

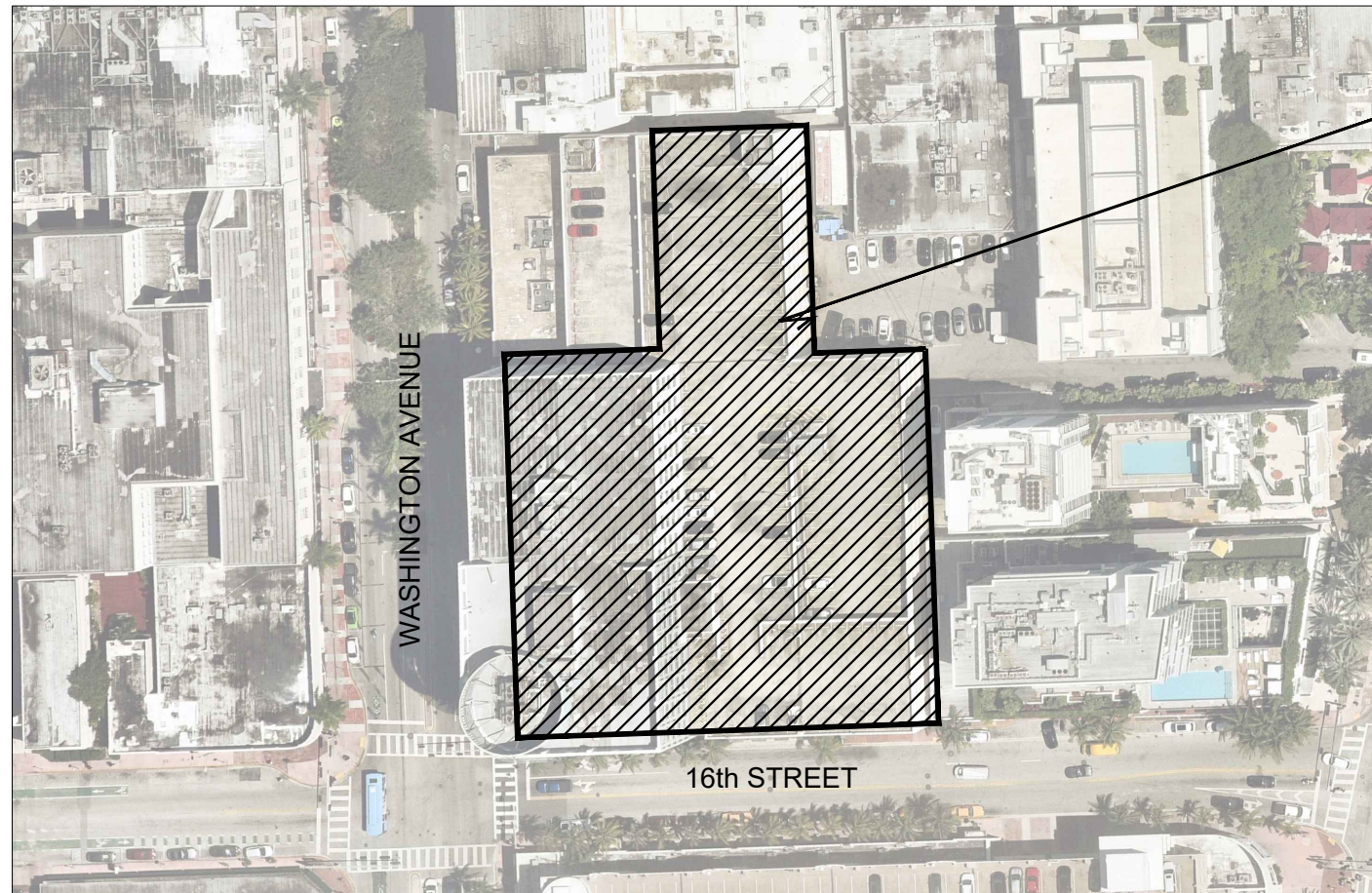
# HPB - SUBMITTAL (#HPB 23-0588)

FOR

## 1601 WASHINGTON AVE

MIAMI BEACH, 33139

SEPTEMBER 2023



PROJECT LOCATION

SCALE: 1" = 100'

LANDSCAPE ARCHITECT:  
**Kimley»Horn**

© 2022 KIMLEY-HORN AND ASSOCIATES, INC.  
 2 ALHAMBRA PLAZA, SUITE 500, MIAMI, FL, 33134  
 PHONE: 305-673-2025  
 WWW.KIMLEY-HORN.COM CA 00000696

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY GREGORY ALEXANDER GONZALEZ, P.L.A. LA6667525, ON DATE ADJACENT TO SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES. THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY GREGORY ALEXANDER GONZALEZ, LA6667525 ON THE DATE ADJACENT TO THE SEAL.



**Architect:**  
 Kobi Karp Architecture and Interior Design, Inc.  
 571 NW 28th Street  
 Miami, Florida 33127 USA  
 Tel: +1(305) 573 1818  
 Fax: +1(305) 573 3766

**Consultant:**  
 Name  
 Address  
 Address  
 Tel:  
 Email

**Consultant:**  
 Name  
 Address  
 Address  
 Tel:  
 Email

**Landscape Architecture**  
 Name Kimley-Horn  
 Address 2 Alhambra Plaza, Suite 500  
 Address Coral Gables, FL 33134  
 Tel: 305 673 2025  
 Email gregory.gonzalez@kimley-horn.com

**Owner**  
 Name NG 1601 WASHINGTON LLC  
 Address 1430 BROADWAY, 7TH FLOOR  
 Address NEW YORK, NY 10018  
 Tel: -  
 Email -

**HPB**  
 2335  
**LE ROYALE**  
 1601 WASHINGTON AVE  
 MIAMI BEACH, FL 33139

Rev.	Date	Rev.	Date
2	09-11-2023		

ALL DRAWINGS AND WRITTEN MATERIAL APPEARING HEREIN CONSTITUTE THE ORIGINAL AND UNPUBLISHED WORK OF KOB I KARP AIA, AND MAY NOT BE DUPLICATED, USED, OR DISCLOSED WITHOUT THE EXPRESS WRITTEN CONSENT OF KOB I KARP ARCHITECTURE & INTERIOR DESIGN, INC. AIA (S) 2018

COVER SHEET

Date	09-11-2023	Sheet No.	
Scale	AS SHOWN		L-000
Project	2335		

**GENERAL NOTES:**

- LIMITS OF SCOPE OF WORK IS PLANTING AND IRRIGATION WITHIN THE SITE.
- CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH OWNERSHIP, ARCHITECT, AND LANDSCAPE ARCHITECT FOR PRIOR TO CONSTRUCTION.
- CONTRACTOR SHALL BE RESPONSIBLE FOR VISITING SITE PRIOR TO BIDDING IN ORDER TO FAMILIARIZE THEMSELVES WITH ALL EXISTING CONDITIONS AFFECTING THE WORK, INCLUDING BUT NOT LIMITED TO, PRIVATE AND PUBLIC UTILITIES ON AND OFFSITE, EXISTING DRAINAGE, ETC.
- CONTRACTOR SHALL NOTIFY OWNERSHIP AND THE LANDSCAPE ARCHITECT IN WRITING IMMEDIATELY OF ANY EXPECTED OR UNKNOWN CONDITIONS OR DISCREPANCIES OR AMBIGUITIES IN THE DRAWINGS OR SPECIFICATIONS, AS WELL AS ERRORS OR OMISSIONS ON THE DRAWINGS PRIOR TO PROCEEDING WITH THE WORK OR SHOP FABRICATION.
- CONTRACTOR SHALL COORDINATE ABE IN COMPLIANCE WITH ALL STATE AND LOCAL CODES AS WARRANTED.
- ANY DISCREPANCIES FOUND BETWEEN THE DRAWINGS AND SPECIFICATIONS AND EXISTING SITE CONDITIONS OR ANY INCONSISTENCIES OR AMBIGUITIES IN DRAWINGS OR SPECIFICATIONS SHALL BE IMMEDIATELY REPORTED TO THE LANDSCAPE ARCHITECT, IN WRITING, WHO SHALL PROMPTLY ADDRESS SUCH INCONSISTENCIES OR AMBIGUITIES. WORK DONE BY THE CONTRACTOR AFTER HIS DISCOVERY OF SUCH DISCREPANCIES, INCONSISTENCIES, OR AMBIGUITIES SHALL BE PERFORMED AT THE CONTRACTOR'S RISK.
- DEVIATION FROM THESE PLANS AND NOTES WITHOUT THE PRIOR CONSENT OF THE OWNER, OR THE LANDSCAPE ARCHITECT, MAY BE CAUSE FOR THE WORK TO BE DESIGNATED UNACCEPTABLE.
- THE CONTRACTOR ACKNOWLEDGES & AGREES THAT THE WORK IS ENTIRELY AT HIS RISK UNTIL SITE IS ACCEPTED, AND HE WILL BE HELD RESPONSIBLE FOR ITS SAFETY BY THE OWNER.
- THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR THE DAMAGE OR LOSS OF ANY REFERENCE POINTS AND HUBS DURING THE CONSTRUCTION OF HIS WORK, AND SHALL BEAR THE COST OF REPLACING SAME.
- THE CONTRACTOR IS RESPONSIBLE FOR HORIZONTALLY AND VERTICALLY LOCATING AND PROTECTING ALL PUBLIC AND PRIVATE UTILITIES WHICH LIE IN OR ADJACENT TO THE CONSTRUCTION SITE AT LEAST 48 HOURS PRIOR TO ANY DEMOLITION, GRADING, OR CONSTRUCTION ACTIVITY (CALL SUNSHINE DIGICALL - 811).
- THE CONTRACTOR SHALL SALVAGE AND PROTECT ALL EXISTING POWER POLES, SIGNS, MANHOLES, TELEPHONE RISERS, WATER VALVES, ETC., DURING ALL CONSTRUCTION PHASES UNLESS NOTED OTHERWISE. THE CONTRACTOR SHALL REPAIR, AT HIS OWN EXPENSE, ANY EXISTING UTILITIES DAMAGED DURING CONSTRUCTION.
- ANY FOREIGN ITEM FOUND DURING CONSTRUCTION IS THE PROPERTY OF THE OWNER. THIS INCLUDES, BUT IS NOT LIMITED TO, PRECIOUS METALS, COINS, PAPER CURRENCY, ARTIFACTS AND ANTIQUITIES.
- ALL SURPLUS EXCAVATION SHALL BE TAKEN TO A SITE DESIGNATED BY OWNER, AT NO ADDITIONAL COST TO THE OWNER. IF OWNER CHOOSES, THE CONTRACTOR MAY TAKE POSSESSION OF SURPLUS EXCAVATION MATERIAL.
- CONTRACTOR IS RESPONSIBLE FOR VERIFYING AND/OR OBTAINING ALL REQUIRED PERMITS AND APPROVALS PRIOR TO COMMENCING CONSTRUCTION.
- CONTRACTOR IS TO MAINTAIN CONTROLLED PEDESTRIAN AND ADA ACCESS THROUGH ALL AREAS OF THE SITE THROUGHOUT CONSTRUCTION PERIOD.
- MAINTAIN THE SITE IN A NEAT AND ORDERLY CONDITION AT ALL TIMES. DAILY, AND MORE OFTEN IF NECESSARY, INSPECT & AND PICK UP ALL SCRAP, DEBRIS, & WASTE MATERIAL.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REMOVE ALL MUD, DIRT, GRAVEL AND OTHER MATERIALS TRACKED ONTO ANY PRIVATE OR PUBLIC STREETS OR SIDEWALKS. THE CONTRACTOR MUST CLEAN THESE DAILY, IF NECESSARY. THE CONTRACTOR MUST USE WATER OR OTHER ACCEPTABLE METHODS TO KEEP AIRBORNE DUST TO A REQUIRED MINIMUM.
- PROVIDE PROTECTION TO ALL FINISHED WORK. MAINTAIN SURFACES CLEAN, UNMARRRED, AND SUITABLY PROTECTED UNTIL ACCEPTANCE BY OWNER.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY DAMAGE RESULTING FROM CONSTRUCTION ACTIVITY TO EXISTING ELEMENTS THAT ARE TO REMAIN.
- EROSION CONTROL MEASURES (IE: SILT FENCING AND SEDIMENT CONTROL) SHALL BE MAINTAINED BY THE CONTRACTOR PER CIVIL SPECIFICATIONS. ANY EROSION CONTROL MEASURES DAMAGED BY THE CONTRACTOR SHALL BE REPLACED PER CIVIL SPECIFICATIONS.
- CONTRACTOR SHALL VERIFY LOCATION, SIZE AND ELEVATION OF EXISTING UTILITIES, STRUCTURES, PIPES, PAVEMENTS, ETC. AS RELATED TO HIS WORK. NOTIFY LANDSCAPE ARCHITECT OF ANY CONFLICT AND/OR DISCREPANCIES IN THE CONSTRUCTION DOCUMENTS, PRIOR TO THE START OF CONSTRUCTION.
- ALL GENERAL CONDITIONS, SUPPLEMENTARY GENERAL CONDITIONS AND TECHNICAL SPECIFICATIONS OF THE CONTRACT SHALL APPLY.
- ALL AREAS OUTSIDE THE LIMITS OF CONSTRUCTION LINE OR TREE CRITICAL ROOT ZONES SHALL NOT BE CROSSED BY HEAVY EQUIPMENT OR USED FOR STORING ANY EQUIPMENT OR MATERIALS.

**GENERAL ABBREVIATIONS:**

- ARCH. = ARCHITECT/ARCHITECTURE
- TG = TOP OF GRADE
- TW = TOP OF WALL
- TPW = TOP OF PLANTER WALL
- FFE = FINISH FLOOR ELEVATION
- AFF = ABOVE FINISH FLOOR
- P.L. = PROPERTY LINE
- M.L. = MONUMENT LINE
- C.L. = CENTER LINE
- CONC = CONCRETE
- STRUCT. = STRUCTURAL / STRUCTURE
- ENG. = ENGINEER / ENGINEERING
- LA = LANDSCAPE ARCHITECT
- DWGS = DRAWINGS
- TYP = TYPICAL
- EXST = EXISTING
- HSCP = HARDSCAPE
- LSCP = LANDSCAPE
- PLNT = PLANTING
- PLTR = PLANTER
- REF = REFER TO
- C.T. = CLEAR TRUNK
- D.B.H = DIAMETER AT BREAST HEIGHT
- B & B = BALLED AND BURLAPPED
- MIN. = MINIMUM

Sheet List Table	
Sheet Number	Sheet Title
L-000	COVER SHEET
L-001	SHEET INDEX
L-100	TREE DISPOSITION PLAN
L-101	TREE LIST CALCS
L-150	TREE DISPOSITION NOTES & DETAILS
L-310	TYPICAL LANDSCAPE PLAN - PLANTERS
L-311	BALCONY PLANTER TYPOLOGIES
L-320	TYPICAL LANDSCAPE PLAN - GARAGE
L-321	GARAGE PLANTER TYPOLOGY
L-350	LANDSCAPE NOTES AND SPECIFICATIONS
L-351	LANDSCAPE DETAILS
IR-410	TYPICAL IRRIGATION PLAN - PLANTERS
IR-411	BALCONY PLANTER IRRIGATION TYPOLOGIES
IR-420	TYPICAL IRRIGATION PLAN - GARAGE
IR-421	GARAGE PLANTER IRRIGATION TYPOLOGY
IR-450	IRRIGATION NOTES AND SPECIFICATIONS
IR-451	IRRIGATION DETAILS

2023.09.11 | HPB SUBMITTAL

Rev.	Date	Rev.	Date
2	09-11-2023		

ALL DRAWINGS AND WRITTEN MATERIAL APPEARING HEREIN CONSTITUTE THE ORIGINAL AND UNPUBLISHED WORK OF KOBİ KARP AIA, AND MAY NOT BE DUPLICATED, USED, OR DISCLOSED WITHOUT THE EXPRESS WRITTEN CONSENT OF KOBİ KARP ARCHITECTURE & INTERIOR DESIGN, INC. AIA (03/2018)

**HPB**  
2335

**LE ROYALE**  
1601 WASHINGTON AVE  
MIAMI BEACH, FL 33139

**Owner**  
Name NG 1601 WASHINGTON LLC  
Address 1430 BROADWAY, 7TH FLOOR  
Address NEW YORK, NY 10018  
Tel: -  
Email -

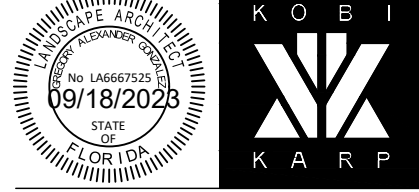
**Landscape Architecture**  
Name Kimley-Horn  
Address 2 Alhambra Plaza, Suite 500  
Address Coral Gables, FL 33134  
Tel: 305 673 2025  
Email gregory.gonzalez@kimley-horn.com

**Consultant:**  
Name  
Address  
Address  
Tel:  
Email

**Consultant:**  
Name  
Address  
Address  
Tel:  
Email

**Architect:**  
Kobi Karp Architecture and Interior Design, Inc.  
571 NW 28th Street  
Miami, Florida 33127 USA  
Tel: +1(305) 573 1818  
Fax: +1(305) 573 3766

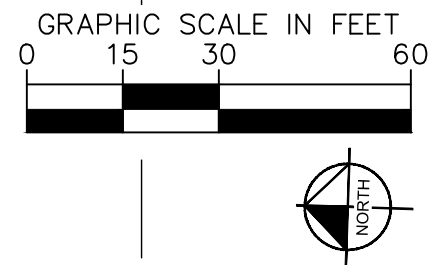
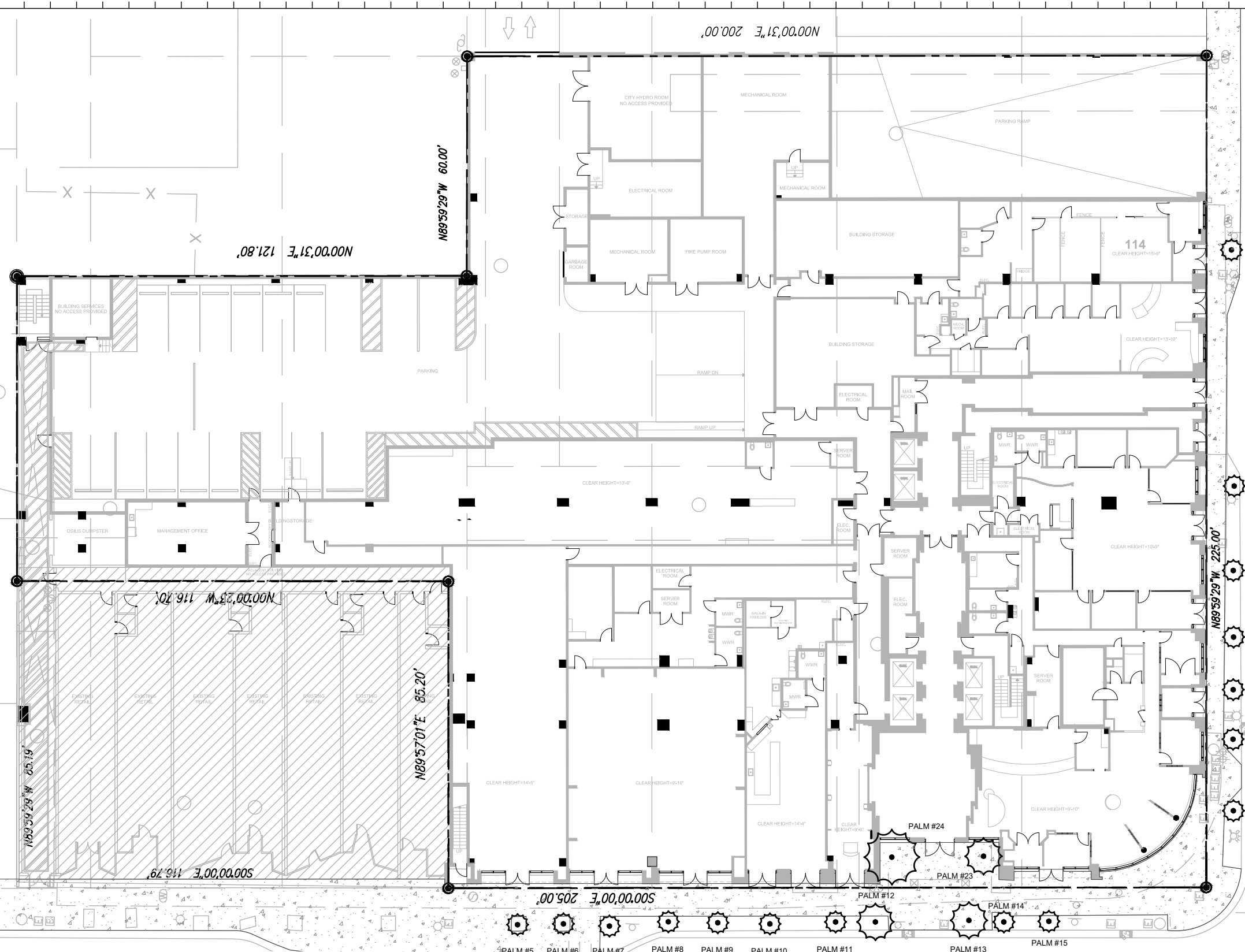
THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY GREGORY ALEXANDER GONZALEZ, P.L.A. LA6667525, ON DATE ADJACENT TO SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES. THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY GREGORY ALEXANDER GONZALEZ, LA6667525 ON THE DATE ADJACENT TO THE SEAL.



