

EXISTING BUILDING - INTERIOR IMPROVEMENTS (AS-BUILT)

Owner: COLON JOSE O & FERNANDEZ SARAI
 Address: 58 CACTUS CIR N, WINTER HAVEN, FL 33880
 Parcel ID: 25-29-03-357011-000150
 Legal Description: THORNHILL ESTATES PB 88 PG 15 LOTE 15

Scope of Work: THIS IS AN EXISTING HOME. THE OWNER WILL NOT MAKE ANY EXTERIOR OR STRUCTURAL MODIFICATION. THE ELECTRICAL & MECHANICAL DEVICES WILL BE REINSTALLED. THE SCOPE OF WORK OF THIS PROJECT, WILL BE LIMITED TO NEW INTERIOR PARTITIONS.

Building Department: POLK COUNTY

AREA CALCULATIONS	
DESCRIPTION	AREA (S.F.)
LIVING AREA	1,717.00 SF.
TOTAL LIVING AREAS	1,717.00 SF. 1,717.00 SF.
F. PORCH	137.00 SF.
PATIO	458.00 SF.
CAR PORCH	209.00 SF.
TOTAL NO LIVING AREA	804.00 SF. 804.00 SF.
TOTAL ROOFED AREA	2,521.00 SF.

GENERAL NOTES

ALL WORK SHOULD BE PERFORMED IN ACCORDANCE WITH ALL CODES, RULES, REGULATIONS, AND RESTRICTIONS HAVING JURISDICTION ON THIS PROJECT. CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION. THE ARCHITECT OR ENGINEER SHALL BE NOTIFIED OF ANY DEVIATION FROM THE PLANS PRIOR TO CONSTRUCTION. DRAWINGS SHALL NOT BE SCALED. WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTOR SHALL REMOVE ALL CONSTRUCTION DEBRIS FROM THE CONST. AREA. DEVIATION FROM THE CONSTRUCTION DOCUMENTS DISCOVERED AT THIS TIME SHALL BE REPORTED BY THE CONTRACTOR IMMEDIATELY TO THE ARCHITECT OR ENGINEER. IF ANY ERROR OR MISSING APPEAR IN THE DRAWINGS, SPECIFICATIONS OR OTHER DOCUMENTS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING OF SUCH OMISSIONS OR ERROR PRIOR TO PROCEEDING WITH ANY WORK WHICH APPEARS IN QUESTION. IN THE EVENT OF THE CONTRACTOR FAILING TO GIVE SUCH NOTICE, HE SHALL BE HELD RESPONSIBLE FOR THE RESULTS OF ANY SUCH ERROR OR OMISSIONS AND THE COST OF RECTIFYING THEM.

AREA CALCULATIONS

SCALE : N.T.S. 1

GENERAL NOTES

SCALE : N.T.S. 2

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- A03 - ELECTRICAL PLAN
- A04 - PLUMBING PLAN
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SCALE : N.T.S. 3



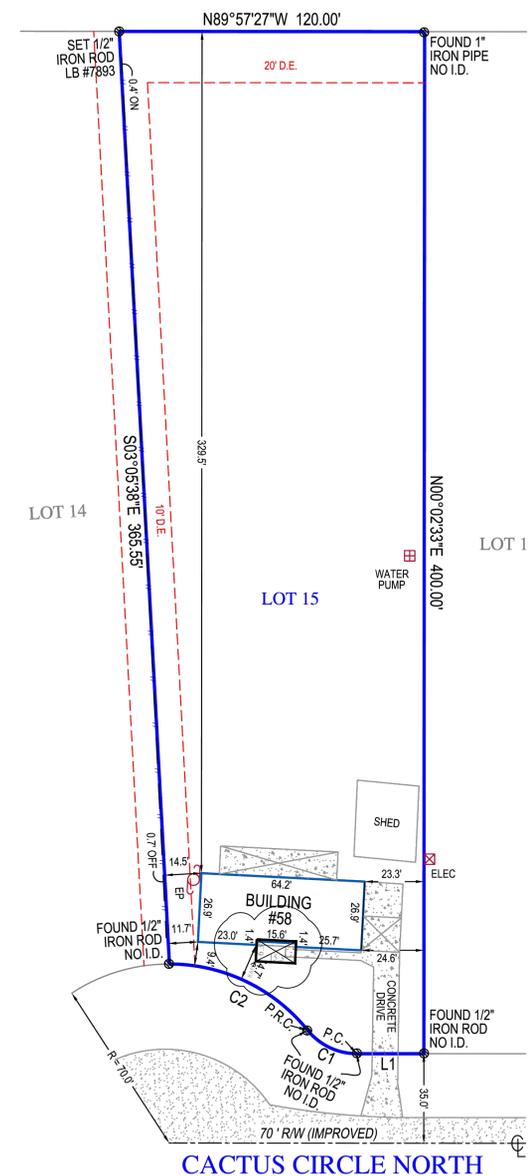
SITE LOCATION

SCALE : N.T.S. 4

SITE PLAN

IMPORTANT NOTE:

This PROPOSED SITE PLAN is NOT an actual survey of said property. The Owner and / or Professional Land Surveyor shall verify site dimensions and conditions, placement of the structure, and any restrictions or limitations before construction begins.



SITE PLAN

SCALE : N.T.S. 6

DESIGN CRITERIA

SCALE : N.T.S. 7

- A. 2023 FLORIDA BUILDING CODE (8th EDITION)
- B. 2023 FLORIDA BUILDING CODE EXISTING BUILDING (8th EDITION)
- C. 2023 FLORIDA BUILDING CODE ACCESSIBILITY (8th EDITION)
- D. 2023 FLORIDA BUILDING CODE MECHANICAL (8th EDITION)
- E. 2023 FLORIDA BUILDING CODE PLUMBING (8th EDITION)
- F. 2023 FLORIDA BUILDING CODE ENERGY CONSERVATION (8th EDITION)
- G. 2023 FLORIDA BUILDING CODE FUEL GAS (8th EDITION)
- H. 2020 FLORIDA NATIONAL ELECTRICAL CODE (NEC) NFPA 70
- I. 2020 FLORIDA FIRE PREVENTION CODE (7th EDITION)
- J. 2020 NFPA 1 (UNIFORM FIRE CODE)
- K. 2020 NFPA 101 (LIFE SAFETY CODE)
- L. INSTALLATION OF PORTABLE FIRE EXTINGUISHER NFPA 10 2020 EDITION
- M. AUTOMATIC SPRINKLER SYSTEM NFPA 13 2016 EDITION
- N. NATIONAL FIRE ALARM CODE NFPA 72 2016 EDITION
- O. WET CHEMICAL EXTINGUISHING SYSTEM NFPA 17A 2020 EDITION

APPLICABLE CODES

SCALE : N.T.S. 8



PERMIT SET

REVISIONS:

NO. DATE

PROJECT NUMBER

2024-361

INSTRUMENTS OF SERVICE OWNERSHIP

ALL REPORTS, PLANS, SPECIFICATIONS, COMPUTER FILES, FIELD DATA, NOTES INSTRUMENTS PREPARED BY THE ARCHITECT OR CONSULTANTS AS INSTRUMENTS OF SERVICE SHALL REMAIN THE PROPERTY OF THE ARCHITECT OR CONSULTANT. THE ARCHITECT AND OR THE CONSULTANT SHALL RETAIN ALL COMMON LAW, STATUTORY AND OTHER RESERVED RIGHTS, INCLUDING THE COPYRIGHT THERE TO.

