <u>PREFERABLY 10 FT. AND AT LEAST 3 FT. MINIMUM.</u> 4. GRAVITY OR PRESSURE SANITARY SEWERS, WASTEWATER FORCE MAINS OR RECLAIMED WATER PREFERABLY <u>10 FT. AND AT LEAST 6</u>
- FT. MAY BE REDUCED TO 3 FT. WHERE BOTTOM OF WATER MAIN IS AT LEAST 6 INCHES ABOVE TOP OF SEWER.
- 5. <u>10 FT. OF ANY PART OF ON-SITE SEWER TREATMENT OR DISPOSAL SYSTEM.</u>

WATER MAIN VERTICAL SEPARATIONS

- 6. SEPARATIONS BETWEEN WATER MAINS AND GRAVITY SEWER, VACUUM TYPE SEWER, OR STORM SEWERS, TO BE PREFERABLY 12 INCHES. OR AT LEAST 6 INCHES ABOVE. OR AT LEAST 12 INCHES IF BELOW.\* 7. PRESSURE SANITARY SEWER, WASTEWATER OR STORM WATER FORCE MAIN, OR RECLAIMED WATER, AT LEAST 12 INCHES ABOVE OR BELOW.\*
- \* NOTE: CENTER 1 FULL LENGTH OF WATER MAIN PIPE AT CROSSINGS; ALTERNATIVELY ARRANGE PIPES SO JOINTS ARE AT LEAST 3 FEET FROM JOINTS IN VACUUM, STORM OR STORM FORCE MAINS. AT LEAST 6 FEET FROM JOINTS IN GRAVITY OF PRESSURE SEWERS, WASTEWATER FORCE MAINS OR RECLAIMED WATER.

### TRENCH PROTECTION

TRENCH EXCAVATION PROTECTION SHALL BE ACCOMPLISHED AS REQUIRED BY THE PROVISIONS OF, PART 1926, SUBPART P, EXCAVATIONS, TRENCHING AND SHORING OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATIONS STANDARDS AND INTERPRETATIONS.

![](_page_18_Figure_11.jpeg)

GENERAL NOTES & SPECIFICATION FOR SEWER MAIN INSTALLA	TIONS NOT A PART OF MDWASD NOTES OR APPROVAL	
(NOT A PART OF M-DWASD NOTES NOR APPROVAL) 1. THE CONTRACTOR SHALL MAKE EVERY REASONABLE EFFORT TO PERFORM THE WORK AND PROPERTY THROUGHOUT CONSTRUCTION. ALL WORK SHALL BE PERFORMED IN ACCORDANCE W TRENCH SAFETY ACT.	D MAINTAIN SAFETY TO THE PUBLIC AND WORKERS, AND THE PROTECTION OF WITH OSHA STANDARDS, AS APPLICABLE. CONTRACTOR MUST COMPLY WITH	
2. ALL UTILITY CROSSING LINES IDENTIFIED ON PLANS AND PROFILES ARE BASED ON BEST APPROPRIATE UTILITIES AND SUNSHINE STATE ONE CALL CENTER OF FLORIDA 811. CONTRACT UTILITY CONFLICTS.	AVAILABLE INFORMATION. CONTRACTOR SHALL VERIFY UTILITY INFORMATION WITH TOR TO INCLUDE ON AS-BUILTS ACCURATE ELEVATION AND LOCATION OF ALL	
3. ALL UTILITIES DAMAGED BY CONSTRUCTION MUST BE PROMPTLY REPAIRED TO THE CONDI	ITION EXISTING PRIOR TO THE DAMAGING OF THE UTILITY. REPAIRS ARE	
4. ALL EXISTING MANHOLES, ELECTRIC BOXES, METER BOXES, AND VALVE BOXES SHALL BE	ADJUSTED TO THE PROPOSED GRADE.	
5. PROPERTY DAMAGE RESULTING FROM WORK REQUIRED BY THIS CONTRACT SHALL BE CLE	ANED UP, REPAIRED OR REPLACED AT NO COST TO OWNER.	
<ol> <li>CONTRACTOR SHALL PROVIDE ALL MAINS, ALL FITTINGS, ATTACHMENTS, AND EQUIPMENT SHALL BE RESTRAINED IN ACCORDANCE WITH M-DWASD STANDARD DETAIL GS 2.0 (1 THRU 5</li> <li>THE CONTRACTOR IS RESPONSIBLE FOR THE COST OF ALL INSPECTIONS.</li> </ol>	REQUIRED TO PERFORM TESTING PER M-DWASD STANDARDS. PIPE AND FITTINGS 5 OF 5)	
8. ALL TRENCHES TO BE OVER-EXCAVATED A MINIMUM OF 6" TO PROVIDE FOR INSTALLATIO	ON OF ROCK BEDDING IN ACCORDANCE WITH M-DWASD STANDARDS.	
9. SURFACE RESTORATION, PAVEMENT REPLACEMENT, SIDEWALK REPLACEMENT, TRENCH BAC GS1.9, SS18.0, A1.0, A1.1 AND A4.0, M-DCPWD STANDARD DETAIL R21.1 AND THE APPLICABL	CKFILLING AND COMPACTION SHALL COMPLY WITH M-DWASD STANDARD DETAILS LE CURRENT CITY OF MIAMI PUBLIC WORKS, M-DCPWD AND FDOT STANDARDS.	SPACE RESERVED FOR CITY OF MIAMI APPROVAL STAM
10. CONTRACTOR SHALL FIELD VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF EXIST CONNECTIONS. CONTRACTOR SHALL ADJUST THE ALIGNMENT OF THE SEWER CONNECTION AND MODIFICATIONS TO ALIGNMENT SHALL BE CLEARLY RECORDED IN THE AS-BUILT DOCUMENTS.	TING SEWER LATERALS PRIOR TO THE CONSTRUCTION OF THE SANITARY SEWER D PROVIDE THE REQUIRED FITTINGS AND CLEANOUTS AS NEEDED. ALL	CITY OF MIAM
11. THE APPROXIMATE LOCATION OF EXISTING UTILITIES SHOWN ON THE PLANS WERE PROVIDE VERTICAL LOCATIONS SHALL BE DETERMINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. "OTHER" UTILITIES (NOT SHOWN IN THE PLANS) EXIST WITHIN THE AREA OF CONSTRUCTION. S CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY.	ED BY THE RESPECTIVE UTILITY COMPANIES. THE EXACT HORIZONTAL AND IN ADDITION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING IF SHOULD THERE BE UTILITY CONFLICTS THAT WERE NOT ANTICIPATED, THE	OFFICE OF CAPITAL IMPROVEMENTS
12. THE PERMITTEE WILL ENSURE THAT NO UNSAFE AREA(S) FOR PEDESTRIAN WILL REMAIN [	DURING ANY TIME OF CONSTRUCTION. PEDESTRIAN CONTROL FOR CLOSURE OF	Miami, FL 33130
13. ACCESS TO REMAIN OPEN AT ALL TIMES. THE PERMITTEE SHALL PROVIDE AND MAINTAIN	C DESIGN STANDARDS INDEX SERIES 600. SAFE TEMPORARY ACCESS TO ALL ADJACENT PROPERTY AT ALL TIMES AND	
SHALL MAINTAIN ACCOMMODATIONS FOR INTERSECTING AND CROSSING TRAFFIC WITHIN THE CUNDULY RESTRICTED AS DETERMINED BY THE ENGINEER.	ONSTRUCTION ZONE. NO ROAD OR STREET CROSSING SHALL BE BLOCKED OR	3125 3125
		$\begin{bmatrix} P & P & P \\ P & Q \\ P & Q \end{bmatrix}$
	1. AT THE COMPLETION OF ANY WATER AND SEWER JOB EITHER DONATION OR CONTRACT, THE CONTRACTOR SHALL SUBMIT:	
1. ALL MATERIALS AND LABOR UNDER THIS PROJECT SHALL BE IN STRICT ACCORDANCE WITH THE REQUIREMENTS OF THE MIAMI-DADE WATER AND SEWER DEPARTMENT AND SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS AVAILABLE AND ON FILE WITH THE DEPARTMENT. <u>SUBMIT SHOP DRAWINGS FOR ALL MATERIALS.</u>	<ul> <li>a. RECORD DRAWING PRINTS WHICH HAVE BEEN SIGNED AND SEALED BY A FLORIDA LICENSED PROFESSIONAL SURVEYOR AND MAPPER (QTY. OF PRINTS AS REQUIRED BY THE DEPARTMENT).</li> <li>2. "RECORD DRAWING" FORMAT:</li> </ul>	NET AMILIA
<ol> <li>COVER OVER WATER OR SEWER FORCE MAINS SHALL BE 4'-O" MIN.</li> <li>ALL MAIN LINE VALVES SHALL BE INSTALLED COMPLETE WITH 10" RISER PIPES AND NO. 3 OR 53 VALVE BOXES FIRE</li> </ol>	a. 24"x 36" PRINTS b. PDF FILE c. CADD FILE (DWG OR DXF) ROTATED AND TRANSLATED TO STATE PLANE COORDINATES NAD 83 FLORIDA EAST	
HYDRANTS AND SERVICE VALVES SHALL BE INSTALLED COMPLETE WITH 6" RISER PIPES AND NO. 2 VALVE BOXES. 4. ALL FORCE MAIN SERVICE CONNECTIONS INTO PRESSURE TRANSMISSION MAINS SHALL HAVE A SHUT OFF VALVE AND CHECK VALVE AT THE POINT OF ENTRY.	ZONE d. THE WORDS "RECORD DRAWING" IN LARGE LETTERS e. TITLE BLOCK WITH DEPARTMENT DS, DW OR ER NUMBER AND PERTINENT INFORMATION	
5. ALL GRAVITY SYSTEMS SHALL BE CONSTRUCTED IN ACCORDANCE WITH DEPARTMENT STANDARDS.	f. PREFERRED SCALE TO BE 1"= 40' HORIZONTALLY AND 1"= 4' VERTICALLY* g. STREET NOMENCLATURE h. SEPARATE RECORD DRAWINGS FOR WATER AND SEWER	
6. ALL WATER METERS WILL BE INSTALLED BY THE MIAMI-DADE WATER AND SEWER DEPARTMENT, PROVIDING THE APPROPRIATE CHARGES HAVE BEEN PREPAID.	i. SEPARATE WATER AND SEWER PROFILE j. STATIONING STARTING WITH 0+00 AT PERMANENT REFERENCE POINT (I.E. ♀, 氧, ETC.) OR AS SHOWN ON DESIGN PERMIT PLANS, AND TO RUN CONTINUOUSLY TO END OF MAIN	
7. FIRE HYDRANT REQUIREMENTS (NUMBER AND LOCATION) SHALL BE AS REQUIRED BY MIAMI-DADE COUNTY FIRE DEPARTMENT OR THE APPROPRIATE FIRE AGENCY WITH INSTALLATION IN ACCORDANCE WITH DEPARTMENT STANDARDS.	k. EASEMENTS, IF ANY, TIED TO PERMANENT REFERENCE POINT I. IDENTIFY ALL CONTROL LINES (I.E. BLDG. LINE, PROPERTY LINE, R/W, ETC.) ALL "PROPOSED" INFORMATION TO DE DELABOR DENTES - ENTROL ONLY DECORD DRAWING INFORMATION	
8. CONTRACTOR MUST CALL MDWASD INSPECTION DIVISION TO ARRANGE FOR A PRECONSTRUCTION MEETING 2 FULL BUSINESS DAYS PRIOR TO PROPOSED START OF CONSTRUCTION. CONTACT ONE CALL CENTER 48 HRS PRIOR TO EXCAVATION.	m. ALL "PROPOSED" INFORMATION TO BE REMOVED FROM PRINTS, LEAVING ONLY RECORD DRAWING INFORMATION REFLECTED IN DRAWINGS	
9. CONTRACT INSPECTOR WILL INSPECT ANY FACILITIES APPROVED BY THE DEPARTMENT. ALL OTHER REQUIREMENTS OF THE PERMITTING AGENCY SHALL BE IN ACCORDANCE WITH THEIR STANDARDS AND REQUIREMENTS.	3. WATER "RECORD DRAWINGS" MUST INCLUDE: g. PLANS SHOWING PIPE SIZE. MATERIAL AND OFFSET OF MAIN, DEFLECTIONS (IF ANY), STATION OF SERVICES.	
10. WORK PERFORMED UNDER THIS PROJECT WILL NOT BE CONSIDERED AS COMPLETE UNTIL FINAL ACCEPTANCE OF THE SYSTEM BY THE DEPARTMENT AND UNTIL THE FOLLOWING DOCUMENTS ARE RECEIVED AND APPROVED BY THE	HYDRANTS, VALVES, FITTINGS, IF ANY, ALL IN STATE PLANE COORDINATES. UTILITY CROSSINGS SHALL BE CLEARLY IDENTIFIED AND LOCATED.	$   \overline{0} = \frac{1}{2}$
DEFARIMENT: a. EASEMENTS, IF REQUIRED b. CONTRACTOR'S WAIVER AND RELEASE OF LIEN	b. PROFILE SHOWING TOP OF GROUND AND TOP OF PIPE ELEVATIONS AT EVERY 100' STATION AND AT ANY CHANGE IN GRADE (WITH CORRESPONDING STATION), PIPE SIZE AND PIPE MATERIALS REFERENCED TO PLAN.	
<ul> <li>c. ABSOLUTE BILL OF SALE</li> <li>d. i. CONTRACTOR'S LETTER OF WARRANTY (I.E., LETTER AGREEMENT)</li> <li>IIII DEVELOPER'S CONTRACT POND (I.E., CONTRACT ACREEMENT)</li> </ul>	4. SEWER "RECORD DRAWINGS" MUST INCLUDE:	$    \square \circ \geq  $
e. "RECORD DRAWING" PRINTS (24"x 36") SHOWING ORCEFICIONS, DEPTH, ETC. OF ALL WATER AND SEWER FACILITIES AS LOCATED BY A LICENSED SURVEYOR & MAPPER, ALONG WITH PRINTS OF "RECORD DRAWINGS" WHICH	a. PLAN SHOWING MANHOLE NUMBER, PIPE SIZE AND PIPE MATERIAL OF PIPE, DEFLECTION, SLOPE OF GRAVITY SEWER, LOCATION OF LATERALS WITH REFERENCE TO MANHOLE AND CLEANOUTS.	
HAVE BEEN SIGNED AND SEALED BY A REGISTERED SURVEYOR & MAPPER. (No. OF PRINTS: 3-FOR WATER, 4-FOR GRAVITY SEWER AND 5-FOR FORCE MAIN OR PUMP STATION PROJECTS). Submitted of final CAD Files required. f. H.R.S. LETTER OF RELEASE REQUIRED FOR ALL WATER PROJECTS	b. THE NORTHERLY AND EASTERLY COORDINATES ON ALL FIELD OBTAINED MEASUREMENTS AND PROVIDED ON ALL RECORD DRAWING SUBMITTALS	
g. BILL OF SALE SKETCH (8½"x 11") FOR WATER AND SEWER, SEPARATELY 11. ALL NEW CONNECTIONS FROM EXISTING DEPARTMENT MAINS TO BE MADE BY DEPARTMENT FORCES ONLY. THE	C. PROFILE SHOWING MANHOLE NUMBER (AS PER PLAN), RIM AND INVERT ELEVATIONS (IF MORE THAN ONE INVERT, LABEL NORTH, SOUTH, ETC.), AND STATION STARTING AT 0+00 AT DOWNSTREAM MANHOLE.	33 C B []
CONTRACTOR TO EXCAVATE AT REQUIRED LOCATIONS, PROVIDE AND INSTALL MATERIAL WITH FITTINGS, PRIOR TO TAP. 12. AN APPROVED PAVING AND DRAINAGE PLAN MUST BE SUBMITTED TO MDWASD FOR ALL NEW SUBDIVISIONS PRIOR TO ADDROVAL OF WATER AND SEWER REPLATE PLANS, UPON, REQUEST.	5. FORCE MAIN "RECORD DRAWING" SAME AS WATER MAIN.	
13. UNLESS OTHERWISE SPECIFIED, ALL TAPS 20 INCHES AND SMALLER FOR CONNECTIONS TO EXISTING MAINS WILL BE DONE BY DEPARTMENT FORCES. UNDER NO CIRCUMSTANCES WILL THE CONTRACTOR BE PERMITTED TO TAP FXISTING	6. EACH RECORD DRAWING SHALL SHOW THE FLORIDA STATE PLANE COORDINATES (CURRENT READJUSTMENT) OF ALL THE MANHOLES AND VALVES AND OF AT LEAST TWO HORIZONTAL CONTROL POINTS PROPERLY IDENTIFIED AND LOCATED WITHIN THE PROJECT.	
MAINS IN THE SIZE RANGE SPECIFIED ABOVE. THE TAPPING SLEEVE AND TAPPING VALVE ARE FURNISHED AND INSTALLED BY THE CONTRACTOR UNDER THE SUPERVISION OF THE INSPECTOR.	* OTHER SCALE MAY BE PERMITTED, BUT MUST BE APPROVED	BER D'AL
ITEM CROSS SPEC. REF. REF.	BY THE DEPARTMENT PRIOR TO PREPARATION OF DRAWINGS.	JFESSIC SF NUN 57
ISSUE DATE     APPROVED BY     S T A N D A R D D E T A I L     GS       03/01/2010     V.F.C.     STANDARD REQUIREMENTS     0.5	ITEM REF. REF.	ED PRO
WATER AND SEWER     Steel       Delivering Executions Every Day     CONSTRUCTION       WATER & SEWER DEPARTMENT     SHEET 1 OF 2	MIAMI-DADE COUNTY Deformative Every Day	FILORID FICENS
	WATER & SEWER DEPARTMENT	
FOR ALL PROJECTS WHERE		No. REVISIONS - SUBMITTALS DATE
REMOVAL OF UTILITY LINES IS PROPOSED		
ITIES BEING REMOVED AND/OR RELOCATED MUST REMAIN ACTIVE AND IN SERVICE, UNTIL SUCH INSTALLED, IN SERVICE, ACCEPTED BY THE DEPARTMENT AND ALL RELATED SERVICES FROM TH	TIME WHEN NEW REPLACING TE EXISTING MAINS HAVE	
OR SEWER FACILITIES LOCATED IN PRIVATE PROPERTY SHALL BE REMOVED AFTER ALL INSTALLED TO THE ALREADY INSTALLED AND IN SERVICE NEW MAINS. ANY ASSOCIATED EXCLUSIVE EASEMEN	D SERVICES FROM THEM HAVE NTS SHALL BE CLOSED AND	.D
IE REMOVAL OF THE EXISTING WATER AND/OR SEWER FACILITIES. <u>S:</u>	4/24/2019	
TER MAIN WILL DE LOOATED CHOL THAT A MINIMUM OF A FORT OFFICIAL TO BE CONTAMINATED.	CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.	; ] ]]
ATER MAIN WILL BE LOCATED SUCH THAT A MINIMUM OF 1-FOOT SEPARATION BETWEEN THE HIG ROTTOM OF THE PIPE WILL BE PROVIDED.	CH WATER	→ <b> </b>
OR SOLID WASTE IS ENCOUNTERED DURING THE INSTALLATION OF THE WATER MAIN, THE WORK SE AND THE RER DEPARTMENT SHALL BE NOTIFIED.	WITHIN THESE	=
IS ENCOUNTERED ADEQUATE MEASURE SHALL BE IMPLEMENTED, INCLUDING AS APPLICABLE BUT		
IPES. TO BE POLYWRAPPED AND ZINC COATED.	Call 811 or www.sunshine811.com two business days before digging to have ut	full PAGE No. SHEET No.
SHALL BE EQUIPPED WITH VITON "O" GASKETS. RENCH WITH SEMI PERMEABLE MEMBRANE. N LINCONTAMINATED SOIL SHALL BE LISED FOR BACKELL, ANY CONTAMINATED SOILS SHALL BE D	Incated and marked.	C-600
AN UNCONTAMINATED SUL SHALL BE USED FOR BACKFILL, ANY CONTAMINATED SOILS SHALL BE P	Check positive response codes before you dig!	

NOT A PART O MDWASD NOTES OR APPROVAL

1. ALL EXIS UTILITIES F BEEN TRAN

2. ALL WA BEEN TRAN RELEASED <u>CONTAMINAT</u>

- 1. NO PORT
- 2. THE PRO TABLE A
- 3. IF CONT. AREAS
- 4. IF CONT. TO:
  - a. AL
  - b. Al
  - c. Ll d. 0

![](_page_18_Picture_28.jpeg)

![](_page_19_Picture_0.jpeg)

### LEGEND:

![](_page_19_Figure_2.jpeg)

EXIST. AND PROP. RIGHT-OF-WAY LINE OR PROPERTY LINE

CENTER LINE OF ROADWAY

MONUMENT LINE

PROP. ASPHALT PAVEMENT (PROP. 28,165 SF)

PROP. LANDSCAPING (SEE LANDSCAPE SET)

PROP. SANITARY SEWER SERVICE LATERAL AND CLEANOUT

PROP. WATER SERVICE LINE

PROP. SANITARY SEWER LATERAL AND MANHOLE

PROP. STORM DRAINAGE PIPE

PROP. EXFILTRATION TRENCH

EXIST. GAS LINE

![](_page_19_Figure_14.jpeg)

4/26/2019

9

		SPACE RESERVED FOR CITY	OF MIAMI APPROVAL STAMP
THE		PBA FERN ISLE PARK REDEVELOPMENT CITY OF MIAMI, PROJECT NO. B-40543 2304 N.W. 14TH STREET, MIAMI, FL 33125	SHEET TITLE: WATER AND SEWER PLAN
			LICENSED PROFESSIONAL
		NO. REVISIONS - S	UBMITTALS DATE
No 59357 STATE OF LOR IDA ONAL	ID SEALED ATE NOT ECTRONIC		
Sunshine	Ŋ.		
Call 811 or www.sunshine811 business days before digging t located and marke <i>Check positive response codes be</i>	com two full have utilities d. <i>re you dig!</i>	PAGE No.	SHEET No. <b>C-601</b>

![](_page_20_Picture_0.jpeg)

### LEGEND:

![](_page_20_Figure_2.jpeg)

EXIST. AND PROP. RIGHT-OF-WAY LINE OR PROPERTY LINE

CENTER LINE OF ROADWAY

MONUMENT LINE

PROP. ASPHALT PAVEMENT (PROP. 28,165 SF)

PROP. LANDSCAPING (SEE LANDSCAPE SET)

PROP. SANITARY SEWER SERVICE LATERAL AND CLEANOUT

PROP. WATER SERVICE LINE

PROP. SANITARY SEWER LATERAL AND MANHOLE

PROP. STORM DRAINAGE PIPE

PROP. EXFILTRATION TRENCH

EXIST. GAS LINE

![](_page_20_Figure_14.jpeg)

	SPACE RESERVED FOR CITY	OF MIAMI APPROVAL STAMP TY OF MIAMI APPROVAL STAMP E OF CAPITAL IMPROVEMENTS S.W. 2nd Avenue, 8th Floor Miami, FL 33130
	PBA FERN ISLE PARK REDEVELOPMENT CITY OF MIAMI, PROJECT NO. B-40543 2304 N.W. 14TH STREET, MIAMI, FL 33125	SHEET TITLE: WATER AND SEWER PLAN
		LICENSED PROFESSIONAL DATE:
THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY ALBERTO P. HERRERA, P.E., ON THE DATE ADJACENT O THE SEAL PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.	NO. REVISIONS - SU	
Call 811 or www.sunshine811.com two full business days before digging to have utilities located and marked. <i>Check positive response codes before you dig!</i>	PAGE No.	SHEET No. <b>C-602</b>

NO 59357 \* STATE OF CONSIDERED SIGNED SIGNATURE MUST BI COPIES.

![](_page_21_Figure_1.jpeg)

### PROP. 6IN P.V.C. SAN. LATERAL

![](_page_21_Figure_4.jpeg)

### PROP. PRIVATE 8IN P.V.C. SAN. LATERAL

![](_page_21_Picture_6.jpeg)

GRAPHIC SCALE IN FEET 0 15 30 60 HORIZONTAL 0 1.5 3 6 VERTICAL FE6"	SPACE RESERVED FOR CITY	OF MIAMI APPROVAL STAMP TY OF MIAMI APPROVAL STAMP E OF CAPITAL IMPROVEMENTS S.W. 2nd Avenue, 8th Floor Miami, FL 33130
	PBA FERN ISLE PARK REDEVELOPMENT CITY OF MIAMI, PROJECT NO. B-40543 2304 N.W. 14TH STREET, MIAMI, FL 33125	SHEET TITLE: WATER AND SEWER PROFILES
		LICENSED PROFESSIONAL ALBERTO HERRERA, P.E. FLORIDA LICENSE NUMBER 59357 DATE:
	No. REVISIONS - SU	JBMITTALS DATE
/2019		
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Sunshine		
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TREE NO.	COMMON NAME	SCIENTIFIC NAME	DIAMETER (IN)	HEIGHT (FT)	CANOPY (FT)	TREE NO.	COMMON NAME	SCIENTIFIC NAME	DIAMETER (IN)	HEIGHT (FT)	CANOPY (FT)
T1	Strangler Fig	Ficus aurea	40	35	60	T46	Strangler Fig	Ficus aurea	40	35	24
Т2	Strangler Fig	Ficus aurea	30.8	35	35	T47	Strangler Fig	Ficus aurea	30.5	35	30
Т3	Strangler Fig	Ficus aurea	51	35	60	T48	Strangler Fig	Ficus aurea	48	60	60
Τ4	Slash Pine	Pinus elliottii	27.6	30	50	T49	West Indies				
Т5	Live Oak	Quercus virginiana	18	20	5	140	Mahogany	Swietenia mahagoni	7	22	16
Т6	Live Oak	Quercus virginiana	19	30	40	T50	West Indies Mahogany	Swietenia mahagoni	8.7	22	16
Т7	Live Oak	Quercus virginiana	7.8 & 7	25	20		West Indies	e motorna managorn	0.7	22	10
Т8	Verawood	Bulnesia arborea	4	10	10	T51	Mahogany	Swietenia mahagoni	8.9	20	16
Т9	Verawood	Bulnesia arborea	2.5	8	2	T52	Live Oak	Quercus virginiana	4.5	18	8
T10	Coconut Palm	Cocos nucifera	9.3	25	14	T54	Live Oak	Quercus virginiana	4.6	16	12
T11	Verawood	Bulnesia arborea	5.5	16	15	T55	West Indies				
T12	Coconut Palm	Cocos nucifera	8.8	25	14	100	Mahogany	Swietenia mahagoni	9.3	22	24
T13	Live Oak	Quercus virginiana	20.6	25	30	T58	Royal Poinciana	Delonix regia	4	20	10
T14	Live Oak	Quercus virginiana	29.5	45	45	T59	Roval Poinciana	Delonix regia	8 + 6 + 7.5 + 6 5	20	24
T15	Live Oak	Quercus virginiana	26.2	45	40	Т60	Java Plum	Svzvgium cumini	6	20	24 20
T16	Live Oak	Quercus virginiana	30.8	45	40	T61	Java Plum	Syzygium cumini	22	40	30
T17	Strangler Fig	Ficus aurea	20.4	25	40	T63	Woman's Tonque	Albizia lebbeck			
T19	Live Oak	Quercus virginiana	23.5	45	40	T64	Woman's Tonque	Albizia lebbeck			
T20	Live Oak	Quercus virginiana	27.6	45	40	T65	Woman's Tonque	Albizia lebbeck			
T21	Strangler Fig	Ficus aurea	21.7	30	25	T66	Strangler Fig	Ficus aurea	72	50	50
T22	Live Oak	Quercus virginiana	30	40	42	T67	Royal Palm	Roystonea regia	16.7	50	18
T23	Live Oak	Quercus virginiana	17.5	30	30	T69	Strangler Fig	Ficus aurea	80	45	60
T24	Live Oak	Quercus virginiana	17	35	35	T104	Guava	Psidium guajava	7.2 & 4.5	14	16
T27	Live Oak	Quercus virginiana	26	35	22	T105	Live Oak	Quercus virginiana	4.6	16	10
T28	Live Oak	Quercus virginiana	21.5	25	10	T106	Non-Existent	C C			
T31	Strangler Fig	Ficus aurea	42	50	45	<b>T</b> 407	West Indies				
T32	Strangler Fig	Ficus aurea	48	50	45	1107	Mahogany	Swietenia mahagoni	9.2	25	20
Т33	Live Oak	Quercus virginiana	16.8	20	0	T108	Woman's Tongue	Albizia lebbeck	10.2+9.5+12.2	25	25
T34	Live Oak	Quercus virginiana	14.2	20	5						
T35	Live Oak	Quercus virginiana	17.2	25	20						
Т36	Live Oak	Quercus virginiana	24.2	28	30						
Т37	Live Oak	Quercus virginiana	14	12	8						
T38	Strangler Fig	Ficus aurea	42	50	50						
Т39	Strangler Fig	Ficus aurea	55	60	35						

![](_page_22_Figure_1.jpeg)

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![](_page_22_Figure_4.jpeg)

![](_page_22_Figure_5.jpeg)

TREE			DIAMETER	HEIGHT	CANOPY	
NO.			(IN)	(FT)	(FT)	
τ.			40	25	<u> </u>	DISPOSITION
	Strangler Fig	Ficus aurea	40	35	60	Remain
12		Ficus aurea	30.8	35	35	Remain
T3	Strangler Fig	Ficus aurea	51	35	60	Remain
T4	Slash Pine	Pinus elliottii	27.6	30	50	Remain
T5	Live Oak	Quercus virginiana	18	20	5	Remove (Nearly Dead)
T6	Live Oak	Quercus virginiana	19	30	40	Remain
T7	Live Oak	Quercus virginiana	7.8 & 7	25	20	Remain
Т8	Verawood	Bulnesia arborea	4	10	10	Remove (Conflict w/ Signage)
Т9	Verawood	Bulnesia arborea	2.5	8	2	Remove (Nearly Dead)
T10	Coconut Palm	Cocos nucifera	9.3	25	14	Remain
T11	Verawood	Bulnesia arborea	5.5	16	15	Remain
T12	Coconut Palm	Cocos nucifera	8.8	25	14	Relocate (Design Conflct)
T13	Live Oak	Quercus virginiana	20.6	25	30	Remain
T14	Live Oak	Quercus virginiana	29.5	45	45	Remain
T15	Live Oak	Quercus virginiana	26.2	45	40	Remain
T16	Live Oak	Quercus virginiana	30.8	45	40	Remain
T17	Strangler Fig	Ficus aurea	20.4	25	40	Remain
T19	Live Oak	Quercus virginiana	23.5	45	40	Remain
T20	Live Oak	Quercus virginiana	27.6	45	40	Remain
T21	Strangler Fig	Ficus aurea	21.7	30	25	Remove (Poor Condition)
T22	Live Oak	Quercus virginiana	30	40	42	Remain
T23	Live Oak	Quercus virginiana	17.5	30	30	Remain
T24	Live Oak	Quercus virginiana	17	35	35	Remain
T27	Live Oak	Quercus virginiana	26	35	22	Remove(Poor Condition)
T28	Live Oak	Quercus virginiana	21 5	25	10	Remove(Dead/Poor Condition)
T31	Strangler Fig	Ficus aurea	42	50	45	Remain
T32	Strangler Fig	Ficus aurea	48	50	45	Remain
T33	Live Oak	Quercus virginiana	16.8	20	0	Remove(Dead)
T34	Live Oak	Quercus virginiana	14.2	20	5	Remove(Nearly Dead)
T35	Live Oak	Quercus virginiana	17.2	25	20	Remain
T36	Live Oak	Quercus virginiana	24.2	28	30	Remain
T37	Live Oak	Quercus virginiana	14	12	8	Remove(Nearly Dead)
T38	Strangler Fig	Ficus aurea	42	50	50	Remain
Т39	Strangler Fig	Ficus aurea	55	60	35	Remove(Poor Condition)
T46	Strangler Fig	Ficus aurea	40	35	24	Remain
T47	Strangler Fig	Ficus aurea	30.5	35	30	Remain
T48	Strangler Fig	Ficus aurea	48	60	60	Remain
T49	West Indies Mahogany	Swietenia mahagoni	7	22	16	Remain
T50	West Indies Mahogany	Swietenia mahagoni	8.7	22	16	Remain

NO.		
	COMMON NAME	SCIEN
T51	West Indies Mahogany	Swiete
T52	Live Oak	Querci
T54	Live Oak	Querci
	West Indies	
T55	Mahogany	Swiete
T58	Royal Poinciana	Deloni
T59	Royal Poinciana	Deloni
T60	Java Plum	Syzyg
T61	Java Plum	Syzyg
T63	Woman's Tongue	Albizia
T64	Woman's Tongue	Albizia
T65	Woman's Tongue	Albizia
T66	Strangler Fig	Ficus a
T67	Royal Palm	Roysto
T69	Strangler Fig	Ficus a
T104	Guava	Psidiu
T105	Live Oak	Querc
T106	Non-Existent	
T107	West Indies	
1107	Mahogany	Swiete
T108	Woman's Tongue	Albizia
MITI	GATION SU	MM/
KEQUI		
TOTAL	DBH (IN) OF TREES	TO BE
40 REF	PLACEMENT TREES	@ 16' H
PROPC	SED MITIGATION	
SCIENT		СОМ
REPLA	CEMENT TREES	
Bulnesi	a arborea	VERA
Chrysop	ohyllum oliviforme	SATI
Olea Ca	apensis	BLAC
Quercu	s virginiana	SOU
$\sim \sim$		$\sim$
<u>NOTE:</u>		

![](_page_23_Figure_3.jpeg)