SHEET INDEX

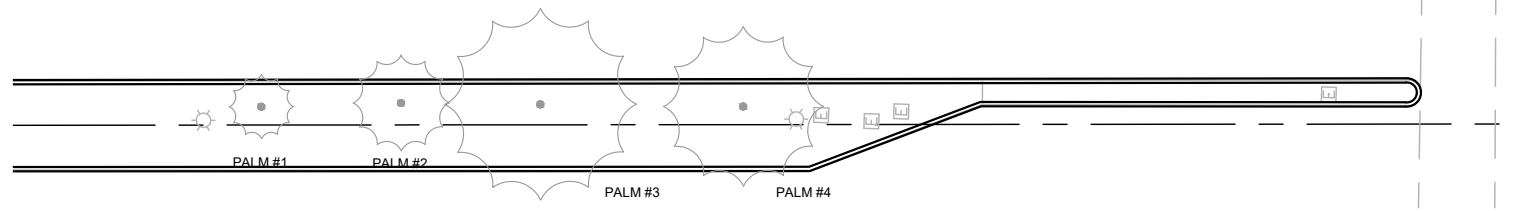
Date	09-11-2023	Sheet No.	L-001
Scale	AS SHOWN		
Project	2335		

© 2022 KIMLEY-HORN AND ASSOCIATES, INC.  
 K:\MB\_LRG\143721000-1601 Washington Ave Landscape\CADD\PlanSheets\L-100 TREE DISPOSITION PLAN.dwg  
 Plotted By: Lieberman, Amy Sheet Set: 1601 WASHINGTON AVE Layout: L-100 TREE DISPOSITION PLAN September 11, 2023 03:21:10pm



**TREE DISPOSITION GRAPHIC LEGEND**

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	EXISTING TREE NOT IN SCOPE		TREE PROTECTION FENCE
	PALM TO REMAIN		



Rev.	Date	Rev.	Date
2	09-11-2023		

ALL DRAWINGS AND WRITTEN MATERIAL APPEARING HEREIN CONSTITUTE THE ORIGINAL AND UNPUBLISHED WORK OF KOBİ KARP AIA, AND MAY NOT BE DUPLICATED, USED, OR DISCLOSED WITHOUT THE EXPRESS WRITTEN CONSENT OF KOBİ KARP ARCHITECTURE & INTERIOR DESIGN, INC. AIA (0) 2018

**HPB**  
 2335  
**LE ROYALE**  
 1601 WASHINGTON AVE  
 MIAMI BEACH, FL 33139

**Owner**  
 Name NG 1601 WASHINGTON LLC  
 Address 1430 BROADWAY, 7TH FLOOR  
 Address NEW YORK, NY 10018  
 Tel: -  
 Email: -

**Landscape Architecture**  
 Name Kimley-Horn  
 Address 2 Alhambra Plaza, Suite 500  
 Address Coral Gables, FL 33134  
 Tel: 305 673 2025  
 Email gregory.gonzalez@kimley-horn.com

**Consultant:**  
 Name  
 Address  
 Address  
 Tel:  
 Email

**Consultant:**  
 Name  
 Address  
 Address  
 Tel:  
 Email

**Architect:**  
 Kobi Karp Architecture and Interior Design, Inc.  
 571 NW 28th Street  
 Miami, Florida 33127 USA  
 Tel: +1(305) 573 1818  
 Fax: +1(305) 573 3766

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY GREGORY ALEXANDER GONZALEZ, P.L.A. LA6667525, ON DATE ADJACENT TO SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES. THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY GREGORY ALEXANDER GONZALEZ, LA6667525 ON THE DATE ADJACENT TO THE SEAL.



**TREE DISPOSITION PLAN**

Date	09-11-2023	Sheet No.	L-100
Scale	AS SHOWN		
Project	2335		

© 2022 KIMLEY-HORN AND ASSOCIATES, INC. K:\MIB\_LIRC\43721000-1601 Washington Ave\Landscapa\CADD\PlanSheets\L-100 TREE DISPOSITION PLAN.dwg Plotted By:Lieberman, Amy Sheet Set:1601 WASHINGTON AVE Layout:L-101 TREE LIST CALCS September 11, 2023 03:21:10pm

# TREE DISPOSITION LIST

SURVEY TREE NO.	SCIENTIFIC NAME	COMMON NAME	DBH (IN.)	HEIGHT (FT.)	CANOPY (FT.)	DISPOSITION	COMMENTS
1	<i>Delonix regia</i>	Royal Poinciana	3	25	10	REMAIN (ROW) (NIS)	
2	<i>Roystonea regia</i>	Royal Palm	3	30	15	REMAIN (ROW) (NIS)	
3	<i>Roystonea regia</i>	Royal Palm	3	40	30	REMAIN (ROW) (NIS)	
4	<i>Roystonea regia</i>	Royal Palm	3	20	25	REMAIN (ROW) (NIS)	
5	<i>Cocos nucifera</i>	Coconut Palm	1	30	6	REMAIN (ROW)	
6	<i>Cocos nucifera</i>	Coconut Palm	1	30	6	REMAIN (ROW)	
7	<i>Cocos nucifera</i>	Coconut Palm	1	30	6	REMAIN (ROW)	
8	<i>Cocos nucifera</i>	Coconut Palm	1	30	6	REMAIN (ROW)	
9	<i>Cocos nucifera</i>	Coconut Palm	1	30	6	REMAIN (ROW)	
10	<i>Cocos nucifera</i>	Coconut Palm	1	30	6	REMAIN (ROW)	
11	<i>Cocos nucifera</i>	Coconut Palm	1	30	6	REMAIN (ROW)	
12	<i>Phoenix dactylifera</i>	Date palm	3	20	10	REMAIN (ROW)	
13	<i>Phoenix dactylifera</i>	Date palm	3	20	10	REMAIN (ROW)	
14	<i>Cocos nucifera</i>	Coconut Palm	1	30	6	REMAIN (ROW)	
15	<i>Cocos nucifera</i>	Coconut Palm	1	30	6	REMAIN (ROW)	
16	<i>Cocos nucifera</i>	Coconut Palm	1	30	6	REMAIN (ROW)	
17	<i>Cocos nucifera</i>	Coconut Palm	1	30	6	REMAIN (ROW)	
18	<i>Cocos nucifera</i>	Coconut Palm	1	30	6	REMAIN (ROW)	
19	<i>Cocos nucifera</i>	Coconut Palm	1	30	6	REMAIN (ROW)	
20	<i>Cocos nucifera</i>	Coconut Palm	1	30	6	REMAIN (ROW)	
21	<i>Cocos nucifera</i>	Coconut Palm	1	30	6	REMAIN (ROW)	
22	<i>Cocos nucifera</i>	Coconut Palm	1	30	6	REMAIN (ROW)	
23	<i>Dyopsis cabadae</i>	Cabada Palm	0.5	30	15	REMAIN	
24	<i>Dyopsis cabadae</i>	Cabada Palm	0.5	25	10	REMAIN	

Total DBH to be removed =	-
Palms to be removed	-

TREE DISPOSITION GRAPHIC KEY	
TEXT	Requires mitigation
TEXT	Does not require mitigation / not regulated due to size or species / Tree not in scope
TEXT	Palm

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY GREGORY ALEXANDER GONZALEZ, P.L.A. LA6667525, ON DATE ADJACENT TO SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES. THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY GREGORY ALEXANDER GONZALEZ, LA6667525 ON THE DATE ADJACENT TO THE SEAL.

Rev.	Date	Rev.	Date
2	09-11-2023		

ALL DRAWINGS AND WRITTEN MATERIAL APPEARING HEREIN CONSTITUTE THE ORIGINAL AND UNPUBLISHED WORK OF KOBİ KARP AIA, AND MAY NOT BE DUPLICATED, USED, OR DISCLOSED WITHOUT THE EXPRESS WRITTEN CONSENT OF KOBİ KARP ARCHITECTURE & INTERIOR DESIGN, INC. AIA (©) 2018

**HPB**  
2335

**LE ROYALE**  
1601 WASHINGTON AVE  
MIAMI BEACH, FL 33139

**Owner**  
Name NG 1601 WASHINGTON LLC  
Address 1430 BROADWAY, 7TH FLOOR  
Address NEW YORK, NY 10018  
Tel: -  
Email -

**Landscape Architecture**  
Name Kimley-Horn  
Address 2 Alhambra Plaza, Suite 500  
Address Coral Gables, FL 33134  
Tel: 305 673 2025  
Email gregory.gonzalez@kimley-horn.com

**Consultant:**  
Name  
Address  
Address  
Tel:  
Email

**Consultant:**  
Name  
Address  
Address  
Tel:  
Email

**Architect:**  
Kobi Karp Architecture and Interior Design, Inc.  
571 NW 28th Street  
Miami, Florida 33127 USA  
Tel: +1(305) 573 1818  
Fax: +1(305) 573 3766



TREE LIST CALCS

Date	09-11-2023	Sheet No.	L-101
Scale	AS SHOWN		
Project	2335		

# TREE REMOVAL AND TREE TO REMAIN PRUNING SPECIFICATIONS

**PART 1 - EXPLANATION OF NATURAL RESOURCE PRESERVATION PROCEDURES**  
 THE SEQUENCE OF OPERATION IS CRITICAL TO THE PROTECTION OF THE TREES.  
 A. TREE CANOPY PRUNING IS TO COMPENSATE FOR ROOT LOSS AND DAMAGE.  
 B. FERTILIZATION IS TO STIMULATE ROOT SYSTEMS TO HEAL QUICKLY AND GROW BACK IN ROOT-PRUNED AREAS. IT ALSO PRODUCES FASTER AVAILABILITY OF FOOD TO A ROOT SYSTEM THAT IS LESS EFFICIENT DUE TO THE DAMAGE INCURRED.  
 C. ROOT PRUNING IS TO REMOVE THE ROOTS WITH A TRENCHING PROCEDURE THAT IS LESS DAMAGING TO THE ROOTS THAN REGULAR CONSTRUCTION.

**PART 2 - DEFINITIONS**  
 A. NATURAL RESOURCE - EXISTING TREES OR PALMS.  
 B. CRITICAL ROOT ZONE - THE MASS OF ROOTS SURROUNDING A TREE THAT IS REQUIRED BY THE TREE TO LIVE. THE CRITICAL ROOT ZONE IS OFTEN MUCH LARGER THAN THE CANOPY. THE CRITICAL ROOT ZONE FOR EACH TREE OR PALM WITHIN THE PROJECT LIMITS TO BE DETERMINED BY THE CONTRACTOR'S CERTIFIED ARBORIST.  
 C. DBH - DIAMETER BREAFAST HIGH - INDICATES THE LOCATION ON THE TRUNK, APPROXIMATELY 4.5' ABOVE GROUND, TO MEASURE THE DIAMETER OF A TREE.  
 D. GRADE - THE GRADE OF A TREE REFERS TO THE OVERALL HEALTH AND APPEARANCE OF THE TREE. THE GRADES RANGE FROM "A" BEING EXCELLENT TO "D" BEING HAZARDOUS.  
 E. PRESERVED TREES - TREES THAT ARE TO BE SAVERED/REMAIN IN PLACE.  
 F. OWNER'S REPRESENTATIVE - A REPRESENTATIVE, HIRED AND PAID FOR BY THE OWNER, THAT SUPERVISES THE CONSTRUCTION OF THE PROCEDURES SHOWN ON THE TREE DISPOSITION PLANS.  
 G. PROTECTION ZONES/AREAS - ANY AREA ENCLOSED PARTIALLY OR COMPLETELY BY A TREE PROTECTOR BARRIER/FENCE.  
 H. CONTRACTOR'S CERTIFIED ARBORIST - AN INDEPENDENT ISA CERTIFIED ARBORIST, HIRED AND PAID FOR BY THE CONTRACTOR, THAT SUPERVISES THE CONSTRUCTION OF THE PROCEDURES SHOWN ON THE TREE DISPOSITION PLANS.

**PART 3 - PRODUCTS FOR TREE TREATMENT**  
 EVERY EFFORT SHALL BE MADE TO UTILIZE CHEMICALS OF AN ORGANIC OR BIODEGRADABLE NATURE IN ORDER TO OFFER THE LEAST IMPACT TO THE NATURAL ENVIRONMENT. CONTRACTOR IS RESPONSIBLE FOR MIXING, APPLYING, AND DISPOSAL OF ALL CHEMICALS IN ACCORDANCE WITH STRICT ADHERENCE TO MANUFACTURER'S DIRECTIONS, UNLESS OTHERWISE DIRECTED IN THESE DRAWINGS. REFER TO "PART 4B" BELOW.  
 A. CHEMICAL TREATMENTS  
 1. RECOMMENDED FERTILIZER  
 A. "XL INJECTO FEED", PRODUCT OF DOGGETT CORP., LEBANON, NEW JERSEY (808) 236-6335. APPLY A 12:24:24 RATIO WITH A DILUTION RATE 1/3 MORE WATER THAN SPECIFIED ON BAG.  
 B. RECOMMENDED WETTING AGENT  
 A. "APSA-80", PRODUCT OF AMWAY CORP. (800) 253-7088.  
 2. MYCORRHIZAL TREATMENT  
 A. PLANT HEALTH CARE, INC. (800) 421-9051  
 PRODUCTS OF THE SAME TYPE FROM OTHER SOURCES SHALL NOT BE EXCLUDED, PROVIDED THEY POSSESS LIKE PHYSICAL AND FUNCTIONAL CHARACTERISTICS AND ARE APPROVED BY THE PROJECT LANDSCAPE ARCHITECT.  
 B. INSECTICIDE TREATMENTS  
 1. "ASTRO", A PRODUCT OF FMC CORPORATION, (800) 321-1362.  
 C. TREE PROTECTOR BARRIER MATERIAL  
 1. SIX (6) FOOT TALL ORANGE VINYL MESH CONSTRUCTION FENCE SUPPORTED BY EIGHT (8) FOOT TALL METAL T-BAR POSTS AND POST CAPS.  
 2. THE TREE PROTECTOR BARRIER SHALL HAVE A TWO (2) FOOT BY TWO (2) FOOT "TREE PROTECTION ZONE" SIGN AFFIXED TO THE FENCE EVERY TWENTY (20) FEET PLACED IN SUCH A MANNER TO BE CLEARLY VISIBLE TO THE CONSTRUCTION WORKERS. THE SIGN MUST BE MADE UP OF WEATHER RESISTANT MATERIAL.  
 3. THE EIGHT (8) FOOT TALL METAL T-BAR POST AND POST CAP SHALL BE PLACED A MAXIMUM OF SIX (6) FOOT INTERVALS.

