



C.M.B. PUBLIC WORKS / GREENSPACE MANAGEMENT CONDITIONS

- SHOULD ANY EXISTING PALMS BE DAMAGED THEY SHALL BE EVALUATED BY THE CITY URBAN FORESTER TO DETERMINE CORRECTIVE ACTIONS THAT MAY INCLUDE REMOVAL, CORRECTIVE PRUNING AND OR REPLACEMENT. ANY CORRECTIVE ACTIONS REQUIRED SHALL BE PERFORMED IN ACCORDANCE WITH MIAMI BEACH CODE, THE MOST CURRENT ANSI A-300 PRUNING STANDARDS AND OR AN ISSUED CITY OF MIAMI BEACH TREE WORK PERMIT. ANY CORRECTIVE PRUNING REQUIRED SHALL BE PERFORMED BY AN ISA CERTIFIED ARBORIST AND THE CITY URBAN FORESTER SHALL BE CONSULTED.
- CARE SHALL BE TAKEN TO AVOID UTILITY OR CONSTRUCTION TRENCHING THROUGH EXISTING PALM DRIP LINES OF PALMS SLATED TO REMAIN IN PLACE OR BE RELOCATED. IF CONSTRUCTION REQUIRES THE CUTTING OF ANY ROOTS WITH A DIAMETER OF 2" OR GREATER, ROOTS SHALL BE CLEANLY CUT WITH A SHARP TOOL, AS DIRECTED BY AN ISA CERTIFIED ARBORIST, AND IN ACCORDANCE WITH THE ANSI A-300 STANDARDS. CUT ROOTS SHOULD BE IMMEDIATELY COVERED WITH SOIL TO PREVENT DRYING. ROOTS SHOULD NOT BE TORN OR BROKEN BY HEAVY EQUIPMENT, AND NO SHREDDED, RAGGED OR BROKEN ROOT ENDS SHOULD BE LEFT. THE CITY URBAN FORESTER SHALL BE NOTIFIED IN WRITING AND OR CONSULTED PRIOR TO ANY ROOT PRUNING TAKING PLACE.
- 3. SHOULD ANY CORRECTIVE STRUCTURAL PRUNING BE NECESSARY FOR PALMS PROPOSED TO REMAIN ONSITE, DUE TO CLEARANCE, SAFETY OR FOR CONSTRUCTION RELATED REASONS THE PRUNING SHALL BE PERFORMED BY AN ISA OR ASCA CERTIFED ARBORIST IN ACCORDANCE WITH THE LATEST VERSION OF THE ANSI A-300 PRUNING STANDARDS AND GOOD HORTICULTURAL PRACTICES. THE CITY URBAN FORESTER SHALL BE PROVIDED WITH A WRITTEN COPY OF THE PROPOSED PRUNING PLAN INCLUDING THE REASONS WHY PRUNING IS NECESSARY, PRIOR TO THE PRUNING ACTVITIES TAKING PLACE.
- 4. ANY ROOT PRUNING, IF REQUIRED DURING THE PROJECT, SHALL BE CONDUCTED UNDER THE SUPERVISION OF AN ISA CERTIFIED ARBORIST OR ACSA CONSULTING ARBORIST. ANY ROOT PRUNING, IF REQUIRED, WILL BE LIMITED TO WHAT IS ABSOLUTELY NECESSARY FOR CONSTRUCTION. ADDITIONALLY, AND ROOT PRUNING WORK WILL BE DOCUMENTED WITH COLOR PICTURES AND PROVIDED TO MR. MARK WILLIAMS AT C.M.B. PUBLIC WORKS / GREENSPACE MANAGEMENT + MR. RICARDO GUZMAN AT C.M.B. PLANNING + ZONING DEPARTMENTS ON A REGULAR BASIS.

C.M.B. EXISTING TREE SURVEY LEGEND

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TREE or PALM TO BE REMOVED. SEE CHART L-1.

PALM TO REMAIN. PRESERVE + PROTECT

TREE or PALM PROTECTION FENCE

C.M.B. CANOPY MITIGATION NOTES

- (6) DATE PALMS: 300 SF (MB category IV @ 50 SF each)

THE CANOPY MITIGATION OF 2,728 SF AS REQUIRED BY THE CITY OF MIAMI BEACH, CHAPTER 46 - ENVIRONMENT, DIVISION 2, TREE PRESERVATION and PROTECTION ORDINANCE HAS BEEN MET AND EXCEEDED. A TOTAL 8,000 SF OF CANOPY HAS BEEN PROVIDED.

CANOPY MITIGATION SUMMARY

- (20) NATIVE CLUSIA ROSEA TREES: 6,000 SF (MB category I @ 300 SF each)
- (11) NATIVE SIMPSON'S STOPPER TREES: 1,100 SF (MB category III @100 SF each) - (6) BAYRUM TREES: 600 SF (MB category III @100 SF each)

C.M.B. CHAPTER 46, DIVISION 2 - TREE INVENTORY + DISPOSITION PLAN NOTES

- THIS 'EXISTING TREE INVENTORY + DISPOSITION PLAN' HAS BEEN PREPARED IN ACCORDANCE WITH THE CITY OF MIAMI BEACH, CHAPTER 46 - ENVIRONMENT, DIVISION 2, TREE PRESERVATION and PROTECTION ORDINANCE.
- EXISTING TREE, PALM, AND VEGETATION INFORMATION AS INDICATED HAS BEEN PREPARED AS AN OVERLAY ON THE SURVEY PREPARED BY AMERICAN SERVICES OF MIAMI CORP. DATED 10.13.16
- . THE INFORMATION AS PRESENTED HEREIN HAS BEEN FIELD VERIFIED BY THE LANDSCAPE ARCHITECT ON
- I. MIAMI BEACH P+Z MUST APPROVE LANDSCAPE PLANS PRIOR TO REMOVING ANY TREES OR PALMS WITH A DBH BETWEEN 6" AND 12" INCHES. A WRITTEN TREE REMOVAL PERMIT IS REQUIRED FROM CITY OF MIAMI BEACH GREENSPACE MANAGEMENT / P.W FOR THE REMOVAL OF TREES / PALMS WITH A DBH GREATER THAN 12" INCHES OR IN THE R.O.W.
- 5. THE OWNER RESERVES THE RIGHT TO REMOVE ANY VEGETATION NOT LOCATED WITHIN THE CITY R.O.W. w/ a D.B.H. OF LESS THAN 6" WITHOUT OBTAINING A TREE REMOVAL PERMIT.

C.M.B. PUBLIC WORKS / EROSION + SEDIMENT CONTROL NOTES

- PROPER EROSION AND SEDIMENT CONTROLS MUST BE INSTALLED BEFORE ANY SOIL DISTURBING ACTIVITIES CAN
- THE STRUCTURES SHALL BE INSPECTED AFTER EACH RAIN AND REPAIRS MADE AS NEEDED. SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH RAINFALL. THEY MUST BE REMOVED WHEN THE LEVEL OF DEPOSITION REACHES APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER.
- THE SITE CONTRACTOR IS RESPONSIBLE FOR REMOVING THE TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES AFTER COMPLETION OF CONSTRUCTION AND ONLY WHEN AREAS HAVE BEEN STABILIZED.

C.N	C.M.B. EXISTING TREE INVENTORY + DISPOSITION CHART - 28 WEST DILIDO										
NUMBER	COMMON NAME	BOTANICAL NAME	SPECIMEN	D.B.H. (IN)	HEIGHT (FT)	SPREAD (FT)	CONDITION	DISPOSITION	CANOPY AREA	CANOPY LOSS / MIT. REQ. (SF)	COMM
#1	Christmas Palm	Adonidia merrelli	NO	+/- 6"	+/- 30'	+/- 6'	FAIR	REMAIN	29 SF	0 SF	PRESE
COSTA S PACOCOMPANA COPPAGA			Tell and a second control	PERMITTENDE	1947/2004/2004/2004	AMERICA STOREST PORT	14 (MAZ 17 4 A) Page		- 222 24 27 27 27 27 27 27 28 28 28 28 28 28 28 28 28 28 28 28 28	The second second	

EXISTING LANDSCAPE LOCATED WITHIN EASEMENT / PORPERTY LINE TO REMAIN

PRESERVE AND PROTECT DURING CONSTRUCTION

NUMBER	COMMON NAME	BOTANICAL NAME	SPECIMEN	D.B.H. (IN)	HEIGHT (FT)	SPREAD (FT)	CONDITION	DISPOSITION	CANOPY AREA	CANOPY LOSS / MIT. REQ. (SF)	COMMENTS	PERMIT REQUIREMENTS P+Z - GPM / PW - N.A.
#1	Christmas Palm	Adonidia merrelli	NO	+/- 6"	+/- 30'	+/- 6'	FAIR	REMAIN	29 SF	0 SF	PRESERVE + PROTECT.	PERMIT REQUIRED
#2	Chinese Fan Palm	Livistonia chinensis	YES	+/- 12"	+/- 25'	+/- 8'	FAIR	REMOVE	51 SF	51 SF	IN CONFLICT WITH SITE DESIGN. MITIGATION PROVIDED	PERMIT REQUIRED
#3	Pygmy Date Palm	Phoenix roebellini	NO	+/- 4"	÷/-,5'	+/- 5'	POOR	REMOVE	20 SF	20 SF	IN CONFLICT WITH SITE DESIGN. MITIGATION PROVIDED	N/A - NO PERMIT REQUIRED
#4	Royal Palm	Roystonea elata	YES	+/- 18"	+/- 45'	+/- 30'	GOOD	REMAIN	707 SF	0 SF	PRESERVE + PROTECT.	
#5	Christmas Palm	Adonidia merrelli	NO	+/- 6"	+/- 25'	+/- 6'	FAIR	REMAIN	29 SF	0 SF	PRESERVE + PROTECT.	PERMIT REQUIRED
#6	Christmas Palm	Adonidia merrelli	NO	+/- 6"	+/- 25'	+/- 6'	FAIR	REMAIN	29 SF	0 SF	PRESERVE + PROTECT.	PERMIT REQUIRED
#7	Christmas Palm	Adonidia merrelli	NO	+/- 6"	+/- 25'	+/- 6'	FAIR	REMAIN	29 SF	0 SF	PRESERVE + PROTECT.	PERMIT REQUIRED
#8	Christmas Palm	Adonidia merrelli	NO.	+/- 6"	+1- 25	+/- 6'	FAIR (REMOVE	29 SF	29.SF	IN CONFLICT WITH SITE DESIGN. MITIGATION PROVIDED	PERMIT REQUIRED
#9	Royal Palm	Roystonea elata	YES	-+/- 18"	+/- 45'	∄s +/- 30'	FAIR	REMOVE	707 SF	707.SF	IN CONFLICT WITH SITE DESIGN, MITIGATION PROVIDED.	PERMIT REQUIRED
#10	Weeping Fig	Ficus benjamina	YES	+/- 12"	+/- 35'	+/- 20'	FAIR	REMAIN	314 SF	314 SF	PRESERVE + PROTECT.	PERMIT REQUIRED
#11	Weeping Fig	Ficus benjamina	YES	+/- 12"	+/- 35'	+/- 20'	FAIR	REMAIN	314 SF	314 SF	PRESERVE + PROTECT.	PERMIT REQUIRED
#12	Bismarck Palm	Bismarckia nobilis	YES	+/- 30"	+/- 30'	+/~18'	POOR	REMOVE or RELOCATE	254 SF	254 SF	IN CONFLICT WITH SITE DESIGN, MITIGATION PROVIDED	PERMIT REQUIRED
#13	Mango Tree	Mangifera indica	YES	+/- 18"	+/- 18'	+/- 15'	FAIR	REMAIN	177 SF	0 SF	PRESERVE + PROTECT.	PERMIT REQUIRED
#14	Weeping Fig	Ficus benjamina	YES	+/- 18"	+/- 25'	+/- 15'	FAIR	REMAIN	177 SF	0 SF	PRESERVE + PROTECT.	PERMIT REQUIRED
#15	Pygmy Date Palm	Phoenix roebellini	NO	+/- 4"	+/- 8'	+/- 5'	FAIR	REMAIN	20 SF	0 SF	PRESERVE + PROTECT.	N/A - NO PERMIT REQUIRED
#16	Christmas Palm	Adonidia merrelli	' NO	+/- 6"	* - +/- 25'	+/- 6'	GOOD	REMOVE	29 SF	.29 SF	IN CONFLICT WITH SITE DESIGN, MITIGATION PROVIDED	PERMIT REQUIRED
#17	Christmas Palm	Adonidia merrelli	NO	+/- 6"	+/- 25	. , +/- 6'	GOOD	REMOVE	29 SF	29 SF	IN CONFLICT WITH SITE DESIGN, MITIGATION PROVIDED	PERMIT REQUIRED
#18	Royal Palm	Roystonea elata	YES	+/- 18"	+/- 50'	+/- 40'	GOOD	REMOVE or RELOCATE	707 SF	707 SF	IN CONFLICT WITH SITE DESIGN, MITIGATION PROVIDED	PERMIT REQUIRED
#19	Royal Palm	Roystonea elata	YES	+/- 18"	+/- 50'	+/- 40	GOOD	REMOVE or RELOCATE	707 SF	707 SF	IN CONFLICT WITH SITE DESIGN, MITIGATION PROVIDED	PERMIT REQUIRED
#20	Bird of Paradise	Strelitzia regina	NO	+/- 2"	+/- 25'	+/- 8'	'GOOD	REMOVE	51 SF	51 SF	IN CONFLICT WITH SITE DESIGN, MITIGATION PROVIDED	N/A - NO PERMIT REQUIRED
#21	Bird of Paradise	Strelitzia regina	NO	+/- 2"	+/- 25'	+/- 8'	GOOD "	REMOVE	51 SF	51 SF	IN CONFLICT WITH SITE DESIGN, MITIGATION PROVIDED	N/A - NO PERMIT REQUIRED
#22	Bird of Paradise	Strelitzia regina	NO	: +/- 2"	+/- 25'	. +/- 8'	GOOD	REMOVE	51 SF	51 SF	IN CONFLICT WITH SITE DESIGN, MITIGATION PROVIDED	N/A - NO PERMIT REQUIRED
#23	Alexander Palms	Ptychosperma elegans	NO	+/- 2"	+/- 20'	+/- 4'	GOOD	REMOVE	13 SF	13.SF	IN CONFLICT WITH SITE DESIGN, MITIGATION PROVIDED	N/A - NO PERMIT REQUIRED
#24	Alexander Palms	Ptychosperma elegans	NO	+/- 3"	+/- 20'	+/6'	GOOD	REMOVE	29 SF	29 SF	IN CONFLICT WITH SITE DESIGN, MITIGATION PROVIDED	N/A - NO PERMIT REQUIRED
#25	Bird of Paradise	Strelitzia regina	NO	+/- 36"	+/- 30'	+/- 20'	GOOD	REMAIN	314 SF	0 SF	PRESERVE + PROTECT.	PERMIT REQUIRED
#26	Bird of Paradise	Strelitzia regina	NO	+/- 36"	+/- 30'	+/- 20'	GOOD	REMAIN	314 SF	0 SF	PRESERVE + PROTECT.	PERMIT REQUIRED

TOTAL MITIGATION REQUIRED: 2,728 SF **TOTAL MITIGATION PROVIDED: 8,000 SF**

EXISTING TREE SURVEY + DISPOSITION PLAN



date: 2/3/17

revised:

CMP PARKING PLAN <u>11</u> 03.02.17

BD COMMENTS <u>/L2\</u> 04.01.17



LANDSCAPE PLAN LEGEND

'EMPIRE TURF' ZOYSIA GRASS - OVER 2" TOPSOIL BED, SEE PLANTING SPECS

EXISTING VEGETATION ON ADJACENT PROPERTY

- B 3/8" GRAY DECOMPOSED GRANITE AGGREGATE OVER FILTER FABRIC
- CONTEMPORARY CONTAINERS OR POTS TO BE SELECTED
- STONE PAVERS TO BE SELECTE
- 15' SITE TRIANGLE PER MB STANDARDS

LANDSCAPE PLAN NOTES

- 1. CONTRACTOR SHALL REMOVE ALL STAKES, POLES, WELLINGTON TAPE AND / OR BRACING MATERIALS FROM ALL PALMS, TREES, AND SHRUBS, WITHIN (1) YEAR OF INSTALLATION. THIS NOTE IS APPLICABLE TO ALL PLANTING DETAILS ON THIS SHEET.
- 2. EXISTING SITE CONDITIONS HAVE BEEN FIELD VERIFIED BY LANDSCAPE ARCHITECT.
- 3. ALL LANDSCAPE AREAS TO BE 100% COVERED BY A FULLY AUTOMATIC IRRIGATION SYSTEM WITH RAIN SENSOR. CONTRACTOR TO PROVIDE SHOP DRAWING OF MODIFIED IRRIGATION SYSTEM TO LANDSCAPE ARCHITECT FOR REVIEW AND APPROVAL.
- 4. SHEETS L-1 thru L-4 TO BE UTILIZED FOR LANDSCAPE AND IRRIGATION PURPOSES ONLY. ALL SITE IMPROVEMENTS INCLUDING GRADING AND DRAINAGE TO BE BY OTHERS. REFER TO ARCHITECTURE AND ENGINEERING PLANS FOR ALL ADDITIONAL INFORMATION.

KEY	NATIVE	QTY.	COMMON NAME	BOTANICAL NAME	HEIGHT, SPECIFICATION, & NOTES
TREES					
СВ	NO	ALT	BRAZILIAN BEAUTYLEAF TREE	Callophyllum brasiliensis	45 gallon, 14' height x 6-8' spread, 4' clear trunk, 3" caliper
CR	YES	25	PITCH APPLE TREE	Clusia rosea	45 gallon, 16' height x 6-8' spread, 4' clear trunk, 3" caliper
MF	YES	11	SIMPSON STOPPER TREE	Myrcianthes fragrens	45 gallon, 12' height x 5' spread, 4' clear trunk, 3" caliper
PI	NO	18	BAYRUM TREE	Pimenta racemosa	45 gallon, 12' height x 6' spread, 2" caliper, standard
PALMS					
PM	NO	9	'MEDJOOL' DATE PALM	Phoenix dactylifera 'Medjool'	Field grown specimen, 14' clear trunk, diamond cut, certified,
RH	NO	30	LADY PALM	Rhapis excelsa	4' overall height, full to base, space 36" on center, equal to Botanics Wholesale
SHRUBS					
CAM	NO	75	CARRISSA 'EMERALD BLANKET'	Carissa mac. "Emerald Blanket'	3 gallon, full, space 18" on center
CHR	YES	200	HORIZONTAL COCOPLUM	Chrysobalanus icaco 'Horizontal'	7 gallon, full, space 24" on center
GYL	YES	34	CRABWOOD SHRUB	Gymnanthes lucida	15 gallon, 5' height x 5' spread, 36" on center

NOTE: CONTRACTOR TO PROVIDE IMAGES OF ALL MAJOR PLANT MATERIAL TO LANDSCAPE ARCHITECT AND OWNER FOR APPROVAL BEFORE PURCHASE + INSTALLATION. LANDSCAPE CONTRACTOR TO MEET WITH LANDSCAPE ARCHITECT AND OWNER ON SITE TO REVIEW THE PROPOSED DESIGN PRIOR TO SUBMITTING A BID FOR THE PROJECT. THE LANDSCAPE CONTRACTOR IS TO PROVIDE AN ADDITIONAL ALLOWANCE OF \$5,000 DOLLARS FOR POTTED PLANTS + MISCELLANEOUS VEGETATION TO BE SELECTED DURING THE INSTALLATION OF THE PROJECT

KEY	NATIVE	QTY.	COMMON NAME	BOTANICAL NAME	HEIGHT, SPECIFICATION, & NOTES		
ROPICA	LS, GROUI	NDCOVE	RS, + ACCENTS				
CYR	NO	3	KING SAGO	Cycas revoluta	15 gallon, 3' height min X 3' spreadmin		
DIS	NO	4	DIOON SPINULOSUM	Dioon spinulosum	7 gallon, 36" height X 36"spread,		
LIR	NO	202	LILY TURF	Liriope muscari	3 gallon, full, 18" on center		
MIC	NO	25	WART FERN	Microsorum scolopendrium	1 gallon, full, space 18" on center		
NEG	NO	47	APOSTLE'S IRIS	Neomarica gracilis	3 gallon, full, space 24" on center		
PIL	NO	45	ARTILLERY FERN	Pilea serpyllacea 'Stoplight'	1 gallon, full, space 12" on center		
PRC	NO	32	PHILODENDRON 'ROJO CONGO'	Same	3 gallon, full, space 18" on center		
TRD	YES	40	FAKAHATCHEE GRASS	Tripsacum dactyloides	3 gallon, full, space 18" on center		
ZAP	YES	35	COONTIE	Zamia pumila	3 gallon, full, space 18" on center		
SOD, AG	GREGATE	& MULC	Н				
DGA	3/8" D	3/8" DECOMPOSED GRANITE AGGREGATE OR STONE TO BE SELECTED, INSTALLED OVER WEED BARRIER MATERIAL / OLIMAR, 2" MIN. DEPTH					
MLC	DARK	BROWN	FLORI MULCH' SHREDDED ORGAN	IC MULCH (NO CYPRESS), TO	BE DETERMINED		
SOD	'EMPIRE TURF' ZOYSIA GRASS - OVER 2" TOPSOIL BED, SEE PLANTING SPECS						

REVIEW FOR CODE COMPLIANC

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Florida License LA 6666786

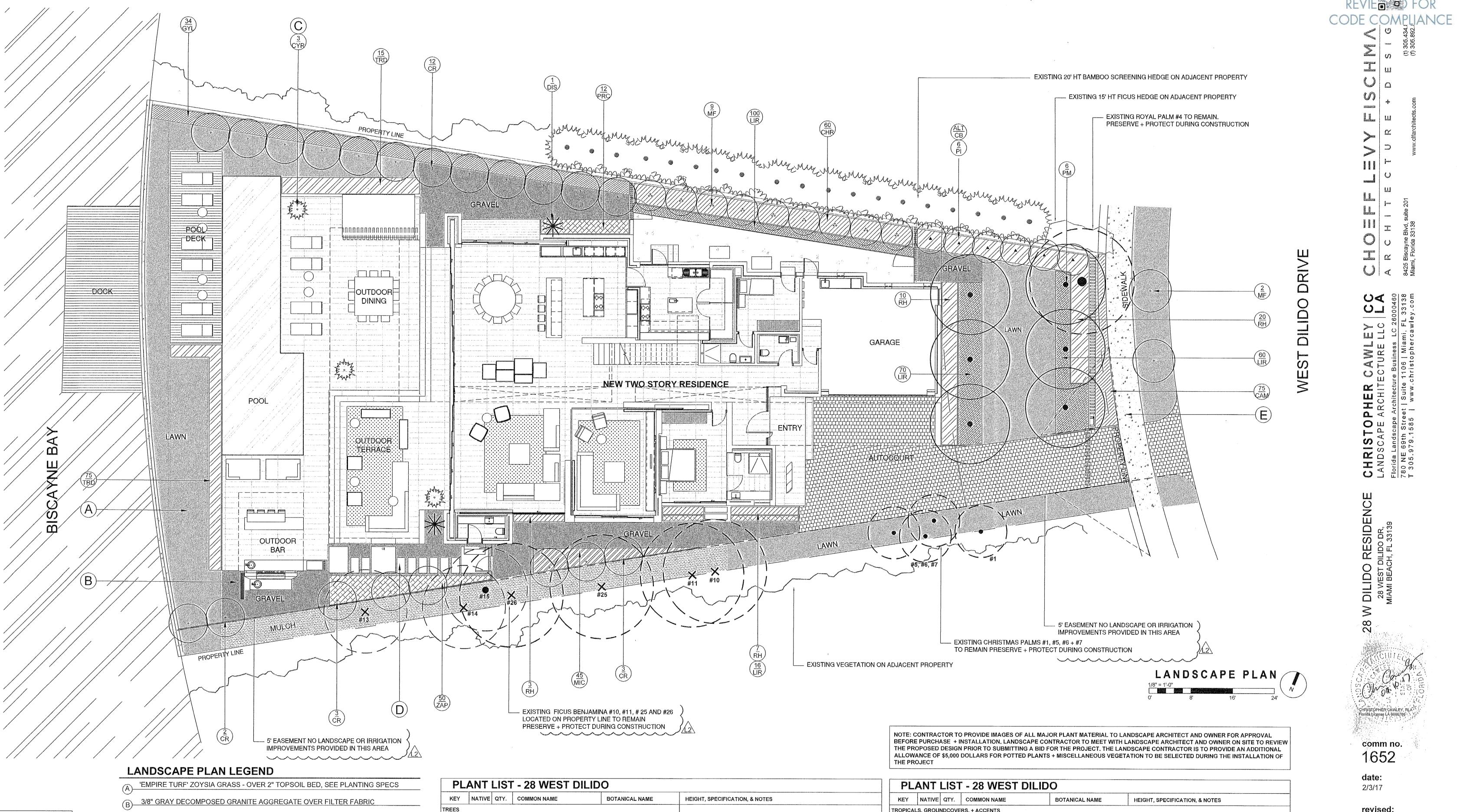
comm no. 1652

date: 2/3/17

revised:

sheet no.

L-2





LANDSCAPE PLAN NOTES

1. CONTRACTOR SHALL REMOVE ALL STAKES, POLES, WELLINGTON TAPE AND / OR BRACING MATERIALS FROM ALL PALMS, TREES, AND SHRUBS, WITHIN (1) YEAR OF INSTALLATION. THIS NOTE IS APPLICABLE TO ALL PLANTING DETAILS ON THIS SHEET.

E 15' SITE TRIANGLE PER MB STANDARDS

(D) STONE PAVERS TO BE SELECTED

(C) CONTEMPORARY CONTAINERS OR POTS TO BE SELECTED

- 2. EXISTING SITE CONDITIONS HAVE BEEN FIELD VERIFIED BY LANDSCAPE ARCHITECT.
- 3. ALL LANDSCAPE AREAS TO BE 100% COVERED BY A FULLY AUTOMATIC IRRIGATION SYSTEM WITH RAIN SENSOR. CONTRACTOR TO PROVIDE SHOP DRAWING OF MODIFIED IRRIGATION SYSTEM TO LANDSCAPE ARCHITECT FOR REVIEW AND APPROVAL.
- 4. SHEETS L-1 thru L-4 TO BE UTILIZED FOR LANDSCAPE AND IRRIGATION PURPOSES ONLY. ALL SITE IMPROVEMENTS INCLUDING GRADING AND DRAINAGE TO BE BY OTHERS. REFER TO ARCHITECTURE AND ENGINEERING PLANS FOR ALL ADDITIONAL INFORMATION.

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TREES							T
СВ	NO	ALT	BRAZILIAN BEAUTYLEAF TREE	Callophyllum brasiliensis	65 gallon, 16' height x 6-8' spread, 4' clear trunk, 3" caliper		_
CR	YES	20	PITCH APPLE TREE	Clusia rosea	45 gallon, 16' height x 6-8' spread, 4' clear trunk, 3" caliper		-
MF	YES	11	SIMPSON STOPPER TREE	Myrcianthes fragrens	45 gallon, 12' height x 5' spread, 4' clear trunk, 3" caliper		_
Pl	NO	6	BAYRUM TREE	Pimenta racemosa	45 gallon, 12' height x 6' spread, 2" caliper, standard		_
PALMS							_
PM	NO	6	'MEDJOOL' DATE PALM	Phoenix dactylifera 'Medjool'	Field grown specimen, 14' clear trunk, diamond cut, certified,		
RH	NO	40	LADY PALM	Rhapis excelsa	4' overall height, full to base, space 36" on center, equal to Botanics Wholesale		
SHRUBS						1	
CAM	NO	75	CARRISSA 'EMERALD BLANKET'	Carissa mac. "Emerald Blanket'	3 gallon, full, space 18" on center		S

Gymnanthes lucida

Chrysobalanus icaco 'Horizontal' 7 gallon, full, space 24" on center

15 gallon, 5' height x 5' spread, 36" on center

YES 60 HORIZONTAL COCOPLUM

YES 34 CRABWOOD SHRUB

	11(01107)	,	100012	1100
	CYR	NO	3	k
	DIS	NO	ALT	E
	LIR	NO	250	L
	MIC	NO	25	٧
	PIL	NO	45	A
	PRC	NO	12	F
cs Wholesale	TRD	YES	100	F
	ZAP	YES	50	C
	SOD, AGG	REGATE	& MULCI	1
	DGA	3/8" DI	ECOMPO	SE
	MLC	DARK	BROWN	'FL

KEY	NATIVE	QTY.	COMMON NAME	BOTANICAL NAME	HEIGHT, SPECIFICATION, & NOTES	
OPICAL	.s, groui	NDCOVE	RS, + ACCENTS	***************************************		
CYR	NO	3	KING SAGO	Cycas revoluta	15 gallon, 3' height min X 3' spreadmin	
DIS	NO	ALT	DIOON SPINULOSUM	Dioon spinulosum	7 gallon, 36" height X 36"spread,	
LIR	NO	250	LILY TURF	Liriope muscari	3 gallon, full, 18" on center	
MIC	NO	25	WART FERN	Microsorum scolopendrium	1 gallon, full, space 18" on center	
PIL	NO	45	ARTILLERY FERN	Pilea serpyllacea 'Stoplight'	1 gallon, full, space 12" on center	
PRC	NO	12	PHILODENDRON 'ROJO CONGO'	Same	3 gallon, full, space 18" on center	
TRD	YES	100	FAKAHATCHEE GRASS	Tripsacum dactyloides	3 gallon, full, space 18" on center	
ZAP	YES	50	COONTIE	Zamia pumila	3 gallon, full, space 18" on center	
D, AGG	REGATE	& MULC	H			

SED GRANITE AGGREGATE OR STONE TO BE SELECTED, INSTALLED OVER WEED BARRIER MATERIAL / OLIMAR, 2" MIN. DEPTH LORI MULCH' SHREDDED ORGANIC MULCH (NO CYPRESS), TO BE DETERMINED SOD 'EMPIRE TURF' ZOYSIA GRASS - OVER 2" TOPSOIL BED, SEE PLANTING SPECS

comm no. 1652

date: 2/3/17

revised:

CMP PARKING PLAN <u>/L1\</u> 03.02.17

<u>/L2\</u> 04.01.17

sheet no.

LANDSCAPE NOTES

- 1. ALL PLANT MATERIAL SHALL BE FLORIDA GRADE NO. 1 OR BETTER.
- 2. CONTRACTOR SHALL BECOME FAMILIAR WITH THE LOCATION OF, AVOID, AND PROTECT ALL UTILITY LINES, BURIED CABLES, AND OTHER UTILITIES.
- 3. TREE, PALM, ACCENT AND BED LINES ARE TO BE LOCATED IN THE FIELD AND APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.

ANY CHANGES TO R.O.W. (RIGHT OF WAY) MATERIAL IN REGARDS TO PLACEMENT OF SPECIES SHALL REQUIRE THE APPROVAL AND CONSULTATION OF THE CITY URBAN FORESTER AND OR CITY STAFF.

4. ALL PLANTING SOIL SHALL BE 50:50 TOPSOIL:SAND MIX, FREE OF CLAY, STONES, ROCKS, OR OTHER FOREIGN MATTER. THIS SPECIFICATION INCLUDES ALL BACKFILL FOR BERMS AND OTHER LANDSCAPE AREAS.

CARE SHALL BE TAKEN TO AVOID PLACEMENT OF CONSTRUCTION FILL, GRAVEL, AND OR DEBRIS OVER THE ROOTBALLS OF INSTALLED OR EXISTING TREES AND OR PALMS ON SITE.

SODDED-LAWN AREAS

2" DEPTH PLANTING SOIL SPREAD IN PLACE- THROUGHOUT

GROUNDCOVER PLANTING BEDS:
6" DEPTH PLANTING SOIL SPREAD IN PLACE- THROUGHOUT.

SHRUB AND HEDGE PLANTING AREAS:

12" DEPTH PLANTING SOIL SPREAD IN PLACE- THROUGHOUT.

TREES, PALMS, SPECIMEN PLANT MATERIAL LOCATIONS REMOVE ALL LIMEROCK PRESENT TO A DEPTH OF AT LEAST 30"BEFORE PLACING NEW PLANTING SOIL. APPLY NEW CLEAN PLANTING SOIL IN PLANTING AREA AS REQUIRED

THE SITE CONTRACTOR SHALL BE RESPONSIBLE TO BRING ALL GRADES TO WITHIN 2" OF FINAL GRADES. THIS SHALL INCLUDE A 2" APPLICATION OF 50:50 TOPSOIL:SAND MIX FOR ALL LANDSCAPE AND AREAS TO BE SODDED.

