AIR DISTRIBUTION/DUCTWORK NOTES:

1. REFER TO ARCHITECTURAL PLANS FOR CEILING TYPE.
2. PROVIDE OFF WHITE FINISH (SUBJECT TO ARCHITECT'S APPROVAL).
3. DUCTWORK MATERIALS:
   A. S/A & R/A – FIBERGLASS DUCT BOARD WITH VAPOR BARRIER: JOHNS MANVILLE MICROLITE TYPE 75, 1.5 INCH THICKNESS, R=6 (MIN.) UNLESS OTHERWISE NOTED.
   B. GENERAL EXHAUST AIR DUCTWORK: GALVANIZED SHEETMETAL.
   C. FLEXIBLE AIR DUCT SHALL BE UL 181 RATED. SUCH DUCTS SHALL BE LISTED AND LABELED AS CLASS 0 OR CLASS 1 FLEXIBLE DUCTS. FLEXIBLE DUCT INSULATION TO BE R=6 MINIMUM.
   D. DUCT SEAL CLASS AS PER SMACNA STANDARD DUCT SEALING REQUIREMENTS. (REFER TO TABLE)
4. DUCT SYSTEM CONSTRUCTION AND SEALING REQUIREMENTS: DUCTWORK SHALL COMPLY WITH REQUIREMENTS AS PER TABLE C403.2.7.2. FBC (E) 2020 7TH EDITION AND "SMACNA" STANDARDS.
5. ALL DUCTWORK SHALL BE INSTALLED IN ACCORDANCE WITH "SMACNA" STANDARDS AND FBC 2020 7TH EDITION.
6. INSULATION SHALL BE PROTECTED FROM DAMAGE, INCLUDING THAT DUE TO SUNLIGHT, MOISTURE, EQUIPMENT MAINTENANCE, AND WIND, BUT NOT LIMITED TO THE FOLLOWING:
   A. INSULATION EXPOSED TO WEATHER SHALL BE PROTECTED BY 20 GA SHEET METAL.
   B. INSULATION COVERING COOLING DUCTS LOCATED OUTSIDE THE CONDITIONED SPACE SHALL INCLUDE A VAPOR RETARD LOCATED OUTSIDE THE INSULATION.
7. PROVIDE FOIL-FACED INSULATION (MIN. R=8.0) ON TOP/BACK OF ALL AIR DEVICES. TAPE ALL JOINTS AND SEAMS TO PROVIDE CONTINUOUS VAPOR BARRIER OVER DEVICE AND FLEXIBLE CONNECTION.
8. ALL DUCTWORK AND DIFFUSERS SHALL BE RATED FOR THE USE, PRESSURE AND TEMPERATURE SPECIFIED AND AS REQUIRED BY THE CEILING SYSTEM RATING.
9. ALL DUCTWORK SHALL BE FABRICATED AND INSTALLED IN ACCORDANCE WITH "SMACNA" STANDARDS AND LOCAL BUILDING CODES.
10. ALL DUCT SIZES ARE CLEAR INSIDE DIMENSIONS.
11. SEAL ALL DUCTS, JOINTS AND SEAMS IN AN APPROVED MANNER AND INSURE AGAINST LEAKAGE.
12. PROVIDE ACCESS DOORS AS REQUIRED FOR ALL MECHANICAL EQUIPMENT TO SERVICE AND VISUALLY CHECK ROTATION OF FANS AND MOTORS, POSITION OF DAMPERS, REPLACE FIRE DAMPER LINKS, ADJUST OR REPLACE CONTROLS, ETC.
13. PROVIDE VANED ELBOWS IN ALL CASES, SPLITTER DAMPERS WHERE INDICATED ON DRAWINGS AND VOLUME CONTROL DAMPERS IN ALL BRANCH DUCTS OR DIFFUSER CONNECTIONS.

HVAC NOTES

DESCRIPTION:

1. THESE PLANS ARE SCHEMATIC IN NATURE AND ARE INTENDED TO ESTABLISH SIZE, GENERAL ROUTING, LOCATION AND PERFORMANCE AND ARE NOT INTENDED TO SHOW ALL POSSIBLE CONDITIONS. ALL WORK SHALL BE FULLY COORDINATED WITH OTHER TRADES. CONTRACTOR SHALL NOT SCALE DRAWINGS.

GENERAL NOTES:

1. ALL MECHANICAL SYSTEMS ARE TO BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE SECTIONS OF THE NFPA STANDARDS, ANSI STANDARDS, THE LOCAL BUILDING CODE, NOISE & HEIGHT ORDINANCES, PLANS AND SPECIFICATIONS.
2. ALL MATERIALS SHALL BE NEW, QUALITY OF WORK AND MATERIALS SHALL BE IN STRICT ACCORDANCE WITH APPLICABLE LOCAL CODES, PRODUCT APPROVAL, RULES AND ORDINANCES, ANY DAMAGED EQUIPMENT SHALL BE REPLACED OR RESTORED TO ORIGINAL CONDITION.
3. THE CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, EQUIPMENT, ACCESS PANELS, CONTROL SYSTEMS, DEVICES, PERMITS AND SERVICES NECESSARY FOR FURNISHING AND INSTALLING A COMPLETE OPERABLE MECHANICAL SYSTEM.
4. ALL LOUVERS, GRILLES, PIPING, ETC. SHALL BE PAINTED TO MATCH SURROUNDING COLOR AND TEXTURES AS REQUIRED BY ARCHITECT. VERIFY COLOR AND TEXTURE WITH ARCHITECT. PAINT ALL EXPOSED MECHANICAL EQUIPMENT WITH BENJAMIN MOORE EPOXY ENAMEL 182.
5. THE CONTRACTOR SHALL PROVIDE PLASTIC OR ALUMINUM TYPE EQUIPMENT IDENTIFICATION LABELS FOR ALL MECHANICAL EQUIPMENT AS PER SCHEDULE TAGS. (SETON OR SIMILAR)
6. ALL O/A INTAKES SHALL HAVE A 2" HIGH STENCILED LETTERING READING "INTAKE" PER FBC REQUIREMENTS.
7. ALL CUTTING, PATCHING, STRUCTURAL STEEL, WEATHER PROOFING, PAINTING, AND WALL OPENINGS SHALL BE BY THE GENERAL CONTRACTOR.
8. ALL OPENINGS IN BUILDING STRUCTURE, FOR DUCTWORK, PIPING, ETC. TO BE 1/2" LARGER (ON ALL SIDES) THEN THE OUTSIDE DIMENSIONS. FILL VOIDS WITH FIRE RETARDANT SILICONE FOAM (I.E. CHASE-FOAM CTC PR-855 BY CHASE TECHNOLOGY CORP.).
9. BUILDING HVAC CALCULATIONS ARE BASED ON THE FOLLOWING:
   A. INDOOR DESIGN: SUMMER 75 DDB/50% RH, WINTER 72 DDB.
   B. OUTDOOR DESIGN: SUMMER 91 DDB/90 DWB, WINTER 52 DDB.
10. PROVIDE FLEXIBLE DUCT CONNECTORS, RATED AS REQUIRED, TO ALL FANS, A/C UNITS, OR MECHANICAL EQUIPMENT.
11. PROVIDE MAINTENANCE AND OPERATION MANUAL ON ALL MECHANICAL EQUIPMENT OR SYSTEMS. SUBMITTALS SHALL HAVE A SUMMARY SHEET SHOWING ALL SCHEDULED INFORMATION.
12. HVAC CONTRACTOR WILL WARRANTY ALL MECHANICAL SYSTEMS, DUCTWORK, THERMOSTATS, AND ALL OTHER EQUIPMENT,PARTS AND LABOR UNDER THESE DRAWINGS AND SPECIFICATIONS FOR A PERIOD OF ONE (1) YEAR AFTER C.O. OF BUILDING. ANY REPAIRS REQUIRING SYSTEM SHUT DOWN WILL BE DONE DURING NON OPERATIONAL PERIODS. HVAC CONTRACTOR SHALL COORDINATE WITH ALL OTHER TRADES PRIOR TO BIDDING AND PURCHASING ANY EQUIPMENT.

MECHANICAL EQUIPMENT NOTES:

1. ALL MECHANICAL EQUIPMENT SHALL BE ARI & U.L. LISTED WHERE APPLICABLE AND RATED FOR THE REQUIRED SERVICE, PRESSURES, TEMPERATURES, AND SHALL BE PROVIDED WITH ALL NECESSARY TRANSFORMERS, SEALS, VALVES, CONNECTIONS, ETC. TO FUNCTION PROPERLY.
2. PROVIDE IONIZATION TYPE SMOKE DETECTORS IN THE S/A AND R/A DUCTS OF ALL AIR HANDLING EQUIPMENT WITH AIR DELIVERY CAPACITIES GREATER THAN 2000 CFM TO SHUT DOWN THE UNIT UPON DETECTION OF SMOKE. SMOKE DETECTORS SHALL BE LOCATED TO PROVIDE ACCESS FOR MAINTENANCE AND INSPECTION AND SHALL NOT BE HIGHER THAN 48"ABOVE CEILING. SMOKE DETECTOR SHALL BE UL268A LISTED AND COMPATIBLE WITH THE FACP, SIMPLEX SERIES 2098 OR APPROVED EQUIVALENT. PROVIDE AUDIO-VISUAL TEST STATION, PER NFPA 90A-4-4, MOUNTED BELOW THE CEILING OVER NORMALLY-OCCUPIED SPACE. DO NOT LOCATE IN RESTROOMS, JANITOR OR STORAGE.). PROVIDE DUCT ACCESS DOORS FOR MAINTENANCE AND INSPECTION OF SMOKE DETECTORS. ALL SMOKE DETECTORS SHALL BE BY ONE MANUFACTURER; COORDINATE VOLTAGE ETC. WITH ELECTRICAL CONTRACTOR AND FIRE ALARM SYSTEM BEFORE ORDERING.
3. PROVIDE TYPE "B" FIRE DAMPERS IN ALL DUCTS OR OPENINGS PENETRATING FIRE RATED WALLS, PARTITIONS, FLOORS OR ROOF SLABS AND AT FRESH AIR INTAKES IF REQUIRED (SEE ARCHITECTS PLANS FOR RATINGS). PROVIDE RADIATION DAMPERS IN RATED CEILINGS FOR ALL CEILING OPENINGS, CEILING FANS, DIFFUSERS OR GRILLES RATED FOR USE IN THE CEILING ASSEMBLY AS SPECIFIED BY ARCHITECT.
4. IN CASE OF FIRE RATED CORRIDOR DUCTS SHALL PENETRATE THROUGH SIDE OF RATED ENCLOSURE ONLY. (NO PENETRATIONS THROUGH HORIZONTAL RATED STRUCTURE).
5. PROVIDE BACKDRAFT DAMPERS ON ALL EXHAUST FANS AND/OR INLINE FANS.
6. PROVIDE VIBRATION ISOLATORS ON ALL MECHANICAL EQUIPMENT AS CALLED FOR IN THE SPECIFICATIONS. IF NOT SPECIFIED, AS RECOMMENDED BY MANUFACTURER FOR QUIET OPERATION (WITH 99% ISOLATION EFFICIENCY).
7. PROVIDE A MIN. OF 10' CLEARANCE BETWEEN O/A INTAKES AND VTR OR EXHAUST OPENINGS.
8. THERMOSTAT AND REMOTE TEMPERATURE SENSOR(S) LOCATION SHALL BE APPROVED BY OWNER AND ARCHITECT BEFORE INSTALLATION. FOR REQUIREMENTS SEE EQUIPMENT SCHEDULE.
9. RUN INSULATED CONDENSATE DRAINS AS PER PLUMBING DRAWINGS.
10. MOUNT ALL OUTDOOR EQUIPMENT FOR WIND LOADS AND MOUNTING HEIGHTS AS REQUIRED BY LOCAL CODES.
11. ALL PIPING AND DUCTWORK SHALL BE SLEEVED THRU WALLS, BEAMS, SLABS, ETC, AS REQUIRED AND COORDINATED WITH THE STRUCTURAL ENGINEER. REWORK BAR JOIST CROSS BRACING AND PROVIDE NECESSARY TRANSITIONS AS REQUIRED FOR DUCTWORK INSTALLATION.
12. ALL INSULATION WILL HAVE FIRE/SMOKE RATING LESS THAN 25/50.
13. PROVIDE MOTOR STARTERS AS FOLLOWS (UNLESS OTHERWISE RECOMMENDED BY MOTOR MANUFACTURER): A: PROVIDE OVERLOAD PROTECTION – 1/3 HP AND ABOVE (ALL PHASES). B: PROVIDE ACROSS THE LINE VOLTAGE STARTING BELOW 25 HP.
14. ALL OUTDOOR EQUIPMENT SHALL COMPLY WITH LOCAL ZONING NOISE ORDINANCES. MIN. REQUIREMENT SHALL NOT EXCEED A NOISE LEVEL OF 65 DB AS MEASURED RADIALLY 30 FT FROM THE EQUIPMENT IN ALL DIRECTIONS.
15. FILTERS SHALL BE IN PLACE DURING CONSTRUCTION. PROVIDE A NEW SET PRIOR TO TEST AND BALANCE AND A FINAL SET AT THE END OF ONE YEAR SERVICE PERIOD.
16. COUNTERBALANCED BACKDRAFT DAMPERS SHALL BE HEAVY DUTY EXTRUDED ALUMINUM RUSKIN MODEL CBD2 OR APPROVED EQUAL.

CODES

CODE – THE ENTIRE INSTALLATION SHALL BE DONE IN ACCORDANCE WITH APPLICABLE BUILDING CODES:
- **FLORIDA BUILDING CODE (2020 7TH EDITION)**
- **FLORIDA MECHANICAL CODE (2020 7TH EDITION)**
- **FLORIDA ENERGY CONSERVATION CODE (2020 7TH EDITION)**

AND THE LATEST EDITIONS OF ALL LOCAL CODES, RULES AND ORDINANCES HAVING JURISDICTION.

FLORIDA — STATE
GLADES — COUNTY

MECHANICAL SYMBOL LEGEND

SYMBOL	DESCRIPTION
T	THERMOSTAT WITH SUBBASE
S	CEILING MOUNTED REMOTER TEMPERATURE SENSOR
SD	SMOKE DETECTOR
SP	STATIC PRESSURE SENSOR
	POINT OF DISCONNECT
	POINT OF CONNECTION
XXXXX	EXISTING PIPING (OR DUCTWORK) TO BE REMOVED
	EXISTING PIPING (OR DUCTWORK) TO REMAIN
	NEW PIPING (OR DUCTWORK).
	SUPPLY AIR (DIRECTION OF THROW)
	RETURN AIR
OBD	OPPOSED BLADE DAMPER
BDD	BACK DRAFT DAMPER
	MANUAL VOLUME DAMPER
MCD	MOTORIZED CONTROL DAMPER
SD	SMOKE DAMPER
FD	FIRE DAMPER
MD	MOTORIZED DAMPER INTERCONNECTED WITH AHU
VD	VOLUME DAMPER
FSD	FIRE SMOKE DAMPER W/ACCESS DOOR
SR	SIDEWALL REGISTER
CD	CEILING DIFFUSER
CG	CEILING GRILLE
RAG	RETURN AIR GRILLE
RG	RELIEF AIR GRILLE
ATG	AIR TRANSFER GRILLE
EG	EXHAUST GRILLE
EF	EXHAUST FAN
AHU	AIR HANDLING UNIT
CU	CONDENSING UNIT
RTU	ROOFTOOP UNIT
ACCU	AIR COOLED CONDENSER UNIT
WMS	WIRE MESH SCREEN
OAL	OUTSIDE AIR LOUVER
EAL	EXHAUST AIR LOUVER
A.F.F	ABOVE FINISHED FLOOR
CD1	DIFFUSER/GRILLE TYPE, REF. SCHEDULE
CFM	DESIGN CFM (WHERE APPLICABLE)
TEF	TOILET EXHAUST FAN
KEF	KITCHEN EXHAUST FAN
	4-WAY DIRECTIONAL FLOW CEILING DIFFUSER (CD)
	3-WAY DIRECTIONAL FLOW CEILING DIFFUSER (CD)
	SIDE GRILLE (SG)
	EXHAUST GRILLE (EG)
	RETUTN GRILLE. (RG)
T	THERMOSTAT
	FLEXIBLE DUCTWORK (FULLY STRETCHED)
	ELBOW WITH "AIRFOIL" TURNING VANES
	FULL RADIUS CURVED ELBOW R/W=1.5
	SUPPLY/RETURN AIR DUCTWORK
	DUCT TRANSITION

NOTE: HVAC LEGEND IS PROVIDED AS A GENERAL REFERENCE. SOME SYMBOLS SHOWN MAY NOT PERTAIN TO THIS PROJECT.

STANDARD DUCT SEALING REQUIREMENTS

(BASED ON SMACNA)

SEAL CLASS	SEALING REQUIREMENTS	APPLICABLE STATIC PRESSURE CONSTRUCTION STANDARD
A	ALL TRANSVERSE JOINTS, LONGITUDINAL SEAMS, AND DUCT WALL PENETRATIONS	4" WG AND UP (1000 PA)
B	ALL TRANSVERSE JOINTS AND LONGITUDINAL SEAMS ONLY	3" WG (750 PA)
C	TRANSVERSE JOINTS ONLY	2" WG (500 PA)

NOTE:
IN ADDITION TO THE ABOVE, ANY VARIABLE AIR VOLUME SYSTEM DUCT OF 1" (250 PA) AND 1/2" WG (125 PA) CONSTRUCTION CLASS THAT IS UPSTREAM OF THE VAV BOXES SHALL MEET SEAL CLASS C.

MECHANICAL INDEX

	DRAWING	⚠		
1	M-1.0	MECHANICAL INDEX, SYMBOL LEGEND AND NOTES		
2	M-2.0	FIRST FLOOR MECHANICAL PLAN		
3	M-2.1	SECOND FLOOR MECHANICAL PLAN		
4	M-2.2	THIRD FLOOR MECHANICAL PLAN		
5	M-3.0	MECHANICAL SCHEDULES		
6	M-3.1	MECHANICAL DETAILS		

SHOP DRAWING REQUIREMENTS

1. CONTRACTOR SHALL SUBMIT DIGITAL SHOP DRAWINGS, TOGETHER AT ONE TIME AND MUST COME THROUGH THE ARCHITECT. ALL SUBMITTALS SHALL BE MADE WITHIN 30 DAYS OF NOTICE TO PROCEED.
2. ALL SUBMITTALS MUST CLEARLY INDICATE EXACTLY WHICH ITEMS ARE BEING PROPOSED FOR USE. IF NOT, THE SUBMITTAL SHALL BE REJECTED.
3. SUBSTITUTIONS SHALL BE LIMITED TO ONE OF THE ALTERNATES LISTED IN THE CONSTRUCTION DOCUMENTS. PRODUCTS CONSIDERED TO BE EQUAL SHALL BE REVIEWED AND ACCEPTED BY THE ENGINEER, ARCHITECT AND OWNER (10) DAYS PRIOR TO BID DATE.
4. THE CONTRACTOR ASSUMES ALL DESIGN RESPONSIBILITY AND ALL FINANCIAL RISKS FOR PROCEEDING PRIOR TO SHOP DRAWINGS PROCESSING, AND OR ANY ITEM OR WORK THAT IS AT VARIANCE TO THE CONSTRUCTION DOCUMENTS.
5. CONTRACTOR SHALL SUBMIT DIGITAL EQUIPMENT LAYOUTS OF ALL ELECTRICAL SPACES, ROOMS, ETC. TO THE ENGINEER FOR APPROVAL PRIOR TO ORDERING EQUIPMENT OR INSTALLING CONDUITS, ETC. THE LAYOUTS SHALL CONSIST OF PLAN VIEWS AT A SCALE OF 1/2" = 1'0" AND ELEVATIONS FOR EACH SUCH SPACE OR ROOM, ETC.

COORDINATION NOTES

1. A/C CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE THE WORK FOR SIZE, LOCATION, CLEARANCE, ACCESS AND ELECTRICAL CHARACTERISTICS WITH ALL OTHER TRADES AND TO PROVIDE SHOP DRAWINGS TO THE ENGINEER FOR REVIEW BEFORE INSTALLATION OF DUCTWORK OR EQUIPMENT. SHOP DRAWING WILL INCLUDE BEAM OR STRUCTURE ELEVATION & REQUIRED EQUIPMENT ACCESS AREAS.
2. WALL, ROOF, AND CEILING OPENINGS INDICATED ON CONTRACTOR DRAWINGS ARE NOMINAL DIMENSIONS ONLY AND ALL DUCT, PIPE OR EQUIPMENT PENETRATIONS SHALL BE SLEEVED AND FIRE RATED AS REQUIRED, ADJUST OPENINGS.
3. COORDINATE LOCATION OF CEILING DIFFUSERS, GRILLES AND REGISTERS IN THE FIELD WITH LIGHTS, SPRINKLERS AND ARCHITECTURAL ELEMENTS.
4. COORDINATE LOCATION OF A/C UNITS, THERMOSTATS, FANS AND DUCTWORK WITH BUILDING STRUCTURE AND OTHER TRADES TO THAT NO INTERFERENCES OCCUR.
5. IN GENERAL, DUCT OFFSETS HAVE NOT BEEN SHOWN. A/C CONTRACTOR TO COORDINATE THESE AS REQUIRED.
6. MECHANICAL PLANS IN GENERAL, ARE DIAGRAMMATIC IN NATURE, AND ARE TO BE READ IN CONJUNCTION WITH ARCH. PLUMBING, ELECTRICAL AND STRUCTURAL PLANS AND SHALL BE CONSIDERED AS ONE SET OF DOCUMENTS. DUCT AND PIPING OFFSETS, BENDS AND TRANSITIONS WILL BE REQUIRED TO PROVIDE AND INSTALL A COMPLETE FUNCTIONAL SYSTEM AND SHALL BE PROVIDED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
7. THE CONTRACTOR SHALL VERIFY EXISTING CONDITIONS PRIOR TO BIDDING, ORDERING, FABRICATION OR INSTALLATION OF MATERIALS OR EQUIPMENT.

REQUIREMENTS FOR SUBMITTALS

IF CONTRACTOR SUBMITS A DIFFERENT EQUIPMENT MANUFACTURER-MODEL, THE CONTRACTOR SHALL ASSURE THAT THE SUBSTITUTION HAS EQUAL OR BETTER ENERGY AND INDOOR ENVIRONMENTAL PERFORMANCE WHEN COMPARED TO THE EQUIPMENT SPECIFIED ON THE ORIGINAL CONSTRUCTION DOCUMENT.

