

MECHANICAL AND ELECTRICAL SYMBOLS AND ABBREVIATIONS

A	ABOVE FINISH FLOOR ABOVE FINISH GRADE ACRYLONITRILE BUTADIENE STYRENE PIPE AIR CONDITIONING AIR HANDLING UNIT ALTERNATING CURRENT ALUMINUM AMERICAN NATIONAL STANDARDS INSTITUTE AMERICAN SOCIETY OF MECHANICAL ENGINEERS AMERICAN WIRE GAUGE AMERICANS WITH DISABILITIES ACT AMPERE ANALOG INPUT ANALOG OUTPUT ARCHITECT or ARCHITECTURAL AUTHORITY HAVING JURISDICTION AUTOMATIC TRANSFORMER SWITCH	AFF AFG ABS A/C AHU AC AL ANSI ASME AWG ADA AMP or A AI AO ARCH AHJ ATS
B	BELOW CEILING BELOW GRADE BINARY INPUT BINARY OUTPUT BOOT WASH BRITISH THERMAL UNIT BTUs PER HOUR BUILDING	BC BG BI BO BW BTU BTUH BLDG
C	CABLE TELEVISION CAPACITY CATEGORY CEILING MOUNT CELSIUS CHILLED WATER CHILLED WATER RETURN CHILLED WATER SUPPLY CIRCUIT BREAKER CLEANOUT CLOTHES WASHER CONNECTION BOX COLD WATER (DOMESTIC) COMMON CONCRETE CONDENSING UNIT CONDUIT CONDUIT ONLY (WITH PULL STRING) COPPER COUNTER TOP CROSS-LINKED POLYETHYLENE PIPE CUBIC FEET PER MINUTE CUBIC YARD	CATV CAP CAT CLG C CHW CHWR CHWS CB CO CCB CW C CONC CU C CO CU CT PEX CFM CU YD
D	DEPTH or DEEP DIRECT CURRENT DIRECT DIGITAL CONTROL DIRECT EXPANSION DISCONNECT SWITCH DISH WASHER DRINKING FOUNTAIN DRY BULB	D DC DDC DX DS DW DF DB
E	ELECTRIC or ELECTRICAL ELECTRIC WATER COOLER ELECTRIC HEATER ELECTRICAL CONTRACTOR ELECTRICAL METALLIC TUBING ENTERING AIR TEMPERATURE ENTERING WATER TEMPERATURE EQUIPMENT EXHAUST EXHAUST AIR EXHAUST FAN EXHAUST GRILLE EXISTING EXISTING TO REMAIN EXTERNAL STATIC PRESSURE	E or ELEC EWC EH EC EMT EAT EWT EQUIP EXH EA EF EG EXIST ETR ESP
F	FAHRENHEIT FAN COIL UNIT FEET FEET PER MINUTE FIBER OPTIC CABEL FINISH FLOOR CLEAN OUT FINISH GRADE FINISH GRADE CLEAN OUT FIRE ALARM FLEXIBLE METALLIC CONDUIT FLOOR DRAIN FLOOR SINK	F FCU FT FPM FOC FFCO FG FGCO FA FMC FD FS
G	GALLON GALLONS PER FLUSH GALLONS PER HOUR GALLONS PER MINUTE GALVANIZED RIGID STEEL CONDUIT GAS GAUGE GENERAL CONTRACTOR GLOBAL POSITIONING SYSTEM GOVERNMENT FURNISHED/CONTRACTOR INSTALLED GOVERNMENT FURNISHED/GOVERNMENT INSTALLED GROUNDING ELECTRODE CONDUCTOR GROUNDING (BONDING) CONDUCTOR GROUND FAULT CIRCUIT INTERRUPTER GROUND FAULT PROTECTION FOR EQUIPMENT	GAL GPF GPH GPM GRC G GA GC GPS GFCI GFGI GEC G GFI GPFE
H	HANDHOLE HEATING HEATING WATER RETURN HEATING WATER SUPPLY HIGH DENSITY POLYETHYLENE CONDUIT HORSEPOWER HOT GAS RE-HEAT HOT WATER (DOMESTIC) HOT WATER HEATER HOT WATER PUMP HOT WATER RECIRC. (DOMESTIC) HOUR	HH HTG HR HS HDPE HP HGRH HW HWH HWP HWR HR
K	KELVIN KILOWATT	K KW
L	LAUNDRY TUB LAVATORY LEAVING AIR TEMPERATURE LEAVING WATER TEMPERATURE LIGHTING LIQUIDTIGHT FLEXIBLE METAL CONDUIT	LT LAV LAT LWT LTG LFMC
M	KCMIL (THOUSAND CIRCULAR MILLS) MAIN CIRCUIT BREAKER MAIN LUG ONLY MANHOLE MANUFACTURER MAXIMUM MAXIMUM OVERCURRENT PROTECTION MECHANICAL CONTRACTOR MINIMUM MINIMUM CIRCUIT AMPACITY NEMA RATED MOTOR STARTER MOUNTED MULTIMODE	MCM MCB MLO MH MANUF MAX MOCP MC MIN MCA MS MTD MM
N	NATIONAL ELECTRICAL CODE (NFPA 70) NATIONAL ELECTRICAL MANUFACTURER'S ASSOC. NATIONAL FIRE PROTECTION ASSOCIATION NATIONALLY RECOGNIZED TESTING LABORATORY NATURAL GAS NEUTRAL (GROUNDED) CONDUCTOR NOMINAL NON FUSED NORMALLY CLOSED NORMALLY OPEN NORTH NOT APPLICABLE NOT TO SCALE	NEC NEMA NFPA NRTL G or NAT GAS N NOM NF NC NO N N/A NTS
O	ON CENTER OUTDOOR AIR OUTSIDE DIAMETER OUTSIDE PLANT CABLE OVERHEAD	O.C. OA OD OSP OH
P	PASSIVE INFRARED PHASE POLYVINYL CHLORIDE POLYVINYL CHLORIDE CONDUIT POUNDS POUNDS PER SQUARE INCH PRESSURE REDUCING VALVE PULL BOX	PIR PH OR Ø PVC PVC LBS PSI PRV PB
R	RECEPTACLE REQUIRED RETURN AIR RETURN GRILLE ROOF TOP UNIT REVOLUTIONS PER MINUTE	RCPT REQ'D RA RG RTU RPM
S	SENSIBLE SERVICE ENTRANCE SWITCHBOARD SERVICE SINK SHOWER SINGLE MODE SINGLE POLE, DOUBLE THROW SPECIFICATIONS SQUARE FEET STRAND SUPPLY AIR SUPPLY DIFFUSER SURGE PROTECTION DEVICE	SENS SES SS SH SM SPDT SPEC SQ FT or SF ST SA SD SPD
T	TAMPERPROOF ENCLOSURE TELECOMMUNICATIONS ROOM TELEPHONE TELEVISION TEMPERATURE (CHANGE IN) TEMPERATURE/PRESSURE TEMPERATURE CONTROL CONTRACTOR THOUSAND BTUs PER HOUR TOTAL TRANSIENT VOLTAGE SURGE SUPPRESSION TYPICAL	TP TR T TV TEMP (ΔT) T/P TC MBH TOT TVSS TYP
U	UNDERGROUND UNDERWRITERS LABRATORIES UNINTERRUPTIBLE POWER SUPPLY UNLESS NOTED OTHERWISE UNSHIELDED TWISTED PAIR	UG UL UPS UNO UTP
V	VENT BELOW SLAB VENT THROUGH ROOF VENTILATION FAN VOLT-AMPERES VOLTS VOLTS ALTERNATING CURRENT	VBS VTR VF VA V VAC
W	WALL HYDRANT WASH TUB WATER CLOSET WATER COLUMN (in inches) WATER SERVICE WATT(S) WEATHERPROOF ENCLOSURE WET BULB WIRE WAY WITH	WH WT WC "WC W W WP WB WW W/
X	TRANSFORMER	XFMR

PLUMBING SYMBOLS

	PIPE TURNING UP
	PIPE TURNING DOWN
	CONDENSATE DRAIN LINE
	SANITARY DRAIN BELOW GRADE
	GREASE SANITARY DRAIN BELOW GRADE
	SANITARY DRAIN ABOVE GRADE
	SANITARY VENT
	DOMESTIC COLD WATER
	DOMESTIC HOT WATER
	DOMESTIC HOT WATER RECIRC
	TEMPERED DOMESTIC WATER
	WATER SERVICE PIPING
	FIRE PROTECTION PIPING
	NATURAL GAS
	UNION
	BALL VALVE
	CHECK VALVE
	GATE VALVE
	BUTTERFLY VALVE
	STRAINER
	THERMOMETER
	GAUGE
	TEST PORT
	FLOW CONTROL VALVE
	GAS COCK
	SOLENOID VALVE
	PRESSURE REDUCING VALVE
	NATURAL GAS REGULATOR

SYMBOL MODIFICATION DESIGNATORS/ABBREVIATIONS

OA	OUTDOOR AIR
RA	RETURN AIR
SA	SUPPLY AIR
DDC	DIRECT DIGITAL CONTROL
MC	MECHANICAL CONTRACTOR
TC	TEMPERATURE CONTROL CONTRACTOR
EC	ELECTRICAL CONTRACTOR
GC	GENERAL CONTRACTOR
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
BG	BELOW GRADE
FG	FINISHED GRADE
FFCO	FINISH FLOOR CLEAN OUT
FWCO	FINISH WALL CLEAN OUT
FGCO	FINISH GRADE CLEAN OUT
UNO	UNLESS NOTED OTHERWISE

GENERAL SYMBOLS

	DETAIL REFERENCE
	DETAIL NUMBER
	SHEET NUMBER
	ELEVATION REFERENCE
	DETAIL NUMBER
	SHEET NUMBER
	SECTION CUT
	DETAIL NUMBER
	SHEET NUMBER
	KEYED PLAN NOTE
	REVISION NOTE
	ELEVATION
	CONNECT TO EXISTING, FIELD VERIFY LOCATION & MATERIAL OF EXISTING

POWER SYMBOLS

	SINGLE RECEPTACLE
	DUPLEX RECEPTACLE
	SPLIT CONTROLLED DUPLEX RECEPTACLE
	DOUBLE DUPLEX RECEPTACLE
	SPECIAL RECEPTACLE (# = NEMA CONFIGURATION)
	FLUSH FLOOR DUPLEX RECEPTACLE
	SINGLE POLE WALL SWITCH
	TWO POLE WALL SWITCH
	THREE WAY WALL SWITCH
	KEYED WALL SWITCH
	SINGLE POLE, DOUBLE THROW (SPDT) SWITCH (CENTER OFF)
	MOTOR HP RATED SWITCH WITHOUT OVERLOAD PROTECTION
	MECHANICAL DIAL TIMER WALL SWITCH
	LINE VOLTAGE OCCUPANCY SENSING WALL SWITCH
	DUAL RELAY LINE VOLTAGE OCCUPANCY SENSING WALL SWITCH
	LOW VOLTAGE OCCUPANCY SENSOR
	POWER PACK FOR LOW VOLTAGE OCCUPANCY SENSORS
	LIGHTING CONTACTOR
	EXTERIOR PHOTOCCELL
	CONTACTOR
	PUSH BUTTON OPERATOR
	CLASS 2 TRANSFORMER POWER SUPPLY
	DOOR ANNUNCIATOR A/V HORN STROBE
	JUNCTION BOX
	MOTOR
	MOTORIZED DAMPER
	DISCONNECT SWITCH
	BRANCH CIRCUIT PANELBOARD
	SWITCHBOARD

MECHANICAL SYMBOLS

	THERMOSTAT
	TEMPERATURE SENSOR
	CONTROL CABLE, VERIFY TYPE WITH EQUIPMENT MANUFACTURER
	SQUARE SUPPLY DIFFUSER - TYPE AND AIRFLOW INDICATED
	SQUARE RETURN GRILLE - TYPE INDICATED
	WALL DIFFUSER
	GRILLE/DIFFUSER TAG
	TOP: DEVICE TAG (SEE SCHEDULE)
	MIDDLE: NECK SIZE
	BOTTOM: AIRFLOW
	MANUAL BALANCING DAMPER
	RECTANGULAR RETURN OR RELIEF AIR DUCT UP
	RECTANGULAR RETURN OR RELIEF AIR DUCT UP
	RECTANGULAR SUPPLY AIR DUCT UP
	RECTANGULAR SUPPLY AIR DUCT DOWN
	RECTANGULAR RETURN OR EXHAUST AIR DUCT DOWN
	ROUND DUCT UP
	ROUND DUCT DOWN
	FLEXIBLE DUCTWORK - MAX 5'
	RIGID DUCT RUNOUT
	90° ELBOW WITH TURNING VANES
	FIRE/SMOKE DAMPER
	FIRE DAMPER

FIRE ALARM DEVICE MOUNTING

- VISUAL UNIT**
DEVICE BOTTOM 80" ABOVE HIGHEST FLOOR LEVEL OR TOP 6" BELOW CEILING; WHICHEVER IS LOWER (PER ADA)
- AUDIO UNIT**
DEVICE BOTTOM 80" ABOVE HIGHEST FLOOR LEVEL OR TOP 6" BELOW CEILING; WHICHEVER IS LOWER (PER ADA)

* TOP OF UNIT NOT LESS THAN 90" ABOVE FLOOR AND NOT LESS THAN 6" BELOW CEILING (NFPA) (BOTTOM AT 88" WITH CMU COURSES). MOUNT AT NFPA HEIGHT ONLY IF REQUIRED BY LOCAL AHJ.
- AUDIO/VISUAL UNIT**
DEVICE BOTTOM 80" ABOVE HIGHEST FLOOR LEVEL OR TOP 6" BELOW CEILING; WHICHEVER IS LOWER (PER ADA)
- PULL STATION**
HIGHEST OPERABLE PART SHALL NOT BE MORE THAN 48" ABOVE THE FLOOR (FRONT APPROACH) (PER ADA)

CIRCUIT AND RACEWAY SYMBOLS

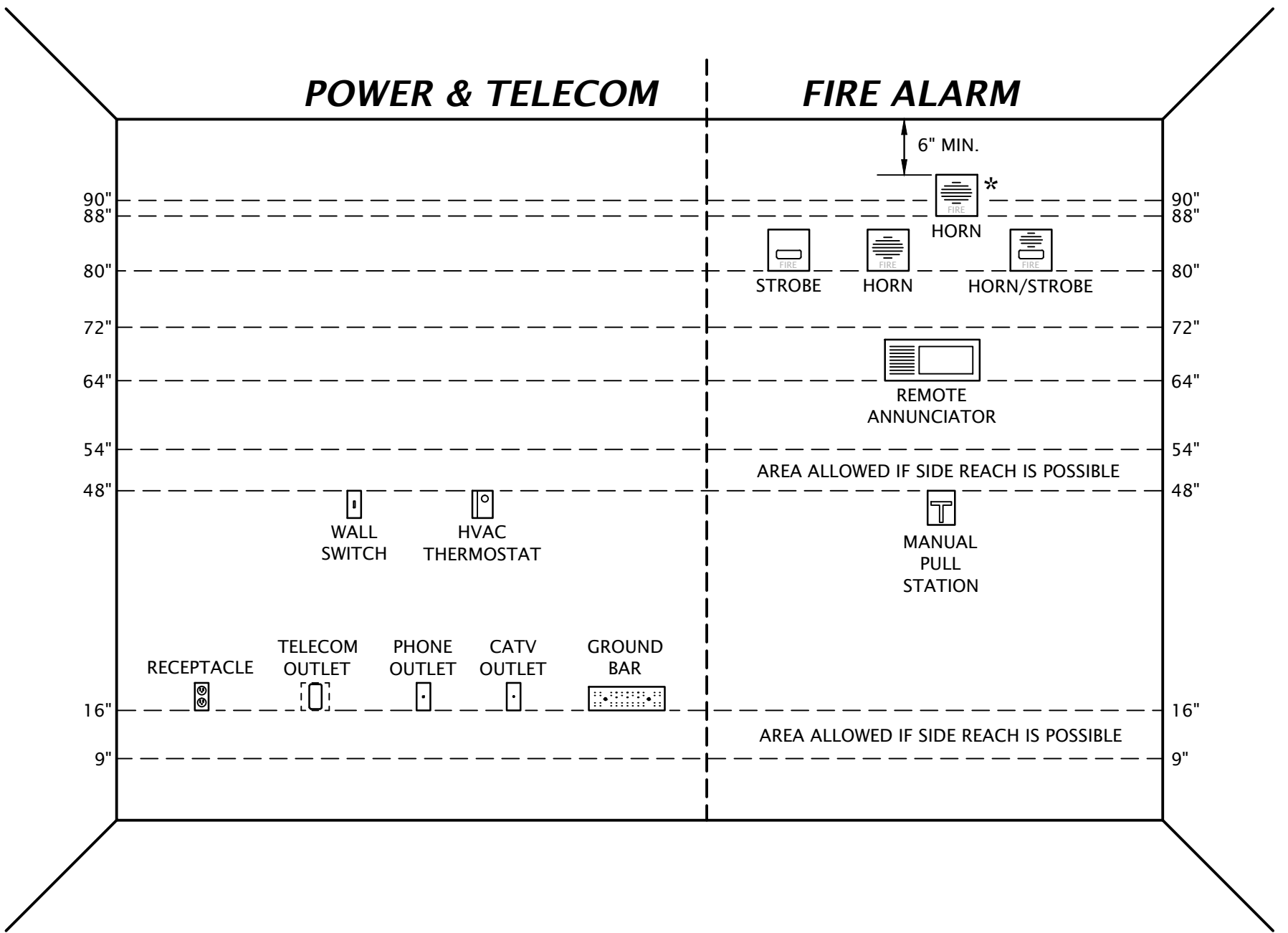
	CIRCUIT DESIGNATION: TOP INDICATES PANEL OF CIRCUIT ORIGIN BOTTOM INDICATES CIRCUIT NUMBER
	HOMERUN - WIRING TO PANEL OF CIRCUIT ORIGIN
	PARTIAL HOMERUN - WIRING TO PANEL OF CIRCUIT ORIGIN
	CONDUIT CONCEALED IN WALL OR ABOVE CEILING
	CONDUIT BELOW GRADE OR EMBEDDED IN CONCRETE
	LINE VOLTAGE CIRCUIT CONDUCTORS SHORT = HOT/TRACER/SWITCH LEG CONDUCTOR LONG = NEUTRAL (GROUNDED) CONDUCTOR CURVED = GROUNDING (BONDING) CONDUCTOR
	CONDUIT STUB OUT WITH NYLON END BUSHING
	CONDUIT TURNED UP
	CONDUIT TURNED DOWN
	GROUNDING CONNECTION

LIGHTING SYMBOLS

	STATIC LED TROFFER
	PENDANT OR SURFACE MOUNTED LINEAR LUMINAIRE
	LED STRIP LIGHT
	SURFACE MOUNTED ROUND LIGHT
	RECESSED DOWNLIGHT
	WALL MOUNTED LUMINAIRE
	DECORATIVE PENDANT
	SINGLE FACE EXIT SIGN - WALL AND CEILING MOUNTED WITH DIRECTIONAL ARROWS AS INDICATED ON PLANS
	DOUBLE FACE EXIT SIGN - WALL AND CEILING MOUNTED WITH DIRECTIONAL ARROWS AS INDICATED ON PLANS
	REMOTE EMERGENCY LIGHTING UNIT

SITE ELECTRICAL SYMBOLS

	UNDERGROUND ELECTRICAL SERVICE LATERAL
	UNDERGROUND ELECTRICAL PRIMARY
	UNDERGROUND TELEPHONE SERVICE
	UNDERGROUND CATV SERVICE
	POLE MOUNTED AREA LIGHT
	GRADE MOUNTED LIGHT
	RECESSED DOWNLIGHT/FLAG UPLIGHT
	POWER COMPANY PAD MOUNTED UTILITY TRANSFORMER
	POWER COMPANY UTILITY POLE



ELECTRICAL DEVICE MOUNTING HEIGHTS

1 No Scale

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TELECOMMUNICATIONS SYMBOLS

	APARTMENT PHONE OUTLET
	TELECOMMUNICATIONS OUTLET
	APARTMENT CATV OUTLET
	TELEPHONE TERMINAL BOARD

FIRE ALARM SYMBOLS

	FIRE ALARM CONTROL PANEL
	FIRE ALARM REMOTE ANNUNCIATOR PANEL
	MANUAL PULL STATION
	HEAT DETECTOR
	SMOKE DETECTOR
	ADDRESSABLE MONITORING MODULE
	NOTIFICATION HORN APPLIANCE
	MINIATURE NOTIFICATION HORN APPLIANCE
	LOW FREQUENCY NOTIFICATION HORN APPLIANCE
	NOTIFICATION STROBE APPLIANCE
	NOTIFICATION HORN/STROBE APPLIANCE
	NOTIFICATION LOW FREQUENCY SOUNDER/STROBE APPLIANCE
	FIRE ALARM RELAY
	ELECTROMAGNETIC DOOR HOLDER
	SMOKE DAMPER OR COMBINATION FIRE/SMOKE DAMPER
	FIRE SPRINKLER FLOW SWITCH
	FIRE SPRINKLER TAMPER SWITCH
	FIRE SPRINKLER BELL/GONG OR HORN/STROBE
	120V COMBINATION CO/SMOKE ALARM

SYMBOL MODIFYING DESIGNATORS

CLG	CEILING MOUNTED • FLUSH MOUNTED IN SUSPENDED OR HARD CEILINGS • SURFACE MOUNTED TO STRUCTURE ABOVE IN OPEN CEILINGS
CT	MOUNT BOTTOM OF DEVICE AT 6" ABOVE COUNTERTOP
EM	GRADE LUMINAIRE WITH EMERGENCY BATTERY BACKUP
GFI	GROUND FAULT CIRCUIT INTERRUPTING DEVICE
NL	NIGHTLIGHT WIRED TO UNSWITCHED HOT CONDUCTOR
WP	PROVIDE WEATHERPROOF ENCLOSURE FOR DEVICE
XX"	MOUNTING HEIGHT OF DEVICE ABOVE FINISHED FLOOR

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THE RESERVES at MAGNOLIA
NEW APARTMENT COMPLEX
DENTON, TEXAS

5-17-2023

REVISION:

DATE: 06-26-2023

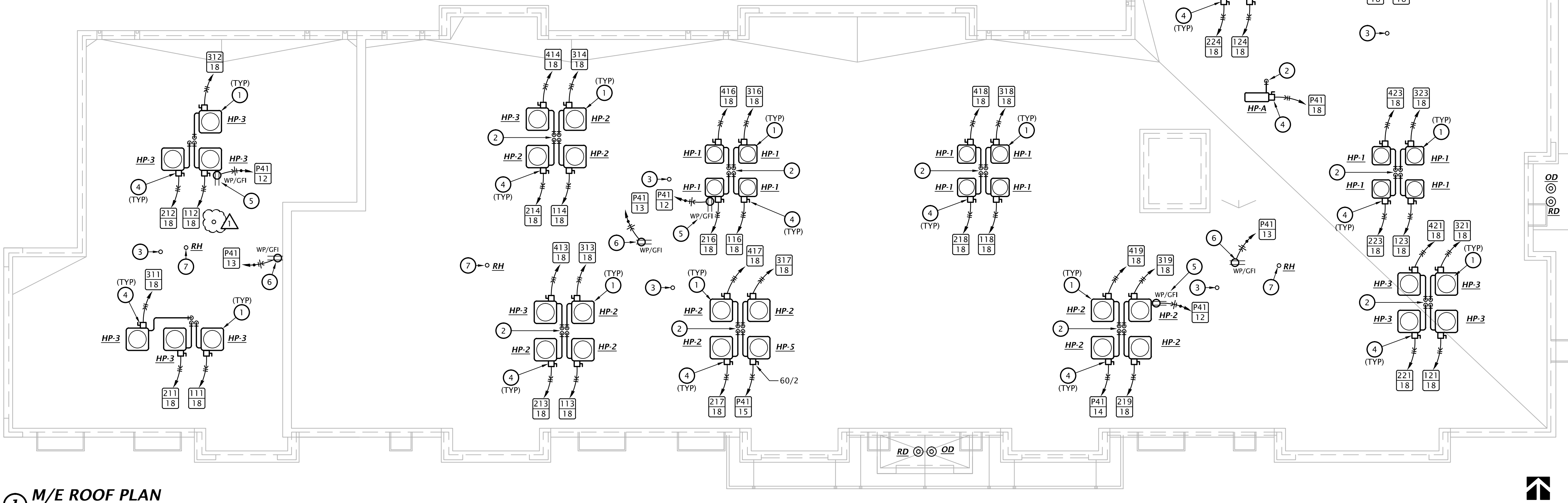
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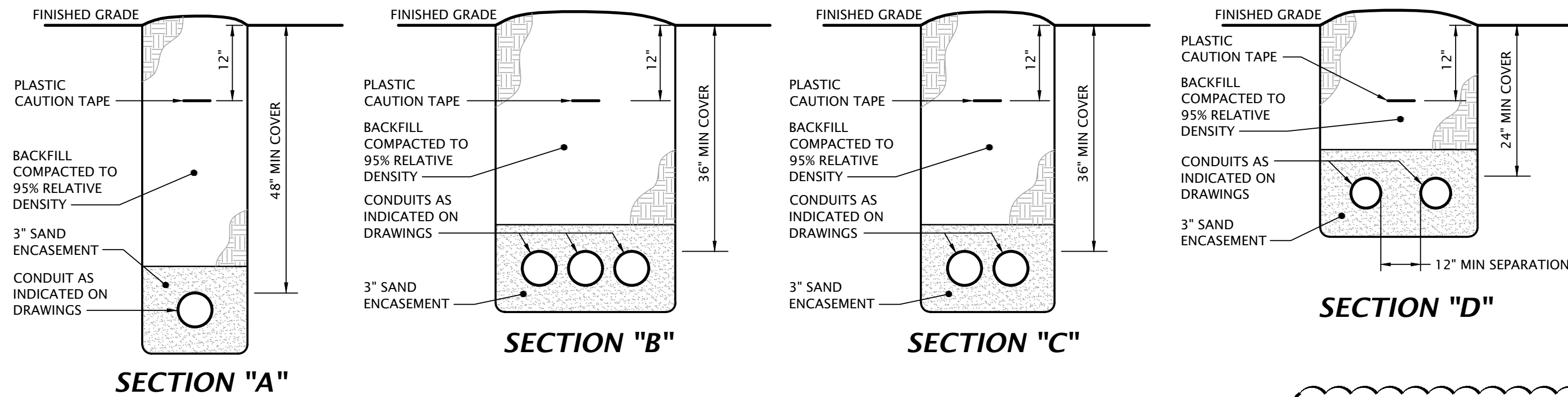
ROOF PLAN NOTES BY SYMBOL

1. MOUNT CONDENSING UNIT TO UNISTRUT FRAME SUPPORTED ON NVENT CADDY PYRAMID ROOF SUPPORTS. PROVIDE VIBRATION ISOLATORS BETWEEN ROOF SUPPORTS AND UNISTRUT FRAME. COORDINATE INSTALLATION WITH ROOFING CONTRACTOR.
2. REFRIGERANT PIPING THROUGH ROOF TO MATCHING BLOWER COIL. PROVIDE PIPING PENETRATION ASSEMBLY EQUAL TO RPH AW SERIES ROOF VAULT WITH EXIT SEALS FOR REFRIGERANT PIPING AND ELECTRICAL CONDUIT AND TWO ADDITIONAL SPARE EXIT SEALS. SUBMIT PRODUCT DATA FOR REVIEW PRIOR TO INSTALLATION.
3. 3" PLUMBING VENT THROUGH ROOF.
4. UNLESS NOTED OTHERWISE, PROVIDE 30A/2P, NON-FUSED DISCONNECT SWITCH IN NEMA 3R ENCLOSURE AND MAKE FINAL CONNECTION TO EQUIPMENT IN LFMC RACEWAY. MOUNT TO UNISTRUT FRAME SUPPORTED FROM EQUIPMENT SUPPORT RAILS. PANEL OF ORIGIN NUMBER SHOWN ON HOMERUN TAG INDICATES UNIT BEING SERVED.
5. MOUNT RECEPTACLES TO UNITSTRUT FRAME SUPPORTED FROM CONDENSING UNIT UNISTRUT FRAME.
6. PROVIDE RECEPTACLE ON ROOF FOR FUTURE RADON FAN. COORDINATE EXACT LOCATION PRIOR TO COMMENCING WORK. COORDINATE ROOF PENETRATIONS WITH ROOFING CONTRACTOR AND G.C.
7. ROUTE ROOF HYDRANT DRAIN TO NEAREST MECHANICAL CLOSET AND DRAIN TO FLOOR DRAIN.



1 M/E ROOF PLAN

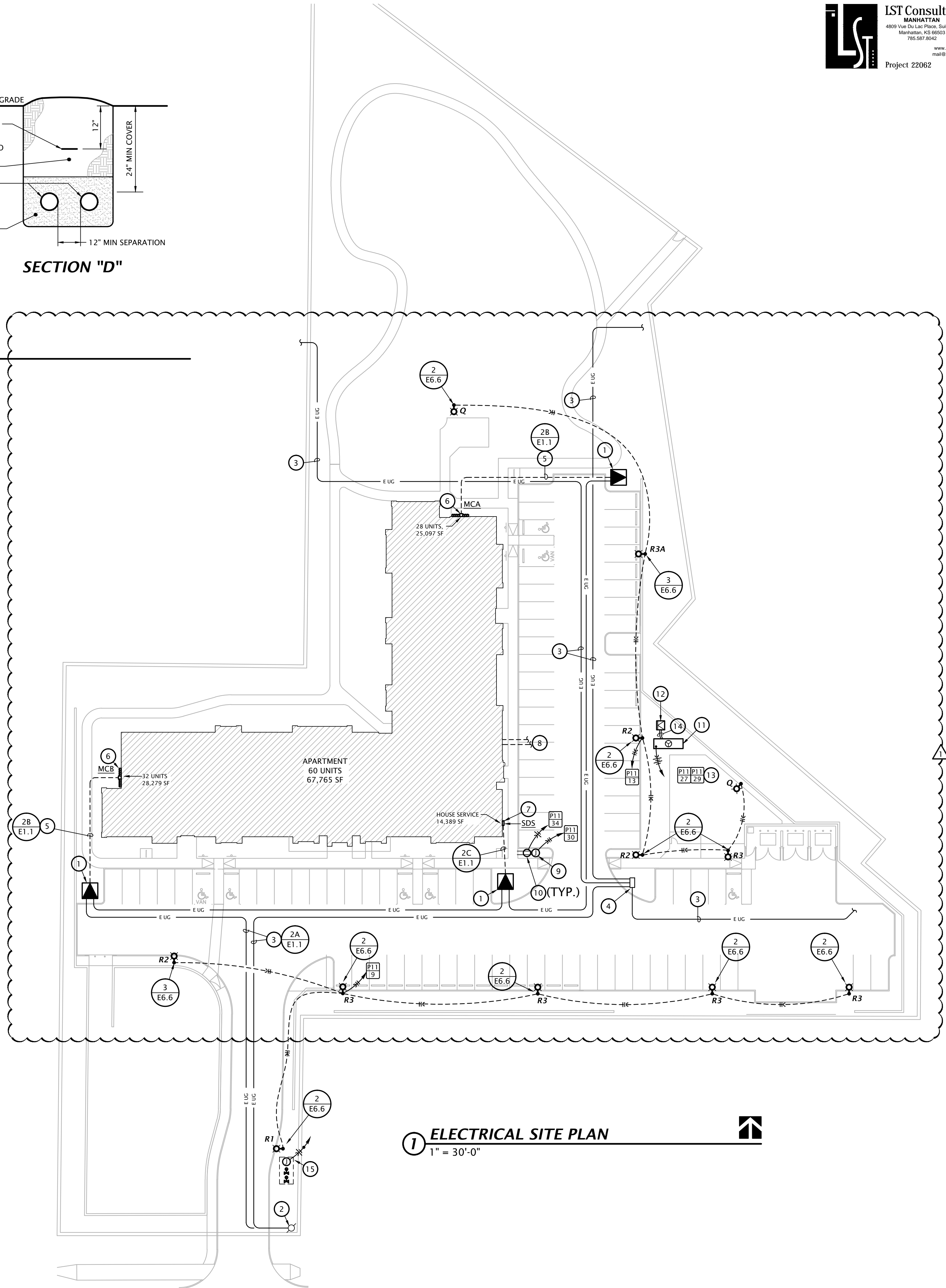
1/8" = 1'-0"



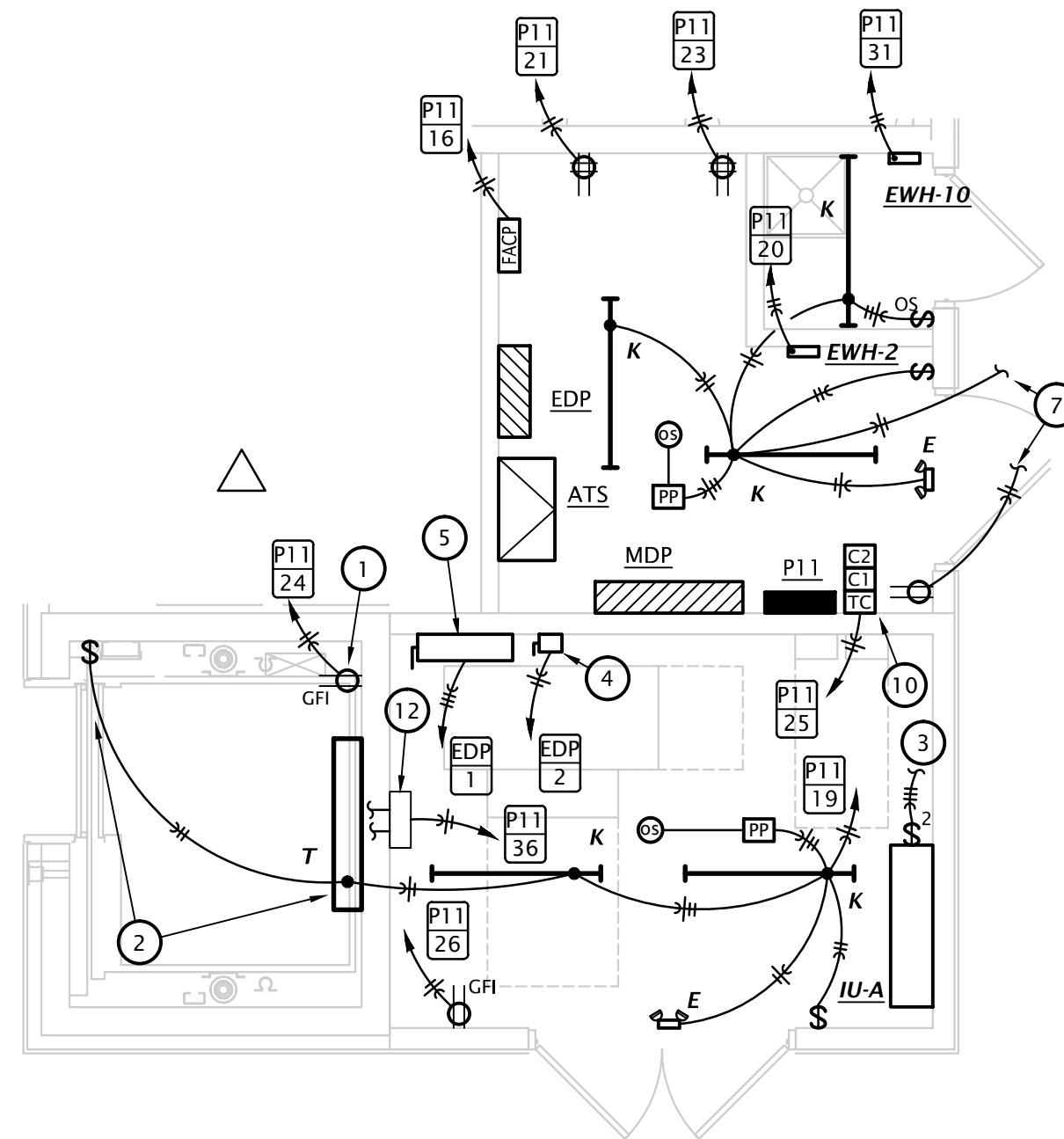
2 CONDUIT TRENCH DETAILS
No Scale

3 ELECTRICAL SITE PLAN NOTES BY SYMBOL

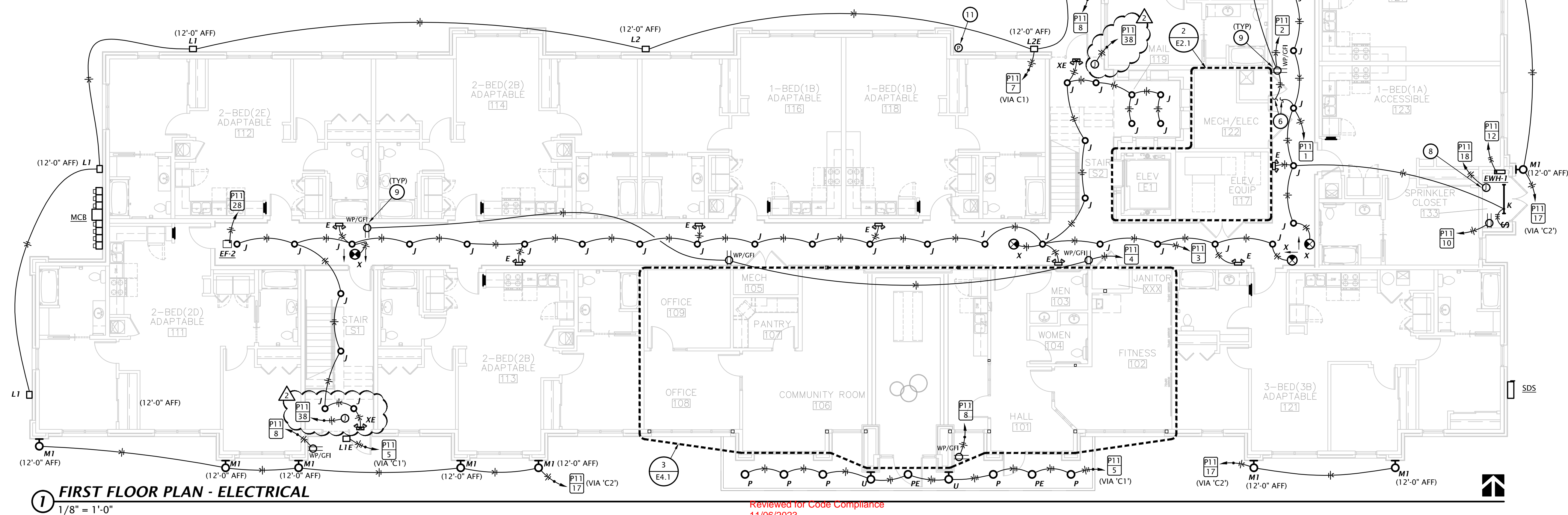
- POWER COMPANY PAD MOUNTED TRANSFORMER. CONCRETE PAD BY GENERAL CONTRACTOR PER LOCAL POWER COMPANY STANDARDS. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH DENTON MUNICIPAL ELECTRIC PRIOR TO COMMENCING WORK.
- EXISTING UTILITY POLE TO BE UTILIZED FOR NEW 3-PHASE PRIMARY SERVICE DROP. COORDINATE PRIMARY CONDUIT STUB-UP WITH POWER COMPANY.
- POWER COMPANY UNDERGROUND PRIMARY ELECTRICAL DISTRIBUTION. SEE CIVIL DRAWINGS FOR MORE INFORMATION.
- 3-PHASE PRIMARY PEDESTAL JUNCTION BOX BY POWER COMPANY. VERIFY EXACT LOCATION WITH DENTON MUNICIPAL ELECTRIC.
- UNDERGROUND SERVICE LATERAL. PROVIDE CONDUIT AND CONDUCTORS PER 2:E1.1 AND RISER DIAGRAMS ON SHEET E6.2.
- APARTMENT UNIT METER CENTER. SEE RISER DIAGRAMS ON SHEET E6.2.
- HOUSE SERVICE METER AND DISCONNECT SWITCH. SEE RISER DIAGRAM ON SHEET E6.2.
- (2) 3" CONDUITS FOR COMMUNICATIONS SERVICES. PROVIDE PULL STRING IN EACH RACEWAY. VERIFY TERMINATION POINTS AT PROPERTY LINE WITH LOCAL COMMUNICATIONS SERVICE PROVIDERS.
- MAKE FINAL CONNECTION TO OWNER PROVIDED SINGLE PORT EV CHARGING STATION EQUIPMNT. VERIFY EXACT REQUIREMENTS WITH MANUFACTURER'S INSTRUCTIONS
- MOUNT RECEPTACLE ON BOLLARD 18" AFG. COORDINATE EXACT LOCATION REQUIREMENTS WITH G.C.
- EMERGENCY STANDBY DIESEL GENERATOR. CONCRETE PAD BY GC PER GENERATOR MANUFACTURER'S RECOMMENDATIONS. SEE SPECIFICATIONS AND RISER DIAGRAM, SHEET E6.3.
- MANUAL TRANSFER SWITCH 'MTS'. CONCRETE PAD BY GC PER EQUIPMENT MANUFACTURER'S RECOMMENDATIONS. SEE SPECIFICATIONS AND RISER DIAGRAM, SHEET E6.3.
- PROVIDE CIRCUITRY FOR GENSET BATTERY CHARGER AND COOLANT HEATER CONSISTING OF 4#8, #8G, 1" C.
- UNDERGROUND CONDUITS FOR GENERATOR FEEDER AND CONTROL CABLING. SEE RISER DIAGRAM ON SHEET E6.3.
- 120V POWER FOR FIRE SPRINKLER TAMPER SWITCHES. SEE CIVIL DRAWING FOR EXACT LOCATION. COORDINATE WORK WITH FIRE SPRINKLER SYSTEMS INSTALLER.



1. INSTALL RECEPTACLE ON WALL OF ELEVATOR PIT. VERIFY EXACT LOCATION WITH ELEVATOR EQUIPMENT INSTALLER.
2. LOCATE LIGHT FIXTURE AND SWITCH IN ELEVATOR PIT. COORDINATE EXACT LOCATION WITH ELEVATOR EQUIPMENT.
3. PROVIDE 2-POLE SNAP SWITCH AND CONNECT POWER AND CONTROL CIRCUITRY TO HEAT PUMP ON ROOF.
4. 30A/2P FUSED DISCONNECT SWITCH WITH SOLID NEUTRAL AND (1) 20A DUAL-ELEMENT, TIME DELAY FUSE, NEMA 1 ENCLOSURE FOR ELEVATOR CAB LIGHTS AND EXHAUST. SWITCH SHALL BE CAPABLE OF BEING LOCKED "OFF". MOUNT AT 6'-0" AFF TO TOP AND LABEL WITH CIRCUIT NUMBER. COORDINATE EXACT MOUNTING LOCATION AND REQUIREMENTS WITH ELEVATOR EQUIPMENT INSTALLER. PROVIDE FINAL ELECTRICAL CONNECTION TO ELEVATOR CONTROLLER.
5. ELEVATOR POWER MODULE SWITCH: 200A/208V/3PH SWITCH COMPLETE WITH 175A DUAL ELEMENT TIME DELAY CLASS "J" FUSES, 120V CONTROL TRANSFORMER, FIRE ALARM SAFETY INTERFACE RELAY, KEY TEST SWITCH, GREEN PILOT LIGHT, AUXILIARY CONTRACTS FOR ELEVATOR RECALL, AND FIRE ALARM VOLTAGE MONITORING RELAY. COOPER BUSSMAN #PS-W-T20-R1-K-G-B-F1 OR EQUAL. COORDINATE EXACT MOUNTING LOCATION AND REQUIREMENTS WITH ELEVATOR EQUIPMENT INSTALLER. PROVIDE FINAL ELECTRICAL CONNECTION TO ELEVATOR CONTROLLER.
6. SEE 2-E2.1 FOR CONTINUATION.
7. SEE 1-E2.1 FOR CONTINUATION.
8. 120V POWER FOR FIRE SPRINKLER FLOW SWITCH(ES) AND BELL. PROVIDE #8 CU BONDING JUMPER FROM CIRCUIT EQUIPMENT GROUNDING CONDUCTOR TO METAL SPRINKLER SYSTEM PIPING AT AN ACCESSIBLE LOCATION PER 250.104(B). COORDINATE WORK WITH FIRE SPRINKLER SYSTEM INSTALLER.
9. HALLWAY RECEPTACLES DO NOT NEED TO BE "WEATHERPROOF WHILE IN USE". TYPICAL.
10. EXTERIOR LIGHTING CONTROLS. SEE 1-E6.6 FOR MORE INFORMATION.
11. PHOTOCELL FOR CONTROL OF EXTERIOR LIGHTS. SEE 1-E6.6 FOR MORE INFORMATION.
12. ELEVATOR SUMP PUMP ALARM PANEL. PROVIDE 120V POWER CONNECTION AND (2) 1" CONDUITS WITH PULL STRINGS FROM PANEL STUBBED INTO ELEVATOR PIT FOR POWER AND CONTROL CABLING. COORDINATE ALL WORK WITH P.C.

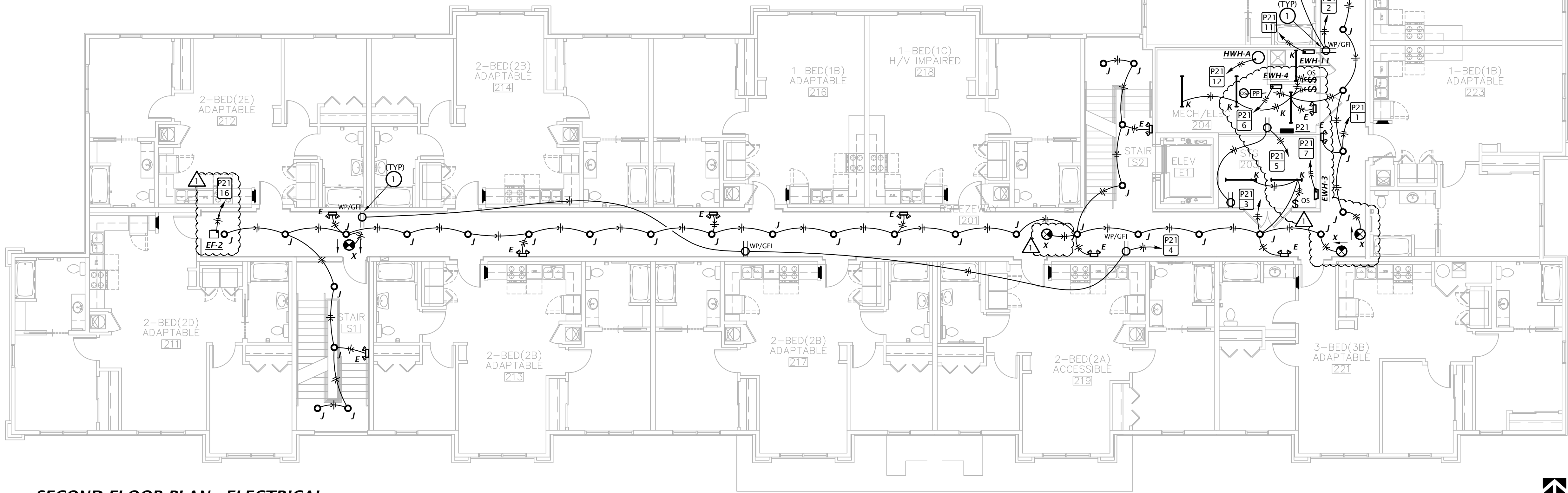


2 ENLARGED ELECTRICAL PLAN
1/4" = 1'-0"



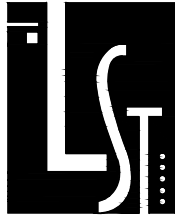
Ⓢ ELECTRICAL PLAN NOTES BY SYMBOL

1. HALLWAY RECEPTACLES DO NOT NEED TO BE "WEATHERPROOF WHILE IN USE". TYPICAL.



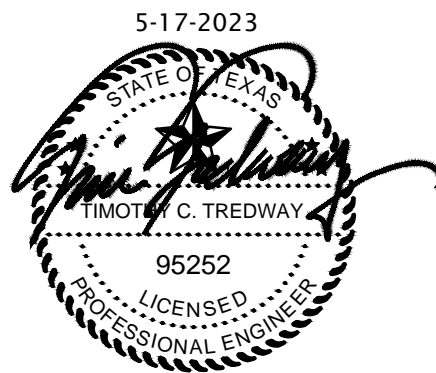
1 SECOND FLOOR PLAN - ELECTRICAL
1/8" = 1'-0"

Reviewed for Code Compliance
11/06/2023
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May 2023

THE RESERVES at MAGNOLIA
NEW APARTMENT COMPLEX
DENTON, TEXAS



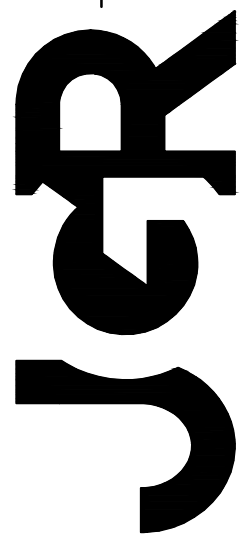
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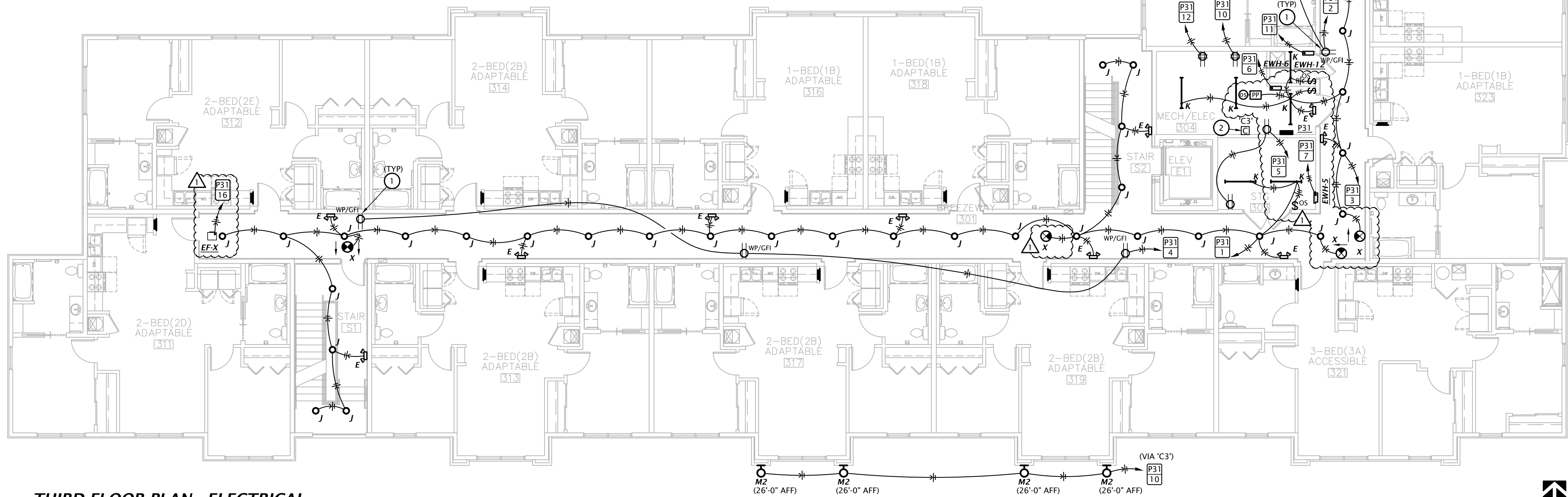
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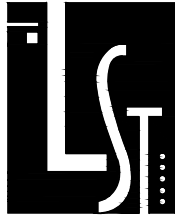
Ⓢ ELECTRICAL PLAN NOTES BY SYMBOL

- HALLWAY RECEPTACLES DO NOT NEED TO BE "WEATHERPROOF WHILE IN USE". TYPICAL.
- EXTERIOR LIGHTING CONTROLS. SEE 1:E6.6 FOR MORE INFORMATION.



