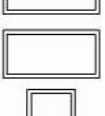



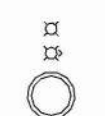










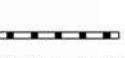







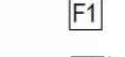
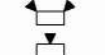


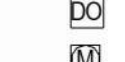




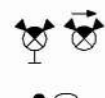

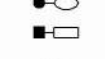




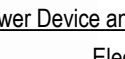





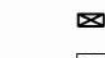








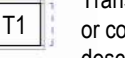
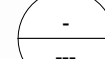


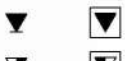






Electrical Symbol Legend

Lighting Symbols	Power Symbols
 <p>Lighting Fixtures, Typical, Rectangular (Various Symbols)</p>	   <p>Simplex Receptacle</p>
 <p>Lighting Fixtures, Typical, Round (Various Symbols) Center dot indicates pendant. Chevron indicates wall wash.</p>	   <p>Duplex Receptacle Quadplex Receptacle Special Receptacle, Type as Indicated</p>
 <p>Wall-mounted fixtures, Typical (Various Symbols)</p>	<p>Receptacle Modifiers:</p>      <p>Half shading indicates split (typically switched) Outside shading indicates tamperproof device Center shading indicates GFI type Full shading indicates tamperproof GFI type</p>
 <p>Strip Fixture</p>	 <p>Multiolet Assembly Filled squares indicate 120V outlet Open squares indicate with USB</p>
 <p>Directional Light, Track Light, Flood Light</p>	 <p>Cord Reel, Device Varies</p>
 <p>Linear Light, Tape Light</p>	 <p>Drop Cord, Device Varies</p>
 <p>Emergency Lighting Unit, Ceiling-Mounted, Integral Battery</p>	 <p>Junction Box</p>
 <p>Emergency Lighting Unit, Ceiling-Mounted, Remote Battery</p>	 <p>Floor Box, see schedule for type</p>
 <p>Emergency Lighting Unit, Wall-Mounted, Integral Battery</p>	 <p>Emergency Power Off</p>
 <p>Emergency Lighting Unit, Wall-Mounted, Remote Battery</p>	 <p>Door Opener Push Plate</p>
 <p>Exit Light, Ceiling-Mounted. Shading and arrows indicate faces and directional chevrons.</p>	 <p>Power Meter</p>
 <p>Exit Light, Wall-Mounted. Shading and arrows indicate faces and directional chevrons.</p>	 <p>Safety Switch, Fused</p>
 <p>Exit/ELU Combo</p>	 <p>Safety Switch, Unfused</p>
 <p>Pole/Area Lights</p>	 <p>Motor Starter</p>
 <p>Post-Top Area Light</p>	 <p>Combination Starter/Disconnect</p>
 <p>Bollard Light</p>	 <p>Contactor</p>
 <p>Hatch indicates light on an emergency or life safety circuit.</p>	<p>Power Device and Equipment Tags</p> <p>LPIA-1: Electrical Device Tags: Uppercase letter(s) indicates Panel ID and circuit number. Lowercase letter indicates designation of controlling switch (where applicable).</p>
 <p>Single-Pole Switch</p>	<p>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.</p>
 <p>Two-Pole Switch</p>	 <p>XK-1</p>
 <p>Three-Pole Switch</p>	<p>Wiring</p> <p>Solid, arc'd lines connecting equipment, devices, or fixtures indicate unscheduled 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.</p>
<p>Switch Modifiers:</p> <p>3: 3-Way OS: Occupancy Sensor 4: 4-Way VS: Vacancy Sensor K: Keyed CT: Above-Counter D: Dimming LV: Low-Voltage T: Timer M: Motor-Rated</p>	<p>Dashed, arc'd lines connecting equipment, devices, or fixtures indicate switched power.</p>
 <p>Lighting Control Panel</p>	<p>Home run to branch circuit panelboard: The equipment name and circuit number(s) are indicated, separated by a hyphen. Home runs are only intended to indicate panel and circuit number. Actual homerun location shall be field-determined by the contractor.</p>
 <p>Occupancy Sensor</p>	<p>Power Distribution Equipment</p>
 <p>Daylight Harvesting Sensor</p>	 <p>SB1</p>
<p>Lighting Tags</p> <p>Top Value: Fixture Type ID (Underlined) MDP-1a Bottom Value, Lowercase Letter: Switch ID Bottom Value, Number(s): Circuit Number Bottom Value, Uppercase Letter(s): Panel</p> <p>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.</p>	 <p>MDP</p>  <p>HP1A</p>  <p>LPIA</p>
<p>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.</p>	<p>Hatched fill indicates distribution panel or switchboard. Solid fill indicates branch panel or load center. Dashed box indicates code-required clearance (width and depth). Dots indicate front of recessed panel.</p>
<p>Miscellaneous</p>  <p>Area Not in Contract</p>	<p>Devices and fixtures are tagged with Panel and circuit number. For example, a device tagged with "A:1" indicates the device is circled to panel designated "A," circuit number 1.</p>
 <p>Note by Symbol</p>	 <p>T1 Transformer. Typically transformer names begin with and contain the letter "T". See Single-Line Diagram for description and requirements.</p>
 <p>Callout: Top Value: Detail Number on Sheet Bottom Value: Sheet Number of Detail</p>	<p>Telecom Symbols</p>
 <p>Room 1 Room Name and Number</p>	 <p>Data Outlet</p>
	 <p>Telephone Outlet</p>
	 <p>Data/Telephone Outlet</p>
	<p>Outlet Modifiers:</p>   <p>Wireless Access Point</p>
	 <p>TV Outlet</p>

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 UNBUSHED-RED-HOT CONDUIT, UPSTREAM OF ALL CONTROLS.
- C. DIRECT CURRENT POWER WIRING FROM EXISTING 12VTS TO REMOTE EXTERIOR EMERGENCY LIGHTING HEADS SHALL BE (2) #10 IN 1" CONDUIT UNLESS NOTED OTHERWISE.
- D. IN AREAS WHERE CEILING MOUNTED OCCUPANCY SENSORS ARE USED FOR LIGHTING CONTROL, IN CONJUNCTION WITH WALL SWITCHES, OCCUPANCY SENSORS AND POWER PULSES TO SWITCH LEGS SHALL BE WIRED IN SERIES WITH WALL SWITCHES TO PROVIDE OVERCURE "OFF" CONTROL FOR LIGHTS.
- E. CONTROL WIRING FOR 0-10 Vdc 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 THW OR TFN CONDUCTORS. CONDUIT/INSULATION COLOR SHALL BE VIOLET (-Vdc) AND PINK (+Vdc). WHERE MC-CABLE IS USED FOR FINAL 6" POWER CONNECTION WHIP 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 MECHANICAL CONTRACTOR. COORDINATE WITH ELECTRICAL CONTRACTORS. COORDINATE CONDUIT STRUT-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 STRUT OUT TO ABOVE ACCESSIBLE CEILING WITH NYLON BUSHINGS AND PULLSTRINGS 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:

- 1. WALL PHONE OUTLET: 2"x4"x2-1/8" DEEP DEVICE BOX WITH (1) 3/4" CONDUIT TO ABOVE ACCESSIBLE CEILING.
- 2. 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.
- 3. 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 EACH CONDUIT END NOT CONNECTED TO A BOX OR FITTING TO PROTECT CABLE FROM DAMAGE.

C. CONDUITS FROM EACH OUTLET SHALL BE STUBBED 2" ABOVE THE FINISHED CEILING AREAS AND 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.

GENERAL FIRE ALARM NOTES

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

B. AT LOCATION OF SMOKE DAMPERS AND COMBINATION FIRE/SMOKE DAMPERS, PROVIDE DUCT OR AREA SMOKE DETECTOR (AS SHOWN ON PLANS) WITHIN 5' OF DAMPER. 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.

C. 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 (DIELECTRIC SURGE PROTECTOR) FOR EACH MONITORED VALVE. COORDINATE WITH AND OBTAIN WORK CONTACTOR FOR ALL VALVES INSTALLED. MONITORING IS NOT REQUIRED FOR VALVES INSTALLED IN ROADWAY BOXES BY THE MUNICIPALITY/PUBLIC UTILITY.

Electrical Sheet List	
E1.1	ELECTRICAL PLANS
E1.2	ELECTRICAL PLANS
E1.3	SPECIAL SYSTEMS PLANS
E1.4	SPECIAL SYSTEMS PLANS
E4.1	ENLARGED ELECTRICAL PLANS
E4.2	ENLARGED ELECTRICAL PLANS
E6.1	ELECTRICAL SCHEDULES AND DETAILS
E6.3	ELECTRICAL SCHEDULES
E0.1	ELECTRICAL TITLE SHEET
E6.2	ELECTRICAL LOAD AND RISER DIAGRAMS

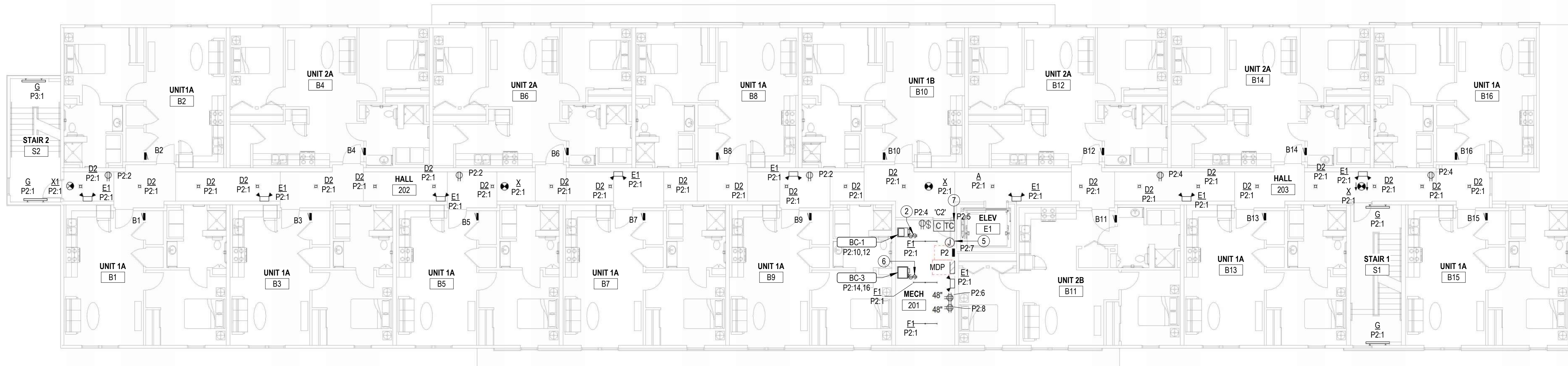
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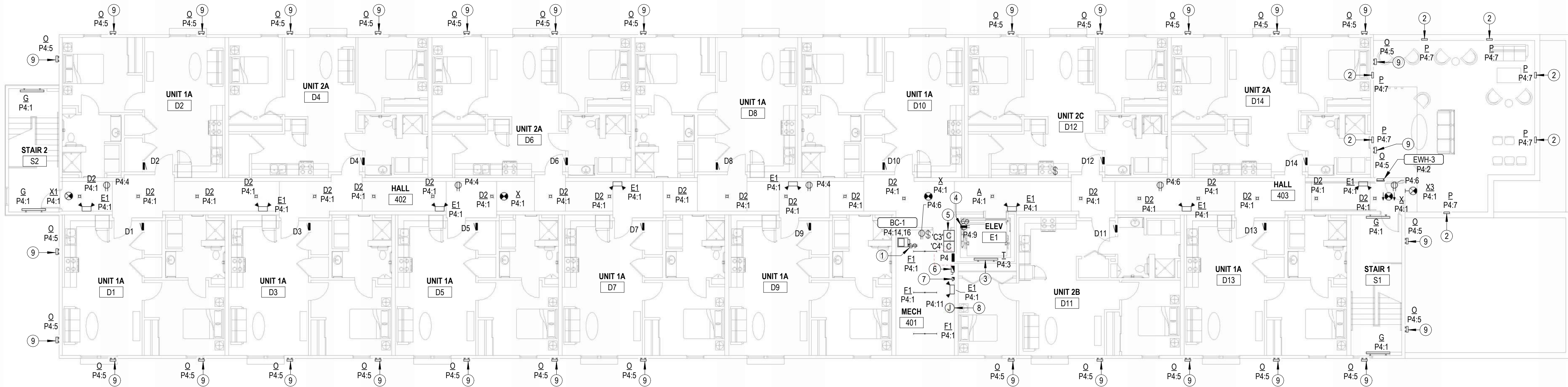


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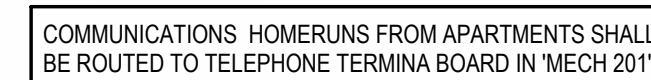
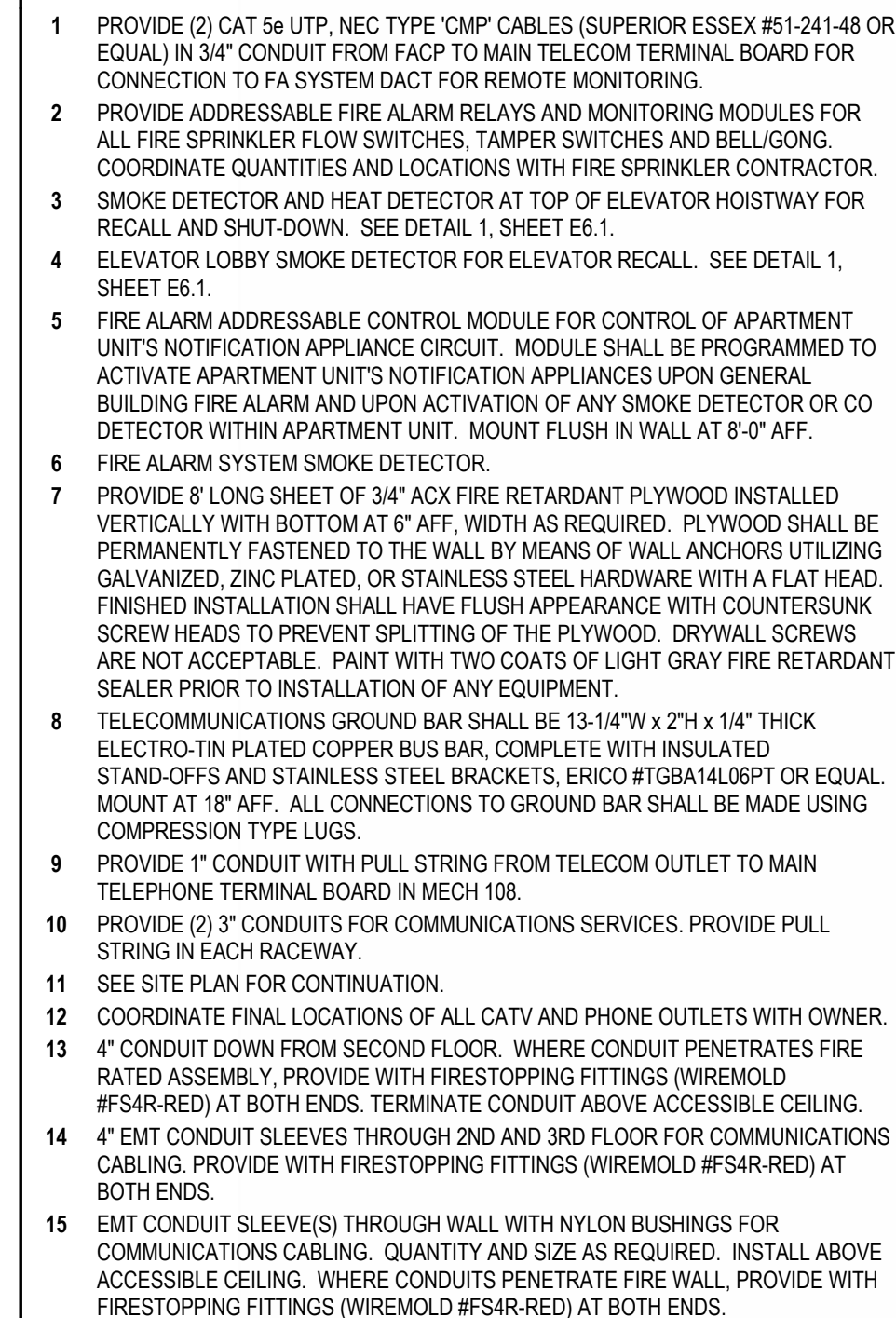


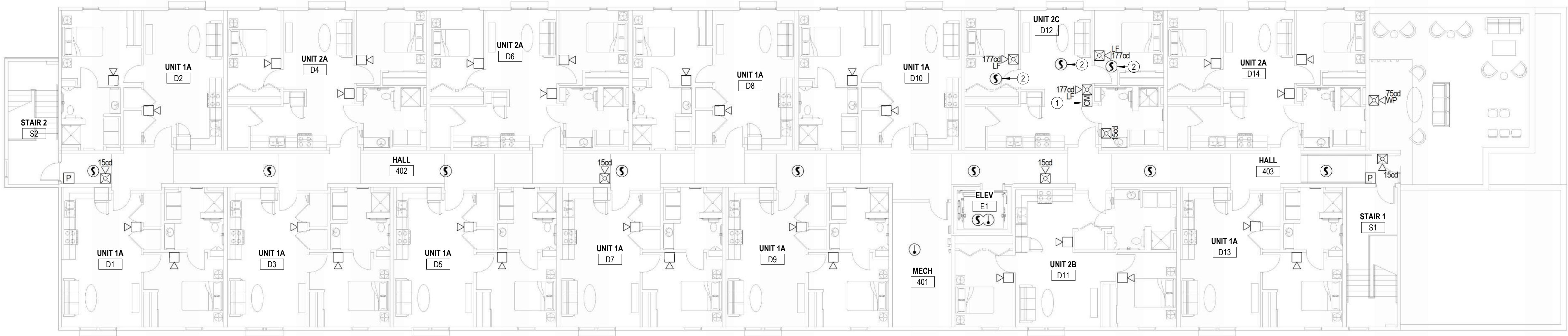


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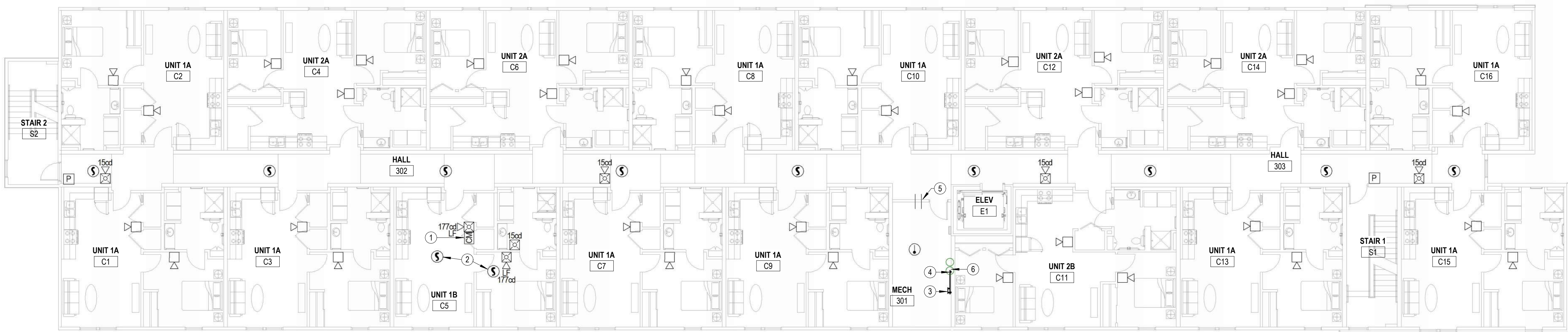
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COMMUNICATIONS HOMERUNS FROM APARTMENTS SHALL BE ROUTED TO TELEPHONE TERMINAL BOARD IN MECH 301