THE PROPOSED SUBSTITUTION SHALL ALSO BE CONSISTENT WITH THE FOLLOWING REQUIREMENTS:
- CAPACITY
- EFFICIENCY
- REFRIGERANT
- ELECTRICAL DATA
- WEIGHT
- AUTOMATIC CONTROL
- ANY SPECIAL NOTE OR ACCESSORY LISTED ON SCHEDULES

NOTE:
DRAWINGS/DETAILS ARE TO BE CONSIDERED DIAGRAMMATIC, NOT NECESSARILY SHOWING IN DETAIL OR TO SCALE ALL MINOR ITEMS. UNLESS SPECIFIC DIMENSIONS ARE SHOWN, THE STRUCTURAL, ARCHITECTURAL AND SITE CONDITIONS SHALL GOVERN EXACT LOCATIONS. CONTRACTOR SHALL FOLLOW DRAWINGS IN LAYING OUT WORK, AND CHECK/COORDINATE DRAWINGS OF ALL TRADES

HVAC GENERAL NOTES

BUILDING HVAC CALCULATIONS ARE BASED ON THE FOLLOWING:

GLASS U VALUE	0.40
GLASS SHGC	0.25
WALL ASSEMBLY R-VALUE	11.7 FOR CMU WALL AND 15 FOR WOOD WALL
ROOF ASSEMBLY R-VALUE	40

FLOOD NOTES

NOTE:
MEP EQUIPMENT SHALL BE LOCATED ABOVE THE BASE FLOOD ELEVATION + 1 FOOT, EXCEPT AS REQUIRED TO ADDRESS LIFE SAFETY REQUIREMENTS.

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CLIENT:

REVISIONS

DESCRIPTION	DATE	NO.

PROJECT NAME / LOCATION:
DUPLEX MASTER
OKEECHOBEE, FL

DRAWING TITLE:
INDEX, NOTES AND SYMBOL LEGEND

ENGINEER'S SIGNATURE

STATE OF FLORIDA — SHIMON GREENEBAUM — LICENSE AR100413 — REGISTERED ARCHITECT

PROFESSIONAL SEAL:

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CA#00009181

P.M. MGR: STEPHEN BENDER, P.E.
PROJECT #: 230515-B
(Duplex Permit Set)

Shimon E Greenebaum — Digitally signed by Shimon E Greenebaum — Date: 2023.07.25 09:30:30 -04'00'

GEORGE SANJUAN, P.E.
FLORIDA LICENSE #46100

SCALE:

DATE:

PROJECT NO:

M-1.0

DRAWING NO:

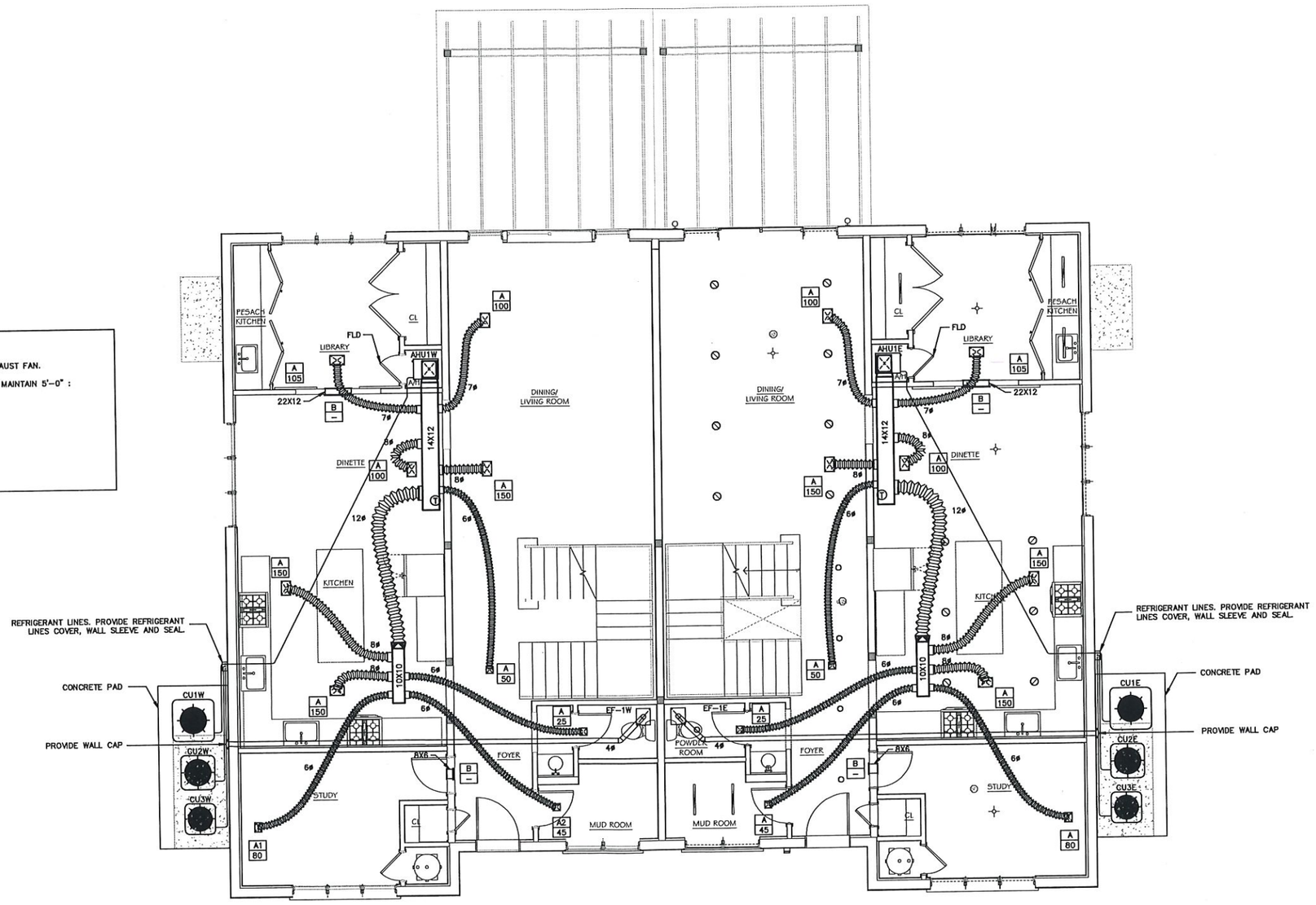
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THE GENERAL CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS AND REPORT ALL ERRORS AND OMISSIONS TO THE ARCHITECTS. DO NOT SCALE DRAWING. THE DRAWING SHALL NOT BE USED ON THE JOB FOR THE CONSTRUCTION

NOTES:

KITCHEN EXHAUST HOOD INTERNAL EXHAUST FAN.

CONDENSING UNIT INSTALLATION SHALL MAINTAIN 5'-0" : CLEAR FROM THE PROPERTY LINE.



1 FIRST FLOOR MECHANICAL PLAN
1/4" = 1'-0"

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CLIENT

REVISIONS

DESCRIPTION	DATE	NO.

PROJECT NAME / LOCATION
DUPLEX MASTER
OKEECHOBEE, FL

DRAWING TITLE
FIRST FLOOR MECHANICAL PLAN

EXAMINER'S SIGNATURE

STATE OF FLORIDA — SHIMON GREENEBAUM — AR102415 — REGISTERED ARCHITECT

Shimon E Greenebaum (RA, Florida and New York) has authorized the placing of this seal on this document on the date adjacent to the seal.

PROFESSIONAL SEAL

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FLORIDA LICENSE #46100

SCALE

DATE

PROJECT NO.

M-2.0

DRAWING NO.

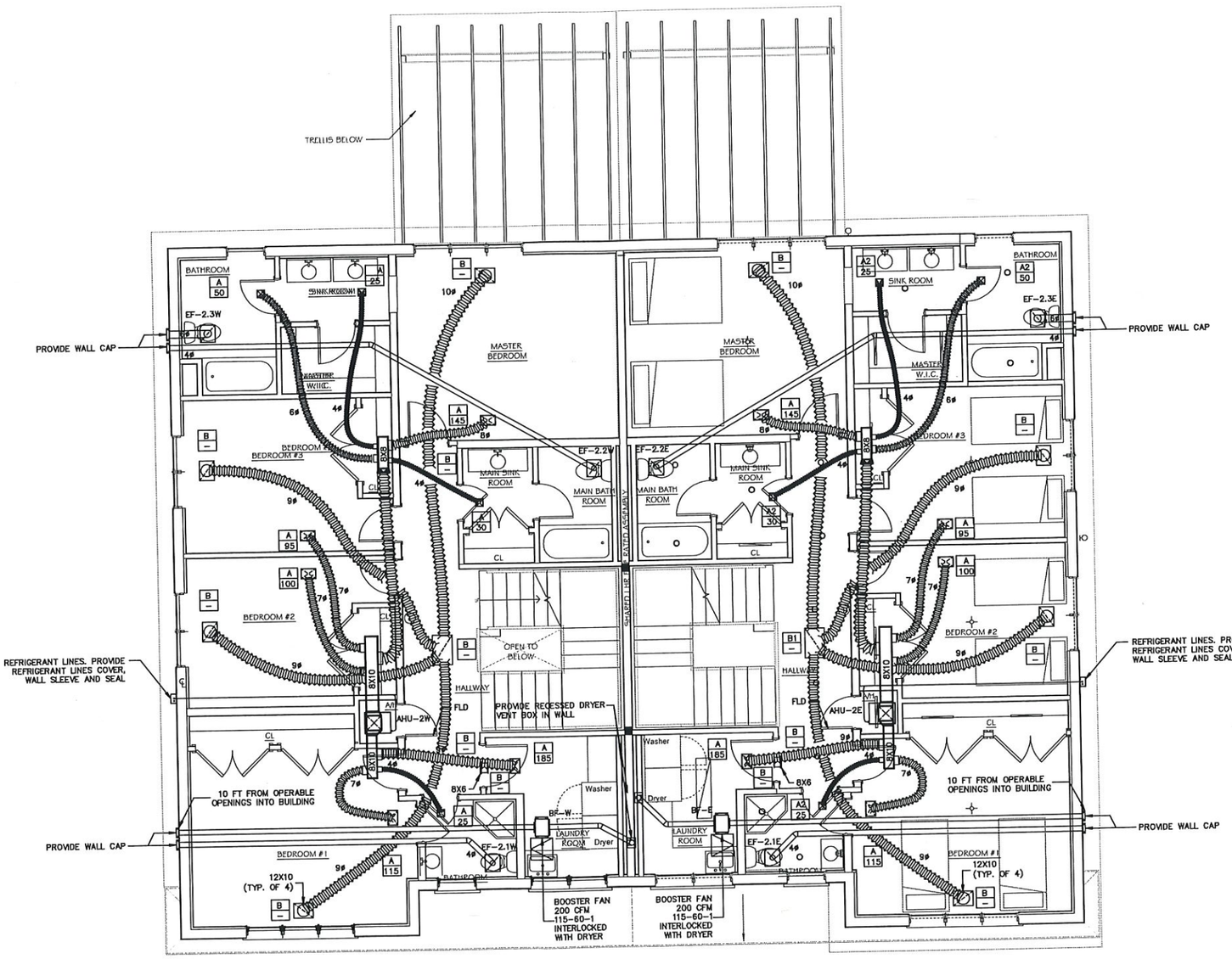
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THE GENERAL CONTRACTOR SHALL CHECK AND VERIFY ALL JOB RECORD AND REPORT ALL ERRORS AND INCONSISTENCIES TO THE ARCHITECTS DO NOT SCALE DRAWINGS THE DRAWING SHALL NOT BE USED FOR CONSTRUCTION UNLESS SIGNED BY THE CONSULTANTS

NOTES:

PROVIDE RECESSED DRYER VENT BOX IN WALL. REFER TO DETAIL 10 SHEET 3.1.

REFRIGERANT LINES. PROVIDE REFRIGERANT LINES COVER, WALL SLEEVE AND SEAL.



1 SECOND FLOOR MECHANICAL PLAN
1/4" = 1'-0"

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CLIENT:

REVISIONS:

DESCRIPTION	DATE	NO

PROJECT NAME / LOCATION:
DUPLEX MASTER
OKEECHOBEE, FL

DRAWING TITLE:
SECOND FLOOR MECHANICAL PLAN

EXAMINER'S SIGNATURE:

STATE OF FLORIDA — SHIMON ELIEZER GREENEBAUM — REGISTERED ARCHITECT — AR102415

Shimon E Greenebaum

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PROJECT #: 230515-B
(Duplex Permit Set)

GEORGE SANJUAN, P.E.
FLORIDA LICENSE #46100

SCALE:

DATE:

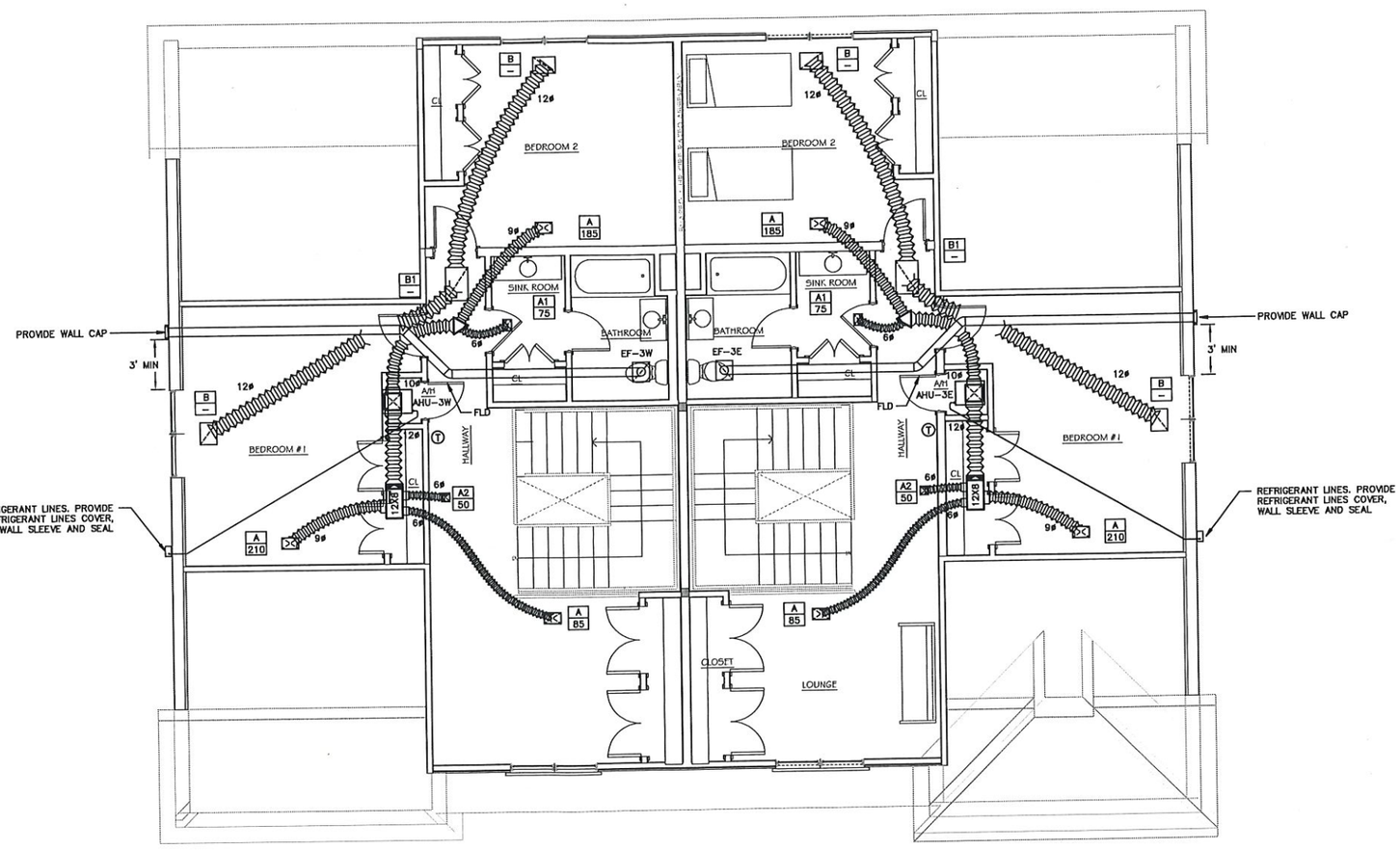
PROJECT #:

M-2.1

DRAWING NO.

THE GENERAL CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS AND REPORT ALL ERRORS AND OMISSIONS TO THE ARCHITECTS. DO NOT SCALE DRAWING. THE DRAWING SHALL SIGN AND SEAL ON ALL SIGNED AND SEALED CONSTRUCTION DOCUMENTS.

7/25/2023 9:30:30 AM



1 THIRD FLOOR MECHANICAL PLAN
1/4" = 1'-0"

RISE | FL
architecture

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CLIENT:

REVISIONS:

DESCRIPTION	DATE	NO

PROJECT NAME / LOCATION:
DUPLEX MASTER
OKEECHOBEE, FL.

DRAWING TITLE:
THIRD FLOOR MECHANICAL PLAN

EXAMINER'S SIGNATURE

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Shimon E Greenebaum, PA

PROFESSIONAL SEAL:

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P.I.T. MGR: STEPHEN BENDER, P.E.
PROJECT #: 230515-B
(Duplex Permit Set)

GEORGE SANJUAN, P.E.
FLORIDA LICENSE #46100

SCALE:
DATE:
PROJECT NO:

DRAWING NO:
M-2.2

PLOTTED:
7/25/2023 9:30:30 AM

THE GENERAL CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS AND REPORT ALL ERRORS AND OMISSIONS TO THE ARCHITECTS. DO NOT SCALE DRAWING. THE DRAWING SHALL NOT BE USED FOR ANY PURPOSE OTHER THAN THE CONTRACT WORK

SPLIT SYSTEM SCHEDULE BASIS OF DESIGN DAIKIN.

INDOOR UNIT

TAG	BASIS OF DESIGN (DAIKIN)	NOMINAL TONNAGE	SUPPLY FAN	COOLING CAPACITY				ELECTRIC HEATER	ELECTRICAL			DIMENSIONS	WEIGHT	CONNECTED TO:
			FULL LOAD AIR VOLUME RATE (SCFM)	TOTAL (BTU/h)	SENSIBLE (BTU/h)	ENTERING AIR °F DB	ENTERING AIR °F WB	KW	POWER SUPPLY VOLTAGE - PHASE	MIN CIRCUIT AMPS MCA	MAX OVERCURRENT PROTECTION MOP	HxWxD inch	Net lbs	CONDENSING UNIT
AHU 1	AMST30BU14	2.5	950	27829	20536	75	63	3	208-230V 1ph	19/21.4	20/25	45 x 17 x 21	111	CU 1
AHU 2	AMST24BU14	2	760	22940	16471	75	63	3	208-230V 1ph	19/21.4	20/25	45 x 17 x 21	111	CU 2
AHU 3	AMST24BU14	1.5	620	17394	13390	75	63	3	208-230V 1ph	19/21.4	20/25	45 x 17 x 21	111	CU 3

OUTDOOR UNIT

MODEL NO.	ELECTRICAL VOLTAGE-PHASE	ELECTRICAL MIN CIRCUIT AMPS (MCA)	ELECTRICAL MAX OVERCURRENT PROTECTION (MOP)	ELECTRICAL COMPRESSOR RATED LOAD AMPS (RLA)	DIMENSIONS (WxDxH) (inch)	DIMENSIONS WEIGHT (lbs)	SYSTEM DATA EFFICIENCY SEER2	SYSTEM DATA AHRI REF No.
DX5SEA3010	208-230V 1ph	17	25	12.8	35½ x 35½ x 39½	202	15.2	208144308
DX5SEA2410	208-230V 1ph	15.3	25	11.5	29 x 29 x 32	151	15.2	208143733
DX5SEA1B10	208-230V 1ph	11.9	20	9	26 x 26 x 27	126	15.2	208142355

NOTES INDOOR UNITS:
- INTERNAL FACTORY-INSTALLED THERMAL EXPANSION VALVES
- DIRECT-DRIVE, 9-SPEED ECM BLOWER MOTOR
- ALL-ALUMINUM EVAPORATOR COIL WITH HIGH PERFORMANCE COATED FIN
- COIL MOUNTING TRACK FOR QUICK REPOSITIONING
- OPTIMIZED FOR USE WITH R-410A REFRIGERANT
- CABINET AIR LEAKAGE LESS THAN 1.4% AT 0.5 INCH H_2O WHEN TESTED IN ACCORDANCE WITH ASHRAE STANDARD 193
- RIGID SMARTFRAME™ CABINET
- HORIZONTAL OR VERTICAL CONFIGURATION CAPABILITIES
- DECABDE-FREE THERMOPLASTIC DRAIN PAN WITH SECONDARY DRAIN CONNECTIONS
- SCREW-LESS SIDES AND BACK HELPS TO REDUCE CONDENSATION WHEN INSTALLED IN HUMID LOCATIONS
- FOIL-FACED INSULATION COVERS THE INTERNAL CASING TO REDUCE CABINET CONDENSATION
- GALVANIZED, LEATHER GRAIN-EMBOSSED FINISH
- GLUE-LESS CABINET INSULATION RETENTION
- TOOL-LESS FILTER ACCESS

NOTES OUTDOOR UNITS
- HIGH-EFFICIENCY SCROLL COMPRESSOR WITH ADVANCED COPELAND* CORESENSE™ TECHNOLOGY
- HIGH-DENSITY FOAM COMPRESSOR SOUND BLANKET
- FACTORY-INSTALLED FILTER DRIER
- HIGH- AND LOW-PRESSURE SWITCHES
- SERVICE VALVES WITH SWEAT CONNECTIONS
- VENTURI FOR INCREASED VELOCITY OF AIRFLOW
- CUSTOM NICKEL GRAY POWDER-PAINT FINISH
- 500-HOUR SALT-SPRAY TESTED
- TOP AND SIDE MAINTENANCE ACCESS

GENERAL NOTES:
1.- OUTSIDE DESIGN CONDITIONS: 91FDB - 77FDB
2.- PROVIDE WIRED REMOTE CONTROLLER.
3.- SIZE AND RUN REFRIGERANT PIPING AS MANUFACTURER'S PUBLISHED RECOMMENDATIONS.
4.- PROVIDE PROPER VIBRATION ISOLATORS AS PER ISOLATION MANUFACTURER'S RECOMMENDATIONS.
5.- PROVIDE BUILT-IN CONDENSATE PUMP W/ DETECTION UNIT INSTALLED INSIDE THE INDOOR UNIT (EXTERNAL DEVICE IS NOT ALLOWED BY CODE) THAT AUTOMATICALLY
6.- ALLOWED BY CODE THAT AUTOMATICALLY CUTS OFF THE AC SYSTEM. INSULATE REFRIGERANT SUCTION LINE WITH 3/4" FIRE RETARDANT ARMAFLEX.
7.- INSTALL CHEMICAL DRYER AND STRAINER IN REFRIGERANT LIQUID LINES.
8.-PROVIDE BUILT-IN DISCONNECT.
9.- PROVIDE CONDENSING UNITS W/ FACTORY PRE-COATED COILS.