- 5. THE LANDSCAPE CONTRACTOR SHALL CALCULATE AND SUBMIT AN ITEMIZED PRICE FOR THE 2" APPLICATION OF 50:50 MIX FOR ALL SOD AREAS AS A REFERENCE IN THE CASE THAT THERE WOULD BE A DISCREPANCY BETWEEN SITE AND LANDSCAPE CONTRACTORS AND NOTIFY THE SITE CONTRACTOR OR PROJECT SUPERINTENDENT AS TO THIS DISCREPANCY. IT WILL THEN BE DETERMINED WHICH PARTY WILL PROVIDE THIS 2" TOPSOIL:SAND APPLICATION AND SUBSEQUENT PAYMENT.OTHER PLANTING SOIL MIXES TO BE ADDED, I.E. FOR TREES, PALMS, SPECIMEN PLANTS, SHRUBS AND GROUND COVERS SHALL BE THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR AND BE INCLUSIVE WITH THE LANDSCAPE BID.
- 6. ALL EXISTING TREE + PALM INFORMATION THAT HAS BEEN PROVIDED ON THIS PLAN FOLLOWS THE MIAMI DADE COUNTY E.R.M. TREE PERMITTING GUIDELINES. ANY TREES or PALMS CONSIDERED INVASIVE OR THAT FALLS UNDER THE TREE PERMIT EXEMPTION / PROHIBITED SPECIES LIST 24-94 (4) MAY NOT BE SHOWN FOR CLARITY PURPOSES. ANY DISCREPANCIES IF NOTED UPON FURTHER FIELD INSPECTION SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE LANDSCAPE ARCHITECT
- 7. IRRIGATION SHALL PROVIDE FOR A 100% COVERAGE WITH 50% OVERLAP MINIMUM AND BE PROVIDED BY A FULLY AUTOMATIC IRRIGATION SYSTEM W/ RAIN MOISTURE SENSOR ATTACHED TO CONTROLLER. ALL FLORIDA BUILDING CODE APPENDIX "F" IRRIGATION REQUIREMENTS SHALL BE STRICTLY ADHERED TO FOR INSTALLATION AND PREVAILING WATER MANAGEMENT DISTRICT RESTRICTIONS AND REGULATIONS SHALL BE IN COMPLIANCE FOR POST-INSTALLATION WATERING SCHEDULES.CONTRACTOR SHALL COORDINATE WITH THE IRRIGATION CONTRACTOR AND LEAVE PROVISIONS FOR ALL SLEEVING AND PIPE ROUTING. ALL UNDERGROUND UTILITIES TO BE LOCATED BY DIALING

811 AS REQUIRED BY LAW.

- 8. ALL PLANTING BEDS SHALL BE MULCHED TO A DEPTH OF 2" WITH A SMALL GRAY GRANITE AGGREGATE or APPROVED ORGANIC MULCH FREE FROM WEEDS AND PESTS. NO 'CYPRESS MULCH' OR 'RED DYED MULCH' TO BE ACCEPTED. KEEP MULCH 6" AWAY FROM TREE OR PALM TRUNKS AS PER INDUSTRY RECOMMENDATIONS.
- 9. SOD SHALL BE 'EMPIRE TURF' ZOYSIA GRASS IN ALL LAWN AREAS AS SHOWN ON THE PLANS. SOD SHALL BE STRONGLY ROOTED, FREE FROM WEED, FUNGUS, INSECTS AND DISEASE. CONTRACTOR SHALL SOD ALL AREAS AS INDICATED ON THE PLANS OR AS DIRECTED. PAYMENT SHALL BE DETERMINED BY THE TOTAL MEASURED SODDED AREAS X THE UNIT PRICE SUBMITTED AND FIELD VERIFIED. SOD SHALL CARRY A 5-MONTH
- 10. ALL TREES, PALMS, SHRUBS AND GROUNDCOVERS, AND SOD / LAWN SHALL CARRY A ONE-YEAR WARRANTY FROM THE DATE OF FINAL ACCEPTANCE.
- 11. ALL TREES AND PALMS SHALL BE STAKED PER ACCEPTED STANDARDS BY THE FLORIDA NURSERYMEN & GROWERS LANDSCAPE ASSOCIATION (FNGLA) AND ANSI A-300 (PART 6)-2012 TREE, SHRUB, AND OTHER WOODY PLANT MANAGEMENT STANDARD PRACTICES (PLANTING AND TRANSPLANTING). CONTRACTOR SHALL ENSURE THAT THE PLANS, DETAILS, SPECIFICATIONS AND NOTES HAVE BEEN ADHERED TO AND THAT THE LANDSCAPE AND IRRIGATION INSTALLATION IS COMPLIANT TO ALL ITEMS AS DIRECTED ON THE PLANS PRIOR TO SCHEDULING OF THE FINAL INSPECTION.

CONTRACTOR SHALL REMOVE ALL STAKES, POLES, WELLINGTON TAPE AND OR BRACING MATERIALS FROM ALL PALMS, TREES AND SHRUBS WITHIN 1 YEAR OF INSTALLATION.

- 12. THE PLANT LIST IS INTENDED ONLY AS AN AID TO BIDDING. ANY DISCREPANCIES FOUND BETWEEN THE QUANTITIES ON THE PLAN AND PLANT LIST, THE QUANTITIES ON THE PLAN SHALL BE HELD VALID.
- 13. IF NECESSARY, CONTRACTOR SHALL PROVIDE A WATER TRUCK DURING PLANTING TO ENSURE PROPER WATERING-IN DURING INSTALLATION AND CONTRACTOR WILL BE RESPONSIBLE FOR CONTINUAL WATERING UNTIL FINAL ACCEPTANCE BY THE OWNER.

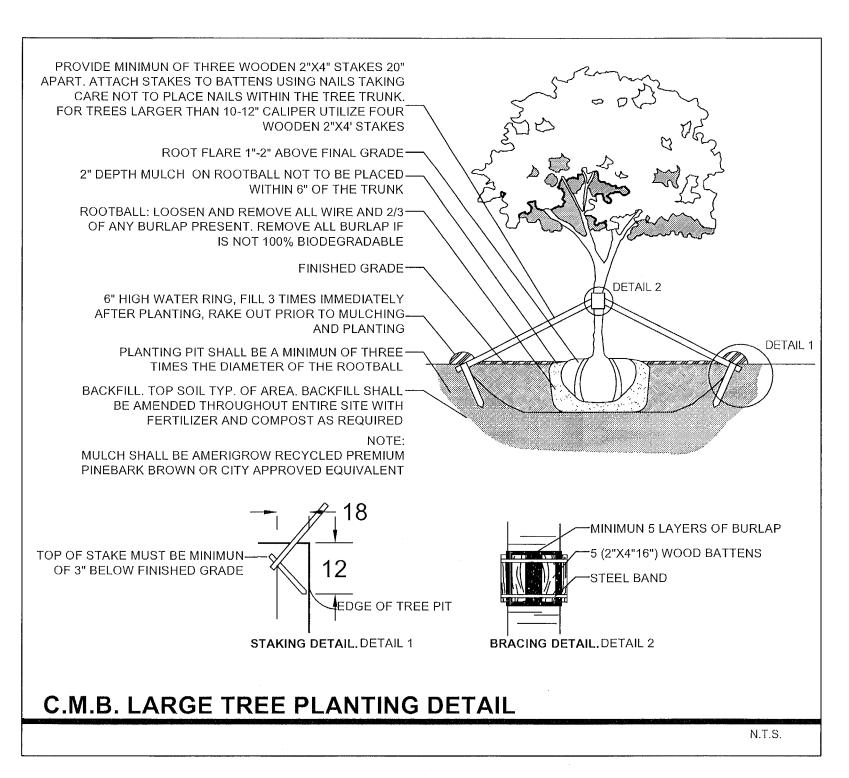
A MINIMUM OF 6 MONTHS OF SUPPLEMENTAL HAND OR AUTOMATIC IRRIGATION SYSTEM WATERING SHALL BE REQUIRED TO AID IN NEW TREE OR PALM

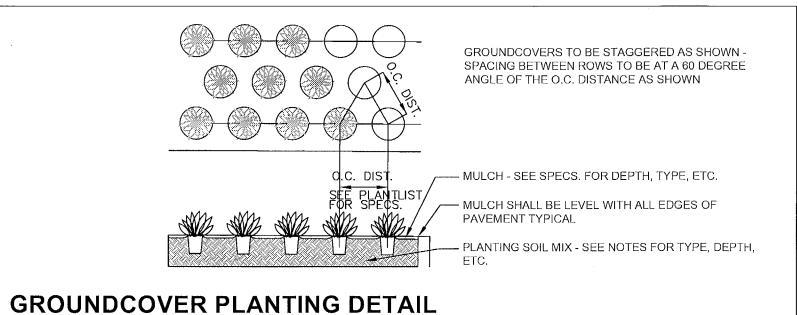
- 14. FERTILIZATION: ONE COMPLETE APPLICATION OF GRANULAR FERTILIZER SHALL BE APPLIED PRIOR TO FINAL ACCEPTANCE AND APPROVAL BY THE LANDSCAPE ARCHITECT. FERTILIZER SHALL BE OSMACOTE OR APPROVAL EQUAL
- 15. SHOULD ANY TREES OR PALMS BE DAMAGED THEY SHALL BE EVALUATED BY THE CITY URBAN FORESTER TO DETERMINE CORRECTIVE ACTIONS THAT MAY INCLUDE REMOVAL. CORRECTIVE PRUNING AND OR REPLACEMENT. ANY CORRECTIVE ACTION REQUIRED SHALL BE PERFORMED IN ACCORDANCE WITH A MIAMI DADE COUNTY CODE, ANSI-A 300 PRUNING STANDARDS AND OR AN ISSUED ERM TREE PERMIT OR ENVIRONMENTAL PERMIT. ANY CORRECTIVE PRUNIING REQUIRED SHALL BE PERFORMED BY AN ISA CERTIFIED ARBORIST OR ASCA CONSULTING ARBORIST AND THE CITY URBAN FORESTER SHALL BE CONSULTED.
- 16. CITY OF URBAN FORESTER AND OR PLANNING DEPARTMENT STAFF TO APPROVE ROW TREES BEFORE THEY ARE PLANTED.
- 20. MULCH SHALL NOT BE APPLIED WITHIN 6" OF ANY TREE OR PALM TRUNK THAT IS INSTALLED OR INCORPORATED INTO THE PROJECT. FOR ROW TREES, ALL MULCH SHALL BE AMERIGROW 'PREMIUM PINEBARK BROWN' SHREDDED MULCH OR A CITY APPROVED ALTERNATIVE.

IRRIGATION NOTES

- IRRIGATION CONTRACTOR SHALL PROVIDE, FURNISH, AND INSTALL A FULLY AUTOMATIC IRRIGATION SYSTEM WHICH WILL COMPLY WITH ALL LOCAL CODE, STATE CODE, & WATER MANAGEMENT DISTRICT (SWFMD) REQUIREMENTS.
- 2. THE IRRIGATION CONTRACTOR SHALL SCHEDULE AN ON-SITE PRE-CONSTRUCTION CONFERENCE WITH THE OWNER AND THE OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO COMMENCEMENT OF INSTALLATION OF THE IRRIGATION SYSTEM.
- 3. CONTRACTOR SHALL INSTALL POP-UP TYPE HEADS. SPRAY TYPE SHALL BE ROTOR, IMPACT, SPRAY, OR BUBBLER AND SHALL BE INSTALLED SO AS NOT TO CAUSE ANY OVERSPRAY ONTO ANY PAVED SURFACES, I.E. ROADS, SIDEWALKS, ETC. ALL FIXTURES SHALL BE "TORO", "RAINBIRD" OR AN APPROVED EQUAL. ALL WORK SHALL BE DONE IN A PROFESSIONAL MANNER AS PER MANUFACTURER'S SPECIFICATIONS.
- 4. ALL MAIN SUPPLY LINE SHALL BE PVC SCHEDULE 40 PIPE. ALL PVC FITTINGS SHALL BE SCHEDULE 40. THE MAINLINE IS SHOWN SCHEMATICALLY, LOCATE MAIN LINES IN LANDSCAPE AREAS WHERE POSSIBLE AND SLEEVE UNDER PAVEMENT WHERE NECESSARY. MAINLINES SHALL BE IN THE SAME TRENCH WITH THE LATERAL LINES WHERE POSSIBLE.
- CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE LOCATION OF AND AVOID & PROTECT ALL UTILITY LINES, DUCTS, BURIED CABLES AND OTHER UTILITIES IN THE AREA. CONTRACTOR WILL BE RESPONSIBLE FOR THE REPAIR, LIABILITY, AND COSTS INCURRED IN THE DAMAGE OR DESTRUCTION OF SAID UTILITIES. CALL SUNSHINE STATE ONE CALLS 811, 48 HOURS PRIOR TO COMMENCEMENT OF ANY WORK FOR PROPER UTILITY LOCATION AND CLEARANCES.
- 6. THE CONTRACTOR SHALL SECURE ALL WORK WITH THE PROJECT MANAGER, LANDSCAPE CONTRACTOR AND ALL OTHER CONTRACTORS TO INSURE PROPER INSTALLATION, SCHEDULING, AND PROCEDURE.
- 7. THE CONTRACTOR SHALL COORDINATE WITH THE PROJECT MANAGER TO PROVIDE ELECTRICAL SUPPLY TO THE CONTROLLER, PUMP, ETC. AS NEEDED.

- 8. THE CONTRACTOR SHALL BE RESPONSIBLE TO SECURE ALL PERMITS AS MAY BE DEEMED NECESSARY TO PERFORM THE WORK. ENTIRE SYSTEM SHALL BE INSTALLED IN COMPLIANCE WITH ALL LOCAL AND STATE CODES.
- 9. ALL SLEEVES UNDER PAVEMENT SHALL BE BURIED PER FLORIDA BUILDING CODE, APPENDIX "F". ALL LATERAL SLEEVES UNDER SIDEWALKS SHALL BE BURIED BELOW WALKWAYS AND SHALL BE SCHEDULE 40 PVC. ALL SLEEVING SHALL BE SCHEDULE 40 PVC PIPE AND SHALL BE 2 TIMES THE MAIN OR LATERAL PIPE SIZE.
- 10. THE CONTRACTOR SHALL CONNECT THE MASTER VALVE (WHEN APPLICABLE) AND ALL ELECTRIC VALVES TO THE CONTROLLER AND PROVIDE PROPER SYNCHRONIZATION.
- 11. ALL LOW VOLTAGE ELECTRIC VALVES SHALL BE #14 DIRECT BURIAL, ALL WIRES UNDER ROADS TO BE PLACED IN A SPERARATE 1" SLEEVE, CONTRACTOR SHALL PROVIDE A MINIMUM OF TWO EXTRA WIRES FOR EMERGENCY POST INSTALLATION WIRING.
- 12. ALL LINE LOCATIONS ARE APPROXIMATE. THE CONTRACTOR SHALL ADJUST TRENCHING AND LOCATION OF SPRAY HEADS IN THE FIELD FOR EXISTING CONDITIONS, WALKS, UTILITIES, STRUCTURES, AND PLANTINGS TO PROVIDE AND INSURE 100% COVERAGE AND 100% OVERLAP.
- 13. CONTRACTOR SHALL PROVIDE A ONE-YEAR GUARANTEE ON ALL PARTS AND A 90 DAY GUARANTEE ON LABOR FROM THE DATE OF FINAL ACCEPTANCE...
- 14. THE IRRIGATION CONTRACTOR SHALL RECORD ALL CHANGES MADE TO THE IRRIGATION SYSTEM DURING INSTALLATION, AND PROVIDE AN AS-BUILT DRAWING O THE OWNER'S REPRESENTATIVE UPON COMPLETION AND ACCEPTANCE OF THE WORK.
- 15. THE IRRIGATION CONTRACTOR SHALL INSTRUCT THE OWNER OR THE OWNER'S REPRESENTATIVE IN THE COMPLETE OPERATION AND MAINTENANCE OF THE SYSTEM. THE CONTRACTOR SHALL FURNISH TWO COPIES OF AN IRRIGATION SYSTEM MANAGEMENT MANUAL PREPARED BY THE MANUFACTURER AND THE SYSTEM INSTALLER.





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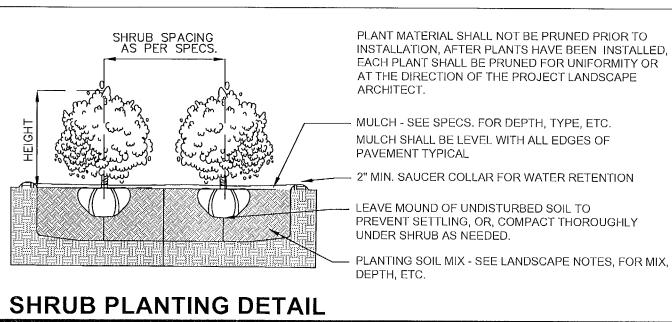
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-NAIL BRACING TO WOOD BATTONS (DO NOT ALLOW NAILS TO PENETRATE TRUNK) ~3/4" STEEL BANDING _(3) 2"X4" WOOD BRACES SPACED 120-DEGREES O.C (see notes below) BASE OF LEAD BUD - 3" DEPTH MULCH LAYER-REFER TO SPECIFICATION ORANGE SAFETY --- 26" COMPACTED SOIL SAUCE TO HOLD WATER FLAGS ON --ALL BRACING - 2"X4"X30" TREE STAKE - FINAL GRADE - NATIVE SOIL BACKFILL OR AMENDED PLANTING SOIL AS REQUIRED BY SOIL ANALYSIS PLANTING ROOTBALL RECEIVING PLANTING HOLE 1. PALMS OVER 30' GW HEIGHT, USE MINIMUN (4) 4X4 BRACING AND STAKES 2. PRIMARY STAKES SHOULD PLACED PARALLEL TO WALKWAYS WHENEVER POSSIBLE 3. RECEIVING PLANTING HOLE SHALL BE APPROXIMATELY 1/3 LARGER THAN ROOTBALL 4. BUD SHALL BE PERPENDICULAR TO THE GROUND PLANE 5. TRUNK SHALL BE STRAIGHT AND WITHOUT CURVES 6. NO SCARRED OR BLACKENED TRUNKS 7. AMENDED SOIL MIX TO BE ADDED AT THE TIME OF PLANTING NEEDED, SHALL CONSIST OF A RATIO MIX OF 80% CLEAN SILICA SAND AND 20% SCREENED PULVERIZED TOPSOIL AS NEEDED

C.M.B. PALM PLANTING DETAIL

N.T.S.



LANDSCAPE LEGEND MIAMI BEACH LANDSCAPE ORDINANCE CHAPTER 26 (RS1 - RS4 Single Family Home Residential)

ZONING: **LOT SIZE:** 14,166 SF **ACRES:** .32

FRONT YARD - 2 TREES REQUIRED / 2 TREES PROVIDED REAR YARD -3 TREES REQUIRED / 3 TREES PROVIDED

TOTAL OF 5 TREES REQUIRED FOR LOTS UP TO 6,000 SF. 1 ADDITIONAL TREE IS REQUIRED FOR EACH ADDITIONAL 1,000 SF OF LOT AREA. 14,166 SF - 6000 SF = 8,166 SF

14,166 SF = 14 TOTAL TREES REQUIRED / 54 TREES PROVIDED.

(25 NATIVE PITCH APPLE TREES + 11 SIMPSON STOPPER TREES + 18 BAYRUM TREES + 9 MEDJOOL DATE PALMS PROVIDED)

DIVERSITY REQUIREMENT

11-15 REQUIRED TREES = 4 TREE SPECIES / 4 SPECIES PROVIDED

NATIVE TREES

30% OF REQUIRED TREES OR .30 X 14 = 4.2 NATIVE TREES REQUIRED / 36 NATIVE TREES PROVIDED (25 NATIVE PITCH APPLE TREES + 11 SIMPSON STOPPER TREES PROVIDED)

LOW MAINTENANCE TREES

50% OF REQUIRED TREES OR .50 X 36 = 18 NATIVE TREES REQUIRED / 36 NATIVE TREES PROVIDED (25 NATIVE PITCH APPLE TREES + 11 SIMPSON STOPPER TREES PROVIDED)

STREET TREE REQUIREMENT AVERAGE STREET TREE SPACING 20' ON CENTER

EAST DILIDO: 48 LF / 20 = 2.4 STREET TREES REQUIRED / 2 STREET TREES PROVIDED

12 SHRUBS (OR VINES) REQUIRED FOR EACH REQUIRED LOT AND STREET TREE or 12 X (16) = 192 REQUIRED / 309 SHRUBS PROVIDED (34 CRABWOOD SHRUBS + 75 DWARF CARISSA + 200 HORIZONTAL COCOPLUM PROVIDED)

NATIVE SHRUBS

50% OF TOTAL SHRUBS REQUIRED MUST BE NATIVE or .50 X 192 = 96 / 234 NATIVE SHRUBS PROVIDED (200 COCOPLUM SHRUBS, 34 CRABWOOD SHRUBS PROVIDED)

LARGE SHRUBS / SMALL TREES 10% OF TOTAL SHRUBS REQUIRED MUST BE LARGE SHRUBS OR SMALL TREES or .10 X 96 = 9.6 / 34 LARGE SHRUBS PROVIDED (34 CRABWOOD SHRUBS PROVIDED)

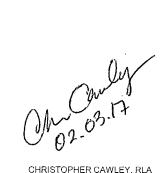
NATIVE LARGE SHRUBS / SMALL TREES

50% OF TOTAL LARGE SHRUBS REQUIRED MUST BE NATIVE or .50 X 9.6 = 4.8 / 34 NATIVE LARGE SHRUBS PROVIDED (34 CRABWOOD SHRUBS PROVIDED)

50% MAXIMUM OF LANDSCAPE AREA: NEW LAWN AREAS ARE LESS THAN 50% OF LANDSCAPE AREA

IRRIGATION SYSTEM 100% COVERAGE PROVIDED PURSUANT TO MIAMI DADE CODE

LANDSCAPE NOTES + DETAILS



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- 2. CONTRACTOR SHALL BECOME FAMILIAR WITH THE LOCATION OF, AVOID, AND PROTECT ALL UTILITY LINES, BURIED CABLES, AND OTHER UTILITIES.
- 3. TREE, PALM, ACCENT AND BED LINES ARE TO BE LOCATED IN THE FIELD AND APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.

ANY CHANGES TO R.O.W. (RIGHT OF WAY) MATERIAL IN REGARDS TO PLACEMENT OF SPECIES SHALL REQUIRE THE APPROVAL AND CONSULTATION OF THE CITY URBAN FORESTER AND OR CITY STAFF.

4. ALL PLANTING SOIL SHALL BE 50:50 TOPSOIL:SAND MIX, FREE OF CLAY, STONES, ROCKS, OR OTHER FOREIGN MATTER. THIS SPECIFICATION INCLUDES ALL BACKFILL FOR BERMS AND OTHER LANDSCAPE

CARE SHALL BE TAKEN TO AVOID PLACEMENT OF CONSTRUCTION FILL, GRAVEL, AND OR DEBRIS OVER THE ROOTBALLS OF INSTALLED OR EXISTING TREES AND OR PALMS ON SITE.

2" DEPTH PLANTING SOIL SPREAD IN PLACE- THROUGHOUT.

GROUNDCOVER PLANTING BEDS:

6" DEPTH PLANTING SOIL SPREAD IN PLACE- THROUGHOUT.

SHRUB AND HEDGE PLANTING AREAS:

12" DEPTH PLANTING SOIL SPREAD IN PLACE- THROUGHOUT.

TREES, PALMS, SPECIMEN PLANT MATERIAL LOCATIONS: REMOVE ALL LIMEROCK PRESENT TO A DEPTH OF AT LEAST 30"BEFORE PLACING NEW PLANTING SOIL. APPLY NEW CLEAN PLANTING SOIL IN PLANTING AREA AS REQUIRED

THE SITE CONTRACTOR SHALL BE RESPONSIBLE TO BRING ALL GRADES TO WITHIN 2" OF FINAL GRADES. THIS SHALL INCLUDE A 2" APPLICATION OF 50:50 TOPSOIL:SAND MIX FOR ALL LANDSCAPE AND AREAS TO BE SODDED.

- 5. THE LANDSCAPE CONTRACTOR SHALL CALCULATE AND SUBMIT AN ITEMIZED PRICE FOR THE 2" APPLICATION OF 50:50 MIX FOR ALL SOD AREAS AS A REFERENCE IN THE CASE THAT THERE WOULD BE A DISCREPANCY BETWEEN SITE AND LANDSCAPE CONTRACTORS AND NOTIFY THE SITE CONTRACTOR OR PROJECT SUPERINTENDENT AS TO THIS DISCREPANCY. IT WILL THEN BE DETERMINED WHICH PARTY WILL PROVIDE THIS 2" TOPSOIL:SAND APPLICATION AND SUBSEQUENT PAYMENT.OTHER PLANTING SOIL MIXES TO BE ADDED, I.E. FOR TREES, PALMS, SPECIMEN PLANTS, SHRUBS AND GROUND COVERS SHALL BE THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR AND BE INCLUSIVE WITH THE LANDSCAPE
- 6. ALL EXISTING TREE + PALM INFORMATION THAT HAS BEEN PROVIDED ON THIS PLAN FOLLOWS THE MIAMI DADE COUNTY E.R.M. TREE PERMITTING GUIDELINES. ANY TREES or PALMS CONSIDERED INVASIVE OR THAT FALLS UNDER THE TREE PERMIT EXEMPTION / PROHIBITED SPECIES LIST 24-94 (4) MAY NOT BE SHOWN FOR CLARITY PURPOSES. ANY DISCREPANCIES IF NOTED UPON FURTHER FIELD INSPECTION SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE LANDSCAPE ARCHITECT.
- 7. IRRIGATION SHALL PROVIDE FOR A 100% COVERAGE WITH 50% OVERLAP MINIMUM AND BE PROVIDED BY A FULLY AUTOMATIC IRRIGATION SYSTEM W/ RAIN MOISTURE SENSOR ATTACHED TO CONTROLLER. ALL FLORIDA BUILDING CODE APPENDIX "F" IRRIGATION REQUIREMENTS SHALL BE STRICTLY ADHERED TO FOR INSTALLATION AND PREVAILING WATER MANAGEMENT DISTRICT RESTRICTIONS AND REGULATIONS SHALL BE IN COMPLIANCE FOR POST-INSTALLATION WATERING SCHEDULES.CONTRACTOR SHALL
- 8. THE CONTRACTOR SHALL BE RESPONSIBLE TO SECURE ALL PERMITS AS MAY BE DEEMED
- 9. ALL SLEEVES UNDER PAVEMENT SHALL BE BURIED PER FLORIDA BUILDING CODE, APPENDIX "F". ALL LATERAL SLEEVES UNDER SIDEWALKS SHALL BE BURIED BELOW WALKWAYS AND SHALL BE SCHEDULE 40 PVC. ALL SLEEVING SHALL BE SCHEDULE 40 PVC PIPE AND SHALL BE 2 TIMES THE MAIN OR LATERAL PIPE SIZE.
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- 15. THE IRRIGATION CONTRACTOR SHALL INSTRUCT THE OWNER OR THE OWNER'S REPRESENTATIVE IN THE COMPLETE OPERATION AND MAINTENANCE OF THE SYSTEM, THE CONTRACTOR SHALL FURNISH TWO COPIES OF AN IRRIGATION SYSTEM MANAGEMENT MANUAL PREPARED BY THE MANUFACTURER AND THE SYSTEM INSTALLER.

APPROVED ORGANIC MULCH FREE FROM WEEDS AND PESTS. NO 'CYPRESS MULCH' OR 'RED DYED MULCH' TO BE ACCEPTED. KEEP MULCH 6" AWAY FROM TREE OR PALM TRUNKS AS PER INDUSTRY RECOMMENDATIONS. 9. SOD SHALL BE 'EMPIRE TURF' ZOYSIA GRASS IN ALL LAWN AREAS AS SHOWN ON THE PLANS, SOD SHALL

8. ALL PLANTING BEDS SHALL BE MULCHED TO A DEPTH OF 2" WITH A SMALL GRAY GRANITE AGGREGATE or

COORDINATE WITH THE IRRIGATION CONTRACTOR AND LEAVE PROVISIONS FOR ALL SLEEVING AND PIPE

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NECESSARY TO PERFORM THE WORK. ENTIRE SYSTEM SHALL BE INSTALLED IN COMPLIANCE WITH ALL LOCAL AND STATE CODES.

- VALVES TO THE CONTROLLER AND PROVIDE PROPER SYNCHRONIZATION.
- FOR EMERGENCY POST INSTALLATION WIRING.
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- 14. THE IRRIGATION CONTRACTOR SHALL RECORD ALL CHANGES MADE TO THE IRRIGATION SYSTEM

LANDSCAPE LEGEND

MIAMI BEACH LANDSCAPE ORDINANCE CHAPTER 26 (RS1 - RS4 Single Family Home Residential)

ZONING: RS-3

LOT SIZE: 14,166 SF ACRES: 0.32

FRONT YARD - 2 TREES REQUIRED / 2 TREES PROVIDED REAR YARD -3 TREES REQUIRED / 3 TREES PROVIDED

TOTAL OF 5 TREES REQUIRED FOR LOTS UP TO 6,000 SF. 1 ADDITIONAL TREE IS REQUIRED FOR EACH ADDITIONAL 1,000 SF OF LOT AREA. 14,166 SF - 6000 SF = 8,166 SF

14,166 SF = 14 TOTAL TREES REQUIRED / 37 TREES PROVIDED. (20 NATIVE PITCH APPLE TREES + 11 SIMPSON STOPPER TREES + 6 BAYRUM TREES PROVIDED)

11-15 REQUIRED TREES = 4 TREE SPECIES / 4 SPECIES PROVIDED

(20 NATIVE PITCH APPLE TREES + 11 SIMPSON STOPPER TREES PROVIDED)

30% OF REQUIRED TREES OR .30 X 14 = 4.2 NATIVE TREES REQUIRED / 31 NATIVE TREES PROVIDED (20 NATIVE PITCH APPLE TREES + 11 SIMPSON STOPPER TREES PROVIDED)

50% OF REQUIRED TREES OR .50 X 36 = 18 NATIVE TREES REQUIRED / 31 LOW MAINTENANCE TREES

STREET TREE REQUIREMT

AVERAGE STREET TREE SPACING 20' ON CENTER

EAST DILIDO: 48 LF / 20 = 2.4 STREET TREES REQUIRED / 2 STREET TREES PROVIDED

12 SHRUBS (OR VINES) REQUIRED FOR EACH REQUIRED LOT AND STREET TREE or 12 X (16) = 192 REQUIRED / 209 SHRUBS PROVIDED (34 CRABWOOD SHRUBS + 75 DWARF CARISSA + 60 HORIZONTAL COCOPLUM + 50 FAKAHATCHEE GRASS PROVIDED)

50% OF TOTAL SHRUBS REQUIRED MUST BE NATIVE or .50 X 192 = 96 / 234 NATIVE SHRUBS PROVIDED

(200 COCOPLUM SHRUBS, 34 CRABWOOD SHRUBS PROVIDED) LARGE SHRUBS / SMALL TREES 10% OF TOTAL SHRUBS REQUIRED MUST BE LARGE SHRUBS OR SMALL TREES or .10 X 96 = 9.6 / 34 LARGE

SHRUBS PROVIDED (34 CRABWOOD SHRUBS PROVIDED)

NATIVE LARGE SHRUBS / SMALL TREES 50% OF TOTAL LARGE SHRUBS REQUIRED MUST BE NATIVE or .50 X 9.6 = 4.8 / 34 NATIVE LARGE SHRUBS

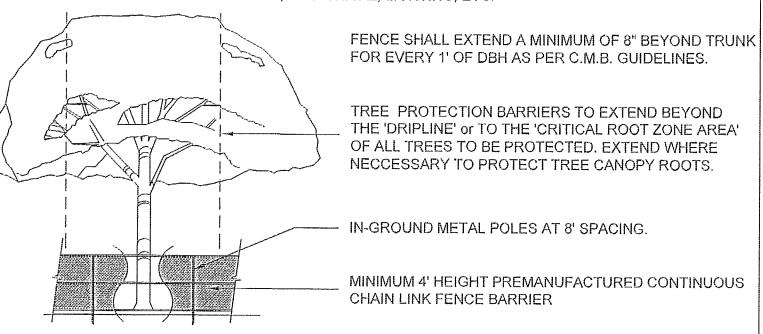
PROVIDED (34 CRABWOOD SHRUBS PROVIDED)

50% MAXIMUM OF LANDSCAPE AREA: NEW LAWN AREAS ARE LESS THAN 50% OF LANDSCAPE AREA

100% COVERAGE PROVIDED PURSUANT TO MIAMI DADE CODE

TREE PROTECTION FENCES SHALL BE CONSTRUCTED PRIOR TO ANY CONSTRUCTION ACTIVITY INCLUDING GRUBBING FOR ALL TREES / PALMS THAT ARE 'TO REMAIN, BE PROTECTED, or BE RELOCATED'

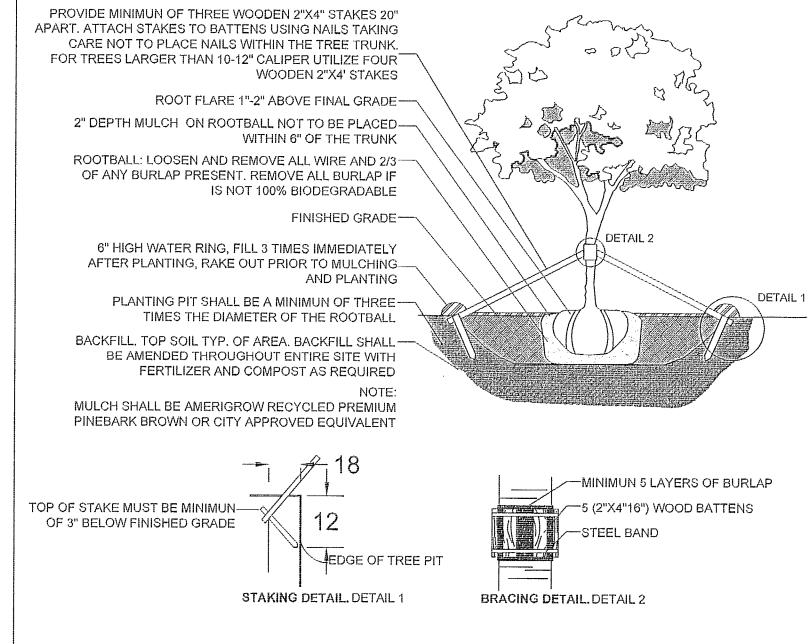
NO ACTIVITY OR DISTURBANCE SHOULD OCCUR WITHIN THE FENCED AREAS, INCLUDING VEHICLE USE. STORAGE OF MATERIALS, DUMPING OF LIQUIDS OR MATERIALS, GRADE CHANGES, GRUBBING, AND MECHANICAL TRENCHING FOR IRRIGATION, ELECTRICAL, LIGHTING, ETC.



PROTECTION DETAIL NOTE CONTRACTOR TO INSTALL 'TREE PROTECTION FENCE BARRIERS' AROUND ALL EXISTING TREES OR PALMS AT THE START OF THE PROJECT. BARRIERS TO REMAIN IN PLACE THROUGHOUT THE DURATION OF THE PROJECT AND SHOULD NOT BE REMOVED OR DROPPED FOR ANY REASON WITHOUT AUTHORIZATION FROM THE CITY OF MIAMI BEACH URBAN FORESTER + PLANNING + ZONING DEPARTMENT

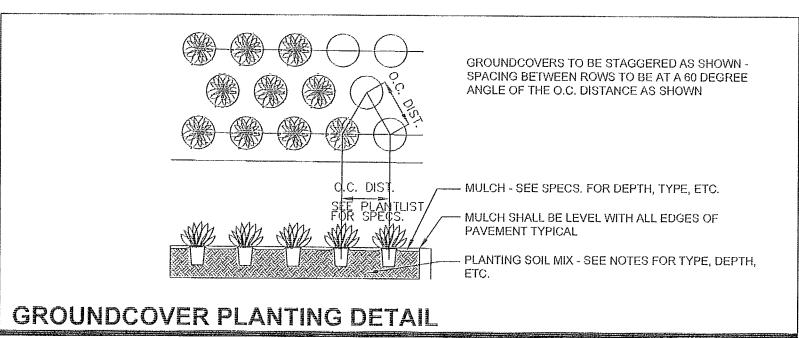
C.M.B. TREE PROTECTION. DETAIL (CHAINLINK)

N.T.S.