### TREE REMOVAL/TRANSPLANT SPECIFICATIONS

The A. B.	EXPLANATION OF NATURAL RESOURCE PRESERVATION PROCEDURES		
В.	sequence of operation is critical to the protection of the trees. Tree canopy pruning is to compensate for root loss and damage.		2. Clearing Contractor is to clear all remaining trees after the lifence is damaged, repair is to be performed immediate
	Fertilization is to stimulate root systems to heal quickly and grow back in root-pruned areas. It also		taken not to damage trees marked for preservation.
C.	Root pruning is to remove the roots with a trenching procedure that is less damaging to the roots than		to be mulched and stockpiled or hauled directly to mulched
D.	regular construction. Mulching is to increase moisture-holding capacity and keep the temperature of the soil more constant.		landscape plans for mulching). All excess wood chips show is complete.
ART 2	- DEFINITIONS		4. Clearing Contractor is to haul off all stumps.
A. B	Combo Fence - Combination silt and natural resource protection fence (see detail).	G.	Topsoil
D.	root zone is often much larger than the canopy. Shown on the plans as dashed circles.		1. All clean backfill/clean topsoil necessary for transplant ope
С.	DBH - Diameter Breast High - Indicates the location on the trunk, approximately 4.5' above ground, to measure the diameter of a tree.	1.1	Machine Due Trementant Operation
D.	Grade - Refers specifically to grade on the Significant Tree or Transplant Schedule. The grade of a tree refers to the overall health and appearance of the tree. The grades range from "A" being excellent to "D"	Π.	1. Dig transplant-receiving hole.
F	being hazardous. Preserve Trees - Trees that are to be saved in place		<ol> <li>Set spade dug root ball into receiving hole 4"-6" above ex</li> <li>Wash sand or topsoil into air pockets between root ball ar</li> </ol>
F.	Project Urban Forester - A representative, hired and paid for by the owner, that supervises		4. Install topsoil ring, 4" high, 10" wide, around perimeter o Saver Mycorrhizal Transplant Inoculant into topsoil ring. Se
G.	Protection Zones/Areas - Any area enclosed partially or completely by a fence shown on the natural		5. Install 4"-6" mulch from perimeter of root ball to within 6. Cover topsoil ring with 1" of mulch and extend mulch 4"-
Н.	resource plans. Spade Transplant – A tree transplanted using a tree spade machine.		root ball. 7 Water trapenlant
Ι.	Transplanted Trees – Trees that are to be moved by hand, spade, crane or gantry to another location.		
ART 3 · Ever	- PRODUCTS FOR TREE TREATMENT / effort shall be made to utilize chemicals of an organic or biodearadable nature in order to offer the	١.	1. Coordinate with Owner's Representative for location. Coordi
least all c	impact to the natural environment. Contractor is responsible for mixing, applying, and disposal of pemicals in accordance with strict adherence to manufacturer's directions, unless otherwise directed		Owner's Representative. 2. Install protection fencing surrounding holding area after all
in th	ese drawings. Chamings		instructed by Owner's Represenative. 3. Transplants shall be placed into the soil at the holding ar
А.	1. Recommended Fertilizer:		unacceptable by Project Landscape Architect. If unacceptable shall be relocated to a new location or excavated to a der
	a.   "XL Injecto Feed", product of Doggett Corp., Lebanon, New Jersey (908) 236–6335. Apply a 12/24/24 ratio with a dilution rate 1/3 more water than specified on bag.		and new approved topsoil installed. Transplants shall be be
	2. Recommended Wetting Agent: a. "APSA-80", product of Amway Corp. (800) 253-7088.		4. Install three (5) 12 tensiometers. One on opposite corner area. Project Landscape Architect shall adjust locations of
	3. Mycorrhizal Treatment:		5. General Contractor shall supply temporary irrigation to the shall consist of above the ground PVC or Polyethylene pipe
	Products of the same type from other sources shall not be excluded, provided they possess like		head coverage) and a controller. Set schedule per Part 7
	physical and functional characteristics and are approved by the Project Landscape Architect.	PART 5	- PENALTIES
B.	Insecticide Treatments. 1.     "Astro", a product of FMC Corporation. (800) 321–1362.	А.	1. If any damage to trees or other natural resources should a
C	Fencina Materials		the construction period, the Project Urban Forester shall a recommendations to the owner for repair by the General r
⊂.	1. Woven wire fence (Minimum 14.5 gauge maximum 6" mesh spacing). 2. Antio Vinvil Elagoing Colon International Oceanies Counting Coloristics (2000) (17,5010)		2. If any tree that is designated to be saved is deemed subs construction damage, at the sole discretion of Project Lan
	Artic vinyi riagging, color: international Orange. Forestry Suppliers Catalog (800) 647-5368. Artic Vinyl Flagging is required due to strength and longevity. No substitution without approval		apply: $a$ Trees $1^{"} - 12^{"}$ of trunk diameter massived at $1^{"}$ or
	of Project Urban Forester. 3. 6' T-Bar Post.		\$300.00 per diameter inch.
	4. T-Bar Post Caps. a. Rebar Caps. Brilliant Oranae mushroom type as manufactured by Mutual Industries		b. Trees 13" and above of trunk diameter measured at at \$400.00 per diameter inch.
	North (800) 523-0888 or equal. b R-4 T-Ban Post Cans as manufactured by Person (800) 434 8455 as count		c. If any tree designated to be saved is removed from owner's representative, the penalty will be \$600.00
	$\omega$ . $\nabla -4$ = Dur Fust Cups as manufactured by KammFence (800) 434-8455 or equal.	R	Repair of Damaaed Natural Resource Fences
₹. 1	- EXECUTION	2.	1. If any damage to Natural Resource Fences should occur by Contractor will be responsible for immediate renains of th
Α.	Tree Canopy Pruning Operation 1.   Trees to be pruned shall include only trees affected by construction or as designated on		as follows:
	Significant Tree or Transplant Schedule. This item is to be coordinated by the Project Urban Forester.		b. In the event the fence is not repaired within 24 hou
	2. All pruning shall be done in accordance with ANSI A300 (Part 1) Pruning. 3. Certified Arbanist shall perform all pruning		satisfaction, an additional fine of \$100.00 per day wil satisfactorily repaired.
	4. Pruning shall consist of the following methods:		c. In the event a natural resource is damaged due to for plus the cost of repair or replacement of the natura
	b. Interfering branch removal.		Landscape Architect will be imposed.
B.	c. Raising, see Sect. 5.6.4. Height to be 6' (min.) in parking lot areas only. Fertilization Operation	PART 6	- NATURAL RESOURCE PROTECTION SEQUENCE
	1. Unly trees affected by construction or as shown on the Tree Removal Plan shall be treated	А.	<ol> <li>Root Pruning and Root Barriers.</li> </ol>
	2. Trees specified to receive fertilizer shall be treated in the fall of 2008. Preserve Tree Injectable Fertilizer Treatment. See detail sheet.		<ol> <li>Natural Resource Fencing.</li> <li>Clearing and Grading.</li> </ol>
	a. Mix fertilizer with a dilution rate 1/3 more water than label instructions into a tank with a dilution $-133$ Gallons)		4. Tree Pruning. 5. Fertilization.
	b. Mix Wetting Agent at a rate of 5 oz. Per 100 gallons of fertilizer solution into same		6. Insecticide General Contractor's Surveyor shall stake all site improve
	tank with fertilizer. Agitate mix. c. Inject the mixture with a hydraulic injection system set at 100 to 150 p.s.i. for sandy	Ţ.	location of trenching and fencing operations.
	soils, 200 p.s.i. for silt/clay soils, into the upper 6-12 inches of soil with a soil probe. Inject at the rate of one third (1/3) gallon at each injection site.	В. С.	General Contractor's access to Fenced protection areas will be
	d.   Critical Root Zone areas shall be injected, where possible, in the Critical Root Zone area plus 2' beyond Critical Root Zone, but not beyond Root Prunes. See detail.	D.	with approval of owner's representative. Perform any excavation or grading required within the fenced r
	e. Fertilizer shall be installed prior to installation of any aeration systems.	E.	operation is to be supervised by the Project Landscape Architec Limit required grading to 3" cut or fill within the fenced tree t
	RETURNED TO THE SPECIFIER FOR PROOF OF USE.	F	supervised by the Owner's Representative. Clear by hand designated trees, shrubs, vines, and argundcover
	a. Mix fertilizer with a dilution rate 1/3 more water than label instructions into a tank with	G.	Do not install conduit, sprinklers, or any utility line in any crit
	agitation capability (15165. = 133 Gallons). b. Mix Wetting Agent at a rate of 5 oz. Per 100 gallons of fertilizer solution into same		- IDDICATION
	tank with fertilizer. Agitate mix. c.  Inject the mixture with a hydraulic injection system set at 100 to 150 p.s.i. for sandv	FARI 7 Ever	- IRRIGATION y effort shall be made to water the transplants as shown below.
	soils, 200 p.s.i. for silt/clay soils, into the upper 6-12 inches of soil with a soil probe. Inject at the rate of one third (1/3) gallon at each injection site	Arch mon	nitect and/or Owner's Representative shall inspect all irrigation zor ths and adjust settings accordingly to insure proper waterina. Wat
	d. See transplant details on this sheet for injection locations. EMPTY PRODUCT BACE TO BE STOCKELLED FOR INSPECTION BY DROUGHT	after	r planting. Tree Relocation Contractor shall water by hand or by splants after planting as required by Landscape Architect or Owne
	LANDSCAPE ARCHITECT PRIOR TO DISPOSAL.	irrig	ation is installed and operating. Irrigation Contractor shall install s
	4. Transplant Inoculant ∉ Biostimulant. See Detail Sheet. a. Use one 3 oz. Packet of MycorTree Tree Saver Transplant Mycorrhizal Transplant	shou A.	Transplant Irrigation Zones ¢ Holding Area Zones
	Inoculant for every 1-foot diameter of root ball. Mix inoculant in 10" wide topsoil ring around the root ball.		Use the following watering schedule for all transplants: 1. Set the controller to water for the following limits:
	b. Mix one 4 oz. Bag of MycorTree Tree Saver Injectable Mycorrhizal Inoculant and 4		First 90 days = 15 minutes, 4 times a week. (0.5" per 90 days - 270 days = 2 times a week.(1" per application
	packs (to equal I bound) PHC BioPack per 100 aglions of water		270 days on = 2 times a week (0.5" per application = 1"
	packs (to equal 1 pound) PHC BioPack per 100 gallons of water. c. Agitate for 10 minutes. d. Inject the mixture with a budgewie injection and the balloo is 150 minutes.		privation within current watering restrictions as appliants
	packs (to equal 1 pound) PHC BioPack per 100 gallons of water. c. Agitate for 10 minutes. d. Inject the mixture with a hydraulic injection system set at 100 to 150 p.s.i. for sandy soils, 200 p.s.i. for silt/clay soils, into the upper 6-12 inches of soil with a soil probe.		Irrigation within current watering restrictions, as applicab
	packs (to equal I pound) PHC BioPack per 100 gallons of water. c. Agitate for 10 minutes. d. Inject the mixture with a hydraulic injection system set at 100 to 150 p.s.i. for sandy soils, 200 p.s.i. for silt/clay soils, into the upper 6-12 inches of soil with a soil probe. Inject at the rate of one third (1/3) gallon at each injection site. See transplant details on this sheet for injection locations.		Irrigation within current watering restrictions, as applicat
	<ul> <li>packs (to equal 1 pound) PHC BioPack per 100 gallons of water.</li> <li>c. Agitate for 10 minutes.</li> <li>d. Inject the mixture with a hydraulic injection system set at 100 to 150 p.s.i. for sandy soils, 200 p.s.i. for silt/clay soils, into the upper 6-12 inches of soil with a soil probe. Inject at the rate of one third (1/3) gallon at each injection site. See transplant details on this sheet for injection locations.</li> <li>EMPTY PRODUCT BAGS TO BE STOCKPILED FOR INSPECTION BY PROJECT</li> </ul>		Irrigation within current watering restrictions, as applicab
	<ul> <li>packs (to equal I pound) PHC BioPack per 100 gallons of water.</li> <li>c. Agitate for 10 minutes.</li> <li>d. Inject the mixture with a hydraulic injection system set at 100 to 150 p.s.i. for sandy soils, 200 p.s.i. for silt/clay soils, into the upper 6-12 inches of soil with a soil probe. Inject at the rate of one third (1/3) gallon at each injection site. See transplant details on this sheet for injection locations.</li> <li>EMPTY PRODUCT BAGS TO BE STOCKPILED FOR INSPECTION BY PROJECT LANDSCAPE ARCHITECT PRIOR TO DISPOSAL.</li> <li>5. Transplant Maintenance</li> </ul>		Irrigation within current watering restrictions, as applicab
	<ul> <li>c. Agitate for 10 minutes.</li> <li>d. Inject the mixture with a hydraulic injection system set at 100 to 150 p.s.i. for sandy soils, 200 p.s.i. for silt/clay soils, into the upper 6-12 inches of soil with a soil probe. Inject at the rate of one third (1/3) gallon at each injection site. See transplant details on this sheet for injection locations.</li> <li>EMPTY PRODUCT BAGS TO BE STOCKPILED FOR INSPECTION BY PROJECT LANDSCAPE ARCHITECT PRIOR TO DISPOSAL.</li> <li>5. Transplant Maintenance         <ul> <li>a. Approximately one year after planting, the Tree Relocation Contractor shall refertilize all transplants utilizing the same procedure.</li> </ul> </li> </ul>		Irrigation within current watering restrictions, as applicab
	<ul> <li>c. Agitate for 10 minutes.</li> <li>d. Inject the mixture with a hydraulic injection system set at 100 to 150 p.s.i. for sandy soils, 200 p.s.i. for silt/clay soils, into the upper 6-12 inches of soil with a soil probe. Inject at the rate of one third (1/3) gallon at each injection site. See transplant details on this sheet for injection locations.</li> <li>EMPTY PRODUCT BAGS TO BE STOCKPILED FOR INSPECTION BY PROJECT LANDSCAPE ARCHITECT PRIOR TO DISPOSAL.</li> <li>5. Transplant Maintenance         <ul> <li>a. Approximately one year after planting, the Tree Relocation Contractor shall refertilize all transplants utilizing the same procedure.</li> <li>c. Insecticide Operation</li> <li>i. Apply "Astro" as a topical solution if recommended by Project Landscape Architect or by these planting.</li> </ul> </li> </ul>	ans.	Irrigation within current watering restrictions, as applicab
	<ul> <li>c. Agitate for 10 minutes.</li> <li>d. Inject the mixture with a hydraulic injection system set at 100 to 150 p.s.i. for sandy soils, 200 p.s.i. for silt/clay soils, into the upper 6-12 inches of soil with a soil probe. Inject at the rate of one third (1/3) gallon at each injection site. See transplant details on this sheet for injection locations.</li> <li>EMPTY PRODUCT BAGS TO BE STOCKPILED FOR INSPECTION BY PROJECT LANDSCAPE ARCHITECT PRIOR TO DISPOSAL.</li> <li>5. Transplant Maintenance <ul> <li>a. Approximately one year after planting, the Tree Relocation Contractor shall refertilize all transplants utilizing the same procedure.</li> </ul> </li> <li>C. Insecticide Operation <ul> <li>1. Apply "Astro" as a topical solution if recommended by Project Landscape Architect or by these pl Notify Project Landscape Architect if an infestation is noticed. Apply around base of trunk to soil trunk and any limb 1/3 the size of the trunk to 25'=30' biab. Insure complete coverage.</li> </ul> </li> </ul>	ans. line,	Irrigation within current watering restrictions, as applicab
	<ul> <li>c. Agitate for 10 minutes.</li> <li>d. Inject the mixture with a hydraulic injection system set at 100 to 150 p.s.i. for sandy soils, 200 p.s.i. for silt/clay soils, into the upper 6-12 inches of soil with a soil probe. Inject at the rate of one third (1/3) gallon at each injection site. See transplant details on this sheet for injection locations.</li> <li>EMPTY PRODUCT BAGS TO BE STOCKPILED FOR INSPECTION BY PROJECT LANDSCAPE ARCHITECT PRIOR TO DISPOSAL.</li> <li>5. Transplant Maintenance <ul> <li>a. Approximately one year after planting, the Tree Relocation Contractor shall refertilize all transplants utilizing the same procedure.</li> </ul> </li> <li>C. Insecticide Operation <ul> <li>I. Apply "Astro" as a topical solution if recommended by Project Landscape Architect or by these pl Notify Project Landscape Architect if an infestation is noticed. Apply around base of trunk to soil trunk and any limb 1/3 the size of the trunk to 25'-30' high. Insure complete coverage. Reapply "Astro" 2-3 months after initial application utilizing same procedure.</li> </ul> </li> </ul>	ans. line,	Irrigation within current watering restrictions, as applicab
	<ul> <li>c. Agitate for 10 minutes.</li> <li>d. Inject the mixture with a hydraulic injection system set at 100 to 150 p.s.i. for sandy soils, 200 p.s.i. for silt/clay soils, into the upper 6-12 inches of soil with a soil probe. Inject at the rate of one third (1/3) gallon at each injection site. See transplant details on this sheet for injection locations.</li> <li>EMPTY PRODUCT BAGS TO BE STOCKPILED FOR INSPECTION BY PROJECT LANDSCAPE ARCHITECT PRIOR TO DISPOSAL.</li> <li>5. Transplant Maintenance <ul> <li>a. Approximately one year after planting, the Tree Relocation Contractor shall refertilize all transplants utilizing the same procedure.</li> </ul> </li> <li>C. Insecticide Operation <ul> <li>I. Apply "Astro" as a topical solution if recommended by Project Landscape Architect or by these pl Natify Project Landscape Architect if an infestation is noticed. Apply around base of trunk to soil trunk and any limb 1/3 the size of the trunk to 25'-30' high. Insure complete coverage. Reapply "Astro" 2-3 months after initial application utilizing same procedure.</li> </ul> </li> <li>2. Follow all manufacturers' recommendations concerning application when applying "Astro". Read all warning labels. Any pets, as well as, the pets food and water bowls should be removed</li> </ul>	ans. line,	Irrigation within current watering restrictions, as applicab
	<ul> <li>c. Agitate for 10 minutes.</li> <li>d. Inject the mixture with a hydraulic injection system set at 100 to 150 p.s.i. for sandy soils, 200 p.s.i. for silt/clay soils, into the upper 6-12 inches of soil with a soil probe. Inject at the rate of one third (1/3) gallon at each injection site. See transplant details on this sheet for injection locations.</li> <li>EMPTY PRODUCT BAGS TO BE STOCKPILED FOR INSPECTION BY PROJECT LANDSCAPE ARCHITECT PRIOR TO DISPOSAL.</li> <li>5. Transplant Maintenance <ul> <li>a. Approximately one year after planting, the Tree Relocation Contractor shall refertilize all transplants utilizing the same procedure.</li> </ul> </li> <li>C. Insecticide Operation <ul> <li>Apply "Astro" as a topical solution if recommended by Project Landscape Architect or by these pl Natify Project Landscape Architect if an infestation is noticed. Apply around base of trunk to soil trunk and any limb 1/3 the size of the trunk to 25'-30' high. Insure complete coverage. Reapply "Astro" 2-3 months after initial application utilizing same procedure.</li> </ul> </li> <li>2. Follow all manufacturers' recommendations concerning application when applying "Astro". Read all warning labels. Any pets, as well as, the pets food and water bowls should be removed from the area and any swimming pools should be covered. Coordinate with Project Urban Forester for further instruction</li> </ul>	ans. line,	Irrigation within current watering restrictions, as applicat
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ring Contractor is to clear all remaining trees after the Natural Resource Fencing is installed. nce is damaged, repair is to be performed immediately. See Fence Penalties. Care must be not to damage trees marked for preservation. wood from removals shall be hauled from the site the same day, except for tops. All tops are mulched and stockpiled or hauled directly to mulched areas, if scheduling permits. (See cape plans for mulching). All excess wood chips should be hauled off site after landscaping mplete.

ring Contractor is to haul off all stumps. burn pits if applicable must be approved by the Project Urban Forester and owner.

lean backfill/clean topsoil necessary for transplant operations shall fall within the limits he planting specifications, located elsewhere in the contract documents.

### Dug Transplant Operation transplant-receiving hole.

spade dug root ball into receiving hole 4"-6" above existing grade.

a sand or topsoil into air pockets between root ball and receiving hole. all topsoil ring, 4" high, 10" wide, around perimeter of root ball. Mix MycorrTree Tree Mycorrhizal Transplant Inoculant into topsoil ring. See Part 4 Section B for procedure. all 4"-6" mulch from perimeter of root ball to within 6" of tree trunk. er topsoil ring with 1" of mulch and extend mulch 4"-6" deep, 6" away from perimeter of

### er transplant.

dinate with Owner's Representative for location. Coordinate construction and scheduling with er's Representative. all protection fencing surrounding holding area after all transplants have been moved unless otherwise

ucted by Owner's Represenative. nsplants shall be placed into the soil at the holding area unless the soil is deemed ceptable by Project Landscape Architect. If unacceptable soil is encountered, the holding area be relocated to a new location or excavated to a depth determined by Project Landscape Architect new approved topsoil installed. Transplants shall be backfilled with approved topsoil. all three (3) 12" tensiometers. One on opposite corners and one in the middle of the holding . Project Landscape Architect shall adjust locations of tensiometers per observations in the field. eral Contractor shall supply temporary irrigation to the holding area. Temporary irrigation consist of above the ground PVC or Polyethylene pipe, spray or rotor heads (with head to

### Damaged Trees

y damage to trees or other natural resources should occur by accident or negligence during construction period, the Project Urban Forester shall appraise the damage and make mmendations to the owner for repair by the General Contractor.

ny tree that is designated to be saved is deemed substantially damaged or dead due to cruction damage, at the sole discretion of Project Landscape Architect, the following penalties will

Trees 1" - 12" of trunk diameter, measured at 1' from the ground will be valued at \$300.00 per diameter inch.

Trees 13" and above of trunk diameter measured at 4.5' from the ground will be valued at \$400.00 per diameter inch. If any tree designated to be saved is removed from the site without permission of the owner's representative, the penalty will be \$600.00 per inch.

### Damaged Natural Resource Fences

y damage to Natural Resource Fences should occur by accident or negligence, the General ractor will be responsible for immediate repairs of the initial damage. Fines will be imposed ollows:

First time offense, a fine of \$200.00 will be imposed. In the event the fence is not repaired within 24 hours to the Owner's Representative's satisfaction, an additional fine of \$100.00 per day will be imposed, until the fence is satisfactorily repaired.

In the event a natural resource is damaged due to fence being down, a fine of \$200.00 plus the cost of repair or replacement of the natural resource as appraised by the Project Landscape Architect will be imposed.

### RESOURCE PROTECTION SEQUENCE

ence of tree treatment and preservation measures shall be:

### aring and Grading. Pruning.

neral Contractor's Surveyor shall stake all site improvements in order to facilitate accurate ation of trenching and fencing operations. and repair Natural Resource fencing during site construction operations.

Contractor's access to Fenced protection areas will be permitted only

any excavation or grading required within the fenced root zone areas by hand. This is to be supervised by the Project Landscape Architect or Owner's Representative. uired grading to 3" cut or fill within the fenced tree root zone areas. All grading to be by the Owner's Representative.

hand designated trees, shrubs, vines and groundcover from protected root zone areas. istall conduit, sprinklers, or any utility line in any critical root zone area without the of the Project Landscape Architect.

nall be made to water the transplants as shown below. The Landscape Owner's Representative shall inspect all irrigation zones during the initial irrigation

ust settings accordingly to insure proper watering. Water in all transplants immediately Tree Relocation Contractor shall water by hand or by temporary irrigation, all planting as required by Landscape Architect or Owner's Representative until permanent talled and operating. Irrigation Contractor shall install systems and set controllers as

the controller to water for the following limits: st 90 days = 15 minutes, 4 times a week. (0.5" per application = 2" per week) days - 270 days = 2 times a week. (1" per application = 2" per week)

) days on = 2 times a week.(0.5" per application = 1" per week) gation within current watering restrictions, as applicable.

MOLITION PROCED SEQUENCE PERFORM ANY 2. INSTALL PROT IF REQUIRED. 3. PROJECT URBA BACKHOE, TRACKHOE SHALL BE PRES COMPLETE OPE OR SIMILAR EQUIPMENT 4. CAREFULLY EX TO SUBGRADE. 5. INVESTIGATE SIZE OF ROOT 6. LOSSEN SOIL ROOTS PRESEN 7. INSTALL AERA CLEAN BACKFIL ALL DEMOLITION PROCEDURES SHALL OCCUR OUTSIDE THE PROTECTION AREA. COORDINATE WITH PROJECT URBAN FORESTER

SEQUENCE 1. PERFORM ANY ROOT PRUNING. 2. INSTALL PROTECTION FENCING.
 3. BREAK OR CUT CURB A 6<sup>1</sup>

OPERATIONS W/ PROJECT

6. INSTALL NEW BACKFILL OR CURB AWAY

ALL DEMOLITION PROCEDURES

PROTECTION AREA. COORDINATE

WITH PROJECT URBAN FORESTER

SHALL OCCUR OUTSIDE THE

ROTATE

FROM TREE

SECTION OF CURB. 4. CAREFULLY ROTATE CURB SECTION AWAY FROM ROOTS. 5. COORDINATE ALL DEMOLITION

URBAN FORESTER.

SIDEWALK/CURB.

BACKHOE, TRACKHOE

OR SIMILAR EQUIPMENT

![](_page_24_Figure_42.jpeg)

![](_page_24_Figure_43.jpeg)

(C) TREE/SHRUB PROTECTION

TREE TREE ROOTS PLAN PROTECTION FENCE SEE PLAN	Sunshine Exponential Constraints of the constraints		
I AFRATION SYSTEM OR		SPACE RESERVED FOR CIT	TY OF MIAMI APPROVAL STAMP ITY OF MIAMI APPROVAL STAMP ITY OF MIAMI APPROVEMENTS ITY OF CAPITAL IMPROVEMENTS IN 2nd Avenue, 8th Floor Miami, FL 33130
ALL AERATION STISTENTOR N BACKFILL, SEE PLAN. PROTECTION F SEE PLAN PROTECTION PROTECTION AREA AREA	ENCE	PBA FERN ISLE PARK REDEVELOP CITY OF MIAMI, PROJECT NO. B-4 2304 N.W. 14TH STREET, MIAMI, FL	TITLE: TREE DISPOSITION NOT DETAILS
<ul> <li>FALLATION NOTES:</li> <li>POST SELECTION SHOULD BE BASED ON AND THE LENGTH OF TIME FENCE WILL E</li> <li>DRIP LINE REFERS TO THE THE AREA DE CIRCUMFERENCE OF A TREE CANOPY WHE ONTO THE GROUND. REFER TO ARBORIST</li> <li>COORDINATE ALL IMPROVEMENTS WITHIN CERTIFIED ARBORIST.</li> <li>NO CONSTRUCTION MATERIALS OR ACTIV PROTECTION ZONE AREA UNLESS SUPERV CERTIFIED ARBORIST. REFER TO ARBORI ROOT ZONE (CRZ).</li> <li>TREE PROTECTION ZONE SHALL BE KEPT</li> <li>ALL EXCAVATION AND REMOVAL OF HARE PROTECTION ZONE SHALL BE DONE EITHE THE USE OF AN AIR SPADE.</li> <li>THE MINIMUM DISTANCE BETWEEN AN OP SHALL BE BETWEEN 6" - 1'-0" FOR EVER (REFER TO DBH IN ARBORIST REPORT). BE 10'-0".</li> <li>BARRIER TO FORM CONTINUOUS CIRCLE A OF TREES.</li> </ul>	EXPECTED STRENGTH NEEDS THE IN PLACE. EFINED BY THE OUTERMOST THE WATER DRIPS FROM AN REPORT. THE TREE PROTECTION WITH THES ALLOWED IN THE TREE ISED / COORDINATED WITH ST REPORT FOR CRITICAL CLEAR OF DEBRIS. DSCAPE WITHIN THE TREE TR MANUALLY OR THROUGH EN TRENCH AND ANY TREE Y INCH OF TRUNK DIAMETER MINIMUM CLEARANCE SHALL	THIS ITEM HAS BEEN DIGITALLY SIGNED AN SEALED BY GEORGE E. PUIG, ON THE DATI ADJACENT TO THE SEAL.         PRINTED COPIES OF THIS DOCUMENT ARE CONSIDERED SIGNED AND SEALED AND THIS SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.         No.       REVISIONS -         01       PERMIT SET         02       PERMIT SET         01       DERMIT SET	Image: Not
<u>ection fence/bar</u>	RIER DETAIL NTS	PAGE No.	SHEET No. L-250

![](_page_25_Picture_0.jpeg)

Call 811 or www.sunshine811.com two ful located and marked.

![](_page_25_Figure_2.jpeg)

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	DETAIL	SYMBOL	LIGHTING DESCRIPTION	DETAIL					
	2,3,4 / EX-5		LIGHT POLE	L-500 / SEE MEP					
	/ EX-4	LI-IO2	LIGHTED BOLLARD	L-500 / SEE MEP					
ON)	SHEETS EX-I, EX-2, EX-3	LI-I03	MONUMENT FLOOD LIGHT	L-500 / SEE MEP					
	I / EX-I		IRRIGATION						
	3 / EX-4	<u>SYMBOL</u>	DESCRIPTION	DETAIL					
	2 / EX-4	[ <b> R</b> - 0 ]	38" X 30" CONCRETE PAD WITH 3HP BOOSTER PUMP AND GATE	/ L <b>-650</b>					
	I / L-353								
	/ EX-6	GENERAL SITE N	IOTES:						
	2 / EX-6	1. LIMITS OF SCOPE DEFINED BY PROPERTY LINE. 2. REFER TO CIVIL ENGINEER'S DRAWINGS FOR GRADING, SURFACE DRAINAGE,							
	4 / EX-4	UTILITY LOCATIONS, AND R.O.W. 3. REFER TO CIVIL ENGINEER'S DRAWINGS FOR SPOT ELEVATIONS AND FINISH							
	2 / EX-I	FLOOR ELEVATIONS. 4. GENERAL CONTRACTOR, SUBCONTRACTORS, AND INSTALLERS SHALL CROSS							
	3 / L-352	REFERENCE ARCHITECTURE, ENGINEERING, AND LANDSCAPE DRAWINGS THROUGHOUT IMPLEMENTATION TO ENSURE THE DESIGN INTENT IS MET. ANY DISCREPANCIES SHALL BE NOTED AND BROUGHT TO THE GENERAL CONTRACTOR'S ATTENTION FOR CLARIFICATION WITH THE LANDSCAPE ARCHITECT. 5 CONTRACTOR SHALL BE RESPONSIBLE FOR VISITING SITE PRIOR TO							
	I / L-352								
	3 / L-352								
	3 / EX-6	BIDDING IN CONDITIONS	ORDER TO FAMILIARIZE THEMSELVES WITH ALL EX AFFECTING THE WORK, INCLUDING BUT NOT LIMIT	KISTING TED TO,					
	4 / L-353	PRIVATE AND PUBLIC UTILITIES ON AND OFF SITE, ACCESS ROADS, AND							
	TO BE PROVIDED BY CITY	6. CONTRACTOR MUST NOTIFY LANDSCAPE ARCHITECT IMMEDIATELY OF ANY							
	REFER TO ARCHITECT'S DRAWINGS	AND CONTRACT DOCUMENTS, AS WELL AS ANY ERRORS OR OMISSIONS ON THE DRAWINGS PRIOR TO PROCEEDING WITH THE WORK OR SHOP							

![](_page_26_Figure_0.jpeg)

![](_page_27_Figure_0.jpeg)

5. CONTRACTOR SHALL FIELD VERIFY EXISTING AS-BUILT CONDITIONS PRIOR TO BID AND COMMENCEMENT OF CONSTRUCTION.

<image/> <text><text></text></text>	SPACE RESERVED FOR CITY O	DF MIAMI APPROVAL STAMP
	PBA FERN ISLE PARK REDEVELOPMENT CITY OF MIAMI, PROJECT NO. B-40543 2304 N.W. 14TH STREET, MIAMI, FL 33125	SHEET TITE: HARDSCAPE DETAILS
	THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY GEORGE E. PUIG, ON THE DATE ADJACENT TO THE SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.	STATE OF OF OF OF OF OF OF OF
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	PAGE No.	THEET NO. L-351

![](_page_28_Figure_0.jpeg)

![](_page_28_Figure_1.jpeg)

![](_page_29_Figure_0.jpeg)

![](_page_30_Figure_0.jpeg)

1/29/2014

Page 7 of 9 1/29/2014

<u>N(</u>	
:	

630-3 Grill Pedestal Mounted Cooking Grill

Firebox shall have a length of 20", a width of 15", and a height of 10". Sides shall be fabricated of 10 gauge steel and the floor of 3/16" steel plate for added strength. For safety, corners of firebox shall be rounded. For drainage, holes shall be provided in the rear corners of side plates. The theft resistant cooking grate shall be fabricated from 1/2" steel bars with a cooking surface of 300 sq. inches. Support bars for grate will be of heavier 5/8" round steel, with cool coil spring grip handles on each side. Grate will adjust to four convenient levels. Finish will be non-toxic rust resistant, black paint or hot dipped galvanized. Support post will be 3-1/2" O.D. galvanized steel pipe, 40" in levels. 40" in length, for setting in concrete.

ROTATING FLIP GRILL SCALE: N.T.S.

.

mutt mitt

SI

![](_page_30_Picture_9.jpeg)

NOTES: 1. INSTALL AS PER MANUFACTURER'S

- SPECIFICATIONS. 2. CONTRACTOR TO PROVIDE PRODUCT DATA, SHOP DRAWINGS, AND FINISH SAMPLES FOR APPROVAL BY
- LANDSCAPE ARCHITECT PRIOR TO PROCUREMENT, FABRICATION, AND INSTALLATION. 3. PRIOR TO PROCUREMENT, FABRICATION,
- AND INSTALLATION CONTRACTOR SHALL FURNISH ALL NECESSARY ANCHORING DEVICES FOR COMPLIANCE WITH MANUFACTURER'S SPECIFICATIONS FOR ANCHORING.
- 4. ANCHOR WITH CONCRETE FOOTER MIN. 2' FROM EDGE OF SIDEWALK.

COMPLETE STATION WITH 400, 2-PLY MUTT MITTS ITEM#: 1004/1006

2 PET STATION SCALE: N.T.S.

![](_page_30_Picture_19.jpeg)

![](_page_30_Figure_20.jpeg)

### <u>IOTE</u>S

- CONTRACTOR TO PROVIDE PRODUCT DATA, SHOP DRAWINGS, AND FINISH SAMPLES FOR APPROVAL BY LANDSCAPE
- ARCHITECT PRIOR TO PROCUREMENT, FABRICATION, AND INSTALLATION. 2. CONTRACTOR TO VERIFY AND COMPLY TO HIGHEST CITY, STATE, AND FEDERAL REGULATIONS AND REQUIREMENTS FOR PUBLIC CHARCOAL GRILLS.
- 3. INSTALL AS PER MANUFACTURER'S SPECIFICATIONS.
- 4. PRIOR TO PROCUREMENT AND INSTALLATION CONTRACTOR SHALL FURNISH ALL NECESSARY ANCHORING DEVICES FOR COMPLIANCE WITH MANUFACTURER'S SPECIFICATIONS FOR ANCHORING.
- 5. PEDESTAL MOUNTED (3.5" POST)

### SPECIFICATIONS:

MODEL: 630-3

MANUFACTURER: ULTRA SITE

1. INSTALL AS PER MANUFACTURER'S SPECIFICATIONS. 2. REFER TO DETAIL 4 / EX-06 FOR SURFACE FINISH GRADE.

### **INSTALLATION INSTRUCTIONS**

Name: Custom Announcement Sign This unit ships in 1 separately wrapped component.

![](_page_30_Picture_33.jpeg)

Page 9 of 9

# 

Dimensions

![](_page_30_Figure_37.jpeg)

![](_page_30_Picture_38.jpeg)

![](_page_30_Picture_39.jpeg)

**Greenfields installation instructions: 1. All units MUST be fully assembled,** leveled, and braced in place in the footing hole before any concrete is poured. **2.** A monolithic pour MUST be used for concrete. (All concrete must be poured at one time)

3. Concrete requirement: 3250 psi or better. 4. The top of the blue tape attached to the posts on the equipment is final top surface level.

5. All screws must be attached using LocTite. 6. It is recommended to wait a minimum of one week after concrete is poured before equipment is used. 7. The use of Decomposed Granite Surfacing (DG) is known to accelerate normal wear & tear of footrests.

![](_page_30_Picture_43.jpeg)

Questions? Please call 888-315-9037 x105

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During installation, please be sure to also refer to guidelines in Greenfields' Preliminary Instructions document. In order to honor our commitment to quality and safety, Greenfields Outdoor Fitness reserves the right to make changes and revise the design specifications without notice.

![](_page_30_Picture_47.jpeg)

### INSTALLATION INSTRUCTIONS Model: GR2005-1-21

Name: 4-Person Lower Body Combo This unit ships in 2 separately wrapped components.

![](_page_31_Figure_2.jpeg)

![](_page_31_Picture_3.jpeg)

### **Greenfields installation instructions: 1. All units MUST be fully assembled,** leveled, and braced in place in the footing hole before any concrete is poured. 2. A monolithic pour MUST be used for concrete. (All concrete must be poured at one time)

3. Concrete requirement: 3250 psi or better. 4. The top of the blue tape attached to the posts on the equipment is final top surface level. 5. All screws must be attached using LocTite.

6. It is recommended to wait a minimum of one week after concrete is poured before equipment is used. 7. The use of Decomposed Granite Surfacing (DG) is known to accelerate normal wear & tear of footrests.

![](_page_31_Picture_7.jpeg)

Questions? Please call 888-315-9037 x105

During installation, please be sure to also refer to guidelines in Greenfields' Preliminary Instructions document. © 2015 Greenfields Outdoor Fitness, Inc. In order to honor our commitment to quality and safety, Greenfields Outdoor Fitness reserves the right to make changes and revise the design specifications without notice.

- NOTE: 1. INSTALL AS PER MANUFACTURER'S SPECIFICATIONS.
- 2. REFER TO DETAIL 4 / EX-06 FOR SURFACE FINISH GRADE. 1) OUTDOOR EXERCISE EQUIPMENT

### INSTALLATION INSTRUCTIONS Model:GR2005-1-26

Name: 2-Person Cross Country Ski This unit ships in 2 separately wrapped components.

![](_page_31_Figure_15.jpeg)

door Fitness Promoting Wellness & Fighting Obesity One Community at a Time.

**Greenfields installation instructions:** 1. All units MUST be fully assembled, leveled, and braced in place in the footing hole before any concrete is poured. 2. A monolithic pour MUST be used for concrete. (All concrete must be poured

at one time) 3. Concrete requirement: 3250 psi or better. 4. The top of the blue tape attached to the posts on the equipment is final top surface level. 5. All screws must be attached using LocTite. 6. It is recommended to wait a minimum of one week after concrete is poured before equipment is used. 7. The use of Decomposed Granite Surfacing (DG) is known to accelerate normal wear & tear of footrests.

![](_page_31_Picture_19.jpeg)

Questions? Please call 888-315-9037 x105

During installation, please be sure to also refer to guidelines in Greenfields' Preliminary Instructions document. In order to honor our commitment to quality and safety, Greenfields Outdoor Fitness reserves the right to make changes and revise the design specifications without notice. NOTE:

1. INSTALL AS PER MANUFACTURER'S SPECIFICATIONS. 2. REFER TO DETAIL 4 / EX-06 FOR SURFACE FINISH GRADE.

OUTDOOR EXERCISE EQUIPMENT (3) SCALE: N.T.S.

### **INSTALLATION INSTRUCTIONS** Model:GR2005-1-22

40" -

Name: Pendulum, Abs, & Dip station This unit ships in 2 separately wrapped components.

![](_page_31_Picture_27.jpeg)

**Greenfields installation instructions: 1. All units MUST be fully assembled,** leveled, and braced in place in the footing hole before any concrete is poured. 2. A monolithic pour MUST be used for concrete. (All concrete must be poured at one time)

3. Concrete requirement: 3250 psi or better. 4. The top of the blue tape attached to the posts on the

equipment is final top surface level.

- 5. All screws must be attached using LocTite.
- 6. It is recommended to wait a minimum of one week after concrete is poured before equipment is used. 7. The use of Decomposed Granite Surfacing (DG) is known to accelerate normal wear & tear of footrests.

![](_page_31_Picture_33.jpeg)

Questions? Please call 888-315-9037 x105

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During installation, please be sure to also refer to guidelines in Greenfields' Preliminary Instructions document. In order to honor our commitment to quality and safety, Greenfields Outdoor Fitness reserves the right to make changes and revise the design specifications without notice. NOTE:

Dimensions

Surface Level

1. INSTALL AS PER MANUFACTURER'S SPECIFICATIONS. 2. REFER TO DETAIL 4 / EX-06 FOR SURFACE FINISH GRADE.

Fighten Screws fully

inside backrest and

on main post.