1 THIRD FLOOR PLAN - ELECTRICAL
1/8" = 1'-0"

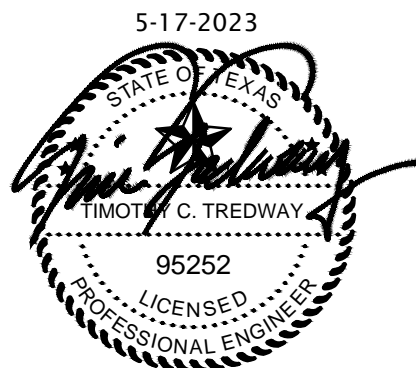
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REVISION:
06-26-2023

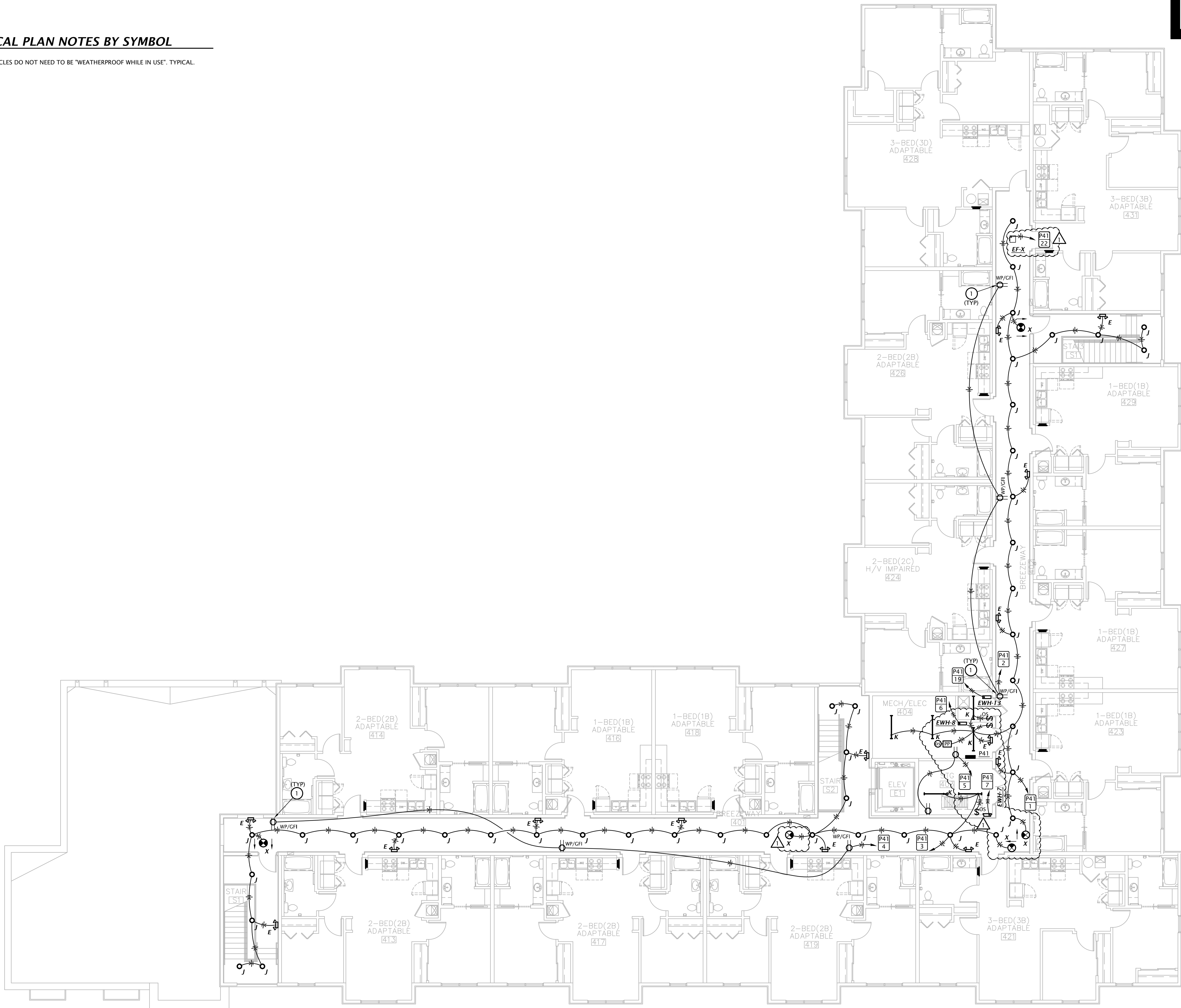
DATE: 06-26-2023
JOB: 21-3205
SHEET NO.:

E2.3

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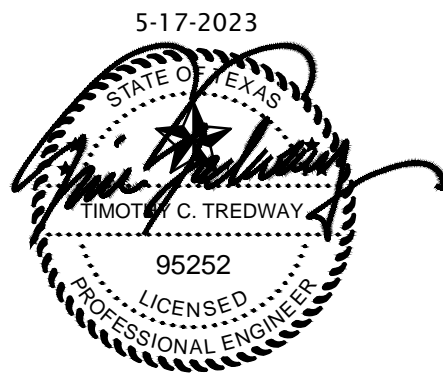
Ⓢ ELECTRICAL PLAN NOTES BY SYMBOL

1. HALLWAY RECEPTACLES DO NOT NEED TO BE "WEATHERPROOF WHILE IN USE". TYPICAL.



1 FOURTH FLOOR PLAN - ELECTRICAL
1/8" = 1'-0"

Reviewed for Code Compliance
11/06/2023
Joshua Hamlin



REVISION:
⚠ 06-26-2023

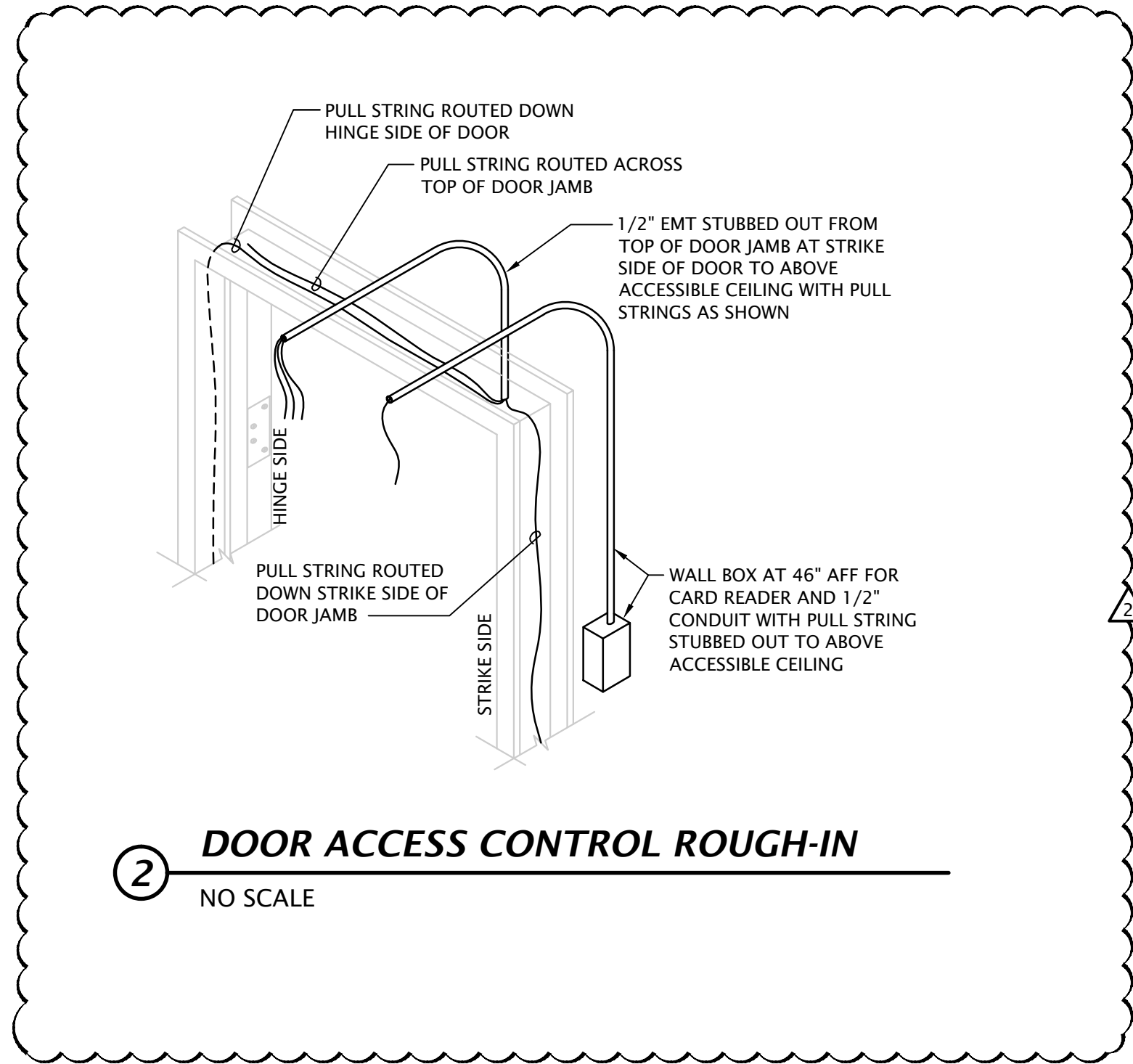
DATE: 06-26-2023
JOB: 21-3205
SHEET NO.:

TELECOMMUNICATIONS GENERAL NOTES

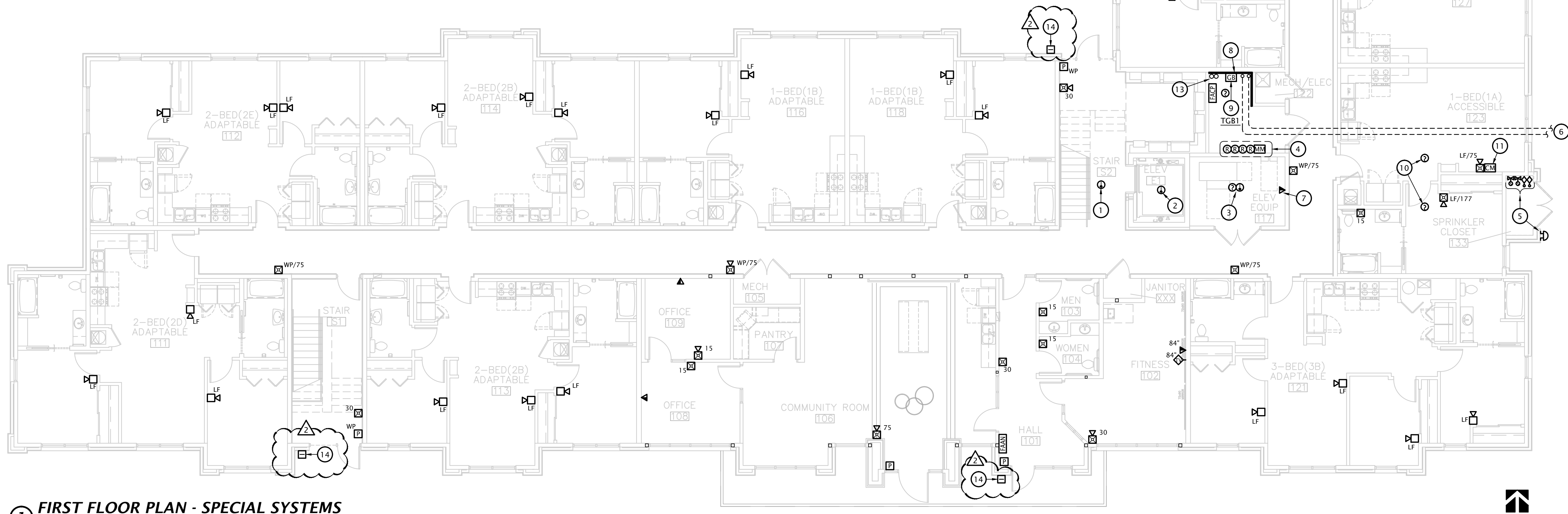
- A. PROVIDE COMPLETE WIRED PHONE AND CATV OUTLETS IN APARTMENT UNITS AS INDICATED ON SHEET E4.1.
- B. AT TELECOMMUNICATIONS OUTLETS IN COMMON AREAS, PROVIDE 4" SQUARE x 2-1/8" DEEP BOX WITH 1-GANG DEVICE RING AND (1) 1" CONDUIT STUBBED INTO MECHANICAL ROOM AS FOLLOWS: 1ST AND 2ND FLOORS - ROOM 117; 3RD AND 4TH FLOORS - ROOM 306.
- C. PROVIDE NYLON BUSHINGS FOR ALL CONDUIT ENDS NOT CONNECTED TO A BOX OR FITTING TO PROTECT CABLING FROM DAMAGE.
- D. PROVIDE BLANK, STAINLESS STEEL COVER PLATES FOR ALL COMMON AREA TELECOM OUTLETS NOT ACTIVATED BY OWNER.
- E. PROVIDE SUITABLE PULL STRING IN ALL CONDUITS.
- F. ALL TELECOM VOICE AND DATA CABLING, JACKS, CONNECTORS, TERMINATIONS, EQUIPMENT AND TESTING FOR OUTLETS IN COMMONS AREAS SHALL BE PROVIDED BY OWNER.

SPECIAL SYSTEMS PLAN NOTES BY SYMBOL

1. ELEVATOR LOBBY HEAT DETECTOR. SEE DETAIL 3:E6.1.
2. INSTALL HEAT DETECTOR IN ELEVATOR PIT. SEE DETAIL 3:E6.1.
3. ELEVATOR MACHINE ROOM SMOKE AND HEAT DETECTORS. SEE DETAIL 3:E6.1.
4. ADDRESSABLE RELAYS FOR ELEVATOR RECALL, FIREMAN'S HAT, AND POWER SHUNT-TRIP, AND ADDRESSABLE MONITORING MODULE FOR MONITORING OF SHUNT TRIP VOLTAGE. SEE DETAIL 3:E6.1.
5. PROVIDE FIRE ALARM RELAYS AND MONITORING MODULES FOR ALL FIRE SPRINKLER FLOW SWITCHES, AND BELL/GONG. COORDINATE QUANTITIES AND LOCATIONS WITH FIRE SPRINKLER CONTRACTOR PRIOR TO BID. SEE SITE PLAN FOR ADDITIONAL FLOW SWITCH LOCATIONS.
6. (2) 3" CONDUITS FOR COMMUNICATIONS SERVICES. SEE SITE PLAN, E1.1 FOR CONTINUATION.
7. PROVIDE 1" CONDUIT WITH PULL STRING FROM TELECOM OUTLET TO MAIN TELEPHONE TERMINAL BOARD IN MECH 122.
8. TELEPHONE TERMINAL BOARD: COVER WALL AS INDICATED ON PLAN WITH 4"x8"x3/4" ACX FIRE RETARDANT PLYWOOD SHEETS INSTALLED VERTICALLY WITH BOTTOM AT 6" AFF. PLYWOOD SHALL BE PERMANENTLY FASTENED TO THE WALL BY MEANS OF WALL ANCHORS UTILIZING GALVANIZED, ZINC PLATED, OR STAINLESS STEEL HARDWARE WITH A FLAT HEAD. FINISHED INSTALLATION SHALL HAVE FLUSH APPEARANCE WITH COUNTERSUNK SCREW HEADS TO PREVENT SPLITTING OF THE PLYWOOD. DRYWALL SCREWS ARE NOT ACCEPTABLE. PAINT WITH TWO COATS OF LIGHT GRAY FIRE RETARDANT SEALER PRIOR TO INSTALLATION OF ANY EQUIPMENT.
9. TELECOMMUNICATIONS GROUND BAR AT 18" AFF. SEE DETAIL X, SHEET E6.X.
10. FIRE ALARM SYSTEM COMBINATION CO / SMOKE DETECTOR.
11. FIRE ALARM ADDRESSABLE CONTROL MODULE FOR CONTROL OF APARTMENT UNIT'S NOTIFICATION APPLIANCE CIRCUIT. MODULE SHALL BE PROGRAMMED TO ACTIVATE APARTMENT UNIT'S NOTIFICATION APPLIANCES UPON GENERAL BUILDING FIRE ALARM AND UPON ACTIVATION OF ANY SMOKE DETECTOR OR CO DETECTOR WITHIN APARTMENT UNIT. MOUNT FLUSH IN WALL AT 8'-0" AFF.
12. INSTALL SMOKE DETECTOR AND HEAT DETECTOR AT TOP OF ELEVATOR HOISTWAY PER LOCAL JURISDICTION REQUIREMENTS. SEE DETAIL X:E6.X FOR MORE DETAILS.
13. (2) 4" EMT CONDUIT SLEEVES THROUGH FLOOR FOR COMMUNICATIONS CABLING. PROVIDE WITH FIRESTOPPING FITTINGS (WIREMOLD #FS4R-RED) AT BOTH ENDS.
14. PROVIDE CARD READER ROUGH-IN AND PREP DOOR JAM WITH RACE WAY AS INDICATED IN DETAIL 2, THIS SHEET.



CAT-6 UTP COPPER AND RG6 COAXIAL CABLE HOMERUNS FROM APARTMENT UNITS ON THIS FLOOR SHALL BE ROUTED TO TELEPHONE TERMINAL BOARD IN MECHANICAL ROOM 122

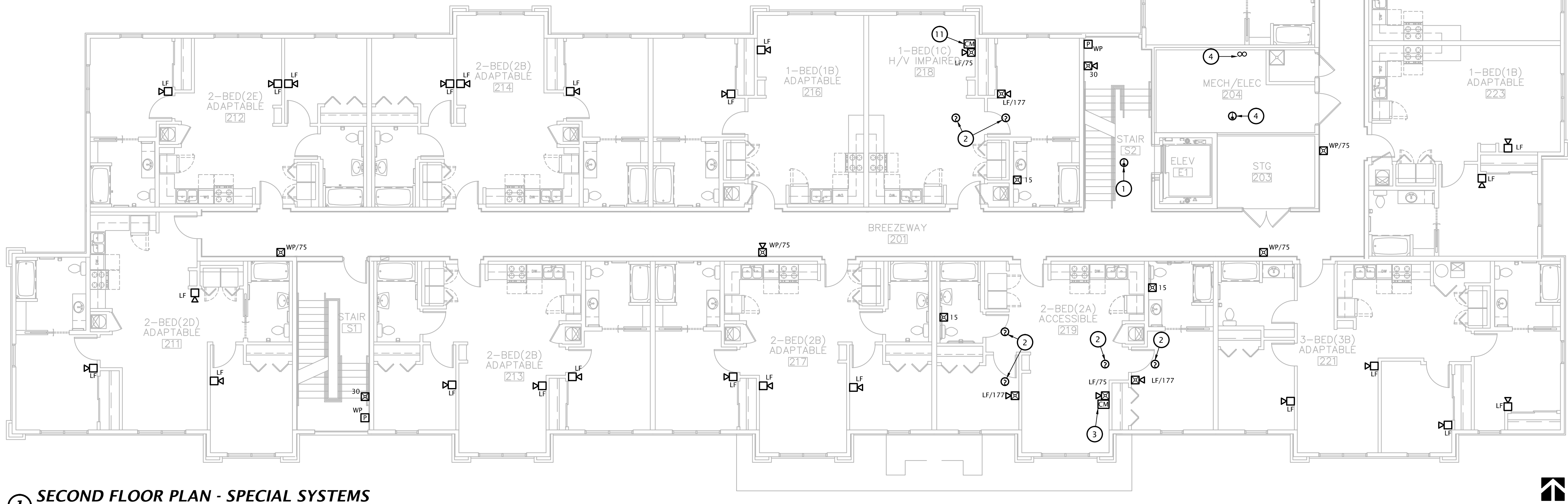


TELECOMMUNICATIONS GENERAL NOTES

- A. PROVIDE COMPLETE WIRED PHONE AND CATV OUTLETS IN APARTMENT UNITS AS INDICATED ON SHEET E4.1.
- B. AT TELECOMMUNICATIONS OUTLETS IN COMMON AREAS, PROVIDE 4" SQUARE x 2-1/8" DEEP BOX WITH 1-GANG DEVICE RING AND (1) 1" CONDUIT STUBBED INTO MECHANICAL ROOM AS FOLLOWS: 1ST AND 2ND FLOORS - ROOM 117; 3RD AND 4TH FLOORS - ROOM 306.
- C. PROVIDE NYLON BUSHINGS FOR ALL CONDUIT ENDS NOT CONNECTED TO A BOX OR FITTING TO PROTECT CABLING FROM DAMAGE.
- D. PROVIDE BLANK, STAINLESS STEEL COVER PLATES FOR ALL COMMON AREA TELECOM OUTLETS NOT ACTIVATED BY OWNER.
- E. PROVIDE SUITABLE PULL STRING IN ALL CONDUITS.
- F. ALL TELECOM VOICE AND DATA CABLING, JACKS, CONNECTORS, TERMINATIONS, EQUIPMENT AND TESTING FOR OUTLETS IN COMMONS AREAS SHALL BE PROVIDED BY OWNER.

SPECIAL SYSTEMS PLAN NOTES BY SYMBOL

1. ELEVATOR LOBBY HEAT DETECTOR. SEE DETAIL 3:E6.1.
2. FIRE ALARM SYSTEM COMBINATION CO / SMOKE DETECTOR.
3. FIRE ALARM ADDRESSABLE CONTROL MODULE FOR CONTROL OF APARTMENT UNIT'S NOTIFICATION APPLIANCE CIRCUIT. MODULE SHALL BE PROGRAMMED TO ACTIVATE APARTMENT UNIT'S NOTIFICATION APPLIANCES UPON GENERAL BUILDING FIRE ALARM AND UPON ACTIVATION OF ANY SMOKE DETECTOR OR CO DETECTOR WITHIN APARTMENT UNIT. MOUNT FLUSH IN WALL AT 8'-0" AFF.
4. (2) 4" EMT CONDUIT SLEEVES THROUGH FLOOR FOR COMMUNICATIONS CABLING. PROVIDE WITH FIRESTOPPING FITTINGS (WIREMOLD #FS4R-RED) AT BOTH ENDS.
5. MECHANICAL ROOM HEAT DETECTOR.



1 SECOND FLOOR PLAN - SPECIAL SYSTEMS
1/8" = 1'-0"

Reviewed for Code Compliance
11/06/2023
Joshua Hamlin



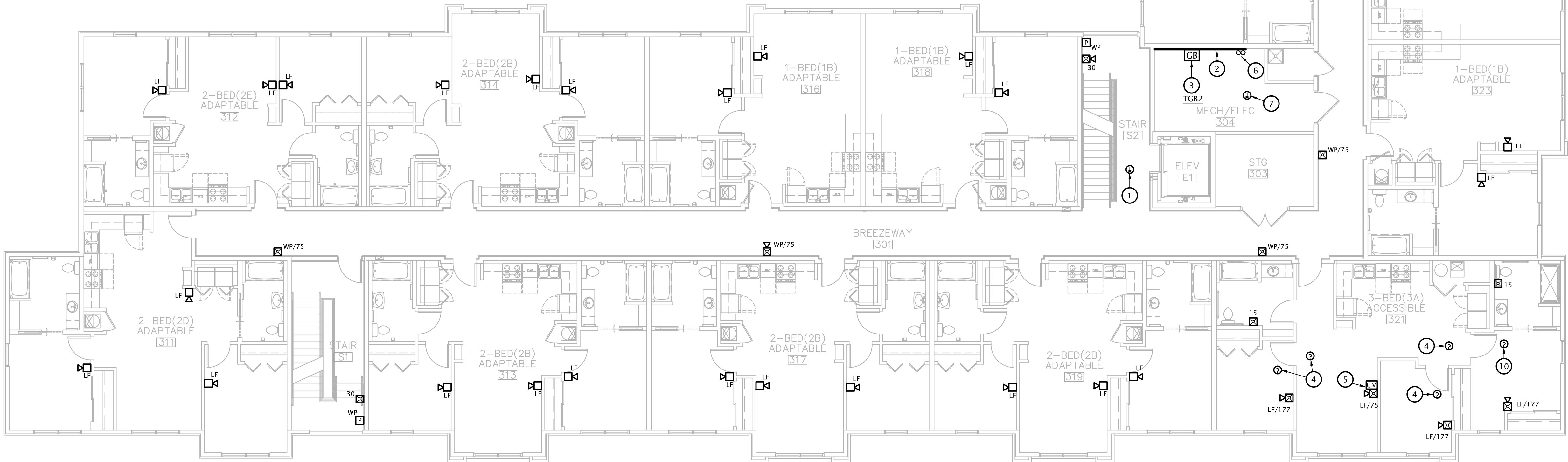
REVISION:	
DATE:	06-26-2023
JOB:	21-3205
SHEET NO.:	

TELECOMMUNICATIONS GENERAL NOTES

- A. PROVIDE COMPLETE WIRED PHONE AND CATV OUTLETS IN APARTMENT UNITS AS INDICATED ON SHEET E4.1.
- B. AT TELECOMMUNICATIONS OUTLETS IN COMMON AREAS, PROVIDE 4" SQUARE x 2-1/8" DEEP BOX WITH 1-GANG DEVICE RING AND (1) 1" CONDUIT STUBBED INTO MECHANICAL ROOM AS FOLLOWS: 1ST AND 2ND FLOORS - ROOM 117; 3RD AND 4TH FLOORS - ROOM 306.
- C. PROVIDE NYLON BUSHINGS FOR ALL CONDUIT ENDS NOT CONNECTED TO A BOX OR FITTING TO PROTECT CABLING FROM DAMAGE.
- D. PROVIDE BLANK, STAINLESS STEEL COVER PLATES FOR ALL COMMON AREA TELECOM OUTLETS NOT ACTIVATED BY OWNER.
- E. PROVIDE SUITABLE PULL STRING IN ALL CONDUITS.
- F. ALL TELECOM VOICE AND DATA CABLING, JACKS, CONNECTORS, TERMINATIONS, EQUIPMENT AND TESTING FOR OUTLETS IN COMMONS AREAS SHALL BE PROVIDED BY OWNER.

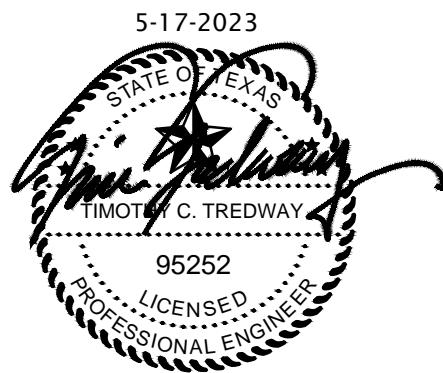
SPECIAL SYSTEMS PLAN NOTES BY SYMBOL

1. ELEVATOR LOBBY HEAT DETECTOR. SEE DETAIL 3:E6.1.
2. TELEPHONE TERMINAL BOARD: COVER WALL AS INDICATED ON PLAN WITH 4"x8"x3/4" ACX FIRE RETARDANT PLYWOOD SHEETS INSTALLED VERTICALLY WITH BOTTOM AT 6" AFF. PLYWOOD SHALL BE PERMANENTLY FASTENED TO THE WALL BY MEANS OF WALL ANCHORS UTILIZING GALVANIZED, ZINC PLATED, OR STAINLESS STEEL HARDWARE WITH A FLAT HEAD. FINISHED INSTALLATION SHALL HAVE FLUSH APPEARANCE WITH COUNTERSUNK SCREW HEADS TO PREVENT SPLITTING OF THE PLYWOOD. DRYWALL SCREWS ARE NOT ACCEPTABLE. PAINT WITH TWO COATS OF LIGHT GRAY FIRE RETARDANT SEALER PRIOR TO INSTALLATION OF ANY EQUIPMENT.
3. TELECOMMUNICATIONS GROUND BAR AT 18" AFF. SEE DETAIL X, SHEET E6.X.
4. FIRE ALARM SYSTEM COMBINATION CO / SMOKE DETECTOR.
5. FIRE ALARM ADDRESSABLE CONTROL MODULE FOR CONTROL OF APARTMENT UNIT'S NOTIFICATION APPLIANCE CIRCUIT. MODULE SHALL BE PROGRAMMED TO ACTIVATE APARTMENT UNIT'S NOTIFICATION APPLIANCES UPON GENERAL BUILDING FIRE ALARM AND UPON ACTIVATION OF ANY SMOKE DETECTOR OR CO DETECTOR WITHIN APARTMENT UNIT. MOUNT FLUSH IN WALL AT 8'-0" AFF.
6. (2) 4" EMT CONDUIT SLEEVES THROUGH FLOOR FOR COMMUNICATIONS CABLING. PROVIDE WITH FIRESTOPPING FITTINGS (WIREMOLD # F54R-RED) AT BOTH ENDS.
7. MECHANICAL ROOM HEAT DETECTOR.



1 THIRD FLOOR PLAN - SPECIAL SYSTEMS
1/8" = 1'-0"

CAT-6 UTP COPPER AND RG6 COAXIAL CABLE
HOMERUNS FROM APARTMENT UNITS ON THIS
FLOOR SHALL BE ROUTED TO TELEPHONE
TERMINAL BOARD IN MECHANICAL ROOM 304



REVISION:

DATE: 06-26-2023
JOB: 21-3205
SHEET NO.:

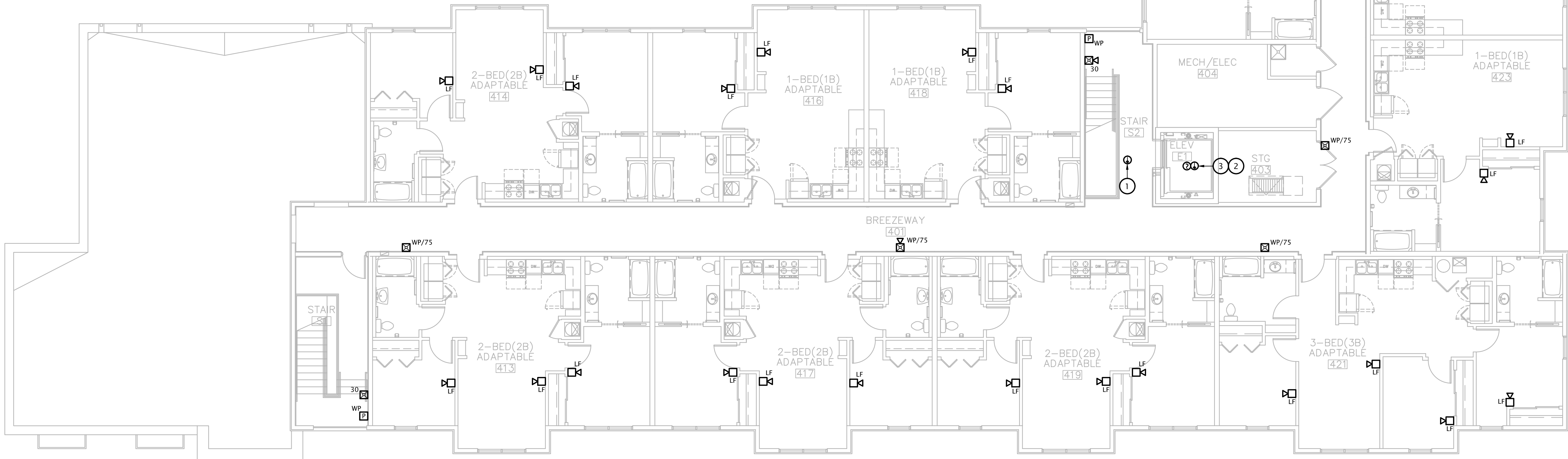
TELECOMMUNICATIONS GENERAL NOTES

- A. PROVIDE COMPLETE WIRED PHONE AND CATV OUTLETS IN APARTMENT UNITS AS INDICATED ON SHEET E4.1.
- B. AT TELECOMMUNICATIONS OUTLETS IN COMMON AREAS, PROVIDE 4" SQUARE x 2-1/8" DEEP BOX WITH 1-GANG DEVICE RING AND (1) 1" CONDUIT STUBBED INTO MECHANICAL ROOM AS FOLLOWS: 1ST AND 2ND FLOORS - ROOM 117; 3RD AND 4TH FLOORS - ROOM 306.
- C. PROVIDE NYLON BUSHINGS FOR ALL CONDUIT ENDS NOT CONNECTED TO A BOX OR FITTING TO PROTECT CABLING FROM DAMAGE.
- D. PROVIDE BLANK, STAINLESS STEEL COVER PLATES FOR ALL COMMON AREA TELECOM OUTLETS NOT ACTIVATED BY OWNER.
- E. PROVIDE SUITABLE PULL STRING IN ALL CONDUITS.
- F. ALL TELECOM VOICE AND DATA CABLING, JACKS, CONNECTORS, TERMINATIONS, EQUIPMENT AND TESTING FOR OUTLETS IN COMMONS AREAS SHALL BE PROVIDED BY OWNER.

SPECIAL SYSTEMS PLAN NOTES BY SYMBOL

1. ELEVATOR LOBBY HEAT DETECTOR. SEE DETAIL 3:E6.1.
2. INSTALL SMOKE AND HEAT DETECTORS IN ELEVATOR HOISTWAY. SEE DETAIL 3:E6.1.
3. ADDRESSABLE RELAYS FOR ELEVATOR RECALL, FIREMAN'S HAT, AND POWER SHUNT-TRIP, AND ADDRESSABLE MONITORING MODULE FOR MONITORING OF SHUNT TRIP VOLTAGE. SEE DETAIL 3:E6.1.
4. FIRE ALARM SYSTEM COMBINATION CO / SMOKE DETECTOR.
5. FIRE ALARM ADDRESSABLE CONTROL MODULE FOR CONTROL OF APARTMENT UNIT'S NOTIFICATION APPLIANCE CIRCUIT. MODULE SHALL BE PROGRAMMED TO ACTIVATE APARTMENT UNIT'S NOTIFICATION APPLIANCES UPON GENERAL BUILDING FIRE ALARM AND UPON ACTIVATION OF ANY SMOKE DETECTOR OR CO DETECTOR WITHIN APARTMENT UNIT. MOUNT FLUSH IN WALL AT 8'-0" AFF.

CAT-6 UTP COPPER AND RG6 COAXIAL CABLE HOMERUNS FROM APARTMENT UNITS ON THIS FLOOR SHALL BE ROUTED TO TELEPHONE TERMINAL BOARD IN MECHANICAL ROOM 304



FOURTH FLOOR PLAN - SPECIAL SYSTEMS

1/8" = 1'-0"

Reviewed for Code Compliance
11/06/2023
Joshua Hamlin

REVISION:

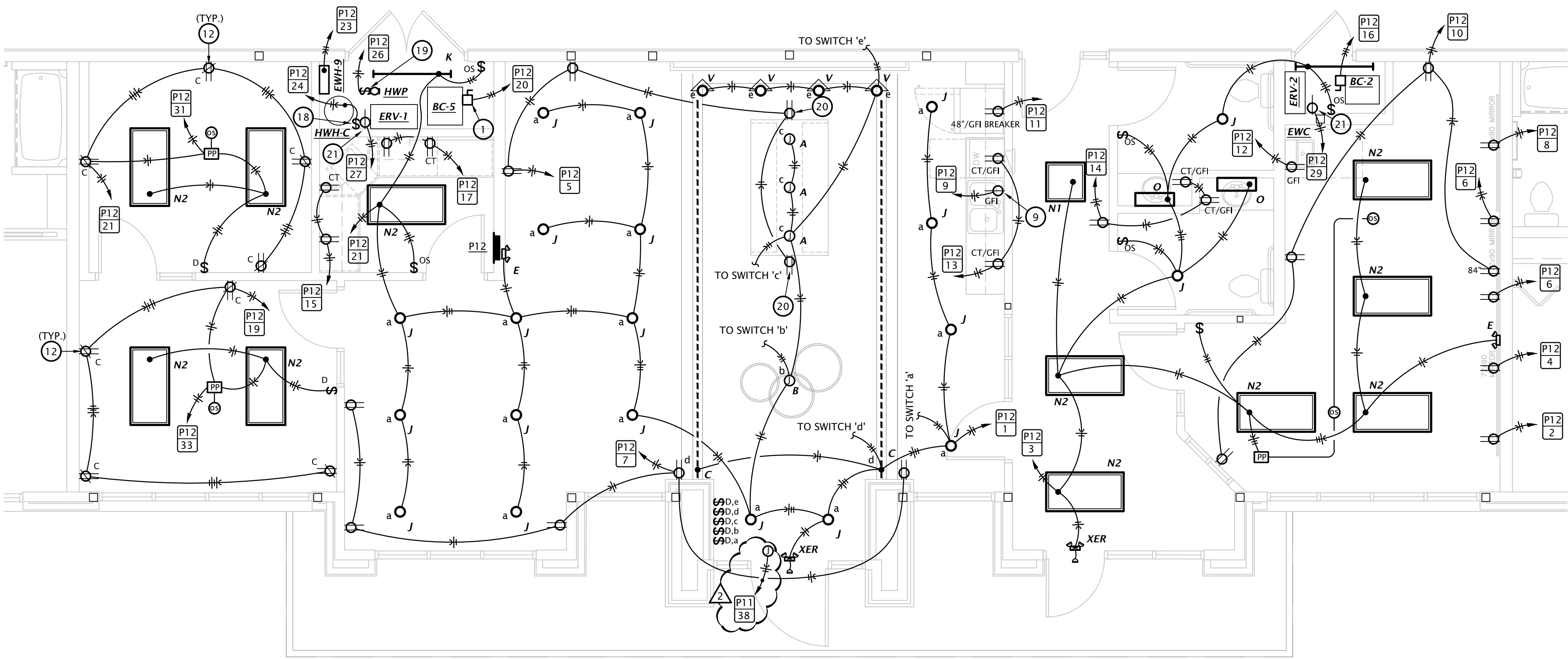
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JOB: 21-3205

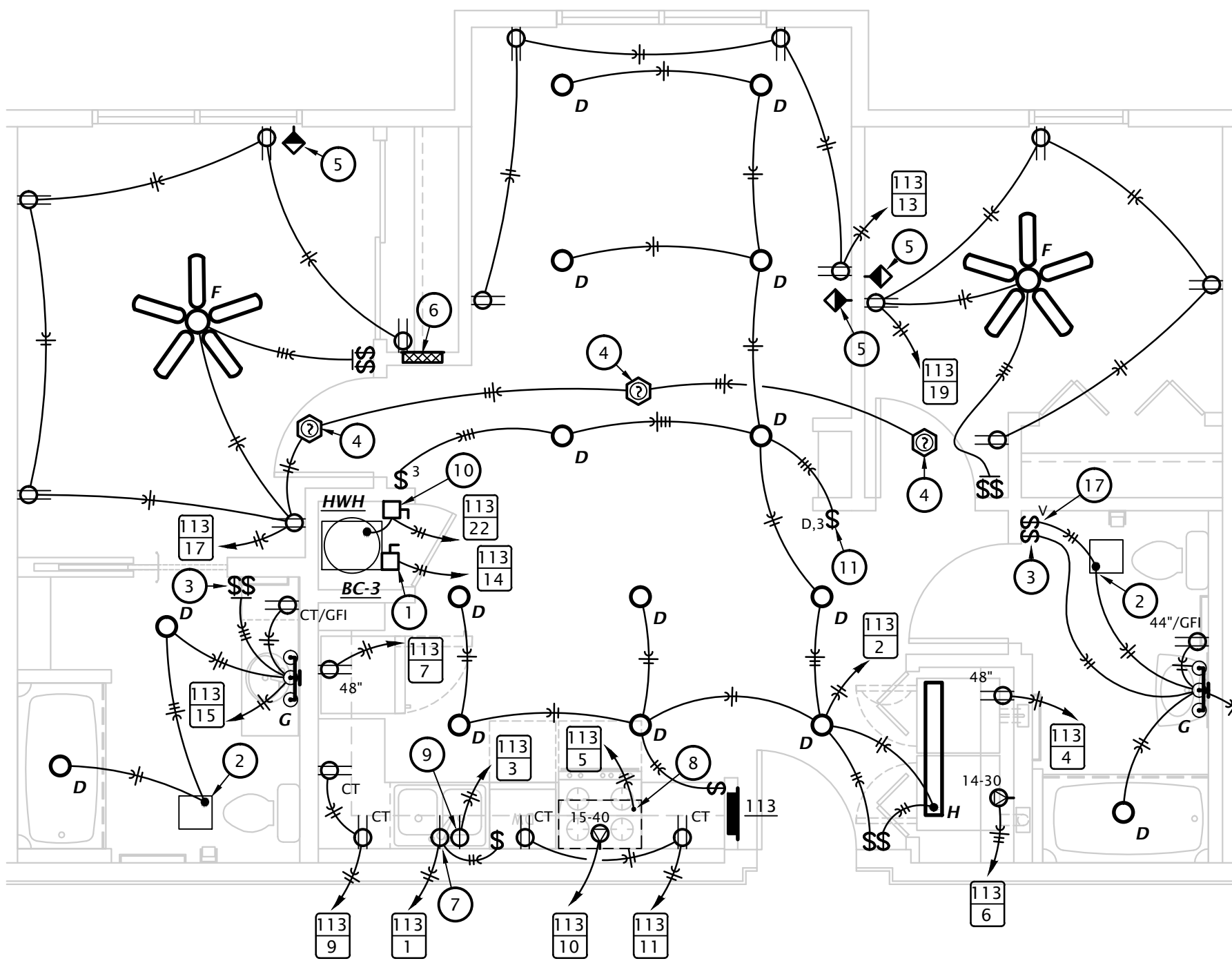
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ELECTRICAL PLAN NOTES BY SYMBOL

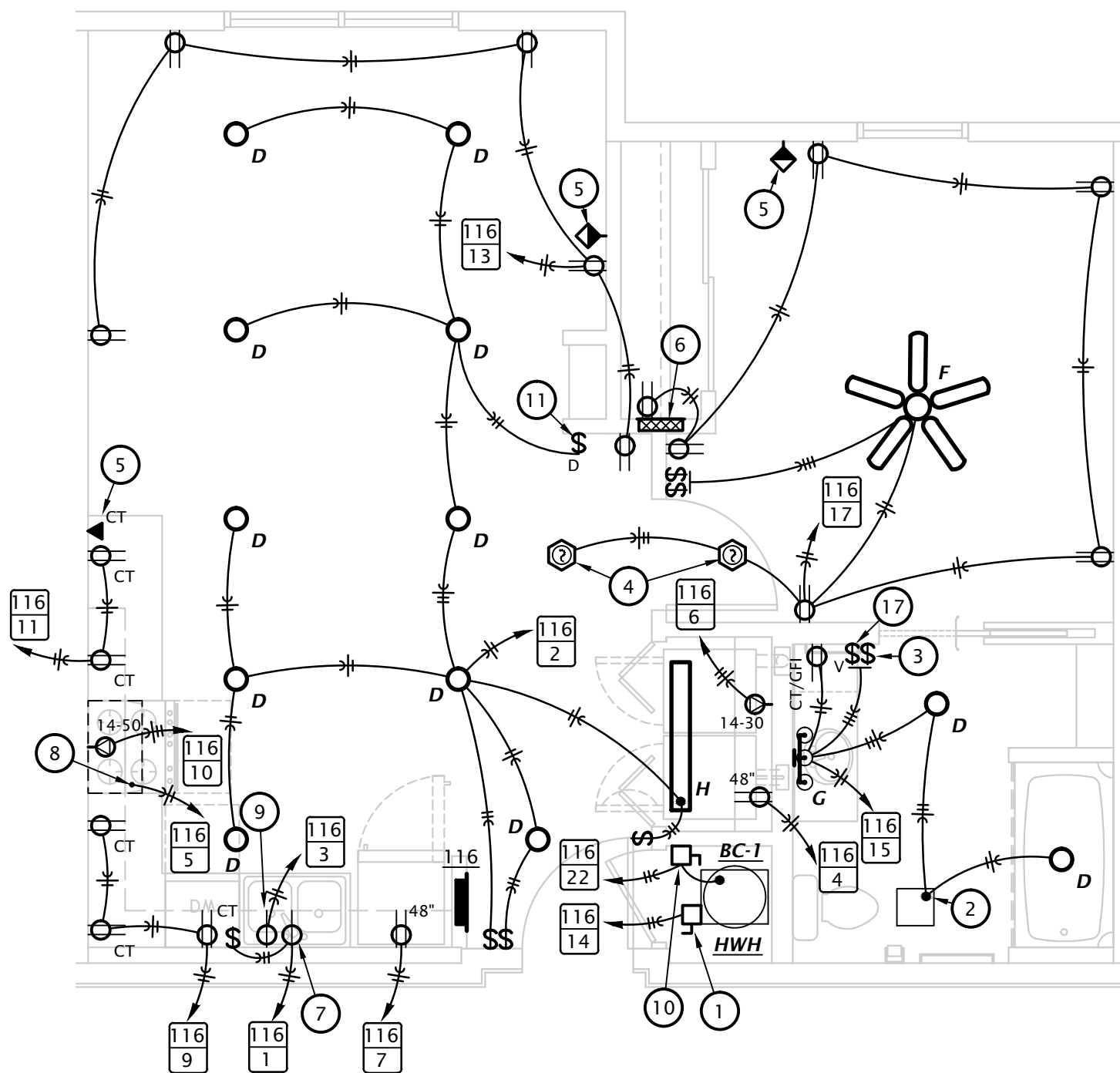
- GENERAL NOTE:
 PROVIDE TAMPER PROOF RECEPTACLES IN DWELLING UNITS PER NEC REQUIREMENTS.
- PROVIDE DISCONNECT SWITCH AND CONNECT BLOWER COIL WITH ELECTRIC HEAT. COORDINATE REQUIREMENTS WITH EQUIPMENT PROVIDER. DISCONNECT SHALL BE SIZED AS FOLLOWS: BC-1:30A/2P, BC-2,3,4,5:60A/2P.
 - CONNECT EXHAUST FAN PROVIDED BY MECHANICAL CONTRACTOR.
 - SWITCH CLOSEST TO THE DOOR SHALL CONTROL ALL LIGHTS IN BATHROOM, AND THE OTHER SWITCH SHALL CONTROL THE EXHAUST FAN.
 - CEILING MOUNTED SMOKE ALARM IN APARTMENTS TO BE 120VAC WITH 9V BATTERY BACKUP, INTERCONNECTED TO OTHERS IN SAME APARTMENT. DEVICE SHALL HAVE CARBON MONOXIDE DETECTOR AND PHOTOELECTRIC TYPE SMOKE DETECTOR WITH SOUNDER HORN HAVING AN 85dB OUTPUT AT 10', SHALL HAVE A SINGLE BUTTON FOR TEST/SILENCE AND LED INDICATOR LIGHTS, AND SHALL BE UL 217 LISTED. BRK #SC70108 OR EQUAL. SEE SPECIAL SYSTEMS SHEETS FOR MORE INFORMATION.
 - COORDINATE FINAL LOCATIONS OF ALL CATV AND PHONE OUTLETS WITH OWNER. SEE 1:E6.1 FOR OUTLET DETAILS.
 - TELECOM DISTRIBUTION DEVICE APPROXIMATELY 4'-0" AFF. SEE DETAIL 1:E6.1.
 - SWITCHED RECEPTACLE BELOW COUNTER FOR GARBAGE DISPOSAL.
 - PROVIDE 120V CONNECTION TO RANGE HOOD/MICROWAVE. STANDARD AND ADAPTABLE UNITS WILL HAVE MICROWAVE ABOVE RANGE. ACCESSIBLE UNITS WILL HAVE RANGE HOOD. COORDINATE EXACT ELECTRICAL ROUGH-IN REQUIREMENTS WITH EQUIPMENT PROVIDED. IF EQUIPMENT IS CORD AND PLUG, PROVIDE RECEPTACLE INSIDE CABINET ABOVE RANGE.
 - PROVIDE RECEPTACLE BELOW COUNTER FOR CORD AND PLUG CONNECTION OF DISHWASHER. PROVIDE CORD AND GROUNDING PLUG AS REQUIRED. RECEPTACLE SHALL BE LOCATED IN BASE CABINET ADJACENT TO DISHWASHER TO ALLOW ACCESS TO PLUG.
 - PROVIDE 30A/2P DISCONNECT SWITCH AND CONNECT WATER HEATER.
 - PROVIDE PRESET SLIDE DIMMER COMPATIBLE WITH ASSOCIATED LIGHT FIXTURES.
 - PROVIDE SPLIT CONTROLLED RECEPTACLES PER 2021 IECC REQUIREMENTS. DEVICES SHALL BE IN ACCORDANCE WITH NEC 406.3(E).
 - PROVIDE DOOR ANNUNCIATOR SYSTEM A/V HORN/STROBE DEVICE AND LOW VOLTAGE TRANSFORMER AT ALL ACCESSIBLE APARTMENTS AND ALSO AT APARTMENTS DESIGNATED FOR HEARING-IMPAIRED GUESTS. REFER TO ARCH DRAWINGS FOR APPLICABLE ROOMS. INSTALL HORN/STROBE APPLIANCE AT 80" AFF PER ADA. INSTALL TRANSFORMER IN DOUBLE GANG JUNCTION BOX ABOVE HORN/STROBE WITH BLANK COVER PLATE AND PROVIDE LOW VOLTAGE CONTROL WIRING. REFER TO DETAIL 2, SHEET E6.1. PROVIDE ENGRAVED SIGN AT THE HORN/STROBE DEVICE TO READ "DOOR".
 - PROVIDE PUSH BUTTON AT 48" AFF FOR ANNUNCIATOR SYSTEM AT ALL ACCESSIBLE APARTMENTS AND ALSO AT APARTMENTS DESIGNATED FOR HEARING-IMPAIRED. REFER TO ARCH DRAWINGS FOR APPLICABLE ROOMS. REFER TO DETAIL 2, SHEET E6.1.
 - PROVIDE SWITCH IN ACCESSIBLE UNITS FOR CONTROL OF RANGE HOOD.
 - IN ACCESSIBLE UNITS, INSTALL COUNTERTOP RECEPTACLES A MINIMUM 36" AWAY FROM CORNER PER FAIR HOUSING ACT DESIGN MANUAL CHAPTER 5 'SIDE REACH OVER AN OBSTRUCTION' REQUIREMENTS. WHERE AN OBSTRUCTION PREVENTS 36" DISTANCE REQUIREMENT, INSTALL RECEPTACLE AS FAR FROM CORNER AS POSSIBLE. PROVIDE ADDITIONAL OUTLETS WITHIN 36" OF CORNER TO ENSURE COMPLIANCE WITH NEC SPACING REQUIREMENTS.
 - INSTALL TIMER SWITCH EQUAL TO AIR CYCLER 'FAN CONNECT' FOR CONTROL OF EXHAUST FAN. COORDINATE REQUIREMENTS WITH EQUIPMENT PROVIDED BY E.C.
 - PROVIDE 30A/1P SNAP SWITCH AND MAKE FINAL CONNECTION TO WATER HEATER.
 - ROUTE 120V CIRCUIT FROM HOT WATER RECIRCULATION PUMP 'HWP' THROUGH ADJACENT AQUASTAT AND MAKE FINAL FLEXIBLE CONNECTION. COORDINATE WITH PLUMBING CONTRACTOR.
 - MOUNT RECEPTACLE IN FACE OF ISLAND BELOW COUNTER TOP.
 - PROVIDE SIMPLEX RECEPTACLE FOR CORD AND PLUG CONNECTION OF EQUIPMENT. COORDINATE EXACT REQUIREMENTS WITH EQUIPMENT PROVIDED.