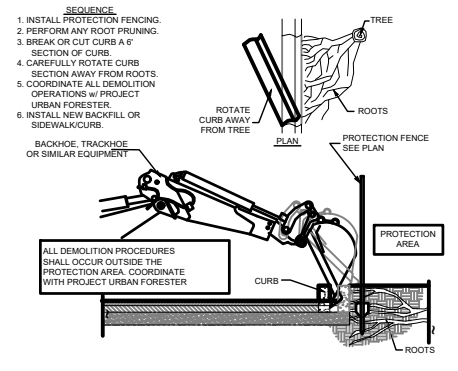
**PART 4 - EXECUTION**  
 A. TREE CANOPY/ROOT PRUNING OPERATION  
 1. TREES TO BE PRUNED SHALL INCLUDE ONLY TREES AFFECTED BY CONSTRUCTION OR AS DESIGNATED ON THE TREE DISPOSITION LIST. THIS ITEM IS TO BE COORDINATED BY THE CONTRACTOR'S CERTIFIED ARBORIST WITH THE OWNER'S REPRESENTATIVE.  
 2. ALL PRUNING SHALL BE DONE IN ACCORDANCE WITH ANSI A300 (PART 1) PRUNING.  
 3. THE CONTRACTOR'S CERTIFIED ARBORIST MUST BE PRESENT DURING ALL PRUNING OPERATIONS.  
 4. PRUNING SHALL CONSIST OF THE FOLLOWING METHODS:  
 A. CLEANING  
 B. INTERFERING BRANCH REMOVAL  
 C. RAISING  
 D. ROOT PRUNING.  
 B. FERTILIZATION OPERATION  
 ONLY TREES AFFECTED BY CONSTRUCTION (CANOPY AND/OR ROOT PRUNING) SHALL BE FERTILIZED.  
 2. TREES SPECIFIED TO RECEIVE FERTILIZER SHALL BE TREATED DURING THE TIME OF YEAR AS RECOMMENDED BY THE CONTRACTOR'S CERTIFIED ARBORIST.  
 A. MIX FERTILIZER WITH A DILUTION RATE 1/3 MORE WATER THAN LABEL INSTRUCTIONS INTO A TANK WITH AGITATION CAPABILITY (15LBS. = 133 GALLONS).  
 B. MIX WETTING AGENT AT A RATE OF 5 OZ. PER 100 GALLONS OF FERTILIZER SOLUTION INTO SAME TANK WITH FERTILIZER. AGITATE MIX.  
 C. INJECT THE MIXTURE WITH A HYDRAULIC INJECTION SYSTEM SET AT 100 TO 150 P.S.I. FOR SANDY SOILS, 200 P.S.I. FOR SILTCLAY 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.  
 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.  
 E. FERTILIZERS SHALL BE INSTALLED PRIOR TO INSTALLATION OF ANY AERATION SYSTEMS (IF APPLICABLE). AT THE REQUEST OF THE OWNER'S REPRESENTATIVE, EMPTY PRODUCT BAGS TO BE RETURNED TO THE OWNER'S REPRESENTATIVE FOR PROOF OF USE.  
 3. INJECTABLE FERTILIZER TREATMENT  
 A. MIX FERTILIZER WITH A DILUTION RATE 1/3 MORE WATER THAN LABEL INSTRUCTIONS INTO A TANK WITH AGITATION CAPABILITY (15LBS. = 133 GALLONS).  
 B. MIX WETTING AGENT AT A RATE OF 5 OZ. PER 100 GALLONS OF FERTILIZER SOLUTION INTO SAME TANK WITH FERTILIZER. AGITATE MIX.  
 C. INJECT THE MIXTURE WITH A HYDRAULIC INJECTION SYSTEM SET AT 100 TO 150 P.S.I. FOR SANDY SOILS, 200 P.S.I. FOR SILTCLAY 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.  
 EMPTY PRODUCT BAGS TO BE STOCKPILED FOR INSPECTION BY OWNER'S REPRESENTATIVE PRIOR TO DISPOSAL.  
 4. INOCULANT & BIOSTIMULANT  
 A. USE ONE 3 OZ. PACKET OF MYCORRTREE TREE SAVER TRANSPLANT MYCORRHIZAL TRANSPLANT INOCULANT FOR EVERY ONE (1) FOOT DIAMETER OF ROOT BALL. MIX INOCULANT IN 1/2" WET TOPSOIL RING AROUND THE ROOT BALL.  
 B. MIX ONE 4 OZ. BAG OF MYCORRTREE TREE SAVER INJECTABLE MYCORRHIZAL INOCULANT AND 4 PACKETS TO EQUAL 4 (POUNDS) PHC BIOLOCK 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 SILTCLAY 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.  
 EMPTY PRODUCT BAGS TO BE STOCKPILED FOR INSPECTION BY OWNER'S REPRESENTATIVE PRIOR TO DISPOSAL.

**C. INSECTICIDE OPERATION**  
 1. APPLY "ASTRO" AS A TOPICAL SOLUTION AS DIRECTED BY THE CONTRACTOR'S CERTIFIED ARBORIST. NOTIFY OWNER'S REPRESENTATIVE IF AN INFESTATION IS NOTICED. APPLY AROUND BASE OF TRUNK TO SOIL LINE, 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.  
 2. FOLLOW ALL MANUFACTURER'S 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 (IF APPLICABLE).  
 3. CONTRACTOR SHALL ENSURE NO MIXING OF CHEMICALS OCCURS WITHOUT PROTECTIVE MEASURES TO PREVENT SPILLAGE AND POTENTIAL CONTAMINATION OF SOILS.  
 D. ROOT PRUNING TRENCHING OPERATION  
 1. TRENCHING LOCATIONS SHALL BE APPROVED IN THE FIELD BY THE OWNER'S REPRESENTATIVE AND THE CONTRACTOR'S CERTIFIED ARBORIST.  
 2. TRENCHING EQUIPMENT THAT WILL TURN AT HIGH RPM'S IS PREFERRED. TRENCHING EQUIPMENT IS TO BE USED TO PERFORM ALL ROOT PRUNING OPERATIONS.  
 A. MINIMUM DEPTH OF THREE FEET IS REQUIRED OR AS DETERMINED BY CONTRACTOR'S CERTIFIED ARBORIST. CLEAN CUT ROOTS IN TRENCH ON TREE SIDE WITH STERILE EQUIPMENT, LOOPERS, OR CHAIN SAW AFTER TRENCHING IS COMPLETE.  
 3. THE TRENCH SHALL BE BACKFILLED AND COMPACTED IMMEDIATELY, AS DIRECTED BY THE CONTRACTOR'S CERTIFIED ARBORIST.  
 4. PHASED ROOT PRUNING TIMEFRAMES VARY BY SPECIES. CONTRACTOR'S CERTIFIED ARBORIST SHALL DIRECT PRUNING SCHEDULE.  
 E. TREE PROTECTOR BARRIER  
 1. SEE DETAILS THIS SHEET.  
 2. TREE PROTECTOR BARRIER IS TO BE PLACED BY THE CONTRACTOR AROUND EACH TREE TO REMAIN AS DIRECTED BY THE CONTRACTOR'S CERTIFIED ARBORIST.  
 F. TREE REMOVALS  
 1. CONTRACTOR SHALL REMOVE AND DISCARD ALL TREES SHOWN AS "REMOVE" ON THE TREE DISPOSITION PLAN AND THE TREE DISPOSITION LIST. ALL TREES SHOWN TO BE REMOVED SHALL BE FELLED WITH A CHAIN SAW AND STUMP GROUND 4" BELOW SURFACE. ANY TREE SHOWN TO BE REMOVED AND IS IN AN AREA WHERE COMPACTION IS CRITICAL, THE TREE SHALL BE FELLED WITH A CHAIN SAW AND STUMP REMOVED BY THE CONTRACTOR. CARE MUST BE TAKEN NOT TO DAMAGE THE EXISTING TREES MARKED TO REMAIN.  
 2. IF TREE PROTECTOR BARRIER IS DAMAGED, REPAIR IS TO BE PERFORMED IMMEDIATELY. CARE MUST BE TAKEN NOT TO DAMAGE THE TREES TO REMAIN.  
 3. CONTRACTOR SHALL REMOVE AND HAUL AWAY FROM THE JOB SITE ALL WOOD GENERATED FROM TREE REMOVALS, INCLUDING STUMPS, THE SAME DAY THE REMOVAL HAPPENS.  
 4. BURN PITS ARE NOT ALLOWED.

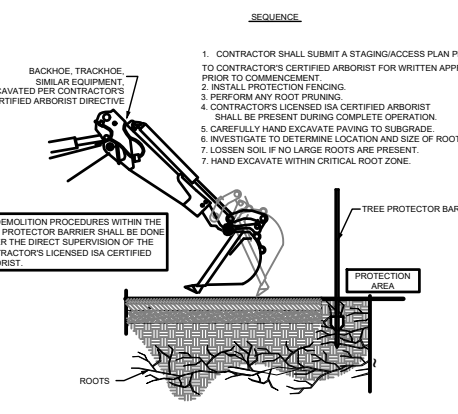
**PART 5 - PENALTIES**  
 A. REPAIR OF DAMAGED TREES TO REMAIN  
 1. IF ANY DAMAGE TO TREES TO REMAIN OR OTHER NATURAL RESOURCES SHOULD OCCUR BY ACCIDENT OR NEGLIGENCE DURING THE CONSTRUCTION PERIOD, THE OWNER'S REPRESENTATIVE SHALL APPRAISE THE DAMAGE AND MAKE RECOMMENDATIONS TO THE OWNER FOR REPAIR BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.  
 2. IF ANY TREE THAT IS DESIGNATED TO REMAIN IS DEEMED SUBSTANTIALLY DAMAGED OR DEAD DUE TO CONSTRUCTION DAMAGE, AT THE SOLE DISCRETION OF THE OWNER'S REPRESENTATIVE, THE FOLLOWING PENALTIES WILL APPLY:  
 A. TREES 1" - 12" OF TRUNK DIAMETER, MEASURED AT 1' FROM THE GROUND WILL BE VALUED AT \$300.00 PER DIAMETER INCH.  
 B. TREES 17" AND ABOVE OF TRUNK DIAMETER MEASURED AT 4.5' FROM THE GROUND WILL BE VALUED AT \$400.00 PER DIAMETER INCH.  
 C. IF ANY TREE DESIGNATED TO REMAIN IS REMOVED FROM THE SITE WITHOUT PERMISSION OF THE OWNER'S REPRESENTATIVE, THE PENALTY WILL BE \$600.00 PER INCH.  
 B. REPAIR OF DAMAGED TREE PROTECTOR BARRIER  
 1. IF ANY DAMAGE TO THE TREE PROTECTOR BARRIER SHOULD OCCUR BY ACCIDENT OR NEGLIGENCE, THE CONTRACTOR WILL BE RESPONSIBLE FOR IMMEDIATE REPAIRS OF THE INITIAL DAMAGE. FINES WILL BE IMPOSED AS FOLLOWS:  
 A. FIRST TIME OFFENSE, A FINE OF \$200.00 WILL BE IMPOSED.  
 B. 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.  
 C. IN THE EVENT A NATURAL RESOURCE IS DAMAGED DUE TO A TREE PROTECTOR BARRIER BEING DOWN, A FINE OF \$200.00 PLUS THE COST OF REPAIR OR REPLACEMENT OF THE NATURAL RESOURCE AS APPRAISED BY THE OWNER'S REPRESENTATIVE WILL BE IMPOSED.  
 D. CONTRACTOR SHALL ALSO BEAR THE COST OF ANY FINES, BONDED TREE VALUES, ATTORNEY FEES, EXPENSES INCURRED BY PROJECT DELAYS, ETC., AS DETERMINED BY THE COUNTY AND LOCAL MUNICIPALITY FOR UNAUTHORIZED TREE REMOVAL.

**PART 6 - NATURAL RESOURCE PROTECTION SEQUENCE**  
 A. THE SEQUENCE OF TREE TREATMENT AND PRESERVATION MEASURES SHALL BE:  
 1. CONTRACTOR SHALL SUBMIT A STAGING/ACCESS PLAN PROVIDED TO CONTRACTOR'S CERTIFIED ARBORIST FOR WRITTEN APPROVAL PRIOR TO COMMENCEMENT.  
 2. TREE PROTECTOR BARRIER  
 3. ROOT PRUNING AND ROOT BARRIERS  
 4. CLEARING AND GRADING  
 5. TREE PRUNING  
 6. FERTILIZATION  
 7. INSECTICIDE  
 B. CONTRACTOR'S SURVEYOR SHALL STAKE ALL SITE IMPROVEMENTS IN ORDER TO FACILITATE ACCURATE LOCATION OF TRENCHING AND FENCING OPERATIONS.  
 C. CONTRACTOR'S CERTIFIED ARBORIST TO DETERMINE THE LOCATION OF THE TREE PROTECTOR BARRIER AROUND EACH TREE TO REMAIN BASED ON HIS/HER ANALYSIS OF EACH EXISTING TREE TO REMAIN THAT IS ADJACENT TO CONSTRUCTION IMPROVEMENTS SUCH AS UTILITY INSTALLATION, PAVEMENT ADDITION AND/OR RESTORATION, ETC.  
 D. CONTRACTOR SHALL MAINTAIN AND REPAIR THE TREE PROTECTOR BARRIER DURING SITE CONSTRUCTION OPERATIONS.  
 E. CONTRACTOR'S ACCESS TO THE FENCED TREE PROTECTION AREAS WILL BE PERMITTED ONLY WITH APPROVAL OF OWNER'S REPRESENTATIVE AND CONTRACTOR'S CERTIFIED ARBORIST'S WRITTEN DIRECTIVE.  
 F. CONTRACTOR SHALL PERFORM ANY EXCAVATION OR GRADING REQUIRED WITHIN THE FENCED TREE PROTECTION ZONE AREAS BY HAND. THIS OPERATION IS TO BE DONE UNDER THE DIRECT SUPERVISION OF THE CONTRACTOR'S CERTIFIED ARBORIST AND THE OWNER'S REPRESENTATIVE.  
 G. CONTRACTOR TO LIMIT REQUIRED GRADING WITHIN THE FENCED TREE PROTECTION AREAS TO A MAXIMUM OF 3" CUT OR FILL OF THE TREE CRITICAL ROOT ZONE AREAS. ALL GRADING TO BE SUPERVISED BY THE CONTRACTOR'S CERTIFIED ARBORIST AND THE OWNER'S REPRESENTATIVE.  
 H. CONTRACTOR SHALL CLEAR BY HAND TREES DESIGNATED TO BE REMOVED WITHIN CRITICAL ROOT ZONE AREAS OF THE TREES TO REMAIN.  
 I. CONTRACTOR SHALL NOT INSTALL CONDUIT, SPRINKLERS, OR ANY UTILITY LINE IN ANY CRITICAL ROOT ZONE AREAS WITHOUT THE APPROVAL OF THE CONTRACTOR'S CERTIFIED ARBORIST AND OWNER'S REPRESENTATIVE.

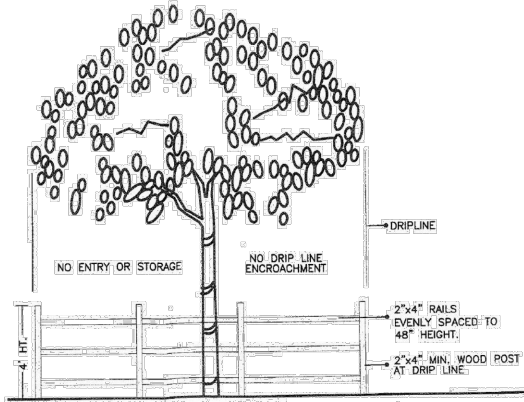
**PART 7 - IRRIGATION**  
 CONTRACTOR SHALL WATER THE TREES THAT HAVE BEEN PRUNED (CANOPY AND/OR ROOT) AS SHOWN BELOW. WATER ALL PRUNED TREES IMMEDIATELY AFTER PRUNING. CONTRACTOR SHALL WATER BY HAND. IF A POTABLE WATER SOURCE IS NOT AVAILABLE ON-SITE OR IS IT NOT IN WORKING CONDITION, THEN THE CONTRACTOR WILL BE RESPONSIBLE FOR PROVIDING THE WATER AND WATER SOURCE AT HIS/HER OWN EXPENSE.  
 A. HAND WATERING SCHEDULE  
 USE THE FOLLOWING WATERING SCHEDULE:  
 1. CONTRACTOR SHALL WATER ALL NEWLY (CANOPY AND ROOT) PRUNED TREES:  
 (1) THREE TIMES A WEEK FOR THE FIRST THREE MONTHS  
 (2) TWO TIMES A WEEK FOR MONTHS FOUR AND FIVE  
 (3) ONE TIME A WEEK FOR MONTH SIX  
 2. CONTRACTOR SHALL CONSULT HIS/HER CERTIFIED ARBORIST FOR WATERING REQUIREMENTS FOR THE TREES THAT HAVE BEEN CANOPY AND/OR ROOT PRUNED.  
 B. PER DIRECTION OF 1 AND 2, CONTRACTOR SHALL PROCEED WITH THE MORE STRINGENT WATERING SCHEDULE.



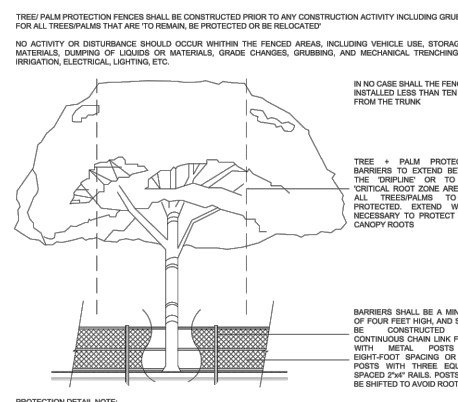
**A DEMOLITION PROCEDURE - CURB**



**B DEMOLITION PROCEDURE - PAVEMENT**



**C TREE PRESERVATION / BARRICADE FENCING DETAIL**



**D C.M.B TREE / PALM PROTECTION DETAIL**

Rev.	Date	Rev.	Date
2	09-11-2023		

ALL DRAWINGS AND WRITTEN MATERIAL APPEARING HEREIN CONSTITUTE THE ORIGINAL AND UNPUBLISHED WORK OF KOBİ KARP AIA, AND MAY NOT BE DUPLICATED, USED, OR DISCLOSED WITHOUT THE EXPRESS WRITTEN CONSENT OF KOBİ KARP ARCHITECTURE A INTERIOR DESIGN, INC. AIA, 03/19/18

**HPB**  
 2335

**LE ROYALE**  
 1601 WASHINGTON AVE  
 MIAMI BEACH, FL 33139

**Owner**  
 Name NG 1601 WASHINGTON LLC  
 Address 1430 BROADWAY, 7TH FLOOR  
 Address NEW YORK, NY 10018  
 Tel: -  
 Email -  
**Landscape Architecture**  
 Name Kimley-Horn  
 Address 2 Alhambra Plaza, Suite 500  
 Address Coral Gables, FL 33134  
 Tel: 305 673 2025  
 Email gregory.gonzalez@kimley-horn.com

**Consultant:**  
 Name  
 Address  
 Address  
 Tel:  
 Email

**Consultant:**  
 Name  
 Address  
 Address  
 Tel:  
 Email

**Architect:**  
 Kobi Karp Architecture and Interior Design, Inc.  
 571 NW 28th Street  
 Miami, Florida 33127 USA  
 Tel: +1(305) 573 1818  
 Fax: +1(305) 573 3766

