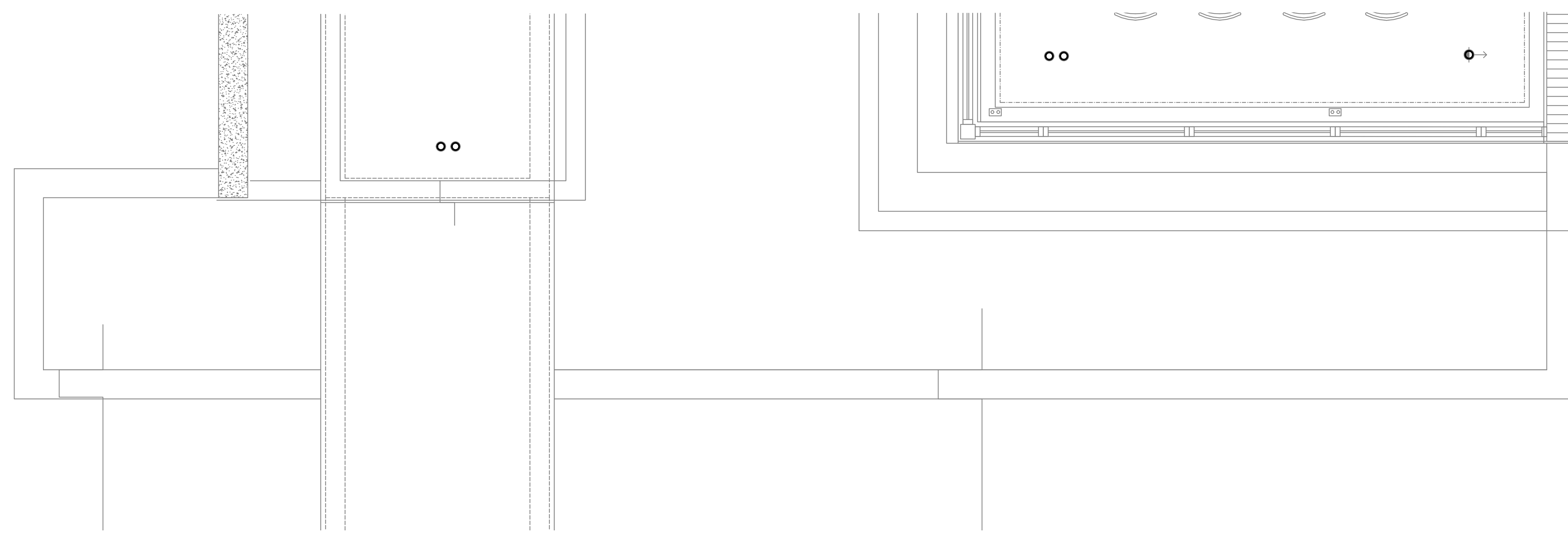

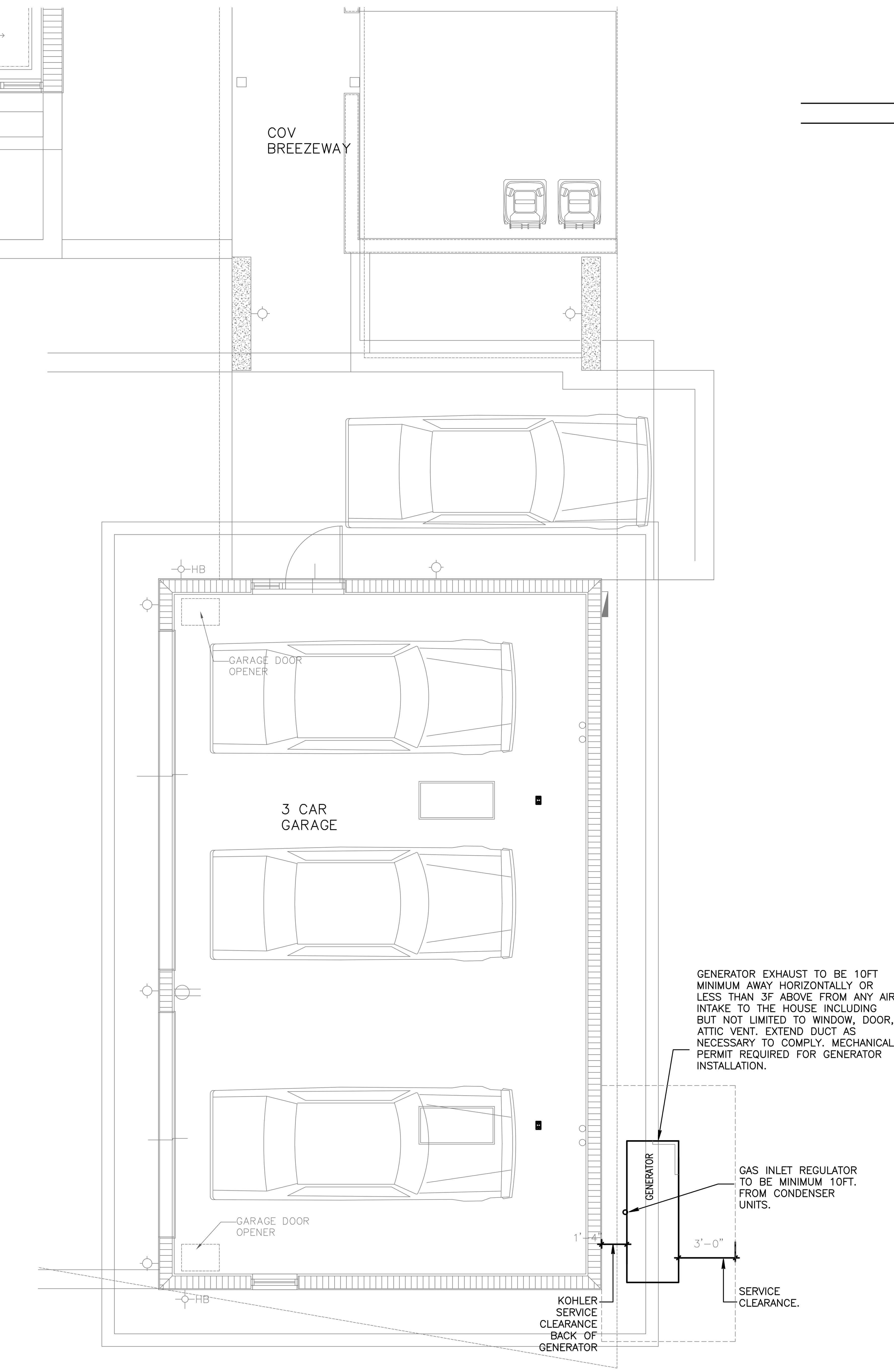

03 / 02 — 02 / 01

HVAC NOTES

1–MECHANICAL CONTRACTOR SHALL COORDINATE WITH ELECTRICAL CONTRACTOR DUCT LOCATION TO AVOID CONFLICTS WITH LIGHT FIXTURES. MINIMUM CLEAR CEILING SPACE TO RUN AC & LIGHTING SYSTEM SHALL BE PROVIDE DEPENDING ON THE LIGHT FIXTURE HOUSING.

2–LOCATION OF ALL SUPPLY AIR AND RETURN AIR CEILING DEVICES SHALL BE COORDINATED WITH TRUSSES LOCATION TO AVOID CONFLICTS.

3–MECHANICAL CONTRACTOR SHALL COORDINATE WITH GC CEILINGS PRIOR TO DUCTWORK ORDERING AND INSTALLATION.

4–FINAL RUN OF CONDENSATE PIPES & TERMINATION SHALL BE COORDINATED WITH ARCHITECT.

5–FINAL RUN OF REFRIGERANT LINES & FINAL LOCATION OF CONDENSER UNIT SHALL BE COORDINATED WITH ARCHITECT.