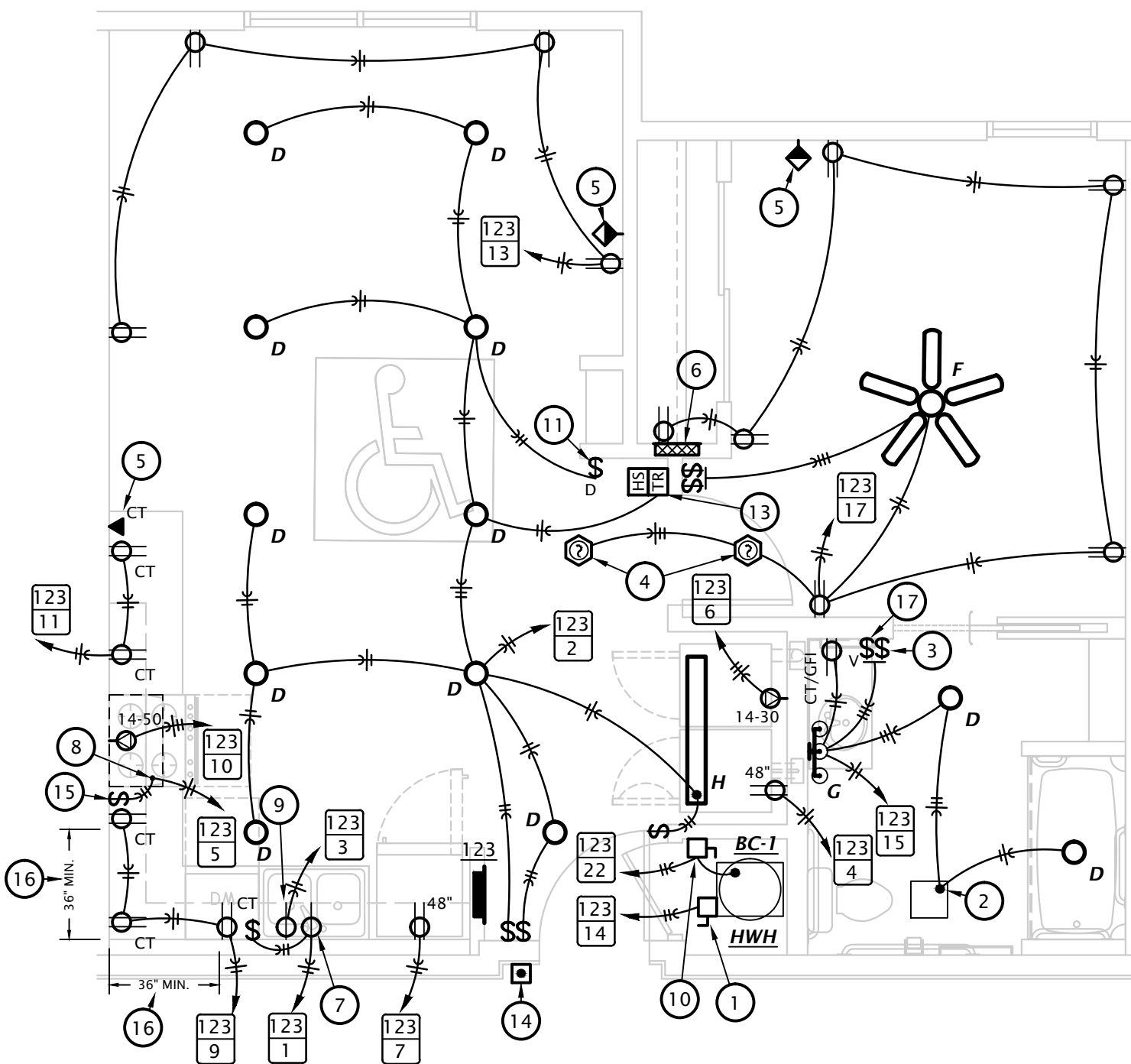
3 ENLARGED COMMUNITY SPACE ELECTRICAL PLAN
 1/4" = 1'-0"



4 2 BEDROOM ELECTRICAL PLAN (APT. 413, & 414)
 1/4" = 1'-0"



2 1 BEDROOM ELECTRICAL PLAN (TYPE B)
 1/4" = 1'-0"



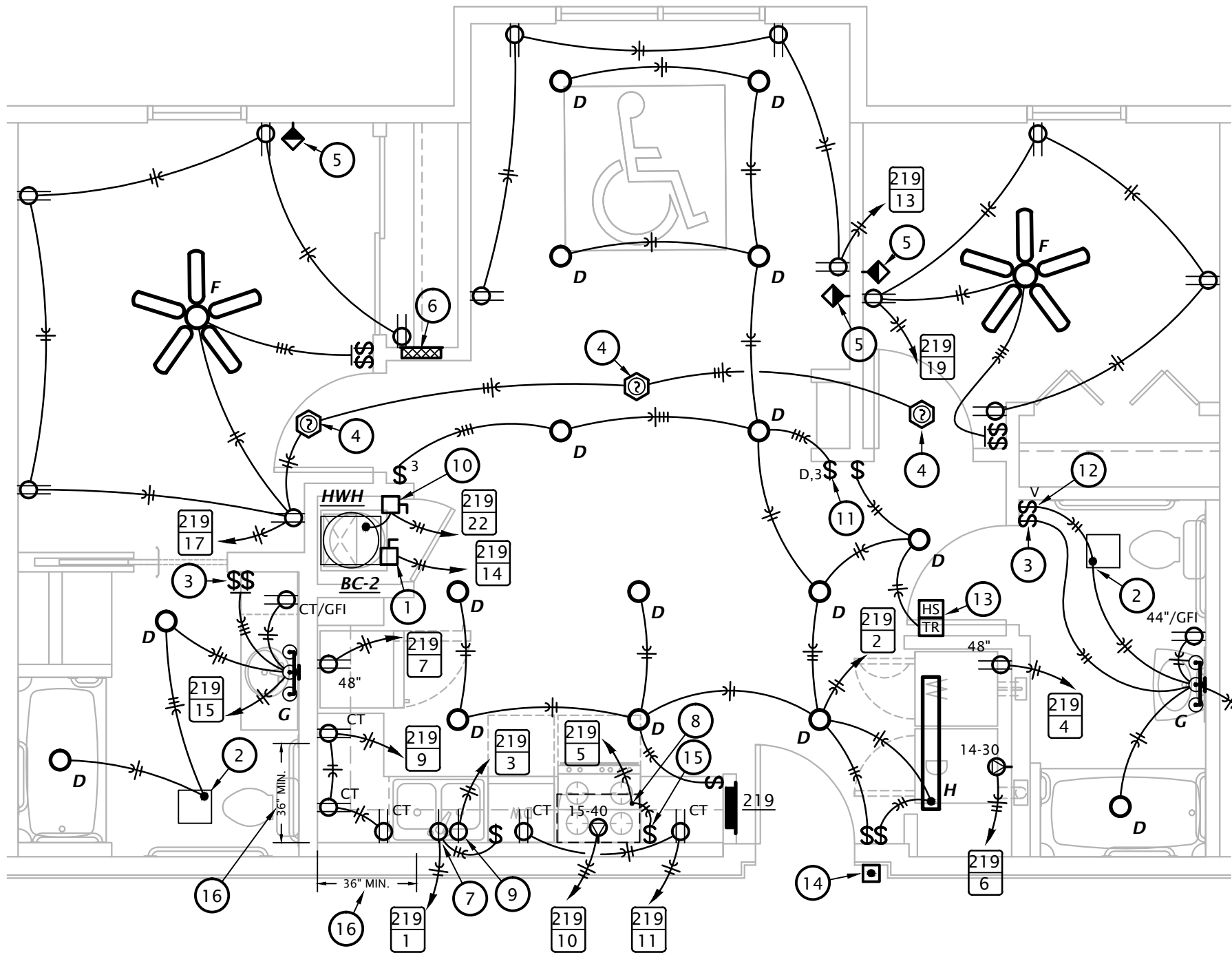
1 1 BEDROOM ACCESSIBLE ELECTRICAL PLAN (TYPES A, AND C)
 1/4" = 1'-0"

Ⓔ **ELECTRICAL PLAN NOTES BY SYMBOL**

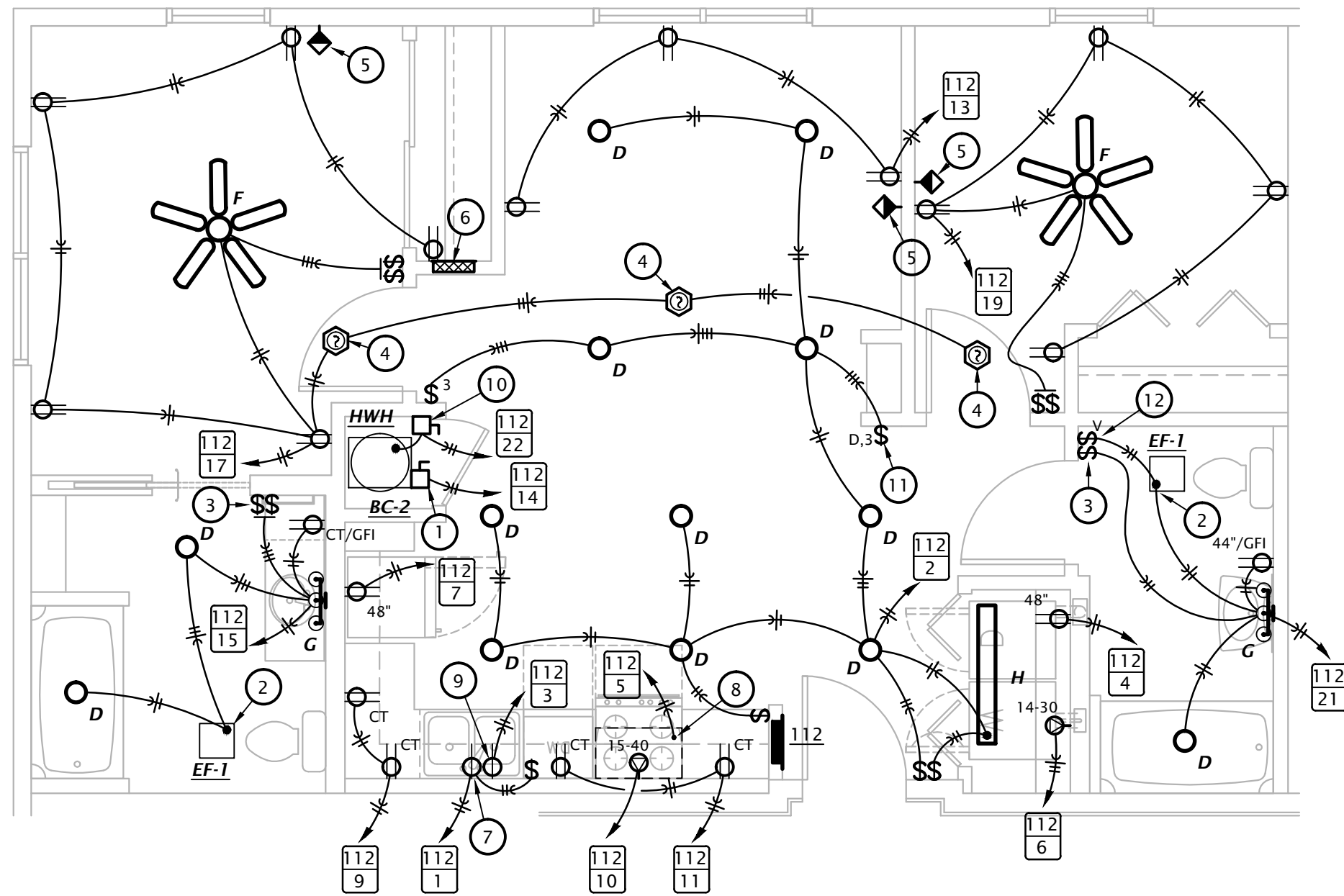
GENERAL NOTE:

PROVIDE TAMPER PROOF RECEPTACLES IN DWELLING UNITS PER NEC REQUIREMENTS.

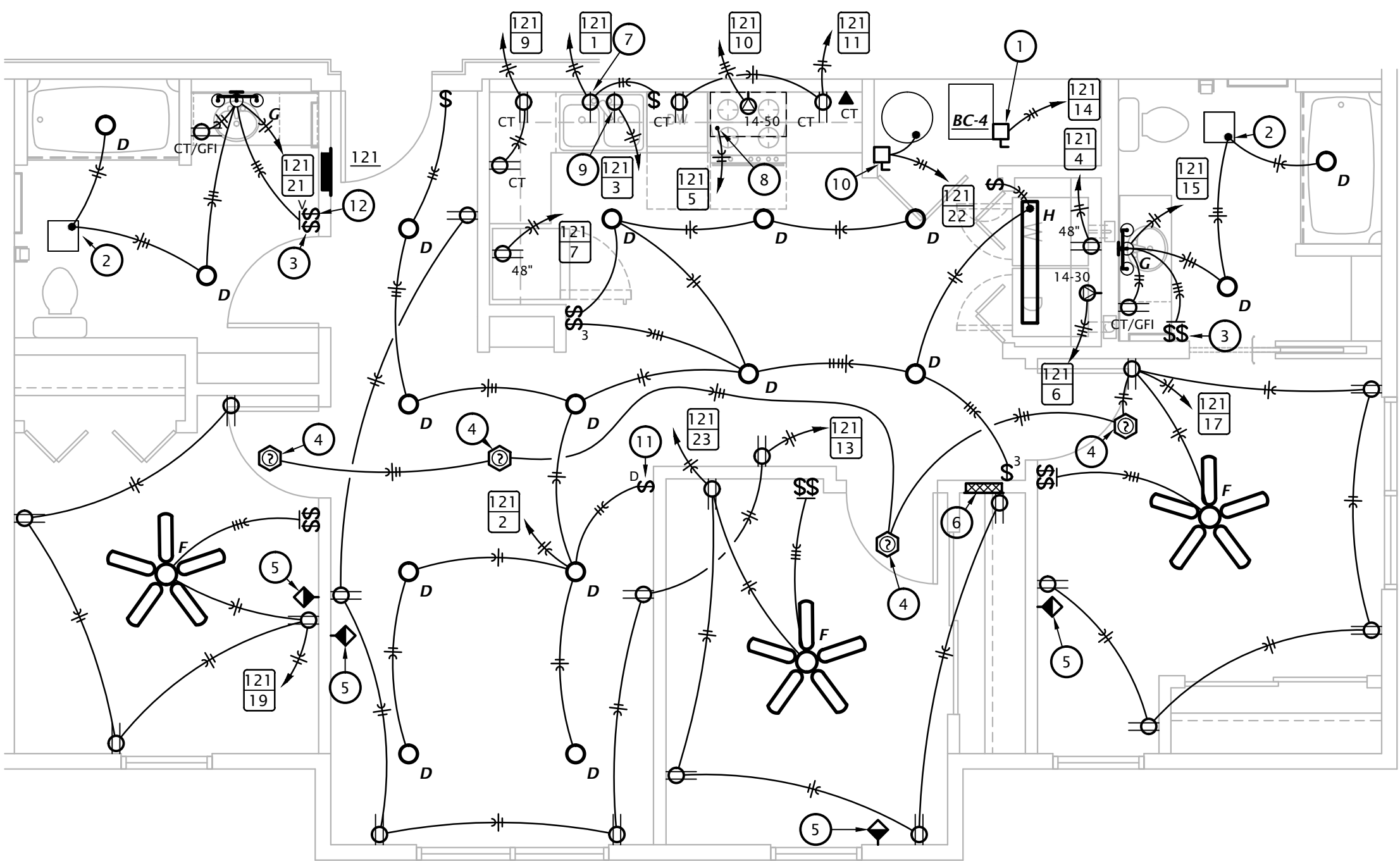
1. PROVIDE DISCONNECT SWITCH AND CONNECT BLOWER COIL WITH ELECTRIC HEAT. COORDINATE REQUIREMENTS WITH EQUIPMENT PROVIDER. DISCONNECTS SHALL BE SIZED AS FOLLOWS: BC-1:30A/2P, BC-2,3,4,5:60A/2P.
2. CONNECT EXHAUST FAN PROVIDED BY MECHANICAL CONTRACTOR.
3. SWITCH CLOSEST TO THE DOOR SHALL CONTROL ALL LIGHTS IN BATHROOM, AND THE OTHER SWITCH SHALL CONTROL THE EXHAUST FAN.
4. CEILING MOUNTED SMOKE ALARM IN APARTMENTS TO BE 120VAC WITH 9V BATTERY BACKUP, INTERCONNECTED TO OTHERS IN SAME APARTMENT. DEVICE SHALL HAVE CARBON MONOXIDE DETECTOR AND PHOTOELECTRIC TYPE SMOKE DETECTOR WITH SOUNDER HORN HAVING AN 85dB OUTPUT AT 10', SHALL HAVE A SINGLE BUTTON FOR TEST/SILENCE AND LED INDICATOR LIGHTS, AND SHALL BE UL 217 LISTED. BRK #SC7010B OR EQUAL. SEE SPECIAL SYSTEMS SHEETS FOR MORE INFORMATION.
5. COORDINATE FINAL LOCATIONS OF ALL CATV AND PHONE OUTLETS WITH OWNER. SEE 1:E6.1 FOR OUTLET DETAILS.
6. TELECOM DISTRIBUTION DEVICE APPROXIMATELY 4'-0" AFF. SEE DETAIL 1:E6.1.
7. SWITCHED RECEPTACLE BELOW COUNTER FOR GARBAGE DISPOSAL.
8. PROVIDE 120V CONNECTION TO RANGE HOOD/MICROWAVE. STANDARD AND ADAPTABLE UNITS WILL HAVE MICROWAVE ABOVE RANGE. ACCESSIBLE UNITS WILL HAVE RANGE HOOD. COORDINATE EXACT ELECTRICAL ROUGH-IN REQUIREMENTS WITH EQUIPMENT PROVIDED. IF EQUIPMENT IS CORD AND PLUG, PROVIDE RECEPTACLE INSIDE CABINET ABOVE RANGE.
9. PROVIDE RECEPTACLE BELOW COUNTER FOR CORD AND PLUG CONNECTION OF DISHWASHER. PROVIDE CORD AND GROUNDING PLUG AS REQUIRED. RECEPTACLE SHALL BE LOCATED IN BASE CABINET ADJACENT TO DISHWASHER TO ALLOW ACCESS TO PLUG.
10. PROVIDE 30A/2P DISCONNECT SWITCH AND CONNECT WATER HEATER.
11. PROVIDE PRESET SLIDE DIMMER COMPATIBLE WITH ASSOCIATED LIGHT FIXTURES.
12. PROVIDE TIMER SWITCH EQUAL TO AIR CYCLER 'FAN CONNECT' FOR CONTROL OF EXHAUST FAN. COORDINATE REQUIREMENTS WITH EQUIPMENT PROVIDED BY E.C.
13. PROVIDE DOOR ANNUNCIATOR SYSTEM A/V HORN/STROBE DEVICE AND LOW VOLTAGE TRANSFORMER AT ALL ACCESSIBLE APARTMENTS AND ALSO AT APARTMENTS DESIGNATED FOR HEARING-IMPAIRED GUESTS. REFER TO ARCH DRAWINGS FOR APPLICABLE ROOMS. INSTALL HORN/STROBE APPLIANCE AT 80" AFF PER ADA. INSTALL TRANSFORMER IN DOUBLE GANG JUNCTION BOX ABOVE HORN/STROBE WITH BLANK COVER PLATE AND PROVIDE LOW VOLTAGE CONTROL WIRING. REFER TO DETAIL 2, SHEET E6.1. PROVIDE ENGRAVED SIGN AT THE HORN/STROBE DEVICE TO READ "DOOR".
14. PROVIDE PUSH BUTTON AT 48" AFF FOR ANNUNCIATOR SYSTEM AT ALL ACCESSIBLE APARTMENTS AND ALSO AT APARTMENTS DESIGNATED FOR HEARING-IMPAIRED. REFER TO ARCH DRAWINGS FOR APPLICABLE ROOMS. REFER TO DETAIL 2, SHEET E6.1.
15. PROVIDE SWITCH IN ACCESSIBLE UNITS FOR CONTROL OF RANGE HOOD.
16. IN ACCESSIBLE UNITS, INSTALL COUNTERTOP RECEPTACLES A MINIMUM 36" AWAY FROM CORNER PER FAIR HOUSING ACT DESIGN MANUAL CHAPTER 5 'SIDE REACH OVER AN OBSTRUCTION' REQUIREMENTS. WHERE AN OBSTRUCTION PREVENTS 36" DISTANCE REQUIREMENT, INSTALL RECEPTACLE AS FAR FROM CORNER AS POSSIBLE. PROVIDE ADDITIONAL OUTLETS WITHIN 36" OF CORNER TO ENSURE COMPLIANCE WITH NEC SPACING REQUIREMENTS.



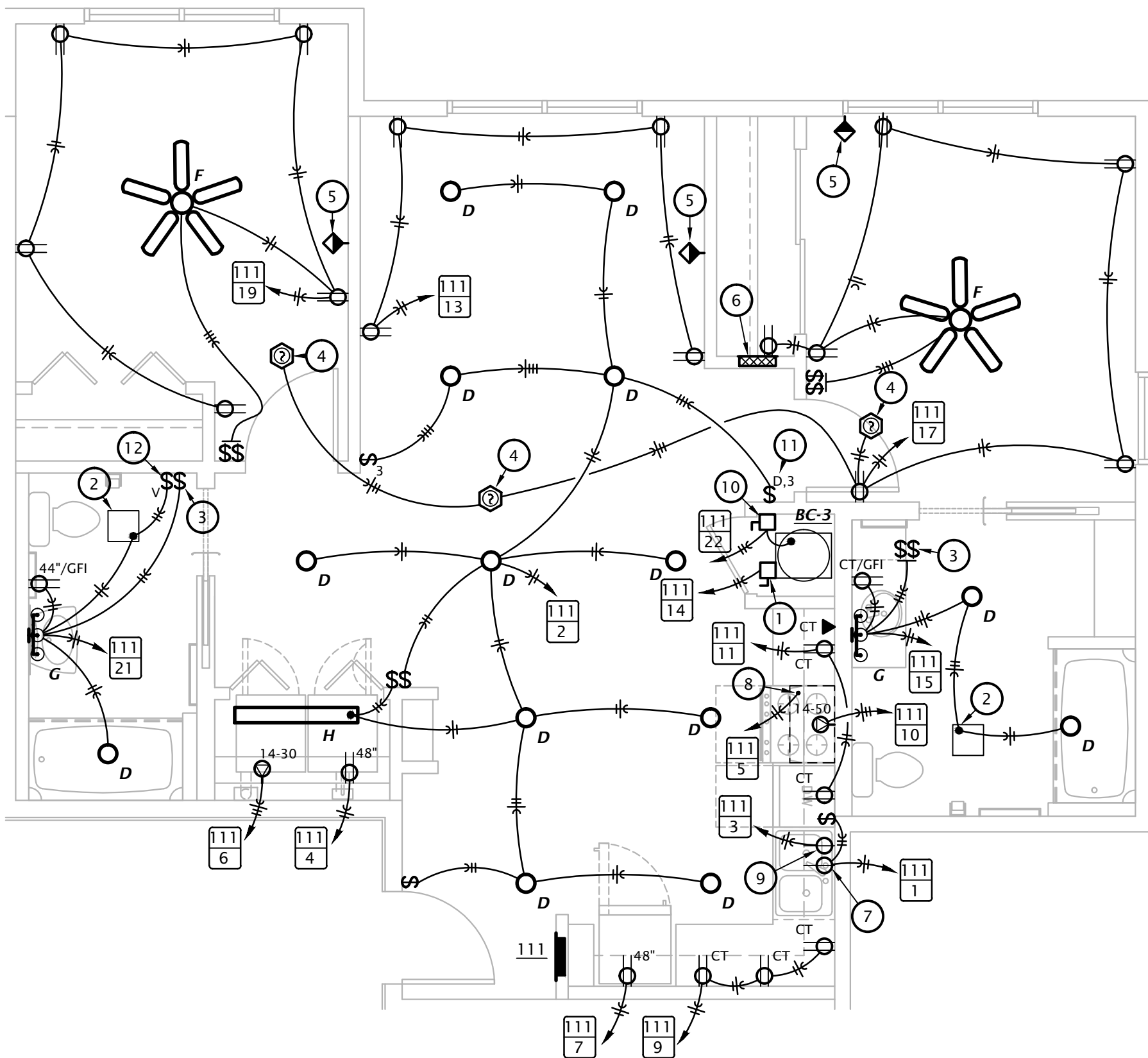
④ **2 BEDROOM ACCESSIBLE ELECTRICAL PLAN (TYPES A, AND C)**
1/4" = 1'-0"



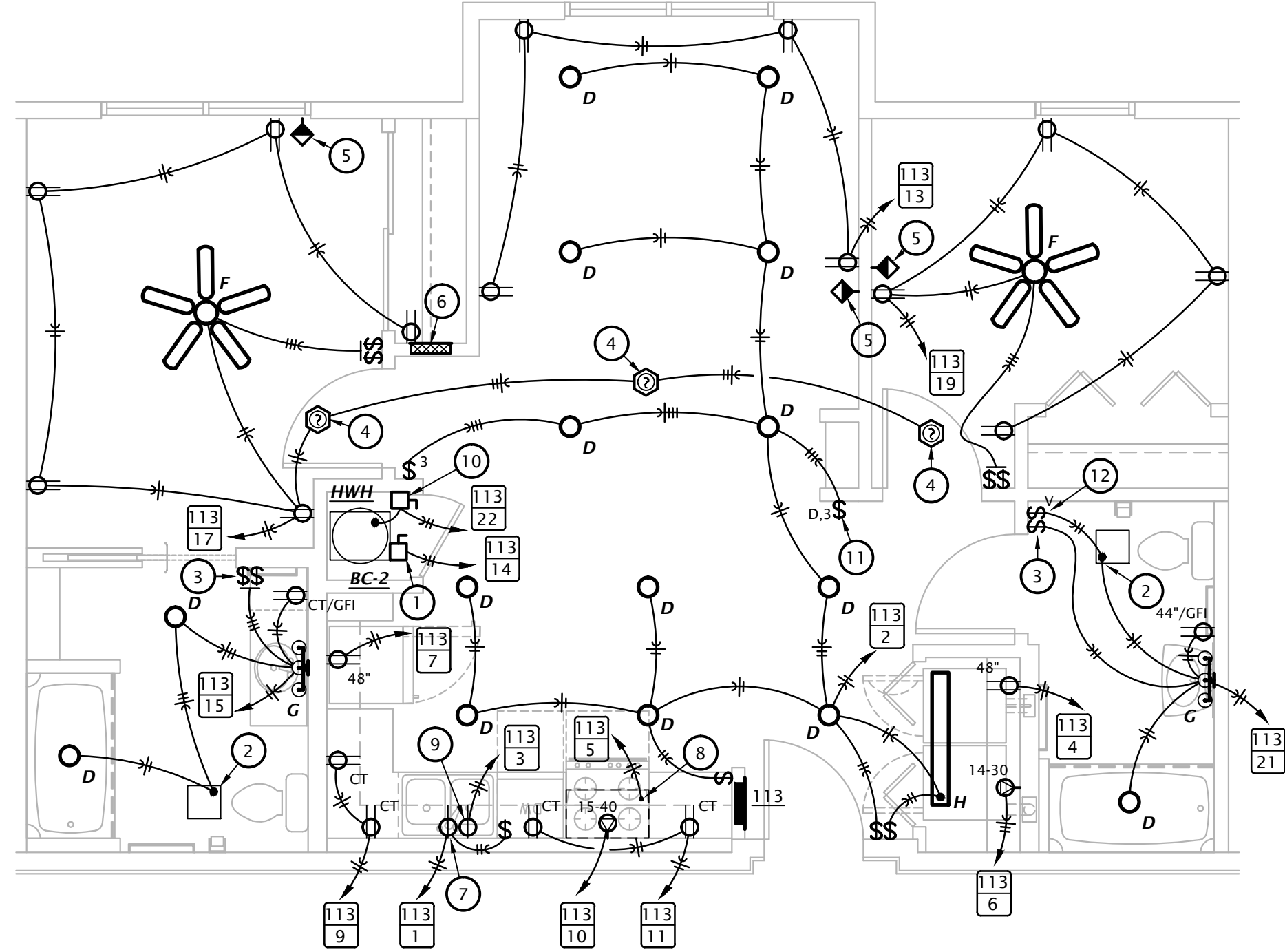
③ **2 BEDROOM ELECTRICAL PLAN (TYPE E)**
1/4" = 1'-0"



⑤ **3 BEDROOM ELECTRICAL PLAN (APT. 431)**
1/4" = 1'-0"

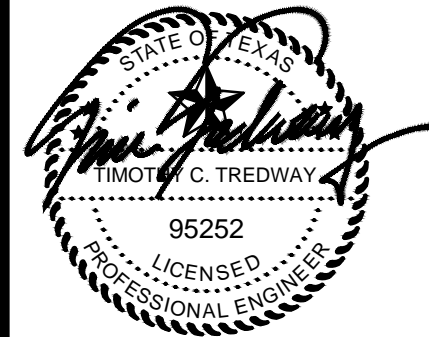


② **2 BEDROOM ELECTRICAL PLAN (TYPE D)**
1/4" = 1'-0"



① **2 BEDROOM ELECTRICAL PLAN (TYPE B)**
1/4" = 1'-0"

5-17-2023



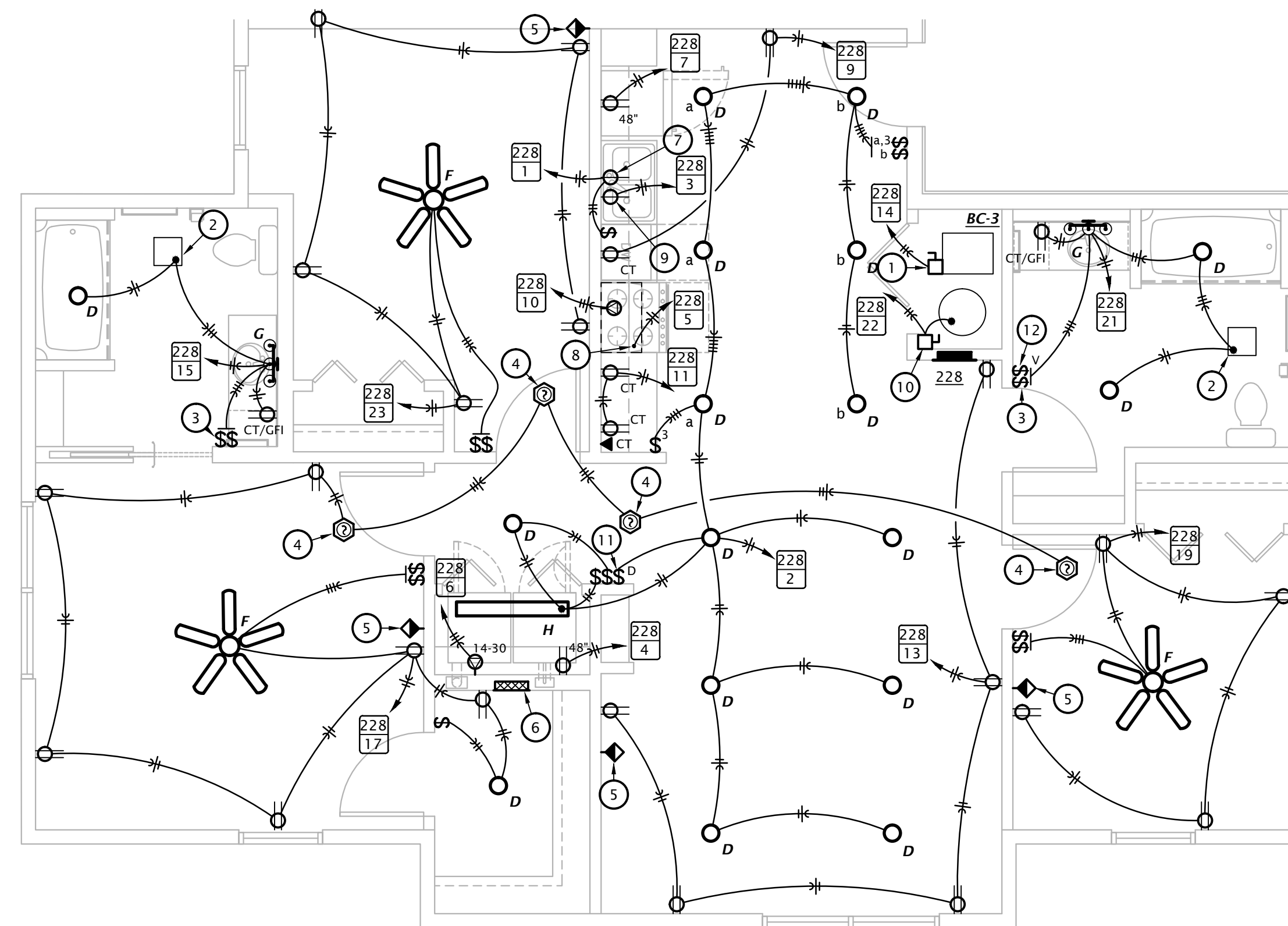
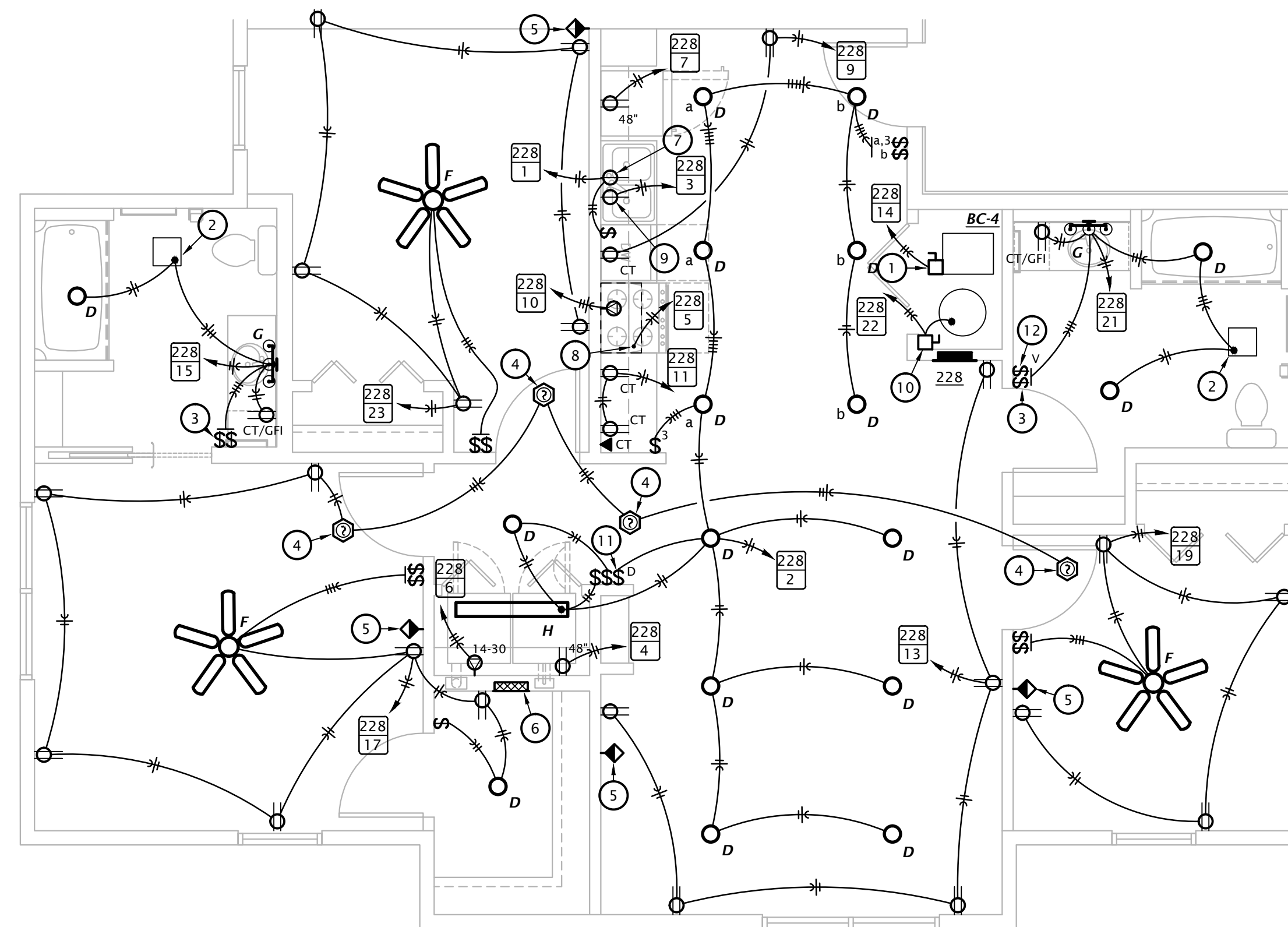
REVISION:

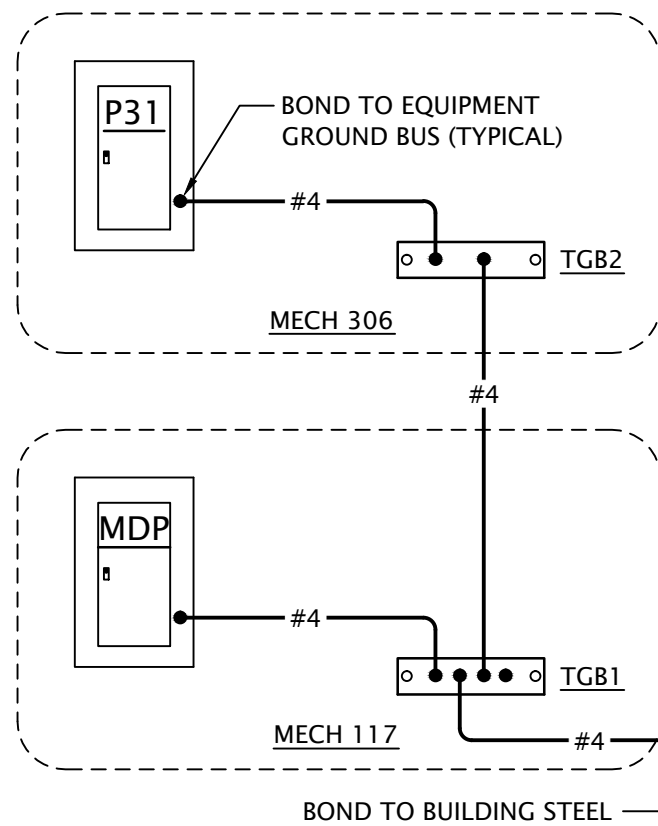
DATE: 06-26-2023
JOB: 21-3205
SHEET NO.:

GENERAL NOTE:

PROVIDE TAMPER PROOF RECEPTACLE IN DWELLING UNITS PER NEC REQUIREMENTS.

1. PROVIDE CIRCUIT BREAKER SWITCH AND CONNECT BLOWER COIL WITH ELECTRIC HEAT. COORDINATE REQUIREMENTS WITH EQUIPMENT PROVIDER. DISCONNECTS SHALL BE SIZED AS FOLLOWS: BC1: 30A/2P, BC2: 3,4,5: 60A/2P
2. CONNECT EXHAUST FAN PROVIDED BY MECHANICAL CONTRACTOR.
3. SWITCH CLOSEST TO THE DOOR SHALL CONTROL ALL LIGHTS IN BATHROOM, AND THE OTHER SWITCH SHALL CONTROL THE EXHAUST FAN.
4. CEILING MOUNTED SMOKE ALARM IN APARTMENTS TO BE 120VAC WITH 9V BATTERY BACKUP, INTERCONNECTED TO OTHERS IN SAME APARTMENT. DEVICE SHALL HAVE CARBON MONOXIDE DETECTOR AND PHOTOELECTRIC TYPE SMOKE DETECTOR WITH SOUNDER HORN HAVING AN 85DB OUTPUT AT 10', SHALL HAVE A SINGLE TUNED FOR TEST/SILENCE AND LED INDICATOR LIGHTS, AND SHALL BE UL 217 LISTED. BRK #SC7010B OR EQUAL. SEE SPECIAL SYSTEMS SHEETS FOR MORE INFORMATION.
5. COORDINATE FINAL LOCATIONS OF ALL CATV AND PHONE OUTLETS WITH OWNER. SEE 1.E6.1 FOR OUTLET DETAILS.
6. TELECOM DISTRIBUTION DEVICE APPROXIMATELY 4'-0" AFF. SEE DETAIL 1-E6.1.
7. SWITCHED RECEPTACLE BELOW COUNTER FOR GARBAGE DISPOSAL.
8. PROVIDE 120V CONNECTION TO RANGE HOOD/MICROWAVE. STANDARD AND ADAPTABLE UNITS WILL HAVE MICROWAVE ABOVE RANGE. ACCESSIBLE UNITS WILL HAVE RANGE HOOD. COORDINATE EXACT ELECTRICAL ROUGH-IN REQUIREMENTS WITH EQUIPMENT PROVIDER. IF EQUIPMENT IS CORD AND PLUG, PROVIDE RECEPTACLE INSIDE CABINET ABOVE RANGE.
9. PROVIDE RECEPTACLE BELOW COUNTER FOR CORD AND PLUG CONNECTION OF DISHWASHER. PROVIDE CORD AND GROUNDING PLUG AS REQUIRED. RECEPTACLE SHALL BE LOCATED IN BASE CABINET ADJACENT TO DISHWASHER TO ALLOW ACCESS TO PLUG.
10. PROVIDE 30A/2P DISCONNECT SWITCH AND CONNECT WATER HEATER.
11. PROVIDE PRESET SLIDE DIMMER COMPATIBLE WITH ASSOCIATED LIGHT FIXTURES.
12. PROVIDE TIMER SWITCH EQUAL TO AIR CYCLER 'FAN CONNECT' FOR CONTROL OF EXHAUST FAN. COORDINATE REQUIREMENTS WITH EQUIPMENT PROVIDED BY E.C.
13. PROVIDE DOOR ANNUNCIATOR SYSTEM A/V HORN/STROBE DEVICE AND LOW VOLTAGE TRANSFORMER AT ALL ACCESSIBLE APARTMENTS AND ALSO AT APARTMENTS DESIGNATED FOR HEARING/IMPAIRED GUESTS. REFER TO ARCH DRAWINGS FOR APPLICABLE ROOMS. INSTALL HORN/STROBE APPLIANCE AT 80" AFF PER ADA. INSTALL TRANSFORMER IN DOUBLE GANG JUNCTION BOX ABOVE HORN/STROBE WITH BLANK COVER PLATE AND PROVIDE LOW VOLTAGE CONTROL WIRING. REFER TO DETAIL 2, SHEET E6.1. PROVIDE ENGRAVED SIGN AT THE HORN/STROBE DEVICE TO READ "DOOR".
14. PROVIDE PUSH BUTTON AT 48" AFF FOR ANNUNCIATOR SYSTEM AT ALL ACCESSIBLE APARTMENTS AND ALSO AT APARTMENTS DESIGNATED FOR HEARING/IMPAIRED. REFER TO ARCH DRAWINGS FOR APPLICABLE ROOMS. REFER TO DETAIL 2, SHEET E6.1.
15. PROVIDE SWITCH IN ACCESSIBLE UNITS FOR CONTROL OF RANGE HOOD.
16. IN ACCESSIBLE UNITS, INSTALL COUNTERTOP RECEPTACLES A MINIMUM 36" AWAY FROM CORNER PER FAIR HOUSING ACT DESIGN MANUAL CHAPTER 5 'SIDE REACH OR AN OBSTRUCTION' REQUIREMENTS. WHERE AN OBSTRUCTION PREVENTS 36" DISTANCE REQUIREMENT, INSTALL RECEPTACLE AS FAR FROM CORNER AS POSSIBLE. PROVIDE ADDITIONAL OUTLETS WITHIN 36" OF CORNER TO ENSURE COMPLIANCE WITH NEC SPACING REQUIREMENTS.

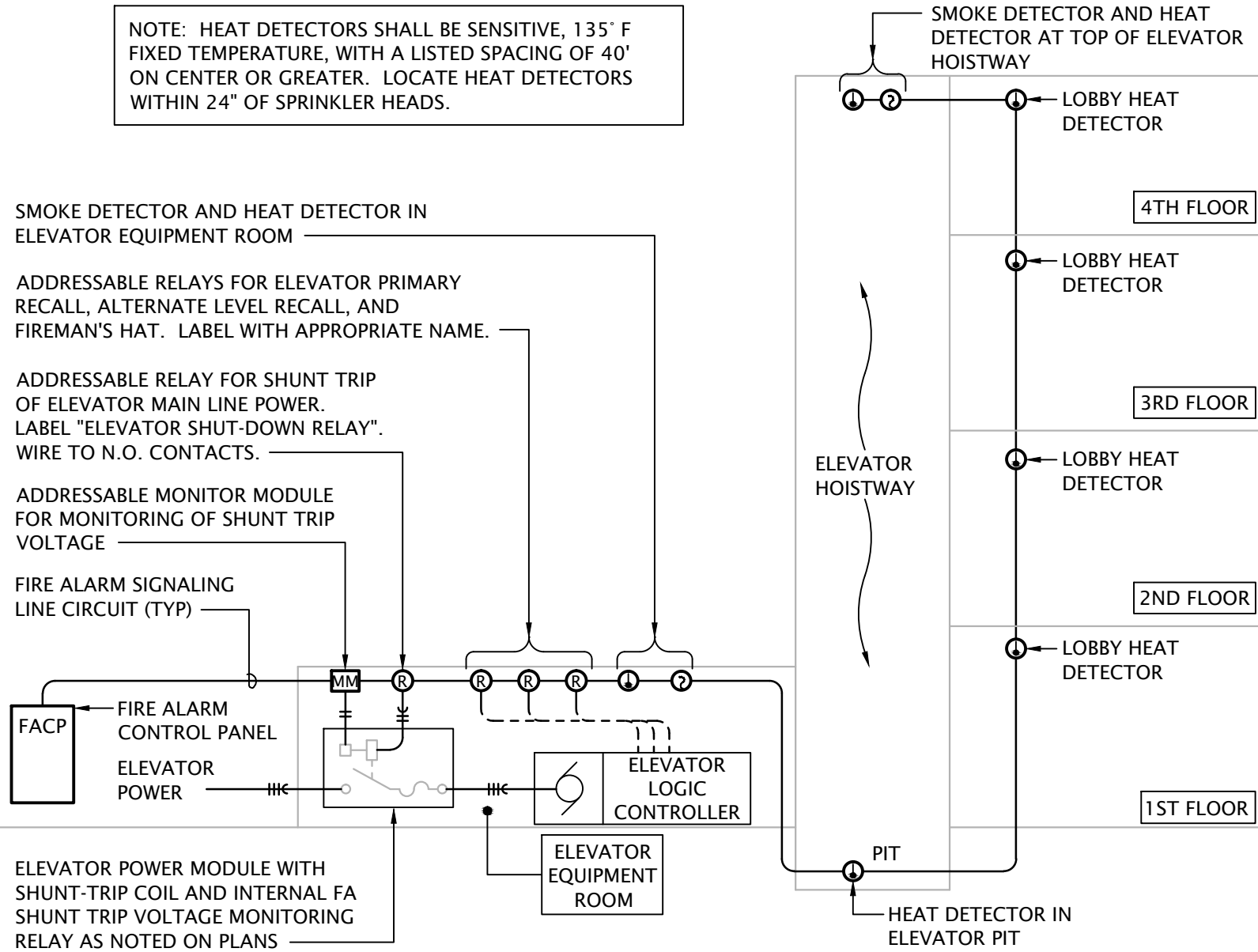




- NOTES:**
- TELECOMMUNICATIONS GROUND BARS SHALL BE 13-1/4"W x 2"H x 1/4" THICK ELECTRO-TIN PLATED COPPER BUS BAR, COMPLETE WITH INSULATED STAND-OFFS AND STAINLESS STEEL BRACKETS, ERICO #TGBA14L06PT OR EQUAL.
 - ALL GROUNDING / BONDING CONDUCTORS SHALL BE #4 AWG INSULATED STRANDED COPPER. INSTALL IN 3/4" CONDUIT WHERE EXPOSED AND WHERE SUBJECT TO PHYSICAL DAMAGE.
 - ALL CONNECTIONS TO GROUND BAR SHALL BE MADE USING COMPRESSION TYPE LUGS (MECHANICAL LUGS ARE NOT ACCEPTABLE).

4 TELECOM GROUNDING & BONDING DIAGRAM

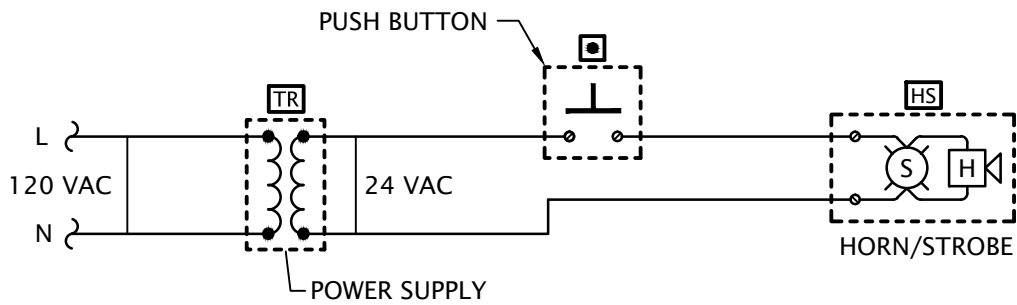
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- ELEVATOR SEQUENCE OF OPERATION: (DURING SMOKE/HEAT ALARM)**
- UPON SENSING SMOKE FROM ONE OR MORE LOBBY, ELEVATOR HOISTWAY OR ELEVATOR EQUIPMENT ROOM, THE SMOKE DETECTOR SHALL SIGNAL THE FACP, WHICH WILL FORWARD THE SIGNAL TO THE ELEVATOR LOGIC CONTROLLER TO RECALL ELEVATOR CAB TO THE DESIGNATED MAIN FLOOR. IF DESIGNATED FLOOR'S LOBBY SMOKE DETECTOR SENSES SMOKE AT THAT FLOOR, THE ELEVATOR CONTROLLER WILL SEND THE ELEVATOR CAB TO THE NEXT FLOOR CLEAR OF SMOKE. ONCE THE ELEVATOR CAB HAS REACHED THE DESIGNATED FLOOR, THE ELEVATOR CAB DOORS WILL OPEN AND THE CONTROLLER WILL LOCK THE ELEVATOR CAB AT THAT FLOOR, DISABLING THE ELEVATOR CAB CONTROLS, UNLESS A FIREMAN'S KEY IS USED TO OVERRIDE AUTOMATIC CONTROLS.
 - ALL SMOKE DETECTORS (LOBBIES, HOISTWAY, MACHINE ROOM) SHALL TRANSMIT A SEPARATE AND DISTINCT VISIBLE ANNUNCIATION AT THE FACP AND ANNUNCIATOR PANEL.
 - HEAT DETECTORS IN THE ELEVATOR HOISTWAY AND ELEVATOR EQUIPMENT ROOM WILL SEND A SIGNAL TO THE SHUNT-TRIP SWITCH POWERING THE ELEVATOR SO AS TO SHUT DOWN POWER TO THAT CIRCUIT. (THIS IS A NON-AUTO RESET SWITCH). WHEN THE SPRINKLER HEAD HAS REACHED ITS CRITICAL TEMPERATURE OF 165° F., THE HEAD WILL BEGIN DISCHARGE OF WATER.

3 ELEVATOR INTERLOCK WITH FIRE ALARM

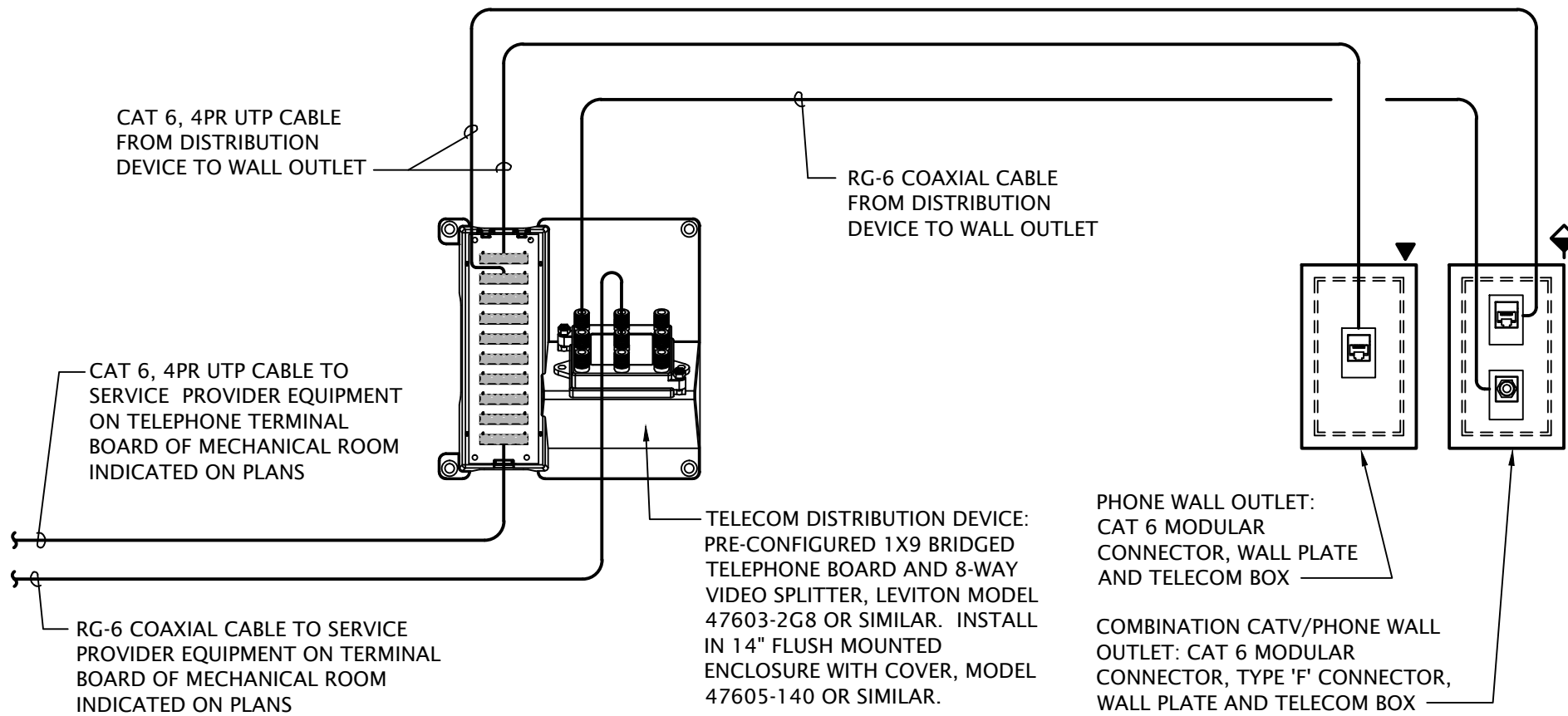
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- DOOR ALARM BUZZER SYSTEM NOTES**
- PROVIDE DOOR ANNUNCIATOR SYSTEM COMPLETE WITH PUSH BUTTON, HORN/STROBE(S), POWER SUPPLIES AND ALL WIRING REQUIRED. HORN/STROBE SHALL ACTIVATE WHEN PUSH BUTTON IS DEPRESSED.
 - HORN/STROBE SHALL OPERATE AT 24VAC, HAVE A CLEAR LENS WITH 50cd STROBE AND HORN WITH 82dB AT 10', UL 1638 LISTED, EDWARDS #6536-G5. FLUSH MOUNT IN WALL AT 6'-8" AFF.
 - PUSH BUTTON SHALL BE WHITE WITH CHROME RIM, NON-ILLUMINATED, WITH N.O. MOMENTARY CONTACTS, RATED FOR 0.67 AMPS AT 24VAC, EDWARDS #620. PROVIDE WITH STAINLESS STEEL COVER PLATE, EDWARDS #147-10. MOUNT AT 48" AFF.
 - POWER SUPPLY SHALL BE A LOW VOLTAGE CLASS 2 TRANSFORMER WITH 120VAC PRIMARY AND 24VAC SECONDARY, 20VA, EDWARDS #598. FLUSH MOUNT IN 2-GANG WALL BOX WITH BLANK COVER PLATE, DIRECTLY ABOVE HORN/STROBE.
 - LOW VOLTAGE CLASS 2 CABLING SHALL BE MINIMUM 18 AWG UNSHIELDED.

2 APARTMENT DOORBELL WIRING SCHEMATIC

No Scale



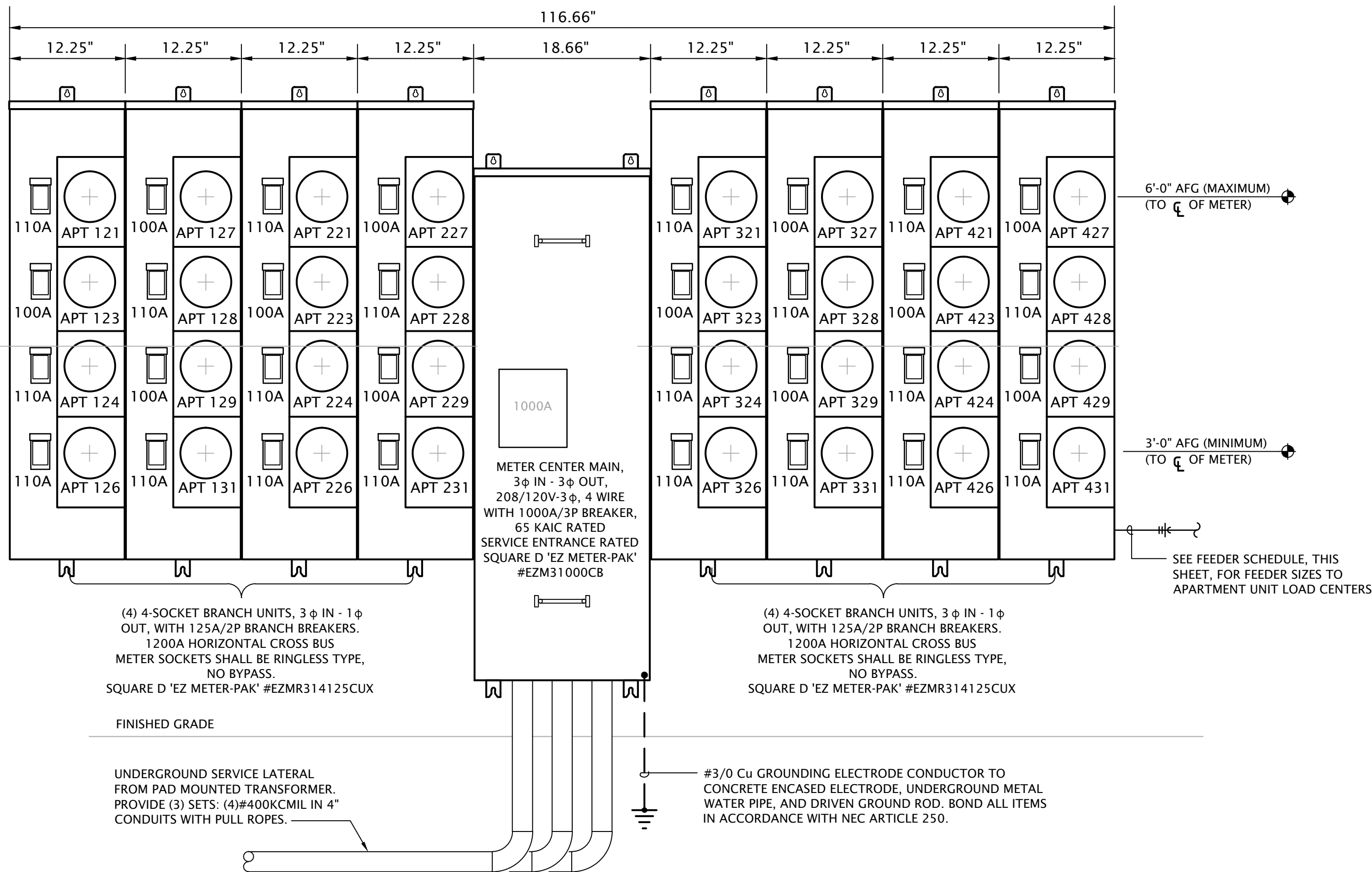
1 APARTMENT TELECOM WIRING SCHEMATIC

NO SCALE

APARTMENT FEEDER SCHEDULE	
Apartment #	Feeder Size
111, 112, 113, 114, 128, 131, 211, 212, 213, 214, 226, 228, 231, 311, 312, 313, 314, 328, 331, 428, 431	COPPER (BASE BID): (3)#3, #6G IN 1-1/4" C OR MC-CABLE ALUMINUM (ALTERNATE BID): (3)#1, #4G IN 1-1/4" C OR MC-CABLE
116, 124, 126, 129, 216, 217, 224, 229, 316, 326, 329, 413, 414, 426, 429	COPPER (BASE BID): (3)#2, #6G IN 1-1/4" C OR MC-CABLE ALUMINUM (ALTERNATE BID): (3)#1/0, #4G IN 1-1/4" C OR MC-CABLE
118, 127, 218, 227, 317, 324, 416, 417, 424	COPPER (BASE BID): (3)#1, #4G IN 1-1/4" C OR MC-CABLE ALUMINUM (ALTERNATE BID): (3)#2/0, #2G IN 1-1/2" C OR MC-CABLE
121, 123, 219, 221, 223, 318, 319, 323, 327, 418, 419, 423, 427	COPPER (BASE BID): (3)#1/0, #3G IN 1-1/2" C OR MC-CABLE ALUMINUM (ALTERNATE BID): (3)#3/0, #1G IN 2" C OR MC-CABLE
321, 421	COPPER (BASE BID): (3)#2/0, #2G IN 1-1/2" C OR MC-CABLE ALUMINUM (ALTERNATE BID): (3)#4/0, #1G IN 2" C OR MC-CABLE
NOTES: 1. Voltage drop has been accounted for in sizes indicated, further up-sizing of feeders is not necessary 2. Ensure panel lugs are adequately sized to handle up-sized feeders.	