AIR DISTRIBUTION SCHEDULE

SYMBOL	USE	TYPE	ACCESSORIES	DESIGN MANUFACTURER AND MODEL NO.	REMARKS
A	SUPPLY AIR	DIFFUSER	-	TITUS 250-AA	SURFACE MOUNTED 12x8
A1					SURFACE MOUNTED 8x6
A2					SURFACE MOUNTED 6x6
B	RETURN AIR	GRILLE	-	TITUS 4F	SURFACE MOUNTED WALL MOUNTED
B1	RETURN AIR	GRILLE	-	TITUS 4F	SURFACE MOUNTED 24x16

NOTES:
1. REFER TO ARCHITECT PLANS FOR CEILING TYPE.
2. CONTRACTOR TO COORDINATE BORDER TYPE; FINISH AND COLOR FOR ALL AIR DISTRIBUTION DEVICES BEFORE ORDERING.
3. PROVIDE DISCHARGE PATTERN AS INDICATED ON PLANS.
4. CONTRACTOR TO PROVIDE 1-1/2 IN. INSULATED PLENUMS FOR LINEAR DIFFUSERS.
5. DUE TO THE AVAILABLE SPACE IN THE CEILING CAVITY FABRICATION OF CUSTOM PLENUMS MIGHT BE REQUIRED.
6. WHERE SHOWN ON THE DRAWINGS OR OTHERWISE INDICATED, PROVIDE A FRICTION-TYPE VOLUME DAMPER LOCATED IN THE ENTRY COLLAR OF THE SUPPLY AIR PLENUM, ACCESSIBLE THROUGH THE SLOT DIFFUSER. PROVIDE REMOTELY OPERATED DAMPERS IF REQUIRED.
7. WHEN REQUIRED REMOTELY OPERATED DAMPERS SHALL BE YOUNG REGULATOR TYPE.
8. PROVIDE ALL NECESSARY HARDWARE TO ENSURE COMPATIBILITY WITH THE REMOTE CABLE CONTROL SYSTEM.
9. COORDINATE THE EXACT LOCATION OF CEILING MOUNTED CONCEALED REGULATOR WITH THE ARCHITECT PRIOR TO INSTALLATION.

FANS SCHEDULE

MARK	SELECTION BASED ON MAKE	SELECTION BASED ON MODEL NO.	TYPE	SERVED AREA	CFM	TSP IN WG.	MOTOR DATA FLA	MCA	RPM	VOLTAGE	DRIVE	REMARKS
EF-1E, 1W, 2.1E, 2.1W	GREENHECK	SP-B80	CEALING	1ST FLOOR POWDER ROOM 2ND FLOOR BATHROOM	50	0.31	0.16	0.2	900	115/60/1	DIRECT	2
EF-2.2E, 2.2W	GREENHECK	SP-B110ES	CEALING	2ND FLOOR MAIN BATHROOM	50	0.65	0.27	0.3	650	115/60/1	DIRECT	2
EF-2.3E, 2.3W	GREENHECK	SP-A110	CEALING	2ND FLOOR MASTER BATHROOM	100	0.13	0.19	0.2	950	115/60/1	DIRECT	2
EF-3	GREENHECK	SP-B150	CEALING	3RD BATHROOM	100	0.13	0.19	0.2	950	115/60/1	DIRECT	2
BF-E, W	GREENHECK	CSP-A390-VG	INLINE	2ND FLOOR DRYER	200	0.61	1.5	1.9	1344	115/60/1	DIRECT	5

GENERAL FAN NOTES:

1.- PROVIDE MOTOR STARTERS, DISCONNECTS AND ALL ASSOCIATED CONTROLS ON ALL FANS.
2.- PROVIDE BACKDRAFT DAMPERS FOR OUTSIDE AIR FANS.
3.- FIELD ADJUST OPENINGS WITH STRUCTURE.
4.- COORDINATE WITH ELECTRICAL CONTRACTOR BEFORE BIDDING OR ORDERING ANY EQUIPMENT.
5.- SEE GENERAL, AIR CONDITIONING, DUCTWORK, AND COORDINATION NOTES FOR OTHER FIELD SUPPLIED ITEMS.
6.- PROVIDE FACTORY FAN MOUNTING SUPPORTS-LEGS, CURBS, HANGING CLIPS, ETC.

REMARKS:

1.- SPEED CONTROL.
2.- INTERLOCK W/ LIGHT.
3.- WALL SWITCH.
4.- INTERLOCK WITH AHU.
5.- INTERLOCK WITH DRYER.

RISE | FL architecture

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CLIENT:

REVISIONS:

DESCRIPTION	DATE	NO.

PROJECT - ADDRESS:
DUPLEX MASTER
OKEECHOBEE, FL.

DRAWING TITLE:
MECHANICAL SCHEDULES

EXAMINER'S SIGNATURE

STATE OF FLORIDA — SHIMON GREENEBAUM — REGISTERED ARCHITECT — AR102455

Shimon E Greenebaum

PROFESSIONAL SEAL:

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PJT. MGR: STEPHEN BENDER, P.E.
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FLORIDA LICENSE #46100

SCALE:

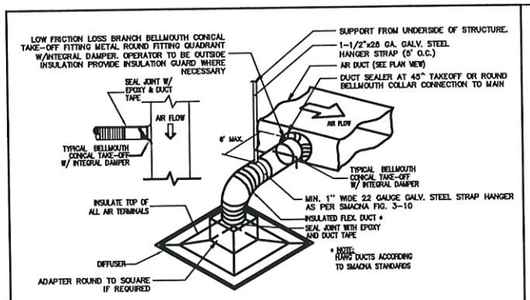
DATE:

PROJECT NO.

M-3.0

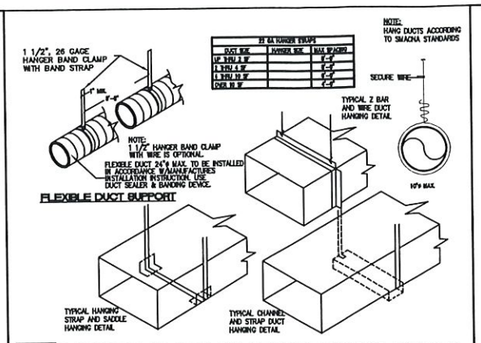
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4 M-3.1 FLEXIBLE ROUND DUCT TAKEOFF CONNECTION DETAIL

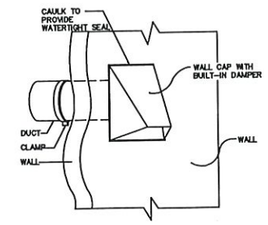
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25 GA HANGER STRAPS		
DUCT SIZE	HANGER SIZE	MAX SPACING
UP THRU 18 W	1"x25	8'-0"
THRU 4 W	1"x25	8'-0"
THRU 18 W	1"x25	6'-0"
OVER 18 W	1"x25	4'-0"

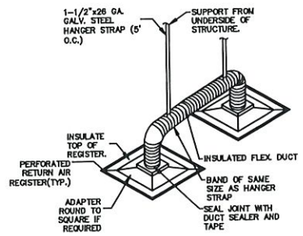
3 M-3.1 METHODS OF HANGING DUCTS DETAIL

SCALE: N.T.S.



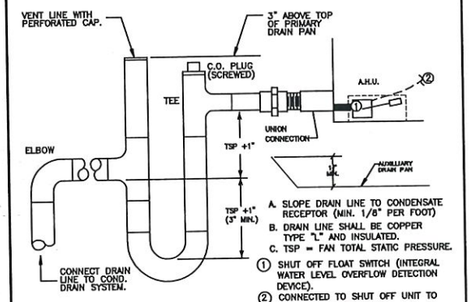
2 M-3.0 WALL CAP DETAIL

SCALE: N.T.S.



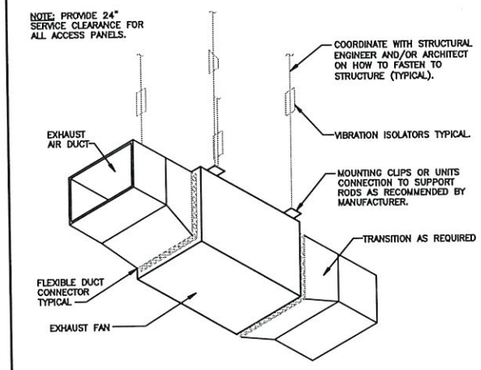
1 M-3.1 CEILING TRANSFER RETURN

SCALE: N.T.S.



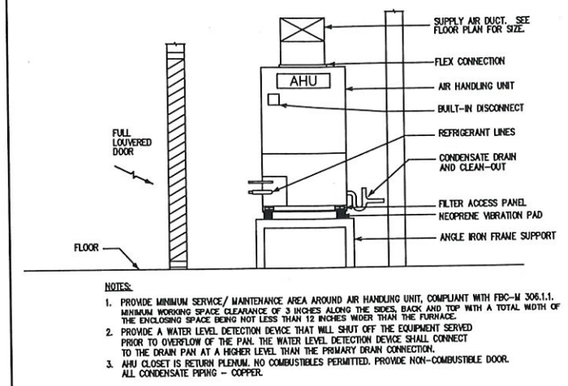
8 M-3.1 CONDENSATE P-TRAP DETAIL

SCALE: N.T.S.



7 M-3.1 INLINE BOOSTER FAN HANGING DETAIL

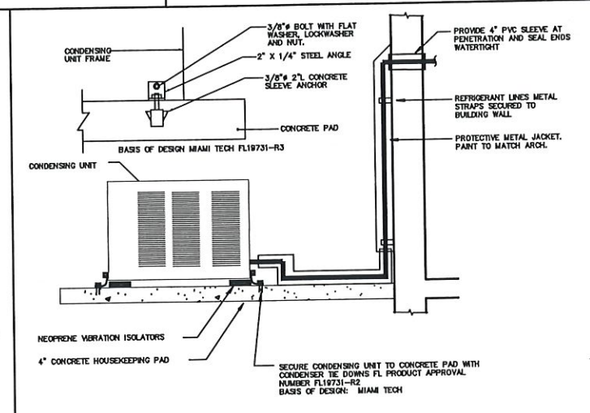
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NOTES:
1. PROVIDE MINIMUM SERVICE/ MAINTENANCE AREA AROUND AIR HANDLING UNIT, COMPLIANT WITH FBC-M 306.1.1. MINIMUM WORKING SPACE CLEARANCE OF 3 INCHES ALONG THE SIDES, BACK AND TOP WITH A TOTAL WIDTH OF THE ENCLOSING SPACE BEING NOT LESS THAN 12 INCHES WIDER THAN THE FURNACE.
2. PROVIDE A WATER LEVEL DETECTION DEVICE THAT WILL SHUT OFF THE EQUIPMENT SERVED PRIOR TO OVERFLOW OF THE PAN. THE WATER LEVEL DETECTION DEVICE SHALL CONNECT TO THE DRAIN PAN AT A HIGHER LEVEL THAN THE PRIMARY DRAIN CONNECTION.
3. AHU CLOSET IS RETURN PLENUM. NO COMBUSTIBLES PERMITTED. PROVIDE NON-COMBUSTIBLE DOOR. ALL CONDENSATE PIPING – COPPER.

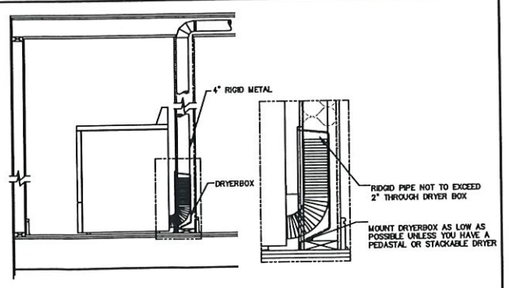
6 M-3.1 AHU MOUNTING DETAIL

SCALE: N.T.S.



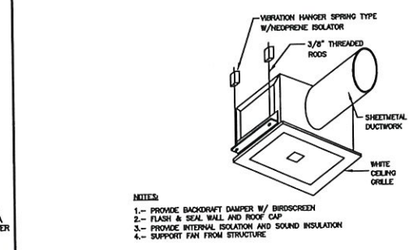
5 M-3.1 CONDENSING UNIT MOUNTING DETAIL

SCALE: N.T.S.



10 M-3.1 RECESSED DRYER VENT BOX DETAIL

SCALE: N.T.S.



NOTES:
1.- PROVIDE BACKDRAFT DAMPER W/ BIROSCREEN
2.- FLASH & SEAL WALL AND ROOF CAP
3.- PROVIDE INTERNAL ISOLATION AND SOUND INSULATION
4.- SUPPORT FAN FROM STRUCTURE

9 M-3.1 CEILING CABINET MOUNTING DETAIL

SCALE: N.T.S.

RISE | FL architecture

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CLIENT

REVISIONS

DESCRIPTION	DATE	NO.

PROJECT NAME / LOCATION
DUPLEX MASTER
OKEECHOBEE, FL

DRAWING TITLE
MECHANICAL DETAILS

DRAWING'S SIGNATURE

STATE OF FLORIDA — SHIMON GREENEBAUM — AR102113 — REGISTERED ARCHITECT

Shimon E Greenebaum

PROFESSIONAL SEAL

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7/25/2023 9:30:30 AM

GENERAL ELECTRICAL NOTES

(GENERAL NOTES ARE PROVIDED AS A BASIC DESCRIPTION OF THE EXTENT AND QUALITY EXPECTED IN THIS PROJECT. IF A CONFLICT EXISTS BETWEEN THESE GENERAL NOTES AND THE REMAINDER OF THE CONTRACT DOCUMENTS THE SPECIFICATIONS, PLANS AND DETAILS WILL GOVERN.)