2
E1.4
FOURTH FLOOR SPECIAL SYSTEMS PLAN
3/32" = 1'-0"



1
E1.4
THIRD FLOOR SPECIAL SYSTEMS PLAN
3/32" = 1'-0"

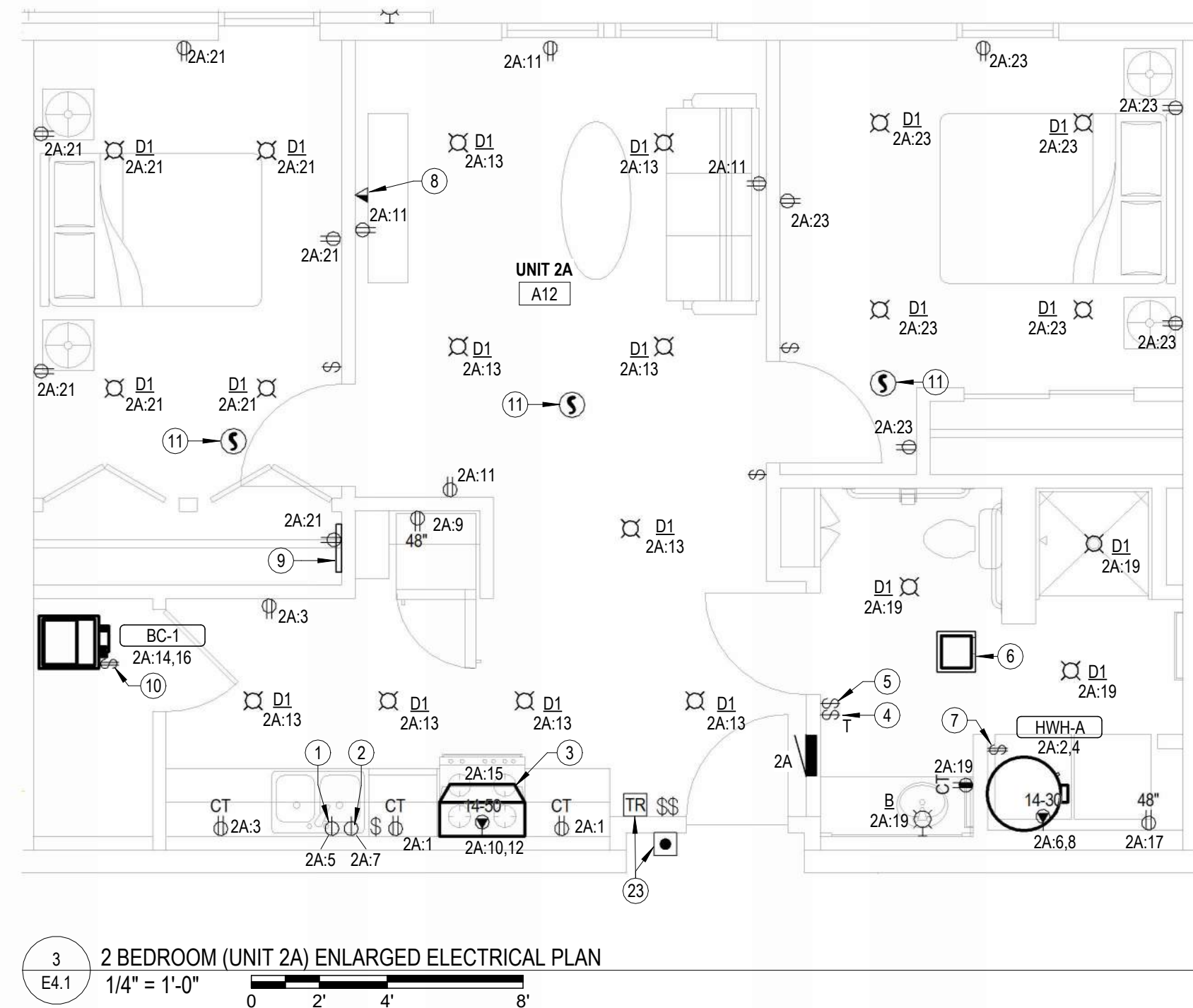
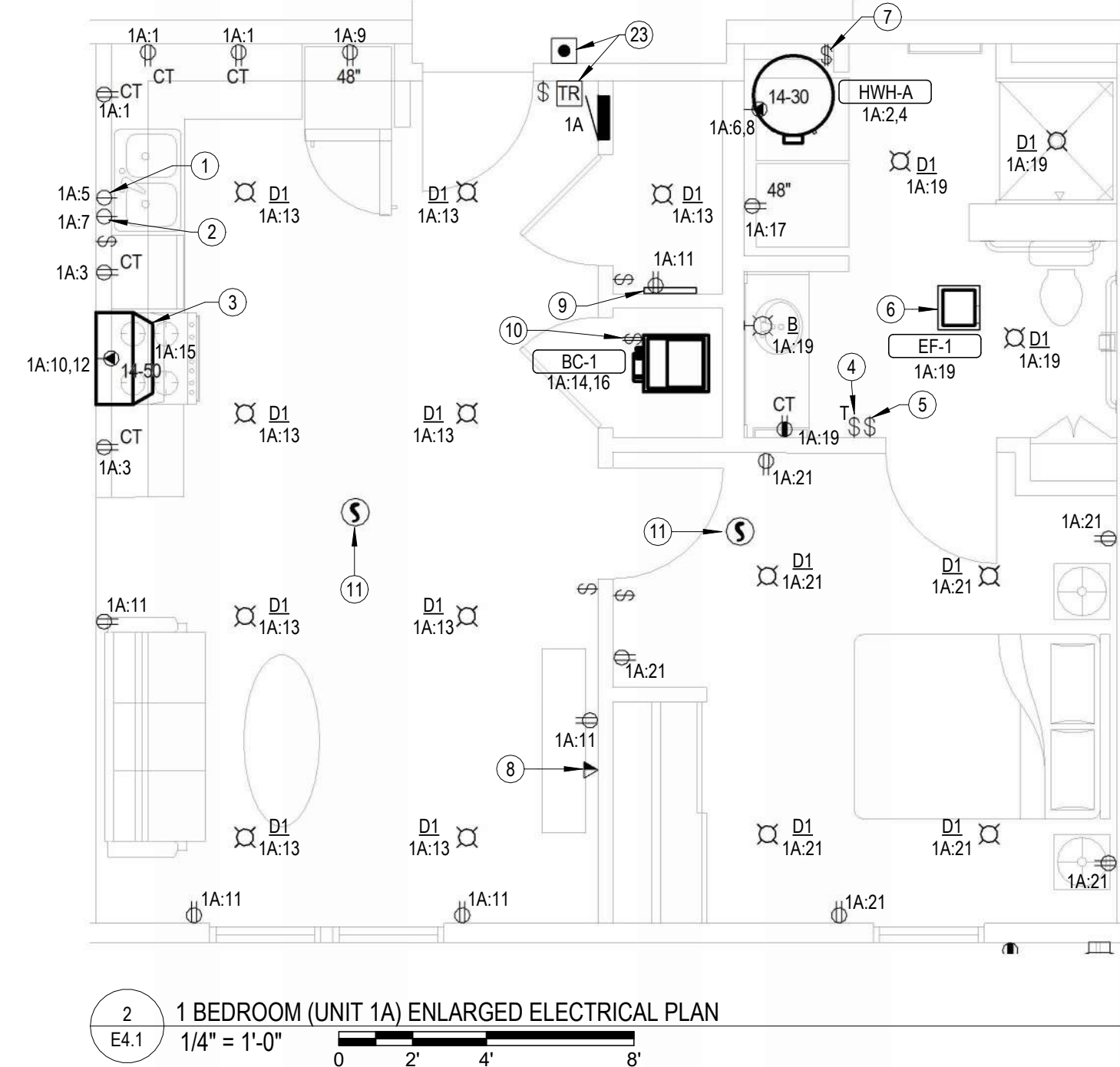
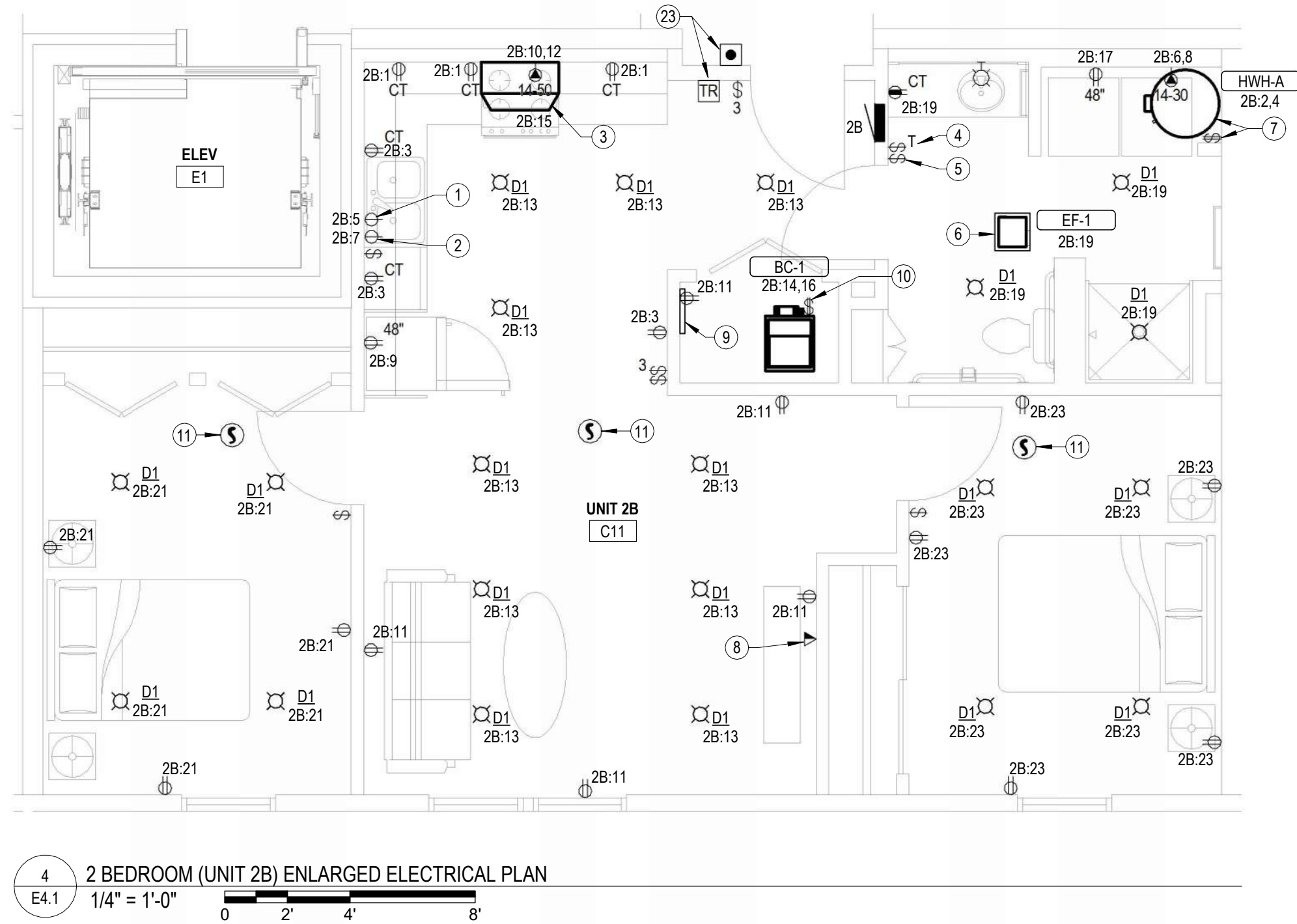
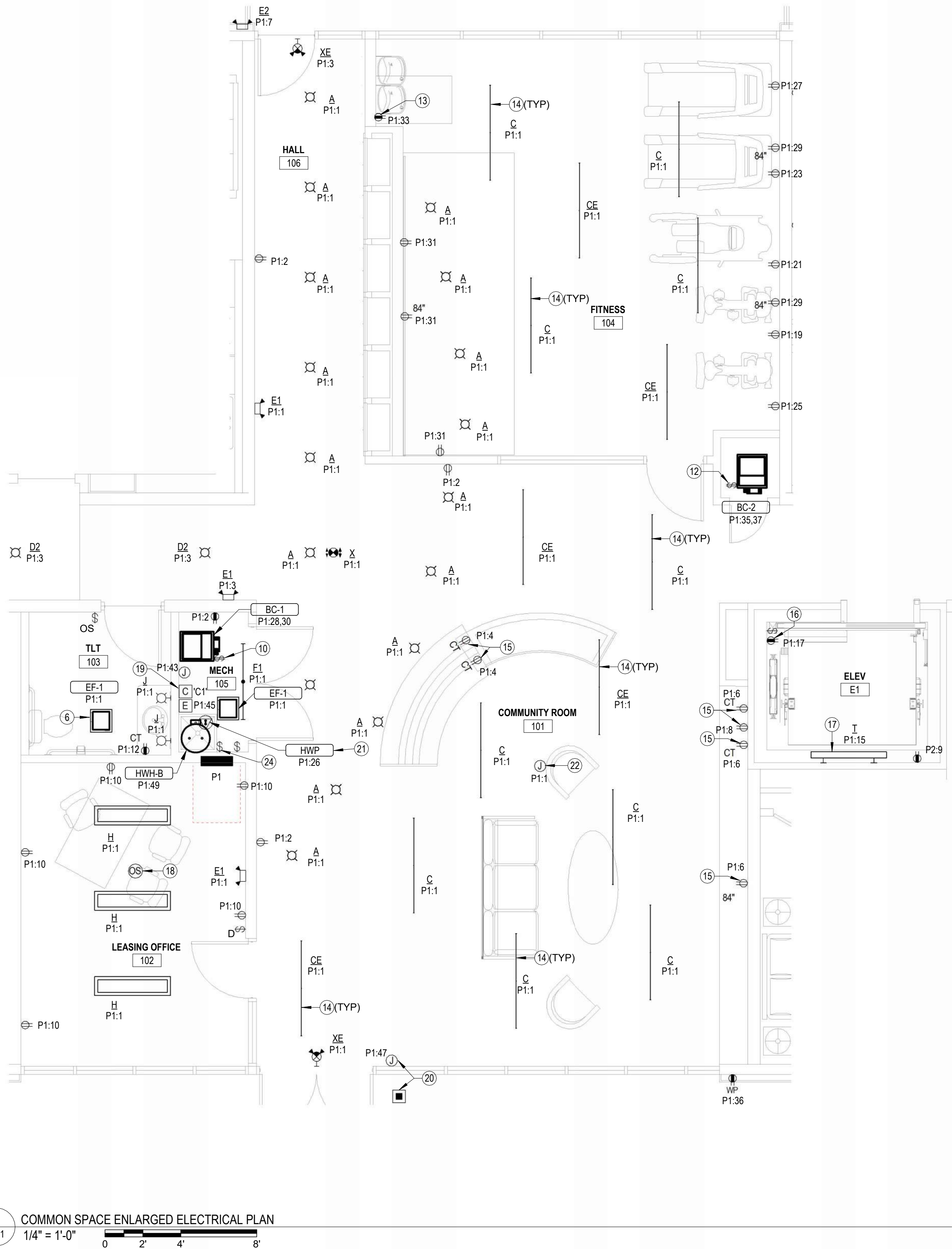
- NOTES BY SYMBOL**
- 1 FIRE ALARM ADDRESSABLE CONTROL MODULE FOR CONTROL OF APARTMENT UNIT'S NOTIFICATION APPLIANCE CIRCUIT. MODULE SHALL BE PROGRAMMED TO ACTIVATE APARTMENT UNIT'S NOTIFICATION APPLIANCES UPON GENERAL BUILDING FIRE ALARM AND UPON ACTIVATION OF ANY SMOKE DETECTOR OR CO DETECTOR WITHIN APARTMENT UNIT. MOUNT FLUSH IN WALL AT 8'-0" AFF.
 - 2 FIRE ALARM SYSTEM SMOKE DETECTOR.
 - 3 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 #TGBA14L06PT OR EQUAL. MOUNT AT 18" AFF. ALL CONNECTIONS TO GROUND BAR SHALL BE MADE USING COMPRESSION TYPE LUGS.
 - 4 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.
 - 5 EMT CONDUIT SLEEVE(S) THROUGH WALL WITH NYLON BUSHINGS FOR COMMUNICATIONS CABLING. QUANTITY AND SIZE AS REQUIRED. INSTALL ABOVE ACCESSIBLE CEILING. WHERE CONDUITS PENETRATE FIRE WALL, PROVIDE WITH FIRESTOPPING FITTINGS (WIREMOLD #FS4R-RED) AT BOTH ENDS.
 - 6 4" EMT CONDUIT SLEEVES THROUGH 2ND AND 3RD FLOOR FOR COMMUNICATIONS CABLING. PROVIDE WITH FIRESTOPPING FITTINGS (WIREMOLD #FS4R-RED) AT BOTH ENDS.

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- NOTES BY SYMBOL**
- 1 SWITCHED RECEPTACLE BELOW COUNTER FOR GARBAGE DISPOSAL. COORDINATE EXACT LOCATION OF SWITCH WITH ARCHITECT.
 - 2 PROVIDE RECEPTACLE BELOW COUNTER FOR CORD AND PLUG CONNECTION OF DISHWASHER. PROVIDE CORD AND GROUNDING PLUG AS REQUIRED.
 - 3 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.
 - 4 PROVIDE TIMER SWITCH EQUAL TO AIR CYCLER 'SMART EXHAUST' FOR CONTROL OF EXHAUST FAN. SET SWITCH PER MANUFACTURER'S INSTRUCTIONS TO OPERATE FAN AS INDICATED BELOW:
1 BEDROOM: 36 MINUTES PER HOUR
2 BEDROOM: 54 MINUTES PER HOUR
NOTE: CONTRACTOR MAY OMIT TIMER SWITCH IN 2 BEDROOM UNITS AND WIRE EXHAUST FAN FOR CONTINUOUS OPERATION.
 - 5 SWITCH CLOSEST TO DOOR SHALL CONTROL ALL LIGHTS IN BATHROOM, AND THE OTHER SWITCH SHALL CONTROL THE EXHAUST FAN.
 - 6 CONNECT EXHAUST FANLIGHT PROVIDED BY MECHANICAL CONTRACTOR.
 - 7 PROVIDE 30A/2P SNAP SWITCH AND CONNECT WATER HEATER. INSTALL SWITCH ADJACENT TO WATER HEATER.
 - 8 COORDINATE FINAL LOCATIONS OF ALL CATV AND PHONE OUTLETS WITH OWNER.
 - 9 TELECOM DISTRIBUTION DEVICE APPROXIMATELY 4'-0" AFF. COORDINATE EXACT REQUIREMENTS WITH UTILITY PROVIDER SELECTED BY OWNER.
 - 10 PROVIDE 30A/2P, SINGLE THROW, MANUAL MOTOR CONTROLLER SNAP SWITCH IN NEMA 1 ENCLOSURE. HUBBELL #HBL7832D OR EQUAL. MAKE FINAL FLEXIBLE CONNECTION TO BLOWER COIL/ELECTRIC HEAT.
 - 11 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 85-95 DB OUTPUT AT 10'. SHALL HAVE A SINGLE BUTTON FOR TEST/SILENCE AND LED INDICATOR LIGHTS, AND SHALL BE UL 217 LISTED, BRK #SC70106 OR EQUAL.
 - 12 PROVIDE 40A/2P, SINGLE THROW, MANUAL MOTOR CONTROLLER SNAP SWITCH IN NEMA 1 ENCLOSURE. HUBBELL #HBL7842D OR EQUAL. MAKE FINAL FLEXIBLE CONNECTION TO BLOWER COIL/ELECTRIC HEAT.
 - 13 COORDINATE EXACT MOUNTING LOCATION OF DRINKING FOUNTAIN RECEPTACLE WITH PLUMBING CONTRACTOR.
 - 14 INSTALL LIGHT FIXTURES IN ARCHITECTURAL DROP CEILING. COORDINATE REQUIREMENTS WITH G.C. AND ARCHITECT.
 - 15 COORDINATE ELECTRICAL ROUGH-IN LOCATIONS WITH FINAL CASEWORK DESIGN.
 - 16 INSTALL RECEPTACLE ON WALL OF ELEVATOR PIT. VERIFY EXACT LOCATION WITH ELEVATOR EQUIPMENT INSTALLER.
 - 17 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.
 - 18 PROVIDE LINE VOLTAGE OCCUPANCY SENSOR FOR CONTROL OF ROOM LIGHTS.
 - 19 TIMECLOCK AND CONTACTORS FOR EXTERIOR LIGHTING AND OFFICE RECEPTACLE CONTROL. RE-2 ES.1.
 - 20 PROVIDE PUSH BUTTON ROUGH-IN AND PREP DOOR JAM WITH RACEWAY AS INDICATED IN DETAIL 3.6.1 FOR AUTOMATIC DOOR OPENER. COORDINATE EXACT REQUIREMENTS WITH OWNER.
 - 21 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.
 - 22 ROUGH-IN FOR DECORATIVE LIGHT FIXTURE. FIXTURE TO BE SELECTED BY INTERIOR DESIGNER, PROVIDED BY E.C.
 - 23 INSTALL DOORBELL SYSTEM AS SELECTED BY INTERIOR DESIGNER. CIRCUIT TRANSFORMER TO NEAREST UNSWITCHED LIGHTING CIRCUIT. PROVIDE ALL COMPONENTS REQUIRED FOR COMPLETE INSTALLATION. COORDINATE EXACT REQUIREMENTS WITH ARCHITECT AND G.C.
 - 24 PROVIDE 30A/1P SNAP SWITCH AND CONNECT WATER HEATER. INSTALL SWITCH ADJACENT TO WATER HEATER.