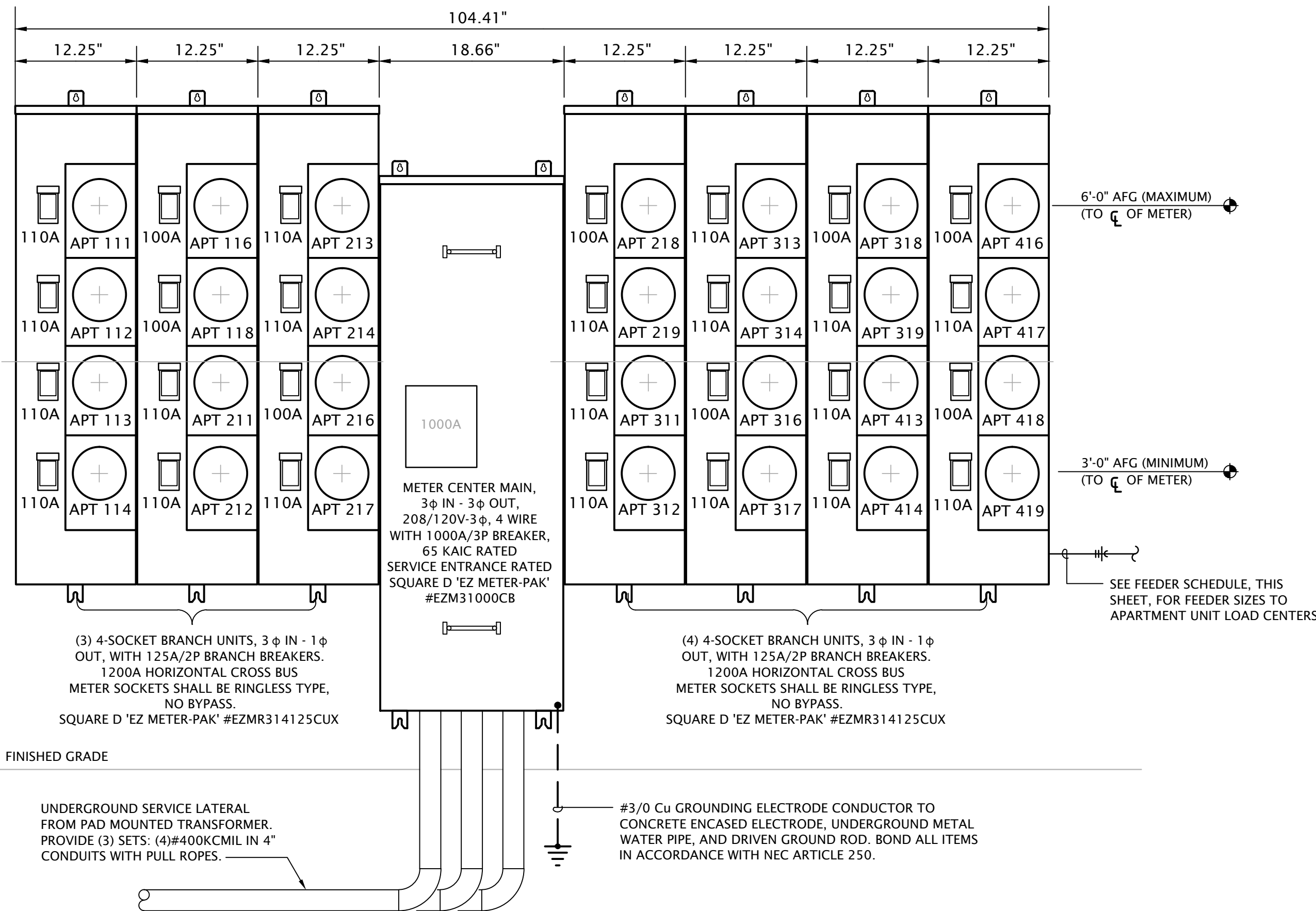
- NOTES:
- Meter Center main circuit breakers shall be 65 kAIC fully rated. Feeder breakers may be series rated with main breaker for a 65 kAIC rating.
 - All conductor sizes are based on copper, U.N.O.
 - Entire installation shall comply with NEC.
 - Coordinate all responsibilities and requirements with power utility company and pay associated fees. Contact Information:
Denton Municipal Electric
Daniel Howington
Line Designer
(940) 349-7168
daniel.howington@cityofdenton.com
 - Coordinate final location of meter assemblies with utility company. Provide shop drawings of proposed equipment whether as specified or substituted to utility company for approval.
 - All meter center components shall be NEMA 3R.
 - All dimensions based on Square D equipment. It is the contractor's responsibility to verify the dimensions of substitute equipment.
 - For each meter, provide a permanent brass, copper or aluminum tag identifying the apartment served. Tags shall be securely fastened to the meter base and be stamped with 1/8" letters, minimum.

Dwelling Unit Meter Center 'MCA' Load Calculation				
Area:	28,279 SF (Dwelling Units Only)			
	32 Dwelling Units	Connected Demand Load (VA)	Load (VA)	
Feeder & Service Loads per NEC 220.84 Part IV				
C1 General Loads (220.84 (C)(1))				
a Lighting & Receptacles	3 VA/SF	28279 SF	84,837	
C2 Required Circuits (220.84 (C)(2))				
a Laundry Circuit	1,500 VA/Circuit	32 Circuit	48,000	
b Kitchen Circuits	1,500 VA/Circuit	64 Circuit	96,000	
C3 Nameplate Ratings of Equipment (220.84 (C)(3))				
a1 Microwave	1,000 VA/Circuit	32 ea	32,000	
a2 Dishwasher	840 VA/Circuit	32 ea	26,880	
a3 Disposal	1175 VA/Circuit	32 ea	37,600	
a4 Refrigerator	1200 VA/Circuit	32 ea	38,400	
b Electric Range	8,000 VA/Circuit	32 ea	256,000	
c Electric Clothes Dryer	5,000 VA/Circuit	32 ea	160,000	
C4 Nameplate Ratings of Motors (220.84 (C)(4))				
Blower Fan #1	956 VA/Circuit	12 ea	11,472	
Blower Fan #2	956 VA/Circuit	8 ea	7,648	
Blower Fan #3	900 VA/Circuit	12 ea	10,800	
C5 Larger of Heating and A/C load (220.84 (C)(5))				
Electric Heat (5 kW)	3,900 VA/Circuit	12 ea	46,800	
Electric Heat (8 kW)	5,200 VA/Circuit	8 ea	41,600	
Electric Heat (9.6 kW)	6,900 VA/Circuit	12 ea	82,800	
		Connected Load Total	980,837	
		Dwelling Unit Demand Load from Table 220.84 = 31%	304,059	
Meter Center NEC Demand Load (VA) Sub-Total				
		Spare Capacity 10%	30,406	
Total Meter Center Demand Load (VA)				
			334,465	
Total Meter Center Demand Load (Amperes) @ 208Y/120V-3Ph, 4W				
			929	
Provide 1000A Meter Center				

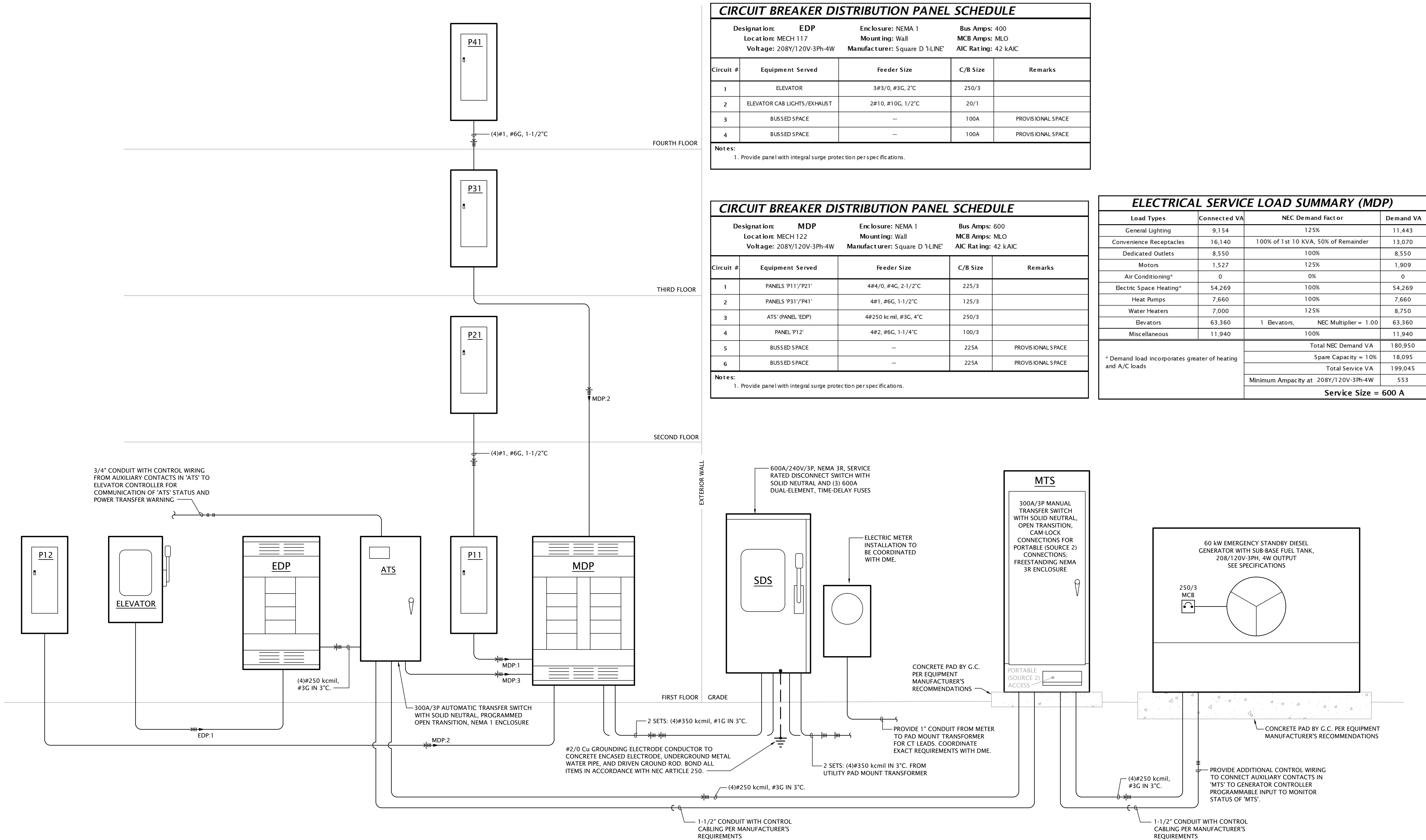


2 ELECTRICAL RISER DIAGRAM 'MCA'
No Scale

Dwelling Unit Meter Center 'MCB' Load Calculation				
Area:	25,097 SF (Dwelling Units Only)			
	28 Dwelling Units	Connected Demand Load (VA)	Load (VA)	
Feeder & Service Loads per NEC 220.84 Part IV				
C1 General Loads (220.84 (C)(1))				
a Lighting & Receptacles	3 VA/SF	25097 SF	75,291	
C2 Required Circuits (220.84 (C)(2))				
a Laundry Circuit	1,500 VA/Circuit	28 Circuit	42,000	
b Kitchen Circuits	1,500 VA/Circuit	56 Circuit	84,000	
C3 Nameplate Ratings of Equipment (220.84 (C)(3))				
a1 Microwave	1,000 VA/Circuit	28 ea	28,000	
a2 Dishwasher	840 VA/Circuit	28 ea	23,520	
a3 Disposal	1175 VA/Circuit	28 ea	32,900	
a4 Refrigerator	1200 VA/Circuit	28 ea	33,600	
b Electric Range	8,000 VA/Circuit	28 ea	224,000	
c Electric Clothes Dryer	5,000 VA/Circuit	28 ea	140,000	
C4 Nameplate Ratings of Motors (220.84 (C)(4))				
Blower Fan #1	956 VA/Circuit	8 ea	7,648	
Blower Fan #2	956 VA/Circuit	18 ea	17,208	
Blower Fan #3	900 VA/Circuit	4 ea	3,600	
C5 Larger of Heating and A/C load (220.84 (C)(5))				
Electric Heat (5 kW)	3,900 VA/Circuit	8 ea	31,200	
Electric Heat (8 kW)	5,200 VA/Circuit	18 ea	93,600	
Electric Heat (9.6 kW)	6,900 VA/Circuit	4 ea	27,600	
		Connected Load Total	864,167	
		Dwelling Unit Demand Load from Table 220.84 = 33%	285,175	
Meter Center NEC Demand Load (VA) Sub-Total				
		Spare Capacity 10%	28,518	
Total Meter Center Demand Load (VA)				
			313,693	
Total Meter Center Demand Load (Amperes) @ 208Y/120V-3Ph, 4W				
			871	
Provide 1000A Meter Center				



1 ELECTRICAL RISER DIAGRAM 'MCB'
No Scale



1 ELECTRICAL RISER DIAGRAM - HOUSE SERVICE
No Scale

PANEL 'P11'/'P21' LOAD SUMMARY			
Load Types	Connected VA	NEC Demand Factor	Demand VA
General Lighting	4,708	125%	5,885
Convenience Receptacles	5,700	100% of 1st 10 KVA, 50% of Remainder	5,700
Dedicated Outlets	2,800	100%	2,800
Electric Space Heating*	21,000	100%	21,000
Miscellaneous	10,440	100%	10,440
* Demand load incorporates greater of heating and A/C loads	Total NEC Demand VA		51,450
	Spare Capacity = 10%		5,145
	Total Service VA		56,595
	Minimum Ampacity at 208Y/120V-3Ph-4W		157
	Minimum Panel Size = 125 A		

PANEL SCHEDULE NOTES BY SYMBOL

1. PROVIDE LOCK-ON CLIP FOR BREAKER.
2. HACR RATED BREAKER.

Designation: P21 Location: MECH 206 Voltage: 208Y/120V-3Ph-4W Enclosure: NEMA 1 Mounting: Surface				Manufacturer: Square D 'NQ' Bus Amps: 225 MCB Amps: MLO AIC Rating: 22 kAIC Other:			
Circuit #	Load Description	Conductors	C/B Size	C/B Size	Conductors	Load Description	Circuit #
1	LTG - STG 212, MECH 213, BREEZEWAY 202	2# 12, #12G, 1/2"C	20 / 1	20 / 1	2# 12, #12G, 1/2"C	RECEPT - BREEZEWAY 202	2
3	LTG - BREEZEWAY 201	2# 12, #12G, 1/2"C	20 / 1	20 / 1	2# 12, #12G, 1/2"C	RECEPT - BREEZEWAY 201	4
5	RECEPT - MECH 204, STG 203	2# 12, #12G, 1/2"C	20 / 1	30 / 2	2# 10, #10G, 3/4"C	ELECTRIC WALL HEATER 'EWH-4' - MECH 204	6
7	ELECTRIC WALL HEATER 'EWH-3' - STG 203	2# 12, #12G, 1/2"C	20 / 2				8
9				20 / 1	—	SPARE	10
11	ELECTRIC WALL HEATER 'EWH-11' - JANITOR	2# 12, #12G, 1/2"C	20 / 2	30 / 2	2# 10, #10G, 3/4"C	WATER HEATER 'HWH-A'	12
13							14
15	SPACE ONLY	—	—	20 / 1	2# 12, #12G, 1/2"C	BREEZEWAY EXHUAIST	16
17	SPACE ONLY	—	—	—	—	SPACE ONLY	18
19	SPACE ONLY	—	—	—	—	SPACE ONLY	20
21	SPACE ONLY	—	—	—	—	SPACE ONLY	22
23	SPACE ONLY	—	—	—	—	SPACE ONLY	24
25	SPACE ONLY	—	—	—	—	SPACE ONLY	26
27	SPACE ONLY	—	—	—	—	SPACE ONLY	28
29	SPACE ONLY	—	—	—	—	SPACE ONLY	30

Designation: P11 Location: MECH 117 Voltage: 208Y/120V-3Ph-4W Enclosure: NEMA 1 Mounting: Surface				Manufacturer: Square D 'NQ' Bus Amps: 225 MCB Amps: MLO AIC Rating: 22 kAIC Other: Feed-Through Lugs			
Circuit #	Load Description	Conductors	C/B Size	C/B Size	Conductors	Load Description	Circuit #
1	LTG - MECH 122, BREEZEWAY 132	2# 12, #12G, 1/2"C	20 / 1	20 / 1	2# 12, #12G, 1/2"C	RECEPT - BREEZEWAY 132	2
3	LTG - BREEZEWAY 110	2# 12, #12G, 1/2"C	20 / 1	20 / 1	2# 12, #12G, 1/2"C	RECEPT - BREEZEWAY 110	4
5	EXT. LTG - SOUTH	2# 12, #12G, 1/2"C	1	20 / 1	2# 12, #12G, 1/2"C	RECEPTS - NE EXTERIOR	6
7	EXT. LTG - NORTH/WEST WALL PACKS	2# 12, #12G, 1/2"C	20 / 1	20 / 1	2# 12, #12G, 1/2"C	RECEPTS - SW EXTERIOR	8
9	PARKING LOT POLE LIGHTS	2# 10, #10G, 3/4"C	20 / 2	20 / 1	2# 12, #12G, 1/2"C	RECEPT - FIRE SPRINKLER AIR COMPRESSOR	10
11				30 / 2	2# 10, #10G, 1/2"C	ELECTRIC WALL HEATER 'EWH-1' - SPRINKLER 133	12
13	PARKING LOT POLE LIGHTS	2# 10, #10G, 3/4"C	20 / 2				14
15				20 / 1	2# 12, #12G, 1/2"C	FIRE ALARMPANEL	16
17	EXT. LTG - FAÇADE WALL SCONCE	2# 12, #12G, 1/2"C	20 / 1	20 / 1	2# 12, #12G, 1/2"C	FIRE SPRINKLER FLOW/BELL	18
19	LTG - ELEV EQUIP/PIT	2# 12, #12G, 1/2"C	20 / 1	30 / 2	2# 10, #10G, 3/4"C	ELECTRIC WALL HEATER 'EWH-2' - MECH 122	20
21	RECEPT - TELECOM BACKBOARD	2# 12, #12G, 1/2"C	20 / 1				22
23	RECEPT - TELECOM BACKBOARD	2# 12, #12G, 1/2"C	20 / 1	20 / 1	2# 12, #12G, 1/2"C	RECEPT - ELEVATOR PIT	24
25	LIGHTING CONTROLS	2# 12, #12G, 1/2"C	20 / 1	20 / 1	2# 12, #12G, 1/2"C	RECEPT - ELEVATOR EQUIPMENT	26
27	GENSET BATTERY CHARGER	SEE SITE PLAN E1.1	20 / 1	20 / 1	2# 12, #12G, 1/2"C	BREEZEWAY EXHAUST	28
29	GENSET COOLANT HEATER	SEE SITE PLAN E1.1	20 / 1	40 / 2	2# 8, #10G, 3/4"C	EV CHARGING STATION	30
31	ELECTRIC WALL HEATER 'EWH-10' - JANITOR	2# 12, #12G, 1/2"C	20 / 2				32
33				20 / 1	2# 12, #12G, 1/2"C	RECEPT - EV CHARGING MAINTENANCE	34
35	SPARE BREAKER	—	20 / 1	20 / 1	—	SPARE BREAKER	36
37	SPARE BREAKER	—	20 / 1	20 / 1	2# 12, #12G, 1/2"C	DOOR ACCESS CONTROL	38
39	SPACE ONLY	—	—	—	—	SPACE ONLY	40
41	SPACE ONLY	—	—	—	—	SPACE ONLY	42
43	SPACE ONLY	—	—	—	—	SPACE ONLY	44
45	SPACE ONLY	—	—	—	—	SPACE ONLY	46
47	SPACE ONLY	—	—	—	—	SPACE ONLY	48
49	SPACE ONLY	—	—	—	—	SPACE ONLY	50
51	SPACE ONLY	—	—	—	—	SPACE ONLY	52
53	SPACE ONLY	—	—	—	—	SPACE ONLY	54

PANEL 'P31'/'P41' LOAD SUMMARY			
Load Types	Connected VA	NEC Demand Factor	Demand VA
General Lighting	2,416	125%	3,020
Convenience Receptacles	5,040	100% of 1st 10 KVA, 50% of Remainder	5,040
Dedicated Outlets	1,600	100%	1,600
Motors	700	125%	875
Electric Space Heating*	18,000	100%	18,000
* Demand load incorporates greater of heating and A/C loads	Total NEC Demand VA		36,195
	Spare Capacity = 10%		3,620
	Total Service VA		39,815
	Minimum Ampacity at 208Y/120V-3Ph-4W		111
	Minimum Panel Size = 125 A		

Designation: P41 Location: MECH 416 Voltage: 208Y/120V-3Ph-4W Enclosure: NEMA 1 Mounting: Surface				Manufacturer: Square D 'NQ' Bus Amps: 225 MCB Amps: MLO AIC Rating: 18 kAIC Other:			
Circuit #	Load Description	Conductors	C/B Size	C/B Size	Conductors	Load Description	Circuit #
1	LTG - STG 409, MECH 411, BREEZEWAY 402	2# 12, #12G, 1/2"C	20 / 1	20 / 1	2# 12, #12G, 1/2"C	RECEPT - BREEZEWAY 402	2
3	LTG - BREEZEWAY 401	2# 12, #12G, 1/2"C	20 / 1	20 / 1	2# 12, #12G, 1/2"C	RECEPT - BREEZEWAY 401	4
5	RECEPT - MECH 404, STG 403	2# 12, #12G, 1/2"C	20 / 1	30 / 2	2# 10, #10G, 3/4"C	ELECTRIC WALL HEATER 'EWH-8' - MECH 411	6
7	ELECTRIC WALL HEATER 'EWH-7' - STG 403	2# 12, #12G, 1/2"C	20 / 2				8
9				20 / 1	2# 12, #12G, 1/2"C	ROOF RECEPTACLES	10
11	RECEPTS - RADON FANS	2# 12, #12G, 1/2"C	20 / 1	20 / 1	2# 12, #12G, 1/2"C	ROOF RECEPTACLES	12
13	RECEPTS - RADON FANS	2# 12, #12G, 1/2"C	20 / 1	25 / 2	2# 10, #10G, 3/4"C	HEAT PUMP 'HP-2' HALL/FITNESS	14
15	HEAT PUMP 'HP-4' COMMUNITY/OFFICE	2# 8, #10G, 3/4"C	35 / 2				16
17				25 / 2	2# 10, #10G, 3/4"C	HEAT PUMP 'HP-A' ELEVATOR EQUIPMENT	18
19	ELECTRIC WALL HEATER 'EWH-13' - JANITOR	2# 12, #12G, 1/2"C	20 / 2				20
21				20 / 1	2# 12, #12G, 1/2"C	BREEZEWAY EXHUAIST	22
23	SPACE ONLY	—	—	—	—	SPACE ONLY	24
25	SPACE ONLY	—	—	—	—	SPACE ONLY	26
27	SPACE ONLY	—	—	—	—	SPACE ONLY	28
29	SPACE ONLY	—	—	—	—	SPACE ONLY	30

Designation: P31 Location: MECH 306 Voltage: 208Y/120V-3Ph-4W Enclosure: NEMA 1 Mounting: Surface				Manufacturer: Square D 'NQ' Bus Amps: 225 MCB Amps: MLO AIC Rating: 18 kAIC Other: Feed-Through Lugs			
Circuit #	Load Description	Conductors	C/B Size	C/B Size	Conductors	Load Description	Circuit #
1	LTG - STG 312, MECH 313, BREEZEWAY 301	2# 12, #12G, 1/2"C	20 / 1	20 / 1	2# 12, #12G, 1/2"C	RECEPT - BREEZEWAY 302	2
3	LTG - BREEZEWAY 302	2# 12, #12G, 1/2"C	20 / 1	20 / 1	2# 12, #12G, 1/2"C	RECEPT - BREEZEWAY 301	4
5	RECEPT - MECH 304, STG 303	2# 12, #12G, 1/2"C	20 / 1	30 / 2	2# 10, #10G, 3/4"C	ELECTRIC WALL HEATER 'EWH-6' - MECH 304	6
7	ELECTRIC WALL HEATER 'EWH-5' - STG 303	2# 12, #12G, 1/2"C	20 / 2				8
9				20 / 1	2# 12, #12G, 1/2"C	RECEPT - TELECOM BACKBOARD	10
11	ELECTRIC WALL HEATER 'EWH-12' - JANITOR	2# 12, #12G, 1/2"C	20 / 2	20 / 1	2# 12, #12G, 1/2"C	RECEPT - TELECOM BACKBOARD	12
13				20 / 1	2# 12, #12G, 1/2"C	EXT. LTG - FAÇADE WALL SCONCE	14
15	SPARE BREAKER	—	20 / 1	20 / 1	2# 12, #12G, 1/2"C	BREEZEWAY EXHUAIST	16
17	SPACE ONLY	—	—	—	—	SPACE ONLY	18
19	SPACE ONLY	—	—	—	—	SPACE ONLY	20
21	SPACE ONLY	—	—	—	—	SPACE ONLY	22
23	SPACE ONLY	—	—	—	—	SPACE ONLY	24
25	SPACE ONLY	—	—	—	—	SPACE ONLY	26
27	SPACE ONLY	—	—	—	—	SPACE ONLY	28
29	SPACE ONLY	—	—	—	—	SPACE ONLY	30

PANEL 'P12' LOAD SUMMARY			
Load Types	Connected VA	NEC Demand Factor	Demand VA
General Lighting	2,030	125%	2,538
Convenience Receptacles	5,400	100% of 1st 10 KVA, 50% of Remainder	5,400
Dedicated Outlets	4,150	100%	4,150
Motors	827	125%	1,034
Electric Space Heating*	15,269	100%	15,269
Water Heaters	2,500	125%	3,125
* Demand load incorporates greater of heating and A/C loads	Total NEC Demand VA		31,515
	Spare Capacity = 10%		3,151
	Total Service VA		34,666
	Minimum Ampacity at 208Y/120V-3Ph-4W		96
	Minimum Panel Size = 100 A		

Designation: P12 Location: Pantry 107 Voltage: 208Y/120V-3Ph-4W Enclosure: NEMA 1 Mounting: Recessed				Manufacturer: Square D 'NQ' Bus Amps: 100 MCB Amps: MLO AIC Rating: 22 kAIC Other:			
Circuit #	Load Description	Conductors	C/B Size	C/B Size	Conductors	Load Description	Circuit #
1	LTG - CLUBHOUSE	2# 12, #12G, 1/2"C	20 / 1	20 / 1	2# 12, #12G, 1/2"C	RECEPT - FITNESS 102	2
3	LTG - FITNESS, HALL	2# 12, #12G, 1/2"C	20 / 1	20 / 1	2# 12, #12G, 1/2"C	RECEPT - FITNESS 102	4
5	RECEPT - COMMUNITY 106	2# 12, #12G, 1/2"C	20 / 1	20 / 1	2# 12, #12G, 1/2"C	RECEPT - FITNESS 102	6
7	RECEPT - COMMUNITY 106	2# 12, #12G, 1/2"C	20 / 1	20 / 1	2# 12, #12G, 1/2"C	RECEPT - FITNESS 102	8
9	DISHWASHER COMMUNITY 106	2# 12, #12G, 1/2"C	20 / 1	20 / 1	2# 12, #12G, 1/2"C	RECEPTS - FITNESS 102	10
11	REFRIG. COMMUNITY 106	2# 12, #12G, 1/2"C	20 / 1	20 / 1	2# 12, #12G, 1/2"C	RECEPT - FITNESS 102 'EWC'	12
13	COUNTERTOP RECEPTS COMMUNITY 106	2# 12, #12G, 1/2"C	20 / 1	20 / 1	2# 12, #12G, 1/2"C	RECEPT - HALL 101, MEN 103, WOMEN 104	14
15	RECEPT - PANTRY 107	2# 12, #12G, 1/2"C	20 / 1	35 / 2	2# 8, #10G, 3/4"C	BLOWER COIL 'BC-2' FITNESS/HALL	16
17	RECEPT - PANTRY 107	2# 12, #12G, 1/2"C	20 / 1				18
19	RECEPT - OFFICE 108	2# 12, #12G, 1/2"C	20 / 1	50 / 2	2# 6, #10G, 3/4"C	BLOWER COIL 'BC-4' COMMUNITY/OFFICE	20
21	RECEPT - OFFICE 109	2# 12, #12G, 1/2"C	20 / 1				22
23	ELECTRIC WALL HEATER 'EWH' - MECH 105	2# 10, #10G, 3/4"C	30 / 2	30 / 1	2# 10, #10G, 3/4"C	WATER HEATER 'HWH'	24
25				15 / 1	2# 12, #12G, 1/2"C	HOT WATER RECIRC. PUMP 'HWP'	26
27	RECEPT: 'ERV-1'	2# 12, #12G, 1/2"C	15 / 1	20 / 1	—	SPARE BREAKER	28
29	RECEPT: 'ERV-2'	2# 12, #12G, 1/2"C	15 / 1	20 / 1	—	SPARE BREAKER	30
31	OFFICE 108 LTG/CONTROLLED RCPTS	2# 12, #12G, 1/2"C	20 / 1	20 / 1	—	SPARE BREAKER	32
33	OFFICE 109 LTG/CONTROLLED RCPTS	2# 12, #12G, 1/2"C	20 / 1	20 / 1	—	SPARE BREAKER	34
35	SPACE ONLY	—	—	—	—	SPACE ONLY	36
37	SPACE ONLY	—	—	—	—	SPACE ONLY	38
39	SPACE ONLY	—	—	—	—	SPACE ONLY	40
41	SPACE ONLY	—	—	—	—	SPACE ONLY	42

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PANEL SCHEDULE NOTES BY SYMBOL

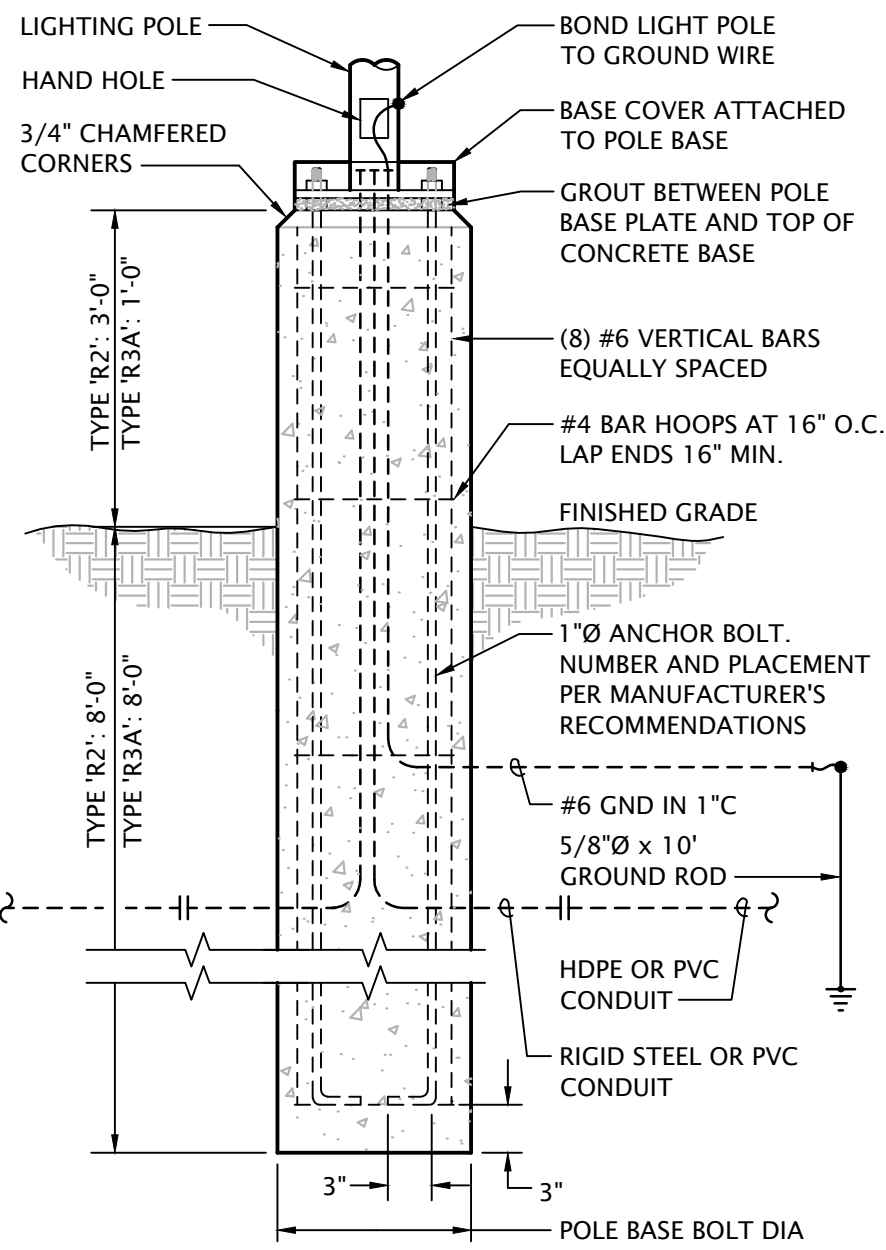
1. ARC FAULT CIRCUIT INTERRUPTING (AFCI) TYPE BREAKER.
2. CLASS 'A', 5mA RATED GROUND FAULT CIRCUIT INTERRUPTING (GFCI) TYPE BREAKER.
3. COMBINATION AFCI/GFCI TYPE BREAKER.

Designation: (3BR Apt #) Location: 3 Bedroom Apt Voltage: 208/120V-1Ph-3W Enclosure: NEMA 1 Mounting: Recessed Flush					Manufacturer: Square D 'NQ' Bus Amps: 125 MCB Amps: MLO AIC Rating: 10 kAIC Other:				
Circuit #	Load Description	Conductors	C/B Size	C/B Size	Conductors	Load Description	Circuit #		
3	1	DISPOSAL	2#12, #12G, 1/2"C	20 / 1	20 / 1	2#12, #12G, 1/2"C	KITCHEN/LIVING/ LAUNDRY LTS	2	1
3	3	DISHWASHER	2#12, #12G, 1/2"C	20 / 1	20 / 1	2#12, #12G, 1/2"C	CLOTHES WASHER RCPT	4	3
3	5	HOOD/MICROWAVE	2#12, #12G, 1/2"C	20 / 1	30 / 2	3#10, #10G, 3/4"C	CLOTHES DRYER	6	2
3	7	REFRIGERATOR	2#12, #12G, 1/2"C	20 / 1				8	
3	9	KITCHEN RCPTS	2#12, #12G, 1/2"C	20 / 1	50 / 2	3#6, #10G, 1"C	RANGE	10	2
3	11	KITCHEN RCPTS	2#12, #12G, 1/2"C	20 / 1				12	
1	13	LIVING ROOM RCPTS	2#12, #12G, 1/2"C	20 / 1	35 / 2	2#8, #10G, 3/4"C	BLOWER COIL	14	
	15	MASTER BATHROOM	2#12, #12G, 1/2"C	20 / 1				16	
1	17	MASTER BEDROOM	2#12, #12G, 1/2"C	20 / 1	30 / 2	2#10, #10G, 3/4"C	HEAT PUMP	18	
1	19	2ND BEDROOM	2#12, #12G, 1/2"C	20 / 1				20	
	21	2ND BATHROOM	2#12, #12G, 1/2"C	20 / 1	30 / 2	2#10, #10G, 1/2"C	WATER HEATER 'HWH'	22	
1	23	3RD BEDROOM	2#12, #12G, 1/2"C	20 / 1				24	

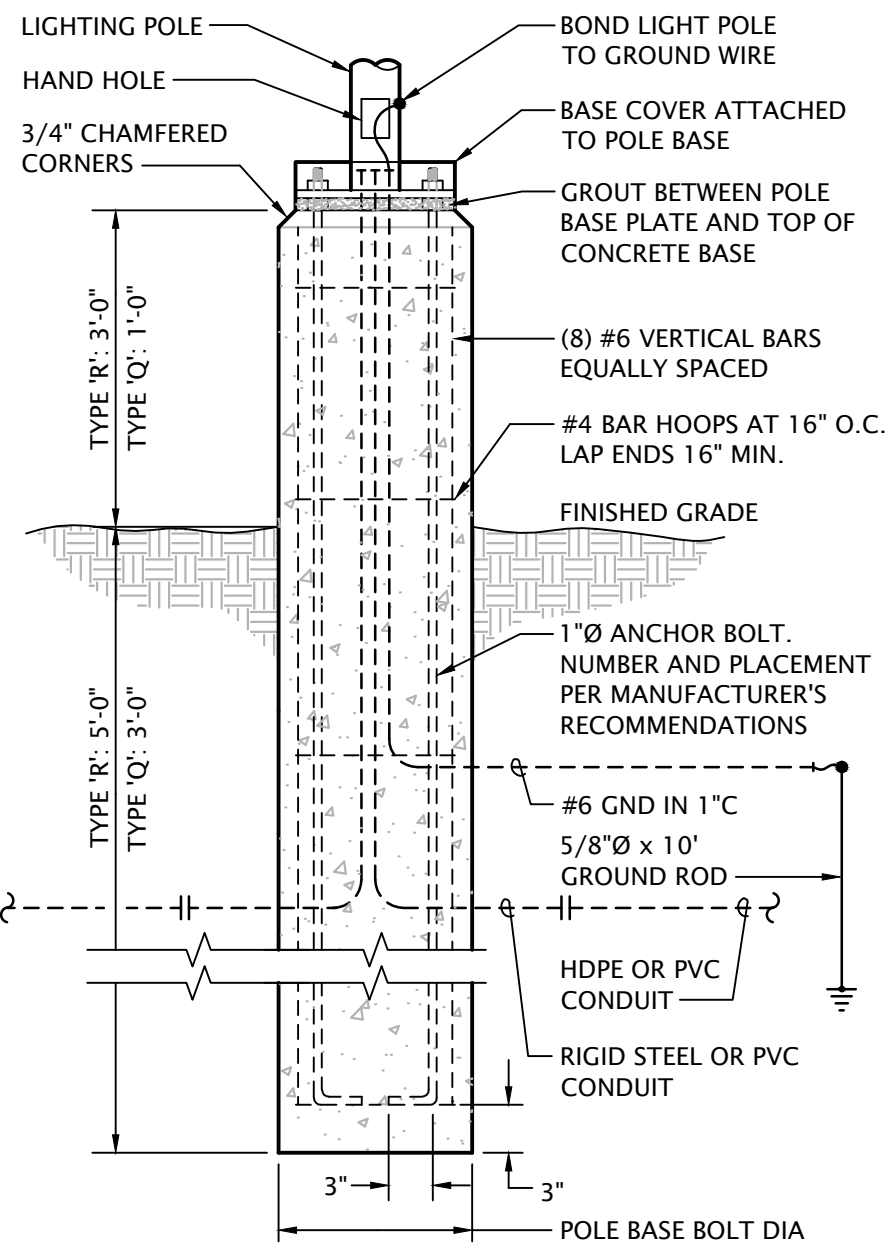
Designation: (2BR Apt #) Location: 2 Bedroom Apt Voltage: 208/120V-1Ph-3W Enclosure: NEMA 1 Mounting: Recessed Flush					Manufacturer: Square D 'NQ' Bus Amps: 125 MCB Amps: MLO AIC Rating: 10 kAIC Other:				
Circuit #	Load Description	Conductors	C/B Size	C/B Size	Conductors	Load Description	Circuit #		
3	1	DISPOSAL	2#12, #12G, 1/2"	20 / 1	20 / 1	2#12, #12G, 1/2"	KITCHEN/LIVING/ LAUNDRY LTS	2	
3	3	DISHWASHER	2#12, #12G, 1/2"	20 / 1	20 / 1	2#12, #12G, 1/2"	CLOTHES WASHER RCPT	4	
3	5	HOOD/MICROWAVE	2#12, #12G, 1/2"	20 / 1	30 / 2	3#10, #10G, 3/4"	CLOTHES DRYER	6	
3	7	REFRIGERATOR	2#12, #12G, 1/2"	20 / 1	50 / 2	3#6, #10G, 1"	RANGE	8	
3	9	KITCHEN RCPTS	2#12, #12G, 1/2"	20 / 1				10	
3	11	KITCHEN RCPTS	2#12, #12G, 1/2"	20 / 1				12	
1	13	LIVING ROOM RCPTS	2#12, #12G, 1/2"	20 / 1				25 / 2	2#10, #10G, 1/2"
	15	MASTER BATHROOM	2#12, #12G, 1/2"	20 / 1				16	
1	17	MASTER BEDROOM	2#12, #12G, 1/2"	20 / 1	25 / 2	2#10, #10G, 3/4"	HEAT PUMP 'HP-2' (SEE NOTE BELOW)	18	
1	19	2ND BEDROOM	2#12, #12G, 1/2"	20 / 1				20	
	21	2ND BATHROOM	2#12, #12G, 1/2"	20 / 1	30 / 2	2#10, #10G, 1/2"	WATER HEATER 'HWH'	22	
	23	SPACE ONLY	---	---				24	
NOTE: FOR UNITS 111, 112, 211, 212, 311, 312, 413, 414 REPLACE BC-2 WITH BC-3 AND HP-2 WITH HP-3. PROVIDE THE FOLLOWING BREAKERS/CIRCUITRY: BC-3: 35A/2P BREAKER WITH 2#8, #10G., 3/4". HP-3: 30A/2P BREAKER WITH 2#10, #10G., 3/4".									

Designation: (1BR Apt #) Location: 1 Bedroom Apt Voltage: 208/120V-1Ph-3W Enclosure: NEMA 1 Mounting: Recessed Flush					Manufacturer: Square D 'NQ' Bus Amps: 125 MCB Amps: MLO AIC Rating: 10 kAIC Other:				
Circuit #	Load Description	Conductors	C/B Size	C/B Size	Conductors	Load Description	Circuit #		
3	1	DISPOSAL	2#12, #12G, 1/2"C	20 / 1	20 / 1	2#12, #12G, 1/2"C	KITCHEN/LIVING/ LAUNDRY LTS	2	
3	3	DISHWASHER	2#12, #12G, 1/2"C	20 / 1	20 / 1	2#12, #12G, 1/2"C	CLOTHES WASHER RCPT	4	
3	5	HOOD/MICROWAVE	2#12, #12G, 1/2"C	20 / 1	30 / 2	3#10, #10G, 3/4"C	CLOTHES DRYER	6	
3	7	REFRIGERATOR	2#12, #12G, 1/2"C	20 / 1				8	
3	9	KITCHEN RCPTS	2#12, #12G, 1/2"C	20 / 1	50 / 2	3#6, #10G, 1"C	RANGE	10	
3	11	KITCHEN RCPTS	2#12, #12G, 1/2"C	20 / 1				12	
1	13	LIVING ROOM RCPTS	2#12, #12G, 1/2"C	20 / 1	20 / 2	2#12, #12G, 1/2"C	BLOWER COIL	14	
	15	BATHROOM	2#12, #12G, 1/2"C	20 / 1				16	
1	17	BEDROOM	2#12, #12G, 1/2"C	20 / 1	20 / 2	2#12, #12G, 1/2"C	HEAT PUMP	18	
	19	SPACE ONLY	---	---				20	
	21	SPACE ONLY	---	---	30 / 2	2#10, #10G, 1/2"C	WATER HEATER 'HWH'	22	
	23	SPACE ONLY	---	---				24	

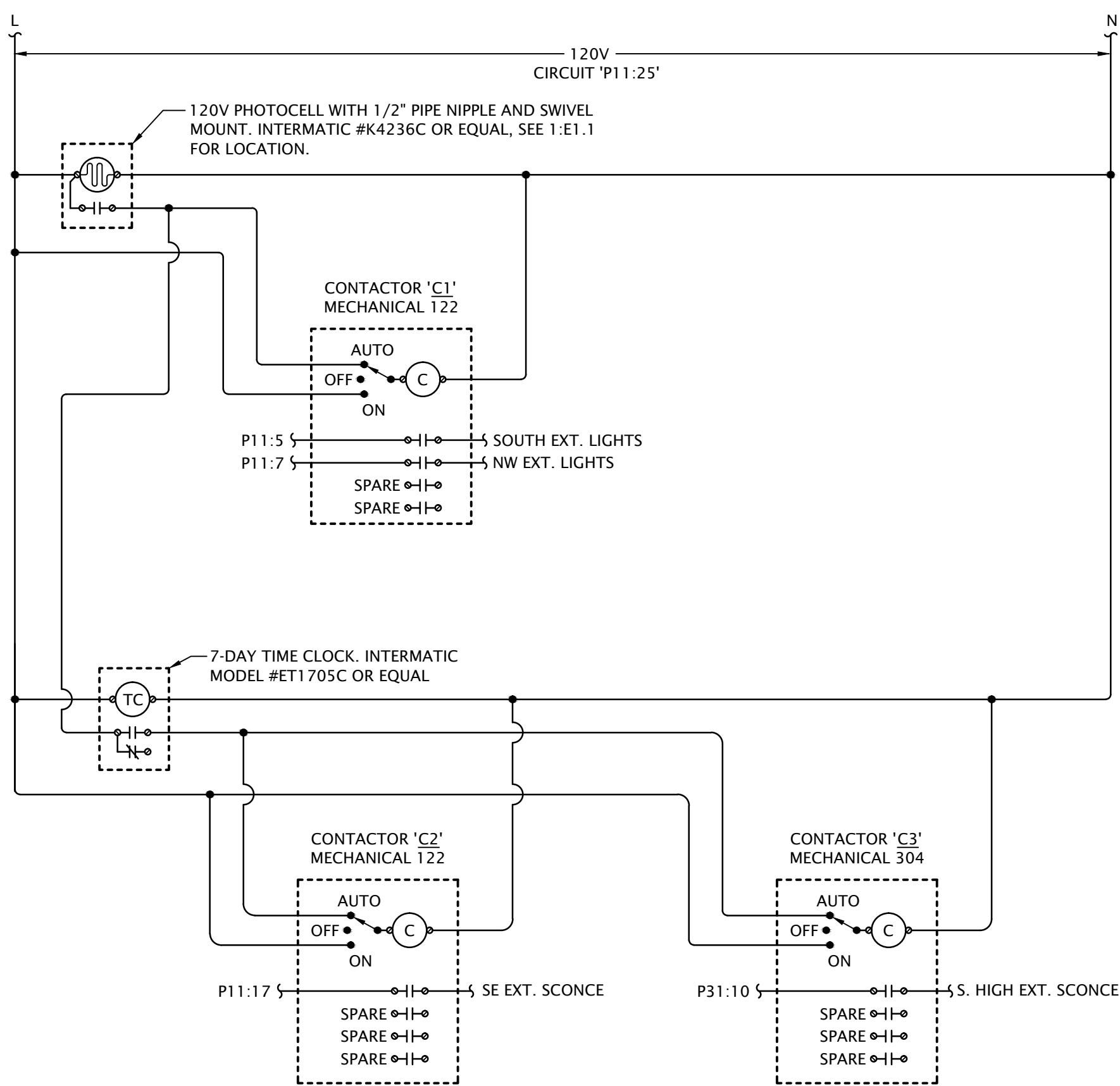
Units 3D (3 Bed / 2 Bath) Feeder Calculation						
Area	1294 SF				Connected Load (VA)	Demand Load (VA)
Feeder & Service Loads per NEC 220.82 Part IV						
B GENERAL LOADS						
B1	General Lighting & Receptacles (220.82 (B)(1))					
	a) Lighting & Receptacles	3 VA/SF	1294 SF		3,882	
B2	Small Appliance & Laundry Branch Circuits (220.82 (B)(2))					
	a) Laundry Circuit	1,500 VA/Circuit	1 Circuit		1,500	
	b) Kitchen Circuits	1,500 VA/Circuit	2 Circuit		3,000	
B3	Nameplate Ratings of Equipment (220.82 (B)(3))					
	a1) Dishwasher	840 VA/Circuit	1 ea		840	
	a2) Refrigerator	1,000 VA/Circuit	1 ea		1,000	
	a3) Microwave	1,000 VA/Circuit	1 ea		1,000	
	a4) Disposal	1,175 VA/Circuit	1 ea		1,175	
	b) Electric Range	8,000 VA/Circuit	1 ea		8,000	
	c) Clothes Dryer	5,000 VA/Circuit	1 ea		5,000	
	d) Water Heater	4,500 VA/Circuit	1 ea		4,500	
B4	Nameplate Ratings of Motors (220.82 (B)(4))					
	1) Furnace Blower Fan	900 VA/Circuit	1 ea		900	
				Part (B) Connected Load Total	30,797	
						18,319
C HEATING AND AIR-CONDITIONING LOAD						
C2	100% Nameplate Ratings of Heat Pump (220.82 (C)(2))					
	1) Heat Pump Unit #3	3,744 VA/Circuit	1 ea		3,744	
C4	65% of Total Electric Heat if < 4 Separately Controlled Units (220.82 (C)(4))					
	1) kW of Electric Heat	6.90 kW	65%		4,485	
				Part (C) Connected Load Total	8,229	
				Part (C) Demand Load (Largest of C1 - C5)		4,485
Total Dwelling Unit Demand Load						22,804
Total Amps @ 208/120V-1Ph-3W						110
Provide 125A Load Center & Feed with 110A/2P Breaker						



3 CONCRETE POLE BASE DETAIL
(AT RETAINING WALLS)
No Scale



2 CONCRETE POLE BASE DETAIL
No Scale



PROVIDE LIGHTING CONTACTORS WITH QUANTITY OF POLES SHOWN, 120V COIL, INTEGRAL 3-POSITION MANUAL SELECTOR SWITCH, AND NEMA 1 ENCLOSURE.