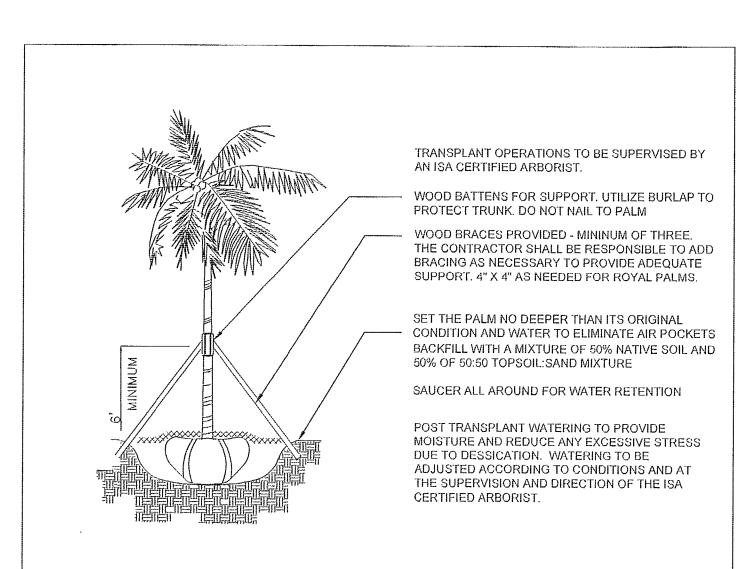
C.M.B. LARGE TREE PLANTING DETAIL

N.T.S.

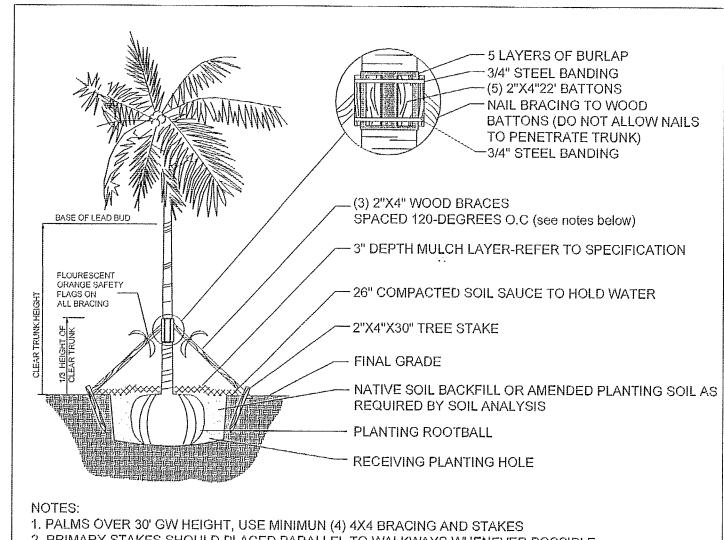


TREE AND PALM TRANSPLANTING PROCEDURAL SPECIFICATION

- PURPOSE: TO MAXIMIZE THE SUCCESS OF TREE TRANSPLANTING OPERATIONS.
- ALL STANDARDS SHALL MEET OR EXCEED THE ANSI A300 (PART 6)-2005 (TRANSPLANTING) STANDARD PRACTICES AND ANY APPLICABLE LOCAL CODES.
- CONTRACTOR SHALL EMPLOY AN ISA CERTIFIED ARBORIST OR BIOLOGIST WITH VERIFIABLE TREE TRANSPLANT EXPERIENCE AS THE "EXPERT ARBORIST OF RECORD" TO CARRY OUT THE FOLLOWING DUTIES:
 - SHALL MAKE SITE VISITS PRIOR TO AND DURING ANY RELOCATION WORK TO INSPECT THAT PROPER PREPARATION IS PERFORMED ACCORDING TO ALL APPLICABLE TREE RELOCATION GUIDELINES. • SHALL DOCUMENT ALL INSPECTIONS AND PROVIDE REPORT TO THE OWNER'S AGENT WITHIN 5 BUSINESS DAYS OF SITE
- SHALL SUBMIT PRIOR TO FINAL ACCEPTANCE BY OWNER'S AGENT, A POST-TRANSPLANT CARE GUIDE FOR UP TO THREE YEARS THAT INCLUDES WATERING, FERTILIZATION, PRUNING, PEST CONTROL, STAKING, ETC



C.M.B. PALM TRANSPLANT DETAIL



2. PRIMARY STAKES SHOULD PLACED PARALLEL TO WALKWAYS WHENEVER POSSIBLE 3. RECEIVING PLANTING HOLE SHALL BE APPROXIMATELY 1/3 LARGER THAN ROOTBALL 4. BUD SHALL BE PERPENDICULAR TO THE GROUND PLANE 5. TRUNK SHALL BE STRAIGHT AND WITHOUT CURVES

6. NO SCARRED OR BLACKENED TRUNKS 7. AMENDED SOIL MIX TO BE ADDED AT THE TIME OF PLANTING NEEDED, SHALL CONSIST OF A RATIO MIX OF 80% CLEAN SILICA SAND AND 20% SCREENED PULVERIZED TOPSOIL AS NEEDED

C.M.B. PALM PLANTING DETAIL

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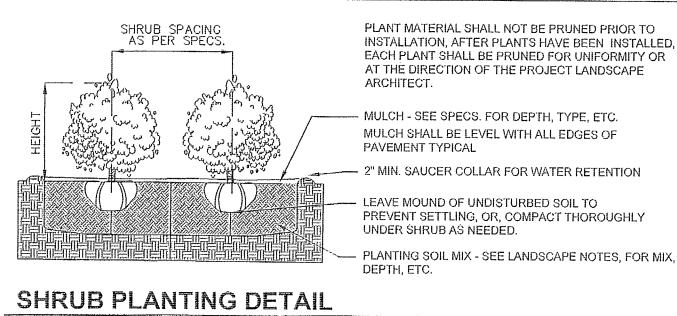
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PLANT MATERIAL SHALL NOT BE PRUNED PRIOR TO INSTALLATION, AFTER PLANTS HAVE BEEN INSTALLED. EACH PLANT SHALL BE PRUNED FOR UNIFORMITY OR AT THE DIRECTION OF THE PROJECT LANDSCAPE - MULCH - SEE SPECS. FOR DEPTH, TYPE, ETC. MULCH SHALL BE LEVEL WITH ALL EDGES OF — 2" MIN. SAUCER COLLAR FOR WATER RETENTION PREVENT SETTLING, OR, COMPACT THOROUGHLY

LANDSCAPE NOTES + DETAILS

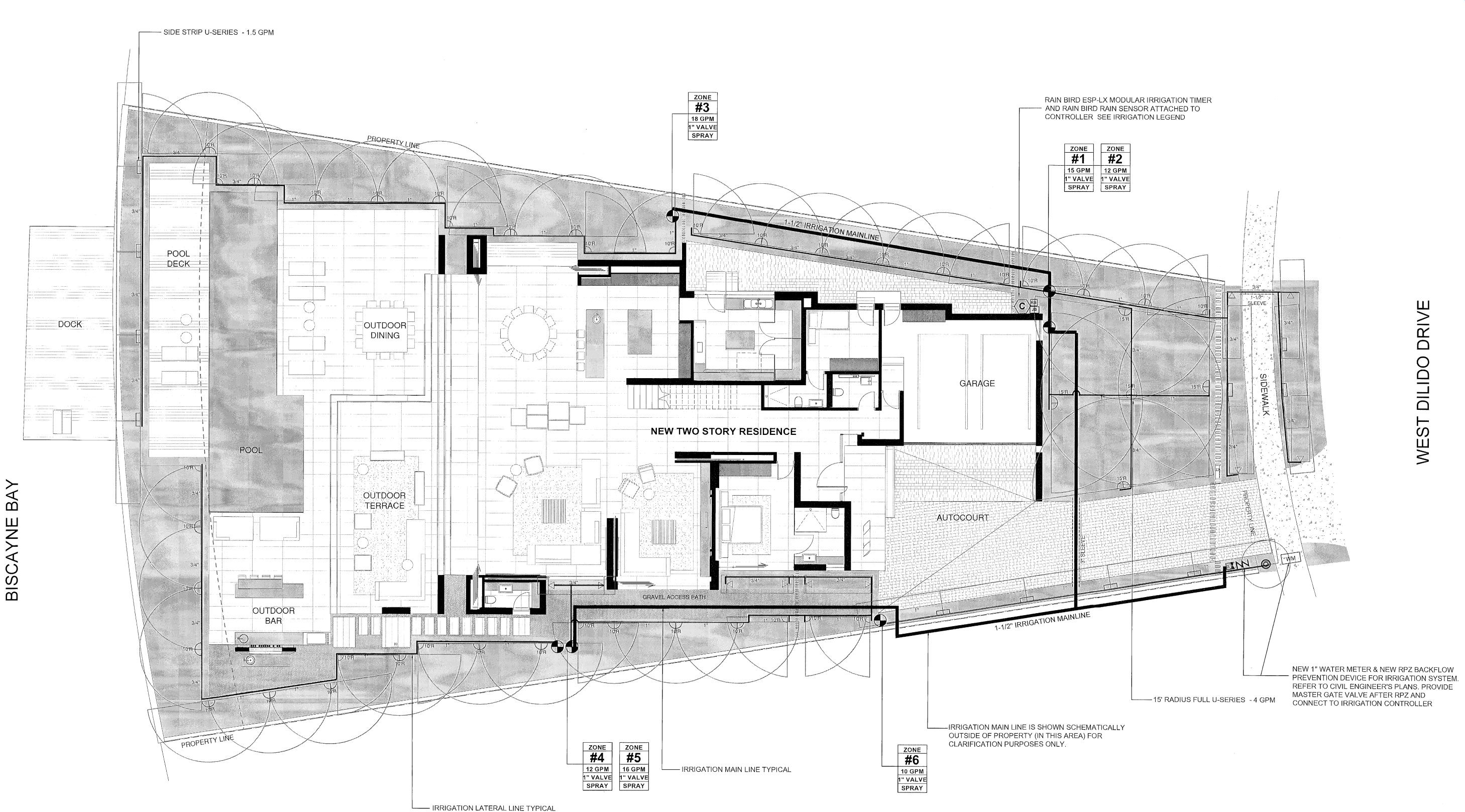
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PIPE INSTALLATION + SLEEVE NOTES

	DING CODE - APPENDIX F TION - DEPTH OF COVER	1 1	G CODE - APPENDIX F S - PART V A-6	
VEHICLE	TRAFFIC AREAS	WATER PIPE SIZE	SLEEVE SIZE	
PIPE SIZE (INCHES)	DEPTH OF COVER (INCHES)	3/4"	1 1/2"	
1/2" TO 2 1/2"	18" TO 24"	1"	2"	
3" TO 5"	24" TO 30"	1 1/4"	2 1/2"	
6" OR GREATER	30 TO 36"	1 1/2"	3"	
NON-TRAFFIC AI	ND NON-CULTIVATED AREAS	2"	4"	
PIPE SIZE (INCHES)	DEPTH OF COVER (INCHES)	3"	6"	
1/2" TO 1 1/4"	6" TO 12"	4"	8"	
1 1/2" TO 2"	12" TO 18"	SLEEVES TO EXTEND A	A MIN. 3' BEYOND ALL	
2 1/2" TO 3"	18" TO 24"	PAVED AREAS, BACKFI		
4" OR LARGER	24" TO 36"	PER APPENDIX F		

IRRIGATION PLAN NOTES

ALL MAIN LINES, LATERAL LINES and IRRIGATION SPRINKLER COMPONENT LOCATIONS ARE SHOWN SCHEMATICALLY AND SHALL BE ADJUSTED BASED ON FIELD CONDITIONS. ALL LANDSCAPES AREAS TO RECEIVE 100% COVERAGE WITH A MINIMUM 50% OVERLAP BY A FULLY AUTOMATIC IRRIGATION SYSTEM with RAIN SENSOR. AFTER SITE INVESTIGATION THE LANDSCAPE CONTRACTOR IS TO PROVIDE A 'SHOP DRAWING' DETAILING THE PROPOSED IRRIGATION SYSTEM DESIGN TO THE LANDSCAPE ARCHITECT AND GENERAL CONTRACTOR.

A ROUGH INSPECTION IS REQUIRED BY THE CITY OF MIAMI BEACH PRIOR TO TRENCH BACKFILLING AND A FINAL INSPECTION SHALL BE REQUIRED PRIOR TO COMPLETION OF IRRIGATION WORK.

SOUTH FLORIDA WATER MANAGEMENT DISTRICT (SFWMD) WATER RESTRICTIONS, PHASE II ARE IN EFFECT. NEW LANDSCAPE INSTALLATION SHALL BE EXEMPT PER SFWMD FOR A PERIOD OF SIXTY DAYS AFTER INSTALLATION with CONTRACTOR and/or OWNER TO ASSUME RESPONSIBILITY AFTER 60 DAY PERIOD.

1" IRRIGATION METER

IRRIGATION LEGEND

REFER TO CIVIL ENGINEER'S PLANS RPZ (REDUCED PRESSURE ZONE) REFER TO CIVIL ENGINEER'S PLANS

1" MASTER VALVE FOR TOTAL SYSTEM SHUT OFF. CONNECT TO CONTROLLER RAINBIRD ESP-LX MODULAR SERIES CONTROLLER W/ RAINBIRD RAIN SENSOR

RAINBIRD RSD SERIES RAIN SENSOR ATTACHED TO CONTROLLER

1" ELECTRIC VALVES-RAINBIRD PEB SERIES OR APPROVED EQUAL, IN 10" ROUND VALVE BOX

JUNCTION BOX w/ WATER PROOF CONNECTORS
REFER TO FLECTBION ENGINEERS REFER TO ELECTRICAL ENGINEER'S PLANS 1 1/2" PVC Main Supply Line - Sch 40

PIPE CROSSING

PVC LATERAL LINE (Sch. 160) PIPE in SLEEVE (See Sizing Chart) PIPE CONNECTION

ZONE ZONE DESIGNATION & INFORMATION 25 GPM GALLONS PER MINUTE 1" VALVE VALVE SIZE SPRAY IRRIGATION TYPE

RAINBIRD 1800 PRS - U SERIES NOZZE

10", 12", 15" POP-UP / QUARTER, HALF, FULL RADIUS DIAMETERS AS NOTED

RAINBIRD 1800 SERIES STRIP-TYPE
15EST (END STRIP), 15 CST (CENTER STRIP) 1.5 GPM RAINBIRD -5 SERIES, MPR STREAM BUBBLER NOZZLES, 5' RADIUS, 1.5 GPM



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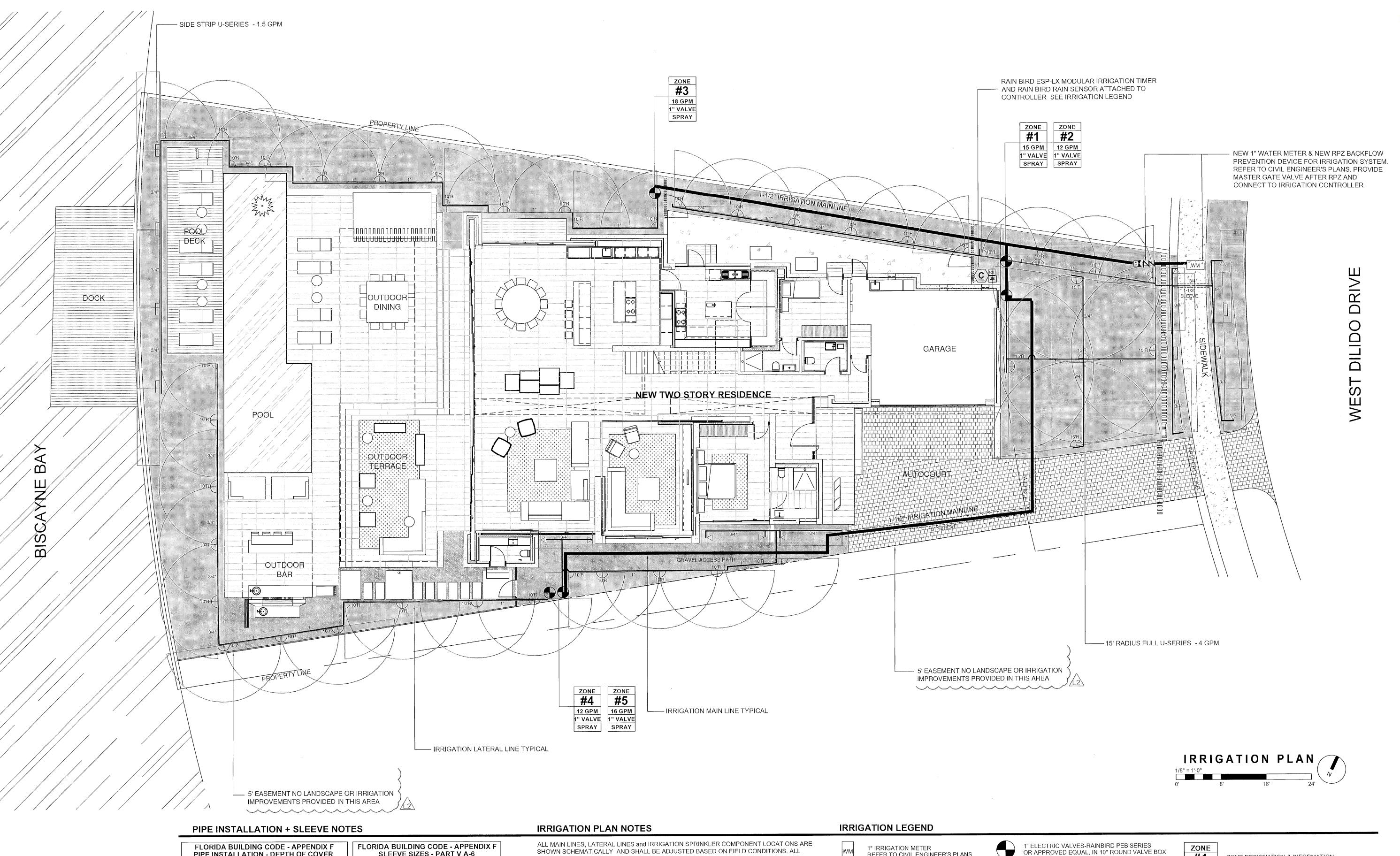
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PIPE INSTALLA	TION - DEPTH OF COVER	SLEEVE SIZE	S - PART V A-6	
VEHICLE	TRAFFIC AREAS	WATER PIPE SIZE	SLEEVE SIZE	
PIPE SIZE (INCHES)	DEPTH OF COVER (INCHES)	3/4"	1 1/2"	
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RAINBIRD 1800 PRS - U SERIES NOZZE 10", 12", 15" POP-UP / QUARTER, HALF, FULL 10", 12", 15" POP-UP / QUARTER, RADIUS DIAMETERS AS NOTED

RAINBIRD 1800 SERIES STRIP-TYPE
15EST (END STRIP), 15 CST (CENTER STRIP) 1.5 GPM RAINBIRD -5 SERIES, MPR STREAM BUBBLER NOZZLES, 5' RADIUS, 1.5 GPM



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A.C. GENERAL NOTES:

- 1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE 2014 FBC, RECOMMENDED STANDARDS, FEDERAL REGULATIONS, LOCAL CODES AND ANY REQUIREMENT THAT APPLY FROM AHJ.
- VENTILATION DUCTWORK SHALL BE GALVANIZED STEEL WITH GAUGES, DUCT CONSTRUCTION, BRACING AND SUSPENSION IN ACCORDANCE WITH THE RECOMMENDATIONS SET FORTH IN THE LATEST EDITION OF THE A.S.H.R.A.E. GUIDE AND S.M.A.C.N.A. STANDARDS. DUCT SIZES SHOWN ARE "INSIDE" DIMENSIONS. VERIFY EXACT LOCATION OF DUCT WITH RESPECT TO STRUCTURE BEFORE FABRICATION. ALL VENTILATION DUCTWORK SHALL BE FIELD R-6 INSULATED, PREVENTING CONDENSATION ISSUES.
- FLEXIBLE DUCT SHALL BE STEEL HELIX WIRE ON 7/8" CENTERS, ENCAPSULATED IN A CONTINUOUS SOFT VINYL FILM, JOINED BY MOLECULAR WELDING TO FORM AN AIR TIGHT INNER CORE, THE CORE IS TO BE INSULATED WITH FIBERGLASS INSULATION (R-6), AND SHEATHED IN A REINFORCED, ALUMINUM METALIZED POLYESTER VAPOR BARRIER JACKET. PROVIDE SPIN COLLAR WITH DAMPER AND EXTRACTOR WHERE FLEXIBLE DUCT IS CONNECTED TO RECTANGULAR DUCTWORK. DAMPER ACTUATOR SHALL BE EXTENDED OUTSIDE INSULATION.
- 4. AIR CONDITIONING SUPPLY AND RETURN DUCTWORK SHALL BE 1-1/2" (R=6 MIN.) FIBERGLASS U.L. 181 LISTED, CLASS I AIR DUCT. DUCTWORK SHALL BE FABRICATED IN ACCORDANCE WITH S.M.A.C.N.A. STANDARDS. IF ANY STEP, INSTALLATION PROCEDURE, CONSTRUCTION CONDITION REQUIRES THAT DUCTWORK BE EXPOSED TO WEATHER TEMPORALLY OR PERMANENTLY, DUCT MATERIALS SHALL BE SHEET LINED METAL GALVANIZED.
- TEMPERATURE CONTROL SHALL BE AS SHOWN IN EQUIPMENT NOTES
 ALL WORK SHALL BE COORDINATED WITH OTHER TRADES TO AVOID INTERFERENCE WITH THE PROGRESS OF CONSTRUCTION AND IN STRICT COMPLIANCE WITH ALL APPLICABLE CODES AND STANDARDS.
- 7. CONTRACTOR TO SUBMITT DUCTWORK SHOP DRAWINGS ACCORDINGLY TO EXISTING FIELD CONDITIONS FOR ENGINEERING REVISION AND APPROVAL PREVIOUS PURCHASING, FABRICATION OR INSTALLATION PROCESSES OR REQUIRED DUCTWORK SHOP DRAWINGS SHALL MEET SMACNA'S FIBROUS GLASS DUCT CONSTRUCTION, SMACNA'S HVAC DUCT CONSTRUCTION STANDARDS METAL AND FLEXIBLE AND ANY RELATED LOCAL AND STATE CODE AND NATIONAL REGULATION
- 8. PRIOR OF CLOSING OF WALL AND CEILINGS, CONTRACTOR TO SCHEDULE A FIELD VISIT BY E.O.R. TO CONDUCT A SITE INVESTIGATION OF DUCTWORK AND ALL RELATED HVAC SYSTEMS AND EQUIPMENTS TO VERIFY THAT THE COMPLETED INSTALLATION MEETS THE DESIGN INTENT. FAILURE TO DO SO WILL NOT BE ACCEPTED AS A REASON FOR EXTRA PAY REQUESTING. WHERE THE CONDITIONS ADVERSELY AFFECT THE DESIGN INTENT ANY DEFFECTS SHALL BE COMPLETED WITHOUT ADDITIONAL CHARGES AND SHALL INCLUDE REPLACEMENT OR REPAIRS OF ANY OTHER PHASE OF THE INSTALLATION.
- 9. MECHANICAL CONTRACTOR SHALL VERIFY DIRECTION OF EXISTING STRUCTURE BEFORE INSTALLATION OF EQUIPMENTS AND DUCTWORK. SHOULD ANY DISCREPANCIES BE FOUND CONTACT ARCHITECT/ENGINEER.
- 10. VIBRATION ISOLATION: ALL EQUIPMENT AS PER MANUFACTURER RECOMMENDATIONS TO ELIMINATE ANY EQUIPMENT NOISE FROM BEING HEARD.
- 11. PRESSURE DIFFERENTIALS ACROSS CLOSED DOORS SHALL BE LIMITED TO 0.01 in.wg. DESIGNED AIR RETURN PATHS ARE BASED ON THIS REQUIREMENT. MECHANICAL CONTRACTOR TO SUBMITT SHOP DRAWINGS FOR APPROVAL PREVIOUS FABRICATION AND INSTALLATION OF DUCTWORK SYSTEMS.
- 12. GUARANTEES:

 A. ALL COMPRESSOR MOTORS ON NEW EQUIPMENT FURNISHED UNDER
 THIS CONTRACT SHALL HAVE A 5 YEARS PRODUCT GUARANTEE FROM
 DATE OF START-UP.
- B. CONTRACTOR SHALL GUARANTEE ALL MATERIALS AND WORKMANSHIP FREE FROM DEFECTS FOR A PERIOD OF NOT LESS THAN A 1 YEAR FROM DATE OF ACCEPTANCE.

13. TESTING:

- A. ALL REFRIGERANT HIGH SIDE PIPING TO 300 PSIG. LOW SIDE TO 150 PSIG. AFTER TESTING, EVACUATE SYSTEM TO 28% MERCURY GAUGE PRESSURE WITH VACUUM PUMP. HOLD FOR 25 HOURS WITH PUMP OFF. BREAK VACUUM WITH REFRIGERANT.
 B. BALANCE AIR SYSTEM TO DELIVER QUANTITIES AT EACH OUTLET WITHIN 5% USING A.A.B.C. PROCEDURES AND TESTS. SUBMIT AIR BALANCE TEST RESULTS FOR APPROVAL PRIOR TO FINAL INSPECTION.
- 14. REFRIGERATION SUCTION PIPING SHALL BE INSULATED WITH 3/4" IN—
 COAFLEX. ARMAFLEX INSULATION MAY ONLY BE USED IN NON—PLENUM
 AREAS. FINISHED WHERE EXPOSED WITH 2 COATS OF WHITE LATEX PAINT
 ALL A PER MANUFACTURER'S INSTRUCTION.
- 15. ALL REFRIGERANT PIPING SHALL BE TYPE "K" HARD COPPER, TOGETHER WITH WROUGHT COPPER SOLDER FITTINGS. JOINTS SHALL BE MADE WITH SILVER SOLDER OR "SILFOS". ALL CONDENSATE DRAIN PIPING TO BE SCHEDULE 40 TYPE II HIGH IMPACT PVC WITH SLIP JOINT FITTING OF THE SAME MATERIALS WITH AN APPROVED SOLVENT INSTALLED IN A

MANNER RECOMMENDED BY THE FITTING MANUFACTURER.

16. FOR CU's:
CONDENSER UNITS COILS SHALL BE COATED WITH CORROSION PROTECTION
USING SURFSIL, LUVATA OR EQUAL PROCEDURES, PREVIOUS COORDINATION
WITH MANUFACTURER.

	PACKAGED A/C UNIT SCH	IEDOF!	<u> </u>
UN	IT DESIGNATION		RTU-8
AR	EA SERVED		SEE DWGS
UN	IT TYPE		PACKAGED
REI	FRIGERANT TYPE		R-410A
	TOTAL AIR CFM	CFM	1200
	OUTSIDE AIR CFM	CFM	194
AN	EXTERNAL STATIC PRESSURE IN. OF WATER		1.0
	FAN SPEED	RPM	1126
	BHP (MAX)/MOTOR HP (NON-OVERLOAD)		0.83/1.2
	DESIGN AIR FLOW	CFM	1200
 	ENTERING AIR TEMP. °F DB/WB °.	F DB/WB	80/67
	FACE VELOCITY FP	M (MAX)	307
EVAP.	TOTAL CAPACITY	BTU/HR	36,700
	SENSIBLE CAPACITY	BTU/HR	28,200
TER.	QTY/SIZE(in)		2/16x25x2
ద	FACE AREA. SQ. FT. (MIN)		3.9
01	PERATING WEIGHT LBS.		458
	NO. OF COMPRESSORS		1
	CAPACITY REDUCTION PERCENT EACH		0-100
SOMP	COMPRESSOR TYPE		SCROLL
O	TOTAL FULL LOAD/LOCKED ROTOR AMPS(EA COMPRESS	OR)	10.4/73
	NO. OF FANS		1
	HP EACH		1/8
COND.	MOTOR DRIVE TYPE		DIRECT
8	WATTS/FLA(EA)	, ,	PROP.
	AMBIENT AIR TEMPERATURE °F		95
EL	ECTRICAL SERVICE AVAILABLE		208-240/1/60
EL	ECTRICAL HEATER - TOTAL KW/STEPS		REVERSED CYCLE
			YES
ACCE	ROOF CURB VIBRATION ISOLATION TYPE EVERSED CYCLE HEATER CAPACITY (LOW-HIGH)		INTERNAL
RE	EVERSED CYCLE HEATER CAPACITY (LOW-HIGH)	BTUH	18,400-34,000
	NIMUM CIRCUIT AMPACITY (MCA)		20
	AXIMUM OVERCURRENT PROTECTION		25
	FICIENCY (EER OR SEER)-(HSPF OR COP)		SEER:15.6-HSPF:8.0
	ODEL NO.	50HQ-A04A2F3	
	ESIGN MANUFACTURER		CARRIER

	FAN SCI	HEDULE	1	
UNIT NUMBER		EF-1	EF-2	EF-3
AREA SERVED		SEE DWG	SEE DWGS.	GARAGE
LOCATION		CEILING	CEILING	CEILING
DUTY	SUPPLY/EXH.	EXH.	EXH.	EXH.
FAN TYPE		CEILING	IN-LINE	CEILING
DRIVE	BELT/DIRECT	DIRECT	DIRECT	DIRECT
FAN SPEED	RPM	800	550	960
AIR QUANTITY	CFM	55	50	400
TOTAL STATIC PRESS.	H ₂ 0	0.25	0.125	0.25
OPENING REQUIRED	IN.	_		
FAN MOTOR	HP	47.2 WATTS	21 WATTS	135 WATTS
ELECTRICAL CHAR.	V/Ø/∼	115/1/60	115/1/60	115/1/60
MANUFACTURER		LOREN COOK	LOREN COOK	LOREN COOK
MODEL NUMBER		GC-122	GN-126	GC-620
WEIGHT	LBS.	25	15	35
REMARKS	SONES	0.6	0.4	3.3

1.— EF—3 SHALL BE ACTIVATED UNDER CO DETECTOR SYSTEM COMMAND.

INSULATION VALUES USED IN ENERGY CALC'S:

WALLS:	R-4.1			
ROOF:	R-30			
WINDOWS:	U	SHGC	AREA FT. ²	
	0.63	0.40	2,880	
	0.49	0.32	155	

NOTES:

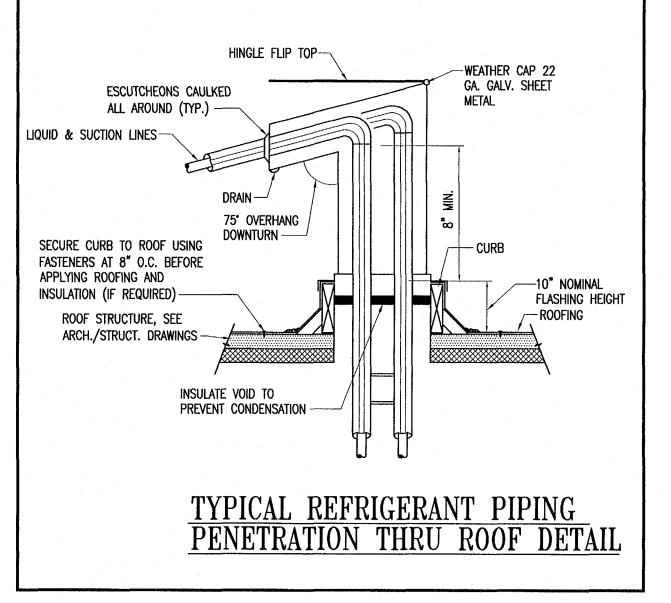
1. ARCHITECTURAL DRAWINGS SHALL MEET THE MINIMUM INSULATION VALUES USED IN ENERGY CALCULATIONS

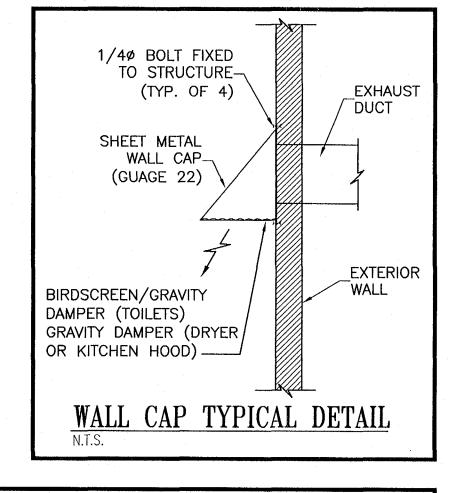
AII	R DIS	TRIBU	TION SCHEI)ULE
SYMBOL	NECK SIZE	MFGR.	MODEL NUMBER	REMARKS
(A)	SEE FLR. PLAN	TITUS	LINEAR CLG. DIFF. ML-40 1 SLOT 1-1/2"(SUPPLY)	BORDERLESS TYPE 22
B	SEE FLR. PLAN	TITUS	LINEAR CLG. MLR-40 1 SLOT 1-1/2" (RETURN)	BORDERLESS TYPE 22
(C)	SEE FLR. PLAN	TITUS	LINEAR CLG. MLR-40 1 SLOT 1-1/2" (EXHAUST)	BORDERLESS TYPE 22
D	SEE FLR. PLAN	AIR GUIDE	LINEAR SIDEWALL LD-0' 1-1/2" (SUPPLY)	

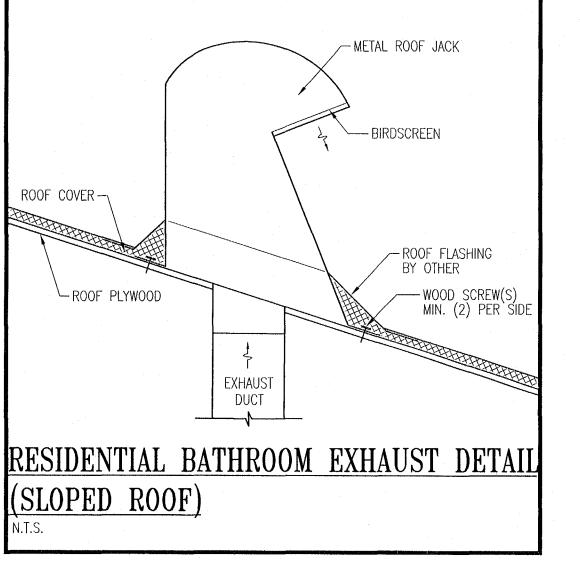
NOTES:

- 1. REFER TO PLAN FOR QUANTITY, LOCATION AIR THROW PATTERN AND SIZES.
- 2. ALL AIR DISTRIBUTION DEVICES SHALL BE OF EXTRUDED ALUMINUM CONSTRUCTION, FURNISH WITH OPPOSED BLADE DAMPERS AND CONCEALED MOUNTING FRAME FOR ACOUSTICAL OR PLASTER CEILING INSTALLATION.
- 3. ALL LINEAR DIFFUSER (SUPPLY & RETURN) LOCATION AND LENGTH ARE APPROX., SHALL COORDINATE WITH ARCHITECT.
- 4. INSTALL ALL LINEAR DIFFUSER (SUPPLY), WITH SCREW VOLUME CONTROL.

HVAC DESIGN REQUIRES	YES	NO
DUCT SMOKE DETECTOR		
FIRE DAMPER		-
SMOKE DETECTOR		
FIRE RATED ENCLOSURE		~
FIRE REATED ROOF CELING ASSEMBLY		
FIRE STOPPING		~
SMOKE CONTROL		-







REVIE D FOR CODE COMPLIANCE

W DILIDO RESIDENCE 28 WEST DILIDO DR, MIAMI BEACH, FL 33139

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- COMPLIANCE WITH ALL APPLICABLE CODES AND STANDARDS.

