



REVISIONS:

DATE: 11/15/2024

JOB: 24-3395

SHEET NO.:

Electrical Abbreviations			
1P	1 Pole (2P, 3P, 4P, ETC.)	MCB	Main Circuit Breaker
A	Amps	MCC	Motor Control Center
AC	Above Counter	MDC	Main Distribution Center
ACLG	Above Ceiling	MDP	Main Distribution Panel
ADO	Automatic Door Opener	MFR	Manufacturer
AF	Any Frame	MFS	Main Fused Disconnect Switch
AFF	Above Finished Floor	MH	Manhole
AFG	Above Finished Grade	MIC	Microphone
AFI	Arc Fault Circuit Interrupter	MIN	Minimum
AGI	Combination Arc and Ground Fault Circuit Interrupter	MISC	Miscellaneous
AHU	Air Handling Unit	MLO	Main Lugs Only
AL	Aluminum	MMS	Manual Motor Starter
ALT	Alternate	MOA	Multicoulet Assembly
AMP	Ampere	MSP	Motor Starter Panelboard
AMPL	Amplifier	MSBD	Main Switchboard
ANNUN	Annunciator	MSS	Motor Starter Switch
APPROX	Approximately	MT	Mount
AQ-STAT	Aquastat	MT.C	Empty Conduit
ARCH	Architect, Architectural	MTS	Manual Transfer Switch
AS	Amp Switch	MTR	Motor, Motorized
AT	Amp Trip	N.C.	Normally Closed
ATS	Automatic Transfer Switch	NEC	National Electrical Code
AUTO	Automatic	NEMA	National Electrical Manufacturer's Association
AUX	Auxiliary	NFDS	Non-Fused Safety Disconnect Switch
AV	Audio Visual	NIC	Not In Contract
AWG	American Wire Gauge	NL	Night Light
BATT	Battery	N.O.	Normally Open
BD	Board	NQ	Normally Open
BLDG	Building	NPF	Normal Power Factor
BMS	Building Management System	NTS	Not To Scale
C	Conduit	OC	On Center
CAB	Cabinet	OH	Overhead
CAT	Catalog	OL	Overloads
CATV	Cable Television	PA	Public Address
CB	Circuit Breaker	PB	Pull Box Or Pushbutton
CCTV	Closed Circuit Television	PE	Pneumatic Electric
CKT	Circuit	PED	Pedestal
CLG	Ceiling	PF	Power Factor
COMB	Combination	PH	Phase
CMR	Compressor	PIV	Post Indicating Valve
CONN	Connection	PNL	Panel
CONST	Construction	PP	Power Pole
CONT	Continuation Or Continuous	PR	Pair
CONTR	Contractor	PRJ	Primary
CONV	Converter	PROJ	Projection
CP	Circulating Pump	PRV	Power Roof Ventilator
CRT	Cathode-Ray Tube	PT	Potential Transformer
CT	Current Transformer	PVC	Polyvinyl Chloride (Conduit)
CTR	Center	PWR	Power
CJ	Copper	QUAN	Quantity
DCP	Domestic Water Circulating Pump	RCPT	Receptacle
DEPT	Department	REQD	Required
DET	Detail	RM	Room
DIA	Diameter	RSC	Rigid Steel Conduit
DISC	Disconnect	RTU	Roof Top Unit
DIST	Distribution	SC	Surface Conduit
DN	Down	SEC	Secondary
DPR	Damper	SHT	Sheet
DS	Safety Disconnect Switch	SH	Similar
DT	Double Throw	SLD	Single-Line Diagram
DWG	Drawing	SN	Solid Neutral
EC	Electrical Contractor	SPEC	Specification
ELEC	Electric, Electrical	SPKR	Speaker
ELEV	Elevator	SP	Spare
ELU	Emergency Lighting Unit	SPP	Single-Point Power
EM	Emergency	SR	Surface Raceway
EMS	Energy Management System	SS	Stainless Steel
EMT	Electrical Metallic Tubing	SSW	Selector Switch
EP	Electric Pneumatic	S/S	Stop/Start Pushbuttons
EQUIP	Equipment	STA	Station
EWG	Electric Water Cooler	STD	Standard
EXIST	Existing	SURF	Surface Mounted
EXH	Exhaust	SW	Switch
EXP	Explosion Proof	SWBD	Switchboard
FA	Fire Alarm	SYM	Symmetrical
FABP	Fire Alarm Booster Power Supply Panel	SYS	System
FACP	Fire Alarm Control Panel	TEL	Telephone
FCU	Fan Coil Unit	TERM	Terminal
FXT	Fixture	TL	Twist Lock
FLR	Floor	TR	Tamper Resistant
FLUOR	Fluorescent	T-STAT	Thermostat
FU	Fuse	TTC	Telephone Terminal Cabinet
FUDS	Fused Safety Disconnect Switch	TV	Television
GA	Gauge	TYTC	Television Terminal Cabinet
GAL	Gallon	TYP	Typical
GALV	Galvanized	UC	Under Counter
GC	General Contractor	UE	Underground Electrical
GEN	Generator	UG	Underground
GFI	Ground Fault Circuit Interrupter	UH	Unit Heater
GFP	Ground Fault Protector	UT	Underground Telephone
GND	Ground	UTIL	Utility
GRS	Galvanized Rigid Steel (Conduit)	UV	Ultraviolet
GYP BD	Gypsum Board	V	Volt
HOA	Hands-Off-Automatic Switch	V	Volt-Amperes
HORIZ	Horizontal	VDT	Video Display Terminal
HP	Horsepower	VERT	Vertical
HPF	High Power Factor	VFD	Variable Frequency Drive
HT	Height	VOL	Volume
HTG	Heating	W	Watt
HTR	Heater	W	With
HV	High Voltage	WG	Wire Guard
HVAC	Heating, Ventilating And Air Conditioning	WH	Water Heater
IC	Interrupting Capacity	W/O	Without
IG	Isolated Ground	WP	Weatherproof
IMC	Intermediate Metal Conduit	XFMR	Transformer
INCCAND	Incandescent	XFR	Transfer
IR	Infrared		
I/W	Interlock With		
J-BOX	Junction Box		
KV	Kilovolt		
KVA	Kilovolt-Ampere		
KVAR	Kilovolt-Ampere Reactive		
KW	Kilowatt		
KWH	Kilowatt Hour		
LOC	Locate Or Location		
LT	Light		
LTG	Lighting		
LTNG	Lightning		
LV	Low Voltage		
MAX	Maximum		
MAG-S	Magnetic Starter		
M/C	Momentary Contact		
MC	Mechanical Contractor		

Electrical Symbol Legend			
Lighting Symbols			
	Lighting Fixtures, Typical, Rectangular (Various Symbols) Filled circles indicate recessed. Open circles indicate surface-mounted. Diagonal line indicates lensed. Outer dots indicate suspended.		
	Lighting Fixtures, Typical, Round (Various Symbols) Center dot indicates pendant. Diagonal line indicates lensed. Chevron indicates wall wash.		
	Wall-mounted fixtures, Typical (Various Symbols)		
	Strip Fixture		
	Directional Light, Track Light, Flood Light		
	Linear Light, Tape Light		
	Emergency Lighting Unit, Ceiling-Mounted, Integral Battery		
	Emergency Lighting Unit, Ceiling-Mounted, Remote Battery		
	Emergency Lighting Unit, Wall-Mounted, Integral Battery		
	Emergency Lighting Unit, Wall-Mounted, Remote Battery		
	Exit Light, Ceiling-Mounted. Shading and arrows indicate faces and directional chevrons.		
	Exit Light, Wall-Mounted. Shading and arrows indicate faces and directional chevrons.		
	Exit/ELU Combo		
	Pole/Area Lights		
	Post-Top Area Light		
	Bollard Light		
	Diagonal hatch indicates light on a critical circuit.		
	Solid hatch indicates light on an emergency or life safety circuit.		
	Single-Pole Switch		
	Two-Pole Switch		
	Three-Pole Switch		
	Switch Modifiers: 3: 3-Way 4: 4-Way K: Keyed D: Dimming T: Timer OS: Occupancy Sensor VS: Vacancy Sensor CT: Above-Counter LV: Low-Voltage M: Motor-Rated		
	Lighting Contactor		
	Lighting Control Panel		
	Occupancy Sensor		
	Daylight Harvesting Sensor		
Lighting Tags			
	Top Value: Fixture Type ID (<u>Underlined</u>) Bottom Value, Lowercase Letter: Switch ID Bottom Value, Number(s): Circuit Number Bottom Value, Uppercase Letter(s): Panel		
Absence of a switch designation on a lighting fixture indicates fixture is controlled by the only switch in the space. An "x" in place of the switch designation indicates unswitched.			
	a Switch ID indicated by a lowercase letter. Switch IDs are unique per space. A switch with an ID "a" controls all devices within the space in which it is located tagged with "a". A switch without a tagged ID controls all lighting fixtures within a space. ID tags may be used on control devices other than switches, such as occupancy sensors or contactors.		
Grounding and Lightning Protection Symbols			
	Ground Rod		
	Ground Rod with Test Well		
	Static Ground Receptacle		
	Lightning Protection Air Terminal		
	Lightning Protection Conductor Splice		
Power Symbols			
	Simplex Receptacle		
	Duplex Receptacle		
	Quadruplex Receptacle		
	Special Receptacle, Type as Indicated		
	Receptacle Modifiers: ##": Height AFF CT: Mounted Above Counter Top GFI: Ground-Fault Circuit Interrupter WP: Weatherproof In-Use Cover		
	Half shading indicates split (typically switched)		
	Outside shading indicates emergency circuit		
	Center shading indicates isolated ground		
	Multicoulet Assembly Filled squares indicate 120V outlet Open squares indicate with USB		
	Cord Reel, Device Varies		
	Drop Cord, Device Varies		
	Junction Box		
	Floor Box, see schedule for type		
	Emergency Power Off		
	Door Opener Push Plate		
	Power Meter		
	Safety Switch, Fused		
	Safety Switch, Unfused		
	Motor Starter		
	Combination Starter/Disconnect		
	Contactor		
Power Device and Equipment Tags			
	Electrical Device Tags: Uppercase letter(s) indicates Panel ID and circuit number. Lowercase letter indicates designation of controlling switch (where applicable).		
	Equipment Tags: Equipment ID is indicated by an underlined tag adjacent to the equipment. See the equipment connection schedule for description, electrical requirements, and panel and circuit number. Symbols/graphic appearance of equipment varies.		
	XX-1		
Wiring			
	Solid, arced lines connecting equipment, devices, or fixtures indicate unswitched power circuiting. Wires are only intended to indicate to what circuit devices are connected. Actual connections, circuit routing, installation, junction boxes, etc. shall be field-determined by the contractor.		
	Dashed, arced lines connecting equipment, devices, or fixtures indicate switched power.		
	Home run to branch circuit panelboard. The equipment name and circuit number(s) are indicated, separated by a hyphen. Homeruns are only intended to indicate panel and circuit number. Actual homerun location shall be field-determined by the contractor.		
Power Distribution Equipment			
	Hatched fill indicates distribution panel or switchboard. Solid fill indicates branch panel or load center. Dashed box indicates code-required clearance (width and depth). Door indicates front of recessed panel.		
	SB1		
	MDP		
	HP1A		
	LP1A		
Devices and fixtures are tagged with Panel and circuit number. For example, a device tagged with "A.1" indicates the device is circuited to panel designated "A," circuit number 1.			
	Transformer. Typically transformer names begin with or contain the letter "T". See Single-Line Diagram for description and requirements.		
Telecom Symbols			
	Wall		
	Ceiling		
	Floor		
	Data Outlet		
	Telephone Outlet		
	Data/Telephone Outlet		
	Outlet Modifiers: ##": Height AFF OC CT: Mounted Above Counter Top		
	Wireless Access Point		
	TV Outlet		
Nurse Call Symbols			
	Nurse Call Corridor Light Number of lights as indicated		
	Nurse Call Device B: Code Blue D: Duty Station E: Emergency P: Patient Call S: Staff		
	Nurse Call Control Unit NCAP: Nurse Call Annunciator Panel NCHS: Nurse Call Host Controller NCPA: Nurse Call Power Supply NCTC: Nurse Call Terminal Cabinet NCUPS: Uninterruptable Power Supply		
Security Symbols			
	Security Camera PTZ: Pan/Tilt/Zoom		
	Card Reader		
	Card Reader with Keypad		
	Closed Circuit TV Outlet		
	Door Contact		
	Electric Strike		
	Intercom		
	Magnetic Lock		
	Request to Exit Button		
	Request to Exit Sensor		
	Motion Detector		
	Security Control Unit SCP: Security Control Panel SPS: Security Power Supply Unit		
Construction Phasing (Typical All Symbols and Equipment)			
	Existing to Remain		
	Existing to Be Demolished		
	New		
Miscellaneous			
	Area Not in Contract		
	Note by Symbol		
	Callout: Top Value: Detail Number on Sheet Bottom Value: Sheet Number of Detail		
	Room Room Name and Number		
Fire Alarm Symbols			
	Manual Pull Station		
	Horn, Wall		
	Horn, Ceiling		
	Strobe, Wall, Candelabra as indicated		
	Strobe, Ceiling, Candelabra as indicated		
	Horn/Strobe, Wall, Candelabra as indicated		
	Horn/Strobe, Ceiling, Candelabra as indicated		
	Remote Indicator w/ Test Switch, Wall		
	Remote Indicate w/ Test Switch, Ceiling		
	Smoke Detector		
	Heat Detector		
	Carbon Monoxide Detector		
	Beam Detector T: Transmitter R: Receiver		
	Combination Detector (Up to Three)		
	Duct Smoke Detector		
	Smoke Damper		
	Door Holder		
	Door Closer		
	Fire Service Phone		
	Addressable Module		
	AIM: Addressable Input Module AOM: Addressable Output Control Module AIO: Addressable Input/Output Module		
	Fire Alarm Control Unit		
	EVA: Voice Evacuation Control Panel FAA: Fire Alarm Annunciator FACP: Fire Alarm Control Panel FATC: Fire Alarm Terminal Cabinet NACP: Notification Appliance Circuit Panel FAMN: Fire Alarm Mass Notification Control Panel		
	Supervisory or Interface Device		
	PIV: Post Indicator Valve Supervisory PS: Pressure Switch R: Non-Addressable Relay VS: Valve Supervisory Switch WF: Water Flow Switch		

GENERAL ELECTRICAL NOTES

A. COORDINATE INSTALLATION OF ELECTRICAL WORK ABOVE THE CEILING TO PROVIDE THE GREATEST POSSIBLE CLEARANCE FOR INSTALLATION OF PLUMBING AND MECHANICAL INSTALLATION. CONDUITS SHALL BE ROUTED THROUGH JOIST WEBS WHERE POSSIBLE.

B. VERIFY EXACT PLACEMENT OF ALL LUMINAIRES, DEVICES, AND EQUIPMENT SHOWN ON THE ELECTRICAL CONSTRUCTION DOCUMENTS WITH ARCHITECTURAL, MECHANICAL AND PLUMBING DRAWINGS PRIOR TO FINAL PLACEMENT

C. ELECTRICAL EQUIPMENT AND DEVICES SHALL BE "LISTED" AND "IDENTIFIED" AS RATED FOR A MINIMUM OF 75°C CONDUCTOR TERMINATION.

D. DEFINITION OF TERMS

"SHALL": ACTION THAT IS REQUIRED WITHOUT OPTION OR QUALIFICATION

"FURNISH": CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING.

"INSTALL": CONTRACTOR SHALL BE RESPONSIBLE FOR LABOR AND CONSTRUCTION EQUIPMENT NECESSARY TO SET IN PLACE, CONNECT, CALIBRATE AND TEST EQUIPMENT FURNISHED BY HIM OR OTHERS

"PROVIDE": CONTRACTOR SHALL FURNISH AND INSTALL.

MOUNTING HEIGHT REQUIREMENTS:

UNLESS SPECIFICALLY INDICATED OTHERWISE, THE FOLLOWING MOUNTING HEIGHTS SHALL APPLY:

- RECEPTACLES 16" TO BOTTOM
- TELECOMMUNICATIONS OUTLETS 16" TO BOTTOM
- LIGHT SWITCHES 48" TO TOP
- THERMOSTATS 48" TO TOP
- HUMIDISTATS 48" TO TOP
- FIRE ALARM PULL STATIONS 48" TO TOP
- FIRE ALARM NOTIFICATION DEVICES LOWER OF: 88" TO BOTTOM OR TOP AT 6" BELOW CEILING

GENERAL LIGHTING NOTES

A. THE CIRCUITING OF ALL LUMINAIRES HAS BEEN SHOWN ON THE PLANS, AND THE CONTRACTOR SHALL FOLLOW THIS CIRCUITING LAYOUT.

B. CIRCUIT ALL EMERGENCY LIGHTS, NIGHT LIGHTS AND EXIT LIGHTS TO AN UNSWITCHED HOT CONDUCTOR, UPSTREAM OF ALL CONTROLS.

C. DIRECT CURRENT POWER WIRING FROM EXIT SIGNS TO REMOTE EXTERIOR EMERGENCY LIGHTING HEADS SHALL BE (2) #10 IN 1/2" CONDUIT UNLESS NOTED OTHERWISE.

D. IN AREAS WHERE CEILING MOUNTED OCCUPANCY SENSORS ARE USED FOR LIGHTING CONTROL IN CONJUNCTION WITH WALL SWITCHES, OCCUPANCY SENSOR/POWER PACK SHALL SWITCH LEDS SHALL BE WIRED IN SERIES WITH WALL SWITCHES TO PROVIDE OVERRIDE "OFF" CONTROL FOR LIGHTS.

E. CONTROL WIRING FOR 0-10 V-dc DIMMING SIGNAL CIRCUITS SHALL BE NEC CLASS 1, ROUTED IN SAME RACEWAY/CABLE WITH LIGHTING CIRCUIT POWER CONDUCTORS. WIRING SHALL CONSIST OF (2) #16 SOLID CU THHN OR TRN CONDUCTORS. CONDUCTOR INSULATION COLOR SHALL BE VIOLET (+ V-dc) AND PINK (- V-dc). WHERE MC-CABLE IS USED FOR FINAL 6 POWER CONNECTION WHP TO LUMINAIRE, UTILIZE "LUMINARY" TYPE MC-CABLE WITH INTEGRAL CLASS 1 CONTROL WIRING.

GENERAL POWER NOTES

A. THE CIRCUITING OF ALL DEVICES HAS BEEN SHOWN ON THE PLANS, AND THE CONTRACTOR SHALL FOLLOW THIS CIRCUITING LAYOUT.

B. VERIFY EXACT LOCATIONS OF HVAC AND PLUMBING EQUIPMENT WITH THE GENERAL CONTRACTOR AND ASSOCIATED SUBCONTRACTORS. COORDINATE CONDUIT STUB-UP AND POWER CONNECTIONS PRIOR TO COMMENCING ROUGH-IN WORK. ELECTRICAL DEVICES (DISCONNECTS, RECEPTACLES, ETC.) INSTALLED ON EQUIPMENT SHALL BE MOUNTED ON A NON-REMOVABLE PANEL OF THE EQUIPMENT. FIELD COORDINATE EXACT DEVICE MOUNTING LOCATIONS PRIOR TO INSTALLATION.

C. WALL MOUNTED HVAC CONTROL DEVICES (THERMOSTATS, TEMPERATURE SENSORS, HUMIDISTATS, CO₂ SENSORS, ETC) SHALL BE PROVIDED BY MECHANICAL CONTRACTOR, UNLESS NOTED OTHERWISE. ELECTRICAL CONTRACTOR SHALL PROVIDE SINGLE GANG WALL BOX WITH 1/2" CONDUIT STUBBED OUT TO ABOVE ACCESSIBLE CEILING WITH NYLON BUSHINGS AND PULLSTRING IN RACEWAY. REFER TO MECHANICAL DRAWINGS FOR LOCATIONS OF DEVICES.

GENERAL TELECOMMUNICATIONS NOTES

A. PROVIDE THE FOLLOWING RACEWAY ROUGH-IN FOR TELECOMMUNICATIONS OUTLET TYPES INDICATED:

- WALL PHONE OUTLET: 2"x4"x2-1/8" DEEP DEVICE BOX WITH (1) 3/4" CONDUIT TO ABOVE ACCESSIBLE CEILING.
- PHONE/DATA OUTLET: 4-11/16" SQUARE x 3-1/4" DEEP BOX (RACO #260 OR EQUAL) WITH 1-GANG DEVICE RING AND 1-1/4" CONDUIT TO ABOVE ACCESSIBLE CEILING.
- TV OUTLET: 4-11/16" SQUARE x 3-1/4" DEEP BOX (RACO #260 OR EQUAL) WITH 2-GANG DEVICE RING AND (1) 2" CONDUIT TO ABOVE ACCESSIBLE CEILING.

B. PROVIDE NYLON BUSHINGS FOR ALL CONDUIT ENDS NOT CONNECTED TO A BOX OR FITTINGS TO PROTECT CABLEING FROM DAMAGE.

C. CONDUITS FROM EACH OUTLET SHALL BE STUBBED 2" ABOVE THE FINISHED CEILINGS IN AREAS WITH ACCESSIBLE TILES. IN AREAS WITH OPEN CEILINGS, STUB CONDUIT INTO STRUCTURAL JOIST SPACE.

D. PROVIDE BLANK, STAINLESS STEEL COVER PLATES FOR ALL OUTLETS NOT ACTIVATED BY OWNER.

E. PROVIDE SUITABLE PULL STRING IN ALL CONDUITS.

F. ALL TELECOMMUNICATIONS AND AV CABLEING, JACKS, CONNECTORS, TERMINATIONS, EQUIPMENT AND TESTING SHALL BE PROVIDED BY OWNER.

GENERAL FIRE ALARM NOTES

A. FIRE ALARM CABLEING SHALL BE INSTALLED IN CONDUIT WHERE EXPOSED, INACCESSIBLE, AND WHERE SUBJECT TO PHYSICAL DAMAGE.

B. DUCT TYPE SMOKE DETECTORS SHALL BE FURNISHED AND WIRED BY FIRE ALARM CONTRACTOR. INSTALLED IN DUCT BY MECHANICAL CONTRACTOR.