1 EXTERIOR LIGHTING CONTROL DIAGRAM
No Scale

LIGHT FIXTURE SCHEDULE

MARK	MANUFACTURER	MODEL NUMBER	LAMP / LED DATA		BALLAST/DRIVER	MOUNTING	FINISH	DESCRIPTION	NOTES
			WATT/LUMENS	COLOR					
A	----	SELECTED BY OWNER, PROVIDED BY E.C.	---	---	---	PENDANT	---	DECORATIVE PENDANT AT ISLAND	
B	---	SELECTED BY OWNER, PROVIDED BY E.C.	---	---	---	PENDANT	---	DECORATIVE ENTRY PENDANT	
C	JESCO	DL-AC-FLEX2-NPX-FR-3090	6W/FT LED 312 LUMENS/FT	3000°K	STANDARD	COVE	WHITE	LINEAR LINE VOLTAGE LED STRIP LIGHT	
D	HALO	SMD6R-6-930-WH	9.6W LED 750 LUMENS	3000°K	INTEGRAL DRIVER	SURFACE	BRONZE	6" ROUND SURFACE MOUNT DOWNLIGHT	
E	SURE-LITES	SEL25SD	---	WHITE	N/A	WALL AT 7'-6" AFF	WHITE	TWIN HEAD POLYCARBONATE EMERGENCY LIGHT	1,2,10
F	SEAGULL	15040EN-782	(2) 10W LED	3000°K	INTEGRAL DRIVER	SURFACE	BRONZE	52" DIAMETER CEILING FAN WITH LED LIGHT KIT	
G	SEAGULL	4423003EN3-710	(3) 9.5W LED	3000°K	INTEGRAL DRIVER	WALL AT 7'-0"	BURN'T SIENNA	3-LAMP LED VANITY LIGHT	
H	SEAGULL	5913291S-15	38W LED 3,500 LUMENS	3000°K	INTEGRAL DRIVER	SURFACE	WHITE	4' LINEAR FLUORESCENT WITH PRISMATIC ACRYLIC LENS	
J	HALO	SMD6R-12-930-WH	15.3W LED 1200 LUMENS	3000°K	INTEGRAL DRIVER	SURFACE	BRONZE	6" ROUND SURFACE MOUNT DOWNLIGHT	10
K	METALUX	45NLED-LD4-49SL-LW-UNV-L835-CD1	38W LED 5,000 LUMENS	3500°K	0-10V DIMMING (10%-100%)	SURFACE	WHITE	4' LED STRIP WITH FROSTED LENS, WIDE DISTRIBUTION	
L1	LITHONIA	WSR-LED-P1-40K-SR3-MVOLT	20W LED 2,244 LUMENS	4000°K	STANDARD	WALL	BLACK	EXTERIOR LED WALL PACK WITH IES TYPE III DISTRIBUTION	7
L1E	LITHONIA	WSR-LED-P1-40K-SR3-MVOLT	20W LED 2,244 LUMENS	4000°K	STANDARD	WALL	BLACK	EXTERIOR LED WALL PACK WITH IES TYPE III DISTRIBUTION	7
L2	LITHONIA	WSR-LED-P2-40K-SR4-MVOLT	29W LED 3,053 LUMENS	4000°K	STANDARD	WALL	BLACK	EXTERIOR LED WALL PACK WITH IES TYPE IV DISTRIBUTION	7
L2E	LITHONIA	WSR-LED-P2-40K-SR4-MVOLT	29W LED 3,053 LUMENS	4000°K	STANDARD	WALL	BLACK	EXTERIOR LED WALL PACK WITH IES TYPE IV DISTRIBUTION	7
M1	ERALUX	ET6024-C80-4-08-62-80-B-DMG	3,160 UP 3,160 DOWN	3000°K	0-10V DIMMING	WALL	BLACK	DIE-CAST DIRECTIONAL FACADE LIGHT, 8" NARROW UPLIGHT, 62" WIDE FLOOD DOWNLIGHT	7
M2	ERALUX	ET6024-C80-4-18-18-80-B-DMG	3,160 UP 3,160 DOWN	3000°K	0-10V DIMMING	WALL	BLACK	DIE-CAST DIRECTIONAL FACADE LIGHT, 18" UPLIGHT, 18" DOWNLIGHT	7
N1	ILP	PAN22-30WLED-U-35	31W LED 4,000 LUMENS	3500°K	0-10V DIMMING	LAY-IN	WHITE	2x2 EDGE-LIT FLAT PANEL	
N2	ILP	PAN24-30WLED-U-35	31W LED 4,000 LUMENS	3500°K	0-10V DIMMING	LAY-IN	WHITE	2x4 EDGE-LIT FLAT PANEL	
O	AIDEN	53062BK	36W LED 2,900 LUMEN	3000°K	FIXED OUTPUT DRIVER	WALL COORD. W/ ARCH	BLACK	2" ARCHITECTURAL WALL BRACKET	
P	LIGHTOLIER	6RN-P6R-DL-15-830-CL	15W LED 1,500 LUMENS	3000°K	0-10V DIMMING	RECESSED	WHITE	6" LED DOWNLIGHT WITH NEW CONSTRUCTION FRAME KIT	10
PE	LIGHTOLIER	6RN-EM6-P6R-DL-15-830-CL	15W LED 1,500 LUMENS	3000°K	0-10V DIMMING	RECESSED	WHITE	6" LED DOWNLIGHT WITH NEW CONSTRUCTION FRAME KIT AND EMERGENCY BATTERY BACKUP	10
Q	LITHONIA	DSX0-LED-P1-40K-70CRI-T4M-MVOLT-HS-DBLXD	33W LED 4,860 LUMENS	4000°K	FIXED OUTPUT DRIVER	9" SSS POLE	BLACK	LED AREA LIGHT, SINGLE HEAD FULL CUT-OFF WITH IES TYPE IV DISTRIBUTION AND HOUSE SIDE SHIELD	4,7,9
R1	LITHONIA	DSX0-LED-P4-40K-70CRI-T2M-MVOLT-HS-DBLXD	93W LED 11,003 LUMENS	4000°K	FIXED OUTPUT DRIVER	17" SSS POLE	BLACK	LED AREA LIGHT, SINGLE HEAD FULL CUT-OFF WITH IES TYPE II DISTRIBUTION AND HOUSE SIDE SHIELD	5,7,9,12
R2	LITHONIA	DSX0-LED-P4-40K-70CRI-TFTM-MVOLT-HS-DBLXD	93W LED 11,374 LUMENS	4000°K	FIXED OUTPUT DRIVER	17" SSS POLE	BLACK	LED AREA LIGHT, SINGLE HEAD FULL CUT-OFF WITH IES TYPE IV DISTRIBUTION AND HOUSE SIDE SHIELD	5,7,9,12
R3	LITHONIA	DSX0-LED-P5-40K-8LC4-MVOLT-DBLXD	90 W LED 9,083 LUMENS	4000°K	FIXED OUTPUT DRIVER	17" SSS POLE	BLACK	LED AREA LIGHT, SINGLE HEAD FULL CUT-OFF WITH IES TYPE IV BACKLIGHT CONTROL DISTRIBUTION	5,7,9,12
R3A	LITHONIA	DSX0-LED-P5-40K-8LC4-MVOLT-DBLXD	90 W LED 9,083 LUMENS	4000°K	FIXED OUTPUT DRIVER	13" SSS POLE	BLACK	LED AREA LIGHT, SINGLE HEAD FULL CUT-OFF WITH IES TYPE IV BACKLIGHT CONTROL DISTRIBUTION	7,9,11,12
S	ACCLAIM	DFB-111-AKEU	50W LED 2455 LUMEN	4000°K	FIXED OUTPUT DRIVER	GRADE	BLACK	IP-66 RATED, GRADE MOUNTED LED FLOOD LIGHT	7
T	WILLIAMS	96-4-L40/830-HIAFR-WET/1-DRV-UNV	30W LED 4,000 LUMENS	3000°K	FIXED OUTPUT DRIVER	SURFACE	WHITE	4' FULLY ENCLOSED AND GASKETED INDUSTRIAL FIXTURE WITH FROSTED, RIBBED, IMPACT-RESISTANT ACRYLIC LENS	
U	EVERGREEN	EVOL30-W-44-90LED-MBK-WDA-30K	90W LED 7,200 LUMENS	3000°K	FIXED OUTPUT DRIVER	WALL COORD. W/ ARCH	BLACK	44" TALL DECORATIVE WALL MOUNT FIXTURE WITH WHITE DURABLE ACRYLIC LENS	7
V	HALO	PR4F512D010 - PR4M12MD8FSMWPR4WW	21.3W LED 2,000 LUMENS	3000°K	0-10V DIMMING	RECESSED	WHITE	4" LED RECESSED DOWNLIGHT WITH WALL WASH OPTIC	
X	MULE	MXBRU-SD	---	GREEN LETTERS	N/A	CEILING/WALL/END	BLACK	SINGLE/DOUBLE FACE POLYCARBONATE LED EXIT	1,2,10
XE	MULE	SQC-LED-1-R-WW-SD	1 WATT	GREEN LETTERS	N/A	CEILING/WALL	BLACK	SINGLE FACE COMINATION POLYCARBONATE EXIT SIGN/TWIN HEAD EMERGENCY LIGHT	1,2,10
XER	MULE	SQC-LED-1-R-WW-SD	1 WATT	GREEN LETTERS	N/A	CEILING/WALL	BLACK	SINGLE FACE COMINATION POLYCARBONATE EXIT SIGN/TWIN HEAD EMERGENCY LIGHT	1,2,10

GENERAL:

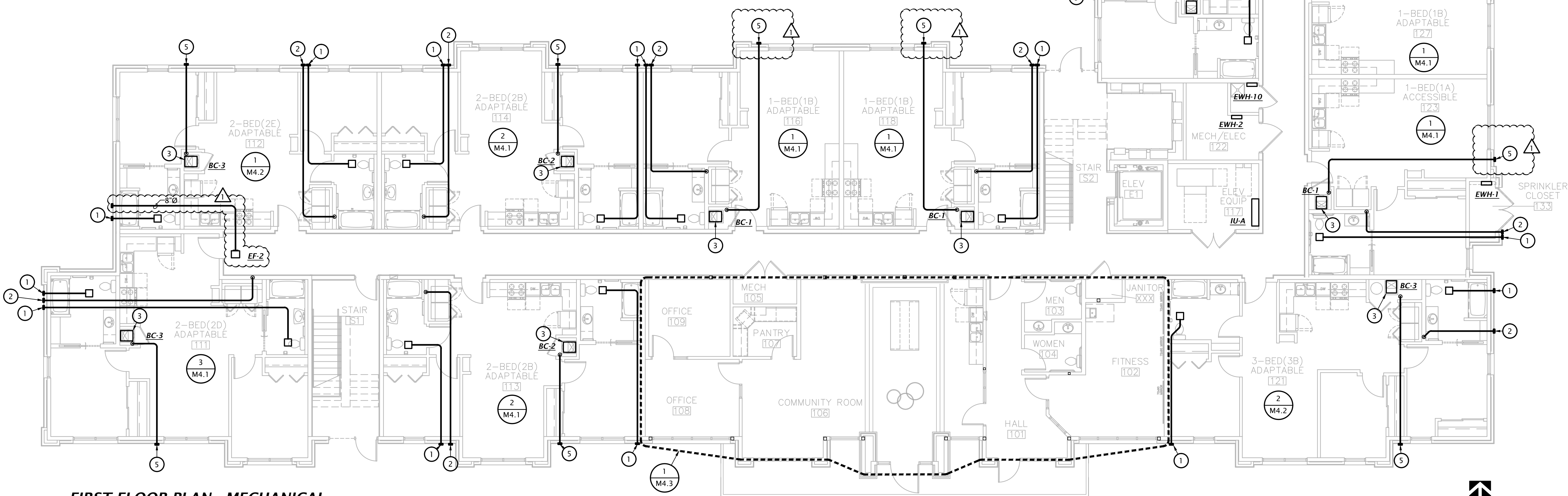
- All interior LED fixtures shall be 3000°K corrected color temperature, min. 80 CRI.
- All light fixtures shall be provided with universal drivers capable of operating at 120V or 208V UNO.
- All LED fixtures shall adhere to LM79 and LM80 standards.
- All apartment light fixtures shall be Energy Star certified.

NOTES:

- Fixture shall have self-diagnostic/self-testing electronics.
- Provide with emergency battery integral charger.
- Fixture shall be capable of operation in temperatures ranging from -40°F through 104°F.
- Provide fixture/pole assembly with 10" round straight steel pole, black to match fixture. Fixture height shall not exceed 12'-0" AFG.
- Provide fixture/pole assembly with 17" round straight steel pole, black to match fixture. Fixture height shall not exceed 20'-0" AFG.
- Provide with bar hangers appropriate for ceiling system in which fixture is installed.
- U.L. listed for 'wet location'.
- Where installed in fire rated assembly, provide fire rated recessed light cover equal to Tenmat FF109. Verify rating requirement with Architect.
- Fixture/pole assembly shall be rated for 100 mph wind loads. Provide with vibration damper per manufacturer's recommendations.
- U.L. listed for 'damp location'.
- Fixture installed above retaining wall. Provide fixture/pole assembly with 13" round straight steel pole, black to match fixture. Fixture height shall not exceed 20'-0" above parking lot surface.
- Provide fixture with motion/ambient sensor enabled at 1 footcandle, control option PIRH1FC3V.

MECHANICAL PLAN NOTES BY SYMBOL

- ROUTE 4"Ø EXHAUST DUCT TO MANUFACTURER'S WALL CAP WITH BACKDRAFT DAMPER, COORDINATE FINAL LOCATION WITH ARCHITECT.
- 4"Ø DRYER EXHAUST DUCT. SEE ENLARGED PLANS FOR MORE INFORMATION. COORDINATE FINAL LOCATION OF WALL CAP WITH ARCHITECT.
- ROUTE REFRIGERANT PIPING FROM BLOWER COIL TO MATCHING HEAT PUMP ON ROOF. CONCEAL PIPING IN WALLS AND ABOVE CEILINGS. REFERENCE ME2.1 FOR HEAT PUMP LOCATIONS.
- ROUTE 8" EXHAUST DUCT TO MANUFACTURER'S WALL CAP WITH BACKDRAFT DAMPER, COORDINATE FINAL LOCATION WITH ARCHITECT.
- ROUTE 6"Ø OUTDOOR AIR DUCT FROM MANUFACTURER'S WALL CAP TO MECHANICAL CLOSET. SEE ENLARGED PLANS FOR MORE INFORMATION.



FIRST FLOOR PLAN - MECHANICAL
1/8" = 1'-0"

Reviewed for Code Compliance
11/06/2023
Joshua Hamlin



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Project 22062
May 2023

THE RESERVES at MAGNOLIA
NEW APARTMENT COMPLEX
DENTON, TEXAS

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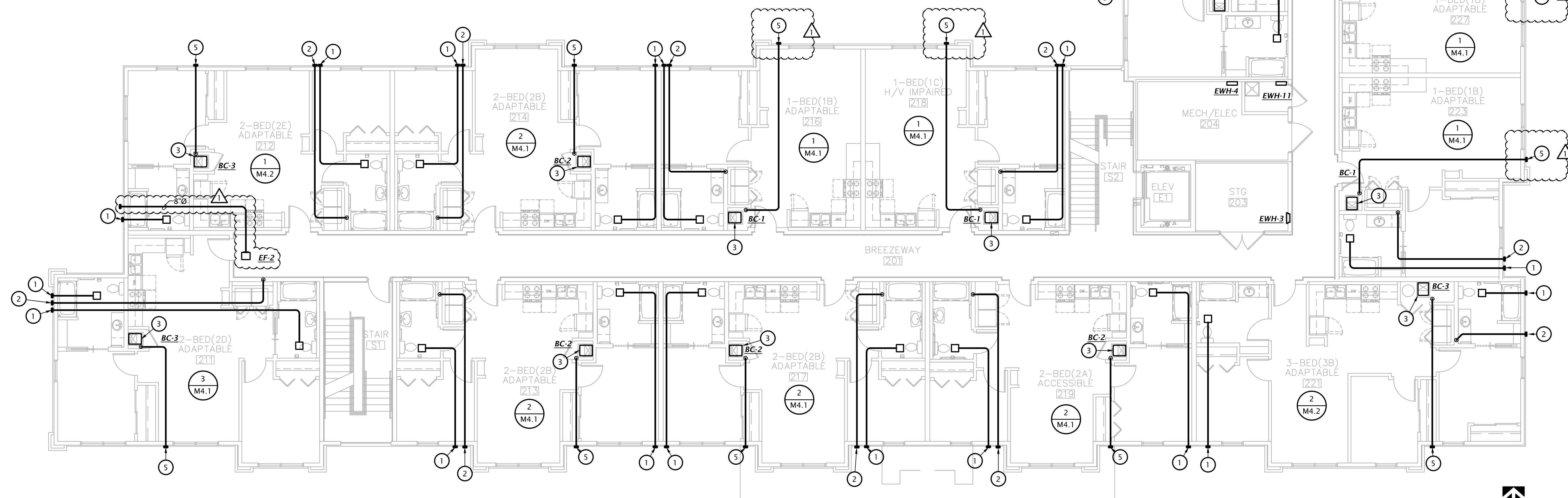
REVISION:
06-26-2023

DATE: 06-26-2023
JOB: 21-3205
SHEET NO.:

M2.1

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1. ROUTE 4"Ø EXHAUST DUCT TO MANUFACTURER'S WALL CAP WITH BACKDRAFT DAMPER, COORDINATE FINAL LOCATION WITH ARCHITECT.
2. 4"Ø DRYER EXHAUST DUCT. SEE ENLARGED PLANS FOR MORE INFORMATION. COORDINATE FINAL LOCATION OF WALL CAP WITH ARCHITECT.
3. ROUTE REFRIGERANT PIPING FROM BLOWER COIL TO MATCHING HEAT PUMP ON ROOF. CONCEAL PIPING IN WALLS AND ABOVE CEILINGS. REFERENCE ME2.1 FOR HEAT PUMP LOCATIONS.
4. ROUTE 8" EXHAUST DUCT TO MANUFACTURER'S WALL CAP WITH BACKDRAFT DAMPER, COORDINATE FINAL LOCATION WITH ARCHITECT.
5. ROUTE 6"Ø OUTDOOR AIR DUCT FROM MANUFACTURER'S WALL CAP TO MECHANICAL CLOSET. SEE ENLARGED PLANS FOR MORE INFORMATION.



1 SECOND FLOOR PLAN - MECHANICAL
1/8" = 1'-0"

Reviewed for Code Compliance
11/06/2023
Joshua Hamlin



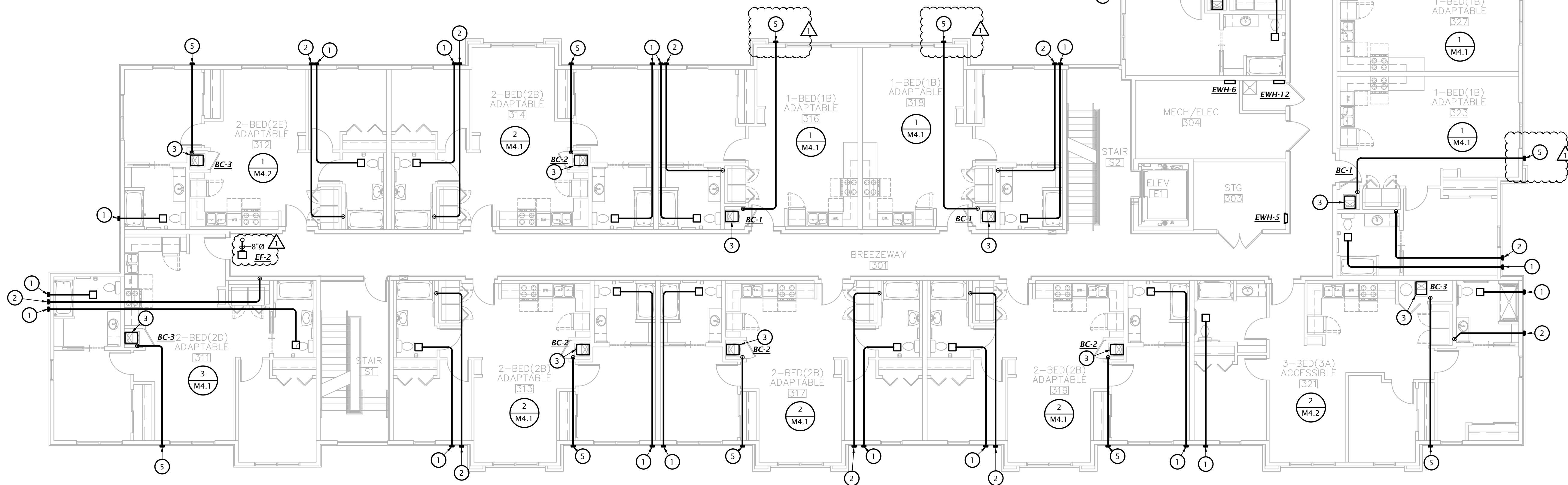
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	06-26-2023
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JOB: 21-3205	
SHEET NO.:	

M2.2

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MECHANICAL PLAN NOTES BY SYMBOL

1. ROUTE 4"Ø EXHAUST DUCT TO MANUFACTURER'S WALL CAP WITH BACKDRAFT DAMPER, COORDINATE FINAL LOCATION WITH ARCHITECT.
2. 4"Ø DRYER EXHAUST DUCT. SEE ENLARGED PLANS FOR MORE INFORMATION. COORDINATE FINAL LOCATION OF WALL CAP WITH ARCHITECT.
3. ROUTE REFRIGERANT PIPING FROM BLOWER COIL TO MATCHING HEAT PUMP ON ROOF. CONCEAL PIPING IN WALLS AND ABOVE CEILINGS. REFERENCE ME2.1 FOR HEAT PUMP LOCATIONS.
4. ROUTE 8" EXHAUST DUCT TO MANUFACTURER'S WALL CAP WITH BACKDRAFT DAMPER, COORDINATE FINAL LOCATION WITH ARCHITECT.
5. ROUTE 6"Ø OUTDOOR AIR DUCT FROM MANUFACTURER'S WALL CAP TO MECHANICAL CLOSET. SEE ENLARGED PLANS FOR MORE INFORMATION.



1 THIRD FLOOR PLAN - MECHANICAL
1/8" = 1'-0"

Reviewed for Code Compliance
11/06/2023
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May 2023

THE RESERVES at MAGNOLIA
NEW APARTMENT COMPLEX
DENTON, TEXAS



REVISION:
06-26-2023

DATE: 06-26-2023
JOB: 21-3205
SHEET NO.:

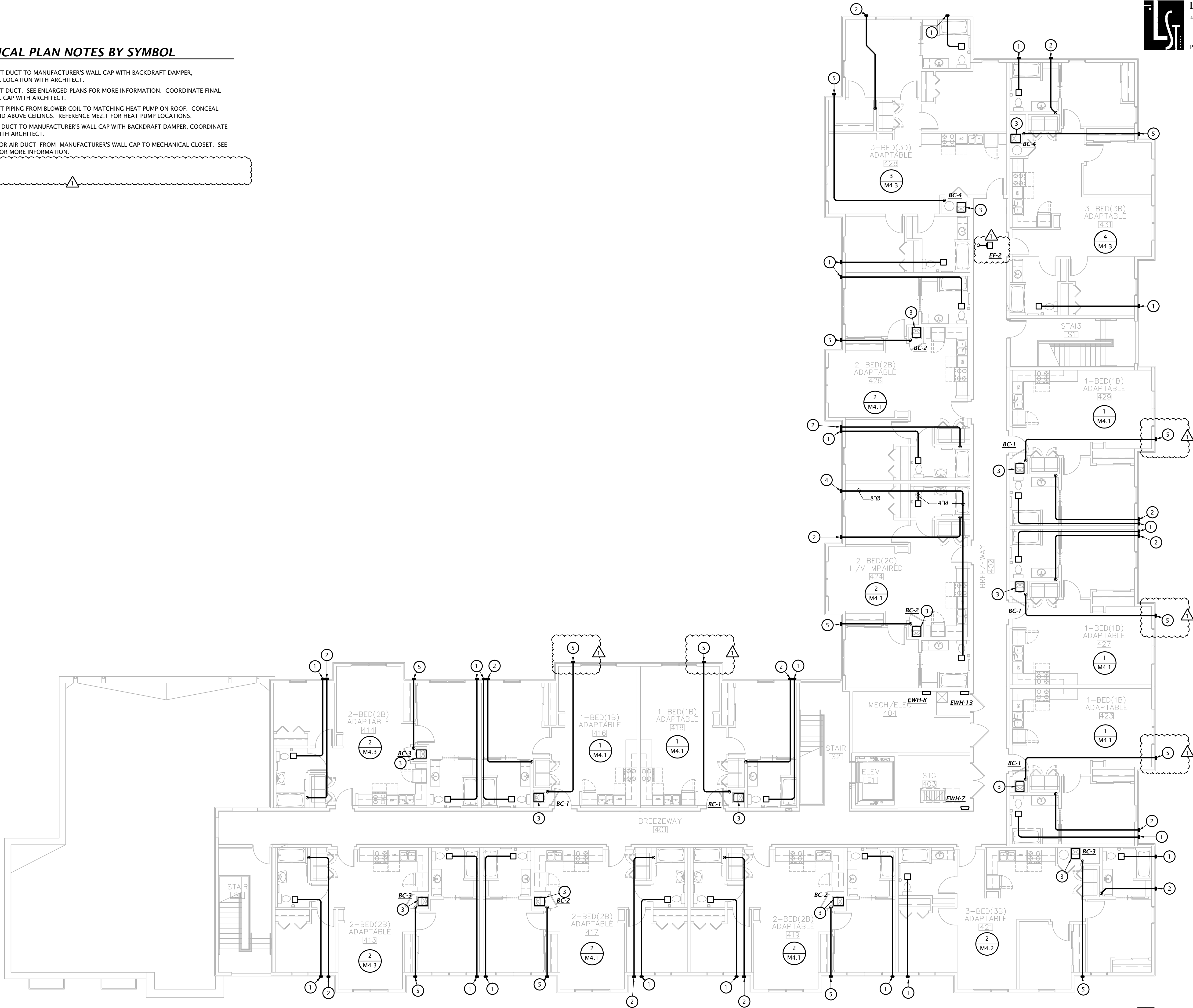
M2.3

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MECHANICAL PLAN NOTES BY SYMBOL

- ROUTE 4"Ø EXHAUST DUCT TO MANUFACTURER'S WALL CAP WITH BACKDRAFT DAMPER, COORDINATE FINAL LOCATION WITH ARCHITECT.
- 4"Ø DRYER EXHAUST DUCT. SEE ENLARGED PLANS FOR MORE INFORMATION. COORDINATE FINAL LOCATION OF WALL CAP WITH ARCHITECT.
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- ROUTE 8" EXHAUST DUCT TO MANUFACTURER'S WALL CAP WITH BACKDRAFT DAMPER, COORDINATE FINAL LOCATION WITH ARCHITECT.
- ROUTE 6"Ø OUTDOOR AIR DUCT FROM MANUFACTURER'S WALL CAP TO MECHANICAL CLOSET. SEE ENLARGED PLANS FOR MORE INFORMATION.



FOURTH FLOOR PLAN - MECHANICAL
1/8" = 1'-0"

Reviewed for Code Compliance
11/06/2023
Joshua Hamlin



REVISION:	
06-26-2023	
DATE:	06-26-2023
JOB:	21-3205
SHEET NO.:	

GENERAL HVAC PLAN NOTES

- PROJECT SHALL COMPLY WITH ALL REQUIREMENTS OF THE 2021 IECC. REFERENCE SPECIFICATIONS FOR COMMISSIONING REQUIREMENTS.
- ON FOURTH FLOOR WHERE DUCTWORK OCCURS IN UNCONDITIONED SPACE, SEAL DUCTWORK PER IECC 2021 AND WRAP IN MINIMUM R-8 INSULATION.
- PROVIDE RADIATION DAMPERS AT ALL PENETRATIONS OF FIRE RATED FLOOR/CEILING ASSEMBLIES.
- ALL DUCTWORK SHALL BE SEALED AND TESTED IN ACCORDANCE WITH R403.3.4, R403.3.5 OF THE 2021 IECC.
- REFRIGERANT PIPING SHALL BE INSULATED PER TABLE C403.12.3 OF THE 2021 IECC.
- INSULATE BACKSIDE OF ALL SUPPLY DIFFUSERS.

ENLARGED HVAC PLAN NOTES BY SYMBOL

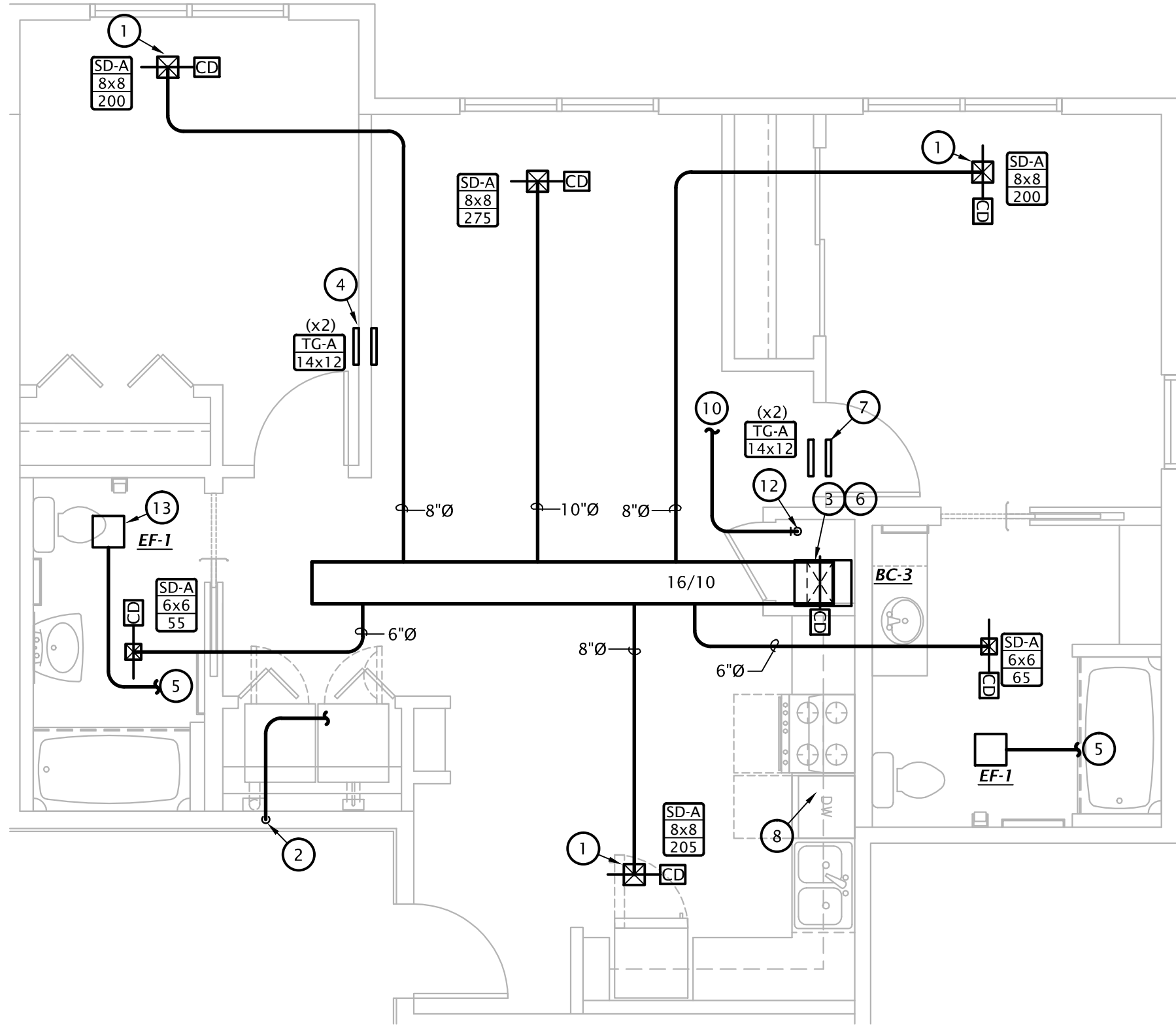
NOTES SHOWN ARE TYPICAL FOR ALL APARTMENTS WHERE APPLICABLE.

- PROVIDE ALL SUPPLY AIR PENETRATIONS OF CEILING WITH U.L. LISTED RADIATION DAMPER, GREENHECK CRD OR EQUIVALENT, TYPICAL.
- PROVIDE U.L. LISTED DRYER BOX EQUAL TO IN-O-VATE TECHNOLOGIES IN WALL INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS, AND ROUTE 4" DRYER EXHAUST DUCT TO DRYER MANUFACTURER'S RECOMMENDED WALL CAP WITH BACKDRAFT DAMPER. SEE OVERALL MECHANICAL PLANS FOR UNIT SPECIFIC ROUTING. MAXIMUM ALLOWABLE DUCT LENGTH = 35' WITH THREE 90° ELBOWS. PROVIDE PERMANENT LABEL IDENTIFYING EQUIVALENT LENGTH OF DRYER DUCT INSTALLED PER IMC 504.

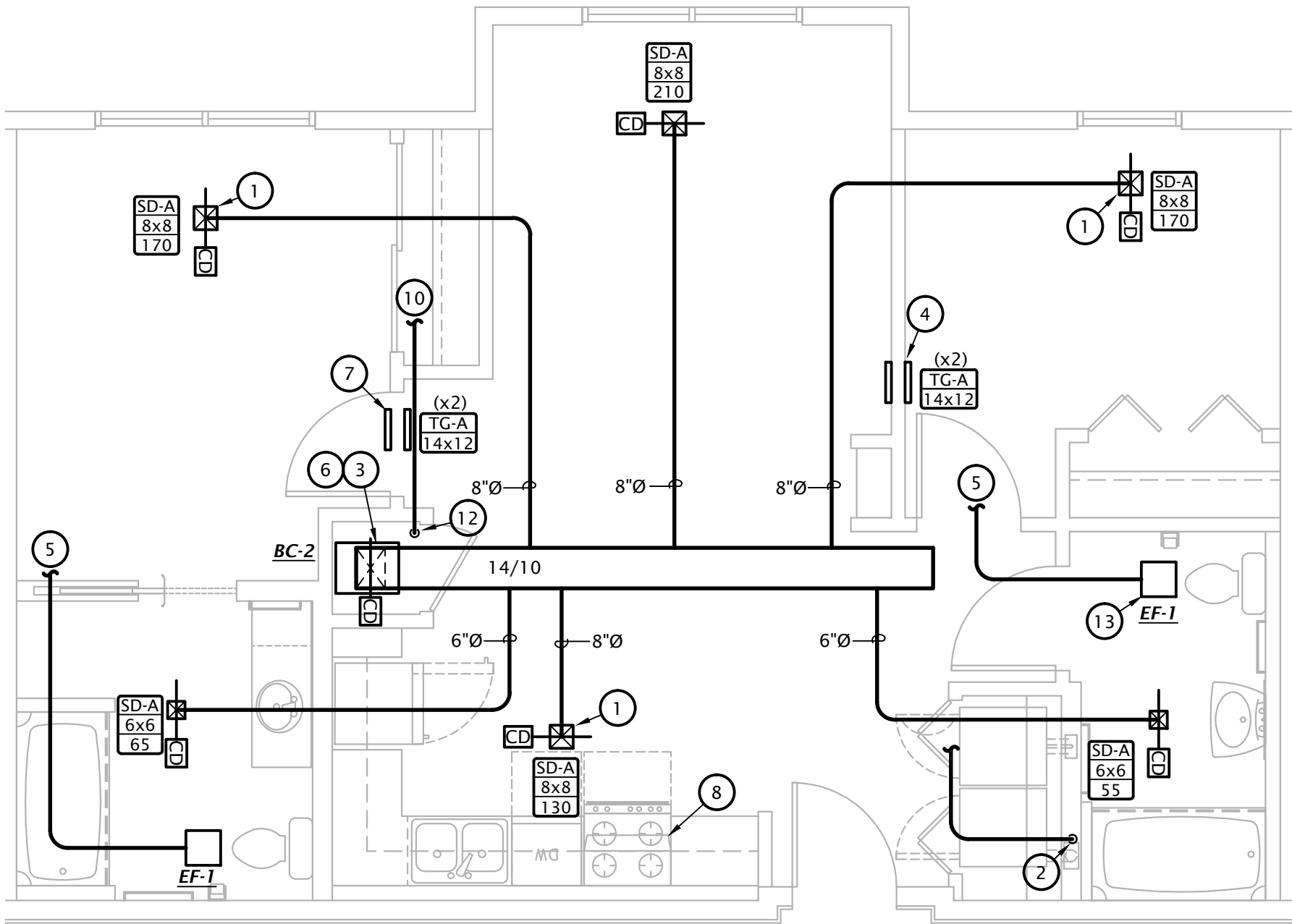
NOTE: ANNULAR SPACE AROUND DUCT IS TO BE SEALED AT ALL PENETRATIONS OF FLOORS AND CEILINGS WITH U.L. LISTED FIRE STOPPING SYSTEM.

- PROVIDE AUXILIARY DRAIN PAN BELOW BLOWER COIL UNIT, AND PIPE OVERFLOW DRAIN TO FLOOR DRAIN.
- INSTALL TRANSFER GRILLES ON OPPOSITE SIDES OF WALL. MOUNT GRILL 6" BELOW CEILING IN HALL AND 6" AFF IN BEDROOM, LINE STUD CAVITY WITH SHEET METAL DUCTWORK.
- ROUTE 4"Ø EXHAUST DUCT TO WALL CAP. SEE OVERALL MECHANICAL PLANS FOR UNIT SPECIFIC ROUTING.
- ROUTE REFRIGERANT PIPING FROM EVAPORATOR COIL TO MATCHING CONDENSING UNIT. SEE SHEET ME2.1, FOR CONDENSING UNIT LOCATIONS. (TYPICAL)
- INSTALL TRANSFER GRILLES ON OPPOSITE SIDES OF WALL ABOVE BEDROOM DOOR. OFFSET VERTICALLY AS MUCH AS POSSIBLE, LINE STUD CAVITY WITH SHEET METAL DUCTWORK.
- RECIRCULATING RANGE HOOD PROVIDED BY OTHERS.
- NOTE NOT USED.
- ROUTE 6"Ø INTAKE DUCT FROM MANUFACTURER'S WALL INTAKE. SEE OVERALL MECHANICAL PLANS FOR SPECIFIC ROUTING.
- PROVIDE AIR CYCLER G2 4" MOTORIZED DAMPER AND CONTROLLER. INSTALL AND SETUP SYSTEM PER MANUFACTURER'S INSTRUCTIONS.
- PROVIDE AIR CYCLER G2 6" MOTORIZED DAMPER AND CONTROLLER. INSTALL AND SETUP SYSTEM PER MANUFACTURER'S
- CONNECT EXHAUST FAN TO AIR CYCLER G2 SYSTEM. PROVIDE 'FAN CONNECT' SWITCH TO E.C. FOR INSTALLATION.

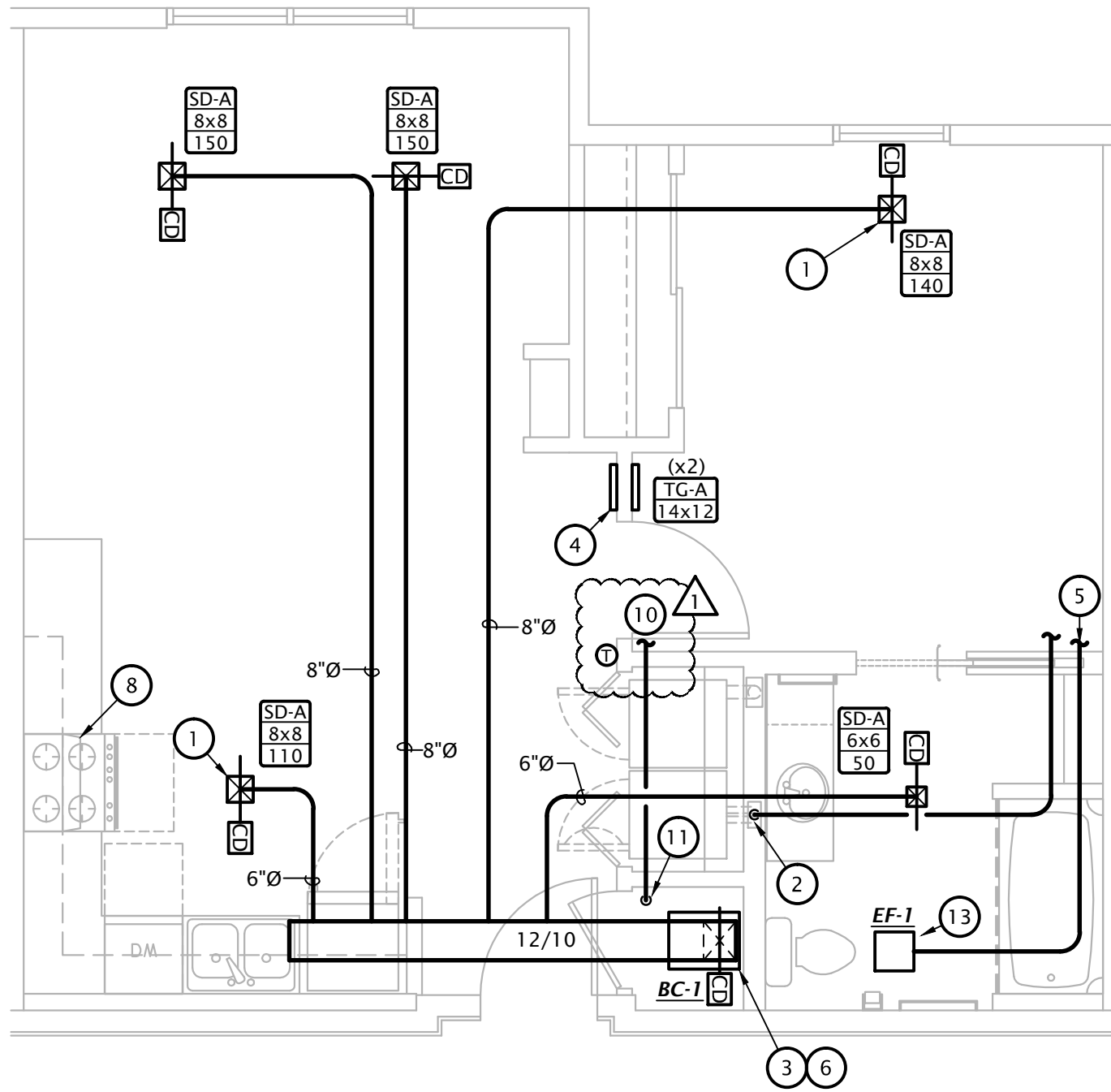
OUTDOOR AIR CALCULATIONS PER: IMC 2021 Table 403.1.1.1				
	A (FT^2)	V (FT^3)	#BR	OA (CFM)
1 Bedroom A, B, and C	630	5670	1	33
2 Bedroom A, B, and C	795	7155	2	45
2 Bedroom D	890	8010	2	47
2 Bedroom E	760	6840	2	45
3 Bedroom A, B, and E	1000	9000	3	60
3 Bedroom D	1160	10440	3	61
OA = (Volume* 0.35 ACH)/60 (MIN. 15 CFM PER PERSON)				



3 2 BEDROOM HVAC PLAN (TYPE D)
1/4" = 1'-0"



2 2 BEDROOM HVAC PLAN (TYPES A, B, AND C)
1/4" = 1'-0"



1 1 BEDROOM HVAC PLAN (TYPES A, B, AND C)
1/4" = 1'-0"

GENERAL HVAC PLAN NOTES

- PROJECT SHALL COMPLY WITH ALL REQUIREMENTS OF THE 2021 IECC. REFERENCE SPECIFICATIONS FOR COMMISSIONING REQUIREMENTS.
- ON FOURTH FLOOR WHERE DUCTWORK OCCURS IN UNCONDITIONED SPACE, SEAL DUCTWORK PER IECC 2021 AND WRAP IN MINIMUM R-8 INSULATION.
- PROVIDE RADIATION DAMPERS AT ALL PENETRATIONS OF FIRE RATED FLOOR/CEILING ASSEMBLIES.
- ALL DUCTWORK SHALL BE SEALED AND TESTED IN ACCORDANCE WITH R403.3.4, R403.3.5 OF THE 2021 IECC.
- REFRIGERANT PIPING SHALL BE INSULATED PER TABLE C403.12 OF THE 2021 IECC.
- INSULATE BACKSIDE OF ALL SUPPLY DIFFUSERS.

ENLARGED HVAC PLAN NOTES BY SYMBOL

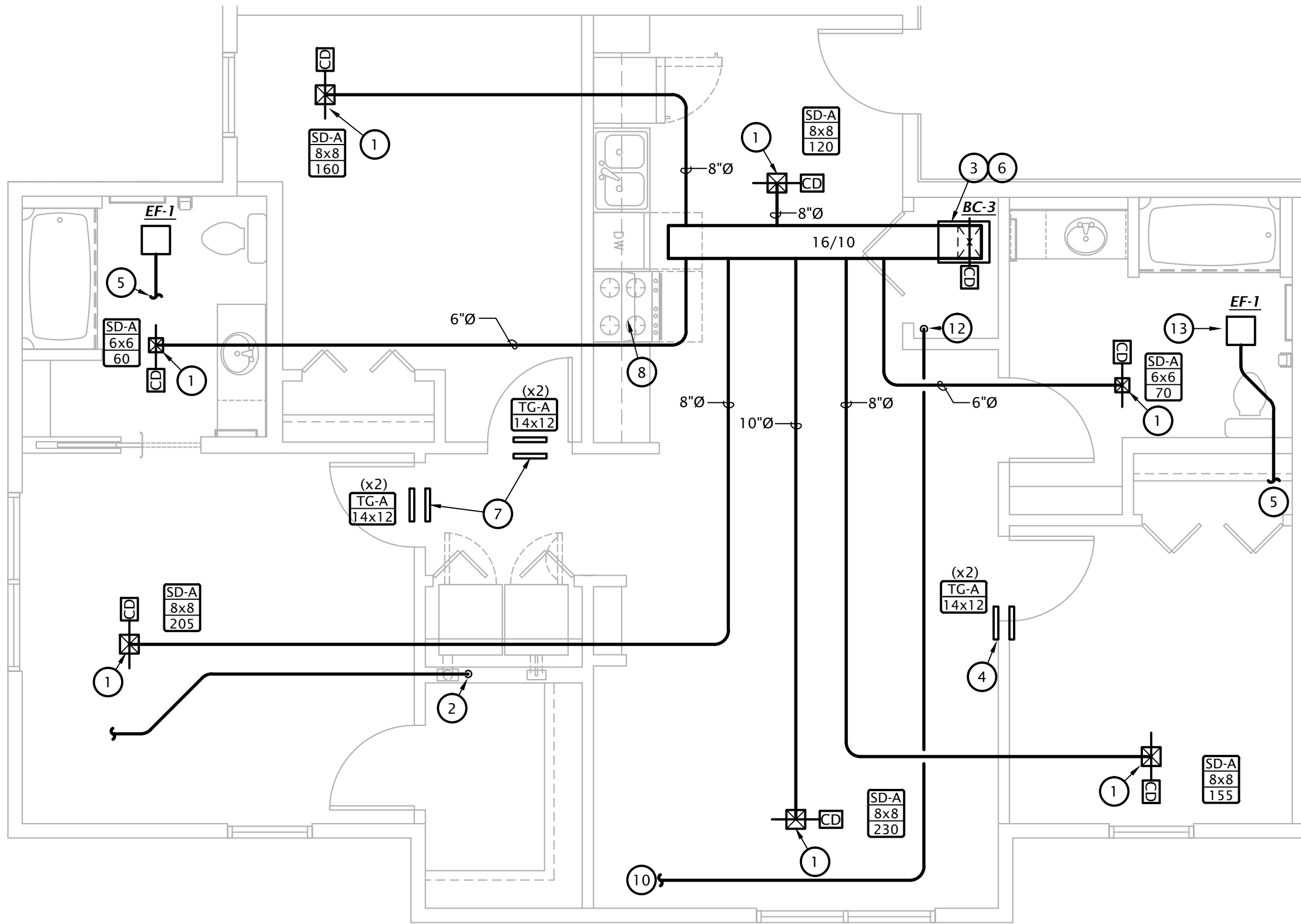
NOTES SHOWN ARE TYPICAL FOR ALL APARTMENTS WHERE APPLICABLE.

- PROVIDE ALL SUPPLY AIR PENETRATIONS OF CEILING WITH U.L. LISTED RADIATION DAMPER, GREENHECK CRD OR EQUIVALENT, TYPICAL.
- PROVIDE U.L. LISTED DRYER BOX EQUAL TO IN-O-VATE TECHNOLOGIES IN WALL INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS, AND ROUTE 4"Ø DRYER EXHAUST DUCT TO DRYER MANUFACTURER'S RECOMMENDED WALL CAP WITH BACKDRAFT DAMPER. SEE OVERALL MECHANICAL PLANS FOR UNIT SPECIFIC ROUTING. MAXIMUM ALLOWABLE DUCT LENGTH = 35' WITH THREE 90° ELBOWS. PROVIDE PERMANENT LABEL IDENTIFYING EQUIVALENT LENGTH OF DRYER DUCT INSTALLED PER IMC 504.

NOTE: ANNULAR SPACE AROUND DUCT IS TO BE SEALED AT ALL PENETRATIONS OF FLOORS AND CEILINGS WITH U.L. LISTED FIRE STOPPING SYSTEM.

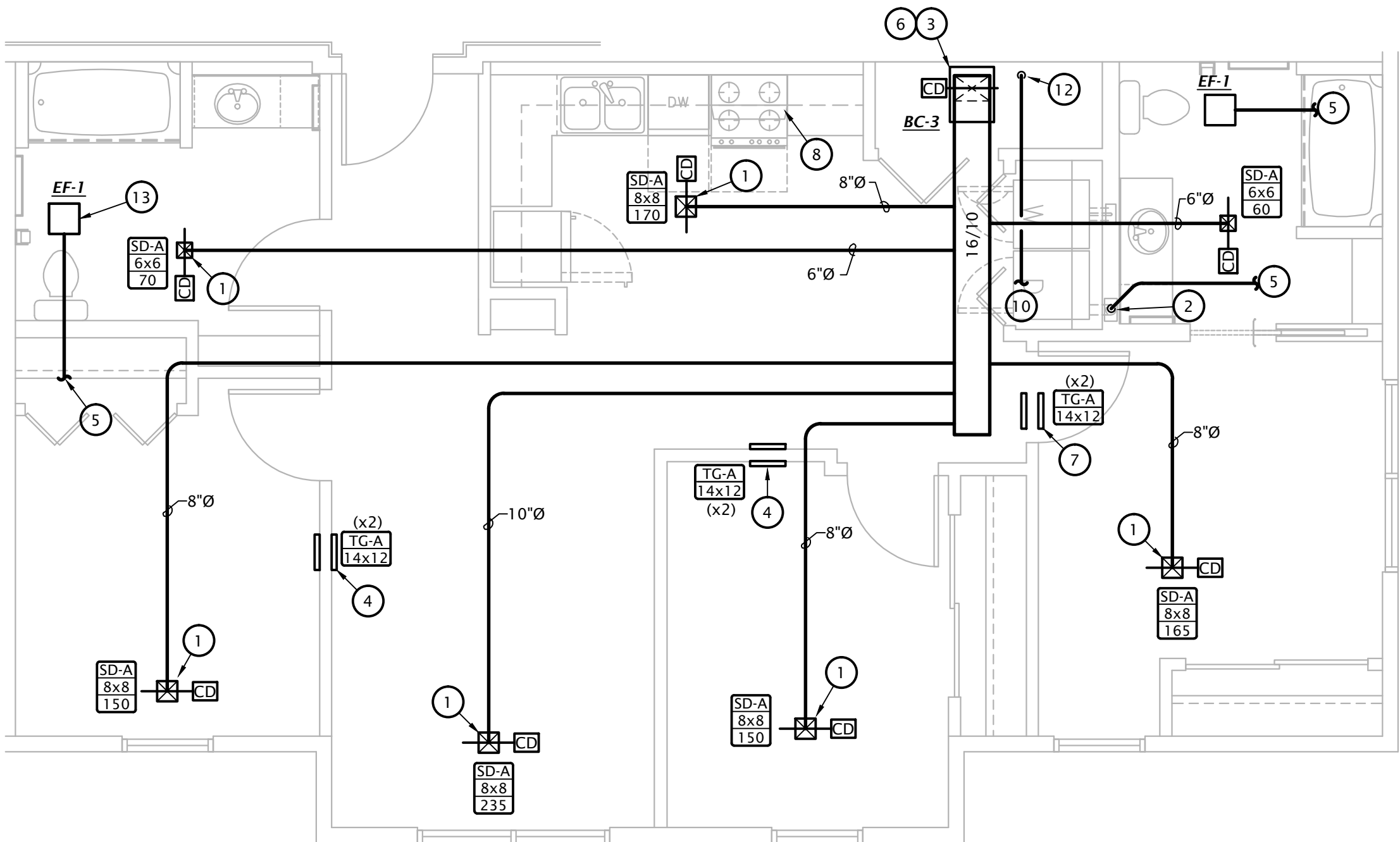
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- INSTALL TRANSFER GRILLES ON OPPOSITE SIDES OF WALL. MOUNT GRILL 6" BELOW CEILING IN HALL AND 6" AFF IN BEDROOM. LINE STUD CAVITY WITH SHEET METAL DUCTWORK.
- ROUTE 4"Ø EXHAUST DUCT TO WALL CAP. SEE OVERALL MECHANICAL PLANS FOR UNIT SPECIFIC ROUTING.
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- CONNECT EXHAUST FAN TO AIR CYCLER G2 SYSTEM. PROVIDE 'FAN CONNECT' SWITCH TO E.C. FOR INSTALLATION.