1. THE ENTIRE INSTALLATION SHALL BE IN ACCORDANCE WITH THE FOLLOWING CODES AND STANDARDS:
   FLORIDA STATE FIRE MARSHALL'S RULE 69A-3.012 FAC AND
   RULE CHAPTER 69A-60 FLORIDA ADMINISTRATIVE CODE (FAC) AND
   FLORIDA STATUTE SECTION 633.022.
   A. NFPA 70: NATIONAL ELECTRICAL CODE (2017 EDITION)
   B. NFPA 72: NATIONAL FIRE ALARM CODE (2016 EDITION)
   C. NFPA 99: HEALTH CARE FACILITIES (2018 EDITION)
   D. NFPA 101: LIFE SAFETY CODE (2018 EDITION)
   E. NFPA 110: STANDARD FOR EMERGENCY AND STANDBY POWER SYSTEMS (2016 EDITION)
   F. NFPA 780: STANDARD FOR THE INSTALLATION OF LIGHTNING PROTECTION SYSTEMS (2017 EDITION)
   IN ADDITION, THE INSTALLATION SHALL ALSO BE IN ACCORDANCE WITH THE FOLLOWING:
   G. FLORIDA BUILDING CODE 2020 7th EDITION (FBC)
   H. THE GUIDELINES FOR DESIGN AND CONSTRUCTION OF HEALTH CARE FACILITIES (FGI GUIDELINES, 2018 EDITION)
   I. FLORIDA FIRE PREVENTION CODE (2020 EDITION)
2. AS A MINIMUM, ALL EQUIPMENT SHALL MEET APPLICABLE STANDARDS, FOR THE TYPE OF EQUIPMENT AND INTENDED USE, OF THE FOLLOWING:
   A. AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)
   B. ILLUMINATING ENGINEERS SOCIETY (IES)
   C. AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)
   D. NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATES.(NEMA)
   E. NOTE: THESE STANDARDS ARE SUBORDINATE TO CODES AND STANDARDS SET BY U.L.
   ALL ELECTRICAL EQUIPMENT, DEVICES, WIRE, ETC., SHALL BE LISTED, FOR INTENDED USE, WITH UNDERWRITER'S LABORATORIES INC. (U.L.), WHERE STANDARDS HAVE BEEN ESTABLISHED BY U.L.
3. CONTRACTOR TO PROVIDE ALL LABOR, MATERIALS AND SUPERVISION NECESSARY TO ACCOMPLISH THE WORK AS SHOWN AND/OR NOTED ON THE DRAWINGS.
4. THE CONTRACTOR SHALL VISIT THE JOB SITE AND VERIFY ALL CONDITIONS, LOCATIONS, DIMENSIONS AND COUNTS AS SHOWN OR NOTED ON THE DRAWINGS, PRIOR TO SUBMITTING BID.
5. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE ALL LABOR, MATERIALS AND SUPERVISION NECESSARY TO ACCOMPLISH THE WORK AS SHOWN AND/OR NOTED ON THE PLANS.
6. ELECTRICAL CONTRACTOR SHALL NOT SCALE DRAWINGS. CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS AND ELEVATIONS FOR EXACT LOCATIONS OF ALL EQUIPMENT UNLESS NOTED OTHERWISE.
7. IT SHALL BE UNDERSTOOD THAT ALL WORK PERFORMED SHALL BE DONE BY A LICENSED CONTRACTOR AND IN A FIRST-CLASS MANNER. SAID CONTRACTOR SHALL MEET ALL REQUIREMENTS SET FORTH BY ANY LOCAL ORDINANCE AND GOVERNING AUTHORITIES.
8. THE CONTRACTOR SHALL PROVIDE ALL REQUIRED INSURANCE FOR PROTECTION AGAINST PUBLIC LIABILITY AND PROPERTY DAMAGE FOR THE DURATION OF THE WORK.
9. CONTRACTOR SHALL GUARANTEE ALL MATERIALS AND INSTALLATION FREE FROM DEFECTS FOR A PERIOD OF NOT LESS THAN ONE YEAR FROM DATE OF ACCEPTANCE, UNLESS INDICATED OR SPECIFIED OTHERWISE.
10. IT SHALL NOT BE THE INTENT OF THESE PLANS AND/OR SPECIFICATIONS TO SHOW EVERY MINOR DETAIL OF CONSTRUCTION. THE CONTRACTOR SHALL BE EXPECTED TO FURNISH AND INSTALL ALL ITEMS FOR A COMPLETE ELECTRICAL SYSTEM AND PROVIDE FOR ALL REQUIREMENTS NECESSARY FOR EQUIPMENT TO BE PLACED IN PROPER WORKING ORDER.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING TO ORIGINAL CONDITIONS, ANY AND ALL DAMAGES TO BUILDING SURFACES, EQUIPMENT, ETC. CAUSED DURING THE PERFORMANCE OF WORK.
12. CORRECTION OF ANY DEFECTS SHALL BE COMPLETED WITHOUT ADDITIONAL CHARGE OR DELAYS AND SHALL INCLUDE REPLACEMENT OR REPAIR OF ANY OTHER PHASE OF THE INSTALLATION WHICH MAY HAVE BEEN DAMAGED THEREBY.
13. FOR ELECTRIC POWER SYSTEM, COORDINATE POWER SERVICE WITH POWER COMPANY;
   A. VERIFY LOCATION OF POWER SERVICE TERMINATION WITH POWER COMPANY, PRIOR TO SUBMITTING BID. CONTRACTOR TO VERIFY AVAILABLE SERVICE VOLTAGE AND PHASES WITH POWER COMPANY PRIOR TO BID AND PROVIDE BID ALLOWANCE FOR ALTERNATES.
   B. PROVIDE TEMPORARY ELECTRICAL SERVICE FOR USE BY ALL TRADES DURING CONSTRUCTION AND REMOVE SAME AT COMPLETION OF PROJECT.
14. CONTRACTOR SHALL KEEP ALL AREAS IN WHICH WORK IS BEING PERFORMED, FREE FROM DEBRIS AT ALL TIMES AND SAID AREAS SHALL BE LEFT BROOM CLEAN AT THE END OF EACH WORKING DAY.
15. CONTRACTOR SHALL PAY FOR ALL PERMITS, FEES, INSPECTIONS, AND TESTING COSTS.
16. COORDINATE ALL ELECTRICAL SITE WORK WITH ALL OTHER TRADES CONTRACTORS.
17. IT SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR FOR THE ADVANCE ORDERING OF LONG LEAD ITEMS, AS TO NOT INTERFERE WITH THE PRODUCTION OF OTHER TRADES RESULTING IN ANY DOWN OR LAG TIME. THE CONTRACTOR SHALL NOT ORDER ANY ITEMS UNTIL APPROVED SHOP DRAWINGS ARE RETURNED.
18. ELECTRICAL CONTRACTOR SHALL SUBMIT EQUIPMENT LAYOUT DIGITAL SHOP DRAWINGS OF ALL ELECTRICAL SPACES, ROOMS, ETC., TO ENGINEER FOR APPROVAL PRIOR TO ORDERING EQUIPMENT OR INSTALLING CONDUITS, ETC. LAYOUT SHALL CONSIST OF PLAN VIEWS (SCALED AS REQUIRED) AND ELEVATIONS (DIMENSIONED) FOR EACH SUCH SPACE, ROOM, ETC.
19. CONTRACTOR SHALL SUBMIT AT ONE TIME, DIGITAL SHOP DRAWINGS/SUBMITTALS, INDEXED WITH ALL PRODUCTS, MATERIALS, LIGHTING FIXTURES, LAMPS, WIRING DEVICES, SWITCHGEAR, ETC. CLEARLY HIGHLIGHTING ALL EQUIPMENT QUANTITIES AND DETAILS. ALL EQUIPMENT SHALL BE AS SPECIFIED ON PLANS: THE RESPONSIBILITY TO ACCEPT OR REJECT ANY PROPOSED SUBSTITUTION REMAINS WITH THE PROJECT ENGINEER. THE CONTRACTOR MAY USE ANY ARTICLE, DEVICE, PRODUCT, OR MATERIAL WHICH IN THE JUDGMENT OF THE ENGINEER EXPRESSED IN WRITING ARE EQUAL TO THAT SPECIFIED.
20. ALL CONDUCTORS SHALL BE COPPER, TYPE THHN/THWN EXCEPT WHERE OTHERWISE REQUIRED BY U.L. OR CODES. MINIMUM WIRE SIZE SHALL BE #12 AWG, EXCLUDING CONTROL WIRING. ALUMINUM CONDUCTORS ARE NOT PERMITTED.
21. ALL CONDUCTORS SHALL BE IN CONDUITS. ALL CONDUITS SHALL BE GALVANIZED RIGID STEEL (GRS) EXCEPT THAT: (a) PVC CONDUITS MAY BE USED UNDERGROUND PROVIDED ELBOWS AND RISERS ARE GALVANIZED RIGID STEEL OR SCHEDULE 80 PVC, WHERE SUBJECT TO PHYSICAL DAMAGE (b) ELECTRICAL METALLIC TUBING (EMT) MAY BE USED IN OR ON WALLS OR CEILINGS WHERE NOT SUBJECT TO MECHANICAL DAMAGE, DAMP OR CORROSIVE CONDITIONS, (c) LIQUID TIGHT FLEXIBLE CONDUIT WHERE REQUIRED, (d) FLEXIBLE METALLIC CONDUIT WHERE REQUIRED IN DRY LOCATIONS ONLY, (e) MC CABLE WITH DEDICATED GREEN GROUNDING CONDUCTOR WHERE PERMITTED. ALL CONDUITS IN HAZARDOUS AREAS (PER NEC) SHALL MEET THE REQUIREMENTS OF NEC CHAPTER 5.
22. FOR UNDERGROUND ELECTRICAL CONDUITS, PROVIDE PULL BOXES, SUCH THAT NO SINGLE CONDUIT RUN HAS BENDS IN EXCESS OF 360. PULL BOXES SHALL BE SUITABLE AND APPROVED FOR THE INTENDED USE. WARNING TAPE WHICH SAYS "WARNING BURIED ELECTRIC" SHALL BE PLACED IN TRENCHES ABOVE ALL UNDERGROUND ELECTRIC CONDUITS. WHERE CONDUITS PASS UNDERNEATH PAVED AREAS, THE CONDUITS SHALL BE PVC. WHERE UNDERGROUND CONDUITS ARE NOT EXPOSED TO MECHANICAL DAMAGE OR ARE NOT UNDER PAVED AREAS, THE CONDUITS SHALL BE SCHEDULE 40 PVC.
23. ALL CONDUIT RUNS ARE SHOWN DIAGRAMMATIC. EXACT ROUTING SHALL BE DETERMINED IN THE FIELD, UNLESS OTHERWISE NOTED.
24. WIREWAYS SHALL BE SIZED AS REQUIRED, PER NEC, UNLESS OTHERWISE NOTED (UON).
25. WHERE CORE DRILLING OF FLOOR/WALLS IS REQUIRED, CONTRACTOR SHALL SEAL OPENINGS WATERTIGHT AFTER UTILITIES HAVE BEEN INSTALLED. LOCATION OF CORED HOLES SHALL COORDINATE WITH LOCATION OF EQUIPMENT IN A MANNER TO BE CLEAN AND FUNCTIONAL. THE CONTRACTOR SHALL INSTALL ONLY ONE CONDUIT PER HOLE AND SEAL THE OPENING AROUND THE CONDUIT AS SPECIFIED.
26. PROVIDE FIRE RETARDANT U.L. APPROVED SEALANT ON ALL PENETRATIONS OF FIRE RATED PARTITIONS, WALLS AND STRUCTURAL SLABS. CONTRACTOR TO VERIFY, PRIOR TO SUBMITTING BID, LOCATIONS OF ALL SUCH FIRE RATED PARTITIONS, WALL AND STRUCTURAL SLABS.
27. UNLESS NOTED AS EXISTING, ALL EQUIPMENT, WIRING, DEVICES, ETC. SHALL BE NEW.
28. ALL CIRCUIT BREAKERS SHALL BE INVERSE TIME TYPE (THERMAL MAGNETIC OR SOLID STATE AS REQUIRED BY SPECIFICATION). TWO AND THREE POLE CIRCUIT BREAKERS SHALL BE COMMON TRIP. NO TIE HANDLES PERMITTED.
29. ALL FUSES SHALL BE CURRENT LIMITING, PER U.L., RATED 600V., UON.
   A. NON-TIME DELAY FUSES IN MAIN SWITCHES AND SWITCHES FEEDING PANELS.
   B. TIME DELAY FUSES FOR MOTOR AND A/C CIRCUITS.
30. ALL DISCONNECT SWITCHES SHALL BE SIZED BY NEC REQUIREMENTS TO ACCOMMODATE EQUIPMENT SERVED, INCLUDING REQUIRED FUSES U.O.N. SWITCHES SHALL BE HORSEPOWER RATED FOR MAX. HORSEPOWER, HEAVY DUTY TYPE.
31. CONTRACTOR SHALL VERIFY CIRCUIT PROTECTIVE DEVICE RATING FOR EQUIPMENT PRIOR TO INSTALLATION.
32. FURNISH AND INSTALL DISCONNECT SWITCHES AND WIRING FOR AIR CONDITIONING SYSTEM AS PER MANUFACTURER RECOMMENDATIONS. CONTROLS ARE TO BE SUPPLIED BY AIR CONDITIONING CONTRACTOR AND CONNECTED. PROVIDE ALL CONTROL WIRING FOR A/C SENSORING AND CONTROL UNITS, COORDINATE WITH A/C CONTRACTOR FOR WIRING DIAGRAMS AND EXACT MOUNTING LOCATIONS.
33. ALL ELECTRICAL EQUIPMENT SHALL BE RAINTIGHT WHERE EXPOSED TO THE WEATHER. ALL FLEX CONDUITS CONNECTED TO SUCH EQUIPMENT SHALL BE LIQUID TIGHT.
34. EQUIPMENT SHALL BE OF MATERIALS SUITABLE FOR AND NEMA RATED FOR THE ENVIRONMENT IN WHICH THEY ARE TO BE INSTALLED.
35. ALL CONNECTIONS TO GROUND RODS SHALL BE MADE WITH U.L. APPROVED WELDED CONNECTIONS, UNLESS NOTED OTHERWISE. THE CONTRACTOR SHALL FORM A GROUNDING ELECTRODE SYSTEM AS PER NEC 250-50.
36. OUTLET IN DRY LOCATIONS BOXES SHALL BE PRESSED STEEL. IN WET OR DAMP LOCATIONS SHALL BE CAST ALLOY WEATHER-RESISTANT OUTLET WITH THREADED HUBS AND IN OTHER CLASSIFIED AREAS IT SHALL BE IN A SPECIAL ENCLOSURE. PROPER PLASTER RINGS SHALL BE USED WITH OUTLET BOXES. PROPER COORDINATION BETWEEN ELECTRICAL SUBCONTRACTOR AND GENERAL CONTRACTOR FOR PLASTER RING INITIATION WILL BE REQUIRED. NO "GOOF" RINGS SHALL BE ALLOWED. ALL OUTLET BOXES SHALL BE SECURELY FASTENED.
37. WHEN ELECTRICAL BOXES ARE LOCATED IN VERTICAL FIRE RESISTIVE ASSEMBLIES, (CLASSIFIED AS FIRE/SMOKE AND SMOKE PARTITIONS), THEY SHALL BE INSTALLED WITHOUT AFFECTING THE FIRE CLASSIFICATION. ALL OF THE FOLLOWING CONDITIONS SHALL BE MET:
   A. ALL ELECTRICAL BOXES SHALL BE METALLIC.
   B. BOX OPENING SHALL OCCUR ONLY ON ONE SIDE OF FRAMING SPACE.
   C. BOX OPENING SHALL NOT EXCEED 10322.56 SQUARE MM (16SQUARE INCHES).
   D. ALL CLEARANCES BETWEEN OUTLET BOX AND GYPSUM BOARD SHALL BE COMPLETELY FILLED WITH JOINT COMPOUND (OR OTHER APPROVED MATERIAL).
   E. PROVIDE A WALL AROUND OUTLETS LARGER THAT 10322.56 SQUARE MM (16 SQUARE INCHES). THE INTEGRITY OF THE WALL RATING SHALL BE MAINTAINED.
   F. THE TOTAL AGGREGATE SURFACE AREA OF THE BOXES SHALL NOT EXCEED 64516 SQUARE MM (100 SQUARE INCHES) PER 9.29 SQUARE METERS (100 SQUARE FEET).
   G. OUTLET BOXES LOCATED ON OPPOSITE SIDES OF FIRE RESISTIVE ASSEMBLIES SHALL BE SEPARATED BY A MINIMUM HORIZONTAL DISTANCE OF 609.6MM (24 INCHES).
   H. OUTLET BOXES SHALL BE SECURELY FASTENED TO WALL FRAMING MEMBERS.
   I. THE OPENING IN THE GYPSUM BOARD FACING SHALL BE CUT NOT TO EXCEED 3.175MM (1/8 INCH) BETWEEN THE EDGES OF THE OUTLET BOX AND THE EDGES OF THE OPENING.
38. SMOKE DETECTORS SHALL BE PROVIDED NO CLOSER THAN 36" FROM SUPPLY AIR DIFFUSERS.
39. CONTRACTOR SHALL PROVIDE A TYPE WRITTEN DIRECTORY OF EACH PANELBOARD. HAND WRITTEN DIRECTORY IS NOT ACCEPTABLE, EXCEPT SPARE AND SPACES SHALL BE HANDWRITTEN IN PENCIL.
40. PROVIDE A 4" STEEL REINFORCED CONCRETE HOUSEKEEPING PAD UNDER ALL FLOOR MOUNTED ELECTRICAL EQUIPMENT.
41. A. WORKING CLEARANCES FOR ELECTRICAL EQUIPMENT SHALL BE IN COMPLIANCE WITH NEC 110.26
   B. THE EXCLUSIVELY DEDICATED SPACE EXTENDING FROM FLOOR TO STRUCTURAL CEILING WITH A WIDTH AND DEPTH OF THE PANELBOARD OR SWITCHBOARD MUST BE CLEAR OF ALL PIPING, DUCTS, EQUIPMENT FOREIGN TO THE ELECTRICAL EQUIPMENT OR ARCHITECTURAL APPURTENANCES IN ACCORDANCE WITH NEC 408.
42. METER CANS, HUBS, & LUGS FOR SAME ARE TO BE FURNISHED & INSTALLED BY CONTRACTOR. CONTRACTOR TO VERIFY SPECIFIC TYPE OF METER CAN TO BE USED WITH F.P.L. PRIOR TO BID.
43. A. PROVIDE A PERMANENT SIGN ON THE MAIN ELECTRICAL ROOM DOOR TO THE BLDG. STATING THAT THE SERVICE DISCONNECTS ARE LOCATED INSIDE.
   B. SIGNS SHALL BE PLACED AT THE MAIN DISCONNECT EQUIPMENT INDICATING TYPE AND LOCATION OF ON-SITE EMERGENCY POWER SOURCES.
44. THE EQUIPMENT GROUNDING TERMINAL BARS OF THE NORMAL AND EMERGENCY ELECTRICAL SYSTEM PANELBOARDS SERVING THE SAME BUILDING SHALL BE BONDED TOGETHER WITH AN INSULATED, CONTINUOUS, COPPER CONDUCTOR NOT SMALLER THAN NUMBER 6.
45. THE ELECTRICAL CONTRACTOR SHALL FURNISH A COMPLETE SET OF AS-BUILT DRAWINGS, SHOWING ALL CHANGES AND DEVIATIONS TO THE ARCHITECT/ENGINEER PRIOR TO COMPLETION OF THE PROJECT.
46. ARCHITECTURAL AND/OR ENGINEERING EXPENSES THAT ARE INCURRED DUE TO REVISIONS OR SUBSTITUTIONS REQUESTED BY THE CONTRACTOR SHALL BE PAID FOR BY THAT CONTRACTOR.
47. FOR TELEPHONE SYSTEMS:
   A. PROVIDE GROUNDING FOR ALL TELEPHONE OUTLETS AND EQUIPMENT PER REQUIREMENTS OF THE TELEPHONE COMPANY.
   B. COORDINATE INSTALLATION OF ALL TELEPHONE OUTLETS, RACEWAYS, ENCLOSURES AND BACKBOARDS WITH TELE. CO.
   C. VERIFY LOCATION OF TELEPHONE SERVICE WITH TELEPHONE COMPANY. PROVIDE SERVICE CONDUIT TO BLDG. FROM SERVICE POINT PER TELCO. INSTRUCTIONS, INCLUDE ALL ASSOCIATED COSTS IN BID.
   D. MARK TERMINATIONS OF TELEPHONE CONDUIT AS DIRECTED BY THE TELEPHONE COMPANY.
   E. VERIFY LOCATION OF TELEPHONE SERVICE WITH TELEPHONE COMPANY PRIOR TO SUBMITTING BID, INCLUDE ALL ASSOCIATED COSTS IN BID.
   F. USE EXTERIOR GRADE 3/4" PLYWOOD BACKBOARDS FOR MOUNTING TELEPHONE EQUIPMENT AND TERMINAL STRIPS. PAINT BOARD ON ALL SIDES AND EDGES WITH TWO COATS OF FLAT BLACK FIRE RETARDANT PAINT.
48. INDUSTRIAL CONTROL TYPE TRANSFORMERS SHALL BE PROVIDED WITH FINGERSAFE COVERS AND PRIMARY FUSE PROTECTION AS REQUIRED PER NEC 450-3. MOUNT TRANSFORMERS ON 4"X4" JUNCTION BOX ABOVE ACCESSIBLE CEILINGS OR ELECTRICAL ROOMS.
49. DWELLING UNITS: ALL 120-VOLT SINGLE-PHASE, 15&20A. BRANCH CIRCUITS SUPPLYING OUTLETS OR DEVICES INSTALLED IN DWELLING UNIT KITCHENS, FAMILY ROOMS, DINING ROOMS, LIVING ROOMS, PARLORS, LIBRARIES, DENS, BEDROOMS, SUNROOMS, RECREATION ROOMS, CLOSETS, HALLWAYS, LAUNDRY AREAS, OR SIMILAR ROOMS OR AREAS SHALL BE PROTECTED BY ARC-FAULT TECHNOLOGY IN ACCORDANCE WITH NEC 210.12(A) 1-6.
50. PROVIDE U.L. LISTED COMPOUND APPLIED TO BACK OF "BACK TO BACK" BOXES IN RATED WALLS WHERE THE BOXES ARE LESS THAN 609.6MM (24 INCHES) APART MEASURED HORIZONTALLY.
51. CONTRACTOR SHALL PROVIDE TYPED, UPDATED PANEL DIRECTORIES ON ALL PANELS THAT ARE AFFECTED AT THE COMPLETION OF THE JOB.
52. FOR RECEPTACLES IN DAMP AND WET LOCATIONS THE CONTRACTOR SHALL PROVIDE ALL 125V. AND 250V., 15A. AND 20A. RECEPTACLES THAT ARE LISTED AS WEATHER RESISTANT TYPE TO COMPLY WITH NEC ARTICLE 406.8.
53. SERVICE EQUIPMENT IN OTHER THAN DWELLING UNITS SHALL BE LEGIBLY MARKED IN THE FIELD WITH THE MAXIMUM AVAILABLE FAULT CURRENT. THE FIELD MARKING(S) SHALL INCLUDE THE DATE THE FAULT CURRENT CALCULATION WAS PERFORMED AND BE OF SUFFICIENT DURABILITY TO WITHSTAND THE ENVIRONMENT INVOLVED. COMPLY FULLY WITH NEC 110.16.
54. VOLTAGE DROP
   1. CONDUCTORS FOR ALL FEEDERS SHALL BE INCREASED FROM SIZES INDICATED ON DRAWINGS TO PREVENT VOLTAGE DROP EXCEEDING 2%.
   2. CONDUCTORS FOR ALL BRANCH CIRCUITS SHALL BE INCREASED FROM SIZES INDICATED ON DRAWINGS TO PREVENT VOLTAGE DROP EXCEEDING 3%. FROM THE FURTHEST DEVICE.
   3. DETERMINING CONDUCTOR SIZES SHALL BE BASED ON 80% OF THE BREAKER RATING.
   4. FOR DETERMINATION OF WIRE SIZE FOR BID PURPOSES:
      - INCREASE WIRE BY 1 WIRE SIZE FOR RUNS 60 FT. TO 100 FT.
      - INCREASE WIRE BY 2 WIRE SIZES FOR RUNS 100 FT. TO 150 FT.
      - INCREASE WIRE BY 3 WIRE SIZES FOR RUNS FROM 150 FT. TO 230 FT.

GENERAL LIGHTING NOTES:

1. CONTRACTOR SHALL COMPLY WITH 2020 FBC SECTION R404.1. MINIMUM OF 90% OF THE PERMANENTLY INSTALLED LIGHTING FIXTURES SHALL BE HIGH-EFFICIENCY LAMPS. MIN. 65L/W..
2. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT LOCATION OF LIGHT FIXTURES.
3. COORDINATE TYPE OF CEILING FOR EACH FIXTURE WITH ARCHITECTURAL REFLECTED CEILING PLANS AND PROVIDE FIXTURE TRIM AS REQUIRED.
4. ALL LED DOWNLIGHTS SHALL USE LAMPS WITH 3500K TEMPERATURE, MINIMUM 30,000 HOUR LIFE, FOR LAMPS AND DRIVERS.
5. PROVIDE APPROVED FIRE RATED ENCLOSURES FOR ALL LIGHT FIXTURES LOCATED IN FIRE RATED CEILINGS.
6. FIXTURES IN AREAS WITHOUT CEILINGS, OR IN MECHANICAL AND ELECTRICAL ROOMS SHALL BE MOUNTED WITH 1 ½"X1 ½"KINDORF CHANNEL SUPPORT SUSPENDED FROM ROOF STRUCTURE WITH THREAD RODS. FIXTURES SHALL BE MOUNTED 10'-0" A.F.F.
7. ALL ACRYLIC LENSED FIXTURES SHALL HAVE A LENS THICKNESS OF .125 INCHES MINIMUM.
8. HALF SHADED FIXTURES DENOTE EMERGENCY FIXTURES EITHER WITH 1100 LUMEN EMERGENCY BATTERY PACK OR ON LIFE SAFETY CIRCUIT.
9. LIGHTING FIXTURE SCHEDULE IS PREDICTED ON PERFORMANCE AND IS DESIGNED TO MEET CERTAIN AESTHETIC CRITERIA. ALL ALTERNATIVE SELECTIONS MUST BE SUBMITTED FOR PRIOR APPROVAL TEN (10) DAYS PRIOR TO BID DATE.
10. ALL BALLASTS SHALL HAVE MINIMUM POWER FACTOR OF 0.90. ALL BALLASTS FOR METAL HALIDE AND HIGH PRESSURE SODIUM FIXTURES SHALL BE CONSTANT WATTAGE TYPE WITH +/-5% LAMP WATTS FOR +/-10% NOMINAL LINE VOLTAGE VARIATION.
11. PROVIDE LAMPS WITH FIXTURES, VERIFY LAMP TYPE WITH MANUFACTURER.
12. FLUORESCENT LUMINAIRES THAT UTILIZE DOUBLE-ENDED LAMPS AND CONTAIN BALLAST(S) OR MULTIWIRE BALASTED LUMINAIRES SHALL CONTAIN AN INTEGRATED INTERNAL DISCONNECT AND TO BE COMPLIED WITH NEC 410.130(G).
13. ALL OPENINGS FOR LIGHT FIXTURES IN CEILINGS SHALL BE PROTECTED IN A MANNER (PER ALL GOVERNING CODES) THAT WILL PROVIDE THE SAME RATING AS THE CEILING. (THIS APPLIES TO ALL FIRE RATED CEILINGS).
14. FOR EMERGENCY EXIT SIGNS AND EMERGENCY BATTERY PACKS MAKE CONNECTION TO THE GENERAL LIGHTING CIRCUIT IN THE IMMEDIATE AREA; AHEAD OF ALL SWITCHES AND CONTROLS.
15. PROVIDE A FUSE HOLDER AND FUSE (BUSSMAN HEB AND FNQ OR EQUAL), IN THE PRIMARY SIDE OF EACH UNGROUNDED CONDUCTOR FOR ALL BALLASTS AT THE HAND HOLE OF EACH EXTERIOR POLE MOUNTED LIGHTING FIXTURE OR J-BOX FOR WALL OR GROUND MOUNTED FIXTURE.
16. PROVIDE WIND LOAD RATED LIGHT POLES WITH 170 MPH MINIMUM WIND SPEED (ASCE 7). EXPOSURE C WITH IMPORTANCE FACTOR OF 1.0, AND PROVIDE PHOTOMETRICS WITH ALL FIXTURE SUBMITTALS. CONTRACTOR TO VERIFY VOLTAGES OF ALL LIGHT FIXTURES PRIOR TO BIDDING.
17. PHOTOMETRICS ARE BASED ON MANUFACTURER'S INFORMATION AND CATALOG NUMBERS. ALTERNATIVE MANUFACTURERS MUST PROVIDE THE IESNA FORMAT ELECTRONIC FILES OF THE INDEPENDENT TEST LAB REPORTS FOR THE PROPOSED FIXTURES 10 WORKING DAYS PRIOR TO BID. (SPECIFIER) WILL CONFIRM THAT THE PHOTOMETRIC CRITERIA HAS BEEN MET, AND IF ALTERNATE IS APPROVED WILL ISSUE AN ADDENDUM. MANUFACTURERS NOT LISTED ON THE PLANS OR IN AN ADDENDUM WILL NOT BE ACCEPTED.
18. TO CONFIRM THAT THE SPECIFIED PHOTOMETRIC CRITERIA HAS BEEN MET, PHOTOMETRIC DRAWINGS FOR THE PROPOSED ALTERNATE MUST BE SUBMITTED TO (SPECIFIER) FOR EVALUATION NO LESS THAT 10 DAYS PRIOR TO BID. ANY ACCEPTABLE ALTERNATE MUST BE APPROVED IN WRITING PRIOR TO BID DATE.
19. CONTRACTOR MUST BID PROJECT USING SPECIFIED LIGHTING FIXTURES AS BASE BID (NO EXCEPTIONS). IF ALTERNATE FIXTURES ARE PROPOSED, THEY MUST BE BID AS AN ALTERNATE BID MUST INCLUDE:
   A) TOTAL DOLLAR CREDIT TO OWNER IF ALTERNATE IS ACCEPTED.
   B) LINE ITEM CREDIT FOR EACH ALTERNATE FIXTURE PROPOSED.
   C) CATALOG SUBMITTAL DATA FOR EACH ALTERNATE FIXTURE PROPOSED.
20. IF THERE IS A DISCREPANCY BETWEEN A FIXTURE DESCRIPTION AND GENERAL NOTES, AND THE CATALOG NUMBER LISTED, THE FIXTURE DESCRIPTION AND GENERAL NOTES SHALL GOVERN.
21. COORDINATE FIXTURE TYPES WITH ARCHITECTURAL DRAWINGS.
22. INTERNALLY ILLUMINATED EXIT SIGNS SHALL NOT EXCEED 5 WATTS PER SIDE.
23. RECESSED LUMINAIRES INSTALLED IN THE BUILDING THERMAL ENVELOPE SHALL BE SEALED TO LIMIT AIR LEAKAGE BETWEEN CONDITIONED AND UNCONDITIONED SPACES. ALL RECESSED LUMINAIRES SHALL BE IC-RATED AND LABELED AS MEETING ASTM E 283 WHEN TESTED AT 75 Pa PRESSURE DIFFERENTIAL WITH NO MORE THAN 2.0 CFM OF AIR MOVEMENT FROM THE CONDITIONED SPACE TO THE CEILING CAVITY. ALL RECESSED LUMINAIRES SHALL BE SEALED WITH A GASKET OR CAULK BETWEEN THE HOUSING AND THE INTERIOR WALL OR CEILING COVERING.
24. ALL EXTERIOR PARKING LIGHTING SHALL MEET IES ILLUMINATION STANDARDS AND LOCAL CODE REQUIRED FOOTCANDLE LEVELS. ILLUMINATION LEVELS SHALL BE MEASURED WITH A FOOTCANDLE METER AT COMPLETION OF THE PROJECT BY A REGISTERED PROFESSIONAL ENGINEER AND SAID ENGINEER SHALL ISSUE A LETTER ATTESTING TO COMPLIANCE WITH ALL CODE REQUIREMENTS.
25. THE CONTRACTOR SHALL SUBMIT PHOTOMETRICS FOR MEANS OF EGRESS ILLUMINATION MEETING REQUIREMENTS OF FBC 1008.1. 1FC UNDER NORMAL POWER; UNDER EMERGENCY POWER, 1FC AVERAGE, AND 0.1FC MINIMUM.
26. ALL LUMINAIRES INSTALLED IN WET LOCATIONS SHALL BE MARKED "SUITABLE FOR WET LOCATIONS". ALL LUMINAIRES INSTALLED IN DAMP LOCATIONS SHALL BE MARKED "SUITABLE FOR WET LOCATIONS" OR "SUITABLE FOR DAMP LOCATIONS" IN COMPLIANCE WITH N.E.C. 410.4A.