C. FIRE ALARM SYSTEM HVAC SHUT DOWN RELAYS SHALL BE PROVIDED AND WIRED TO FIRE ALARM CONTROL PANEL BY FIRE ALARM CONTRACTOR. LOCATE RELAYS WITHIN 5' OF HVAC EQUIPMENT AND PROVIDE CONDUIT WITH PULL STRING FROM RELAY TO EQUIPMENT. UNIT SHUT DOWN CONTROL WIRING SHALL BE PROVIDED BY MECHANICAL CONTRACTOR.

D. AT LOCATION OF SMOKE DAMPERS AND COMBINATION FIRE/SMOKE DAMPERS, PROVIDE DUCT OR AREA SMOKE DETECTOR (AS SHOWN ON PLANS) WITHIN 5' OF DAMPER AND WIRE TO FIRE ALARM CONTROL PANEL. PROVIDE FIRE ALARM RELAY FOR CONTROL OF 120V POWER TO DAMPER ACTUATOR. DAMPER SHALL CLOSE UPON DETECTION OF SMOKE.

E. IN ADDITION TO VALVES INSTALLED ON FIRE SPRINKLER SYSTEM RISER, ALL VALVES INSTALLED OUTSIDE THE BUILDING (POST INDICATOR VALVE, TAPPING SLEEVE VALVE, ETC.) SHALL BE SUPERVISED BY THE FIRE ALARM SYSTEM. PROVIDE ADDRESSABLE MONITORING MODULE AND SURGE PROTECTION DEVICE (DTEK #DTK-2MHLP48B) FOR EACH MONITORED VALVE. COORDINATE WITH GC AND SITE WORK CONTRACTOR FOR ALL VALVES INSTALLED. MONITORING IS NOT REQUIRED FOR VALVES INSTALLED IN ROADWAY BOXES BY THE MUNICIPALITY/PUBLIC UTILITY.

NOTES BY SYMBOL

1. INSTALL RECEPTACLE ON WALL OF ELEVATOR PIT. VERIFY EXACT LOCATION WITH ELEVATOR EQUIPMENT INSTALLER.
2. SWITCH EXHAUST FAN WITH ROOM LIGHTS.
3. PROVIDE NEMA6-20R RECEPTACLE FOR CORD AND PLUG CONNECTION OF PTAC. VERIFY RECEPTACLE CONFIGURATION WITH PTAC SUPPLIED BY MECHANICAL CONTRACTOR. INSTALL RECEPTACLE CONCEALED IN UNIT SUB-BASE.
4. ROUTE CIRCUIT THROUGH CONTACTOR INDICATED ON DETAIL 2.E6.1.
5. PROVIDE 30A/2P, SINGLE THROW, MANUAL MOTOR CONTROLLER SNAP SWITCH IN NEMA 1 ENCLOSURE. HUBBELL #BL7842D OR EQUAL. MAKE FINAL FLEXIBLE CONNECTION TO BLOWER COIL/ELECTRIC HEAT.
6. ROUTE 120V CIRCUIT FOR HOT WATER RECIRCULATION PUMP THROUGH ADJACENT AQUASTAT. PROVIDE 20A/1P SNAP SWITCH ADJACENT TO PUMP AND MAKE FINAL FLEXIBLE CONNECTION. COORDINATE WITH PLUMBING CONTRACTOR.
7. 30A/2P NON-FUSED DISCONNECT SWITCH IN NEMA 3R ENCLOSURE. MAKE FINAL CONNECTION TO EQUIPMENT IN LFMC RACEWAY.
8. 120V POWER FOR FIRE SPRINKLER SYSTEM FLOW SWITCH(IES) AND BELL. PROVIDE #8 CU BONDING JUMPER FROM CIRCUIT EQUIPMENT GROUNDING CONDUCTOR TO METAL SPRINKLER SYSTEM PIPING AT AN ACCESSIBLE LOCATION PER NEC 250.104(B). COORDINATE WORK WITH FIRE SPRINKLER SYSTEM INSTALLER.
9. PROVIDE 120V POWER CONNECTION TO ELEVATOR SUMP PUMP ALARM PANEL AND 1" CONDUIT WITH PULL STRING STUBBED INTO ELEVATOR PIT FOR CONTROL CABLING. COORDINATE ALL WORK WITH PLUMBING CONTRACTOR.
10. 2-HOUR DIAL TIMER OVERRIDE SWITCH FOR SWITCHED RECEPTACLES. SEE 2.E6.1.
11. ONE RECEPTACLE SHALL BE CONNECTED TO CIRCUIT P1.2 (UNCONTROLLED) AND THE OTHER RECEPTACLES SHALL BE CONNECTED TO CIRCUIT P1.4 (CONTROLLED). CONTROLLED RECEPTACLE SHALL BE MARKED IN ACCORDANCE WITH NEC 408.3(E).
12. TIMELOCK AND CONTACTORS FOR EXTERIOR LIGHTING AND OFFICE RECEPTACLE CONTROL. RE: 2.E6.1.
13. INSTALL LUMINAIRE ON WALL OF ELEVATOR PIT. VERIFY EXACT LOCATION WITH ELEVATOR EQUIPMENT INSTALLER. INSTALL LIGHT SWITCH ADJACENT TO PIT LADDER AT 48" ABOVE FLOOR LANDING.
14. ELECTRIC SERVICE EQUIPMENT. SEE RISER DIAGRAM ON SHEET E6.2.

GENERAL ELECTRICAL NOTES

- A. ELECTRICAL EQUIPMENT AND DEVICES SHALL BE "LISTED" AND "IDENTIFIED" AS RATED FOR A MINIMUM OF 75°C CONDUCTOR TERMINATION.
- B. THE CIRCUITING OF ALL LIGHT AND RECEPTACLE OUTLETS HAS BEEN SHOWN ON THE PLANS, AND THE CONTRACTOR SHALL FOLLOW THIS CIRCUITING LAYOUT .
- C. CIRCUIT ALL EMERGENCY LIGHTS, NIGHT LIGHTS AND EXIT LIGHTS TO AN UNSWITCHED HOT CONDUCTOR , UPSTREAM OF ALL CONTROLS.
- D. WALL MOUNTED HVAC CONTROL DEVICES (THERMOSTATS, TEMPERATURE SENSORS, ETC) SHALL BE PROVIDED BY MECHANICAL CONTRACTOR. UNLESS NOTED OTHERWISE, ELECTRICAL CONTRACTOR SHALL PROVIDE SINGLE GANG WALL BOX AT 48" AFF AND 1/2" CONDUIT STUBBED OUT TO ABOVE ACCESSIBLE CEILING WITH NYLON BUSHINGS AND PULLSTRING IN RACEWAY. REFER TO MECHANICAL DRAWINGS FOR LOCATIONS OF DEVICES.
- E. COORDINATE INSTALLATION OF ELECTRICAL WORK ABOVE THE CEILING TO PROVIDE THE GREATEST POSSIBLE CLEARANCE FOR INSTALLATION OF PLUMBING AND MECHANICAL INSTALLATION. CONDUITS SHALL BE ROUTED THROUGH JOIST WEBS WHERE POSSIBLE.
- F. VERIFY EXACT PLACEMENT OF ALL DEVICES SHOWN ON THE ELECTRICAL CONSTRUCTION DOCUMENTS WITH ARCHITECTURAL, MECHANICAL AND PLUMBING DRAWINGS PRIOR TO FINAL PLACEMENT.
- G. PROVIDE TAMPER PROOF RECEPTACLES IN DWELLING UNITS PER NEC REQUIREMENTS.
- H. DEFINITION OF TERMS
* SHALL - ACTION THAT IS REQUIRED WITHOUT OPTION OR QUALIFICATION.
* FURNISH - CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING.
* INSTALL - CONTRACTOR SHALL BE RESPONSIBLE FOR LABOR AND CONSTRUCTION EQUIPMENT NECESSARY TO SET IN PLACE, CONNECT, CALIBRATE AND TEST EQUIPMENT FURNISHED BY HIM OR OTHERS.
* PROVIDE - CONTRACTOR SHALL FURNISH AND INSTALL

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RESIDENCE AT GREEN MEADOW

NEW SENIOR LIVING FACILITY

TEXAS

SAN ANGELO,

REVISIONS:

DATE: 11/15/2024
JOB: 24-3395
SHEET NO.:

E1.1

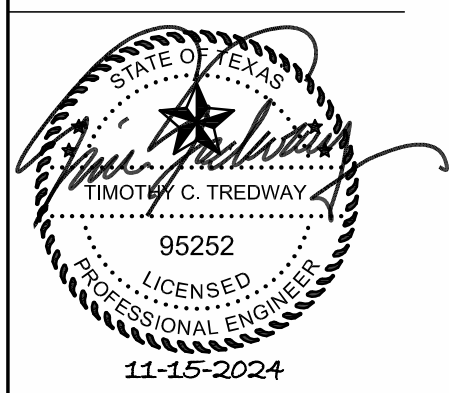
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2 FIRST FLOOR LIGHTING PLAN
1/8" = 1'-0"



NEW SENIOR LIVING FACILITY

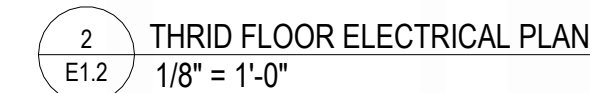
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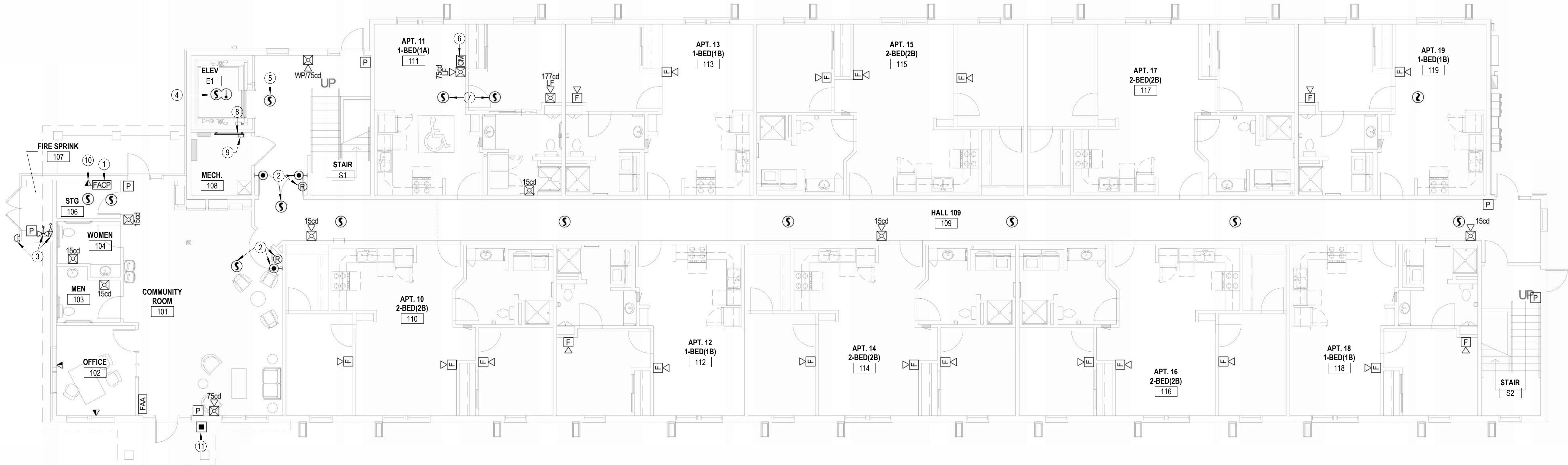
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E1.2

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- NOTES BY SYMBOL**
- 1 PROVIDE NEMA#20R RECEPTACLE FOR CORD AND PLUG CONNECTION OF PTAC. VERIFY RECEPTACLE CONFIGURATION WITH PTAC SUPPLIED BY MECHANICAL CONTRACTOR. INSTALL RECEPTACLE CONCEALED IN UNIT SUB-BASE.
 - 2 INSTALL TOP OF PTAC 12" BELOW FINISHED CEILING. COORDINATE INSTALLATION WITH ARCHITECT AND G.C.
 - 3 30A DISCONNECT SWITCH, LOCKABLE IN "OFF" POSITION, WITH SOLID NEUTRAL AND (1) 20A DUAL-ELEMENT, TIME DELAY FUSE IN NEMA 1 ENCLOSURE FOR ELEVATOR CAB LIGHTS & EXHAUST. MOUNT AT 6'-0" AFF TO TOP AND LABEL WITH CORRESPONDING ELEVATOR CAR NUMBER AND CIRCUIT NUMBER. COORDINATE EXACT MOUNTING LOCATION AND REQUIREMENTS WITH ELEVATOR EQUIPMENT INSTALLER. PROVIDE FINAL ELECTRICAL CONNECTION TO ELEVATOR CONTROLLER.
 - 4 ELEVATOR POWER MODULE SWITCH: 400A/208V/3P SWITCH COMPLETE WITH 225A DUAL-ELEMENT, TIME DELAY CLASS J FUSES, 120V CONTROL TRANSFORMER, FIRE ALARM SAFETY RELAY, KEY TEST SWITCH, GREEN PILOT LIGHT, AUXILIARY CONTACTS FOR ELEVATOR RECALL, AND FLAME ILLUM VOLTAGE MONITORING RELAY. EATON BUSSMAN #PS 4-120-R1-K-G-B-61 OR EQUIVALENT EXACT MOUNTING LOCATION AND REQUIREMENTS WITH ELEVATOR EQUIPMENT INSTALLER, AND PROVIDE FINAL ELECTRICAL CONNECTION TO ELEVATOR CONTROLLER. SEE DETAIL 1.E6.1.
 - 5 PROVIDE POWER FOR ELEVATOR SHUNT TRIP CONTROL. SEE 1.E6.1 FOR MORE INFORMATION.



1 FIRST FLOOR SPECIAL SYSTEMS PLAN
E1.3 1/8" = 1'-0"

GENERAL TELECOMMUNICATIONS 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 107.
- 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 DATA CABLING, JACKS, CONNECTORS, TERMINATIONS, EQUIPMENT AND TESTING SHALL BE PROVIDED BY OWNER.

NOTES BY SYMBOL

- 1 PROVIDE (2) CAT 5e UTP, NEC TYPE 'CMP' CABLES (SUPERIOR ESSEX #51-241-48 OR EQUAL) IN 3/4" CONDUIT FROM FACP TO MAIN TELECOM TERMINAL BOARD FOR CONNECTION TO FA SYSTEM DACT FOR REMOTE MONITORING.
- 2 SMOKE DETECTOR AND ADDRESSABLE RELAY FOR CONTROL OF ELECTROMAGNETIC DOOR HOLDERS. DOORS SHALL RELEASE UPON DETECTION OF SMOKE.
- 3 PROVIDE ADDRESSABLE FIRE ALARM RELAYS AND MONITORING MODULES FOR ALL FIRE SPRINKLER FLOW SWITCHES, TAMPER SWITCHES AND BELLGONG. COORDINATE QUANTITIES AND LOCATIONS WITH FIRE SPRINKLER CONTRACTOR.
- 4 SMOKE DETECTOR AND HEAT DETECTOR IN ELEVATOR PIT FOR RECALL AND SHUT-DOWN. SEE DETAIL 1, SHEET E6.1.
- 5 ELEVATOR LOBBY SMOKE DETECTOR FOR ELEVATOR RECALL. SEE DETAIL 1, SHEET E6.1.
- 6 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.
- 7 FIRE ALARM SYSTEM SMOKE DETECTOR.
- 8 PROVIDE 8' LONG SHEET OF 3/4" ACX FIRE RETARDANT PLYWOOD INSTALLED VERTICALLY WITH BOTTOM AT 6" AFF, WIDTH AS REQUIRED. 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 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 #TG8A14L06PT OR EQUAL. MOUNT AT 18" AFF. ALL CONNECTIONS TO GROUND BAR SHALL BE MADE USING COMPRESSION TYPE LUGS.
- 10 PROVIDE 1" CONDUIT WITH PULL STRING FROM TELECOM OUTLET TO MAIN TELEPHONE TERMINAL BOARD IN MECH 108.
- 11 PROVIDE PUSH BUTTON ROUGH-IN AND PREP DOOR JAM WITH RACEWAY AS INDICATED IN DETAIL 3-M6.1 FOR AUTOMATIC DOOR OPENER. COORDINATE EXACT REQUIREMENTS WITH OWNER.



REVISIONS:

DATE: 11/15/2024
JOB: 24-3395
SHEET NO.:



REVISIONS:	
DATE:	11/15/2024
JOB:	24-3395
SHEET NO.:	

- NOTES BY SYMBOL
- 1

SMOKE DETECTOR AND ADDRESSABLE RELAY FOR CONTROL OF ELECTROMAGNETIC DOOR HOLDERS. DOORS SHALL RELEASE UPON DETECTION OF SMOKE.
- 2

SMOKE DETECTOR AND HEAT DETECTOR AT TOP OF ELEVATOR HOISTWAY FOR RECALL AND SHUT-DOWN. SEE DETAIL 1, SHEET E6.1.
- 3

ELEVATOR LOBBY SMOKE DETECTOR FOR ELEVATOR RECALL. SEE DETAIL 1, SHEET E6.1.
- 4

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.
- 5

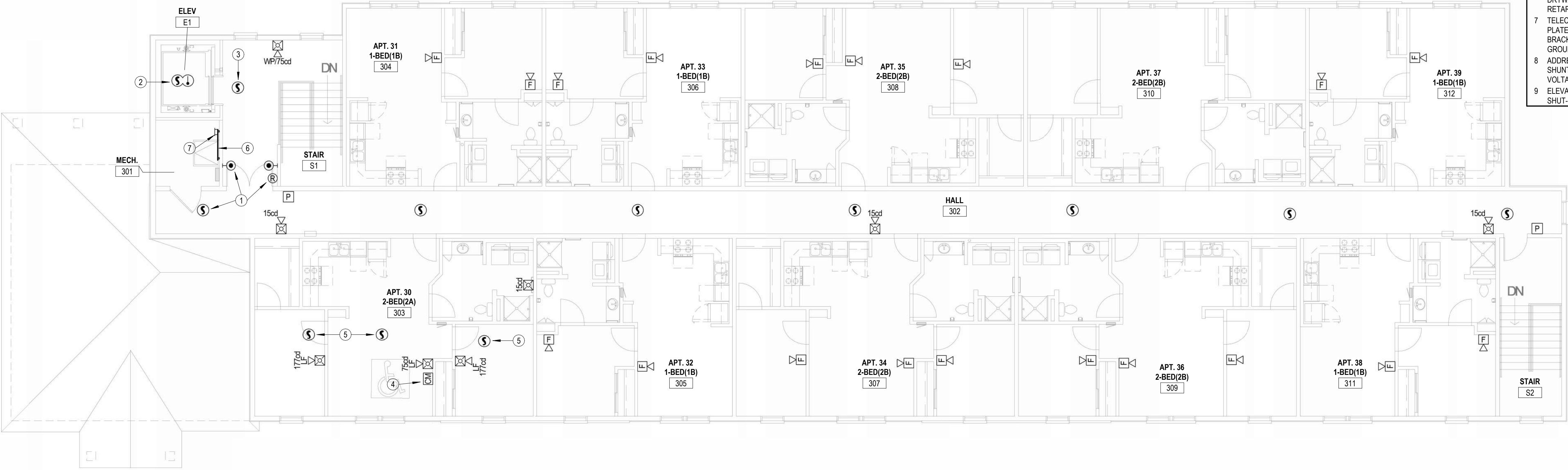
FIRE ALARM SYSTEM SMOKE DETECTOR.
- 6

PROVIDE 8' LONG SHEET OF 3/4" ACX FIRE RETARDANT PLYWOOD INSTALLED VERTICALLY WITH BOTTOM AT 6" AFF. WIDTH AS REQUIRED. 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.
- 7

TELECOMMUNICATIONS GROUND BAR 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 #7814L08PT OR EQUAL. MOUNT AT 18" AFF. ALL CONNECTIONS TO GROUND BAR SHALL BE MADE USING COMPRESSION TYPE LUGS.
- 8

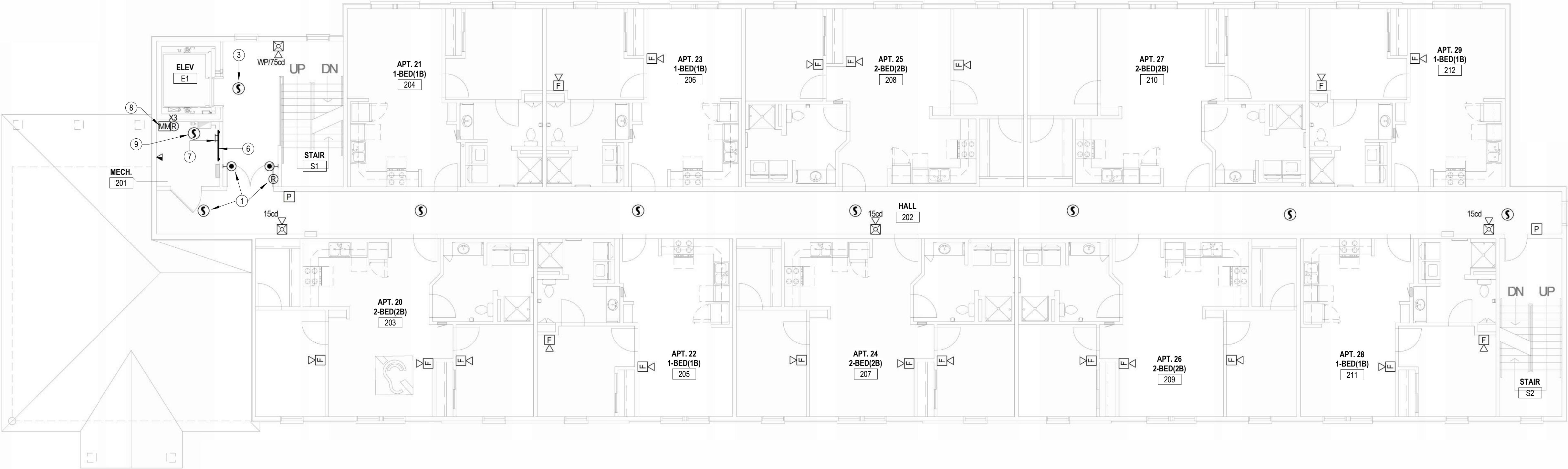
ADDRESSABLE FIRE ALARM RELAYS FOR ELEVATOR RECALL, FIREMAN'S HAT, AND POWER SHUNT-TRIP, AND ADDRESSABLE MONITORING MODULE FOR MONITORING OF SHUNT TRIP VOLTAGE. SEE DETAIL #, SHEET E#.#.
- 9

ELEVATOR MACHINE ROOM SMOKE AND HEAT DETECTORS FOR ELEVATOR RECALL AND SHUT-DOWN. SEE DETAIL 1, SHEET E6.1.