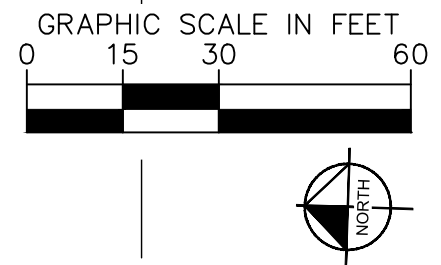
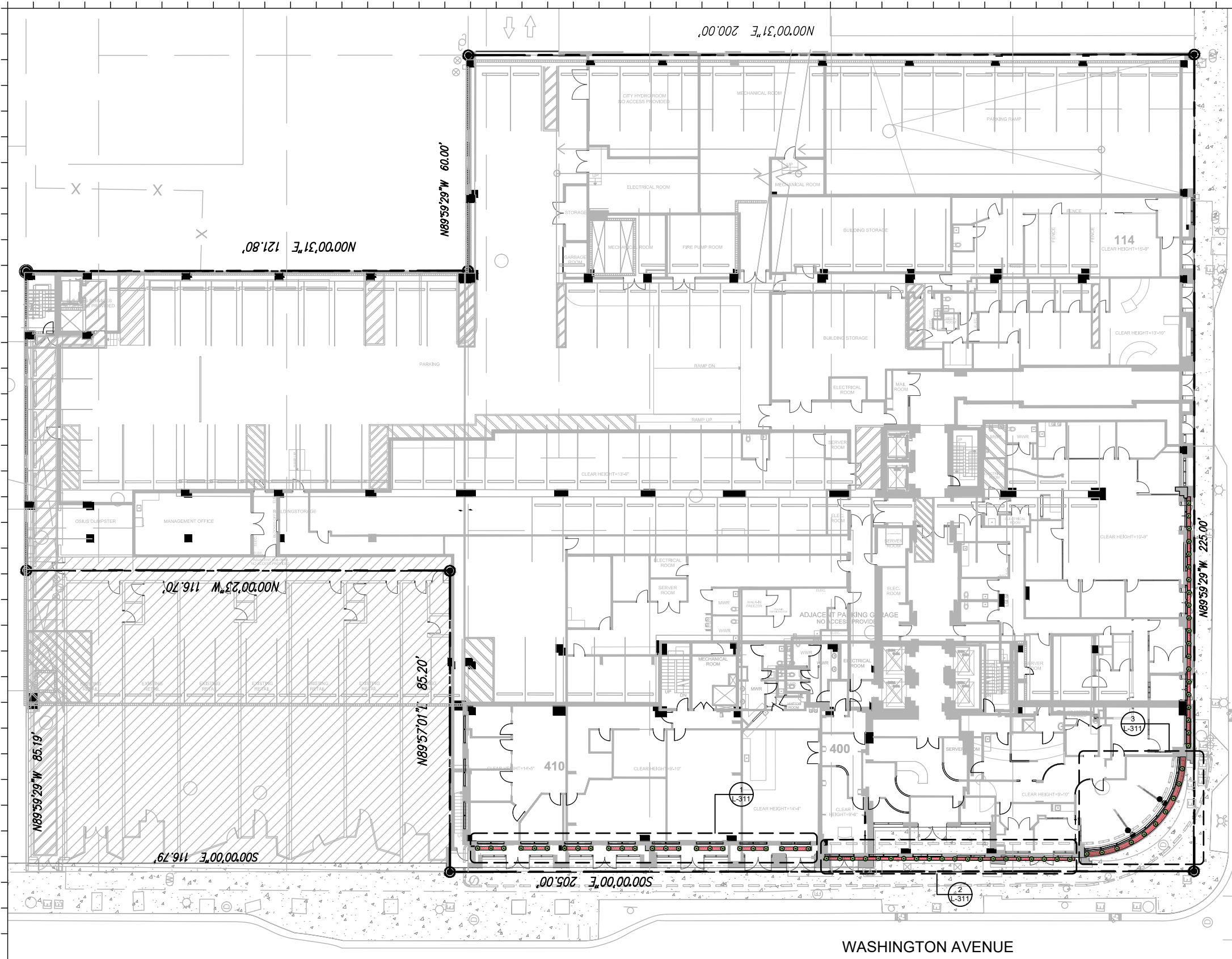


## TREE DISPOSITION NOTES & DETAILS

Date	09-11-2023	Sheet No.
Scale	AS SHOWN	L-150
Project	2335	

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY GREGORY ALEXANDER GONZALEZ, P.L.A. LA6667525, ON DATE ADJACENT TO SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES. THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY GREGORY ALEXANDER GONZALEZ, LA6667525 ON THE DATE ADJACENT TO THE SEAL.

Plotted By: Lieberman, Amy Sheet Set: 1601 WASHINGTON AVE Layout: L-310 TYPICAL LANDSCAPE PLAN - PLANTERS September 11, 2023 03:21:31pm K:\MIB\_URG\143721000-1601 Washington Ave Landscape\CADD\PlanSheets\L-310 TYPICAL LANDSCAPE PLAN FOR PLANTERS\WAGY-HORN AND ASSOCIATES, INC.



Rev.	Date	Rev.	Date
2	09-11-2023		

ALL DRAWINGS AND WRITTEN MATERIAL APPEARING HEREIN CONSTITUTE THE ORIGINAL AND UNPUBLISHED WORK OF KOBİ KARP AIA, AND MAY NOT BE DUPLICATED, USED, OR DISCLOSED WITHOUT THE EXPRESS WRITTEN CONSENT OF KOBİ KARP ARCHITECTURE & INTERIOR DESIGN, INC. AIA (0) 2018

**HPB**  
2335

**LE ROYALE**  
1601 WASHINGTON AVE  
MIAMI BEACH, FL 33139

**Owner**  
Name NG 1601 WASHINGTON LLC  
Address 1430 BROADWAY, 7TH FLOOR  
Address NEW YORK, NY 10018  
Tel: -  
Email: -

**Landscape Architecture**  
Name Kimley-Horn  
Address 2 Alhambra Plaza, Suite 500  
Address Coral Gables, FL 33134  
Tel: 305 673 2025  
Email gregory.gonzalez@kimley-horn.com

**Consultant:**  
Name  
Address  
Address  
Tel:  
Email

**Consultant:**  
Name  
Address  
Address  
Tel:  
Email

**Architect:**  
Kobi Karp Architecture and Interior Design, Inc.  
571 NW 28th Street  
Miami, Florida 33127 USA  
Tel: +1(305) 573 1818  
Fax: +1(305) 573 3766

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY GREGORY ALEXANDER GONZALEZ, P.L.A. LA6667525, ON DATE ADJACENT TO SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES. THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY GREGORY ALEXANDER GONZALEZ, LA6667525 ON THE DATE ADJACENT TO THE SEAL.



TYPICAL LANDSCAPE PLAN - PLANTERS

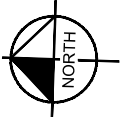
### PLANTER TYPICAL FOR LEVELS 2, 4, 6, 8 - PLANT LIST

ACCENT SHRUBS	CODE	QTY	BOTANICAL / COMMON NAME	CONT./ROOTBALL SIZE	SPACING	SIZE	NATIVE	REMARKS
	EI	+/- 74	ERNODEA LITTORALIS GOLDEN CREEPER	CONT.	AS SHOWN	15" X 15"	YES	
GROUND COVERS	CODE	QTY	BOTANICAL / COMMON NAME	CONT./ROOTBALL SIZE	SPACING	SIZE	NATIVE	REMARKS
	IC	+/- 213	IMPATIENS X 'SAMKIMP03'	CONT.	12" O.C.	8" X 8"	NO	12" o.c.

**GENERAL PLANTING NOTE:**  
ALL PLANTING TO BE INSTALLED IN CUSTOM REMOVABLE PLANTERS THAT ARE INSERTED INTO THE BUILT-IN PLANTERS BY THE ARCHITECT.

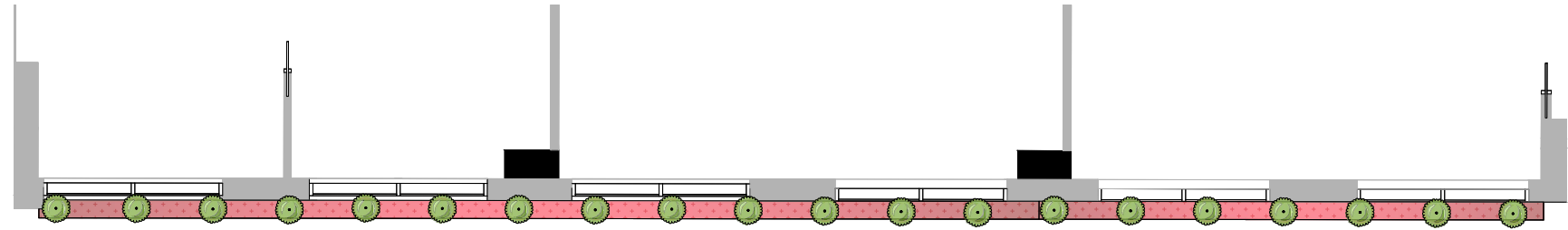
Date	09-11-2023	Sheet No.	L-310
Scale	AS SHOWN		
Project	2335		

Plotted By: Lieberman, Amy Sheet Set: 1601 WASHINGTON AVE Layout: L-311 BALCONY PLANTER TYPOLOGIES September 11, 2023 04:34:51pm K:\MIB\_LJRG\143721000-1601 Washington Ave Landscape CAD\PlanSheets\L-310 TYPICAL LANDSCAPE PLAN FOR PLANTERS@4022 KIMLEY-HORN AND ASSOCIATES, INC.



**1** BALCONY TYPOLOGY - TYP. OF 8  
1/8" = 1'-0"

143-721-000-01

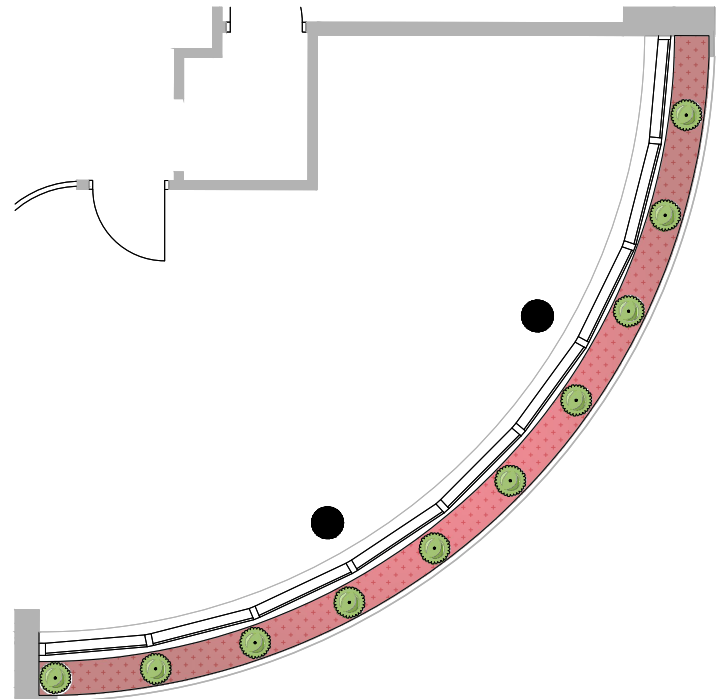


**GOLDEN CREEPER**



**2** BALCONY TYPOLOGY 2 - TYP. OF 2  
1/8" = 1'-0"

143-721-000-02



**SUNPATIENS**



**3** BALCONY TYPOLOGY 3 - TYP. OF 1  
1/8" = 1'-0"

143-721-000-03

**PLANTER TYPICAL FOR LEVELS 2, 4, 6, 8 - PLANT LIST**

ACCENT SHRUBS	CODE	QTY	BOTANICAL / COMMON NAME	CONT./ROOTBALL SIZE	SPACING	SIZE	NATIVE	REMARKS	
	EI	+/- 74	ERNODEA LITTORALIS GOLDEN CREEPER	CONT.	AS SHOWN	15" X 15"	YES		
GROUND COVERS	CODE	QTY	BOTANICAL / COMMON NAME	CONT./ROOTBALL SIZE	SPACING	SIZE	NATIVE	SPACING	REMARKS
	Ic	+/- 213	IMPATIENS X 'SAMKIMP039' COMPACT FIRE RED SUNPATIENS®	CONT.	12" O.C.	8" X 8"	NO	12" o.c.	

Rev.	Date	Rev.	Date
2	09-11-2023		

ALL DRAWINGS AND WRITTEN MATERIAL APPEARING HEREIN CONSTITUTE THE ORIGINAL AND UNPUBLISHED WORK OF KOBİ KARP AIA, AND MAY NOT BE DUPLICATED, USED, OR DISCLOSED WITHOUT THE EXPRESS WRITTEN CONSENT OF KOBİ KARP ARCHITECTURE & INTERIOR DESIGN, INC. AIA (©) 2018

**HPB**  
2335

**LE ROYALE**  
1601 WASHINGTON AVE  
MIAMI BEACH, FL 33139

**Owner**  
Name NG 1601 WASHINGTON LLC  
Address 1430 BROADWAY, 7TH FLOOR  
Address NEW YORK, NY 10018  
Tel: -  
Email: -

**Landscape Architecture**  
Name Kimley-Horn  
Address 2 Alhambra Plaza, Suite 500  
Address Coral Gables, FL 33134  
Tel: 305 673 2025  
Email gregory.gonzalez@kimley-horn.com

**Consultant:**  
Name  
Address  
Address  
Tel:  
Email

**Consultant:**  
Name  
Address  
Address  
Tel:  
Email

**Architect:**  
Kobi Karp Architecture and Interior Design, Inc.  
571 NW 28th Street  
Miami, Florida 33127 USA  
Tel: +1(305) 573 1818  
Fax: +1(305) 573 3766

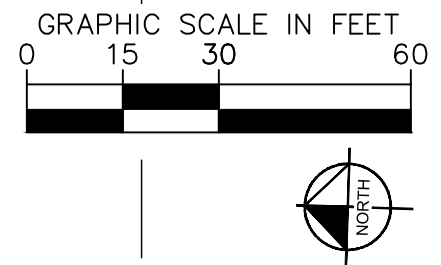
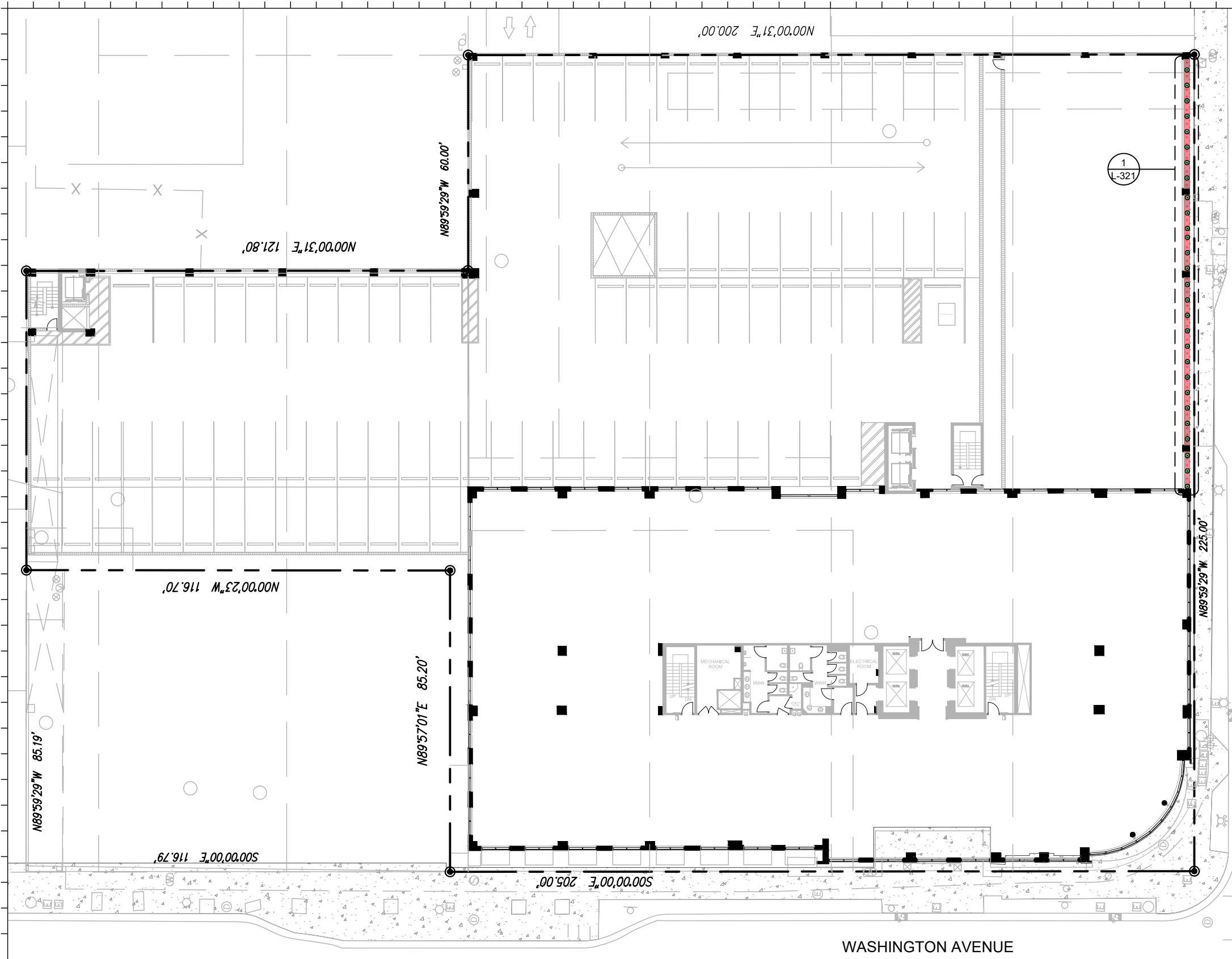
THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY GREGORY ALEXANDER GONZALEZ, P.L.A. LA6667525, ON DATE ADJACENT TO SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES. THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY GREGORY ALEXANDER GONZALEZ, LA6667525 ON THE DATE ADJACENT TO THE SEAL.



**BALCONY PLANTER TYPOLOGIES**

Date	09-11-2023	Sheet No.	L-311
Scale	AS SHOWN		
Project	2335		

© 2022 KIMLEY-HORN AND ASSOCIATES, INC. K:\MIB\_URG\143721000-1601 Washington Ave Landscape\CADD\PlanSheets\L-320 TYPICAL LANDSCAPE PLAN FOR GARAGE.dwg Plotted By: Lieberman, Amy Sheet Set: 1601 WASHINGTON AVE Layout: L-320 September 11, 2023 03:21:50pm



Rev.	Date	Rev.	Date
2	09-11-2023		

ALL DRAWINGS AND WRITTEN MATERIAL APPEARING HEREIN CONSTITUTE THE ORIGINAL AND UNPUBLISHED WORK OF KOBİ KARP AIA, AND MAY NOT BE DUPLICATED, USED, OR DISCLOSED WITHOUT THE EXPRESS WRITTEN CONSENT OF KOBİ KARP ARCHITECTURE & INTERIOR DESIGN, INC. AIA (S) 2018

**HPB**  
2335

**LE ROYALE**  
1601 WASHINGTON AVE  
MIAMI BEACH, FL 33139

**Owner**  
Name NG 1601 WASHINGTON LLC  
Address 1430 BROADWAY, 7TH FLOOR  
Address NEW YORK, NY 10018  
Tel: -  
Email: -

**Landscape Architecture**  
Name Kimley-Horn  
Address 2 Alhambra Plaza, Suite 500  
Address Coral Gables, FL 33134  
Tel: 305 673 2025  
Email gregory.gonzalez@kimley-horn.com

**Consultant:**  
Name  
Address  
Address  
Tel:  
Email

**Consultant:**  
Name  
Address  
Address  
Tel:  
Email

**Architect:**  
Kobi Karp Architecture and Interior Design, Inc.  
571 NW 28th Street  
Miami, Florida 33127 USA  
Tel: +1(305) 573 1818  
Fax: +1(305) 573 3766

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY GREGORY ALEXANDER GONZALEZ, P.L.A. LA6667525, ON DATE ADJACENT TO SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES. THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY GREGORY ALEXANDER GONZALEZ, LA6667525 ON THE DATE ADJACENT TO THE SEAL.