 7. CONTRACTOR TO SUBMITT DUCTWORK SHOP DRAWINGS ACCORDINGLY TO EXISTING FIELD CONDITIONS FOR ENGINEERING REVISION AND APPROVAL PREVIOUS PURCHASING, FABRICATION OR INSTALLATION PROCESSES OR REQUIRED DUCTWORK. SHOP DRAWINGS SHALL MEET SMACNA'S FIBROUS GLASS DUCT CONSTRUCTION, SMACNA'S HVAC DUCT CONSTRUCTION STANDARDS METAL AND FLEXIBLE AND ANY RELATED LOCAL AND STATE CODE AND NATIONAL REGULATION
- 8. PRIOR OF CLOSING OF WALL AND CEILINGS, CONTRACTOR TO SCHEDULE A FIELD VISIT BY E.O.R. TO CONDUCT A SITE INVESTIGATION OF DUCTWORK AND ALL RELATED HVAC SYSTEMS AND EQUIPMENTS TO VERIFY THAT THE COMPLETED INSTALLATION MEETS THE DESIGN INTENT. FAILURE TO DO SO WILL NOT BE ACCEPTED AS A REASON FOR EXTRA PAY REQUESTING. WHERE THE CONDITIONS ADVERSELY AFFECT THE DESIGN INTENT ANY DEFFECTS SHALL BE COMPLETED WITHOUT ADDITIONAL CHARGES AND SHALL INCLUDE REPLACEMENTS OR REPAIRS OF ANY OTHER PHASE OF THE INSTALLATION.
- 9. MECHANICAL CONTRACTOR SHALL VERIFY DIRECTION OF EXISTING STRUCTURE BEFORE INSTALLATION OF EQUIPMENTS AND DUCTWORK. SHOULD ANY DISCREPANCIES BE FOUND CONTACT ARCHITECT/ENGINEER.
- 10. VIBRATION ISOLATION: ALL EQUIPMENT AS PER MANUFACTURER RECOMMENDATIONS TO ELIMINATE ANY EQUIPMENT NOISE FROM BEING HEARD.
- 11. PRESSURE DIFFERENTIALS ACROSS CLOSED DOORS SHALL BE LIMITED TO 0.01 in.wg. DESIGNED AIR RETURN PATHS ARE BASED ON THIS REQUIREMENT. MECHANICAL CONTRACTOR TO SUBMITT SHOP DRAWINGS FOR APPROVAL PREVIOUS FABRICATION AND INSTALLATION OF DUCTWORK SYSTEMS.
- 12. GUARANTEES:

 A. ALL COMPRESSOR MOTORS ON NEW EQUIPMENT FURNISHED UNDER
 THIS CONTRACT SHALL HAVE A 5 YEARS PRODUCT GUARANTEE FROM
 DATE OF START-UP.
- B. CONTRACTOR SHALL GUARANTEE ALL MATERIALS AND WORKMANSHIP FREE FROM DEFECTS FOR A PERIOD OF NOT LESS THAN A 1 YEAR FROM DATE OF ACCEPTANCE.

13. TESTING:

- A. ALL REFRIGERANT HIGH SIDE PIPING TO 300 PSIG. LOW SIDE TO 150 PSIG. AFTER TESTING, EVACUATE SYSTEM TO 28% MERCURY GAUGE PRESSURE WITH VACUUM PUMP. HOLD FOR 25 HOURS WITH PUMP OFF. BREAK VACUUM WITH REFRIGERANT.
- B. BALANCE AIR SYSTEM TO DELIVER QUANTITIES AT EACH OUTLET WITHIN 5% USING A.A.B.C. PROCEDURES AND TESTS. SUBMIT AIR BALANCE TEST RESULTS FOR APPROVAL PRIOR TO FINAL INSPECTION.
- 14. REFRIGERATION SUCTION PIPING SHALL BE INSULATED WITH 3/4" IN—
 COAFLEX. ARMAFLEX INSULATION MAY ONLY BE USED IN NON—PLENUM
 AREAS. FINISHED WHERE EXPOSED WITH 2 COATS OF WHITE LATEX PAINT
 ALL A PER MANUFACTURER'S INSTRUCTION.
- 15. ALL REFRIGERANT PIPING SHALL BE TYPE "K" HARD COPPER, TOGETHER WITH WROUGHT COPPER SOLDER FITTINGS. JOINTS SHALL BE MADE WITH SILVER SOLDER OR "SILFOS". ALL CONDENSATE DRAIN PIPING TO BE SCHEDULE 40 TYPE II HIGH IMPACT PVC WITH SLIP JOINT FITTING OF THE SAME MATERIALS WITH AN APPROVED SOLVENT INSTALLED IN A MANNER RECOMMENDED BY THE FITTING MANUFACTURER.
- 16. FOR CU's:
 CONDENSER UNITS COILS SHALL BE COATED WITH CORROSION PROTECTION
 USING SURFSIL, LUVATA OR EQUAL PROCEDURES, PREVIOUS COORDINATION
 WITH MANUFACTURER.
- 17. PROVISIONS SHALL BE TAKEN TO PREVENT DUCT SURFACE CONTACT WITH WITH THE FOAM INSULATION; EITHER DURING APPLICATION OR AFTER THE FOAM IS DRIER UP TO PREVENT AVOIDED LISTING OF THE DUCTS (BOTH FLEX AND FIBERGLASS DUCT BOARD).

	PACKAGED A/C UNIT SCHEDULI	<u> </u>
UN	T DESIGNATION	RTU-8
ARE	EA SERVED	SEE DWGS
UN	T TYPE	PACKAGED
REF	RIGERANT TYPE	R-410A
	TOTAL AIR CFM CFM	1200
	OUTSIDE AIR CFM CFM	194
¥.	EXTERNAL STATIC PRESSURE IN. OF WATER	1.0
	FAN SPÉED RPM	1126
	BHP (MAX)/MOTOR HP (NON-OVERLOAD)	0.83/1.2
	DESIGN AIR FLOW CFM	1200
ll SS	ENTERING AIR TEMP. 'F DB/WB 'F DB/WB	80/67
\circ	FACE VELOCITY FPM (MAX)	307
EVAP.	TOTAL CAPACITY BTU/HR	36,700
	SENSIBLE CAPACITY BTU/HR	28,200
TER.	QTY/SIZE(in)	2/16x25x2
뤁	FACE AREA. SQ. FT. (MIN)	3.9
OF	PERATING WEIGHT LBS.	458
	NO. OF COMPRESSORS	1
	CAPACITY REDUCTION PERCENT EACH	0-100
COMP	COMPRESSOR TYPE	SCROLL
Ö	TOTAL FULL LOAD/LOCKED ROTOR AMPS(EA COMPRESSOR)	10.4/73
	NO. OF FANS	1
	HP EACH	1/8
COND.	MOTOR DRIVE TYPE	DIRECT
8	WATTS/FLA(EA)	PROP.
	AMBIENT AIR TEMPERATURE °F	95
EL	ECTRICAL SERVICE AVAILABLE	208-240/1/60
EL	ECTRICAL HEATER - TOTAL KW/STEPS	REVERSED CYCLE
SS	ROOF CURB	YES
PSC BSC	ROOF CURB VIBRATION ISOLATION TYPE	INTERNAL
	EVERSED CYCLE HEATER CAPACITY (LOW-HIGH) BTUH	18,400-34,000
MI	NIMUM CIRCUIT AMPACITY (MCA)	20
M	AXIMUM OVERCURRENT PROTECTION	25
EF	FICIENCY (EER OR SEER)—(HSPF OR COP)	SEER:15.6-HSPF:8.0
	ODEL NO.	50HQ-A04A2F3
I	ESIGN MANUFACTURER	CARRIER

FAN SCHEDULE											
UNIT NUMBER		EF-1	EF-2	EF-3							
AREA SERVED		SEE DWG	SEE DWGS.	GARAGE							
LOCATION		CEILING	CEILING	CEILING							
DUTY	SUPPLY/EXH.	EXH.	EXH.	EXH.							
FAN TYPE		CEILING	IN-LINE	CEILING							
DRIVE	BELT/DIRECT	DIRECT	DIRECT	DIRECT							
FAN SPEED	RPM	800	550	960							
AIR QUANTITY	CFM	55	50	400							
TOTAL STATIC PRESS.	H ₂ 0	0.25	0.125	0.25							
OPENING REQUIRED	IN.	_	_ `.	-							
FAN MOTOR	HP	47.2 WATTS	21 WATTS	135 WATTS							
ELECTRICAL CHAR.	V/Ø/~	115/1/60	115/1/60	115/1/60							
MANUFACTURER	and the second s	LOREN COOK	LOREN COOK	LOREN COO							
MODEL NUMBER		GC-122	GN-126	GC-620							
WEIGHT	LBS.	25	15	35							
REMARKS	SONES	0.6	0.4	3.3							

1.— EF-3 SHALL BE ACTIVATED UNDER CO DETECTOR SYSTEM COMMAND.

INSULATION VALUES USED IN ENERGY CALC'S:

WALLS:	R-4.1		
ROOF:	R-30		
WINDOWS:	U	SHGC	AREA FT. ²
	0.63	0.40	2,880
	0.49	0.32	155

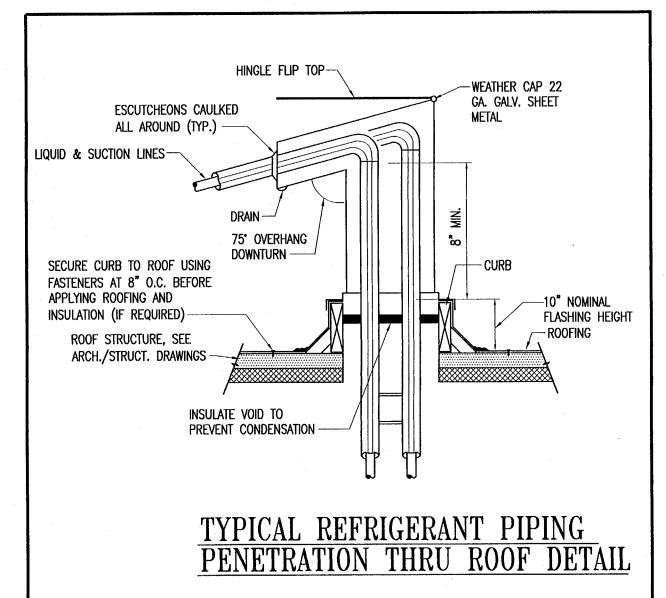
1. ARCHITECTURAL DRAWINGS SHALL MEET THE MINIMUM INSULATION VALUES USED IN ENERGY CALCULATIONS

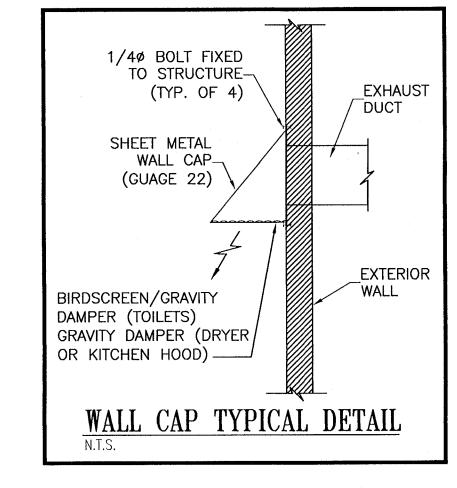
AIF	R DIS	TRIBU	TION SCHEI	ULE
SYMBOL	NECK SIZE	MFGR.	MODEL NUMBER	REMARKS
A	SEE FLR. PLAN	TITUS	LINEAR CLG. DIFF. ML-40 1 SLOT 1-1/2"(SUPPLY)	BORDERLESS TYPE 22
B	SEE FLR. PLAN	TITUS	LINEAR CLG. MLR-40 1 SLOT 1-1/2" (RETURN)	BORDERLESS TYPE 22
©	SEE FLR. PLAN	TITUS	LINEAR CLG. MLR-40 1 SLOT 1-1/2" (EXHAUST)	BORDERLESS TYPE 22
D	SEE FLR. PLAN	AIR GUIDE	LINEAR SIDEWALL LD-0° 1-1/2" (SUPPLY)	

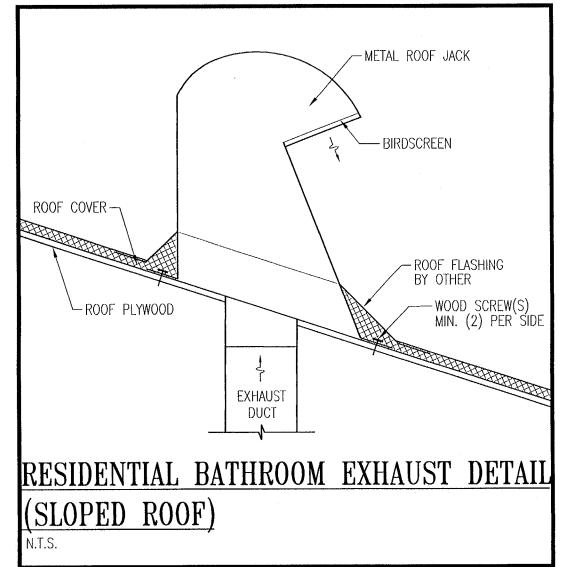
NOTES

- 1. REFER TO PLAN FOR QUANTITY, LOCATION AIR THROW PATTERN AND SIZES.
- 2. ALL AIR DISTRIBUTION DEVICES SHALL BE OF EXTRUDED ALUMINUM CONSTRUCTION, FURNISH WITH OPPOSED BLADE DAMPERS AND CONCEALED MOUNTING FRAME FOR ACOUSTICAL OR PLASTER CEILING INSTALLATION.
- 3. ALL LINEAR DIFFUSER (SUPPLY & RETURN) LOCATION AND LENGTH ARE APPROX., SHALL COORDINATE WITH ARCHITECT.
- 4. INSTALL ALL LINEAR DIFFUSER (SUPPLY), WITH SCREW VOLUME CONTROL.

HVAC DESIGN REQUIRES	YES	NO
DUCT SMOKE DETECTOR		
FIRE DAMPER		
SMOKE DETECTOR		
FIRE RATED ENCLOSURE		
FIRE REATED ROOF CELING ASSEMBLY		-
FIRE STOPPING		~
SMOKE CONTROL		







REVIE D FOR CODE COMPLIANCE

28 W DILIDO RESIDENCI 28 WEST DILIDO DR, MIAMI BEACH, FL 33139

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HENRY VIDAL, P.E. PE # 56204

1652

comm no.

date: 02.03.2017

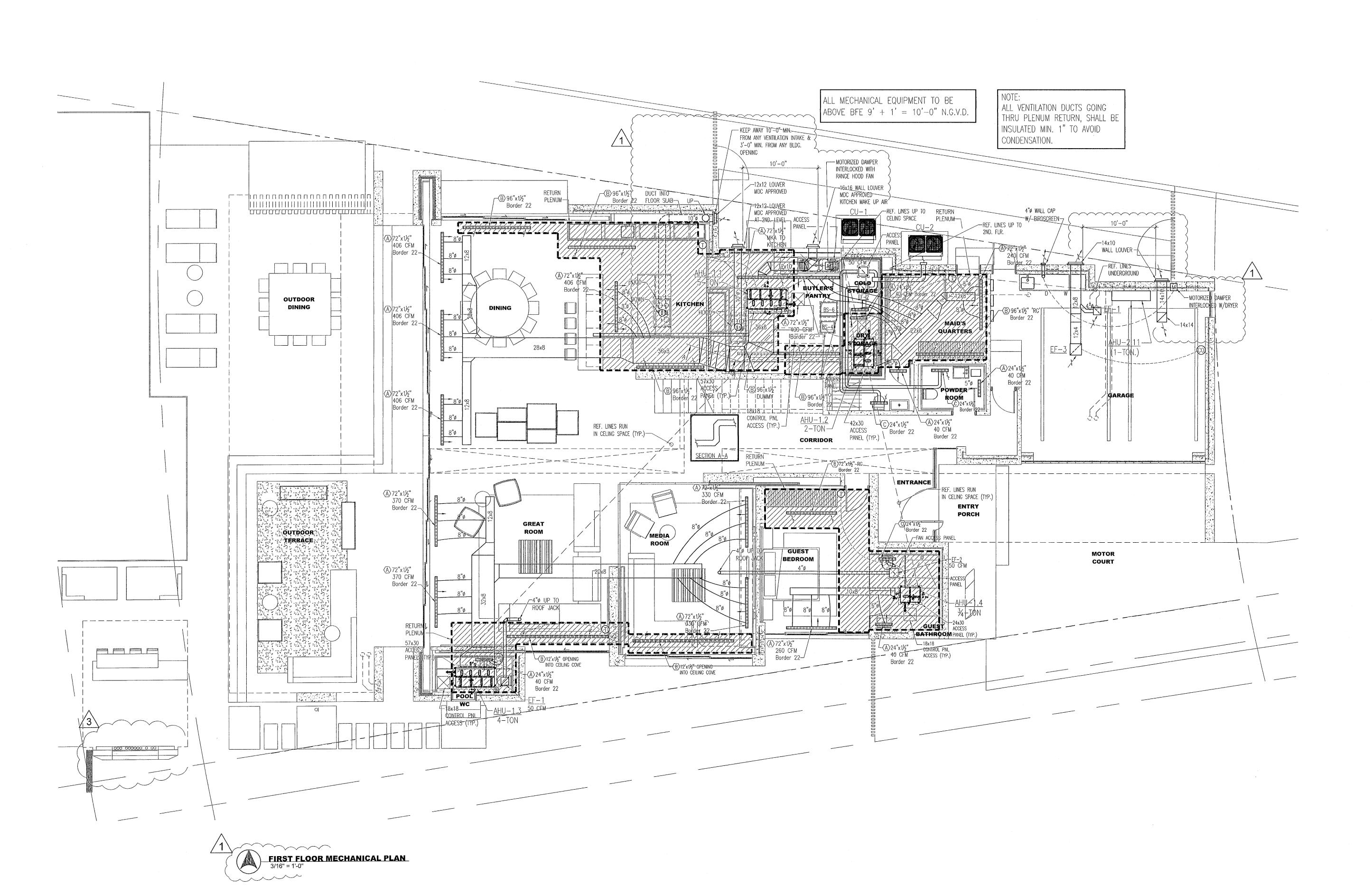
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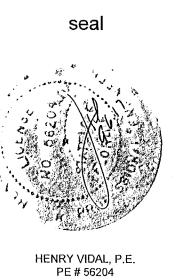
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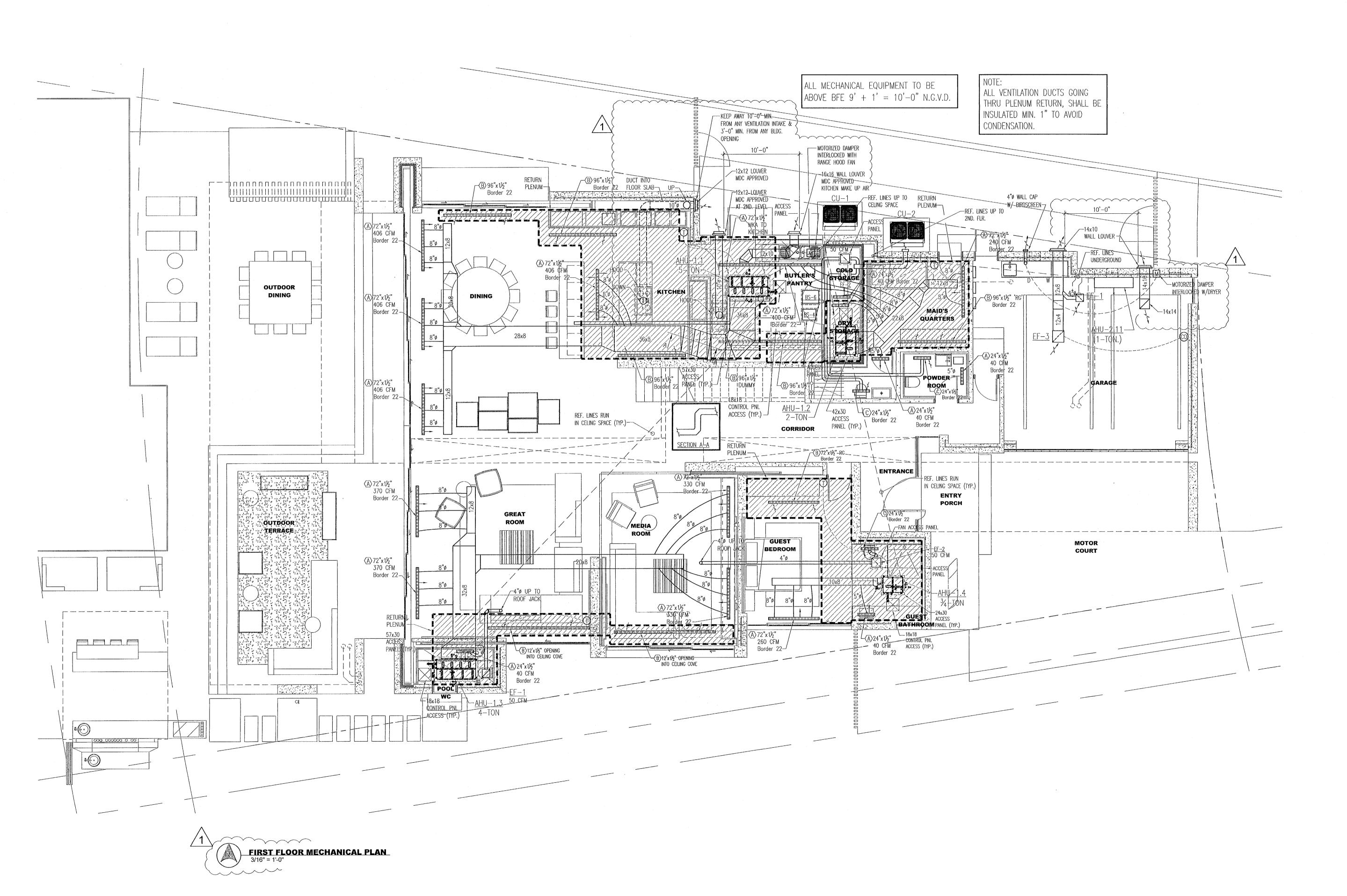
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ENGINEERING COMMENT







date: 02.03.2017

revised:

1 04.13.17 BLDG. DEPT.

ANDEACH
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CODE COMPLIANCE

28 W DILIDO RESIDENCE
28 WEST DILIDO DR,
MIAMI BEACH, FL 33139
A R C H



comm no. 1652

sheet no.

CONSULTING ENGINEERS
241 N.W. SOUTH RIVER DRIVE
MIAMI, FL 33128
HENRY VIDAL, P.E., PE #56204
CERTIFICATION OF AUTHORIZATION #9056

PHONE: (305) 571-1860 FAX: (305)571-1861 INFO@VIDALENGINEERING.COM

VIDALENGINEERING.COM

H.VIDAL

date: 02.03.2017

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CONSULTING ENGINEERS

241 N.W. SOUTH RIVER DRIVE

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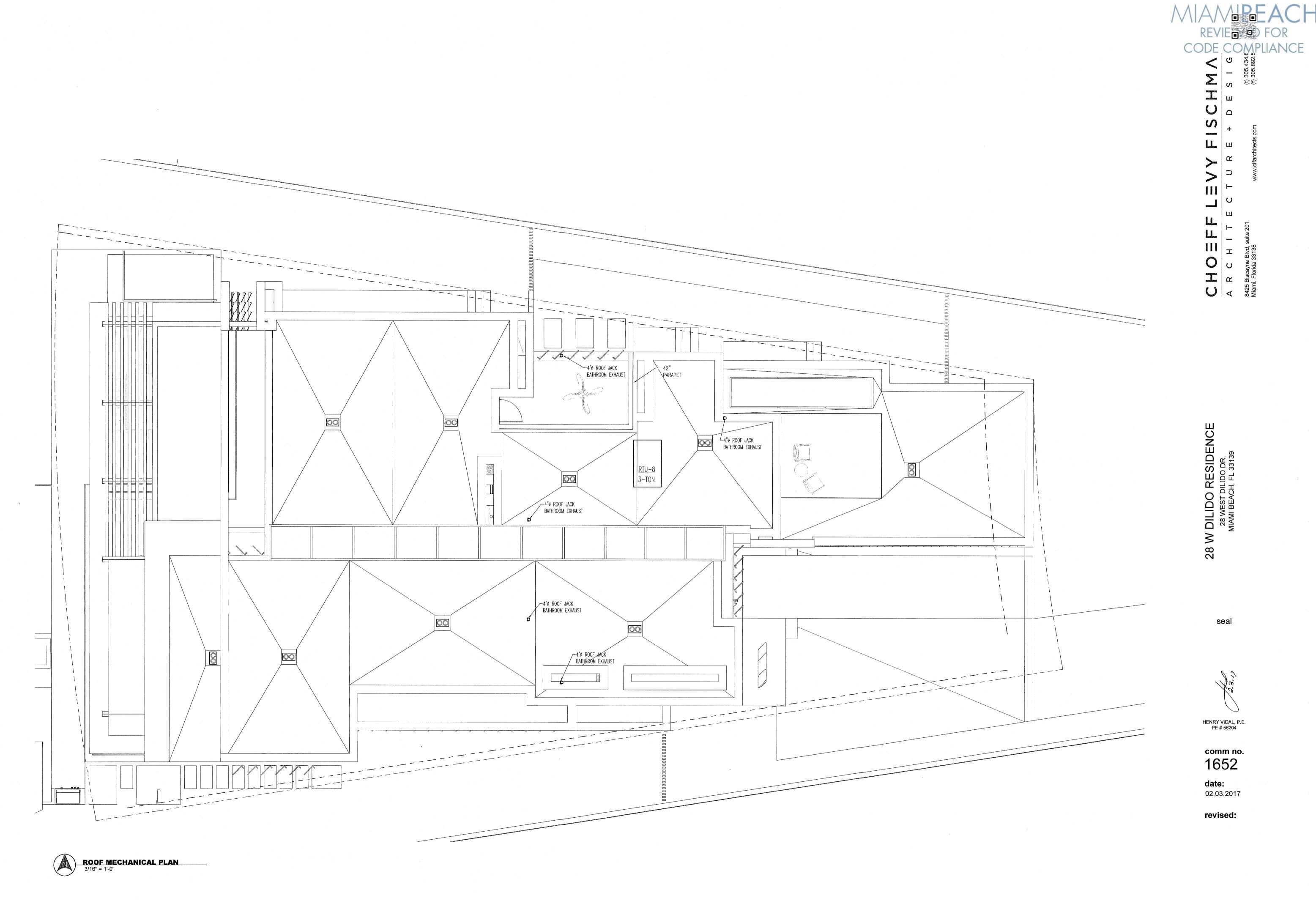
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CERTIFICATION OF AUX. (305) 671-1861

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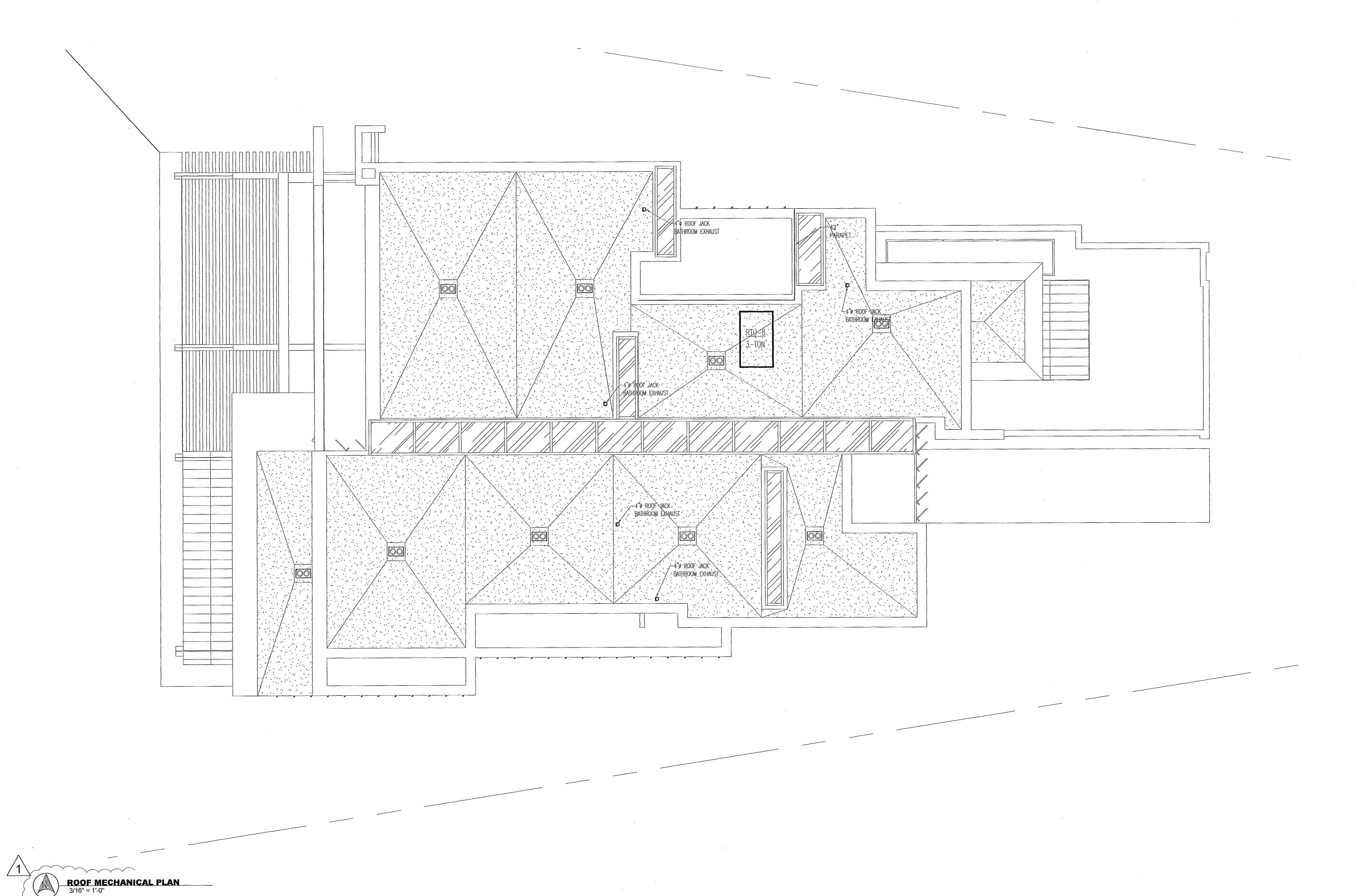
date: 02.03.2017

1 04.13.17 BLDG. DEPT.



CONSULTING ENGINEERS
241 N.W. SOUTH RIVER DRIVE
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HENRY VIDAL, P.E. PE # 56204

comm no. 1652

date: 02.03.2017

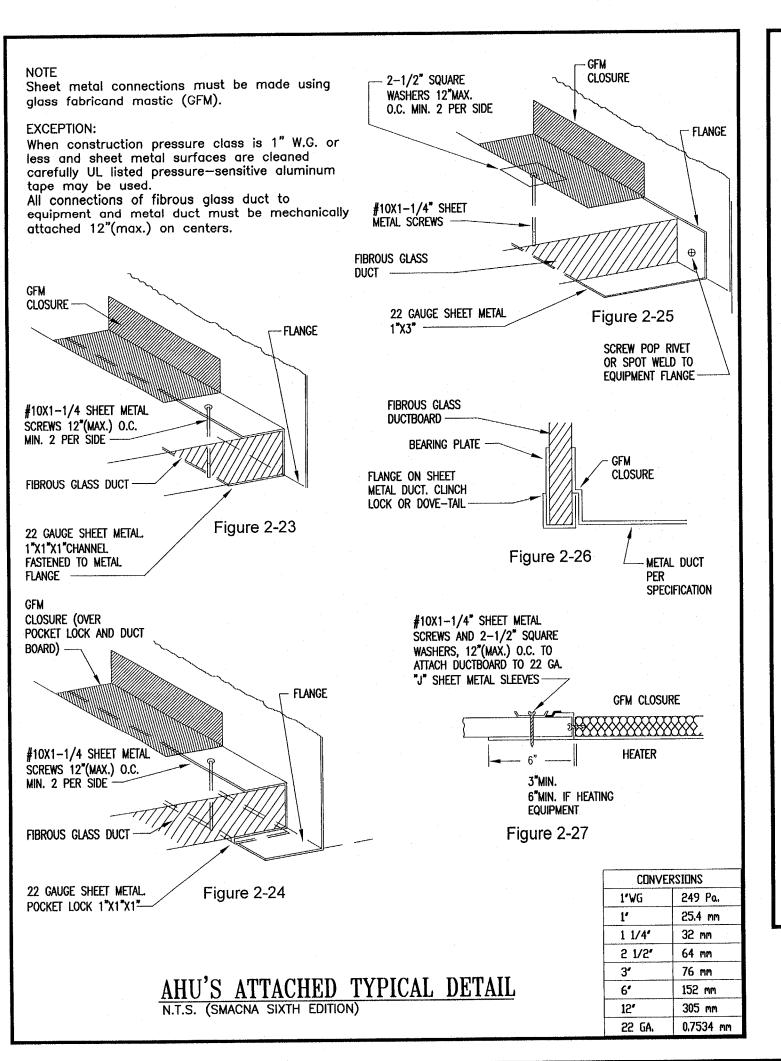
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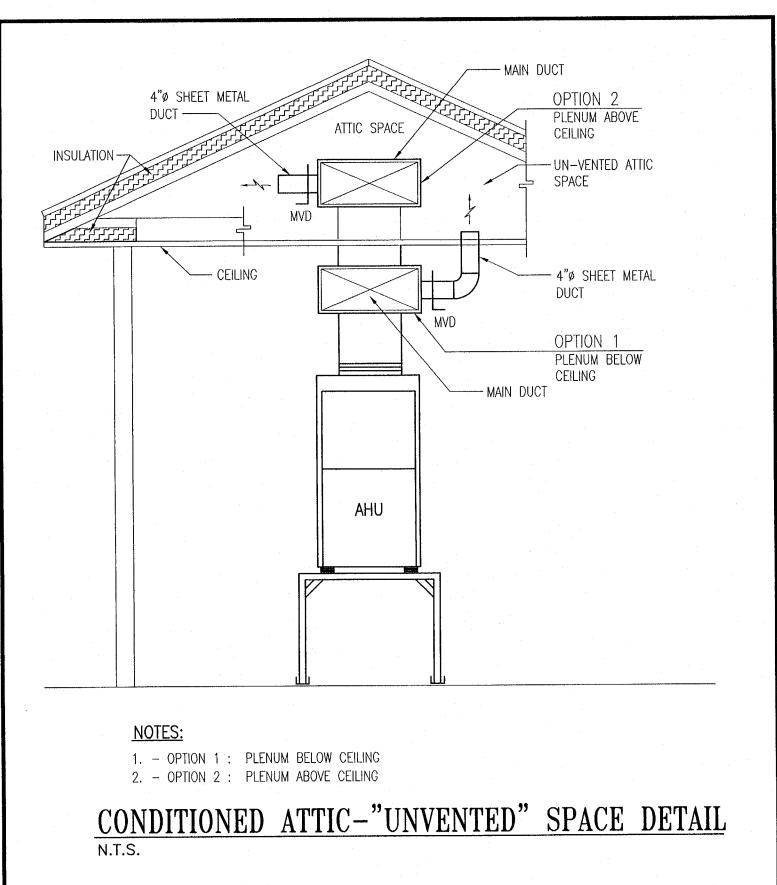
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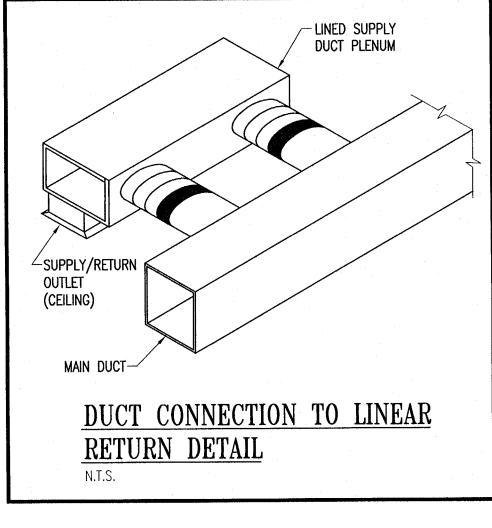
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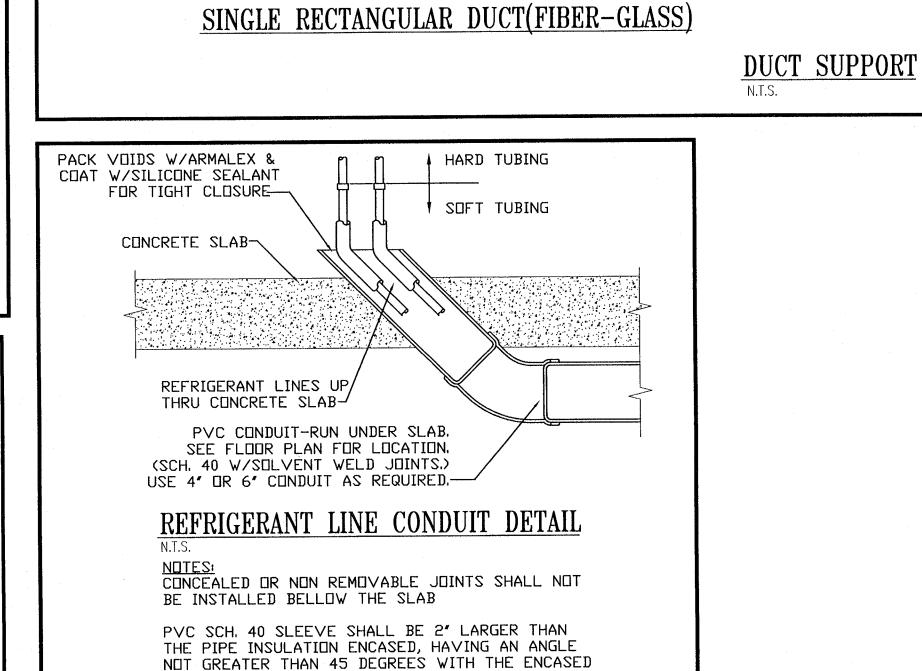
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MIAMI, FL 33128
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REFRIGERANT PIPING REMOVABLE FOR REPLACEMENT.