ELECTRICAL SYMBOL LEGEND

SYMBOL | DESCRIPTION

LIGHTING (REFER TO LIGHTING FIXTURE SCHEDULE)

- A — LIGHT FIXTURE DESIGNATION.
- LIGHTING FIXTURE, SURFACE MOUNTED
- LIGHTING FIXTURE (HID, FLUORESCENT OR INCANDESCENT), RECESSED MTD.
- LIGHTING FIXTURE, WALL MOUNTED
- EXIT LIGHT FIXTURE. DIRECTION ARROWS AS SHOWN
- WALL MOUNTED EXIT LIGHT FIXTURE (SHADED QUADRANT INDICATES FACE(S) OF FIXTURE)
- 2 X 2 FLUORESCENT LIGHT FIXTURE
- 2 X 4 FLUORESCENT LIGHT FIXTURE
- DIAGONAL SHADING DENOTES LIGHT FIXTURE CONNECTED TO EMERGENCY BRANCH CIRCUIT OR, W/EMERG. 90 MIN. BATTERY PACK.
- 1 X 4 FLUORESCENT LIGHT FIXTURE
- DIAGONAL SHADING DENOTES LIGHT FIXTURE CONNECTED TO EMERGENCY BRANCH CIRCUIT OR, W/EMERG. 90 MIN. BATTERY PACK.
- FLUORESCENT WALL MOUNTED FIXTURE WITH WALL OUTLET BOX
- FLUORESCENT STRIP FIXTURE
- DIAGONAL SHADING DENOTES LIGHT FIXTURE CONNECTED TO EMERGENCY BRANCH CIRCUIT OR, W/EMERG. 90 MIN. BATTERY PACK.
- EXTERIOR LIGHT FIXTURE WITH ARMS AS SHOWN ON DRAWINGS
- EMERGENCY BATTERY WALL PACK WITH TWIN HEADS
- $ — TOGGLE SWITCH 120/277V. 20 AMP.,(M.H. = 48" A.F.F.)
- $3 — TOGGLE SWITCH 120/277V. 20 AMP. ,(M.H. = 48" A.F.F.) , 3-WAY
- $4 — TOGGLE SWITCH 120/277V. 20 AMP., (M.H. = 48" A.F.F.), 4-WAY
- $B — LIGHTING CONTROL BY-PASS SWITCH, (MAX. 2 HOUR OVER-RIDE).
- $K — TOGGLE SWITCH 120/277V. 20 AMP. KEYSWITCH, (M.H. = 48" A.F.F.)
- $F — FAN SWITCH 120/277V. 20 AMP, (HORSEPOWER RATED)
- $T — 30-MINUTE ROTATABLE TIMER SWITCH (M.H. = 48" A.F.F.)
- $P — TOGGLE SWITCH 120/277V. 20 AMP., WITH PILOT LIGHT, (M.H.=48"A.F.F.)
- $EX — TOGGLE SWITCH 120/277V. 20 AMP. EXPLOSION-PROOF, (M.H.=48"A.F.F.)
- $S — SPEED SWITCH 120/277V. 20 AMP. U.O.N. ,(M.H. = 48" A.F.F.)
- $M — SINGLE PHASE MANUAL MOTOR STARTER, (M.H.=48" A.F.F.)
- $D — DIMMER SWITCH 120/277V. 20 AMP., (M.H.=48" A.F.F.) (1500 WATTS UNLESS OTHERWISE INDICATED)
- $3D — THREE-WAY DIMMER SWITCH (48" A.F.F.)
- $a — SINGLE POLE SWITCH (48" A.F.F.) (SUBSCRIPT INDICATES ITEM CONTROLLED)
- (P) — PANIC SWITCH, MUSHROOM TYPE, (M.H.=48" A.F.F.)
- a,b — WALL MOUNTED - OCCUPANCY SENSOR SWITCH,(M.H.=48"A.F.F.)MFGR./MODEL# SENSOR SWITCH/#WSD-PDT (a, b) OR (2) INDICATES TWO POLE SWITCH - WSD-PDT-2P LV INDICATES LOW VOLTAGE - WSD-PDT-LV
- OS — CEILING MOUNTED OCCUPANCY SENSOR - LIGHTING CIRCUIT CONTROLLER. MFGR./MODEL# (SENSOR SWITCH/#CM-PDT)
- OS E — CEILING MOUNTED DUAL TECHNOLOGY EXTENDED RANGE OCCUPANCY SENSOR - LIGHTING CIRCUIT CONTROLLER. SENSOR SWITCH/#CM-PDT-10.
- OS — WALL MOUNTED - OCCUPANCY SENSOR (M.H.=96"A.F.F.) MFGR./MODEL#WV-PDT
- PP — POWER PACK

OCCUPANCY SENSOR NOTE:
CONTRACTOR SHALL PROVIDE ALL SWITCHPACKS AND CONDUCTORS AS REQUIRED FOR LAYOUTS AND CONTROLS SHOWN ON PLANS.

IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE AND INSTALL A COMPLETE AND FULLY FUNCTIONAL LIGHTING CONTROL SYSTEM IN ACCORDANCE WITH THE PLANS, DETAILS, INTENT OF THE DESIGN AND SPECIFICATIONS SHOWN ON THESE PLANS.

BASIC MATERIALS

- DUPLEX RECEPTACLE, 20 AMP., 125V., (M.H.=18"A.F.F.)
- FLOOR OUTLET BOX AND DUPLEX RECEPTACLE 20 AMP., 125V., WITH APPROPRIATE FLANGE.
- CEILING OUTLET BOX AND DUPLEX RECEPTACLE 20A, 125V.
- DUPLEX RECEPTACLE, 20 AMP., 125V., TOP HALF SWITCHED, M.H. = 18" A.F.F. UNLESS OTHERWISE NOTED
- DUPLEX RECEPTACLE, 20 AMP., 125V., ISOLATED GROUND AND SURGE PROTECTED, (M.H.=18"A.F.F.)
- SINGLE RECEPTACLE, 20 AMP., 125V., COORDINATE M.H. WITH EQUIPMENT.
- EWC — SIMPLEX RECEPTACLE (16" A.F.F.) (EWC DENOTES ELECTRIC WATER COOLER. COORDINATE WITH EWC INSTALLER FOR MOUNTING HEIGHT)
- TWO DUPLEX RECEPTACLES WITH COMMON COVER 20A., 125V.,(18" A.F.F.)
- TWO DUPLEX RECEPTACLES WITH COMMON COVER 20A., 125V.,(42" A.F.F.)
- DUPLEX RECEPTACLE, 20 AMP., 125V., MOUNT ABOVE COUNTER @42"AFF.
- SPECIAL PURPOSE OUTLET e.g. RANGE OUTLET, COORD. W/ EQUIPT.
- GFCI DUPLEX RECEPTACLE, 20 AMP., 125V., (M.H.=18"A.F.F.)
- GFCI DUPLEX RECEPTACLE, 20 AMP., 125V., MTD. ABOVE COUNTER (VERIFY HEIGHT)
- 30 AMP., 125V., TWIST LOCK RECEPTACLE FOR FLOOR POLISHING MACHINE
- JUNCTION BOX, MOUNTING AS SHOWN
- POWER POLE
- ELECTRIC MOTOR, NUMBER INDICATES HORSEPOWER
- MAGNETIC MOTOR STARTER OR CONTACTOR,
- COMBINATION MAGNETIC MOTOR STARTER, SIZE AS NOTED
- DISCONNECT SWITCH, SIZE AS NOTED — 3 100 * : # OF POLES; AMP RATING/FRAME; FUSE SIZE (* DENOTES AS PER MANUFACTURER). ENCLOSURE TYPE: NEMA 3R- FOR EXTERIOR; NEMA 1- FOR INTERIOR
- LIGHTING CONTROL TIME CLOCK
- PHOTOCELL, MOUNTED ON ROOF FACING NORTH
- SHUNT-TRIP BUTTON - FLUSH MOUNTED UNLESS OTHERWISE NOTED
- PLUG-IN STRIP WITH RECEPTACLES, 18" O.C. UNLESS OTHERWISE INDICATED
- CABLE TRAY
- GROUND OR GROUND ROD AS NOTED
- CONDUIT TURNING UP
- CONDUIT TURNING DOWN
- CONDUIT STUB
- CONDUIT CONTINUED

NOTE: SOME SYMBOLS SHOWN ON THIS LEGEND MAY NOT PERTAIN TO THIS PROJECT.

TO THE BEST OF THE ENGINEER'S KNOWLEDGE, THE PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE MINIMUM BLDG. CODES AND APPLICABLE FIRE-SAFETY STANDARDS AS DETERMINED BY THE LOCAL AUTHORITY IN ACCORDANCE WITH SECTION 110.3.7.4.4 AND CHAPTER 633, FLORIDA STATUES.

SYSTEMS SYMBOL LEGEND

SYMBOL | DESCRIPTION

- CALL BACK PUSH BUTTON
- CIRCUIT BREAKER, TYPE AND SIZE AS PER DRAWINGS.
- KP — SECURITY SYSTEM KEYPAD
- C — CLOCK
- B — BELL
- R — AIR HANDLING UNIT SHUT-DOWN RELAY
- R — POWER ON INDICATOR WITH KEYED RESET

SERVICE AND DISTRIBUTION

- ELECTRICAL BRANCH CIRCUIT PANELBOARD, RECESS MOUNTED. (SEE PANEL SCHEDULE FOR DETAILS)
- ELECTRICAL BRANCH CIRCUIT PANELBOARD, SURFACE MOUNTED. (SEE PANEL SCHEDULE FOR DETAILS)
- T — TRANSFORMER, SIZE AS NOTED
- AUTOMATIC TRANSFER SWITCH
- EXISTING EQUIPMENT TO REMAIN
- NEW EQUIPMENT OR WORK OF THIS PROJECT

TELEPHONE/COMPUTER RACEWAY SYSTEM

- TELEPHONE/COMPUTER TERMINAL BOARD "TTB"
- S — INTERCOM SYSTEM SPEAKER
- COMPUTER/TELEPHONE OUTLET WITH (2) 8-CONDUCTOR RJ-45 JACKS IN A SINGLE-GANG BOX MOUNTED AT 18" A.F.F. C = ABOVE THE COUNTER; P = PUBLIC PAY (48" A.F.F.); W = WALL MOUNTED (18" A.F.F.)
- DATA/TELEPHONE PORT - CEILING MOUNTED
- DATA/TELEPHONE PORT - FLOOR MOUNTED
- TV — TELEVISION SIGNAL WALL OUTLET (M.H. = 18" A.F.F.) WITH 8-CONDUCTOR RJ-45 JACK AND F-TYPE RG6 COAX JACK IN SINGLE-GANG BOX.
- TV — TELEVISION SIGNAL WALL OUTLET F-TYPE RG6 COAX JACK & COMPUTER/TELEPHONE OUTLET (2) 8-CONDUCTOR RJ-45 JACKS IN SINGLE-GANG BOX. (18" A.F.F.)

SECURITY SYSTEM

- SECURITY SYSTEM CAMERA, PROVIDE POWER AND SIGNAL CONNECTION, SEE SPECS.
- SECURITY SYSTEM MONITORS AND RECORDERS, SEE SPECS.
- CR — SECURITY SYSTEM CARD READER, SEE SPECS.
- SECURITY SYSTEM CABLES IN CONDUIT, SEE SPECS.
- J S — SECURITY SYSTEM JUNCTION BOX AT ACCESSIBLE LOCATION.
- SECURITY SYSTEM HIDDEN PUSH BUTTON FOR DOOR STRIKE RELEASE, COORDINATE INSTALLATION WITH FURNITURE OR EQUIPMENT.
- S — SECURITY SYSTEM SPEAKER WITH INTEGRAL MICROPHONE
- KB — SECURITY SYSTEM KNOX BOX

FIRE ALARM/DETECTION SYSTEM

- F — FIRE ALARM MANUAL PULL STATION 48" A.F.F.
- 110 CD — COMBINATION AUDIBLE/VISUAL SIGNALING UNIT - FIRE ALARM HORN (SPEAKER)/ FLASHING STROBE LIGHT (WALL MTD.) MOUNT AT 80" A.F.F. OR 6" BELOW CEILING WHICHEVER IS LOWER.
- WP — WP DENOTES WEATHERPROOF ENCLOSURE
- 15/75 CD — VISUAL SIGNALING UNIT - FLASHING STROBE LIGHT ONLY (80" TO BOTTOM) (NO AUDIO DEVICE)
- P — PHOTO-ELECTRIC SMOKE DETECTOR E = ELEVATOR I = IONIZATION
- DD — DUCT MOUNTED SMOKE DETECTOR, WITH SAMPLE TUBE, REMOTE TEST AND HEAVY DUTY CONTROL RELAY. R = RETURN S = SUPPLY
- R — TYPICAL 120V. RESIDENTIAL TYPE SMOKE DETECTOR WITH SOUNDER BASE AND BATTERY BACK-UP.
- CM — TYPICAL 120V. RESIDENTIAL TYPE COMBO SMOKE DETECTOR/CARBON MONOXIDE WITH SOUNDER BASE AND BATTERY BACK-UP.
- S FA — FIRE ALARM SPEAKER (WALL OR CEILING MOUNTED)
- F — FIREFIGHTER'S PHONE JACK
- R/F — HEAT DETECTOR, FIXED TEMPERATURE (135°) UNLESS OTHERWISE INDICATED
- FIRE ALARM FLOW SWITCH (FURNISHED BY SPRINKLER CONTRACTOR)
- FIRE ALARM TAMPER SWITCH (FURNISHED BY SPRINKLER CONTRACTOR)
- MOTION SENSOR - CEILING MOUNTED
- M — MONITOR MODULE
- FACP — FIRE ALARM CONTROL PANEL - ADDRESSABLE
- RAP — FIRE ALARM REMOTE ANNUNCIATOR PANEL - FLUSH MOUNTED
- FATC — FIRE ALARM TERMINAL CABINET
- EWL — FIREFIGHTER'S ELEVATOR WARNING LIGHT
- DAS ANTENNA

NOTE: SOME SYMBOLS SHOWN ON THIS LEGEND MAY NOT PERTAIN TO THIS PROJECT.

ABBREVIATIONS

A.C.	ABOVE COUNTER	EX	EXISTING
A.F.	ARC FAULT	ER	EXISTING RELOCATED
A.F.F.	ABOVE FINISHED FLOOR	G.F.I.	GROUND FAULT INTERRUPTER
A.S.W.	ABOVE SHOW WINDOW RCPT.	L.C.	LOCKABLE COVER
B.F.C.	BELOW FINISHED CEILING	M.H.	MOUNTING HEIGHT
B.F.G.	BELOW FINISHED GRADE	N	NEW DEVICE
C.B.	CIRCUIT BREAKER	N.F.	NON FUSED
CL	CENTER LINE	NL	NIGHT LIGHT
D	DEDICATED FOR COMPUTER, PROVIDE DEDICATED GROUND AND NEUTRAL	RE	EXISTING TO BE REMOVED
		T.C.	TERMINAL CABINET
IG	ISOLATED GROUND (ORANGE DEVICE)	T.S.	TIME SWITCH
		U.O.N.	UNLESS OTHERWISE NOTED
EM	PROVIDE EMERGENCY BATTERY PACK W/FIXTURE, CONNECT AHEAD OF ALL SWITCHES.	WP.	WEATHER PROOF ENCLOSURE
		XFMR.	TRANSFORMER.
		X / E-XXX	DETAIL / SHEET NUMBER

NOTE: SOME SYMBOLS SHOWN ON THIS LEGEND MAY NOT PERTAIN TO THIS PROJECT.

ELECTRICAL INDEX

		DRAWING	X		
1	E-1.0	ELECTRICAL INDEX, SYMBOL LEGEND AND NOTES			
2	E-2.0	FIRST FLOOR ELECTRICAL PLAN			
3	E-2.1	SECOND FLOOR ELECTRICAL PLAN			
4	E-2.2	THIRD FLOOR ELECTRICAL PLAN			
5	E-	X			
6	E-	X			
7	E-	X			
8	E-	X			
9	E-	X			
10	E-	X			
11	E-	X			
12	E-	X			
13	E-	X			
14	E-	X			
15	E-	X			
16	E-	X			
17	E-	X			
18	E-	X			
19	E-	X			
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22	E-	X			
23	E-	X			
24	E-	X			
25	E-	X			
26	E-	X			
27	E-	X			
28	E-	X			
29	E-	X			
30	E-	X			
31	E-	X			
32	E-	X			
33	E-	X			
34	E-	X			
35	E-	X			
36	E-	X			

SHOP DRAWING REQUIREMENTS

1. CONTRACTOR SHALL SUBMIT DIGITAL SHOP DRAWINGS, TOGETHER AT ONE TIME AND MUST COME THROUGH THE ARCHITECT. ALL SUBMITTALS SHALL BE MADE WITHIN 30 DAYS OF NOTICE TO PROCEED.
2. ALL SUBMITTALS MUST CLEARLY INDICATE EXACTLY WHICH ITEMS ARE BEING PROPOSED FOR USE. IF NOT, THE SUBMITTAL SHALL BE REJECTED.
3. SUBSTITUTIONS SHALL BE LIMITED TO ONE OF THE ALTERNATES LISTED IN THE CONSTRUCTION DOCUMENTS. PRODUCTS CONSIDERED TO BE EQUAL SHALL BE REVIEWED AND ACCEPTED BY THE ENGINEER, ARCHITECT AND OWNER (10) DAYS PRIOR TO BID DATE.
4. THE CONTRACTOR ASSUMES ALL DESIGN RESPONSIBILITY AND ALL FINANCIAL RISKS FOR PROCEEDING PRIOR TO SHOP DRAWINGS PROCESSING, AND ON ANY ITEM OR WORK THAT IS AT VARIANCE TO THE CONSTRUCTION DOCUMENTS.
5. CONTRACTOR SHALL SUBMIT DIGITAL EQUIPMENT LAYOUTS OF ALL ELECTRICAL SPACES, ROOMS, ETC. TO THE ENGINEER FOR APPROVAL PRIOR TO ORDERING EQUIPMENT OR INSTALLING CONDUITS, ETC. THE LAYOUTS SHALL CONSIST OF PLAN VIEWS AT A SCALE OF 1/2" = 1'0" AND ELEVATIONS FOR EACH SUCH SPACE OR ROOM, ETC.

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CLIENT:

REVISIONS

DESCRIPTION | DATE | NO.

PROJECT NAME / LOCATION:
DUPLEX MASTER
OKEECHOBEE, FL

DRAWING TITLE:
INDEX, NOTES AND SYMBOL LEGEND

EXAMINER'S SIGNATURE

STATE OF FLORIDA — SHIMON GREENEBAUM — AR102415 — REGISTERED ARCHITECT

Shimon E Greenebaum

PROFESSIONAL SEAL:

DELTA G CONSULTING ENGINEERS, INC.
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Fort Lauderdale, FL. 33316
(954) 527-1112
CA#00009181

PJT. MGR: STEPHEN BENDER, P.E.
PROJECT #: 230515-B
(Duplex Permit Set)

GEORGE SANJUAN, P.E.
FLORIDA LICENSE #46100

SCALE:

DATE:

PROJECT NO.

E-1.0

DRAWING NO.

7/25/2023 9:30:30 AM

BARCODE

THE GENERAL CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS AND REPORT ALL ERRORS AND OMISSIONS TO THE ARCHITECTS. DO NOT SCALE DRAWING. THE DRAWING SHALL NOT BE USED UNTIL SIGNED BY CONSULTANTS

PANEL "D" SCHEDULE

LOCATION: SEE FLOOR PLAN — ☐ EXISTING ■ NEW

SPEC: SQUARE D, ITE, G.E. — ■ COPPER BUS ☐ ALUMINUM BUS

CKT.	LOAD DESCRIPTION	TYP.	WIRE	GRD.	COND.	POLE/ TRIP	KVA A PHASE	KVA B PHASE	POLE/ TRIP	COND.	GRD.	WIRE	TYP.	LOAD DESCRIPTION	CKT.
1	STUDY RECEPTACLES		12	12	1/2	20	0.6 3.0		30	1/2	10	10		COOKTOP	2
3	DINING/LIVING RECEPTACLES		12	12	1/2	20		0.6 3.0	30	1/2	10	10		COOKTOP	4
5	FOYER/MUD RM. RECEPTS.		12	12	1/2	20	0.6 1.5								6
7	GFCI WP. RECEPTACLES		12	12	1/2	20		0.6 1.5	30	1/2	10	10		COOKTOP	8
9	BATH RECEPTACLES		12	12	1/2	20	0.6 3.0								10
11	FOYER/STUDY/M. RM. LIGHTS		12	12	1/2	20		0.6 3.0	30	1/2	10	10		EWH	12
13	DINING/LIVING LGTS.		12	12	1/2	20	0.6 2.2								14
15	KITCHEN LGTS.		12	12	1/2	20		0.6 2.3	20	1/2	12	12		WASHER	16
17	REFRIGERATOR		12	12	1/2	20	1.2 1.5		30	1/2	10	10		DRYER	18
19	DISHWASHER		12	12	1/2	20		1.0 2.5							20
21	SMALL APPLIANCES		12	12	1/2	20	1.5 2.5								22
23	SMALL APPLIANCES		12	12	1/2	20		1.5 (1.0)	25	1/2	12	12		AHU-1	24
25	DISHWASHER		12	12	1/2	20	1.0 (1.0)								26
27	SMALL APPLIANCES		12	12	1/2	20		1.5 2.1	25	1/2	12	12		CU-1	28
29	DINNETTE RECEPTS.		12	12	1/2	20	0.6 2.1								30
31	BED-1 LGTS/RECEPTS.		12	12	1/2	20		0.6 (1.0)	25	1/2	12	12		AHU-2	32
33	BED-2 LGTS/RECEPTS.		12	12	1/2	20	0.6 (1.0)								34
35	BED-3 LGTS/RECEPTS.		12	12	1/2	20		0.6 1.9	25	1/2	12	12		CU-2	36
37	MASTER BED LGTS/RECEPTS.		12	12	1/2	20	0.5 1.9								38
39	SPARE		–	–	–	20		– (1.0)	25	1/2	12	12		AHU-3	40
41	2ND FL. COOR/LANDRY LGTS.		12	12	1/2	20	0.8 (1.0)								42
43	2ND FL. CORRIDOR RCPTS.		12	12	1/2	20		0.6 1.4	20	1/2	12	12		CU-3	44
45	2ND FL. BED 1 LGTS/RCPTS.		12	12	1/2	20	0.8 1.4								46
47	3RD FL. BED 2 LGTS/RCPTS.		12	12	1/2	20		0.6 0.3	20	1/2	12	12		RF-E	48
49	3RD FL. BATH LGTS/RCPTS.		12	12	1/2	20	0.6 –		20	–	–	–		SPARE	50
51	3RD FL. LOUNGE/COOR. L/R.		12	12	1/2	20		0.6 –	20	–	–	–		SPARE	52
53	SPARE		–	–	–	20	0.6 –		20	–	–	–		SPARE	54
55	SPARE		–	–	–	20		– –	20	–	–	–		SPARE	56
57	SPARE		–	–	–	20	– –		20	–	–	–		SPARE	58
59	SPARE		–	–	–	20		– –	20	–	–	–		SPARE	60
					SUBTOTAL		29.9	27.4							

ALL FEEDER CALCULATIONS ARE BASED ON 75ºC/90ºC CU. WIRE NOT MORE THAN 4 CONDUCTORS IN A RACEWAY

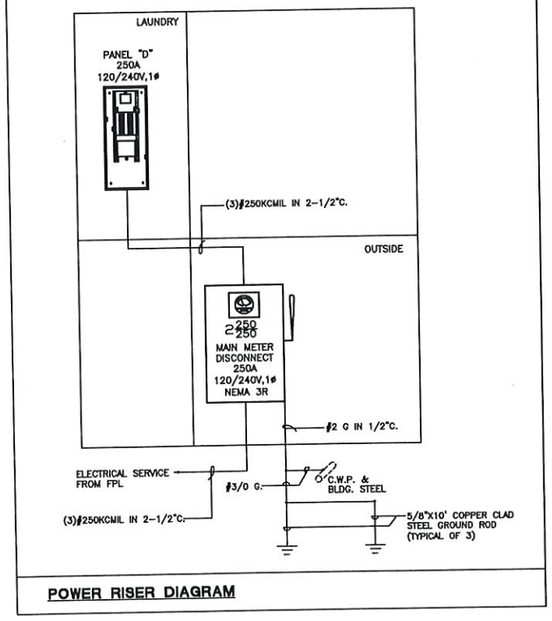
TOTAL KVA IS: 57.3 KVA
TOTAL AMPERES IS: 230.8 AMPS
ESTIMATED DEMAND LOAD= 145.0 AMPS

CIRCUIT TYPE: (A) ARC FAULT (T) TIME SWITCH CONTROL (S) SHUNT TRIP (F) GROUND FAULT (D) DEDICATED (I) ISOLATED GRD.