Designation: 1A

Installed Location: 1 Bedroom Unit (1A)
Voltage: 120/208 1PH 3W-1Ph-3W
Mounting: Flush
Enclosure: NEMA 1

Bus Amps: 100
MCB Amps: MLO
Features & Modifications: PROVIDE SURGE PROTECTION DEVICE

SCCR/AIC: 22.0 kA
Mains FN/Note: -

Ckt	Description	Circuitry	Trip (A)	FN	A	B	FN	Trip (A)	Circuitry	Description	Ckt
1A-1	Counter Top Receptacles	1/2"C, 1#12, #12N, #12G	20	GA	4.5 A 21....			30	1/2"C, 2#10, #10G	Electric Water Heating	1A-2
1A-3	Counter Top Receptacle	1/2"C, 1#12, #12N, #12G	20	GA		3.0 A 21....					1A-4
1A-5	Disposal	1/2"C, 1#12, #12N, #12G	20	GA	4.2 A 40....			G 60	3/4"C, 2#4, #10G	Clothes Dryer	1A-6
1A-7	Dishwasher	1/2"C, 1#12, #12N, #12G	20	GA		4.2 A 40....					1A-8
1A-9	Refrigerator	1/2"C, 1#12, #12N, #12G	20	GA	1.5 A 40....			G 60	3/4"C, 2#4, #10G	Range	1A-10
1A-11	Living Room Receptacles	1/2"C, 1#12, #12N, #12G	20	A		7.5 A 40....					1A-12
1A-13	Kitchen/Living Room Lights	1/2"C, 1#12, #12N, #12G	20	A	0.8 A 20....			30	1/2"C, 2#10, #10G	Blower Coil	1A-14
1A-15	Hood/Microwave	1/2"C, 1#12, #12N, #12G	20	GA		2.1 A 20....					1A-16
1A-17	Clothes Washer Receptacle	1/2"C, 1#12, #12N, #12G	20	A	1.5 A 11....			20	1/2"C, 2#12, #12G	Heat Pump	1A-18
1A-19	Bathroom	1/2"C, 1#12, #12N, #12G	20			2.8 A 11....		--	--		1A-20
1A-21	Bedroom	1/2"C, 1#12, #12N, #12G	20	A	7.9 A --			--	--	Surge Protection	1A-22
1A-23	Space	--	--			--	--	--	--	Surge Protection	1A-24

Designation: 1B

Installed Location: 1 Bedroom Unit (1B)
Voltage: 120/208 1PH 3W-1Ph-3W
Mounting: Flush
Enclosure: NEMA 1

Bus Amps: 100
MCB Amps: MLO
Features & Modifications: PROVIDE SURGE PROTECTION DEVICE

SCCR/AIC: 22.0 kA
Mains FN/Note: -

Ckt	Description	Circuitry	Trip (A)	FN	A	B	FN	Trip (A)	Circuitry	Description	Ckt
1B-1	Counter Top Receptacles	1/2"C, 1#12, #12N, #12G	20	GA	4.5 A 21....			30	1/2"C, 2#10, #10G	Electric Water Heating	1B-2
1B-3	Counter Top Receptacles	1/2"C, 1#12, #12N, #12G	20	GA		3.0 A 21....					1B-4
1B-5	Disposal	1/2"C, 1#12, #12N, #12G	20	GA	4.2 A 40....			G 60	3/4"C, 2#4, #10G	Clothes Dryer	1B-6
1B-7	Dishwasher	1/2"C, 1#12, #12N, #12G	20	GA		4.2 A 40....					1B-8
1B-9	Refrigerator	1/2"C, 1#12, #12N, #12G	20	GA	1.5 A 40....			G 60	3/4"C, 2#4, #10G	Range	1B-10
1B-11	Living Room Receptacles	1/2"C, 1#12, #12N, #12G	20	A		7.5 A 40....					1B-12
1B-13	Kitchen/Living Room Lights	1/2"C, 1#12, #12N, #12G	20	A	0.8 A 20....			30	1/2"C, 2#10, #10G	Blower Coil	1B-14
1B-15	Hood/Microwave	1/2"C, 1#12, #12N, #12G	20	GA		2.1 A 20....					1B-16
1B-17	Clothes Washer Receptacle	1/2"C, 1#12, #12N, #12G	20	A	1.5 A 11....			20	1/2"C, 2#12, #12G	Heat Pump	1B-18
1B-19	Bathroom	1/2"C, 1#12, #12N, #12G	20			2.8 A 11....		--	--		1B-20
1B-21	Bedroom	1/2"C, 1#12, #12N, #12G	20	A	7.9 A --			--	--	Surge Protection	1B-22
1B-23	Space	--	--			--	--	--	--	Surge Protection	1B-24

Designation: 2A

Installed Location: 2 Bedroom Unit (2A)
Voltage: 120/208 1PH 3W-1Ph-3W
Mounting: Flush
Enclosure: NEMA 1

Bus Amps: 100
MCB Amps: MLO
Features & Modifications: PROVIDE SURGE PROTECTION DEVICE

SCCR/AIC: 22.0 kA
Mains FN/Note: -

Ckt	Description	Circuitry	Trip (A)	FN	A	B	FN	Trip (A)	Circuitry	Description	Ckt
2A-1	Counter Top Receptacles	1/2"C, 1#12, #12N, #12G	20	GA	3.0 A 21....			30	1/2"C, 2#10, #10G	Electric Water Heating	2A-2
2A-3	Counter Top/Kitchen Receptacles	1/2"C, 1#12, #12N, #12G	20	GA		3.0 A 21....					2A-4
2A-5	Disposal	1/2"C, 1#12, #12N, #12G	20	GA	4.2 A 40....			G 60	3/4"C, 2#4, #10G	Clothes Dryer	2A-6
2A-7	Dishwasher	1/2"C, 1#12, #12N, #12G	20	GA		4.2 A 40....					2A-8
2A-9	Refrigerator	1/2"C, 1#12, #12N, #12G	20	GA	1.5 A 40....			G 60	3/4"C, 2#4, #10G	Range	2A-10
2A-11	Living Room Receptacles	1/2"C, 1#12, #12N, #12G	20	A		6.0 A 40....					2A-12
2A-13	Kitchen/Living Room Lights	1/2"C, 1#12, #12N, #12G	20	A	0.8 A 20....			30	1/2"C, 2#10, #10G	Blower Coil	2A-14
2A-15	Hood/Microwave	1/2"C, 1#12, #12N, #12G	20	GA		2.1 A 20....					2A-16
2A-17	Clothes Washer Receptacle	1/2"C, 1#12, #12N, #12G	20	A	1.5 A 11....			20	1/2"C, 2#12, #12G	Heat Pump	2A-18
2A-19	Bathroom	1/2"C, 1#12, #12N, #12G	20			2.8 A 11....		--	--		2A-20
2A-21	Bedroom 1	1/2"C, 1#12, #12N, #12G	20	A	7.9 A --			--	--	Surge Protection	2A-22
2A-23	Bedroom 2	1/2"C, 1#12, #12N, #12G	20	A		7.9 A --		--	--	Surge Protection	2A-24

Designation: 2B

Installed Location: 2 Bedroom Unit (2B)
Voltage: 120/208 1PH 3W-1Ph-3W
Mounting: Flush
Enclosure: NEMA 1

Bus Amps: 100
MCB Amps: MLO
Features & Modifications: PROVIDE SURGE PROTECTION DEVICE

SCCR/AIC: 22.0 kA
Mains FN/Note: -

Ckt	Description	Circuitry	Trip (A)	FN	A	B	FN	Trip (A)	Circuitry	Description	Ckt
2B-1	Counter Top Receptacles	1/2"C, 1#12, #12N, #12G	20	GA	4.5 A 21....			30	1/2"C, 2#10, #10G	Electric Water Heating	2B-2
2B-3	Counter Top/Kitchen Receptacles	1/2"C, 1#12, #12N, #12G	20	GA		4.5 A 21....					2B-4
2B-5	Disposal	1/2"C, 1#12, #12N, #12G	20	GA	4.2 A 40....			G 60	3/4"C, 2#4, #10G	Clothes Dryer	2B-6
2B-7	Dishwasher	1/2"C, 1#12, #12N, #12G	20	GA		4.2 A 40....					2B-8
2B-9	Refrigerator	1/2"C, 1#12, #12N, #12G	20	GA	1.5 A 40....			G 60	3/4"C, 2#4, #10G	Range	2B-10
2B-11	Living Room Receptacles	1/2"C, 1#12, #12N, #12G	20	A		7.5 A 40....					2B-12
2B-13	Kitchen/Living Room Lights	1/2"C, 1#12, #12N, #12G	20	A	0.9 A 20....			30	1/2"C, 2#10, #10G	Blower Coil	2B-14
2B-15	Hood/Microwave	1/2"C, 1#12, #12N, #12G	20	GA		2.1 A 20....					2B-16
2B-17	Clothes Washer Receptacle	1/2"C, 1#12, #12N, #12G	20	A	1.5 A 11....			20	1/2"C, 2#12, #12G	Heat Pump	2B-18
2B-19	Bathroom	1/2"C, 1#12, #12N, #12G	20			2.8 A 11....		--	--		2B-20
2B-21	Bedroom 1	1/2"C, 1#12, #12N, #12G	20	A	4.9 A --			--	--	Surge Protection	2B-22
2B-23	Bedroom 2	1/2"C, 1#12, #12N, #12G	20	A		7.9 A --		--	--	Surge Protection	2B-24

Designation: 2C

Installed Location: 2 Bedroom Unit (2C)
Voltage: 120/208 1PH 3W-1Ph-3W
Mounting: Flush
Enclosure: NEMA 1

Bus Amps: 100
MCB Amps: MLO
Features & Modifications: PROVIDE SURGE PROTECTION DEVICE

SCCR/AIC: 22.0 kA
Mains FN/Note: -

Ckt	Description	Circuitry	Trip (A)	FN	A	B	FN	Trip (A)	Circuitry	Description	Ckt
2C-1	Counter Top Receptacles	1/2"C, 1#12, #12N, #12G	20	GA	3.0 A 21....			30	1/2"C, 2#10, #10G	Electric Water Heating	2C-2
2C-3	Counter Top/Kitchen Receptacles	1/2"C, 1#12, #12N, #12G	20	GA		3.0 A 21....					2C-4
2C-5	Disposal	1/2"C, 1#12, #12N, #12G	20	GA	4.2 A 40....			G 60	3/4"C, 2#4, #10G	Clothes Dryer	2C-6
2C-7	Dishwasher	1/2"C, 1#12, #12N, #12G	20	GA		4.2 A 40....					2C-8
2C-9	Refrigerator	1/2"C, 1#12, #12N, #12G	20	GA	1.5 A 40....			G 60	3/4"C, 2#4, #10G	Range	2C-10
2C-11	Living Room Receptacles	1/2"C, 1#12, #12N, #12G	20	A		6.0 A 40....					2C-12
2C-13	Kitchen/Living Room Lights	1/2"C, 1#12, #12N, #12G	20	A	0.8 A 20....			30	1/2"C, 2#10, #10G	Blower Coil	2C-14
2C-15	Hood/Microwave	1/2"C, 1#12, #12N, #12G	20	GA		2.1 A 20....					2C-16
2C-17	Clothes Washer Receptacle	1/2"C, 1#12, #12N, #12G	20	A	1.5 A 11....			20	1/2"C, 2#12, #12G	Heat Pump	2C-18
2C-19	Bathroom	1/2"C, 1#12, #12N, #12G	20			2.8 A 11....		--	--		2C-20
2C-21	Bedroom 1	1/2"C, 1#12, #12N, #12G	20	A	7.9 A --			--	--	Surge Protection	2C-22
2C-23	Bedroom 2	1/2"C, 1#12, #12N, #12G	20	A		7.9 A --		--	--	Surge Protection	2C-24

Designation: 2D

Installed Location: 2 Bedroom Unit (2D)
Voltage: 120/208 1PH 3W-1Ph-3W
Mounting: Flush
Enclosure: NEMA 1

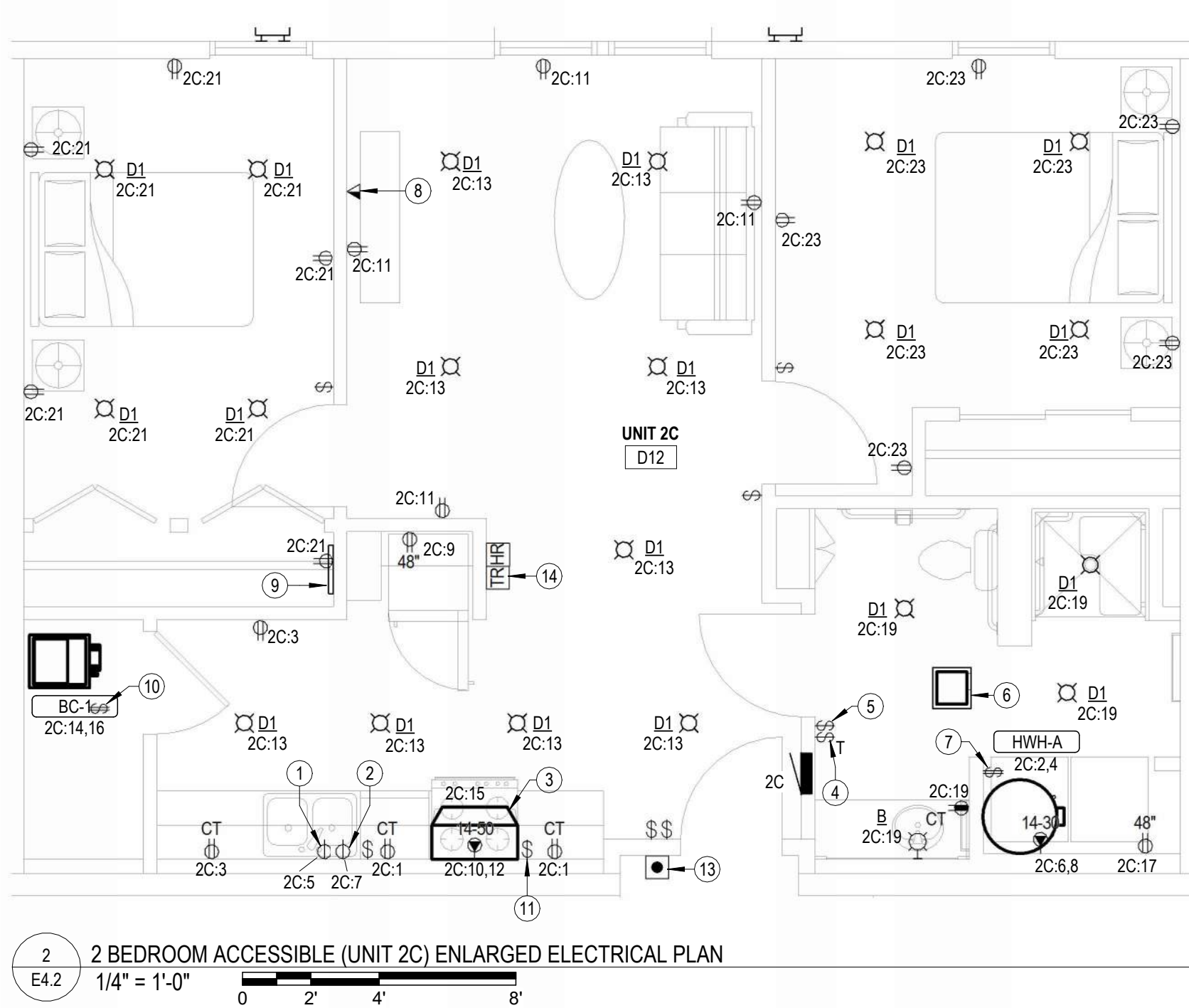
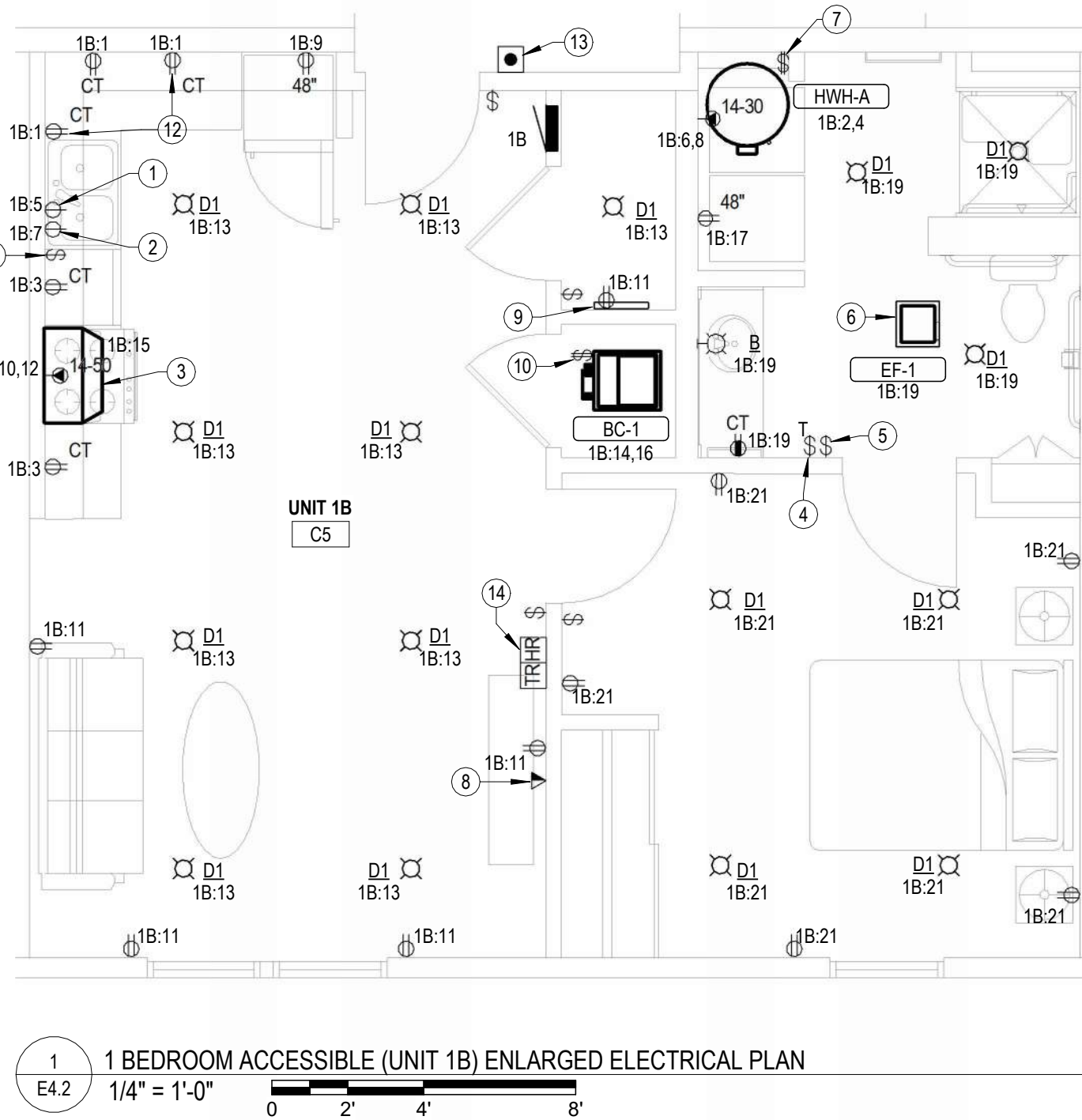
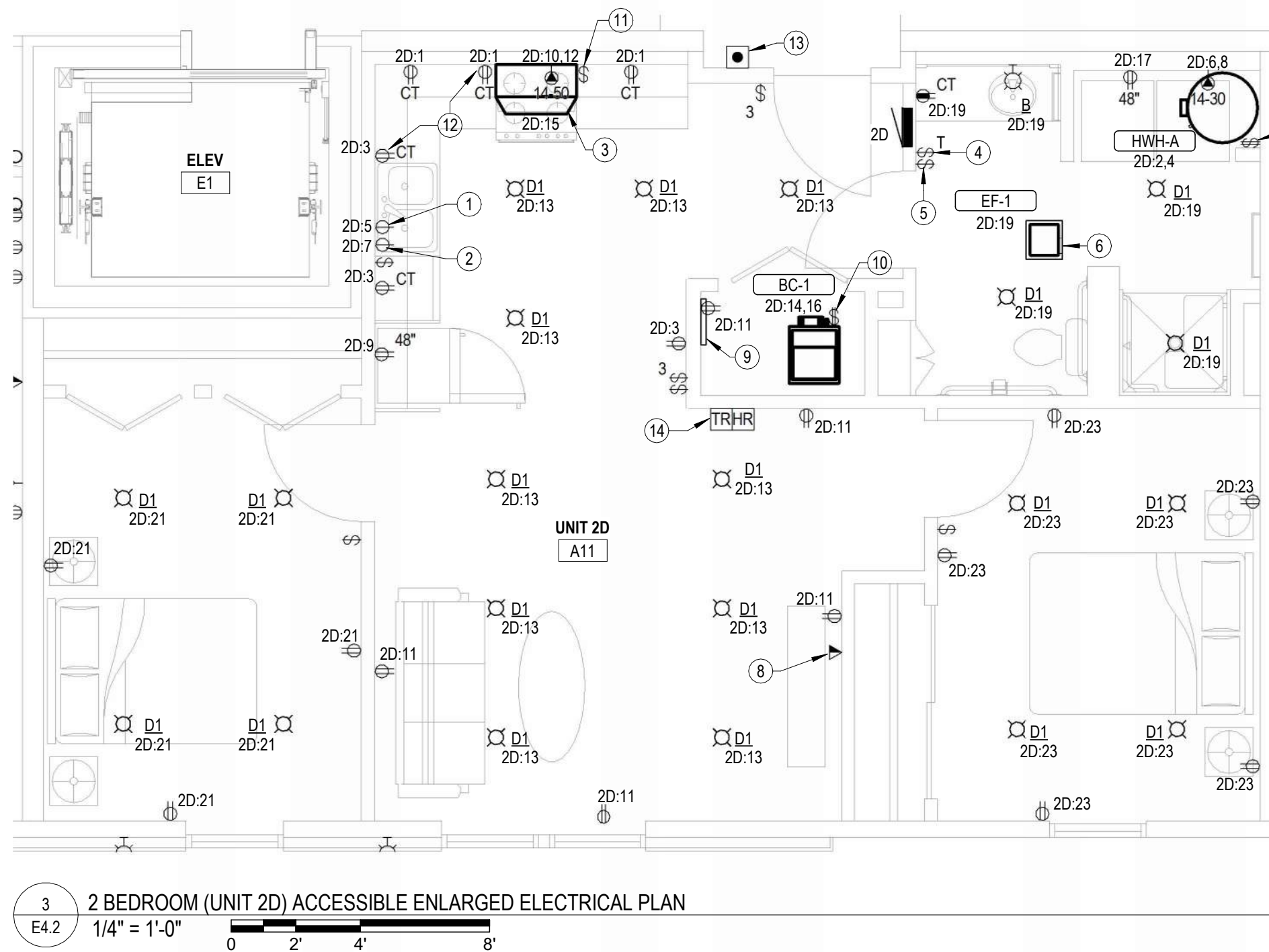
Bus Amps: 100
MCB Amps: MLO
Features & Modifications: PROVIDE SURGE PROTECTION DEVICE