6–CONDENSER UNIT SHOULD BE INSTALLED OBSERVING MANUFACTURER SERVICE CLEARANCES.

7–CONDENSER UNIT SHOULD BE PLACED SO ROOF RUN–OFF WATER DOES NOT POUR DIRECTLY ON UNIT.

8–MECHANICAL CONTRACTOR SHALL COORDINATE NEW WALL CAP AND LOUVER LOCATION TO AVOID CONFLICTS WITH ELECTRICAL DEVICES AT EXTERIOR WALL, OBSERVING MINIMUM CLEARANCE REQUIRED BY ELECTRICAL CODE.

9–CU MUST BE INSTALLED AT THE FFE OF THE HOUSE, ALL EQUIPMENT TO BE INSTALLED ABOVE FLOOD LEVEL.

10–THE AC SYSTEM MUST BE TESTING AND BALANCE BY CERTIFY THIRD PART.

11–PROVIDE INSULATION TO ALL EXHAUST AND MAKE UP AIR DUCTS WHEN RUNNING INSIDE A/C SPACE AND UNVESTED ATTIC.

12–BACK DRAFT DAMPER TO BE INSTALLED TO ALL EXHAUST DUCT AT THE OUTLET LOCATION EITHER WALL CAP OR ROOF CAP

SOLAR READY CONSTRUCTION

REMARKS: a) CONSTRUCTION OF BUILDINGS AND REMODELING WHERE THE COST OF REMODELING IS MORE THAN 50 PERCENT OF THE ASSESSED VALUE OF THE BUILDING SHALL PROVIDE A ROOF LAYOUT PLAN THAT ILLUSTRATES HOW FUTURE INSTALLATION OF A PHOTOVOLTAIC SYSTEM AND/OR SOLAR WATER HEATING SYSTEM COULD BE ACCOMMODATED. THE PROPERTY OWNER SHALL BE REQUIRED TO PROVIDE FOR THE EVENTUAL INSTALLATION OF ONE SYSTEM. REQUIREMENTS ARE AS FOLLOWS:

REMARKS: 1) PHOTOVOLTAIC SYSTEM. INSTALLATION OF AN APPROPRIATE SIZED CONDUIT, A MINIMUM OF ONE–INCH DIAMETER, LEADING FROM AN EXTERIOR SOUTH–FACING, EAST–FACING, OR WEST–FACING ROOF, WHERE A MINIMUM OF FOUR HOURS OF DIRECT SUNLIGHT IS ACHIEVED, TO A STUBBED JUNCTION BOX ADJACENT TO THE ELECTRICAL METER. ALL EXPOSED CONDUIT SHALL BE CAPPED AND PROVIDED WITH ADEQUATE FLASHING. THE CONDUIT SHALL NOT BE LOCATED ON OR IN THE DIRECTION OF A NORTH FACING ROOF. ROOF REINFORCEMENTS SHALL BE ADDRESSED AT THE TIME OF INSTALLATION.

REMARKS: 2) SOLAR HEATING SYSTEM. INSTALLATION OF 3/4" DIAMETER HOT AND COLD COPPER WATER PIPES FROM A SOUTH–FACING, EAST–FACING AND WEST–FACING, WHERE A MINIMUM OF FOUR HOURS OF DIRECT SUNLIGHT IS ACHIEVED, TO AN EXISTING WATER HEATER TANK. BOTH ENDS OF THE THREE–FOURTHS INCH DIAMETER COPPER PIPES SHALL BE STUBBED OUT AND SHALL NOT BE LOCATED ON OR IN THE DIRECTION OF A NORTH–FACING ROOF. ALL EXPOSED PIPES SHALL BE CAPPED AND PROVIDED WITH ADEQUATE FLASHING. ROOF REINFORCEMENTS SHALL BE ADDRESSED AT THE TIME OF INSTALLATION.

KEY NOTES HVAC

(1) FULL SIZE SUPPLY / RETURN AIR PLENUM.