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2 Bedroom E	760	6840	2	45
3 Bedroom A, B, and E	1000	9000	3	60
3 Bedroom D	1160	10440	3	61
OA = (Volume* 0.35 ACH)/60 (MIN. 15 CFM PER PERSON)				



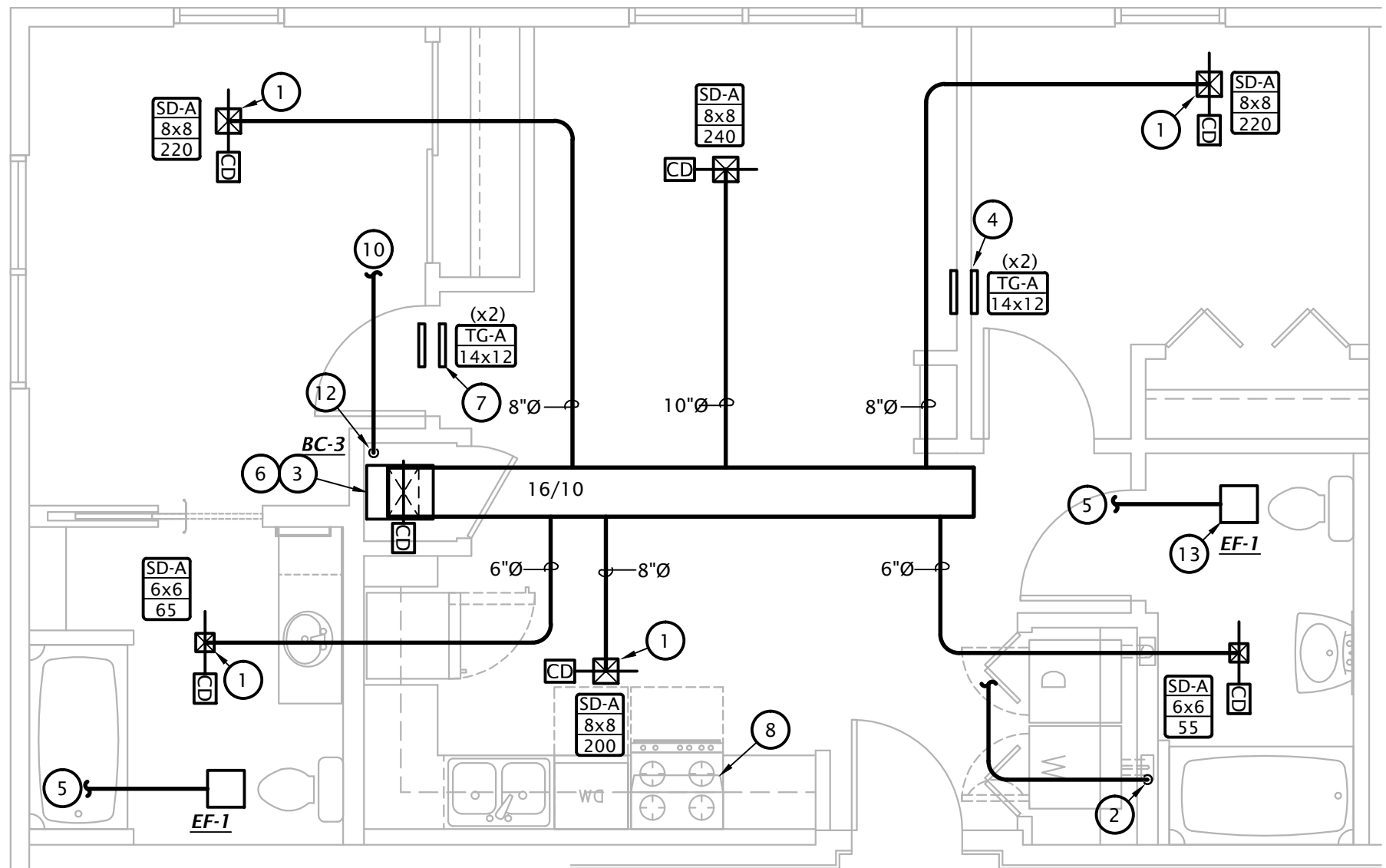
3 3 BEDROOM HVAC PLAN (TYPE D)

1/4" = 1'-0"



2 3 BEDROOM HVAC PLAN (TYPES A, B, AND E)

1/4" = 1'-0"



1 2 BEDROOM HVAC PLAN (TYPE E)

1/4" = 1'-0"

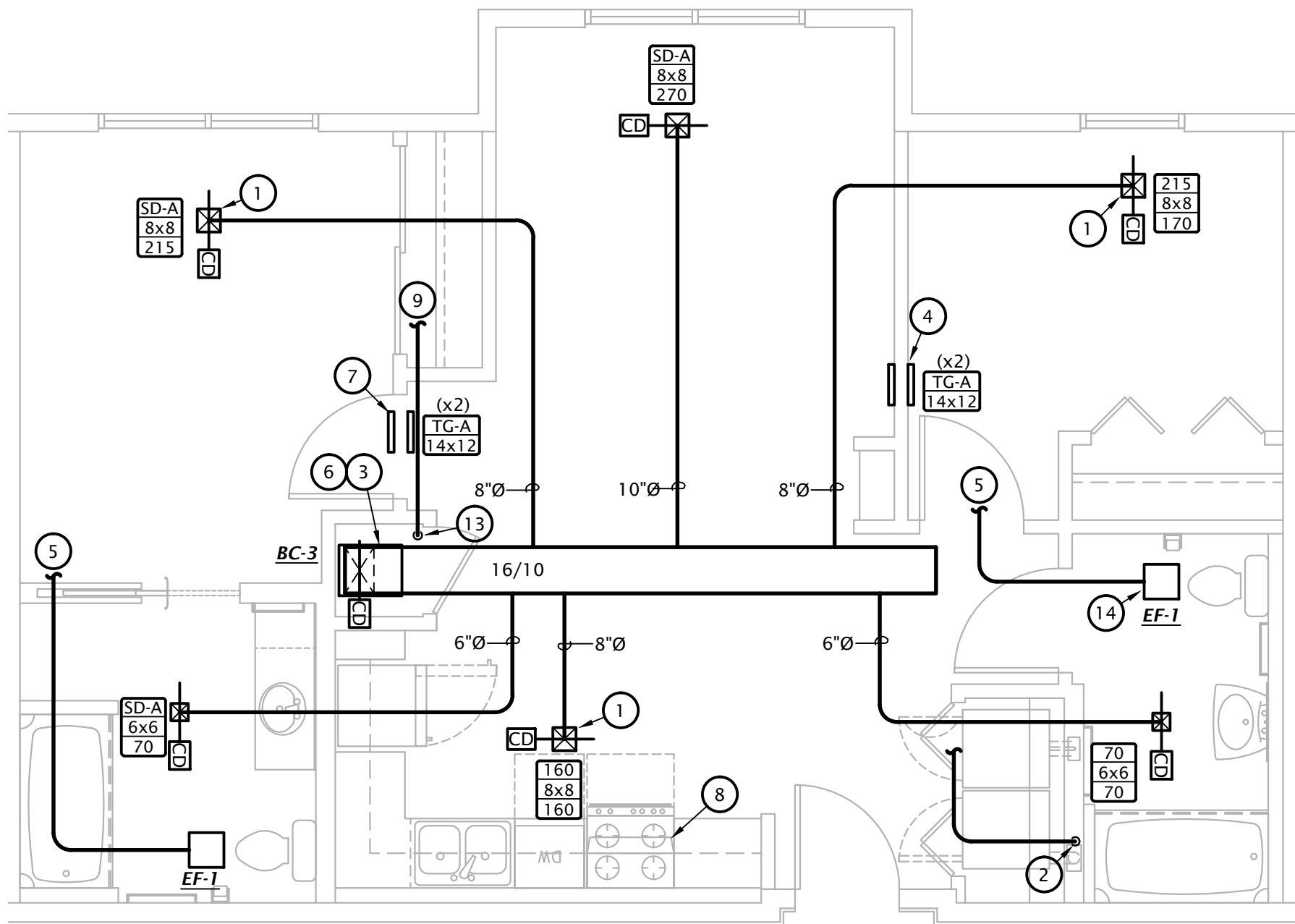
GENERAL HVAC PLAN NOTES

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- REFRIGERANT PIPING SHALL BE INSULATED PER TABLE C403.12 OF THE 2021 IECC.
- INSULATE BACKSIDE OF ALL SUPPLY DIFFUSERS.

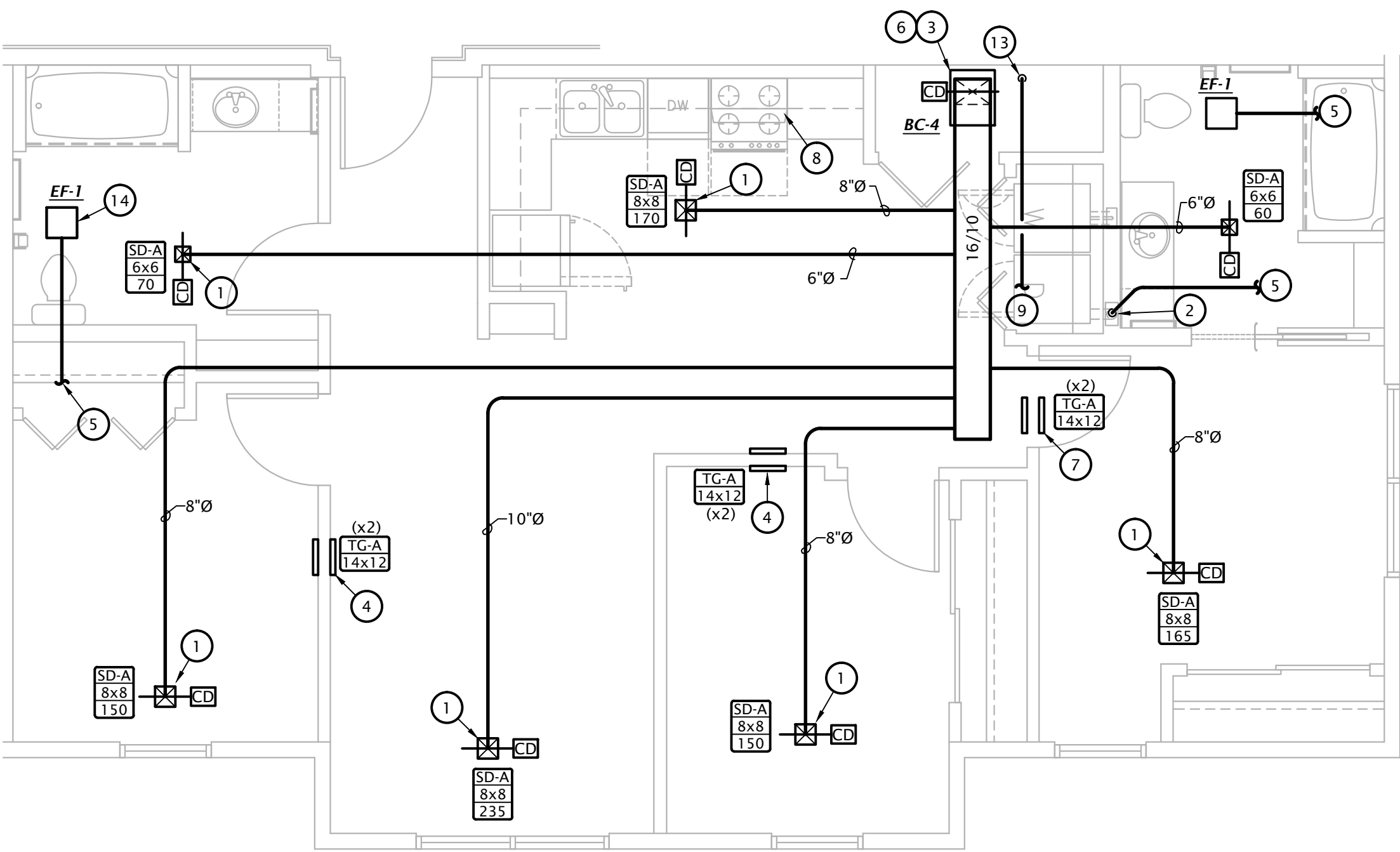
ENLARGED HVAC PLAN NOTES BY SYMBOL

NOTES SHOWN ARE TYPICAL FOR ALL APARTMENTS WHERE APPLICABLE.

- PROVIDE ALL SUPPLY AIR PENETRATIONS OF CEILING WITH U.L. LISTED RADIATION DAMPER, GREENHECK CRD OR EQUIVALENT, TYPICAL.
- PROVIDE U.L. LISTED DRYER BOX EQUAL TO IN-O-VATE TECHNOLOGIES IN WALL INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS, AND ROUTE 4" DRYER EXHAUST DUCT TO DRYER MANUFACTURER'S RECOMMENDED WALL CAP WITH BACKDRAFT DAMPER. SEE OVERALL MECHANICAL PLANS FOR UNIT SPECIFIC ROUTING. MAXIMUM ALLOWABLE DUCT LENGTH = 35' WITH THREE 90° ELBOWS. PROVIDE PERMANENT LABEL IDENTIFYING EQUIVALENT LENGTH OF DRYER DUCT INSTALLED PER IMC 504.
- NOTE: ANNUAL SPACE AROUND DUCT IS TO BE SEALED AT ALL PENETRATIONS OF FLOORS AND CEILINGS WITH U.L. LISTED FIRE STOPPING SYSTEM.
- PROVIDE AUXILIARY DRAIN PAN BELOW BLOWER COIL UNIT, AND PIPE OVERFLOW DRAIN TO FLOOR DRAIN.
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- ROUTE 4" Ø EXHAUST DUCT TO WALL CAP. SEE OVERALL MECHANICAL PLANS FOR UNIT SPECIFIC ROUTING.
- ROUTE REFRIGERANT PIPING FROM EVAPORATOR COIL TO MATCHING CONDENSING UNIT. SEE SHEET ME2.1, FOR CONDENSING UNIT LOCATIONS. (TYPICAL)
- INSTALL TRANSFER GRILLES ON OPPOSITE SIDES OF WALL ABOVE BEDROOM DOOR. OFFSET VERTICALLY AS MUCH AS POSSIBLE, LINE STUD CAVITY WITH SHEET METAL DUCTWORK.
- RECIRCULATING RANGE HOOD PROVIDED BY OTHERS.
- ROUTE 6" Ø INTAKE DUCT FROM MANUFACTURER'S WALL INTAKE. SEE OVERALL MECHANICAL PLANS FOR SPECIFIC ROUTING.
- ROUTE REFRIGERANT PIPING FROM BLOWER COIL TO MATCHING HEAT PUMP ON ROOF. CONCEAL PIPING IN WALLS AND ABOVE CEILINGS. REFERENCE ME2.1 FOR HEAT PUMP LOCATIONS.
- ROUTE DUCT THROUGH SOFFIT. COORDINATE DUCT ROUTING WITH STRUCTURAL BEAMS AND CEILING. TRANSITION DUCT UP BETWEEN BEAMS FOR SIDE CONNECTION OF BRANCH DUCTS TO BE ROUTED ABOVE HARD CEILING.
- PROVIDE AIR CYCLER G2 4" MOTORIZED DAMPER AND CONTROLLER. INSTALL AND SETUP SYSTEM PER MANUFACTURER'S INSTRUCTIONS.
- PROVIDE AIR CYCLER G2 6" MOTORIZED DAMPER AND CONTROLLER. INSTALL AND SETUP SYSTEM PER MANUFACTURER'S INSTRUCTIONS.
- CONNECT EXHAUST FAN TO AIR CYCLER G2 SYSTEM. PROVIDE "FAN CONNECT" SWITCH TO E.C. FOR INSTALLATION.
- CONNECT ERV SUPPLY DUCT TO RETURN AIR DUCTWORK AT BLOWER COIL.
- MOUNT RETURN GRILLE AS HIGH AS POSSIBLE.
- PROVIDE SUPPLY GRILLE WITH MANUAL BALANCING DAMPER.
- COORDINATE DUCTWORK ROUTING WITH WASTE AND VENT PIPING, TRANSITION WHERE REQUIRED TO ACCOMMODATE PIPING.
- PROVIDE OUTDOOR AIR/EXHAUST GRILLE IN SOFFIT. PROVIDE PRICE 630 ALUMINUM LOUVERED RETURN GRILLE WITH INSECT SCREEN, SIZE AS NOTED.
- PROVIDE 6" EXHAUST WALL CAP WITH BACKDRAFT DAMPER AND INSECT SCREEN.



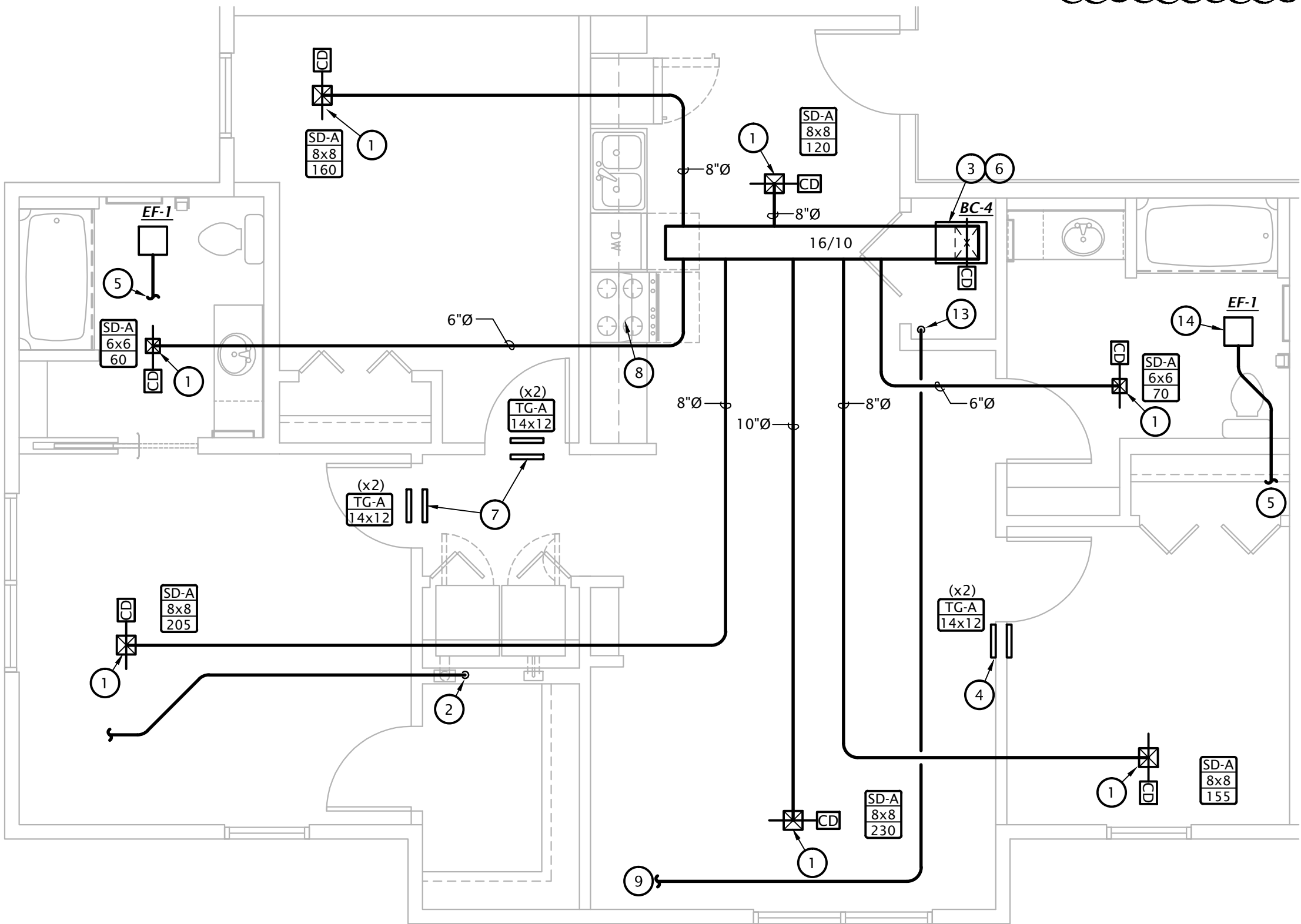
2 BEDROOM HVAC PLAN (APT. 413, & 414)
 1/4" = 1'-0"



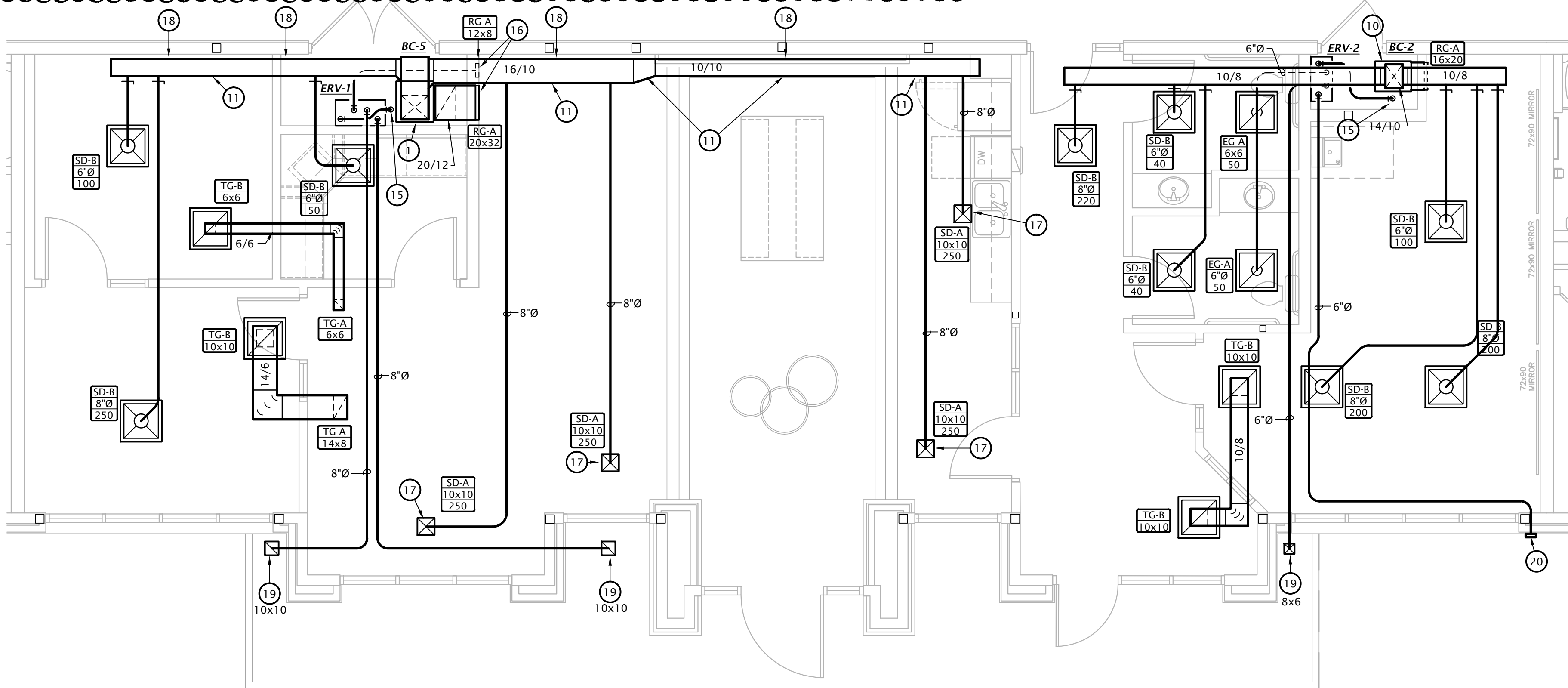
3 BEDROOM HVAC PLAN (APT. 431)
 1/4" = 1'-0"

OUTDOOR AIR CALCULATIONS PER: IMC 2021 Table 403.1.1					
	A (FT²)	Ra	Rp	P	OA (CFM)
Community Room/Pantry	800	0.06	5	13	113
Leasing Offices	145	0.06	5	2	19
Office	145	0.06	5	1	14
ERV-1				Total:	145
Fitness Room	288	0.06	20	4	97
Toilet	40	0	0	0	0
Toilet	56	0	0	0	0
Hall	180	0.06	0	0	11
ERV-2				Total:	108
OA = Rp * P + Ra * A					

OUTDOOR AIR CALCULATIONS PER: IMC 2021 Table 403.1.1.1				
	A (FT²)	V (FT³)	#BR	OA (CFM)
1 Bedroom A, B, and C	630	5670	1	33
2 Bedroom A, B, and C	795	7155	2	45
2 Bedroom D	890	8010	2	47
2 Bedroom E	760	6840	2	45
3 Bedroom A, B, and E	1000	9000	3	60
3 Bedroom D	1160	10440	3	61
OA = (Volume * 0.35 ACH)/60 (MIN. 15 CFM PER PERSON)				



3 BEDROOM HVAC PLAN (APT. 428)
 1/4" = 1'-0"



ENLARGED COMMONS HVAC PLAN
 1/4" = 1'-0"

EXHAUST FAN SCHEDULE							
MARK	MANUFACTURER	MODEL	CFM	ESP (" wg)	POWER	VOLTS/ PHASE	NOTES
EF-1	BROAN	XB80	80	0.4"	6 W	120 / 1	1,2,3,4,5,6,7
EF-2	GREENHECK	SP-A390	345	0.375"	57.2 W	120 / 1	1,3,4,5,6
NOTES:							
1. Fixture shall be Energy Star listed.							
2. Fixture shall operate at <1 SONE							
3. Provide integral disconnect.							
4. Provide manufacturer's wall cap or roof jack, see plans.							
5. Provide integral backdraft damper.							
6. Provide with manufacturer's ceiling radiation damper.							
7. Fixture occurs in each tenant unit.							

ELECTRIC HEATER SCHEDULE							
MARK	MANUF.	MODEL	MOUNTING	WATTS	VOLTAGE/PHASE	DESCRIPTION	NOTES
EWH-3,5,7,10,11,12,13	TRANE	UHW	WALL	2,000	208/1	Architectural fan forced wall heater	1,2,3
EWH-1,2,4,6,8,9	TRANE	UHW	WALL	5,000	208/1	Architectural fan forced wall heater	1,2,4
NOTES:							
1. Provide with high temp. thermal cutout and fan delay.							
2. Provide with integral thermostat and unit mounted disconnect switch.							
3. Provide with manufacturer's semi-recessed mounting adapter sleeve. Coordinate exact mounting requirements and locations with Arch. and rated construction.							
4. Provide with manufacturer's surface mounting adapter sleeve. Coordinate exact mounting requirements and locations with Arch. and rated construction.							

MECHANICAL SYMBOLS	
	THERMOSTAT
	SQUARE SUPPLY DIFFUSER - TYPE AND AIRFLOW INDICATED
	SQUARE RETURN GRILLE - TYPE INDICATED
	MANUAL BALANCING DAMPER
	FLEXIBLE DUCTWORK - MAX. 5'
	DIFFUSER DESIGNATION AIRFLOW INDICATED
	RECTANGULAR RETURN OR RELIEF AIR DUCT UP
	RECTANGULAR SUPPLY AIR DUCT UP
	RECTANGULAR SUPPLY AIR DUCT DOWN
	RECTANGULAR RETURN OR EXHAUST AIR DUCT DOWN
	WALL DIFFUSER
	ROUND DUCT UP
	PIPE TURNING UP
	PIPE TURNING DOWN
	REFRIGERANT LIQUID
	REFRIGERANT SUCTION
	CEILING RADIATION DAMPER
	CONTROL CABLE, VERIFY TYPE WITH EQUIPMENT MANUFACTURER

HEAT PUMP SCHEDULE															
MARK	MANUF.	MODEL	NOMINAL TONS	WEIGHT (LBS.)	COOLING CAPACITY				HEATING CAPACITY			MIN HSPF2	ELECTRICAL		
					OA DB	ENT AIR DB/WB	SENS MBH	TOT MBH	MIN SEER2	OA DB	ENT AIR DB	TOT MBH	MCA	MOCP	V/PH
HP-1	GOODMAN	GSZC160181	1.5	174	105	78/67	11.3	16.9	14.3	47	70	18.0	7.5	12.2	20 208/1
HP-2	GOODMAN	GSZC160241	2	180	105	78/67	15.1	22.5	14.3	47	70	24.0	7.5	14.7	25 208/1
HP-3	GOODMAN	GSZC160301	2.5	186	105	78/67	21.0	26.3	14.3	47	70	29.4	7.5	18.0	30 208/1
HP-4	GOODMAN	GSZC160361	3	220	105	80/67	32.3	25.2	14.3	47	70	35.0	7.5	18.9	30 208/1
HP-5	GOODMAN	GSZC160421	3.5	226	105	80/67	30.8	38.1	14.3	47	70	40.0	7.5	22.1	35 208/1
Notes:															
1. Refrigerant lines shall be field fabricated. Coordinate line sizing requirements with equipment manufacturer for length of run for each apartment. Provide suction accumulators, etc. as required.															
2. Provide 7-day programmable thermostat.															
3. Provide with R410a refrigerant.															
4. Provide 2 sets of MERV-7 filters.															

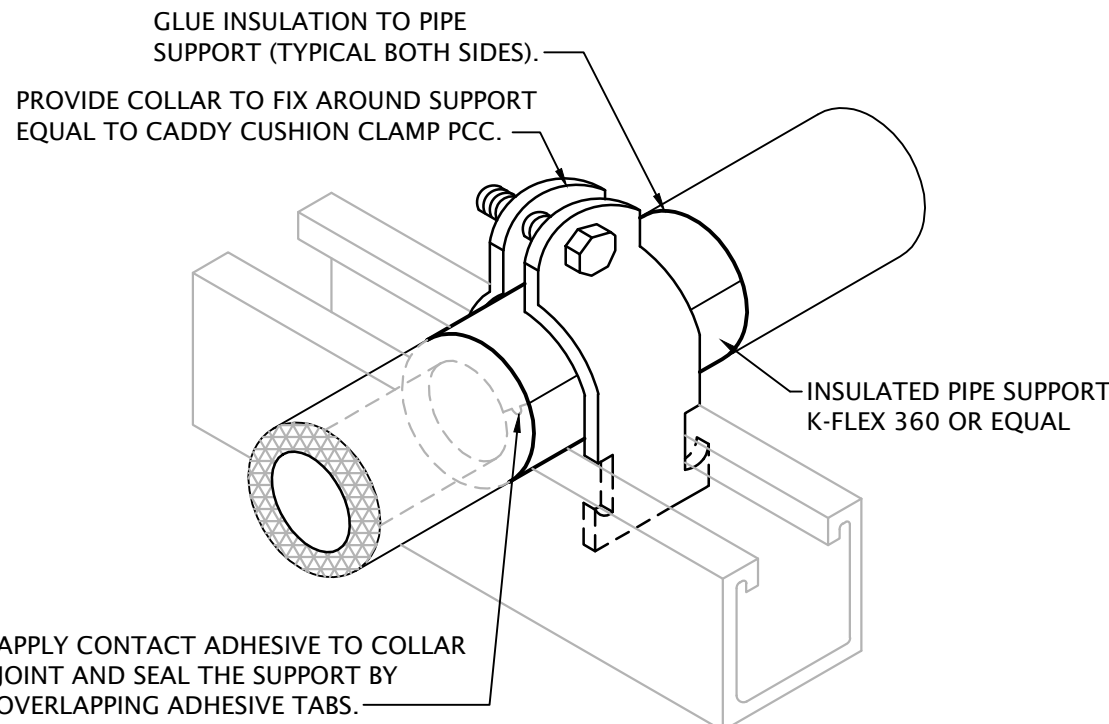
MITSUBISHI ELECTRIC TRANE HVAC US: CITY MULTI VRF OUTDOOR UNIT SCHEDULE									
System Tag	Model Number	Design Cooling Outdoor Temp DB (°F)	Design Heating Outdoor Temp WB (°F)	Corrected Cooling Total Capacity (BTU/h)	Corrected Heating Capacity (BTU/h)	Electrical			
						Voltage / Phase	MCA	RFS	MOCP
HP-A	TRUYA0301HA70NA	101.0	15.5	25,976	19,451	208/230V / 1-phase	19	25	25
Notes:									
1 Provide Heat Pumps with manufacturer's hail guards.									

MITSUBISHI ELECTRIC TRANE HVAC US: CITY MULTI VRF INDOOR UNIT SCHEDULE												
System Tag	Room Name	Tag Reference	Model	Type	Cooling Design Entering Temp DB/WB (°F)	Heating Design Entering Temp DB/WB (°F)	Cooling Total Capacity (BTU/h)	Cooling Sensible Capacity (BTU/h)	Heating Capacity (BTU/h)	Estimated Cooling Coil LAT (°F)	Estimated Heating Coil LAT (°F)	Refrig Pipe Dim Liquid/Suction (inch)
HP-A	ELEVATOR	IU-A	TPKA0A0301KA70A	Wall -Mounted	75.0/63.0	70.0	25,976	19,559.80	19,451	50.5	94.1	5/8 / 3/8
Notes:												
1 Provide unit with manufacturer's condensate lift. Pump shall be installed inside unit housing.												
					Voltage / Phase		MCA		RFS		MOCP	
					208/230V/1-phase		19		25		25	
											Powered by Outdoor	

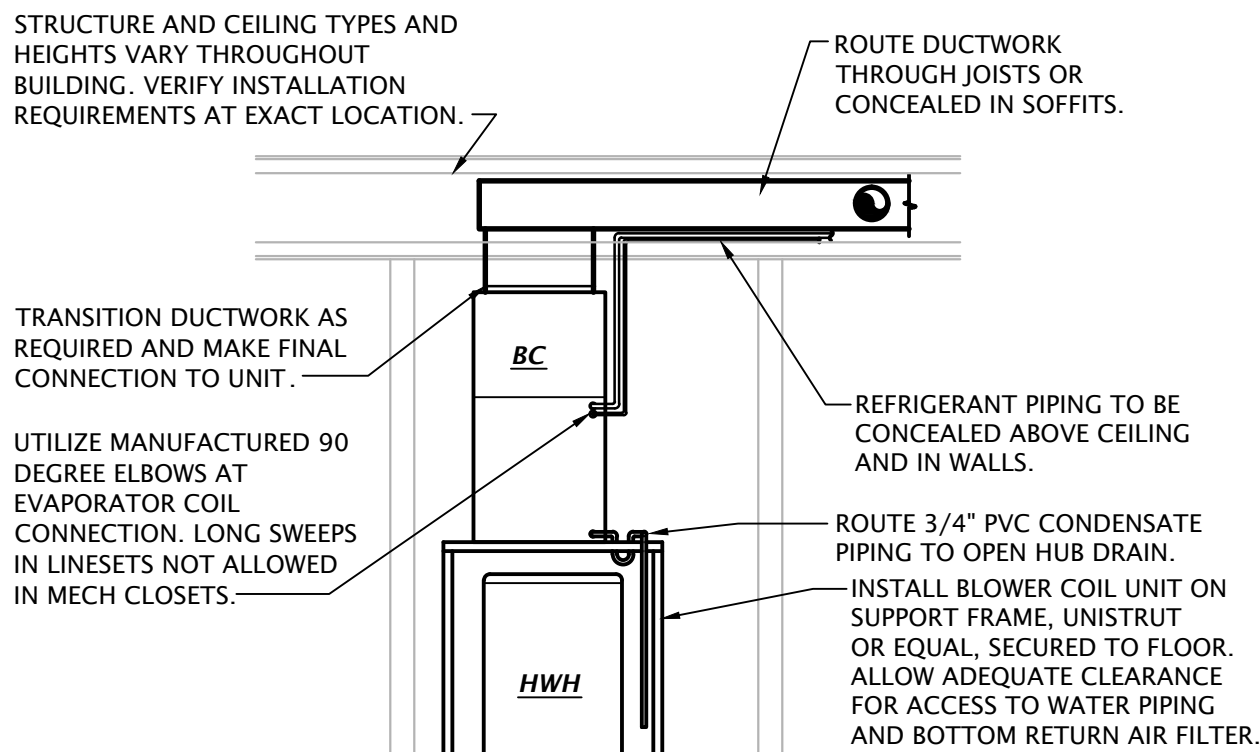
MARK	MANUFACTURER	MODEL	APPLICATION				FINISH	MOUNTING	DAMPER	DESCRIPTION
			SUPPLY	RETURN	EXHAUST	TRANSFER				
SD-A	PRICE	520	•				White	Surface	No	Steel double deflection supply grille with front blades parallels to long dimension, size as indicated on plans
SD-B	PRICE	SCD	•				White	Lay-in	No	24"x24" steel square cone diffuser, neck as indicated on drawings.
RG-A	PRICE	530		•			White	Surface Wall/Ceiling	No	Steel louvered return grille, size as indicated on plans
RG-B	PRICE	PDDR		•			White	Lay-in	No	24"x24" perforated face return grille, neck as indicated on drawings.
EG-A	PRICE	PDDR			•		White	Lay-in	No	24"x24" perforated face return grille, nech as indicated on drawings.
TG-A	PRICE	530			•		White	Surface Wall/Ceiling	No	Steel louvered transfer grille, size as indicated on plans
TG-B	PRICE	PDDR			•		White	Lay-in	No	24"x24" perforated face return grille, nech as indicated on drawings.
GENERAL NOTES:										
• Maximum noise criteria shall be 25.										
• Runouts to diffusers shall be same size as neck, U.N.O.										
• Paint objects visible through grilles with flat black paint.										
• Provide mounting frame as required for ceiling type. Coordinate with Architect.										
• Verify finish with Architect.										
• Provide devices with raditaion dampers as required in rated ceilings. Coordinate with Arch.										

BLOWER COIL SCHEDULE										
MARK	MANUF.	MODEL	FAN			HEATING KW	V/Ph	MOTOR FLA	MCA	MOCP
			CFM	ESP	SPEED					
BC-1	GOODMAN	ASPT29B	600	0.7	MED	3.9	208/1	4.6	27	30
BC-2	GOODMAN	ASPT29B	800	0.7	MED-HIGH	5.2	208/1	4.6	33	35
BC-3	GOODMAN	ASPT37C	1000	0.7	MED-HIGH	6.9	208/1	4.5	42	45
BC-4	GOODMAN	ASPT35	1000	0.7	MED-HIGH	6.9	208/1	4.5	42	45
BC-5	GOODMAN	ASPT47D	1400	0.7	MED-HIGH	8.3	208/1	3.9	49	50
Notes:										
1. Single point connection required, coordinate the exact electrical requirements of equipment provided with E.C.										
2. Electric heater shall not operate simultaneously with heat pump. Electric heater shall be used as back-up heat only.										

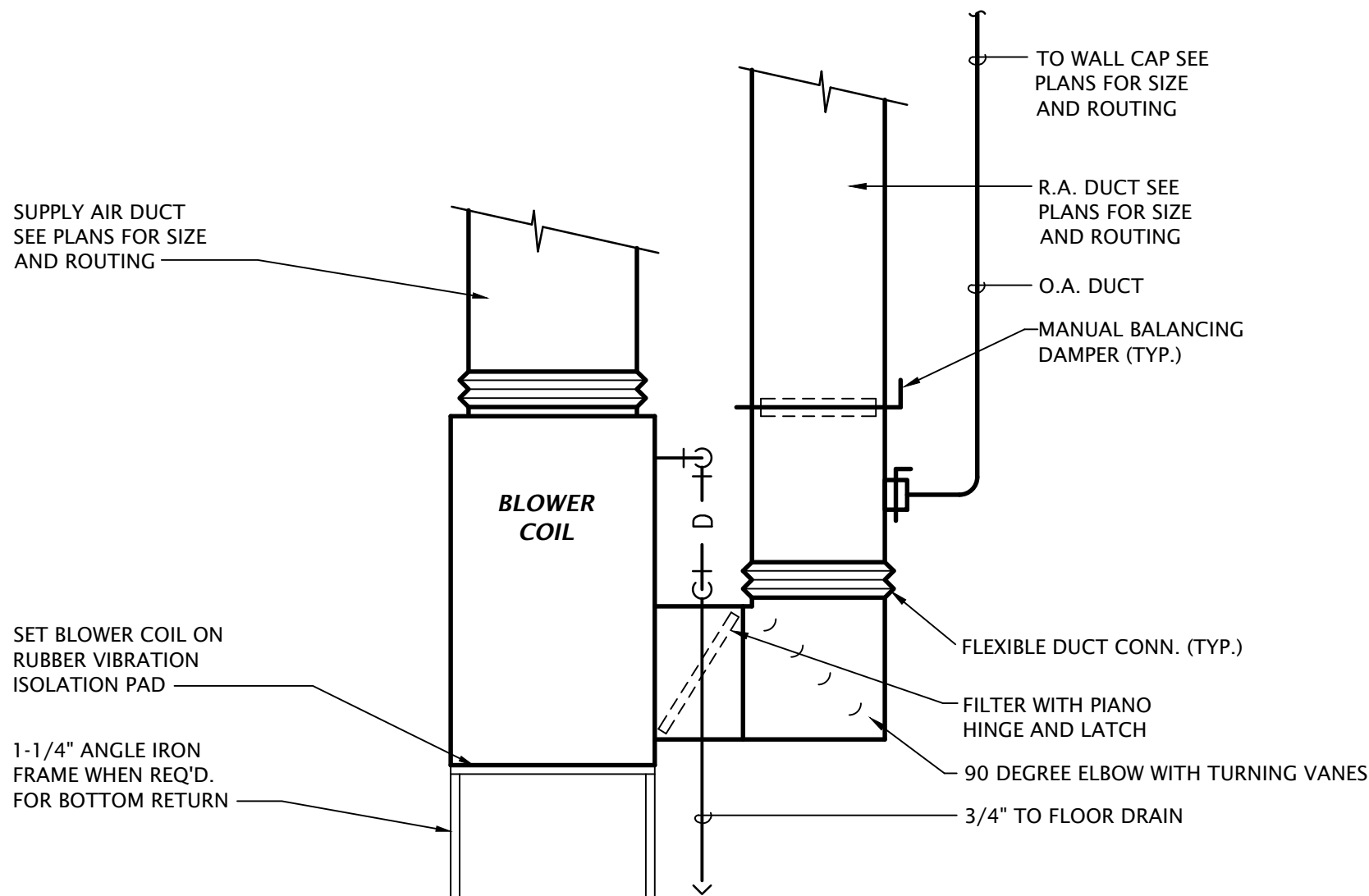
ENERGY RECOVERY VENTILATOR SCHEDULE									
MARK	MANUFATURER	MODEL NUMBER	TYPE	AIRFLOW		E.S.P. (W.C.)	MCA	VOLTAGE/PHASE	WEIGHT (LBS.)
				SUPPLY	EXHAUST				
ERV-1	ALDES	H190-TRG	POLYPROPYLENE CORE	200	190	0.40	1.95	120V/1 PH	46
ERV-2	ALDES	H95-TRG	POLYPROPYLENE CORE	110	100	0.20	0.6	120V/1 PH	32
NOTES:									
1. Provide with Digital Multifunction Control.									
2. Provide all components and startup per manufacturer's recommendations.									
3. Mount on wall as shown on plans and coordinate with other trades.									



3 EXTERIOR PIPE SUPPORT DETAIL
NO SCALE



NOTE: WHERE SPACE ALLOWS, INSTALL WATER HEATER ADJACENT TO BLOWER COIL.
2 APARTMENT BLOWER COIL DETAIL
Scale: 1/4" = 1'-0"



1 COMMON AREA BLOWER COIL DETAIL
NO SCALE

1. COORDINATE EXACT ROOF DRAIN PIPE ROUTING AND OVERFLOW DRAIN REQUIREMENTS WITH ARCHITECT AND CIVIL ENGINEER.
2. PROVIDE OIL INTERCEPTOR EQUAL TO MIFAB SERIES MI-O-HU-3 WITH RATED FLOW = 50 GPM; HOLDING CAPACITY = 163 GALLONS. SEPARATOR MUST HOLD TOTAL HYDRAULIC FLUID CAPACITY OF ELEVATOR SYSTEM, 124 GALLONS.
3. PROVIDE SAMPLING WELL, COORDINATE REQUIREMENTS WITH CITY.
4. 3" VENT BELOW GRADE.
5. 3" VENT ABOVE FIRST FLOOR CEILING.
6. LIMITED SPACE ABOVE CEILING IN THIS AREA. ROUTE PIPING AS HIGH AS POSSIBLE, COORDINATE ROUTING WITH OTHER TRADES.
7. SEE DETAIL 2 THIS SHEET FOR MORE INFORMATION.
8. PIPING LOCATED ABOVE FIRST FLOOR CEILING.

NOTES:
SEE PLUMBING ROUGH-IN SCHEDULE ON SHEET P6.1 FOR
ADDITIONAL INFORMATION.
SIZES INDICATED ARE TYPICAL FOR SIMILAR FIXTURES IN EACH
APARTMENT.

PER THE 2021 IPC 913.2, WASTE STACK VENTS SHALL BE VERTICAL, AND BOTH HORIZONTAL AND VERTICAL OFFSETS SHALL BE PROHIBITED BETWEEN THE LOWEST FIXTURE DRAIN CONNECTION AND THE HIGHEST FIXTURE DRAIN CONNECTION.



1 FIRST FLOOR PLAN - WASTE AND VENT
 1/8" = 1'-0"

Reviewed for Code Compliance

Ⓢ WASTE AND VENT PLAN NOTES BY SYMBOL

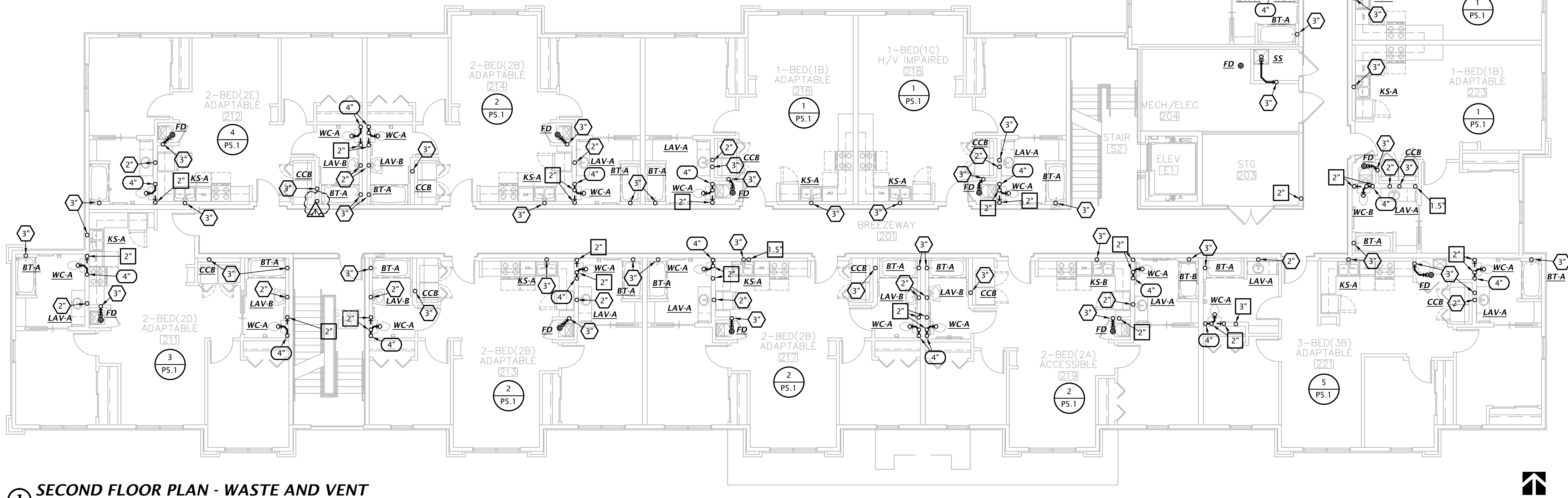
- COORDINATE EXACT ROOF DRAIN PIPE ROUTING AND OVERFLOW DRAIN REQUIREMENTS WITH ARCHITECT AND CIVIL ENGINEER.
- PROVIDE OIL INTERCEPTOR EQUAL TO MIFAB SERIES MI-O-HU-3 WITH RATED FLOW = 50 GPM; HOLDING CAPACITY = 163 GALLONS. SEPARATOR MUST HOLD TOTAL HYDRAULIC FLUID CAPACITY OF ELEVATOR SYSTEM, 124 GALLONS.
- PROVIDE SAMPLING WELL, COORDINATE REQUIREMENTS WITH CITY.
- 3" VENT BELOW GRADE.
- 3" VENT ABOVE FIRST FLOOR CEILING.
- LIMITED SPACE ABOVE CEILING IN THIS AREA. ROUTE PIPING AS HIGH AS POSSIBLE, COORDINATE ROUTING WITH OTHER TRADES.
- SEE DETAIL 2 THIS SHEET FOR MORE INFORMATION.
- PIPING LOCATED ABOVE FIRST FLOOR CEILING.

PLUMBING SIZING SYMBOLS	
	DRAIN (X = SIZE)
	VENT (X = SIZE)
	WASTE STACK VENT (X = SIZE)

NOTES:
SEE PLUMBING ROUGH-IN SCHEDULE ON SHEET P6.1 FOR ADDITIONAL INFORMATION.

SIZES INDICATED ARE TYPICAL FOR SIMILAR FIXTURES IN EACH APARTMENT.

PER THE 2021 IPC 913.2, WASTE STACK VENTS SHALL BE VERTICAL, AND BOTH HORIZONTAL AND VERTICAL OFFSETS SHALL BE PROHIBITED BETWEEN THE LOWEST FIXTURE DRAIN CONNECTION AND THE HIGHEST FIXTURE DRAIN CONNECTION..



1 SECOND FLOOR PLAN - WASTE AND VENT
1/8" = 1'-0"

Reviewed for Code Compliance
11/06/2023
Joshua Hamlin



REVISION:
06-26-2023

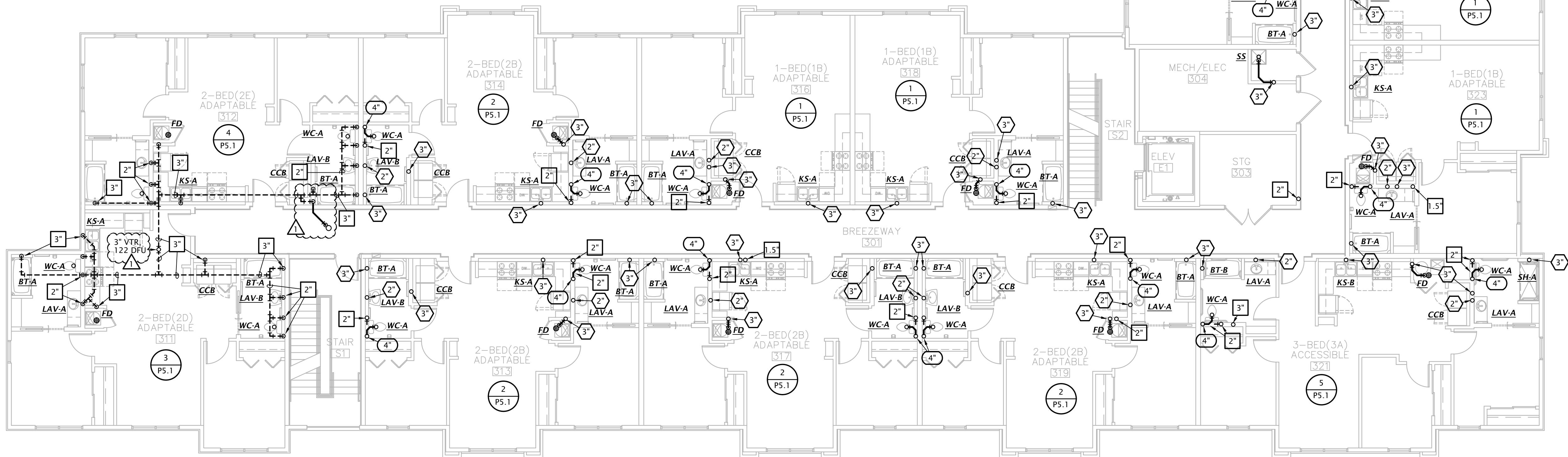
DATE: 06-26-2023
JOB: 21-3205
SHEET NO.:

WASTE AND VENT PLAN NOTES BY SYMBOL

- COORDINATE EXACT ROOF DRAIN PIPE ROUTING AND OVERFLOW DRAIN REQUIREMENTS WITH ARCHITECT AND CIVIL ENGINEER.
- PROVIDE OIL INTERCEPTOR EQUAL TO MIFAB SERIES MI-O-HU-3 WITH RATED FLOW = 50 GPM; HOLDING CAPACITY = 163 GALLONS. SEPARATOR MUST HOLD TOTAL HYDRAULIC FLUID CAPACITY OF ELEVATOR SYSTEM, 124 GALLONS.
- PROVIDE SAMPLING WELL, COORDINATE REQUIREMENTS WITH CITY.
- 3" VENT BELOW GRADE.
- 3" VENT ABOVE FIRST FLOOR CEILING.
- LIMITED SPACE ABOVE CEILING IN THIS AREA. ROUTE PIPING AS HIGH AS POSSIBLE, COORDINATE ROUTING WITH OTHER TRADES.
- SEE DETAIL 2 THIS SHEET FOR MORE INFORMATION.
- PIPING LOCATED ABOVE FIRST FLOOR CEILING.

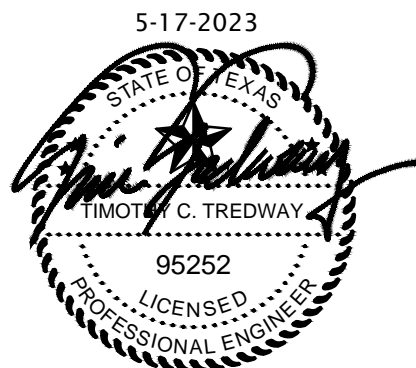
PLUMBING SIZING SYMBOLS	
	DRAIN (X = SIZE)
	VENT (X = SIZE)
	WASTE STACK VENT (X = SIZE)

NOTES:
SEE PLUMBING ROUGH-IN SCHEDULE ON SHEET P6.1 FOR ADDITIONAL INFORMATION.
SIZES INDICATED ARE TYPICAL FOR SIMILAR FIXTURES IN EACH APARTMENT.
PER THE 2021 IPC 913.2, WASTE STACK VENTS SHALL BE VERTICAL, AND BOTH HORIZONTAL AND VERTICAL OFFSETS SHALL BE PROHIBITED BETWEEN THE LOWEST FIXTURE DRAIN CONNECTION AND THE HIGHEST FIXTURE DRAIN CONNECTION..



1 THIRD FLOOR PLAN - WASTE AND VENT
1/8" = 1'-0"

Reviewed for Code Compliance
11/06/2023
Joshua Hamlin



REVISION:
06-26-2023

DATE: 06-26-2023
JOB: 21-3205
SHEET NO.:

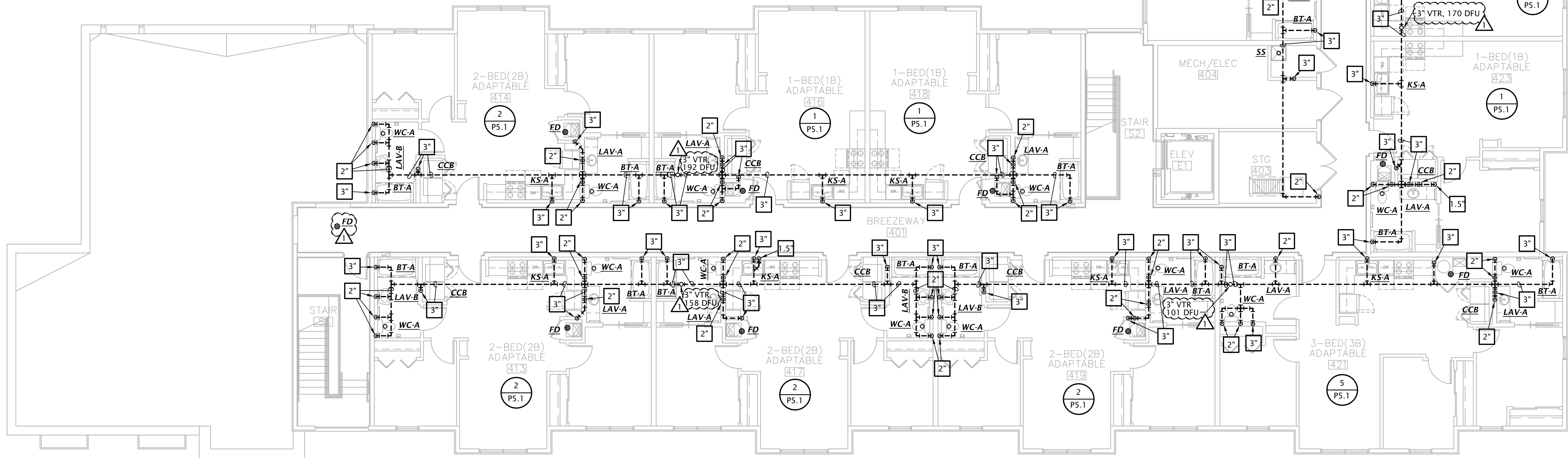
WASTE AND VENT PLAN NOTES BY SYMBOL

- COORDINATE EXACT ROOF DRAIN PIPE ROUTING AND OVERFLOW DRAIN REQUIREMENTS WITH ARCHITECT AND CIVIL ENGINEER.
- PROVIDE OIL INTERCEPTOR EQUAL TO MIFAB SERIES MI-O-HU-3 WITH RATED FLOW = 50 GPM; HOLDING CAPACITY = 163 GALLONS. SEPARATOR MUST HOLD TOTAL HYDRAULIC FLUID CAPACITY OF ELEVATOR SYSTEM, 124 GALLONS.
- PROVIDE SAMPLING WELL, COORDINATE REQUIREMENTS WITH CITY.
- 3" VENT BELOW GRADE.
- 3" VENT ABOVE FIRST FLOOR CEILING.
- LIMITED SPACE ABOVE CEILING IN THIS AREA. ROUTE PIPING AS HIGH AS POSSIBLE, COORDINATE ROUTING WITH OTHER TRADES.
- SEE DETAIL 2 THIS SHEET FOR MORE INFORMATION.
- PIPING LOCATED ABOVE FIRST FLOOR CEILING.