SCCR/AIC: 22.0 kA
Mains FN/Note: -

Ckt	Description	Circuitry	Trip (A)	FN	A	B	FN	Trip (A)	Circuitry	Description	Ckt
2D-1	Counter Top Receptacles	1/2"C, 1#12, #12N, #12G	20	GA	4.5 A 21....			30	1/2"C, 2#10, #10G	Electric Water Heating	2D-2
2D-3	Counter Top/Kitchen Receptacles	1/2"C, 1#12, #12N, #12G	20	GA		4.5 A 21....					2D-4
2D-5	Disposal	1/2"C, 1#12, #12N, #12G	20	GA	4.2 A 40....			G 60	3/4"C, 2#4, #10G	Clothes Dryer	2D-6
2D-7	Dishwasher	1/2"C, 1#12, #12N, #12G	20	GA		4.2 A 40....					2D-8
2D-9	Refrigerator	1/2"C, 1#12, #12N, #12G	20	GA	1.5 A 40....			G 60	3/4"C, 2#4, #10G	Range	2D-10
2D-11	Living Room Receptacles	1/2"C, 1#12, #12N, #12G	20	A		7.5 A 40....					2D-12
2D-13	Kitchen/Living Room Lights	1/2"C, 1#12, #12N, #12G	20	A	0.9 A 20....			30	1/2"C, 2#10, #10G	Blower Coil	2D-14
2D-15	Hood/Microwave	1/2"C, 1#12, #12N, #12G	20	GA		2.1 A 20....					2D-16
2D-17	Clothes Washer Receptacle	1/2"C, 1#12, #12N, #12G	20	A	1.5 A 11....			20	1/2"C, 2#12, #12G	Heat Pump	2D-18
2D-19	Bathroom	1/2"C, 1#12, #12N, #12G	20			2.8 A 11....		--	--		2D-20
2D-21	Bedroom 1	1/2"C, 1#12, #12N, #12G	20	A	4.9 A --			--	--	Surge Protection	2D-22
2D-23	Bedroom 2	1/2"C, 1#12, #12N, #12G	20	A		7.9 A --		--	--	Surge Protection	2D-24

Breaker Function Schedule

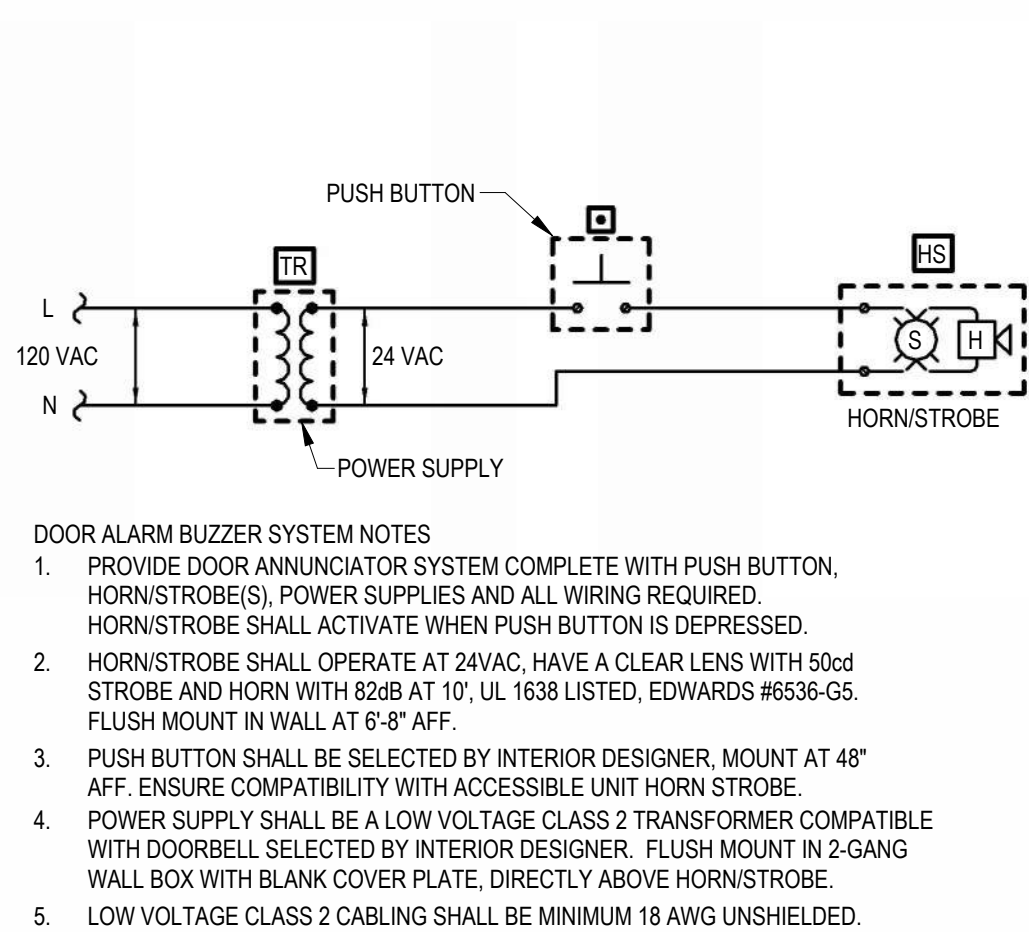
A	Arc-Fault Interrupter (AFCI) Protection
AG	Combination Arc and Ground Fault Circuit Interrupter Protection
G	Ground-Fault Circuit Interrupter (GFCI) Protection (5 mA)
L	Provide breaker with lock-on clip



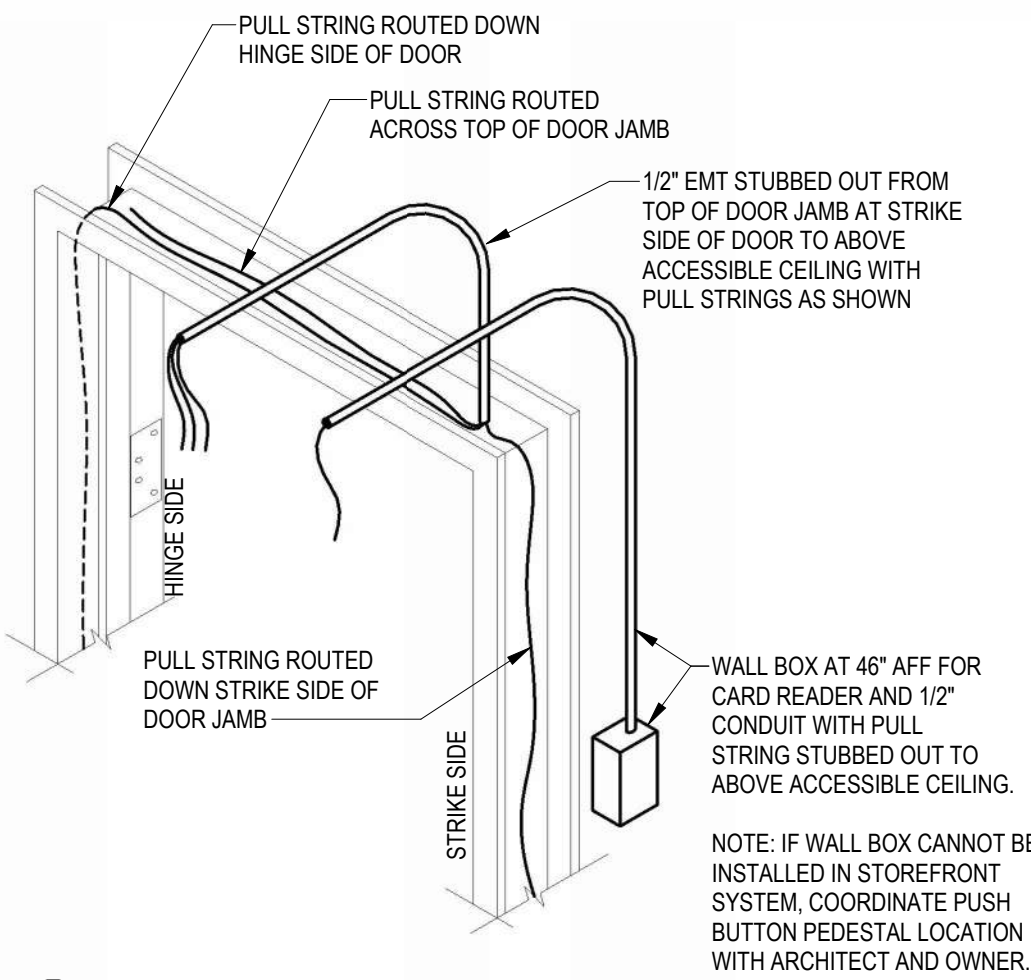
NOTES BY SYMBOL

- 1 SWITCHED RECEPTACLE BELOW COUNTER FOR GARBAGE DISPOSAL. COORDINATE EXACT LOCATION OF SWITCH WITH ARCHITECT.
- 2 PROVIDE RECEPTACLE BELOW COUNTER FOR CORD AND PLUG CONNECTION OF DISHWASHER. PROVIDE CORD AND GROUNDING PLUG AS REQUIRED.
- 3 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.
- 4 PROVIDE TIMER SWITCH EQUAL TO AIR CYCLER 'SMART EXHAUST' FOR CONTROL OF EXHAUST FAN. SET SWITCH PER MANUFACTURER'S INSTRUCTIONS TO OPERATE FAN AS INDICATED BELOW:
1 BEDROOM: 35 MINUTES PER HOUR
2 BEDROOM: 54 MINUTES PER HOUR
NOTE: CONTRACTOR MAY OMIT TIMER SWITCH IN 2 BEDROOM UNITS AND WIRE EXHAUST FAN FOR CONTINUOUS OPERATION.
- 5 SWITCH CLOSEST TO DOOR SHALL CONTROL ALL LIGHTS IN BATHROOM, AND THE OTHER SWITCH SHALL CONTROL THE EXHAUST FAN.
- 6 CONNECT EXHAUST FANLIGHT PROVIDED BY MECHANICAL CONTRACTOR.
- 7 PROVIDE 30A/2P SNAP SWITCH AND CONNECT WATER HEATER. INSTALL SWITCH ADJACENT TO WATER HEATER.
- 8 COORDINATE FINAL LOCATIONS OF ALL CATV AND PHONE OUTLETS WITH OWNER.
- 9 TELECOM DISTRIBUTION DEVICE APPROXIMATELY 4'-0" AFF. COORDINATE EXACT REQUIREMENTS WITH UTILITY PROVIDER SELECTED BY OWNER.
- 10 PROVIDE 30A/2P, SINGLE THROW, MANUAL MOTOR CONTROLLER SNAP SWITCH IN NEMA 1 ENCLOSURE. HUBBELL #HBL7832D OR EQUAL. MAKE FINAL FLEXIBLE CONNECTION TO BLOWER COIL/ELECTRIC HEAT.
- 11 PROVIDE SWITCH IN ACCESSIBLE UNITS FOR CONTROL OF RANGE HOOD
- 12 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 PAGING REQUIREMENTS.
- 13 PROVIDE PUSH BUTTON AT 48" AFF FOR ANNUNCIATOR SYSTEM AT ALL ACCESSIBLE APARTMENTS AND ALSO AT APARTMENTS DESIGNATED FOR HEARING-IM

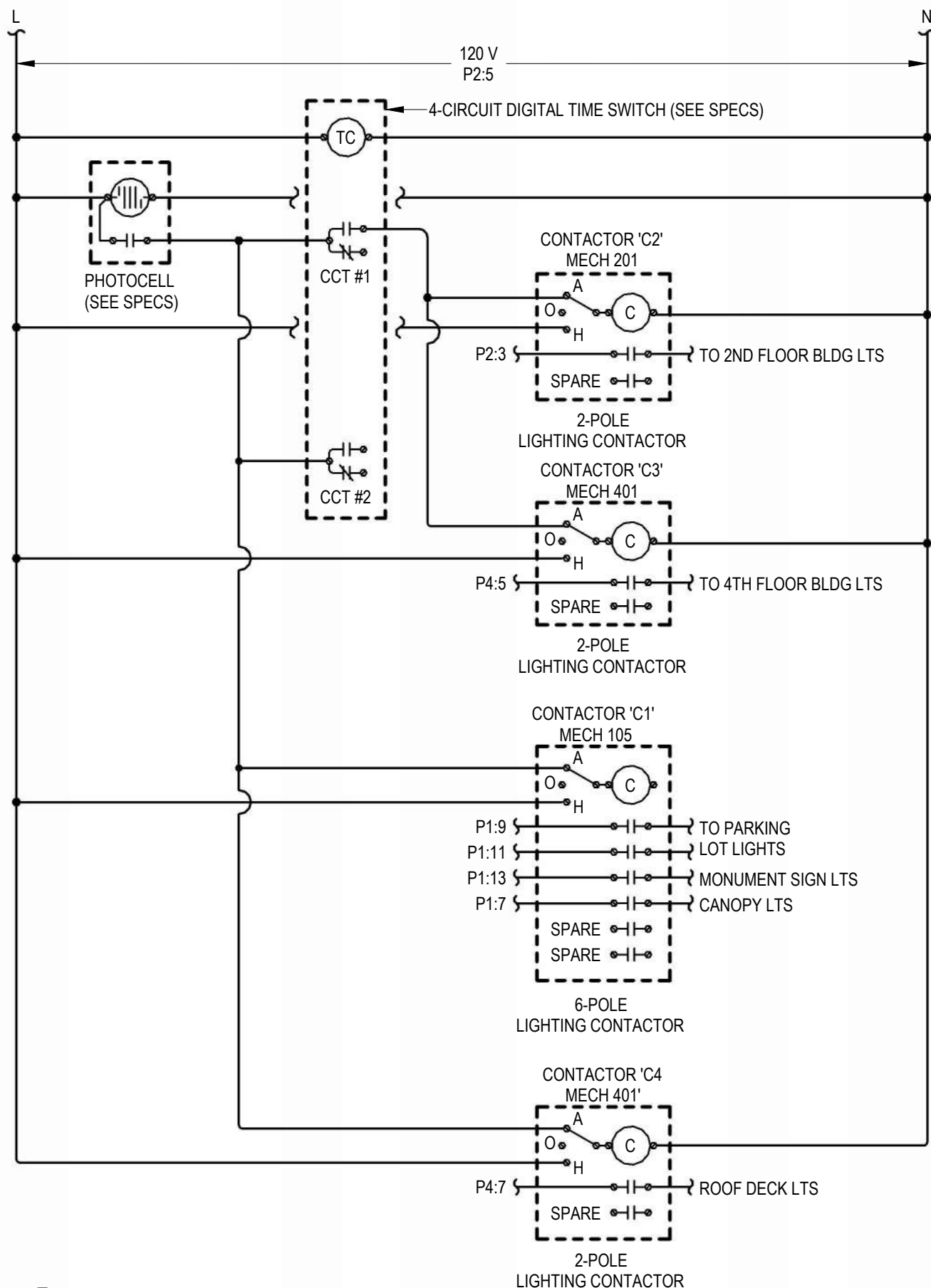
LIGHT FIXTURE SCHEDULE									
MARK	MANUFACTURER	MODEL NUMBER	WATTAGE	LUMEN OUTPUT	DRIVER	MOUNTING	FINISH	DESCRIPTION	NOTES
A	---	---			STANDARD	CEILING SURFACE	---	SURFACE MOUNTED DOWNLIGHT SELECTED BY INTERIOR DESIGNER	13
B	SEAGULL	FML-WL-48-35	29 W		STANDARD	SURFACE WALL	WHITE	3 LAMP VANITY LIGHT	--
C	T-BAR LED	TBSL-MN-5-15-B2-B	40 W	2190 lm	0-10V DIMMING TO 10%	CEILING SURFACE	BLACK	5' T-BAR LED WITH BLOCK CLEAR DUFFUSING LENS INTEGRAL TO SUSPENDED CEILING	13
CE	T-BAR LED	TBSL-MN-5-15-B2-B	40 W	2190 lm	0-10V DIMMING TO 10%	CEILING SURFACE	BLACK	5' T-BAR LED WITH BLOCK CLEAR DUFFUSING LENS INTEGRAL TO SUSPENDED CEILING WITH EMERGENCY BATTERY BACKUP OPTION	13
D1	HALO	SMD6R6930WH	10 W	750 lm	0-10V DIMMING TO 10%	CEILING SURFACE	WHITE	6" DIA ROUND SURFACE MOUNT DOWNLIGHT	6
D2	HALO	SMD6R12930WH	15 W	1200 lm	0-10V DIMMING TO 10%	CEILING SURFACE	WHITE	6" DIA ROUND SURFACE MOUNT DOWNLIGHT	--
E1	LITHONIA	ELM6L UVOLT LTP	3 W		--	SURFACE WALL	WHITE	LED DUAL-HEAD EMERGENCY LIGHT	1
E2	LITHONIA	AFB-OEL-DDBTXD-UVOLT-N-WT	3 W		--	SURFACE WALL	WHITE	DIE-CAST ALUMINUM EMERGENCY LIGHT WITH POLYCARBONATE LENS, INTEGRAL BATTERY	1,2,3
F1	DAY-BRITE CFI	FSS440LB40-UNV-DIM	30 W	4077 lm	0-10V DIMMING TO 10%	CEILING SURFACE	WHITE	4' STANDARD STRIP WITH CURVED FROSTED ACRYLIC LENS	--
F2	DAY-BRITE CFI	FSS220LB40-UNV-DIM	17 W	2049 lm	0-10V DIMMING TO 10%	CEILING SURFACE	WHITE	2' STANDARD STRIP WITH CURVED FROSTED ACRYLIC LENS	--
G	LITHONIA	WL4-40L-EZ1-LP630-MSD7-DIM50-E10WLC-P	40 W	3927 lm	STANDARD	SURFACE WALL	WHITE	4 FT. WALL MOUNTED STAIRWELL LIGHT WITH EMERGENCY BATTERY BACKUP	8
H	LITHONIA	FMFL-30840-CAML-WH	35 W	2800 lm	STANDARD	SURFACE	WHITE	LED DECORATIVE SURFACE	--
J	---	---			STANDARD	SURFACE WALL	WHITE	VERTICAL VANITY LIGHT SELECTED BY INTERIOR DESIGNER	13
L	LIGHTOLIER	P6RDL15940MCL-Z10UI	12 W	1500 lm	STANDARD	SURFACE	WHITE	6" ROUND SURFACE MOUNTED DOWNLIGHT	1,4
M	GARDCO	GCS-A01-840-T3M-UNV	10 W	1500 lm	STANDARD	SURFACE WALL	WHITE	AREA WALL SCONCE WITH TYPE 3 IES DISTRIBUTION	17
N	GARDCO	GCM-B04-840-PEN-U-STP-UNV-FAWS	16 W	1611 lm	STANDARD	SURFACE WALL	WHITE	UP/DOWN WALL SCONCE WITH SPOT DISTRIBUTION	14,16
O	BOCA	NANO-X-3W-4000K-120V-120-A-H-E-LD-SQ	3 W	573 lm	STANDARD	SURFACE WALL	WHITE	1" LED 120" WALL WASH UP LIGHT	3,15
P	GARDCO	941L-21L-NW-LV-UNV	32 W	466 lm	STANDARD	SURFACE WALL	WHITE	LED STEP LIGHTS	3
R1	COOPER LIGHTING	GALN-SA1C-840-U-T2-HSS	57 W	7154 lm	LED DRIVER	ROUND POLE	BLACK	LED AREA LIGHT, SINGLE HEAD FULL CUT-OFF WITH IES TYPE II DISTRIBUTION AND HOUSE SIDE SHIELD	3,7,10
R2	COOPER LIGHTING	GALN-SA3C-840-U-T3-HSS	160 W	20812 lm	LED DRIVER	ROUND POLE	BLACK	LED AREA LIGHT, SINGLE HEAD FULL CUT-OFF WITH IES TYPE III DISTRIBUTION AND HOUSE SIDE SHIELD	3,7,11
R3	COOPER LIGHTING	GALN-SA3C-840-U-5WQ	160 W	21966 lm	LED DRIVER	ROUND POLE	BLACK	LED AREA LIGHT, SINGLE HEAD FULL CUT-OFF WITH IES TYPE V DISTRIBUTION	3,7,12
S	ACCLAIM	DFB-111-AKEU	50 W	2455 lm	STANDARD	GRADE	BLACK	IP-66 RATED, GRADE MOUNTED LED FLOOR LIGHT	
T	LITHONIA	FEM-L48-4000LM-IMAF-L-WD-MVOLT-GZ10-35K-800R	24 W	3615 lm	STANDARD	SURFACE WALL	WHITE	4 FT. FULLY ENCLOSED AND GASKETED INDUSTRIAL FIXTURE WITH FROSTED, RIBBED, IMPACT-RESISTANT ACRYLIC LENS	--
X	LIFE SAFETY LIGHTING	LSXS2RWEMSDT			--	CEILING	WHITE	UNIVERSAL SINGLE/DOUBLE FACE POLYCARBONATE EXIT SIGN	
X1	LITHONIA	EDGR 1 R EL			--	CEILING	WHITE	SINGLE FACE LED EXIT SIGN	1,2
X3	LITHONIA	EDG 1 R EL WM			--	WALL	WHITE	SINGLE FACE LED EXIT SIGN	1,2
XE	LITHONIA	LHQM LED R HO			--	WALL	WHITE	COMBO EXIT/EMERGENCY LIGHTING UNIT	1,2
<div>GENERAL:</div> <ul style="list-style-type: none">ALL LED FIXTURES SHALL ADHERE TO LM79 AND LM80 STANDARDSPROVIDE MANUFACTURER'S FLANGE KIT WHERE LAY-IN FIXTURES ARE TO BE INSTALLED IN GYP.ALL APARTMENT LIGHT FIXTURES SHALL BE ENERGY STAR CERTIFIED <div>NOTES:</div> <ol style="list-style-type: none">PROVIDE FIXTURE WITH EMERGENCY BATTERY INTEGRAL CHARGER WITH SELF-DIAGNOSTIC/SELF-TESTING ELECTRONICS.FIXTURE SHALL BE CAPABLE OF WALL OR CEILING MOUNT APPLICATIONS AND SHALL HAVE BREAK-OUT DIRECTIONAL CHEVRONS.U.L. LISTED FOR 'WET LOCATION'.U.L. LISTED FOR 'DAMP LOCATION'.FIXTURE TO COMPLY WITH NEC 410.16(C)(5).WHERE INSTALLED IN BATHROOMS TO BE 'DAMP LOCATION' U.L. LISTED, WHERE ABOVE SHOWERS TO BE 'WET LOCATION' U.L. LISTED.FIXTURE/POLE ASSEMBLY SHALL BE RATED FOR 100 MPH WIND LOADS. PROVIDE WITH VIBRATION DAMPER PER MANUFACTURER'S RECOMMENDATIONS.PROVIDE FIXTURE WITH INTEGRAL OCCUPANCY SENSOR AND CONTROLS TO DIM FIXTURE TO 50% LIGHT OUTPUT WITH UNOCCUPIED.WHERE INSTALLED IN FIRE RATED ASSEMBLY, PROVIDE FIRE RATED RECESSED LIGHT COVER EQUAL TO TENMAT FF109. VERIFY RATING REQUIREMENTS WITH ARCHITECT.PROVIDE FIXTURE/POLE ASSEMBLY WITH 11" ROUND STRAIGHT STEEL POLE, BLACK TO MATCH FIXTURE. FIXTURE HEIGHT SHALL NOT EXCEED 7'-0".PROVIDE FIXTURE/POLE ASSEMBLY WITH 14" ROUND STRAIGHT STEEL POLE, BLACK TO MATCH FIXTURE. FIXTURE HEIGHT SHALL NOT EXCEED 7'-0".PROVIDE FIXTURE/POLE ASSEMBLY WITH 22" ROUND STRAIGHT STEEL POLE, BLACK TO MATCH FIXTURE. FIXTURE HEIGHT SHALL NOT EXCEED 7'-0".FIXTURE TO BE SELECTED BY INTERIOR DESIGNER. COORDINATE ALL REQUIREMENTS WITH INTERIOR DESIGNER.CONTRACTOR SHALL ADJUST LUMEN OUTPUT AS DIRECTED BY OWNER. COORDINATION SHALL OCCUR AFTER DARK TO ENSURE DESIRED ILLUMINATION.INSTALL FIXTURE 41" ABOVE FIRST FLOOR FINISHED FLOOR.INSTALL FIXTURE 10" ABOVE FINISHED FLOOR.INSTALL FIXTURE 7" ABOVE FINISHED FLOOR.									