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PROJECT FOR:
COLON JOSE O & FERNANDEZ SARAI

PROJECT ADDRESS:
58 CACTUS CIR N,
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COVER

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SHEET

A01



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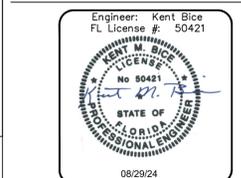
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FLOOR PLAN

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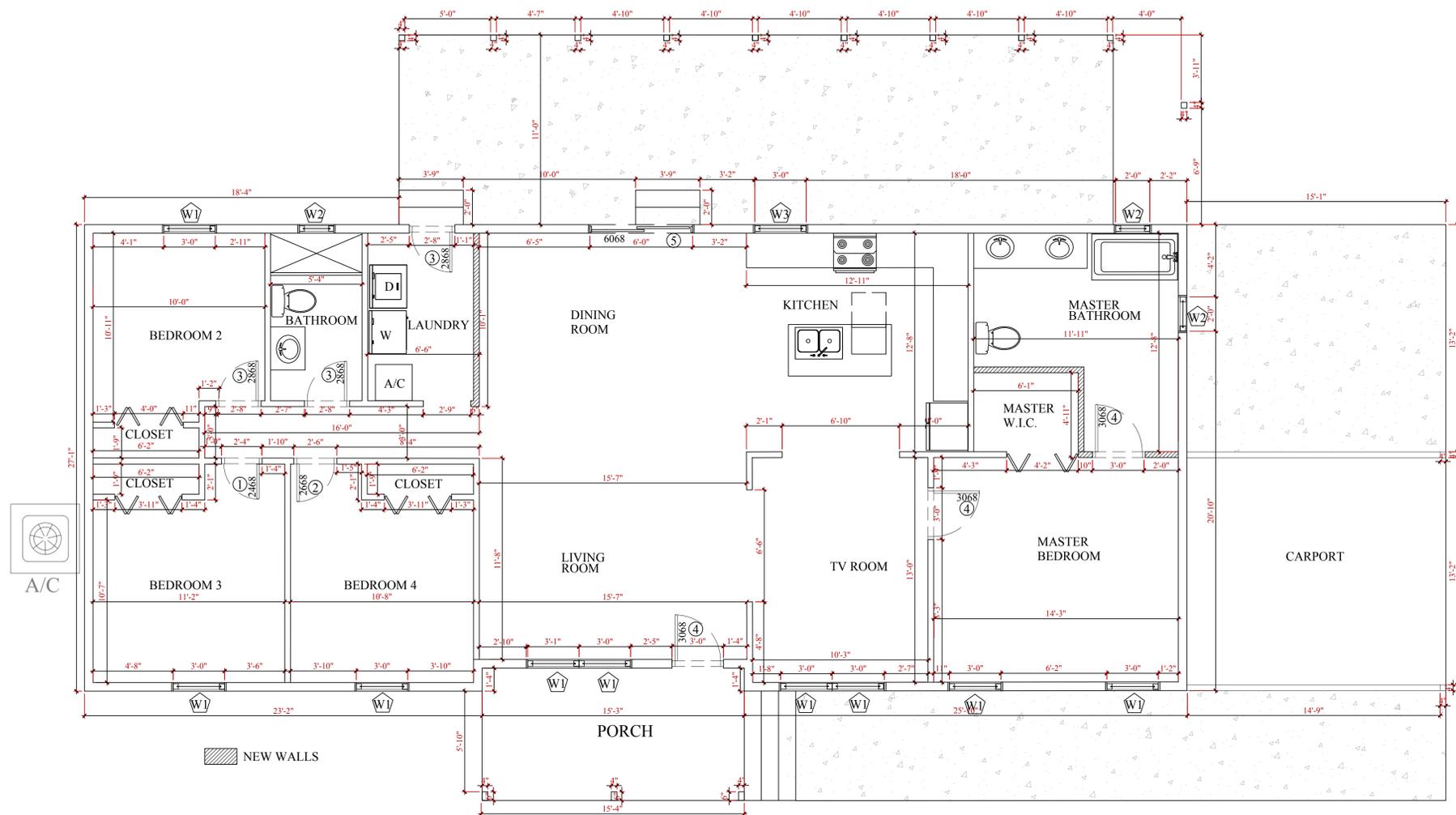
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A02



WINDOW SCHEDULE					
WINDOW #	SIZE	QTY.	MATERIAL	REMARKS	MANUF.
W-1	3'-0" X 5'-1"	9	ALUMINUM OR VINYL	SINGLE HUNG INSUL. GLASS	JPG INDUSTRIES OR SIMILAR
W-2	2'-4" X 2'-4"	3	ALUMINUM OR VINYL	SINGLE HUNG INSUL. GLASS	
W-3	3'-6" X 2'-7"	1	ALUMINUM OR VINYL	SINGLE HUNG INSUL. GLASS	

DOOR SCHEDULE						
DOOR #	TYPE	SIZE	QTY.	MATERIAL	FRAME	MANUF.
D1	SWINGING	2'-4"x6'-8"	1	WOOD	WOOD	JPG INDUSTRIES OR SIMILAR
D2	SWINGING	2'-6"x6'-8"	2	WOOD	WOOD	
D3	SWINGING	2'-8"x6'-8"	3	WOOD	WOOD	
D4	SWINGING	3'-0"x6'-8"	3	WOOD	WOOD	
D5	GLASS	6'-0"x6'-8"	1	ALUM	WOOD	



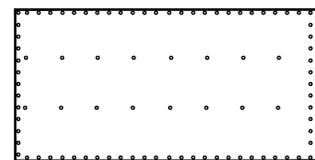
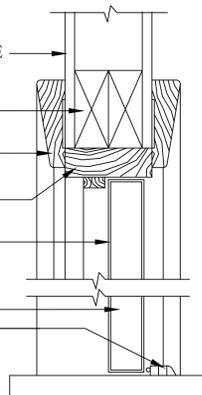
PROPOSED FLOOR PLAN