2
E1.4

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



1
E1.4

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

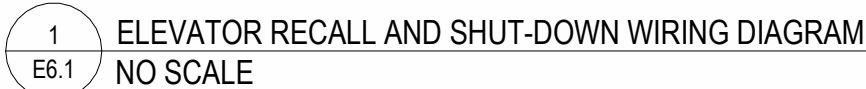
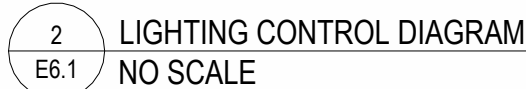


GENERAL:

- ALL LED FIXTURES SHALL ADHERE TO LM79 AND LM80 STANDARDS
- PROVIDE MANUFACTURER'S FLANGE KIT WHERE LAY-IN FIXTURES ARE TO BE INSTALLED IN GYP.
- ALL APARTMENT LIGHT FIXTURES SHALL BE ENERGY STAR CERTIFIED

NOTES:

1. PROVIDE FIXTURE WITH EMERGENCY BATTERY INTEGRAL CHARGER WITH SELF-DIAGNOSTIC/SELF-TESTING ELECTRONICS.
2. FIXTURE SHALL BE CAPABLE OF WALL OR CEILING MOUNT APPLICATIONS AND SHALL HAVE BREAK-OUT DIRECTIONAL CHEVRONS.
3. U.L. LISTED FOR "WET LOCATION".
4. U.L. LISTED FOR "DAMP LOCATION".
5. FIXTURE TO COMPLY WITH NEC 410.16(C)(5).
6. WHERE INSTALLED IN BATHROOMS TO BE "DAMP LOCATION" U.L. LISTED, WHERE ABOVE SHOWERS TO BE "WET LOCATION" U.L. LISTED.
7. PROVIDE FIXTURE/POLE ASSEMBLY WITH 20" ROUND STRAIGHT STEEL POLE, BLACK TO MATCH FIXTURE. FIXTURE HEIGHT SHALL NOT EXCEED "7'-0".
8. FIXTURE/POLE ASSEMBLY SHALL BE RATED FOR 100 MPH WIND LOADS. PROVIDE WITH VIBRATION DAMPER PER MANUFACTURER'S RECOMMENDATIONS.
9. PROVIDE FIXTURE WITH INTEGRAL OCCUPANCY SENSOR AND CONTROLS TO DIM FIXTURE TO 50% LIGHT OUTPUT WITH UNOCCUPIED.
10. WHERE INSTALLED IN FIRE RATED ASSEMBLY, PROVIDE FIRE RATED RECESSED LIGHT COVER EQUAL TO TEMAAT FF109. VERIFY RATING REQUIREMENTS WITH ARCHITECT
11. PROVIDE FIXTURE/POLE ASSEMBLY WITH 10" ROUND STRAIGHT STEEL POLE, BLACK TO MATCH FIXTURE. FIXTURE HEIGHT SHALL NOT EXCEED "7'-0".





RESIDENCE AT GREEN MEADOW

NEW SENIOR LIVING FACILITY

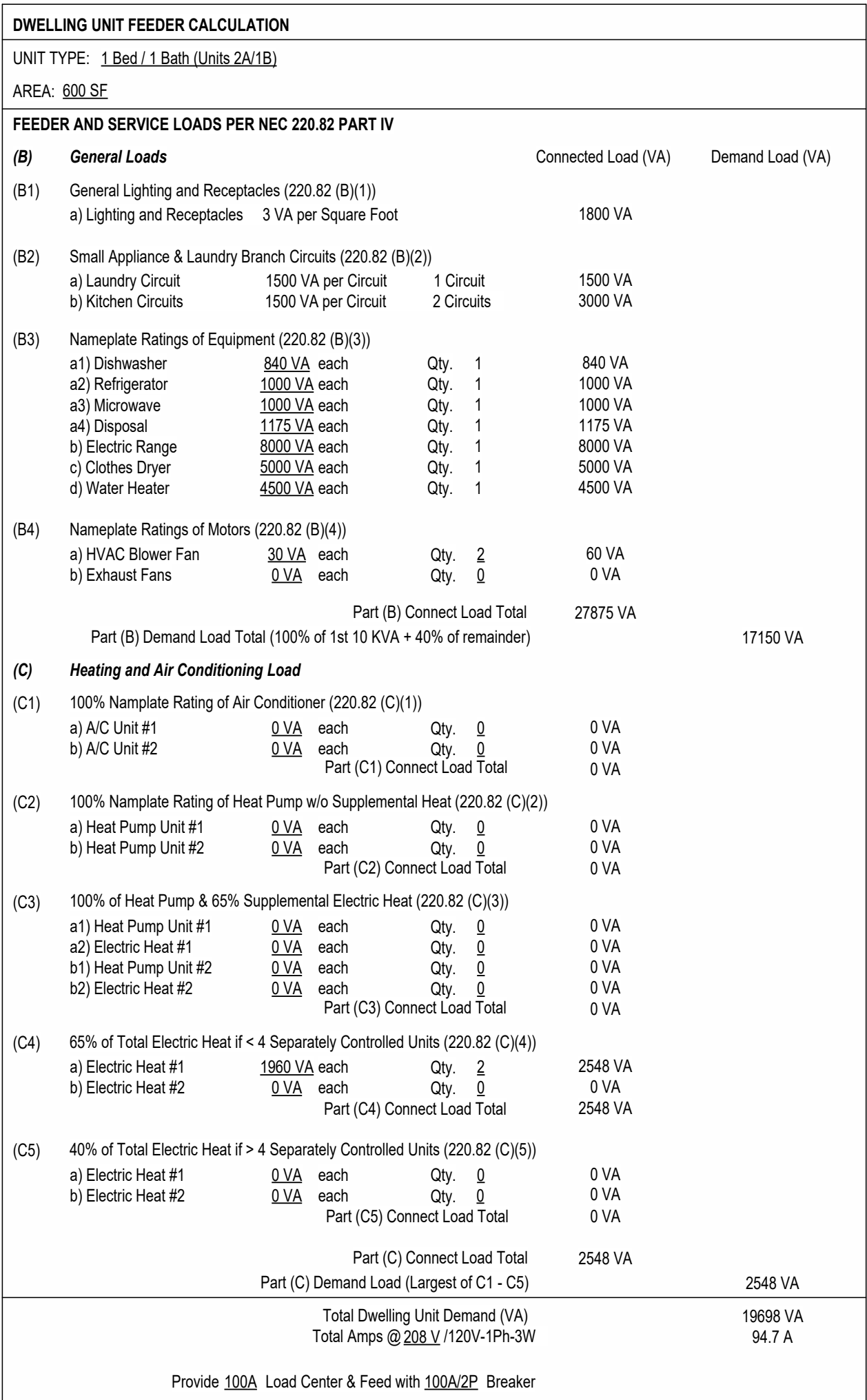
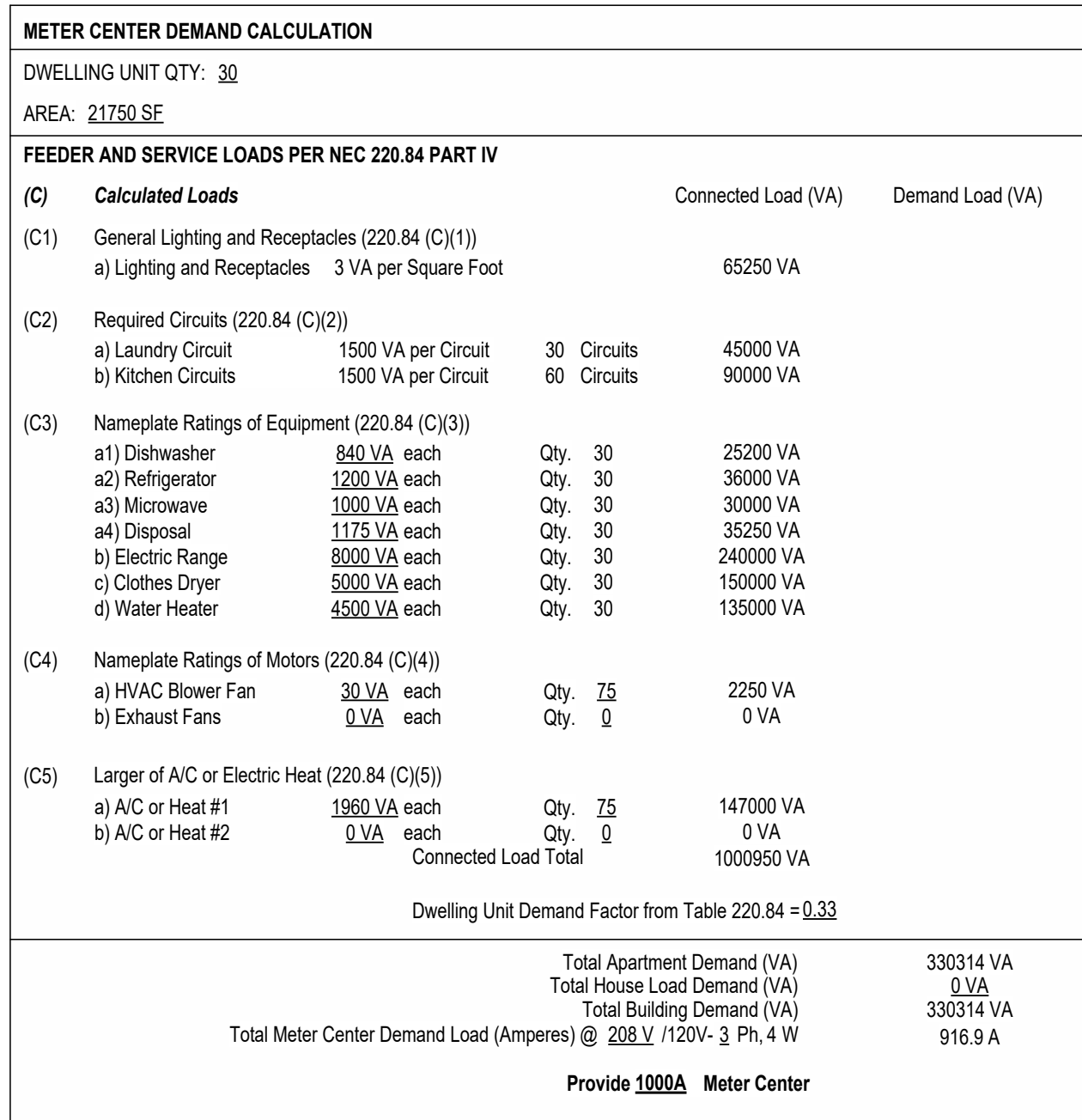
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DATE:	11/15/2024
JOB:	24-339
SHEET NO.:	

E6.2

E6.2

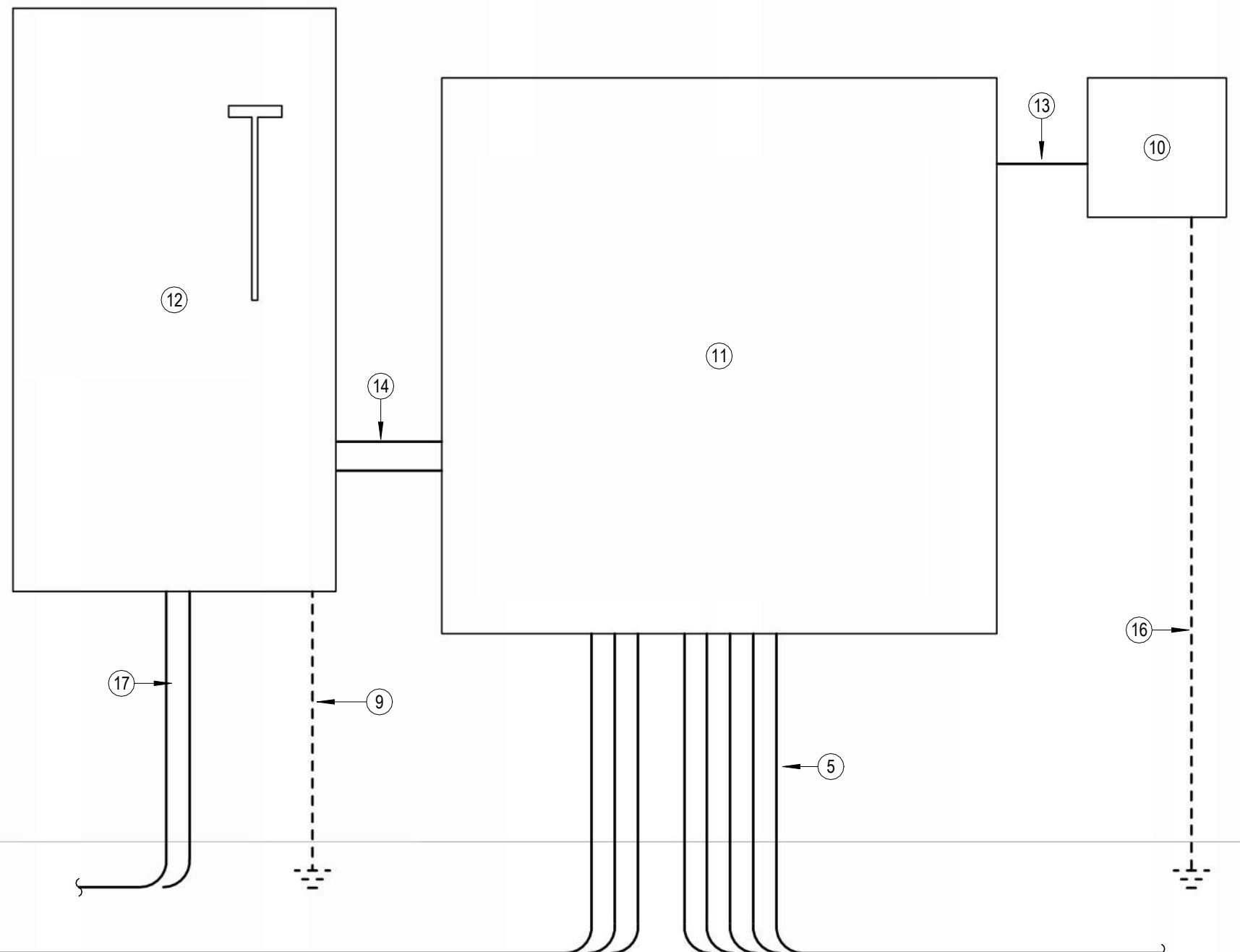
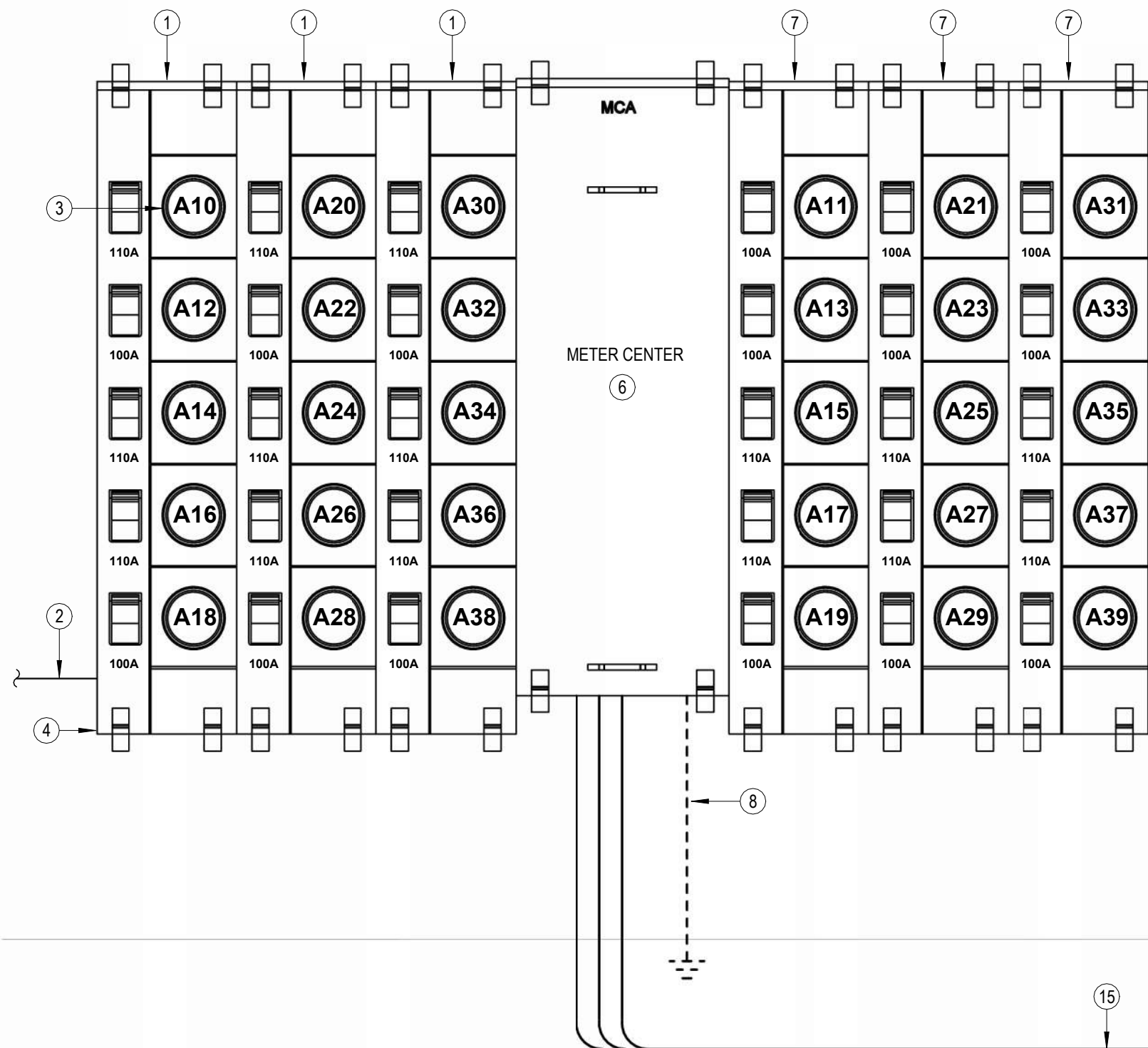


APARTMENT FEEDER SCHEDULE		
APARTMENT PANEL NUMBER	COPPER	ALUMINUM OR SER
A15, A16, A17, A18, A19, A26, A27, A28, A29	(3)#1, #8G, 1-1/4" C.	(3)#1/0, #4G, 1-1/2" C.
A14, A24, A25, #33, A36, A37, A38, A39	(3)#1, #8G, 1-1/4" C.	(3)#2/0, #3G, 2" C.
A11, A12, A13, A23, A34, A35	(3)#1/0, #6G, 1-1/2" C.	(3)#3/0, #2G, 2" C.
A21, A22, A31, A32	(3)#2/0, #4G, 2" C.	(3)#4/0, #1G, 2" C.
A10, A20, A30	(3)#3/0, #4G, 2" C.	(3)#250 KCMIL, #1/0G, 2-1/2" C.