(2) PROGRAMMABLE THERMOSTAT WITH BUILT–IN HUMIDISTAT MOUNT 48" A.F.F. PROVIDE TEMPERATURE SENSORS AS PER PLANS TO OPERATE ON AVERAGE TEMPERATURE. TEMPERATURE SENSOR AT RETURN DUCT OR INSIDE OF A/C CLOSET.

(3) (VERTICAL) UPFLOW AIR HANDLER UNIT (AHU) AS SIZED ON PLAN. PROVIDE MINIMUM 6" SERVICE / MAINTENANCE AREA AROUND AIR HANDLING UNIT.

(3A) CEILING HUNG (HORIZONTAL) AIR HANDLER UNIT (AHU), AS SIZED ON PLAN WITH AUXILIARY CONDENSATE DRAIN PAN. MECHANICAL CONTRACTOR TO ENCLOSE AHU WITH DRYWALL TO PROTECT FROM HEAT.

(4) CONCRETE PAD MOUNT CONDENSER UNIT ABOVE FLOOD LEVEL. TIE DOWN AS PER MIAMI–DADE APPROVED METHOD. CONDENSER SHALL BE INSTALLED ABOVE FLOOD LEVEL.

(5) 1" DOOR UNDERCUT. TYPICAL.

(6) CEILING EXHAUST FAN & GRILLE, AS SIZED ON PLAN W/BACKDRAFT DAMPER.

(7) EXHAUST DUCT; AS SIZED ON PLAN GOING TO WALL CAP OR ROOF CAP. WALL CAP OR ROOF CAP WITH CORROSION RESISTANT SCREEN, MUST BE MINIMUM 10FT. FROM ANY O/A INTAKE AND MUST BE MINIMUM 3FT. FROM ANY WINDOW.

(8) HVAC DUCTWORK TO BE FIBER GLASS, INSTALLED AS PER SMACNA STANDARDS WITH 1.5" THICK (R–6) INSULATION FIRST FLOOR CEILING SPACE, UNLESS NOTED OTHERWISE.

(9) FLEXIBLE INSULATED DUCTWORK WITH 1.5" FIBERGLASS INSULATION WITH FRK VAPOR BARRIER, CLASS I AIR DUCT, U.L. R–6.0 INSULATION. TYPICAL FIRST FLOOR CEILING.

(10) PROVIDE FLEXIBLE DUCT CONNECTION WITH AHU.

(11) CONDENSATE DRAIN LINE TO DRYWELL CONNECTION. 2" WHEN RUNNING UNDERGROUND.

(11A) CONDENSATE DRAIN LINE RUNNING AT CEILING SPACE TO PARTITION WALL.

(12) REFRIGERANT RUNNING UNDERGROUND INSIDE OF THE 4"ø SCHEDULE 40 CPVC PIPE.

(12A) REFRIGERANT PIPES RUNNING AT CEILING SPACE

(13) REFRIGERANT SUCTION LINE TO BE INSULATED WITH INSULATION HAVING A THERMAL RESISTIVITY OF AT LEAST R–4 AND HAVING AN EXTERNAL PERMEANCE NOT EXCEEDING 0.05 PERM WHEN TESTED IN ACCORDANCE WITH ASTM E96. PROVIDE UV COAT PROTECTION.

(14) REFRIGERANT CIRCUIT ACCESS PORTS LOCATED OUTDOORS SHALL BE FITTED WITH LOCKING–TYPE TAMPER–RESISTANT CAPS OR SHALL BE OTHERWISE SECURED TO PREVENT UNAUTHORIZED ACCESS UNLESS THE PORTS ARE LOCATED INSIDE THE CONDENSING UNIT CABINET (FBCR–M1411.8)

(15) CONTRACTOR MUST VERIFY TOTAL REFRIGERANT PIPING LENGTH AND PIPING LIFT THAT IS NOT GREATER THAN THOSE VALUES RECOMMENDED BY MANUFACTURER. NOTIFY THE ENGINEER'S OFFICE WITH THIS SITUATION AND TO FIND THE BEST SOLUTION.