∠\_\_\_\_ Optionak

<sup>→</sup> Surfacing

Ensure distance

bars is equal on both sides.

/ between handle- ---- 24" -----

2) OUTDOOR EXERCISE EQUIPMENT

![](_page_31_Picture_38.jpeg)

### INSTALLATION INSTRUCTIONS Model:GR2005-1-42

Name: 2-Person Back & Arms Combo This unit ships in 1 separately wrapped component.

![](_page_31_Figure_41.jpeg)

![](_page_31_Picture_42.jpeg)

Promoting Wellness & Fighting Obesity One Community at a Time. **Greenfields installation instructions:** 

1. All units MUST be fully assembled, leveled, and braced in place in the footing hole before any concrete is poured. 2. A monolithic pour MUST be used for concrete. (All concrete must be poured at one time)

3. Concrete requirement: 3250 psi or better. 4. The top of the blue tape attached to the posts on the equipment is final top surface level.

5. All screws must be attached using LocTite.

6. It is recommended to wait a minimum of one week

after concrete is poured before equipment is used. 7. The use of Decomposed Granite Surfacing (DG) is known to accelerate normal wear & tear of footrests.

![](_page_31_Picture_49.jpeg)

Questions? Please call 888-315-9037 x105

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During installation, please be sure to also refer to guidelines in Greenfields' Preliminary Instructions document. In order to honor our commitment to quality and safety, Greenfields Outdoor Fitness reserves the right to make changes and revise the design specifications without notice. NOTE

1. INSTALL AS PER MANUFACTURER'S SPECIFICATIONS. 2. REFER TO DETAIL 4 / EX-06 FOR SURFACE FINISH GRADE.

4 OUTDOOR EXERCISE EQUIPMENT

![](_page_31_Picture_54.jpeg)

![](_page_31_Picture_55.jpeg)

© 2015 Greenfields Outdoor Fitness, Inc.

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**EX-2** 

**INSTALLATION INSTRUCTIONS** Model:GR2005-1-47-W

Name: 2-Person Accessible Vertical Press U.S. Pat. No. 9,079,069 B1 This unit ships in 1 separately wrapped component.

![](_page_32_Figure_2.jpeg)

![](_page_32_Figure_3.jpeg)

![](_page_32_Picture_4.jpeg)

**Greenfields installation instructions:** 1. All units MUST be fully assembled, leveled, and braced in place in the footing hole before any concrete is poured. **2. A monolithic pour MUST be used for** concrete. (All concrete must be poured at one time)

3. Concrete requirement: 3250 psi or better. 4. The top of the blue tape attached to the posts on the equipment is final top surface level. 5. All screws must be attached using LocTite. 6. It is recommended to wait a minimum of one week

after concrete is poured before equipment is used. 7. The use of Decomposed Granite Surfacing (DG) is known to accelerate normal wear & tear of footrests.

![](_page_32_Picture_8.jpeg)

Questions? Please call 888-315-9037 x105

During installation, please be sure to also refer to guidelines in Greenfields' Preliminary Instructions document. In order to honor our commitment to quality and safety, Greenfields Outdoor Fitness reserves the right to make changes and revise the design specifications without notice. © 2015 Greenfields Outdoor Fitness, Inc.

NOTE: INSTALL AS PER MANUFACTURER'S SPECIFICATIONS. 2. REFER TO DETAIL 4 / EX-06 FOR SURFACE FINISH GRADE.

1) OUTDOOR EXERCISE EQUIPMENT

![](_page_32_Figure_13.jpeg)

door Fitnes: Promoting Wellness & Fighting Obesity One Community at a Time.

Greenfields installation instructions: 1. All units MUST be fully assembled, leveled, and braced in place in the footing hole before any concrete is poured. **2. A monolithic pour MUST be used for** concrete. (All concrete must be poured at one time)

3. Concrete requirement: 3250 psi or better. 4. The top of the blue tape attached to the posts on the equipment is final top surface level. 5. All screws must be attached using LocTite. 6. It is recommended to wait a minimum of one week after concrete is poured before equipment is used. 7. The use of Decomposed Granite Surfacing (DG) is known to accelerate normal wear & tear of footrests

![](_page_32_Picture_17.jpeg)

Questions? Please call 888-315-9037 x105

During installation, please be sure to also refer to guidelines in Greenfields' Preliminary Instructions document. In order to honor our commitment to quality and safety, Greenfields Outdoor Fitness reserves the right to make changes and revise the design specifications without notice. NOTE:

1. INSTALL AS PER MANUFACTURER'S SPECIFICATIONS. 2. REFER TO DETAIL 4 / EX-06 FOR SURFACE FINISH GRADE.

OUTDOOR EXERCISE EQUIPMENT (3) SCALE: N.T.S.

### **INSTALLATION INSTRUCTIONS**

long 2x4

spacing /

for proper

Model:GR2005-1-48A-W Name: 2-Person Accessible Chest Press U.S. Pat. No. 9,079,069 B1 This unit ships in 1 separately wrapped component.

![](_page_32_Picture_25.jpeg)

**Greenfields installation instructions: 1. All units MUST be fully assembled,** leveled, and braced in place in the footing hole before any concrete is poured. **2. A monolithic pour MUST be used for** concrete. (All concrete must be poured at one time)

3. Concrete requirement: 3250 psi or better.

4. The top of the blue tape attached to the posts on the equipment is final top surface level.

5. All screws must be attached using LocTite.

6. It is recommended to wait a minimum of one week after concrete is poured before equipment is used. 7. The use of Decomposed Granite Surfacing (DG) is known

to accelerate normal wear & tear of footrests.

![](_page_32_Picture_32.jpeg)

**Questions?** Please call 888-315-9037 x105

During installation, please be sure to also refer to guidelines in Greenfields' Preliminary Instructions document. In order to honor our commitment to quality and safety, Greenfields Outdoor Fitness reserves the right to make changes and revise the design specifications without notice. © 2015 Greenfields Outdoor Fitness, Inc. NOTE:

Stopper Plate

must rest above

al surface lev

Stopper Placement

Below Seat

Dimensions

Surface Leve

Optional

1. INSTALL AS PER MANUFACTURER'S SPECIFICATIONS. 2. REFER TO DETAIL 4 / EX-06 FOR SURFACE FINISH GRADE.

![](_page_32_Picture_36.jpeg)

![](_page_32_Picture_37.jpeg)

### **INSTALLATION INSTRUCTIONS**

Model:GR2005-1-71 Name: 3-Person Static Combo This unit ships in 4 separately wrapped components.

![](_page_32_Figure_40.jpeg)

![](_page_32_Picture_41.jpeg)

Promoting Wellness & Fighting Obesity One Community at a Time. **Greenfields installation instructions:** 

1. All units MUST be fully assembled, leveled, and braced in place in the footing hole before any concrete is poured. 2. A monolithic pour MUST be used for concrete. (All concrete must be poured at one time)

3. Concrete requirement: 3250 psi or better. 4. The top of the blue tape attached to the posts on the equipment is final top surface level.

5. All screws must be attached using LocTite.

6. It is recommended to wait a minimum of one week after concrete is poured before equipment is used.

7. The use of Decomposed Granite Surfacing (DG) is known to accelerate normal wear & tear of footrests.

![](_page_32_Picture_48.jpeg)

**Questions?** Please call 888-315-9037 x105

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During installation, please be sure to also refer to guidelines in Greenfields' Preliminary Instructions document. In order to honor our commitment to quality and safety, Greenfields Outdoor Fitness reserves the right to make changes and revise the design specifications without notice.

NOTE 1. INSTALL AS PER MANUFACTURER'S SPECIFICATIONS. 2. REFER TO DETAIL 4 / EX-06 FOR SURFACE FINISH GRADE.

4 OUTDOOR EXERCISE EQUIPMENT

![](_page_32_Picture_56.jpeg)

© 2015 Greenfields Outdoor Fitness, Inc.

## S $\mathbf{C}$

EX-3

![](_page_33_Figure_0.jpeg)

WAUSAU TILE (800)388-8728 WWW.WAUSAUTILE.COM OR APPROVED EQUAL

TROY DAHLKE (FL SALES REP) 813-334-0016 (MOBILE) 813-907-1756 (OFFICE) TROYD27@VERIZON.NET (EMAIL)

TF3200 REINFORCED CONCRETE

85" X 62" X 33"

(1) TABLE (TF3578) (2) BENCHES (TF9570)

S20 WHITE CONCRETE WITH PORCELAIN INCLUDED

SURFACE MOUNT INSTALL PER MANUFACTURER'S SPECIFICATION.

ONE TABLE IS TO BE ADA COMPLIANT. SEE HARDSCAPE PLAN FOR LOCATION

QUICK CLOSE VALVE MODEL: FINISH: NOTES: H- WATER SUPPLY BY OTHERS

![](_page_33_Figure_15.jpeg)

![](_page_33_Figure_16.jpeg)

2 BIKE RACK

MANUFACTURER: MOST DEPENDABLE FOUNTAINS, INC (800)552-6331 WWW.MOSTDEPENDABLE.COM

OR APPROVED EQUAL

10145 SMSS OUTDOOR BOTTLE FILLER STATION

ZINC POWDER COAT CHROME

- 1. OPTIONAL STAINLESS STEEL SURFACE CARRIER RECOMMENDED BY MANUFACTURER
- 2. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS
- 3. THIS DRAWING IS INTENDED TO BE USED FOR PLANNING PURPOSES ONLY AND IS NOT TO BE USED FOR CONSTRUCTION

### S

![](_page_33_Picture_26.jpeg)

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![](_page_34_Figure_0.jpeg)

Model List			
Height - ft (m)	Caliper - in (mm)		
8'-15' (2.5m - 4.5m)	1.5" – 3" (40mm - 75mm)		
12"	– 24" Box		
15'-25' (4.5m - 7.5m)	3" – 5.75" (75mm 150mm )		
24"	– 48" Box		
25'-40' (7.5m - 12m)	5.75" – 9.5" (150m – 230mm)		
48"	– 60" Box		
t Platious representative for boxes ove			

![](_page_34_Figure_7.jpeg)

![](_page_34_Figure_9.jpeg)

![](_page_34_Figure_10.jpeg)

5/18/2015

40'X40' PREFABRICATED SHELTER

SHELTER GENERAL NOTES: 1. SEE DETAIL 1/L-350 FOR CONCRETE FINISH. TO MATCH SIDEWALK.

- 2. COLUMNS TO BE CLADDED TO MATCH RESTROOM BUILDING'S 2 1 CAST STONE WAINSCOT. REFER TO ARCHITECTURE DRAWINGS. SEE DETAIL 3 / L-353.
- 3. CONTRACTOR SHALL SUBMIT DETAILED, SIGNED AND SEALED ENGINEERED SHOP DRAWINGS WITH LOADING AND ANCHORING PROVISION SPECIFIED AND FINISHES / COLORS FROM MANUFACTURER FOR APPROVAL BY LANDSCAPE ARCHITECT PRIOR TO PROCUREMENT, FABRICATION, AND INSTALLATION.
- 4. CONTRACTOR SHALL COORDINATE AND ATTAIN ALL NECESSARY PERMITS REQUIRED FOR THE PREFABRICATED SHELTER AT NO ADDITIONAL EXPENSE TO THE CLIENT.
- 5. CONTRACTOR SHALL PROVIDE SAMPLES OF FINISHES AND SAMPLES FOR LANDSCAPE ARCHITECT APPROVAL.
- 6. SHELTER ROOFS TO MATCH THE GALVALUME FINISH OF RESTROOM BUILDING.

### S $\mathbf{\Gamma}$ $\geq$

![](_page_34_Picture_20.jpeg)

![](_page_35_Figure_0.jpeg)


Call 811 or www.sunshine811.com two full located and marked.



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DE	QTY	BOTANICAL NAME	COMMON NAME	<u>CONT</u>	<u>SIZE</u>	<u>SPACING</u>	-		104	
	517	CHRYSOBALANUS ICACO 'HORIZONTAL'	HORIZONTAL COCOPLUM	CONT.	24" O.C.	20" HT				
	294	HAMELIA PATENS `COMPACTA`	DWARF FIRE BUSH	CONT.	24" O.C.	24" X 24"				
l	1,068	MUHLENBERGIA CAPILLARIS	PINK MUHLY	CONT.	30" O.C.	20" HT.				
	727	MICROSORUM SCOLOPENDRUM	WART FERN	CONT.	18" O.C.	15"X15"				
	1,945	NEPHROLEPSIS EXALTATA	SWORD FERN	CONT.	18" OC	12" HT.				
	258	PSYCHOTRIA NERVOSA	WILD COFFEE	CONT.	24" O.C.	24" X 24"				
	506	SERENOA REPENS 'SILVER FORM'	SILVER SAW PALMETTO	CONT.	30" O.C.	24" HT.				
	249	TRIPSACUM FLORIDANUM	FLORIDA GAMAGRASS	CONT.	30" O.C.	24" X 24"		•	EXISTING TREE/PALM TO REMAIN	
	383	ZAMIA PUMILA	COONTIE	CONT.	30" OC	24" HT.				
<u>DE</u> D	<u>QTY</u> 133,377 SF	BOTANICAL NAME STENOTAPHRUM SECUNDATUM	COMMON NAME ST. AUGUSTINE `PALMETTO`	<u>CONT</u> SOD	<u>SIZE</u>	<u>SPACING</u>	, (		EXISTING SABAL PALMS & CYPRESS TREES	
								_	NUT IN SCOPE	



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KENT TO EGGE OF PAYEHENT SUCH THAT AT MATERIENT IN GEDER MOT TO MATERIA ATTIMA AREAS SHALL HAVE KIEL CARASTER SHALL HAVE KIEL OF THE SOD AND THE FINISHED GRADE	PBA FERN ISLE PARK REDEVELOPMENT CITY OF MIAMI, PROJECT NO. B-40543 2304 N.W. 14TH STREET, MIAMI, FL 33125	SHEFT TILE: LANDSCAPE DETAILS
NTS	THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY GEORGE E. PUIG, ON THE DATE ADJACENT TO THE SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NO CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.	No LAODOL706
	No.       REVISIONS - S         01       PERMIT SET RI         02       PERMIT SET RI	UBMITTALS DATE EV 01 03/08/19 EV 02 04/26/19
	PAGE No.	SHEET No.
		L-450

## GENERAL LANDSCAPE SPECIFICATIONS AND NOTES

#### A. SCOPE OF WORK

- 1. THE WORK CONSISTS OF: FURNISHING ALL LABOR, MATERIALS, EQUIPMENT, TOOLS, TRANSPORTATION, AND ANY OTHER APPURTENANCES NECESSARY FOR THE COMPLETION OF THIS PROJECT AS SHOWN ON THE DRAWINGS, AS INCLUDED IN THE PLANT LIST, AND AS HEREIN SPECIFIED.
- 2. WORK SHALL INCLUDE MAINTENANCE AND WATERING OF ALL CONTRACT PLANTING AREAS UNTIL CERTIFICATION OF ACCEPTABILITY BY THE OWNER.

#### B. PROTECTION OF EXISTING STRUCTURES

ALL EXISTING BUILDINGS, WALKS, WALLS, PAVING, PIPING, OTHER SITE CONSTRUCTION ITEMS AND PLANTING ALREADY COMPLETED OR ESTABLISHED SHALL BE PROTECTED FROM DAMAGE BY THE CONTRACTOR UNLESS OTHERWISE SPECIFIED. ALL DAMAGE RESULTING FROM NEGLIGENCE SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE OWNER, AT NO COST TO THE OWNER.

#### C. PROTECTION OF EXISTING PLANT MATERIALS OUTSIDE LIMIT OF WORK

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL UNAUTHORIZED CUTTING OR DAMAGE TO TREES AND SHRUBS EXISTING OR OTHERWISE, CAUSED BY CARELESS EQUIPMENT OPERATION, MATERIAL STOCKPILING, ETC. THIS SHALL INCLUDE COMPACTION BY DRIVING OR PARKING INSIDE THE DRIP-LINE AND SPILLING OIL, GASOLINE, OR OTHER DELETERIOUS MATERIALS WITHIN THE DRIP-LINE. NO MATERIALS SHALL BE BURNED WHERE HEAT WILL DAMAGE ANY PLANT. EXISTING TREES KILLED OR DAMAGED SO THAT THEY ARE MISSHAPEN AND/ OR UNSIGHTLY SHALL BE REPLACED AT THE COST TO THE CONTRACTOR OF ONE HUNDRED DOLLARS (\$100) PER CALIPER INCH ON AN ESCALATING SCALE WHICH ADDS AN ADDITIONAL TWENTY (20) PERCENT PER INCH OVER FOUR (4) INCHES CALIPER AS FIXED AND AGREED LIQUIDATED DAMAGES. CALIPER SHALL BE MEASURED SIX (6) INCHES ABOVE GROUND LEVEL FOR TREES UP TO AND INCLUDING FOUR (4) INCHES IN CALIPER AND TWELVE (12) INCHES ABOVE GROUND LEVEL FOR TREES OVER FOUR (4) INCHES IN CALIPER.

#### D. MATERIALS

#### 1. GENERAL

MATERIALS LISTED BELOW SHALL BE SUBMITTED FOR APPROVAL. UPON SUBMITTALS' APPROVAL, DELIVERY OF MATERIALS MAY COMMENCE.

MATERIAL	
MULCH	PRODUCT DATA
TOPSOIL MIX	AMENDMENT MIX/ PRODUCT DATA/ TEST RESULTS
PLANTS	PHOTOGRAPHS OF ONE (1) OF EACH SPECIES (OR TAGGED IN NURSERY)
	INDICATE SIZES (HEIGHT/WIDTH) AND QUALITY PER SPEC
	CLIENT-REQUESTED TAGGING MAY SUBSTITUTE PHOTOS.
FERTILIZER	PRODUCT DATA
INNOCULANT	PRODUCT DATA
HERBICIDE	PRODUCT DATA

#### 2. PLANT MATERIALS

A. PLANT SPECIES AND SIZE SHALL CONFORM TO THOSE INDICATED ON THE DRAWINGS. NOMENCLATURE SHALL CONFORM TO STANDARDIZED PLANT NAMES, 1942 EDITION. ALL NURSERY STOCK SHALL BE IN ACCORDANCE WITH GRADES AND STANDARDS FOR NURSERY PLANTS, LATEST EDITION, PUBLISHED BY THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES. ALL PLANTS SHALL BE FLORIDA GRADE NO. 1 OR BETTER AS DETERMINED BY THE FLORIDA DIVISION OF PLANT INDUSTRY. ALL PLANTS SHALL BE HEALTHY, VIGOROUS, SOUND, WELL-BRANCHED, AND FREE OF DISEASE AND INSECTS, INSECT EGGS AND LARVAE AND SHALL HAVE ADEQUATE ROOT SYSTEMS. TREES FOR PLANTING IN ROWS SHALL BE UNIFORM IN SIZE AND SHAPE. ALL MATERIALS SHALL BE SUBJECT TO APPROVAL BY THE OWNER. WHERE ANY REQUIREMENTS ARE OMITTED FROM THE PLANT LIST, THE PLANTS FURNISHED SHALL BE NORMAL FOR THE VARIETY. PLANTS SHALL BE PRUNED PRIOR TO DELIVERY ONLY WITH APPROVAL FROM OWNER OR OWNER'S REPRESENTATIVE. NO SUBSTITUTIONS SHALL BE MADE WITHOUT WRITTEN PERMISSION FROM THE OWNER'S REPRESENTATIVE

B. MEASUREMENTS: THE HEIGHT AND/OR WIDTH OF TREES SHALL BE MEASURED FROM THE GROUND OR ACROSS THE NORMAL SPREAD OF BRANCHES WITH THE PLANTS IN THEIR NORMAL POSITION. THIS MEASUREMENT SHALL NOT INCLUDE THE IMMEDIATE TERMINAL GROWTH. PLANTS LARGER IN SIZE THAN THOSE SPECIFIED IN THE PLANT LIST MAY BE USED IF APPROVED BY THE OWNER. IF THE USE OF LARGER PLANTS IS APPROVED, THE BALL OF EARTH OR SPREAD OF ROOTS SHALL BE INCREASED IN PROPORTION TO THE SIZE OF THE PLANT.

C. INSPECTION: PLANTS SHALL BE SUBJECT TO INSPECTION AND APPROVAL AT THE PLACE OF GROWTH, OR UPON DELIVERY TO THE SITE, AS DETERMINED BY THE OWNER, FOR QUALITY, SIZE, AND VARIETY; SUCH APPROVAL SHALL NOT IMPAIR THE RIGHT OF INSPECTION AND REJECTION AT THE SITE DURING PROGRESS OF THE WORK OR AFTER COMPLETION FOR SIZE AND CONDITION OF ROOT BALLS OR ROOTS, LATENT DEFECTS OR INJURIES. REJECTED PLANTS SHALL BE REMOVED IMMEDIATELY FROM THE SITE. NOTICE REQUESTING INSPECTION SHALL BE SUBMITTED IN WRITING BY THE CONTRACTOR AT LEAST ONE (1) WEEK PRIOR TO ANTICIPATED DATE.

- E. SOIL MIXTURE (PLANTING MEDIUM, PLANTING MIX, TOPSOIL MIX) 1. SOIL MIXTURE (PLANTING MEDIUM FOR PLANT PITS) SHALL CONSIST OF 60% SAND, 40%
- NORTH FLORIDA PEAT, AS DESCRIBED BELOW:
- 2. SOIL MIXTURE FOR BACKFILLING PLANT PITS SHALL BE FERTILE AND FRIABLE, REASONABLY FREE OF SUBSOIL, CLAY LUMPS, BRUSH WEEDS AND OTHER LITTER; FREE OF ROOTS, STUMPS, STONES LARGER THAN 2" IN ANY DIRECTION, AND OTHER EXTRANEOUS OR TOXIC MATTER HARMFUL TO PLANT GROWTH. SHALL HAVE A PH BETWEEN 5.5 AND 7.0 - SUBMIT SAMPLE AND PH TESTING RESULTS FOR APPROVAL
- 3. <u>SAND</u> SHALL BE COARSE, CLEAN, WELL-DRAINING, NATIVE SAND. CONTRACTOR SHALL SUBMIT RESULTS OF SOIL TESTS FOR TOPSOIL AND SAND PROPOSED FOR USE UNDER THIS CONTRACT FOR APPROVAL BY THE OWNER.
- 4. CONTRACTOR TO SUBMIT SAMPLES OF SOIL MIXTURE FOR OWNER'S REPRESENTATIVE APPROVAL PRIOR TO PLANT INSTALLATION OPERATIONS COMMENCE.

#### F. WATER

WATER NECESSARY FOR PLANTING AND MAINTENANCE SHALL BE OF SATISFACTORY QUALITY TO SUSTAIN AN ADEQUATE PLANT GROWTH AND SHALL NOT CONTAIN HARMFUL, NATURAL OR MAN-MADE ELEMENTS DETRIMENTAL TO PLANTS. WATER MEETING THE ABOVE STANDARD SHALL BE OBTAINED ON THE SITE FROM THE OWNER, IF AVAILABLE, AND THE CONTRACTOR SHALL BE RESPONSIBLE TO MAKE ARRANGEMENTS FOR ITS USE BY HIS TANKS, HOSES, SPRINKLERS, ETC .. IF SUCH WATER IS NOT AVAILABLE AT THE SITE, THE CONTRACTOR SHALL PROVIDE SATISFACTORY WATER FROM SOURCES OFF THE SITE AT NO ADDITIONAL COST TO THE OWNER. \*WATERING/IRRIGATION RESTRICTIONS MAY APPLY - REFER TO PROPERTY'S JURISDICTIONAL AUTHORITY.

#### G. FERTILIZER

- FERTILIZER TYPES SHALL BE ORGANIC OR OTHERWISE NATURALLY-DERIVED.
- AUTHORITY. H. MULCH
- EUCALYPTUS MULCH

#### I. DIGGING AND HANDLING

- ("WILTPRUF" OR EQUAL) TO MINIMIZE TRANSPIRATIONAL WATER LOSS.
- NOT BE HANDLED BY STEMS.
- TRANSPORTATION AND PRIOR TO PLANTING.
- DETAIL.
- ELEMENTS, FOOTERS AND PREPARED SUB- BASES.

#### J. CONTAINER GROWN STOCK

- CONDITION, FLORIDA #1 OR BETTER.
- GROWN STOCK SHALL NOT BE HANDLED BY THEIR STEMS.
- 3. PLANT ROOTS BOUND IN CONTAINERS ARE NOT ACCEPTABLE.

#### K. COLLECTED STOCK

- VARIFTY L. NATIVE STOCK
- INDICATE FULL RECOVERY FROM TRANSPLANTING INTO THE NURSERY ROW.

#### M. MATERIALS LIST

THE MINIMUM ACCEPTABLE SIZE

#### N. FINE GRADING

- UNLESS OTHERWISE NOTED.
- FOR TRANSPORTING SOIL WITHIN THE SITE.
- FINAL GRADES.

## O. PLANTING PROCEDURES

- LOCATE UTILITIES.

TO SOIL TYPE, PLANT INSTALLATION TYPE, AND SITE'S PROPOSED USE. SUGGESTED

\*FERTILIZER RESTRICTIONS MAY APPLY - REFER TO PROPERTY'S JURISDICTIONAL

MULCH MATERIAL SHALL BE MOISTENED AT THE TIME OF APPLICATION TO PREVENT WIND DISPLACEMENT, AND APPLIED AT A MINIMUM DEPTH OF 3 INCHES. CLEAR MULCH FROM EACH PLANT'S CROWN (BASE). TYPE OF MATERIAL: "FLORIMULCH" OR SHREDDED, STERILE

1. PROTECT ROOTS OR ROOT BALLS OF PLANTS AT ALL TIMES FROM SUN, DRYING WINDS WATER AND FREEZING, AS NECESSARY UNTIL PLANTING. PLANT MATERIALS SHALL BE ADEQUATELY PACKED TO PREVENT DAMAGE DURING TRANSIT. TREES TRANSPORTED MORE THAN TEN (10) MILES OR WHICH ARE NOT PLANTED WITHIN THREE (3) DAYS OF DELIVERY TO SITE SHALL BE SPRAYED WITH AN ANTITRANSPIRANT PRODUCT

2. BALLED AND BURLAPPED PLANTS (B&B) SHALL BE DUG WITH FIRM, NATURAL BALLS OF SOIL OF SUFFICIENT SIZE TO ENCOMPASS THE FIBROUS AND FEEDING ROOTS OF THE PLANTS. NO PLANTS MOVED WITH A ROOT BALL SHALL BE PLANTED IF THE BALL IS CRACKED OR BROKEN. PLANTS BALLED AND BURLAPPED OR CONTAINER GROWN SHALL

3. PLANTS MARKED "BR" IN THE PLANT LIST SHALL BE DUG WITH BARE ROOTS, COMPLYING WITH FLORIDA GRADES AND STANDARDS FOR NURSERY PLANTS, CURRENT EDITION. CARE SHALL BE EXERCISED THAT THE ROOTS DO NOT DRY OUT DURING

4. PROTECTION OF PALMS (IF APPLICABLE): ONLY A MINIMUM OF FRONDS SHALL BE REMOVED FROM THE CROWN OF THE PALM TREES TO FACILITATE MOVING AND HANDLING. CLEAR TRUNK (CT) SHALL BE AS SPECIFIED AFTER THE MINIMUM OF FRONDS HAVE BEEN REMOVED. ALL PALMS SHALL BE BRACED PER PALM PLANTING

5. EXCAVATION OF TREE PITS SHALL BE PERFORMED USING EXTREME CARE TO AVOID DAMAGE TO SURFACE AND SUBSURFACE ELEMENTS SUCH AS UTILITIES OR HARDSCAPE

1. ALL CONTAINER GROWN MATERIAL SHALL BE HEALTHY, VIGOROUS, WELL-ROOTED PLANTS ESTABLISHED IN THE CONTAINER IN WHICH THEY ARE SOLD. THE PLANTS SHALL HAVE TOPS WHICH ARE OF GOOD QUALITY AND ARE IN A HEALTHY GROWING

2. AN ESTABLISHED CONTAINER GROWN PLANT SHALL BE TRANSPLANTED INTO A CONTAINER AND GROWN IN THAT CONTAINER SUFFICIENTLY LONG FOR THE NEW FIBROUS ROOTS TO HAVE DEVELOPED SO THAT THE ROOT MASS WILL RETAIN ITS SHAPE AND HOLD TOGETHER WHEN REMOVED FROM THE CONTAINER. CONTAINER

4. SUBSTITUTION OF NON-CONTAINER GROWN MATERIAL FOR MATERIAL EXPLICITLY SPECIFIED TO BE CONTAINER GROWN WILL NOT BE PERMITTED WITHOUT WRITTEN APPROVAL IS OBTAINED FROM THE OWNER OR OWNER'S REPRESENTATIVE.

WHEN THE USE OF COLLECTED STOCK IS PERMITTED AS INDICATED BY THE OWNER OR OWNER'S REPRESENTATIVE, THE MINIMUM SIZES OF ROOTBALLS SHALL BE EQUAL TO THAT SPECIFIED FOR THE NEXT LARGER SIZE OF NURSERY GROWN STOCK OF THE SAME

PLANTS COLLECTED FROM WILD OR NATIVE STANDS SHALL BE CONSIDERED NURSERY GROWN WHEN THEY HAVE BEEN SUCCESSFULLY RE-ESTABLISHED IN A NURSERY ROW AND GROWN UNDER REGULAR NURSERY CULTURAL PRACTICES FOR A MINIMUM OF TWO (2) GROWING SEASONS AND HAVE ATTAINED ADEQUATE ROOT AND TOP GROWTH TO

QUANTITIES NECESSARY TO COMPLETE THE WORK ON THE DRAWINGS SHALL BE FURNISHED BY THE CONTRACTOR. QUANTITY ESTIMATES HAVE BEEN MADE CAREFULLY, BUT THE LANDSCAPE ARCHITECT OR OWNER ASSUMES NO LIABILITY FOR OMISSIONS OR ERRORS. SHOULD A DISCREPANCY OCCUR BETWEEN THE PLANS AND THE PLANT LIST QUANTITY, THE LANDSCAPE ARCHITECT SHALL BE NOTIFIED FOR CLARIFICATION PRIOR TO BIDDING OR INSTALLATION. ALL DIMENSIONS AND/OR SIZES SPECIFIED SHALL BE

1. FINE GRADING UNDER THIS CONTRACT SHALL CONSIST OF FINAL FINISHED GRADING OF LAWN AND PLANTING AREAS THAT HAVE BEEN ROUGH GRADED BY OTHERS. BERMING AS SHOWN ON THE DRAWINGS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR,

2. THE CONTRACTOR SHALL FINE GRADE THE LAWN AND PLANTING AREAS TO BRING THE ROUGH GRADE UP TO FINAL FINISHED GRADE ALLOWING FOR THICKNESS OF SOD AND/OR MULCH DEPTH. THIS CONTRACTOR SHALL FINE GRADE BY HAND AND/OR WITH ALL EQUIPMENT NECESSARY INCLUDING A GRADING TRACTOR WITH FRONT-END LOADER

3. ALL PLANTING AREAS SHALL BE GRADED AND MAINTAINED FOR POSITIVE DRAINAGE TO SURFACE/SUBSURFACE STORM DRAIN SYSTEMS. AREAS ADJACENT TO BUILDINGS SHALL SLOPE AWAY FROM THE BUILDINGS. REFER TO CIVIL ENGINEER'S PLANS FOR

1. CLEANING UP BEFORE COMMENCING WORK: THE CONTRACTOR SHALL CLEAN WORK AND SURROUNDING AREAS OF ALL RUBBISH OR OBJECTIONABLE MATTER. ALL MORTAR, CEMENT, AND TOXIC MATERIAL SHALL BE REMOVED FROM THE SURFACE OF ALL PLANT BEDS. THESE MATERIALS SHALL NOT BE MIXED WITH THE SOIL. SHOULD THE CONTRACTOR FIND SUCH SOIL CONDITIONS BENEATH THE SOIL WHICH WILL IN ANY WAY ADVERSELY AFFECT THE PLANT GROWTH, HE SHALL IMMEDIATELY CALL IT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE. FAILURE TO DO SO BEFORE PLANTING SHALL MAKE THE CORRECTIVE MEASURES THE RESPONSIBILITY OF THE CONTRACTOR.