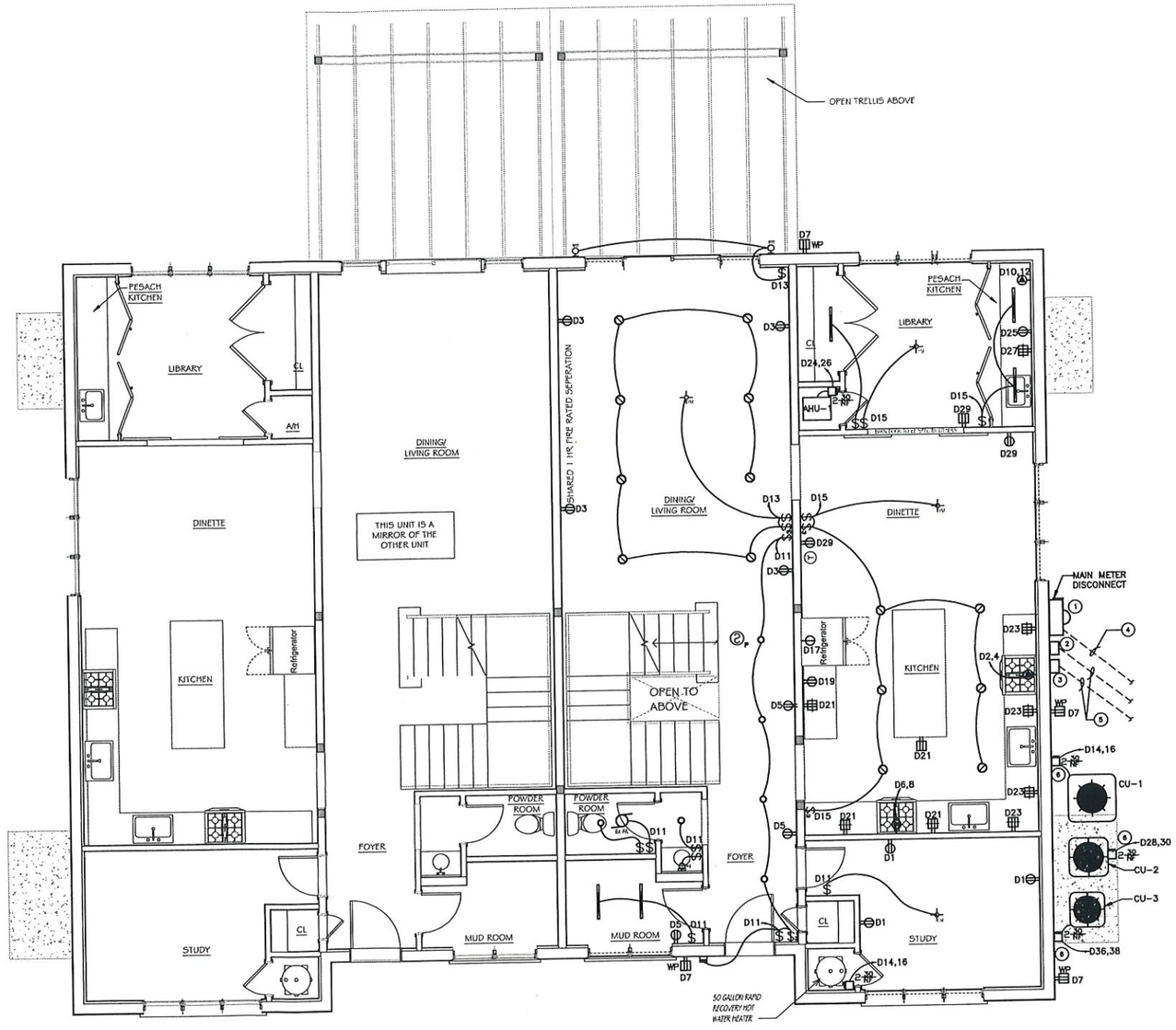
				POLE	TRIP	TYPE
RATED VOLTAGE= 120/240 VOLTS 1 PHASE	3 WIRE ■ EQPT. GRD. ☐ ISOL. GRD.	MAINS: ■ M.L.O.	☐ BREAKER :	—	—	
FEEDER SIZE IS: ■ CABLE = SEE RISER	☐ BUSWAY	BRANCH POLES: 60	BRANCH BREAKERS=	10 KAIC		
MOUNTING: ☐ SURFACE ■ FLUSH	☐ FREE STANDING ☐ KEYED DOOR	BUS RATING: 250	BRACING =	10 KAIC		
NEUTRAL BUS IS: ☐ HALF SIZE ■ FULL SIZE	☐ K RATED (1.5) ☐ K RATED (2.0)	GROUND BAR: ■ EQUIPMENT ☐ ISOLATED	☐ BOTH			
ENCLOSURE : ■ NEMA 1 ☐ NEMA 3R	☐ NEMA 4X CLASS( ) DIV ( )	FEED LOCATION: ☐ TOP	■ BOTTOM	☐ FEED THRU		
PANEL TYPE : ☐ FUSED ■ CB PLUG IN ■ CB BOLT IN		FED FROM: ■ NORMAL	☐ EMERGENCY ☐ UNINTERRUPTABLE			
PROVIDE A 3/4"C. W/P.S. TO ACCESSIBLE LOCATION ABOVE CEILING FOR EACH (3) SPARES.	NOTE:					

DEWLING UNIT DEMAND CALC.

NEC DEMAND LOAD CALCULATION		
TOTAL CONNECTED LOAD FOR	=	57.3KVA
FIRST 10.0KVA IS	=	10.0KVA
AC AT 100% IS	=	10.8KVA
REMAINDER 36.5KVA AT 40% IS	=	14.6KVA
TOTAL NEC DEMAND LOAD IS	34.8KVA =	145.0AMPS



POWER RISER DIAGRAM



1 FIRST FLOOR ELECTRICAL PLAN
1/4" = 1'-0"

KEY NOTES

1. PROPOSED METER DISCONNECT COMBO LOCATION. COORDINATE ALL WORK WITH CONTRACTOR PRIOR TO BIDDING.
2. PROPOSED CATV SERVICE BOX IN GROUND. COORDINATE ALL WORK WITH SERVICE REP. PRIOR TO BIDDING.
3. PROPOSED TELCO SERVICE BOX IN GROUND, COORDINATE ALL WORK WITH SERVICE REP. PRIOR TO BIDDING.
4. ROUTED SERVICE LINES AT 24" B.F.G. COORDINATE ROUTING OF THE U/G SERVICE CONDUITS
5. 2-2" PVC SCHED. 40; 1 FOR CATV, 1 FOR TELE/DATA.
6. EXTERIOR DISCONNECTS MUST BE NEMA 3R.

RISE | FL architecture

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CLIENT:

REVISIONS:	DESCRIPTION	DATE	NO.

PROJECT NAME / LOCATION:
DUPLEX MASTER
OKEECHOBEE, FL

DRAWING TITLE:
FIRST FLOOR ELECTRICAL PLAN

ENGINEERS SIGNATURE:

STATE OF FLORIDA — SHIMON E GREENEBAUM — AR102415 — REGISTERED ARCHITECT

Shimon E Greenebaum

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PJT. MGR: STEPHEN BENDER, P.E.
PROJECT #: 230515-B
(Duplex Permit Set)

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FLORIDA LICENSE #46100

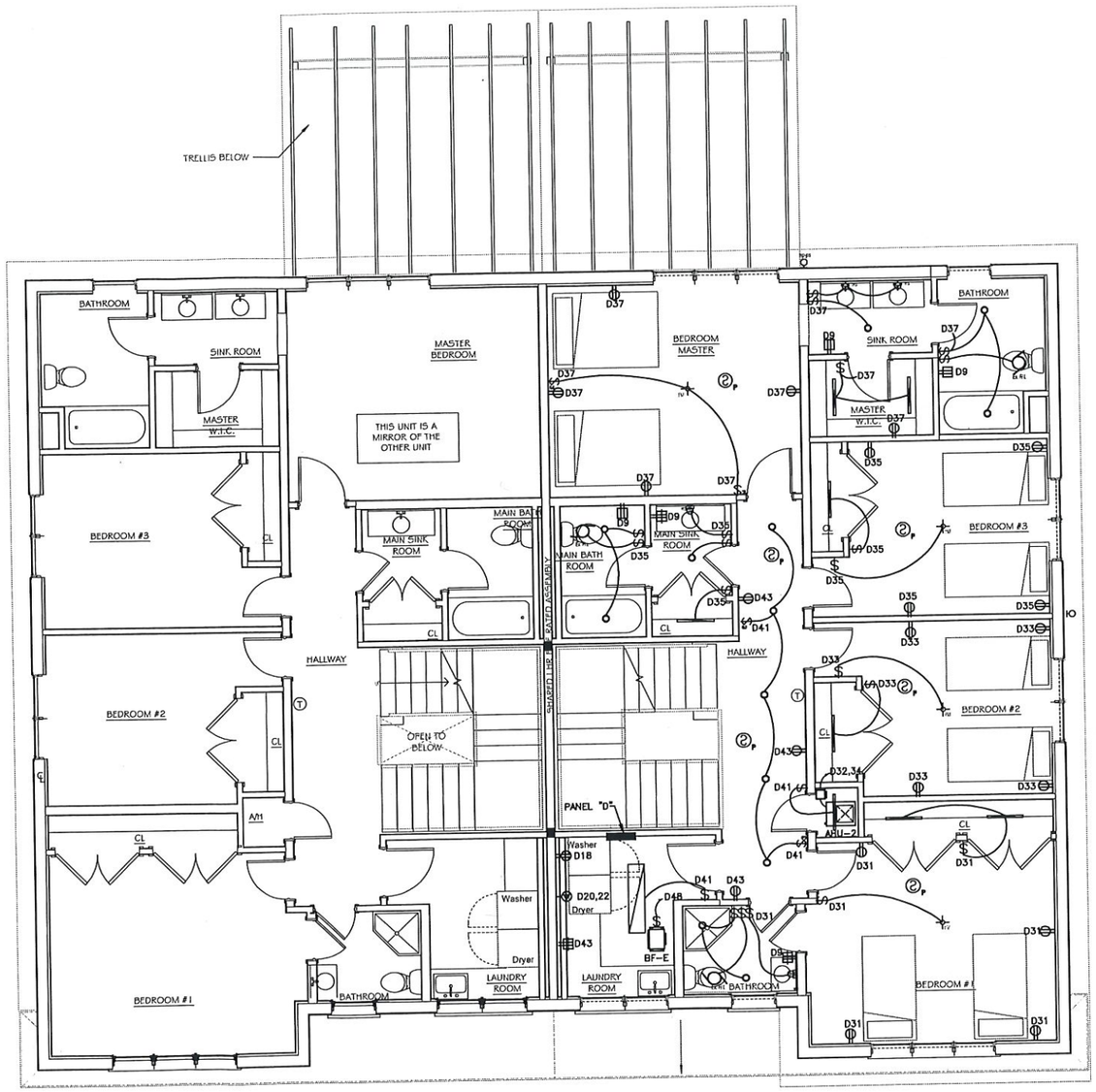
SCALE:
DATE:
PROJECT NO:

E-2.0

DRAWING NO:

BUILDING CODE:

THE GENERAL CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS AND BE RESPONSIBLE FOR ALL ERRORS AND OMISSIONS TO THE ARCHITECT. DO NOT SCALE DRAWING. THE DRAWINGS SHALL NOT BE USED FOR, BUT SHALL BE CONSIDERED AS



1 SECOND FLOOR ELECTRICAL PLAN
1/4" = 1'-0"

RISE | FL
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CLIENT:

REVISIONS:

DESCRIPTION	DATE	NO.

PROJECT NAME/LOCATION:
DUPLEX MASTER
OKEECHOBEE, FL

DRAWING TITLE:
SECOND FLOOR ELECTRICAL PLAN

ENGINEER'S SIGNATURE

STATE OF FLORIDA — SHIMON GREENEBAUM — AR102415 — REGISTERED ARCHITECT

Shimon E Greenebaum

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PROJECT #: 230515-B
(Duplex Permit Set)

GEORGE SANJUAN, P.E.
FLORIDA LICENSE #46100

SCALE:

DATE:

PROJECT NO:

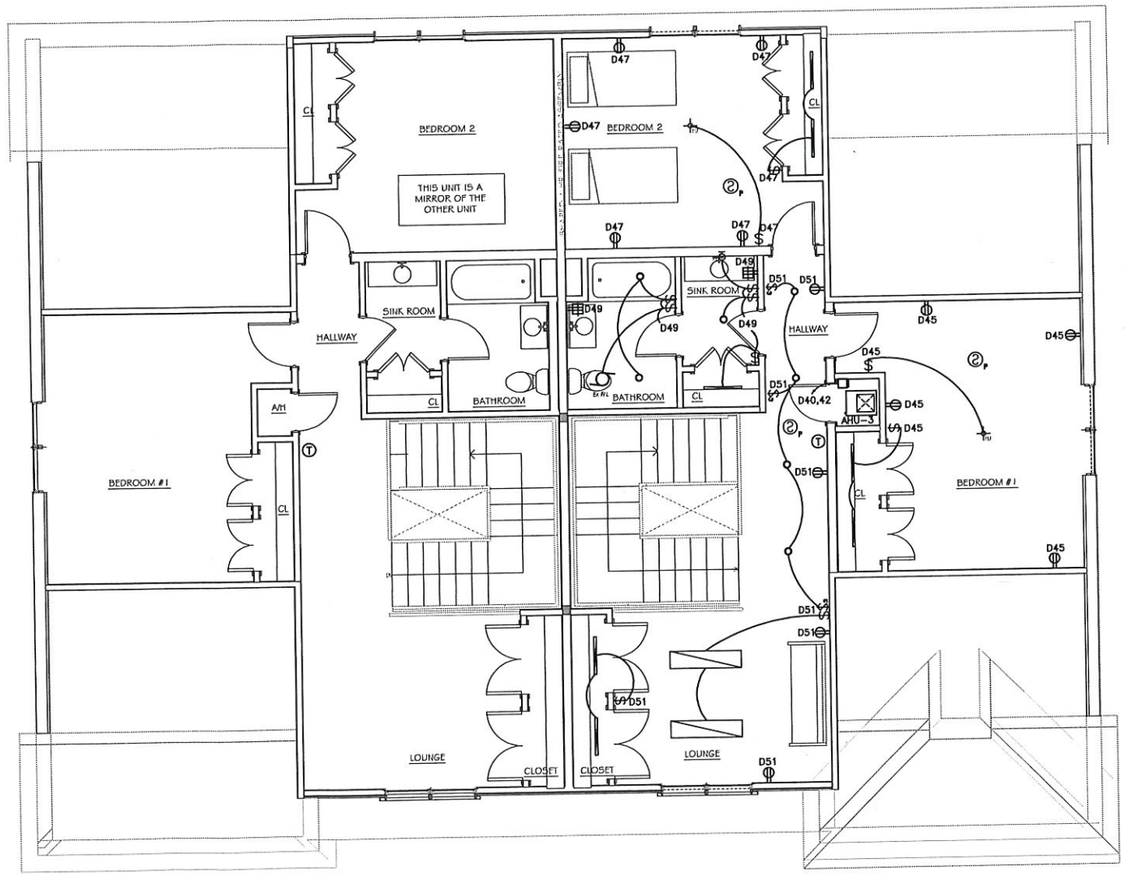
E-2.1

DRAWING NO:

BARCODE:

THE GENERAL CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS AND REPORT ALL ERRORS AND OMISSIONS TO THE ARCHITECTS BEFORE SCALE DRAWINGS THE DRAWINGS SHALL NOT BE USED ON A DISHONEST CONSTRUCTION

2025/6/3 3:36:36 PM



1 THIRD FLOOR ELECTRICAL PLAN
1/4" = 1'-0"

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architecture

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CLIENT

REVISIONS

DESCRIPTION	DATE	NO.

PROJECT NAME / LOCATION
DUPLEX MASTER
OKEECHOBEE, FL.

DRAWING TITLE
THIRD FLOOR
ELECTRICAL PLAN

EXAMINER'S SIGNATURE

STATE OF FLORIDA
SHIMON GREENBAUM
REGISTERED ARCHITECT
AR102415

Shimon E Greenbaum

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FLORIDA LICENSE #46100

SCALE

DATE

PROJECT NO

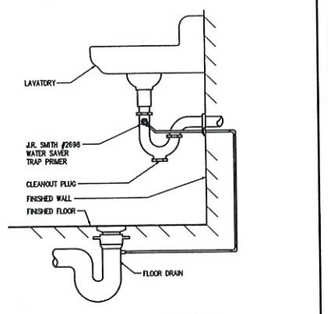
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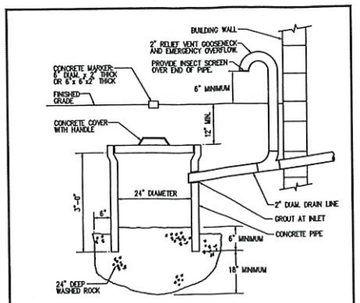
EARLOOK

THE GENERAL CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS AND REPORT ALL ERRORS AND OMISSIONS TO THE ARCHITECTS DO NOT SCALE DRAWING THE DRAWING SHALL NOT BE USED ON THE SITE BY CONTRACTORS

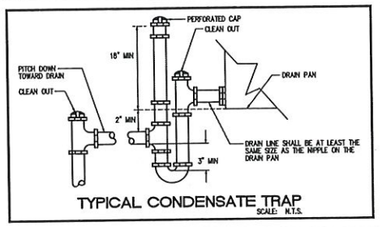
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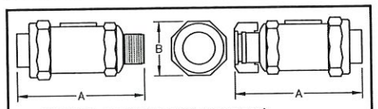
TRAP PRIMER DETAIL
SCALE: N.T.S.



CONDENSATE DRYWELL
SCALE: N.T.S.



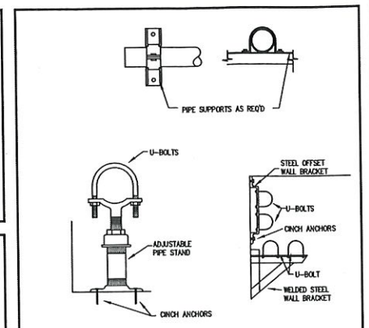
TYPICAL CONDENSATE TRAP
SCALE: N.T.S.



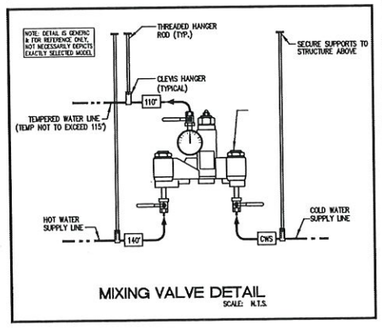
DIMENSIONS & WEIGHTS (DO NOT INCLUDE PCG.)

MODEL SIZE		DIMENSIONS A		B		WEIGHT	
IN.	MM.	IN.	MM.	IN.	MM.	LB.	KG.
1/4	6	3 3/16	81	1 3/4	45	1	0.5
3/8	9	3 3/16	81	1 3/4	45	1	0.5
1/2	15	3 3/16	81	1 3/4	45	1	0.5
3/4	20	4 1/2	114	2	51	2	0.9
1	25	4 1/2	114	2	51	2	0.9
1-1/4	32	4 3/4	121	2	51	2	0.9

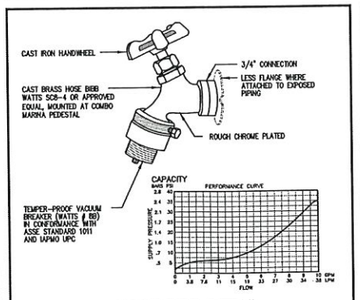
DEVICE BACKFLOW DISHWASHER DETAIL
SCALE: N.T.S.



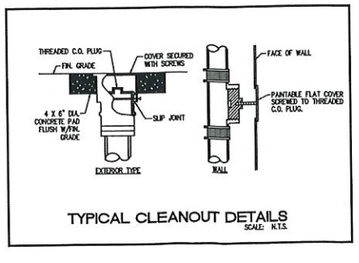
UNDERCOUNTER SUPPORT DETAILS
SCALE: N.T.S.



MIXING VALVE DETAIL
SCALE: N.T.S.



HOSE BIBB DETAIL
SCALE: N.T.S.



TYPICAL CLEANOUT DETAILS
SCALE: N.T.S.