(16) PROVIDE AUXILIARY CONDENSATE DRAINPAN SYSTEM TO AHU, SEE DETAIL.

(17) 6"ø DOUBLE WALL INSULATED R–8 SHEET METAL 22 GA. OUTSIDE AIR (O/A) DUCT, AS SIZED ON PLAN. O/A SHALL BE MINIMUM 10' AWAY FROM ANY EXHAUST OR VENT.

(18) PROVIDE MOTORIZED DAMPER MD TO O/A DUCTWORKS. THE MOTORIZED DAMPER OPEN WHILE THE A/C UNIT IS WORKING, AND RETURNING TO CLOSE POSITION WHEN CU IS OFF.

(19) DRYER EXHAUST (26 GAUGE MIN), WITHIN RECESSED DRYER VENT BOX, TERMINATING WITH ROOF CAP OR WALL CAP; NO SCREEN.

(20) RANGE EXHAUST DUCT GALVANIZED SHEET METAL 26GA.; AS SIZED ON PLAN TERMINATING WITH ROOF OR WALL CAP WITH BACK DRAFT DAMPER. PROVIDE CORROSION RESISTANT SCREEN.

(21) N/A

(22) PROVIDE 60"x30" ACCESS PANEL FOR INSPECTION, SERVICE, REPAIR AND REPLACEMENT WITHOUT DISABLING THE FUNCTION OF A FIRE–RESISTANCE–RATED ASSEMBLY OR REMOVING PERMANENT CONSTRUCTION.

(23) AC CLOSET AS A RETURN AIR PLENUM. NO COMBUSTIBLE MATERIAL INSIDE OF CLOSET. AC CLOSET DOOR AND AC CLOSET PLENUM SHALL MEET ASTM E–84, 25/50 FLAME/SMOKE DEVELOP MATERIAL.

(24) INTAKE AIR LOUVER WITH FILTER AND MOTORIZED DAMPER CONTROL, WHICH WILL BE IN THE CLOSED POSITION DURING THE EXHAUST FAN ARE TURN OFF.

(25) EXHAUST FAN IN BASEMENT ARE ELECTRICALLY INTERLOCK WITH THE CARBON MONOXIDE SENSOR OF THE SPACE.

(26) FIREPLACE BY OTHERS, PLEASE REFER TO PERMIT AND SHOP DWGs BY EVENINGS DELIGHT FOR FOR TECHNICAL REQUIREMENTS, SPECIFICATIONS, LOCATIONS OF GAS AND ELECTRIC OUTLETS AS REQUIRED.

(27) PROVIDE INSTALLATION OF CARBON MONOXIDE DETECTOR, AND SHALL COMPLY WITH NFPA 720 AND BE ANSI/UL 2034 LISTED AND IAS CERTIFIED

(28) IN WALL VENTILATION FIREPLACE:
A METAL OR PLASTIC IDENTIFICATION PLATE SHALL BE PERMANENTLY MOUNTED TO THE EXTERIOR OF THE BUILDING AT A MINIMUM HEIGHT OF EIGHT (8) FEET ABOVE GRADE DIRECTLY IN LINE WITH THE EXHAUST VENT TERMINAL FOR THE HORIZONTALLY VENTED GAS FUELED HEATING APPLIANCE OR EQUIPMENT. THE SIGN SHALL READ, IN PRINT SIZE NO LESS THAN ONE–HALF (1/2) IN. IN SIZE, "GAS VENT DIRECTLY BELOW. KEEP CLEAR OF ALL OBSTRUCTIONS".