2. VERIFY LOCATIONS OF ALL UTILITIES, CONDUITS, SUPPLY LINES AND CABLES, INCLUDING BUT NOT LIMITED TO: ELECTRIC, GAS (LINES AND TANKS), WATER, SANITARY SEWER, STORMWATER SYSTEMS, CABLE, AND TELEPHONE. PROPERLY MAINTAIN AND PROTECT EXISTING UTILITIES. CALL NATIONAL ONE CALL - 811 - TO

- CONTRACTOR SHALL PROVIDE FERTILIZER APPLICATION SCHEDULE TO OWNER, AS APPLICABLE 3. SUBGRADE EXCAVATION: CONTRACTOR IS RESPONSIBLE TO REMOVE ALL EXISTING AND IMPORTED LIMEROCK AND LIMEROCK SUB-BASE FROM ALL LANDSCAPE PLANTING AREAS TO A MINIMUM DEPTH OF 36". CONTRACTOR IS RESPONSIBLE TO BACKFILL THESE PLANTING AREAS TO ROUGH FINISHED GRADE WITH CLEAN TOPSOIL FROM AN ON-SITE SOURCE OR AN IMPORTED SOURCE. IF LIMEROCK OR OTHER ADVERSE CONDITIONS OCCUR IN PLANTED AREAS AFTER 36" DEEP EXCAVATION BY THE CONTRACTOR, AND ADEQUATE PERCOLATION CAN NOT BE ACHIEVED, CONTRACTOR SHALL UTILIZE PLANTING DETAIL THAT ADDRESSES POOR DRAINAGE.
  - 4. FURNISH NURSERY'S CERTIFICATE OF COMPLIANCE WITH ALL REQUIREMENTS AS HEREIN SPECIFIED AND REQUIRED. INSPECT AND SELECT PLANT MATERIALS BEFORE PLANTS ARE DUG AT NURSERY OR GROWING SITE.
  - 5. GENERAL: COMPLY WITH APPLICABLE FEDERAL, STATE, COUNTY, AND LOCAL REGULATIONS GOVERNING LANDSCAPE MATERIALS AND WORK. CONFORM TO ACCEPTED HORTICULTURAL PRACTICES AS USED IN THE TRADE. UPON ARRIVAL AT THE SITE , PLANTS SHALL BE THOROUGHLY WATERED AND PROPERLY MAINTAINED UNTIL PLANTED. PLANTS STORED ON-SITE SHALL NOT REMAIN UNPLANTED FOR A PERIOD EXCEEDING TWENTY-FOUR (24) HOURS. AT ALL TIMES, METHODS CUSTOMARY IN GOOD HORTICULTURAL PRACTICES SHALL BE EXERCISED.
  - 6. THE WORK SHALL BE COORDINATED WITH OTHER TRADES TO PREVENT CONFLICTS. COORDINATE PLANTING WITH IRRIGATION WORK TO ASSURE AVAILABILITY OF WATER AND PROPER LOCATION OF IRRIGATION APPURTENANCES AND PLANTS.
  - 7. ALL PLANTING PITS SHALL BE EXCAVATED TO SIZE AND DEPTH IN ACCORDANCE WITH THE USA STANDARD FOR NURSERY STOCK 260.1, UNLESS SHOWN OTHERWISE ON THE DRAWINGS, AND BACKFILLED WITH THE PREPARED PLANTING SOIL MIXTURE AS SPECIFIED IN SECTION E. TEST ALL TREE PITS WITH WATER BEFORE PLANTING TO ASSURE PROPER DRAINAGE PERCOLATION IS AVAILABLE. NO ALLOWANCE WILL BE MADE FOR LOST PLANTS DUE TO IMPROPER PERCOLATION. IF POOR PERCOLATION EXISTS, UTILIZE "POOR DRAINAGE CONDITION" PLANTING DETAIL. TREES SHALL BE SET PLUMB AND HELD IN POSITION UNTIL THE PLANTING MIXTURE HAS BEEN FLUSHED INTO PLACE WITH A SLOW, FULL HOSE STREAM. ALL PLANTING SHALL BE PERFORMED BY PERSONNEL FAMILIAR WITH PLANTING PROCEDURES AND UNDER THE SUPERVISION OF A QUALIFIED LANDSCAPE FOREMAN. PROPER "JETTING IN" SHALL BE ASSURED TO ELIMINATE AIR POCKETS AROUND THE ROOTS. "JET STICK" OR EQUAL IS RECOMMENDED.
  - 8. TAKE ALL NECESSARY PRECAUTIONS TO AVOID DAMAGE TO BUILDINGS AND BUILDING STRUCTURES WHILE INSTALLING TREES.
  - 9. SOIL MIXTURE SHALL BE AS SPECIFIED IN SECTION E OF THESE SPECIFICATIONS.
  - 10. TREES AND SHRUBS SHALL BE SET STRAIGHT AT AN ELEVATION THAT, AFTER SETTLEMENT, THE PLANT CROWN WILL STAND ONE (1) TO TWO (2) INCHES ABOVE GRADE. EACH PLANT SHALL BE SET IN THE CENTER OF THE PIT. PLANTING SOIL MIXTURE SHALL BE BACKFILLED, THOROUGHLY TAMPED AROUND THE BALL, AND SETTLED BY WATER (AFTER TAMPING).
  - 11. AMEND PINE AND OAK PLANT PITS WITH ECTOMYCORRHIZAL SOIL APPLICATION PER MANUFACTURER'S RECOMMENDATION. ALL OTHER PLANT PITS SHALL BE AMENDED WITH ENDOMYCORRHIZAL SOIL APPLICATION PER MANUFACTURER'S RECOMMENDATION. PROVIDE PRODUCT INFORMATION SUBMITTAL PRIOR TO INOCULATION.
  - 12. FILL HOLE WITH SOIL MIXTURE, MAKING CERTAIN ALL SOIL IS SATURATED. TO DO THIS, FILL HOLE WITH WATER AND ALLOW TO SOAK MINIMUM TWENTY (20) MINUTES, STIRRING IF NECESSARY TO GET SOIL THOROUGHLY WET. PACK LIGHTLY WITH FEET. ADD MORE WET SOIL MIXTURE. DO NOT COVER TOP OF BALL WITH SOIL MIXTURE, ONLY WITH MULCH. ALL BURLAP, ROPE, WIRES, BASKETS, ETC., SHALL BE REMOVED FROM THE SIDES AND TOPS OF BALLS, BUT NO BURLAP SHALL BE PULLED FROM UNDERNEATH. S. MAINTENANCE (ALTERNATE BID ITEM)
  - 13. PRUNING: TREES SHALL BE PRUNED, AT THE DIRECTION OF THE OWNER OR OWNER'S REPRESENTATIVE, TO PRESERVE THE NATURAL CHARACTER OF THE PLANT. ALL SOFT WOOD OR SUCKER GROWTH AND ALL BROKEN OR BADLY DAMAGED BRANCHES SHALL BE REMOVED WITH A CLEAN CUT. ALL PRUNING TO BE PERFORMED BY LICENSED ARBORIST, IN ACCORDANCE WITH ANSI A-300.
  - 14. SHRUBS AND GROUND COVER PLANTS SHALL BE EVENLY SPACED IN ACCORDANCE WITH THE DRAWINGS AND AS INDICATED ON THE PLANT LIST. CULTIVATE ALL PLANTING AREAS TO A MINIMUM DEPTH OF 6", REMOVE AND DISPOSE ALL DEBRIS. MIX TOP 4" TO ACHEIVE SOIL MIXTURE AS SPECIFIED IN SECTION E. THOROUGHLY WATER ALL PLANTS AFTER INSTALLATION.
  - 15. TREE GUYING AND BRACING SHALL BE INSTALLED BY THE CONTRACTOR IN ACCORDANCE WITH THE PLANS TO INSURE STABILITY AND MAINTAIN TREES IN AN UPRIGHT POSITION. IF THE CONTRACTOR AND OWNER DECIDE TO WAIVE THE TREE GUYING AND BRACING, THE OWNER SHALL NOTIFY THE LANDSCAPE ARCHITECT IN WRITING AND AGREE TO INDEMNIFY AND HOLD HARMLESS THE LANDSCAPE ARCHITECT IN THE EVENT UNSUPPORTED TREES PLANTED UNDER THIS CONTRACT FALL AND DAMAGE PERSON OR PROPERTY.
  - 16. MULCHING: PROVIDE A THREE INCH (MINIMUM) LAYER OF SPECIFIED MULCH OVER THE ENTIRE AREA OF EACH SHRUB BED, GROUND COVER, VINE BED, AND TREE PIT PLANTED UNDER THIS CONTRACT.
  - 17. HERBICIDE WEED CONTROL: ALL PLANT BEDS SHALL BE KEPT FREE OF NOXIOUS WEEDS UNTIL FINAL ACCEPTANCE OF WORK. IF DIRECTED BY THE OWNER, "ROUND-UP" SHALL BE APPLIED FOR WEED CONTROL BY QUALIFIED PERSONNEL TO ALL PLANTING AREAS IN SPOT APPLICATIONS PER MANUFACTURER'S PRECAUTIONS AND SPECIFICATIONS. PRIOR TO FINAL INSPECTION, TREAT ALL PLANTING BEDS WITH AN APPROVED PRE-EMERGENT HERBICIDE AT AN APPLICATION RATE RECOMMENDED BY THE MANUFACTURER. (AS ALLOWED BY JURISDICTIONAL AUTHORITY)
  - P. LAWN SODDING
  - 1. THE WORK CONSISTS OF LAWN BED PREPARATION, SOIL PREPARATION, AND SODDING COMPLETE, IN STRICT ACCORDANCE WITH THE SPECIFICATIONS AND THE APPLICABLE DRAWINGS TO PRODUCE A TURF GRASS LAWN ACCEPTABLE TO THE OWNER.
  - 2. LAWN BED PREPARATION: ALL AREAS THAT ARE TO BE SODDED SHALL BE CLEARED OF ANY ROUGH GRASS, WEEDS, AND DEBRIS, AND THE GROUND BROUGHT TO AN EVEN GRADE. THE ENTIRE SURFACE SHALL BE ROLLED WITH A ROLLER WEIGHING NOT MORE THAN ONE-HUNDRED (100) POUNDS PER FOOT OF WIDTH. DURING THE ROLLING, ALL DEPRESSIONS CAUSED BY SETTLEMENT SHALL BE FILLED WITH ADDITIONAL SOIL, AND THE SURFACE SHALL BE REGRADED AND ROLLED UNTIL PRESENTING A SMOOTH AND EVEN FINISH TO THE REQUIRED GRADE.
  - 3. SOIL PREPARATION: PREPARE LOOSE BED FOUR (4) INCHES DEEP. HAND RAKE UNTIL ALL BUMPS AND DEPRESSIONS ARE REMOVED. WET PREPARED AREA THOROUGHLY.
  - 4. SODDING
  - A. THE CONTRACTOR SHALL SOD ALL AREAS THAT ARE NOT PAVED OR PLANTED AS DESIGNATED ON THE DRAWINGS WITHIN THE CONTRACT LIMITS, UNLESS SPECIFICALLY NOTED OTHERWISE.
  - B. THE SOD SHALL BE CERTIFIED TO MEET FLORIDA STATE PLANT BOARD SPECIFICATIONS, ABSOLUTELY TRUE TO VARIETAL TYPE, AND FREE FROM WEEDS, FUNGUS, INSECTS AND DISEASE OF ANY KIND.

C. SOD PANELS SHALL BE LAID TIGHTLY TOGETHER SO AS TO MAKE A SOLID SODDED LAWN AREA. SOD SHALL BE LAID UNIFORMLY AGAINST THE EDGES OF ALL CURBS AND OTHER HARDSCAPE ELEMENTS, PAVED AND PLANTED AREAS. ADJACENT TO BUILDINGS, A 24 INCH STONE MULCH STRIP SHALL BE PROVIDED - REFER TO DETAILS. IMMEDIATELY FOLLOWING SOD LAYING, THE LAWN AREAS SHALL BE ROLLED WITH A LAWN ROLLER CUSTOMARILY USED FOR SUCH PURPOSES, AND THEN THOROUGHLY IRRIGATED. IF, IN THE OPINION OF THE OWNER, TOP-DRESSING IS NECESSARY AFTER ROLLING TO FILL THE VOIDS BETWEEN THE SOD PANELS AND TO EVEN OUT INCONSISTENCIES IN THE SOD, CLEAN SAND, AS APPROVED BY THE OWNER'S REPRESENTATIVE, SHALL BE UNIFORMLY SPREAD OVER THE ENTIRE SURFACE OF THE SOD AND THOROUGHLY WATERED IN. FERTILIZE INSTALLED SOD AS ALLOWED BY PROPERTY'S JURISDICTIONAL AUTHORITY.

5. DURING DELIVERY, PRIOR TO, AND DURING THE PLANTING OF THE LAWN AREAS, THE SOD PANELS SHALL AT ALL TIMES BE PROTECTED FROM EXCESSIVE DRYING AND UNNECESSARY EXPOSURE OF THE ROOTS TO THE SUN. ALL SOD SHALL BE STACKED SO AS NOT TO BE DAMAGED BY SWEATING OR EXCESSIVE HEAT AND MOISTURE.

## 6. LAWN MAINTENANCE:

A. WITHIN THE CONTRACT LIMITS, THE CONTRACTOR SHALL PRODUCE A DENSE, WELL ESTABLISHED LAWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR AND RE-SODDING OF ALL ERODED, SUNKEN OR BARE SPOTS (LARGER THAN 12"X12") UNTIL CERTIFICATION OF ACCEPTABILITY BY THE OWNER'S REPRESENTATIVE. REPAIRED SODDING SHALL BE ACCOMPLISHED AS IN THE ORIGINAL WORK (INCLUDING REGRADING IF NECESSARY).

B. CONTRACTOR RESPONSIBLE FOR ESTABLISHING AND MAINTAINING SOD/LAWN UNTIL ACCEPTANCE BY THE OWNER'S REPRESENTATIVE. PRIOR TO AND UPON ACCEPTANCE, CONTRACTOR TO PROVIDE WATERING/IRRIGATION SCHEDULE TO OWNER. OBSERVE ALL APPLICABLE WATERING RESTRICTIONS AS SET FORTH BY THE PROPERTY'S JURISDICTIONAL AUTHORITY.

## Q. CLEANUP

UPON COMPLETION OF ALL PLANTING WORK AND BEFORE FINAL ACCEPTANCE, THE CONTRACTOR SHALL REMOVE ALL MATERIAL, EQUIPMENT, AND DEBRIS RESULTING FROM HIS WORK. ALL PAVED AREAS SHALL BE BROOM-CLEANED AND THE SITE LEFT IN A NEAT AND ACCEPTABLE CONDITION AS APPROVED BY THE OWNER'S AUTHORIZED REPRESENTATIVE.

## R. PLANT MATERIAL MAINTENANCE

ALL PLANTS AND PLANTING INCLUDED UNDER THIS CONTRACT SHALL BE MAINTAINED BY WATERING, CULTIVATING, SPRAYING, AND ALL OTHER OPERATIONS (SUCH AS RE-STAKING OR REPAIRING GUY SUPPORTS) NECESSARY TO INSURE A HEALTHY PLANT CONDITION BY THE CONTRACTOR UNTIL CERTIFICATION OF ACCEPTABILITY BY THE OWNER'S REPRESENTATIVE. MAINTENANCE AFTER THE CERTIFICATION OF ACCEPTABILITY SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS IN THIS SECTION. CONTRACTORS ARE REQUESTED TO PROVIDE A BID ESTIMATE TO COVER LANDSCAPE AND IRRIGATION MAINTENANCE FOR A PERIOD OF 90 CALENDAR DAYS COMMENCING AFTER ACCEPTANCE.

CONTRACTORS ARE REQUESTED TO PROVIDE A BID ESTIMATE FOR MAINTENANCE FOLLOWING THE INITIAL 90-DAY MAINTENANCE PERIOD ON A COST-PER-MONTH BASIS.

#### T. FINAL INSPECTION AND ACCEPTANCE OF WORK

FINAL INSPECTION AT THE END OF THE WARRANTY PERIOD SHALL BE ON PLANTING, CONSTRUCTION AND ALL OTHER INCIDENTAL WORK PERTAINING TO THIS CONTRACT. ANY REPLACEMENT AT THIS TIME SHALL BE SUBJECT TO THE SAME ONE (1) YEAR WARRANTY (OR AS SPECIFIED BY THE LANDSCAPE ARCHITECT OR OWNER IN WRITING) BEGINNING WITH THE TIME OF REPLACEMENT AND ENDING WITH THE SAME INSPECTION AND ACCEPTANCE HEREIN DESCRIBED. U. WARRANTY

1. THE LIFE AND SATISFACTORY CONDITION OF ALL PLANT MATERIAL INSTALLED BY THE LANDSCAPE CONTRACTOR SHALL BE WARRANTED BY THE CONTRACTOR FOR A MINIMUM OF ONE (1) CALENDAR YEAR COMMENCING AT THE TIME OF CERTIFICATION OF ACCEPTABILITY BY THE OWNER'S REPRESENTATIVE.

2. REPLACEMENT: ANY PLANT NOT FOUND IN A HEALTHY GROWING CONDITION AT THE END OF THE WARRANTY PERIOD SHALL BE REMOVED FROM THE SITE AND REPLACED AS SOON AS WEATHER CONDITIONS PERMIT. ALL REPLACEMENTS SHALL BE PLANTS OF THE SAME KIND AND SIZE AS SPECIFIED IN THE PLANT LIST. THEY SHALL BE FURNISHED PLANTED AND MULCHED AS SPECIFIED UNDER "PLANTING", AT NO ADDITIONAL COST TO THE OWNER.

3. IN THE EVENT THE OWNER DOES NOT CONTRACT WITH THE CONTRACTOR FOR LANDSCAPE (AND IRRIGATION) MAINTENANCE, THE CONTRACTOR IS ENCOURAGED TO VISIT THE PROJECT SITE PERIODICALLY DURING THE ONE YEAR WARRANTY PERIOD TO EVALUATE MAINTENANCE PROCEDURES BEING PERFORMED BY THE OWNER, AND SHALL NOTIFY THE OWNER IN WRITING OF MAINTENANCE PROCEDURES OR CONDITIONS WHICH THREATEN VIGOROUS AND HEALTHY PLANT GROWTH. IT IS SUGGESTED SUCH SITE VISITS SHALL BE CONDUCTED A MINIMUM OF ONCE PER MONTH FOR A PERIOD OF TWELVE (12) MONTHS FROM THE DATE OF ACCEPTANCE.



No.	<b>REVISIONS - SUBMITTALS</b>	DATE
01	PERMIT SET REV 01	03/08/19
02	PERMIT SET REV 02	04/26/19
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L BIRD PEB BIRD PEB	<u>SIZE</u> 2" 2" 2"	<u>TYPE</u> Shrub Spray Bubbler Shrub Spray	<u>GPM</u> 35.24 40.80 29.09	30 31 32	RAIN BIRD PEB RAIN BIRD PEB RAIN BIRD PEB	2" 2" 2"	SHRUB SPRAY BUBBLER TURE ROTOR	57.88 27.20 56 21	1.	CONTRACTO IRRIGATION DOCUMENTS
BIRD PEB BIRD PEB BIRD PEB BIRD PEB BIRD PEB	2" 2" 2" 2"	TURF ROTOR SHRUB SPRAY TURF ROTOR SHRUB SPRAY TURF ROTOR	40.74 58.08 47.32 38.02	33 34 35 36 37	RAIN BIRD PEB RAIN BIRD PEB RAIN BIRD PEB RAIN BIRD PEB RAIN BIRD PEB	2" 2" 2" 2" 2"	BUBBLER TURF ROTOR SHRUB SPRAY BUBBLER SHRUB SPRAY	52.70 48.12 53.34 51.00 48.80	2.	IRRIGATION EVENT OF O PRECEDENC ATTENTION
BIRD PEB BIRD PEB BIRD PEB BIRD PEB	2" 2" 2" 2"	SHRUB SPRAY TURF ROTOR BUBBLER BUBBLER	42.62 37.82 54.40 57.80	38 39	RAIN BIRD PEB RAIN BIRD PEB Common Wire	2" 2"	TURF ROTOR BUBBLER	44.07 27.20	З.	ANY SUBST BE APPROV REPRESENT
BIRD PEB BIRD PEB BIRD PEB BIRD PEB BIRD PEB BIRD PEB BIRD PEB BIRD PEB BIRD PEB	1 ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	SHRUB SPRAY SHRUB SPRAY SHRUB SPRAY SHRUB SPRAY BUBBLER SHRUB SPRAY TURF ROTOR TURF ROTOR	47.84 47.24 50.54 36.74 66.30 49.62 64.24 64.85						4.	CONTRACTO EQUIPMENT UNDERGROU GROUND EL COMPLETED COORDINATI LANDSCAPE
BIRD PEB BIRD PEB BIRD PEB BIRD PEB BIRD PEB BIRD PEB	2" 2" 2" 2" 2" 2"	TURF ROTOR TURF ROTOR BUBBLER SHRUB SPRAY TURF ROTOR TURF ROTOR	56.21 68.25 39.10 40.19 37.35 37.20						5.	CONTRACTO WORK AND DISCREPANO REPRESENT NOTICE TO
BIRD PEB BIRD PEB BIRD PEB	2" 2" 2"	BUBBLER SHRUB SPRAY TURF ROTOR	61.20 35.04 48.18						6.	IRRIGATION IMPERVIOUS OTHERWISE WITHIN LAN

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI				SCHEDUL
	RAIN BIRD 1804-SAM-PRS 15 STRIP SERIES TURF SPRAY 4.0" POP-UP SPRINKI FR WITH CO-MOI DED	20	<u></u> 30			<u>NUMBER</u>   2	<u>MODEL</u> Rain Bird F Rain Bird F
221	WIPER SEAL. 1/2" NPT FEMALE THREADED INLET. WITH SEAL-A-MATIC CHECK VALVE. PRESSURE REGULATING.					4 3 4	RAIN BIRD F
Image: Optimized with the second	RAIN BIRD 1812-PRS SQ SERIES SHRUB SPRAY 12.0" POP-UP SPRINKLER WITH CO-MOLDED	I	30			5 6 7	kain bird f Rain bird f Rain bird f
	WIPER SEAL. SIDE AND BOTTOM INLET. 1/2" NPT FEMALE THREADED INLET. WITH PRESSURE REGULATING DEVICE.					8 9 10	RAIN BIRD F RAIN BIRD F RAIN BIRD F
EST LCS RCS CST SST	RAIN BIRD 1812-PRS 15 STRIP SERIES SHRUB SPRAY 12.0" POP-UP SPRINKLER WITH CO-MOLDED WIPER SEAL, SIDE AND BOTTOM INLET 1/2" NPT FEMALE	11 <b>9</b>	30			  2  3	RAIN BIRD F RAIN BIRD F RAIN BIRD F
<b>A B B</b>	THREADED INLET. WITH PRESSURE REGULATING DEVICE.		30			14 15	RAIN BIRD F
4V 6V 18V	SHRUB SPRAY 12.0" POP-UP SPRINKLER WITH CO-MOLDED WIPER SEAL. SIDE AND BOTTOM INLET. 1/2" NPT FEMALE	111	50			16 17 18	RAIN BIRD F RAIN BIRD F RAIN BIRD F
8 08HE-VAN 12 12HE-VAN	THREADED INLET. WITH PRESSURE REGULATING DEVICE. RAIN BIRD 1812-PRS ADJ	364	30			19 20 21	RAIN BIRD F RAIN BIRD F RAIN BIRD F
10HE-VAN (15) 15HE-VAN	SHRUB SPRAY 12.0" POP-UP SPRINKLER WITH CO-MOLDED WIPER SEAL. SIDE AND BOTTOM INLET. 1/2" NPT FEMALE THREADED INLET. WITH PRESSURE REGULATING DEVICE.					22 23 24	RAIN BIRD F RAIN BIRD F RAIN BIRD F
ο	RAIN BIRD ISOOAF FLOOD FLOOD BUBBLER ON IPS FLEX HOSE PER DETAIL	286	30			25 26	RAIN BIRD F
				CDM		27 28 29	RAIN BIRD F RAIN BIRD F RAIN BIRD F
<u>511MLDOL</u>	RAIN BIRD 3504-PC	32	35	<u>0.67</u>	17'	30 31 32	RAIN BIRD F RAIN BIRD F RAIN BIRD F
(1.0)	RAIN BIRD 3504-PC	18	35	0.92	21'	33 34 35	RAIN BIRD I RAIN BIRD I RAIN BIRD I
(1.5)	TURF ROTOR, 4.0" POP-UP. ADJUSTABLE AND FULL CIRCLE. RAIN BIRD 3504-PC	23	35	1.28	23'	36 37 38	RAIN BIRD F RAIN BIRD F RAIN BIRD F
2.0	TURF ROTOR, 4.0" POP-UP. ADJUSTABLE AND FULL CIRCLE.	13	35	1.69	27'	39	RAIN BIRD F Common Wird
	TURF ROTOR, 4.0" POP-UP. ADJUSTABLE AND FULL CIRCLE.	2	35	260	_ · a''		
	TURF ROTOR, 4.0" POP-UP. ADJUSTABLE AND FULL CIRCLE.	2		2.00	5		
<u>(4.10</u> 1.5	TURF ROTOR, 4.0" POP-UP. ADJUSTABLE AND FULL CIRCLE.	22 	25	5.58	22		
0	RAIN BIRD 5006-PC, FC-R TURF ROTOR, 6.0" POP-UP, PLASTIC RISER. ADJUSTABLE AND FULL CIRCLE. STANDARD ANGLE NOZZLE. PRESSURE	44	45	1.54	35'		_
_2.0	REGULATING. RAIN BIRD 5006-PC. FC-R	8	45	207	37'		(
0	TURF ROTOR, 6.0" POP-UP, PLASTIC RISER. ADJUSTABLE AND FULL CIRCLE. STANDARD ANGLE NOZZLE. PRESSURE PEGUI ATING	-	- <del>-</del> -	2.01	<b>~</b> 1		$\checkmark$
_2.5	RAIN BIRD 5006-PC, FC-R	6	45	2.51	37'		
$\bigcirc$	AND FULL CIRCLE. STANDARD ANGLE NOZZLE. PRESSURE REGULATING.						45 [
$\bigcirc^{3.\emptyset}$	RAIN BIRD 5006-PC, FC-R TURF ROTOR, 6.0" POP-UP, PLASTIC RISER. ADJUSTABLE	З	45	3.09	40'		
	AND FULL CIRCLE. STANDARD ANGLE NOZZLE. PRESSURE REGULATING.						
<b>○</b> <sup>4.∅</sup>	RAIN BIRD 5006-PC, FC-R TURF ROTOR, 6.0" POP-UP, PLASTIC RISER. ADJUSTABLE AND FULL CIRCLE. STANDARD ANGLE N0771 F. PREGGIRF	6	45	4 <i>.0</i> 1	42'		
E 0.	REGULATING.	з	<u>45</u>	5.00	45'		
$\bigcirc^{\mathfrak{I},\mathfrak{V}}$	TURF ROTOR, 6.0" POP-UP, PLASTIC RISER. ADJUSTABLE AND FULL CIRCLE. STANDARD ANGLE NOZZLE. PRESSURE REGULATING	-	, <b>.</b> .	<b>-</b> 1			
0 <sup>8.0</sup>		42	45	8.03	47'		
$\cup$	IURF ROTOR, 6.0" POP-UP, PLASTIC RISER. ADJUSTABLE AND FULL CIRCLE. STANDARD ANGLE NOZZLE. PRESSURE REGULATING.						
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	<u>aty</u>					SEC
	RAIN BIRD PEB I", I-1/2", 2" PLASTIC INDUSTRIAL VALVES. LOW FLOW	39					
	CHERATING CAPABILITY, GLOBE CONFIGURATION.	I					
BF	REDUCED PRESSURE BACKFLOW PREVENTER. REFER TO CIVIL SHEET C-601.					(2	$2 \right) \frac{1 \Pi R}{3/4^{"}}$
С	RAIN BIRD ESPI2LXMEF 48 STATION COMMERCIAL CONTROLLER. MOUNT IN RAINBIRD LXMMSS PEDESTAL. FLOW SENSING AND WATER	I					
	MANAGEMENT CAPABILITIES.	I					
୧୬	RAIN SENSOR, WITH METAL LATCHING BRACKET, EXTENSION WIRE.						
(RP)	RAIN BIRD LIGHT COMMERCIAL PUMP STATION 3/4HP, IHP, I-I/2HP, 2HP, AND 3HP. RESIDENTIAL, LIGHT COMMERCIAL PARKS AND RECUSE CONFIGURATION	I					
~	STATION, WITH QUICK DISCONNECTION, POWDER COATED STEEL ENCLOSURE, START RELAY AND COOLING LOUVRES.						
	WATER METER 2" REFER TO CIVIL SHEET C-601	I					
L M	IRRIGATION LATERAL LINE: PVC CLASS 200 SDR 21 PVC CLASS 200 IRRIGATION PIPE. ONLY LATERAL	+/- 19,824 L.	.F.				
	TRANSITION PIPE SIZES I" AND ABOVE ARE INDICATED ON THE PLAN, WITH ALL OTHERS BEING 3/4" IN SIZE.						
	IRRIGATION MAINLINE: PVC CLASS 200 SDR 21 PVC CLASS 200 IRRIGATION PIPE.	+/- 2,883 L.I	F.				
	PIPE SLEEVE: PVC SCHEDULE 40 TYPICAL PIPE SLEEVE FOR IRRIGATION PIPE. PIPE SLEEVE	AS NEEDED				NATIVE	SOIL BACKFILL
	SILE SHALL ALLOW FOR IRRIGATION PIPING AND THEIR RELATED COUPLINGS TO EASILY SLIDE THROUGH SLEEVING MATERIAL. EXTEND SLEEVES IS INCHES BEYOND EDGES OF						1PACT TO 95% COMPACTION ATION LATERAL
# • # •	Valve Salivat				BACKFIL	l with native	E SOIL, WATER
<i>"" "" " " " " " " " "</i>	Valve Flow Valve Size				JET & C DENS	OMPACT TO SITY. ALLOW	90% OPTIMUM 48 HOURS TO
					JLIILE, AI	WITH	NATIVE SOIL.
							RIGATION MAIN
						UK S	
							EXISTING SOIL
					$\sim$ -		
					(3) - (3)	NOT TO SCA	









# UNDERGROUND IRRIGATION SYSTEM

PART I: GENERAL 1.01 SCOPE

- A. The work covered by this specification shall include the furnishing of all labor, materials, tools and equipment necessary to perform and complete the installation of an automatic irrigation system as specified herein and as shown on the drawings and any incidental work not shown or specified which can reasonably be determined to be part of the work and necessary to provide a complete and functional system.
- B. The work covered by this specification also includes all permits, federal, state and local taxes and all other costs, both foreseeable and unforeseeable at the time of construction.
- C. No deviation from these specifications, the accompanying drawings, or agreement is authorized or shall be made without prior written authorization signed by the Owner or his duly appointed representative.
- 1.02 QUALITY ASSURANCE
- D. Installer Qualifications: A firm specializing in irrigation work with not less than five (5) years of experience in installing irrigation systems similar to those required for this project.
- E. Coordination: Coordinate and cooperate with other contractors to enable the work to proceed as rapidly and efficiently as possible.
- F. Inspection of Site: The Contractor shall acquaint himself with all site conditions, including underground utilities before construction is to begin. Contractor shall coordinate placement of underground materials with contractors previously working underground in the vicinity or those scheduled to do underground work in the vicinity. Contractor is responsible for minor adjustments in the layout of the work to accommodate existing facilities.
- G. Protection of Existing Plants and Site Conditions: The Contractor shall take necessary precautions to protect site conditions to remain. Should damages be incurred, this Contractor shall repair the damage to its original condition at his own expense. Any disruption, destruction, or disturbance of any existing plant, tree, shrub, or turf, or any structure shall be completely restored to the satisfaction of the Owner and his representatives, solely at the Contractor's expense.
- H. Protection of Work and Property: The Contractor shall be liable for and shall take the following actions as required with regard to damage to any of the Owner's property.
  - 1. Any existing building, equipment, piping, pipe coverings, electrical systems, sewers, sidewalks, roads, grounds, landscaping or structure of any kind (including without limitation, damage from leaks in the piping system being installed or having been installed by Contractor) damaged by the Contractor, or by his agents, employees, or subcontractors, during the course of his work, whether through negligence or otherwise, shall be replaced or repaired by Contractor at his own expense in a manner satisfactory to Owner, which repair or replacement shall be a condition precedent to Owner's obligation to make final payment under the Contract.
  - 2. Contractor shall also be responsible for damage to any work covered by these specifications before final acceptance of the work. He shall securely cover all openings into the systems and cover all apparatus, equipment and appliances, both before and after being set in place to prevent obstructions on the pipes and the breakage, misuse or disfigurement of the apparatus, equipment or appliance.
  - 3. All trenching or other work under the leaf canopy of any and all trees shall be done by hand or by other methods so that no branches are damaged in any way.
  - Buildings, walks, walls, and other property shall be protected from damage. Open ditches left exposed shall be flagged and barricaded by the Contractor by approved means. The Contractor shall restore disturbed areas to their original condition.
  - 4. The Contractor shall be responsible for requesting the proper utility company to stake the exact location of any underground lines including but not limited to electric, gas, telephone service, water, and cable
  - The Contractor shall take whatever precautions are necessary to protect these underground lines from damage. In the event damage does occur, all damage shall be completely repaired to its original condition, at no additional cost to the Owner.
  - 5. The Contractor shall request the Owner, in writing, to locate any private utilities (i.e., electrical service to outside lighting) before proceeding with any excavation. If, after such requests and necessary staking, private utilities which were not staked are encountered and damaged by the Contractor, they shall be repaired by the Owner at no cost to the Contractor. If the Contractor damages staked or located utilities, they shall be repaired at the Contractor's expense.
- J. Codes and Inspections: The entire installation shall comply fully with all local and state laws and ordinances and with all established codes arrange for all necessary inspections and shall pay all fees and expenses in connection with same, as part of the work under this Contract. Upon completion of the work, he shall furnish to the "Owner" all inspection certificates customarily issued in connection with the class of work involved.
- K. The Contractor shall keep on his work, during its progress, a competent superintendent and any necessary assistants, all satisfactory to the Owner, or Owner's representative.
- L. The superintendent shall represent the Contractor in his absence and all directions given to him shall be as binding as if given to the Contractor.
- M. The Owner's Landscape Architect or designated individual shall have full authority to approve or reject work performed by the Contractor. The Owner's Authorized Representative shall also have full authority to make field changes that are deemed necessary.
- N. Final Acceptance: Final acceptance of the work may be obtained from the Owner upon the satisfactory completion of all work. Acceptance by the Landscape Architect and/or Owner in no way removes the Contractor of his responsibility to make further repairs, corrections and adjustments to eliminate any deficiencies which may later be discovered.
- O. Guarantee: All work shall be guaranteed for one year from date of final acceptance against all defects in material, equipment and workmanship to the satisfaction of the Owner. Repairs, if required, shall be done promptly at no cost to the Owner.
- 1. The guarantee shall also cover repair of damage to any part of the premises resulting from leaks or workmanship, to the satisfaction of the Owner. The Contractor shall not be responsible for work damaged by others. Repairs, if required, shall be done promptly. The quarantee shall state the name of the Owner, provide full guarantee terms, effective and termination date, name and license number of Contractor providing guarantee, address, and telephone number. It shall be signed by the chief executive of the Contractor of his liability under the guarantee. Such warranties shall only supplement the guarantee.
- 2. If, within ten (10) days after mailing of written notice by the Owner to the Contractor requesting repairs or replacement resulting from a breach of warranty, the Contractor shall neglect to make or undertake with due diligence to make the same, the Owner may make such repairs at the Contractor's expense; provided, however, that in the case of emergency where, in the judgment of the Owner, delay would cause serious loss or damage, repairs or replacement may be made without notice being sent to the Contractor, and Contractor shall pay the cost thereof.

R. Workmanship: All work shall be installed by qualified, skilled personnel, proficient in the trades required, in a neat, orderly, and responsible manner with recognized standards of workmanship. The Contractor shall have had considerable experience and demonstrated ability in the installation of sprinkler irrigation systems of this type. 1.04 SUBMITTALS

A. Product Data: After the award of the Contract and prior to beginning work, the Contractor shall submit for approval by the Owner and Landscape Architect, two copies of the complete list of materials, manufacturer's technical data, and installation instructions which he proposes to install

B. Commence no work before approval of material list and descriptive material by the Landscape Architect

C. Record Drawings: The Contractor shall record on reproducibles, all changes that may be made during actual installation of the system. Provide controller sequencing and control valve locations.

1. Immediately upon installation of any piping, valves, wiring, sprinklers, etc., in locations other than shown on the original drawings or of sizes other than indicated, the Contractor shall clearly indicate such changes on a set of blueline prints. Records shall be made on a daily basis. All records shall be neat and subject to the approval of the Owner.

2. The Contractor shall also indicate on the record prints the location of all wire splices, original or due to repair, that are installed underground in a location other than the controller pedestal, remote control value box, power source or connection to a value-in-head sprinkler.

3. These drawings shall also serve as work progress sheets. The Contractor shall make neat and legible notations thereon daily as the work proceeds, showing the work as actually installed. These drawings shall be available at all times for review and shall be kept in a location designated by the Owner's Representative.

4. Progress payment request and record drawing information must be approved by Landscape Architect before payment is made.

5. If in the opinion of the Owner or his representative, the record drawing information is not being properly or promptly recorded, construction payment may be stopped until the proper information has been recorded and submitted.

6. Before the date of the final site observation and approval, the Contractor shall deliver one set (copies) of reproducible record drawing plans and notes to the Landscape Architect. Record drawing information shall be approved by the Landscape Architect prior to submittal to Owner for final payments, including retentions.

W. Operations and Maintenance Manuals: The Contractor shall prepare and deliver to the Owner, or his designated representative within ten (10) calendar days prior to completion of construction, a hard cover binder with three rings containing the following information:

1. Index sheet stating the Contractor's address and business telephone number, list of equipment with name(2) and address(es) of local manufacturer's representative(s).

2. Catalog and parts sheets on every material and equipment installed under this Contract.

3. Complete operating and maintenance instruction on all major equipment. Include initial controller schedule and recommended schedule after establishment period.

4. Demonstrate to and provide the Owner's maintenance personnel with instructions for major equipment and show evidence in writing to the Owner, or his designated representative at the conclusion of the project that this service has been rendered.

A. Due to the scale of the drawings, it is not possible to indicate all offsets, fittings and sleeves which may be required. The Contractor shall carefully investigate the structural and finished conditions affecting all of the work and plan his work accordingly, furnishing such offsets, fittings and sleeves as may be required to meet such conditions.

B. The drawings are generally digargmmatic and indicative of the work to be installed. The work shall be installed in such a manner as to avoid conflicts between irrigation systems, planting and architectural features. Deviations shall be brought to the Landscape Architects attention.

C. All work called for a on the drawings by notes or details shall be furnished and installed whether or not specifically mentioned in the specifications.

D. The Contractor shall not willfully install the irrigation system as shown on the drawings when it is obvious in the field that obstructions, grade differences or discrepancies in area dimensions exist that might not have been known in engineering. Such obstructions or differences should be brought to the attention of the Landscape Architect. In the event that notification is not performed, the Contractor shall assume full responsibility for any revision necessary.

E. If, in the opinion of the Landscape Architect, the labor furnished by the Contractor is incompetent, unskilled, or unreliable, his equipment inadequate, improper or unsafe, or if the Contractor shall fail to continuously and diligently execute the construction, the Landscape Architect or Owner shall, in writing, instruct the Contractor to remove all such causes of noncompliance and the Contractor shall promptly comply.

F. The Contractor shall be responsible for full and complete coverage of all irrigation areas. The Landscape Architect shall be notified of any necessary adjustments at no additional cost to the Owner. Any revisions to the irrigation system must be submitted and answered in written form, along with any change in Contract price. Layout may be modified, if necessary to obtain coverage. Spacing not to exceed 60% of the diameter.

PART II: PRODUCTS

Material and equipment shall be supplied by the Contractor. No substitutions shall be allowed without the prior written approval of the Owner/Landscape Architect. The Contractor shall inspect all materials and equipment prior to installation, and defective materials shall be replaced with the proper materials and equipment. Those items used in the installation found to be defective, improperly installed or not as specified, shall be removed and the proper materials and equipment installed in the proper manner, as interpreted by the Owner/Landscape Architect. The Contractor shall remove all damaged and defective pipe and equipment from the site.

P. The Contractor shall provide full, 100% irrigation coverage in all areas designed with proposed plantings, in accordance with the site's governing permitting requirements and as designed.

Q. On-site Observation: At any time during the installation of the irrigation system by the Contractor, the Owner or Landscape Architect may visit the site to observe work underway. Upon request, the Contractor shall be required to uncover specified work as directed by the Owner or material, workmanship or method of installation not meet the standards specified herein, the Contractor shall replace the work at his own expense.

All materials shall be those specified and/or approved by the Landscape Architect.

1.05 EXPLANATION OF DRAWINGS

#### 2.01 MATERIALS

2.02 PIPING

- otherwise directed by the Landscape Architect.

2. Main Line Under Pressure: PVC shall conform to the requirements of ASTM Designation D 2241, Class 1120 or 1220, Schedule 40 with belled end for solvent weld connection.

- 3. Pipe Markings: All PVC pipe shall bear the following markings: o Manufacturer's Name o Nominal Pipe Size
  - o Schedule or Class
  - o Pressure Ratina of PSI
  - o Date of Extrusion
- 2.04 PVC JOINTS

Joints in PVC pipe smaller than 3" shall be solvent welded in accordance with the recommendations of the pipe manufacturer; the solvent cleaner and welding compound furnished with the pipe.

- 2.05 THREADED CONNECTIONS
- A. Threaded PVC connections shall be made up using Teflon tape only.
- using Schedule 80 threaded fittings and nipples.
- 2.06 SOLVENT CEMENT
- gasketted pipe to be intrical ring type. Insert gaskets will not be accepted.
- 2.07 PIPE AND WIRE SLEEVES
- A. Sleeves to be installed:
- - lateral lines, and electric wire.