NOTES:

1. VOLTAGE DROP HAS BEEN ACCOUNTED FOR IN SIZES INDICATED, FURTHER UPSIZING OF FEEDERS IS NOT NECESSARY

2. ENSURE PANEL, LUGS ARE ADEQUATELY SIZED TO HANDLE UP-SIZED FEEDERS. PROVIDE LUG ADAPTER KITS IF REQUIRED



NOTES BY SYMBOL

- 1 5-SOCKET BRANCH UNITS, 3-PH IN, 1-PH OUT, WITH (2) 100A AND (3) 110A BRANCH BREAKERS AS INDICATED. 800A HORIZONTAL CROSS BUS METER SOCKETS SHALL BE RINGLESS TYPE, 5-JAW WITH HORN BYPASS SQUARE D E2Z METER-PAK #E2HM315125. PROVIDE PERMANENT LABEL ON EACH METER SOCKET BREAKER INDICATING THE APARTMENT BEING SERVED.
- 2 SEE FEEDER SCHEDULE, THIS SHEET FOR SIZED TO APARTMENT UNIT LOAD CENTERS.
- 3 MAXIMUM HEIGHT TO CENTERLINE OF TOP METER SOCKET SHALL BE 5'-6" AFG.
- 4 MINIMUM HEIGHT TO BOTTOM OF METER SOCKET ASSEMBLY SHALL BE 18" AFG.
- 5 (5) 4' CONDUITS WITH PULL ROPE UNDERGROUND FOR SERVICE FROM PAD MOUNTED UTILITY TRANSFORMER, CABLEING BY POWER CO. RE. 4ME1.0.
- 6 METER CENTER MAIN, 3-PH IN, 3-PH OUT, 208/120V/3P, 4 WIRE WITH 1000A/3P MAIN BREAKER, 42" RATED METER SOCKET PER NECA 381.1 TEXAS REQUIREMENTS.
- 7 43" W/ 120" NEMA 3R ENCLOSURE RATED WITH INTEGRAL SURGE PROTECTION DEVICE, 5-JAW WITH HORN BYPASS SQUARE D E2Z METER-PAK #E2HM3100CB. PROVIDE SIGNAGE AT CIRCUIT BREAKER TO READ "SERVICE DISCONNECT 1 OF 2"
- 8 5-SOCKET BRANCH UNITS, 3-PH IN, 1-PH OUT, WITH (3) 100A AND (2) 110A BRANCH BREAKERS AS INDICATED. 800A HORIZONTAL CROSS BUS METER SOCKETS SHALL BE RINGLESS TYPE, 5-JAW WITH HORN BYPASS SQUARE D E2Z METER-PAK #E2HM315125. PROVIDE PERMANENT LABEL ON EACH METER SOCKET BREAKER INDICATING THE APARTMENT BEING SERVED.
- 9 #30 CU GROUNDING ELECTRODE CONDUCTOR TO CONCRETE ENCASED ELECTRODE, UNDERGROUND METAL WATER PIPE, AND DRIVEN GROUND ROD. BOND ALL ITEMS IN ACCORDANCE WITH NEC ARTICLE 250.
- 9 #20 CU GROUNDING ELECTRODE CONDUCTOR TO CONCRETE ENCASED ELECTRODE, UNDERGROUND METAL WATER PIPE, AND DRIVEN GROUND ROD. BOND ALL ITEMS IN ACCORDANCE WITH NEC ARTICLE 250.
- 10 CT RATED METER SOCKET PER NECA 381.1 TEXAS REQUIREMENTS
- 11 43" W/ 120" NEMA 3R ENCLOSURE WITH HINGED DOORS, GROUND LUG, AND PROVISIONS FOR POWER COMPANY PADLOCK AND SEAL.
- 12 600A/3P SERVICE ENTRANCE RATED DISCONNECT SWITCH WITH SOLID NEUTRAL, AND (3) 500A DUAL-ELEMENT, TIME-DELAY, CLASS RK1 FUSES IN NEMA 3R ENCLOSURE. PROVIDE SIGNAGE AT DISCONNECT SWITCH TO READ "SERVICE DISCONNECT 2 OF 2"
- 13 2" CONDUIT FOR POWER COMPANY PROVIDED METER WIRING
- 14 (2) PARALLEL 3" CONDUITS, EACH WITH (4) #350 KCMIL COPPER OR (3) PARALLEL 3" CONDUITS, EACH WITH (4)#350KCMIL ALUMINUM
- 15 (3) PARALLEL 3" CONDUITS, EACH WITH (4) #400 KCMIL
- 16 #36 CU GROUND TO 50" DIA, 18' LONG CONCRETE-CLAD STEEL GROUND ROD
- 17 (2) PARALLEL 3" CONDUITS, EACH WITH (4) #350 KCMIL, #20G COPPER, OR (3) PARALLEL 3" CONDUITS, EACH WITH (4)#300KCMIL, #30G COPPER TO PANEL 'H1'.
- 18 (4)#30, #6G, 2'C.
- 19 (4)#1, #6G, 1'-1/2'C.
- 20 (4)#350, #4G, 2'-1/2'C.

<div>Designation: 2B</div> <div>Installed Location: 2 Bedroom</div> <div>Voltage: 120/208-1Ph-3W</div> <div>Mounting: Flush</div> <div>Enclosure: NEMA 1</div> <div>Bus Amps: 125</div> <div>MCB Amps: MLO</div> <div>Features & Modifications: PROVIDE SURGE PROTECTION DEVICE</div> <div>SCCR/AIC: 22.0 kA</div> <div>Mains FNNote: -</div>											
Ckt	Description	Circuitry	Trip (A)	FN	A	B	FN	Trip (A)	Circuitry	Description	Ckt
2B-1	Bathroom	1/2"C,1#12,1#12N,1#12G	20		2.8 A 24....	9.4 A 24....	GFI	50	3/4"C,2#6,2#6N,1#10G	Range	2B-2
2B-3	Master Bedroom	1/2"C,1#12,1#12N,1#12G	20	AFI							2B-4
2B-5	Kitchen/Living/Hall Lights	1/2"C,1#12,1#12N,1#12G	20	AFI	0.9 A 14....						2B-6
2B-7	Living Room Receptacles	1/2"C,1#12,1#12N,1#12G	20	AFI		7.5 A 14....	GFI	30	1/2"C,2#10,1#10N,1#10G	Clothes Dryer	2B-8
2B-9	Refrigerator	1/2"C,1#12,1#12N,1#12G	20	AGI	1.5 A 22....						2B-10
2B-11	Counter Top Receptacles	1/2"C,1#12,1#12N,1#12G	20	AGI		4.5 A 22....		30	1/2"C,2#10,1#10G	Electric Water Heating	2B-12
2B-13	Dishwasher	1/2"C,1#12,1#12N,1#12G	20	AGI	4.2 A 9.4 A				1/2"C,2#12,1#12G	P-TAC Master Bedroom	2B-14
2B-15	Disposal	1/2"C,1#12,1#12N,1#12G	20	AGI		4.2 A 9.4 A		15			2B-16
2B-17	Counter Top Receptacles	1/2"C,1#12,1#12N,1#12G	20	AGI	4.5 A 9.4 A			15	1/2"C,2#12,1#12G	P-TAC Living Room	2B-18
2B-19	Hood/Microwave	1/2"C,1#12,1#12N,1#12G	20	AGI		2.1 A 9.4 A					2B-20
2B-21	Spare Bedroom	1/2"C,1#12,1#12N,1#12G	20	AFI	9.3 A 9.4 A			15	1/2"C,2#12,1#12G	P-TAC Spare Bedroom	2B-22
2B-23	Clothes Washer Receptacle	1/2"C,1#12,1#12N,1#12G	20	AFI		1.5 A 9.4 A					2B-24
2B-25	Space	--	--		--	--		--	--	Space	2B-26
2B-27	Surge Protector	--	--		0.0 A	--		--	--	Space	2B-28
2B-29	Surge Protector	--	--		0.0 A	--		--	--	Space	2B-30

<div>Designation: 2BA</div> <div>Installed Location: 2 Bedroom (Accessible)</div> <div>Voltage: 120/208-1Ph-3W</div> <div>Mounting: Flush</div> <div>Enclosure: NEMA 1</div> <div>Bus Amps: 100</div> <div>MCB Amps: MLO</div> <div>Features & Modifications: PROVIDE SURGE PROTECTION DEVICE</div> <div>SCCR/AIC: 22.0 kA</div> <div>Mains FNNote: -</div>											
Ckt	Description	Circuitry	Trip (A)	FN	A	B	FN	Trip (A)	Circuitry	Description	Ckt
2BA-1	Bathroom	1/2"C,1#12,1#12N,1#12G	20		2.8 A 24....				3/4"C,2#6,2#6N,1#10G	Range	2BA-2
2BA-3	Master Bedroom	1/2"C,1#12,1#12N,1#12G	20	AFI		9.4 A 24....	GFI	50			2BA-4
2BA-5	Kitchen/Living/Hall Lights	1/2"C,1#12,1#12N,1#12G	20	AFI	0.9 A 14....			30	1/2"C,2#10,1#10N,1#10G	Clothes Dryer	2BA-6
2BA-7	Living Room Receptacles	1/2"C,1#12,1#12N,1#12G	20	AFI		7.5 A 14....	GFI				2BA-8
2BA-9	Refrigerator	1/2"C,1#12,1#12N,1#12G	20	AGI	1.5 A 22....			30	1/2"C,2#10,1#10G	Electric Water Heating	2BA-10
2BA-11	Counter Top Receptacles	1/2"C,1#12,1#12N,1#12G	20	AGI		6.0 A 22....					2BA-12
2BA-13	Dishwasher	1/2"C,1#12,1#12N,1#12G	20	AGI	4.2 A 9.4 A			15	1/2"C,2#12,1#12G	P-TAC Master Bedroom	2BA-14
2BA-15	Disposal	1/2"C,1#12,1#12N,1#12G	20	AGI		4.2 A 9.4 A					2BA-16
2BA-17	Counter Top Receptacles	1/2"C,1#12,1#12N,1#12G	20	AGI	4.5 A 9.4 A			15	1/2"C,2#12,1#12G	P-TAC Living Room	2BA-18
2BA-19	Hood/Microwave	1/2"C,1#12,1#12N,1#12G	20	AGI		2.1 A 9.4 A					2BA-20
2BA-21	Spare Bedroom	1/2"C,1#12,1#12N,1#12G	20	AFI	7.8 A 9.4 A			15	1/2"C,2#12,1#12G	P-TAC Spare Bedroom	2BA-22
2BA-23	Clothes Washer Receptacle	1/2"C,1#12,1#12N,1#12G	20	AFI		1.5 A 9.4 A					2BA-24
2BA-25	Space	--	--		--	--		--	--	Space	2BA-26
2BA-27	Surge Protector	--	--		0.0 A	--		--	--	Space	2BA-28
2BA-29	Surge Protector	--	--		0.0 A	--		--	--	Space	2BA-30

<div>Designation: 1B</div> <div>Installed Location: 1 Bedroom</div> <div>Voltage: 120/208-1Ph-3W</div> <div>Mounting: Flush</div> <div>Enclosure: NEMA 1</div> <div>Bus Amps: 100</div> <div>MCB Amps: MLO</div> <div>Features & Modifications: PROVIDE SURGE PROTECTION DEVICE</div> <div>SCCR/AIC: 22.0 kA</div> <div>Mains FNNote: -</div>											
Ckt	Description	Circuitry	Trip (A)	FN	A	B	FN	Trip (A)	Circuitry	Description	Ckt
1B-1	Bathroom	1/2"C,1#12,1#12N,1#12G	20		2.8 A 24....			50	3/4"C,2#6,2#6N,1#10G	Range	1B-2
1B-3	Master Bedroom	1/2"C,1#12,1#12N,1#12G	20	AFI		9.3 A 24....	GFI				1B-4
1B-5	Kitchen/Living/Hall Lights	1/2"C,1#12,1#12N,1#12G	20	AFI	0.7 A 1.5 A			20	1/2"C,1#12,1#12N,1#12G	Clothes Washer Receptacle	1B-6
1B-7	Living Room Receptacles	1/2"C,1#12,1#12N,1#12G	20	AFI		6.0 A 14....	GFI	30	1/2"C,2#10,1#10N,1#10G	Clothes Dryer	1B-8
1B-9	Refrigerator	1/2"C,1#12,1#12N,1#12G	20	AGI	1.5 A 14....						1B-10
1B-11	Counter Top Receptacles	1/2"C,1#12,1#12N,1#12G	20	AGI		4.5 A 22....		30	1/2"C,2#10,1#10G	Electric Water Heating	1B-12
1B-13	Dishwasher	1/2"C,1#12,1#12N,1#12G	20	AGI	4.2 A 22....						1B-14
1B-15	Disposal	1/2"C,1#12,1#12N,1#12G	20	AGI		4.2 A 9.4 A		15	1/2"C,2#12,1#12G	P-TAC Master Bedroom	1B-16
1B-17	Counter Top Receptacles	1/2"C,1#12,1#12N,1#12G	20	AGI	4.5 A 9.4 A						1B-18
1B-19	Hood/Microwave	1/2"C,1#12,1#12N,1#12G	20	AGI		2.1 A 9.4 A		15	1/2"C,2#12,1#12G	P-TAC Living Room	1B-20
1B-21	Surge Protector	--	20		0.0 A 9.4 A			--	--		1B-22
1B-23	Surge Protector	--	20			0.0 A	--	--	--	Space	1B-24

<div>Designation: 1BA</div> <div>Installed Location: 1 Bedroom (Accessible)</div> <div>Voltage: 120/208-1Ph-3W</div> <div>Mounting: Flush</div> <div>Enclosure: NEMA 1</div> <div>Bus Amps: 100</div> <div>MCB Amps: MLO</div> <div>Features & Modifications: PROVIDE SURGE PROTECTION DEVICE</div> <div>SCCR/AIC: 22.0 kA</div> <div>Mains FNNote: -</div>											
Ckt	Description	Circuitry	Trip (A)	FN	A	B	FN	Trip (A)	Circuitry	Description	Ckt
1BA-1	Bathroom	1/2"C,1#12,1#12N,1#12G	20		2.8 A 24....			50	3/4"C,2#6,2#6N,1#10G	Range	1BA-2
1BA-3	Master Bedroom	1/2"C,1#12,1#12N,1#12G	20	AFI		9.3 A 24....	GFI				1BA-4
1BA-5	Kitchen/Living/Hall Lights	1/2"C,1#12,1#12N,1#12G	20	AFI	0.7 A 1.5 A			20	1/2"C,1#12,1#12N,1#12G	Clothes Washer Receptacle	1BA-6
1BA-7	Living Room Receptacles	1/2"C,1#12,1#12N,1#12G	20	AFI		6.0 A 14....	GFI	30	1/2"C,2#10,1#10N,1#10G	Clothes Dryer	1BA-8
1BA-9	Refrigerator	1/2"C,1#12,1#12N,1#12G	20	AGI	1.5 A 14....						1BA-10
1BA-11	Counter Top Receptacles	1/2"C,1#12,1#12N,1#12G	20	AGI		6.0 A 22....		30	1/2"C,2#10,1#10G	Electric Water Heating	1BA-12
1BA-13	Dishwasher	1/2"C,1#12,1#12N,1#12G	20	AGI	4.2 A 22....						1BA-14
1BA-15	Disposal	1/2"C,1#12,1#12N,1#12G	20	AGI		4.2 A 9.4 A		15	1/2"C,2#12,1#12G	P-TAC Master Bedroom	1BA-16
1BA-17	Counter Top Receptacles	1/2"C,1#12,1#12N,1#12G	20	AGI	4.5 A 9.4 A						1BA-18
1BA-19	Hood/Microwave	1/2"C,1#12,1#12N,1#12G	20	AGI		2.1 A 9.4 A		15	1/2"C,2#12,1#12G	P-TAC Living Room	1BA-20
1BA-21	Surge Protector	--	20		0.0 A 9.4 A			--	--		1BA-22
1BA-23	Surge Protector	--	20			0.0 A	--	--	--	Space	1BA-24

Panelboard: P1

Location: Mech 108

Supply: H1

Mounting: Surface

Enclosure: NEMA 1

Voltage: 208 V, 3Ø, 4W

Bus Rating: 225 A

Neutral: 100%

Feed-Thru Lugs: No

Features & Modifications: -

Mains Type: MCB

Mains Rating: 200 A

Mains FNNote: -

SCCR: 22 kA

Ckt	Description	Circuitry	Trip (A)	FN	A KVA	B KVA	C KVA	FN	Trip (A)	Circuitry	Description	Ckt																																																	
P1-1	LTG - Clubhouse	1/2"C,1#12,1#12N,1#12G	20		0.73 0.72				20	1/2"C,1#12,1#12N,1#12G	RCPT - 102 Office	P1-2																																																	
P1-3	LTG - 1st Floor Hall	1/2"C,1#12,1#12N,1#12G	20			0.72 0.72			20	1/2"C,1#12,1#12N,1#12G	RCPT - 102 Office (Controlled)	P1-4																																																	
P1-5	LTG - Exterior Bldg Mounted	1/2"C,1#12,1#12N,1#12G	20				0.21 0.9		20	1/2"C,1#12,1#12N,1#12G	RCPT - 106 Storage, 107 Fire	P1-6																																																	
P1-7	LTG - Parking Lot	1/2"C,2#12,1#12G	20		0.21 0.18				20	1/2"C,1#12,1#12N,1#12G	RCPT - Drinking Fountain	P1-8																																																	
P1-9						0.21 0.9			20	1/2"C,1#12,1#12N,1#12G	RCPT - Exterior	P1-10																																																	
P1-11	LTG - Monument Sign	1/2"C,1#12,1#12N,1#12G	20				0.22 0.98		15	1/2"C,2#12,1#12G	PTAC - 1st Floor Elev Lobby	P1-12																																																	
P1-13	Heat Pump HP-1	1/2"C,2#10,1#10G	25		1.22 0.98				15	1/2"C,2#10,1#10G	PTAC - 1st Floor East Hall	P1-14																																																	
P1-15	15 MCA					1.22 0.98						P1-16																																																	
P1-17	Blower Coil BC-1	1/2"C,2#10,1#10G	25			2.21 0.98			15	1/2"C,2#10,1#10G	PTAC - 1st Floor North Stair	P1-18																																																	
P1-19	3.6 KW Backup Electric Heat				2.21 0.98				15	1/2"C,2#10,1#10G		P1-20																																																	
P1-21	Electric Heat	1/2"C,2#12,1#12G	20			1.5 0.98			20	1/2"C,1#12,1#12N,1#12G	RCPT - Elev Sump Pump	P1-22																																																	
P1-23							1.5 0.18		30	1/2"C,1#10,1#10N,1#10G	Elevator Sump Pump Alarm Panel	P1-24																																																	
P1-25	Water Heater	1/2"C,2#10,1#10G	30		2.25 2.02	2.25 0.36			20	1/2"C,1#12,1#12N,1#12G	Fire Alarm Control Panel	P1-26																																																	
P1-29	Hot Water Recirc Pump HWP	1/2"C,1#12,1#12N,1#12G	20				0.12 0.9		20	1/2"C,1#12,1#12N,1#12G	RCPT - 101 Community	P1-30																																																	
P1-31	RCPT - 1st Floor Hall	1/2"C,1#12,1#12N,1#12G	20		1.08 0.05				20	1/2"C,1#12,1#12N,1#12G	Lighting Controls	P1-32																																																	
P1-33	LTG - Elevator Pit	1/2"C,1#12,1#12N,1#12G	20			0.02 0.1			20	1/2"C,1#12,1#12N,1#12G	Automatic Door Opener Controls	P1-34																																																	
P1-35	RCPT - Elevator Pit	1/2"C,1#12,1#12N,1#12G	20				0.36 0.36		20	1/2"C,1#12,1#12N,1#12G	Fire Sprinkler FlowBell	P1-36																																																	
P1-37	RCPT - Telecom Backboard	1/2"C,1#12,1#12N,1#12G	20		0.36							P1-38																																																	
P1-39	RCPT - Telecom Backboard	1/2"C,1#12,1#12N,1#12G	20			0.36						P1-40																																																	
P1-41	RCPT - Mech 108, Elev Lobby	1/2"C,1#12,1#12N,1#12G	20				0.54					P1-42																																																	
					Connecte...	13 kVA	10 kVA	9 kVA																																																					
					Connecte...	109 A	87 A	79 A																																																					
<table><tr><td colspan="2">Load Classification</td><td>Connected</td><td>Factor</td><td>Demand</td><td colspan="2">Panel Totals</td></tr><tr><td colspan="2">Motor</td><td>8912 VA</td><td>112.41%</td><td>10018 VA</td><td colspan="2">Connected Load: 33 kVA</td></tr><tr><td colspan="2">Other</td><td>1180 VA</td><td>100.00%</td><td>1180 VA</td><td colspan="2">Connected Current: 91 A</td></tr><tr><td colspan="2">Lighting - Interior</td><td>2112 VA</td><td>125.00%</td><td>2640 VA</td><td colspan="2">Demand Load: 38 kVA</td></tr><tr><td colspan="2">Receptacle - General</td><td>7200 VA</td><td>100.00%</td><td>7200 VA</td><td colspan="2">Demand Current: 105 A</td></tr><tr><td colspan="2">Electric Water Heating</td><td>4500 VA</td><td>125.00%</td><td>5625 VA</td><td colspan="2"></td></tr><tr><td colspan="2">Electric Heat</td><td>8880 VA</td><td>125.00%</td><td>11100 VA</td><td colspan="2"></td></tr></table>													Load Classification		Connected	Factor	Demand	Panel Totals		Motor		8912 VA	112.41%	10018 VA	Connected Load: 33 kVA		Other		1180 VA	100.00%	1180 VA	Connected Current: 91 A		Lighting - Interior		2112 VA	125.00%	2640 VA	Demand Load: 38 kVA		Receptacle - General		7200 VA	100.00%	7200 VA	Demand Current: 105 A		Electric Water Heating		4500 VA	125.00%	5625 VA			Electric Heat		8880 VA	125.00%	11100 VA		
Load Classification		Connected	Factor	Demand	Panel Totals																																																								
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Electric Water Heating		4500 VA	125.00%	5625 VA																																																									
Electric Heat		8880 VA	125.00%	11100 VA																																																									

Panelboard: P3

Location: Mech 301

Supply: P2

Mounting: Surface

Enclosure: NEMA 1

Voltage: 208 V, 3Ø, 4W

Bus Rating: 100 A

Neutral: 100%

Feed-Thru Lugs: No

Features & Modifications: -

Mains Type: MLO

Mains Rating: 100 A

Mains FN>Note: -

SCCR: 22 kA

Ckt	Description	Circuitry	Trip (A)	FN	A KVA	B KVA	C KVA	FN	Trip (A)	Circuitry	Description	Ckt
P3-1	LTG - 3rd Floor	1/2"C,1#12,1#12N,1#12G	20		0.63 0.98				15	1/2"C,2#12,1#12G	PTAC - 3rd Floor Elev Lobby	P3-2
P3-3	RCPT - 3rd Floor Telecomm Backboard	1/2"C,1#12,1#12N,1#12G	20			0.36 0.98						P3-4
P3-5	RCPT - 3rd Floor Telecomm Backboard	1/2"C,1#12,1#12N,1#12G	20				0.36 0.98		15	1/2"C,2#12,1#12G	PTAC - 3rd Floor Hall West	P3-6
P3-7	RCPT - 3rd Floor Elev Lobby/Elec Room	1/2"C,1#12,1#12N,1#12G	20		0.54 0.98							P3-8
P3-9	RCPT - 3rd Floor Hall	1/2"C,1#12,1#12N,1#12G	20			1.08 0.98			15	1/2"C,2#12,1#12G	PTAC - 3rd Floor Hall East	P3-10
P3-11	PTAC - 3rd Floor N. Stair	1/2"C,2#10,1#10G	15		0.98		0.98 0.98					P3-12
P3-13												P3-14
P3-15												P3-16
P3-17												P3-18
P3-19												P3-20
P3-21												P3-22
P3-23												P3-24
Connect...					4 kVA	3 kVA	3 kVA					
Connect...					34 A	28 A	28 A					