SCALE : 1/4" = 1'-0"

1

2

- 1/2" GYPSUM BOARD EACH SIDE
- (2) 2X HEADER SIZED FOR OPENING WIDTH
- 3/8"X2 1/2" WOOD CASING
- WOOD JAMB AND STOP
- EXTERIOR DOOR-PER OWNER
- DOOR PER OWNER
- ALUMINUM THRESHOLD
- BED OF CAULK

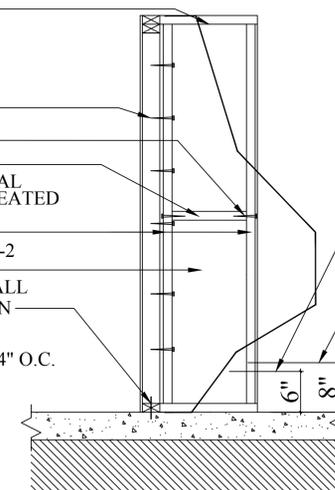


WALL SHEATHING:
1/2" CDX DRYWALL OR 7/16" OSB
NAILING SCHEDULE:
8d COM OR BETTER.
6" O.C. ON EDGE
8" O.C. INTERIOR

2X6 SOUTHERN PINE PRESSURE TREATED TOP PLATE

10d NAILS @ 24" O.C.
10d NAILS
(1) STUD 2X6 BLOCKING-SOUTHERN PINE STRUCTURAL GRADE KD-2 - PRESSURE TREATED

(1) STUD 2X6 @ 16" O.C. SOUTHERN PINE GRADE KD-2 1/2" DRYWALL PRIMER AND PAINTING FOR INTERIOR WALL 2X6 SOUTHERN PINE BOTTOM PRESSURE TREATED PLATE W/ TAPCONS 3/16 x 5" EMBEDMENT 3" @ 24" O.C.



FOR SHEATHING/SIDING CLEAR FAST-DRYING POLYURETHANE COATING BRUSS APPLIED
FOR FRAMING MEMBERS MINWAX FAST-DRYING-POLYURETHANE COATING BRUSS APPLIED

DOOR DETAILS

SCALE : N.T.S.

3

WALL SHEATHING

SCALE : N.T.S.

4

FRAMING WALL & FRAMING WALL

SCALE : N.T.S.

5

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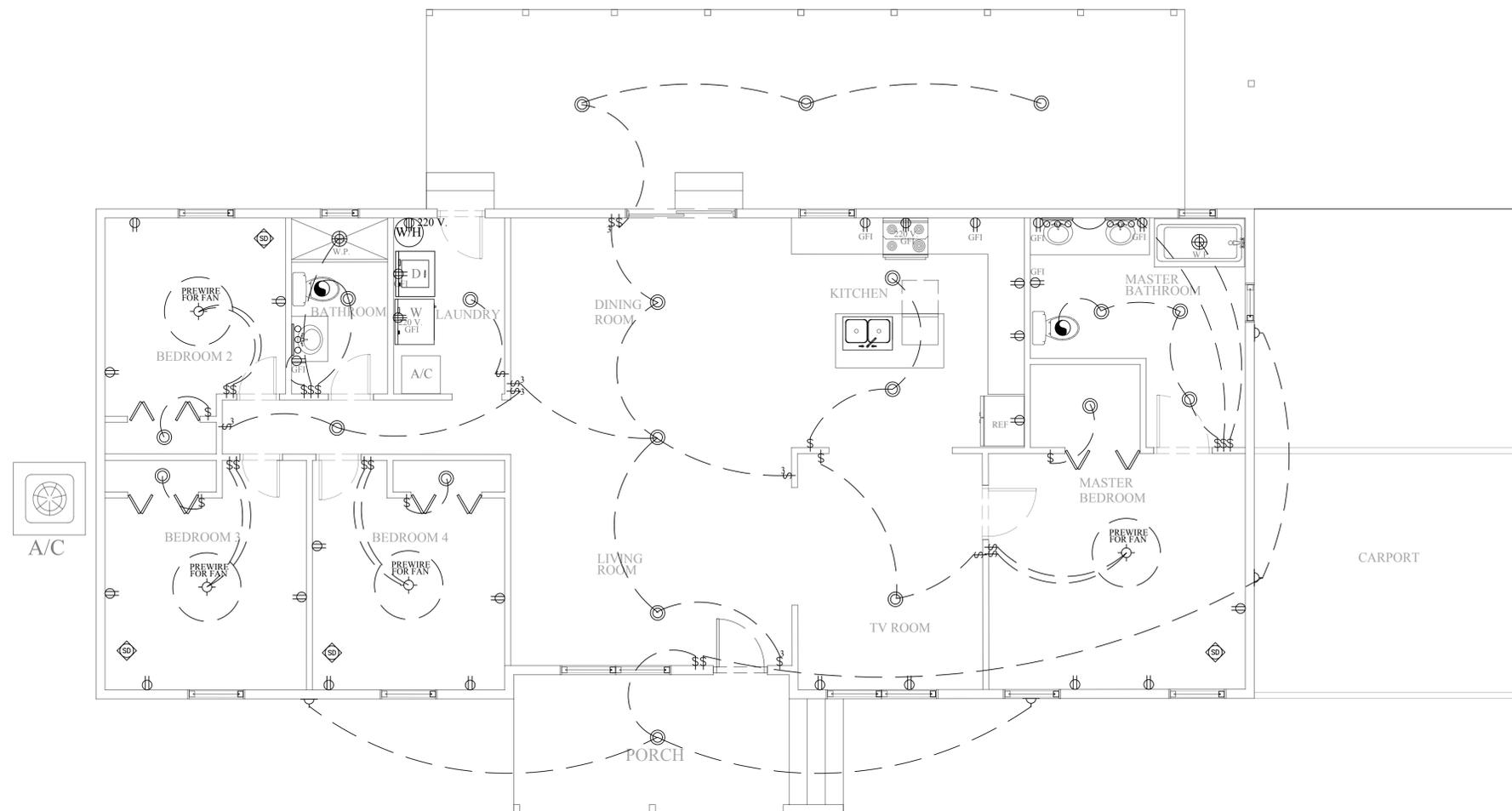
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ELECTRICAL PLAN

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A03



ELECTRICAL PLAN

SCALE : 1/4" = 1'-0" **1**

ELECTRICAL NOTES:

- All work shall comply with the requirements of the latest edition of the National Electrical Code, and applicable rules and regulations of Local and State Laws and Ordinances.
- Do not scale the drawings. Refer to Architectural Plans and Elevations for locations of equipment. Confirm exact location from approved shop drawings with Owner. It is not the intent of these plans to show every minor detail of construction. Any discrepancies shall be called to Architect's attention. The Contractor is expected to furnish and install all items for a complete electrical system and provide all requirements necessary for equipment to be placed in acceptable, proper working order.
- The electrical installation shall meet all standard requirements of local Utility Company. Verify service requirements, current characteristics and transformer data, prior to commencing any work.
- All cutting and patching, excavation, compacting, backfill, etc., required for the electrical work shall be done by the electrical contractor
- All materials shall be new and shall bear Underwriter's and Union Labels, where applicable.
- All work shall be coordinated with other trades to avoid interference with the progress of construction. The final locations of all equipment shall be verified with the Owner or his appointed Agent.
- All work shall be performed by a licensed Electrical Contractor, in a First-Class workmanlike manner. The completed system shall be fully operative and acceptance by Engineer or Architect must be a condition of the Sub-Contract.
- Load data is based on information given Architect at the time of design. Verify all equipment, panel sizes, protective devices and feeders before ordering. Obtain necessary data from the approved shop drawings of the various Sub-Contractors.
- The Electrical system shall be completely and effectively grounded, as required by the latest edition of the N.E.C. Article 250.
- Install facilities for temporary power for construction, as required. Furnish and install all wiring for power and controls of all A/C systems and mechanical equipment. Wire starters and control devices furnished by others. Furnish and install all special systems as called for on the plans or specifications.

- Conduits: Provide conduits where called for on panel schedules electrical metallic tubing(emt) shall be installed only in dry locations.in concrete above grade and where not subject to physical damage. Conduits installed underground shall be polyvinylchloride (pvc) and shall not be smaller than 3/4 trade size. Where pvc conduit is installed underground, elbows turning up and conduit emerging above grade shall be RSC. The tops of conduits shall not be less than 24" below finished grade.PVC installed above grade or direct-buried in earth shall be NEMA TC2 type EPC-40-PVC (schedule 40) except that where under areas subject to heavy vehicular traffic, it shall be NEMA TC2 type EPC-80-PVC(schedule 80)
- Conductors shall be schedule as schedule on panel schedules . All power conductors shall not be smaller than #14AGW (CU), or #12 AGW (AL). control circuit conductors shall not be smaller than #18AGW (CU). insulation rating. All conductors #10 and smaller may be solid. #8 and larger shall be stranded. Conductors shall be continuous from outlet to outlet without splices except within wire way or junction boxes. Mark conductors in panels, pull boxes or wire ways and terminal strip terminals for identification circuits.
- Provided and install junction and pull boxes where indicated and where necessary to terminate.Tap off or redirect multiple conduit runs, of size indicated or asrequired by NECwhere feeder splices are to be made. install boxes large enough to provide ample work space.
- Tests: After each system has been completed, a functional test shall be performed to demonstrate that the system operates in accordance with the requirements of the drawings. the test shall be performed by the contractor in the presence of the owner or administrator.
- Electrical contractor to coordinate existing system with proposed new, relocated and existing to remain. Report any discrepancies to the General Contractor to verify prior to installation.

ELECTRICAL LEGEND

OUTLETS @ 16" A.F.F.	FIXTURES
⊕ DUPLEX	⊕ SURFACE MOUNT CEILING
⊕ GFI DUPLEX - GROUND FAULT INTERRUPT	⊕ SCNCE LIGHTS
⊕ WPGFI DUPLEX - WEATHERPROOF	⊕ ROUND RECESSED CAN
⊕ 220 v. RECEPTACLE	⊕ W.P. VAPOR PROOF RECESSED CAN
⊕ TELEVISION JACK	⊕ POST W/LIGHT
⊕ QUICK DISCONNECT	⊕ EXHAUST FAN
SWITCHES @ 45" A.F.F.	⊕ FLUORESCENT FIXTURE (2 BULB w/ DIFFUSER)
⊕ SWITCH	⊕ ELECTRICAL PANEL
⊕ SWITCH 3 WAY	⊕ DECORATIVE LIGHTS
⊕ MOTION SENSOR LIGHT	⊕ PRE-WIRE FOR SPEAKERS
⊕ INTERCOM SYSTEM	⊕ SMOKE DETECTOR W/ BATTERY-POWERED COMBINATION CARBON MONOXIDE AND SMOKE ALARM.
⊕ CEILING FAN W/ LIGHT COMBO	⊕ HAVC THERMOSTAT
⊕ RING BELL	
⊕ SECURITY CAMERA	

NOTES:

- IN FLOOR PLAN: OUTLETS TO BE LOCATED 16" SWITCHES @ 45" A.F.F. (TO THE BOTTOM OF OUTLET & SWITCH FASE PLATE) FROM ABOVE FINISHED FLOOR
- AFCI REQUIRE ON LIVING ROOMS, DINING ROOMS, SUNROOMS, FAMILY ROOMS, DENS, LIBRARIES, BEDROOMS, PARLORS, AND SIMILAR ROOMS.
- ALL 125 VOLT 15&20 AMP RECEPTACLE SHALL BE LISTED TAMPER RESISTANT RECEPTACLES.
- ALL CIRCUIT BREAKERS FOR BATHROOMS, KITCHEN, LAUNDRY,RECEPTACLES SHALL BE GFI.
- ALL CIRCUIT BREAKERS FOR NEW ADDITION, SHALL BE CONNECT TO EXISTING ELECTRICAL PANEL.

ELECTRICAL PLAN NOTES

ELECTRICAL LEGEND

3

PERMIT SET

REVISIONS:

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PLUMBING PLAN

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SHEET

A04



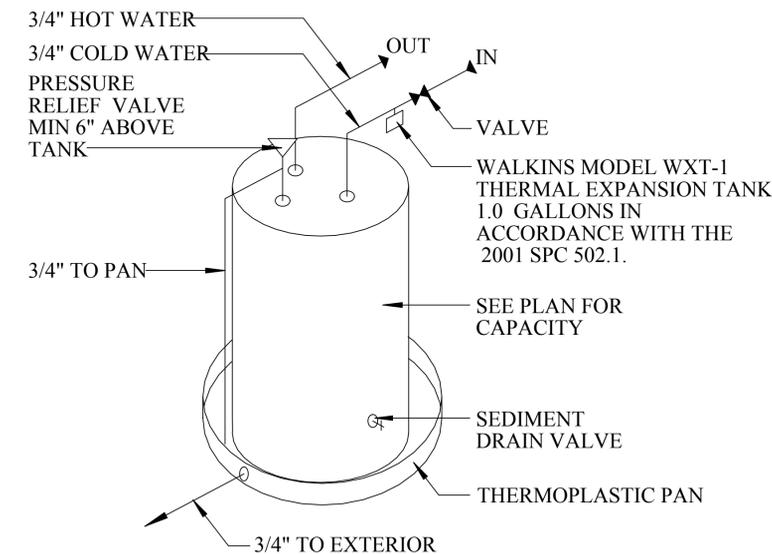
PLUMBING PLAN

SCALE : 1/4" = 1'-0" **1**

GENERAL PLUMBING NOTES

1. PLUMBING INSTALLATION SHALL COMPLY WITH ALL STATE LOCAL CODES, AND UTILITY COMPANY REGULATIONS.
2. PLUMBING CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS AND PAY ALL FEES RELATIVE TO THE INSTALLATION OF HIS WORK
3. PLUMBING CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS DURING PRE-BID SITE VISITS. PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR THE INCLUSION OF ALL REQUIRED DEMOLITION IN AREAS UNDERGOING MODIFICATION, WHETHER OR NOT SUCH WORK IS INDICATED ON THE DRAWINGS. DEMOLITION SHALL GENERALLY BE ARRANGED TO AGREE WITH THE ACCOMPLISHMENT OF WORK UNDER THE VARIOUS PHASES AND IN COORDINATION WITH THE WORK OF OTHER TRADES. CONTRACTOR SHALL EXAMINE ALL ARCHITECTURAL DRAWINGS FOR ADDITIONAL REQUIREMENTS.
4. THE PLUMBING CONTRACTOR SHALL OBTAIN A FULL SET OF DRAWINGS AND SPECIFICATIONS FOR THIS PROJECT, AND SHALL BE AWARE OF THE WORK OF ALL OTHER TRADES WHICH MAY REQUIRE COORDINATION.
5. PLUMBING CONTRACTOR SHALL VERIFY POINT OF CONNECTION TO, AND ELEVATION OF EXISTING PIPING, PRIOR TO INSTALLATION OF NEW PIPING.
6. PLUMBING CONTRACTOR SHALL COORDINATE HIS WORK WITH THAT OF ALL OTHER CONTRACTORS BEFORE INSTALLATION OF HIS WORK IN CHASES, CEILING SPACES AND OTHER AREAS WHERE CONFLICTS MAY OCCUR.
7. ALL PIPING SHOWN IS SCHEMATIC. IT IS NOT POSSIBLE TO INDICATE EVERY OFFSET, ELBOW, UNION, VALVE, TRAP, ACCESS PANEL, ETC. THAT IS REQUIRED FOR A PROPERLY WORKING SYSTEM. NO ADDITIONAL COST WILL BE ALLOWED FOR FITTINGS THAT ARE REQUIRED TO INSTALL THE PIPING SYSTEM WITHIN THE SPACE PROVIDED AND ARE REQUIRED FOR A COMPLETE WORKING SYSTEM IN ACCORDANCE WITH ALL OF THE REQUIREMENTS OF THE CODES AND REGULATIONS.
8. PERFORM ALL EXCAVATION REQUIRED FOR UNDERGROUND PLUMBING LINES. ALL EXCAVATION SHALL BE MADE IN A MANNER TO PROVIDE A UNIFORM

9. SANITARY WASTE AND VENT PIPE, OR STORM DRAIN PIPE AND FITTINGS INSTALLED BELLOW SLAB ON GRADE FLOOR SHALL BE SCHEDULE 40 PVC PIPE .
10. DOMESTIC WATER PIPING RUN UNDER SLAB ON GRADE FLOOR SHALL BE SCHEDULE 40 CPVC AS PER FBCP 2010 (CURRENT).
11. SANITARY DRAINAGE SYSTEM SHALL BE WATER TESTED BEFORE FINAL CONNECTION TO THE SANITARY SEWER. ALL OPENINGS SHALL BE PLUGGED EXCEPT THE HIGHEST OPENING, WHICH SHALL PRODUCE A MINIMUM OF A 10 FOOT HEAD. THE SYSTEM SHALL RETAIN THE WATER LEVEL FOR AT LEAST FIFTEEN (15) MINUTES AT WHICH TIME ALL JOINTS SHALL BE INSPECTED AND ALL OBSERVED LEAKS CORRECTED.
13. VALVES IN DOMESTIC WATER PIPING, 2" AND SMALLER SHALL BE CPVC BODY WITH FULL PORT STAINLESS STEEL BALL, AND LEVER HANDLE.
14. INSTALL VACUUM BREAKERS ON ALL HOSE BIBS AND HYDRANTS.
15. WATER PIPING SHALL BE SUBJECTED TO A HYDROSTATIC PRESSURE TEST OF NOT LESS THAN 100 PSI FOR A PERIOD OF 24 HOURS WITH A PRESSURE LOSS NOT IN EXCESS OF 1 PSI.
16. INSULATION FOR DOMESTIC WATER PIPING SHALL BE 3/4" THICK, PREFORMED FIBERGLASS WITH VAPOR BARRIER JACKET. AT CONTRACTOR'S OPTION HE MAY USE 3/8" THICK PRE-MOLDED FOAM PLASTIC SIMILAR TO "ARMAFLEX" INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
17. THE CONTRACTOR SHALL FURNISH OWNER A CERTIFICATE STATING THAT ALL TESTS HAVE BEEN PERFORMED AND THAT ALL OF THE PIPING SYSTEMS ARE FREE OF DEFECTS, IN MATERIAL AND WORKMANSHIP AND ALL SYSTEMS HAVE



PLUMBING PLAN NOTES

SCALE : N.T.S.

2

WATER HEATER DETAIL

SCALE : N.T.S.