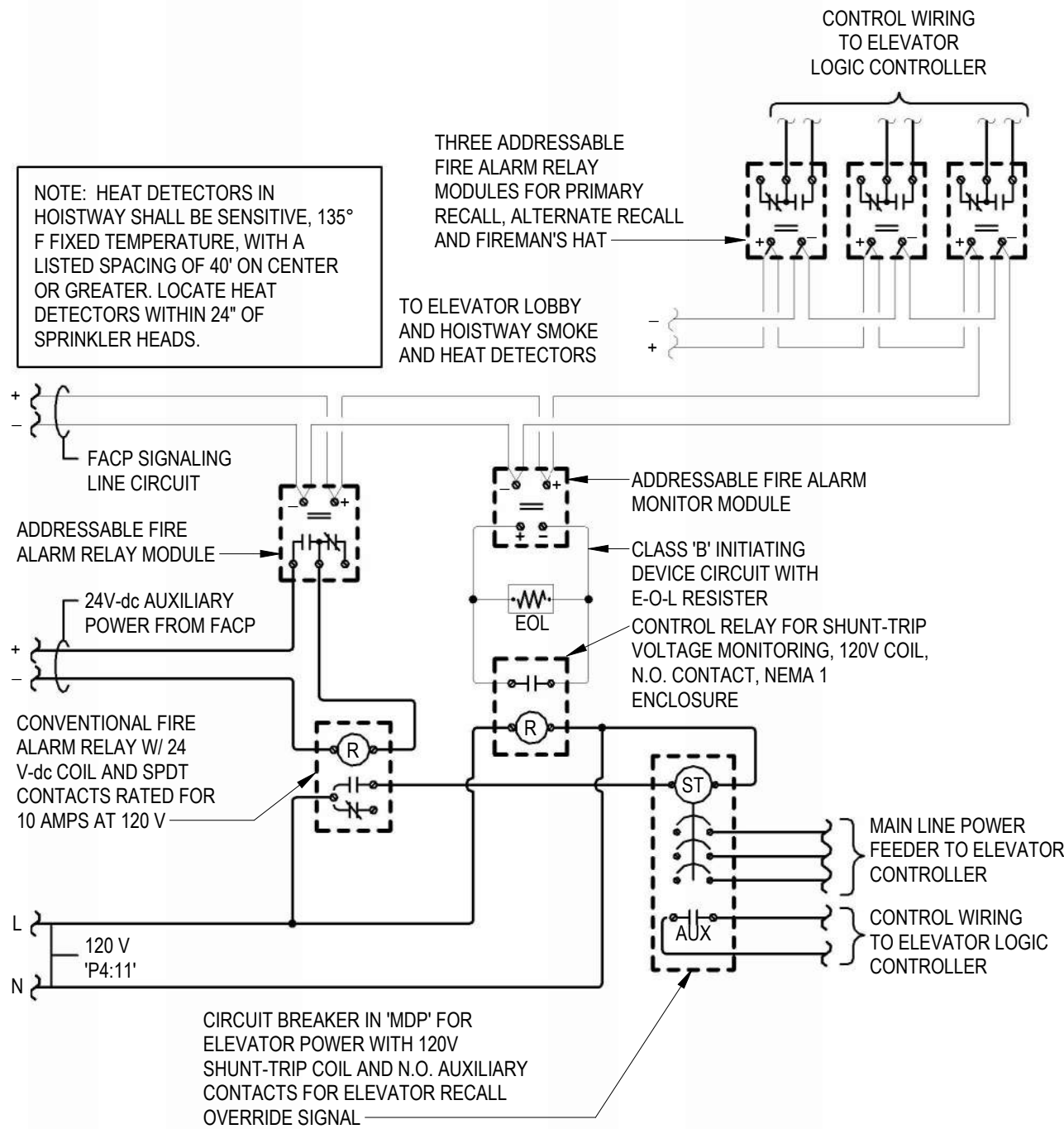
4 ACCESSIBLE APARTMENT DOORBELL WIRING SCHEMATIC
E6.1 NO SCALE



3 DOOR ACCESS CONTROL ROUGH-IN DIAGRAM
E6.1 NO SCALE



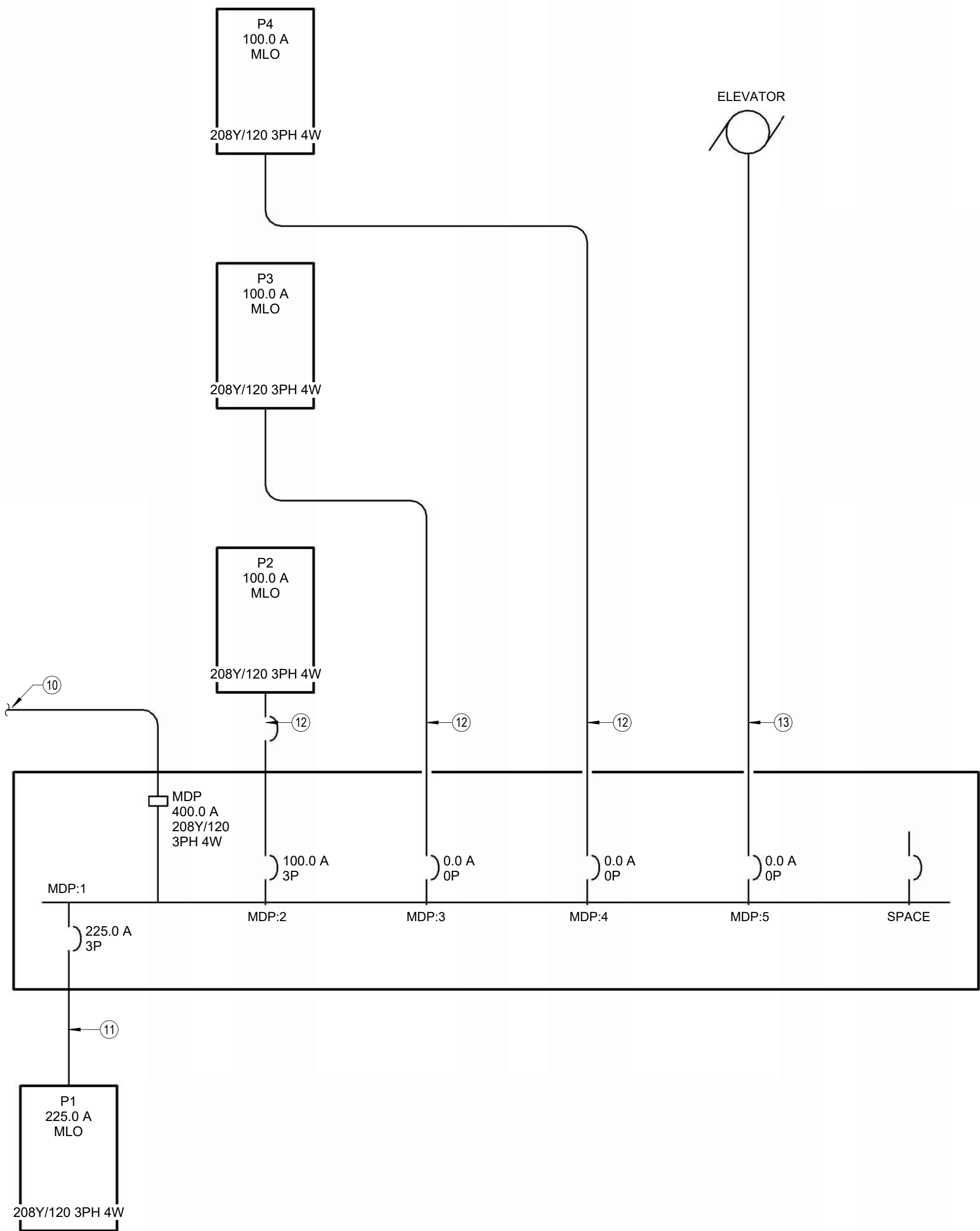
2 LIGHTING CONTROL DIAGRAM
E6.1 NO SCALE



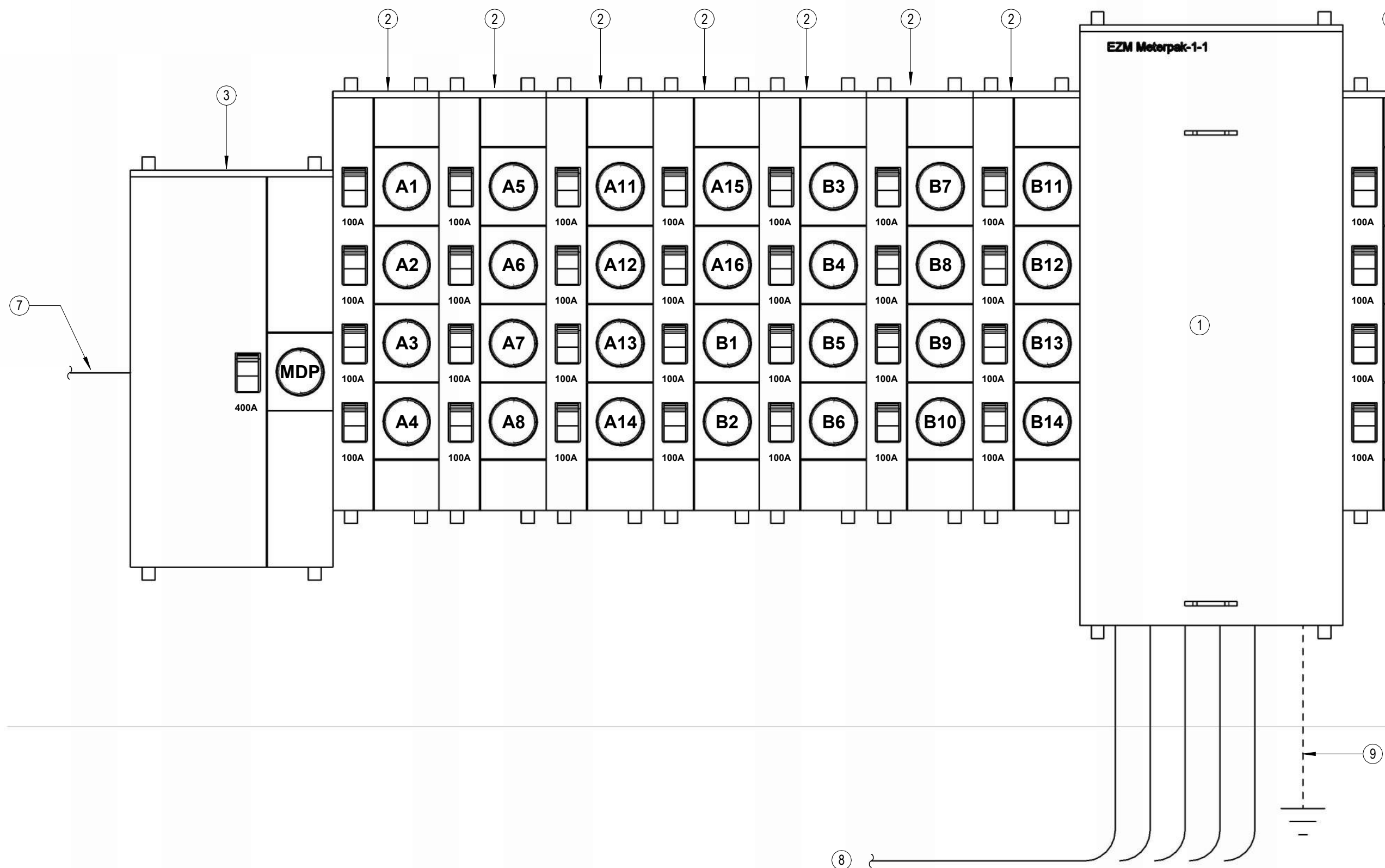
ELEVATOR RECALL AND SHUT-DOWN SEQUENCE OF OPERATION:

- UPON SENSING SMOKE FROM ONE OR MORE ELEVATOR LOBBY OR HOISTWAY, THE SMOKE DETECTOR SHALL SIGNAL THE FIRE ALARM CONTROL PANEL, WHICH WILL FORWARD THE SIGNAL TO THE ELEVATOR LOGIC CONTROLLER VIA ADDRESSABLE RELAY MODULES TO RECALL ELEVATOR CAB TO THE PRIMARY RECALL FLOOR. IF PRIMARY RECALL 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 ASSOCIATED WITH ELEVATOR RECALL (LOBBY AND HOISTWAY) SHALL TRANSMIT A SEPARATE AND DISTINCT VISIBLE ANNUNCIATION AT THE FIRE ALARM CONTROL PANEL.
- UPON SENSING A HEAT ALARM CONDITION IN THE ELEVATOR HOISTWAY, THE HEAT DETECTOR SHALL SIGNAL THE FIRE ALARM CONTROL PANEL, WHICH WILL FORWARD THE SIGNAL TO THE ADDRESSABLE RELAY MODULE TO ACTIVATE (VIA A CONVENTIONAL FIRE ALARM RELAY) THE SHUNT-TRIP BREAKER POWERING THE ELEVATOR SO AS TO DISCONNECT POWER TO THAT CIRCUIT. THIS IS TO BE A NON-AUTO RESET SWITCH. WHEN THE SPRINKLER HEAD HAS REACHED ITS CRITICAL TEMPERATURE OF 165° F., THE HEAD WILL BEGIN DISCHARGE OF WATER.

1 ELEVATOR RECALL AND SHUT-DOWN WIRING DIAGRAM
E6.1 NO SCALE



2 HOUSE ELECTRIC SERVICE RISER DIAGRAM
1" = 1'-0"



1 ELECTRICAL RISER DIAGRAM
1" = 1'-0"

DWELLING UNIT FEEDER CALCULATION					
UNIT TYPE: 2BR					
AREA: 800 SF					
FEEDER AND SERVICE LOADS PER NEC 220.82 PART IV					
(B)	General Loads		Connected Load (VA)	Demand Load (VA)	
(B1)	General Lighting and Receptacles (220.82 (B)(1)) a) Lighting and Receptacles 3 VA per Square Foot		2400 VA		
(B2)	Small Appliance & Laundry Branch Circuits (220.82 (B)(2)) a) Laundry Circuit 1500 VA per Circuit b) Kitchen Circuits 1500 VA per Circuit	1 Circuit 2 Circuits	1500 VA 3000 VA		
(B3)	Nameplate Ratings of Equipment (220.82 (B)(3)) a1) Dishwasher 840 VA each a2) Refrigerator 1000 VA each a3) Microwave 1000 VA each a4) Disposal 1175 VA each b) Electric Range 8000 VA each c) Clothes Dryer 5000 VA each d) Water Heater 4500 VA each	Qty. 1 Qty. 1 Qty. 1 Qty. 1 Qty. 1 Qty. 1 Qty. 1	840 VA 1000 VA 1000 VA 1175 VA 8000 VA 5000 VA 4500 VA		
(B4)	Nameplate Ratings of Motors (220.82 (B)(4)) a) HVAC Blower Fan 336 VA each b) Exhaust Fans 21 VA each	Qty. 1 Qty. 1	336 VA 21 VA		
Part (B) Connect Load Total			28772 VA		
Part (B) Demand Load Total (100% of 1st 10 KVA + 40% of remainder)				17509 VA	
(C)	Heating and Air Conditioning Load				
(C1)	100% Nameplate Rating of Air Conditioner (220.82 (C)(1)) a) A/C Unit #1 0 VA each b) A/C Unit #2 0 VA each	Qty. 0 Qty. 0	0 VA 0 VA		
Part (C1) Connect Load Total			0 VA		
(C2)	100% Nameplate Rating of Heat Pump w/o Supplemental Heat (220.82 (C)(2)) a) Heat Pump Unit #1 0 VA each b) Heat Pump Unit #2 0 VA each	Qty. 0 Qty. 0	0 VA 0 VA		
Part (C2) Connect Load Total			0 VA		
(C3)	100% of Heat Pump & 65% Supplemental Electric Heat (220.82 (C)(3)) a1) Heat Pump Unit #1 0 VA each a2) Electric Heat #1 0 VA each b1) Heat Pump Unit #2 0 VA each b2) Electric Heat #2 0 VA each	Qty. 0 Qty. 0 Qty. 0 Qty. 0	0 VA 0 VA 0 VA 0 VA		
Part (C3) Connect Load Total			0 VA		
(C4)	65% of Total Electric Heat if < 4 Separately Controlled Units (220.82 (C)(4)) a) Electric Heat #1 3900 VA each b) Electric Heat #2 0 VA each	Qty. 1 Qty. 0	2535 VA 0 VA		
Part (C4) Connect Load Total			2535 VA		
(C5)	40% of Total Electric Heat if > 4 Separately Controlled Units (220.82 (C)(5)) a) Electric Heat #1 0 VA each b) Electric Heat #2 0 VA each	Qty. 0 Qty. 0	0 VA 0 VA		
Part (C5) Connect Load Total			0 VA		
Part (C) Connect Load Total			2535 VA		
Part (C) Demand Load (Largest of C1 - C5)				2535 VA	
Total Dwelling Unit Demand (VA)				20044 VA	
Total Amps @ 208 V / 120V-1Ph-3W				96.4 A	
Provide 100A Load Center & Feed with 100A/2P Breaker					

DWELLING UNIT FEEDER CALCULATION					
UNIT TYPE: 1BR					
AREA: 650 SF					
FEEDER AND SERVICE LOADS PER NEC 220.82 PART IV					
(B)	General Loads		Connected Load (VA)	Demand Load (VA)	
(B1)	General Lighting and Receptacles (220.82 (B)(1)) a) Lighting and Receptacles 3 VA per Square Foot		1950 VA		
(B2)	Small Appliance & Laundry Branch Circuits (220.82 (B)(2)) a) Laundry Circuit 1500 VA per Circuit b) Kitchen Circuits 1500 VA per Circuit	1 Circuit 2 Circuits	1500 VA 3000 VA		
(B3)	Nameplate Ratings of Equipment (220.82 (B)(3)) a1) Dishwasher 840 VA each a2) Refrigerator 1000 VA each a3) Microwave 1000 VA each a4) Disposal 1175 VA each b) Electric Range 8000 VA each c) Clothes Dryer 5000 VA each d) Water Heater 4500 VA each	Qty. 1 Qty. 1 Qty. 1 Qty. 1 Qty. 1 Qty. 1 Qty. 1	840 VA 1000 VA 1000 VA 1175 VA 8000 VA 5000 VA 4500 VA		
(B4)	Nameplate Ratings of Motors (220.82 (B)(4)) a) HVAC Blower Fan 336 VA each b) Exhaust Fans 21 VA each	Qty. 1 Qty. 1	336 VA 21 VA		
Part (B) Connect Load Total			28322 VA		
Part (B) Demand Load Total (100% of 1st 10 KVA + 40% of remainder)				17329 VA	
(C)	Heating and Air Conditioning Load				
(C1)	100% Nameplate Rating of Air Conditioner (220.82 (C)(1)) a) A/C Unit #1 0 VA each b) A/C Unit #2 0 VA each	Qty. 0 Qty. 0	0 VA 0 VA		
Part (C1) Connect Load Total			0 VA		
(C2)	100% Nameplate Rating of Heat Pump w/o Supplemental Heat (220.82 (C)(2)) a) Heat Pump Unit #1 0 VA each b) Heat Pump Unit #2 0 VA each	Qty. 0 Qty. 0	0 VA 0 VA		
Part (C2) Connect Load Total			0 VA		
(C3)	100% of Heat Pump & 65% Supplemental Electric Heat (220.82 (C)(3)) a1) Heat Pump Unit #1 0 VA each a2) Electric Heat #1 0 VA each b1) Heat Pump Unit #2 0 VA each b2) Electric Heat #2 0 VA each	Qty. 0 Qty. 0 Qty. 0 Qty. 0	0 VA 0 VA 0 VA 0 VA		
Part (C3) Connect Load Total			0 VA		
(C4)	65% of Total Electric Heat if < 4 Separately Controlled Units (220.82 (C)(4)) a) Electric Heat #1 3900 VA each b) Electric Heat #2 0 VA each	Qty. 1 Qty. 0	2535 VA 0 VA		
Part (C4) Connect Load Total			2535 VA		
(C5)	40% of Total Electric Heat if > 4 Separately Controlled Units (220.82 (C)(5)) a) Electric Heat #1 0 VA each b) Electric Heat #2 0 VA each	Qty. 0 Qty. 0	0 VA 0 VA		
Part (C5) Connect Load Total			0 VA		
Part (C) Connect Load Total			2535 VA		
Part (C) Demand Load (Largest of C1 - C5)				2535 VA	
Total Dwelling Unit Demand (VA)				19864 VA	
Total Amps @ 208 V / 120V-1Ph-3W				95.5 A	
Provide 100A Load Center & Feed with 100A/2P Breaker					

APARTMENT FEEDER SCHEDULE (COPPER)	
APARTMENT PANEL NUMBER	FEEDER SIZE
A1, A2, A3, A4, A5, A6, A7, B1, B2, B3, B4, B5, B6, C1, C2, C3, C4, C5, D1, D2, D3, D4, D5,	(3)#1, #8G, 1-1/4"C.
A8, B8, B9, C6, C7, C8, C9, D6, D7	(3)#1/0, #6G, 1-1/2"C.
A11, B10, C10, D8, D9, D10	(3)#2/0, #4G, 2"C.
A12, A13, B11, B12, C11, C12, D11	(3)#3/0, #4G, 2"C.
A14, A15, A16, B13, B14, B15, B16, C13, C14, C15, C16, D12, D13, D14	(3)#4/0, #4G, 2"C.
NOTES: 1. VOLTAGE DROP HAS BEEN ACCOUNTED FOR IN SIZES INDICATED. FURTHER UPSIZING OF FEEDERS IS NOT... 2. ENSURE PANEL LUGS ARE ADEQUATELY SIZED TO HANDLE UP-SIZED FEEDERS. PROVIDE LUG ADAPTER KI...	