Load Classification

Lighting - Interior

Receptacle - General

Electric Heat

Connected

633 VA

2340 VA

7840 VA

Factor

125.00%

100.00%

125.00%

Demand

791 VA

2340 VA

9800 VA

Panel Totals

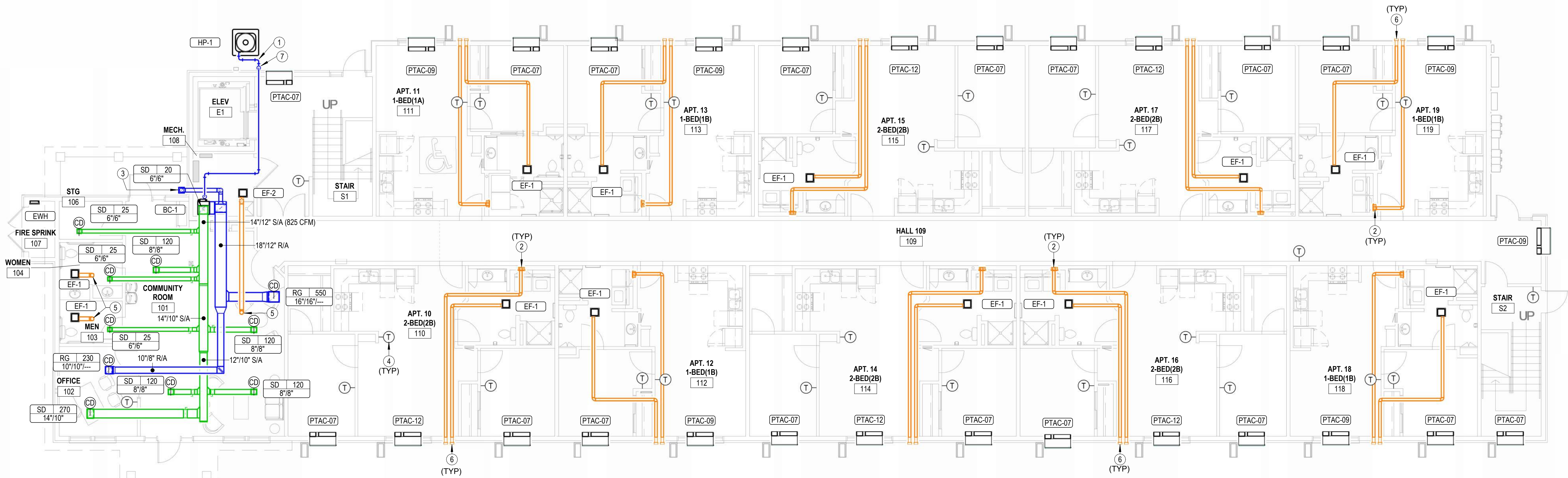
Connected Load: 11 kVA

Connected Current: 30 A

Demand Load: 13 kVA

Demand Current: 36 A

- NOTES BY SYMBOL**
- 1 MOUNT HEAT PUMP ON LEVEL 3-1/2" THICK CONCRETE PAD. COORDINATE WITH G.C.
 - 2 PROVIDE UL LISTED DRYER BOX EQUAL TO IN-Q-VATE TECHNOLOGIES IN WALL INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS, AND ROUTE 4"Ø DRYER EXHAUST DUCT TO WALL CAP WITH BACKDRAFT DAMPER. MAXIMUM ALLOWABLE EQUIVALENT DUCT LENGTH = 35'. UTILIZE LONG RADIUS SMOOTH ELBOWS WHERE REQUIRED. MAXIMUM EQUIVALENT DUCT LENGTH MAY BE INCREASE WHERE DRYER MANUFACTURER'S INSTALLATION INSTRUCTIONS ALLOW, AND DOCUMENTATION IS PROVIDED TO CODE OFFICIAL PRIOR TO CONCEALMENT INSPECTION. COORDINATE EXACT REQUIREMENTS WITH EQUIPMENT PROVIDED. 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.
 - 3 ROUTE 6" DIAMETER OUTDOOR AIR DUCT TO SOFFIT VENT WITH BIRDSCREEN, AND BALANCE OUTDOOR AIR TO 85 CFM.
 - 4 PROVIDE WALL MOUNTED THERMOSTAT FOR EACH PTAC IN APARTMENTS. COORDINATE FINAL LOCATION WITH OWNER.
 - 5 ROUTE 4"Ø EXHAUST DUCT TO MANUFACTURER'S ROOF JACK WITH BACKDRAFT DAMPER AND BIRD SCREEN, COORDINATE ROUTING WITH STRUCTURE.
 - 6 ROUTE 4"Ø EXHAUST DUCT TO MANUFACTURER'S WALL CAP WITH BACKDRAFT DAMPER, COORDINATE ROUTING WITH STRUCTURE.
 - 7 ROUTE REFRIGERANT PIPING FROM BLOWER COIL TO HEAT PUMP. CONCEAL PIPING IN WALLS AND ABOVE CEILINGS. UTILIZE WALL PENETRATION ASSEMBLY EQUAL TO AIREX TITAN OUTLET.



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

RESIDENCE AT GREEN MEADOW

NEW SENIOR LIVING FACILITY

TEXAS

SAN ANGELO,



REVISIONS:

DATE: 11/15/2024
JOB: 24-3395
SHEET NO.:

M1.1

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Packaged Terminal Air Conditioner Schedule										
Mark	Manufacturer	Model Number	Cooling		Heating	Airflow	Electrical			
			Total Cooling	Sensible Cooling	Electric Heat Output		MCA	MOCP	Voltage	Phase
PTAC-07	GE	AZ45E07DAP	6,900 Btu/h	4,210 Btu/h	1.96 kW	350 CFM	11.8 A	15.0 A	208 V	1
PTAC-09	GE	AZ45E09DAP	9,400 Btu/h	5,450 Btu/h	1.96 kW	370 CFM	11.8 A	15.0 A	208 V	1
PTAC-12	GE	AZ45E12DAP	11,200 Btu/h	6,050 Btu/h	1.96 kW	360 CFM	11.8 A	15.0 A	208 V	1
NOTES: 1. Provide with manufacturer's line cord connection kit. 2. Provide with wall case compatible with wall construction coordinate with G.C. 3. Provide with remote wall mounted programmable thermostat with two speed fan control. 4. Provide with manufacturer's sub-base accessory. Provide all components necessary for complete installation.										

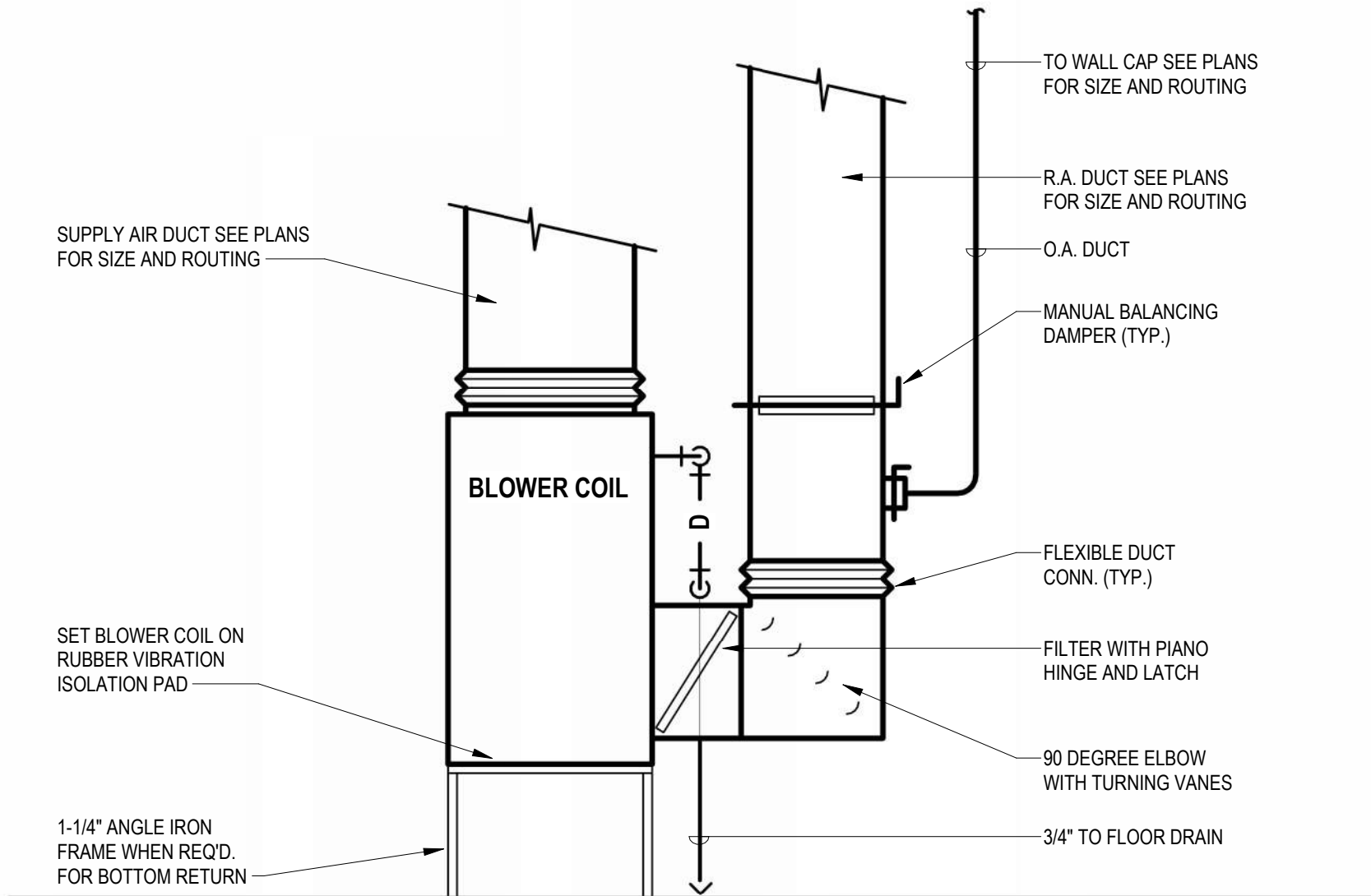
Heat Pump Schedule																
Identity	Manufacturer	Model	Nominal Capacity	Cooling Capacity						Heating Capacity				Electrical		
				EDB	EDB	EWB	Net Sensible Capacity	Rated Cooling Capacity	SEER2 Rating	OA EDB	EDB	Rated Heating Capacity	HSPF2 Rating	Phase	MCA	MOCP
HP-1	Trane	4TWR4024	2.0 ton	105 °F	78 °F	67 °F	15,700 Btu/h	22,200 Btu/h	14.6	47 °F	70 °F	22,800 Btu/h	7.8	1	15.0 A	25.0 A
NOTES: 1. Refrigerant lines shall be field fabricated. Coordinate line sizing requirements with equipment manufacturer for length. 2. Provide 7-day programmable thermostat. 3. Provide 7-day programmable thermostat. Provide with R410a refrigerant. 4. Provide 2 sets of MERV-7 filters.																

Blower Coil Schedule										
Identity	Manufacturer	Model	Fan			Heating	Electrical		MCA	MOCP
			Airflow	ESP	Speed		Voltage	Phase		
BC-1	Trane	TEM6A0B24	800 CFM	0.50 in-wg	Medium	3.6 kW	208 V	1	25.0 A	25.0 A
NOTES: 1. Single point connection required. coordinate the exact electrical requirements of equipment provided with E.C. 2. Electrical heater shall not operate simultaneously with heat pump. Electric heater shall be used as back-up heat only. 3. Provide unit with condensate overflow switch.										

Grilles, Registers & Diffusers Schedule								
ID Type	Manufacturer	Model	Supply	Return	Exhaust	Transfer	Mounting	Include Damper
RG	Price	530	■	■			Surface Mount	No
SD	Price	520	■				Surface Mount	No
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 radiation dampers as required in rated ceilings. Coordinate with Architect.								

Electric Cabinet Heater Schedule									
Mark	Manufacturer	Model	Mounting	Watts	Voltage	Phase	Description	Notes	
EWH	Trane	UHW4	Wall	3.0 kW	208 V	1	Architectural fan forced wall heater	1,2,3	
NOTES: 1. Provide with high temperature thermal cutout and fan delay. 2. Provide wit integral thermostat and unit mounted disconnect switch. 3. Provide with manufacturer's surface mounting adapter sleeve. Coordinate exact mounting requirements and locations with Architect and rated construction.									

Exhaust Fan Schedule								
Mark	Manufacturer	Model	CFM	ESP	Power	Electrical		Notes
						Voltage	Phase	
EF-1	Panasonic	FV-0810VSS1	50 CFM	0.45 in-wg	21 W	120 V	1	1,2,3,4,5,6
EF-2	Panasonic	FV-0511VK2	110 CFM	0.45 in-wg	21 W	120 V	1	1,2,3,4,5,6,7
NOTES:								
1. Fixture shall be Energy Star listed.								
2. Fixture shall operate at < 1 SONE.								
3. Provide with ec motor with 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. Omit radiation dampers where rated ceilings are not present, coordinate with Architect.								
7. Provide Panasonic FV-VS15VK1 multi-spped with time delay module set to provide cfm as listed on drawings continuously with a max of 110 cfm for 15 min (adj_ when wall switch is turned on.								

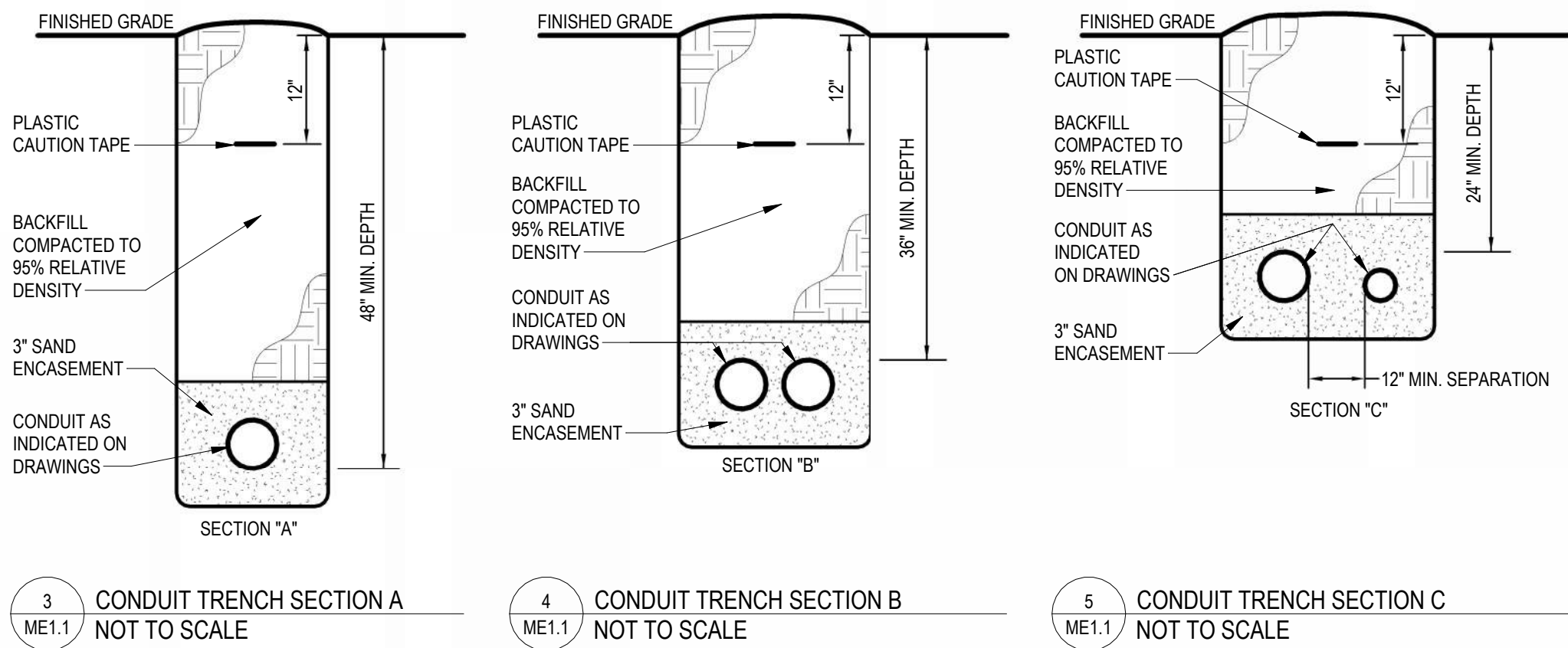


1 BLOWER COIL DETAIL
M6.1 NOT TO SCALE



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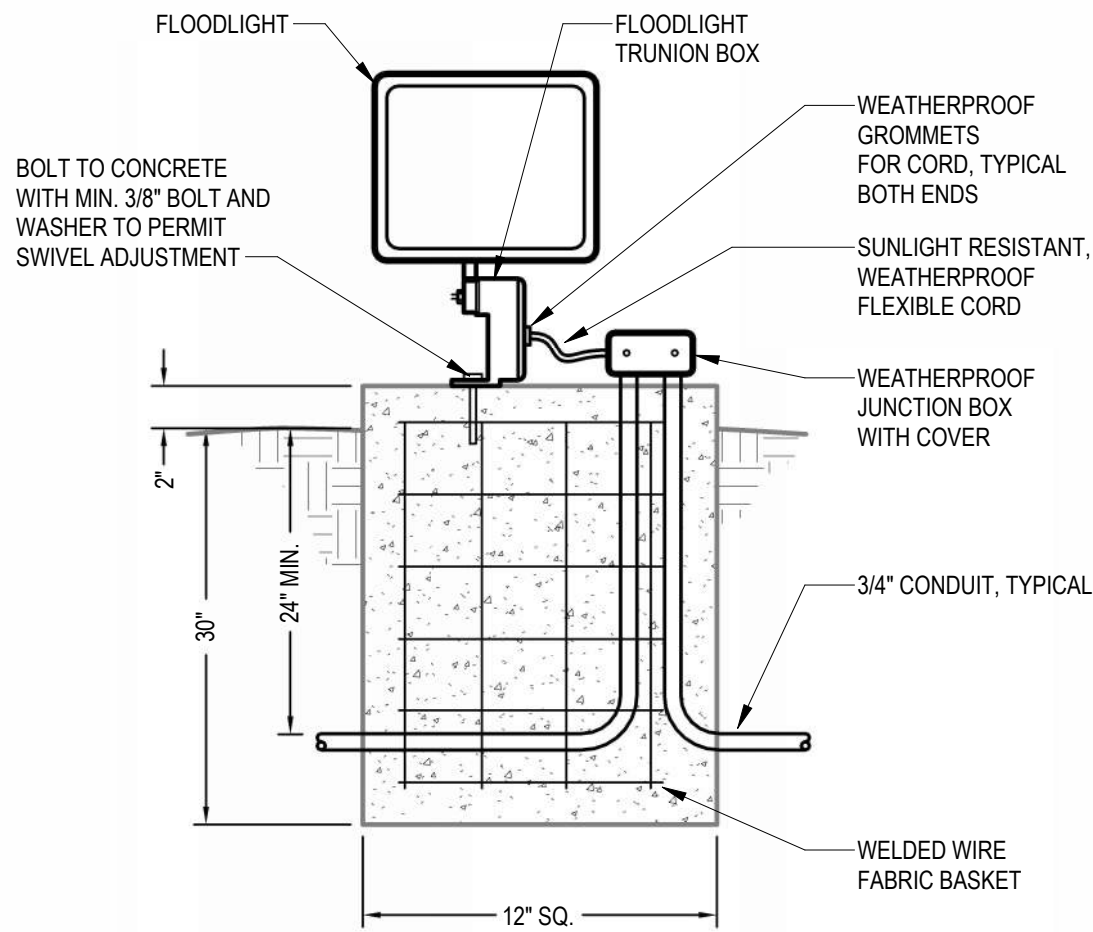
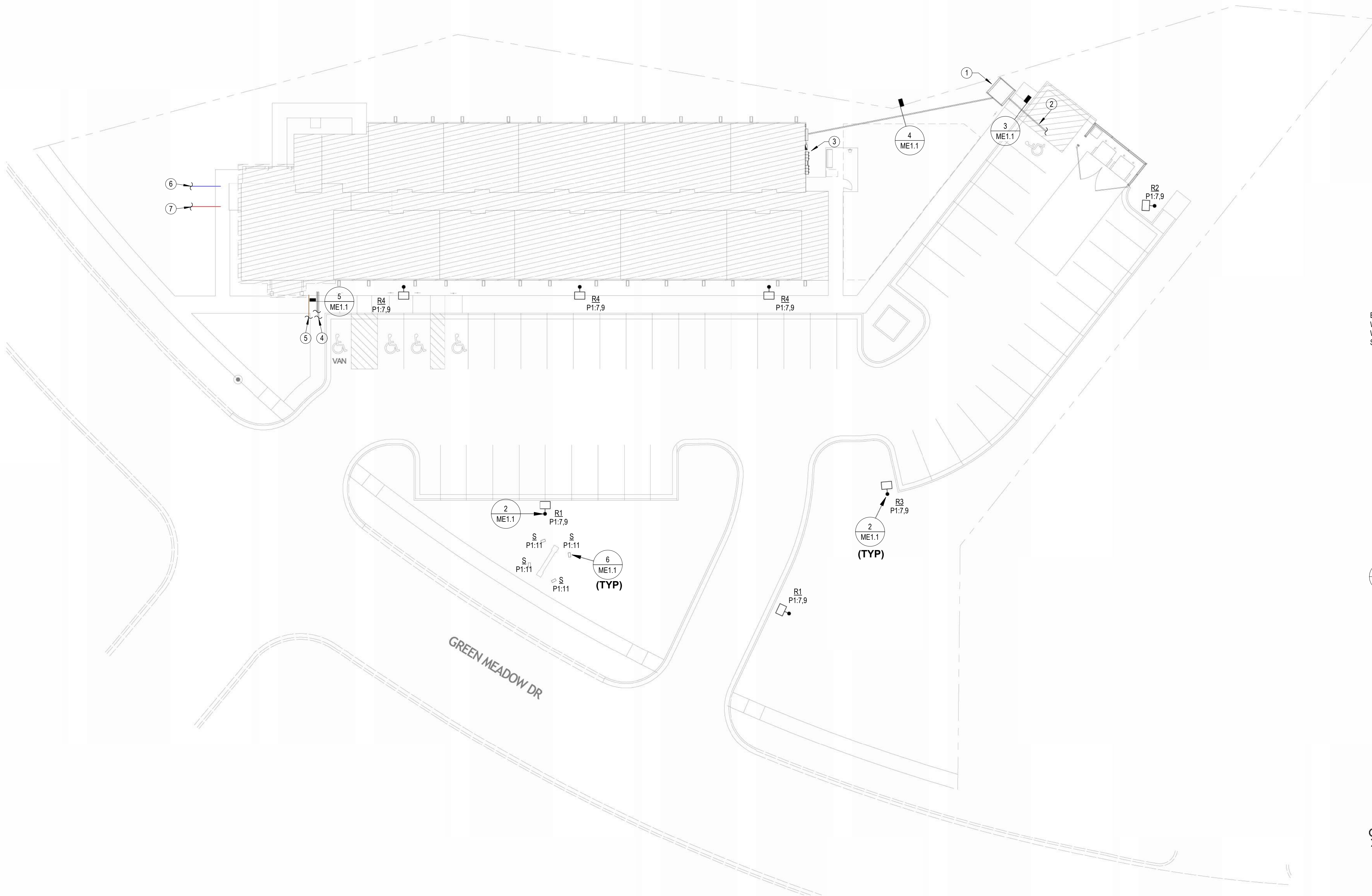