PLUMBING GENERAL NOTES

1. ALL WORKMANSHIP AND MATERIAL SHALL BE IN STRICT ACCORDANCE WITH APPLICABLE LOCAL CODES, RULES AND ORDINANCES.
2. CONTRACTOR SHALL VISIT THE JOB SITE AND THOROUGHLY FAMILIARIZE HIMSELF WITH ALL EXISTING CONDITIONS.
3. ALL MATERIAL SHALL BE NEW.
4. ALL WORK SHALL BE PERFORMED BY A LICENSED PLUMBING CONTRACTOR IN A FIRST CLASS WORKMANLIKE MANNER. THE COMPLETED SYSTEM SHALL BE FULLY OPERATIVE.
5. ALL EXCAVATION AND BACKFILL AS REQUIRED FOR THIS PHASE OF CONSTRUCTION SHALL BE A PART OF THIS CONTRACT.
6. REQUIRED INSURANCE SHALL BE PROVIDED BY THE CONTRACTOR FOR PROTECTION AGAINST PUBLIC LIABILITY AND PROPERTY DAMAGE FOR THE DURATION OF WORK.
7. CONTRACTOR SHALL SECURE AND PAY FOR ALL PERMITS, FEES, INSPECTION AND TESTS.
8. DRAWINGS ARE DIAGRAMMATIC. DO NOT SCALE FOR THE EXACT LOCATION OF FIXTURES, PIPING, EQUIPMENT, ETC.
9. ALL WORK SHALL BE COORDINATED WITH OTHER TRADES TO AVOID INTERFERENCE WITH THE PROGRESS OF CONSTRUCTION. REPORT ANY DISCREPANCY TO ENGINEER/ARCHITECT PRIOR TO BEGINING CONSTRUCTION.
10. VERIFY LOCATION, SIZE, INVERTS OF ALL EXISTING UTILITIES PRIOR TO BEGINING CONSTRUCTION. ADVICE ENGINEER OF ANY DISCREPANCIES.
11. WATER PIPING SHALL BE TYPE "L" COPPER FOR 2" AND UNDER AND TYPE "K" COPPER FOR 2-1/2" AND ABOVE. ALL UNDERGROUND WATER PIPING SHALL BE TYPE "K" COPPER. IT IS ALSO ACCEPTABLE FOR ALL WATER PIPING TO BE MANUFACTURED FROM VIRGIN RIGID CPVC VINYL COMPOUNDS WITH A CELL CLASS OF 24448 AS IDENTIFIED IN ASTM D 1784 AND PER NSF STANDARD 61 (CHARLOTTE OR APPROVED EQUAL).
12. WASTE AND VENT PIPING SHALL BE POLYVINYL CHLORIDE (PVC) SCHEDULE 40 PLASTIC PIPE WITH A SOLID CELLULAR CORE OR COMPOSITE WALL PIPING IN COMPLIANCE WITH STANDARDS ASTM D 2665, ASTM F 891, ASTM F 1488 & CSA B181.2.
13. AIR CONDITIONING CONDENSATE DRAIN PIPING SHALL BE CPVC DRAIN WASTE AND VENT PIPING AND FITTINGS. INSULATE ALL CONDENSATE PIPING.
14. INSULATE ALL HOT WATER, CONDENSATE LINES, EXHAUST LINES ABOVE GRADE AS FOLLOWS: CW, HW SUPPLY AND RETURN – 1" THICK PREFORMED FIBERGLASS PIPE INSULATION W/ FACTORY JACKET. HORIZONTAL STORM DRAIN PIPING – 1 1/2" THICK PREFORMED FIBERGLASS PIPE INSULATION W/ FACTORY JACKET. CONDENSATE PIPING – 3/4" ARMAFLEX PREFORMED. EXHAUST PIPE – 3" THICK CALCIUM SILICATE BLOCK INSULATION W/1200 F. STEVENS CLASS CLOTH WRAP.
15. ALL FIXTURES MUST BE PROVIDED WITH READILY ACCESSIBLE STOPS AND APPROPRIATELY MARKED ACCESS PANELS. COORDINATE LOCATIONS WITH GENERAL CONTRACTOR PRIOR TO INSTALLATION.
16. FURNISH AND INSTALL APPROVED AIR CHAMBERS, AT EACH PLUMBING FIXTURE AND P.D.I. APPROVED SHOCK ARRESTORS ON MAIN LINES ON RISERS.
17. DIELECTRIC COUPLINGS ARE REQUIRED BETWEEN ALL DISSIMILAR METAL IN PIPING AND EQUIPMENT CONNECTIONS.
18. ISOLATE COPPER PIPE FROM HANGER OR SUPPORTS WITH ISOLATOR PAD (HAIR FELT LINING).
19. ALL FIRE RATED FLOOR AND WALL PENETRATIONS SHALL BE PROPERLY PROTECTED FROM FIRE, SMOKE AND WATER PENETRATION BY FILLING VOIDS BETWEEN PIPE AND WALL/FLOOR SLEEVES WITH FIRE RATED FOAM, CHASE TECHNOLOGY CORP.– CTC PR-855 OR 3M, CP-25 CAULKING OR 303 PUTTY, TO ACHIEVE SAME RATING AS WALLS OR FLOORS.
20. CONTRACTOR SHALL GUARANTEE ALL MATERIALS AND WORKMANSHIP FREE FROM DEFECTS FOR A PERIOD OF NOT LESS THAN ONE (1) YEAR FROM DATE OF ACCEPTANCE BY OWNER. CORRECTION OF ANY DEFECTS SHALL BE COMPLETED WITHOUT ADDITIONAL CHARGE AND SHALL INCLUDE REPLACEMENT OR REPAIR OF ANY OTHER PHASE OF THE INSTALLATION WHICH MAY HAVE BEEN DAMAGED.
21. PROVIDE 1/2" TRAP PRIMER LINE FOR ALL FLOOR DRAINS FROM THE NEAREST PLUMBING FIXTURE.
22. PROVIDE ACCESS PANELS FOR ALL CONCEALED VALVES AND ALL WATER HAMMER ARRESTERS. ACCESS PANELS IN RATED WALLS MUST MAINTAIN THE SAME RATING AND MUST MATCH THE FINISH OF THE WALL IN WHICH IT IS INSTALLED.
23. PROVIDE CHROME PLATED COMBINATION COVER PLATE AND CLEANOUT PLUG OR ACCESS PANEL FOR ALL WALL CLEANOUTS – ZURN ZS-1469 SERIES C.O. OR APPROVED ACCESS PANEL.
24. INTERIOR FLOOR CLEANOUTS SHALL BE ZURN ZN1400.
25. ALL CONTROL VALVES SHALL BE TAGGED AND MARKED. A REPRODUCEABLE DIAGRAM LOCATING ALL VALVES SHALL BE PROVIDED FOR OWNER/OPERATOR.
26. ALL FIRE MAINS, HOT & COLD WATER PIPES, AND CONDENSATE PIPING AND GAS PIPING SHALL HAVE IDENTIFICATION AND FLOW DIRECTIONS BANDS.
27. CONTRACTOR SHALL KEEP A SET OF AS BUILTS DWG. ON THE JOB SITE AT ALL TIMES AND DELIVER A SET OF UP TO DATE AS-BUILTS TO THE ENGINEER AND OWNER AT THE COMPLETION OF THE PROJECT.

SHOCK ARRESTOR SCHEDULE

P.D.I. DESIGNATION	MANUF. & MODEL	FIXTURE UNITS	CONNECTION	
A	SIOUX CHIEF 652-A	1-11	1/2"	
B	SIOUX CHIEF 653-B	12-32	3/4"	
C	SIOUX CHIEF 654-C	33-60	1"	

SIOUX CHIEF SHOCK ARRESTORS APPROVED FOR INSTALLATION WITH NO ACCESS DOOR REQUIRED. CONFORMS TO ANSI/ASSE 1010 STANDARDS.

SLOPE OF HORIZ. DRAINAGE PIPE

SIZE (inches)	MINIMUM SLOPE (inch per foot)	
2-1/2 or less	1/4	
3 to 6	1/8	
8 or larger	1/16	

TABLE 704.1 OF THE FLORIDA PLUMBING CODE 2020

PLUMBING INDEX

	DRAWING				
1	P-1.0	PLUMBING INDEX, SYMBOL LEGEND AND NOTES			
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4	P-2.2	SECOND FLOOR DOMESTIC WATER PLAN			
5	P-2.3	SECOND FLOOR SANITARY FLOOR PLAN			
6	P-2.4	THIRD FLOOR DOMESTIC WATER PLAN			
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8	P-3.0	PLUMBING PIPING ISOMETRICS			
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22	P-	X			
23	P-	X			
24	P-	X			
25	P-	X			
26	P-	X			
27	P-	X			
28	P-	X			

SHOP DRAWING REQUIREMENTS

1. CONTRACTOR SHALL SUBMIT DIGITAL SHOP DRAWINGS, TOGETHER AT ONE TIME AND MUST COME THROUGH THE ARCHITECT. ALL SUBMITTALS SHALL BE MADE WITHIN 30 DAYS OF NOTICE TO PROCEED.
2. ALL SUBMITTALS MUST CLEARLY INDICATE EXACTLY WHICH ITEMS ARE BEING PROPOSED FOR USE. IF NOT, THE SUBMITTAL SHALL BE REJECTED.
3. SUBSTITUTIONS SHALL BE LIMITED TO ONE OF THE ALTERNATES LISTED IN THE CONSTRUCTION DOCUMENTS. PRODUCTS CONSIDERED TO BE EQUAL SHALL BE REVIEWED AND ACCEPTED BY THE ENGINEER, ARCHITECT AND OWNER (10) DAYS PRIOR TO BID DATE.
4. THE CONTRACTOR ASSUMES ALL DESIGN RESPONSIBILITY AND ALL FINANCIAL RISKS FOR PROCEEDING PRIOR TO SHOP DRAWINGS PROCESSING, AND ON ANY ITEM OR WORK THAT IS AT VARIANCE TO THE CONSTRUCTION DOCUMENTS.

NOTE:
DRAWINGS/DETAILS ARE TO BE CONSIDERED DIAGRAMMATIC, NOT NECESSARILY SHOWING IN DETAIL OR TO SCALE ALL MINOR ITEMS. UNLESS SPECIFIC DIMENSIONS ARE SHOWN, THE STRUCTURAL, ARCHITECTURAL AND SITE CONDITIONS SHALL GOVERN EXACT LOCATIONS. CONTRACTOR SHALL FOLLOW DRAWINGS IN LAYING OUT WORK, AND CHECK/COORDINATE DRAWINGS OF ALL TRADES

PLUMBING SYMBOL LEGEND

SYMBOL	DESCRIPTION
———	SANITARY LINE (SAN)
- - - - -	VENT LINE (VENT)
—CD—	CONDENSATE LINE (CD)
—CW—	COLD WATER LINE (CW)
—HW—	HOT WATER LINE (HW)
—HWR—	HOT WATER RETURN LINE (HWR)
—G—	GAS LINE (GAS)
	GATE VALVE
	WATER HAMMER ARRESTOR
	FLOOR PENETRATION
FD	FLOOR DRAIN
CO	CLEAN OUT
GCO	CLEAN OUT ON GRADE
AAV	AIR ADMITS VALVE
BV	BALANCING VALVE
VTR	VENT THRU ROOF
RWL	RAIN WATER LEADER

DUPLEX -OKEECHOBEE PROJECT -DOMESTIC HOT WATER HEATER SCHEDULE

TAG:	MFR:	W.H. MODEL:	AHRI	BTU/HR INPUT INPUT KW:	VOLTAGE/ PHASE/AMPS	Rec. @ 50°F Rise:	TANK SIZE:	SUPPLY TEMP. (F):	WATER CONN.	NOTES:
EWH-1	RHEEM/RUUD	ELDB0-TB	0.98	4.5	240/1/18.75	37	(80 GAL) 59 5/8" X 23 3/4" D	120	3/4"	1 - 5

NOTES: CONTACT SPIRIT GROUP INC FOR PRODUCT INFORMATION

1. WATER HEATER TO HAVE RHEEM EXPANSION TANK RRT-12
2. WATER HEATER MUST HAVE DUAL STAINLESS UPPER AND LOWER ELEMENTS
3. WATER HEATER TO EVERKLEEN SELF CLEANING
4. WATER HEATER TO HAVE 3 YEAR WARRANTY
5. WATER HEATER MUST BE AHRI RATED



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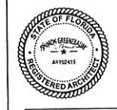
REVISIONS

DESCRIPTION	DATE	NO

PROJECT NAME / LOCATION
DUPLEX MASTER
OKEECHOBEE, FL.

DRAWING TITLE
INDEX, NOTES AND SYMBOL LEGEND

EXAMINER'S SIGNATURE:



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(Duplex Permit Set)

GEORGE SANJUAN, P.E.
FLORIDA LICENSE #46100

SCALE

DATE

PROJECT NO.

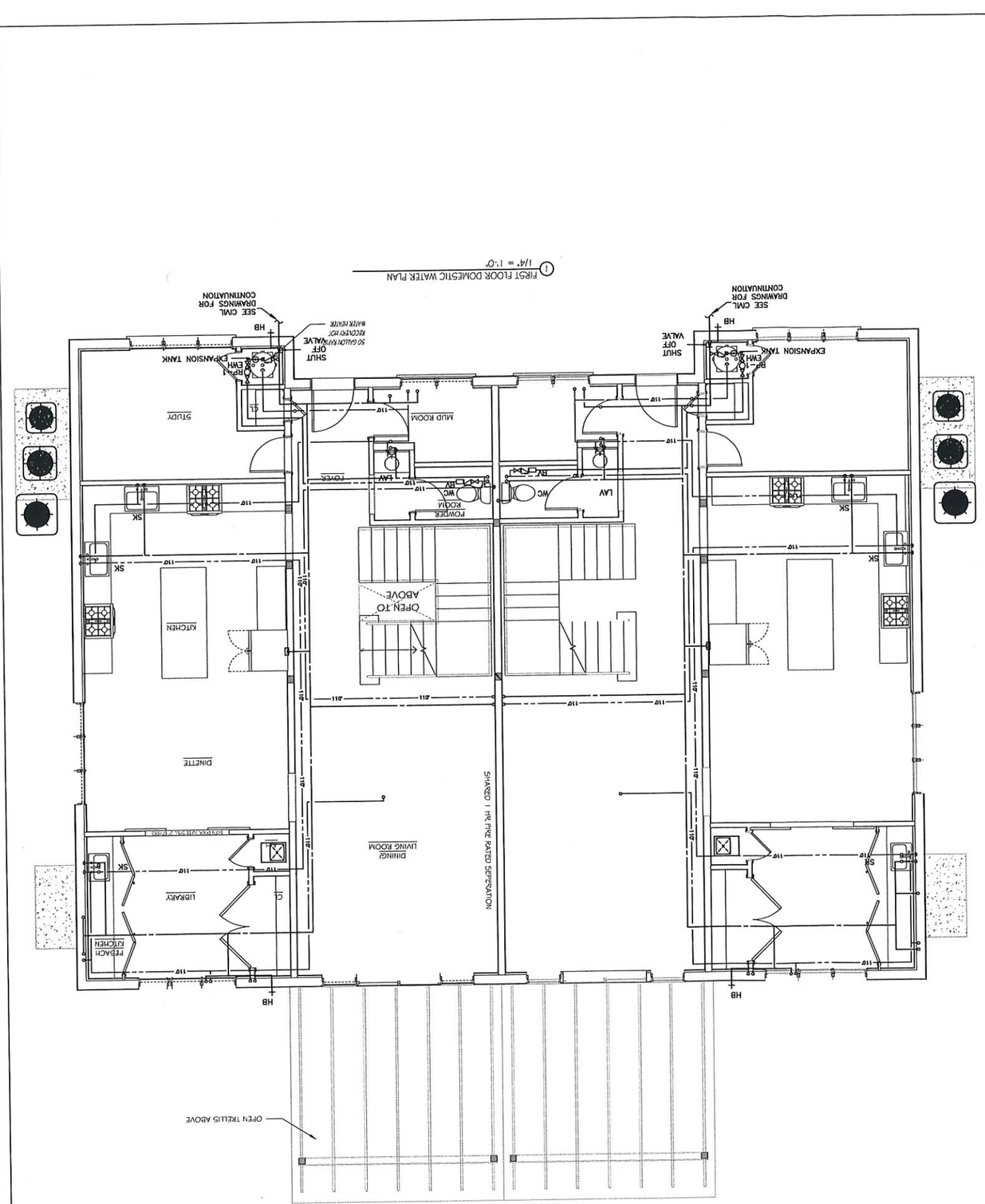
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BARCODE

THE GENERAL CONTRACTOR SHALL CHECK AND VERIFY ALL CONDITIONS AND REPORT ALL ERRORS AND OMISSIONS TO THE ARCHITECTS. DO NOT SCALE DRAWINGS. THE DRAWINGS SHALL NOT BE USED UNTIL SIGNED BY CONSULTANTS

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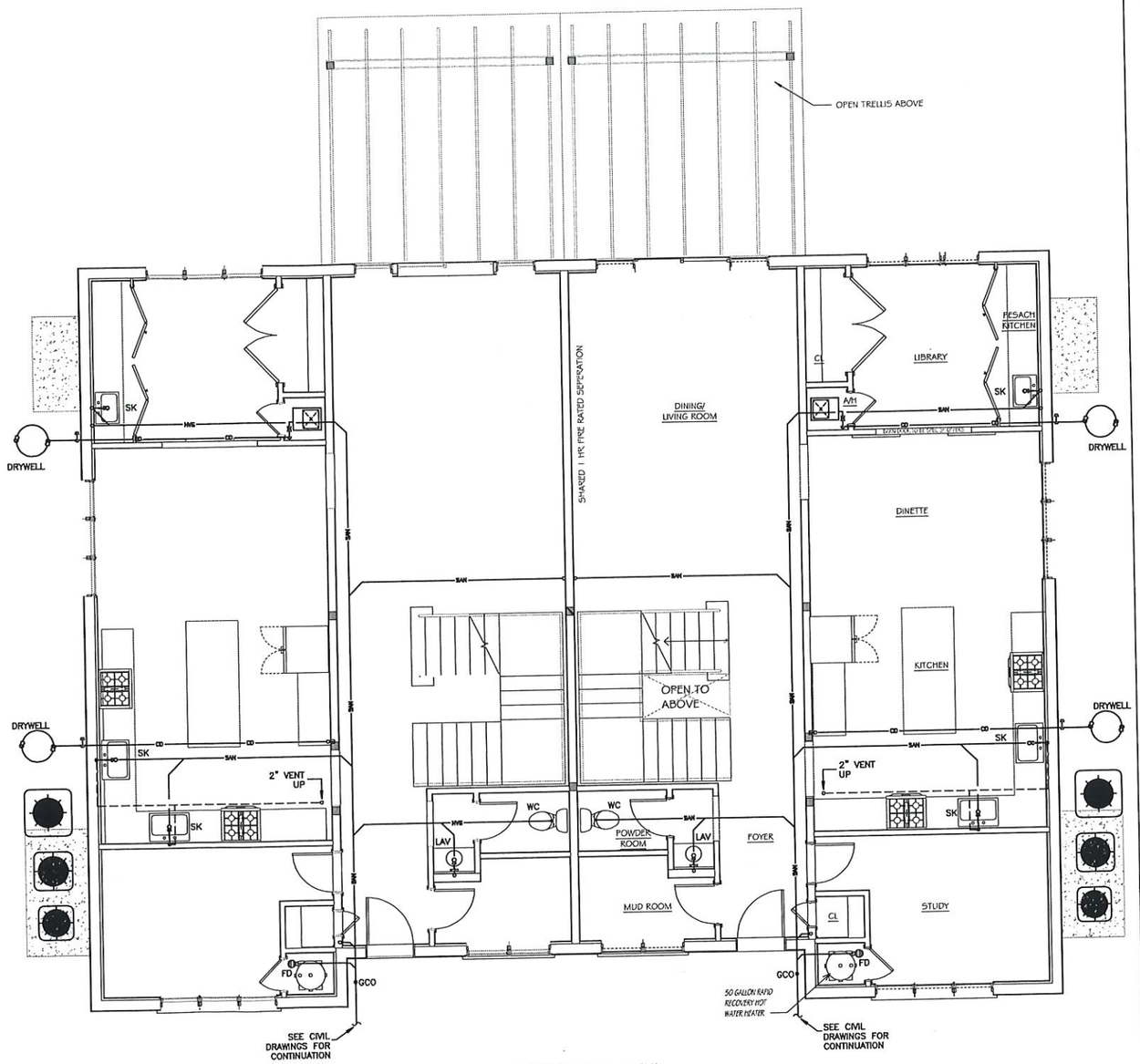
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P-2.0

PROJECT TITLE / LOCATION
DUPLEX MASTER
OKEECHOBEE FL

DRAWING TITLE
FIRST FLOOR DOMESTIC WATER PLAN

EXAMINER'S REVIEW

7/25/2023 9:36:03 AM



1 FIRST FLOOR SANITARY PLAN
1/4" = 1'-0"

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CLIENT:

REVISIONS:

DESCRIPTION	DATE	NO.

PROJECT NAME / LOCATION:
DUPLEX MASTER
OKEECHOBEE, FL

DRAWING TITLE:
FIRST FLOOR SANITARY PLAN

EXAMINER'S SIGNATURE:

STATE OF FLORIDA
SHIMON E GREENEBAUM
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FLORIDA LICENSE #46100

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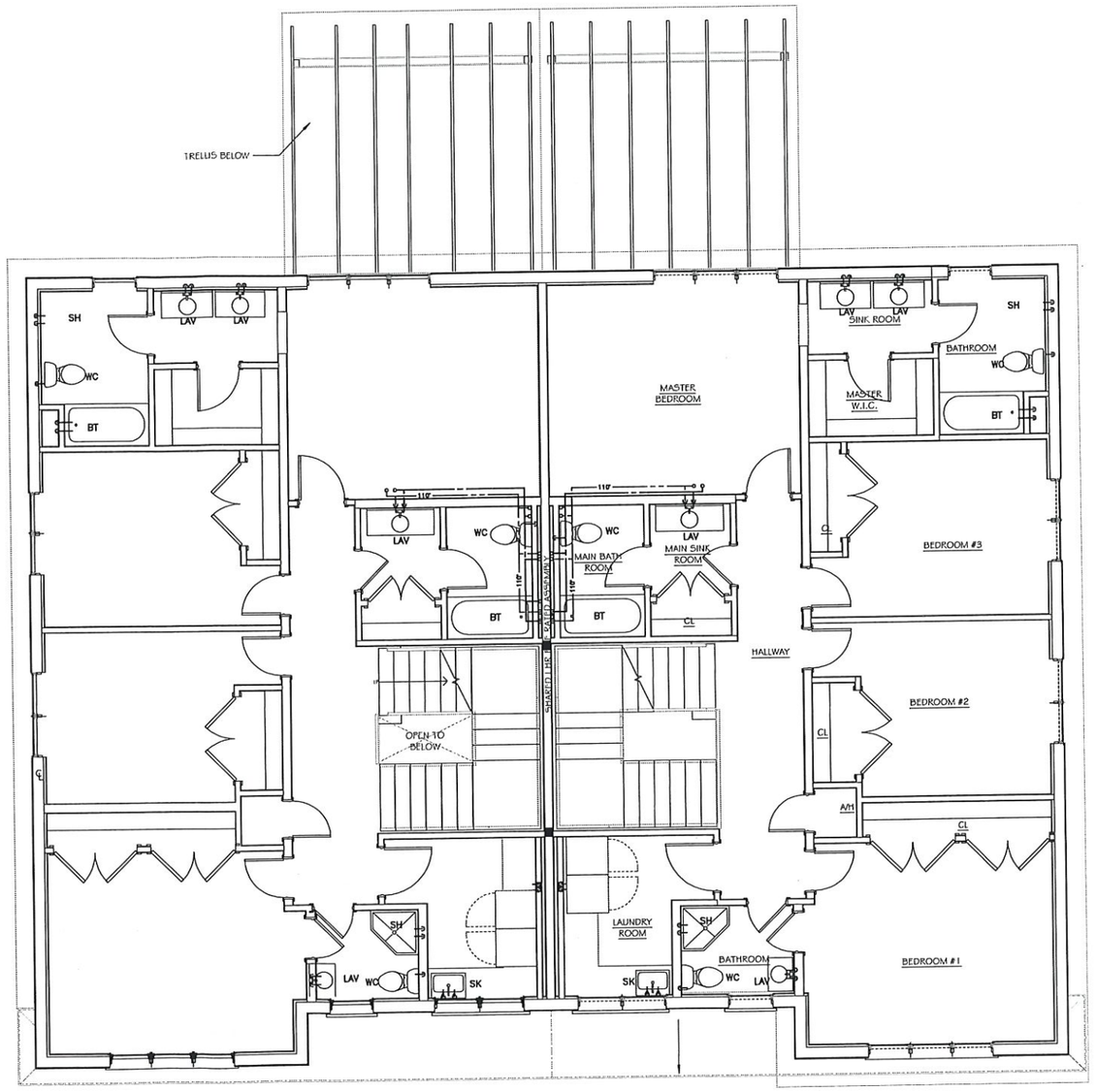
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1 SECOND FLOOR DOMESTIC WATER PLAN
1/4" = 1'-0"

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REVISIONS
DESCRIPTION DATE NO.