3

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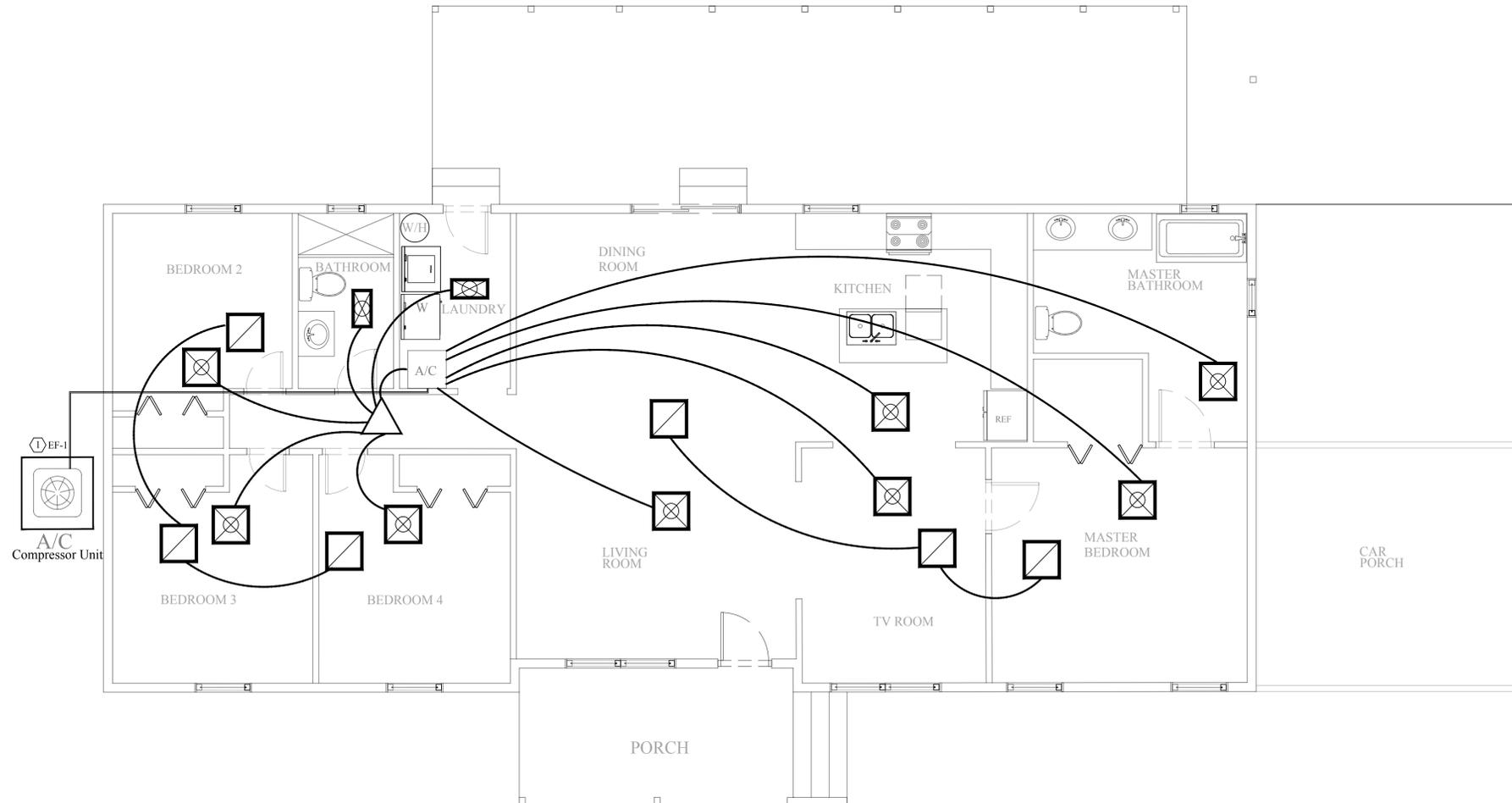
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MECHANICAL PLAN

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SHEET

A05



MECHANICAL PLAN

SCALE : 1/4" = 1'-0" **1**

AIR CONDITIONING HEATING AND VENTILATION SPECIFICATIONS

SCOPE OF WORK:

- 1) ALL WORK INCLUDED UNDER THIS SECTION CONSISTS OF FURNISHING ALL MATERIALS, EQUIPMENT AND LABOR, AND THE PERFORMING OF ALL FUNCTIONS, EXCEPT AS OTHERWISE SPECIFIED HEREIN OR SHOWN ON THE DRAWING, PIPING AND ALL DUCTWORK, GRILLES, REGISTERS, ETC., INCLUDING ALL CONNECTIONS TO EACH SYSTEM AS SPECIFIED HEREIN AND SHOWN ON THE DRAWINGS. IT SHALL FURTHER INCLUDE FURNISHING AND INSTALLING ALL MISCELLANEOUS ITEMS REQUIRED FOR THE OPERATION OF THE SYSTEM, WHETHER SPECIFICALLY CALLED OUT OR NOT.
- 2) INSTALL A COMPLETE AND WORKING MECHANICAL SYSTEM IN STRICT ACCORDANCE WITH THE FLORIDA MECHANICAL CODE AND SMACNA STANDARDS.

COORDINATION:

- 1) ALL CONTRACTORS SHALL BE RESPONSIBLE FOR COORDINATING WORK WITH OTHER TRADES AFFECTED BY EACH OTHER'S WORK.

CODES AND PERMITS:

- 1) ALL MATERIALS, EQUIPMENT AND INSTALLATION MUST COMPLY WITH ALL APPLICABLE LAWS, CODES, RULES AND REGULATIONS, REQUIRED BY CITY, COUNTY AND STATE, AS WELL AS FEDERAL REQUIREMENTS.
- 2) PERMITS: OBTAIN AND PAY FOR ALL REQUIRED PERMITS, LICENSES AND FEES.
- 3) INSPECTIONS: FURNISH OWNER WITH CERTIFICATE OF INSPECTION AND APPROVAL BY LOCAL AUTHORITIES PRIOR TO FINAL ACCEPTANCE OF THE PROJECT BY THE OWNER. ALL WORK MUST BE INSPECTED.

PRODUCTS:

- 1) ALL PRODUCTS SHALL BE NEW AND UNUSED, OF ESTABLISHED AND REPUTABLE AMERICAN MANUFACTURERS. ITEMS OF EQUIPMENT USED FOR THE SAME PURPOSE SHALL BE OF THE SAME MANUFACTURER.
- 2) SYSTEMS SHALL BE COMPLETE AND OPERABLE. ANY ACCESSORIES REQUIRED FOR THE OPERATION OF THE SYSTEM SHALL BE INCLUDED AS THOUGH SPECIFICALLY INDICATED TO THE PROVIDED. SUCH ACCESSORIES WOULD INCLUDE FILTERS, CONDENSATE DRAINS, RELIEF VALVES, SERVICE VALVES, THERMOSTATS, VIBRATION INSULATORS, ETC. MOTOR STARTERS FOR PRE-WIRED EQUIPMENT (AND OTHER PROTECTION AND CONTROL DEVICES) ARE ALSO INCLUDED IN THIS SPECIFICATION.
- 3) SPECIFIC REFERENCE TO A MANUFACTURER'S PRODUCT IS ONLY TO ESTABLISH TYPE, QUALITY, AND PERFORMANCE REQUIRED. THESE QUALIFICATIONS ARE IN ADDITION TO THE REQUIREMENTS SHOWN ON THE DRAWINGS AND HEREIN THESE SPECIFICATIONS. LISTING OF ALTERNATE EQUIPMENT MANUFACTURERS SHALL NOT BE CONSTRUED AS AN UNCONDITIONAL APPROVAL OF THE PRODUCTS OF THOSE MANUFACTURERS.