2 08 SPRINKLER HEADS

A. Spray Sprinklers: The sprinkler shall be a fixed spray type designed for in-ground installation. The nozzle shall elevate 6" (or as designated on plan) when in operation. The body of the sprinkler shall be constructed of non-corrosive heavy duty Cycolac. A filter screen shall be in the nozzle piston. All sprinkler parts shall be removable through the tip of the unit by removal of a threaded cap.

Riser mounted spray shall be as indicated on the plans. The sprinkler shall consist of a nozzle and body. The body of the riser-mount sprinkler shall be constructed of non-corrosive materials. A cone strainer shall be a separate part with the nozzle assembly to allow for easy flushing of the sprinkler. Maximum working pressure at the base of the sprinkler shall be 40 PSI.

(continued...)

A. General Provisions: All materials throughout the system shall be new and in perfect condition unless

B. Polyvinyl Chloride Pipe (PVC): (Where indicated on plan, use non-potable purple piping.)

1. Laterals: PVC shall conform to the requirements of ASTM Designation D 2241, Class 1120 or 1220. All lateral piping less than 3" in diameter shall be Class 200 SDR-21.

o NSF (National Sanitation Foundation) Approval

B. Connection between mainline pipe fittings and automatic or manual control valves shall be made

A. General: Provide solvent cement and primer for PVC solvent weld pipe and fittings recommended by the manufacturer. Pipe joints for solvent weld pipe to be belled end. Pipe joints for

B. Thrust Blocks: Main line piping 3" or greater in diameter shall have thrust blocks sized and placed in accordance with the pipe manufacturer's recommendations or, in the absence of specified recommendations by the pipe manufacturer. 3000 PSI concrete thrusts shall be properly installed at tees, elbows, 45's, crosses, reducers, plugs, caps and valves.

1. The Contractor shall install irrigation system pipe and wire sleeves conforming to the following:

a. All pipe sleeves shall extend a minimum of 36" beyond the edges of pavement.

b. All pipe sleeves to be installed beneath future/existing road surfaces shall be PVC pipe Schedule 40 or jack and bore steel pipe as per FDOT specifications, and as shown on

c. All irrigation system wires shall be sleeved seperately from main or lateral lines.

d. All pipe sleeves shall be installed at the minimum depth specified for main lines,

e. Contractor shall coordinate all pipe sleeve locations and depths prior to initiating installation of the irrigation system.



#### 2.09 AUTOMATIC CONTROL VALVE

The automatic remote control valves shall be as specified on the plans, or approved equal.

2.10 GATE VALVES

- A. Gate valves for 3/4" through 2-1/2" shall be of brass or bronze construction, solid wedge, IPS threads, non-rising stem with wheel operating handle, for a continuous working pressure of 150
- B. Gate valves for 3" and larger: Iron body, brass or bronze mounted AWWA gate valves, with a clear waterway equal to the full nominal diameter of the valve, rubber gasket for a continuous working pressure of 150p PSI. Valve shall be equipped with a square operating nut.

2.11 VALVE BOXES

- A. For aate valves, use AMETEK #10-181-014 box with #10-181-015 locking lid, or as per the drawings.
- B. For control valves 3/4" through 2", the drip valve assemblies, use AMETEK #10-181-014 box with #10-181-015 locking lid, or sized as necessary to effectively house the equipment
- C. For control wiring splices, use AMETEK #10-181-014 box with #10-181-015 locking lid, or as per the drawinas

2.12 IRRIGATION WIRING

- A. Wiring used for connecting the electric control valves to the controllers shall be Type UF, 600 volt, single strand, solid copper with PVC insulation 4/64" thick. Size shall be 14 aguae, red for "hot" or lead wires, and common wire to be 14 gauge, white in color.
- B. Contractor shall perform an ohm test on ground to assure adequate protection against surges and indirect lightning strikes.
- 2.13 MISCELLANEOUS MATERIALS
- A. Drainage Backfill: Cleaned gravel or crushed stone, graded from 1" maximum to 3/4" minimum.
- B. Metalized Underground Tape: The detectable, underground utility marking tape shall consist of a minimum: 5 mil (0.005") overall thickness; five-ply composition; ultra-high molecular weight. 100% virgin polyethylene; acid, alkaline and corrosion resistant; with no less than 150 pounds of tensile break strength per 6" width; color-code impregnated with color stable, lead-free, organic pigments suitable for direct burial. Tapes utilizing reprocessed plastics or resins shall not be acceptable. The detectable, underground utility marking tape shall have a 35 gauge (0.0035") solid aluminum foil, core encapsulated within a 2.55 mil (0.00255") polyethylene backing and a 0.6 mil (0.006") PET cover coating. The laminate on each side shall consist of a 0.75 mil (0.00075") layer of hot LPDE, poly-fusing the "sandwich" without use of adhesives.

#### 2.14 AUTOMATIC CONTROL SYSTEM

for 11

An Independent Station Controller: Furnish a solid state controller, as specified on the plans. Each station shall be capable of timing from zero (0) minute to 99 minutes per station in one (1) minute increments.

Each station shall be capable of operating two (2) 7VA electric valve-in-head solenoids.

The stand-alone controller shall have two (2) possible programs.

The stand-alone controller shall provide global percentage increase/decrease (water budget) for all stations simultaneously, from ten (10) to two hundred (200) percent, in ten (10) percent increments.

All stations shall be able to be turned on/off manually buy operating timing mechanism or by manual switch at station output.

The stand-alone controller shall incorporate an integral MOV surge protection into the terminal block for each of its 24 VAC field wire outputs. Controller power input wires will also incorporate surge protection.

The control panel shall provide continuous display time. It shall have alphanumeric displays of descriptive English menus and legend identifiers with cursor selection of function and precision value adjustment by rotary dial input.

The stand-alone controller shall be UL listed and FCC approved.

The stand-alone controller shall have 117 VAC, 60 Hz input, 26.5 VAC, 60 Hz output for operating 24 VAC solenoids.

The stand-alone controller cabinet shall be a lockable and weather-resistant outdoor cabinet. Mount as noted on plans.

The controller shall be equipped with lightening protection, by the Contractor, on both the primary (120v) and each secondary (24v) circuit. The controller circuits shall be grounded to a copper clad grounding rod located at each controller.

The controller shall be equipped for a water conservation device. as specified.

#### PART III: EXECUTION

3.01 INSPECTION

The Contractor shall examine the areas and conditions under which landscape irrigation system is to be installed and notify the Landscape Architect in writing of conditions detrimental to the proper and timely completion of the work. The Contractor shall proceed with the work until unsatisfactory conditions have been corrected in a manner acceptable to the Landscape Architect.

3.02 PREPARATION

The Contractor shall provide sleeves to accommodate piping under walks or paving. The Contractor shall coordinate with other trades and install to accurate levels prior to paving work. Cutting and patching of paving and concrete will not be permitted. The Contractor shall maintain all warning signs, shoring, barricades, flares and red lanterns, as required by any local codes, ordinances or permits.

A. Excavation: The Contractor shall stake out the location of each run of pipe, sprinkler heads, sprinkler values and isolation values prior to trenching. Excavation shall be open vertical construction sufficiently wide to provide free working space around the work installed and to provide ample space or backfilling and tamping. Trenches for pipe shall be cut to required grade lines, and compacted to provide accurate grade and uniform bearing for the full length of the line. The bottom of the trenches shall be free of rock or other sharp edged objects. Minimum cover shall be as follows:

<u>Pipe and Wire Depth</u>

Pressure Lateral Pi Lateral Pi Control Wiring

B. Minimum Clearances: All pipelines shall have a minimum clearance of six inches from each other and from lines of other crafts. Parallel lines shall not be installed directly over one another. No lateral line shall be installed in the main-line trench.

1. Only the solvent recommended by the pipe manufacturer shall be used. All PVC pipe and fittings shall be installed as outlined and instructed by the pipe manufacturer, and it shall be the Contractor's full responsibility to make arrangements with the pipe manufacturer for any field assistance that may be necessary. The Contractor shall assume full responsibility for the correct installation.

Initial backfill on PVC lines shall be pulyerized native soil, free of foreign matter. Within radius of 4" of the pipe shall be clean soil or sand. Plant locations shall take precedence over sprinkler and pipe locations. The Contractor shall coordinate the location of trees and shrubs with the routing of lines and final head locations.

A. Backfill and Compaction: The Contractor shall leave trenches slightly mounded to allow for settlement after the backfilling is completed. The Contractor shall clean the site of the work continuously of excess waste materials as the backfilling progresses, and leave in a neat condition. No trenches shall be left open for a period of more than 48 hours. Protect open trenches as required.

The Contractor shall carefully backfill excavated materials approved for backfilling, consisting of earth, loam, sand, and other approved materials, free of rock and debris over 1" in size. Backfill shall be compacted to original density of surrounding soil without dips, sunken areas, or irregularities.

The Contractor shall conform to DOT requirements for methods and required compaction percentages, for roads and paving.

The Contractor shall hand place the first 6" of backfill (or to top of pipe) and have it walked on so as to secure the position of the pipe and wire.

No wheel rolling will be allowed. The Contractor shall remove rock or debris extracted from backfill materials and dispose of offsite. The Contractor shall fill any voids left in backfill with approved backfill materials.

B. Existing Lawns: Where trenching is required across existing lawns, uniformly cut strips of sod 6" wider than trench. The Contractor shall remove sod in rolls of suitable size for handling and keep moistened until replanted. The Contractor shall replant sod within 48 hours after removal, roll and water generously. The Contractor shall resod any areas not in healthy condition equal to adjoining lawns 10 days after replanting.

C. Seeded Area: Trenching will be required across existing seeded areas, primarily roadway edging. The Contractor shall conform to the requirements of seeding, Section 02930 for the reseeding of the disturbed trench area.

D. Pavements: Jack and bore or directional bore piping under paving materials as per local regulatory codes. No cutting and patching of pavement will be permitted.

3.06 VALVES

A. Isolation Valves: Shall be sized corresponding to adjacent pipe size. Specified valve boxes shall be installed flush with finish grade in such a manner that surface forces applied to their exposed area will not be transmitted to the piping in which the valve is installed nor any other piping, wiring or other lines in the vicinity of said valves.

C. Electric Control Valves: Shall be installed in specified valve boxes. The valve shall have 6" of 3/4" pea gravel installed below the bottom of the valve. If the valve box does not extend to the base of the valve, a valve box extension shall be installed. Electric control valves shall be installed where shown and grouped together where practical. The Contractor shall place no closer than 24" to walk edges, bikeway edges, buildings and walls. The Contractor shall adjust the value to provide flow rate or rated operating pressure required for each sprinkler circuit.

#### 3.03 TRENCHING AND BACKFILLING

Mainline	18"	at	top	of	pipe	from	Finish	Grade
ping (rotor)	12"	at	top	of	pipe	from	Finish	Grade
ping (pop-up)	12"	at	top	of	pipe	from	Finish	Grade
iring	Sid	e o	of m	ain	Line			

#### 3.04 INSTALLATION OF PIPING

A. PVC Pipe and Joints: The Contractor shall not install solvent wild pipe when air temperature is below 400 F. Installation shall be in accordance with the manufacturer's instructions.

#### 3.05 BACKFILLING PROCEDURES

B. Gate Valves: Install where shown, in valve boxes.

#### 3.07 CONDUIT AND SLEEVES

with the General Site Contractor.

The Contractor shall coordinate installation of sleeves with work of other disciplines. 3.08 CONTROLS

- A. The Contractor shall connect electric control valves to controllers in a clockwise sequence to on the controller.
- steel ground rod driven a minimum of 8' into the ground and clamped
- compliance with NEC requirements.

#### 3.09 CONTROL WIRE

- cleanina.
- wrapping wire at least eight times around a 3/4" pipe and withdrawing pipe.
- D. Electrical connections to electric control valves shall be made with Rainbird Pen-Tite or Techdel GT-3-GEL - Tite connectors or equal.

Power Connections: Electrical connections to power and signal wires shall be made using 3M 82-A2 power cable splice kits.

3.10 SPRINKLER HEADS

#### A. General Provisions:

- flexible PVC. Top to be flush with finish grade or top of curb.
- 2. Spacing of heads shall not exceed the maximum indicated on the shop drawings (unless directed by by the manufacturer.
- B. Head Types:
- pavement.
- from the edge of pavement.

#### 3.11 COMPLETION

sure there is no foreign matter in the lines.

The Contractor shall flush the main lines from dead end fittings for a minimum of five minutes under a full head of pressure.

advance of testing.

Prior to backfilling of main line fittings, Contractor shall fill the main line piping with water, in the presence of the Owner/Landscape Architect, taking care to purge the air from it by operating all the sprinkler control valves one or more times and/or such other means as may be necessary. A small, high pressure pump or other means of maintaining a continuous water supply shall be connected to the main line and set so as to maintain 100 PSI in the main line system for two (2) hours without interruption. When this has been accomplished and while the pressure in the system is still 100 PSI, leakage testing shall be performed in accordance with AWWA Standard C-600. Pressure readings shall be noted and make up water usage shall be recorded. Should the rate of make up water usage indicate significant leakage, the source of such leakage shall be found and corrected and the system then retested until the Owner/Landscape Architect is satisfied that the system is reasonably sound. Lateral line testing shall be conducted during the operating testing of the system by checking visually the ground surface until no leaks in this portion of the system are evident. Leaks shall be repaired or paid for by the Contractor at any time they appear during the warranty period.

C. Adjustment and Coverage of System: Coordinate pressure testing with adjustments and coverage test of system so both may occur at the same time. The Contractor shall balance and adjust the various components of the system so that the overall operation of the system is most efficient. This includes a synchronization of the controllers, adjustments to pressure regulators, pressure relief valves, part circle sprinkler heads, and individual station adjustments on the controllers.

## 3.12 WARRANTY

- Architect that the warranty period is in effect.
- the Owner and/or Landscape Architect.
- make full and immediate restoration for said damages.

#### A. Conduit and Sleeves for Control Wiring and Main/Lateral Pipe: The Contractor shall provide and install where necessary. Contractor shall coordinate locations of previously installed sleeving

correspond with station settings beginning with Stations 1, 2, 3, etc. Automatic controllers shall be provided and installed by the Contractor as noted on the drawings. All zones will be labeled

B. Controllers shall be equipped with lightning protection and grounded to a standard 5/8" copper clad

C. The electrical service to the controllers shall be performed by an electrical subcontractor in

A. Control wiring between the controller and electric valves shall be buried in main line trenches or in separate trenches. Electrical connection at valve will allow for pigtail so solenoid can be removed from valve with sufficient slack to allow ends to be pulled 12" above ground for examination and

B. An expansion loop shall be provided at every value at 100' o.c. Expansion loop shall be formed by

C. The wire shall be bundled and taped every ten feet. The wire shall be laid in the trench prior to installing the pipe being careful to install wire beneath and 6" to the side of the main pipe line.

1. Sprinkler heads shall be installed as designated on the shop drawings. Heads shall be installed on

the Landscape Architect). In no case shall the spacing exceed the maximum recommended

1. Pop-up- Rotary Sprinkler Heads: Shall be installed on flex joint and be set with top of head flush with finish grade. Heads installed at curb shall have 6" to 10" between perimeter of head and concrete. Heads placed at edge of pavement having no curb shall be installed 24" from edge of

2. Spray Pop-up Sprinkler Heads: Shall be installed on flexible PVC and be set with top of head flush with finished grade. Sprinkler heads placed adjacent to curbs will be installed 9" from concrete. Sprinkler heads placed adjacent to pavement having no curb shall be installed 24"

A. Flushing: Before sprinkler heads are set, the Contractor shall flush the lines thoroughly to make

B. Testing: The Contractor shall notify Landscape Architect and Owner forty-eight (48) hours in

A. The Contractor shall fully warrant the landscape irrigation system for a period of one (1) year after the written final acceptance and will receive a written confirmation from the Landscape

B. During the warranty period, the Contractor will enforce all manufacturer's and supplier's warranties as if made by the Contractor himself. Any malfunctions, deficiencies, breaks, damages, disrepair, or other disorder due to materials, workmanship, or installation by the Contractor and his suppliers shall be immediately and properly corrected to the proper order as directed by

C. Any damages caused by system malfunction shall be the responsibility of the Contractor who shall



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#### ABBREVIATIONS

A/C ADJ. A.F.F. ALUM. APPROX.

BD. BLDG. BLK. BM. B.M.

CAB. C. BRD. C.B. C.C. CEIL./CLG. C.I. C.J. © CENTER LINE CLO./CL. C.L.P. C.M.P. COL. CONC. CONST. CONT. CONTR. D.F. DIAM.

DIM. DISP. DN. D.O.T, DR DETAIL DUG.

EA, E.H.E. E.J. ELECT. ELEV. ENCL. EQ, EQUIP. E.W.C. EXIST. EXT.

F.D. F.E. F.E.C. F.E.L. F.H. F.H.C. FIN. FL. F.M. FT. FTG.

GA. GALV. G.B. G,C, G.L. G.W.B. GYP.

H.B. HCPD. H.M. HORIZ. HRDW. HT.



\_\_\_\_\_

JAN. JT.

# AIR CONDITION, -ED, -ER, -ING

ADJUSTABLE ABOVE FINISH FLOOR ALUMINUM AND ANGLE APPROXIMATELY АŤ

LAM. LAV.

L.L.H.

M.

MAT.

MAX.

M.B.H.

MECH.

MANUF.

M.H.

MIN. MISC. M.O. MTD. MTL.

N.

NEOP. NO. / \*

N.I.C.

O/C

O.D.

0.S.

P.B.

P.P.

P.T.

P.T.D.

P.T.H.

P.V.C.

PNL. Ø

R./RAD

R.C.P.

R.D.

RECT.

REINF.

REQ'D.

RM.

RM.V.

R.O.

R.O.W.

R.W.L.

S.

SCH.

S.D. SHT. SM.

SIM.

S.M.S.

S.N.D.

SND. SNV. SPC. SPECS. SQ. S.S. STD. STL. STRUCT.

SW.

Ť.

T. BD. T.B. T. & G.

T.O. T.P.H. TYP. UR.

UR.

V.C.P.

VERT.

W.

W/ W.C. W.D. W.H. W.R.

WOOD

WATER HEATER WASTE RECEPTACLE

PLBG.

PLYWD.

PT. / PTD.

fP

OPNG.

LND'G LP.

BOARD BUILDING BLOCK BEAM BENCH MARK

CABINET CHALKBOARD CATCH BASIN CONTROL CENTER CEILING CAST IRON CONTROL JOINT

CLOSET CONCRETE LIGHT POLE CORRUGATED METAL PIPE COLUMN CONCRETE CONSTRUCTION CONTINUOUS CONTRACTOR

DRINKING FOUNTAIN DIAMETER DIMENSION DISPENSER / DISPOSAL DOWN DEPARTMENT OF TRANSPORTATION DOOR DTL./DET DRAWING

EAST EACH ELECTRIC HAND DRYER EXPANSION JOINT ELECTRICAL ELEVATOR / ELEVATION ENCLOSURE EQUAL EQUIPMENT ELECTRIC WATER COOLER EXISTING EXTERIOR

FLOOR DRAIN FIRE EXTINGUISHER FIRE EXTINGUISHER CABINET FIRE EXTINGUISHER LOCKER FIRE HYDRANT FIRE HOSE CABINET FINISH FLOOR FRAMED MIRROR FEET / FOOT FOOTING

GAUGE GALVANIZED GRAB BAR GENERAL CONTRACTOR GRID LINE GYPSUM WALL BOARD GYPSUM

HOSE BIBB HANDICAPPED HOLLOW METAL HORIZONTAL HARDWARE HEIGHT

INSIDE DIAMETER INVERT JANITOR JOINT

#### SYMBOLS



LAMINATED LAVATORY LONG LEG HORIZONTAL LANDING LIGHT POLE
MIRROR MATERIAL MAXIMUM MOP AND BROOM HOLDER MECHANICAL MANUFACTURER MANHOLE MINIMUM MISCELLANEOUS MASONRY OPENING MOUNTED METAL
NORTH NEOPRENE NUMBER NOT IN SCUPPER
ON CENTER OUTSIDE DIAMETER OPENING OVERFLOW SCUPPER
PLATE PEGBOARD PLUMBING PLYWOOD POWER POLE PAINT / PAINTED PRESSURE TREATED PAPER TOWEL DISPENSER PAPER TOWEL HOLDER POLYVINYL CHLORIDE PANEL
RADIUS REINFORCED CONCRETE PIPE ROOF DRAIN RECTANGULAR REINFORCEMENT REQUIRED ROOM ROOF MANIFOLD VALVE ROUGH OPENING RIGHT-OF-WAY RAIN WATER LEADER
SOUTH SCHEDULE SOAP DISPENSER SHEET SMOOTH SIMILAR STRUCTURAL METAL STUD SANITARY NAPKIN DISPOSAL SANITARY NAPKIN VENDOR SPACE SPECIFICATIONS SQUARE STAINLESS STEEL OR SERVICE SINK STANDARD STEEL STRUCTURAL SWITCH
TOILET TACKBOARD TIE BEAM TONGUE AND GROOVE TOP OF TOILET PAPER HOLDER TYPICAL
VITREUOS CLAY PIPE VERTICAL
WEST WITH WATER CLOSET N





MATERIALS	
POROUS FILL	
ROCK	GLASS (LARGE SCALE)
LIGHTWEIGHT CONCRETE	ACOUSTICAL TILE
CAST-IN-PLACE CONCRETE	CERAMIC TILE (LARGE SCAL
BRICK	GYPSUM WALL BOARD (LARC
CONCRETE MASONRY UNIT (PLAN)	PLASTER, SAND, CEMENT, GR
PRE-CAST CONCRETE	RESILIENT FLOORING
MARBLE	TERRAZZO
RUBBLE STONE	SOUND INSUL, PARTITION (LA
SLATE, FLAGGING	
STRUCTURAL CLAY TILE	
ROUGH WOOD	GLASS BLOCK

GLAZING ELEVATIONS









LOOKING S.E.





(2)



(8)

SITE ENTRY, LOOKING SOUTH



LOOKING EASTWARD



LOOKING S.W. TO EXIST'G STG. BLDG.



SITE ENTRY, LOOKING S.W. (3)





LOOKING EASTWARD











- IMIDICLOPRID, AND PERMETHRING.













# SPACE RESERVED FOR CITY OF MIAMI APPROVAL STAMP CITY OF MIAMI INGORPORATI IBBS OFFICE OF CAPITAL IMPROVEMENT 444 S.W. 2nd Avenue, 8th Floor Miami, FL 33130 OPMENT B-40543 FL\_33125 S ATIONS മ MIAMI ш **N** >>ШОШ Ш Ш $\bigcirc$ Щ $\vdash$ $\mathcal{L}$ PROJI $\mathbf{\mathcal{L}}$ X RO $\mathbf{\mathcal{L}}$ ط 4 \_. ່ທ Ш AIAM 4TH Ш × MIA Ш FERN ОF $\geq$ Ζ сц СЦ 30 Р В В $\sim$ GARY MCGRAW ARCHITECT FL LICENSE AR 00 3.07.2019 |-; **REVISIONS - SUBMITTALS** DATE No. SHEET No. A-4.0



I BUILDING SECTION "A" A5.0 SCALE: 1/2" = 1'-0"



SPACE RESERVED FOR CITY OF MIAMI APPROVAL STAMP

rp**o**r*a* 18886

CITY OF MIAMI

OFFICE OF CAPITAL IMPROVEMENTS

444 S.W. 2nd Avenue, 8th Floor

Miami, FL 33130



CONTINUOUS P.T. IX3 W/ GALVANIZED ALUMINUM FLASHING & DRIP EDGE

- 2"xI2" FASCIA, KERFED & PAINTED

GALVANIZED WIRE LATH AND STUCCO FINISH OVER 5/8" EXTERIOR GRADE PLYWOOD SHEATHING, (TYP.), PAINT. - CONTINUOUS SCREEN VENT

> CONCRETE COLUMN WITH 3/4" PAINTED SMOOTH STUCCO FINISH, SEE STRUCTURAL DWGS.

MODEL 671 LOCKABLE OVERHEAD COILING SECURITY GRILLE BY OVERHEAD DOOR CORP. OR APPROVED EQUAL. (TYP. 2) GALVANIZED STEEL W/ POWDERGUARD WEATHER FINISH COATING. STRAIGHT LATTICE CONFIGURATION GRILLE PATTERN. MANUAL OPERATION W/ AUTO UNLOCK MANUAL RELEASE. PROVIDE SHOP DWGS. FOR A/E REVIEW.

NOTE: ALL CAST STONE WAINSCOT CORNERS TO HAVE MITERED EDGE. (TYPICAL ALL PROJECT CORNER CONDITIONS.)

2 1/2" CAST STONE WAINSCOT SET IN 1/2" MORTAR BED, CORAL ROCK FINISH ON ALL EXPOSED SURFACES, MITER ALL CORNERS. BY ARTISTIC STONES, INC. OR APPROVED EQ. (305) 836-0449

SIDEWALK





A-5.0



I BUILDING SECTION "B" A5.1) SCALE: 1/2" = 1'-0"





GENERA	AL DOO	R NOTES:					
I.) ALL -FIRE- DOOR FRA	RATED DOORS ME ASSEMBLIES	SHALL RECEIVE FIRE-1 3 AND FIRE-RATED HAI	RATED & LABELED RDWARE, GLAZING IN	MARK	ROOM NAME	DOOR TYPE	MI
ALL FIRE-F	ATED DOORS	SHALL BE FIRE RATED			VESTIBULE	A	16'
2.) ALL EXTER PERMANEN	IOR DOORS AN MIAMI-DADE	D DOOR FRAMES SHAL COUNTY PRODUCT CONT	L BE PROVIDED WITH A IROL APPROVED LABEL.		VESTIBULE	A	6
DOOR HAR	DWARE SHALL	MATCH APPROVED DO	OR N.O.A.		ELECTRICAL	B	3'
4) ALL HM D	OORS AND FRA	MES TO BE HOT-DIPPE	D GALVANIZED AND			B	3'
FINISH W/ S	HOP COAT OF	RUST-INHIBITIVE PRIMER	<ol> <li>C) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1</li></ol>		SIORAGE BUILDING		(2)
5.) OPENING D UNLESS NO	EVICES ON ALL TED OTHERWISE	DOORS SHALL BE MOU	JNTED @ 36" A.F.F.				
6.) CONTRACTO CURRENT M	OR SHALL VER IAMI-DADE CO	IFY ALL MASONRY AND UNTY N.O.A. #'S PRIOR 1	ROUGH OPENINGS W/ TO FABRICATION.				
DOORH	ARDWA	ARE NOTE:					
(HANDICAPPED OPERATING ME ROOM DOORS, ROUTE, SHALL WHICH DOES N OF THE WRIST MECHANISMS, A HARDWARE RE MOUNTED NO H	) HANDLES, PUL CHANISMS ON AND OTHER DA HAVE A SHAPE OT REQUIRE A TO OPERATE. AND U-SHAPED QUIRED FOR A IGHER THAN 48	LS, LATCHES, LOCK SE ENTRANCE DOORS, RES OORS WHICH ARE PART TIGHT GRASPING, TIGHT LEVER OPERATED MEC HANDLES ARE ACCESS CCESSIBLE DOOR PAS " A.F.F. SEE GENERAL	TS, AND OTHER TROOM AND TOILET OF AN ACCESSIBLE ASP WITH ONE HAND AND PINCHING OR TWISTING HANISMS, PUCH-TYPE BIBLE DESIGNS. BSAGE SHALL BE DOOR NOTES FOR				
TYPICAL MOUN	TING HEIGHTS.						
DOOR	HARDWARE:						
HEADING	#1						
OPENING 3'-0" ×	DESCRIPTION: 7'-0" x 1 3/4"	× HMD TYPE LOUVER ×	HMF				
(1) SING	LE DOOR # 103						
6 HING 2 PASS 1 DEAD 1 CLOS 1 CLOS 2 SOUN 2 WEA <sup>-</sup> 2 THRE	E DOOK # 104 E E E GAGE LATCH A LOCK E ER 4 ID SEAL 3 'HERSTRIP 3 SHOLD 2	B1168 4-1/2 x 4-1/2 SP 105 RHO 10-025 1661P 10-055 (BLACK TO 111 EDA AVE TBMS (LH) 111 EDA AVB TBMS (RH) 112 CN 1 x 36" 2 x 84" 1005 AV 36" FHSI 25	NRP USP HA 626 SC INT. SIDE 626 AL LC AL LC PE	(A	) SECURITY ( ) SCALE: 1/4" = 1'-0"		
HFADING		R FXTERIOR					
					ROOM NAME		FL MA1
(2) 3'-0"	x 7'-0" x 1-3/4"	x HMD TYPE x HMF			VESTIBULE		C
(1) PAIR	JF DOORS, #105 E	XTERIOR			WOMEN'S RESTROOM		EF
6 ea k	all bearing hinge	BB1199NRP US32D	HA 4-1/2 x 4-1/2		ELECTRICAL		C
1ea 1ea p	oanic exit device oull handle	HC2103 630 H4G US28	PHI HA		JANITOR		EF
1ea r 1ea r	im cylinder nullion 7/0	20022 626 HC822 689	SC PHI		MEN'S RESTROOM		EF
2 ea c	loor closer at	4111 600					
2 ea s	urface bolt 8"	580-8 US26D	RO	=			
2 ea k 1 ea p	anic threshold 72	2145 Black 7 520SV Mil	НА				
1ea v 1ea f	veather strip 20' lat astragal per doe	891SV Mil or manufacturer	HA	00	NC. SEALED CON	C. W/ BROG	OM F
2 f	loor stop	259H	НА	EPC	EPOXY DEX-C	9-TEX FLO	)or
NOTE: C	urrent Miami-Dade	e County Hurricane Approval	N.O.A. required.				
	SIGN						
	GE COPY	COPY COLOR/	REMARKG	-			
		BACKGROUND COLOR		_			
R	NOMEN'S Estroom	BLACK/ WHITE	WITH INTERNATIONAL SYMBOL OF ACCESSIBILITY	-			
	MEN'S Estroom	BLACK/ WHITE	WITH INTERNATIONAL SYMBOL OF ACCESSIBILITY	-			
	RICAL ROOM			_		Г	
I	405	REV/ MHITE		_			INTER
	410	BLACK/ WHITE			K-5 RIGID INSUL UNDERSIDE OF (	ATION TO STRUCTURE -	
			NOTE: ALL SIGNS TO BE MTD	, , )		F	
		<u> </u>	LUINILKEV, J-U A.F.F. (TYP.)		\		
LEGEND				_	POURED CON OR CONC. BI	IC.	•
MATERIAL:	MP PLAST 1/8" THICK,	IC- , MATTE FINISH				ELL	- <b>-</b>
EDGE:	BEVEL				= 	{[	
CORNERS:	SQUARE				ω	.,	Δ.·
LETTER STYLE		A MEDIUM;					
	I" HIGH, RA	USED 1/32"			┝		
MOUNTING:	UNYL TAF	™ (UNATTACHED)/ HOLF	S AND ONE WAY SCREMS				EXTE
	PLASTIC S	HIELDS.				Ľ	
	<u>NOTE:</u> USE SCREP	NS, NOT TAPE, @ ALL E	XTERIOR SIGNS				
NOTES:						3 DET	* <u>A</u>
I.) ALL ROOM APPROVAL	NUMBERS ARE BY THE CLIEN	SUBJECT TO CHANGE P T.	ENDING REVIEW AND				M
2.) BRAILLE A	ND ROOM NUME	ERS SHALL BE PROVID	ED ON ALL ROOM		AD.0 SCALE: 3" :	= ('-0''	
	IUN SIGNS.						
	SIGNS @ 5'-0"	A.F.F. TO THE CENTER	INE OF THE SIGN ON THE				
IDENTIFICA 3.) MOUNT ALL LATCH SIDI	SIGNS @ 5'-0" E OF THE DOOF	A.F.F. TO THE CENTERL १.	INE OF THE SIGN ON THE				

	DOOR SCHEDULE													
DOOR SIZE			FIRE	DETAILS			FRAME	THRESHOLD		HOWR.				
WIDTH	HGT.	THKN.	DOOR MAT'L RATI	RATING	HEAD	JAMB	FRAME MAT'L.	TYPE	DETAIL	MAT'L.	MAT'L.	GROUP	GROUP	REMARKS
16'-O"	12'-0"	-	ALUMINUM			2/A6.0						MODEL 671 OVERHEAD COILING SECURITY OF		
16'-O"	12'-0"	-	ALUMINUM			2/A6.0						PATTERN. MANUAL OPERATION W/ AUTO UNLO		
3'-0"	7'-0"	-3/4"	H.M.		1/A6.0	1/A6.0	H.M.		-	AL.		PAINTED (LOUVERED)		
3'-0"	7'-0"	-3/4"	H.M.		I/A6.0	1/A6.0	H.M.	I	-	AL.	1	PAINTED (LOUVERED)		
(2) 3'-0"	7'-0"	-3/4"	H.M.		1/A6.0	1/A6.0	H.M.	2	-	AL.	2	PAINTED (PAIR)		
		-	I											







FAILS @ POURED CONCRETE COL. WALL, 90° WING (HEAD SIM.)

#### **CONSTRUCTION SEQUENCING AND SCHEDULING**

Work performed on holidays or weekends shall be at no additional expense to the City of Miami, except when approved by the City in writing. WORK RESTRICTIONS

# A. Demolition:

- 1.Perform demolition in a manner to minimize noise, dust, time of disruption, and safety hazards. 2.Perform demolition during hours agreed to by the Town.
- 3.Drill concrete and masonry to avoid reducing load bearing capacities of structural elements or to avoid mechanical and electrical services that may be concealed or built into these materials. IMPORTANT: Safety: The Contractor shall follow all appropriate Life Safety precautions and ensure that power to activate electrical circuits
- being worked upon be disconnected at the source to prevent accidental shock. Prior to initiating any demolition work, the Contractor verifies that he has reviewed all available record documents and extensively examined the area of work for hidden or concealed conditions. B. Schedule Work with the City and the A/E.

#### QUALITY ASSURANCE

- A. Organize and perform demolition work to avoid damage to construction intended to remain.
- B. The G.C. shall field verify all dimensions and visible existing conditions prior to commencing the work. Any discrepancies discovered by the G.C. shall be indicated to the Architect in writing, prior to bid. C. Demolition and transportation of debris shall comply with applicable codes and regulations governing these operations. Fees shall be paid by
- the Contractor and included in the base bid. D. Demolition and removal operations shall be conducted in an expedient manner, with precautions taken to prevent demolition site from being an "attractive nuisance".
- E. Notify the Owner and A/E of any conditions capable of affecting the safety of occupants of adjacent buildings, the normal use of these facilities, or the physical condition of the structures. 1. In case of accidental disruption of utilities or the discovery of previously unknown utilities, stop work immediately and notify the Owner
- and A/E. 2. Do not continue work until the Owner, A/E, and Contractor agree on a plan to correct the situation.

#### SEQUENCING AND SCHEDULING

A. Coordinate with applicable utility companies and the Owner for utility line removal, capping, and utility shutdowns required by removal work. Call (800)432-4770, Sunshine State One Call of Florida, Inc. At least 48 hours prior to digging.

#### PROJECT CONDITIONS

A. Existing work not specified for removal that is temporarily removed, damaged, exposed, or in any way disturbed or altered by removal work shall be repaired, patched, or replaced to the Owner and A/E=s satisfaction at no additional cost to the Owner. B. The G.C. shall provide and maintain all safety barriers throughout the course of demolition and construction. All construction work shall be enclosed by a safety barrier. C. Environmental Protection:

1. Control amount of dust resulting from construction or demolition to prevent spread of dust to other buildings and to avoid creation of a nuisance in surrounding areas. Use of water to control dust will not be allowed when it will result in flooding or other objectionable or hazardous or conditions.

- Use of explosives is not allowed.
- 3. Disposition of demolished materials by burning is not allowed. D. Traffic Maintenance:
- Conduct removal operations to maintain traffic along existing streets and walks.
- Keep paved streets and walkways free of debris. 3. Remove material and other matter tracked or fallen onto traffic surfaces.
- E. Disposition of Materials: Title and responsibility to materials and equipment to be removed, excepting salvageable equipment to be retained by the Owner, is vested in the Contractor upon receipt of Notice to Proceed.
- 2. The Owner will not be responsible for the condition, loss, or damage to such materials and equipment after the Notice to Proceed.

#### DEMOLITION

A. Perform removal and demolition according to Demolition Schedule and take necessary precautions to protect existing adjacent buildings, furnishings, and equipment. The G.C. shall shore up any walls affected by the selective demolition process as required to maintain proper structural stability throughout the course of construction. The G.C. is responsible for the design and engineering of all structural shoring.

#### **BUILDING INSULATION**

A. Ceiling Thermal Insulation: R-19 Unfaced suspension ceiling insulation, Owens-Corning Sonobatts or approved equal product that is designed and approved for use above suspended acoustical tile ceiling systems. Apply insulation throughout the entire building ceiling area, including restrooms with rigid ceilings. Note: Do not install insulation on top of, or within 4-inches of, recessed light fixtures.

#### STANDING SEAM METAL ROOFING SYSTEM

A. Performance Requirements: Coordinate application of roofing system with application of cants and bases, protruding materials, roof flashings, and roof accessories to assure the complete installation is watertight and according to warranty requirements.