BUILDING STRUCTURE -

- ATTACH TO BUILDING

STRUCTURE AS PER STRUCTURAL

1-1/2"x16 GA STRAPS

ENGINEERS RECVOMENDATION

ATTACH TO BUILDING

- DUCT-SEE PROJECT PLAN FOR SIZE

STRUCTURE AS PER STRUCTURAL

TURN STRAP ----

1½"X22" GAGE STRAP

30"D & 1"X%" ABOVE 30"D AT 10" O.C.

DUCT -SEE PROYECT

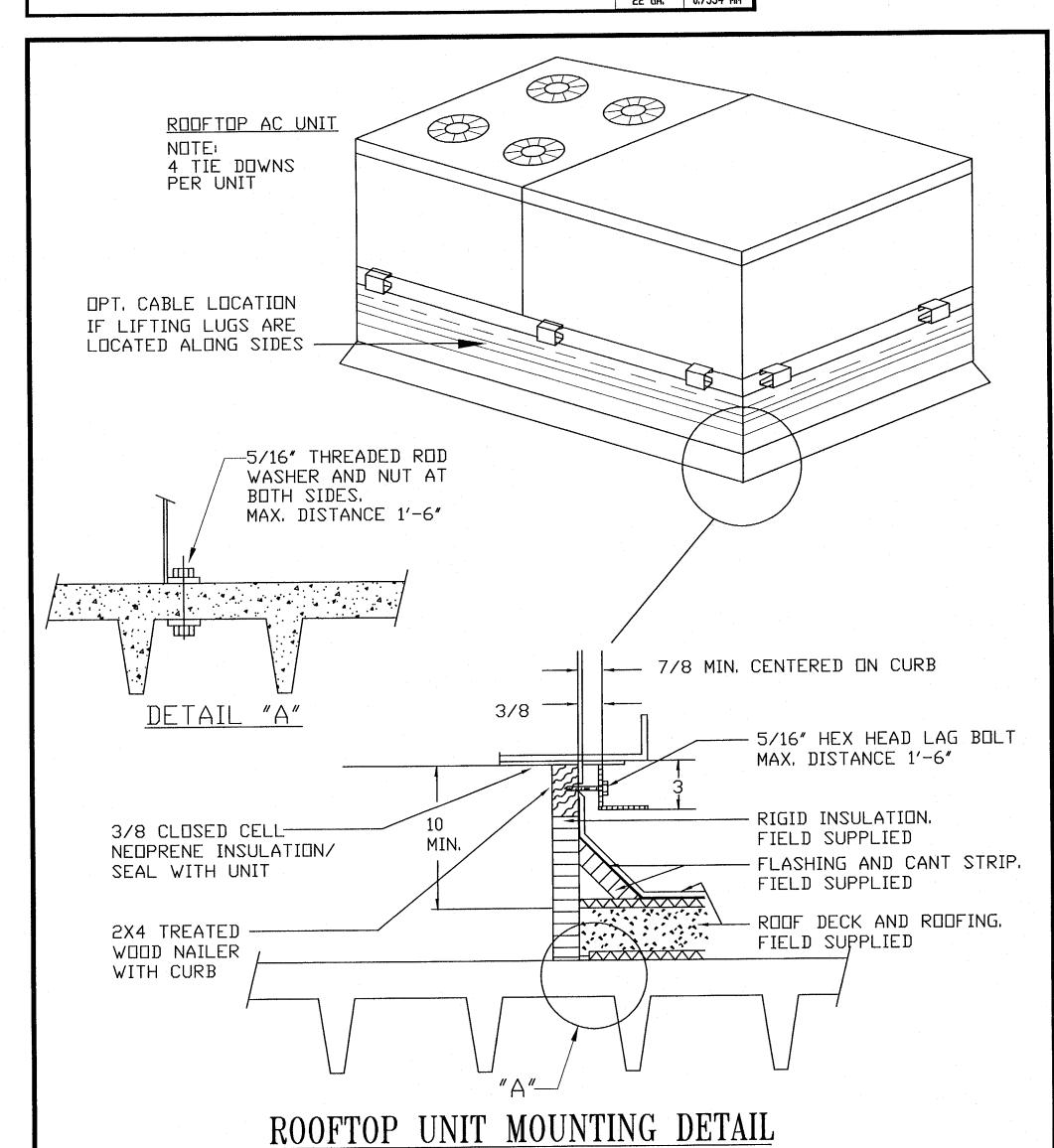
PLAN FOR SIZE-

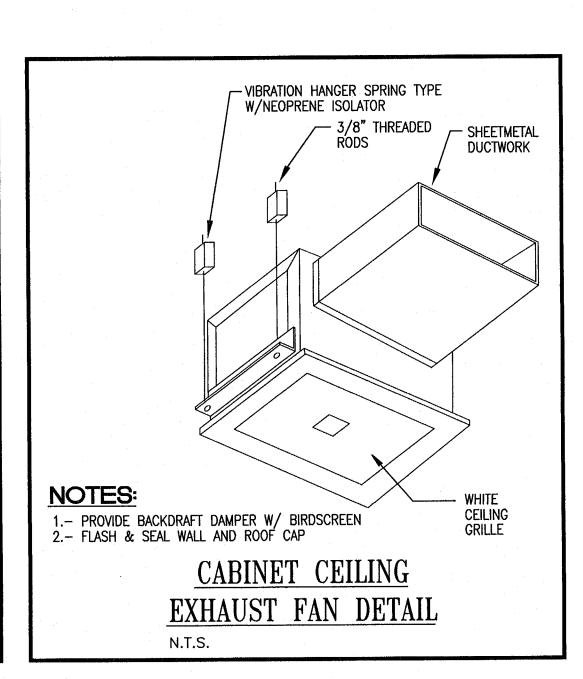
DUCT

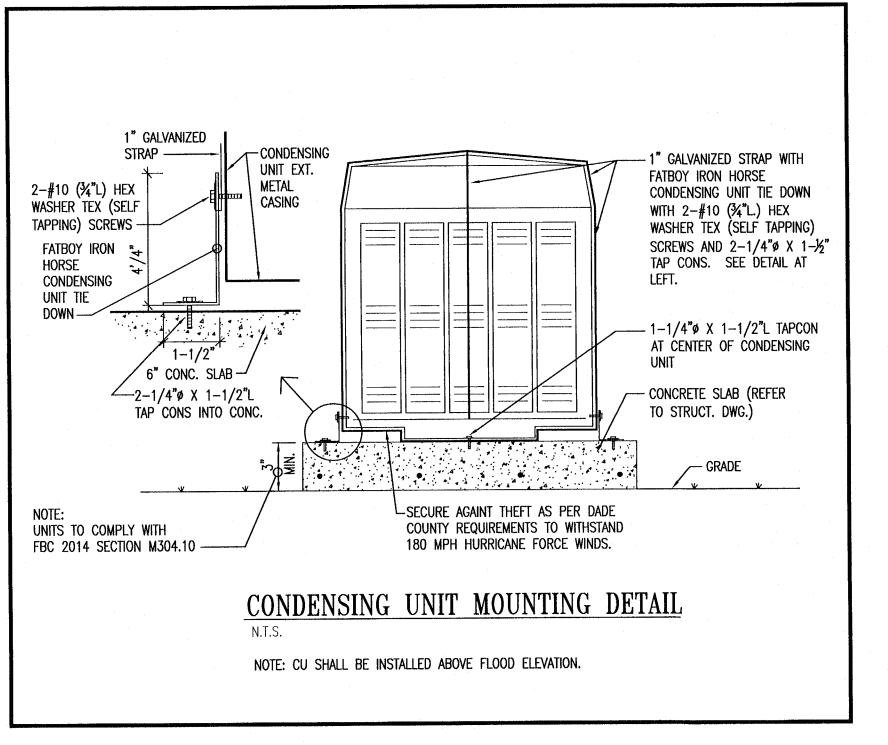
ROUND DUCT(FLEX-DUCT

HANGERS UP THRU

ENGINEERS RECVOMENDATION -







AND EACH
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28 W DILIDO RESIDENCE 28 WEST DILIDO DR, MIAMI BEACH, FL 33139

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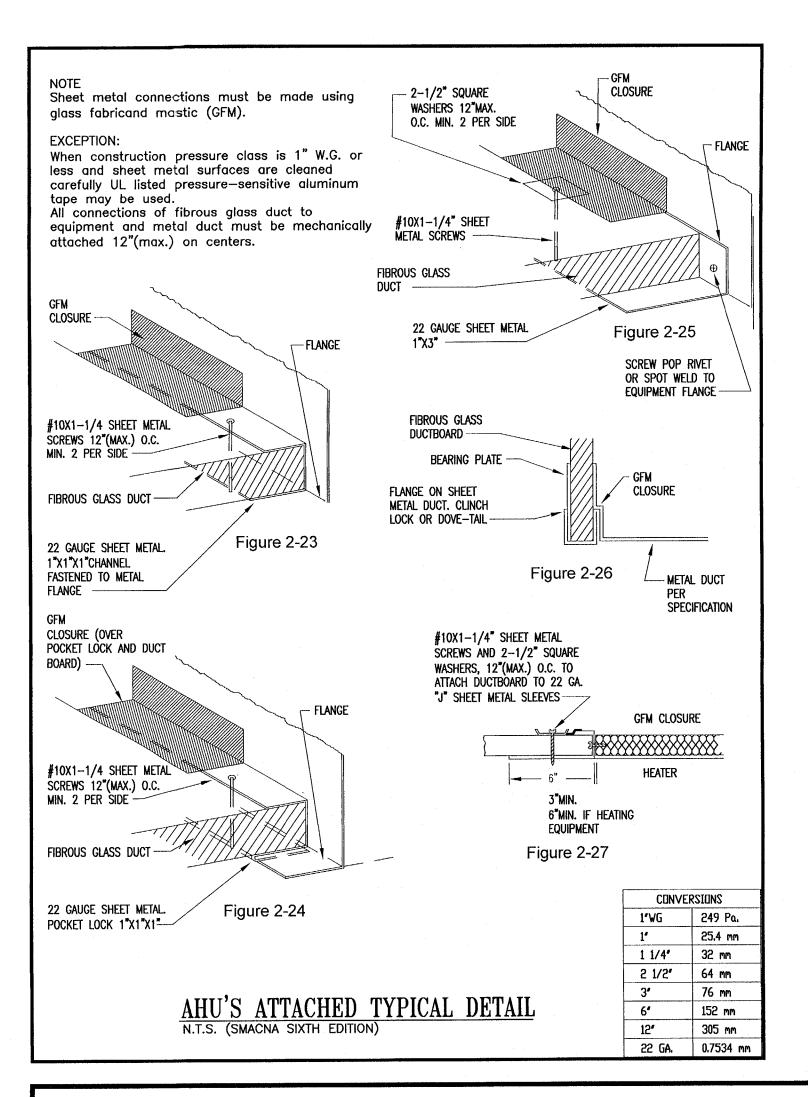
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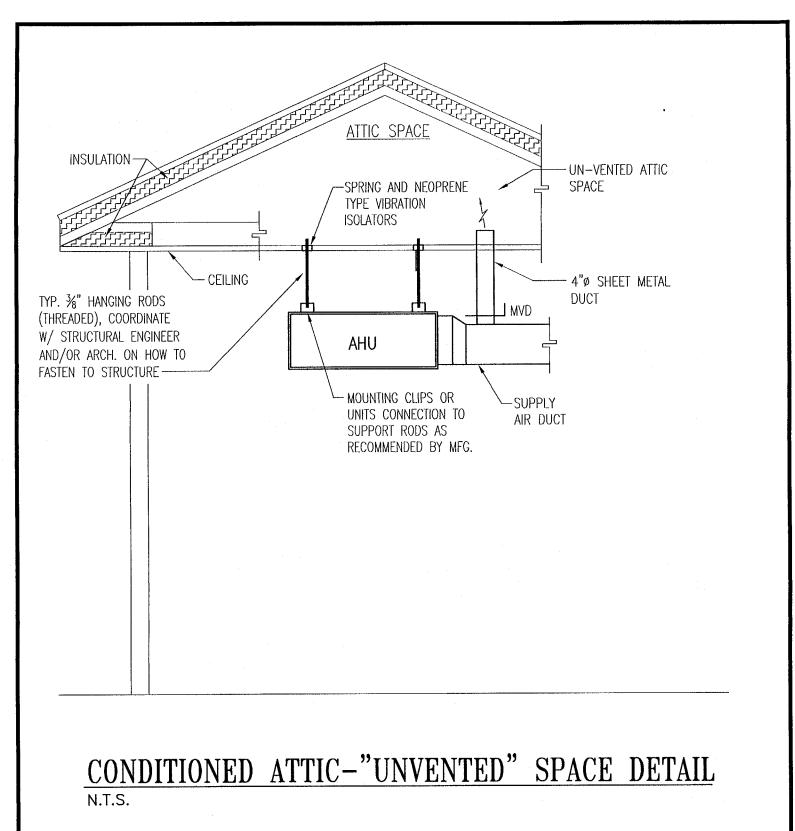
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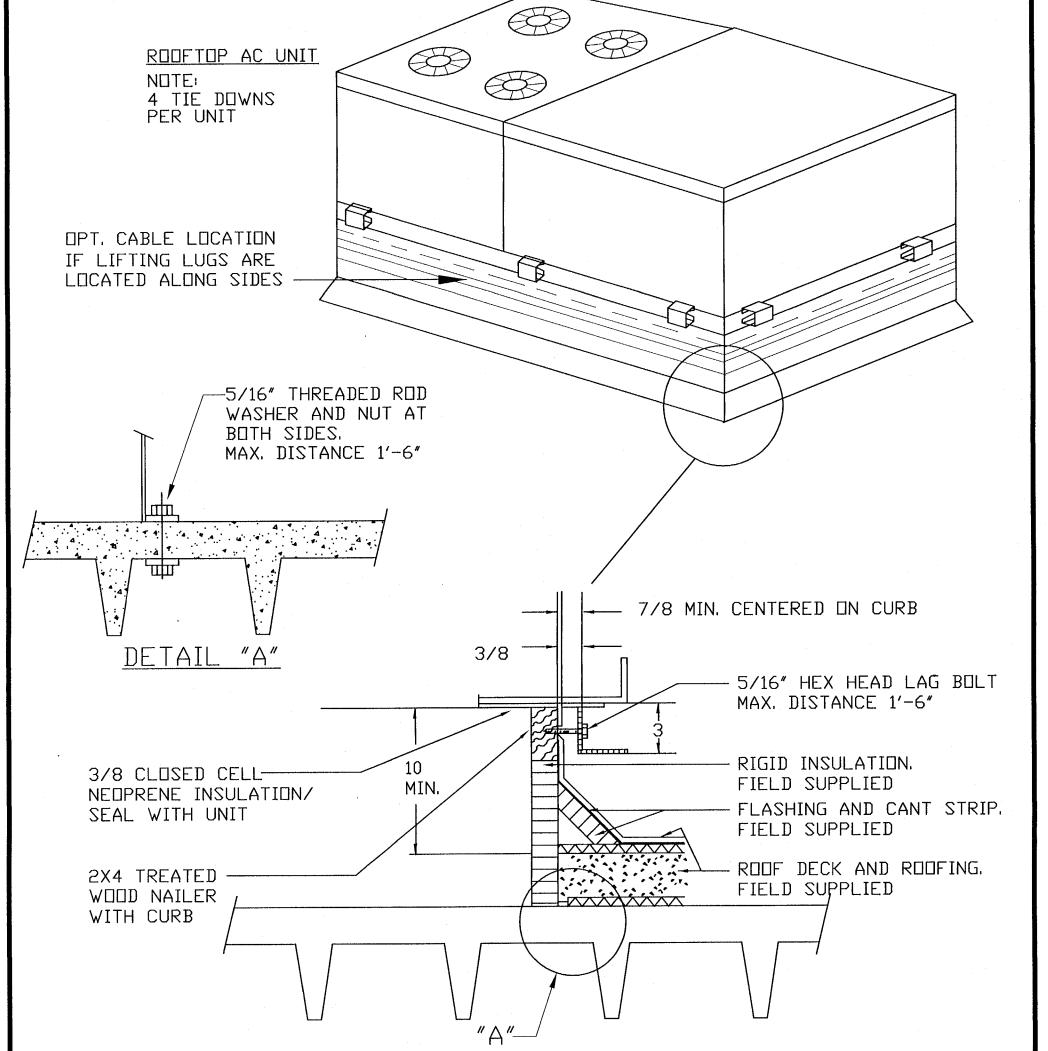
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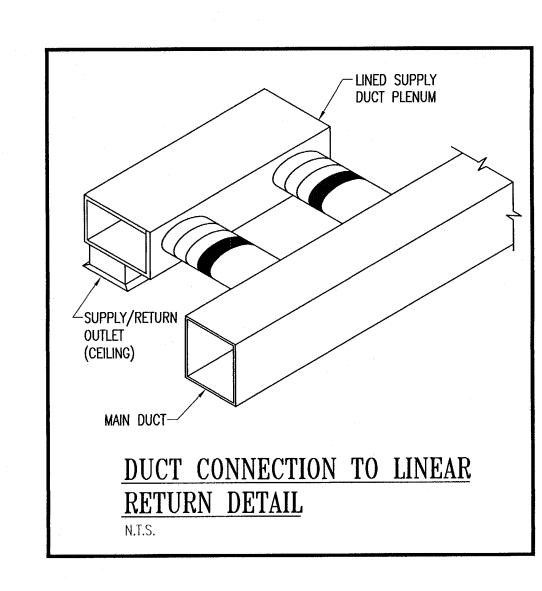


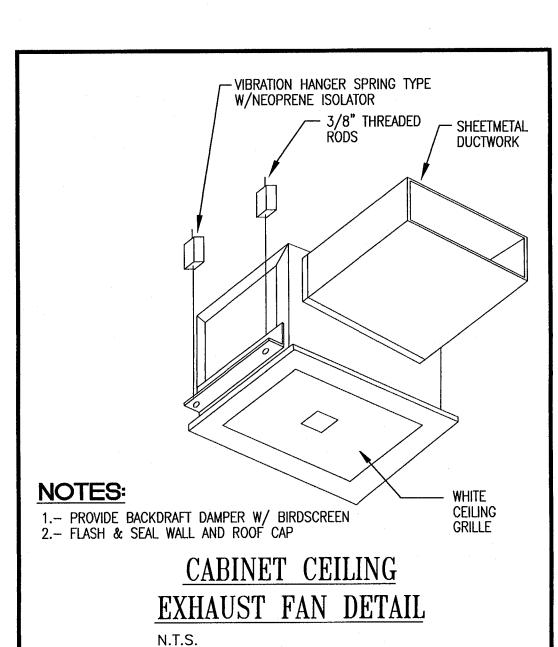


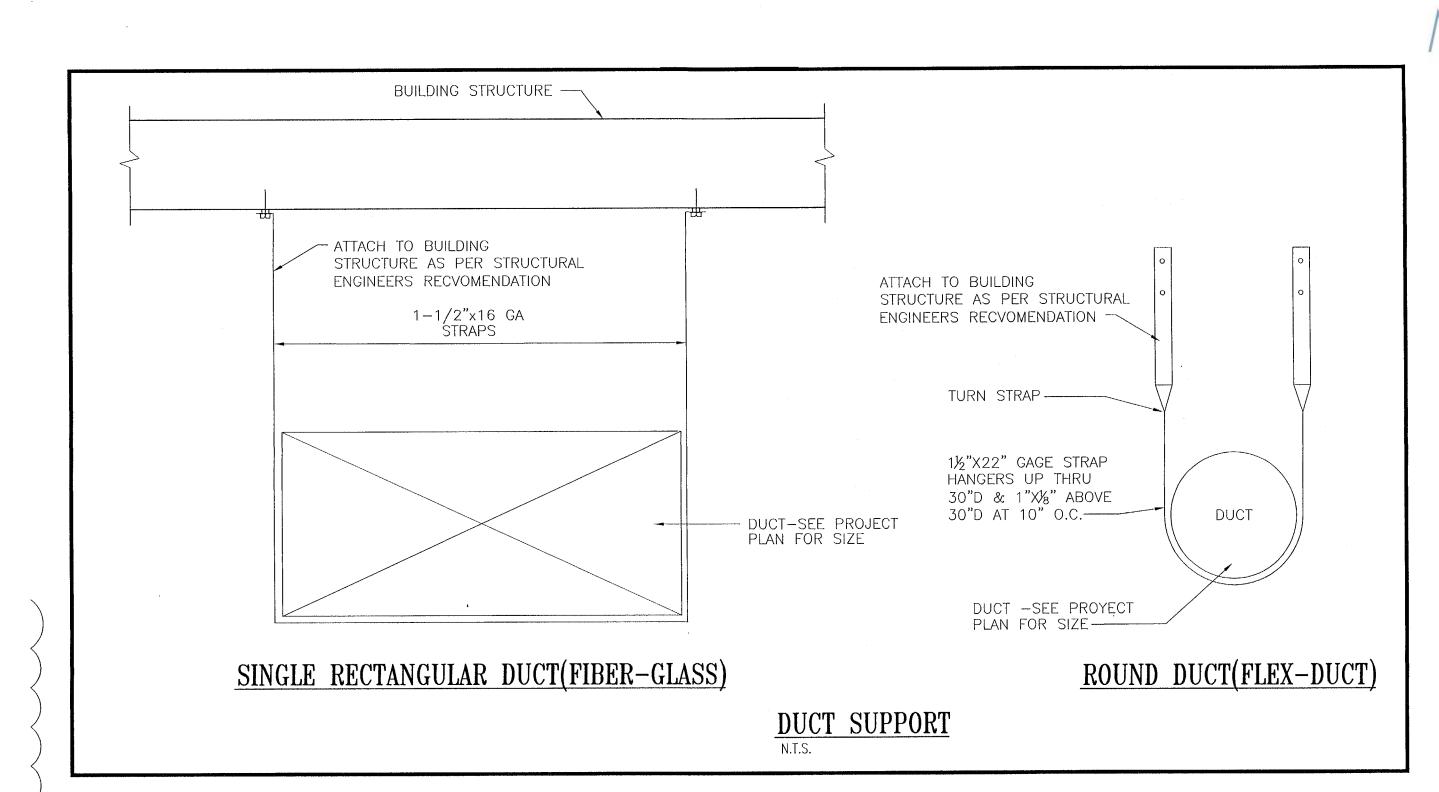


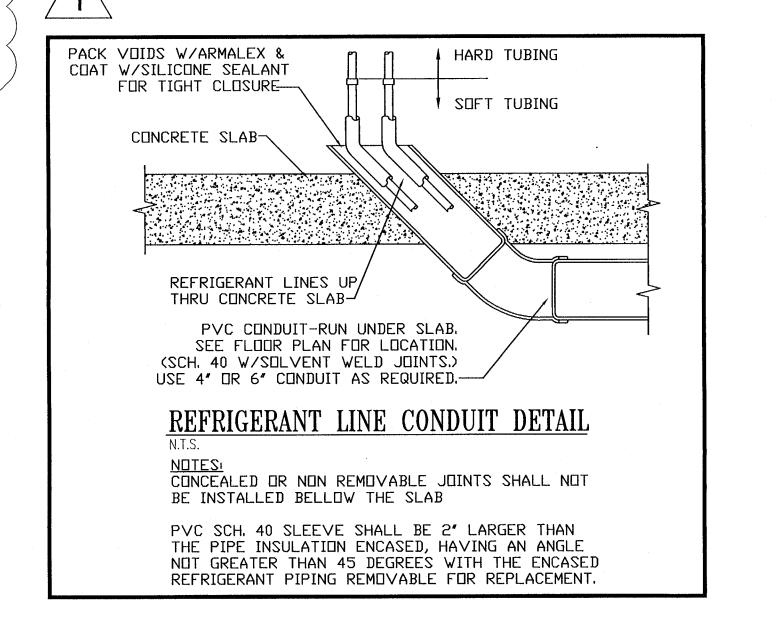


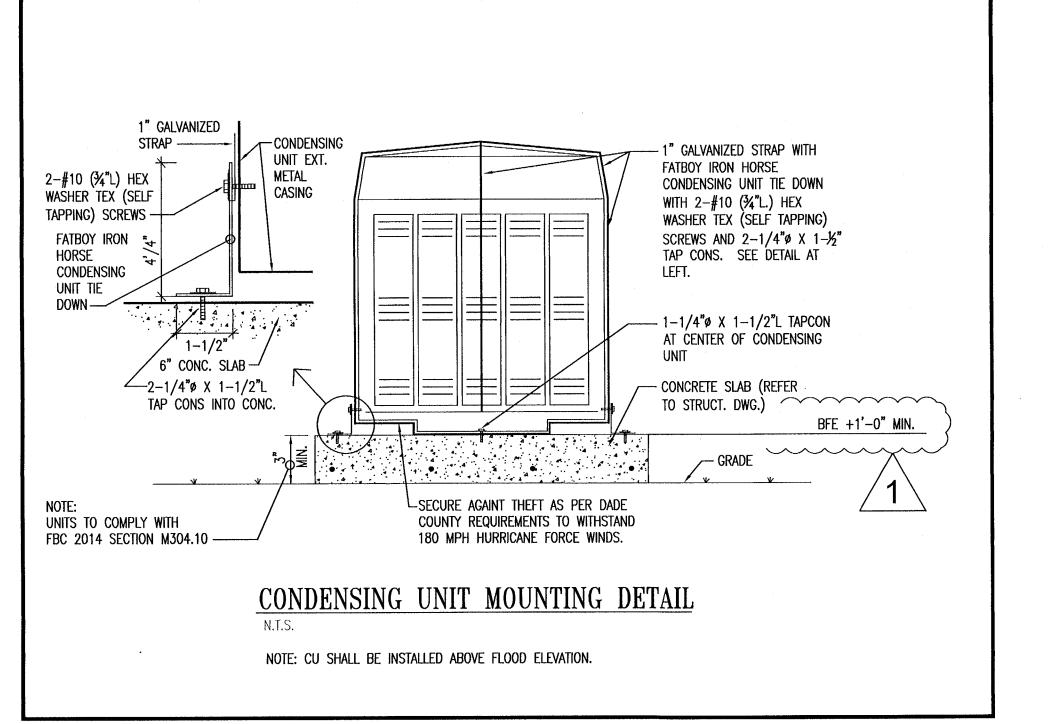
ROOFTOP UNIT MOUNTING DETAIL

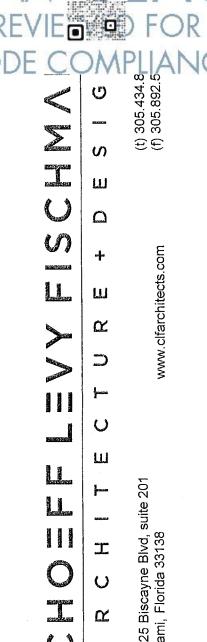




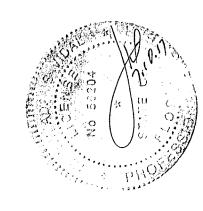








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HENRY VIDAL, P.E. PE # 56204

comm no. 1652

date: 02.03.2017

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Material list

Model	Quantity	Description
REYQ120TTJU	1	VRV-IV (208-230V)
REYQ96TTJU	1	VRV-IV (208-230V)
BS4Q54TVJ	1	Branch selector unit
BS6Q54TVJ	1	Branch selector unit
FXMQ54PBVJU	1	FXMQ - Ceiling Mounted Ducted (Medium Static)
FXMQ24PBVJU	1	FXMQ - Ceiling Mounted Ducted (Medium Static)
FXMQ48PBVJU	1	FXMQ - Ceiling Mounted Ducted (Medium Static)
FXMQ09PBVJU	1	FXMQ - Ceiling Mounted Ducted (Medium Static)
FXMQ18PBVJU	2	FXMQ - Ceiling Mounted Ducted (Medium Static)
FXMQ15PBVJU	2	FXMQ - Ceiling Mounted Ducted (Medium Static)
FXMQ36PBVJU	1	FXMQ - Ceiling Mounted Ducted (Medium Static)
FXAQ12PVJU	1	FXAQ - Wall Mounted Unit
DCM601A71	1	intelligent Touch Manager (iTM)
BRC1E73	10	Navigation Remote Controller

CU 1 - REYQ120TTJU

Capacity data at conditions and connection ratio (113) as entered

Name	Name FCU			Cooling Heating					iting				
		TmpC	Rq TC	Rv TC	Max TC	Rq SC	Tevap	Tdis C	Max SC	Tmp H	Rq HC	Max HC	Tdis H
		°F (DBT/WBT)		BTU/h	BTU/h	BTU/h	°F	°F	BTU/h	۴.	BTU/h	BTU/h	°F
AHU- 1.1	FXMQ54PBVJU	76.0/63.6		0	47,475		42.8	56.5	34,757	68.5		61,644	103.0
AHU- 1.2	FXMQ24PBVJU	76.0/63.6		0	21,100		42.8	54.5	16,227	68.5		27,755	105.2
AHU- 1.3	FXMQ48PBVJU	76.0/63.6		0	42,238		42.8	55.6	30,894	68.5		55,485	105.2
AHU- 1.4	FXMQ09PBVJU	76.0/63.6		0	8,350		42.8	56.8	6,681	68.5		10,790	99.4
			0								n/a		

Name	Sound 🥜	PS	⊭ MCA ⅓	MOP	WxHxD	Weight
A. 7. (17. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19	dBA 🧠		Α		inch	⊪ / lbs
AHU-1.1	43 - 46	230V 1ph	3.4	15A	55.1 x 11.8 x 27.6	103.6
AHU-1.2	38 - 42	230V 1ph	1.8	15A	39.4 x 11.8 x 27.6	79.4
AHU-1.3	40 - 44	230V 1ph	3.4	15A	55.1 x 11.8 x 27.6	101.4
AHU-1.4	29 - 33	230V 1ph	0.6	15A	21.7 x 11.8 x 27.6	55.1

CU 2 - REYQ96TTJU

Capacity data at conditions and connection ratio (119) as entered

		Tmp C	Rq TC	Rv TC	Max TC	Rq SC	Tevap	Tdis C	Max SC	∗Tmp H	Rq HC	Max HC	Tdis H
	7	°F (DBT/WBT)		BTU/h	BTU/h	BTU/h	℉	°F.,,	BTU/h	°۴	BTU/h	BTU/h	**F
AHU- 2.5	FXMQ18PBVJU	76.0/63.6		0	15,823		42.8	56.8	13,391	68.5		20,556	98.0
AHU- 2.6	FXMQ18PBVJU	76.0/63.6		0	15,823		42.8	56.8	13,391	68.5		20,556	98.0
AHU- 2.7	FXMQ15PBVJU	76.0/63.6		0	13,178		42.8	59.2	10,365	68.5		16,949	96.1
AHU- 2.9	FXMQ36PBVJU	76.0/63.6		. 0	31,652		42.8	56.2	24,605	68.5		41,113	101.6
AHU- 2.10	FXMQ15PBVJU	76.0/63.6		0	13,178		42.8	59.2	10,365	68.5		16,949	96.1
AHU- 2.11	FXAQ12PVJU	76.0/63.6		0	10,523		42.8	51.9	7,676	68.5		13,874	112.0
			0								n/a		