APARTMENT FEEDER SCHEDULE (ALUMINUM)	
APARTMENT PANEL NUMBER	FEEDER SIZE
A1, A2, A3, A4, A5, B1, B2, B3, B4, C1, C2, C3, D1, D2, D3	(3)#1, #8G, 1-1/4"C.
B5, C4, C5, D4	(3)#1/0, #6G, 1-1/2"C.
A6, A7, B6, B7, D5	(3)#2/0, #4G, 2"C.
A8, B8, B9, C6, C7, D6, D7	(3)#3/0, #3G, 2"C.
A11, B10, C8, C9, C10, D8, D9, D10	(3)#4/0, #2G, 2"C.
A12, A13, B11, B12, C11	(3)#250 KCMIL, #1G, 2-1/2"C.
A14, B13, C12, C13, D11, D12	(3)#300 KCMIL, #1/0G, 2-1/2"C.
A15, A16, B14, C14, D13	(3)#350 KCMIL, #2/0G, 2-1/2"C.
B15, B16, C15, C16, D14	(3)#400 KCMIL, #2/0G, 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	METER CENTER MAIN, 3-PH IN, 3-PH OUT, 208/120V-3PH, 4 WIRE WITH 1000A/3P MAIN BREAKER, 65 KAIC RATED, SERVICE ENTRANCE RATED WITH INTEGRAL SURGE PROTECTION DEVICE. SQUARE D EZ METER-PAK# EZMH31000CB.
2	5-SOCKET BRANCH UNITS, 3-PH IN, WITH (5) 100A BRANCH BREAKERS AS INDICATED. METER SOCKETS SHALL BE RINGLESS TYPE, 5-JAW WITH HORN BYPASS SQUARE D EZ METER-PAK# EZMH315125. PROVIDE PERMANENT LABEL ON EACH METER SOCKET BREAKER INDICATING THE APARTMENT BEING SERVED.
3	1-SOCKET BRANCH UNITS, 3-PH IN, 3-PH OUT, WITH (1) 400A BRANCH BREAKER. METER SOCKETS SHALL BE RINGLESS TYPE, 5-JAW WITH HORN BYPASS SQUARE D EZ METER-PAK# EZMH331400. PROVIDE PERMANENT LABEL ON METER SOCKET BREAKER TO READ 'HOUSE'.
4	MAXIMUM HEIGHT TO CENTERLINE OF TOP METER SOCKET SHALL BE 5'-6" AFG.
5	MINIMUM HEIGHT TO BOTTOM OF METER SOCKET ASSEMBLY SHALL BE 18" AFG.
6	SEE FEEDER SCHEDULE, THIS SHEET FOR SIZES TO APARTMENT UNIT LOAD CENTERS.
7	(2) PARALLEL 2" CONDUITS, EACH WITH (4)#3/0 KCMIL, #3G COPPER, OR (2) PARALLEL 3" CONDUITS, EACH WITH (4)#300KCMIL, #2/0 GROUND ALUMINUM TO PANEL 'MDP'.
8	(5) PARALLEL 4" CONDUITS EACH WITH (4) #400 KCMIL COPPER FROM TRANSFORMER TO METER CENTER.
9	#3/0 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	SEE 1:E6.2 FOR CONTINUATION.
11	(4)#3/0, #6G, 2"C.
12	(4)#1, #8G, 1-1/2"C.
13	(4)#4, #10G, 1"C.

NOTES:	
Meter Center main circuit breaker shall be 65 kAIC fully rated. Feeder breakers may be series rated with main breaker for a 42 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:	
Energy	
Abby Brungardt	
TD Design IV	
(785) 508-2715	
Abby.Brungardt@evergy.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.	

Designation: P2													
Installed Location: Mech 201				Bus Amps: 100				SCCR/AIC: 22.0 kA					
Voltage: 208Y/120 3PH 4W-3Ph-4W				MCB Amps: MLO				Mains FN/Note: -					
Mounting: Surface				Features & Modifications: -									
Enclosure: NEMA 1													
Ckt	Description	Circuitry	Trip (A)	FN	A	B	C	FN	Trip (A)	Circuitry	Description	Ckt	
P2.1	LTG - 2nd Floor Mech. Halls, Stairs	1/2"C,1#12,#12N,#12G	20	67...	54...				20	1/2"C,1#12,#12N,#12G	RCPT - Hall 202	P2.2	
P2.3	LTG - Exterior Up/Dn Lights	1/2"C,1#12,#12N,#12G	20			19...	54...		20	1/2"C,1#12,#12N,#12G	RCPT - Hall 203	P2.4	
P2.5	Exterior Lighting Controls	1/2"C,1#12,#12N,#12G	20				50...	10...		20	RCPT - Telecomm Backboard	P2.6	
P2.7	Elevator Sump Pump Control Panel	1/2"C,1#12,#12N,#12G	20	36...	10...				20	1/2"C,1#12,#12N,#12G	RCPT - Telecomm Backboard	P2.8	
P2.9	RCPT - Elevator Sump Pump	1/2"C,1#12,#12N,#12G	20			18...	20...						
P2.11	Spare	--	--				0 VA 20...		30	1/2"C,2#10,#10G	Blower Coil 'BC-1' - Second Floor Halls	P2.10	
P2.13	Spare	--	20	0 VA 40...								P2.12	
P2.15	Space	--	--			-- 40...			50	3/4"C,2#6,#10G	Blower Coil 'BC-3' - First Floor Lobby	P2.14	
P2.17	Space	--	--				-- --		--	--	Space	P2.16	
P2.19	Space	--	--		-- --				--	--	Space	P2.18	
P2.21	Space	--	--		-- --	-- --			--	--	Space	P2.20	
P2.23	Space	--	--		-- --	-- --			--	--	Space	P2.22	
Connected Load:				6599 VA	7031 VA	3141 VA							
Connected Amps:				59.4 A	63.0 A	26.2 A							

Designation: P3

Installed Location: Mech 301

Voltage: 208Y/120 3PH 4W-3Ph-4W

Mounting: Surface

Enclosure: NEMA 1

Bus Amps: 100

MCB Amps: MLO

Features & Modifications: -

SCCR/AIC: 22.0 kA

Mains FN/Note: -

Ckt	Description	Circuitry	Trip (A)	FN	A	B	C	FN	Trip (A)	Circuitry	Description	Ckt	
P3.1	LTG - 3rd Floor Mech, Halls, Stairs	1/2"C,1#12,#12N,#12G	20	67...	54...				20	1/2"C,1#12,#12N,#12G	RCPT - Hall 302	P3.2	
P3.3	Blower Coil 'BC-1' - Third Floor Halls	1/2"C,2#10,#10G	30			20...	54...		20	1/2"C,1#12,#12N,#12G	RCPT - Hall 303	P3.4	
P3.5						20...	10...		20	1/2"C,1#12,#12N,#12G	RCPT - Telecomm Backboard	P3.6	
P3.7	Spare	--	20	0 VA	10...				20	1/2"C,1#12,#12N,#12G	RCPT - Telecomm Backboard	P3.8	
P3.9	Spare	--	20			0 VA	--	--	--	--	Space	P3.10	
P3.11	Space	--	--				--	--	--	--	Space	P3.12	
P3.13	Space	--	--	--	--				--	--	Space	P3.14	
P3.15	Space	--	--			--	--		--	--	Space	P3.16	
P3.17	Space	--	--				--	--	--	--	Space	P3.18	
P3.19	Space	--	--		--	--			--	--	Space	P3.20	
P3.21	Space	--	--			--	--	--	--	--	Space	P3.22	
P3.23	Space	--	--				--	--	--	--	Space	P3.24	
Connected Load:				2214 VA	2631 VA	3091 VA							
Connected Amps:				18.5 A	22.5 A	26.3 A							

Designation: P4														
Installed Location: Mech 401				Bus Amps: 100				SCCR/AIC: 22.0 kA						
Voltage: 208Y/120 3PH 4W-3Ph-4W				MCB Amps: MLO				Mains FN/Note: -						
Mounting: Surface				Features & Modifications: -										
Enclosure: NEMA 1														
Ckt	Description	Circuitry	Trip (A)	FN	A	B	C	FN	Trip (A)	Circuitry	Description	Ckt		
P4.1	LTG - 4th Floor Mech. Hall and Stairs	1/2"C,1#12,#12N,#12G	20	64...	18...				20	1/2"C,1#10,#10N,#10G	Electric Wall Heater - Hall 403	P4.2		
P4.3	LTG - Elevator Hoistway	1/2"C,1#12,#12N,#12G	20			24...	54...		20	1/2"C,1#12,#12N,#12G	RCPT - Hall 402	P4.4		
P4.5	LTG - Exterior Facade Lighting	1/2"C,1#12,#12N,#12G	20					93...	54...	20	1/2"C,1#12,#12N,#12G	RCPT - Hall 403	P4.6	
P4.7	LTG - Roof Patio	1/2"C,1#12,#12N,#12G	20	22...	90...				20	1/2"C,1#12,#12N,#12G	RCPT - Rooftop	P4.8		
P4.9	RCPT - Elevator Hoistway	1/2"C,1#12,#12N,#12G	20			18...	14...		20	1/2"C,1#10,#10N,#10G	Future Radon Fan	P4.10		
P4.11	Other	1/2"C,1#12,#12N,#12G	20					36...	10...	20	1/2"C,1#12,#12N,#12G	Future Radon Fan	P4.12	
P4.13	Heat Pump 'HP-2' - Fitness	1/2"C,2#12,#12G	20	12...	20...				30	1/2"C,2#10,#10G	Blower Coil 'BC-1A' - Fourth Floor Hall	P4.14		
P4.15	Heat Pump 'HP-3' - Lobby/Office	1/2"C,2#10,#10G	30			12...	20...		17...	11...	20	1/2"C,2#10,#10G	Heat Pump 'HP-1' - North Stairs	P4.16
P4.17	Heat Pump 'HP-1' - First Floor Halls	1/2"C,2#12,#12G	20			17...	11...							P4.18
P4.19	Heat Pump 'HP-1' - Second Floor Halls	1/2"C,2#12,#12G	20			11...	11...		11...	11...	20	1/2"C,2#12,#12G	Heat Pump 'HP-1' - South Stairs	P4.20
P4.21	Heat Pump 'HP-1' - Third Floor Halls	1/2"C,2#12,#12G	20			11...	0 VA		20	--	Spare			P4.22
P4.23	Heat Pump 'HP-1' - Fourth Floor Halls	1/2"C,2#12,#12G	20			11...	0 VA		20	--	Spare			P4.24
P4.25	Space	--	--		--	--	--		--	--	Space			P4.26
P4.27	Space	--	--		--	--	--		--	--	Space			P4.28
P4.29	Space	--	--		--	--	--		--	--	Space			P4.30
P4.31	Space	--	--		--	--	--		--	--	Space			P4.32
P4.33	Space	--	--		--	--	--		--	--	Space			P4.34
P4.35	Space	--	--		--	--	--		--	--	Space			P4.36
P4.37	Space	--	--		--	--	--		--	--	Space			P4.38
P4.39	Space	--	--		--	--	--		--	--	Space			P4.40
P4.41	Space	--	--		--	--	--		--	--	Space			P4.42
Connected Load:				12219 VA	10280 VA	9790 VA								
Connected Amps:				102.5 A	86.3 A	81.6 A								

Panelboard: MDP

Location: Mech 201

Supply: Meter Center

Mounting: Surface

Enclosure: NEMA 1

Features & Modifications: -

Voltage: 208 V, 3 Ø, 4 W

Bus Rating: 400 A

Neutral: 100%

Mains Type: MLO

Mains Rating: 400 A

Mains FN/Note: -

SCCR: 22 kA

Ckt	Description	Frame (A)	Trip (A)	Poles	FN/Note	Load
MD...P1		225	225	3		47172
MD...P2		100	100	3		16771
MD...P3		100	100	3		7935
MD...P4		100	100	3		32289
MD...Elevator		60	60	3		15500
MD...100A Bussed Space		--	--	3		--

Load Summary

Load Classification	Connected	Factor	Demand	Panel Totals
Motor	297 VA	110.00%	327 VA	Connected Load: 120 kVA
Other	4680 VA	100.00%	4680 VA	Connected Current: 332 A
Lighting - Interior	7247 VA	125.00%	9059 VA	Demand Load: 131 kVA
Receptacle - General	15960 VA	81.33%	12980 VA	Demand Current: 364 A
Receptacle - Dedicated	5800 VA	100.00%	5800 VA	Non-Coincident... 56.3 A
Electric Water Heating	2500 VA	125.00%	3125 VA	Total Est. Demand - NC 307.4 A
Electric Heat	47413 VA	125.00%	59266 VA	
Elevator	15500 VA	100.00%	15500 VA	
Cooling	20270 VA	100.00%	20270 VA	

Notes:

Provide with integral surge protection device per specifications.

Designation: P1												
Installed Location: Leasing Office 102					Bus Amps: 225				SCCR/AIC: 22.0 kA			
Voltage: 208Y/120 3PH 4W-3Ph-4W					MCB Amps: MLO				Mains FN/Note: -			
Mounting: Surface					Features & Modifications: -							
Enclosure: NEMA 1												
Ckt	Description	Circuitry	Trip (A)	FN	A	B	C	FN	Trip (A)	Circuitry	Description	Ckt
P1.1	LTG - Community 101, Fitness 104, Hall 106	1/2"C,1#12,#12N,#12G	20		13... 72...				20	1/2"C,1#12,#12N,#12G	RCPT - Community Room and Hall	P1.2
P1.3	LTG - Hall 107	1/2"C,1#12,#12N,#12G	20			27... 36...			20	1/2"C,1#12,#12N,#12G	RCPT - Community Room 101 Island	P1.4
P1.5	LTG - Hall 108	1/2"C,1#12,#12N,#12G	20				39... 54...		20	1/2"C,1#12,#12N,#12G	RCPT - Community Room Bar	P1.6
P1.7	LTG - Exterior Canopy and Trellis	1/2"C,1#12,#12N,#12G	20		14... 80...				20	1/2"C,1#12,#12N,#12G	RCPT - Community Room Refrigerator	P1.8
P1.9	LTG - Parking Lot	3/4"C,2#8,#8G	20			13... 90...			20	1/2"C,1#12,#12N,#12G	RCPT - Office 102	P1.10
P1.11	LTG - Monument Sign	3/4"C,1#10,#10N,#10G	20		22... 36...		13... 72...		20	1/2"C,1#12,#12N,#12G	RCPT - TLT 103, Hall 107	P1.12
P1.13	LTG - Elevator Pit	1/2"C,1#12,#12N,#12G	20			24... 18...			20	1/2"C,1#8,#8N,#8G	RCPT - Hall 108	P1.14
P1.15	LTG - Elevator Pit	1/2"C,1#12,#12N,#12G	20						20		Electric Wall Heater 'EWH'-1 - Hall 108	P1.16
P1.17	RCPT - Elevator Pit	1/2"C,1#12,#12N,#12G	20				18... 21...		30	1/2"C,2#8,#8G	Electric Wall Heater 'EWH'-4 - Mech 109	P1.18
P1.19	RCPT - S. Fitness Equipment	1/2"C,1#12,#12N,#12G	20		10... 21...							P1.20
P1.21	RCPT - S. Fitness Equipment	1/2"C,1#12,#12N,#12G	20			10...						
P1.23	RCPT - S. Fitness Equipment	1/2"C,1#12,#12N,#12G	20				10...					
P1.25	RCPT - S. Fitness Equipment	1/2"C,1#12,#12N,#12G	20		10... 11...				20	1/2"C,1#12,#12N,#12G	Hot Water Recirculation Pump 'HWP'	P1.26
P1.27	RCPT - S. Fitness Equipment	1/2"C,1#12,#12N,#12G	20			10... 20...			30	1/2"C,2#10,#10G	Blower Coil 'BC'-1 - First Floor Halls	P1.28
P1.29	RCPT - S. Fitness	1/2"C,1#12,#12N,#12G	20				36... 20...					P1.30
P1.31	RCPT - N. Fitness	1/2"C,1#12,#12N,#12G	20		54... 20...							P1.32
P1.33	Electric Water Cooler - Fitness	1/2"C,1#12,#12N,#12G	20			80... 20...			30	1/2"C,2#10,#10G	Blower Coil 'BC'-1 - Stairs 1	P1.34
P1.35	Blower Coil 'BC'-2 - Fitness	1/2"C,2#8,#10G	40		31... 72...		31... 12...		20	1/2"C,1#10,#10N,#10G	Exterior Receptacles	P1.36
P1.37						20... 36...			20	1/2"C,1#12,#12N,#12G	Mech/Stroage Recepticals	P1.38
P1.39	Blower Coil 'BC'-1 - Stairs 2	1/2"C,2#8,#8G	30					L	20	1/2"C,1#12,#12N,#12G	Fire Sprinkler Switch Systems	P1.40
P1.41							20... 0 VA		20	--	Spare	P1.42
P1.43	FACP	1/2"C,1#12,#12N,#12G	20	L	36... 0 VA				20	--	Spare	P1.44
P1.45	Exterior Lighting Inverter	1/2"C,1#12,#12N,#12G	20			55... 0 VA			20	--	Spare	P1.46
P1.47	Door Access Control	1/2"C,1#12,#12N,#12G	20				36... --	--	--	--	Spare	P1.48
P1.49	Electric Water Heating	1/2"C,1#10,#10N,#10G	30	25...	--	--	--	--	--	--	Space	P1.50
P1.51	Space	--	--	--	--	--	--	--	--	--	Space	P1.52
P1.53	Space	--	--	--	--	--	--	--	--	--	Space	P1.54
Connected Load:					17255 VA	14233 VA	15685 VA					
Connected Amps:					145.7 A	118.6 A	132.6 A					