GENERAL SITE POWER NOTES

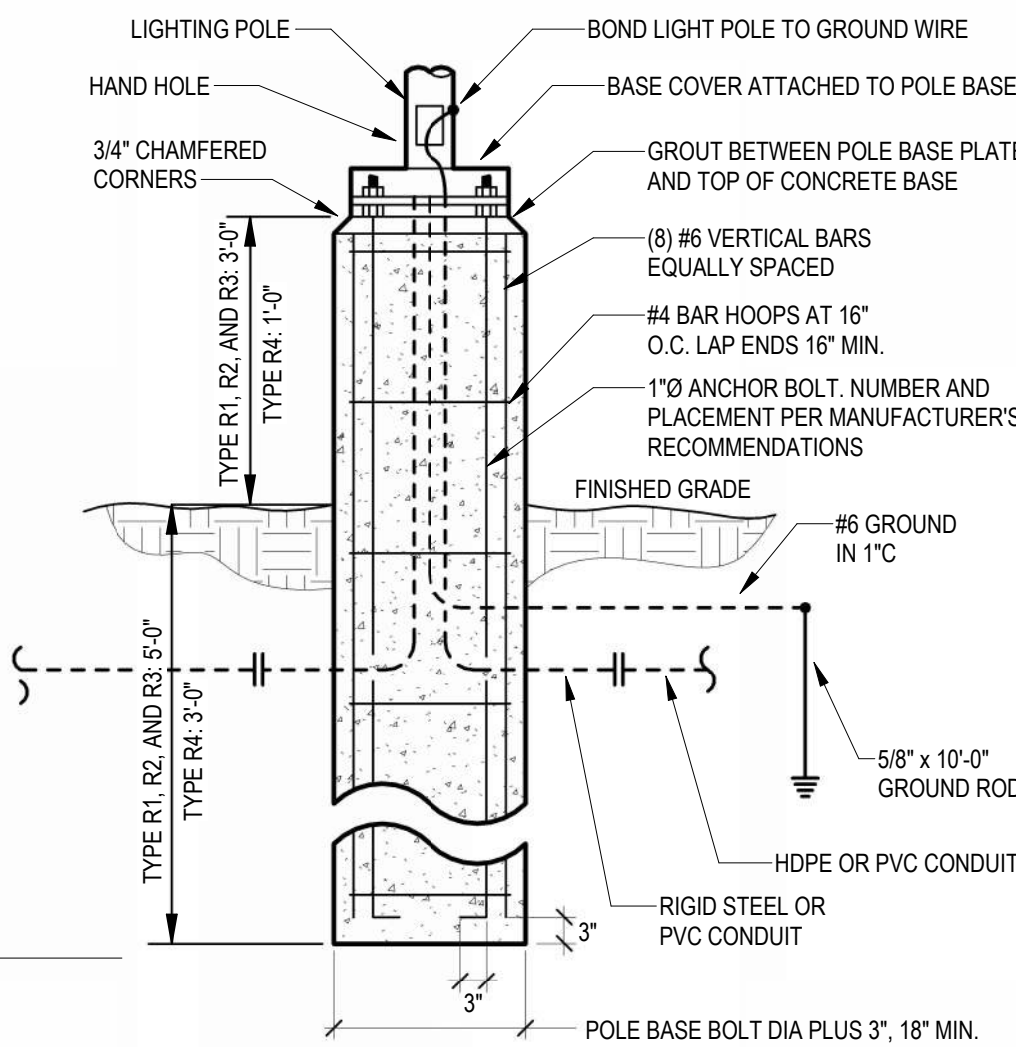
- A. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONDUIT AND ASSOCIATED TRENCHING AND BACKFILL REQUIRED FOR UNDERGROUND ELECTRICAL UTILITY. PRIMARY CABLE. POWER COMPANY SHALL FURNISH, INSTALL, AND TERMINATE ALL CONDUCTORS.
- B. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONDUIT AND ASSOCIATED TRENCHING AND BACKFILL REQUIRED FOR UNDERGROUND ELECTRICAL SERVICE LATERALS FROM UTILITY TRANSFORMERS TO SERVICE EQUIPMENT AT BUILDING EXTERIORS. POWER COMPANY SHALL FURNISH, INSTALL, AND TERMINATE ALL CONDUCTORS.
- C. ALL CONDUIT BELOW GRADE SHALL BE SCHEDULE 40 PVC. ALL CONDUIT ABOVE GRADE SHALL BE SCHEDULE 80 PVC.
- D. ALL CONDUIT TRENCHES MUST BE INSPECTED BY AEP BEFORE BACKFILLING.

NOTES BY SYMBOL

- 1 POWER COMPANY PAD MOUNT TRANSFORMER. PROVIDE CONCRETE PAD PER AEP TEXAS SERVICE STANDARDS. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH AEP TEXAS PRIOR TO STARTING WORK.
- 2 4" PVC CONDUIT FOR POWER COMPANY PROVIDED PRIMARY CABLING. COORDINATE ROUTING WITH AEP TEXAS.
- 3 ELECTRIC SERVICE EQUIPMENT, SEE RISER DIAGRAM ON SHEET E6.2.
- 4 PROVIDE (2) 3" CONDUITS FOR COMMUNICATIONS SERVICES. PROVIDE PULL STRING IN EACH RACEWAY. VERIFY TERMINATION POINTS AT PROPERTY LINE WITH LOCAL COMMUNICATIONS SERVICE PROVIDERS.
- 5 SANITARY SEWER, SEE CIVIL DRAWINGS FOR CONTINUATION.
- 6 DOMESTIC WATER SERVICE, SEE CIVIL DRAWINGS FOR CONTINUATION.
- 7 FIRE SUPPRESSION SERVICE, SEE CIVIL DRAWINGS FOR CONTINUATION.



6 GROUND LIGHT DETAIL
ME1.1 NOT TO SCALE



2 LIGHT POLE BASE DETAIL
ME1.1 NOT TO SCALE

1 M/E SITE PLAN
1" = 20'-0"

RESIDENCE AT GREEN MEADOW

NEW SENIOR LIVING FACILITY

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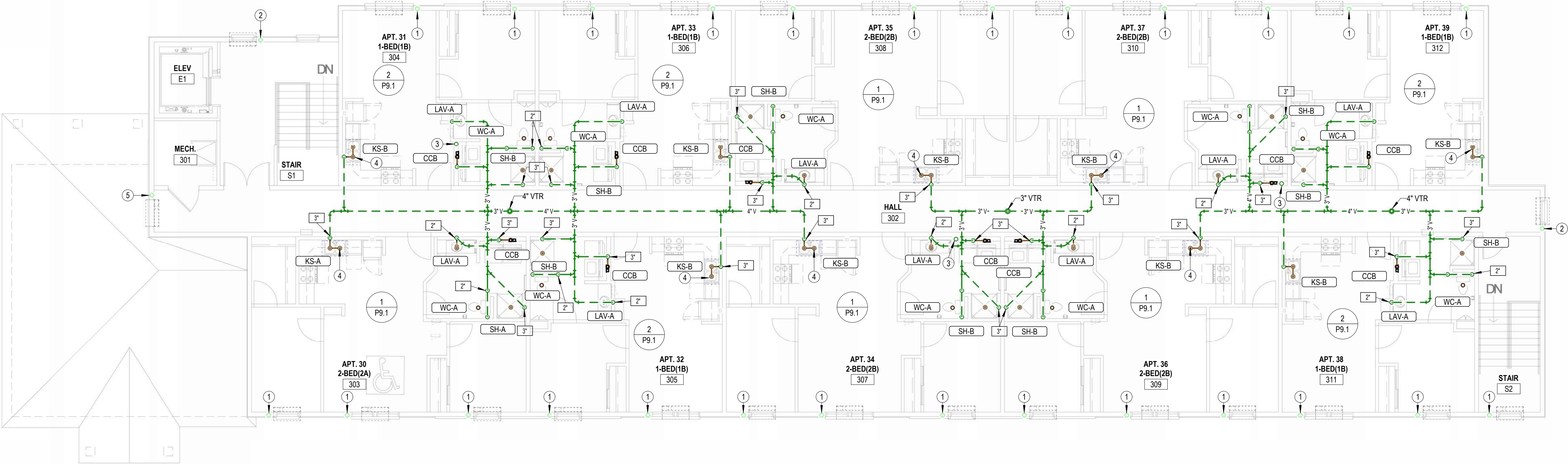
ME1.1

PLUMBING SIZING SYMBOLS

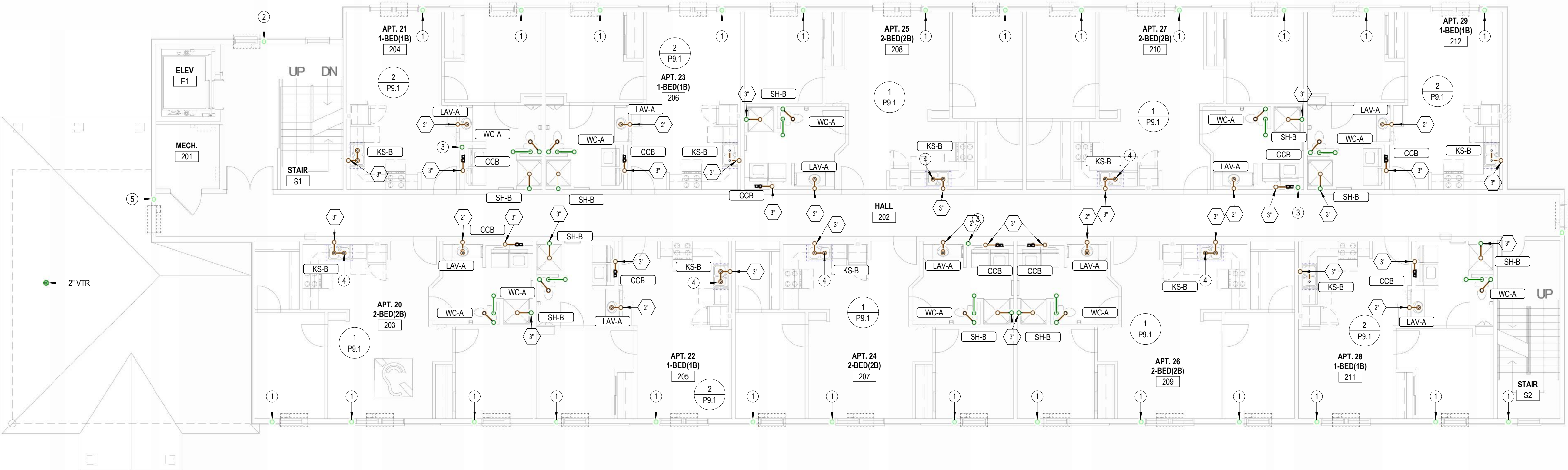
<div><div></div><div>X</div></div>	DRAIN (X = SIZE)
<div><div></div><div>X</div></div>	VENT (X = SIZE)
<div><div></div><div>X</div></div>	WASTE STACK VENT (X = SIZE)

NOTES BY SYMBOL

- 1 CONNECT 3/4" CONDENSATE DRAIN FROM EACH PTAC TO COMMON 1" CONDENSATE PIPE. ROUTE 1" CONDENSATE PIPE CONCEALED IN WALL AND TERMINATE WITH ELBOW DOWN AT 12" A.F.G., ABOVE SPLASH BLOCK. COORDINATE WITH G.C.
- 2 CONNECT 3/4" CONDENSATE DRAIN FROM EACH PTAC TO COMMON 1" CONDENSATE PIPE. ROUTE 1" CONDENSATE PIPE CONCEALED IN WALL AND TERMINATE WITH ELBOW DOWN AT 12" A.F.G. WHERE PTAC IS LOCATED ADJACENT TO EXTERIOR CONCRETE PAVING, SPILL CONDENSATE TO 2" OPEN HUB DRAIN, ROUTE 2" PVC PIPE BELOW GRADE TO DAYLIGHT. COORDINATE WITH CIVIL ENGINEER AND G.C.
- 3 4" PVC PIPE FOR RADON SYSTEM. COORDINATE EXACT REQUIREMENTS WITH ARCHITECT.
- 4 PROVIDE INDIRECT CONNECTION AT GARBAGE DISPOSER AND CONNECT DISHWASHER. ROUTE DRAIN FROM DISHWASHER AT BACK OF CABINETRY. COORDINATE EXACT ROUTING WITH G.C.
- 5 CONNECT 3/4" CONDENSATE DRAIN FROM PTAC AND ROUTE DOWN TO FLOOR DRAIN IN FIRST FLOOR MECHANICAL ROOM



2
P1.2
THIRD FLOOR WASTE AND VENT PLAN
1/8" = 1'-0"

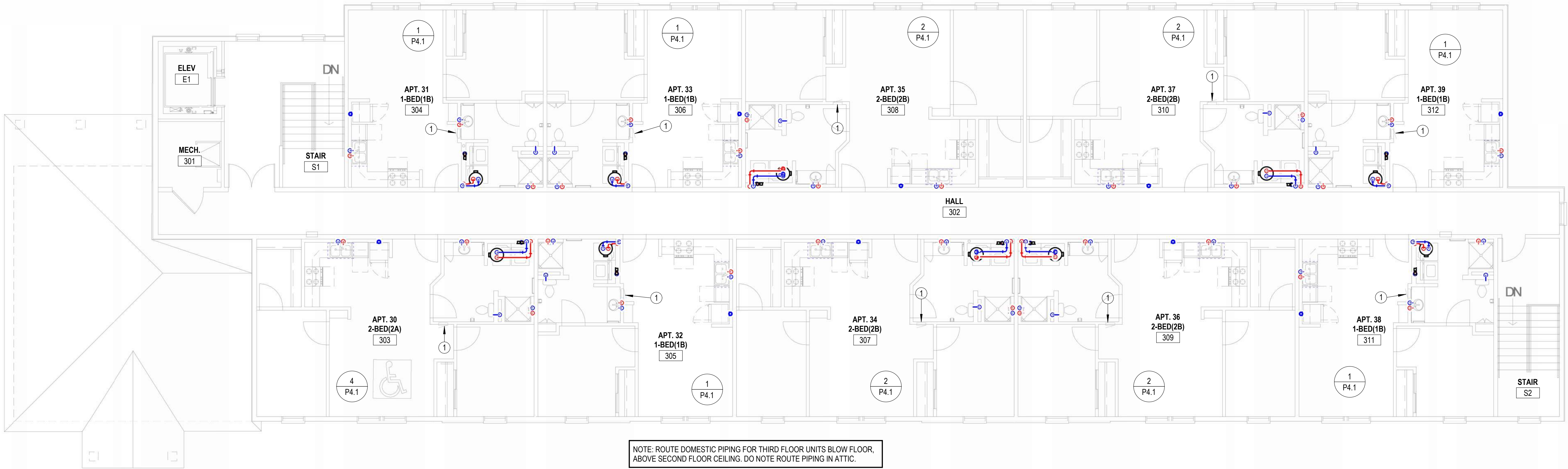


1
P1.2
SECOND FLOOR WASTE AND VENT PLAN
1/8" = 1'-0"

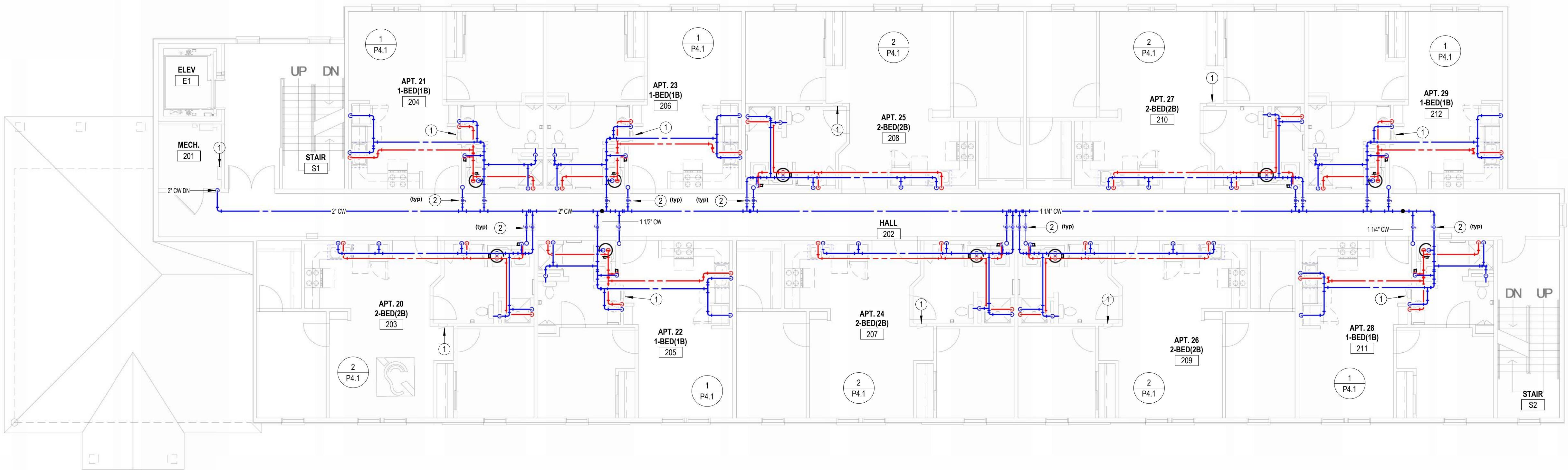
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JOB: 24-3395
SHEET NO.:

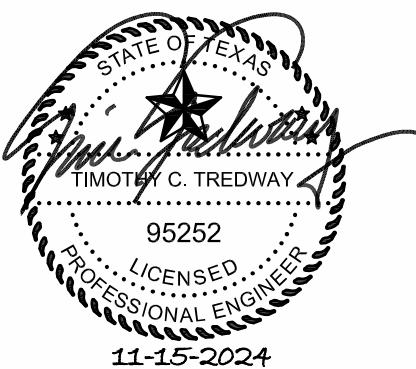
- NOTES BY SYMBOL
- 1 ELECTRICAL EQUIPMENT SHOWN FOR COORDINATION. DO NOT ROUTE PIPING ABOVE OR BELOW EQUIPMENT, AND MAINTAIN WORKING CLEARANCE SHOWN.
 - 2 PROVIDE 1" WATER SERVICE TO APARTMENT WITH SHUT-OFF VALVE. SEE TYPICAL APARTMENT RISER DIAGRAM ON SHEET P9.2 FOR ADDITIONAL INFORMATION.