Name FCU Name	[Cooli	Participation of the second	1.00		eating
Name	Sound 3	PS	MCA	MOP	WxHxD	Weight
	dBA		. A		inch	lbs
AHU-2.5	38 - 42	230V 1ph	1.6	15A	39.4 x 11.8 x 27.6	79.4
AHU-2.6	38 - 42	230V 1ph	1.6	15A	39.4 x 11.8 x 27.6	79.4
AHU-2.7	37 - 40	230V 1ph	1.5	15A	39.4 x 11.8 x 27.6	79.4
AHU-2.9	39 - 43	230V 1ph	2.9	15A	55.1 x 11.8 x 27.6	101.4
AHU-2.10	37 - 40	230V 1ph	1.5	15A	39.4 x 11.8 x 27.6	79.4
AHU-2.11	31 - 38	230V 1ph	0.4	15A	31.3 x 11.4 x 9.3	26.5

Name :	Model	CR	a esperanta de la composición de la co	Cooling			Heating		Piping
	1000		Tmp C	./ ⋅ CC ····	Rq CC	Tmp H	HC ·	Rq HC	
	3,00	%	°F	BTU/h	BTU/h	°F (DBT/WBT)	BTU/h	BTU/h	ft
CU 1	REYQ120TTJU	112.9	95.0	114,843	113,283	32.0/30.7	112,812	78,138	24.6
CU 2	REYQ96TTJU	118.8	95.0	94,690	94,175	32.0/30.7	105,866	65,172	24.6

Name	Model	PS	. MCA	MOP	RunAmps	St curr	WxHxD	Weight
		10 Sept. 200	A ·	Α	A A	Α	inch	lbs
CU 1	REYQ120TTJU	208V - 230V 3ph	43.0	50.0	30.0	0.0	48.9 x 66.7 x 30.2	703.3
BS 1	BS4Q54TVJ	230V 1ph	0.4	15.0	0.0	0.0	14.6 x 11.7 x 18.9	48.5
CU 2	REYQ96TTJU	208V - 230V 3ph	38.0	45.0	27.4	0.0	48.9 x 66.7 x 30.2	703.3
BS 2	BS6Q54TVJ	230V 1ph	0.6	15.0	0.0	0.0	22.8 x 11.7 x 18.9	68.3

Name	S. 19:52	. AH	RI Std 1230	Ducted :	AHRI Std 1230 Non-Ducted					
1000	EER	IEER	COP 47°F	COP 17°F	SCHE	EER	IEER	COP 47°F	COP 17°F	SCHE
CU 1	12.6	20.7	3.51	2.32	25.1	13.9	25.4	3.98	2.54	27.9
CU 2	13.1	21	3.72	2.31	23	15.1	29.3	4.25	2.63	27.3

CU 1 - REYQ120TTJU

odel	Quantity	Description
YQ120TTJU		VRV-IV (208-230V)
4Q54TVJ	1	Branch selector unit
MQ54PBVJU	1	FXMQ - Ceiling Mounted Ducted (Medium Static)
MQ24PBVJU		FXMQ - Ceiling Mounted Ducted (Medium Static)
MQ48PBVJU	1	FXMQ - Ceiling Mounted Ducted (Medium Static)
MQ09PBVJU	1	FXMQ - Ceiling Mounted Ducted (Medium Static)
C1E73		Navigation Remote Controller

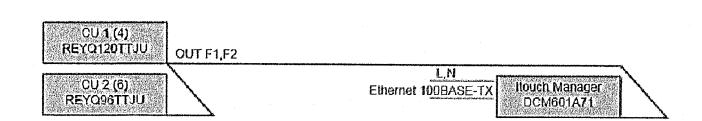
CU 2 - REYQ96TTJU

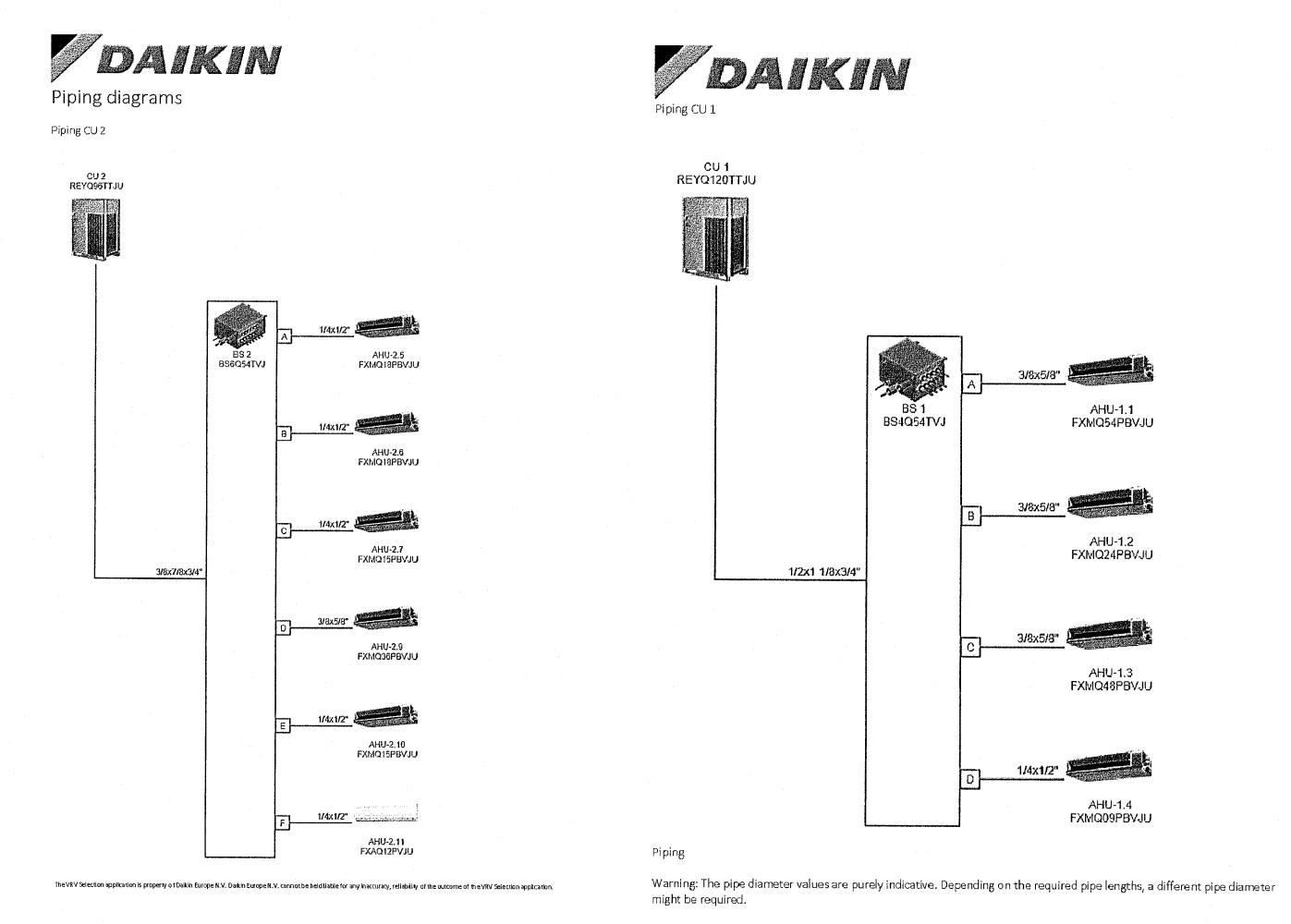
Model	Quantity	Description
REYQ96TTJU	1	VRV-IV (208-230V)
BS6Q54TVJ	1	Branch selector unit
FXMQ18PBVJU	2	FXMQ - Ceiling Mounted Ducted (Medium Static)
FXMQ15PBVJU		FXMQ - Ceiling Mounted Ducted (Medium Static)
fxmq36pbvju	1	FXMQ - Ceiling Mounted Ducted (Medium Static)
FXAQ12PVJU	1	FXAQ - Wall Mounted Unit
BRC1E73	6	Navigation Remote Controller



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Control Group

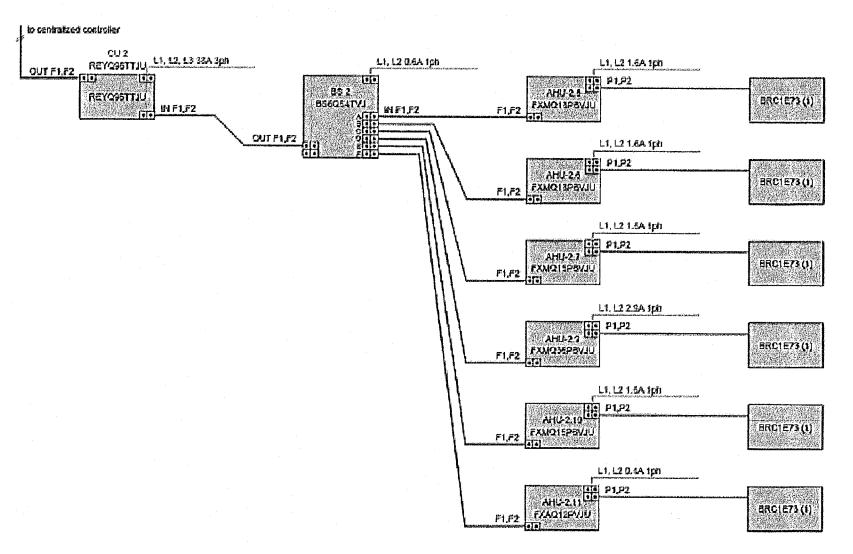






Wiring diagrams

Wiring CU 2

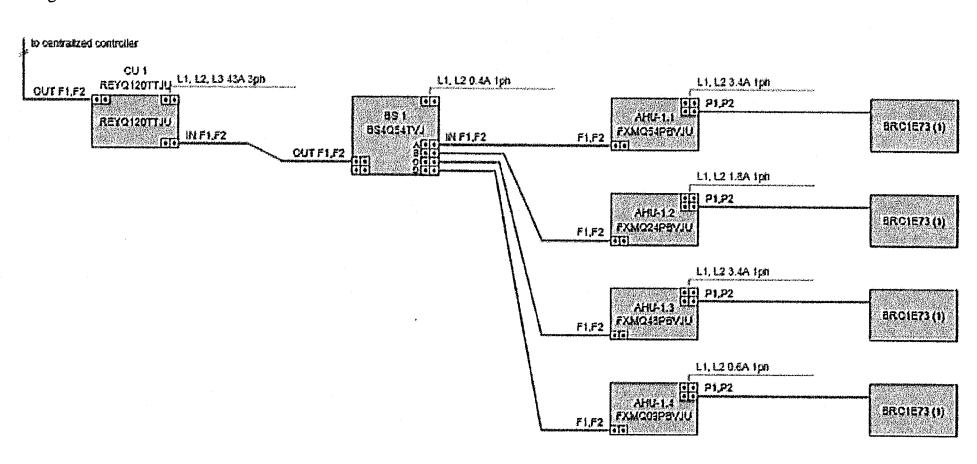


Remarks

F1F2 = AWG 18-2 is required - however always refer to local code for further information.

P1P2 = AWG 18-2 is required - however always refer to local code for further information.

Wiring CU 1



Remarks

F1F2 = AWG 18-2 is required - however always refer to local code for further information.

P1P2 = AWG 18-2 is required - however always refer to local code for further information.

REVIE D FOR CODE COMPLIANCE

(t) 305.892.52 (f) 305.892.52

T E C T U R E

A R C H I T 8425 Biscayne Blvd, suite 201

W DILIDO RESIDENCE
28 WEST DILIDO DR,
MIAMI BEACH, FL 33139

seal

HENRY VIDAL, P.E. PE # 56204

comm no. 1652

date: 02.03.2017

revised:



				CONNECTED TO:		SUPPLY FAN	COOLING CAPACITY			HEATING CAPACITY			ELECTRICAL		DIMENSIONS	WEIGHT 1		
TAG: ROOM	BASIS OF DESIGN (DAIKIN)	NOMINAL TONNAGE	TVDF	CONDENSING UNIT	ZONE CHANGEOVER DEVICE	AIR FLOW RATE cfm	TOTAL BTU/h	SENSIBLE BTU/h	ENTEI Al				POWER SUPPLY	Min Circuit Amps	Max Overcurrent Protection	WxHxD	Net T	Options and
									°F DB	DB F WB	BTU/h	°Fdb	Voltage - Phase	MCA	МОР	inch	lbs	
AHU-1.1	FXMQ54PBVJU	5	Ceiling Mounted Ducted (Medium Static)	CU 1	Yes	1,624	47,475	34,757	76.0	63.6	61,644	68.5	230V 1ph	3.4	15.0	55.1 x 11.8 x 27.6	103.6	BRC1E73 (1)
AHU-1.2	FXMQ24PBVJU	2	Ceiling Mounted Ducted (Medium Static)	CU 1	Yes	688	21,100	16,227			27,755	68.5	230V 1ph	1.8	15.0	39.4 x 11.8 x 27.6		BRC1E73 (1)
AHU-1.3	FXMQ48PBVJU	4	Ceiling Mounted Ducted (Medium Static)	CU 1	Yes	1,377	42,238	30,894	76.0	63.6	55,485	68.5	230V 1ph	3.4		55.1 x 11.8 x 27.6		BRC1E73 (1)
AHU-1.4	FXMQ09PBVJU	1	Ceiling Mounted Ducted (Medium Static)	CU 1	Yes	317	8,350	6,681	76.0	63.6	10,790	68.5	230V 1ph	0.6		21.7 x 11.8 x 27.6	55.1	BRC1E73 (1)
AHU-2.5	FXMQ18PBVJU	2	Ceiling Mounted Ducted (Medium Static)	CU 2	Yes	635	15,823	13,391	76.0	63.6	20,556	68.5	230V 1ph	1.6	15.0	39.4 x 11.8 x 27.6	79.4	BRC1E73 (1)
AHU-2.6	FXMQ18PBVJU	2	Ceiling Mounted Ducted (Medium Static)	CU 2	Yes	635	15,823	13,391	76.0	63.6	20,556	68.5	230V 1ph	1.6	15.0	39.4 x 11.8 x 27.6	79.4	BRC1E73 (1)
AHU-2.7	FXMQ15PBVJU	1	Ceiling Mounted Ducted (Medium Static)	CU 2	Yes	560	13,178	10,365	76.0	63.6	16,949	68.5	230V 1ph	1.5	15.0	39.4 x 11.8 x 27.6	79.4	BRC1E73 (1)
AHU-2.9	FXMQ36PBVJU	3	Ceiling Mounted Ducted (Medium Static)	CU 2	Yes	1,130	31,652	24,605	76.0	63.6	41,113	68.5	230V 1ph	2.9	15.0	55.1 x 11.8 x 27.6	101.4	BRC1E73 (1)
AHU-2.10	FXMQ15PBVJU	1	Ceiling Mounted Ducted (Medium Static)	CU 2	Yes	560	13,178	10,365	76.0	63.6	16,949	68.5	230V 1ph	1.5	15.0	39.4 x 11.8 x 27.6	79.4	BRC1E73 (1)
AHU-2.11	FXAQ12PVJU	1	Wall Mounted Unit	CU 2	Yes	290	10,523	7,676	76.0	63.6	13,874	68.5	230V 1ph	0.4	15.0	31.3 x 11.4 x 9.3	26.5	BRC1E73 (1)

Schedule Notes:

Ease of installation with auto adjusting airflow at commissioning based on external static pressure

Easy maintenance with service access from below

Built-in condensate pump (FXDQ_M, FXFQ_P, FXFQ_T, FXMQ_M, FXMQ_P, FXUQ_P, FXZQ_M)

Optional MERV 8 and 13 filters (FXMQ_M, FXMQ_P)

Optional Economizer Kit

Standard Limited Warranty: 10-year warranty on compressor and all parts

VARIABLE REFRIGERANT VOLUME - AIR-COOLED CONDENSING UNIT SCHEDULE

	BASIS OF DESIGN	NOMINAL		COOLING CAPACITY HEATING CAPACITY			REFRIGERANT CHARGE				ELECTRICAL				DIMENSIONS			EFFICIENCY (NonDucted/Ducted)		
TAG: ROOM	(DAIKIN)	TONNAG	DESCRIPTION	BTU/h	AMBIENT DESIGN (°F DB)	BTU/h	AMBIENT DESIGN (°F DB / WB)	Factory Charge (lbs) Add'l Refrigerant (lbs)	CONNECTION RATIO (%)	I VOLTΔGE-	MIN CIRCUIT AMPS (MCA)	MAX OVERCURRENT PROTECTION (MO	P) RUNNING CURRENT(A)	(WxHxD) (inch)	WEIGHT (lbs)	EER	IEER	COP 47 COP1	SCHE ES
CU 1	REYQ120TTJU	10	Air cooled heat recovery (1)	114,843	95.0	112,812	32.0 / 30.7	25.8	n/a	112.9	208V - 230V 3ph	43.0	50.0	30.0	48.9 x 66.7 x 30.2	2 703.3	13.9/12.6 2	25.4/20.7	3.98/3.51 2.54/2.	32 27.9/25.1
CU 2	REYQ96TTJU	8	Air cooled heat recovery (1)	94,690	95.0	105,866	32.0 / 30.7	25.8	n/a	118.8	208V - 230V 3ph	38.0	45.0						4.25/3.72 2.63/2.	

Manufacturer must be certified, listed, and labeled per AHRI 1230.

System rating data based on design ambient conditions for cooling and for heating.

Manufacturer must certify and submit system performance at extreme conditions of 120 degrees F ambient in cooling mode and -4 degrees F in heating mode.

Submitted performance data must be fully de-rated for all components and accessories, including but not limited to, line length, vertical separation, connection ratio, design

System must provide continuous heating during defrost and oil return. Systems without this capability must be de-rated to account for heating lost during defrost cycle and unit Manufacturer must have published continuous performance rating data at least 120F and -4F to ensure performance during extreme conditions.

Condensing units must have fully modulating INVERTER compressors.

Non - VFD compressors (including digital scroll compressors and compressors with hot gas bypass) will not be permitted.

Condensing units must have have auto changeover functions

Demand limiting relay contact must be provided.

Condensing units must have a minimum of 3 minutes of non-volatile operational memory for use in diagnostics.

All Mode Changeover Devices and FCU refrigerant controls shall be via Electronic Expansion Valves (EEV's) with 2000:1 throttling range.

EEV actuators must be removable from valve body without disturbing the refrigerant system.

Systems using solenoid control valves must include full port isolation valves before and after refrigerant control box and acoustic treatment to provide no greater than NC20 in the occupied mode. Solenoid control valves and full port isolation valves must be rated for 2.5 times the maximum working pressure in the system and be rated for a minimum L10 life of 500, 000 hours

VRF systems using solenoid control valves must provide acoustic treatment to attenuate valve noise below NC20 in all occupied modes.

Condensing units must be furnished with protective coil coating to withstand ASTM B117 salt spray test for a minimum of 2500 hours. Performance of system must be de - rated for coil coating.

Condensing units must have published performance data with 200 % indoor connected capacity.

FCU thermostats must provide +/ -1 degree dead - band set - point and control capability. Air handling units shall be provided with condensate pump.

System shall be provided with i - Touch Manager controller with WEB based software for displaying up to 8 DIII - Net systems with 128 indoor units per system.PC by others.

Manufacturers submittal must include refrigerant piping diagram with pipe diameters, lengths, and refrigerant volume. Substitute manufacturer shall be responsible for additional piping and refrigerant.

Contractor to verify piping dimensions.

Installing contractor must have successfully completed manufacturers certified installation class within past 36 months.

Contractor to furnish and install insulation on refrigerant piping.

Manufacturers Representative must have local stock of parts and factory certified technician on staff.

Manufacturers Representative shall provide proof of ongoing installation training at their local facility for at least the past 5 years.

Manufacturers Representative shall provide proof of continuous sales and support of their products for at least 15 years.

Mechanical contractor shall be responsible for all direct costs and operating costs increases for 20 years associated with any deviations resulting from changes in design.

Condensing unit shall provide auto charging and indoor unit auto addressing capability.

Manufacturer must provide 10 years parts warranty on all FCUs, Condensing Units, Mode Changeover Devices and Zone Controls. Warranty conditions must be clarified during submittal phase.

VARIABLE REFRIGERANT VOLUME - ZONE HEAT RECOVERY DEVICE SCHEDULE

	BASIS OF DESIGN		VOLTAGE-		MAX OVERCURRENT	MAX CAPACITY	DIMENSIONS	
TAG: ROOM	(DAIKIN)	CONDENSING UNIT SERVED	PHASE	I MIN CIRCUIT AMPS (MCA)	PROTECTION (MOP)	(per Port)	(WxHxD inch)	WEIGHT (lbs)
BS 1 BS 2	BS4Q54TVJ BS6Q54TVJ	CU 1 CU 2	230V 1ph 230V 1ph	0.4 0.6	15.0 15.0	54,000 54,000	14.6 x 11.7 x 18.9 22.8 x 11.7 x 18.9	48.5 68.3

Schedule Notes:

Individual control and changeover with extended range of product offerings - 4, 6, 8, 10 and 12 port options.

Unlimited number of unused ports per box or system.

No drain piping needed.

Standard Limited Warranty: 10-year warranty on all parts.

HENRY VIDAL, P.E. PE # 56204

comm no. 1652

date: 02.03.2017

revised:

sheet no.

CONSULTING ENGINEERS

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H.VIDAL

& ASSOCIATES

PHONE: (305) 571-1860 FAX: (305)571-1861

- 1. ALL PLANS AND CALCULATIONS HAVE BEEN PREPARED IN COMPLIANCE WITH F.B.C. RESIDENTIAL 2014
- 2. ROOFING, WATERPROOFING, RAILINGS, POOL, GENERATOR, GARAGE DOOR, EXTERIOR DOORS, WINDOWS, GLASS GUARD RAILS, OPERABLE AND DECORATIVE SCREENS AND LOUVERS AND STAIRS ARE UNDER SEPARATE PERMIT.
- 3. NEW SEAWALL AND DOCK UNDER SEPRATE PERMIT

LIFE SAFETY NOTES

- 1. ALL INTERIOR GLAZING CALLED OUT FOR IN THESE PLANS IS TO BE CATEGORY II SAFETY GLASS AS PER FBC R-308.3.1
- 2. HANDRAILS SHALL BE CONSTRUCTED FOR A CONCENTRATED LOAD OF 200 LBS. APPLIED AT ANY POINT IN ANY DIRECTION HANDRAILS MUST TERMINATE INTO WALL OR POST HANDRAILS MUST COMPLY WITH FBC R311.5.6 SHOP DRAWINGS TO BE PROVIDED BY RAIL MFR.
- 3. ALL STAIR RAILINGS TO BE 3'-6" HIGH ABOVE FINISHED FLOOR RAILING SHALL NOT ALLOW PASSAGE OF A 4"\$
 SPHERE, TYP, 6"\$ AT TRIANGULAR OPENINGS FORMED BY TREAD, RISER AND BOTTOM RAIL OF RAILING AT STAIR.
 RAILING SHALL BE CONSTRUCTED TO RESIST A CONCENTRATED LOAD OF 200 LBS. APPLIED AT ANY POINT IN ANY DIRECTION MFR. TO PROVIDE SHOP DRAWINGS PRIOR TO MANUFACTURING FOR ARCHITECT'S & BUILDING DEPT'S. APPROVALS
- 4. INTERIOR GLASS RAILINGS TO BE CLEAR SEAMLESS TEMPERED SAFETY GLASS - MANUFACTURER TO SUBMIT SHOP DRAWINGS FOR APPROVAL UNDER SEPARATE PERMIT.
- 5. ANY OPENINGS IN RAILING OR BETWEEN RAILING & STRUCTURE ARE TO REJECT A 4" & SPHERE & BOTTOM 6' OF RAILING IS TO REJECT A 2" & SPHERE

SITE WORK NOTES

- 1. CONTRACTOR SHALL FIELD VERIFY, PRIOR TO CONSTRUCTION, THAT ALL SETBACKS ARE MET AS PER SITE PLAN.
- 2. ALL CONCRETE SLABS ON GRADE WITH ENCLOSED AIR CONDITIONED SPACES ABOVE ARE TO HAVE A 6 MIL POLYETHYLENE OR APPROVED VAPOR RETARDED WITH JOINTS LAPPED NOT LESS THAN 6" PLACED BETWEEN THE BOTTOM OF SLAB & THE BASE COURSE OR PREPARED SUBGRADE
- 3. ALL DRAINAGE SHALL BE MAINTAINED ON PROPERTY & SHALL NOT DRAIN INTO NEIGHBORING PROPERTIES
- 4. TERMITE PROTECTION SHALL BE PROVIDED BY FLORIDA REGISTERED TERMITICIDES OR OTHER APPROVED METHODS OF TERMITE PROTECTION LABELED FOR USE AS A PREVENTATIVE TREATMENT TO NEW CONSTRUCTION. COMPLY WITH SECTION R-318 OF SFBC.
- 5. SOIL SHALL BE TERMITE TREATED PRIOR TO CONSTRUCTION
- 6. CONTRACTOR SHALL POST A WEATHER RESISTANT JOB BOARD TO RECEIVE DUPLICATE TREATMENT CERTIFICATES & SHALL DISPLAY PRODUCT USED IDENTITY OR APPLICATOR, TIME & DATE OF TREATMENT, SITE LOCATION, AREA TREATED, CHEMICAL USED, PERCENT CONCENTRATION & NUMBER OF GALLONS USED

FLOOD-RESISTANT DESIGN NOTES

- 1. CLASSIFICATION OF STRUCTURE FOR FLOOD-RESISTANT DESIGN AND CONSTRUCTION IS 2.
- 2. ENCLOSED AREAS BELOW THE DESIGN FLOOD ELEVATION SHALL BE USED SOLELY FOR PARKING, BUILDING ACCESS OR STORAGE.
- 3. FLOOD OPENINGS SHALL NOT BE LESS THAN 3 INCHES IN ANY DIRECTION IN THE PLANE OF THE WALL.
- 4. FLOOD OPENING COVERS SHALL ALLOW THE AUTOMATIC FLOW OF FLOODWATERS INTO AND OUT OF THE ENCLOSED AREA.
- 5. FLOOD OPENING SHALL BE INSTALLED WITHIN 1 FOOT FROM THE ADJACENT GRADE, OR FINISHED GARAGE FLOOR TO THE BOTTOM OF FLOOD VENT.

CONSTRUCTION NOTES

- ALL DIMENSIONS ARE NOMINAL. DRAWINGS SHALL NOT BE SCALED AS ALL WRITTEN DIMENSIONS GOVERN. CONTRACTOR SHALL REPORT ANY AND ALL DISCREPANCIES TO THE ARCHITECT IMMEDIATELY BEFORE PROCEEDING WITH WORK.
- 2. ALL DIMENSIONS GIVEN ARE BASED ON FIELD INSPECTIONS & EXISTING CONSTRUCTION DOCUMENTS. CONTRACTOR SHALL VERIFY ALL DIMENSIONS GIVEN PRIOR TO ANY DEMOLITION/CONSTRUCTION WORK AND NOTIFY THE ARCHITECT OF ANY DISCREPANCIES.
- 3. ALL CONCRETE SLAB EDGES & GRADE BEAMS
 SUPPORTING EXTERIOR CONCRETE BLOCK WALLS SHALL
 BE RECESSED 34" BELOW TOP OF SLAB FOR A WIDTH OF
 THE EXTERIOR WALL
- 4. ALL SLAB & BEAM PENETRATIONS ARE TO BE SLEEVED
- 5. TYPICAL EXTERIOR WALL CONSTRUCTION TO BE 8"
 CAST-IN-PLACE ARCHITECTURAL CONCRETE UNLESS
 OTHERWISE SPECIFIED IN THE DRAWINGS. SEE DRAWINGS
 FOR INTERIOR FINISHES.
- 6. TYPICAL INTERIOR FRAMED PARTITIONS TO BE 11/2" x 35/8" MTL. STUDS @ 16" O.C. FACED w/5/8" GWB, TO RECEIVE PAINT FINISH, UNLESS OTHERWISE SPECIFIED IN DRAWINGS. PROVIDE HORIZONTAL FIREBLOCKING EVERY 1/3 OF WALL TO COMPLY w/SECTION 703.3.3 OF THE F.B.C.
- 7. PROVIDE (2) 2"x6" OR (2) 2"x4" WOOD MEMBERS BACKING OR $\frac{1}{2}$ " PLYWOOD AT ALL WALL HUNG CABINET LOCATIONS, TO COMPLY w/ FBC SECTION 2318.1.14
- 8. PROVIDE CEMENT BOARD AT ALL PARTITIONS LOCATED IN WET AREAS TO COMPLY WITH FBC R702.4.2
- 9. PROVIDE 5" ICYNENE PROSEAL SPRAY FOAM INSULATION
- 10. ALL NEW ELECTRICAL, MECHANICAL & PLUMBING EQUIPMENT IS TO BE ABOVE DESIGN FLOOD ELEVATION.

(R-30) UNDER ALL CONCRETE ROOF SLABS

- 11. CONTRACTOR SHALL PERFORM AN IMPERMEABILITY
 TEST ON ALL ROOF TERRACES FOR A PERIOD OF NO
 LESS THAN 24 HOURS
- 12. ALL EXTERIOR PLYWOOD, WOOD FRAMING MEMBERS, OR OTHER WOOD COMPONENTS TO BE MOISTURE AND MOLD RESISTANT. ALL INTERIOR PLYWOOD, FRAMING MEMBERS OR OTHER WOOD COMPONENTS TO BE FIRE-TREATED.
- 13. ALL CONCRETE SLABS ON GRADE OF ENCLOSED AIR CONDITIONED SPACES ARE TO HAVE A 6 MIL POLYETHYLENE OR APPROVED VAPOR RETARDED WITH JOINTS LAPPED NOT LESS THAN 6", PLACED BETWEEN THE SLAB & THE BASE COURSE OR PREPARED SUBGRADE.
- 14. WALL INSULATION SHALL BE I" RIGID FOAM BOARD EMBEDDED BETWEEN 8" EXTERIOR CONC. WALL & 5" INTERIOR CONC. WALL, MIN. R-5, CONTRACTOR SHALL YERIFY WITH MANUFACTURE TO COMPLY THESE REQUIREMENTS
- 15. STAIR MANUFACTURER SHALL PROVIDE FULLY ENGINEERED SHOP DRAWINGS FOR ARCHITECT'S APPROVAL PRIOR TO MANUFACTURING STAIR, ON-SITE MEASUREMENTS SHALL BE TAKEN & FIELD CONDITIONS VERIFIED BY THE STAIR MANUFACTURER, ALL DISCREPANCIES OR REQUIRED ADJUSTMENTS MUST BE BROUGHT IMMEDIATELY TO THE ARCHITECT'S ATTENTION.
- 16. COORDINATE W/ ELECTRICAL, AV & LOW VOLTAGE, PRIOR TO FORMING AND POURING CONC. SLABS, WALLS OR COLUMNS. PROVIDE EMBEDMENT OF LIGHT FIXTURES PER MFR. SPECS
- 17. PROVIDE FIREBLOCKING IN PARTITIONS @ 8' INTERVALS, AT INTERCONNECTIONS, OPENINGS, FLOOR JOISTS, DOOR POCKETS
- 18. GARAGE FLOOR SHALL BE OF APPROVED NON-COMBUSTIBLE MATERIAL.
- 19. SMOKE ALARMS SHALL BE INTERCONNECTED.
- 20. WATERPROOFING MEMBRANE: SOPREMA ALSAN RS SELF-TERMINATING MEMBRANE OR SIMILAR.
- 21. ROOFING MEMBRANE: SOPREMA MODIFIED BITUMEN ROOFING OR SIMILAR

FINISH NOTES

- 1. ALL CONSTRUCTION AND FINISH MATERIALS BELOW DESIGN FLOOD ELEVATION SHALL BE FLOOD-DAMAGE-RESISTANT MATERIAL.
- 2 ROOFING:
- SHALL BE "HYDROSTOP" PREMIUM COAT FLUID APPLIED
 (3 COAT) ROOFING SYSTEM (WHITE) BY QUEST
 CONSTRUCTION PRODUCTS AND SHALL BE INSTALLED
 PER N.O.A. & MFR. SPECS + DETAILS. (UNDER SEPARATE
 PERMIT.)
- 3. EXTERIOR WALL FINISH: ARCHITECTURAL CONCRETE, UNLESS OTHERWISE NOTED
- 4. INTERIOR PAINT FINISH:
 BENJAMIN MOORE CHINA WHITE INTERIOR LATEX PAINT
 ALL WALL FINISHES SHALL BE FLAT AND WASHABLE -ALL
 BASEBOARDS, DOORS & TRIMS SHALL BE SEMI-GLOSS.
 THIS SPEC APPLIES UNLESS OTHERWISE NOTED OR
 MODIFIED BY INTERIOR DESIGN.
- 5. <u>FLOOR FINISHES:</u> PRE-CAST TERRAZZO SLABS
- 6. GARAGE: SHALL RECEIVE BROOM FINISH ON CONC. SLAB.
- 7. ALL EXTERIOR DOORS & WINDOWS TO RECEIVE 'DARK BRONZE' ALUMINUM FINISH
- 8. COORDINATE/VERIFY ALL FINISHES W/ OWNER & INTERIOR DESIGNER:
- 9. THESE SPECIFICATIONS ARE ONLY TO BE USED AS A GUIDE FOR DETERMINING MAXIMUM ALLOWANCES. THE OWNER & ARCHITECT SHALL BE CONSULTED PRIOR TO FINAL SELECTIONS AND ORDERING OF EACH ITEM SPECIFIED, OR ANY FINISH INVOLVED WITH THIS RESIDENCE.
- 10. ALL SHOWER & BATHTUB AREAS SHALL HAVE A NON-ABSORVENT FLOOR & WALL FINISH UP TO 6'-0" HIGH AS PER FBC R 30T
- 11. WALLS AND CEILINGS FINISHES SHALL HAVE A FLAME-SPREAD CLASSIFICATION OF NOT GREATER THAN 200 AND A SMOKE-DEVELOPED INDEX NOT GREATER THAN 450 AS PER ASTME-84 OR UL 273, FBCR 302,9,
- 12. INSULATION MATERIALS FACING VAPOR RETARDERS
 SHALL HAVE A FLAME-SPREAD CLASIFICATION OF NOT
 GREATER THAN 25 AND SMOKE-DEVELOPED INDEX NOT
 GREATER THAN 450 AS PER ASTM E-84 OR UL 273 FBCR
 302.10

GLAZING NOTES:

- 1. PER FBC R308.1 EACH PANE OF GLAZING INSTALLED IN HAZARDOUS LOCATION AS DEFINED IN FBC R308.4, SHALL BE PROVIDED WITH MANUFACTURERS LABEL DESIGNATING THE TYPE, THICKNESS OF GLASS AND THE SAFETY GLAZING STANDARD WITH WHICH IT COMPLIES, AND SHALL BE VISIBLE IN THE FINAL INSTALLATION.
- 2. PER FBC 308.3.1 GLAZING SHALL COMPLY WITH TEST CRITERIA FOR CATEGORY | OR || AS INDICATED IN TABLE R308.3.1(1)
- 3. PER FBC R308.4, ALL GLAZING IN FIXED AND OPERABLE PANELS OF SWINGING, SLIDING AND BIFOLD DOORS SHALL BE CONSIDERED HAZARDOUS LOCATIONS.
- 4. GLAZING IN SLIDING AND SWINGING DOORS SHALL BE SAFETY-GLAZING COMPLYING WITH THE SAFETY GLAZING STANDARDS AS SET FORTH IN FBC R4410.2.3.1.3
- 5. PER FBC R4410.2.3.1.3 DOORS CONTAINING GLAZING MATERIAL NOT GREATER THAN 9 SQ. FT. IN SURFACE AREA SHALL BE CLASSIFIED AS CATEGORY I GLAZING PRODUCT.
- 6. SWINGING OR SLIDING DOORS OF GLASS WITHOUT A CONTINUOUS FRAME SHALL BE OF ONLY FULLY TEMPERED GLASS NOT LESS THAN 3/8" IN THICKNESS PER FBC R4410.2.6
- 7. LAMINATED GLAZING SHALL BE PERMITTED AS AN EQUAL ALTERNATE TO PICKETS, IF TESTED TO SATISFY THE RESISTANCE REQUIREMENTS AS SET FORTH IN FBC R4403.7.3.6.3
- 8. ALL SHOWER ENCLOSURE SHOULD BE CATEGORY II SAFETY GLASS IN COMPLIANCE WITH CHAPTER 3 FBCR2014

INSULATION NOTES

WALL INSULATION:
ALL EXTERIOR WALLS SHALL BE INSULATED W/ 1" RIGID INSULATION BOARD, MIN. R-4.1.