SUBSTITUTIONS:

- 1) SUBSTITUTIONS OF MATERIALS OR PRODUCTS SHOWN HEREIN SHALL BE AT THE OWNER'S, ARCHITECTS, OR ENGINEER'S WRITTEN APPROVAL ONLY WITH COPIES OF APPROVAL SENT TO THE PROJECT FILE. ANY DEVIATION FROM THESE DRAWINGS WILL NOT BE ALLOWED.

TEMPERATURE CONTROLS AND WIRING:

- 1) ALL WIRING IS INCLUDED UNDER THE ELECTRICAL DIVISION OF THE SPECIFICATIONS. ALL INTEGRAL STARTERS, CONTROLS, RELAYS AND OTHER DEVICES ARE INCLUDED UNDER THE MECHANICAL DIVISION. ALL EQUIPMENT, DEVICES AND WIRING SHALL CONFORM TO THE NATIONAL ELECTRIC CODE. ALL CONTROLS SHALL BE FURNISHED AND PROPERLY IDENTIFIED WITH INSTRUCTIONS FOR PROPER CONNECTIONS. RESPONSIBILITY FOR PROPER CONNECTIONS AND OPERATION IS INCLUDED UNDER THE MECHANICAL.

CONTRACTORS RESPONSIBILITY. VERIFY ALL VOLTAGES, PHASES AND ELECTRICAL CONNECTIONS WITH THE ELECTRICAL CONTRACTOR BEFORE ORDERING ANY EQUIPMENT, AND IF DISCREPANCIES OCCUR, THEY SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND GENERAL CONTRACTOR FOR THEIR DECISION.

DUCTWORK:

- 1) ALL AIR CONDITIONING AND HEATING DUCT WORK SHALL BE CONSTRUCTED OF FIBERGLASS DUCT BOARD (R-6.0) IN ACCORDANCE WITH SMACNA STANDARDS. SEAMS SHALL BE STAPLED OR TAPED AND SEALED WITH GLASS FABRIC IMBEDDED IN MASTIC. USE OF PRESSURE SENSITIVE TAPES AS THE ONLY DUCT CLOSURE METHOD IS PROHIBITED. DUCT WORK SHALL BE SUPPORTED WITH 1-1/2" WIDE GALVANIZED CHANNEL, STRAPPED TO STRUCTURE WITH 1-1/2" WIDE, 18 GAUGE GALVANIZED STEEL BANDS. ETC WITH BANDS SHALL BE SECURED DIRECTLY TO THE STRUCTURE USING SCREWS, RIVETS, OR BOLTS. MAXIMUM DISTANCE BETWEEN SUPPORTS SHALL BE 4 FEET.
- 2) FLEXIBLE DUCT WORK SHALL BE CONSTRUCTED OF U. CLASS 1 POLYESTER LINED, METAL, HELIX SUPPORTED, INSULATED FIBERGLASS FLEXIBLE DUCT (R-6.0). DUCT WORK SHALL BE SUPPORTED WITH 1-1/2" WIDE, 18 GAUGE GALVANIZED STEEL BANDS. BANDS SHALL BE SECURED DIRECTLY TO THE STRUCTURE USING SCREWS, RIVETS, OR BOLTS. MAXIMUM DISTANCE BETWEEN SUPPORTS SHALL BE 6 FEET. MAXIMUM ALLOWABLE DUCT DROOP IS 1 INCH IN 10 FEET.
- 3) EACH DUCT SYSTEM SHALL BE COMPLETE WITH ALL REQUIRED DUCTWORK FITTINGS, TURNING VANES, SPUTTER DAMPERS AND SUPPORTS, AND EXTRACTORS AT ALL RIGHT ANGLE TAKEOFFS AND TEES.
- 4) PROVIDE DOUBLE THICKNESS, FACTORY FABRICATED GALVANIZED SHEET STEEL TURNING VANES WITH AIRFOIL CONTOUR IN ALL RIGHT ANGLE ELBOWS, TEES, AND ELBOWS WITH RADIUS LESS THE 1-1/2 TIMES THE WIDTH OF THE DUCT.
- 5) ALL ROUND DUCT BRANCH TAKEOFFS SHALL BE PROVIDED WITH CROWN COLLAR WITH BALANCING DAMPER.
- 6) ALL FRESH AIR SUPPLY AND EXHAUST DUCT SHALL BE GALVANIZED SHEET METAL.
- 7) DUCT SIZES SHOWN ON THE DRAWINGS ARE TO THE INSIDE OF ACOUSTICAL INSULATION LININGS. INCREASE SIZES OF DUCTS AS REQUIRED TO ALLOW FOR CLEAR INSIDE DISTANCE.
- 8) DUCTWORK SHALL CONFORM TO DIMENSIONS ON THE DRAWINGS, UNLESS LOCATION OF STRUCTURAL MEMBERS PROHIBITED. IN CASE OF CHANGE IN DIMENSIONS, CROSS SECTIONAL AREAS SHALL BE MAINTAINED.

GRILLES, REGISTERS AND DIFFUSERS:

- 1) FURNISH AND INSTALL ALL GRILLES, REGISTERS, CEILING DIFFUSERS AND DOOR GRILLES WHERE INDICATED. THEY SHALL BE OF SIZE AND MODEL CALLED FOR ON THE DRAWINGS.
- 2) ALL GRILLES, REGISTERS, AND CEILING DIFFUSERS MUST BE SET FLUSH AND TRUE TO WALL OR CEILING TO PREVENT AIR LEAKAGE AROUND EDGES. ALL UNITS SHALL BE PROVIDED WITH NEOPRENE GASKETING AROUND THE INSIDE OF THE FRAME.
- 3) ALL UNITS SHALL BE FACTORY FINISHED, OF COLOR SELECTED BY THE ARCHITECT, OR AS OTHERWISE INDICATED.
- 4) THE MECHANICAL CONTRACTOR SHALL PAINT ALL DUCTWORK, TURNING VANES, INSULATION, ETC. THAT IS VISIBLE THROUGH GRILLES, REGISTERS, OR CEILING DIFFUSERS FLAT BLACK.