- B. Product Data: 1. Submit specifications, installation instructions, and general recommendations from manufacturers of roofing system materials, for types of roofing required.
- . Include data proving system has M—Dade Co. Product Approval.
- 3. Provide 5 year Applicator's Warranty and 15 year Warranty from manufacturer. C. Shop Drawings:
- Show roof configuration and sheet layout, details at perimeter, and special conditions.
- D. Applicator=s Warrantv: Contractor shall furnish the City a 5 year written warranty, beginning at Substantial Completion, signed by Roofing applicator, covering materials and quality of work for entire Roofing System. Applicator shall be a factory-approved applicator.
- E. Manufacturer=s Warranty: Manufacturer shall furnish the City a 15 year written warranty, beginning at Substantial Completion, signed by manufacturer=s authorized representative for repair and replacement period and terms. Applicator shall be a factory-approved applicator. D. Provide and install Standing Seam Metal Roofing system per manufacturer's approved installation method. Manufacturer: MBCI or approved
- eaual. F. Materials:

Base Sheet: Compatible reinforced base sheet manufactured and supplied by the roofing membrane manufacturer, suitable for installation over plywood substrate, and shall be part of the manufacturer's FM system for wind uplift as specified. Standing Seam Galvalume Metal Roof:

BattenLok-HS, 24 ga. Standing Seam Metal Roof, 12-inch panel width, with smooth-striated (standard) finish and Galvalume-Plus coating - as Manufactured by MBCI Products or approved equal.

#### **STEEL DOORS AND FRAMES**

A. Exterior Door Certification: Miami-Dade County product approval single listing with specified door, door frame, and hardware, demonstrating compliance with FBC missile impact criteria. 1. Comply with calculations, signed and sealed by a Florida registered professional engineer, establishing wind velocity pressure values for the specific project according to American Society of Civil Engineers (ASCE.

- B. Shop Drawings:
- 1. Indicate manufacturer's model number, door and frame elevations and sections, materials, gauges and finishes, fabrication and erection details, locations of finish hardware by dimension and locations/details of all openings and louvers. Do not proceed with any fabrication until all details are approved.

#### WARRANTY

A. Hollow metal doors and frames shall be supplied with a 1 year warranty against defects in materials and construction. B. Warranty shall begin on date of substantial completion of the project.

#### HOLLOW METAL DOORS

A. Fabricate exterior and interior doors to profiles indicated of 16 gage hot-dip zinc-iron alloy coated sheet steel, A366, with A60 coating designation according to ASTM A924 and ASTM A653 0.50 oz. zinc per sq. ft. total both sides. Steel shall be of commercial quality, stretcher leveled flatness.

- B. Types: Flush, seamless hollow construction with louvers or vision cutouts as shown or specified.
- C. Sizes and Thickness: Sizes shall be as indicated and with 1-3/4" thickness unless otherwise specified or shown. 1.Provide undercuts where indicated for ventilation.

#### **FINISH HARDWARE**

PROVIDE FINISH HARDWARE INCLUDING NECESSARY ACCESSORIES.

#### SUBMITTALS

A. Exterior Door Certification: Miami-Dade County product approval single listing with specified door, door frame, and hardware, demonstrating compliance with Florida Building Code missile impact criteria. B. Hardware Schedules:

- 1. Hardware schedules with A/E review comments shall be resubmitted with corrections. C. Keying:
- 1. Lock cylinders shall be keyed and registered by the factory for all Master Key (MK) and Construction Master Key (CMK) systems to maintain security and identification.
- a. Provide Great Grand Master Keys (GGMK), Grand Master Keys (GMK), Master Keys, Section Master Keys (SMK) and Change Keys (CK) according to the Owner's keving schedule.

# QUALITY ASSURANCE

# 5. United States Gypsum Co. D. Metal Lath: MIXES

PAINTING Warranty:

A. Qualifications: Paint applicator shall be licensed in the State of Florida or in Miami-Dade County and use state or county-certified journeymen. Provide a legible copy of license and, when applicable, a journeyman's certification attesting to qualification requirements. B. Surfaces to be Painted:

4. Except where natural finish of material is specifically noted as surface not to be painted, paint exposed surfaces. If color or finish is not designated, coordinate with A/E for selection. 5. Maintain containers used in storage of paint in a clean condition, free of foreign materials and residue.

A. Phase projects to allow a minimum of 28 days to properly cure concrete and stucco/plaster surfaces before the application of paint. WARRANTY

MANUFACTURERS

MATERIALS

#### METAL STUDS, METAL LATH, SUSPENSION CEILINGS PLASTER, AND STUCCO

## SUBMITTALS

A. Product Data: Submit manufacturer's product data for cementitious materials, lath, metal support components, and accessories.

A. Design Criteria: 1. Coordinate layout and installation of suspension system components for suspended ceilings with other work supported by or penetrating through ceiling.

#### Clear bonding agents are not allowed. . Metal corner beads are not allowed. Use plastic trim accessories.

B. Portland Cement Plaster/Stucco: Florida Super Stucco by Lafarge Florida.

> Lonestar Products. Rinker Materials Corp.

. Southdown, Inc.

C. One Coat Veneer Plaster Over Cement Board: 3/32" Imperial Finish over 5/8" Durock cement board by US Gypsum Co. over metal framing at 16 inches o.c. maximum or accepted equivalent. UL U407 for 1 hour rating.

1. Diamond Mesh Lath: a. Flat: 2.5 lbs. per sq.yd.

b. Self-Furring: 2.5 lbs. per sq.yd.

c. Paper Backing: Provide asphalt-impregnated paper factory-bonded to back and complying with Fed. Spec UU-B-790, Type I, Grade D vapor permeable, Style 2.

A. Portland Cement Plaster/Stucco Mixes and Compositions - Base Coats: 1.Comply with ASTM C926 for Portland cement plaster base and finish coat mixes.

#### B. Ceiling Suspension Systems: 1.Preparation and Coordination:

a Coordinate installation of ceiling suspension system with installation of overhead structural systems to ensure inserts and other structural anchorage provisions have been installed to receive ceiling hangers to allow development of their full strength and at spacings

required to support ceiling. 2. Hanger: Attach hangers to structure above ceiling to comply with Metal Lath/Steel Framing Association (ML/SFA) Specifications for Metal Lath and Furring and with referenced standards.

3. Ceiling Suspension System: Install components of sizes and spacings indicated but not in smaller sizes or greater spacings than required by referenced lath and furring installation standards.

C. Steel Stud Wall/Partition Support System: 1. Install components for steel stud wall/partition support systems to comply with directions of steel stud manufacturer for application indicated.

Non-Load (axial) Bearing Stud Systems: Comply with ASTM C754. Extend partition support systems to finish ceiling and attach to ceiling suspension members, unless otherwise indicated.

D. Portland Cement Plaster/Stucco Application: 1. Portland Cement Plaster Application Standard: Apply Portland cement plaster materials, compositions, and mixes to comply with ASTM C926

A. Product Data: Submit Manufacturer Safety Data Sheet (MSDS), manufacturer's technical information, including paint label analysis and application instructions for each material proposed for use.

Submit paint manufacturer's proposed 6 year warranty document.

2. At the end of the paint work, provide to the Owner, from the authorized paint manufacturer representative, a signed and notarized letter stating that the surfaces painted have met all the conditions for paint adhesion.

#### QUALITY ASSURANCE

#### PROJECT CONDITIONS

A. Comply with the standards established in OSHA Workers Environmental Conditions. B. Take precautions to ensure that personnel and work areas are adequately protected from fire and health hazards resulting from handling, mixing, and application of paints. . Illumination: Provide lighting equal to the permanent lighting planned for designated space. D. Ventilation: Provide adequate ventilation to prevent buildup of fumes.

SEQUENCING AND SCHEDULING

A. Provide a written guarantee, co-signed jointly and severally by the Painting Subcontractor and Materials Manufacturers, against cracking, peeling, flaking, chalking, and mildew on interior painted surfaces, and additionally against erosion and unreasonable fading on exterior surfaces, for 6 years; agreeing to repair and repaint surfaces affected by such defects, at no cost to the Owner.

A. Use approved manufacturers only. Benjamin Moore

> Sherwin-Williams 3. Approved equal

A. Use materials listed below.

Latex-based materials shall be used for painting of exterior and interior finishes.

. Primers, Undercoats, Split and Finish Coats: Use materials from same manufacturer when such materials are applied on same surface. C. Paints for interior and exterior use shall be factory tinted with each stage of coating application (primer, first coat, and finish coat) to be visually distinguishable from the preceding coat until the final coat. The final coat shall match the selected color.

#### APPLICATION

- havina iurisdiction A. EXTERIOR SURFACES PAINT SCHEDULE 1. Stucco Walls:
- 1st Coat Acrylic Primer-sealer pigmented. 2nd Coat Acrylic latex semi-gloss. 3rd Coat Acrylic latex semi-gloss.
- 2. Metal Doors: 1st Coat Field applied rust inhibitive primer over shop primer. 2nd Coat Acrylic latex enamel.
- 3rd Coat Acrylic latex enamel. 3. Stucco Ceilings: 1st Coat Acrylic latex primer.
- 2nd Coat Acrylic latex semi-aloss. 3rd Coat Acrylic latex semi-gloss. 4. Concrete or Blown Stucco Ceilings and Blown Stucco Walls.
- 1st Coat Filler. 2nd Coat Acrylic latex primer. 3rd Coat Acrylic latex semi-gloss 4th Coat Acrylic latex semi-gloss.
- 5. Wood: 1st Coat Sanding sealer. 2nd Coat Acrylic latex semi-gloss.

#### 3rd Coat Acrylic latex semi-gloss. B. INTERIOR SPACES PAINT SCHEDULE

- 1. Walls: 1st Coat Acrylic latex wall primer.
- 2nd Coat Acrylic latex satin.
- 3rd Coat Acrylic latex satin. 2. Walls (Veneer Plaster only) 1st Coat Alkyd-based penetrating chalky wall primer/sealer
- 2nd Coat Acrylic latex satin. 3rd Coat Acrylic latex satin. 3. Metal Doors:
- 1st Coat Field applied rust inhibitive primer over shop primer. 2nd Coat Acrylic latex semi-gloss. 3rd Coat Acrylic latex semi-aloss. 4. Ceilings Not Acoustically Treated:
- 1st Coat Acrylic latex primer. 2nd Coat Acrylic latex semi-gloss. 3rd Coat Acrylic latex semi-gloss.
- C. INTERIOR AND EXTERIOR METALS PAINT SCHEDULE 1. Galvanized Metal: Apply neutralizer and allow to dry thoroughly.
- 1st Coat Galvanized metal primer. 2nd Coat Acrylic latex enamel (or aluminum paint) 3rd Coat Acrylic latex enamel (or aluminum paint). 2. Metal Sash — Doors and Frames:
- 1st Coat Metal primer. 2nd Coat Acrylic latex enamel (or aluminum paint). 3rd Coat Acrylic latex enamel (or aluminum paint). 3. Exposed Ferrous Metal:
- 1st Coat Rust inhibitive primer (reference page F-1 of M-DCPS Paints. 2nd Coat Acrylic latex enamel. 3rd Coat Acrylic latex enamel.
- minimum dry film thickness.
- 2nd Coat High performance chemical resistance coating. 3rd Coat High performance chemical resistance coating. 5. Other Metals Not Previously Mentioned: 1st Coat Rust inhibitive metal primer.
- 2nd Coat Acrylic latex enamel (or aluminum paint). 3rd Coat Acrylic latex enamel (or aluminum paint).

#### PLASTIC TOILET PARTITIONS

- A. Product Data
- hardware, and maintenance instructions.
- . Include test reports confirming Class C and toxicity requirements. B. Shop Drawings:
- C. Copy of manufacturer's standard 15-year warranty submitted with shop drawings, guaranteeing against material defects or faulty fabrication, assembly, and installation

#### QUALITY ASSURANCE

WARRANTY

A. Upon completion of installation, submit warranty for 15- years starting at date of substantial completion, stating that failed products or installation shall be replaced at no additional cost to the Board.

- MANUFACTURERS A. Solid Plastic Toilet Partitions:
- Ampco Products, Hialeah, FL: High Density Polyethylene. . Capitol Partitions, Columbia, MD: Poly—Pro HDPE.
- Comtec Industries, Scranton, PA: Series S200. 4. Santana Products, Scranton, PA: Poly-Mar HD.

## MATERIALS

- 1. Plastic material shall comply with the following: a. Flame Spread of less than 200 and Smoke Developed of less tha



1. Provide dimensioned partition plans, elevations, details, swing of doors, color, and location of hardware items and required wall blocking.



A. Panels, pilasters, and doors of 1 inch thick seamless high—density polyethylene resin compound. A/E shall select color from manufacturer's stock or custom colors. All edges shall be machined to a 0.250" radius. Phenolic resin construction is not acceptable.

CIT	Y	OF	MIAMI
OFFICE	OF	CAPITAL	IMPROVEMENTS

444 S.W. 2nd Avenue, 8th Floor Miami, FL 33130

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SPECIFICATIONS

SHEET No. A-7.0

01	- NEKAL.	REINFORCING STEEL:
1.	THE DRAWINGS ARE INTENDED TO SHOW THE GENERAL ARRANGEMENT, DESIGN AND EXTENT OF THE WORK AND ARE PARTLY DIAGRAMMATIC.	1. TO BE NEW BILLET STEEL CONFOI GRADE 60 SPECIFICATIONS, FABR OF STANDARD PRACTICE OF THE
2.	MENTS, OR TO SERVE AS SHOP DRAWINGS OR PORTIONS THEREOF. ALL DETAILS AND SECTIONS SHOWN ON THE DRAWINGS ARE INTENDED TO BE TYPICAL AND SHALL BE CONSTRUED TO APPLY TO ANY SIMILAR	2. COLUMN REINFORCEMENT: DOWE
3.	SITUATION ELSEWHERE ON THE PROJECT, EXCEPT WHERE A DIFFERENT DETAIL IS SHOWN. THE CONTRACTOR AND ALL SUBCONTRACTORS SHALL VERIFY ALL GRADES,	VERTICALS ABOVE. LAP 48 BAR U.O.N. PROVIDE RIGID TEMPLET STANDARD HOOKS FOR ALL VER TINUOUS COLUMNS (U.O.N.)
	AS SHOWN ON THE DRAWINGS. THEY SHALL REPORT ANY ERRORS OR INCONSISTENCIES IN THE ABOVE TO THE ARCHITECT/ENGINEER (A/E) BEFORE COMMENCING WORK THE CONTRACTOR AND SUBCONTRACTORS	3. ALL DOWELS FOR COLUMNS AND PRIOR TO CONCRETING. DRILLING POSITION IN WET CONCRETE IS N
	SHALL LAY OUT THEIR WORK FROM ESTABLISHED REFERENCE POINTS AND BE RESPONSIBLE FOR ALL LINES, ELEVATIONS AND MEASUREMENTS IN CONNECTION WITH THEIR WORK.	<ol> <li>CONCRETE COVER UNLESS OTHER FOOTINGS 3", COLUMNS 1-3/4" INTERIOR SLABS 3/4", EXPOSED</li> </ol>
4.	A. THE CONTRACTOR IS RESPONSIBLE AND SHALL COMPLY WITH THE REQUIREMENTS OF CHAPTER 33 OF FLORIDA BUILDING CODE 2017 AND ALL LOCAL STATE AND FEDERAL LAWS THE A /F	1-1/2" MEASURED FROM TOP OF 5. SLAB AND BEAM REINFORCEMENT REINFORCING DIAGRAMS, LAPPED REINFORCING DIAGRAMS, LAPPED
	AND HIS EMPLOYEES ARE NOT RESPONSIBLE FOR SAFETY PROCEDURES ON THIS PROJECT. THIS IS THE CONTRACTOR'S RESPONSIBILITY.	MID-SPAN. ALL TOP BARS HOO (U.O.N.). ALL HOOKS TO BE ST, HOOKS AS REQUIRED (U.O.N.)
	B. PROVIDE ALL SHORING, BRACING AND SHEETING AS REQUIRED FOR THE PROPER EXECUTION OF THE WORK. REMOVE WHEN THE WORK IS COMPLETED.	6. ADDED REINFORCEMENT: PRÓVID MINIMUM EACH WAY AT CORNERS TO MATCH ALL HORIZONTAL BAR
	RAILINGE, OBSTRUCTIONS IN THE STREETS, ROADS OR SIDEWALKS AND ALL TRENCHES OR PITS ADJACENT TO PUBLIC WALKS OR ROADS.	CONCRETE: 1. CONCRETE DESIGN AND REINFORC
	D. AT ALL TIMES PROVIDE PROTECTION AGAINST WEATHER (RAIN, WIND, STORMS OR HEAT) SO AS TO MAINTAIN ALL WORK, MATERIALS, APPARATUS AND FILTURES FREE FROM DAMAGE.	AND WITH "DETAILS AND DETAILI (A.C.I. 315).
	F. AT THE CONTRACTOR SHALL PAT FOR ALL DAMAGE TO ADJACENT STRUCTURES, SIDEWALKS AND TO STREETS OR OTHER PUBLIC PROPERTY OR TO ANY PUBLIC UTILITIES. F. AT THE END OF THE DAYS WORK, COVER ALL WORK LIKELY TO BE	STRUCTURAL CONCRETE FOR BUI CONCRETE, DELIVERY, PLACING A WITH "HOT WEATHER CONCRETING
	DAMAGED. ANY WORK DAMAGED BY FAILURE TO PROVIDE PROTECTION SHALL BE REMOVED AND REPLACED WITH NEW WORK AT THE CONTRACTOR'S EXPENSE.	<ol> <li>NO ADMIXTURES PERMITTED WITH GINEER.</li> <li>FOR ALL CONCRETE TO BE PLACE CRADE THE SUMPERALL NOT</li> </ol>
5.	CONTRACTOR AGREES THAT HE WILL HOLD OWNER, A/E AND/OR ANY OF THEIR EMPLOYEES OR AGENTS HARMLESS FROM ANY AND ALL DAMAGE AND/OR CLAIMS WHICH MAY ARISE BY REASON OF ANY NEGLIGENCE	NO WAIVERS OF THIS REQUIREME FOR OTHER CONCRETE SHALL NO 5. ALL CONCRETE, f'c = 3000 P.S.
	SUBCONTRACTORS, MATERIALS AND EQUIPMENT SUPPLIERS AND/OR ANY OF THEIR EMPLOYEES OR AGENTS, IN PERFORMANCE OF THIS CONTRACT; AND, IN CASE ANY ACTION IS BROUGHT THEREFORE AGAINST OWNER,	WITH A MAX WATER-CEMENTITIOU SEE PLANS AND ARCH. DRAWING 6. TAKE ONE SET OF 5 CYLINDERS
	A/E AND/OR ANY OF THEIR EMPLOYEES OR AGENTS, CONTRACTOR Shall Assume full responsibility for defense thereof, and upon his failure to do so on proper notice, owner, a/e and/or any of their employees of accents deserve the dicut to defend	FRACTION THEREOF FOR EACH CI FOLLOW ASTM STANDARDS FOR S CYLINDER AT 3 DAYS AND 7 DA
6.	SUCH ACTION AND CHARGE ALL COSTS THEREOF TO CONTRACTOR. IF ANY ERRORS OR OMISSIONS APPEAR IN THE DRAWINGS, SPECIFICA- TIONS OR_OTHER_DOCUMENTS_THE CONTRACTOR_SHALL_NOTIFY THE	CYLINDER AT 56 DAYS. TAKE ON OF TEST CYLINDERS CAST.
	A/E IN WRITING OF SUCH OMISSIONS OR ERRORS PRIOR TO PROCEEDING WITH ANY WORK WHICH APPEARS IN QUESTION. IN THE EVENT OF THE CONTRACTOR'S FAILING TO GIVE SUCH NOTICE, HE SHALL BE HELD RESPONSIBLE FOR THE RESULTS OF ANY SUCH ERRORS	7. NO CONCRETE TEST WILL BE ACC IN ANY WAY AFTER SAID TEST IS ADDED AFTER INITIAL SAMPLING.
7.	OR OMISSIONS AND THE COST OF RECTIFYING THE SAME. THE CONTRACTOR SHALL USE THE STRUCTURAL DRAWINGS TOGETHER WITH THE ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS TO	9. CONTRACTOR IS RESPONSIBLE FO AND FOR SAFE PRACTICE IN THE
	LOCATE STEPPED FOOTINGS, DEPRESSED SLABS, SLOPES, DRAINS, OUTLETS, RECESSES, OPENINGS, REGLETS, BOLT SETTING, SLEEVES, DIMENSIONS, ETC. POTENTIAL CONFLICTS SHALL BE COMMUNICATED TO THE A CE BEFORE PROCEEDING WITH THE WORK	SIGNED & SEALED SHOP DWGS. ( AS REQUIRED FOR OTHER TRADE DRAWINGS ARE TO IDENTIFY DESI
8. 9.	SUBMIT SHOP DRAWINGS FOR A/E REVIEW BEFORE STARTING FABRICATION. NO SHOP DRAWINGS SHALL BE SUBMITTED FOR A/E REVIEW UNTIL AFTER	AND LOCATIONS SHALL BE FURN THE OPENING. PROVIDE CHAMFE EXPOSED TO VIEW. FORMWORK
	DIMENSIONING AND OTHER TRADE REQUIREMENTS BY THE CONTRACTOR AND STAMPED WITH THE CONTRACTOR'S APPROVAL SEAL. A/E ASSUMES NO RESPONSIBILITY FOR DIMENSIONS, QUANTITIES, ERRORS	ATTAINED ENOUGH STRENGTH TO OF 50 PSF OF ADDITIONAL CONS 10. <u>SPECIFIED EXPANSION BOLTS SH</u>
	OR OMISSIONS AS A RESULT OF CHECKING AND REVIEWING ANY SHOP DRAWINGS. ANY ERRORS OR OMISSIONS MUST BE MADE GOOD BY CONTRACTOR, IRRESPECTIVE OF RECEIPT, CHECKING OR REVIEW OF	OF THE MAXIMUM EMBEDMENT LE LEAD SHIELDS ARE NOT ACCEPT NOT BE SUBSTITUTED FOR SPECI ENCINEER'S APPROVAL
10.	WITH SUCH DRAWINGS. THE REVIEW OF ALL STRUCTURAL SUBMITTALS BY THE STRUCTURAL ENGINEER OF RECORD SHALL BE TO INSURE THAT HIS INTENT HAS BEEN	LINTELS: 1. THE CONTRACTOR SHALL PROVID
11	UNDERSTOOD AND THAT THE SPECIFIED CRITERIA HAVE BEEN USED. A COPY OF ALL STRUCTURAL SUBMITTALS WILL BE RETAINED FOR RECORD KEEPING PURPOSES ONLY.	OF ALL OPENINGS IN MASONRY V BEAMS HAVE NOT BEEN SPECIFIE BEAM WHEN HEAD OF THE OPEN
11.	OR WHERE NEW WORK ADJOINS CANNOT BE DETERMINED FROM THE FLANS, OR WHERE NEW WORK ADJOINS EXISTING CONSTRUCTION, OR WHERE ONE MATERIAL ADJOINS AN IN-PLACE MATERIAL, CONTRACTOR SHALL TAKE FIELD MEASUREMENTS AS REQUIRED TO COMPLETE SHOP DRAWINGS AND	TYPICAL BOTTOM BARS THROUGH 2 #3 STIRRUPS AT 6" O.C. EACH
12	INSTALLATION. REPORT ANY DISCREPANCIES BETWEEN FEILD MEASURED DIMENSIONS AND DRAWING DIMENSIONS TO A/E BEFORE PROCEEDING WITH THE WORK. WHERE A LINE OF STRUCTURE OPENING LOCATION OR DIMENSION IS	2. LINTEL TO BE MINIMUM OF 8
12.	CRITICAL AND BASED ON THE REQUIREMENTS OF ANOTHER TRADE OR SUBCONTRACTOR, THAT SUBCONTRACTOR SHALL SUBMIT A SHOP DRAWING WITH THE REQUIRED DIMENSIONAL INFORMATION UPON WHICH THE	THAN 6 FEET, 12" DEEP WITH 2 6" O.C. EACH END, FOR SPANS FOR SPANS CREATER THAN 8 FE
1 7	CONTRACTOR SHALL BASE THE LAYOUT AND CONSTRUCTION. THIS PROCEDURE IS MANDATORY FOR CURTAIN WALL SYSTEMS, ARCHITECTURAL PRECAST SYSTEMS AND ALL MECHANICAL AND ELECTRICAL OPENINGS.	STRUCTURAL BEAMS.
13.	REVIEW OF SHOP DRAWINGS AND FIELD INSPECTIONS OF THE STRUCTURE BY THIS OFFICE ARE REQUIRED IF THIS OFFICE IS TO BE HELD RESPONSIBLE	MASONRY WALLS AND (SHOP DRAWINGS FOR REINFORCING RE 1. ALL MASONRY CONSTRUCTION TO
S 1	FOR THE STRUCTURAL ADEQUACY OF THE COMPLETED BUILDING.	FLOR FOR MASONRY STRUCTURES FLORIDA BUILDING CODE. ALL M CONSTRUCTED ENTIRELY OF UNIT REINFORCED WITH #9 GAGE LADD
1. 2.	THE DESIGN COMPLIES WITH THE REQUIREMENTS OF THE FLORIDA BUILDING CODE AND OTHER CODES REFERENCED THERE—IN WIND LOAD CRITERIA BASIC WIND VELOCITY — 175 MPH AS PER ASCE 7—10 IN COMPLIANCE	REINFORCING LOCATED AT 16"O. TYPE "M" MORTAR (2500 PSI ON JOINTS.
	WITH FLORIDA BUILDING CODE 2017, LATEST EDITION. EXPOSURE: C INTERNAL PRESSURE: +/- 0.18	2. ALL VERTICAL CELLS WITH REINFOR CONSISTING OF 3000 PSI CONCRETE 8"±1" (SUPERPLASTICIZED) WHERE H
3.	Kd = 0.85 LIVE LOADS: SEE PLANS FOR ADDITIONAL LOADING INFORMATION.	HIGH-LÌFT GROUTING TECHNIQUE WHI BOTTOM OF ALL CELLS AND PLACINC TO 60 MINUTE DELAY BETWEEN LIETS
Е А 1.	R T H W O R K : CONTRACTOR SHALL DEWATER SITE AS NECESSARY, SO THAT ALL	3. CONCRETE MASONRY UNITS (BLO SIONS OF THE STANDARD SPECIF CONSTRUCTION OF LOAD BEARING
	CONCRETE CAN BE PLACED IN THE DRY. ALL BACKFILL SHALL BE ACCOMPLISHED USING MATERIAL CONSISTING OF CRUSHED STONE AND/OR MATERIAL APPROVED BY THE GEOTECHNICAL ENGINEER. THE BACKFILL	<ol> <li>HOLLOW BLOCK SHALL COMPLY 1</li> <li>MORTAR SHALL COMPLY WITH AS COMPRESSIVE STRENGTH AT 28 [</li> </ol>
	PERMANENT FLOORS AT THE TOP AND BOTTOM WITHOUT PROVISIONS FOR ADEQUATE TEMPORARY BRACING OF THOSE WALLS. PROVIDE ADEQUATE EXCAVATION SPACING IN ACCORD WITH	6. HORIZONTAL REINFORCING SHALL BE (TRUSS TYPE FOR NON-REINF. M MASONRY) ASTM CLASS B-2, HC
	GEOTECHNICAL ENGINEER'S RECOMMENDATIONS TO MAINTAIN EXISTING FOOTINGS, UTILITIES AND OTHER IMPROVEMENTS IN A SAFE CONDITION.	7. MASONRY COMPRESSIVE STRENGT 8. STRENGTH OF CONCRETE MASONF STRUCTURAL DESIGN OF ENGINEE
		/ ASCE 5 / TMS 402, BUILDING STRUCTURES AND THE COMMENT
		ACI 530.1 / ASCE 6 / TMS 602 AND THE COMMENTARY ON SPEC
		9. CONTRACTOR IS RESPONSIBLE FOR
		P R O D U C T C O N T R O L 1. PRODUCT CONTROL APPROVAL IN SUBMITTED TO THE ARCHITECT FO
		INCLUDING DOORS, WINDOWS, AN 2. ONLY PRODUCTS THAT HAVE BEE
		AUULI IAULL.

# S

# DRAWING REQUIRED)

O A.S.T.M. A615 IN ACCORDANCE WITH MANUAL AND PLACED IN ACCORDANCE ENGINEERING AND PLACING TRUCTURES

E SAME SIZE AND NUMBER AS ER OR MINIMUM OF 18" DOWEL LOCATION. PROVIDE EINFORCEMENT AT NON-CON-

TO BE SECURED IN POSITION USHING THE DOWELS INTO

RMITTED. ETAILED ON DRAWINGS: BEAMS 1-3/4" TO TIES

1–1/2", SLABS ON GRADE CED IN ACCORDANCE WITH

R DIAMETER OR MINIMUM 18". RTS, TOP BARS SPLICED ONLY AT NON-CONTINUOUS EDGES 90 DEGREE OR 180 DEGREE

TIONAL CORNER BARS BENT 30" EAMS, WALLS FOOTINGS AND WALLS

# IN ACCORDANCE WITH "BUILDING CONCRETE" ( A.C.I. 318). CONCRETE REINFORCEMENT"

ITH "SPECIFICATIONS FOR

(ACI 301). PRODUCTION OF ING TO BE IN ACCORDANCE

REVIEW OF ARCHITECT/EN-SLABS (INCLUDING SLABS ON  $4^{\circ} \pm 1^{\circ}$ ,

BE, CONSIDERED. SLUMP

RETE TO BE REGULAR WEIGHT O OF 0.52. ADDITIONAL REQUIREMENTS.

VERY FIFTY CUBIC YARDS OR OF CONCRETE POURED EACH DAY. NG AND TESTING . TEST ONE O 3 AT 28 DAYS. IF ONE OF THE CIFIED STRENGTH, TEST THE THIRD

P TEST (ASTM C143) FOR EACH SET IF CONCRETE IS TAMPERED WITH DRMED. REPEAT TEST IF WATER IS

M 4-INCH PUMP. ADEQUACY OF FORMS AND SHORING AND REMOVAL. CONTRACTOR SHALL CT COMPLIANCE WITH ACL 347R SUBMIT COMPLIANCE WITH ACI 34/R SUBMIT TOR SHALL COORDINATE ALL OPENINGS INGS WHERE SHOWN ON THE STRUCTURAL INT ONLY. THE SPECIFIC DIMENSIONS OR CONFIRMED BY THE TRADE REQUIRING ALL CORNERS IN CONCRETE MEMBERS IAIN IN PLACE UNTIL CONCRETE HAS ORT ALL DEAD LOADS PLUS A MINIMUM

OF THE SIZE INDICATED AND NTO THE CONCRETE. XPANSION BOLTS SHALL CHOR BOLTS WITHOUT

N LOAD.

AST OR INSITU LINTELS AT THE HEADS IOT EXCEEDING 8 FEET IN WIDTH WHERE EL MAY BE INTEGRAL WITH THE TIE 6" OR LESS BELOW. CONTINUE ADD 2 #5 BOTTOM BARS AT DROP. ADD AND BALANCE AT 12" AT DROP. EACH SIDE OR PROVIDE DOWELS AND

#4 TOP AND BOTTOM FOR SPANS LESS AND BOTTOM AND 3 #3 STIRRUPS AT R THAN 6 FEET UP TO 8 FEET. PLANS AND BEAM SCHEDULE FOR

TITIONS:

CORDANCE WITH "SPECIFICA-.1–13 AND PROVISIONS OF THE Y WALLS TO BE ORMING TO ASTM C-90-90 AND YE HORIZONTAL MASONRY L MASONRY TO BE LAID IN JOB) WITH FULL HEAD AND BED

ALL BE FILLED WITH COARSE GROUT COARSE AGGREGATE. USE HIGH-SLUMP F OPEN CELL EXCEEDS 4'-0", USE JIRES A CLEAN-OUT OPENING AT THE ROUT IN MAXIMUM 4'-0" LIFTS WITH A 30

ALL COMPLY WITH THE PROVI-FOR THE DESIGN AND RETE MASONRY,ACI 530. C-90-90, TYPE II, GRADE N-II. 270, TYPE M, WITH A MINIMUM

2500 PSI. – WALL STANDARD (9 GA.) AT 16" O.C. Y AND LADDER TYPE FOR REINF. ED GALVANIZED OR APPROVED EQUAL = 1500 PSI. (NET AREA COMPRESSIVE S = 1900 P.S.I.

IT MASONRY COMPLIES WITH ACI 530 REQUIREMENTS FOR MASONRY BUILDING CODE REQUIREMENTS FOR ION SHALL BE IN ACCORDANCE WITH

ICATIONS FOR MASONRY STRUCTURES NS FOR MASONRY STRUCTURES. IG OF WALLS DURING CONSTRUCTION.

PROVAL: DANCE WITH THE CITY SHALL BE MANUFACTURER-DESIGNED ITEMS -APPROVED BY DADE COUNTY ARE

## STRUCTURAL WOOD:

- 1. WOOD DESIGN IN CONFORMANCE WITH NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION. TO BE AIR DRIED, WELL SEASONED AND GRADE MARKED AT MILL.
- TO BE NO. 1 SOUTHERN PINE.
- ALL STRUCTURAL WOOD TO BE SURFACED 4 SIDES (S-4-S) WITH A MINIMUM FIBER STRESS IN BENDING OF 1200 P.S.I. AND A MAXIMUM MOISTURE CONTENT OF 19%.
- 5. ALL LUMBER AND PLYWOOD IN CONTACT WITH CONCRETE, STUCCO, MASONRY OR OTHER CEMENTITIOUS MATERIALS SHALL BE TREATED TO COMPLY WITH AWPA STANDARD LP-2.
- 6. STORE ALL LUMBER ABOVE GRADE OR FLOOR. STACK TO ALLOW PROPER AIR CIRCULATION AND PROTECT FROM WETTING WITH SUITABLE COVER. 7. ALL WOOD TRUSSES SHALL BE DESIGNED FOR THE SUPERIMPOSED
- LOADS GIVEN ON PLAN PLUS WEIGHT OF THE TRUSS. 8. WOOD TRUSSES SHALL ALSO BE DESIGNED TO RESIST GIVEN UPLIFT LOADS.
- 9. SUBMIT PLAN(S) AND CALCULATIONS SIGNED AND SEALED BY A FLORIDA REGISTERED ENGINEER FOR A/E REVIEW PRIOR TO
- FABRICATION. THE SUBMITTALS SHALL INCLUDE THE PROJECT IDENTITY THE LOADING AND DESIGN CRITERIA; TRUSS DETAIL AND TRUSS FRAMING PLAN SHEETS SHALL IDENTIFY EACH TRUSS AND LIST THE DESIGN CRITERIA AND LOADING SPECIFY ALL MEMBER SIZES, BRACING ANCHORAGE, CONNECTIONS, TRUSS LOCATIONS AND OTHER NECESSARY TEMPORARY AND PERMANENT FABRICATION AND ERECTION INFORMATION EACH DRAWING SHALL BEAR THE SIGNATURE AND IMPRESSED SEAL OF THE FLORIDA REQISTERED ENGINEER WHO PREPARED THE DRAWINGS AND CALCULATIONS.
- 10. ROOF TRUSSES SHALL BE DESIGNED FOR COMPONENT & CLADDING LOADS UNDER ASCE 7-10. DO NOT MODIFY WOOD TRUSS LAYOUT WITHOUT THE WRITTEN APPROVAL OF THE ENGINEER OF RECORD AND THE APPROVAL OF REVISIONS TO THE MASTER PERMIT BY THE BUILDING DEPARTMENT.

## FOUNDATIONS: SPREAD FOOTINGS

THE FOLLOWING ARE RECOMMENDATIONS FOR OVERALL SITE PREPARATION AND FOUNDATION SUPPORT BASED ON THE GEOTECHNICAL REPORT BY NELCO TESTING AND ENGINEERING SERVICES, INC. FILE NO. B-170367 DATED MARCH 13, 2017. THE FOUNDATIONS WERE DESIGNED BASED ON AN ALLOWABLE BEARING PRESSURE OF 3000 P.S.F.