ICYNENE ROOF INSULATION:
ICYNENE CLASSIC SPRAY-FOAM INSULATION AT
UNDERSIDE OF ROOF SHEATING, R=30 MIN., 81/8" THK. MIN.

TAPERED INSULATION:
EXTRUDED POLYSTYRENE RIGID FOAM INSULATION OR SIMILAR, FIXED TO TOP OF ROOF SLAB AND SLOPED TO DRAIN AT 1/4/FOOT, UNLESS OTHERWISE INDICATED IN THE DRAWINGS.

FOAM PLASTICS NOTE:
FLAME SPREAD INDEX=75 MAX., SMOKE-DEVELOPMENT
INDEX=450 MAX. PER FBC R316.3

REVIE D FOR

CODE COMPLIANCE

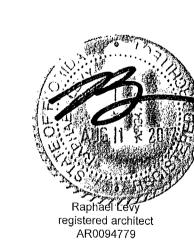
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28 W DILIDO RESIDENCE 28 WEST DILIDO DR, MIAMI BEACH, FL 33139

sea



comm no. 1652

date: 2/1/17

revised:

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 B.D. COMMENTS
 ♠ Ø7/Ø1/17
 B.D. COMMENTS

sheet no.

- CONTRACTOR SHALL SECURE AND PAY FOR ALL PERMITS, FEES, TAXES, INSPECTIONS, TESTS, PERFORMANCE BONDS, FINES AND OTHER ITEMS AS REQUIRED FOR THE INSTALLATION OF THE COMPLETE PLUMBING SYSTEMS, AND SHALL BE RESPONSIBLE FOR OBTAINING HIS OWN PERMIT.
- CONTRACTOR SHALL PROVIDE ALL REQUIRED INSURANCE FOR PROTECTION AGAINST PUBLIC LIABILITY AND PROPERTY DAMAGE FOR THE DURATION OF THE WORK.
- EXCEPT WHERE LONGER WARRANTIES ARE SPECIFIED FOR SPECIFIC EQUIPMENT. CONTRACTOR SHALL WARRANT ALL WORK TO BE FREE OF DEFECTS IN WORKMANSHIP AND MATERIALS FOR A PERIOD OF ONE YEAR AFTER FINAL WRITTEN ACCEPTANCE OF
- PROVIDE ALL NECESSARY INSTRUCTIONS TO THE OWNER IN THE OPERATION OF THE PLUMBING SYSTEMS BEFORE FINAL ACCEPTANCE.
- PROVIDE THREE SETS OF BOUND AND LABELED EQUIPMENT MAINTENANCE AND INSTRUCTION MANUALS. MANUALS TO BE SUBMITTED TO ARCHITECT/ENGINEER FOR ACCEPTANCE.
- SUBMIT SHOP DRAWINGS FOR ALL MATERIALS AND EQUIPMENT FOR ACCEPTANCE OF THE ARCHITECT/ENGINEER BEFORE PROCEEDING WITH THE PURCHASE OR INSTALLA-TION OF ANY EQUIPMENT AND MATERIALS.
- LABEL AND IDENTIFY ALL EQUIPMENT, MOTOR STARTERS, CONTROLS, PIPING AND VALVES. SUBMIT IDENTIFICATION SCHEME TO THE ARCHITECT/ENGINEER FOR
- ALL CONTROL WIRING SHALL BE THE RESPONSIBILITY OF THE MECHANICAL SUB-CONTRACTOR. WIRING SHALL BE AS PER THE ELECTRICAL SPECIFICATIONS. MECHANICAL SUB-CONTRACTOR TO FURNISH ALL MOTORS AND STARTERS, RELAYS,
- 10. PRODUCTS AND MATERIALS SPECIFIED BY TRADE NAME AND/OR MODEL ON THE DRAWINGS ESTABLISH A STANDARD OF QUALITY. APPEARANCE. PERFORMANCE AND DIMENSIONS. CONTRACTOR SHALL BASE HIS BID ON THOSE ITEMS, WHICH SHALL BE CONSIDERED TO ESTABLISH A STANDARD BASIS OF BIDDING. REQUESTS FOR SUBSTITUTION SHALL BE SUBMITTED IN WRITING TO THE ARCHITECT/ENGINEER DEMONSTRATING THAT THE PROPOSED PRODUCT IS COMPARABLE, AND THAT BASIC DESIGN, CONSTRUCTION STANDARDS, QUALITY AND WARRANTIES ARE EQUAL OR BETTER THAN THE PRODUCT SPECIFIED. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY CHANGE IN THE WORK REQUIRED BY OTHER TRADES AND SHALL PAY FOR ANY EXPENSES INCURRED DUE TO THE CONTRACTOR'S REQUEST FOR REVISIONS OR
- 1. CONTRACTOR SHALL MAINTAIN A SET OF DRAWINGS AT THE PROJECT SITE WITH UP TO- 28. VALVES DATE INFORMATION ON AS-BUILT CONDITIONS INDICATING WITH COLORED PENS ALL CHANGES AND DEVIATIONS FROM THE CONTRACT DRAWINGS. THIS SET OF PRINTS SHALL BE TURNED OVER TO THE ARCHITECT/ENGINEER AT THE COMPLETION OF THE PROJECT AS A PRE-REQUISITE FOR FINAL PAYMENT.
- 12. PROVIDE ALL NEW MATERIALS OF AMERICAN MANUFACTURE, BEARING THE U.L. LABEL AS APPLICABLE. PROVIDE SUPPLEMENTAL MATERIALS NOT SPECIFICALLY NOTED HEREIN, BUT REQUIRED TO COMPLETE THE INSTALLATION IN ACCORDANCE WITH THE INTENT OF THE CONTRACT DRAWINGS, AT NO ADDITIONAL COST TO THE OWNER.
- 13. FURNISH ALL NECESSARY ACCESS PANELS TO CONTROL VALVES, DAMPERS, ETC., TO THE GENERAL CONTRACTOR, FOR INSTALLATION UNDER THE GENERAL TRADES.
- 14. ALL WORK SHALL BE FIELD CHECKED BEFORE INSTALLATION AND COORDINATED WITH ALL OTHER TRADES. THE CONTRACT DRAWINGS ARE DIAGRAMMATIC AND INTENDED TO DEPICT APPROXIMATE EQUIPMENT LOCATIONS AND ARRANGEMENTS, NOT SHOW ANY MINOR DETAIL. PLANS SHALL NOT BE SCALED: REFER TO THE ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR DIMENSIONS.
- 15. OFFSET PIPING AS REQUIRED TO CLEAR BUILDING STRUCTURE, DUCTWORK, ETC. AS SHOWN ON DRAWINGS AND AS REQUIRED BY FIELD CONDITIONS.
- 16. PLUMBING CONTRACTOR SHALL VERIFY ALL SPACE CONDITIONS AND DIMENSIONS AT JOB SITE PRIOR TO FABRICATION AND INSTALLATION OF MATERIALS AND EQUIPMENT. VERIFY ALL VOLTAGES WITH THE ELECTRICAL TRADE BEFORE ORDERING ANY
- 17. FURNISH AND INSTALL FIXTURE ACCESSORIES AS REQUIRED. UNLESS OTHERWISE SPECIFIED, ALL ACCESSORIES AND TRIM SHALL BE FIRST QUALITY WITH FINISH AS SELECTED BY ARCHITECT.
- 18. EACH PLUMBING FIXTURE SHALL BE PROVIDED WITH MECHANICAL SHOCK ARRESTORS.
- 19. PROVIDE SHUT-OFF VALVE(S) FOR EACH FIXTURE.
- PROVIDED TO CONNECT BOTH TYPES OF PIPES.
- 21. PROVIDE PIPING AS FOLLOWS:
 - A. DOMESTIC COLD WATER, HOT WATER, AND ELECTRIC WATER HEATER P&T RELIEF VALVE/DRAIN PAN PIPING:
 - UNDERGROUND: TYPE K SEAMLESS HARD DRAWN COPPER TUBE WITH CAST COPPER ALLOY OR WROUGHT SOLDER JOINT FITTINGS. ABOVE GROUND: TYPE L SEAMLESS HARD DRAWN COPPER TUBE WITH CAST
 - COPPER ALLOY OR WROUGHT SOLDER JOINT FITTINGS. SOLDER USED IN JOINTS SHALL BE 100 % LEAD-FREE.
 - STORM WATER, SANITARY WASTE AND VENT PIPING, AIR CONDITIONING CONDENSATE:
 - UNDERGROUND; DWV PVC PIPE WITH SOCKECT TYPE FITTINGS. ABOVE GROUND; DWV PVC PIPE AND FITTINGS WRAPPED WITH SOUND INSULATION. UNLESS NOTED OTHERWISE, HORIZONTAL WASTE PIPING 3-IN. AND LARGER

SHALL BE SLOPED AT A MINIMUM OF 1/8-IN PER FOOT; 2-1/2-IN AND SMALLER

- SHALL BE SLOPED AT NO LESS THAN 1/4-IN PER FOOT. C. PAN DRAIN: DWV COPPER PIPE & FITTINGS WITH SOCKET TYPE FITTINGS.
- D. SCHEDULE 40 (DWV) PVC PIPING SHALL NOT BE LOCATED IN RETURN AIR PLENUM IN THIS CASE USE SERVICE WEIGHT CAST IRON SOIL PIPE. PIPING AND FITTINGS SHALL CONFORM WITH THE REQUIREMENTS OF CISPI STANDARD 301, ASTM A-888 OR ASTM A-74, WRAPPED WITH SOUND INSULATION.
- 22. DISINFECT ALL DOMESTIC WATER PIPING IN ACCORDANCE WITH FBC SECT 610 (PLUMBING).

REDUCER —

VAULT WITH STEEL COVER -

PRE CAST CONCRETE

WATER METER

FINISHED GRADE —

GATE VALVE (TYPICAL) -

WASHED ROCK DRAINFIELD -

- MINIMUM 1/2" THICK OR AS REQUIRED BY THE STATE OF FLORIDA ENERGY CODE. PRE-MOLDED GLASS FIBER PIPE INSULATION WITH SELF-ADHESIVE JACKET.
- B. AIR CONDITIONING CONDENSATE COPPER PIPING: FIRE RATED 1/2" THICK ELASTOMERIC CLOSED CELL POLYETHYLENE THERMAL
- INSULATION WITH BUILT-IN VAPOR BARRIER. SEAL ALL EDGES AS RECOMMENDED BY THE MANUFACTURER.
- C. HORIZONTAL STORM DRAINAGE PIPING RUNNING PARALLEL TO THE ROOF: 1/2" THICK PRE-MOLDED GLASS FIBER PIPE INSULATION WITH SELF-ADHESIVE
- 24. CLEANOUTS
 - WALL CLEANOUT: JOSAM SERIES 58790 WITH THREADED PLUG AND VANDAL PROOF STAINLESS STEEL ACCESS COVER PLATE.
 - B. FLOOR CLEANOUT: INTERIOR; JOSAM SERIES 56020 WITH VANDAL PROOF COVER. EXTERIOR; JOSAM SERIES 58440 WITH VANDAL PROOF COVER.

PROVIDE CLEAN-OUTS IN HORIZONTAL PIPING AT INTERVALS REQUIRED BY CODE. AT THE BOTTOM OF ALL WASTE STACKS AND RISERS, AND AT EVERY CHANGE IN DIRECTION, AND WHERE INDICATED ON DRAWINGS.

25. DRAINS: SHALL BE AS SELECTED BY ARCHITECT.

MILWAUKEE F-2472.

- 26. PLUMBING FIXTURES AND TRIM: PROVIDE FIXTURES COMPLETE WITH DRAINS, TRAPS. SUPPLIES, WALL ESCUTCHEONS AND ANY OTHER ACCESSORY REQUIRED. FIXTURES AND FAUCETS SHALL COMPLY WITH FBC WATER SAVING STANDARDS.
 - A. ELECTRIC WATER HEATER: SHALL COMPLY WITH FBC ENERGY SAVING **STANDARDS**

- A. ALL CARRIERS SHALL BE FULLY BOLTED TO THE FLOOR AND INSTALLED AS RECOMMENDED BY MANUFACTURER.
- LAVATORIES INSTALLED ON METAL STUD PARTITIONS: JOSAM SERIES 17100 RECTANGULAR STRUCTURAL STEEL UPRIGHTS WITH INTEGRAL WELDED HEAVY STEEL FOOT AND DUCTILE IRON CONCEALED.

- A. GATE VALVES: 2 1/2" AND SMALLER; ALL BRONZE CONSTRUCTION, SOLID WEDGE, CLASS 125, 200 PSIG NON-SHOCK WATER, THREADED ENDS, MILWAUKEE 115. 3" AND LARGER; FLANGED ENDS, IRON BODY, BRONZE TRIM, MILWAUKEE F-2882.
- B. GLOBE VALVES: TO 3"; BRONZE CONSTRUCTION, CLASS 125, 200 PSIG NON-SHOCK WATER, THREADED ENDS, MILWAUKEE 502. TO 2"; SOLDERED ENDS,
- C. CHECK VALVES: 2 1/2" AND SMALLER; BRONZE BODY, CLASS 125, 200 PSIG NON-SHOCK WATER, THREADED, MILWAUKEE 509; SOLDERED ENDS, MILWAUKEE 1509.

3" AND LARGER; FLANGED ENDS, IRON BODY, BRONZE TRIM, CLASS 125,

- D. HOSE BIBBS: 3/4" ROUGH BRASS CONSTRUCTION WITH SHUT-OFF VALVE AND VACUUM BREAKER.
- HANG PIPING FROM STRUCTURE UTILIZING GALVANIZED HANGER RODS AND TRAPEZE OR CLEVIS HANGERS. FOR COPPER PIPING, RODS AND HANGERS SHALL BE COPPER CLAD. SUPPORT PIPING INDEPENDENTLY FROM EQUIPMENT. PLACE HANGERS AT EVERY PIPE CHANGE OF DIRECTION AND AT EACH SIDE OF SHUT OFF VALVES. PROVIDE PROTECTING SHEET METAL SHIELDS FOR ALL INSULATED PIPING.

WATER METER ENCLOSURE & BACKFLOW PREVENTER DETAIL

FEBCO MODEL 825Y (3/4" THRU 2") & MODEL 825 (2-1/2" THRU 3")

REDUCED PRESSURE BACKFLOW PREVENTER -

SANITARY AND STORM PIPING: SUBJECT ENTIRE SYSTEM TO A HYDROSTATIC HEAD OF NO LESS THAN 10 FEET OF WATER EXCEPT FOR THE TOPMOST 10 FEET OF PIPE BY FILLING SYSTEM WITH WATER UP TO THE OVERFLOW POINT OF THE HIGHEST OPENING, FOR A PERIOD OF TWO HOURS WITHOUT DROP IN WATER LEVEL.

DOMESTIC WATER PIPING: SUBJECT THE ENTIRE SYSTEM TO A HYDROSTATIC Pressure of no less than 150 psig for a period of two hours without loss

- 20. WHEREVER DISSIMILAR METALS ARE TO BE JOINED, A DIELECTRIC FITTING SHALL BE 31. TEST ALL EQUIPMENT TO DEMONSTRATE PROPER FUNCTIONING AND CAPACITY.
 - SEALERS, VACUUM BREAKERS, GAUGES AND THERMOMETERS, STRAINERS, VALVES, ETC.. FOR COMPLETE AND OPERABLE PLUMBING SYSTEMS AS REQUIRED BY CODE AND AS INDICATED ON PLANS. PROVIDE UNIONS AND FLANGES AT ALL CONNECTIONS TO EQUIPMENT FOR EASY MAINTENANCE AND DISMANTLING. PROVIDE ESCUTCHEONS AT ALL PIPE PENETRATIONS OF WALLS, PARTITIONS, FLOORS AND CEILINGS.

32. PROVIDE SHOCK ABSORBERS, DIELECTRIC FITTINGS, HANGERS AND INSERTS, TRAP RE-

PROVIDE SHORING AND BRACING IN ACCORDANCE WITH STATE AND LOCAL REGULA-TIONS FOR THE PROTECTION OF PERSONNEL AND UTILITIES WHERE EXCAVATIONS ARE MADE. PROVIDE ALL LABOR AND MATERIALS IN CONNECTION WITH EXCAVATING. TRENCHING, DE-WATERING, FILLING, BACKFILING, COMPACTING, ETC., UNDER THIS DIVISION (MECHANICAL).

CONDENSATE DRYWELL DETAIL

TYPICAL CONDENSATE DRAIN TRAP & CONDENSATE PUMP

12" ABOVE

UPPERMOST

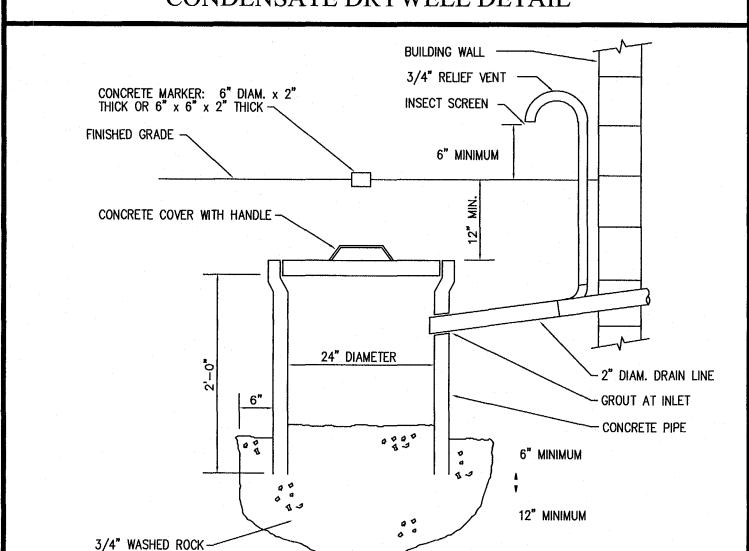
DRAIN PAN

AC UNIT GRAVITY

<u>DRAIN PAN</u>

PERFORATED-

CAP

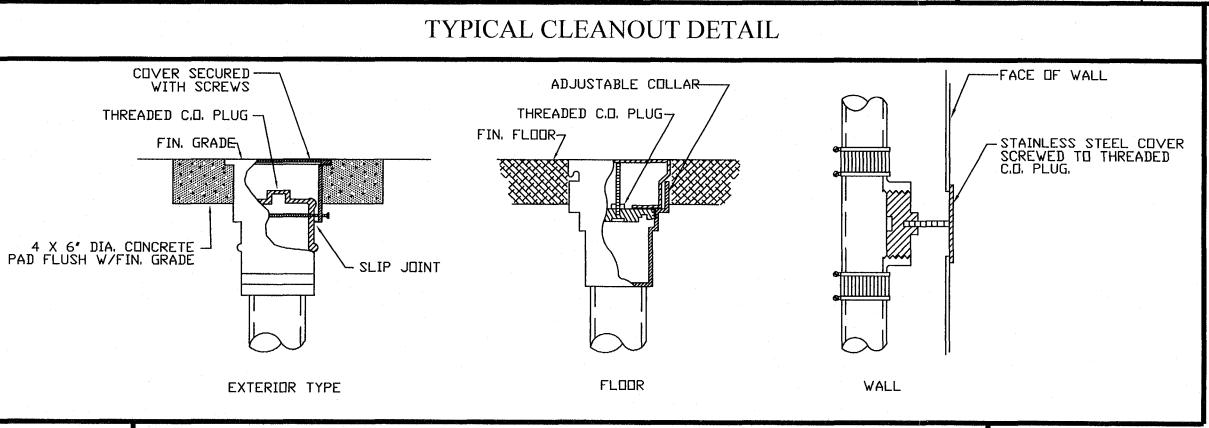


PLUMBING FIXTURE CONNECTION SCHEDULE PLUMBING SYMBOL LEGEND SYMBOL REMARKS DESCRIPTION 1/2" WATER CLOSET (FLOOR MOUNTED) FLUSH TANK, 1.28 GPM, AS SELECTED BY OWNER 1/2" LAVATORY (COUNTER TOP) PROVIDE 1.0 GPM FAUCET, AS SELECTED BY OWNER 3/4" 3/4" SHOWER (SEE NOTES 1&4) PROVIDE 1.5 GPM SHOWER MULTI-HEAD TUB (SEE NOTES 1&4) PROVIDE 1.5 GPM FAUCET/SHOWER HEAD AS SELECTED BY OWNER BAR/HAND SINK 11/4" PROVIDE 1.0 GPM FAUCET, AS SELECTED BY OWNER K.SK KITCHEN SINK 11/2" PROVIDE 1.0 GPM FAUCET, AS SELECTED BY OWNER 1/2" DISHWASHER (BELOW COUNTER) 1" DIA. FLEXIBLE CONNECTION. AS SELECTED BY OWNER REFRIGERATOR/ICE MACHINE 1/2" 1/4" DIA. FLEXIBLE CONNECTION COPPER TUBING 1/2" LAUNDRY SINK 1½" 1/2" PROVIDE 1.0 GPM FAUCET, AS SELECTED BY OWNER 3/4" 3/4" WASHER MACHINE PROVIDE RECESSED WALL BOX. AS SELECTED BY OWNER 1/2" M.SK MOP SINK 1/2" PROVIDE 1.0 GPM FAUCET, AS SELECTED BY OWNER RANGE | GAS RANGE/OVEN NATURAL GAS (240 CFH). AS SELECTED BY OWNER TANKLESS GAS WATER HEATER NATURAL GAS (192 CFH). SEE DETAIL THIS SHEET NATURAL GAS (120 CFH) AS SELECTED BY OWNER BBQ BBQ NATURAL GAS (400 CFH) AS SELECTED BY OWNER POOL HEATER NATURAL GAS (862 CFH) AS SELECTED BY OWNER GEN. GENERATOR NOTES: 1. PROVIDE ANTI-SCALD MIXING VALVE WITH TEMPERATURE LIMITING STOP CONFORMING TO ASSE 1070 PER FBC. P2713.3. 2. ALL PLUMBING FIXTURES SHALL COMPLY WITH FBC PLUMBING SECTIONS 406 THRU 421, WITH TABLE P2701.1 OF THE RESIDENTIAL CODE. MIAMI DADE

-2" CONDENSATE

- ORDINANCE 08-14.
- 3. CONTRACTOR SHALL PROVIDE ALL REQUIRED ACCESSORIES FOR A COMPLETE PLUMBING INSTALLATION. CONSULT FIXTURE SELECTION PACKAGE PRIOR TO
- 4. TUB AND SHOWERS VALVES SHALL COMPLY WITH ASSE 1016 OR CSA B125.
- 5. PROVIDE TEMPERATURE MIXING VALVE LIMITING THE DISCHARGE WATER TEMPERATURE FOR A BIDET TO NO GREATER THAN 110 DEGREES F.

SANITARY PIPE VENT PIPE _____ ___ SD ___ STORM DRAIN PIPE SAFEWASTE PIPE CONDENSATE PIPE ____ CD ____ GAS PIPE —— G —— ____ COLD WATER PIPE HOT WATER PIPE HOT WATER RETURN PIPE _____ CO CLEAN OUT FLOOR DRAIN FD FIRE EXTINGUISHER CABINET FEC ROOF DRAIN RD FCO FLOOR CLEANOUT VTR VENT THRU ROOF MECHANICAL SHOCK ARRESTOR PLUMBING FIXTURE DESIGNATION



'RINNAI" INSTANT EXTERIOR NATURAL GAS WATER HEATER DETAII -SYSTEM CONTROLLER UNIT 1 - DISCONNECT THIS CONNECTOR. ALSO DISCONNECT THIS CONNECTOR ON -REMOTE CONTROLLER PRESSURE RELIEF VALVE.-(TYPICAL) ---GAS PIPE _/-3/4" __3/4" CW _/-3/4" 1-3/4" HW EXPANSION TANK PER MANUFACTURER'S RECOMMENDATIONS "RINNAI" NATURAL GAS TANKLESS WATER HEATERS; MODEL #RL94e, MAX. GAS INPUT 192,000 BTU/HR, 120V. UNITS WILL BE PAIRED AND PLUMBED IN PARALLEL TO PROVIDE GREATER FLOW TO THE SYSTEM. SET UNITS AT 120

DEGREES WITH 70 DEGREE INCOMING GROUND WATER TO PRODUCE APPROX. 6.7 GPM PER UNIT, 13.4 GPM TOTAL.

INSULATE THE HOT WATER PIPING TO PREVENT HEAT LOSS, INSULATE AND APPLY HEATING MATERIALS TO THE COLD WATER SUPPLY PIPING TO PREVENT HEAT LOSS AND FREEZING OF PIPES WHEN EXPOSED TO EXCESSIVELY

COLD TEMPERATURES.

ROOF DRAIN DETAIL STRAINER CLAMP RING 3-PLY BUILT-UP ROOF ON MFR. SPEC. ROOFING FELTS ON POUR ON SITE CONC. ROOF SLAB. SLOPED FOR DRAINAGE (SEE STRUCTURAL DRAWINGS.) DRAIN UNIT ---3"ø RAIN LEADER — /3"/MIN/ OVERLAP

ESIDENCE

DESCRIPTION

seal



HENRY VIDAL, P.E.

date: 02.03.2017

sheet no. **CONSULTING ENGINEERS** 241 N.W. SOUTH RIVER DRIVE HENRY VIDAL, P.E., PE #56204 CERTIFICATION OF AUTHORIZATION #9056 ONE: (305) 571-1860 FAX: (305)571-186 INFO@VIDALENGINEERING.COM H.VIDAL VIDALENGINEERING.COM



- ALL WORK SHALL CONFORM WITH THE 2014 FBC. RESIDENTIAL, NFPA. NEC. AND ALL OTHER APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS AND ORDINANCES. FURNISH ALL LABOR, MATERIALS AND EQUIPMENT REQUIRED FOR THE COMPLETION OF THE PLUMBING SYSTEMS DESCRIBED HEREIN AND SHOWN ON THE DRAWINGS.
- CONTRACTOR SHALL SECURE AND PAY FOR ALL PERMITS, FEES, TAXES, INSPECTIONS, TESTS. PERFORMANCE BONDS. FINES AND OTHER ITEMS AS REQUIRED FOR THE INSTALLATION OF THE COMPLETE PLUMBING SYSTEMS, AND SHALL BE RESPONSIBLE FOR OBTAINING HIS OWN PERMIT.
- CONTRACTOR SHALL PROVIDE ALL REQUIRED INSURANCE FOR PROTECTION AGAINST PUBLIC LIABILITY AND PROPERTY DAMAGE FOR THE DURATION OF THE WORK.
- EXCEPT WHERE LONGER WARRANTIES ARE SPECIFIED FOR SPECIFIC EQUIPMENT, CONTRACTOR SHALL WARRANT ALL WORK TO BE FREE OF DEFECTS IN WORKMANSHIP AND MATERIALS FOR A PERIOD OF ONE YEAR AFTER FINAL WRITTEN ACCEPTANCE OF
- PROVIDE ALL NECESSARY INSTRUCTIONS TO THE OWNER IN THE OPERATION OF THE PLUMBING SYSTEMS BEFORE FINAL ACCEPTANCE.
- PROVIDE THREE SETS OF BOUND AND LABELED EQUIPMENT MAINTENANCE AND INSTRUCTION MANUALS. MANUALS TO BE SUBMITTED TO ARCHITECT/ENGINEER FOR
- SUBMIT SHOP DRAWINGS FOR ALL MATERIALS AND EQUIPMENT FOR ACCEPTANCE OF THE ARCHITECT/ENGINEER BEFORE PROCEEDING WITH THE PURCHASE OR INSTALLA-TION OF ANY EQUIPMENT AND MATERIALS.
- LABEL AND IDENTIFY ALL EQUIPMENT, MOTOR STARTERS, CONTROLS, PIPING AND VALVES. SUBMIT IDENTIFICATION SCHEME TO THE ARCHITECT/ENGINEER FOR
- ALL CONTROL WIRING SHALL BE THE RESPONSIBILITY OF THE MECHANICAL SUB-CONTRACTOR. WIRING SHALL BE AS PER THE ELECTRICAL SPECIFICATIONS. MECHANICAL SUB-CONTRACTOR TO FURNISH ALL MOTORS AND STARTERS, RELAYS,
- 10. PRODUCTS AND MATERIALS SPECIFIED BY TRADE NAME AND/OR MODEL ON THE DRAWINGS ESTABLISH A STANDARD OF QUALITY, APPEARANCE, PERFORMANCE AND DIMENSIONS. CONTRACTOR SHALL BASE HIS BID ON THOSE ITEMS, WHICH SHALL BE CONSIDERED TO ESTABLISH A STANDARD BASIS OF BIDDING. REQUESTS FOR SUBSTITUTION SHALL BE SUBMITTED IN WRITING TO THE ARCHITECT/ENGINEER DEMONSTRATING THAT THE PROPOSED PRODUCT IS COMPARABLE, AND THAT BASIC DESIGN, CONSTRUCTION STANDARDS, QUALITY AND WARRANTIES ARE EQUAL OR BETTER THAN THE PRODUCT SPECIFIED. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY CHANGE IN THE WORK REQUIRED BY OTHER TRADES AND SHALL PAY FOR ANY EXPENSES INCURRED DUE TO THE CONTRACTOR'S REQUEST FOR REVISIONS OR
- CONTRACTOR SHALL MAINTAIN A SET OF DRAWINGS AT THE PROJECT SITE WITH UP TO- 28. VALVES DATE INFORMATION ON AS-BUILT CONDITIONS INDICATING WITH COLORED PENS ALL CHANGES AND DEVIATIONS FROM THE CONTRACT DRAWINGS. THIS SET OF PRINTS SHALL BE TURNED OVER TO THE ARCHITECT/ENGINEER AT THE COMPLETION OF THE PROJECT AS A PRE-REQUISITE FOR FINAL PAYMENT.
- 12. PROVIDE ALL NEW MATERIALS OF AMERICAN MANUFACTURE, BEARING THE U.L. LABEL AS APPLICABLE. PROVIDE SUPPLEMENTAL MATERIALS NOT SPECIFICALLY NOTED HEREIN, BUT REQUIRED TO COMPLETE THE INSTALLATION IN ACCORDANCE WITH THE INTENT OF THE CONTRACT DRAWINGS, AT NO ADDITIONAL COST TO THE OWNER.
- 13. FURNISH ALL NECESSARY ACCESS PANELS TO CONTROL VALVES, DAMPERS, ETC., TO THE GENERAL CONTRACTOR, FOR INSTALLATION UNDER THE GENERAL TRADES.
- 14. ALL WORK SHALL BE FIELD CHECKED BEFORE INSTALLATION AND COORDINATED WITH ALL OTHER TRADES. THE CONTRACT DRAWINGS ARE DIAGRAMMATIC AND INTENDED TO DEPICT APPROXIMATE EQUIPMENT LOCATIONS AND ARRANGEMENTS, NOT SHOW ANY MINOR DETAIL. PLANS SHALL NOT BE SCALED: REFER TO THE ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR DIMENSIONS.
- 15. OFFSET PIPING AS REQUIRED TO CLEAR BUILDING STRUCTURE, DUCTWORK, ETC. AS SHOWN ON DRAWINGS AND AS REQUIRED BY FIELD CONDITIONS.

16. PLUMBING CONTRACTOR SHALL VERIFY ALL SPACE CONDITIONS AND DIMENSIONS AT

- JOB SITE PRIOR TO FABRICATION AND INSTALLATION OF MATERIALS AND EQUIPMENT. VERIFY ALL VOLTAGES WITH THE ELECTRICAL TRADE BEFORE ORDERING ANY
- 17. FURNISH AND INSTALL FIXTURE ACCESSORIES AS REQUIRED. UNLESS OTHERWISE SPECIFIED, ALL ACCESSORIES AND TRIM SHALL BE FIRST QUALITY WITH FINISH AS SELECTED BY ARCHITECT.
- 18. EACH PLUMBING FIXTURE SHALL BE PROVIDED WITH MECHANICAL SHOCK ARRESTORS.
- 19. PROVIDE SHUT-OFF VALVE(S) FOR EACH FIXTURE.
- PROVIDED TO CONNECT BOTH TYPES OF PIPES.
- 21. PROVIDE PIPING AS FOLLOWS:
- A. DOMESTIC COLD WATER, HOT WATER, AND ELECTRIC WATER HEATER P&T RELIEF VALVE/DRAIN PAN PIPING:

UNDERGROUND: TYPE K SEAMLESS HARD DRAWN COPPER TUBE WITH CAST COPPER ALLOY OR WROUGHT SOLDER JOINT FITTINGS. ABOVE GROUND; TYPE L SEAMLESS HARD DRAWN COPPER TUBE WITH CAST

SOLDER USED IN JOINTS SHALL BE 100 % LEAD-FREE.

COPPER ALLOY OR WROUGHT SOLDER JOINT FITTINGS.

B. STORM WATER, SANITARY WASTE AND VENT PIPING, AIR CONDITIONING

UNDERGROUND; DWV PVC PIPE WITH SOCKECT TYPE FITTINGS. ABOVE GROUND; DWV PVC PIPE AND FITTINGS WRAPPED WITH SOUND INSULATION. UNLESS NOTED OTHERWISE, HORIZONTAL WASTE PIPING 3-IN. AND LARGER SHALL BE SLOPED AT A MINIMUM OF 1/8-IN PER FOOT; 2-1/2-IN AND SMALLER

- SHALL BE SLOPED AT NO LESS THAN 1/4-IN PER FOOT. C. PAN DRAIN: DWV COPPER PIPE & FITTINGS WITH SOCKET TYPE FITTINGS.
- D. SCHEDULE 40 (DWV) PVC PIPING SHALL NOT BE LOCATED IN RETURN AIR PLENUM IN THIS CASE USE SERVICE WEIGHT CAST IRON SOIL PIPE. PIPING AND FITTINGS SHALL CONFORM WITH THE REQUIREMENTS OF CISPI STANDARD 301, ASTM A-888 OR ASTM A-74, WRAPPED WITH SOUND INSULATION.
- 22. DISINFECT ALL DOMESTIC WATER PIPING IN ACCORDANCE WITH FBC SECT 610 (PLUMBING).