PROJECT NAME / LOCATION
DUPLEX MASTER
OKEECHOBEE, FL

DRAWING TITLE
SECOND FLOOR DOMESTIC WATER PLAN

EXAMINER'S SIGNATURE

STATE OF FLORIDA — SHIMON GREENEBAUM — AR102415 — REGISTERED ARCHITECT

Shimon E Greenebaum

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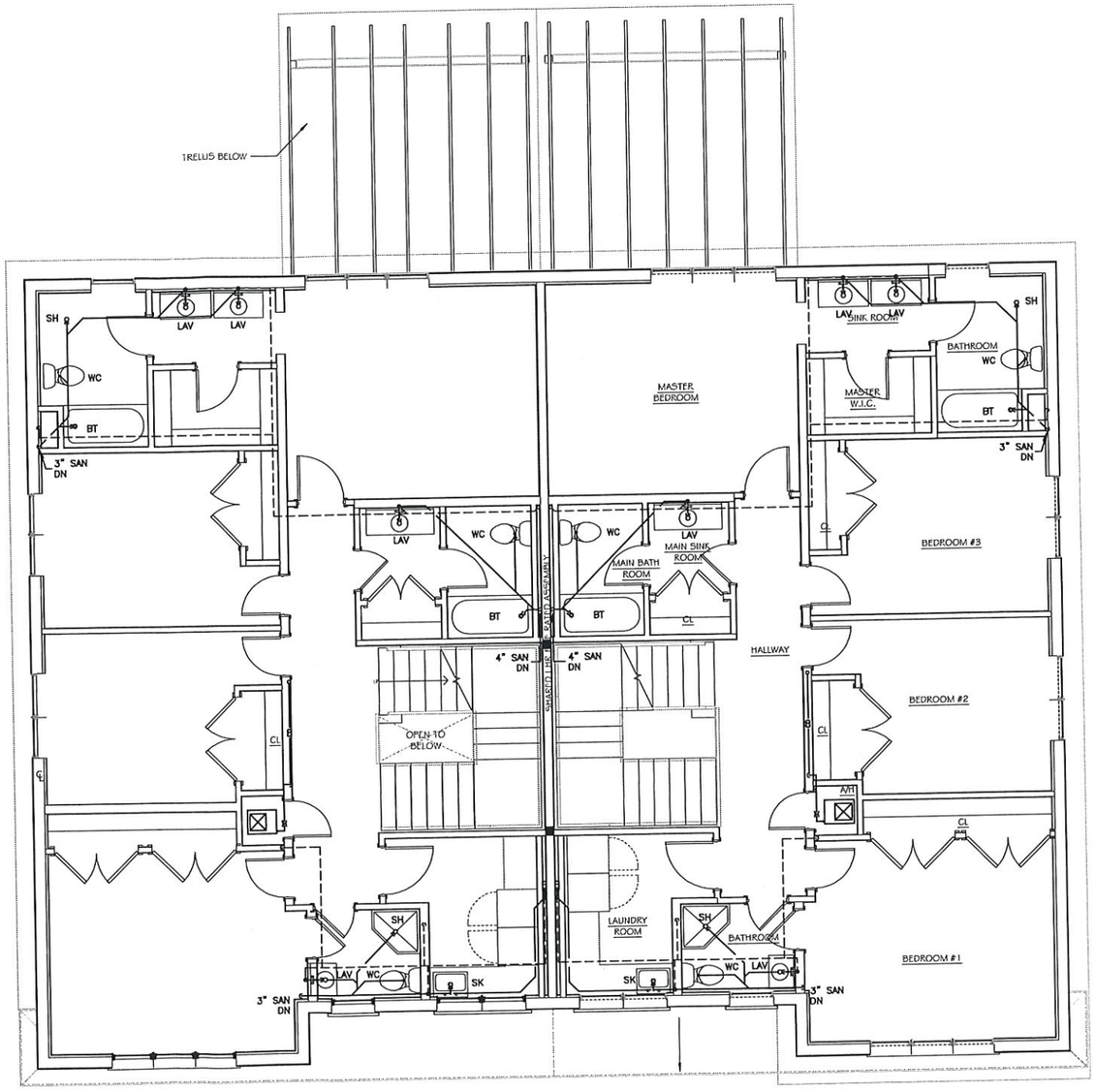
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1 SECOND FLOOR SANITARY PLAN
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REVISIONS

NO.	DATE	DESCRIPTION

PROJECT NAME / LOCATION
DUPLEX MASTER
OKEECHOBEE, FL

DRAWING TITLE
SECOND FLOOR SANITARY PLAN

EXAMINER'S SIGNATURE

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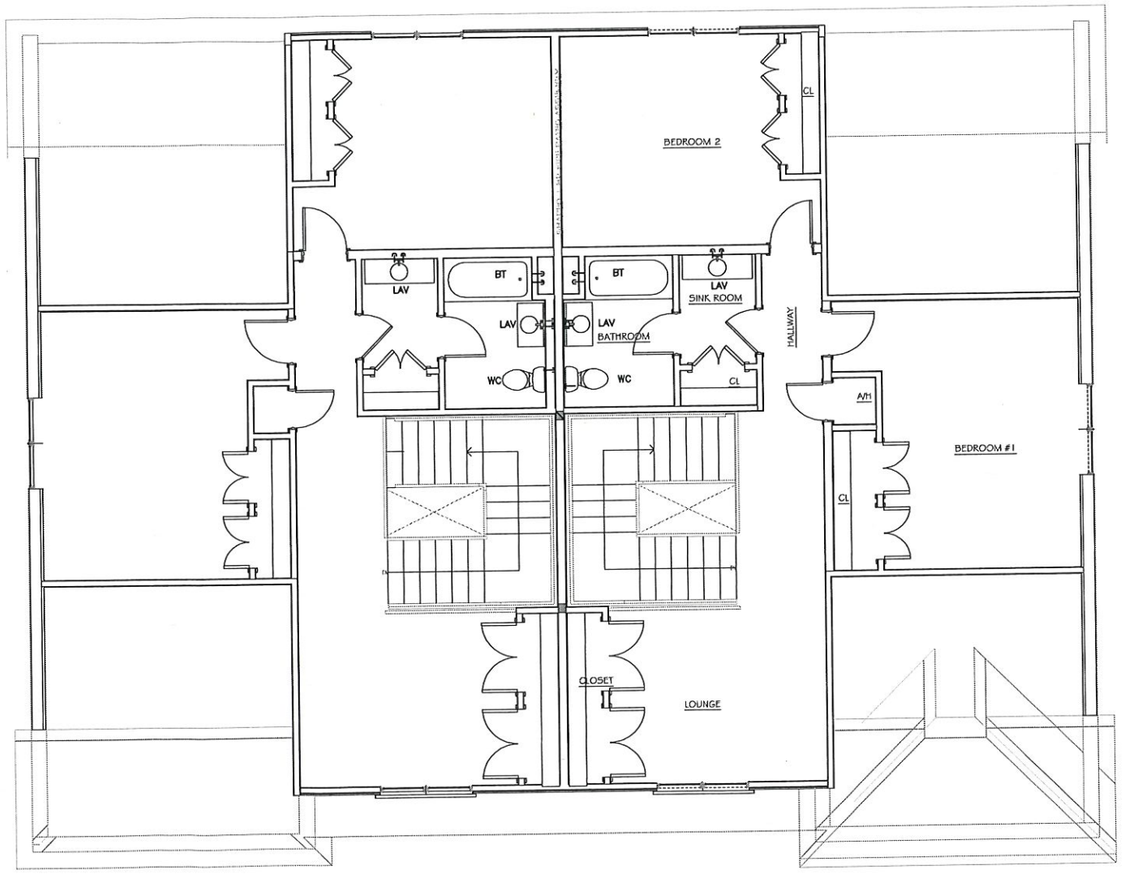
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BASIS OF

THE GENERAL CONTRACTOR SHALL CHECK ALL VERIFY ALL DIMENSIONS AND REPORT ALL ERRORS AND OMISSIONS TO THE ARCHITECTS. DO NOT SCALE DRAWINGS. THE DRAWINGS SHALL NOT BE USED UNTIL SIGNED BY CONSULTANTS

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1 THIRD FLOOR DOMESTIC WATER PLAN
1/4" = 1'-0"

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CLIENT

REVISIONS

NO.	DATE	DESCRIPTION

PROJECT NAME / LOCATION
DUPLEX MASTER
OKEECHOBEE, FL

DRAWING TITLE
THIRD FLOOR DOMESTIC WATER PLAN

EXAMINER'S SIGNATURE

STATE OF FLORIDA — JEFFREY AKERMAN — AR102413 — REGISTERED ARCHITECT

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SCALE

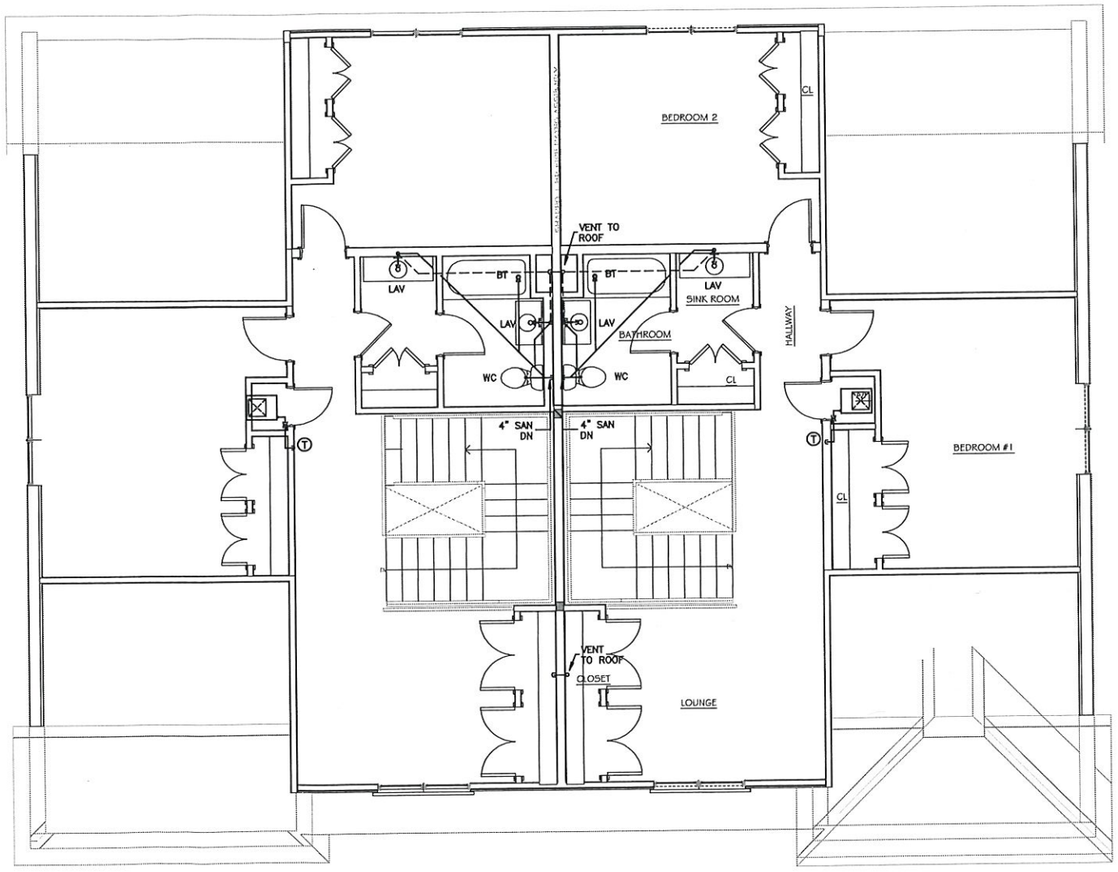
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1 THIRD FLOOR SANITARY PLAN
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CLIENT:

REVISIONS:

DESCRIPTION	DATE	NO.

PROJECT NAME / LOCATION:
DUPLEX MASTER
OKEECHOBEE, FL

DRAWING TITLE:
THIRD FLOOR
SANITARY PLAN

EXAMINER'S SIGNATURE:

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PROJECT #: 2305015-B
(Duplex Permit Set)

GEORGE SANJUAN, P.E.
FLORIDA LICENSE #46100

SCALE:

DATE:

REVISED NO.:

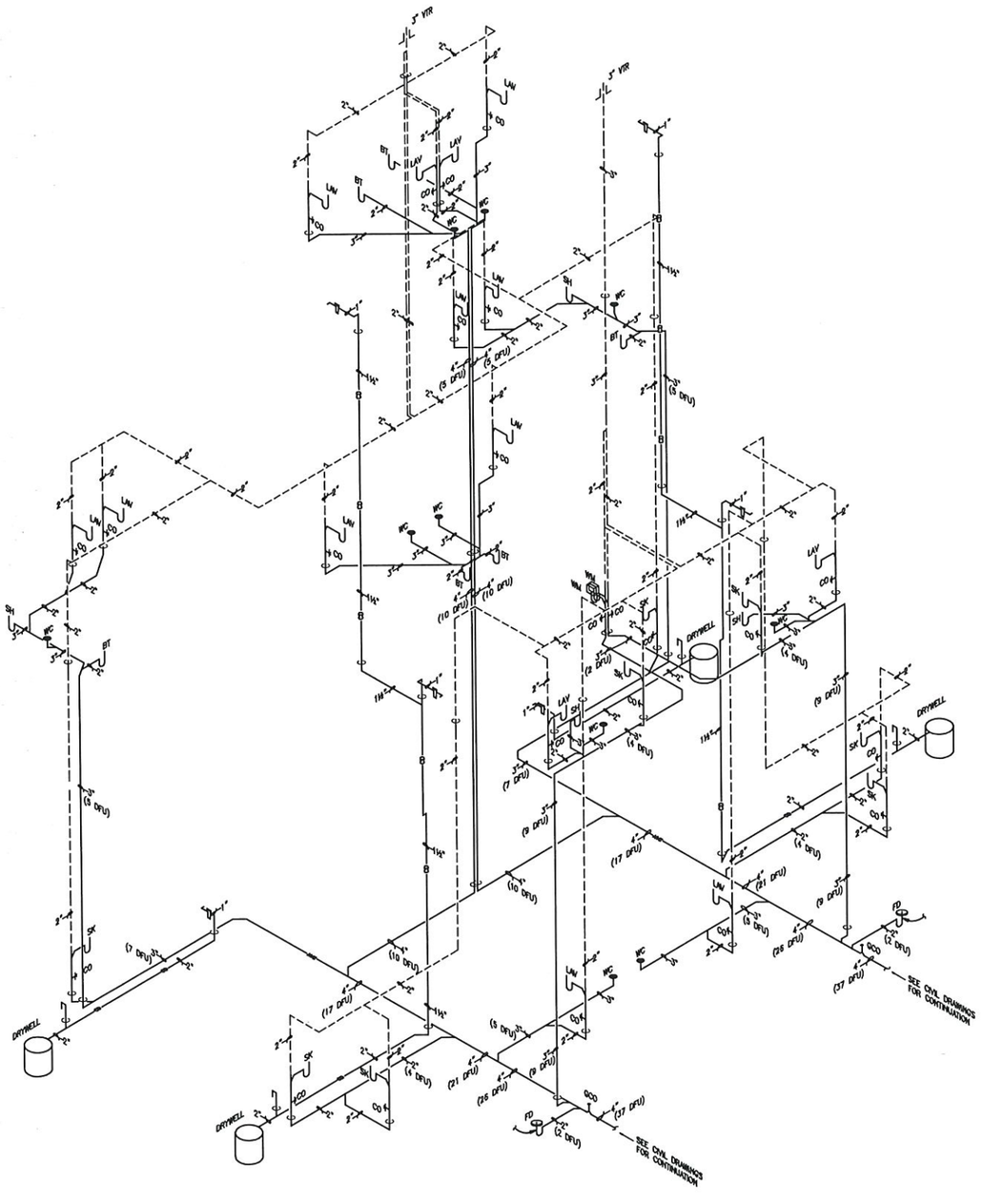
P-2.5

DRAWING NO.:

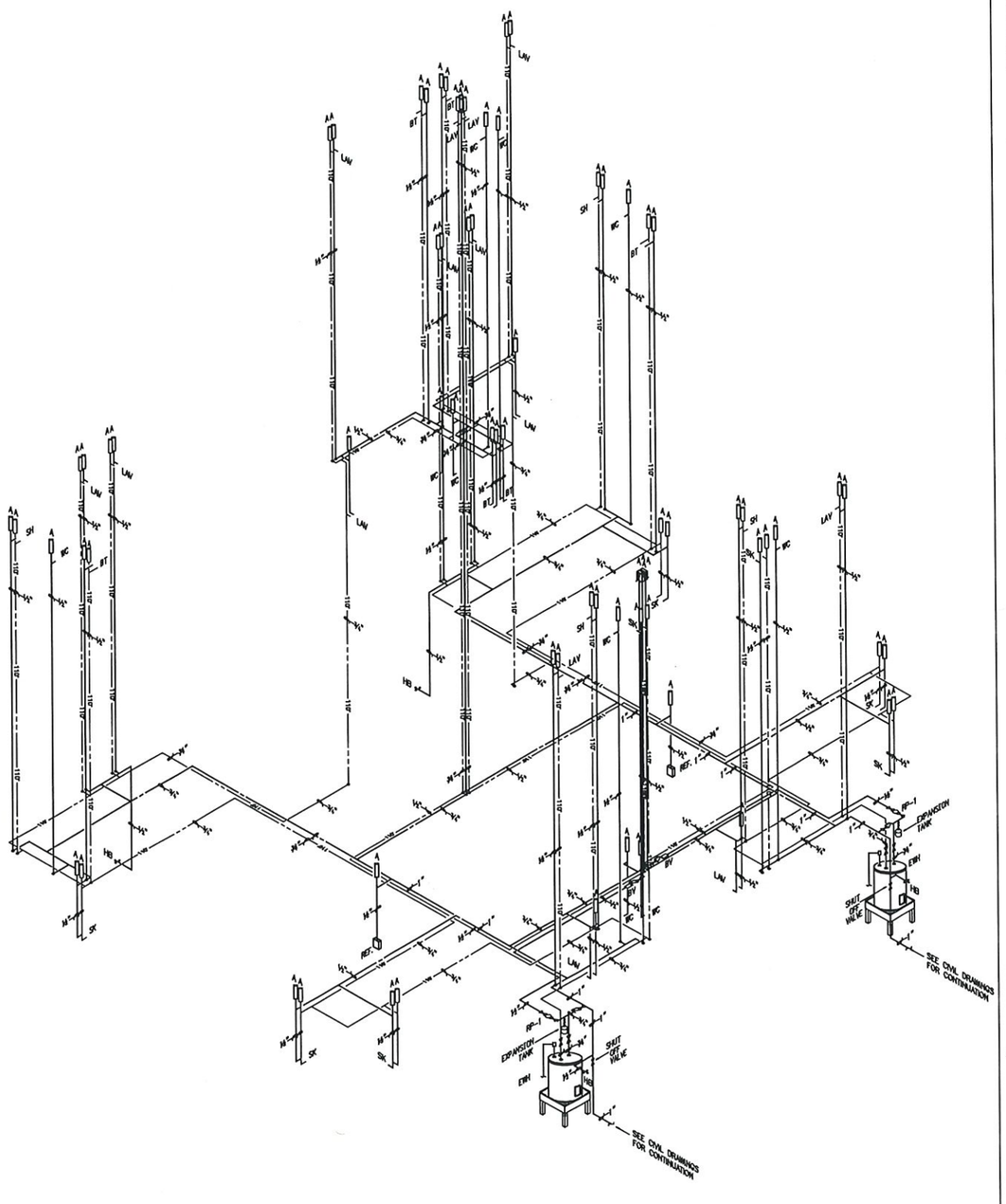
DATE DUE:

THE GENERAL CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS AND REPORT ALL ERRORS AND OMISSIONS TO THE ARCHITECTS. DO NOT SCALE DRAWINGS. THESE DRAWINGS SHALL NOT BE USED UNTIL SIGNED BY CONSULTANTS.

7/25/2023 9:30:30 AM



② SANITARY PIPING ISOMETRICS
N.T.S.



① DOMESTIC WATER PIPING ISOMETRICS
N.T.S.

RISE | FL
architecture

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CLIENT:

REVISIONS:

DESCRIPTION	DATE	NO.

PROJECT NAME / LOCATION:
DUPLEX MASTER
OKEECHOBEE, FL

DRAWING TITLE:
PLUMBING PIPING ISOMETRICS

EXAMINER'S SIGNATURE:

STATE OF FLORIDA — SHIMON E GREENEBAUM — REGISTERED ARCHITECT — AR92415

Shimon E Greenebaum

PROFESSIONAL SEAL:

DELTA G CONSULTING ENGINEERS, INC.
1600 Eller Drive, Suite 570
Fort Lauderdale, FL. 33316
(954) 527-1112
CA#00009181

P.I.T. MGR: STEPHEN BENDER, P.E.
PROJECT #: 230515-B
(Duplex Permit Set)

GEORGE SANJUAN, P.E.
FLORIDA LICENSE #46100

SCALE:

DATE:

PROJECT NO:

P-3.0

DRAWING NO:

DISCLOSURE:
THE GENERAL CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS AND REPORT ALL ERRORS AND OMISSIONS TO THE ARCHITECTS OFFICE BEFORE THE DRAWINGS SHALL NOT BE USED UNLESS SIGNED BY CONSULTANTS

7/25/2023 9:30:30 AM

Location: OKEECHOBEE, Florida
Altitude: 33.0 ft.
Data for: July DESIGN COOLING DAY, 1700