- 1. THE "FOOTPRINT" OF THE PROPOSED BUILDING, PLUS A MINIMUM MARGIN OF 10'-0" SHOULD BE STRIPPED OF ALL SURFACE VEGETATION, DEBRIS, ORGANIC SOIL OR OTHER DELETERIOUS MATERIALS, AS ENCOUNTERED.
- 2. THE ACTUAL DEPTHS OF STRIPPING AND GRUBBING MUST BE DETERMINED BY VISUAL OBSERVATION AND JUDGMENT DURING THE EARTHWORK PREPARATION. SEE NOTE 8 BELOW.
- 3. COMPACT ALL CONSTRUCTION AREAS. AS RECOMMENDED IN THE GEOTECHNICAL REPORT. SEE NOTE 8 BELOW.
- 4. BACKFILL BUILDING AREAS TO REQUIRED ELEVATION IF NEEDED USING CLEAN GRANULAR MATERIAL PLACED IN LIFTS NOT TO EXCEED 12 INCHES IN THICKNESS AND COMPACT AS INDICATED IN THE GEOTECHNICAL REPORT.
- 5. CARE SHOULD BE TAKEN NOT TO USE VIBRATION IN CASE OF EXISTING STRUCTURES IN THE VINICITY OF THE CONSTRUCTION AREA. IF VIBRATION CANNOT BE USED FOR COMPACTION, STATIC COMPACTION MAY BE APPLIED. HOWEVER, IN THIS CASE, THE COMPACTED LAYER SHOULD NOT EXCEED 6 INCHES IN THICKNESS.
- 6. ALL CONSTRUCTION FILL MATERIAL SHALL BE CLEAN GRANULAR SOIL, FREE OFORGANICS OR OTHER DELETERIOUS MATERIAL, AND SHALL CONTAIN NO MORE THAN FIVE PERCENT FINES PASSING A U.S. STANDARD NO. 200 SIEVE. NO PARTICLE SIZE SHALL EXCEED 3 INCHES.
- 7. IN THE EVENT OF EXISTING STRUCTURES, EXISTING FOOTINGS OR PROPOSED DRAINAGE LINES, PROVISIONS SHALL BE MADE BY THE CONTRACTOR TO PROTECT ALL FOOTINGS FROM UNDERMINING AND EXPOSURE. THE GEOTECHNICAL ENGINEER SHALL BE NOTIFIED OF THESE CONDITIONS TO EVALUATE THE APPLICABILITY OF HIS RECOMMENDATIONS.
- 8. ALL GEOTECHNICAL WORK SHALL BE PERFORMED UNDER THE SUPERVISION OF THE GEOTECHNICAL ENGINEER TO VERIFY COMPLIANCE WITH HIS RECOMMENDATIONS AND THE FLORIDA BUILDING CODE (F.B.C.)
- 9. TOP OF WALL FOOTINGS TO BE AT SAME ELEVATION AS TOP OF COLUMN FOOTINGS. WALL FOOTING REINFORCEMENT TO RUN CONTINUOUS THROUGH COLUMN FOOTING. STEP WALL FOOTING FROM HIGHER COLUMN FOOTING TO LOWER ONE.
- 10. ALL EXTERIOR FOOTINGS TO BE MINIMUM 1'-4" BELOW THE TOP OF CONCRETE SLAB ON GRADE OR MINIMUM 8" BELOW FINISHED GRADE. WHICHEVER IS LOWER. (UNLESS OTHERWISE NOTED ON PLANS.) COORD. W/ ARCH. & MECH. DWGS.
- 11. CONTRACTOR SHALL COORDINATE WITH THE GEOTECHNICAL ENGINEER TO ESTABLISH WHETHER ANY UNSUITABLE CONDITIONS ARE DISCOVERED DURING EXCAVATION WHICH WOULD PREVENT ATTAINMENT OF THE ASSUMED SOIL PRESSURE AND TO PERFORM INDUSTRY STANDARD SOIL DENSITY TESTS. TO ENSURE COMFORMANCE WITH REQUIREMENT, REPORT RECOMMENDATIONS PRIOR TO INSTALLATION OF ANY FOOTING REINFORCING. SUBMIT SIGNED AND SEALED REPORTS TO ARCHITECT/ENGINEER.
- CRANE. HEAVY CONSTRUCTION EQUIPMENT. A/C UNITS.
- UTILITY POLES, ETC.: 1. AN ENGINEER SHALL BE EMPLOYED BY THE CONTRACTOR FOR ALL WORK ASSOCIATED WITH TOWER CRANES, INCLUDING FOUNDATION, BRACING, HOLES IN STRUCTURE, SHORING, ETC. THIS ALSO APPLIES TO ANY HEAVY EQUIPMENT THAT IS TO BE ATTACHED TO THE STRUCTURE SUCH AS CONCRETE PUMPS. THIS ALSO APPLIES TO

UTILITY POLES, UNDERGROUND TANKS, A/C SUPPORTS, ETC. 2. COMPLETE CALCULATIONS, IN ACCORDANCE WITH THE FLORIDA BUILDING CODE 2010, WIND LOADS OF ALL ELEMENTS ARE TO BE SUMITTED TO THE ENGINEER OF RECORD, AS WELL AS SIGNED AND SEALED DRAWINGS IF

- APPLICABLE. 3. THE ENGINEER DOING THIS WORK SHALL INSPECT ALL PHASES OF IT TO INSURE COMPLIANCE WITH HIS DESIGN.
- PRODUCT CONTROL APPROVAL: 1. PRODUCT CONTROL APPROVAL IN ACCORDANCE WITH THE CITY SHALL BE SUBMITTED TO THE ARCHITECT FOR ALL MANUFACTURER-DESIGNED ITEMS INCLUDING DOORS, WINDOWS, AND ROOFING. 2. ONLY PRODUCTS THAT HAVE BEEN PRE-APPROVED BY DADE COUNTY ARE ACCEPTABLE.
- CONSTRUCTION TOLERANCES:
- 1. ALL TOLERANCES SHALL CONFORM TO THE STANDARDS SET FORTH IN THE APPLICABLE ACI BUILDING CODE SECTIONS OF THE MANUAL OF CONCRETE PRACTICES. 2. MINIMUM TOLERANCES SHALL BE AS FOLLOWS:
- a. VARIATIONS FROM THE PLUMB:
  - 1. IN THE LINE AND SURFACES OF COLUMNS, PIERS, WALLS, AND IN ARRISES AS FOLLOWS:
  - 2. FOR EXPOSED CORNER COLUMNS, CONTROL JOINT GROOVES, AND OTHER LINES:
- b. VARIATION FROM THE LEVEL OR FROM THE GRADES INDICATED IN THE DRAWINGS: 1. IN SLAB SOFFITS, CEILINGS, BEAM SOFFITS, AND IN ARRISES AS FOLLOWS:

  - 2. FOR EXPOSED LINTELS, SILLS, PARAPETS, HORIZONTAL GROOVES, AND OTHER LINES:



THE ENTIRE BUILDING AREA SHALL HAVE PRE-CONSTRUCTION TREATMENT PROTECTION AGAINST SUBTERRANEAN TERMITES IN ACCORDANCE WITH THE FLORIDA BUILDING CODE 2017 SECTION 1816 AND WITH THE RULES AND

ESTABLISHED BY THE FLORIDA DEPARTMENT OF AGRICULTURE & CONSUMER SERVICES. A "CERTIFICATE OF COMPLIANCE" SHALL BE ISSUED TO THE BUILDING DEPARTMENT BY THE LICENSED PEST CONTROL COMPANY PERFORMING THE TREATMENT ATTESTING THAT "THE BUILDING HAS RECEIVED A COMPLETE TREATMENT FOR THE PREVENTION OF SUBTERRANEAN TERMITES." SEE THE FLORIDA BUILDING CODE FOR TEXT OF CERTIFICATE OF COMPLIANCE





	F(	DOTING	SCHEDUI	_E
	SIZE	REINFO	RCING	
MARK	L × W × D	LONGITUDINAL	TRANSV.	
F5.Ø	5'-Ø"×5'-Ø"×12"	7 #5 BOT	7 #5 BOT	
₩ <b>F</b> -2Ø	2Ø"× 12"	2 #5 B. *		

		COLUMN	SCHEDU	LE
		REINFO	ORCING	
MARK	SIZE	VERTICALS	#3 TIES U.O.N.	
	8"×24"	6#5	a 8" O.C.	
		•		

SPACE RESERVED FOR CITY	OF MIAMI APPROVAL STAMP
CI CI CI CI OFFIC 444	<b>FY OF MIAMINA FILE OF ALL OF AUM</b> <b>FY OF MIAMI</b> E OF CAPITAL IMPROVEMENTS S.W. 2nd Avenue, 8th Floor Miami, FL 33130
PBA FERN ISLE PARK REDEVELOPMENT CITY OF MIAMI, PROJECT NO. B-40543 2304 N.W. 14TH STREET, MIAMI, FL 33125	Sheet title: FOUNDATION PLAN
No. 38007 STATE OF STATE OF NO. 38007 STATE OF STATE OF STATE OF	LICENSED PROFESSIONAL ARMANDO SALAS, P.E. FL LICENSE NUMBER REG. #38007 DATE:
No. REVISIONS - SU	JBMITTALS DATE
PAGE No. 2 of 6	SHEET No. S2.1









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# **GENERAL ELECTRICAL NOTES:**

- SITE INVESTIGATION: PRIOR TO BIDDING THE CONTRACTOR SHALL VISIT THE JOBSITE AND BECOME ACQUAINTED WITH ALL OF THE EXISTING CONDITIONS WHICH WILL AFFECT HIS WORK. FAILURE TO DO GO WILL NOT BE ACCEPTED AS A REASON FOR REQUESTING EXTRA PAY WHERE THE EXISTING CONDITION REGULTS IN EXTRA MATERIAL OR LABOR. THE CONTRACTOR SHALL SUBMIT IN HIS BID AN AMOUNT THAT WOULD BE SET ASIDE FOR UNIDENTIFIED ITEMS.
- 2. ALL WORK SHALL BE PERFORMED BY A LICENSED CONTRACTOR IN A FIRST CLASS MANNER AND SHALL BE A COMPLETED AND FULLY OPERATIVE TO THE ACCEPTANCE OF THE OWNER, GENERAL CONTRACTOR, AND ENGINEER.
- 3. THE CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS AND EQUIPMENT NECESSARY FOR THE COMPLETE INSTALLATION OF THE ELECTRICAL SYSTEMS, ALL IN ACCORDANCE WITH THESE CONSTRUCTION DOCUMENTS, ALL WORK PERFORMED UNDER THIS CONTRACT SHALL COMPLY WITH THE FLORIDA BUILDING CODE (2017) FLORIDA FIRE PREVENTION CODE (2014) AND NFPA CODES INCLUDING, BUT NOT LIMITED TO NEPA 10 - (2014 NEC), NEPA 12 (2013) - (FIRE ALARM).
- 4. THIS CONTRACTOR SHALL PAY FOR ALL FEES, INSPECTIONS, TESTS, FINES, ETC., AS REQUIRED.
- 5. MINIMUM STANDARDS: THE MATERIAL, EQUIPMENT, INSTALLATION, AND WORKMANSHIP FURNISHED UNDER THIS SECTION SHALL CONFORM AT LEAST TO THE REQUIREMENTS OF THE REGULATING AGENCIES AS LISTED ABOVE.
- 6. RESPONSIBILITIES: CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE A COMPLETE OPERATIONAL ELECTRICAL SYSTEM INCLUDING ALL REQUIRED WIRING, RACEWAYS, CONNECTIONS, ETC. INCLUDING COORDINATION WITH OTHER TRADES.
- . GUARANTEE: THE CONTRACTOR SHALL FURNISH A WRITTEN GUARANTEE THAT ALL WORK EXECUTED UNDER THIS CONTRACT SHALL BE FREE FROM DEFECTS OF WORKMANSHIP AND MATERIALS FOR A PERIOD OF ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE AND THAT HE, AT HIS OWN EXPENSE, WILL REPAIR OR REPLACE ALL WORK WHICH BECOMES DEFECTIVE DURING THE TIME OF THE GUARANTEE.
- 8. ALL EQUIPMENT, SYSTEMS AND SYSTEM COMPONENTS SHALL BE FROM THE SAME MANUFACTURER AND SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS AND SPECIFICATIONS.
- 3. VERIFY ALL DIMENSIONS WITH ARCHITECTURAL PLANS PRIOR TO ANY FABRICATION OR INSTALLATION.
- 10.0BTAIN FULL INFORMATION REGARDING RESTRICTIONS AND LIMITATIONS OF SPACE AVAILABLE FOR INSTALLATION OF THE EQUIPMENT AND MATERIALS UNDER CONTRACT, AND PROVIDE READY ACCESSIBILITY TO ELECTRICAL EQUIPMENT, INCLUDING ANY PART OF SYSTEM REQUIRED TO BE REACHED FOR MAINTENANCE AND OPERATION.
- I. PROVIDE ACCURATE LAYOUT, GRADES AND ELEVATIONS. TAKE PROPER PRECAUTIONS TO PROTECT WORK AND EQUIPMENT FROM DAMAGE.
- 2. PROVIDE CODE APPROVED FIRE STOPPING AT ALL CONDUIT PENETRATIONS THROUGHOUT BUILDING CONSTRUCTION TO MAINTAIN FIRE, SMOKE AND SOUND RATING, FIRE SEAL ALL PENETRATIONS. SEAL TELECOMMUNICATION SLEEVES AFTER CABLES HAVE BEEN INSTALLED.
- 13. RACEWAYS AND FITTINGS: CONDUIT RUNS SHALL BE CONCEALED IN CEILING SPACES AND WALL PARTITIONS, NO CONDUIT SHALL BE EXPOSED IN INTERIOR SPACES, CONCEALED CONDUITS ARE TO BE EMT.
- 14. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION WITH ALL OTHER TRADES AS WELL AS PROVIDING TEMPORARY POWER AS REQUIRED FOR THE PROJECT.
- 15. VERIFY EQUIPMENT SIZES, VOLTAGE AND CURRENT CHARACTERISTICS, ETC., BEFORE THE ORDERING OF ANY EQUIPMENT AND PRIOR TO ROUGHING-IN FOR EQUIPMENT SUPPLIED BY OTHERS, NOTIFY ENGINEER OF ANY CONFLICT.
- 16. PROVIDE COMPLETE POWER CIRCUIT WIRING AND CONNECTIONS FOR EACH AND EVERY ITEM OF PERMANENT MECHANICAL EQUIPMENT. PRIOR TO ANY ROUGH-IN, VERIFY HVAC AND PLUMBING EQUIPMENT NAME PLATES TO OBTAIN CORRECT WIRE SIZE AND OVER CURRENT PROTECTION RATINGS. IF THE NAME PLATE REQUIRES THE OVER CURRENT PROTECTION DEVICE TO BE FUSES, PROVIDE A FUSED SWITCH WITH PROPER SIZE FUSES AT THE EQUIPMENT LOCATION.
- I. CONDUCTOR: ALL WIRES AND CABLES SHALL CONSIST OF 98% CONDUCTIVE COPPER. ALL CABLES SHALL BE SINGLE CONDUCTOR, 600 VOLT, THERMOPLASTIC INSULATION, SUITABLE FOR CONTINUOUS OPERATION AT 15 DEGREES C. TEMPERATURE IN BOTH WET AND DRY LOCATIONS. THESE CABLES SHALL BE N.E.C. INSULATION TYPE THUN/THHN, MINIMUM SIZE SHALL BE #2. ALL CONDUCTOR INSULATION SHALL BE COLOR CODED. COLORED INSULATION SHALL BE USED FOR AWG SIZES \*6 AND SMALLER AND APPROVED COLOR TAPES SHALL BE USED FOR AWG SIZES \*4 AND LARGER ALL POWER AND CONTROL CIRCUITS SHALL CARRY EQUIPMENT GROUNDING CONDUCTOR SIZE PER NEC 250-122.
- 8. THE NATURE OF THIS TYPE OF CONSTRUCTION POSES SPECIAL PROBLEMS FOR THE DESIGN ENGINEER AS WELL AS THE CONTRACTOR. EVERY EFFORT HAS BEEN MADE BY THE ENGINEER TO SHOW AND VERIFY WHERE POSSIBLE THE LOCATION OF THE EXISTING ELECTRICAL SYSTEMS. THE MAJOR PORTION OF THE ELECTRICAL SYSTEMS ARE AS SHOWN ON THE DRAWINGS, HOWEVER, MINOR DEVIATIONS MAY BECOME EVIDENT AS THE JOB PROGRESSES. NO ADVANTAGE IS TO BE TAKEN BY THE CONTRACTOR BECAUSE OF THESE MINOR DIFFERENCES.
- 3. CORRECTION OF ANY DEFECTS, REPAIRS OR DAMAGE DURING CONSTRUCTION AS WELL AS ANY MINOR CHANGES IN OUTLET LOCATIONS SHALL BE MADE WITHOUT ADDITIONAL COST TO THE OWNER.
- 20. GUTTERS, PULL BOXES, ETC., SHALL BE GALVANIZED STEEL SIZED PER NATIONAL ELECTRICAL CODE, ARTICLE 312 AND SUITABLE FOR THE ENVIRONMENTAL CONDITIONS PRESENT.

21. ALL FLOORS, WALLS AND ROOF PENETRATIONS SHALL BE PROPERLY SEALED-OFF, IF FIRE RATED, AN APPROVED FIRE RETARDANT SEALANT SHALL BE USED.

22.ALL WIRING SHALL BE INSTALLED IN RACEWAYS.

- A. INDOORS USE THE FOLLOWING:
- EXPOSED: EMT CONCEALED: EMT
- CONNECTION TO VIBRATION EQUIPMENT (INCLUDING TRANSFORMERS AND HYDRAULIC, PNEUMATIC, ELECTRIC SOLENOID, OR MOTOR - DRIVEN EQUIPMENT): FMC, EXCEPT IN WET OR DAMP LOCATIONS USE LFMC.
- DAMP OR WET LOCATIONS: RIGID GALVANIZED STEEL CONDUIT OR INTERMEDIATE METALLIC CONDUIT.

B. OUTDOORS - USE THE FOLLOWING:

 EXPOSED: RIGID GALVANIZED STEEL CONDUIT OR INTERMEDIATE METALLIC CONDUIT. • UNDERGROUND: SCHEDULE 40 PVC

C. SEALING FITTINGS SHALL BE INSTALLED AS REQUIRED BY N.E.C.

23. BOXES AND ENCLOSURES

A. INDOORS - USE THE FOLLOWING:

- NEMA I STEEL • NEMA 3R - STEEL DAMP LOCATION
- NEMA 4X STAINLESS STEEL FOR WET OR CORROSIVE ENVIRONMENTS
- B. OUTDOORS USE THE FOLLOWING:
- NEMA 3R MALLEABLE IRON OR STEEL • NEMA 4X - STAINLESS STEEL FOR WET OR CORROSIVE ENVIRONMENTS
- 24. THESE DRAWINGS ARE A GUIDE FOR THE INSTALLATION OF THE RACEWAY SYSTEM EQUIPMENT. THEY ARE INTENDED TO SHOW THE GENERAL ARRANGEMENT, DESIGN , THE WORK AND ARE PARTLY DIAGRAMMATIC. THE CONTRACTOR IS RESPONSIBLE PROVIDING A COMPLETE AND OPERATIONAL INSTALLATION.
- 25. CIRCUIT NUMBERS ARE FOR IDENTIFICATION PURPOSES ONLY. THE CONTRACTOR RESPONSIBLE FOR CORRECTLY PHASING THE CIRCUITS IN THE PANEL AND SHALL LOAD ON THE PHASES UNDER NORMAL OPERATING CONDITIONS, PROVIDE TYPE BOARD DIRECTORIES IN EXISTING PANEL BOARDS AFFECTED BY THIS PROJECT ELECTRONICALLY TRACING ALL CIRCUITS.
- 26. ANY DEVIATION FROM THESE DRAWINGS AND SPECIFICATIONS MUST BE AUTHORIZ BY THE ENGINEER PRIOR TO MAKING ANY CHANGES. THE CONTRACTOR SHALL BE FOR ANY DEVIATIONS WITHOUT SUCH AUTHORIZATION.
- 27. ALL POWER AND LIGHTING CIRCUITS SHALL HAVE A GREEN EQUIPMENT GROUNDIN SIZED AS PER NEC 250-122.
- 28. PROVIDE NYLON PULL STRINGS IN ALL EMPTY CONDUITS FOR FUTURE USE.
- 29. COLOR CODING FOR CONDUCTORS:
- A. WIRING FOR 120/208 VOLT SYSTEM SHALL BE CODED AS FOLLOWS:
- PHASE A BLACK PHASE B - RED PHASE C - BLUE NEUTRAL - WHITE GROUND - GREEN

B. WIRING FOR 120/240 VOLT SYSTEM SHALL BE AS FOLLOWS:

PHASE A - BLACK PHASE B - ORANGE (HIGH LEG)
PHASE C - RED
NEUTRAL - WHITE
GROUND - GREEN

C. WIRING FOR 211/480 VOLT SYSTEM SHALL BE CODED AS FOLLOWS:

PHASE A - BROWN PHASE B - ORANGE PHASE C - YELLOW NEUTRAL - GRAY

GROUND - GREEN

- D. COLORS ON CONDUCTORS SIZE #6 AUG AND SMALLER SHALL BE AN INTEGRAL INSULATION. ON CONDUCTORS SIZE #4 AWG AND LARGER CONDUCTORS SHALL B CODED BY MEANS OF IDENTIFYING TAPE.
- 30. ANY WORK NOT SHOWN OR SPECIFICALLY MENTIONED ON THESE PLANS BUT CONS NECESSARY FOR COMPLETION OF WORK IN THE PROPER MANNER SHALL BE PROV CONTRACTOR WITHOUT ADDITIONAL CHARGE TO THE OWNER.
- 31. CONTRACTOR SHALL VERIFY SPACE CONDITIONS AND DIMENSIONS AT JOB SITE F FABRICATION AND INSTALLATION OF MATERIALS AND EQUIPMENT, CONTRACTOR IS COORDINATE HIS WORK WITH THE ARCHITECT BEFORE ROUGH INSTALLATION OF AL (LIGHTS, RECEPTACLES, SWITCHES, PULL BOXES, ETC.) FOR EXACT LOCATION.
- 32. ALL ELECTRICAL EQUIPMENT SUCH AS PANELS, PULL AND JUNCTION BOXES, FEEL SHALL BE PROPERLY IDENTIFIED WITH A PERMANENT LABEL AFFIXED TO THE EQU IDENTIFY CIRCUITS IN PANELS BY MEANS OF A TYPED, PLASTIC COVERED DIRECT
- 33. SPOT PAINT CONDUITS AND BOXES, IDENTIFY CONDUITS WITHIN 6 INCHES (6") OF ENCLOSURE. USE COLOR CODE PER OWNER'S REQUIREMENTS/STANDARDS.
- 34. ALL SERVICE INTERRUPTIONS AND ALL REMOVAL AND DISPOSAL WORK SHALL I AND COORDINATED WITH THE AUTHORIZED OWNER REPRESENTATIVE.
- 35. CONTRACTOR SHALL SECURE AND PAY FOR ALL PERMITS, FEES, TAXES, INSPECT AND OTHER ITEMS INCLUDING REQUIRED INSURANCE FOR PROTECTION AGAINST PU AND PROPERTY DAMAGE FOR THE DURATION OF THE WORK.
- 36. CONTRACTOR SHALL MAINTAIN A COMPLETE SET OF PRINTS FOR INDICATING ALL WORK PROGRESSES. AT THE COMPLETION OF THE WORK, THE CONTRACTOR SHALL SET OF AS-BUILT DRAWINGS TO THE OWNER IN REPRODUCIBLE FORM. CONTRACTOR STAMP AS-BUILT ON EACH DRAWING AND INCLUDE SIGNATURE AND DATE.
- 31. CONTRACTOR IS RESPONSIBLE FOR REPLACING SURFACES, WALLS, CEILINGS, FLC PARTITIONS, PAVEMENT, ETC. AFFECTED BY THE IMPLEMENTATION OF WORK SHOWN DRAWINGS. UPON COMPLETION OF WORK, RESTORE ALL AFFECTED SURFACES MATC SURROUNDING SURFACE.
- 38. TELECOM RACEWAYS, EMPTY BOXES AND PULL STRINGS TO BE INSTALLED BY ( WIRING AND WIRING DEVICES AND FINAL CONNECTION IS TO BE BY INSTALLED BY CONTRACTOR UNDER SEPARATE PERMIT.
- 39. ELECTRICAL EQUIPMENT TO BE PROVIDED WITH A WARNING LABEL FOR ARC FLA IN COMPLIANCE WITH NEC 110.16.
- 40. PROJECT TO COMPLY WITH THE REQUIREMENTS OF THE CURRENT EDITION OF NFP "STANDARDS FOR SAFE GUARDING CONSTRUCTION, ALTERATION, AND DEMOLITION
- 41. CONTRACTOR SHALL PROVIDE THE REQUIRED MEASURES FOR THE SAFEGUARDING EXISTING FACILITY AND SYSTEMS THEREIN DURING THE PERFORMANCE OF THE WOR THESE DRAWINGS PER NEPA 241.
- 42. CONTRACTOR SHALL MAINTAIN THE FACILITIES FIRE ALARM SYSTEM IN A COMPLE FUNCTIONAL STATUS DURING ALL PHASES OF CONSTRUCTION.

	BOXES & FITTINGS		LIGHTING LIGHTING FIXTURE TYPE, SEE LTG, FIXTURE SCHEDULE THIS SHEET		RECEPTACLES		
	CEILING MOUNTED JUNCTION BOX WALL MOUNTED JUNCTION BOX , 18' AFF. OR AS OTHERWISE NOTED.	<a> O<sub>2α</sub></a>	RECESSED, SEMI RECESSED, SURFACE OR PENDANT MOUNTED FIXTURE ON NORMAL CIRCUIT 2 IS CIRCUIT NO± 'a' DENOTES SWITCH LEG	$\begin{array}{c} \ominus \\ \ominus \end{array}$	1207, I PHASE 60 HZ 20 AMP SINGLE RECEPTACLE 1207, I PHASE, 60 HZ., 20 AMP. DUPLEX		
J	CEILING MOUNTED JUNCTION BOX, 12"X12"X6" DEEP MINIMUM UNLESS OTHERWISE INDICATED FOR DISTRIBUTION OF TELEPHONE/DATA SYSTEM	0	SURFACE OR PENDANT MOUNTED LIGHT FIXTURE. SURFACE OR PENDANT MOUNTED LIGHT FIXTURE		SAME AS ABOVE EXCEPT MTD. AT 6' ABOVE COUNTER		
PB	PULLBOX, SIZED AS INDICATED OR AS REQUIRED BY N.E.C.	~~	LIGHT RECESSED OR LAY-IN FIXTURE.	$\oplus$	1207,1 PHASE, 60 HZ., 20 AMP. DUAL DUPLEX RECEPTACLE MTD. 18" A.F.F.		
		n n	LIGHT RECESSED OR LAY-IN FIXTURE	⊕-⊕-⊕	DOUBLE DUPLEX RECEPTACLES MOUNTED AS PART OF SURFACE RACEWAY		
_	POWER, LIGHTING OR DISTRIBUTION PANELBOARD. (NEW)	0	SURFACE MOUNTED SINGLE FACE EXIT LIGHT FIXTURE WITH ARROWS AS INDICATED.	$\odot$	FLOOR OUTLET WITH (1) 120V, 1 PHASE 60 Hz, 20 AMP DUPLEX RECEPT.	SPACE RESERVED FOR CITY	OF MIAMI APPROV
			WALL MOUNTED EXIT LIGHT FIXTURE WITH ARROWS AS INDICATED, 7'-6" AFF.		SPECIAL PURPOSE RECEPTACLE.		TY OF M
<b>(D</b> )			SURFACE MOUNTED DOUBLE FACE EXIT LIGHT FIXTURE WITH ARROWS AS INDICATED				CE OF CAPITAL IMPR
) DD	CEILING MOUNTED SMOKE DETECTOR. DUCT MOUNTED SMOKE DETECTOR.		WALL MOUNTED DOUBLE FACE EXIT LIGHT FIXTURE WITH ARROWS AS INDICATED, 7'-6' AFF.			LVINGORPORATED 444	S.W. 2nd Avenue, Miami EL 3313
00	EXIT DOOR SECURITY ALARM WITH MONITOR MODULE TIED TO FIRE		SURFACE MTD. STRIP LIGHT FIXTURE			Add V O R	Midilli, TE 0010
			SURFACE MTD. STRIP LIGHT FIXTURE			SSION A	
(H) F	CEILING MOUNTED HEAT DETECTOR. MANUAL FIRE ALARM PULL STATION, 48' AFF.		COMBINATION EXIT SIGN - EMERGENCY LIGHT			25 ZT	
[SL]	FIRE ALARM STROBE LIGHT, A.D.A. TYPE,		EMERGENCY LIGHT			34; ED	
 F∖	FIRE ALARM HORN, & STROBE LIGHT 80" A.F.F. A.D.A. TYPE.	<u> </u>	OCCUPANCY SENSOR (CEILING MOUNTED) WITH 20 AMP RELAY				
$\mathbb{R}$	SHUT DOWN RELAY.	<b>■</b>	ARM MOUNTED POLE LIGHT				
FAP	FIRE ALARM PANEL		POST TOP MOUNTED POLE LIGHT			J.O.E.	
FS	FLOW SWITCH		CW/ITCLIES				
TS	TAMPER SWITCH	C					
$\mathbb{H}_{V}$	FIRE ALARM HORN, 80' AFF.	Сĸ	MOUNTED 48' AFF.				
F	FIRE ALARM SPEAKER & STROBE LIGHT 80' A.F.F. A.D.A. TYPE	Sa	SINGLE POLE TOGGLE SWITCH, 20A., 120/277 VAC. MOUNTED 48' AFF. 'a' SWITCH LEG.			Т Х О Ш	AL AL
(FS)	FIRE ALARM SYSTEM SPEAKER	$S_3S_4$	THREE-WAY AND FOUR WAY TOGGLE SWITCHES 200A, 120/277 VAC.			P A I	
	MOTORS & CONTROLS	S.	MANUAL MOTOR STARTER TOGGLE SWITCH WITH OVERLOADS, 48" AFF.				
5	MOTOR, $5 = 5$ H.P. OR AS OTHERWISE INDICATED.	M					
$\searrow$	MOTOR MAGNETIC STARTER.	13P <u>50</u>	SAFETY SWITCH, 3P = NO. OF POLES. 60 = SWITCH SIZE, 50 = FUSE SIZE.				
	VAY WITH DUCT HEATER, CONTACTOR AND SAFETY DISCONNECT.	S <sub>oc</sub>	OCCUPANCY TYPE WALL SWITCH				
()	THERMOSTAT		MISCELLANEOUS				
	WIRING	<	TELEPHONE OUTLET			CIT 3A	
		$\triangleleft$	ADMINISTRATIVE TELEPHONE OUTLET, MTD. 48' A.F.F.			BH BH 33	
A−1,3,5 - <del>_///// ►</del>	CONDUCTORS ( $\checkmark$ )INDICATES GROUND WIRE SIZED AS PER N.E.C. ART. 250.	CS	COMBINATION CLOCK SPEAKER.			IGHT OF	SHE
, 	INDICATES A CONDUIT RUN CONCEALED IN A CEILING OR WALL.	HTV	TELEVISION TAP THRU OUTLET, MTD. 6'-8' A.F.F.			СОРҮК	
	INDICATES A CONDUIT RUN CONCEALED IN FLOOR, EMBEDDED IN	┝╍╸	CLASSROOM CALL BACK BUTTON.			ARE THE	SSIONAL
	CONCRETE OR UNDERGROUND AT 24" BELOW GRADE MINIMUM.	D	DATA OUTLET			DUCTS /	PROFE
]	INDICATES A CAPPED CONDUIT.	MD	MOTION DETECTOR			RK PROI	ENSED
}w	INDICATES A FLEXIBLE METAL CONDUIT CONNECTION. USE LIQUID TIGHT CONDUIT IN WET, DAMP OR OILY LOCATIONS.		DOOR CONTACT PROXIMITY CARD READER			LED MOI	REI LIC
	FLEXIBLE EQUIPMENT CONNECTION.	MAG	MAGNETIC DOOR LOCK			No. REVISIONS - S	UBMITTALS
•	CONDUIT RUN TURNED DOWN.	KP	SECURITY SYSTEM KEY PAD				
o x	CONDUIT RUN TURNED UP. CONDUIT EXPANSION JOINT		CEILING MOUNTED CLOSED CIRCUIT TV CAMERA				
			WALL MOUNTED CLOSED CIRCUIT TY CAMERA			SS SPEC	
			NEI. BASU			ASSOCIATES, INC. ALL DRAW	
			No. 40869 No. 40869	s been digitally sir y Rene I. Basulto, adjacent to the s	P.E. Project No 18018 eal. DACIIIIT		
				adjacone to the o			

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Statistics										
Description	Avg	Max	Min	Max/Min	Avg/Min					
BRIDGE	1.7 fc	2.9 fc	0.5 fc	5.8:1	3.4:1					
PARKING LOT	3.5 fc	7.1 fc	1.2 fc	5.9:1	2.9:1					
RAMP	1.4 fc	3.1 fc	0.4 fc	7.8:1	3.5:1					
WALKWAY	2.8 fc	6.4 fc	0.7 fc	9.1:1	4.0:1					



Symbol	Label	MANUFACTURER	CATALOG #	Lamp	Number Lamps	Lumens per Lamp	LLF	Wattage	MOUNTING HEIGHT
$\odot$	SA	ARTEC	SALVUS 20 T3 4K	LED	1	9803	0.9	83.1	15.5' MH
$\odot$	SB	ARTEC	SALVUS 20 T5 4K	LED	1	14055	0.9	111.5	15.5' MH 🛛 🔶
	SC	AMERLUX	FL1-40-HWF-BLK-GSP17-RGS	LED	1	3170	0.9	31	GRADE ON 2" RGS ANCHOR STANCHION. FOUNDATION FOR STANCHION TO BE 18" DIAMETER X 24" DEEP 3000 PSI CONCRETE
	SD	ARTEC	PSLT8 F40 4W 4000K	LED	1	50	0.9	4	42" MH

LIGHTING FIXTURE SCHEDULE										
TYPE	MANUFACTURER	CATALOG NUMBER	L	AMPS	VOLTS		MOUNTING			
			Qty	Туре		INPUTWATTS				
А	LURALINE	HL302XL-WM-FR-TL15COB-FINISH	1	LED	120	15	WALL			
в	LURALINE	HL302-WM-FR-MBL11A-FINISH	1	LED	120	11	WALL			
С	LUMINAIRE	ARV17-50W-3500K-120-277-CP-FINISH	1	LED	120	50	SURFACE			
CE	LUMINAIRE	ARV17-50W-3500K-120-277-CP-FINISH-EMB	1	LED	120	50	SURFACE			
D	LUMINAIRE	VPF84-46-50W-3500K-120-277-CP-FINISH-COR- OCC	1	LED	120	50	SURFACE			
DE	LUMINAIRE	VPF84-46-50W-3500K-120-277-CP-FINISH-COR- OCC-EMB310	1	LED	120	50	SURFACE			
EE	LUMINAIRE	ARV13-25W-3500K-120-277-CP-FINISH-EMB310	1	LED	120	25	SURFACE			
F	BEGHELLI	BS101LED-ECO-4-HT-HO-WT35-120-277	1	LED	120	55	SURFACE			
G	HE WILLIAMS	96-8-L40/840-H/AFR-SSLATCH-WET2-DRV	1	LED	120	6'	SURFACE			
GE	HE WILLIAMS	96-8-L40/840-H/AFR-SSLATCH-WET2-DRV-EM 10WATT	1	LED	120	6'	SURFACE			
н	LUMINAIRE	FFW1212-4000K-120-OP-WHT-WET	1	LED	120		SURFACE			







03-05-2019 ONAL



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VD APPROPRIATE COMPENSATION	SPACI	E RESERVED FOR	CITY CITY OFFIC 444	OF MIAMI A TY OI E OF CAPIT S.W. 2nd A Miami, F	APPROV FM FAL IMPR Avenue, A FL 3313	AL STAMP
IGHT OF THE ENGINEER. REPRODUCTION OF SUCH OR USE OF ELECTRONIC FILES IN PART OR WHOLE IS FORBIDDEN WITHOUT WRITTEN PERMISSION AN		PBA FERN ISLE PARK REDEVELOPMENT CITY OF MIAMI, PROJECT NO. B-40543 2304 N.W. 14TH STREET, MIAMI, FL 33125		SHEET TITLE: NORTH / SOUTH PAVILION AND	STORAGE BUILDING	ELECTRICAL PLAN
ATED WORK PRODUCTS ARE THE COPY				LICENSED PROFESSIONAL	RENE I. BASULTO, P.E.	FL LICENSE NUMBER REG. #40869 date:
CATIONS AND RE	No.	REVISION BUILDING DEPARTM	NS - SU ENT C	JBMITTALS		DATE 04/26/2019
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	SQUAR	E "D" I LIN	<			25,000 A.I.C.
PANEL: MDP	12Ø/24@	0 VOLTS, 10	, 3 WIRE	$\sim$		400A. M.L.O.
	250 AN	1PS. M.L.O.		(NEMA   )		SURFACE MOUNTED
CKT	BRAN	CH SIZE	(AMPS)	FEEDER SIZE		
NO. DESCRIPTION OF LOAD	NO. OF POLES	FRAME	TRIP	WIRE	CONDUIT	KVA
1 PANEL 'RR'	2	200	200	() ()	$(\bigcirc)$	31.9
2 PANEL 'ST'	2	100	100	$\bigcirc \lambda$		1.8
3 SPACE	2	200		$\sim 1$	$  \sim 1$	
	2	100				