2
P1.4
THIRD FLOOR DOMESTIC WATER PLAN
1/8" = 1'-0"



1
P1.4
SECOND FLOOR DOMESTIC WATER PLAN
1/8" = 1'-0"

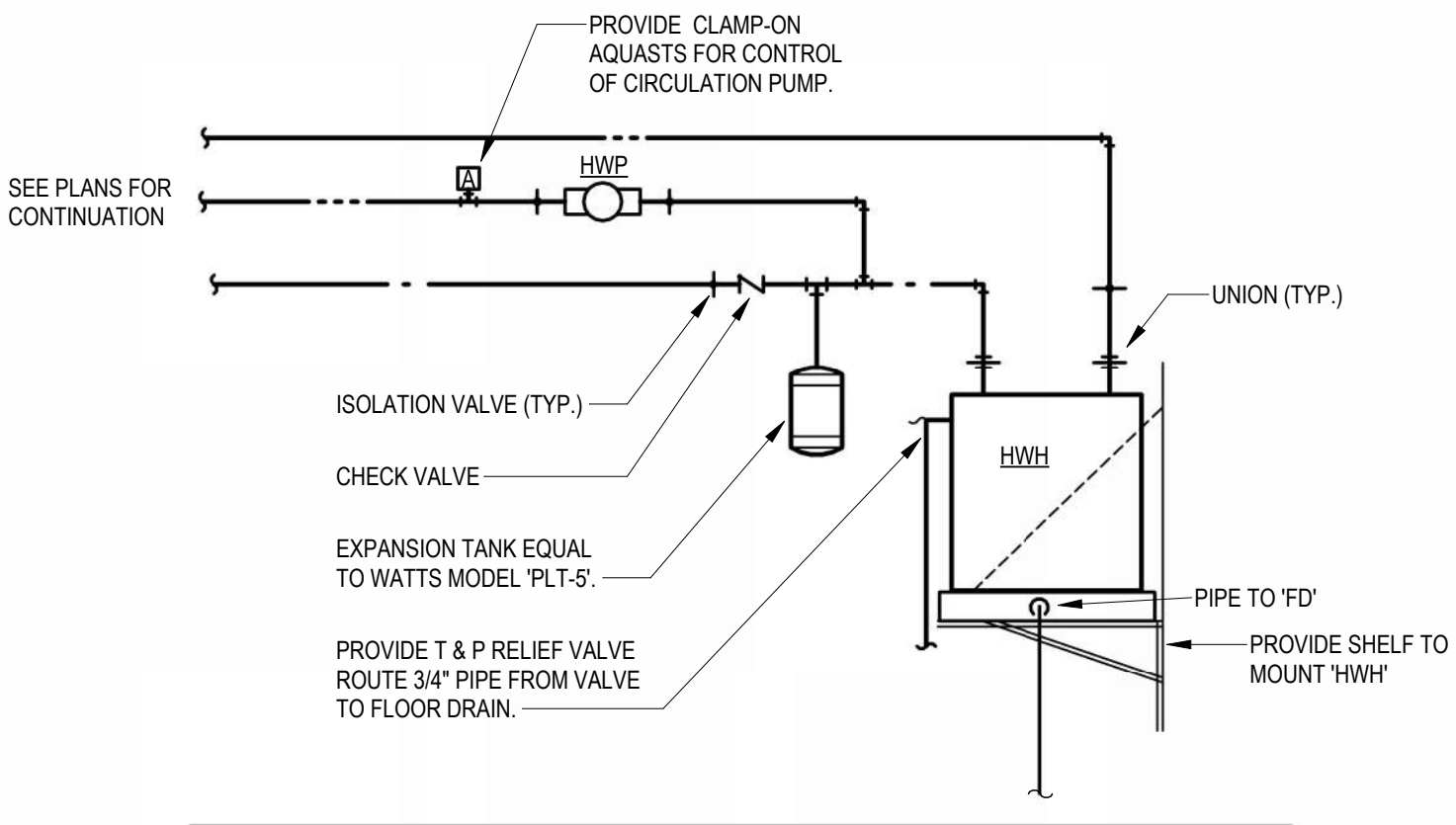


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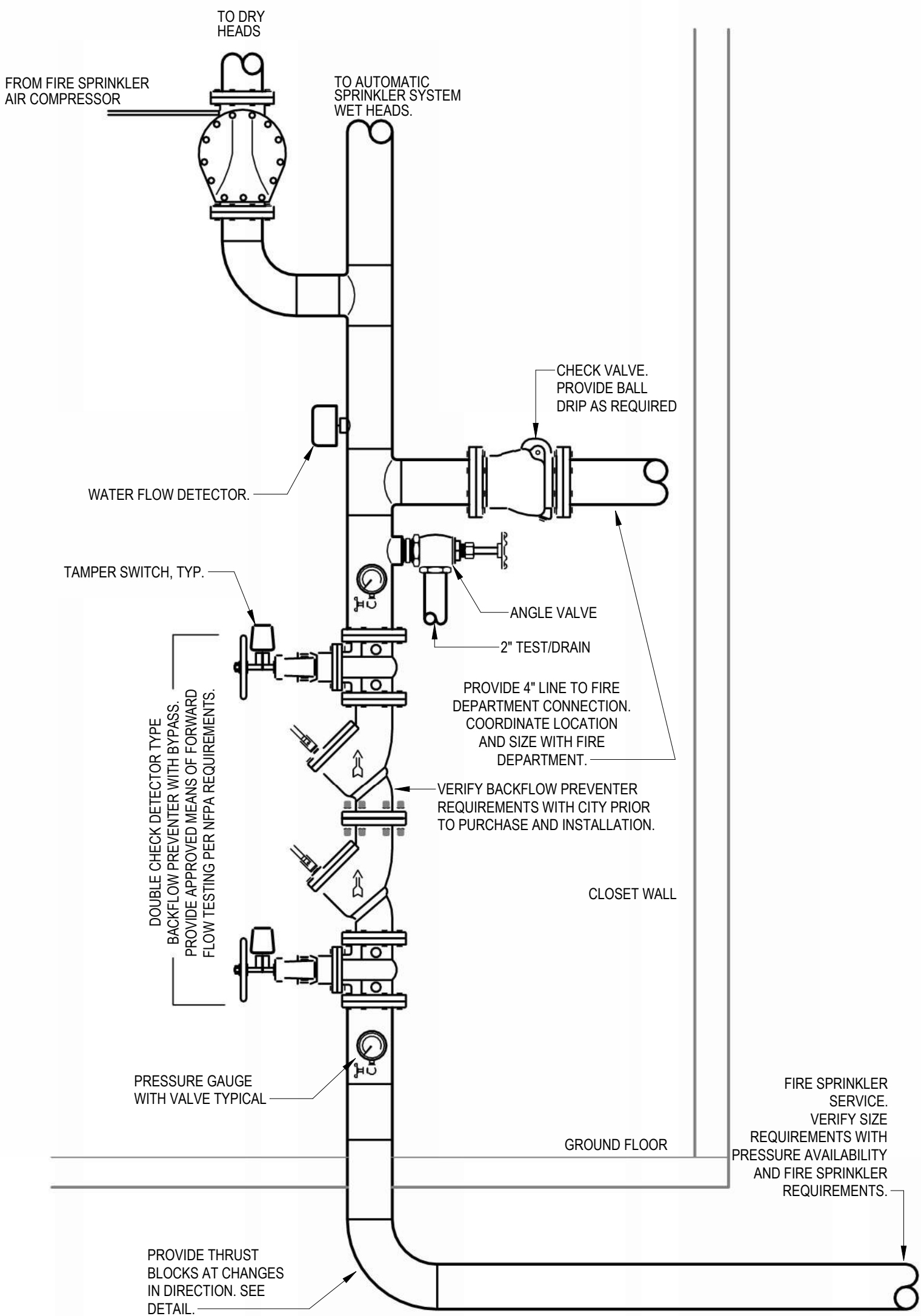
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JOB: 24-3395
SHEET NO.:

P6.1

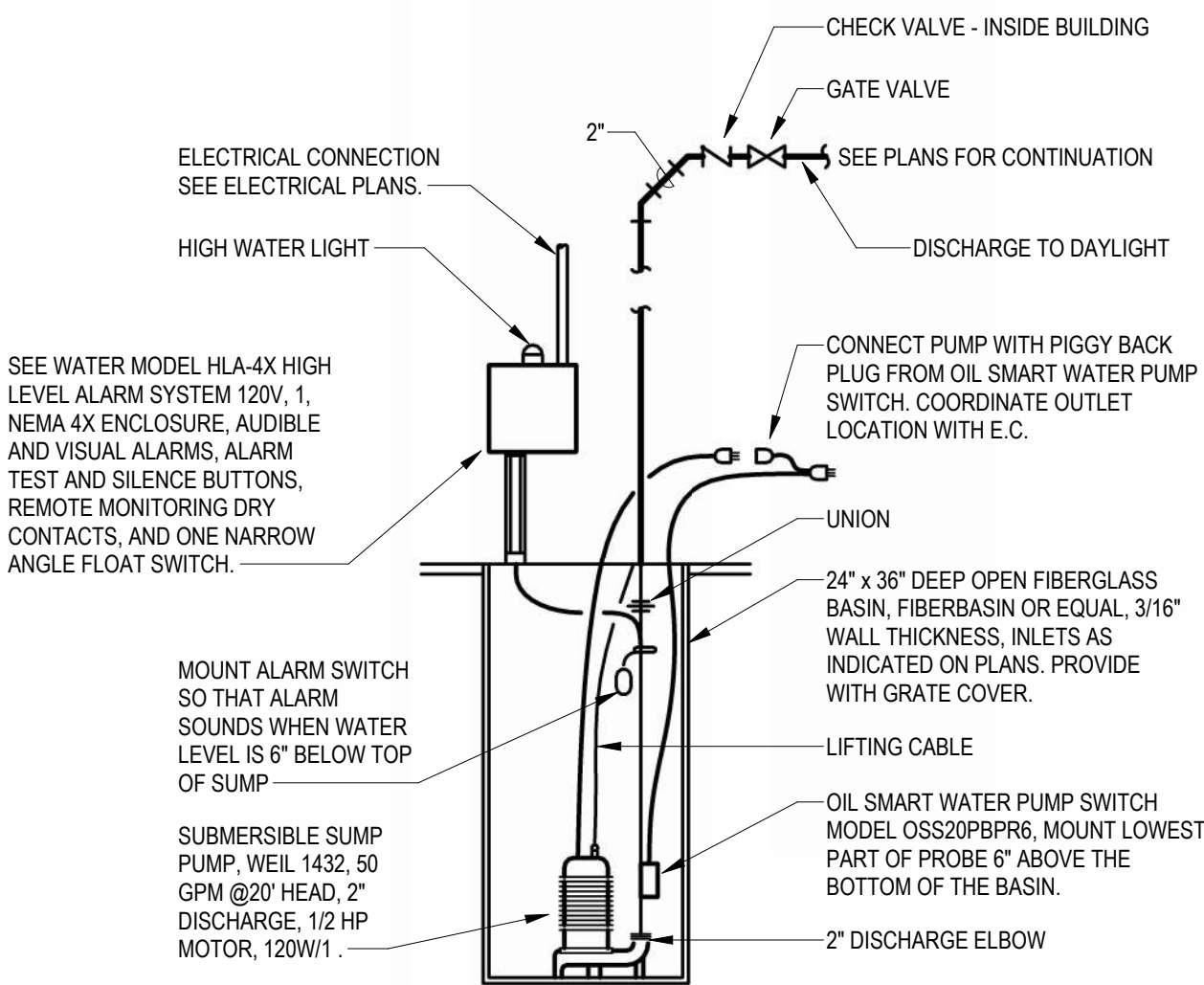
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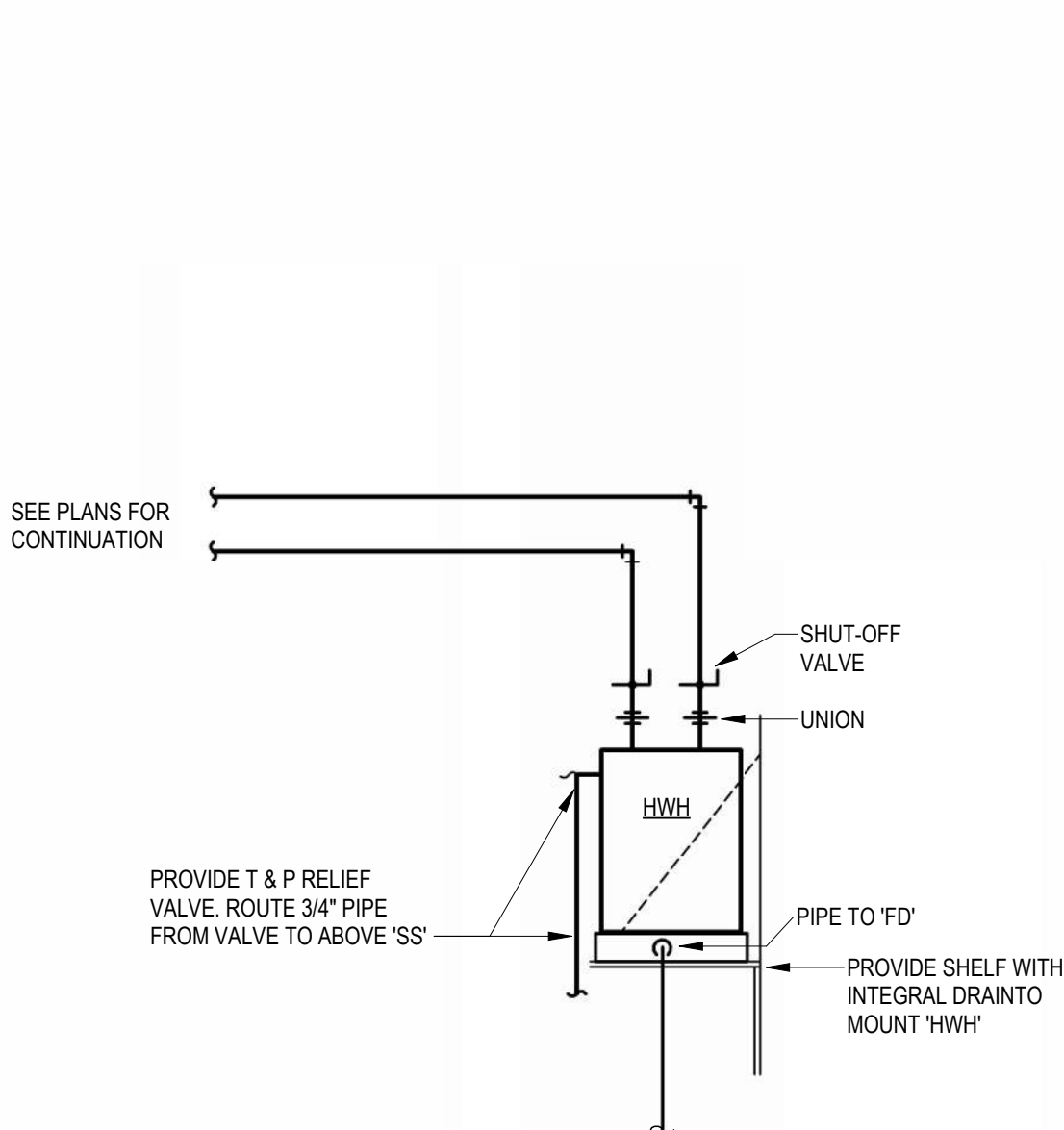
4 WATER HEATER ON SHELF PIPING DIAGRAM
P6.1 NOT TO SCALE



1 FIRE PROTECTION RISER DIAGRAM
P6.1 NOT TO SCALE



2 ELEVATOR SUMP PUMP
P6.1 12" = 1'-0"



3 APARTMENT WATER HEATER DIAGRAM
P6.1 NOT TO SCALE

Mark	Manufacturer	Model	Description	ADA	Trim Manufacturer M/N	Domestic Connections			Drain-Waste-Vent			Notes
						Cold Water	Hot Water	Piping Size(s)	Drain Size	DWV Tee	Vent Size	
CCB	IPS CORP.	W4700	Washing machine box with 2" PVC/ABS drain coupling and knockout test cap. Two, 1/4 turn adaptor ball valves, sweat connection.			Yes	Yes	1/2"	2"	2"	2"	
EW	Elkay	EMABFTLDDWSLK	Dual Height, self-contained water cooler with stainless steel basin, front and side push bar actuator, lead-free, 120v. Provide with EZH20 bottle filling station, and model 98313C accessory apron.	Yes		Yes	No	1/2"	1 1/4"	2"	2"	1
FD	Sioux Chief	833	Adjustable floor drain with nickel bronze strainer. Provide Proset trap protection device.						3"			
FS	Sioux Chief	861	PVC floor sink with PVC strainer. Porvide Proset Trappguard trap protection device.						4"			
ICB	IPS CORP.	FRIB12	Ice maker connection box with 1/4 turn ball valve and 1/2" sweat copper connection.			Yes	No	1/2"	2"			
KS-A	JUST	DL-ADA-2233-A-GR	Two compartment 20 GA stainless steel sink, self rimming, 14"x16"x8"D inside, fully undercoated, faucet holes as required. Single handle kitchen sink faucet with hose spray, and basket strainer. IN-SINK-ERator: "Badger 5" garbage disposal, 1/2hp, 120V cord and plug connected.	Yes	Kohler / K-10412	Yes	Yes	1/2"	2"	2"	2"	1,2,3,4,5
KS-B	JUST	DL-2233-A-GR	Two compartment 20 GA stainless steel sink, self rimming, 14"x16"x5"D inside, fully undercoated, faucet holes as required, and drain holes center rear. Single handle kitchen sink faucet with hose spray, and basket strainer. IN-SINK-ERator: "Badger 5" garbage disposal, 1/2hp, 120V cord and plug connecte	No	Kohler / K-10412	Yes	Yes	1/2"	2"	2"	2"	1,2,3,4,5
LAV-A	KOHLER	2196-4-0	20"W x 17" Self-Rimming lavatory. Faucet holes On 4" Centers. Single handled 0.5 GPM faucet. Provided with pop-drain.	Yes	Kohler / 1518-4NDRA	Yes	Yes	1/2"	2"	2"	2"	1,2,3
LAV-B	KOHLER	2196-4-0	20"W x 17" Self-Rimming lavatory. Faucet holes On 4" Centers. Single handled 0.5 GPM faucet. Provide with grid drain, point of use thermostatic mixing valve, and chrome plated or braided stainless steel domestic water supply lines.	Yes	Kohler / 1518-4NDRA	Yes	Yes	1/2"	2"	2"	2"	1,2,3
SH-A	AQUA BATH CO.	C4136BF-OT-FUS 3/4"	Center drain option, reinforced fiberglass ADA roll-in shower, 36"Wx36"Dx80"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. Entire assembly shall have nickel finish. Max 2.0 GPM	Yes	Kohler / K-8304-KS pressure balancing valve with integral temperature limits and stops / K-TS10583-4 valve trim / K-22173 wall supply elbow / K-9514 60" hose / K-22163 hand shower / K-8524 and K-349 slide bar.	Yes	Yes	1/2"	2"	2"	2"	1
SH-B	AQUA BATH CO.	C4136BF-OT-FUS 3/4"	Center drain option, reinforced fiberglass ADA base model shower, 36"Wx36"Dx80"H with integral soap/toiletry shelves in accordance with ADA requirements, right or left hand rough-in as required, white finish. Provide with collapsible dam and blocking for grab bars and seat to be added at tenant's request. Entire assembly shall have nickel finish. Max 2.0 GPM	Yes	Kohler / K-8304-KS pressure balancing valve with integral temperature limits and stops / K-TS10583-4 valve trim	Yes	Yes	1/2"	2"	2"	2"	
SS	FIAT	MSB-2424	One piece molded stone mop basin, 24" square, stainless steel integral drain body with caulk connection, stainless steel wall gaurds. Faucet with hose thread outlet, vacuum breaker, pail hook, wall brace, and metal lever handles.	No	Delta / 28T9	Yes	Yes	3/4"	3"	3"	3"	4
WC-A	KOHLER	5296 Highline	Two piece, 12" rough-in, elongated 16-1/2" high bowl, siphon jet flushing action, actuator located on open side of room. Elongated closed front seat and cover. Provide with 1/4" brass ball valve at wall connection.	No	Kohler / K-5588	Yes	No	1/2"	4"	2"	2"	1
WC-B	KOHLER	5296 Highline	Two piece, 12" rough-in, elongated 16-1/2" high bowl, siphon jet flushing action, actuator located on open side of room. Elongated closed front seat and cover. Provide with 1/4" brass ball valve at wall connection.	Yes	Kohler / K-5588	Yes	No	1/2"	4"	2"	2"	1
WH	Woodford	67	Non-Freeze Type Wall Hydrant, With Double Check Backflow Preventer, Valve On The Inside Of The Wall. Spout With Backflow Preventer, No And Loose Key Socket On The Outside Of The Wall. Make Arrangements With The General Contractor To Provide The Necessary Recess In The Wall. Where A Riser To A Wall Hydrant Occurs In An Outside Wall The Contractor Shall Insulate The Chase With 2" Styrofoam Insulation On All Sides Of The Chase, Except The Inside Wall Of The Chase. Provide Shutoff Valve In Accessible Location.	No		Yes	No	3/4"				

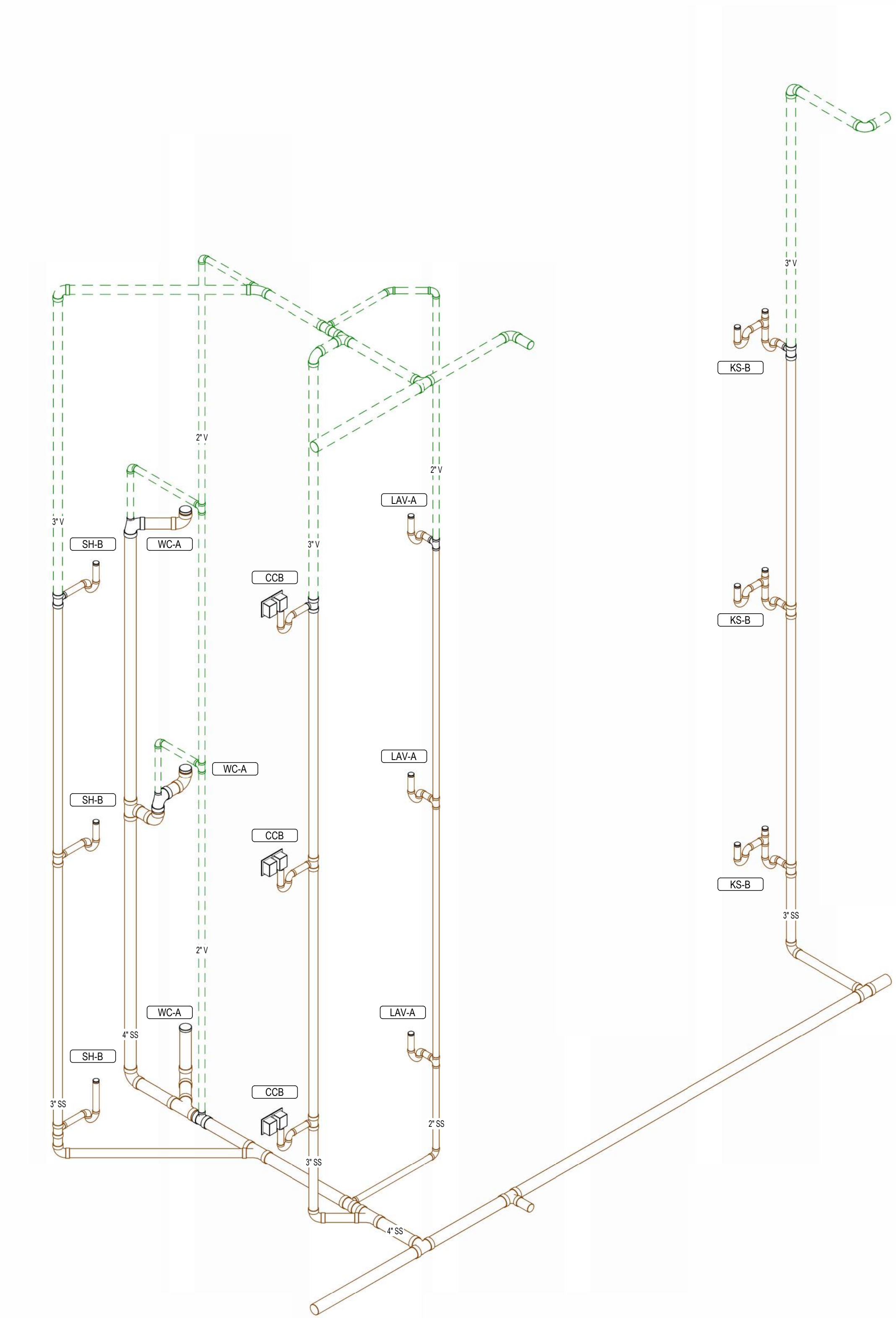
GENERAL:
• Provide fixtures with all trim necessary for complete installation.
• All toilets, lavatory faucets, showerheads, and kitchen faucets shall have EPA's WaterSense label.