EQUIPMENT:

- 1) ALL EQUIPMENT SHALL BE LABELED WITH STEEL TAGS EMBOSSED WITH 1/4" HIGH LETTERS, PERMANENTLY ATTACHED. TAG SHALL CLEARLY INDICATE THE AREA SERVED BY THE EQUIPMENT.
- FINAL TESTS:
 - 1) BEFORE ACCEPTANCE AND FINAL PAYMENT, IT SHALL BE DEMONSTRATED THAT ALL APPARATUS IS FUNCTIONING PROPERLY AND EFFICIENTLY.
 - 2) THE CONTRACTOR SHALL TEST AND BALANCE THE SYSTEM AND PROVIDED A REPORT. THIS SHALL INCLUDE A THOROUGH TEST OF EACH SUPPLY, RETURN, AND EXHAUST SYSTEMS TO ASSURE THAT EACH DIFFUSER, REGISTER AND HOOD HAS THE PROPER QUANTITY OF AIR IN ACCORDANCE WITH AAR OR NIBB. BALANCED SYSTEM SHALL MEET THE OUTSIDE AIR MIX REQUIREMENTS OF ASRAE 62.

GUARANTEE:

- 1) THE CONTRACTOR SHALL GUARANTEE ALL MATERIALS, EQUIPMENT AND WORKMANSHIP FROM DEFECT OF WORKMANSHIP, AND SHALL REPLACE OR REPAIR WITHOUT ADDITIONAL COST TO THE OWNER ALL DEFECTIVE MATERIAL AND WORKMANSHIP, FOR A PERIOD OF (1) YEAR AFTER COMPLETION AND ACCEPTANCE.

RECORD DRAWINGS:

- 1) PROVIDE TWO (2) SETS OF "RECORD" DRAWINGS AND TWO (2) BOUND SETS OF ALL OPERATIONS MANUALS, DIAGRAMS, SERVICE CONTRACTS, GUARANTEES, ETC., ONE FOR THE OWNER AND ONE FOR BUILDING OPERATIONS DEPARTMENT. OBTAIN A COMPLETE SET OF RECORD DRAWINGS OF EXISTING CONSTRUCTION FROM THE OWNERS FOR INFORMATION ON EXISTING CONDITIONS. INCORPORATE ANY EXISTING CONDITIONS ON NEW RECORD DRAWINGS REQUIRED TO SHOW THE "INSTALLED" INSTALLATION.

MECHANICAL GENERAL NOTES

- 1) THE CONTRACTOR SHALL DO ALL THE NECESSARY CUTTING OF WALLS AND FLOOR.
- 2) NO STRUCTURAL MEMBER SHALL BE CUT WITHOUT PERMISSION FROM THE ARCHITECT AND THE ENGINEER.
- 3) PATCH AROUND ALL OPENINGS TO MATCH EXISTING CONSTRUCTION.
- 4) DUCTWORK CONSTRUCTION AND INSTALLATION INCLUDING SHEET METAL GAUGES, REINFORCEMENT, JOINT SEALING, AIR LEAKAGE, AND DETAILS NOT SPECIFICALLY SHOWN ON DRAWINGS SHALL BE IN ACCORDANCE WITH FLORIDA BUILDING CODE-MECHANICAL, LOW VELOCITY DUCT CONSTRUCTION STANDARDS.
- 5) COORDINATE EXACT LOCATION OF MECHANICAL EQUIPMENT, AIR DEVICES, PIPING, DUCTWORK, ETC., WITH PLUMBING, ELECTRICAL, STRUCTURAL, ARCHITECTURAL AND GENERAL CONTRACTORS DRAWINGS.
- 6) WORKMANSHIP: ALL EQUIPMENT APPURTENANCES, DEVICES AND PIPING SHALL BE INSTALLED IN A WORKMANLIKE MANNER IN CONFORMITY WITH THE PROVISIONS AND INTENT OF THE LATEST APPROVED MECHANICAL CODE.
- 7) LOCATE ALL EXHAUST AIR OUTLETS 10'-0" MIN. FROM MECHANICAL EQUIPMENT OUTSIDE AIR INTAKES.
- 8) LIGHTING LOCATIONS TAKE PRECEDENCE OVER DIFFUSER LOCATION. CONTRACTORS SHALL MAKE NECESSARY ADJUSTMENTS TO DIFFUSERS TO AVOID ANY CONFLICT WITH LIGHTING LAYOUT.
- 9) PROVIDE ALL EXHAUST AIR DUCTS WITH BACK DRAFT DAMPER.
- 10) PROVIDE VOLUME DAMPER AT EACH AND EVERY SUPPLY AIR BRANCH DUCT TAKE-OFF, EXCEPT OVER HARD CEILINGS.
- 11) TAKE-OFF FITTING SHALL BE BELL MOUTH SPIN-IN TYPE WITH QUADRANT DAMPER.
- 12) CONTRACTOR SHALL CLEAN AND INSPECT ALL EXISTING EQUIPMENT PRIOR TO COMMENCING WORK. NOTIFY BUILDING OWNER OF ANY DYSFUNCTIONAL EQUIPMENT IMMEDIATELY.
- 13) CONTRACTOR SHALL INSURE THAT ALL EXISTING MECHANICAL EQUIPMENT IS IN SATISFACTORY WORKING CONDITION SO HE MAY MAKE PROVISIONS IN HIS BID TO ACCOMMODATE ANY REPLACEMENTS REQUIRED.
- 14) VERIFY EXACT SIZE, LOCATION, ROUTING, ETC. OF ALL EXISTING MECHANICAL EQUIPMENT, DUCTWORK, AIR DEVICES, SENSORS, PIPING, ETC. WHICH ARE TO BE REMOVED/REPLACED, ABANDONED, REWORKED, ETC., AS REQUIRED AND AS SHOWN ON DRAWINGS.
- 15) ALL TEMPERATURE CONTROLS ARE TO BE TESTED, ADJUSTED AND CALIBRATED FOR PROPER OPERATION.
- 16) THE GENERAL CONTRACTOR SHALL BRING ALL SURFACES (FLOOR, WALLS, AND CEILINGS) BACK TO ORIGINAL CONDITION AFTER MODIFICATIONS HAVE BEEN MADE.
- 17) PROVIDE CLEARANCES AS PER MANUFACTURER'S RECOMMENDATIONS.
- 18) PROVIDE EQUIPMENT IDENTIFICATION.
- 19) INSTALL CLEANOUTS AT EVERY 90-DEGREE TURN ON AIR CONDITIONING CONDENSATE DRAIN LINES.
- 20) MOUNT ALL SENSORS AT 5' ABOVE FINISHED FLOOR UNLESS NOTED OTHERWISE, COORDINATE EXACT LOCATION WITH THE ARCHITECT.

MECHANICAL LEGEND

SYMBOL	DESCRIPTION
	RIGID FIBERGLASS DUCT BOARD
	NEW FLEXIBLE FIBERGLASS DUCT
	CONTROL DAMPER
	MARK OF AIR DISTRIBUTION DEVICE, AND CFM'S
	THERMOSTAT
	SUPPLY GRILLE
	RETURN GRILLE

MECHANICAL PLAN NOTES

2

MECHANICAL LEGEND

3