(1) REFER TO ELECTRICAL RIGER There was a second secon

P/	ANEL	_: RI	२	5Q. 'D' PANEL WITH COPPER	BUS	^			{	10,000	0 A.I.C.	$\left]\right\rangle$
				12Ø/24Ø∨., 1 ₱H., 3 W.					S	URFACE	MTD.	
СКТ		COND	BKR.	SERVES	LOAD AØ	> V-A C Ø	SERVES	BKR	COND	WIRE	CKT.	
	- 5	5	2	PARKING LOT LIGHTING	695 4000	695	INSTANT WATER HEATER	2	3/4'	8	2	]
5			20		498	4000		2	2/41		4	-
F		5	20		420	498 4000	INSTANT WATER HEATER	50	3/4"	8	8	
9	- 5	5	$\frac{2}{20}$	PATH LIGHTING	4000	>	INSTANT WATER HEATER	2	3/4'	8	1Ø 12	-
13			2		556 426	4000	> EXTERIOR LIGHTING	20	3/4'	12	14	
			20		<	556 800	NTERIOR LIGHTING	2Ø	3/4"	12	16	
Г	5	5	2Ø	NORTH PAVILION RECEPT.	180			2	1 5	ि	18	┨┍
61	5	5	2Ø	SOUTH PAVILION RECEPT.	<	180 1000		20			2Ø	
21	12	3/4"	2Ø	AUTO VALVES		$\rangle$	SPACE				22	
23	12	3/4"	2Ø	HAND DRYER			> SPACE				24	
25	12	3/4"	2Ø	HAND DRYER	< <u> </u>	>	SPACE				26	
27	12	3/4"	2Ø	HAND DRYER			> SPACE				28	
29	12	3/4"	2Ø	HAND DRYER		$\rangle$	SPACE				30	
31	12	3/4"	2Ø	EWC			SPACE				32	
33	12	3/4"	2Ø	EXHAUST FANS		$\rangle$	SPACE				34	
35				SPACE		-	SPACE				36	1
37				SPACE		>	SPACE				38	1
39				SPACE			SPACE				40	1
41				SPACE		>	SPACE				42	1
				CONNECTED V-A PER Ø	15,775	16,149	CONNECTED LOAD:	31.9 Kv	/A			1
				TOTAL AMPS, PER Ø	131	135						1

1 VIA 6 POLE, 30 AMP NEMA STYLE CONTACTOR AND TIME CLOCK #

2 VIA 8 POLE, 30 AMP NEMA STYLE CONTACTOR AND TIME CLOCK \*2

3 VIA 4 POLE, 30 AMP NEMA STYLE CONTACTOR AND TIME CLOCK #3

4 GFI TYPE CIRCUIT BREAKER.

5 REFER TO SITE PLAN.

									(	$\sim$	
<b>I</b> PA	PANEL: ST  SQ. 'D' PANEL WITH COPPER BUS AND UNIT MOUNTED M.C.B.										0 A.I.C.
120/240V., 1 PH., 3 W.						NEMA 1 1					M.C.B. E MTD.
CKT.	WIRE	COND	BKR.	SERVES	LOAD A ¢	> ∨-A ₿¢	SERVES	BKR		WIRE	CKT.
1	12	3/4'	2Ø	RECEPTACLES	540		SPACE				2
3	12	3/4'	2Ø	RECEPTCLES	<	540	5PACE				4
5	12	3/4'	2Ø	INTERIOR LIGHTING	366	>	SPACE				6
Г	12	3/4'	2Ø	EXTERIOR LIGHTING	<	32Ø	SPACE				8
9				SPACE		>	SPACE				10
11				SPACE	<		5PACE				12
13				SPACE			SPACE				14
15				SPACE	<		5PACE				16
IT				SPACE	<		SPACE				18
	•			CONNECTED V-A PER Ø	306	860	CONNECTED LOAD:	1.8	KVA	-	
				TOTAL AMPS, PER Ø	8	Г					

1 VIA 2 POLE, 30 AMP NEMA STYLE CONTACTOR AND TIME CLOCK.







4-1 NGERS MINIMUM SIZE									
CING PAIR AT PAIR AT 5 FT SPACING 4 FT SPACING									
WIRE/ ROD	STRAP	ROD	STRAP	ROD					
10 GA (.135")	1"×22 GA.	10 GA (.135")	1"×22 GA.	12 GA (.106")					
<sup>1</sup> ⁄4"	1"×22 GA.	<sup>1</sup> ⁄4 "	1"×22 GA.	<sup>1</sup> ⁄4"					
<sup>3</sup> ⁄8'	1 <b>"×20 G</b> A	3⁄8"	1"×22 GA.	<sup>1</sup> ⁄4"					
3⁄8'	1"X18 GA.	<sup>3</sup> ⁄8"	1"X2Ø GA.	<sup>1</sup> ⁄4 "					
ŀ∕2"	1"X16 GA.	ا <sub>2</sub> "	1"X18 GA.	<sup>3</sup> ⁄8"					
ŀ∕2"	1"×16 GA.	ŀ∕₂ "	1"×16 GA.	3⁄8"					
UIRED									

# FAN SCHEDULE

4	UNIT TAG		EF-1 AND EF-2	EF-3 AND EF-4
	SERVICE AREA		RESTROOMS	ELECT/CUSTODIAL
K	MANUFACTURER		LOREN COOK	LOREN COOK
ີ ເ	MODEL		GC-720	GC-168
	CONFIGURATION		CEILING	CEILING
ົກ				
ৰ ব	AIR FLOW	(CFM)	44Ø	100
Ì	EXTERNAL STATIC PRESSURE	(IN.WG)	Ø3	Ø.3
ב ד	NOISE	(SONES)	3.Ø	2.Ø
₫				
4	MOTOR FAN POWER	(W)	165	4Ø
A J	MOTOR FAN SPEED	(FRPM)	1061	884
2	ELECTRICAL SERVICE	(VOLT/PH/HZ)	115/1/60	115/1/60
<u>א</u> ק				
H				
44	OPERATING WEIGHT	(LBS)	34	15
Ļ	DIMENSION (LXWXH)	(IN)	17 × 12 × 12	14 × 16 × 8
¥ ¥				
ŧ	NOTES			

## NOTE:

- PROVIDE WITH FACTORY PRE-WIRED SPEED CONTROL.
- 2. PROVIDE DISCONNECT SWITCH. COORDINATE WITH ELECTRICAL CONTRACTOR.
- 3. PROVIDE WITH BACK DRAFT DAMPER.
- 4. PROVIDE VIBRATION ISOLATOR.
- 5. FAN SHALL BE OF ALUMINUM CONSTRUCTION.
- 6. ALL FANS SHALL RUN CONTINUOUSLY.
- 1. PROVIDE WITH ALUMINUM GRILLE.

	MECHANICAL LEGEND						
SYMBO							
$\boxtimes$	SUPPLY AIR						
	RETURN AIR CEILING GRILLE						
	EXHAUST AIR CEILING GRILLE						
	SIDE WALL GRILLE, LOUVER						
	SMOKE DAMPER						
	MOTORIZED VOLUME CONTROL DAMPER.						
	MANUAL VOLUME CONTROL DAMPER						
THERMOSTAT/TEMP. SENSOR							
6D	DUCT SMOKE DETECTOR						
C02	CARBON DIOXIDE SENSOR						
NO	NORMALLY OPEN						
NC	NORMALLY CLOSED						
	AIR FLOW MEASURING: DIVICE						
	AIR DISTRIBUTION DEVICE TAG						
GV	GRAVITY VENTILATOR						
	EXHAUGT FAN						
<i>0</i> /A	OUTDOOR AIR						
E/A	EXHAUST AIR						
uc	I' UNDER CUT DOOR (TYP.)						
NOTE: NOT ALL S	SYMBOLS MAY APPLY TO THESE PLAN.						

HVAC DESIGN REQUIRES	YES	NO
DUCT SMOKE DETECTOR		×
NEW FIRE DAMPER'S		X
SMOKE DAMPER'S		×
FIRE RATED ENCLOSURE		×
FIRE RATED ROOF / FLOOR		×
CEILING ASSEMBLY		×
FIRE STOPPING		×
SMOKE CONTROL		X

- AND OPERATION.

- ASTME84



# H.V.A.C. GENERAL NOTES:

THE WORK THAT IS TO BE DONE UNDER THIS HEADING INCLUDES THE FURNISHING OF ALL LABOR, MATERIALS, EQUIPMENT, PERMITS, FEES, INSPECTIONS, TEST, INSURANCE, ETC. REQUIRED FOR THE COMPLETION OF THE HYAC SYSTEM SHOWN ON THE DRAWINGS AND/OR LISTED BELOW.

2. OBTAIN FULL INFORMATION REGARDING PECULIARITIES AND LIMITATIONS OF SPACE AVAILABLE FOR INSTALLATION OF THE EQUIPMENT AND MATERIALS UNDER CONTRACT AND PROVIDE READY ACCESSIBILITY TO DAMPERS, VALVES AND OTHER APPURTENANCES INCLUDING ANY PART OF THE SYSTEM REQUIRED TO BE REACHED FOR BALANCING, TESTING , MAINTENANCE

3. PLANS ARE GENERALLY DIAGRAMMATIC IN NATURE, AND ARE TO BE READ IN CONJUNCTION WITH ARCHITECTURAL, PLUMBING, ELECTRICAL AND STRUCTURAL PLANS AND ALL PLANS RELATED TO PROJECT SHALL BE CONSIDERED AS ONE SET OF DOCUMENTS. DUCT AND PIPING OFFSETS, BENDS AND TRANSITIONS WILL BE REQUIRED TO PROVIDE AND INSTALL A COMPLETE FUNCTIONAL SYSTEM AND SHALL BE PROVIDED BY THE CONTRACTOR AS NECESSARY AT NO ADDITIONAL COST TO THE OWNER.

ALL WORK SHALL BE COORDINATED WITH OTHER TRADES TO AVOID INTERFERENCE WITH THE PROGRESS OF CONSTRUCTION AND IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES AND STANDARDS. WORK SHALL ALSO BE COORDINATED WITH STRUCTURE AND AVAILABLE SPACE TO ENSURE FIT AND PROPER CLEARANCES ARE BEING PROVIDED. ANY DISCREPANCIES SHALL BE REPORTED TO THE ARCHITECT - ENGINEER IMMEDIATELY.

5. CUT ALL OPENINGS AND CHASES REQUIRED TO ACCOMMODATE THE WORK UNDER THIS DIVISION, AND REPAIR ALL FLOORS, WALLS, ETC. DAMAGED BY WORK. ALL WORK PERFORMED UNDER THIS HEADING SHALL CONFORM IN EVERY RESPECT TO THE FINISH AND QUALITY OF MATERIALS AND WORKMANSHIP SPECIFIED UNDER APPROPRIATE SECTIONS FOR THE BUILDING.

6. SUBMIT SHOP DRAWINGS OF ALL MATERIALS AND EQUIPMENT FOR APPROVAL PRIOR TO FABRICATION. DUCTWORK SHOP DRAWINGS SHALL BE SUBMITTED AT 1/4" = 1'-0" SCALE AND BE COORDINATED WITH OTHER TRADES.

1. ALL DUCTWORK SHALL BE GALVANIZED STEEL WITH GAUGES, DUCT CONSTRUCTION, BRACING AND SUSPENSION IN ACCORDANCE WITH THE RECOMMENDATIONS SET FORTH IN THE LATEST EDITION OF THE A.S.H.R.A.E. GUIDE AND SM.A.C.N.A. STANDARDS. DUCT SIZES INDICATED ON DRAWINGS ARE CLEAR INSIDE DIMENSIONS. VERIFY EXACT LOCATION OF DUCT WITH RESPECT TO STRUCTURE AND OTHER TRADES BEFORE FABRICATION.

8. CONTRACTOR SHALL WARRANTY ALL MATERIALS AND WORKMANSHIP FREE FROM DEFECTS FOR A PERIOD OF NOT LEGS THAN A I YEAR FROM DATE OF ACCEPTANCE.

9. INDEPENDENT CONTRACTED FIRM SHALL PERFORM TEST AND BALANCE SYSTEMS AND PROVIDE REPORT IN ACCORDANCE WITH THE 2014 FLORIDA BUILDING CODE ENERGY CONSERVATION C40822 FOR ALL MECHANICAL EQUIPMENT, AIR DEVICES, DAMPERS, AHU'S, FANS AND HYDRONIC SYSTEMS, BALANCING PROCEDURES SHALL BE IN ACCORDANCE WITH THE "NATIONAL ENVIRONMENTAL BALANCING BUREAU' (NEBB) PROCEDURAL STANDARDS, THE 'ASSOCIATED AIR BALANCE COUNCIL' (AABC) NATIONAL STANDARDS OR EQUIVALENT PROCEDURES AND SHALL INCLUDE AIR SIDE OF HVAC SYSTEM INDICATING AIR QUANTITIES FOR ALL SUPPLY, RETURN AND EXHAUST AIR DEVICES, FLOW AND PRESSURE DROP THROUGH COILS, ENTERING AND LEAVING AIR TEMPERATURES ON SUPPLY DEVICES AND ACROSS COILS.

10. CONTRACTOR SHALL MAINTAIN AN "AS-BUILT" SET OF RECORD DRAWINGS ON SITE INDICATING ANY MODIFICATIONS TO THE DESIGNED SYSTEM LAYOUT. SET SHALL CLEARLY INDICATE ACTUAL INSTALLED CONDITIONS AND LOCATION OF ALL EQUIPMENT, PIPING, DUCTWORK, CONTROL DEVICES, ETC. RECORD SET SHALL BE ACCURATELY UPDATED WEEKLY BY THE CONTRACTOR ACCURATE 'AS-BUILT' SET SHALL BE SUPPLIED TO THE ARCHITECT/ENGNIEER AT COMPLETION OF PROJECT. NO MAJOR CHANGES SHALL BE MADE TO THE HVAC DESIGN ENGINEERING UNLESS IT HAS BEEN COORDINATED, DRAWN AND SUBMITTED FOR APPROVAL

II. CONTRACTOR SHALL BASE HIS PROPOSAL UPON THE EQUIPMENT AS SCHEDULED OR SPECIFIED, USING THE MANUFACTURERS AND MODEL NUMBERS AS CALLED FOR IN THE SPECIFICATIONS AND SCHEDULED ON THE DRAWINGS, IF MORE THAN ONE MANUFACTURER OF EQUIPMENT IS SPECIFIED, ANY ONE OF THE MANUFACTURERS OF EQUIPMENT MAY BE USED IN THIS CONTRACTOR'S PROPOSAL. IF THIS CONTRACTOR WIGHES TO USE EQUIPMENT NOT SPECIFIED HE MUST, AT THE TIME OF BIDDING, SUBMIT SEPARATELY ON LETTERHEAD STATIONARY OF THE BIDDER, THE EQUIPMENT HE WOULD SUBSTITUTE AND THE COST TO BE ADDED OR TO BE DEDUCTED FROM HIS PROPOSAL.

12. MECHANICAL CONTRACTOR SHALL VERIFY DIRECTION OF EXISTING STRUCTURE BEFORE INSTALLATION OF EQUIPMENTS AND DUCTWORK SHOULD ANY DISCREPANCIES BE FOUND CONTACT ARCHITECT/ENGINEER.

13. ALL EQUIPMENT SHALL BE PROVIDED WITH VIBRATION ISOLATION IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS TO REDUCE/ELIMINATE NOISE AND VIBRATION FROM TRANSFERRING TO THE OCCUPIED SPACE.

14. FIRE DAMPERS SHALL BE PROVIDED AT ALL FIRE RATED PENETRATIONS OF ONE HOUR OR GREATER DAMPERS SHALL BE U.L. LISTED AND INSTALLED IN STRICT ACCORDANCE WITH THEIR LISTING, N.F.P.A. AND MANUFACTURER'S INSTRUCTIONS. DAMPERS SHALL BE PROVIDED AS INDICATED ON DRAWINGS AND/OR AS REQUIRED BY CODE, REFER TO ARCHITECTURAL DRAWINGS FOR WALL/ROOF RATING INFORMATION, CONTRACTOR SHALL VERIFY AND CONFIRM QUANTITY OF DAMPERS BEFORE BIDDING.

15. MATERIALS WITHIN MECHANICAL ROOMS USED AS RETURN PLENUMS SHALL BE NON-COMBUSTIBLE OR SHALL HAVE A FLAME SPREAD INDEX OF NOT MORE THAN 25 AND SMOKE DEVELOPED INDEX OF NOT MORE THAN 50 WHEN TESTED IN ACCORDANCE WITH

16. ALL MECHANICAL EQUIPMENT AND INSTALLATIONS SHALL CONFORM WITH THE REQUIREMENTS OF THE (2017) FLORIDA MECHANICAL CODE, THE FLORIDA BUILDING CODE, THE STATE ENERGY CODE, NEPA 90A, 101, AND ALL APPLICABLE CODES AND ORDINANCES.





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**REVISIONS - SUBMITTALS** 

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Project No 18018	
B A S S	$     \int_{L} L T O_{E} O_{S} $
CONSULTING	ENGINEERS
René I. Basulto, PE	14160 Palmetto Frontage Road
PE 40869 - FL CA06722	Suite 22, Miami Lakes, FL 33016
www.basulto.com	305.698.3988, fax: 305.698.3989

SHEET No.







RESTROOM FLOOR PLAN - MECHANICAL



<u>KEY NOTES</u>

- (2) 10" x 10" DUCT UP TO 10" x 10" GALVANIZED GOOSENECK VENT ROOF CAP WITH BIRD SCREEN.



ARCHITECTURAL LOUVER. REFER TO ARCHITECTURAL DRAWINGS FOR MORE INFORMATION.

(3) 6' Ø DUCT UP TO GALVANIZED GOOSENECK VENT ROOF CAP WITH BIRD SCREEN.

	SPACI	E RESERVED FOR C	ITY FFIC	OF MIAMI A TY OI E OF CAPIT S.W. 2nd A Miami, F	APPROVA F MI TAL IMPRO Avenue, 8 TL 33130	AL STAMP
RIGHT OF THE ENGINEER. REPRODUCTION OF SUCH OR USE OF ELECTRONIC FILES IN PART OR WHOLE IS FORBIDDEN WITHOUT WRITTEN PERMISSION /		PBA FERN ISLE PARK REDEVELOPMENT CITY OF MIAMI, PROJECT NO. B-40543 2304 N.W. 14TH STREET, MIAMI, FL 33125		SHEET TITLE:	<b>RESTROOM MECHANICAL PLAN</b>	
ATED WORK PRODUCTS ARE THE COPY				LICENSED PROFESSIONAL	RENE I. BASULTO, P.E.	REG. #40869 Date:
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<b>BASULTO A</b>						
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PLUM	PLUMBING FIXTURE SCHEDULE											
SYMBOL	DESCRIPTION	MANUFACTURER	MODEL NO.	CW	ΗW	WASTE	VENT	ADA/ANSI HEIGHT	MAX WATER USUAGE	COLOR FINISH	REMARKS	
WC-1	FLOOR MOUNTED WATER CLOSET HANDICAPPED ACCESSIBLE	AMERICAN STANDARD	3461.528	1"		3'	2"	17-19' AFF	128 GPF	WHITE	MADERA ADA ELONGATED FLUSH VALVE WATER CLOSET WITH BATTERY OPERATED FLUSH VALVE & EXTRA HEAVY DUTY OPEN FRONT SEAT WITH CHROMES STUDS AND HINGES. PROVIDE 120 VAV/24 VAV TRANSFORMER AS NEEDED.	
WC-2	FLOOR MOUNTED WATER CLOSET	AMERICAN STANDARD	2234.001	1"		3'	2"		128 GPF	WHITE	MADERA ELONGATED FLUGH VALVE WATER CLOGET WITH BATTERY OPERATED FLUGH VALVE & EXTRA HEAVY DUTY OPEN FRONT SEAT WITH CHROMES STUDS AND HINGES. PROVIDE 120 VAV/24 VAV TRANSFORMER AS NEEDED.	
UR-1	URINAL-WALL MOUNTED	AMERICAN STANDARD	6590.001	3/4"		2"	1-1/2"	17' AFF	Ø.5 GPF	WHITE	WASHBROOK FLOWISE WALL MOUNTED FIXTURE SUPPORTED BY J.R. SMITH CONCEALED WALL CARRIER, CARRIER SHALL BE FULLY BOLTED TO FLOOR. AMERICAN STANDARD 6063.025.002, 0.5 GPF FLUSH VALVE.	
L-1	LAVATORY HANDICAPPED ACCESSIBLE	AMERICAN STANDARD	Ø355.Ø12 WITH 1385.ØØ8 FAUCET	1/2"	1/2"	2"	1-1/2"		Ø.5 GPM	WHITE	LUCERNE WALL HUNG LAVATORY. PROVIDE GRID DRAIN & WALL CARRIER CONCEALED ARMS. PROVIDE UNDER COUNTER TEMPERING VALVE THAT CONFORMS TO ASSE 1010 OR CSA B125.3. PROVIDE 'TRUEBRO' UNDER SINK LAV GUARD.	
66K-1	SERVICE SINK	AMERICAN STANDARD FLORWELL	7745,811	1/2"	1/2"	3'	1-1/2"		22 GPM	WHITE	28'X28" ENAMELED CAST IRON SERVICE SINK WITH REMOVABLE VINYL RIM GUARD. FAUCET AMERICAN STANDARD 'HERITAGE' 8354.112 WITH ACCESSIBLE EXPOSED YOKE, WALL MOUNTED WITH VACUUM BREAKER AND STOPS IN SHANK.	
FD-1	FLOOR DRAIN	JR SMITH	D×231Ø			3'			2.Ø DFU	BRASS	INGTALL WITH TRAP PRIMER FROM NEARBY COLD WATER LINE AS REQUIRED, SEE DETAILS FOR ADDITIONAL INFORMATION	
WHY-1	WALL HYDRANT	ZURN	Z133Ø-C	3/4"						BRASS	ENCASED, ANTI-SIPHO, AUTOMATIC DRAINING, WALL HYDRANT WITH INTEGRAL BACK FLOW PREVENTED, ALL BRONZE PARTS 3/4" HOSE CONNECTION CHROME PLATED ROUGH CAST BRONZE BOX AND HINDGE COVER . PROVIDED WITH OPERATING KEY	
EWC-1	ELECTRIC WATER COOLER	ELKAY	EZH2O	1/2"		2"	1-1/2"			STAINLESS STEEL	ADA COMPLIANT BI-LEVEL BOTTLE FILLING STATION, VANDAL RESISTANT, 80 GPH, 60 FLA, 115V/60HZ.	
EWH-1	TANKLESS ELECTRIC WATER HEATER	CHRONOMITE	E-80L / 211	3/8"	3/8"					STAINLESS STEEL	INSTANT TEMP LOW FLOW, 8000 WATTS, 29 AMPS, 211 / 1 / 60, ACTIVATION FLOW 0.35 GPM, 44°F TEMPERATURE RISE @ 125 GPM. SATIN FINISH STAINLESS STEEL HOUSING.	
EWH-2	TANKLESS ELECTRIC WATER HEATER	CHRONOMITE	ER-60L / 211	3/4"	3/4"					STAINLESS STEEL	INSTANT TEMP HIGH CAPACITY - LOW ACTIVATION, 16600 WATTS, 60 TOTAL AMPS (2X30), 277 / 1 / 60, ACTIVATION FLOW 0.35 GPM, 38°F TEMPERATURE RISE @ 3.0 GPM. SATIN FINISH STAINLESS STEEL HOUSING.	

# PLUMBING LEGEND

SYMBOL	DESCRIPTION
	SANITARY PIPING
SD	STORM DRAINAGE PIPING
— GW —	GREASE WASTE PIPING
	SANITARY VENT PIPING
	COLD WATER PIPING (CW)
	HOT WATER PIPING (HW)
	HOT WATER RECIRC. PIPING (HWR)
— cd —	CONDENSATE DRAIN PIPING
— G	NATURAL GAS PIPING
	INDIRECT SAFE WASTE
—⋈—	GATE OR BALL VALVE
—ф—	FULL PORT BALL VALVE
🗑 A.A.V.	AIR ADMITTANCE VALVE
	VENT THROUGH ROOF
F6-1	PLUMBING FIXTURE NUMBER (REFER TO PLUMB FIXTURE SCHEDULE)
$\langle \! \diamond \! \rangle$	RISER NUMBER (REFER TO RISERS)
123	EQUIPMENT NUMBER (REFER TO SPECS
	DRAWING KEYED NOTES
— <b>İ</b> —	CHECK VALVE
Ą	WATER HAMMER ARRESTOR
ь <u>—</u>	'P' TRAP
– ↓ +B	HOSE BIBB (HB) W/ VAC. BREAKER
- WHY	WALL HYDRANT W/VAC, BREAKER AND LOCKING COVER
K	PRESSURE REDUCING VALVE
4	₽ ¢ Ť VALVE
SAN	SANITARY
GW	GREASE WASTE
GDO	GUTTER DRAIN OUTLET
∞ ⊢	CLEAN OUT
co ⊗—	FLUGH FLOOR CLEAN OUT
@	FLOOR DRAIN
C00G	CLEAN OUT ON GRADE
FD	FLOOR DRAIN
FS	FLOOR SINK
Y	YENT
~J2	TRAP PRIMER (RESEAL) TO CLOSEST FIXTURE
<b>�</b>	POINT OF CONNECTION

# **GENERAL PLUMBING NOTES**

- ARCHITECT/ENGINEER WILL THEN ISSUE INSTRUCTIONS AS HOW TO PROCEED. WORK SHALL CONFORM TO 2014 FBC.
- EXISTING CONDITIONS, OR PROPER EXECUTION OF THE WORK.
- BETWEEN DRAWINGS, NOTIFY IN WRITING TO THE ARCHITECT/ENGINEER IN AMPLE TIME TO PERMIT REVISIONS BEFORE THE BIDS ARE SUBMITTED,
- REPLACEMENT IS TO BE DONE IMMEDIATELY WHEN DIRECTED BY THE OWNER IN WRITING, AT THE SOLE EXPENSE OF CONTRACTOR
- THEIR EXPENSE, ALL PLUMBING WORK WHICH MAY HAVE TO BE REMOVED BECAUSE OF INTERFERENCE WITH OTHER TRADES.
- ORDINANCES.
- 1. ALL WORK TO BE DONE IN ACCORDANCE WITH THE FLORIDA BUILDING CODE 2011.
- SMALLER THAN 3".
- 9. PROVIDE CLEANOUTS EVERY 15 FT. MINIMUM AND AT BASE OF EVERY WASTE STACK.
- IRON OR CPVC.
- PIPE HANGERS ON HORIZONTAL OVERHEAD PIPING ABOVE CEILING NOT TO EXCEED 6 FT. ON CENTER.
- FIXTURE SCHEDULE FOR MODEL NUMBERS AND DETAILS.
- D. FLOOR CLEANOUTS : JOSAM SERIES 56020 OR EQUAL. ALL CLEANOUTS SHALL BE 2-WAY.
- E. WALL CLEANOUTS: JOSAM SERIES 58750 WITH ACCESS COVER OR EQUAL.
- G. INSULATE DOMESTIC HOT WATER LINES, FITTINGS AND VALVES WITH 1/2' THICK PREFORMED FIBERGLASS INSULATION WITH ALL
- H. HANGERS: AS MANUFACTURED BY 'CLEVIS' OF SIZE & TYPE REQUIRED FOR EACH CONDITION.
- PURCHASE FOR APPROVAL.
- 12. CONTRACTOR SHALL FURNISH COMPETE OPERATIONAL SYSTEMS PROVIDING ALL NECESSARY MATERIALS, ISOLATION VALVES,
- 13. PROVIDE FIXTURES AS SPECIFIED. EACH FIXTURE SHALL BE PROVIDED WITH SHUTOFF VALVE.
- 14. DIELECTRIC FITTING SHALL BE USED AT ALL DISSIMILAR METAL CONNECTIONS.
- 15. ALL PLUMBING LINES SHALL BE CAPPED AND PROTECTED FROM DAMAGE DURING CONSTRUCTION.
- IMMEDIATELY FOR RESOLUTION. 17. PERFORM THE FOLLOWING TEST:
- WITNESSED AND APPROVED BY PROPER AUTHORITIES.
- LESS THAN I HOUR
- AVAILABLE CHLORINE), RETAIN MIXTURE IN PIPES FOR 24 HOURS AND FLUSH THOROUGHLY WITH POTABLE WATER BEFORE PLACING IN SERVICE.
- IS MADE, WATER LEVEL SHALL REMAIN CONSTANT,
- IN-SERVICE TEST AFTER COMPLETION OF INSTALLATION, AND BEFORE FINAL ACCEPTANCE BY OWNER.
- FAHRENHEIT MAXIMUM. WATER TEMPERATURE LIMITING DEVICE SHALL CONFORM TO ASSE 1010.
- COMPLIANCE WITH ALL APPLICABLE CODES AND STANDARDS.
- 21. ANY AND ALL CUTTING OF NEW WALLS FOR PIPING INSTALLATION SHALL BE SAW CUT. PATCHED AND FINISHED TO MATCH EXISTING
- CONDITIONS,



ALL WORK SHALL CONFORM WITH ALL LOCAL, STATE, FEDERAL ORDINANCES AND BUILDING CODES GOVERNING THE INSTALLATION OF THE PLUMBING SYSTEM. IF WORK AS LAID OUT, INDICATED OR SPECIFIED IS CONTRARY TO OR CONFLICTS WITH LOCAL ORDINANCES, BUILDING CODES AND REGULATIONS, THE CONTRACTOR SHALL REPORT IN WRITING TO THE ARCHITECT/ENGINEER BEFORE SUBMITTING A BID. THE

THE DRAWINGS ARE TO BE CONSIDERED DIAGRAMMATIC, NOT NECESSARILY SHOWING IN DETAIL OR SCALE ALL OF THE MINOR ITEMS. UNLESS SPECIFIC DIMENSIONS ARE SHOWN, THE STRUCTURAL, ARCHITECTURAL AND SITE CONDITIONS SHALL GOVERN THE EXACT LOCATIONS. CONTRACTOR SHALL FOLLOW DRAWINGS IN LAYING OUT WORK, CHECK DRAWINGS OF OTHER TRADES TO VERIFY SPACES IN WHICH WORK WILL BE INSTALLED, AND MAINTAIN MAXIMUM HEADROOM, AND SPACE CONDITIONS AT ALL POINTS. WHERE HEADROOM, OR SPACE CONDITIONS APPEAR INADEQUATE, ARCHITECT/ENGINEER SHALL BE NOTIFIED BEFORE PROCEEDING WITH INSTALLATION. THIS CONTRACTOR SHALL, WITHOUT EXTRA CHARGE, MAKE FIELD MODIFICATION IN LAYOUT AS NEEDED TO PREVENT CONFLICT WITH WORK OF VARIOUS TRADES,

EXAMINE ALL DRAWINGS CAREFULLY PRIOR TO SUBMITTING A BID. CONTRACTOR WILL BE REQUIRED TO FURNISH, INSTALL AND OR CONNECT WITH APPROPRIATE SERVICES ALL PLUMBING ITEMS SHOWN ON ANY OF THE ARCHITECTURAL, AIR CONDITIONING, ELECTRICAL AND SPRINKLER DRAWINGS WITHOUT ADDITIONAL COST TO THE OWNER. IF DISCREPANCIES, CONFLICTS, INTERFERENCE'S OR OMISSIONS OCCUR

INSTALL MATERIALS AND EQUIPMENT IN A NEAT AND FIRST CLASS WORKMANLIKE MANNER. THE OWNER RESERVES THE RIGHT TO DIRECT REMOVAL AND REPLACEMENT OF ITEMS WHICH, IN HIS OPINION, DO NOT PRESENT A NEAT AND WORKMANLIKE APPEARANCE. REMOVAL AND

5. START OF WORK BY CONTRACTOR SHALL BE CONSIDERED AS ACCEPTANCE BY THEM OF ALL CLAIMS OR QUESTIONS AS TO SUITABILITY OF THE WORK OF OTHER TRADES OR OTHER CONTRACTORS TO RECEIVE THEIR WORK. THIS CONTRACTOR SHALL REMOVE AND REPLACE, AT

6. THIS CONTRACTOR SHALL PAY ALL INSURANCE, FEES, PERMITS, ASSOCIATED DUES, ROYALTIES AND TAXES OF WHATEVER NATURE SHALL APPLY TO THIS WORK. THE CONTRACTOR SHALL ALSO PAY ALL INSPECTION FEES AS MAY BE REQUIRED BY LAW OR ORDINANCE AN SHALL KEEP THE OUNER HARMLESS FROM ANY DAMAGE AND EXPENSE ARISING FROM ANY VIOLATION OF THE LAWS, RULES OR

8. SANITARY WASTE PIPING SHALL BE SLOPED AT 1/8" PER FOOT MINIMUM FOR PIPES 3" AND LARGER, AND 1/4" PER FOOT MIN. FOR PIPES

10. MATERIALS SHALL BE NEW AND AS FOLLOWS (UNLESS CALL FOR OTHERWISE ON DRAWINGS):

A. SANITARY WASTE AND VENT PIPING: NO-HUB CAST IRON CIGPI STANDARD 301 ABOVE GROUND AND CAST IRON HUB PLAIN END ASTM A-14 WITH NEOPRENE GASKET, OR PVC SHEDULE 40, DRAINAGE WASTE AND VENT PIPING (DWV) CONFORMING TO ASTM D-2665 UNDERGROUND, PROVIDE PIPE REGILIENT HANGERS ON HORIZONTAL PIPING ABOVE CEILING WITH SPACING NOT TO EXCEED 6 FEET ON CENTER OR 4' FOR PVC/CPVC. USE OF PVC PIPING 13 PROHIBITED IN RETURN AIR PLENUM. PROVIDE COPPER, CAST

B. WATER PIPING: COPPER TYPE L WITH VIEGA PROPRESS FITTINGS ABOVE GROUND, CPVC UNDERGROUND. PROVIDE ADJUSTABLE

C. PLUMBING FIXTURES SHALL BE AMERICAN STANDARD, KOHLER OR APPROVED EQUAL MANUFACTURER. REFER TO PLUMBING

F. VALVES: 125 PSIG VIEGA, NIBCO SCOTT, STOCKHAM OR EQUAL. ALL SHUT OFF OR ISOLATION VALVES ON POTABLE WATER SHALL BE BRONZE BODIED, FULL PORT, TEFLON SEATED, STAINLESS STEEL BALL VALVES. GATE VALVES SHALL NOT BE ACCEPTED.

SERVICE JACKET, INSULATION THICKNESS SHALL BE INCREASED AS REQUIRED BY LOCAL CODES AND ORDINANCES.

11. SHOP DRAWINGS: THIS CONTRACTOR SHALL FURNISH THE ENGINEER WITH CUT SHEETS & SHOP DRAWINGS OF EQUIPMENT PRIOR TO

ACCESSORIES, APPURTENANCES, EQUIPMENT AND LABOR TO MEET DESIGN INTENT INDICATED ON THESE DRAWINGS AND SPECIFICATIONS.

16. CONTRACTOR SHALL FIELD VERIFY EXACT LOCATION AND INVERT OF EXISTING UTILITIES AND POINTS OF CONNECTION COORDINATING WITH ALL OTHER TRADES BEFORE COMMENCING WORK. ANY DISCREPANCIES SHALL BE REPORTED IN WRITING TO THE ARCHITECT / ENGINEERING

A. PLUMBING CONTRACTOR SHALL PRESSURE TEST ALL PIPING AS REQUIRED BY CODE AND AS INSTRUCTED HEREIN. TEST SHALL BE

B. WATER LINES SHALL BE TESTED TO A MINIMUM OF 135 PSIG FOR A PERIOD OF TIME SUFFICIENT TO EXAMINE ENTIRE SYSTEM, BUT NOT

C. STERILIZE ALL WATER LINES WITH A MIXTURE OF 2 POUNDS OF CHLORINATED LIME FOR EACH 1000 GALLONS OF WATER (50 PPM OF

D. SANITARY LINES SHALL BE TESTED TO A MINIMUM STANDING HEAD OF 15 FEET, AND SHALL BE ALLOWED TO STAND UNTIL INSPECTION

E. CORRECT ALL DEFECTS DISCLOSED BY ABOVE TEST. COMPLETE SYSTEM, FIXTURES AND EQUIPMENT SHALL BE GIVEN AN

18. DOMESTIC TEMPERED WATER SUPPLIED FOR BATHING AND WASHING PURPOSE SHALL BE LIMITED AT THE POINT OF USE TO 110 DEGREE

19. ALL WORK SHALL BE COORDINATED WITH OTHER TRADER TO AVOID INTERFERENCES WITH THE PROGRESS OF CONSTRUCTION AND IN STRICT

20. ALL PIPING SHALL BE CONCEALED WITHIN WALLS IN FINISHED AREAS, SAW CUT BLOCK/CONCRETE AS REQUIRED TO ACCOMMODATE PIPING.

22. AT PROJECT COMPLETION THE CONTRACTOR SHALL PROVIDE THE OWNER AN "AS-BUILT" SET OF REPRODUCIBLE DRAWINGS SHOWING THE EXACT LOCATION AND ROUTING OF INSTALLED SYSTEMS. THE CONTRACTOR SHALL WARRANT ALL WORKMANSHIP AND MATERIALS FOR ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE BY THE OWNER. ANY NECESSARY REPAIR OR REPLACEMENT OF SYSTEM COMPONENTS OCCURRING WITHIN WARRANTY PERIOD SHALL PERFORMED BY THE CONTRACTOR AT NO EXPENSE TO THE OWNER.

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**REVISIONS - SUBMITTALS** 

This item has been digitally singed and sealed by Rene I. Basulto, P.E. on the date adjacent to the seal.

Printed copies of this document are inot considered signed and sealed and the signature must be verified on any electronic copies.

Project No 18018			
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