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 fixture. 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.

Domestic Water Equipment Schedule				
Mark	Manufacturer	Model	Specification	Notes
HWH	AO Smith	ENJ-40	40 Gallon electric water heater, 0.93 UEF, 4500 watts, 208v heating element, 21 GPH recovery @ 90°F temp rise. Supplied with temperature and pressure relief valve and brass drain valve. Water heater shall have temperature controls set to limit supply temperature to 120°F or less. Provide wall hung platform for water heater equal to Holdrite #60-SWHP-W. Coordinate exact location a mounting height with Architect.	1
HWP	Bell & Gossett	NBF-33	Circulation pump, bronze body, 10 GPM @ 10' head, 120 VAC. Provide clamp-on aquastat for pump control.	2

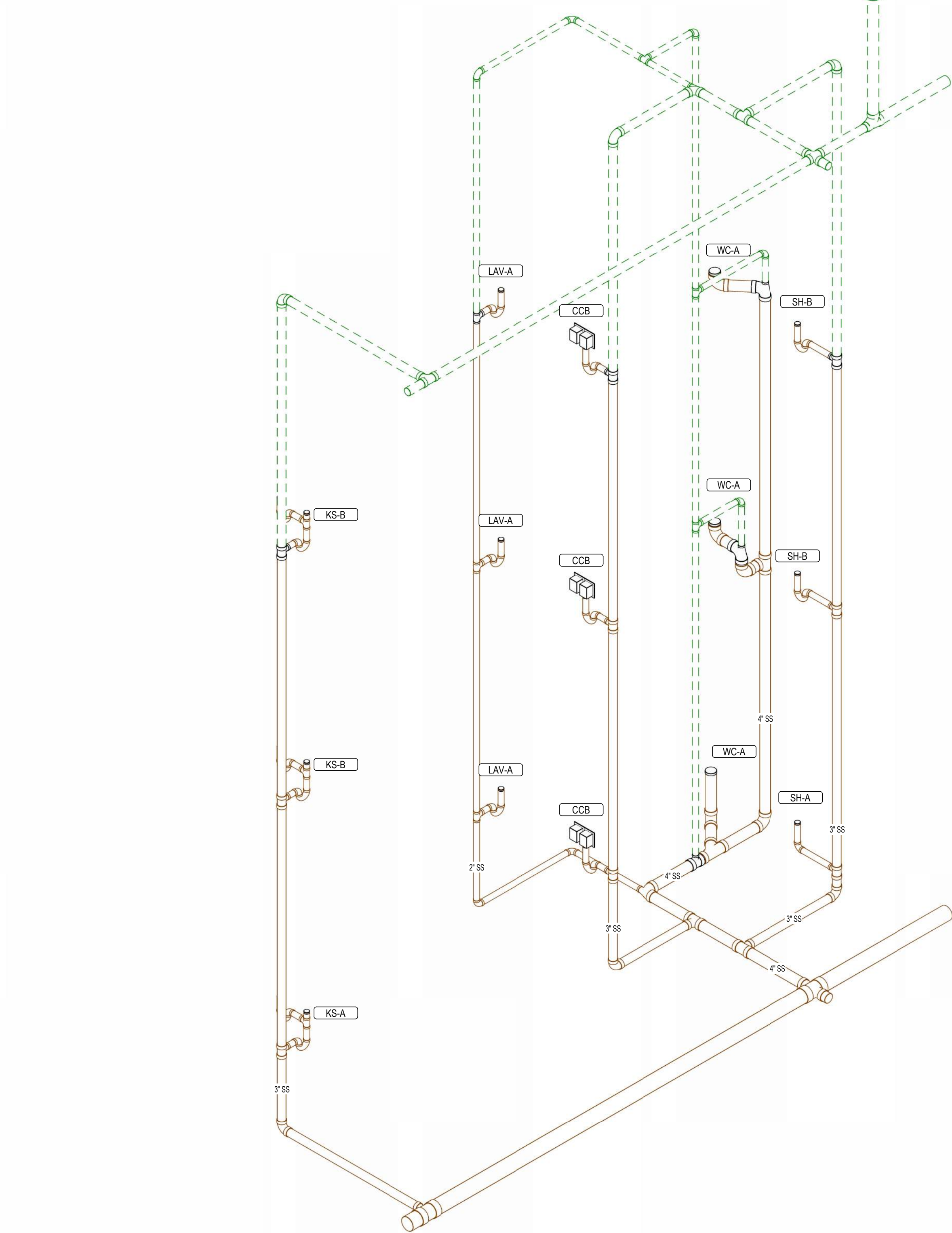
GENERAL:
• Provide fixtures with all trim necessary for complete installation.

NOTES:
1. Provide wall hung platform for water heater equal to Holdrite #60SWHP-W. Coordinate exact location and mounting with height with architect.
2. 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.



1
P9.1

TYPICAL 2 BED ROOM WASTE AND VENT RISER

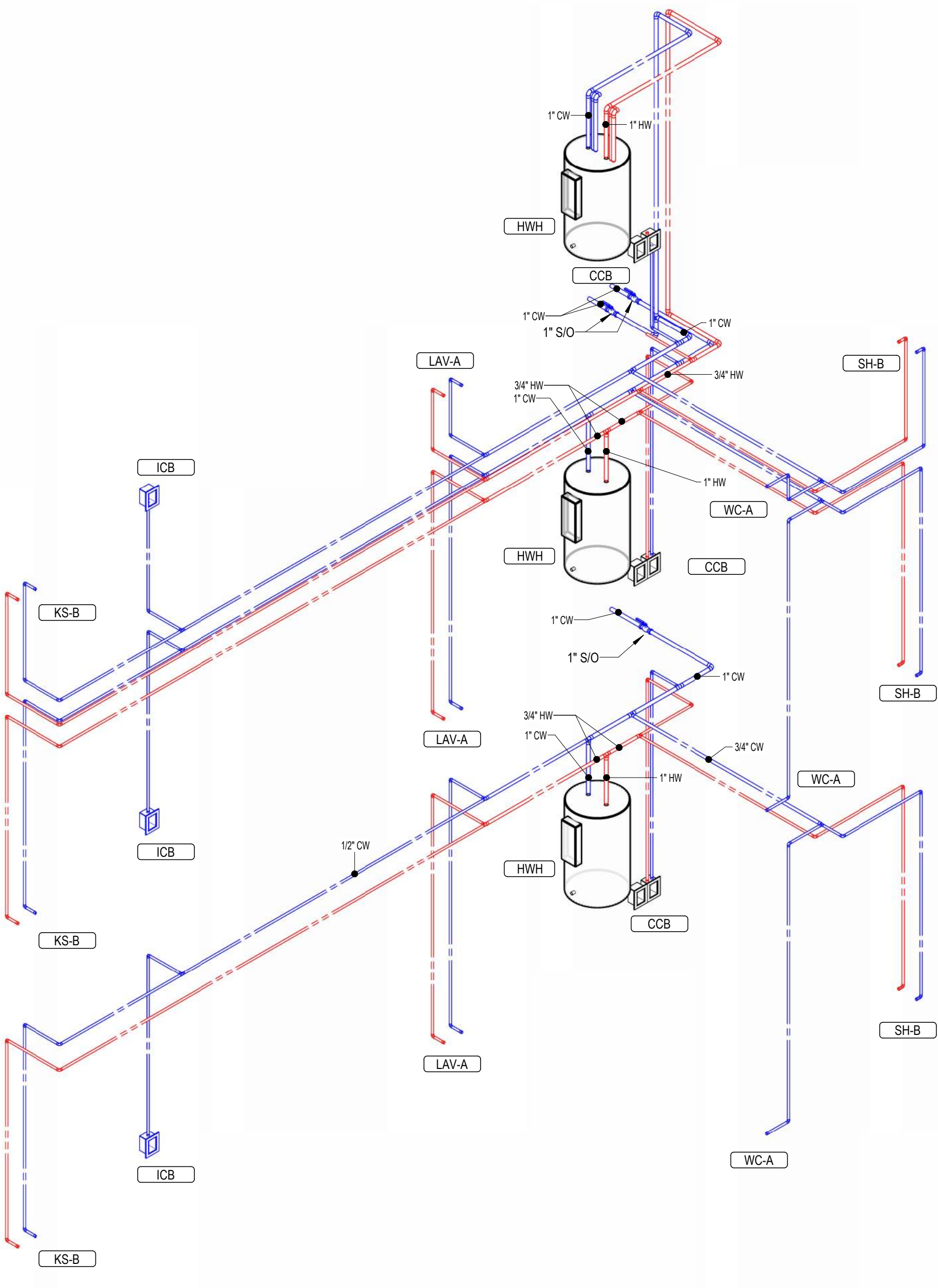


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P9.1

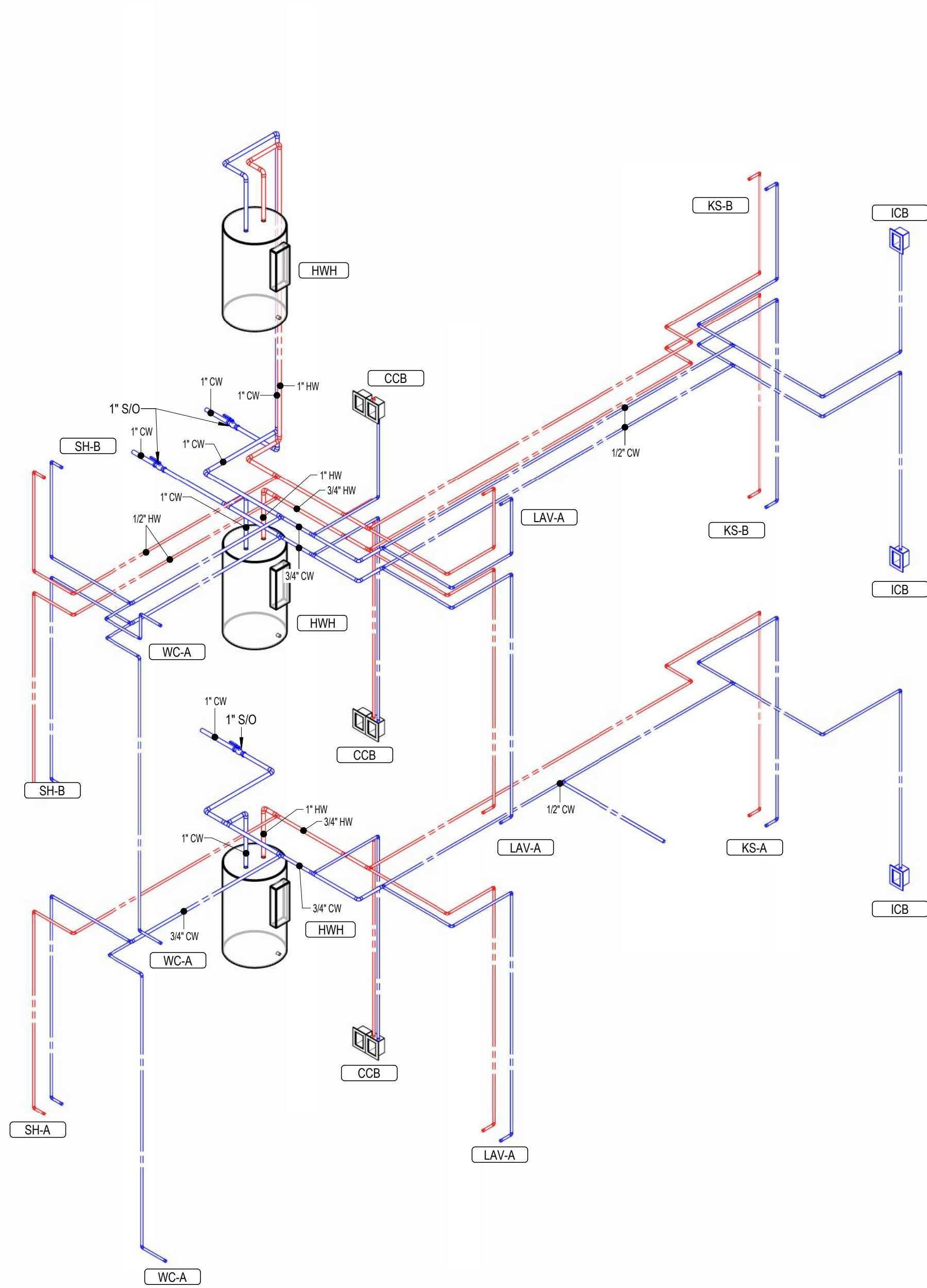
TYPICAL 1 BED ROOM WASTE AND VENT RISER



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JOB:	24-3395
SHEET NO.:	



2
P9.2 TYPICAL 2 BED ROOM DOMESTIC WATER RISER

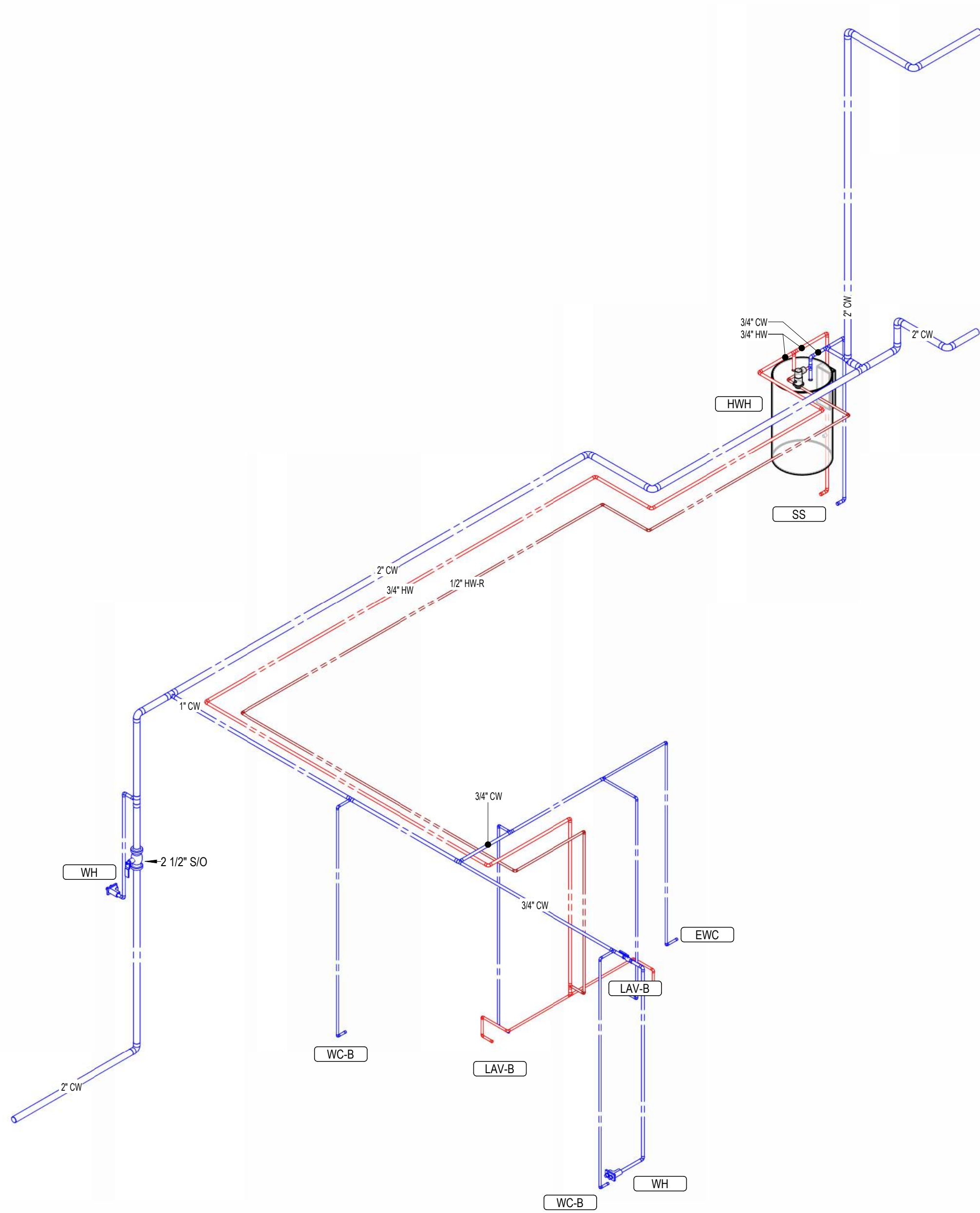


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P9.2 TYPICAL 1 BED ROOM DOMESTIC WATER RISER

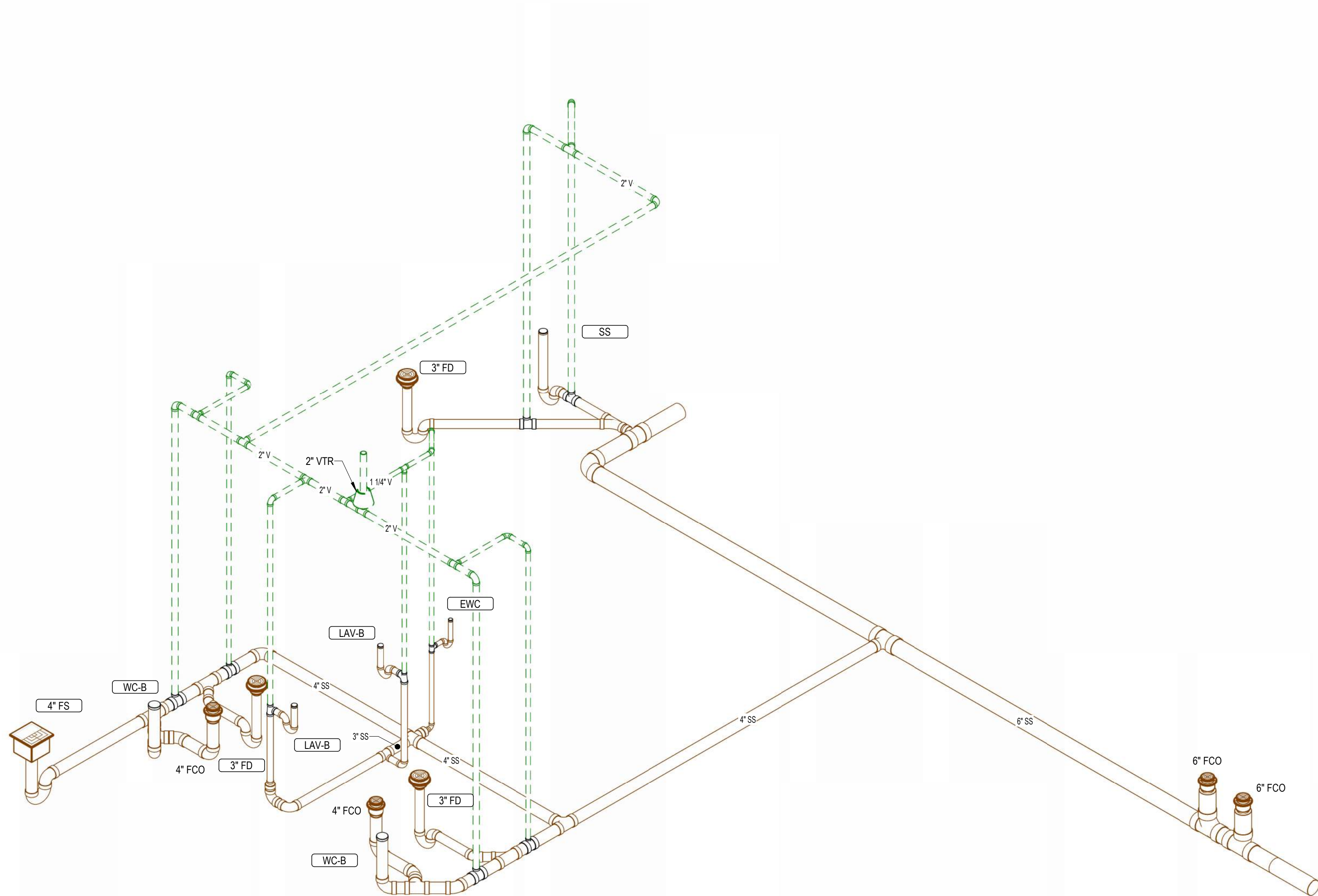
NOTE: ROUTE DOMESTIC PIPING FOR 3RD FLOOR UNITS BLOW FLOOR, ABOVE 2ND FLOOR CEILING.
DO NOTE ROUTE PIPING IN ATTIC.



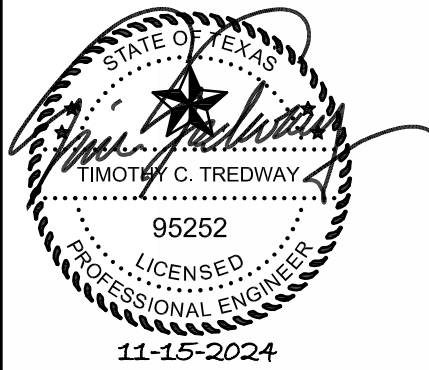
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2 DOMESTIC WATER RISER DIAGRAM
P9.3 NO SCALE



1 WASTE & VENT RISER DIAGRAM
P9.3 NO SCALE



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