(29) CONSTRUCTION RETURN AIR ENCLOSURE PLENUM SHALL BE FBC – MECHANICAL, 8th EDITION (2023), SECTION 602.2. MATERIALS WITHIN PLENUMS SHALL BE NONCOMBUSTIBLE OR SHALL BE LISTED AND LABELED AS HAVING A FLAME SPREAD INDEX OF NOT MORE THAN 25 AND A SMOKE–DEVELOPED INDEX OF NOT MORE THAN 50 WHEN TESTED IN ACCORDANCE WITH ASTM E84 OR UL 723. AS PER SECTION 602.2.1 FBC – MECHANICAL, 8th EDITION (2023)

(30) BLOWER DOOR NEED A TEST TO SHOW COMPLIANCE WITH AIR LEAKAGE ACCEPTED ACCORDING WITH FBC–EC R402.4

SCOPE OF WORK:
NEW AC SYSTEM IN NEW HOUSE.
NEW AIR DISTRIBUTION AND EXHAUST FAN WITH EXHAUST DUCT FOR BATHROOMS.

ENERGY CONSERVATION NOTES:

ALL HVAC EQUIPMENT SHALL BE EQUIPPED WITH PROGRAMMABLE THERMOSTAT TO ALLOW SYSTEM SHUT DOWN AFTER HOURS OF OPERATION. ALL LIGHTING HAS AFTER HOURS SHUT DOWN. ALL AC EQUIPMENT PROVIDE WITH OUTSIDE AIR MOTORIZED DAMPERS TO SHUT DOWN WHEN SPACE IS NOT USED.

02 / 01 — 02 / 01

PARTIAL FIRST RCP: 02

SCALE 1/4" = 1'–0"

N

This item has been digitally signed and sealed by Amarilis Rodriguez, PE, on __________. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

JOB# 24-0407

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> Plumbing > Fire Protection
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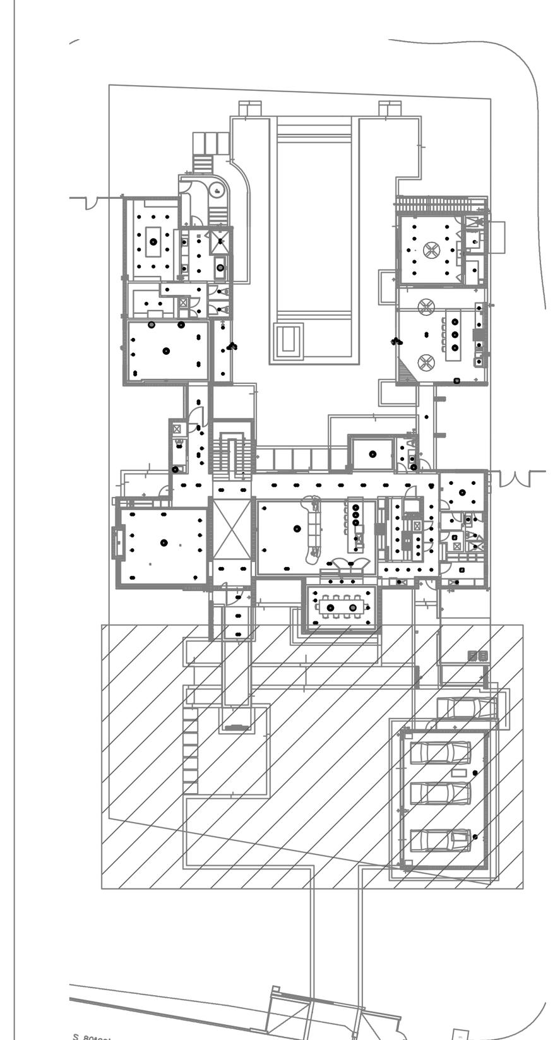
Amarilis Rodriguez, P.E.
License Number 60236
Signature
Date

Date: 2024.06.18 12:27:31 -04'00'

NOTES



KEY PLAN
SCALE 1/4" = 1'–0"

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CONSULTANT(S)

NO.	REVISION/SUBMISSION	DATE
	OWNER REVIEW	03–11–24
	PERMIT SUBMITTAL	06–07–24

PROJECT

New 2–Story Residence:
6100 W Suburban Dr. Pinecrest, Fl 33156

DRAWING

Partial First Reflected Mechanical Plan: 02

SEAL

Nelson de Leon
AR 13937

SCALE As Shown

DRAWN

REVIEWED

PROJ. NO. 351

SHEET NO.

M–01.1