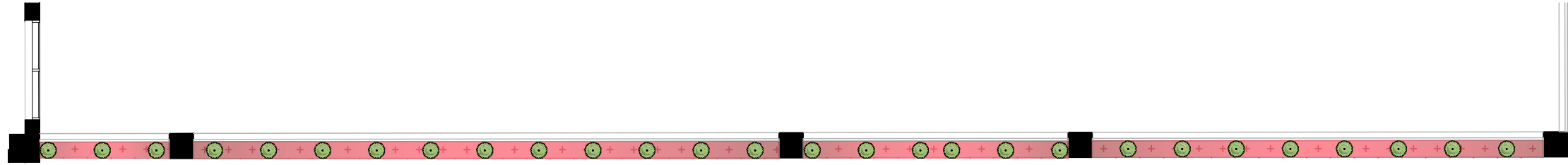
**PLANTER TYPICAL - GARAGE**

ACCENT SHRUBS	CODE	QTY	BOTANICAL / COMMON NAME	CONT./ROOTBALL SIZE	SPACING	SIZE	NATIVE
	E12	+/- 28	ERNODEA LITTORALIS GOLDEN CREEPER	CONT.	AS SHOWN	15' X 15'	YES
GROUND COVERS	CODE	QTY	BOTANICAL / COMMON NAME	CONT./ROOTBALL SIZE	SPACING	SIZE	NATIVE
	Ic2	+/- 121	IMPATIENS X 'SANKIMP039' COMPACT FIRE RED SUNPATIENS®	CONT.	12" O.C.	8" X 8"	NO

TYPICAL LANDSCAPE PLAN - GARAGE

Date	09-11-2023	Sheet No.	L-320
Scale	AS SHOWN		
Project	2335		

Plotted By: Lieberman, Amy Sheet Set: 1601 WASHINGTON AVE Layout: L-321 GARAGE PLANTER TYPOLOGY September 11, 2023 03:21:50pm K:\MIB\_LIRG\143721000-1601 Washington Ave Landscape\CADD\PlanSheets\L-320 TYPICAL LANDSCAPE PLAN FOR GARAGE.dwg © 2022 KIMLEY-HORN AND ASSOCIATES, INC.



1

# GARAGE PLANTER TYPOLOGY 1 - PLANTER TYP. OF 1

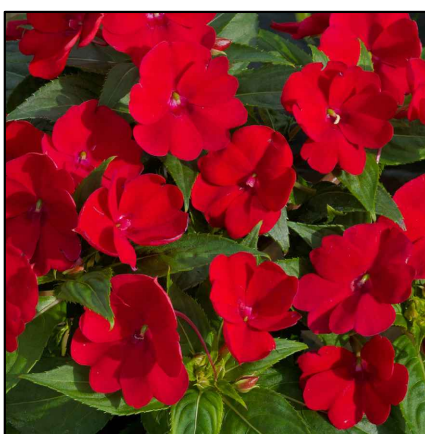
3/32" = 1'-0"

143-721-000-07

## GOLDEN CREEPER



## SUNPATIENS



## PLANTER TYPICAL - GARAGE

ACCENT SHRUBS	CODE	QTY	BOTANICAL / COMMON NAME	CONT./ROOTBALL SIZE	SPACING	SIZE	NATIVE
	E12	+/- 28	ERNODEA LITTORALIS GOLDEN CREEPER	CONT.	AS SHOWN	15" X 15"	YES
GROUND COVERS	CODE	QTY	BOTANICAL / COMMON NAME	CONT./ROOTBALL SIZE	SPACING	SIZE	NATIVE
	Ic2	+/- 121	IMPATIENS X 'SAMKIMP039' COMPACT FIRE RED SUNPATIENS®	CONT.	12" O.C.	8" X 8"	NO

Rev.	Date	Rev.	Date
2	09-11-2023		

ALL DRAWINGS AND WRITTEN MATERIAL APPEARING HEREIN CONSTITUTE THE ORIGINAL AND UNPUBLISHED WORK OF KOBİ KARP AIA, AND MAY NOT BE DUPLICATED, USED, OR DISCLOSED WITHOUT THE EXPRESS WRITTEN CONSENT OF KOBİ KARP ARCHITECTURE & INTERIOR DESIGN, INC. AIA, (©) 2018

**HPB**  
2335

**LE ROYALE**  
1601 WASHINGTON AVE  
MIAMI BEACH, FL 33139

**Owner**  
Name NG 1601 WASHINGTON LLC  
Address 1430 BROADWAY, 7TH FLOOR  
Address NEW YORK, NY 10018  
Tel: -  
Email -

**Landscape Architecture**  
Name Kimley-Horn  
Address 2 Alhambra Plaza, Suite 500  
Address Coral Gables, FL 33134  
Tel: 305 673 2025  
Email gregory.gonzalez@kimley-horn.com

**Consultant:**  
Name  
Address  
Address  
Tel:  
Email

**Consultant:**  
Name  
Address  
Address  
Tel:  
Email

**Architect:**  
Kobi Karp Architecture and Interior Design, Inc.  
571 NW 28th Street  
Miami, Florida 33127 USA  
Tel: +1(305) 573 1818  
Fax: +1(305) 573 3766

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY GREGORY ALEXANDER GONZALEZ, P.L.A. LA6667525, ON DATE ADJACENT TO SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES. THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY GREGORY ALEXANDER GONZALEZ, LA6667525 ON THE DATE ADJACENT TO THE SEAL.



## GARAGE PLANTER TYPOLOGY

Date	09-11-2023	Sheet No.	
Scale	AS SHOWN		L-321
Project	2335		

© 2022 KIMLEY-HORN AND ASSOCIATES, INC. L:\350 LANDSCAPE\_SPECS.dwg K:\WEB\JURC\143721000-1601 Washington Ave\landscape\CADD\PlanSheets\L-350 LANDSCAPE\_SPECS.dwg September 11, 2023 03:22:00pm Plotted By: Lieberman, Amy Sheet Set: 1601 WASHINGTON AVE Layout: L-350 LANDSCAPE NOTES AND SPECIFICATIONS

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

- 1. 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

- 1. 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) INCH CALIPER AND TWELVE (12) INCHES ABOVE GROUND LEVEL FOR TREES OVER FOUR (4) INCH CALIPER.

D. MATERIALS

1. GENERAL

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

Table with 2 columns: MATERIAL and SUBMITTAL. Rows include MULCH, TOPSOIL MIX, PLANTS, FERTILIZER, INNOCULANT, and HERBICIDE with their respective submission requirements.

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

- 1. SOIL MIXTURE (PLANTING MEDIUM FOR PLANT PITS) SHALL CONSIST OF 70% COARSE SAND AND 20% FLORIDA PEAT, AS DESCRIBED BELOW, AND 10% PINE BARK.
2. SOIL FOR USE IN PREPARING SOIL MIXTURE FOR BACKFILLING PLANT PITS SHALL BE FERTILE, FRIABLE, AND OF A LOAMY CHARACTER; REASONABLY FREE OF SUBSOIL, CLAY LUMPS, BRUSH WEEDS AND OTHER LITTER; FREE OF ROOTS, STUMPS, STONES LARGER THAN 2" IN ANY DIRECTION, AND OTHER EXTRANEIOUS OR TOXIC MATTER HARMFUL TO PLANT GROWTH. IT SHALL HAVE A PH BETWEEN 5.5 AND 7.0 - SUBMIT SAMPLE AND PH TESTING RESULTS FOR APPROVAL.
3. SAND SHALL BE COARSE, CLEAN, WELL-DRAINING, NATIVE SAND. CONTRACTOR SHALL SUBMIT RESULTS OF SOIL TEST FOR THE SOIL 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.
5. CONTRACTOR SHALL PROVIDE PH TEST RESULT FOR ALL MIX COMPONENTS.
6. CONTRACTOR SHALL PROVIDE PENETROMETER ON-SITE AT ALL TIMES FOR COMPACTION INSPECTION AT THE DISCRETION OF THE LANDSCAPE ARCHITECT.
7. PENETROMETER CRITERIA / SPECIFICATION SHALL RANGE FROM APPROX. 75 PSI TO LESS THAN 300 PSI OR AS DETERMINE BY LANDSCAPE ARCHITECT.
8. SOIL SHALL BE SUPPLIED BY ATLAS PEAT & SOIL, INC. 9621 STATE RD, BOYNTON BEACH, FLORIDA 33472. PHONE: 561-734-7300 OR APPROVED EQUAL.
9. FINAL MIX SHALL BE TESTED TO HAVE A SATURATED WEIGHT OF NO MORE THAN 110 POUNDS PER CUBIC FOOT WHEN FULLY COMPACTED TO 85% STANDARDS PROCTOR.

F. WATER

- 1. 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.
2. CONTRACTOR SHALL INSURE ALL PLANT MATERIAL RECEIVES APPROPRIATE WATER THROUGHOUT THE GUARANTEE PERIOD SO PLANT MATERIAL THRIVES AND ESTABLISHES READILY.
3. CONTRACTOR SHALL SUBMIT A WATERING SCHEDULE FOR WRITTEN APPROVAL BY THE CLIENT.
\*WATERING/IRRIGATION RESTRICTIONS MAY APPLY - REFER TO PROPERTY'S JURISDICTIONAL AUTHORITY.

G. FERTILIZER

- 1. CONTRACTOR SHALL PROVIDE FERTILIZER APPLICATION SCHEDULE TO OWNER, AS APPLICABLE TO SOIL TYPE, PLANT INSTALLATION TYPE, AND SITE'S PROPOSED USE. SUGGESTED FERTILIZER TYPES SHALL BE ORGANIC OR OTHERWISE NATURALLY-DERIVED.
\*FERTILIZER RESTRICTIONS MAY APPLY - REFER TO PROPERTY'S JURISDICTIONAL AUTHORITY.

H. MULCH

- 1. 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 EUCALYPTUS MULCH.

I. DIGGING AND HANDLING

- 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 ("WILT-PRUF" OR EQUAL) TO MINIMIZE TRANSPIRATIONAL WATER LOSS.
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 NOT BE HANDLED BY STEMS.
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 TRANSPORTATION AND PRIOR TO PLANTING.
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 DETAIL.
5. EXCAVATION OF TREE PITS SHALL BE PERFORMED USING EXTREME CARE TO AVOID DAMAGE TO SURFACE AND SUBSURFACE ELEMENTS SUCH AS UTILITIES OR HARDSCAPE ELEMENTS, FOOTERS AND PREPARED SUB-BASES.

J. CONTAINER GROWN STOCK

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

K. COLLECTED STOCK

- 1. 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 VARIETY.

L. NATIVE STOCK

- 1. 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 INDICATE FULL RECOVERY FROM TRANSPLANTING INTO THE NURSERY ROW.

M. MATERIALS LIST

- 1. 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 THE MINIMUM ACCEPTABLE SIZE.

N. FINE GRADING

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

O. PLANTING PROCEDURES

- 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 LOCATE UTILITIES.
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 FLOWED 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 TAMING).
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.
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 ACHIEVE 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 REGRAIDING 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
1. 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
1. 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.
S. MAINTENANCE (ALTERNATE BID ITEM)
1. 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
1. 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.

Table with 4 columns: Rev., Date, Rev., Date. Row 1: 2, 09-11-2023.

ALL DRAWINGS AND WRITTEN MATERIAL APPEARING HEREIN CONSTITUTE THE ORIGINAL AND UNPUBLISHED WORK OF KOBİ KARP AIA, AND MAY NOT BE DUPLICATED, USED, OR DISCLOSED WITHOUT THE EXPRESS WRITTEN CONSENT OF KOBİ KARP ARCHITECTURE, A INTERIOR DESIGN, INC. AIA, 03/29/18

HPB
2335
LE ROYALE
1601 WASHINGTON AVE
MIAMI BEACH, FL 33139

Owner
Name NG 1601 WASHINGTON LLC
Address 1430 BROADWAY, 7TH FLOOR
Address NEW YORK, NY 10018
Tel: -
Email -
Landscape Architecture
Name Kimley-Horn
Address 2 Alhambra Plaza, Suite 500
Address Coral Gables, FL 33134
Tel: 305 673 2025
Email gregory.gonzalez@kimley-horn.com

Consultant:
Name
Address
Address
Tel:
Email

Consultant:
Name
Address
Address
Tel:
Email

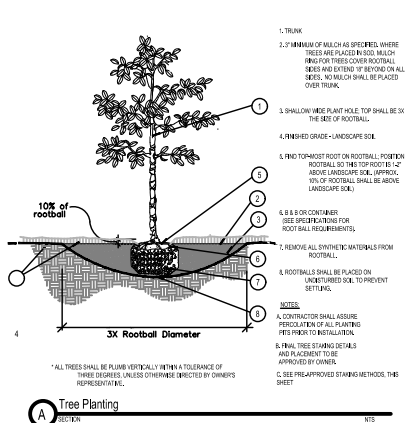
Architect:
Kobi Karp Architecture and Interior Design, Inc.
571 NW 28th Street
Miami, Florida 33127 USA
Tel: +1(305) 573 1818
Fax: +1(305) 573 3766



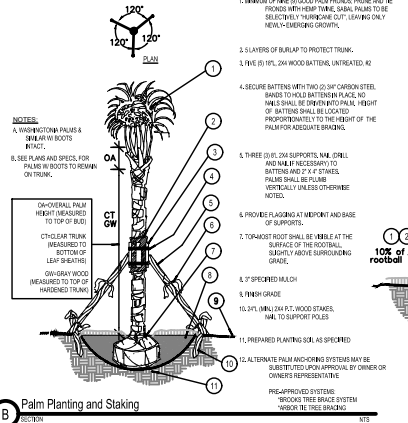
LANDSCAPE NOTES AND SPECIFICATIONS

Table with 2 columns: Date, Scale, Project, Sheet No. Row 1: Date 09-11-2023, Scale AS SHOWN, Project 2335, Sheet No. L-350.

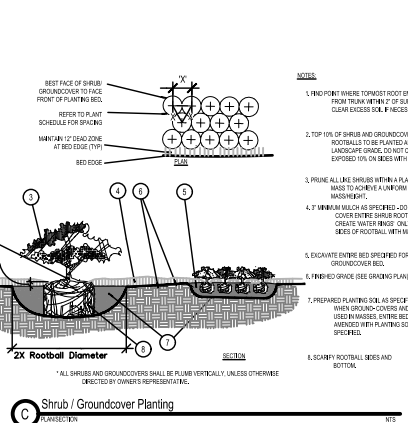
THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY GREGORY ALEXANDER GONZALEZ, P.L.A. LA6667525, ON DATE ADJACENT TO SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES. THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY GREGORY ALEXANDER GONZALEZ, LA6667525 ON THE DATE ADJACENT TO THE SEAL.



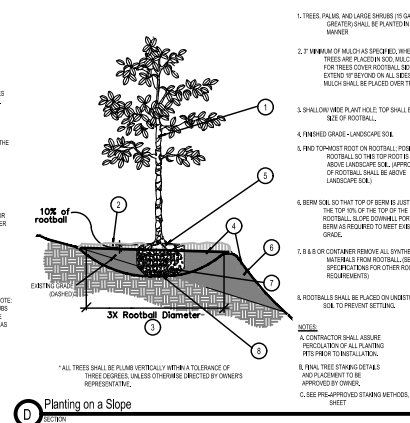
**A Tree Planting**  
SECTION  
NTS



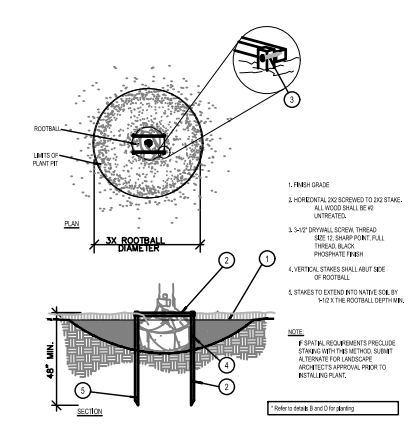
**B Palm Planting and Staking**  
SECTION  
NTS



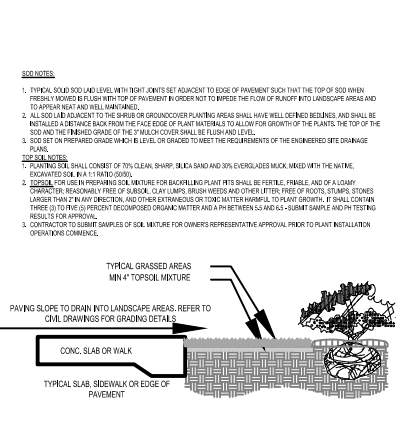
**C Shrub / Groundcover Planting**  
SECTION  
NTS



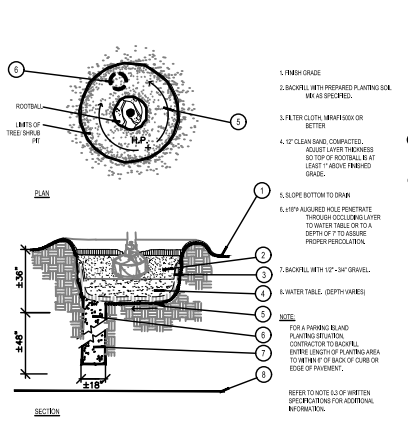
**D Planting on a Slope**  
SECTION  
NTS



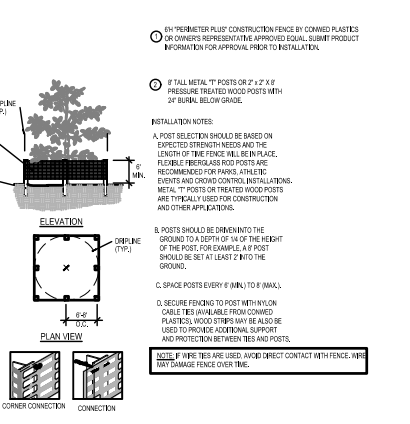
**E Staking - up to 65 gal. or B&B to 3-1/2' Cal.**  
SECTION  
NTS



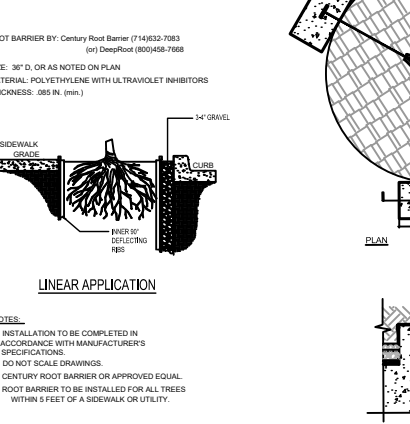
**F SOD**  
SECTION  
NTS



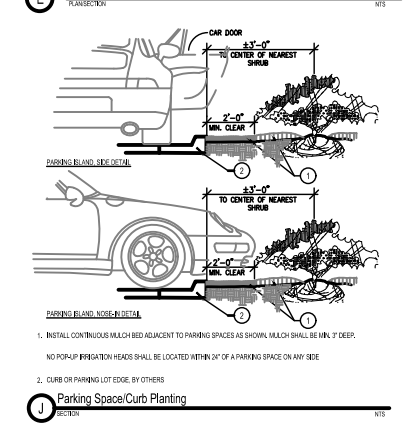
**G Poor Drainage Condition**  
SECTION  
NTS