PLUMBING SIZING SYMBOLS	
	DRAIN (X = SIZE)
	VENT (X = SIZE)
	WASTE STACK VENT (X = SIZE)

NOTES:
SEE PLUMBING ROUGH-IN SCHEDULE ON SHEET P6.1 FOR ADDITIONAL INFORMATION.
SIZES INDICATED ARE TYPICAL FOR SIMILAR FIXTURES IN EACH APARTMENT.

PER THE 2021 IPC 913.2, WASTE STACK VENTS SHALL BE VERTICAL, AND BOTH HORIZONTAL AND VERTICAL OFFSETS SHALL BE PROHIBITED BETWEEN THE LOWEST FIXTURE DRAIN CONNECTION AND THE HIGHEST FIXTURE DRAIN CONNECTION..



FOURTH FLOOR PLAN - WASTE AND VENT
1/8" = 1'-0"

Reviewed for Code Compliance
11/06/2023
Joshua Hamlin



REVISION:
06-26-2023

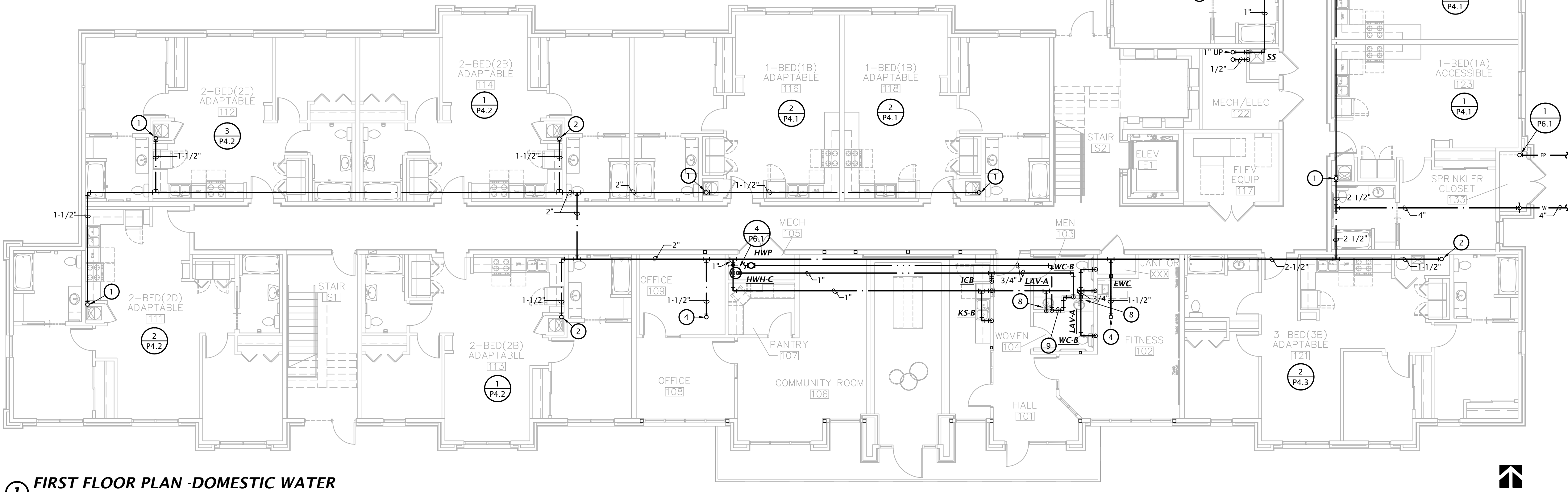
DATE: 06-26-2023
JOB: 21-3205
SHEET NO.:

DOMESTIC WATER PLAN NOTES BY SYMBOL

- ROUTE 1-1/4" UP TO FLOOR ABOVE, SEE 1:P2.6 FOR CONTINUATION. ROUTE BRANCH TO FIRST FLOOR APARTMENT. SEE ENLARGED DOMESTIC WATER PLANS FOR SIZING AND ROUTING IN APARTMENT. PROVIDE SHUT-OFF VALVE AT BASE OF RISER.
- ROUTE 1-1/2" UP TO FLOOR ABOVE, SEE 1:P2.6 FOR CONTINUATION. ROUTE BRANCH TO FIRST FLOOR APARTMENT. SEE ENLARGED DOMESTIC WATER PLANS FOR SIZING AND ROUTING IN APARTMENT. PROVIDE SHUT-OFF VALVE AT BASE OF RISER.
- ROUTE 1-1/4" TO FIRST FLOOR APARTMENT. SEE ENLARGED DOMESTIC WATER PLANS FOR SIZING AND ROUTING IN APARTMENT.
- ROUTE 1-1/2" UP TO FLOOR ABOVE, SEE 1:P2.6 FOR CONTINUATION.
- ROUTE 1-1/4" UP TO FLOOR ABOVE, SEE 1:P2.7 FOR CONTINUATION. ROUTE BRANCH TO SECOND FLOOR APARTMENT. SEE ENLARGED DOMESTIC WATER PLANS FOR SIZING AND ROUTING IN APARTMENT.
- ROUTE 1-1/4" UP TO FOURTH FLOOR APARTMENT ABOVE, SEE 1:P2.8 FOR CONTINUATION. ROUTE BRANCH TO THIRD FLOOR APARTMENT. SEE ENLARGED DOMESTIC WATER PLANS FOR SIZING AND ROUTING IN APARTMENTS.
- ROUTE ALL APARTMENT WATER PIPING BELOW FLOOR.
- PROVIDE PUBLIC LAVATORIES WITH POINT OF USE TEMPERING VALVE.
- ROUTE HOT WATER DOWN IN WALL TO MINIMIZE DISTANCE TO LAVATORIES.
- ROUTE 1" UP TO FOURTH FLOOR APARTMENT ABOVE, SEE 1:P2.8 FOR CONTINUATION. ROUTE BRANCH TO THIRD FLOOR APARTMENTS. SEE ENLARGED DOMESTIC WATER PLANS FOR SIZING AND ROUTING IN APARTMENTS.
- 3/4" DOMESTIC COLD WATER LINE ROUTED IN ATTIC SPACE.
- 3/4" DOMESTIC COLD WATER UP TO ROOF HYDRANT.

		ALTERNATE MATERIAL/SIZE	
		Cross-linked polyethylene (PEX)	Polypropylene (PP)
COPPER PIPE SIZE INDICATED	1/2"	3/4"	1/2"
	3/4"	1"	1"
	1"		1-1/4"
	1-1/4"		1-1/2"
	1-1/2"		2"
	2"		2-1/2"
	2-1/2"		3"
	3"		3-1/2"
Note: Pipe sizes indicated on drawings are for Type L copper pipe. If alternate materials are used, sizes shall be as indicated above. Where no pipe size is shown, use of indicated material in design pipe size is prohibited. Do not use materials other than those listed.			

PROJECT NUMBER: 22062		
PROJECT NAME: The Reserves at Magnolia, Denton, TX		
DATE: 26-Jun-23		
FIXTURE TYPE	QUANTITY	TOTAL WATER FIXTURE UNITS
Bathroom Group (Private FT)	100	360
Dishwasher (Private)	61	85.4
Drinking Fountain	1	0.25
Ice Maker Connection Box	61	15.25
Kitchen Sink (Private)	61	85.4
Lavatory (Public)	2	4
Service Sink	4	12
Washing Machine(Private, 8lb.)	60	84
Water Closet (Public, FT)	2	10
	TOTAL F.U. =	657
2021 IPC	VELOCITY 3.3 PSI	TOTAL FT GPM= 152.9 MIN. PIPE SIZE = 3"



FIRST FLOOR PLAN -DOMESTIC WATER

1/8" = 1'-0"

Reviewed for Code Compliance
11/06/2023
Joshua Hamlin

REVISION:

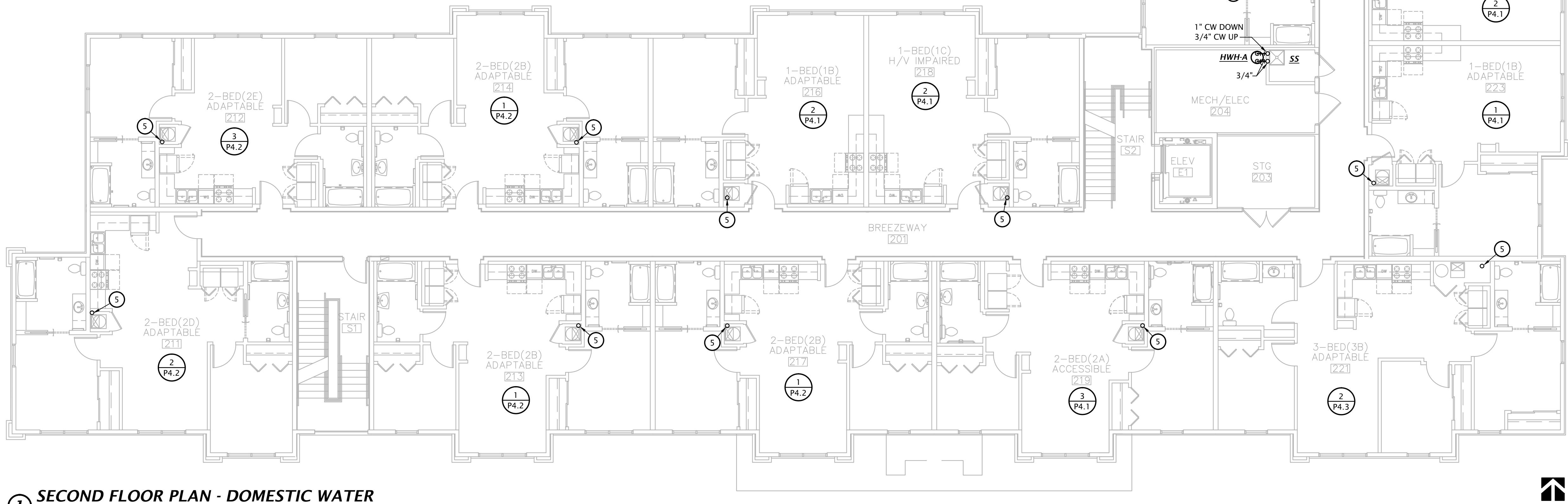
DATE: 06-26-2023
JOB: 21-3205
SHEET NO.:

P2.5

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DOMESTIC WATER PLAN NOTES BY SYMBOL

1. ROUTE 1-1/4" UP TO FLOOR ABOVE, SEE 1:P2.6 FOR CONTINUATION. ROUTE BRANCH TO FIRST FLOOR APARTMENT. SEE ENLARGED DOMESTIC WATER PLANS FOR SIZING AND ROUTING IN APARTMENT. PROVIDE SHUT-OFF VALVE AT BASE OF RISER.
2. ROUTE 1-1/2" UP TO FLOOR ABOVE, SEE 1:P2.6 FOR CONTINUATION. ROUTE BRANCH TO FIRST FLOOR APARTMENT. SEE ENLARGED DOMESTIC WATER PLANS FOR SIZING AND ROUTING IN APARTMENT. PROVIDE SHUT-OFF VALVE AT BASE OF RISER.
3. ROUTE 1-1/4" TO FIRST FLOOR APARTMENT. SEE ENLARGED DOMESTIC WATER PLANS FOR SIZING AND ROUTING IN APARTMENT.
4. ROUTE 1-1/2" UP TO FLOOR ABOVE, SEE 1:P2.6 FOR CONTINUATION.
5. ROUTE 1-1/4" UP TO FLOOR ABOVE, SEE 1:P2.7 FOR CONTINUATION. ROUTE BRANCH TO SECOND FLOOR APARTMENT. SEE ENLARGED DOMESTIC WATER PLANS FOR SIZING AND ROUTING IN APARTMENT.
6. ROUTE 1-1/4" UP TO FOURTH FLOOR APARTMENT ABOVE, SEE 1:P2.8 FOR CONTINUATION. ROUTE BRANCH TO THIRD FLOOR APARTMENT. SEE ENLARGED DOMESTIC WATER PLANS FOR SIZING AND ROUTING IN APARTMENTS.
7. ROUTE ALL APARTMENT WATER PIPING BELOW FLOOR.
8. PROVIDE PUBLIC LAVATORIES WITH POINT OF USE TEMPERING VALVE.
9. ROUTE HOT WATER DOWN IN WALL TO MINIMIZE DISTANCE TO LAVATORIES.
10. ROUTE 1" UP TO FOURTH FLOOR APARTMENT ABOVE, SEE 1:P2.8 FOR CONTINUATION. ROUTE BRANCH TO THIRD FLOOR APARTMENTS. SEE ENLARGED DOMESTIC WATER PLANS FOR SIZING AND ROUTING IN APARTMENTS.
11. 3/4" DOMESTIC COLD WATER LINE ROUTED IN ATTIC SPACE.
12. 3/4" DOMESTIC COLD WATER UP TO ROOF HYDRANT.



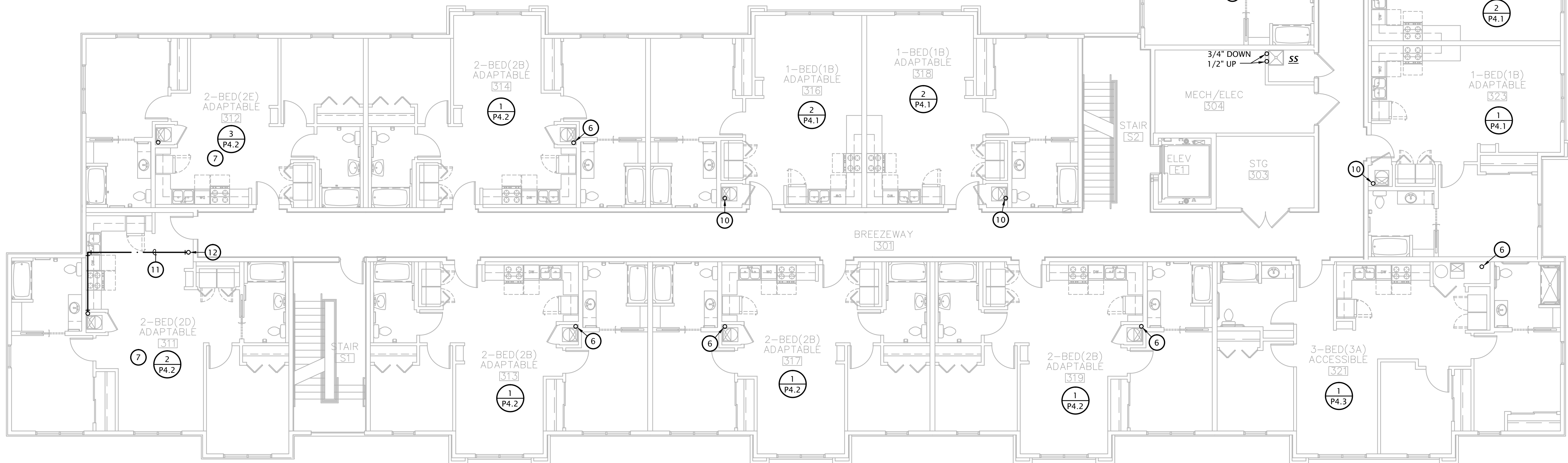
1 SECOND FLOOR PLAN - DOMESTIC WATER
1/8" = 1'-0"

Reviewed for Code Compliance
11/06/2023
Joshua Hamlin

DOMESTIC WATER PLAN NOTES BY SYMBOL

- ROUTE 1-1/4" UP TO FLOOR ABOVE, SEE 1:P2.6 FOR CONTINUATION. ROUTE BRANCH TO FIRST FLOOR APARTMENT. SEE ENLARGED DOMESTIC WATER PLANS FOR SIZING AND ROUTING IN APARTMENT. PROVIDE SHUT-OFF VALVE AT BASE OF RISER.
- ROUTE 1-1/2" UP TO FLOOR ABOVE, SEE 1:P2.6 FOR CONTINUATION. ROUTE BRANCH TO FIRST FLOOR APARTMENT. SEE ENLARGED DOMESTIC WATER PLANS FOR SIZING AND ROUTING IN APARTMENT. PROVIDE SHUT-OFF VALVE AT BASE OF RISER.
- ROUTE 1-1/4" TO FIRST FLOOR APARTMENT. SEE ENLARGED DOMESTIC WATER PLANS FOR SIZING AND ROUTING IN APARTMENT.
- ROUTE 1-1/2" UP TO FLOOR ABOVE, SEE 1:P2.6 FOR CONTINUATION.
- ROUTE 1-1/4" UP TO FLOOR ABOVE, SEE 1:P2.7 FOR CONTINUATION. ROUTE BRANCH TO SECOND FLOOR APARTMENT. SEE ENLARGED DOMESTIC WATER PLANS FOR SIZING AND ROUTING IN APARTMENT.
- ROUTE 1-1/4" UP TO FOURTH FLOOR APARTMENT ABOVE, SEE 1:P2.8 FOR CONTINUATION. ROUTE BRANCH TO THIRD FLOOR APARTMENT. SEE ENLARGED DOMESTIC WATER PLANS FOR SIZING AND ROUTING IN APARTMENTS.
- ROUTE ALL APARTMENT WATER PIPING BELOW FLOOR.
- PROVIDE PUBLIC LAVATORIES WITH POINT OF USE TEMPERING VALVE.
- ROUTE HOT WATER DOWN IN WALL TO MINIMIZE DISTANCE TO LAVATORIES.
- ROUTE 1" UP TO FOURTH FLOOR APARTMENT ABOVE, SEE 1:P2.8 FOR CONTINUATION. ROUTE BRANCH TO THIRD FLOOR APARTMENTS. SEE ENLARGED DOMESTIC WATER PLANS FOR SIZING AND ROUTING IN APARTMENTS.
- 3/4" DOMESTIC COLD WATER LINE ROUTED IN ATTIC SPACE.
- 3/4" DOMESTIC COLD WATER UP TO ROOF HYDRANT.

		ALTERNATE MATERIAL/SIZE	
		Cross-linked polyethylene (PEX)	Polypropylene (PP)
COPPER PIPE SIZE INDICATED	1/2"	3/4"	1/2"
	3/4"	1"	1"
	1"		1-1/4"
	1-1/4"		1-1/2"
	1-1/2"		2"
	2"		2-1/2"
	2-1/2"		3"
	3"		3-1/2"
Note: Pipe sizes indicated on drawings are for Type L copper pipe. If alternate materials are used, sizes shall be as indicated above. Where no pipe size is shown, use of indicated material in design pipe size is prohibited. Do not use materials other than those listed.			



1 THIRD FLOOR PLAN - DOMESTIC WATER
1/8" = 1'-0"

Reviewed for Code Compliance
11/06/2023
Joshua Hamlin



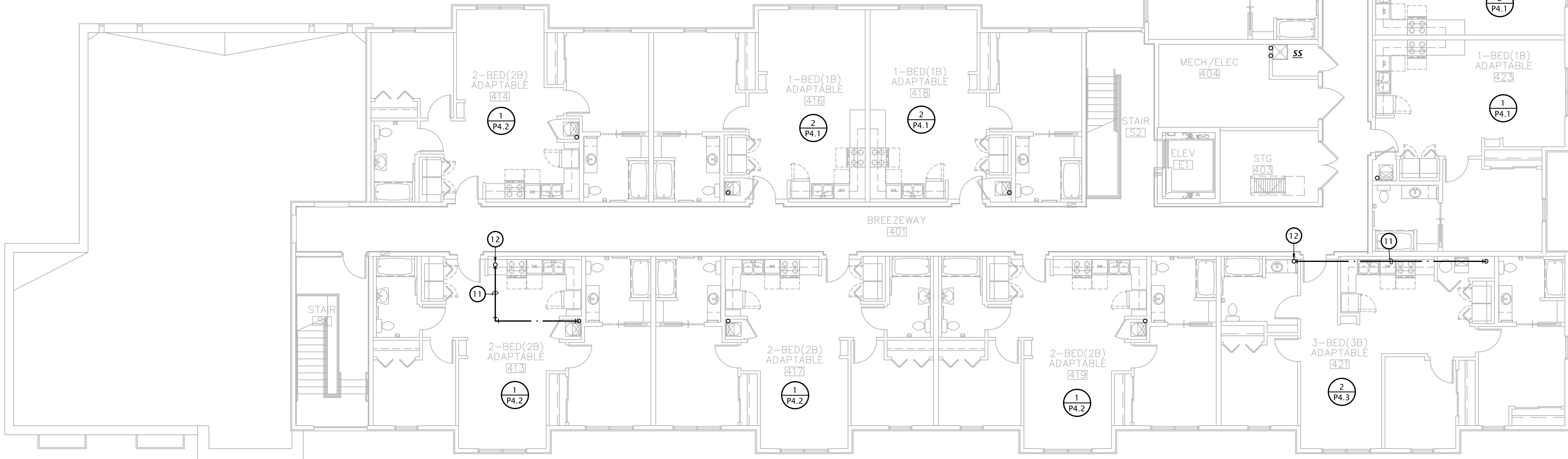
REVISION:

DATE: 06-26-2023
JOB: 21-3205
SHEET NO.:

DOMESTIC WATER PLAN NOTES BY SYMBOL

- ROUTE 1-1/4" UP TO FLOOR ABOVE, SEE 1:P2.6 FOR CONTINUATION. ROUTE BRANCH TO FIRST FLOOR APARTMENT. SEE ENLARGED DOMESTIC WATER PLANS FOR SIZING AND ROUTING IN APARTMENT. PROVIDE SHUT-OFF VALVE AT BASE OF RISER.
- ROUTE 1-1/2" UP TO FLOOR ABOVE, SEE 1:P2.6 FOR CONTINUATION. ROUTE BRANCH TO FIRST FLOOR APARTMENT. SEE ENLARGED DOMESTIC WATER PLANS FOR SIZING AND ROUTING IN APARTMENT. PROVIDE SHUT-OFF VALVE AT BASE OF RISER.
- ROUTE 1-1/4" TO FIRST FLOOR APARTMENT. SEE ENLARGED DOMESTIC WATER PLANS FOR SIZING AND ROUTING IN APARTMENT.
- ROUTE 1-1/2" UP TO FLOOR ABOVE, SEE 1:P2.6 FOR CONTINUATION.
- ROUTE 1-1/4" UP TO FLOOR ABOVE, SEE 1:P2.7 FOR CONTINUATION. ROUTE BRANCH TO SECOND FLOOR APARTMENT. SEE ENLARGED DOMESTIC WATER PLANS FOR SIZING AND ROUTING IN APARTMENT.
- ROUTE 1-1/4" UP TO FOURTH FLOOR APARTMENT ABOVE, SEE 1:P2.8 FOR CONTINUATION. ROUTE BRANCH TO THIRD FLOOR APARTMENT. SEE ENLARGED DOMESTIC WATER PLANS FOR SIZING AND ROUTING IN APARTMENTS.
- ROUTE ALL APARTMENT WATER PIPING BELOW FLOOR.
- PROVIDE PUBLIC LAVATORIES WITH POINT OF USE TEMPERING VALVE.
- ROUTE HOT WATER DOWN IN WALL TO MINIMIZE DISTANCE TO LAVATORIES.
- ROUTE 1" UP TO FOURTH FLOOR APARTMENT ABOVE, SEE 1:P2.8 FOR CONTINUATION. ROUTE BRANCH TO THIRD FLOOR APARTMENTS. SEE ENLARGED DOMESTIC WATER PLANS FOR SIZING AND ROUTING IN APARTMENTS.
- 3/4" DOMESTIC COLD WATER LINE ROUTED IN ATTIC SPACE.
- 3/4" DOMESTIC COLD WATER UP TO ROOF HYDRANT.

		ALTERNATE MATERIAL/SIZE	
		Cross-linked polyethylene (PEX)	Polypropylene (PP)
COPPER PIPE SIZE INDICATED	1/2"	3/4"	1/2"
	3/4"	1"	1"
	1"		1-1/4"
	1-1/4"		1-1/2"
	1-1/2"		2"
	2"		2-1/2"
	2-1/2"		3"
	3"		3-1/2"
Note: Pipe sizes indicated on drawings are for Type L copper pipe. If alternate materials are used, sizes shall be as indicated above. Where no pipe size is shown, use of indicated material in design pipe size is prohibited. Do not use materials other than those listed.			



FOURTH FLOOR PLAN - DOMESTIC WATER
1/8" = 1'-0"

Reviewed for Code Compliance
11/06/2023
Joshua Hamlin



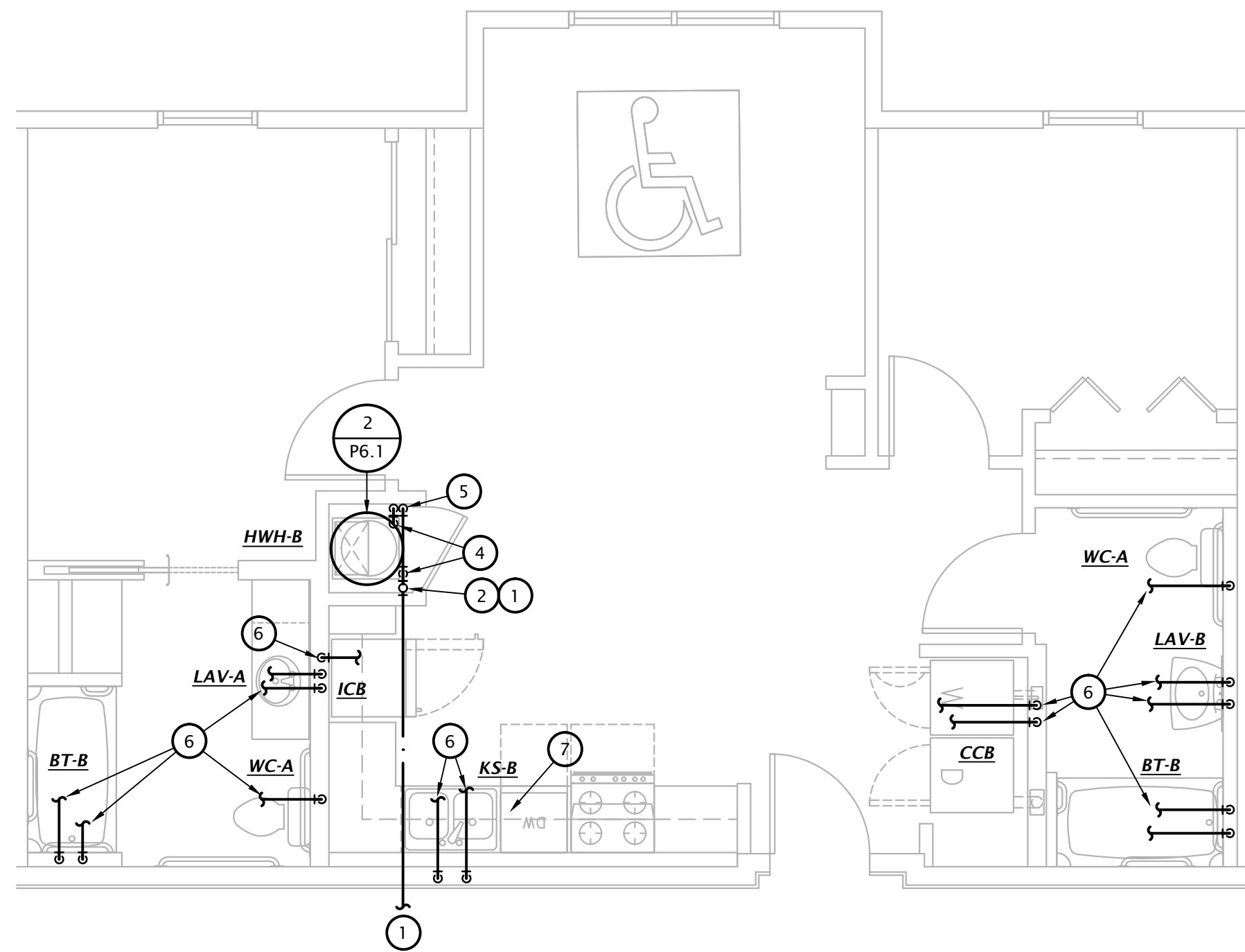
REVISION:	
DATE:	06-26-2023
JOB:	21-3205
SHEET NO.:	

- NOTES:
- PIPING SHALL NOT BE INSTALLED ABOVE ELECTRICAL PANELS.
 - COORDINATE INSTALLATION OF PIPING IN MECHANICAL CLOSET W/ M.C. & E.C.
 - SEE PLUMBING FIXTURE SCHEDULE ON SHEET P6.1 FOR FIXTURE ROUGH-IN INFORMATION.
 - ROUTE PIPING BELOW FLOOR FOR 4TH FLOOR APARTMENTS AND WHERE NOTED ON OVERALL PLAN. DO NOT ROUTE PIPING ABOVE CEILING IN UNCONDITIONED ATTIC/ PLENUM SPACES EXPOSED TO EXTERIOR.
 - INSULATE ALL HW PIPING WITH MINIMUM R-3 INSULATION PER 2021 IECC R403.5.2.

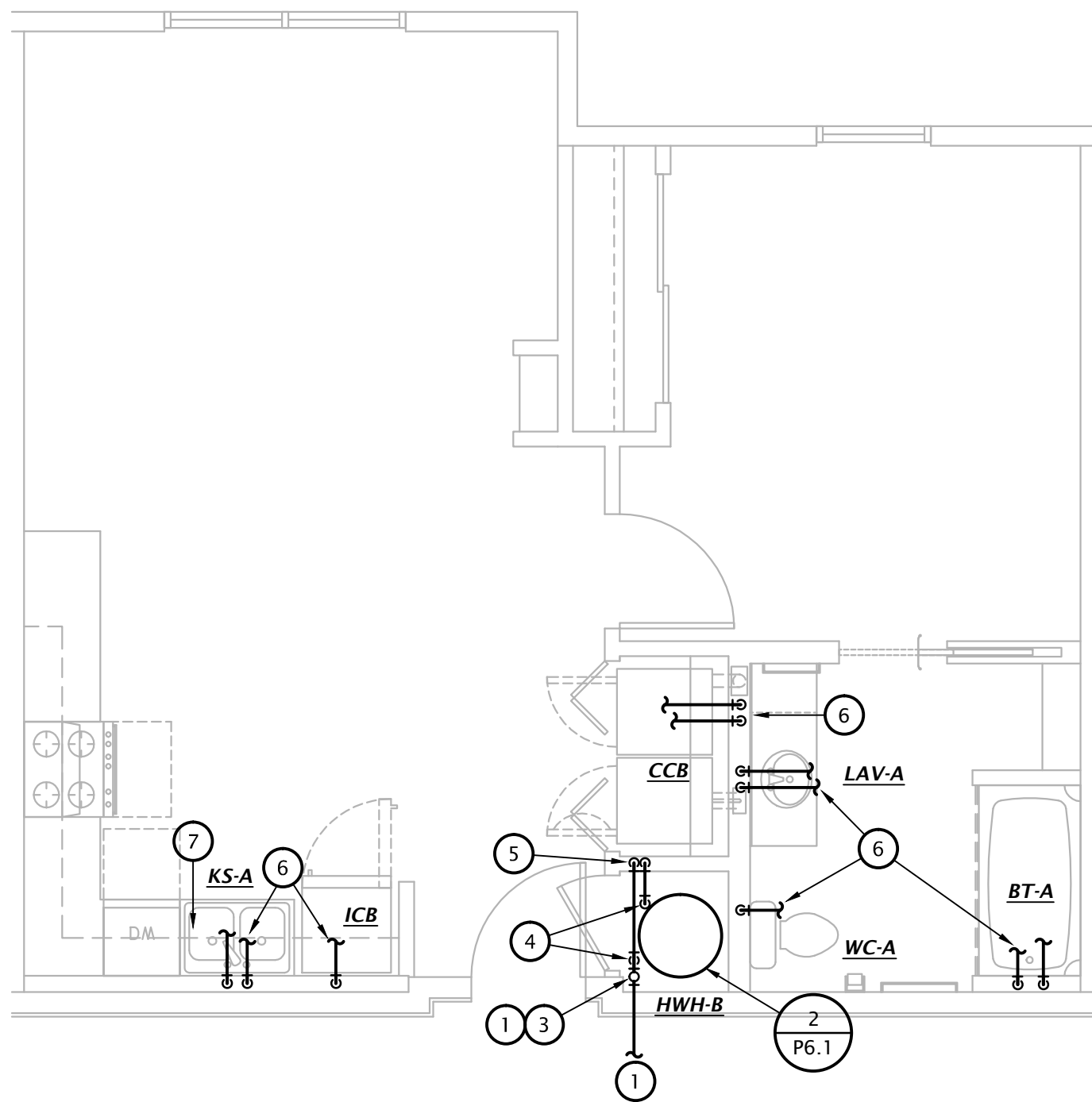
PROJECT SHALL COMPLY WITH ALL REQUIREMENTS OF THE 2021 IECC. REFERENCE SPECIFICATIONS FOR COMMISSIONING REQUIREMENTS.

ENLARGED DOMESTIC WATER PLAN NOTES BY SYMBOL

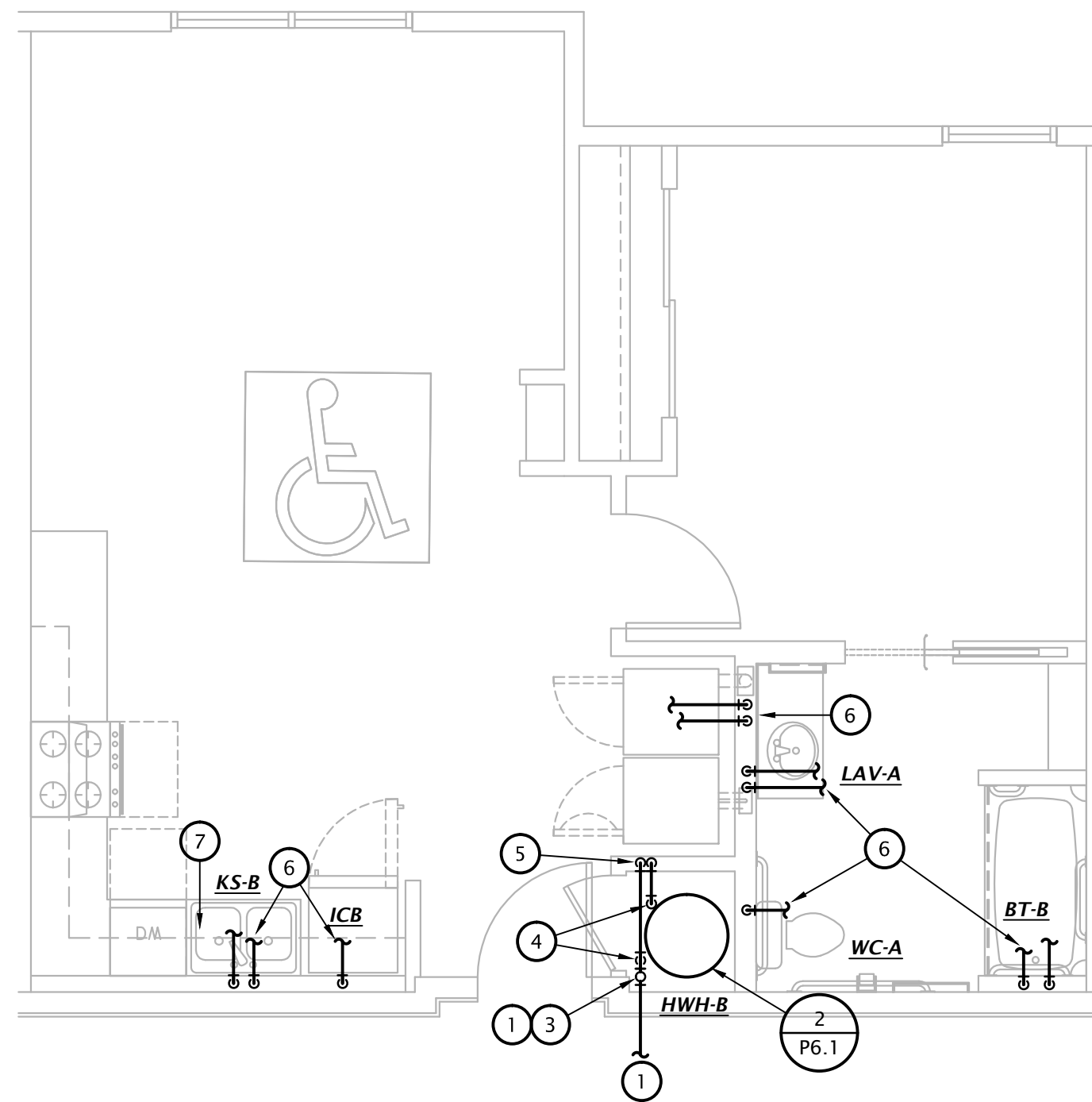
1. SEE OVERALL DOMESTIC WATER PLANS FOR SIZING AND CONTINUATION.
2. PROVIDE 1-1/4" WATER SERVICE TO ALL TWO AND THREE BEDROOM APARTMENTS. PROVIDE INDIVIDUAL SHUT-OFF VALVE FOR EACH DWELLING UNIT.
3. PROVIDE 1" WATER SERVICE TO ONE BEDROOM APARTMENTS. PROVIDE INDIVIDUAL SHUT-OFF VALVE FOR EACH DWELLING UNIT.
4. CONNECT 1" CW AND HW TO WATER HEATER.
5. PROVIDE 1" HW AND CW COPPER MANIFOLD WITH 1/2" PEX BRANCHES AND ROUTE 1/2"PEX BRANCHES TO EACH FIXTURE. MOUNT MANIFOLDS IN ACCESSIBLE LOCATION FIELD COORDINATE EXACT LOCATION OF MANIFOLD WITH G.C. AND OTHER TRADES. PROVIDE ACCESS PANEL IF MOUNTED IN WALL.
6. ROUTE 1/2" PEX BRANCHES TO MANIFOLD. PROVIDE COPPER STUB-OUTS AT ROUGH-IN FOR EACH FIXTURE.
7. PROVIDE 1/2" VALVED BRANCH BELOW SINK AND CONNECT DISHWASHER. ROUTE PIPING ALONG BACK OF CABINETRY, COORDINATE EXACT ROUTING WITH G.C. COORDINATE EXACT REQUIREMENTS WITH DISHWASHER PROVIDED.



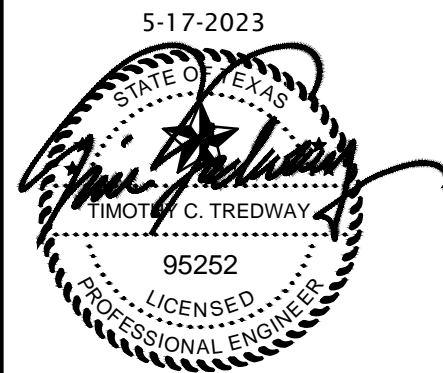
3 2 BEDROOM ACCESSIBLE DOMESTIC WATER PLAN (TYPE A)
1/4" = 1'-0"



2 1 BEDROOM DOMESTIC WATER PLAN (TYPES B, AND C)
1/4" = 1'-0"



1 1 BEDROOM ACCESSIBLE DOMESTIC WATER PLAN (TYPE A)
1/4" = 1'-0"



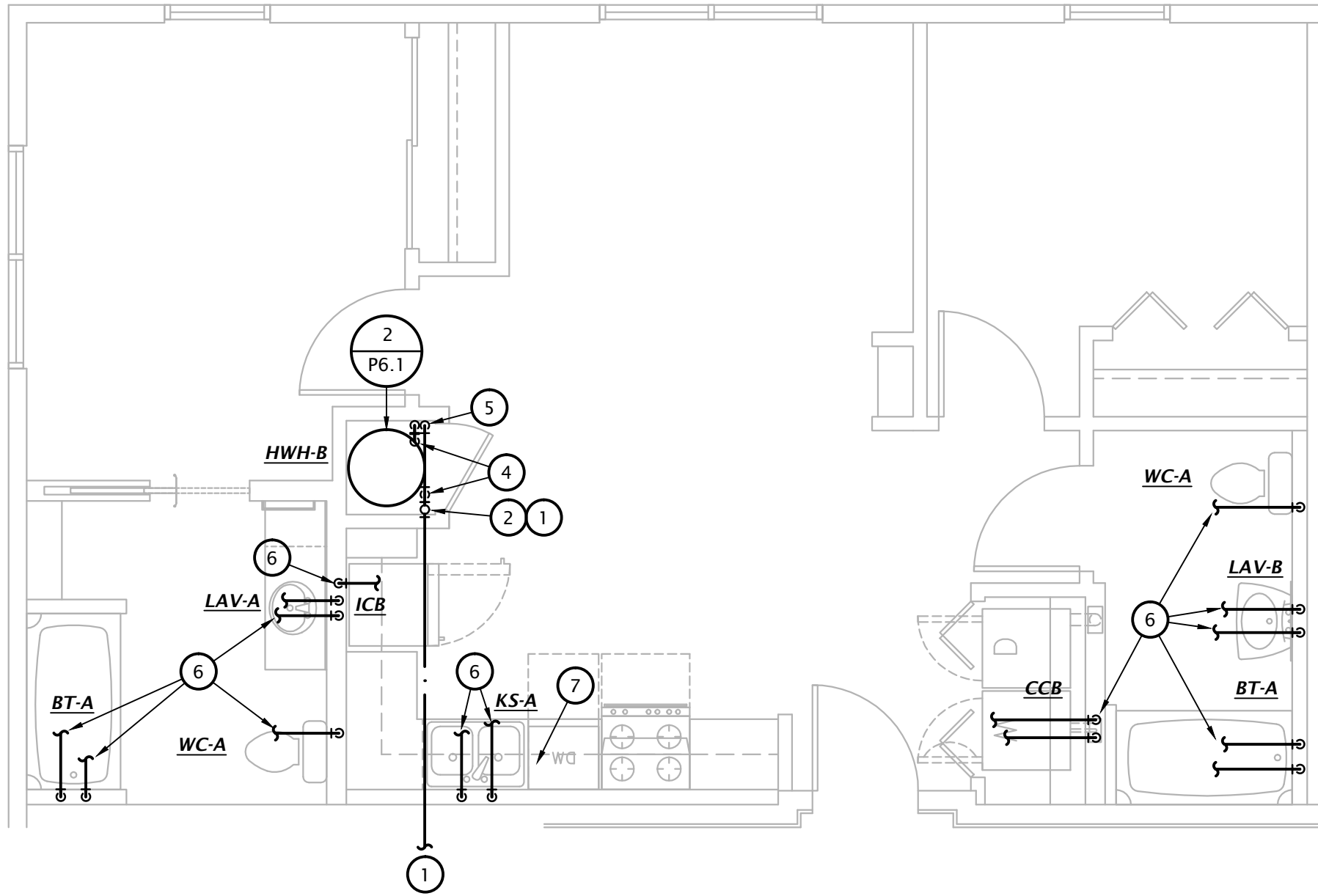
REVISION:	
DATE:	06-26-2023
JOB:	21-3205
SHEET NO.:	

- NOTES:
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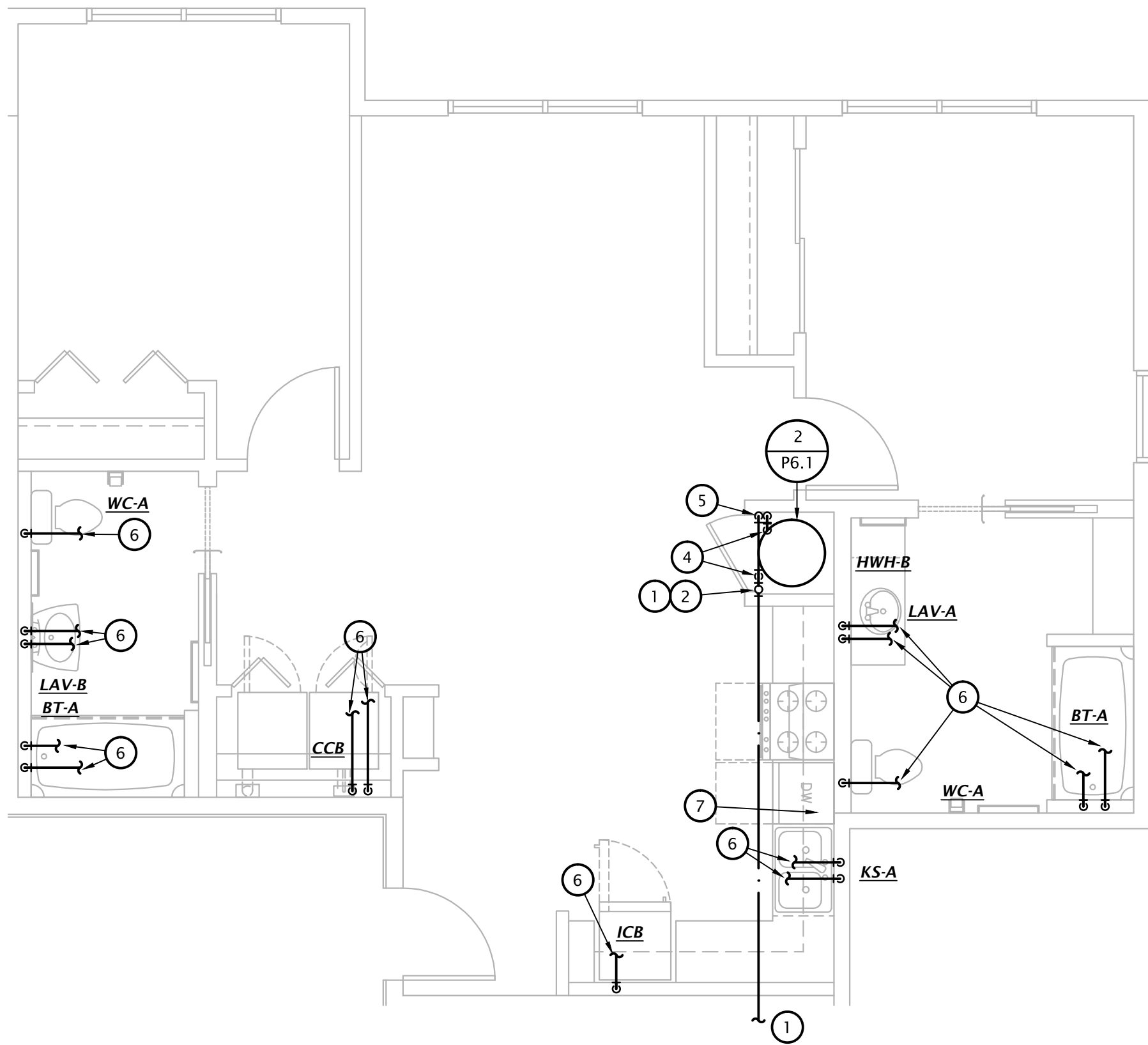
PROJECT SHALL COMPLY WITH ALL REQUIREMENTS OF THE 2021 IECC. REFERENCE SPECIFICATIONS FOR COMMISSIONING REQUIREMENTS.

ENLARGED DOMESTIC WATER PLAN NOTES BY SYMBOL

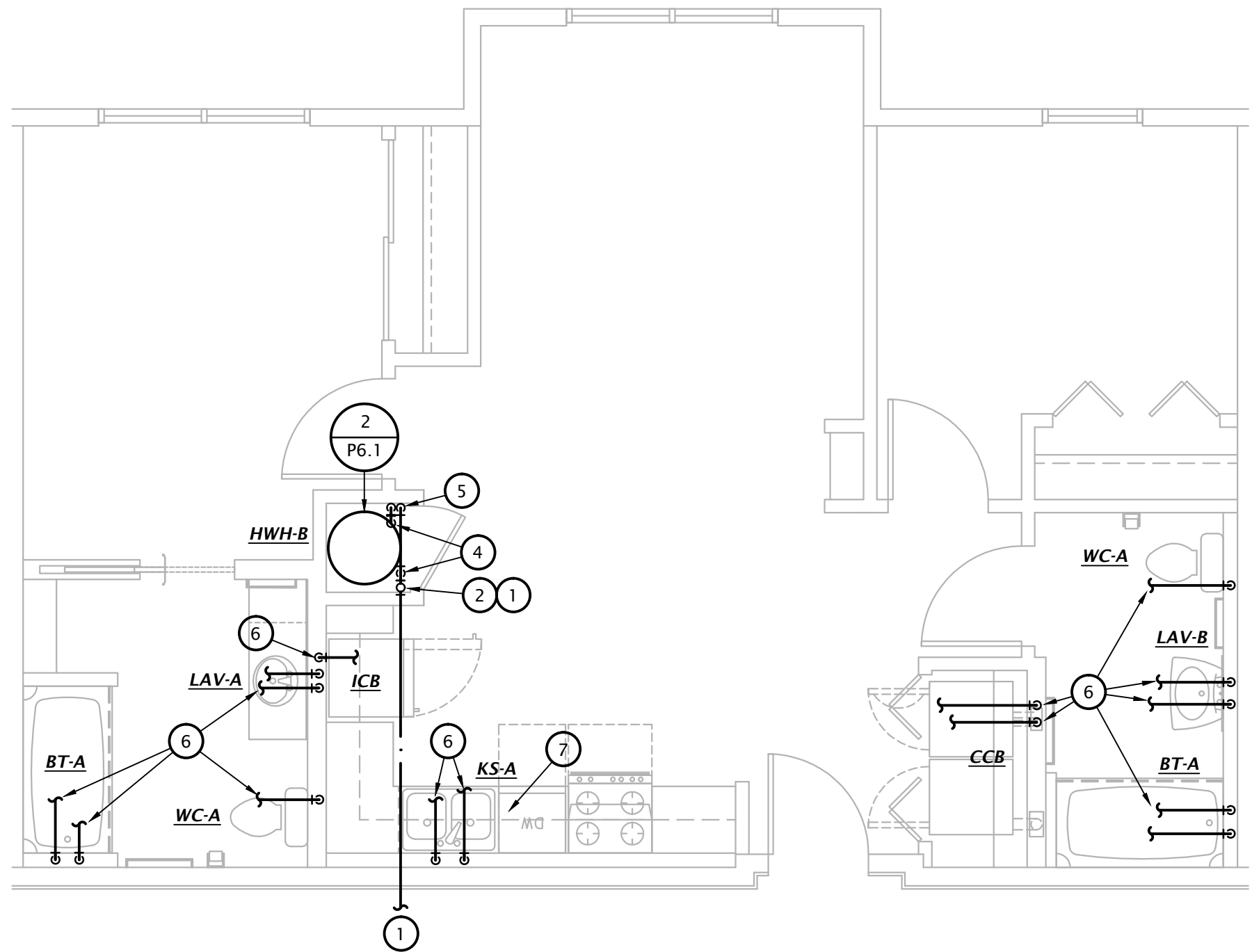
1. SEE OVERALL DOMESTIC WATER PLANS FOR SIZING AND CONTINUATION.
2. PROVIDE 1-1/4" WATER SERVICE TO ALL TWO AND THREE BEDROOM APARTMENTS. PROVIDE INDIVIDUAL SHUT-OFF VALVE FOR EACH DWELLING UNIT.
3. PROVIDE 1" WATER SERVICE TO ONE BEDROOM APARTMENTS. PROVIDE INDIVIDUAL SHUT-OFF VALVE FOR EACH DWELLING UNIT.
4. CONNECT 1" CW AND HW TO WATER HEATER.
5. PROVIDE 1" HW AND CW COPPER MANIFOLD WITH 1/2" PEX BRANCHES AND ROUTE 1/2"PEX BRANCHES TO EACH FIXTURE. MOUNT MANIFOLDS IN ACCESSIBLE LOCATION FIELD COORDINATE EXACT LOCATION OF MANIFOLD WITH G.C. AND OTHER TRADES. PROVIDE ACCESS PANEL IF MOUNTED IN WALL.
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7. PROVIDE 1/2" VALVED BRANCH BELOW SINK AND CONNECT DISHWASHER. ROUTE PIPING ALONG BACK OF CABINETRY, COORDINATE EXACT ROUTING WITH G.C. COORDINATE EXACT REQUIREMENTS WITH DISHWASHER PROVIDED.