General Plan Symbols			HVAC Symbols	
	Plan Revision Number			Sq. Duct Size (Width/Height)
	Detail Number on Sheet			Oval Duct Size (Width x Height)
	Sheet Number Where Detail is Placed			Round Duct Size (Diameter)
	Keynote Symbol			Existing Duct To Remain
	Continuation Symbol			Duct To Be Demolished
	Point Where New Connects To Existing			Supply Air
	Room Name / Number			Ventilation Air
	Area Being Demolished			Outdoor Air
	Area Not In Contract			Return Air
	Electrical Equipment. Do not route HVAC installation above or below equipment. Maintain working clearance as indicated by dashed line.			Transfer Air
				General Exhaust Air
				Kitchen Exhaust Duct
				Flue Gas Vent
				Combustion Air
				Rect. Supply Duct Rise / Drop
				Round Supply Duct Rise / Drop
				Rect. Return Duct Rise / Drop
				Round Return Duct Rise / Drop
				Rect. Exhaust Duct Rise / Drop
				Round Exhaust Duct Rise / Drop
			Grille, Register, Diffusers	
			Square Ceiling Diffuser	
				Type (See Schedule) Airflow Neck Size / Module Size
			Round Ceiling Diffuser	
				Type (See Schedule) Airflow Neck Size TYP. X 4 Type Count for Space
			Sidewall Supply Grille	
				Type (See Schedule) Airflow Nominal Duct Size Mounting Elevation (Centerline)
			Linear Diffuser	
				Type (See Schedule) Airflow Neck Size/ Slot(s) Active Length
			Sidewall Return Grille	
				Type (See Schedule) Airflow Nominal Duct Size Mounting Elevation (Centerline)
			Ceiling Return	
				Type (See Schedule) Airflow Neck Size / Module Size
			Mechanical Equipment	
				Unit Identity
				Existing to Remain Equipment
				Existing Relocated Equipment
				Equipment By Others (Refer To Other Disciplines)
			Mechanical Control Devices	
				Thermostat
				Humidistat
				Temperature Sensor
				Humidity Sensor
				Carbon Dioxide Detector
				Hazardous Gas Detector
			Damper Types	
				Manual Damper
				Motorized Damper
				Backdraft Damper
				Smoke Damper
				Fire Damper
				Comb. Fire/Smoke Damper
			Abbreviations	
Ø	ROUND	LVR	LOUVER	
ABV	ABOVE	LWT	LEAVING WATER TEMPERATURE	
AC	AIR CONDITIONING	M/A	MIXED AIR	
AD	AREA DRAIN	MAX	MAXIMUM	
ADD	ADDENDUM	MBH	ONE THOUSAND BTU PER HOUR	
AFF	ABOVE FINISHED FLOOR	MCF	ONE THOUSAND CUBIC FEET	
AFUE	ANNUAL FUEL UTILIZATION EFFICIENCY	MD	MOTORIZED DAMPER	
ALT	ALTERNATE	MECH	MECHANICAL	
AP	ACCESS PANEL	MFR	MANUFACTURER	
ARCH	ARCHITECT/ARCHITECTURAL	MIN	MINIMUM	
BFF	BELOW FINISHED FLOOR	MISC	MISCELLANEOUS	
BLW	BELOW	MTR	MOTOR	
BTU	BRITISH THERMAL UNITS	MU/A	MAKE-UP/AIR	
BTUH	BRITISH THERMAL UNITS PER HOUR	NC	NOISE CRITERIA	
CAP	CAPACITY	NC	NORMALLY CLOSED	
CB	CATCH BASIN	NIC	NOT IN CONTRACT	
CFM	CUBIC FEET PER MINUTE	NO	NUMBER	
CLG	CEILING	NO	NORMALLY OPEN	
CO	CLEAN OUT	NTS	NOT TO SCALE	
CW	COLD WATER	O	OXYGEN	
D	DEGREE	O/A	OUTSIDE AIR	
DB	DRY BULB	ORD	OVERFLOW ROOF DRAIN	
DIA	DIAMETER	PD	PRESSURE DROP	
DN	DOWN	PV	POST INDICATOR VALVE	
DW	DISTILLED WATER	PLBG	PLUMBING	
EA	EACH	PRESS	PRESSURE	
EAT	ENTERING AIR TEMPERATURE	PRV	PRESSURE REDUCING VALVE	
ELEC	ELECTRICAL	PSI	POUNDS PER SQUARE INCH	
EQUIP	EQUIPMENT	PSIG	POUNDS PER SQUARE INCH GAUGE	
EWIC	ELECTRIC WATER COOLER	PWR	POWER	
EWT	ENTERING WATER TEMPERATURE	R	DUCT RISER	
E/A	EXHAUST AIR	R/A	RETURN AIR	
EXIST	EXISTING	RCP	RADIANT CEILING PANEL	
F	DEGREES FAHRENHEIT	RD	ROOF DRAIN	
FCO	FLOOR CLEAN OUT	REC	RECESSED	
FD	FLOOR DRAIN	RED	REDUCER	
FDC	FIRE DEPARTMENT CONNECTION	RH	RELATIVE HUMIDITY	
FL	FLOOR	RL/A	RELIEF AIR	
FO	FUEL OIL	RM	ROOM	
FOV	FUEL OIL VENT	RPM	REVOLUTIONS PER MINUTE	
FOR	FUEL OIL RETURN	RW	RAIN WATER	
FOS	FUEL OIL SUPPLY	SF	SQUARE FOOT	
FPM	FEET PER MINUTE	S/A	SUPPLY AIR	
FS	FLOOR SINK	SAN	SANITARY	
FT	FOOT/FEET	SF	SQUARE FOOT	
FTT	FIN TUBE RADIATION	SD	SMOKE DAMPER	
GAL	GALLON	SM	SURFACE MOUNT	
GF	GAS-FIRED	SP	STANDPIPE	
GC	GENERAL CONTRACTOR	SP	STATIC PRESSURE	
GPM	GALLONS PER MINUTE	STM	STEAM	
GW	GREASE WASTE	T	THERMOSTAT	
HB	HOSE BIB	TD	TEMPERATURE DROP	
HP	HORSE POWER	TDR	TRENCH DRAIN	
HTG	HEATING	TEMP	TEMPERATURE	
HTR	HEATER	TYP	TYPICAL	
HW	HOT WATER	UG	UNDERGROUND	
HYD	HYDRANT	VAC	VACUUM	
ID	INDIRECT	V	VENT	
IN	INCH	VAV	VARIABLE AIR VOLUME	
INV	INVERT	VENT	VENTILATION	
LB	POUND	VTR	VENT THROUGH ROOF	
LBHR	POUNDS PER HOUR	W	WASTE	
LAT	LEAVING AIR TEMPERATURE	WB	WET BULB	
LP	LOW PRESSURE	WCO	WALL CLEAN OUT	
LPG	LIQUEFIED PETROLEUM GAS	WH	WALL HYDRANT	
			Equipment Abbreviations	
AC	AIR CONDITIONING UNIT	ET	EXPANSION TANK	
ACCU	AIR COOLING CONDENSING UNIT	EWB	ELECTRIC WATER HEATER	
AHU	AIR HANDLING UNIT	FCU	FAN COIL UNIT	
AS	AIR SEPARATOR	FP	FIRE PUMP	
B	BOILER	GI	GREASE INTERCEPTOR	
CH	CHILLER	GRV	GRAVITY ROOF VENTILATOR	
CT	COOLING TOWER	HWP	HEATING WATER PUMP	
CUH	CABINET UNIT HEATER	HRU	HEAT RECOVERY UNIT	
CHWP	CHILLED WATER PUMP	PRV	POWER ROOF VENTILATOR	
DBP	DOMESTIC WATER BOOSTER PUMP	RE	RETURN/EXHAUST FAN	
DC	DUCT MOUNTED COIL	RTU	ROOFTOP UNIT	
DCP	DOMESTIC WATER CIRCULATING PUMP	SP	SUMP PUMP	
EF	EXHAUST FAN	UH	UNIT HEATER	
EDC	ELECTRIC DUCT COIL	WH	WATER HEATER	
			NOTE	
			ALL OF GENERAL NOTES ON THIS SHEET ARE TO BE APPLIED TO ALL OTHER DRAWINGS IN THIS SET.THE SYMBOLS AND ABBREVIATIONS SHOWN ON THIS SHEET MAY OR MAY NOT BE USED IN THIS SET OF DRAWINGS.	

HVAC SHEET INDEX	
M1.1	HVAC PLANS
M1.2	HVAC PLANS
M4.1	ENLARGED HVAC PLANS
M4.2	ENLARGED HVAC PLANS
M6.1	HVAC SCHEDULES AND DETAILS
M0.1	HVAC TITLE SHEET

- GENERAL HVAC NOTES**
- CONTRACTOR SHALL LOCATE THERMOSTATS AND HUMIDISTATS AT 4'-0" AFF UNLESS NOTED OTHERWISE. MAINTAIN A MINIMUM HORIZONTAL SEPARATION OF 8" FROM LIGHT SWITCHES.
 - CONDENSATE DRAINS SHALL BE SUPPLIED FOR ALL COOLING EQUIPMENT. CONTRACTOR SHALL ENSURE PROPER INSTALLATION AND DRAINAGE AS REQUIRED BY FEDERAL, STATE, AND LOCAL CODES. CONDENSATE PIPING SHALL BE TYPE "L" COPPER. WHERE INSTALLED ABOVE CEILINGS, CONDENSATE DRAIN PIPING SHALL BE INSULATED WITH MINIMUM 1/2" FIBERGLASS PIPE INSULATION WITH ALL SERVICE JACKET.
 - ALL SUPPLY, RETURN, AND EXHAUST DUCTWORK SHALL BE RATED FOR PRESSURE CLASS OF 2" W.G. UNLESS NOTED OTHERWISE.
 - COORDINATE THE EXACT LOCATION OF ALL CEILING DIFFUSERS, REGISTERS, AND GRILLES WITH LIGHTING.
 - PROVIDE DIFFUSERS AND REGISTERS WITH 4-WAY BLOW PATTERN UNLESS OTHERWISE NOTED.
 - HVAC EQUIPMENT SHALL NOT BE UTILIZED UNTIL ALL DUCT PRODUCING CONSTRUCTION ACTIVITY HAS BEEN COMPLETED. CONTRACTOR SHALL BE REQUIRED TO OBTAIN APPROVAL FROM OWNER PRIOR TO EQUIPMENT STARTUP AND TO REPLACE FILTERS ON HVAC EQUIPMENT UPON FINAL COMPLETION.
 - LOCATIONS OF PIPING, DUCTWORK AND EQUIPMENT AS INDICATED ON THE DRAWINGS ARE APPROXIMATE AND SUBJECT TO MINOR ADJUSTMENTS IN THE FIELD. WORK SHALL BE COORDINATED WITH ALL OTHER TRADES TO AVOID INTERFERENCE IN THE FIELD.
 - FINAL PRODUCT SHALL BE A COMPLETE AND FUNCTIONING SYSTEM, AND SHALL CONFORM TO ALL REQUIREMENTS OF APPLICABLE FEDERAL, STATE, AND LOCAL CODES, INCLUDING BUT NOT LIMITED TO THE INTERNATIONAL BUILDING CODE AND INTERNATIONAL MECHANICAL CODE.
 - LOCATE EQUIPMENT REQUIRING ACCESS 2'-0" MAXIMUM ABOVE CEILING.
 - ALL ROOF MOUNTED EQUIPMENT SHALL BE A MINIMUM 10'-0" FROM EDGE OF ROOFS WITHOUT A 42" HIGH PARAPET OR GUARD RAIL. WHERE PROVIDING 10'-0" SEPARATION FROM ROOF EDGE IS NOT POSSIBLE, PROVIDE PERMANENT FALL ARREST ANCHORS COMPLIANT WITH ANSI/ASSP Z359.1. COORDINATE WITH GENERAL CONTRACTOR.
 - LOCATE DUCTWORK, PIPING AND MECHANICAL EQUIPMENT OUTSIDE OF THE NEC REQUIRED CLEAR SPACE ABOVE AND AROUND ELECTRICAL PANELS, TRANSFORMERS AND OTHER ELECTRICAL EQUIPMENT. COORDINATE WITH ELECTRICAL CONTRACTOR.
 - PENETRATIONS OF RATED ASSEMBLIES SHALL BE FIRE STOPPED. FIRE STOPPING SHALL BE U.L. LISTED. SEE ARCHITECTURAL DRAWINGS FOR LOCATIONS OF RATED ASSEMBLIES.
 - PROVIDE SLEEVES AND/OR OPENINGS TO RUN PIPES AND DUCTS THROUGH FOUNDATIONS, FLOORS, WALLS, AND ROOF. MAINTAIN CLEAR ACCESS TO SERVICE EQUIPMENT AND OTHER ACCESSORIES REQUIRING SERVICE. VISUAL INSPECTION OR HAND OPERATION. WHERE INDICATED OR REQUIRED, PROVIDE ACCESS PANELS OF THE TYPE SELECTED TO SUIT MATERIALS IN WHICH INSTALLED.
 - TRANSITION FROM PIPING AND DUCTWORK SIZES SHOWN TO PROPERLY CONNECT TO MECHANICAL EQUIPMENT.
 - PIPE SIZES SHOWN SHALL BE CONTINUED IN THE DIRECTION OF FLOW UNTIL ANOTHER SIZE IS SHOWN.
 - INSTALL ALL EQUIPMENT IN ACCORDANCE WITH THE RESPECTIVE MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS, AT A LEVEL OF QUALITY AND WORKMANSHIP CONSISTENT WITH THE SPECIFICATIONS.
 - INSTALL EXPOSED PIPING AND DUCTWORK AS HIGH AS PRACTICAL IN ROOMS WITHOUT CEILINGS.
 - PRIOR TO STARTING WORK, SUBMIT SHOP DRAWINGS FOR ALL MECHANICAL EQUIPMENT AND MATERIALS. SUBSTITUTE EQUIPMENT INSTALLED WITHOUT PRIOR APPROVAL SHALL BE SUBJECT TO REPLACEMENT AT CONTRACTOR'S EXPENSE.
 - CONTRACTOR SHALL OBTAIN AND PAY FOR ALL NECESSARY PERMITS AND SHALL ARRANGE FOR ALL INSPECTIONS AS REQUIRED.
 - PROVIDE ONE YEAR WARRANTY FOR ALL WORKMANSHIP AND MATERIALS AFTER THE DATE OF FINAL ACCEPTANCE.

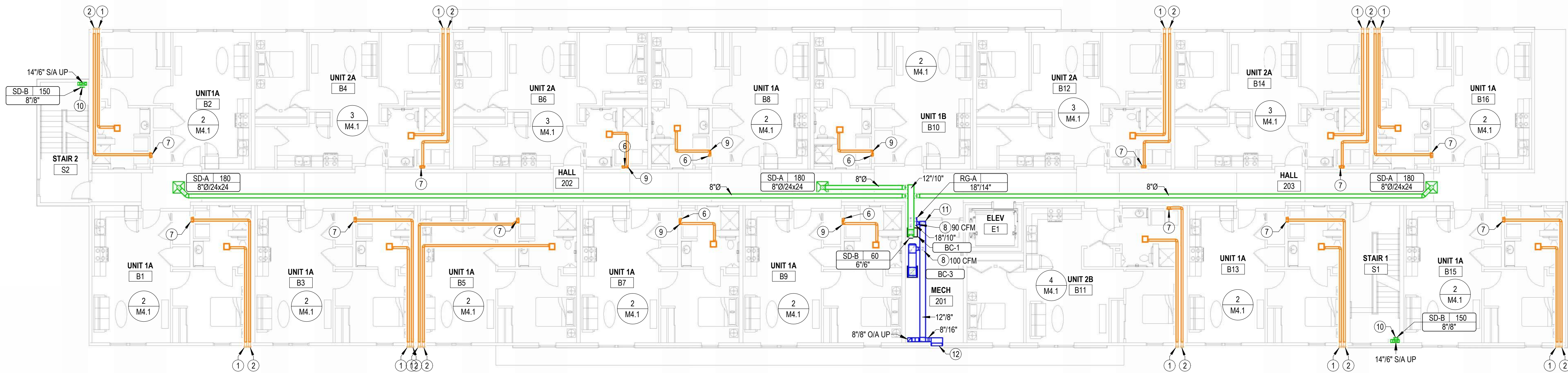
PROJECT SHALL COMPLY WITH ALL REQUIREMENTS OF THE 2018 IECC. REFERENCE SPECIFICATIONS FOR COMMISSIONING REQUIREMENTS

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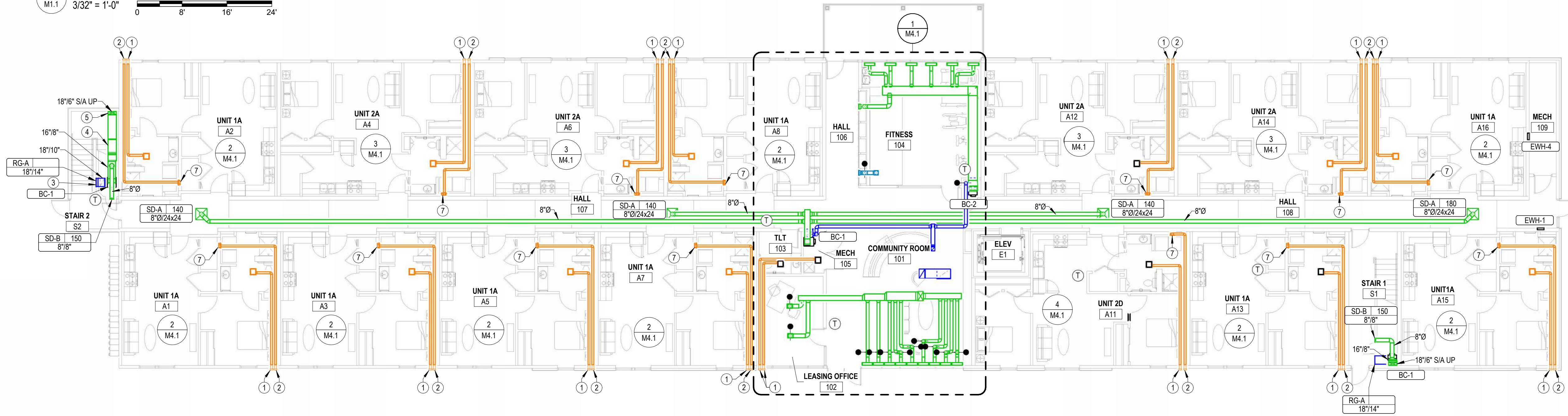
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M1.1

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2 SECOND FLOOR HVAC PLAN
3/32" = 1'-0"
0 8' 16' 24'



1 FIRST FLOOR HVAC PLAN
3/32" = 1'-0"
0 8' 16' 24'

NOTES BY SYMBOL

- ROUTE 4" Ø EXHAUST DUCT TO MANUFACTURER'S WALL CAP WITH BACKDRAFT DAMPER AND BIRD SCREEN, COORDINATE FINAL LOCATION WITH ARCHITECT.
- 4" Ø DRYER DUCT. SEE ENLARGED PLANS FOR MORE INFORMATION. COORDINATE FINAL LOCATION OF WALL CAP WITH ARCHITECT.
- MOUNT RETURN GRILLE HIGH IN WALL, TRANSITION DOWN TO CONNECT TO BOTTOM OF BLOWER COIL.
- TRANSITION DUCT DOWN AS REQUIRED TO ROUTE BELOW STAIR LANDING.
- ROUTE DUCT UP THROUGH STAIR LANDING IN CHASE, COORDINATE WITH ARCHITECT.
- PROVIDE UL 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 ROOF JACK WITH BACKDRAFT DAMPER. SEE OVERALL MECHANICAL PLANS FOR UNIT SPECIFIC ROUTING. MAXIMUM ALLOWABLE EQUIVALENT DUCT LENGTH = 35'. UTILIZE LONG RADIUS SMOOTH ELBOWS WHERE REQUIRED. MAXIMUM EQUIVALENT DUCT LENGTH MAY BE INCREASED 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.
- PROVIDE UL 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 WALL CAP WITH BACKDRAFT DAMPER. SEE OVERALL MECHANICAL PLANS FOR UNIT SPECIFIC ROUTING. MAXIMUM ALLOWABLE EQUIVALENT DUCT LENGTH = 35'. UTILIZE LONG RADIUS SMOOTH ELBOWS WHERE REQUIRED. MAXIMUM EQUIVALENT DUCT LENGTH MAY BE INCREASED 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.
- PROVIDE BALANCING DAMPER AND CONNECT OUTDOOR AIR DUCT TO RETURN DUCTWORK AT BLOWER COIL AND BALANCE TO AIRFLOW LISTED ON PLANS.
- ROUTE 4" EXHAUST UP IN WALL TO ROOF. DUCTS SHALL BE RUN IN WALLS CONTINUOUS FROM EXHAUST FAN TO EXTERIOR OF BUILDING WITHOUT BEING COMBINED. COORDINATE EXACT ROUTING AND WALL LOCATIONS WITH G.C.
- MOUNT SUPPLY DIFFUSER 7'-0" ABOVE LANDING.
- TRANSITION OUTDOOR AIR DUCT TO 8"x8" AFTER 'BC-1' TAP. ROUTE DUCT DOWN TO ABOVE FIRST FLOOR CEILING, SEE 1.M4.1 FOR CONTINUATION.
- PROVIDE 24"x18" OUTDOOR AIR WALL LOUVER EQUAL TO GREENHECK ESJ-602 WITH BIRD SCREEN AND BACKDRAFT DAMPER. PROVIDE FULL SIZE CONNECTION AND TRANSITION TO DUCT AS SHOWN ON PLANS. INSTALL TOP OF LOUVER IN LINE WITH ADJACENT WINDOWS. COORDINATE LOUVER FINISH WITH ARCHITECT.