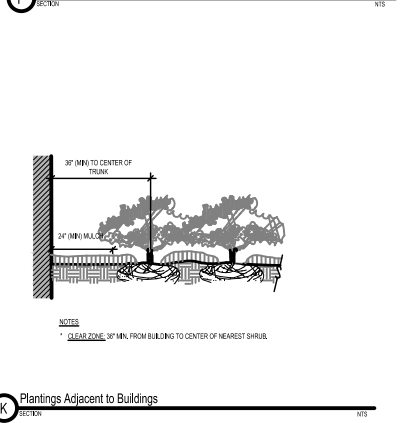
**H Tree/Shrub Protector**  
SECTION  
NTS



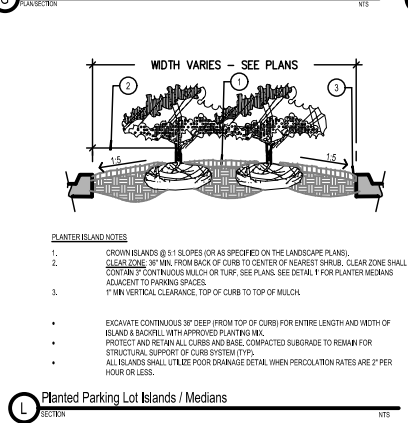
**I Root Barrier**  
SECTION  
NTS



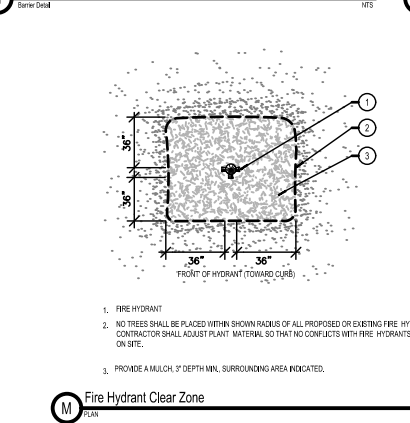
**J Parking Space/Curb Planting**  
SECTION  
NTS



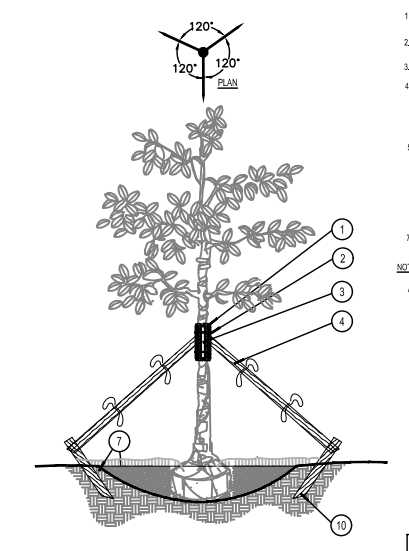
**K Plantings Adjacent to Buildings**  
SECTION  
NTS



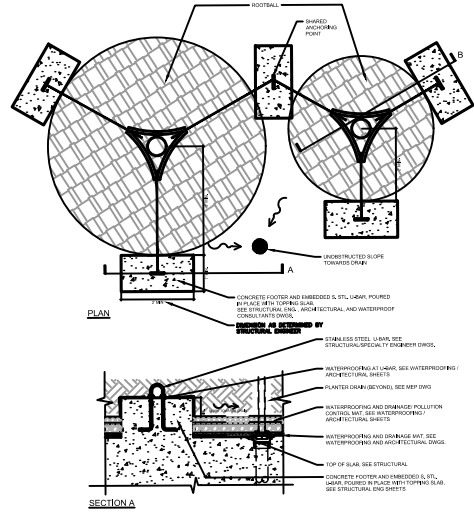
**L Planted Parking Lot Islands / Medians**  
SECTION  
NTS



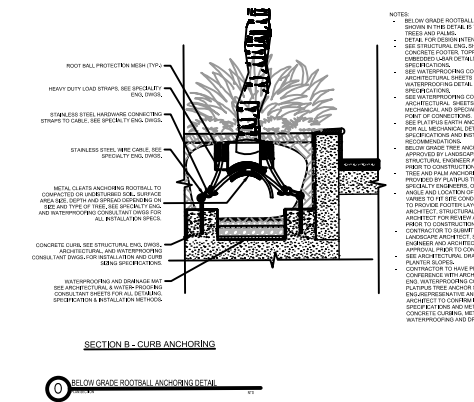
**M Fire Hydrant Clear Zone**  
SECTION  
NTS



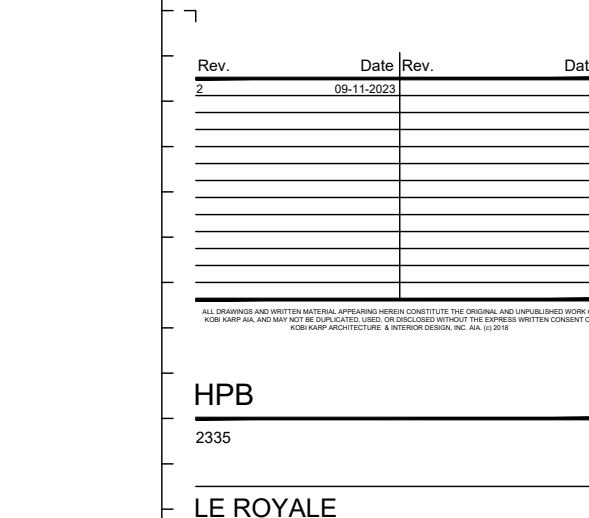
**N Large Tree Staking - 100 Gal + or B&B 4' +**  
SECTION  
NTS



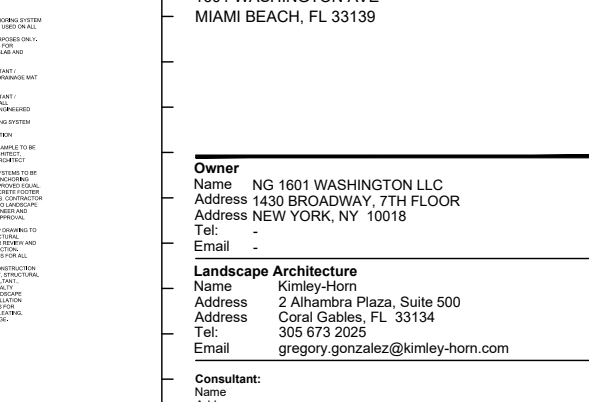
**O Root Barrier**  
SECTION  
NTS



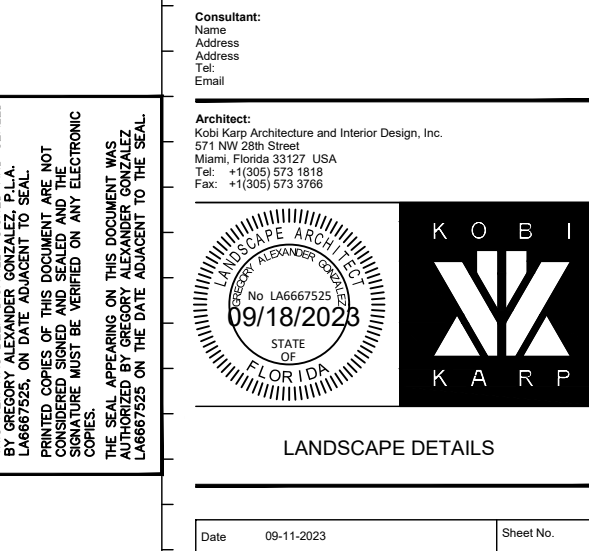
**P Root Barrier**  
SECTION  
NTS



**Q Root Barrier**  
SECTION  
NTS



**R Root Barrier**  
SECTION  
NTS



**S Root Barrier**  
SECTION  
NTS

Rev.	Date	Rev.	Date
2	09-11-2023		

ALL DIMENSIONS AND WRITTEN MATERIAL APPEARING HEREIN CONSTITUTE THE ORIGINAL AND UNPUBLISHED WORK OF KOBİ KARP AIA, AND MAY NOT BE DUPLICATED, USED, OR DISCLOSED WITHOUT THE EXPRESS WRITTEN CONSENT OF KOBİ KARP ARCHITECTURE & INTERIOR DESIGN, INC. AIA (S) 2018

**HPB**  
2335

**LE ROYALE**  
1601 WASHINGTON AVE  
MIAMI BEACH, FL 33139

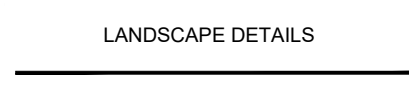
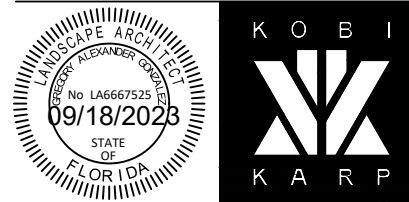
**Owner**  
Name NG 1601 WASHINGTON LLC  
Address 1430 BROADWAY, 7TH FLOOR  
Address NEW YORK, NY 10018  
Tel: -  
Email: -

**Landscape Architecture**  
Name Kimley-Horn  
Address 2 Alhambra Plaza, Suite 500  
Address Coral Gables, FL 33134  
Tel: 305 673 2025  
Email: gregory.gonzalez@kimley-horn.com

**Consultant:**  
Name  
Address  
Address  
Tel:  
Email

**Consultant:**  
Name  
Address  
Address  
Tel:  
Email

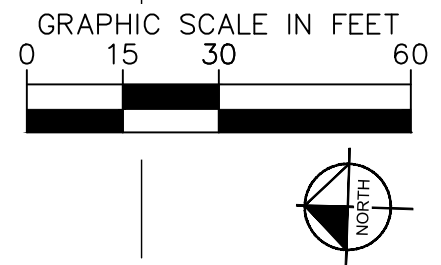
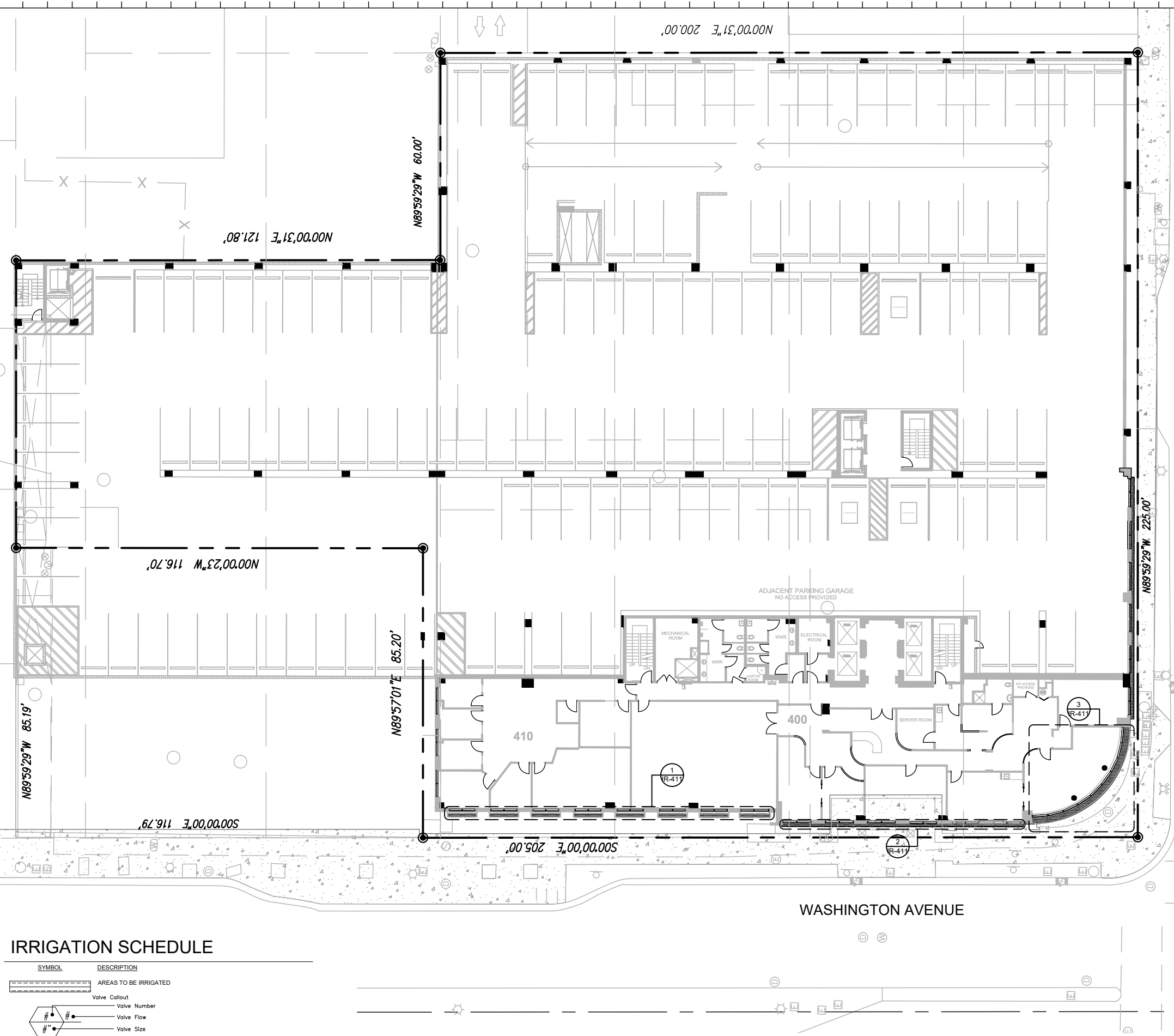
**Architect:**  
Kobi Karp Architecture and Interior Design, Inc.  
571 NW 20th Street  
Miami, Florida 33127 USA  
Tel: +1(305) 573 1818  
Fax: +1(305) 573 3766



LANDSCAPE DETAILS  
Date 09-11-2023 Sheet No.  
Scale AS SHOWN L-351  
Project 2335

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY GREGORY ALEXANDER GONZALEZ, P.L.A. LA6667525, ON DATE ADJACENT TO SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES. THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY GREGORY ALEXANDER GONZALEZ, LA6667525 ON THE DATE ADJACENT TO THE SEAL.

Plotted By: Lieberman, Amy Sheet Set: 1601 WASHINGTON AVE Layout: IR-410 TYPICAL IRRIGATION PLAN - GARAGE September 11, 2023 03:22:25pm K:\MIB\_LIRC\143721000-1601 Washington Ave\Landscapes\CADD\PlanSheets\IR-410 TYPICAL IRRIGATION PLAN FOR PLAN 1601-0323-04\MLEY-HORN AND ASSOCIATES, INC.



Rev.	Date	Rev.	Date
2	09-11-2023		

ALL DRAWINGS AND WRITTEN MATERIAL APPEARING HEREIN CONSTITUTE THE ORIGINAL AND UNPUBLISHED WORK OF KOBİ KARP AIA, AND MAY NOT BE REPRODUCED, COPIED, OR DISCLOSED WITHOUT THE EXPRESS WRITTEN CONSENT OF KOBİ KARP ARCHITECTURE & INTERIOR DESIGN, INC. AIA (S) 2018

**HPB**  
2335

**LE ROYALE**  
1601 WASHINGTON AVE  
MIAMI BEACH, FL 33139

**Owner**  
Name NG 1601 WASHINGTON LLC  
Address 1430 BROADWAY, 7TH FLOOR  
Address NEW YORK, NY 10018  
Tel: -  
Email: -

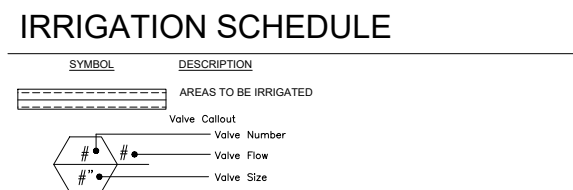
**Landscape Architecture**  
Name Kimley-Horn  
Address 2 Alhambra Plaza, Suite 500  
Address Coral Gables, FL 33134  
Tel: 305 673 2025  
Email gregory.gonzalez@kimley-horn.com

**Consultant:**  
Name  
Address  
Address  
Tel:  
Email

**Consultant:**  
Name  
Address  
Address  
Tel:  
Email

**Architect:**  
Kobi Karp Architecture and Interior Design, Inc.  
571 NW 28th Street  
Miami, Florida 33127 USA  
Tel: +1(305) 573 1818  
Fax: +1(305) 573 3766

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY GREGORY ALEXANDER GONZALEZ, P.L.A. LA6667525, ON DATE ADJACENT TO SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES. THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY GREGORY ALEXANDER GONZALEZ, LA6667525 ON THE DATE ADJACENT TO THE SEAL.

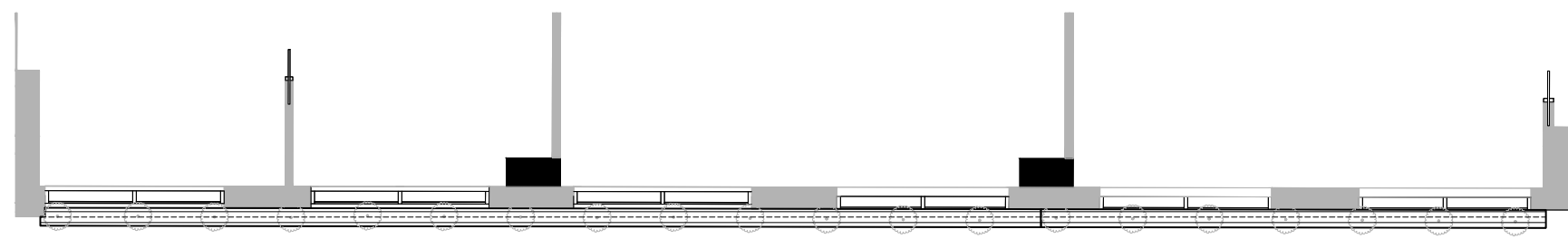


TYPICAL IRRIGATION PLAN - PLANTERS

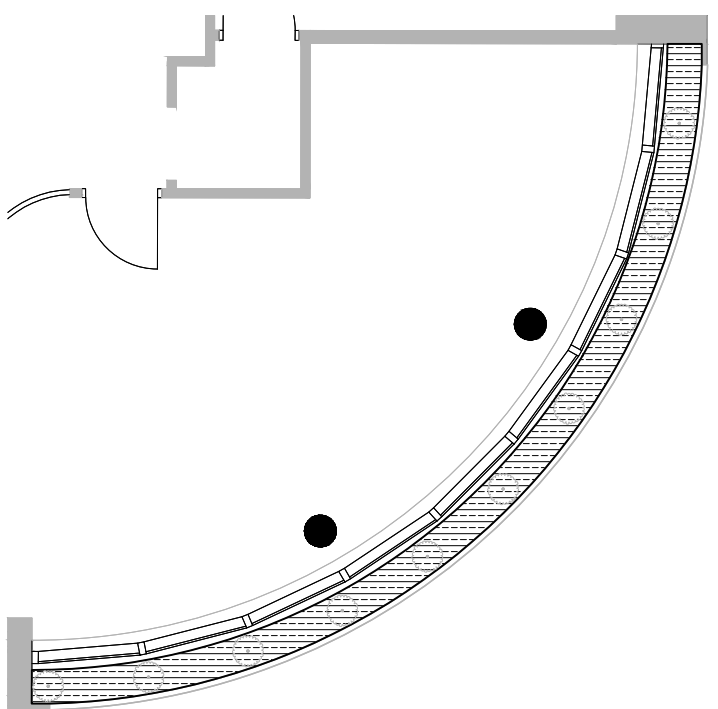
Date	09-11-2023	Sheet No.	IR-410
Scale	AS SHOWN		
Project	2335		

Plotted By: Lieberman, Amy Sheet Set: 1601 WASHINGTON AVE Layout: IR-411 BALCONY PLANTER IRRIGATION TYPOLOGIES September 11, 2023 03:22:29pm K:\MIB JURC\43721000-1601 Washington Ave\Landscape\CADD\PlanSheets\IR-410 TYPICAL IRRIGATION PLAN FOR PLANTER TYP. OF 8 AND ASSOCIATES, INC.