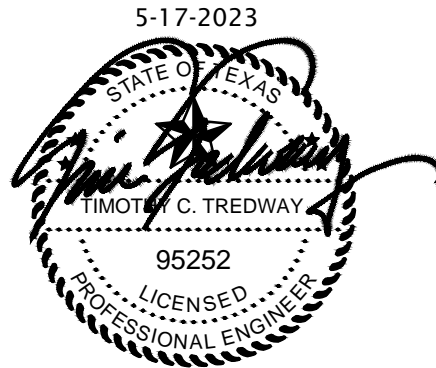
3 2 BEDROOM DOMESTIC WATER PLAN (TYPE E)
1/4" = 1'-0"



2 2 BEDROOM DOMESTIC WATER PLAN (TYPE D)
1/4" = 1'-0"



1 2 BEDROOM DOMESTIC WATER PLAN (TYPES B, AND C)
1/4" = 1'-0"



REVISION:

DATE: 06-26-2023

JOB: 21-3205

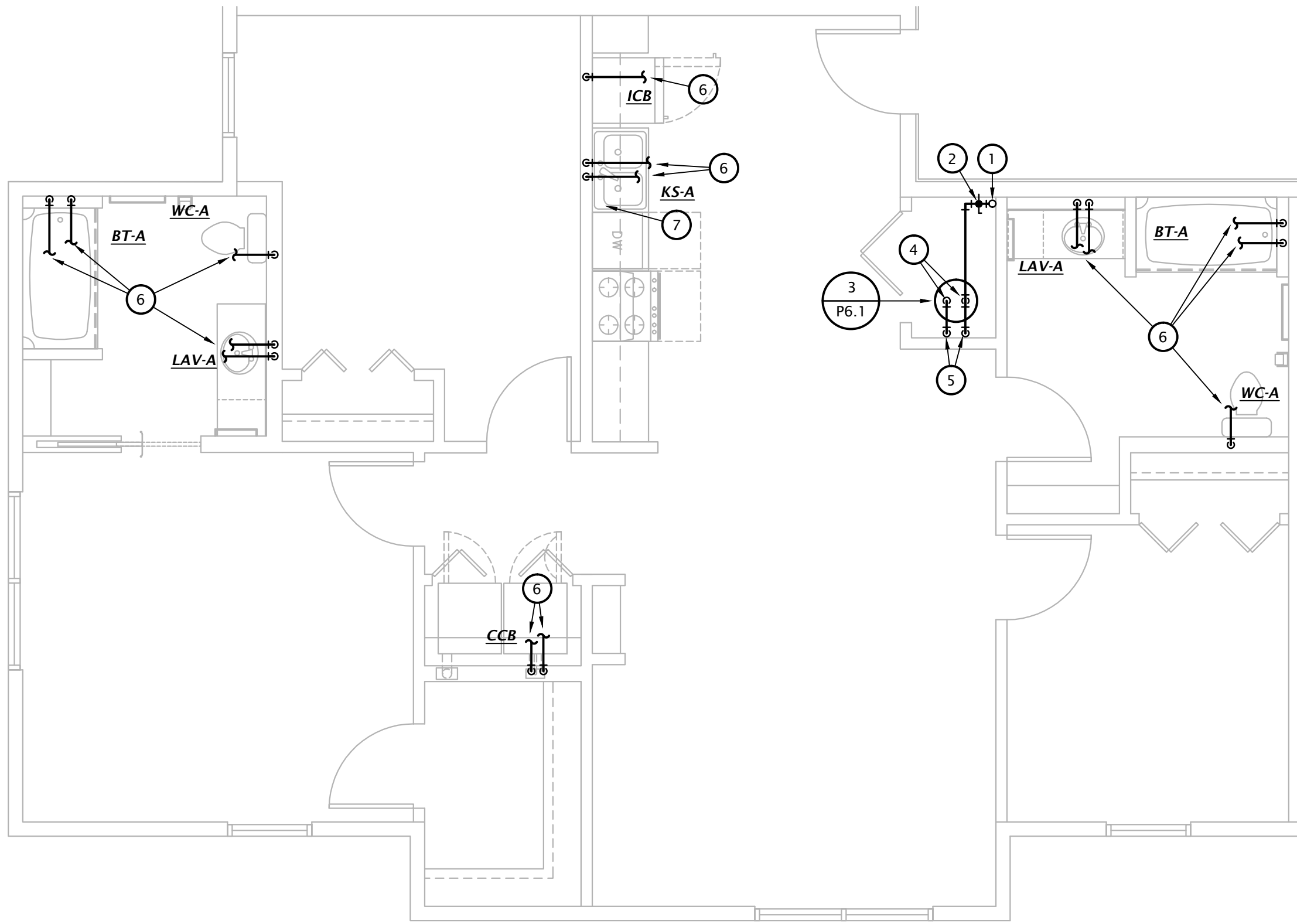
SHEET NO.:

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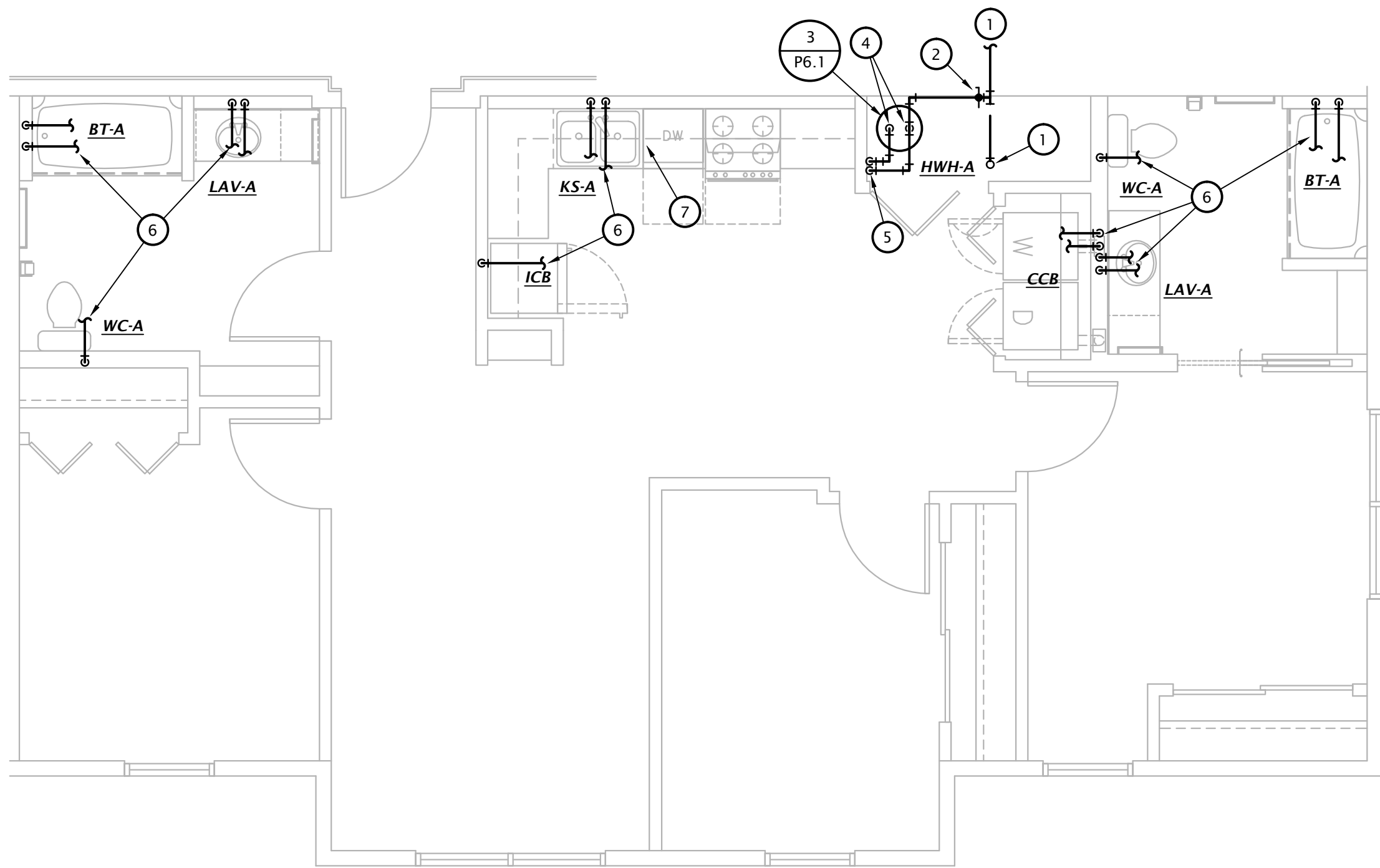
PROJECT SHALL COMPLY WITH ALL REQUIREMENTS OF THE 2021 IECC. REFERENCE SPECIFICATIONS FOR COMMISSIONING REQUIREMENTS.

ENLARGED DOMESTIC WATER PLAN NOTES BY SYMBOL

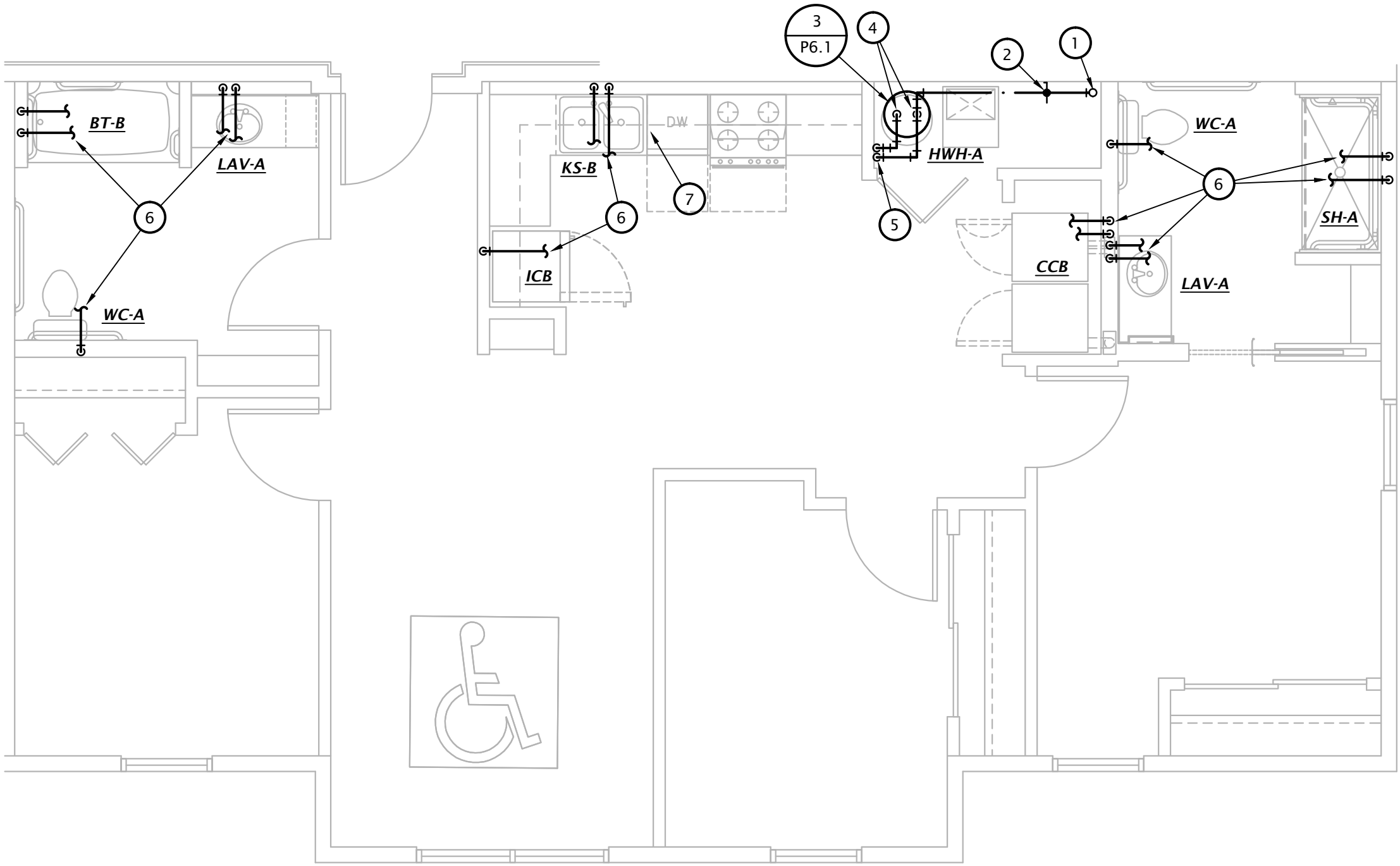
1. SEE OVERALL DOMESTIC WATER PLANS FOR SIZING AND CONTINUATION.
2. PROVIDE 1-1/4" WATER SERVICE TO ALL TWO AND THREE BEDROOM APARTMENTS. PROVIDE INDIVIDUAL SHUT-OFF VALVE FOR EACH DWELLING UNIT.
3. PROVIDE 1" WATER SERVICE TO ONE BEDROOM APARTMENTS. PROVIDE INDIVIDUAL SHUT-OFF VALVE FOR EACH DWELLING UNIT.
4. CONNECT 1" CW AND HW TO WATER HEATER.
5. PROVIDE 1" HW AND CW COPPER MANIFOLD WITH 1/2" PEX BRANCHES AND ROUTE 1/2" PEX BRANCHES TO EACH FIXTURE. MOUNT MANIFOLDS IN ACCESSIBLE LOCATION FIELD COORDINATE EXACT LOCATION OF MANIFOLD WITH G.C. AND OTHER TRADES. PROVIDE ACCESS PANEL IF MOUNTED IN WALL.
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7. PROVIDE 1/2" VALVED BRANCH BELOW SINK AND CONNECT DISHWASHER. ROUTE PIPING ALONG BACK OF CABINETRY, COORDINATE EXACT ROUTING WITH G.C. COORDINATE EXACT REQUIREMENTS WITH DISHWASHER PROVIDED.



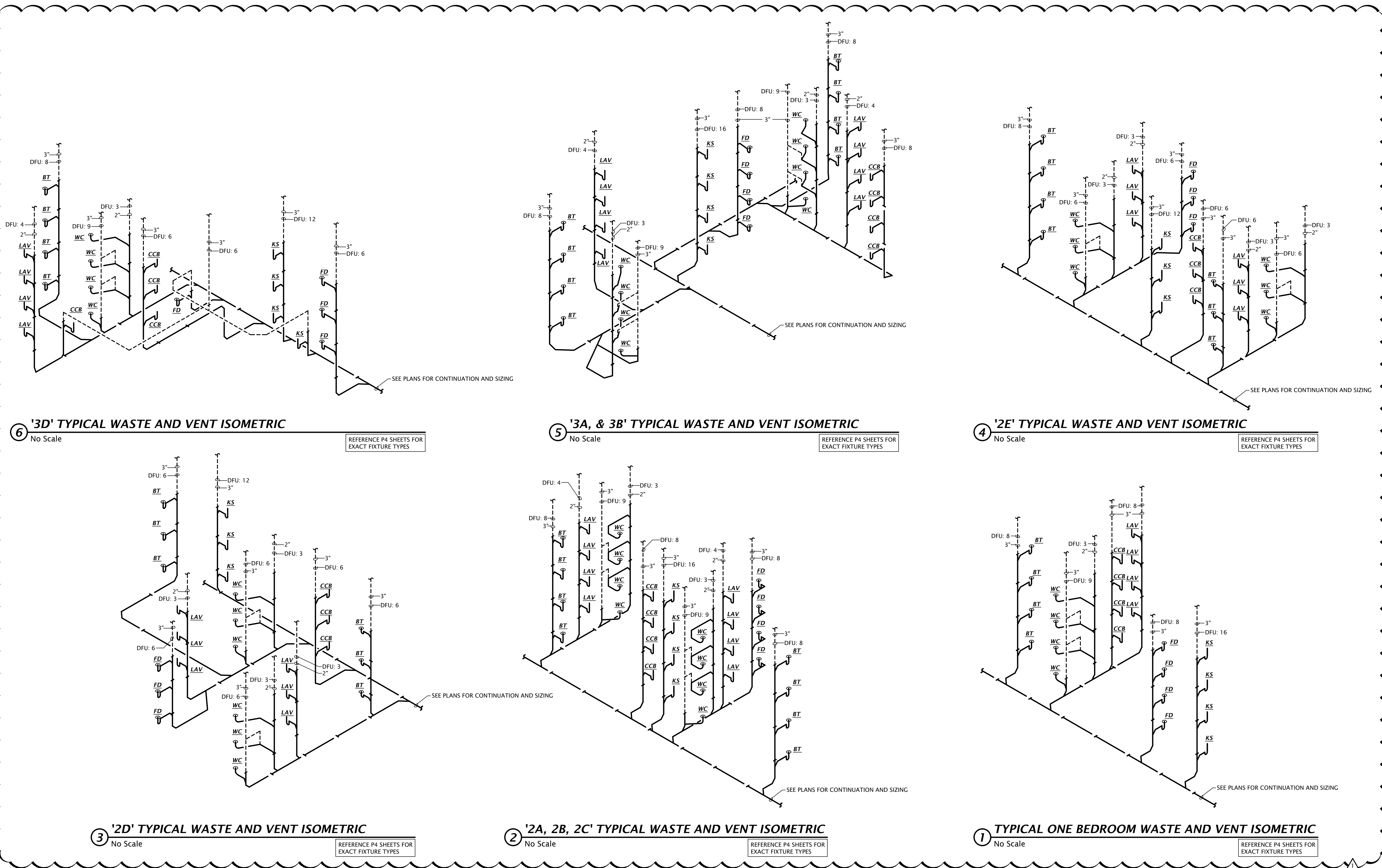
3 3 BEDROOM DOMESTIC WATER PLAN (TYPE D)
1/4" = 1'-0"

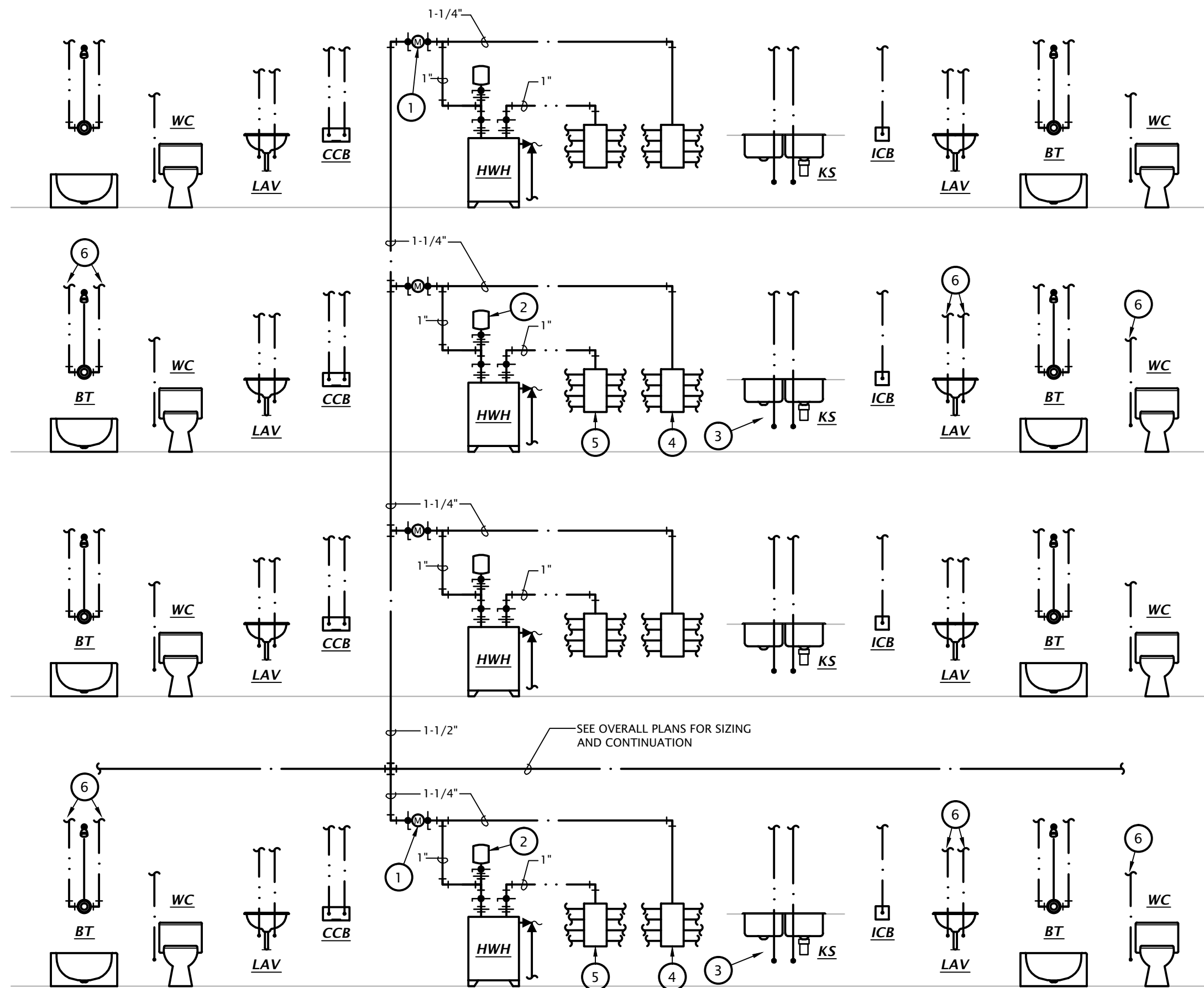


2 3 BEDROOM DOMESTIC WATER PLAN (TYPE B, AND E)
1/4" = 1'-0"



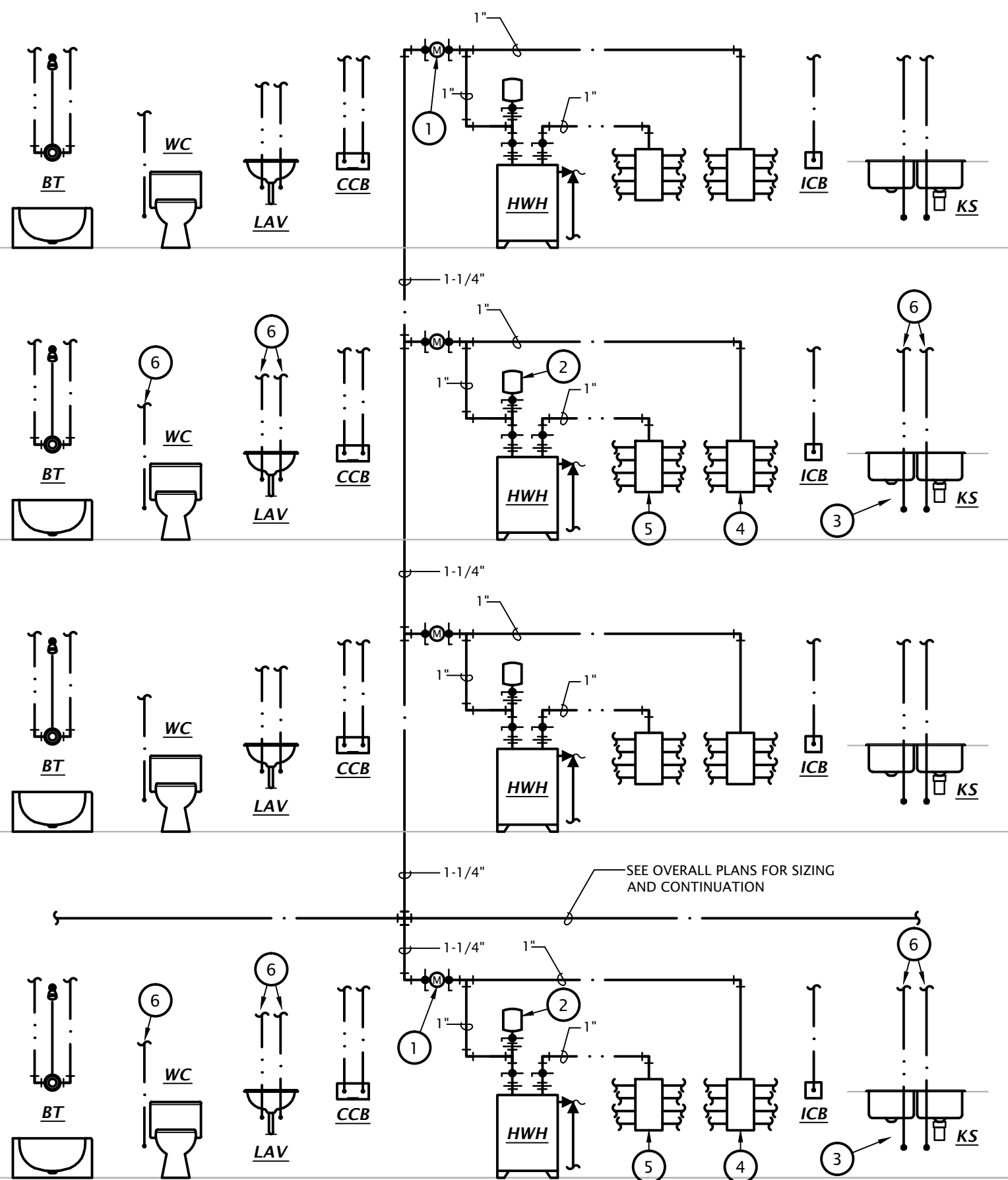
1 3 BEDROOM ACCESSIBLE DOMESTIC WATER PLAN (TYPE A)
1/4" = 1'-0"





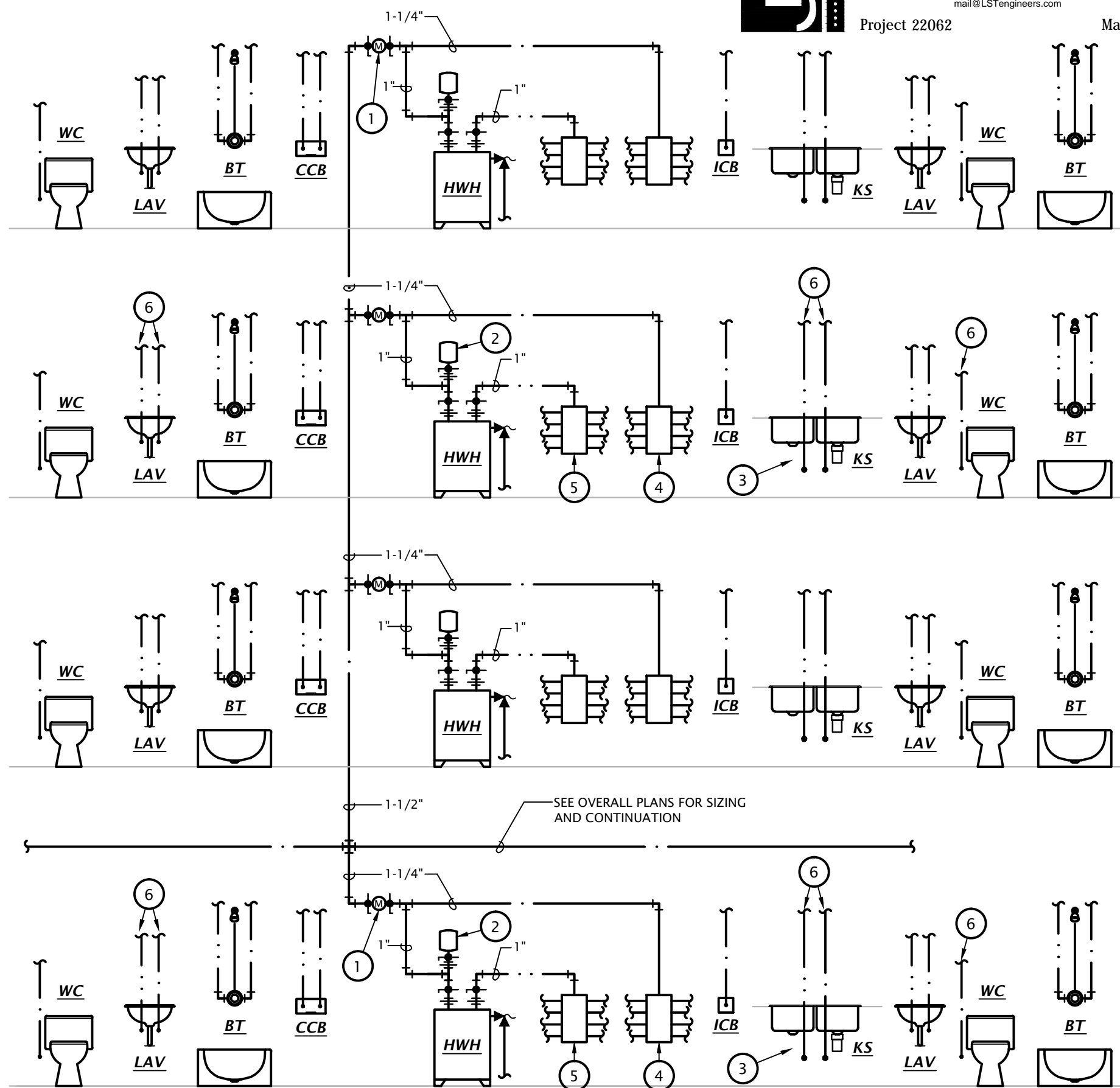
6 THREE BEDROOM TYPICAL DOMESTIC WATER RISER DIAGRAM
 Not to Scale

REFERENCE P4 SHEETS FOR EXACT FIXTURE TYPES



5 ONE BEDROOM TYPICAL DOMESTIC WATER RISER DIAGRAM
 Not to Scale

REFERENCE P4 SHEETS FOR EXACT FIXTURE TYPES

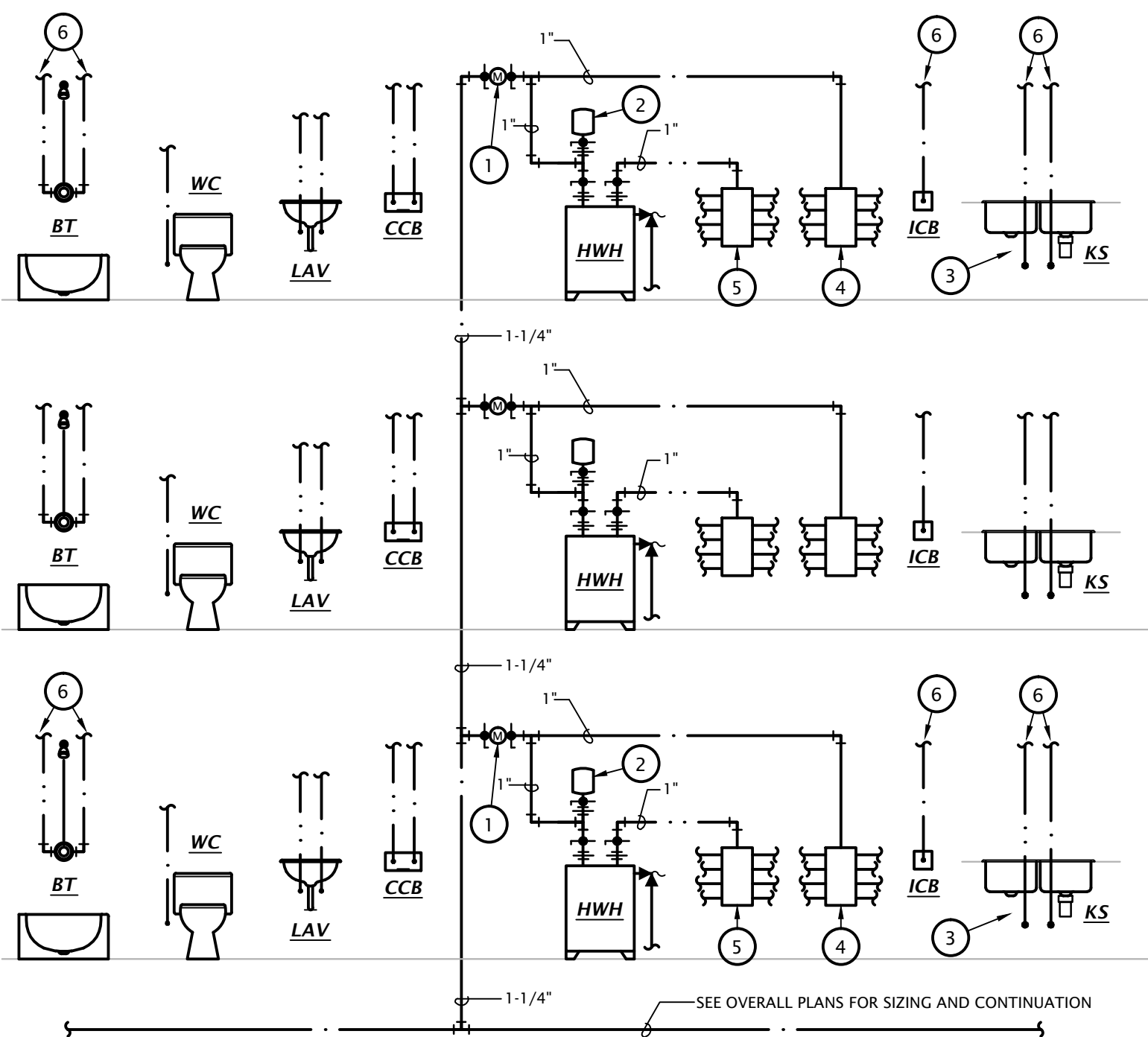


4 '2A, 2B, & 2C' TYPICAL DOMESTIC WATER RISER DIAGRAM
 Not to Scale

REFERENCE P4 SHEETS FOR EXACT FIXTURE TYPES

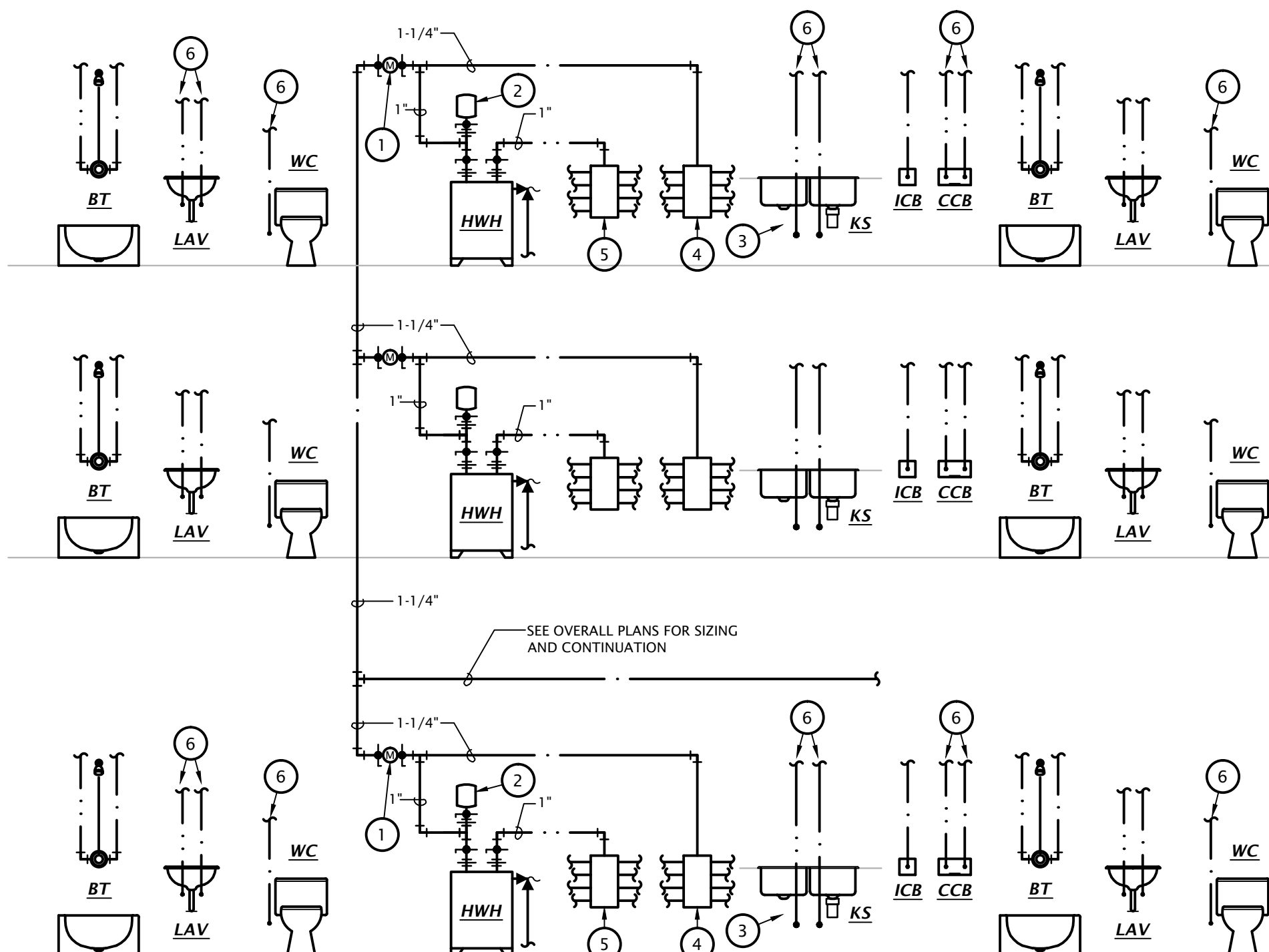
WATER RISER DIAGRAM NOTES

1. PROVIDE TENANT METER AT EACH APARTMENT. COORDIANTE REQUIREMENTS WITH OWNER . (TYPICAL)
2. PROVIDE WATTS MODEL PLT-5 EXPANSION TANK. (TYPICAL)
3. PROVIDE 1/2" VALVED HOT WATER CONNECTION TO DISHWASHER. (TYPICAL)
4. COLD WATER SUPPLY PEX MANIFOLD. (TYPICAL)
5. HOW WATER SUPPLY PEX MANIFOLD. (TYPICAL)
6. ROUTE HOT AND COLD WATER PEX AS REQUIRED FROM FIXTURE TO APPROPRIATE MANIFOLD. SEE P4 SHEETS FOR SIZING AND CONTINUATION. (TYPICAL)



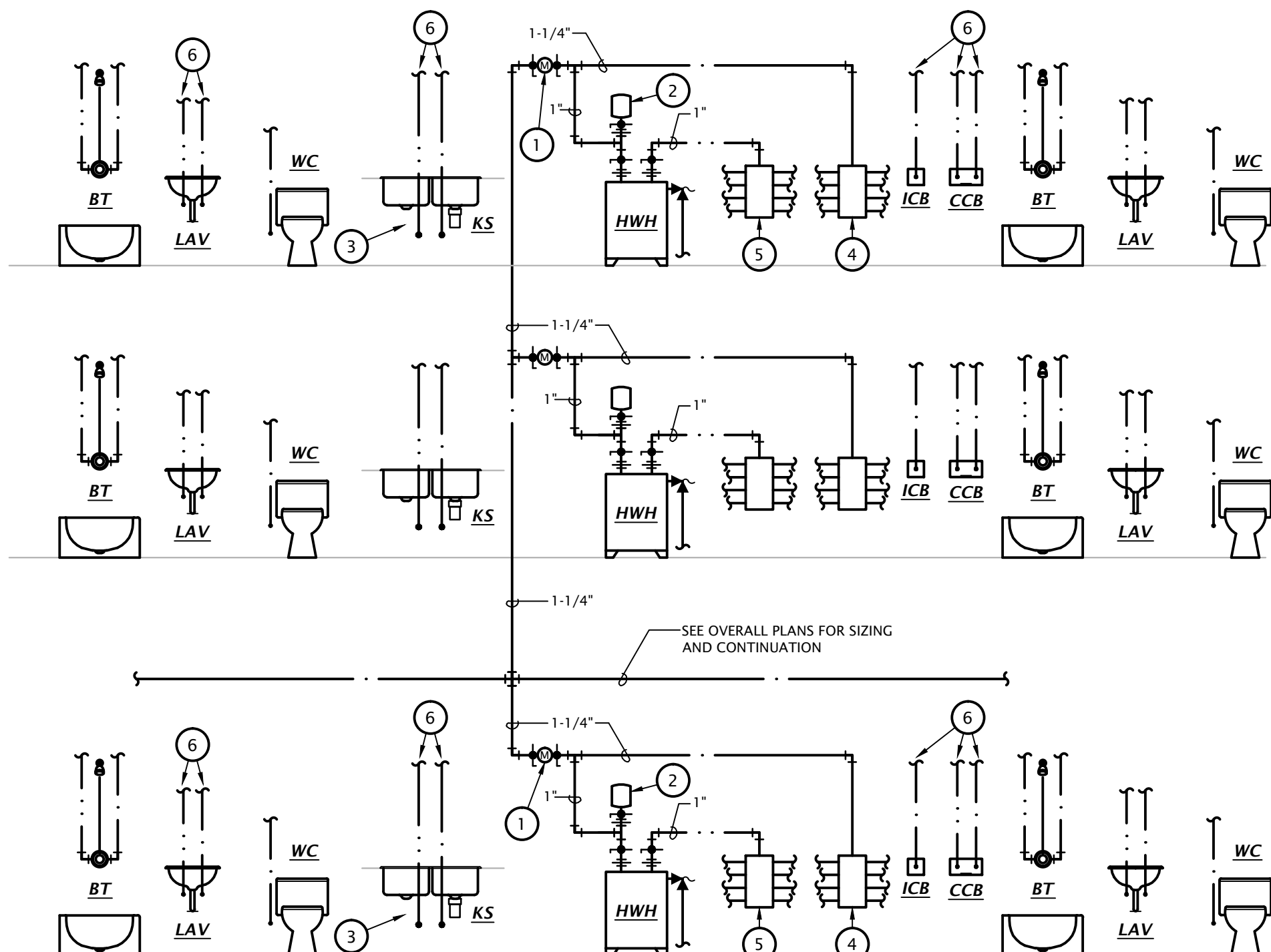
3 ALT. ONE BEDROOM DOMESTIC WATER RISER DIAGRAM
 Not to Scale

REFERENCE P4 SHEETS FOR EXACT FIXTURE TYPES



2 '2E' TYPICAL DOMESTIC WATER RISER DIAGRAM
 Not to Scale

REFERENCE P4 SHEETS FOR EXACT FIXTURE TYPES



1 '2D' TYPICAL DOMESTIC WATER RISER DIAGRAM
 Not to Scale

REFERENCE P4 SHEETS FOR EXACT FIXTURE TYPES

- WATER RISER DIAGRAM NOTES
1. PROVIDE TENANT METER AT EACH APARTMENT. COORDIANTE REQUIREMENTS WITH OWNER . (TYPICAL)

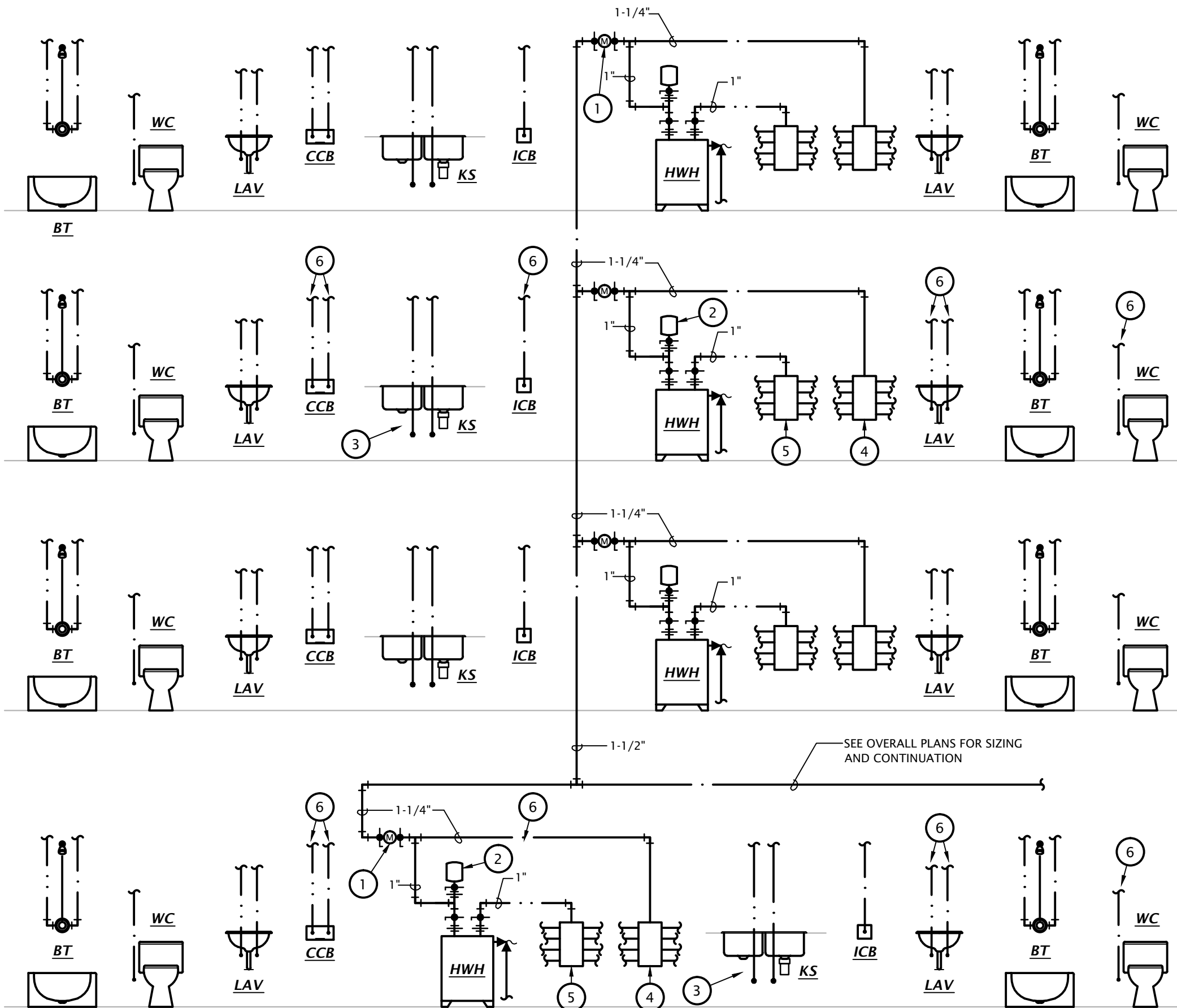
2. PROVIDE WATTS MODEL PLT-5 EXPANSION TANK. (TYPICAL)

3. PROVIDE 1/2" VALVED HOT WATER CONNECTION TO DISHWASHER. (TYPICAL)

4. COLD WATER SUPPLY PEX MANIFOLD. (TYPICAL)

5. HOW WATER SUPPLY PEX MANIFOLD. (TYPICAL)

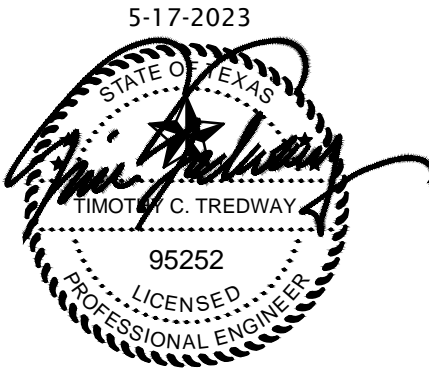
6. ROUTE HOT AND COLD WATER PEX AS REQUIRED FROM FIXTURE TO APPROPRIATE MANIFOLD. SEE P4 SHEETS FOR SIZING AND CONTINUATION. (TYPICAL)



1 ALT. THREE BEDROOM DOMESTIC WATER RISER DIAGRAM

Not to Scale

REFERENCE P4 SHEETS FOR EXACT FIXTURE TYPES



REVISION:	
DATE:	06-26-2023
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PLUMBING FIXTURE SCHEDULE									
MARK	MANUFACTURER	DESCRIPTION	TRIM		ROUGH-IN SIZES				NOTES
			MANUFACTURER	DESCRIPTION	WASTE	VENT	CW	HW	
WC-A	KOHLER	Model #K-3658-(RA)-0 "Highline Classic" ADA compliant flush tank water closet, white vitreous china, two piece, 12" rough-in, elongated 16-1/2" high bowl, siphon jet flushing action, 1.28 GPF, polished chrome actuator. Coordinate location of trip lever with installation.	KOHLER	#K-4636-0 white, closed front plastic seat with slow closing lid.	4"	2"	1/2"	---	1
WC-B	KOHLER	Model #K-3658-(RA)-0 "Highline Classic" ADA compliant flush tank water closet, white vitreous china, two piece, 12" rough-in, elongated 16-1/2" high bowl, siphon jet flushing action, 1.28 GPF, polished chrome actuator. Coordinate location of trip lever with installation.	KOHLER	#K-4731-CA-0 white, open front, anti-microbial plastic seat without lid, with check hinge.	4"	2"	1/2"	---	1
LAV-A	KOHLER	Model 2196-4-0 self-rimming lavatory, white vitreous china, 20"W x 17", faucet holes on 4" centers.	KOHLER	#K-394-4-2 two handle faucet with pop-up drain and nickel finish.	2"	1-1/2"	1/2"	1/2"	1,2,3
LAV-B	KOHLER	Model 2005-0 wall hung lavatory, white vitreous china, 18-1/4"W x 17-1/4", faucet holes on 4" centers.	KOHLER	#K-394-4-2 two handle faucet with pop-up drain and nickel finish.	2"	1-1/2"	1/2"	1/2"	1,2,3
KS-A	KOHLER	Model K-3369-3 two compartment 18 GA stainless steel top-mount sink, 14-1/2"x16-1/2"x8"D inside, fully undercoated, faucet holes as required.	KOHLER INSINKERATOR	#K-780 single handle pull down kitchen sink faucet with chrome finish, single hole installation. Provide basket strainer. Badger 5 1/2 HP garbage disposal with dishwasher waste connection.	2"	1-1/2"	1/2"	1/2"	1,2,4
KS-B	JUST	Model DL-ADA-2233-A-GR two compartment 18 GA stainless steel sink, self rimming, 14"x16"x5"D inside, fully undercoated, faucet holes as required, and drain hole center rear.	KOHLER IN-SINK-ERATOR	#K-780 single handle pull down kitchen sink faucet with chrome finish, single hole installation. Provide basket strainer. Badger 5 1/2 HP garbage disposal with dishwasher waste connection.	2"	1-1/2"	1/2"	1/2"	1,2,4,5
SH-A	AQUARIUS	Model G-6233-BF-.75 reinforced fiberglass ADA roll-in shower, 60"W x33"D x73-3/4"H, with integral soap/toiletry shelves and grab bars in accordance with ADA requirements, fold-up seat, right or left hand rough-in as required, white finish. Provide with collapsible dam.	KOHLER	#K-304 pressure balancing valve with integral temperature limits and stops, #K-TS10584-4 valve trim, #K-355 wall supply elbow, #K-9514 60" hose, #K-22163-G hand shower, and #K-8524/K-349 slide bar. Entire assembly shall have nickel finish. Max. 2 GPM.	2"	1-1/2"	1/2"	1/2"	1
BT-A	AQUARIUS	Model A 6000 TS OT 2P cast acrylic ADA tub/shower, 60"W x33-3/4"D x78"H, with integral soap/toiletry shelves in accordance with ADA requirements right or left hand rough-in as required, white finish. Provide with blocking for grab bars and seat to be added at tenant's request.	KOHLER	#K-304 pressure balancing valve with integral temperature limits and stops, #K-TS10582-4 valve trim, #K-355 wall supply elbow, #K-9514 60" hose, #K-22163-G hand shower, and #K-8524/K-349 slide bar. Entire assembly shall have nickel finish. Max. 2 GPM.	2"	1-1/2"	1/2"	1/2"	2,4
BT-B	AQUARIUS	Model A 6000 TS OT 2P cast acrylic ADA tub/shower, 60"W x33-3/4"D x78"H, with integral soap/toiletry shelves and grab bars in accordance with ADA requirements, seat at end of tub, right or left hand rough-in as required, white finish.	KOHLER	#K-304 pressure balancing valve with integral temperature limits and stops, #K-TS10582-4 valve trim, #K-355 wall supply elbow, #K-9514 60" hose, #K-22163-G hand shower, and #K-8524/K-349 slide bar. Entire assembly shall have nickel finish. Max. 2 GPM.	2"	1-1/2"	1/2"	1/2"	1,2,4
SS	FIAT	Model MS8-2424 one piece molded stone mop basin, 24" square, stainless steel integral drain body with caulk connection, stainless steel wall guards.	DELTA	Model 28T9 faucet with hose thread outlet, vacuum breaker, pail hook, wall brace, metal lever handles.	3"	1-1/2"	3/4"	3/4"	4
WH	WOODFORD	Model 25 frost proof wall hydrant with anti-siphon vacuum breaker, metal handle.			---	---	3/4"	---	
RH	WOODFORD	Model RHY2-MS freezeless roof hydrant with vacuum breaker, cast iron mounting system, and vent to allow draining. Provide with 1/8" tapping for drain.			---	---	3/4"	---	
CCB	WATER-TITE	SUPPLIED BY OTHERS			2"	2"	1/2"	1/2"	
ICB	OATEY	Model 3848X fire rated ice maker connection box with 1/4 turn ball valve.			---	---	1/2"	---	
FD	WADE	Model 1102STD5 floor drain with satin nickel bronze strainer. Provide trap protection device equal to ProSet Trapguard.			2"	1-1/2"	---	---	
FS	WADE	Model 9140 floor sink with 8" deep body, enameled interior, sediment bucket, nickel bronze trim and grate with openings as required. Provide trap protection device equal to ProSet Trapguard.			3"	1-1/2"	---	---	
EWC	MURDOCK	Model A1 72108F-UG ADA compliant dual height, self contained water cooler with stainless steal basin, from push bar actuator, and lead-free cooling system capable of cooling 8.0 GPH, 120 volts.			2"	1-1/2"	1/2"	---	1
RD	WADE	Model 3000 cast iron side outlet body roof drain with flange, flashing ring with gravel stop, undeck clamp and cast iron dome strainer.							
OD	WADE	Model 3000 cast iron side outlet body roof drain with flange, flashing ring with gravel stop, undeck clamp and cast iron dome strainer.							
DN	ZURN	Model ZF199 black downspout nozzle with threaded outlet and flange to secure nozzle to wall.							
HWH-A	A.O. SMITH	Model ENT-40, 40 gallon electric water heater, (2) non simultaneous 4500 watts, 208 volts heating elements, 21 GPH recovery @ 90°F temp rise. Minimum 0.92 UEF. Supplied with temperature & pressure relief valve and brass drain valve.							
HWH-B	A.O. SMITH	Model ENJ-40, 40 gallon electric water heater, (2) non simultaneous 4500 watts, 208 volts heating elements, 21 GPH recovery @ 90°F temp rise. Minimum 0.93 UEF. Supplied with temperature & pressure relief valve and brass drain valve.							
HWH-C	A.O. SMITH	Model EJC5-20, 20 gallon electric water heater, 2500 watts, 208 volts heating element, 11 GPH recovery @ 90°F temp rise. Supplied with temperature & pressure relief valve and brass drain valve.							6
HWP	BELL & GOSSETT	Model NBF-33 circulation pump, bronze body, 10 GPM @ 10' head, 120 VAC. Provide clamp-on aquastat for pump control.							7
GENERAL:									
• Provide fixtures with all trim necessary for complete installation.									
• All toilets, lavatory faucets, showerheads, and kitchen faucets shall have EPA's WaterSense label.									
NOTES:									
1. In areas open to the public, fixture and installation to meet requirements of Americans with Disabilities Act. In apartments, fixture and installation to meet requirements of the Fair Housing Act.									
2. Provide Dearborn supplies with stops and escutcheon plate, 1-1/4" cast brass p-trap.									
3. Insulate water and waste piping below lavatory. Utilize insulation kit equivalent to LavGuard by Truebro.									
4. Trim shall be provided with polished chrome finish.									
5. Insulate water and waste piping below sink. Utilize insulation kit equivalent to LavGuard by Truebro. Provide Plumberex model #3071WD-N waste disposal cover.									
6. Provide wall hung platform for water heater equal to Holdrite #50-SWHP-W-C. Coordinate exact location and mounting height with architect.									
7. Pump shall have controls to prevent startup within 5 minutes from the end of the previous heating cycle. Hot water recirculation system shall meet all requirements of 2015 IECC.									