PRE-MOLDED GLASS FIBER PIPE INSULATION WITH SELF-ADHESIVE JACKET. B. AIR CONDITIONING CONDENSATE COPPER PIPING: FIRE RATED 1/2" THICK ELASTOMERIC CLOSED CELL POLYETHYLENE THERMAL

A. DOMESTIC HOT WATER PIPING:

BY THE MANUFACTURER.

C. HORIZONTAL STORM DRAINAGE PIPING RUNNING PARALLEL TO THE ROOF: 1/2" THICK PRE-MOLDED GLASS FIBER PIPE INSULATION WITH SELF-ADHESIVE

24. CLEANOUTS

A. WALL CLEANOUT: JOSAM SERIES 58790 WITH THREADED PLUG AND VANDAL PROOF STAINLESS STEEL ACCESS COVER PLATE.

MINIMUM 1/2" THICK OR AS REQUIRED BY THE STATE OF FLORIDA ENERGY CODE,

INSULATION WITH BUILT-IN VAPOR BARRIER. SEAL ALL EDGES AS RECOMMENDED

B. FLOOR CLEANOUT: INTERIOR; JOSAM SERIES 56020 WITH VANDAL PROOF COVER. EXTERIOR; JOSAM SERIES 58440 WITH VANDAL PROOF COVER.

PROVIDE CLEAN-OUTS IN HORIZONTAL PIPING AT INTERVALS REQUIRED BY CODE, AT THE BOTTOM OF ALL WASTE STACKS AND RISERS, AND AT EVERY CHANGE IN DIRECTION, AND WHERE INDICATED ON DRAWINGS.

- 25. DRAINS: SHALL BE AS SELECTED BY ARCHITECT.
- 26. PLUMBING FIXTURES AND TRIM: PROVIDE FIXTURES COMPLETE WITH DRAINS, TRAPS. SUPPLIES, WALL ESCUTCHEONS AND ANY OTHER ACCESSORY REQUIRED. FIXTURES AND FAUCETS SHALL COMPLY WITH FBC WATER SAVING STANDARDS.
 - ELECTRIC WATER HEATER: SHALL COMPLY WITH FBC ENERGY SAVING

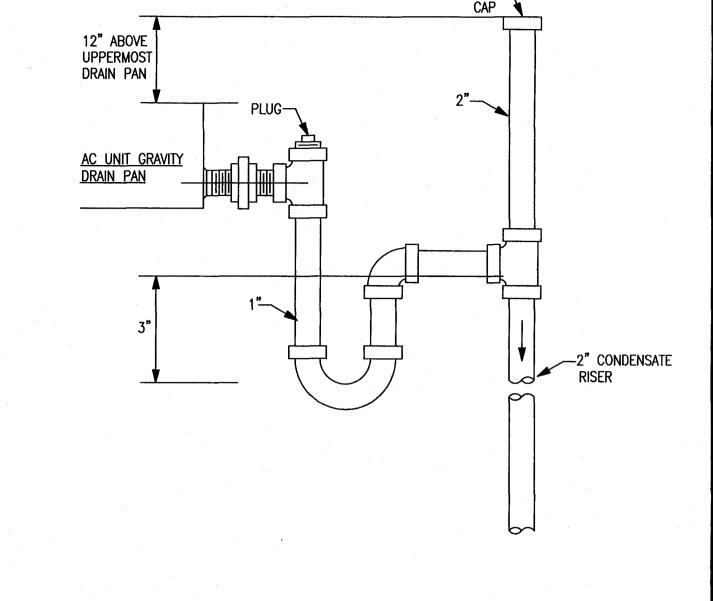
- ALL CARRIERS SHALL BE FULLY BOLTED TO THE FLOOR AND INSTALLED AS recommended by Manufacturer.
- LAVATORIES INSTALLED ON METAL STUD PARTITIONS: JOSAM SERIES 17100 RECTANGULAR STRUCTURAL STEEL UPRIGHTS WITH INTEGRAL WELDED HEAVY STEEL FOOT AND DUCTILE IRON CONCEALED.

- A. GATE VALVES: 2 1/2" AND SMALLER; ALL BRONZE CONSTRUCTION, SOLID WEDGE, CLASS 125, 200 PSIG NON-SHOCK WATER, THREADED ENDS, MILWAUKEE 115. 3" AND LARGER; FLANGED ENDS, IRON BODY, BRONZE TRIM, MILWAUKEE F-2882.
- GLOBE VALVES: TO 3": BRONZE CONSTRUCTION, CLASS 125, 200 PSIG NON-SHOCK WATER, THREADED ENDS, MILWAUKEE 502. TO 2"; SOLDERED ENDS, MILWAUKEE 1502.
- CHECK VALVES: 2 1/2" AND SMALLER; BRONZE BODY, CLASS 125, 200 PSIG NON-SHOCK WATER, THREADED, MILWAUKEE 509; SOLDERED ENDS, MILWAUKEE 1509. 3" AND LARGER; FLANGED ENDS, IRON BODY, BRONZE TRIM, CLASS 125, MILWAUKEE F-2472.
- HOSE BIBBS: 3/4" ROUGH BRASS CONSTRUCTION WITH SHUT-OFF VALVE AND VACUUM BREAKER.
- 29. HANG PIPING FROM STRUCTURE UTILIZING GALVANIZED HANGER RODS AND TRAPEZE OR CLEVIS HANGERS. FOR COPPER PIPING, RODS AND HANGERS SHALL BE COPPER CLAD. SUPPORT PIPING INDEPENDENTLY FROM EQUIPMENT. PLACE HANGERS AT EVERY PIPE CHANGE OF DIRECTION AND AT EACH SIDE OF SHUT OFF VALVES. PROVIDE PROTECTING SHEET METAL SHIELDS FOR ALL INSULATED PIPING.
- 30. PIPING TESTS

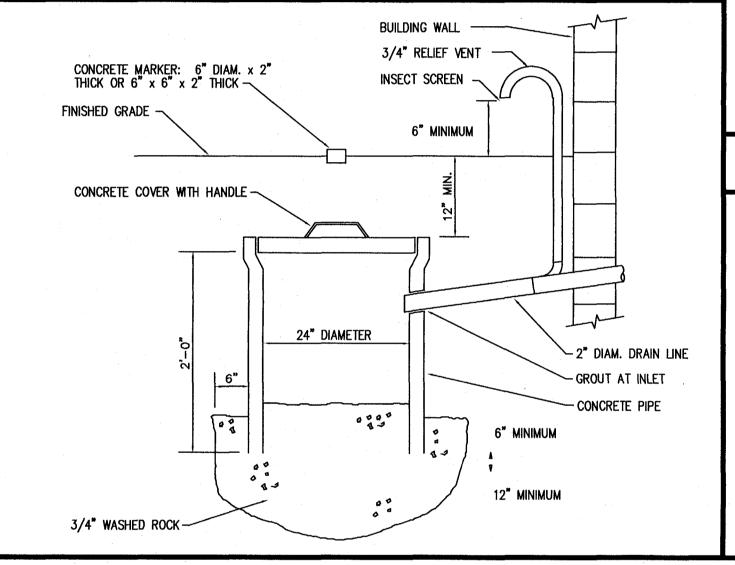
SANITARY AND STORM PIPING: SUBJECT ENTIRE SYSTEM TO A HYDROSTATIC HEAD OF NO LESS THAN 10 FEET OF WATER EXCEPT FOR THE TOPMOST 10 FEET OF PIPE BY FILLING SYSTEM WITH WATER UP TO THE OVERFLOW POINT OF THE HIGHEST OPENING, FOR A PERIOD OF TWO HOURS WITHOUT DROP IN WATER LEVEL.

DOMESTIC WATER PIPING: SUBJECT THE ENTIRE SYSTEM TO A HYDROSTATIC PRESSURE OF NO LESS THAN 150 PSIG FOR A PERIOD OF TWO HOURS WITHOUT LOSS

- 20. WHEREVER DISSIMILAR METALS ARE TO BE JOINED, A DIELECTRIC FITTING SHALL BE 31. TEST ALL EQUIPMENT TO DEMONSTRATE PROPER FUNCTIONING AND CAPACITY.
 - 32. PROVIDE SHOCK ABSORBERS, DIELECTRIC FITTINGS, HANGERS AND INSERTS, TRAP RE-SEALERS, VACUUM BREAKERS, GAUGES AND THERMOMETERS, STRAINERS, VALVES, ETC.. FOR COMPLETE AND OPERABLE PLUMBING SYSTEMS AS REQUIRED BY CODE AND AS INDICATED ON PLANS. PROVIDE UNIONS AND FLANGES AT ALL CONNECTIONS TO EQUIPMENT FOR EASY MAINTENANCE AND DISMANTLING. PROVIDE ESCUTCHEONS AT ALL PIPE PENETRATIONS OF WALLS, PARTITIONS, FLOORS AND CEILINGS.
 - 33. PROVIDE SHORING AND BRACING IN ACCORDANCE WITH STATE AND LOCAL REGULA-TIONS FOR THE PROTECTION OF PERSONNEL AND UTILITIES WHERE EXCAVATIONS ARE MADE. PROVIDE ALL LABOR AND MATERIALS IN CONNECTION WITH EXCAVATING, TRENCHING, DE-WATERING, FILLING, BACKFILING, COMPACTING, ETC., UNDER THIS DIVISION (MECHANICAL).

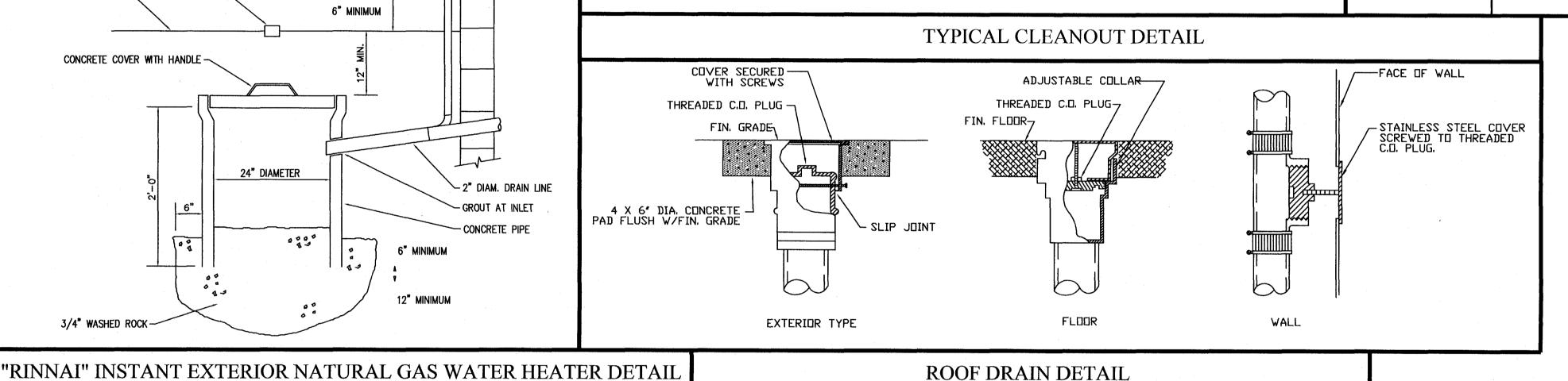


CONDENSATE DRYWELL DETAIL

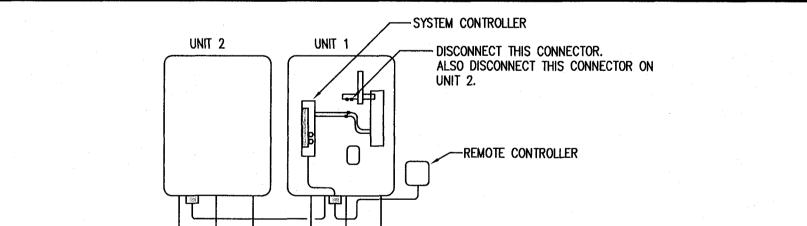


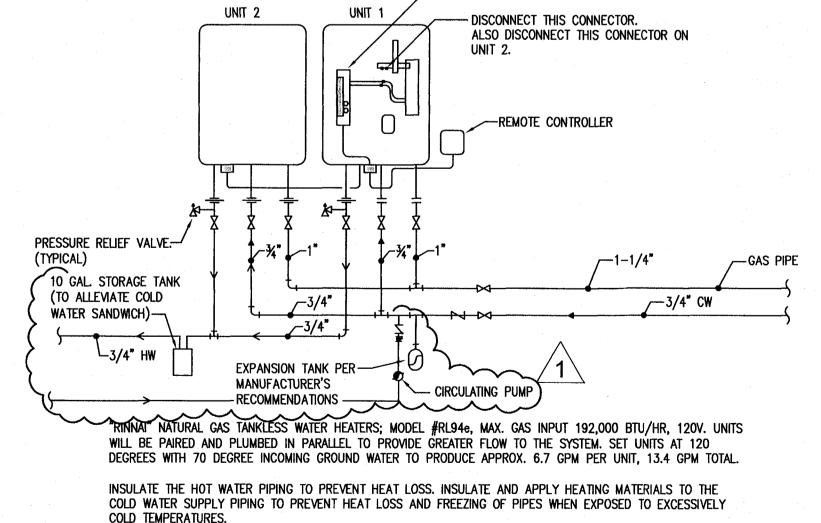
WATER CLOSET (FLOOR MOUNTED) FLUSH TANK, 1.28 GPM. AS SELECTED BY OWNER ______ 1/2" LAV LAVATORY (COUNTER TOP) PROVIDE 1.0 GPM FAUCET, AS SELECTED BY OWNER ____ SD ____ 3/4" 3/4" SHOWER (SEE NOTES 1&4) PROVIDE 1.5 GPM SHOWER MULTI-HEAD 1/2" TUB (SEE NOTES 1&4) PROVIDE 1.5 GPM FAUCET/SHOWER HEAD AS SELECTED BY OWNER —— CD —— ____ G ____ BAR/HAND SINK 1/2" PROVIDE 1.0 GPM FAUCET, AS SELECTED BY OWNER _____ K.SK KITCHEN SINK 1/2" PROVIDE 1.0 GPM FAUCET, AS SELECTED BY OWNER 1/2" DISHWASHER (BELOW COUNTER) DW 1" DIA. FLEXIBLE CONNECTION. AS SELECTED BY OWNER ______ REFRIGERATOR/ICE MACHINE 1/2" REF 1/4" DIA. FLEXIBLE CONNECTION COPPER TUBING 1/2" L.SK | LAUNDRY SINK PROVIDE 1.0 GPM FAUCET, AS SELECTED BY OWNER 3/4" 3/4" WASHER MACHINE PROVIDE RECESSED WALL BOX. AS SELECTED BY OWNER 1/2" M.SK | MOP SINK PROVIDE 1.0 GPM FAUCET, AS SELECTED BY OWNER RANGE GAS RANGE/OVEN NATURAL GAS (240 CFH). AS SELECTED BY OWNER TANKLESS GAS WATER HEATER NATURAL GAS (192 CFH). SEE DETAIL THIS SHEET NATURAL GAS (120 CFH) AS SELECTED BY OWNER BBQ PH POOL HEATER NATURAL GAS (400 CFH) AS SELECTED BY OWNER GEN. | GENERATOR NATURAL GAS (862 CFH) AS SELECTED BY OWNER NOTES: PROVIDE ANTI-SCALD MIXING VALVE WITH TEMPERATURE LIMITING STOP CONFORMING TO ASSE 1070 PER FBC. P2713.3. 2. ALL PLUMBING FIXTURES SHALL COMPLY WITH FBC PLUMBING SECTIONS 406 THRU 421, WITH TABLE P2701.1 OF THE RESIDENTIAL CODE. MIAMI DADE

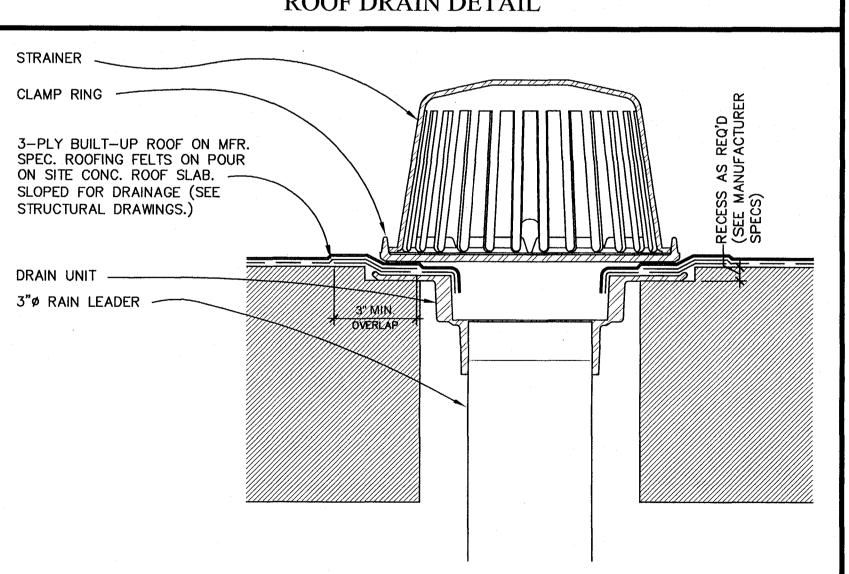
- ORDINANCE 08-14.
- 3. CONTRACTOR SHALL PROVIDE ALL REQUIRED ACCESSORIES FOR A COMPLETE PLUMBING INSTALLATION. CONSULT FIXTURE SELECTION PACKAGE PRIOR TO
- 4. TUB AND SHOWERS VALVES SHALL COMPLY WITH ASSE 1016 OR CSA B125.
- 5. PROVIDE TEMPERATURE MIXING VALVE LIMITING THE DISCHARGE WATER TEMPERATURE FOR A BIDET TO NO GREATER THAN 110 DEGREES F. PER FBC P2721.2.

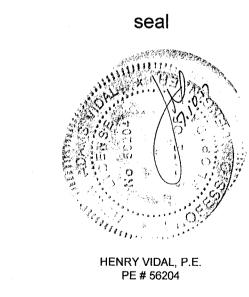


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comm no. 1652

date: 02.03.2017

revised: **∕1** \ 04.13.17 BLDG. DEPT.

WATER METER ENCLOSURE & BACKFLOW PREVENTER DETAIL

FEBCO MODEL 825Y (3/4" THRU 2") & MODEL 825 (2-1/2" THRU 3") REDUCED PRESSURE BACKFLOW PREVENTER-REDUCER ---PRE CAST CONCRETE VAULT WITH STEEL COVER -WATER METER FINISHED GRADE ----GATE VALVE (TYPICAL) — WASHED ROCK DRAINFIELD -

CONSULTING ENGINEERS 241 N.W. SOUTH RIVER DRIVE MIAMI, FL 33128 HENRY VIDAL, P.E., PE #56204 CERTIFICATION OF AUTHORIZATION #905 IONE: (305) 571-1860 FAX: (305)571-186 INFO@VIDALENGINEERING.COM H.VIDAL VIDALENGINEERING.COM & ASSOCIATES

SANITARY PIPE

STORM DRAIN PIPE

SAFEWASTE PIPE

CONDENSATE PIPE

COLD WATER PIPE

HOT WATER RETURN PIPE

FIRE EXTINGUISHER CABINET

HOT WATER PIPE

VENT PIPE

GAS PIPE

CLEAN OUT

FLOOR DRAIN

ROOF DRAIN

ARRESTOR

DESIGNATION

FLOOR CLEANOUT

VENT THRU ROOF

PLUMBING FIXTURE

MECHANICAL SHOCK

CO

FD

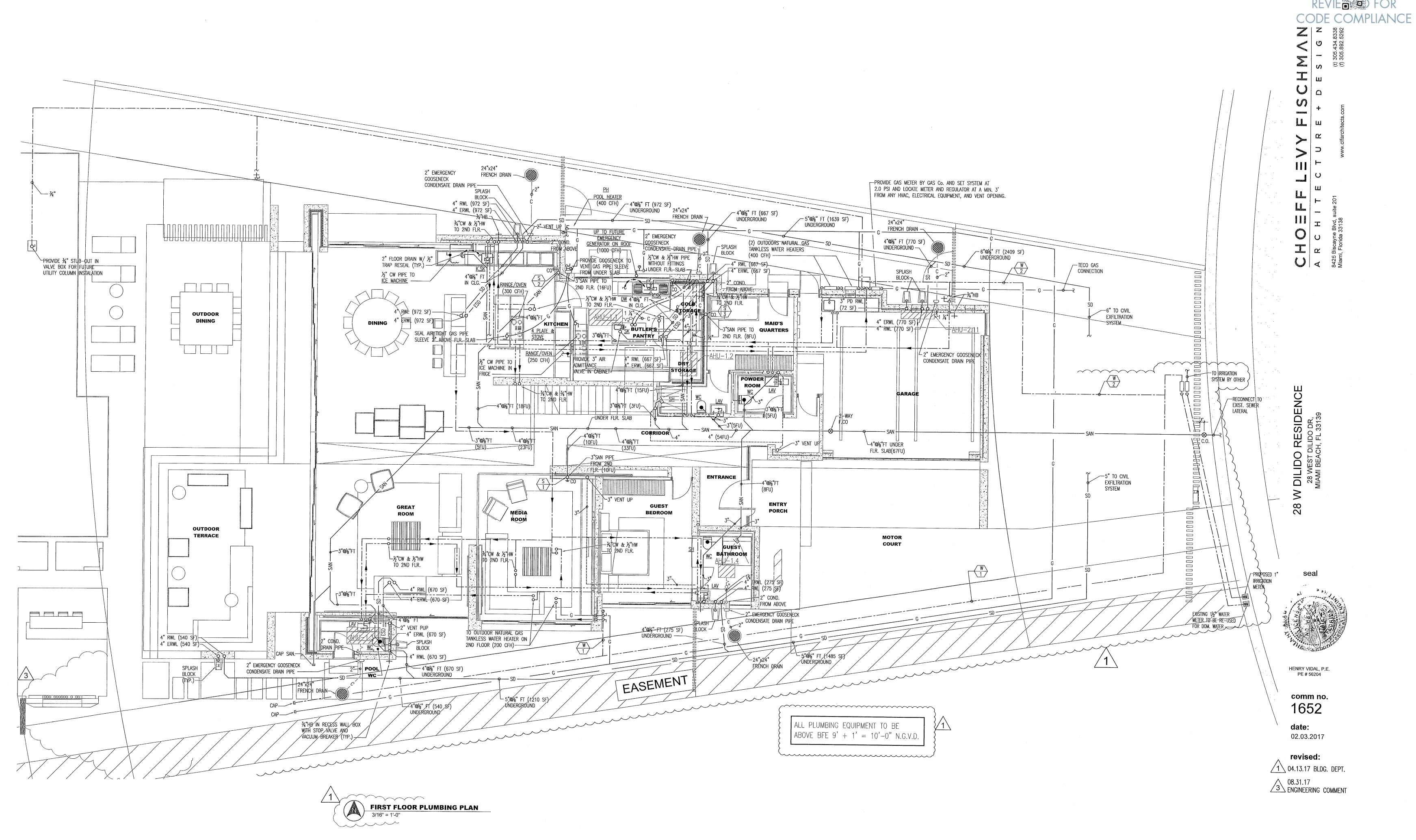
FEC

RD

FCO

VTR

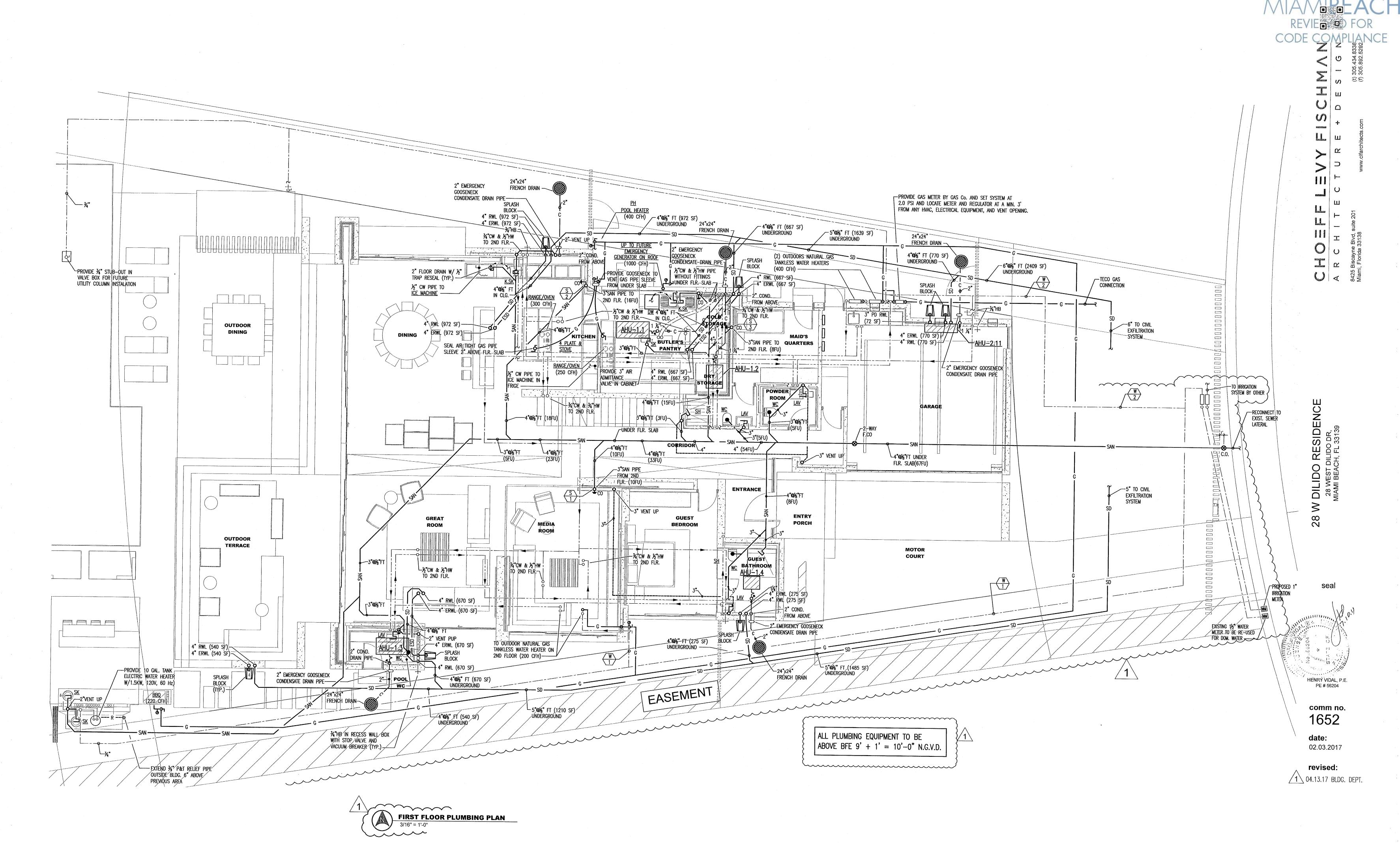
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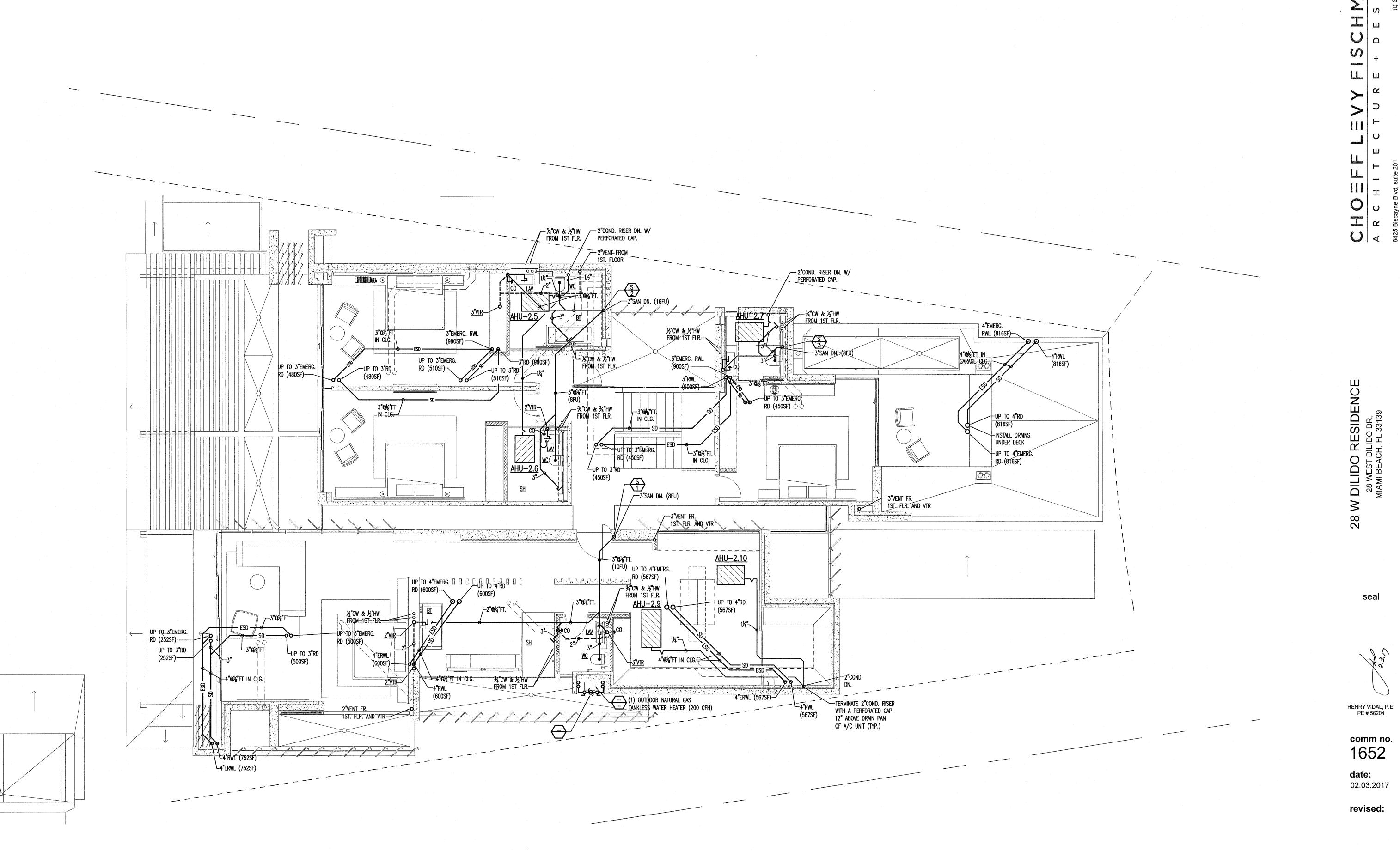
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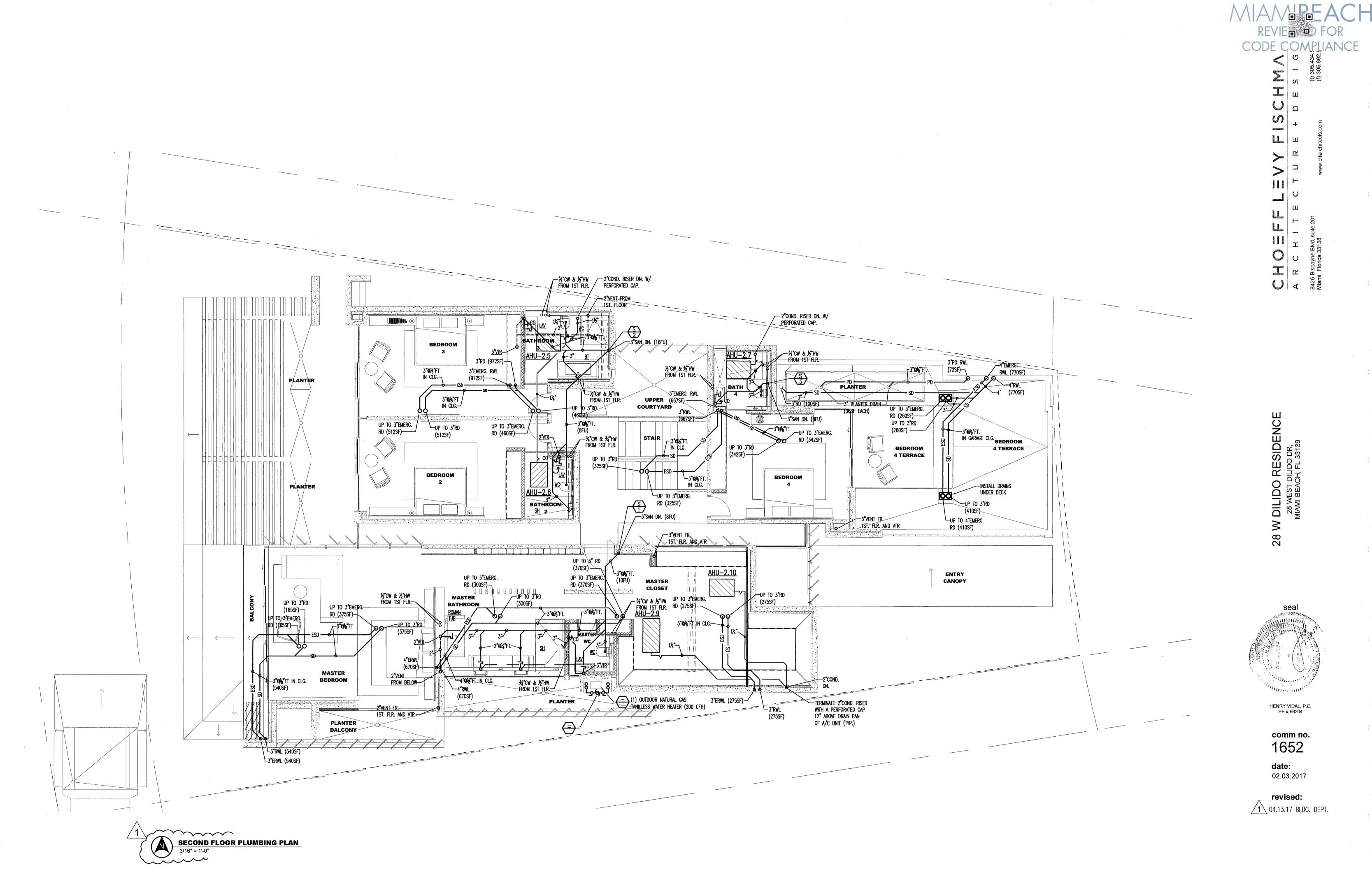
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SECOND FLOOR PLUMBING PLAN
3/16" = 1'-0"

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