**1** BALCONY IRRIGATION TYPOLOGY 1 - PLANTER TYP. OF 8  
1/8" = 1'-0" 143-721-000-04



**2** BALCONY IRRIGATION TYPOLOGY 2 - PLANTER TYP. OF 2  
1/8" = 1'-0" 143-721-000-05



**3** BALCONY IRRIGATION TYPOLOGY - PLANTER TYP. OF 1  
1/8" = 1'-0" 143-721-000-06

**IRRIGATION SCHEDULE**

SYMBOL	DESCRIPTION
	AREAS TO BE IRRIGATED
	Valve Callout
	Valve Number
	Valve Flow
	Valve Size

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY GREGORY ALEXANDER GONZALEZ, P.L.A. LA6667525, ON DATE ADJACENT TO SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES. THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY GREGORY ALEXANDER GONZALEZ, LA6667525 ON THE DATE ADJACENT TO THE SEAL.

Rev.	Date	Rev.	Date
2	09-11-2023		

ALL DRAWINGS AND WRITTEN MATERIAL APPEARING HEREIN CONSTITUTE THE ORIGINAL AND UNPUBLISHED WORK OF KOBI KARP AIA, AND MAY NOT BE DUPLICATED, USED, OR DISCLOSED WITHOUT THE EXPRESS WRITTEN CONSENT OF KOBI KARP ARCHITECTURE & INTERIOR DESIGN, INC. AIA (S) 2018

**HPB**  
2335

**LE ROYALE**  
1601 WASHINGTON AVE  
MIAMI BEACH, FL 33139

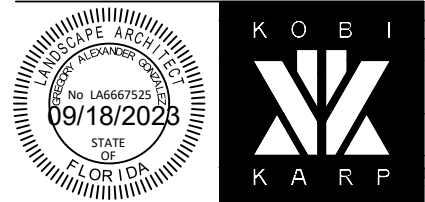
**Owner**  
Name NG 1601 WASHINGTON LLC  
Address 1430 BROADWAY, 7TH FLOOR  
Address NEW YORK, NY 10018  
Tel: -  
Email: -

**Landscape Architecture**  
Name Kimley-Horn  
Address 2 Alhambra Plaza, Suite 500  
Address Coral Gables, FL 33134  
Tel: 305 673 2025  
Email gregory.gonzalez@kimley-horn.com

**Consultant:**  
Name  
Address  
Address  
Tel:  
Email

**Consultant:**  
Name  
Address  
Address  
Tel:  
Email

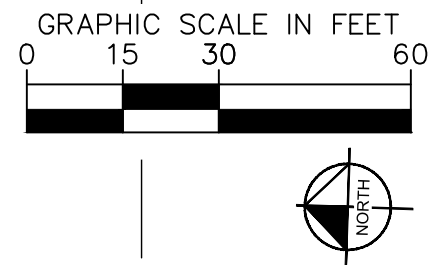
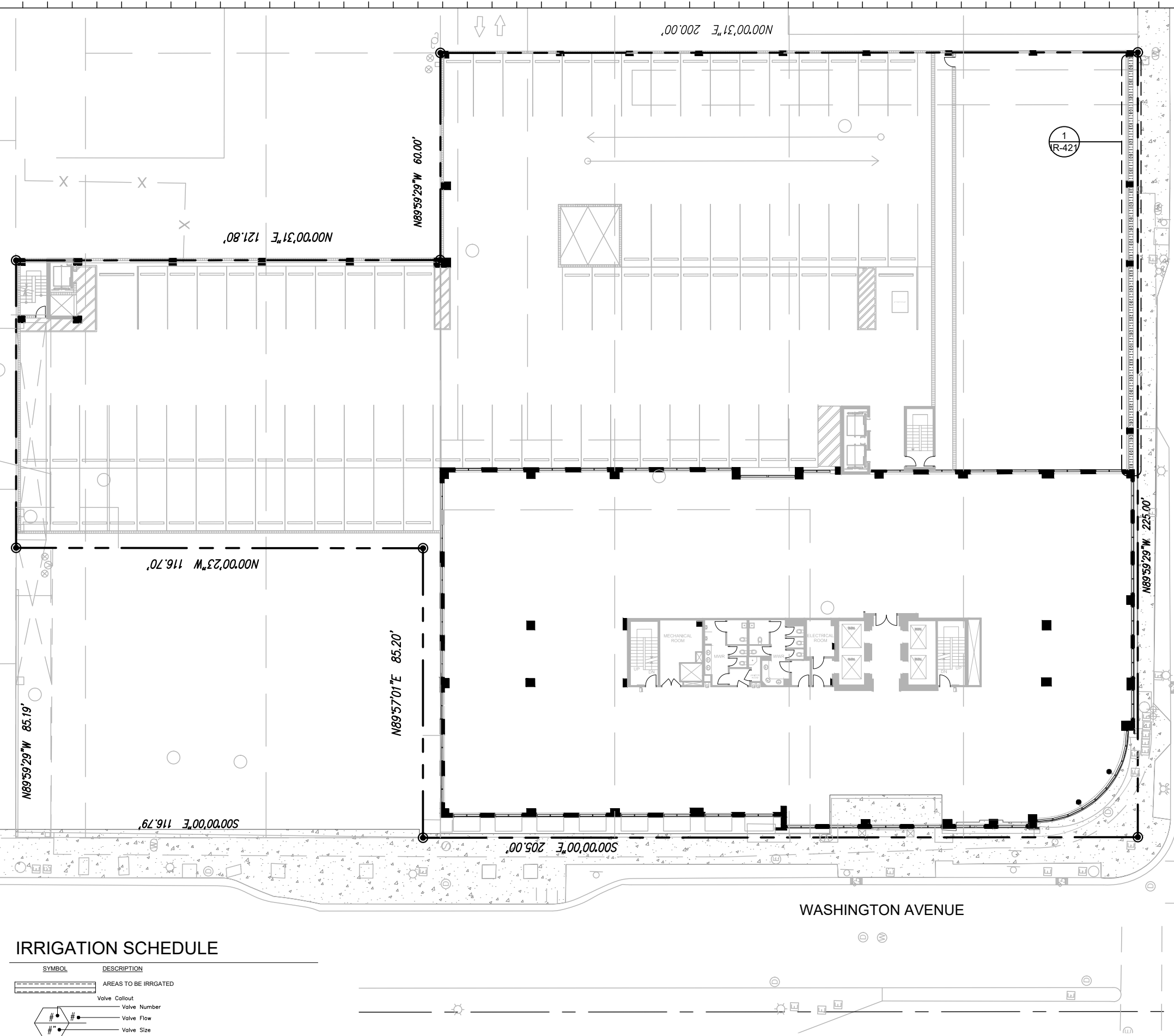
**Architect:**  
Kobi Karp Architecture and Interior Design, Inc.  
571 NW 28th Street  
Miami, Florida 33127 USA  
Tel: +1(305) 573 1818  
Fax: +1(305) 573 3766



**BALCONY PLANTER IRRIGATION TYPOLOGIES**

Date	09-11-2023	Sheet No.	IR-411
Scale	AS SHOWN		
Project	2335		

Plotted By: Lieberman, Amy Sheet Set: 1601 WASHINGTON AVE Layout: IR-420 TYPICAL IRRIGATION PLAN - GARAGE September 11, 2023 03:22:44pm K:\MIB\_LIRC\143721000-1601 Washington Ave\Landscapes\CADD\PlanSheets\IR-420 TYPICAL IRRIGATION PLAN FOR GARAGE.dwg\WILEY-HORN AND ASSOCIATES, INC.



**IRRIGATION SCHEDULE**

SYMBOL	DESCRIPTION
	AREAS TO BE IRRIGATED
	Valve Callout
	Valve Number
	Valve Flow
	Valve Size

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY GREGORY ALEXANDER GONZALEZ, P.L.A. LA6667525, ON DATE ADJACENT TO SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES. THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY GREGORY ALEXANDER GONZALEZ, LA6667525 ON THE DATE ADJACENT TO THE SEAL.

Rev.	Date	Rev.	Date
2	09-11-2023		

**HPB**  
2335

**LE ROYALE**  
1601 WASHINGTON AVE  
MIAMI BEACH, FL 33139

**Owner**  
Name NG 1601 WASHINGTON LLC  
Address 1430 BROADWAY, 7TH FLOOR  
Address NEW YORK, NY 10018  
Tel: -  
Email -

**Landscape Architecture**  
Name Kimley-Horn  
Address 2 Alhambra Plaza, Suite 500  
Address Coral Gables, FL 33134  
Tel: 305 673 2025  
Email gregory.gonzalez@kimley-horn.com

**Consultant:**  
Name  
Address  
Address  
Tel:  
Email

**Consultant:**  
Name  
Address  
Address  
Tel:  
Email

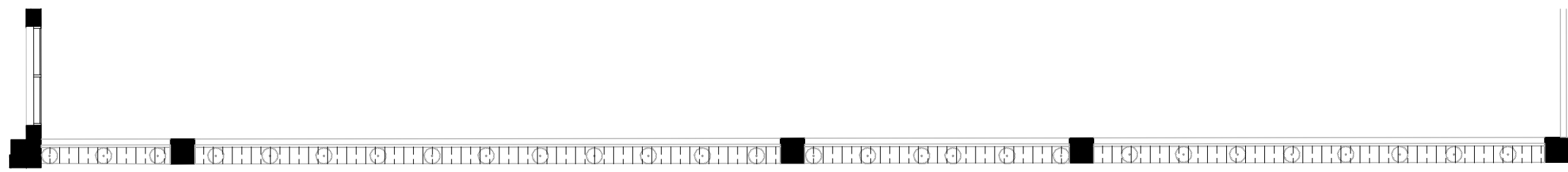
**Architect:**  
Kobi Karp Architecture and Interior Design, Inc.  
571 NW 28th Street  
Miami, Florida 33127 USA  
Tel: +1(305) 573 1818  
Fax: +1(305) 573 3766



**TYPICAL IRRIGATION PLAN - GARAGE**

Date	09-11-2023	Sheet No.	IR-420
Scale	AS SHOWN		
Project	2335		

Plotted By: Lieberman, Amy Sheet Set: 1601 WASHINGTON AVE Layout: IR-421 GARAGE PLANTER IRRIGATION TYPOLOGY September 11, 2023 03:22:44pm K:\MIB\_LIRC\143721000-1601 Washington Ave\Landscapa\CADD\PlanSheets\IR-420 TYPICAL IRRIGATION PLAN FOR GARAGE



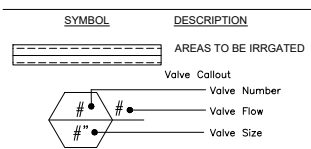
1

# GARAGE IRRIGATION PLANTER TYPOLOGY 1 - PLANTER TYP. OF 1

3/32" = 1'-0"

143-721-000-08

## IRRIGATION SCHEDULE



THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY GREGORY ALEXANDER GONZALEZ, P.L.A. LA6667525, ON DATE ADJACENT TO SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES. THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY GREGORY ALEXANDER GONZALEZ, LA6667525 ON THE DATE ADJACENT TO THE SEAL.

Rev.	Date	Rev.	Date
2	09-11-2023		

ALL DRAWINGS AND WRITTEN MATERIAL APPEARING HEREIN CONSTITUTE THE ORIGINAL AND UNPUBLISHED WORK OF KOBI KARP AIA, AND MAY NOT BE DUPLICATED, USED, OR DISCLOSED WITHOUT THE EXPRESS WRITTEN CONSENT OF KOBI KARP ARCHITECTURE & INTERIOR DESIGN, INC. AIA, (S) 2018

**HPB**  
2335

**LE ROYALE**  
1601 WASHINGTON AVE  
MIAMI BEACH, FL 33139

**Owner**  
Name NG 1601 WASHINGTON LLC  
Address 1430 BROADWAY, 7TH FLOOR  
Address NEW YORK, NY 10018  
Tel: -  
Email -

**Landscape Architecture**  
Name Kimley-Horn  
Address 2 Alhambra Plaza, Suite 500  
Address Coral Gables, FL 33134  
Tel: 305 673 2025  
Email gregory.gonzalez@kimley-horn.com

**Consultant:**  
Name  
Address  
Address  
Tel:  
Email

**Consultant:**  
Name  
Address  
Address  
Tel:  
Email

**Architect:**  
Kobi Karp Architecture and Interior Design, Inc.  
571 NW 28th Street  
Miami, Florida 33127 USA  
Tel: +1(305) 573 1818  
Fax: +1(305) 573 3766



GARAGE PLANTER  
IRRIGATION TYPOLOGY

Date	09-11-2023	Sheet No.	IR-421
Scale	AS SHOWN		
Project	2335		

© 2022 KIMLEY-HORN AND ASSOCIATES, INC. Washington Ave \Landscape\CADD\PlanSheets\IR-450\_IRRIGATION.dwg K:\WEB\_URO\143721000-1601\_ Washington Ave \Landscape\CADD\PlanSheets\IR-450\_IRRIGATION.dwg September 11, 2023 03:22:54pm Plotted By:Lieberman, Amy Sheet Set:1601 WASHINGTON AVE Layout:IR-450\_IRRIGATION NOTES AND SPECIFICATIONS

GENERAL IRRIGATION SPECIFICATIONS AND NOTES

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
A. 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.
B. COORDINATION: COORDINATE AND COOPERATE WITH OTHER CONTRACTORS TO ENABLE THE WORK TO PROCEED AS RAPIDLY AND EFFICIENTLY AS POSSIBLE.
C. INSPECTION OF SITE: THE CONTRACTOR SHALL ACQUAINT HIMSELF WITH ALL SITE CONDITIONS, INCLUDING UNDERGROUND UTILITIES BEFORE CONSTRUCTION IS TO BEGIN. THE 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.
D. 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.
E. 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 REPAIRED OR REPLACED 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. THE CONTRACTOR SHALL 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. ANY TRENCING OR OTHER WORK UNDER THE LEAF CANOPY OF ANY AND ALL TREES SHALL BE DONE BY HAND OR BY OTHER MECHANICAL MEANS AND SHALL BE LIMITED TO THE TRUNKS, BRANCHES, TWIGS, WALLS, AND OTHER PROPERLY SHOWN AND PROTECTED FROM DAMAGE. OPEN DITCHES LEFT UNPROTECTED 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 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.
F. CODES AND INSPECTIONS: THE ENTIRE INSTALLATION SHALL COMPLY FULLY WITH ALL LOCAL AND STATE LAWS AND ORDINANCES AND WITH ALL ESTABLISHED CODES AND REGULATIONS. THE CONTRACTOR 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.
G. 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.
H. THE SUPERINTENDENT SHALL REPRESENT THE CONTRACTOR IN HIS ABSENCE AND ALL DIRECTIONS GIVEN TO HIM SHALL BE AS BINDING AS IF GIVEN BY THE CONTRACTOR.
I. 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.
J. 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'S RESPONSIBILITY TO MAKE FURTHER REPAIRS, CORRECTIONS AND ADJUSTMENTS TO ELIMINATE ANY DEFICIENCIES WHICH MAY LATER BE DISCOVERED.
K. 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 GUARANTEE 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 MAKING 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.
L. 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.
M. 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.
N. 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.
1.03 SUBMITTALS
ALL MATERIALS SHALL BE THOSE SPECIFIED AND/OR APPROVED BY THE LANDSCAPE ARCHITECT.
A. PRODUCT DATA: AFTER THE AWARD OF THE CONTRACT AND PRIOR TO BEGINNING WORK, THE CONTRACTOR SHALL SUBMIT FOR APPROVAL BY THE OWNER 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 VALVE BOX, POWER SOURCE OR CONNECTION TO A VALVE-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.
D. 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(S) 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, INCLUDING 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.
1.04 EXPLANATION OF DRAWINGS
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 DIAGRAMMATIC 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 ARCHITECT'S ATTENTION.
C. ALL WORK CALLED FOR OR 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 INCOMPLETE, 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
2.01 MATERIALS
A. 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.
2.02 PIPING
A. GENERAL PROVISIONS: ALL MATERIALS THROUGHOUT THE SYSTEM SHALL BE NEW AND IN PERFECT CONDITION UNLESS OTHERWISE DIRECTED BY THE LANDSCAPE ARCHITECT.
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.
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:
a. MANUFACTURER'S NAME
b. NOMINAL PIPE SIZE
c. SCHEDULE OR CLASS
d. PRESSURE RATING OF PSI
e. NSF (NATIONAL SANITATION FOUNDATION) APPROVAL
f. DATE OF EXTRUSION
2.03 PVC JOINTS
A. 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.
2.04 THREADED CONNECTIONS
A. THREADED PVC CONNECTIONS SHALL BE MADE UP USING TEFLOM TAPE ONLY.
B. CONNECTION BETWEEN MAINLINE PIPE FITTINGS AND AUTOMATIC OR MANUAL CONTROL VALVES SHALL BE MADE USING SCHEDULE 80 THREADED FITTINGS AND NIPPLES.
2.05 SOLVENT CEMENT
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 GASKETED PIPE TO BE INTRICAL RING TYPE. INSERT GASKETS WILL NOT BE ACCEPTED.
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 ELBS, TEELOS, 45'S, CROSSES, REDUCERS, PLUGS, CAPS AND VALVES.
2.06 PIPE AND WIRE SLEEVES
A. SLEEVES TO BE INSTALLED:
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 FOOT SPECIFICATIONS, AND AS SHOWN ON PLANS.
c. ALL IRRIGATION SYSTEM WIRES SHALL BE SLEEVED SEPARATELY FROM MAIN OR LATERAL LINES.
d. ALL PIPE SLEEVES SHALL BE INSTALLED AT THE MINIMUM DEPTH SPECIFIED FOR MAIN LINES, LATERAL LINES, AND ELECTRIC WIRE.

- e. CONTRACTOR SHALL COORDINATE ALL PIPE SLEEVE LOCATIONS AND DEPTHS PRIOR TO INITIATING INSTALLATION OF THE IRRIGATION SYSTEM.
2.09 AUTOMATIC CONTROL VALVE
A. 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 THREADED, NON-RISING STEM WITH WHEEL OPERATING HANDLE, FOR A CONTINUOUS WORKING PRESSURE OF 150 PSI.
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 GATE 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 DRAWINGS.
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 GAUGE, RED FOR "HOT" OR LEAD WIRES, AND COMMON WIRE TO BE 14 GAUGE, WHITE IN COLOR.
B. CONTRACTOR SHALL PERFORM AN OHM TEST ON BR4OUND 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 ALUMINIUM FOIL CORE ENCAPSULATED WITHIN A 2.55 MIL (0.00255") POLYETHYLENE BACKING AND A 0.5 MIL (0.005") 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
1. AN INDEPENDENT STATION CONTROLLER: FURNISH A SOLID STATE CONTROLLER, AS SPECIFIED ON THE PLANS.
a. EACH STATION SHALL BE CAPABLE OF TIMING FROM ZERO (0) MINUTE TO 99 MINUTES PER STATION IN ONE (1) MINUTE INCREMENTS.
b. EACH STATION SHALL BE CAPABLE OF OPERATING TWO (2) 7VA ELECTRIC VALVE-IN-HEAD SOLENOIDS.
c. THE STAND-ALONE CONTROLLER SHALL HAVE TWO (2) POSSIBLE PROGRAMS.
d. 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.
e. ALL STATIONS SHALL BE ABLE TO BE TURNED ON/OFF MANUALLY BUY OPERATING TIMING MECHANISM OR BY MANUAL SWITCH AT STATION OUTPUT.
f. 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.
g. 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.
h. THE STAND-ALONE CONTROLLER SHALL BE UL LISTED AND FCC APPROVED.
i. THE STAND-ALONE CONTROLLER SHALL HAVE 117 VAC, 60 HZ INPUT, 26.5 VAC, 60 HZ OUTPUT FOR OPERATING 24 VAC SOLENOIDS.
j. THE STAND-ALONE CONTROLLER CABINET SHALL BE A LOCKABLE AND WEATHER-RESISTANT OUTDOOR CABINET. MOUNT AS NOTED ON PLANS.
k. 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.
l. THE CONTROLLER SHALL BE EQUIPPED FOR A WATER CONSERVATION DEVICE, AS SPECIFIED.
PART III: EXECUTION
3.01 INSPECTION
A. 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
A. 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.
3.03 TRENCING AND BACKFILLING
A. EXCAVATION: THE CONTRACTOR SHALL STAKE OUT THE LOCATION OF EACH RUN OF PIPE, SPRINKLER HEADS, SPRINKLER VALVES AND ISOLATION VALVES PRIOR TO TRENCING. EXCAVATION SHALL BE OPEN VERTICAL CONSTRUCTION SUFFICIENTLY WIDE TO PROVIDE FREE WORKING SPACE UNDER THE PIPE 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:
PIPE AND WIRE DEPTH
PRESSURE MAINLINE 18" AT TOP OF PIPE FROM FINISH GRADE
LATERAL PIPING (ROTOR) 12" AT TOP OF PIPE FROM FINISH GRADE
LATERAL PIPING (POP-UP) 12" AT TOP OF PIPE FROM FINISH GRADE
CONTROL WIRING SIDE OF MAIN LINE
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
3.04 INSTALLATION OF PIPING
A. PVC PIPE AND JOINTS: THE CONTRACTOR SHALL NOT INSTALL SOLVENT WELD PIPE WHEN AIR TEMPERATURE IS BELOW 40°F. INSTALLATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.
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.
3.05 BACKFILLING PROCEDURES
INITIAL BACKFILL ON PVC LINES SHALL BE PULVERIZED 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 COMPACTON: 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.
3.12 WARRANTY
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 ARCHITECT THAT THE WARRANTY PERIOD IS IN EFFECT.
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 THE OWNER AND/OR LANDSCAPE ARCHITECT.
C. ANY DAMAGES CAUSED BY SYSTEM MALFUNCTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR WHO SHALL MAKE FULL AND IMMEDIATE RESTORATION FOR SAID DAMAGES.

- 1. 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.
2. THE CONTRACTOR SHALL CONFORM TO DOT REQUIREMENTS FOR METHODS AND REQUIRED COMPACTION PERCENTAGES, FOR ROADS AND PAVING.
3. 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.
4. 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.
5. EXISTING LAWNS: WHERE TRENCING IS REQUIRED ACROSS EXISTING LAWNS, UNIFORMLY CUT STRIPS OF SOG 6" WIDER THAN TRENCH. THE CONTRACTOR SHALL REMOVE SOG IN ROLLS OF SUITABLE SIZE FOR HANDLING AND KEEP MOISTENED UNTIL REPLANTED. THE CONTRACTOR SHALL REPLANT SOG 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: TRENCING WILL BE REQUIRED ACROSS EXISTING SEEDED AREAS, PRIMARILY ROADWAY EDGING. THE CONTRACTOR SHALL CONFORM TO THE REQUIREMENTS OF SEEDING, SECTION 02390 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.
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 FLORES 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.
B. GATE VALVES: INSTALL WHERE SHOWN, IN VALVE BOXES.
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 VALVE TO PROVIDE FLOW RATE OR RATED OPERATING PRESSURE REQUIRED FOR EACH SPRINKLER CIRCUIT.
3.07 CONDUIT AND SLEEVES
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 WITH THE GENERAL SITE CONTRACTOR.
1. 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 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 ON THE CONTROLLER.
B. CONTROLLERS SHALL BE EQUIPPED WITH LIGHTNING PROTECTION AND GROUNDED TO A STANDARD 5/8" COPPER CLAD STEEL GROUND ROD DRIVEN A MINIMUM OF 8' INTO THE GROUND AND CLAMPED.
C. THE ELECTRICAL SERVICE TO THE CONTROLLERS SHALL BE PERFORMED BY AN ELECTRICAL SUBCONTRACTOR IN COMPLIANCE WITH NEC REQUIREMENTS.
3.09 CONTROL WIRE
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 CLEANING.
B. AN EXPANSION LOOP SHALL BE PROVIDED AT EVERY VALVE AT 100' O.C. EXPANSION LOOP SHALL BE FORMED BY WRAPPING WIRE AT LEAST EIGHT TIMES AROUND A 3/4" PIPE AND WITHDRAWING PIPE.
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.
D. ELECTRICAL CONNECTIONS TO ELECTRIC CONTROL VALVES SHALL BE MADE WITH RAINBIRD PEN-TITE OR TECHDEL GT-36L - TITE CONNECTORS OR EQUAL.
a. POWER CONNECTIONS: ELECTRICAL CONNECTIONS TO POWER AND SIGNAL WIRES SHALL BE MADE USING 3M 82-42 POWER CABLE SPLICE KITS.
3.10 SPRINKLER HEADS
A. GENERAL PROVISIONS:
1. SPRINKLER HEADS SHALL BE INSTALLED AS DESIGNATED ON THE SHOP DRAWINGS. HEADS SHALL BE INSTALLED ON 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 THE LANDSCAPE ARCHITECT). IN NO CASE SHALL THE SPACING EXCEED THE MAXIMUM RECOMMENDED BY THE MANUFACTURER.
B. HEAD TYPES:
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 PAVEMENT.
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" FROM THE EDGE OF PAVEMENT.
3.11 COMPLETION
A. FLUSHING: BEFORE SPRINKLER HEADS ARE SET, THE CONTRACTOR SHALL FLUSH THE LINES THOROUGHLY TO MAKE SURE THERE IS NO FOREIGN MATTER IN THE LINES.
1. THE CONTRACTOR SHALL FLUSH THE MAIN LINES FROM DEAD END FITTINGS FOR A MINIMUM OF FIVE MINUTES UNDER A FULL HEAD OF PRESSURE.
B. TESTING: THE CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT AND OWNER FORTY-EIGHT (48) HOURS IN ADVANCE OF TESTING.
1. 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.
2. 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
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 ARCHITECT THAT THE WARRANTY PERIOD IS IN EFFECT.
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 THE OWNER AND/OR LANDSCAPE ARCHITECT.
C. ANY DAMAGES CAUSED BY SYSTEM MALFUNCTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR WHO SHALL MAKE FULL AND IMMEDIATE RESTORATION FOR SAID DAMAGES.

Table with 4 columns: Rev., Date, Rev., Date. Row 1: 2, 09-11-2023.

HPB
2335
LE ROYALE
1601 WASHINGTON AVE
MIAMI BEACH, FL 33139

Owner
Name NG 1601 WASHINGTON LLC
Address 1430 BROADWAY, 7TH FLOOR
Address NEW YORK, NY 10018
Tel: -
Email -
Landscape Architecture
Name Kimley-Horn
Address 2 Alhambra Plaza, Suite 500
Address Coral Gables, FL 33134
Tel: 305 673 2025
Email gregory.gonzalez@kimley-horn.com

Consultant:
Name
Address
Address
Tel:
Email
Consultant:
Name
Address
Address
Tel:
Email

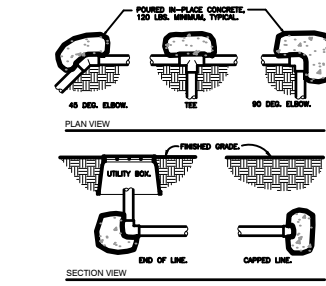
Architect:
Kobi Karp Architecture and Interior Design, Inc.
571 NW 26th Street
Miami, Florida 33127 USA
Tel: +1(305) 573 1818
Fax: +1(305) 573 3786
Professional Seal: LANDSCAPE ARCHITECT, KOB I KAR P, No. LA6667525, 09/18/2023, STATE OF FLORIDA.

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY GREGORY ALEXANDER GONZALEZ, P.L.A. LA6667525, ON DATE ADJACENT TO SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES. THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY GREGORY ALEXANDER GONZALEZ, LA6667525 ON THE DATE ADJACENT TO THE SEAL.

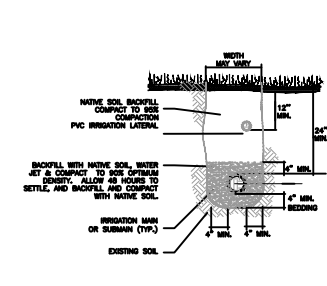
IRRIGATION NOTES AND SPECIFICATIONS

Table with 3 columns: Date, Scale, Project. Row 1: 09-11-2023, AS SHOWN, 2335. Row 2: Sheet No., IR-450.

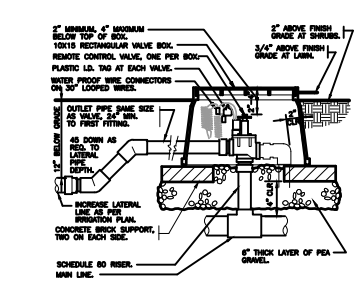
© 2022 KIMLEY-HORN AND ASSOCIATES, INC. Plotted By: Lieberman, Amy Sheet Set: 1601 WASHINGTON AVE Layout: IR-451 IRRIGATION DETAILS September 11, 2023 03:22:56pm K:\MIB\_ORG\143727000-1601 WASHINGTON AVE Landscape\CADD\PlanSheets\IR-451 IRRIGATION.dwg



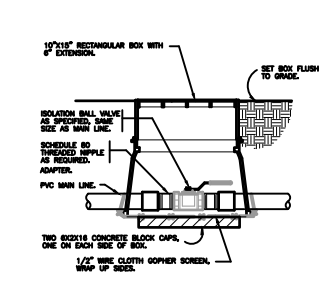
1 THRUST BLOCKING  
3/4" x 1'-4"



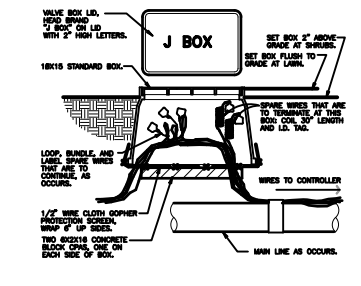
2 TRENCHING DETAIL  
NOT TO SCALE



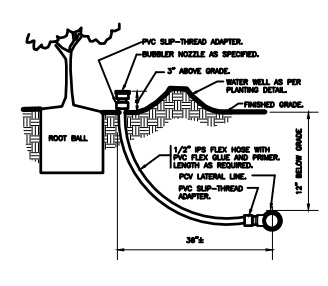
3 ELECTRIC REMOTE CONTROL VALVE  
1 1/2" x 1'-4"



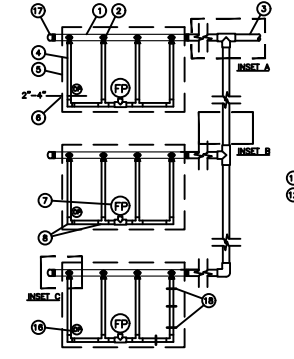
4 BRASS BALL ISOLATION VALVE  
1 1/2" x 1'-4"



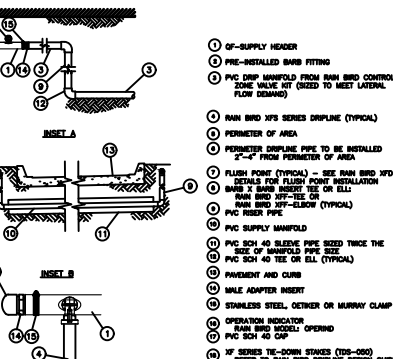
5 WIRE BUNDLE JUNCTION BOX  
1 1/2" x 1'-4"



6 BUBBLER ON FLEX HOSE RISER  
2" x 1'-4"

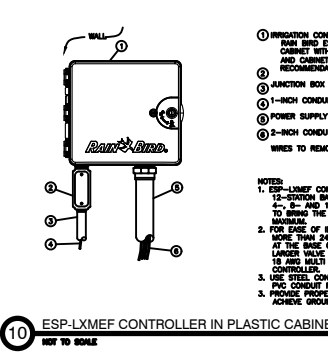


12 TYPICAL DRIPLINE LAYOUT REQUIREMENTS  
NOT TO SCALE

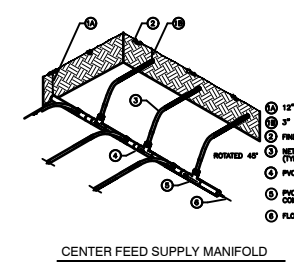


**XFS Dripline Maximum Lateral Lengths (Feet)**

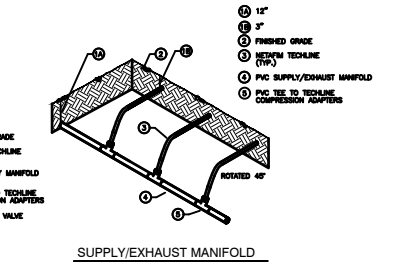
Inlet Pressure psi	12" Spacing		18" Spacing		24" Spacing	
	Normal Flow (gph)	Normal Flow (gph)	Normal Flow (gph)	Normal Flow (gph)	Normal Flow (gph)	Normal Flow (gph)
0.5	0.9	0.6	0.9	0.6	0.9	0.6
15	273	155	314	250	424	322
20	318	169	353	264	508	368
30	380	230	413	350	585	414
40	392	255	462	402	652	474
50	417	285	528	420	720	488
60	460	290	596	455	780	514



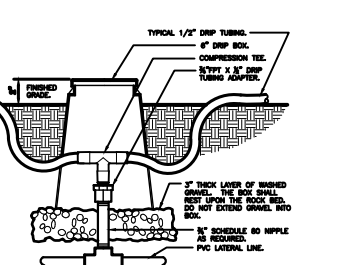
10 ESP-LXMEF CONTROLLER IN PLASTIC CABINET  
NOT TO SCALE



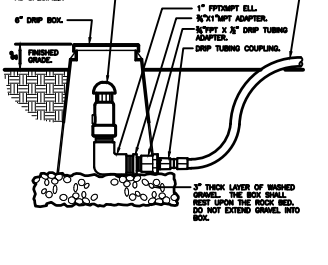
16 LATERAL TO DRIP FEED DETAILS  
NOT TO SCALE



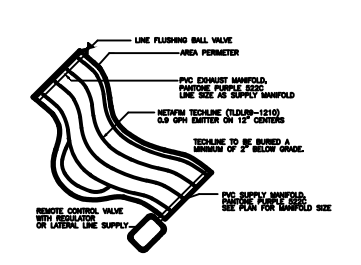
13 DRIP AIR RELIEF VALVE IN BOX  
2" x 1'-4"



14 IRREGULAR AREAS  
NOT TO SCALE



15 DRIP ZONE CONTROL VALVE KIT IN JUMBO VALVE BOX  
NOT TO SCALE



18 DRIP EMITTER AT 1/4\"/>



19 DRIP FLUSH VALVE  
1 1/2" x 1'-4"

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY GREGORY ALEXANDER CONZALEZ, P.L.A. LA6667525, ON DATE ADJACENT TO SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES. THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY GREGORY ALEXANDER CONZALEZ, LA6667525 ON THE DATE ADJACENT TO THE SEAL.

Rev.	Date	Rev.	Date
2	09-11-2023		

HPB  
2335

LE ROYALE  
1601 WASHINGTON AVE  
MIAMI BEACH, FL 33139

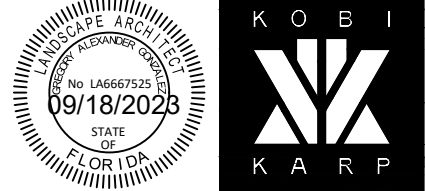
Owner  
Name NG 1601 WASHINGTON LLC  
Address 1430 BROADWAY, 7TH FLOOR  
Address NEW YORK, NY 10018  
Tel: -  
Email: -

Landscape Architecture  
Name Kimley-Horn  
Address 2 Alhambra Plaza, Suite 500  
Address Coral Gables, FL 33134  
Tel: 305 673 2025  
Email gregory.gonzalez@kimley-horn.com

Consultant:  
Name  
Address  
Address  
Tel:  
Email

Consultant:  
Name  
Address  
Address  
Tel:  
Email

Architect:  
Kobi Karp Architecture and Interior Design, Inc.  
571 NW 28th Street  
Miami, Florida 33127 USA  
Tel: +1(305) 573 1818  
Fax: +1(305) 573 3766



IRRIGATION DETAILS

Date	09-11-2023	Sheet No.	
Scale	AS SHOWN		IR-451
Project	2335		