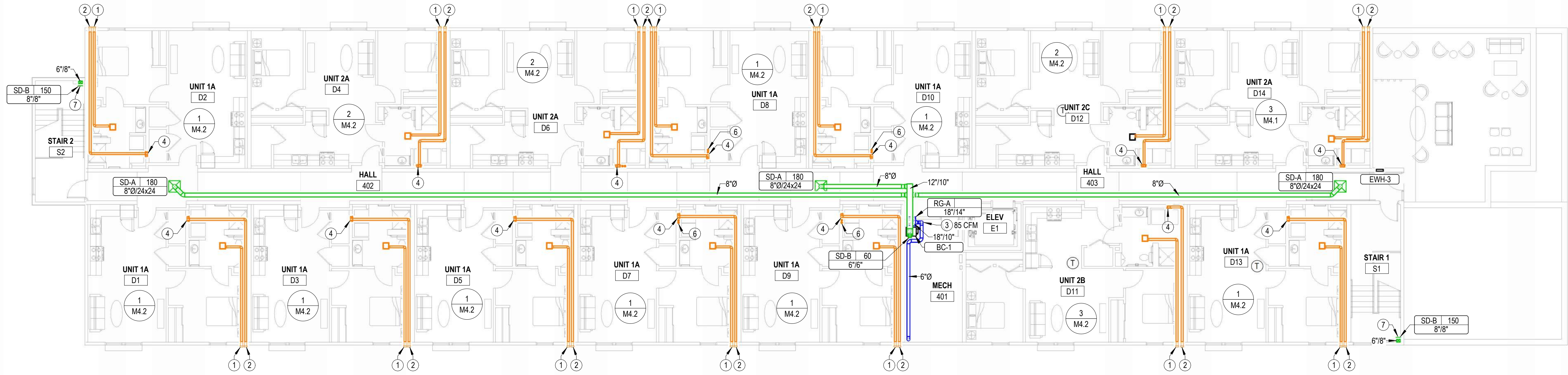
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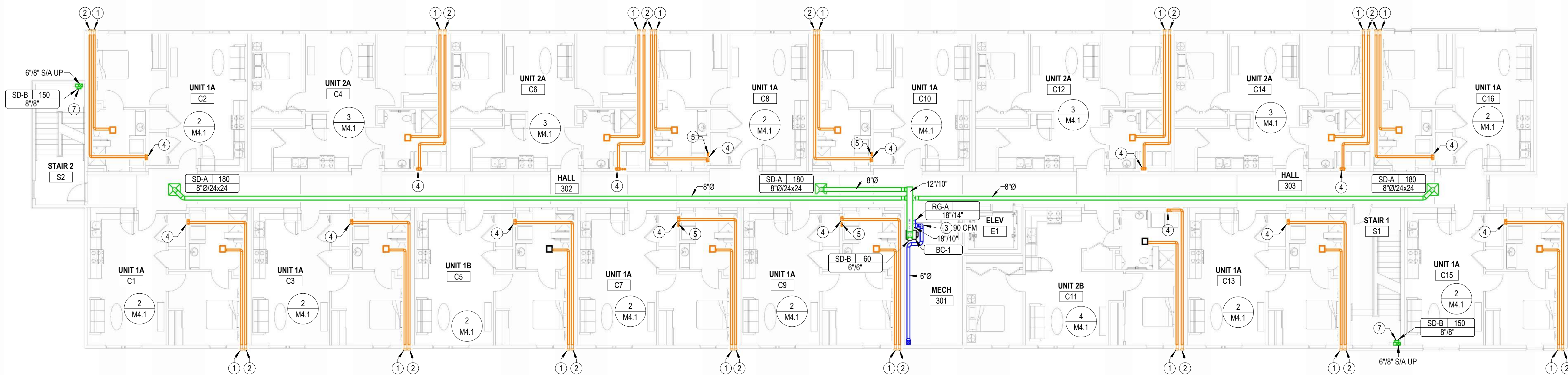


NOTES BY SYMBOL

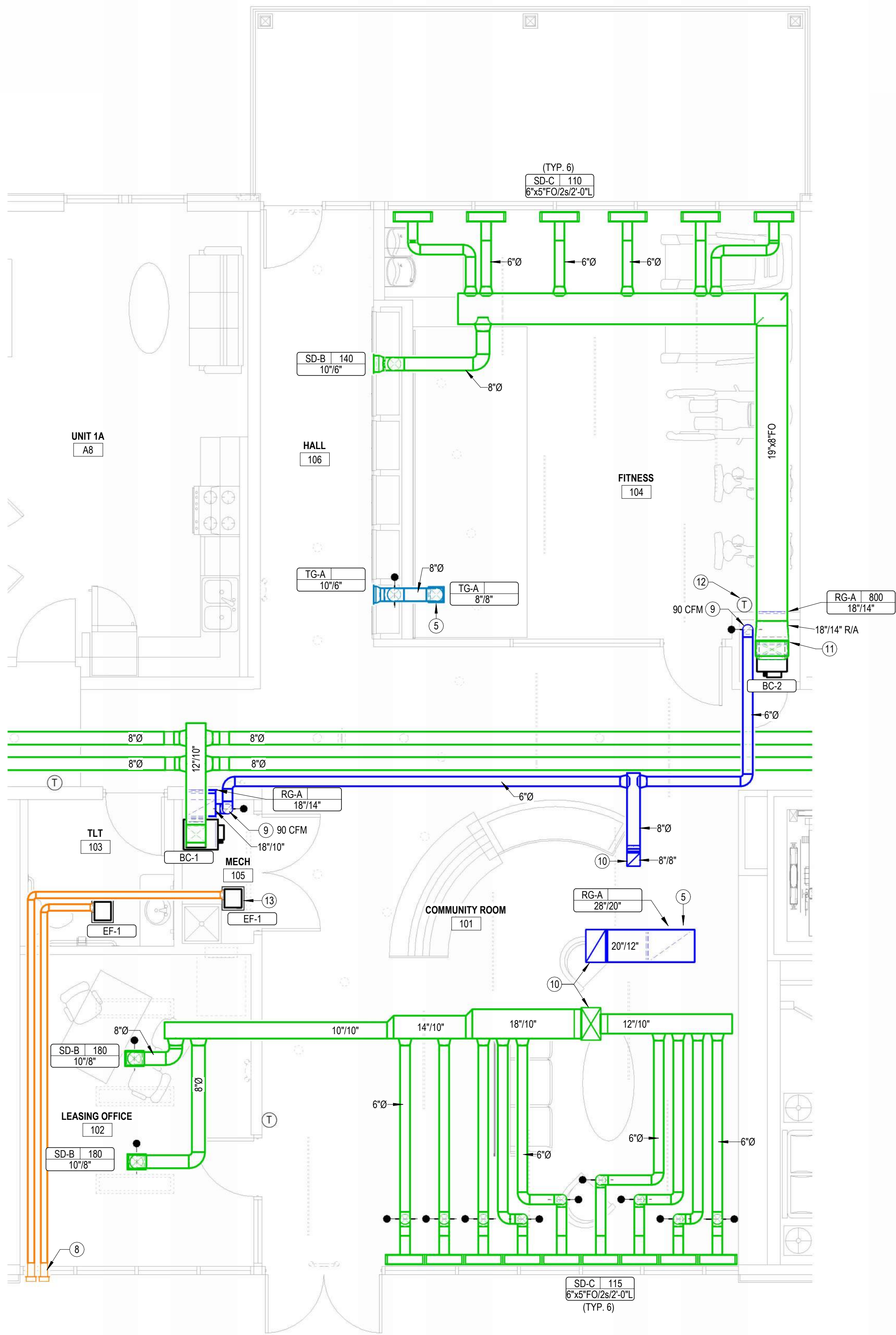
- 1 ROUTE 4" EXHAUST DUCT TO MANUFACTURER'S WALL CAP WITH BACKDRAFT DAMPER AND BIRD SCREEN. COORDINATE FINAL LOCATION WITH ARCHITECT.
- 2 4" DRYER DUCT. SEE ENLARGED PLANS FOR MORE INFORMATION. COORDINATE FINAL LOCATION OF WALL CAP WITH ARCHITECT.
- 3 PROVIDE BALANCING DAMPER AND CONNECT OUTDOOR AIR DUCT TO RETURN DUCTWORK AT BLOWER COIL AND BALANCE TO AIRFLOW LISTED ON PLANS.
- 4 PROVIDE UL 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 WALL CAP WITH BACKDRAFT DAMPER. SEE OVERALL MECHANICAL PLANS FOR UNIT SPECIFIC ROUTING. MAXIMUM ALLOWABLE EQUIVALENT DUCT LENGTH = 35'. UTILIZE LONG RADIUS SMOOTH ELBOWS WHERE REQUIRED. MAXIMUM EQUIVALENT DUCT LENGTH MAY BE INCREASED WHERE DRYER MANUFACTURER'S INSTALLATION INSTRUCTIONS ALLOW. AND DOCUMENTATION IS PROVIDED TO CODE OFFICIAL PRIOR TO CONCEALMENT INSPECTION. COORDINATE EXACT IDENTIFYING EQUIVALENT LENGTH OF DRYER DUCT INSTALLED PER IMC 504.
- 5 EXHAUST DUCT UP FROM SECOND FLOOR TO ROOF. SEE 2.M1.2 FOR CONTINUATION.
- 6 SEE ME1.2 FOR CONTINUATION.
- 7 MOUNT SUPPLY DIFFUSER 7'-0" ABOVE LANDING.

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

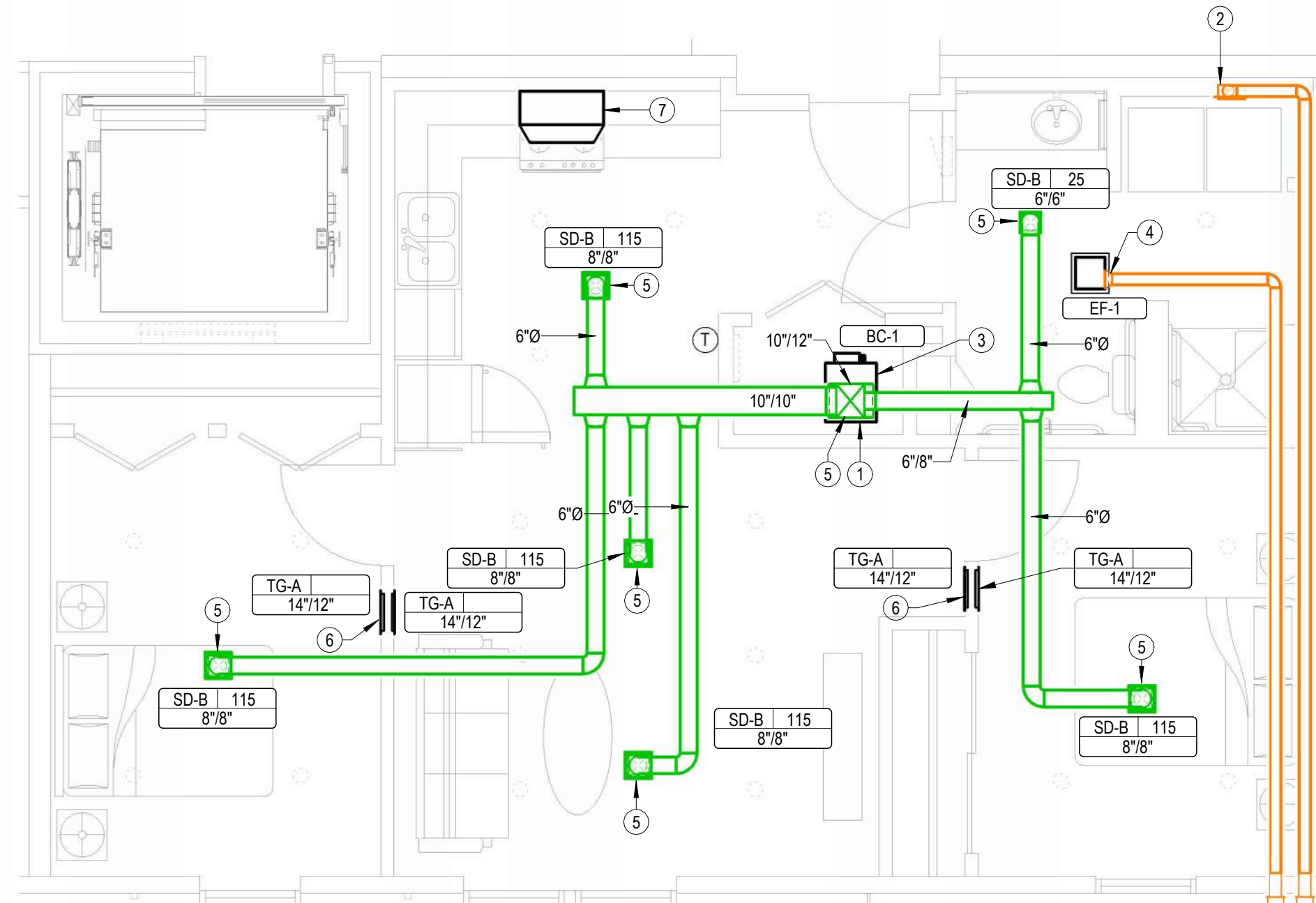
2 FOURTH FLOOR HVAC PLAN
3/32" = 1'-0"
0 8' 16' 24'



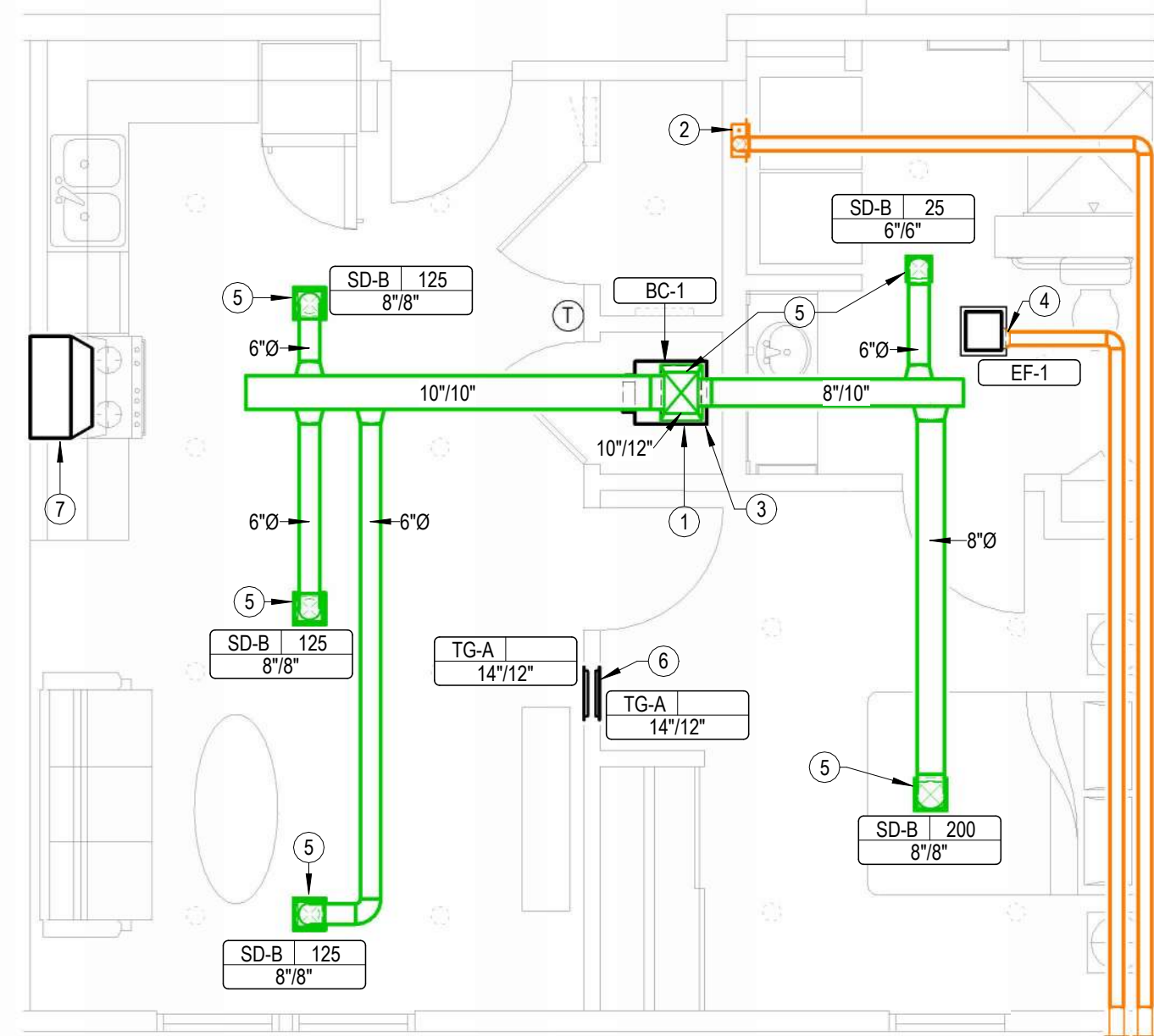
1 THIRD FLOOR HVAC PLAN
3/32" = 1'-0"
0 8' 16' 24'



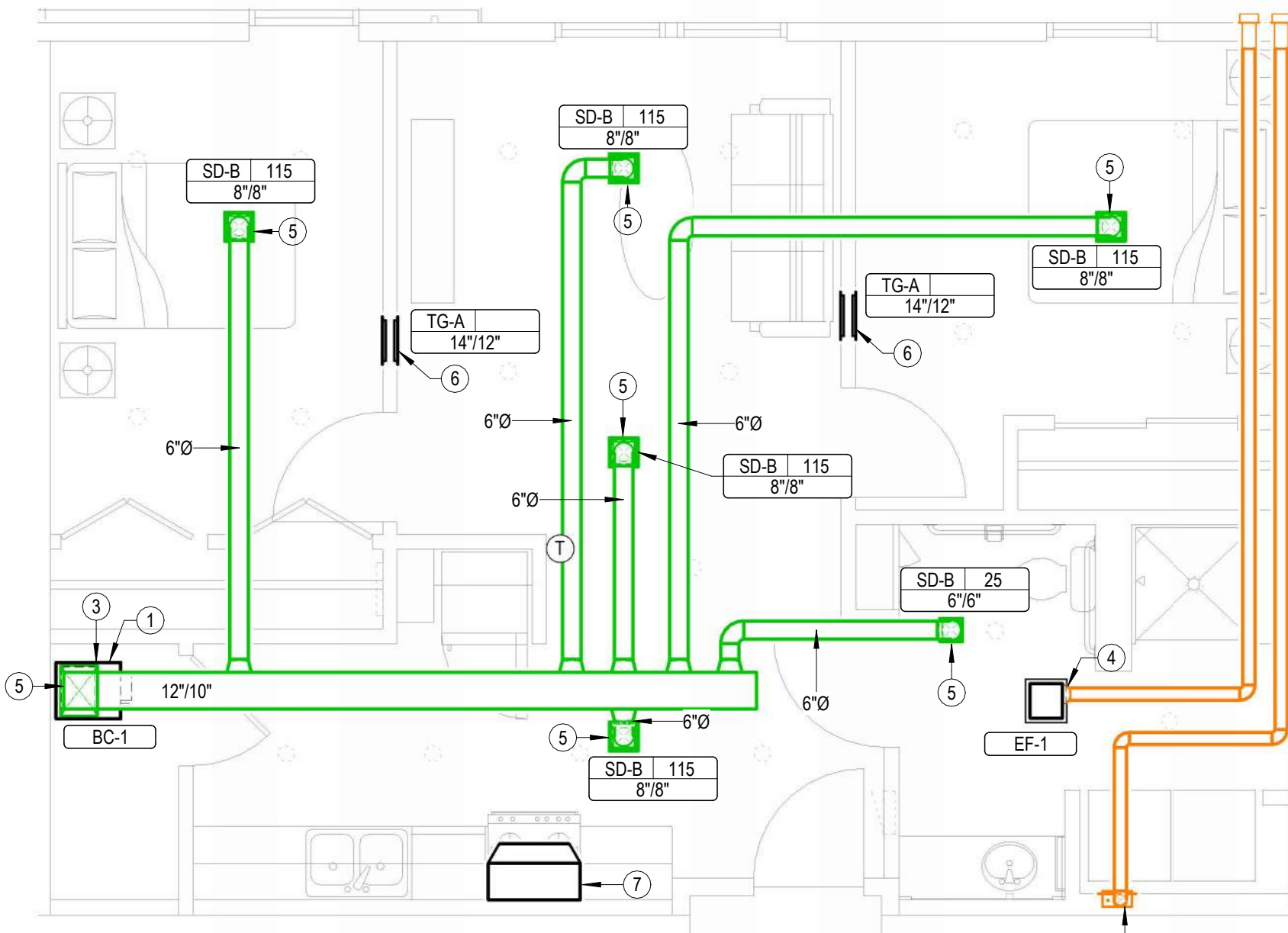
1 COMMON SPACE ENLARGED HVAC PLAN
1/4" = 1'-0"



2 2 BEDROOM (UNITS 2B/2D) ENLARGED HVAC PLAN
1/4" = 1'-0"



3 1 BEDROOM (UNITS 1A/1B) ENLARGED HVAC PLAN
1/4" = 1'-0"



4 2 BEDROOM (UNIT 2A) ENLARGED HVAC PLAN
1/4" = 1'-0"

PROJECT SHALL COMPLY WITH ALL
REQUIREMENTS OF THE 2018 IECC.
REFERENCE SPECIFICATIONS FOR
COMMISSIONING REQUIREMENTS

- NOTES BY SYMBOL**
- 1 ROUTE REFRIGERANT PIPING FROM BLOWER COIL TO HEAT PUMP. CONCEAL PIPING IN WALLS AND ABOVE CEILINGS. SEE M1.2 FOR HEAT PUMP LOCATIONS.
 - 2 SEE M1.1 AND M1.2 FOR DRYER EXHAUST DUCT ROUTING.
 - 3 PROVIDE AUXILIARY DRAIN PAN BELOW BLOWER COIL, AND PIPE OVERFLOW DRAIN TO FLOOR DRAIN.
 - 4 SEE M1.1 AND M1.2 FOR BATHROOM EXHAUST DUCT ROUTING.
 - 5 PROVIDE ALL SUPPLY AIR PENETRATIONS OF CEILING WITH U.L. LISTED RADIATION DAMPER, GREENHECK CRD OR EQUIVALENT.
 - 6 MOUNT TRANSFER GRILLE IN BEDROOM 6" BELOW CEILING AND MOUNT TRANSFER GRILLE ON OPPOSITE SIDE OF WALL 6" ABOVE FINISHED FLOOR. LINE STUD CAVITY WITH SHEET METAL.
 - 7 RECIRCULATING RANGE HOOD BY OTHERS.
 - 8 ROUTE 4"Ø EXHAUST DUCT TO MANUFACTURER'S WALL CAP WITH BACKDRAFT DAMPER AND BIRD SCREEN, COORDINATE FINAL LOCATION WITH ARCHITECT.
 - 9 PROVIDE BALANCING DAMPER AND CONNECT OUTDOOR AIR DUCT TO RETURN DUCTWORK AT BLOWER COIL AND BALANCE TO AIRFLOW LISTED ON PLANS.
 - 10 SEE M1.2 FOR CONTINUATION.
 - 11 TRANSITION FROM BLOWER COIL TO 20"x8" SUPPLY DUCT. PROVIDE MITERED ELBOW AND TRANSITION TO FLAT OVAL PRIOR TO ENTERING FITNESS ROOM. ROUTE DUCT BETWEEN CEILING AND SUSPENDED CLOUD, COORDINATE WITH EXACT REQUIREMENTS WITH ARCHITECT AND G.C.
 - 12 PROVIDE THERMOSTAT WITH HUMIDITY CONTROL.
 - 13 SET EXHAUST FAN TO 30 CFM.

THE RESIDENCE AT HERATIGE WEST
NEW SENIOR LIVING FACILITY
ANDOVER, KANSAS

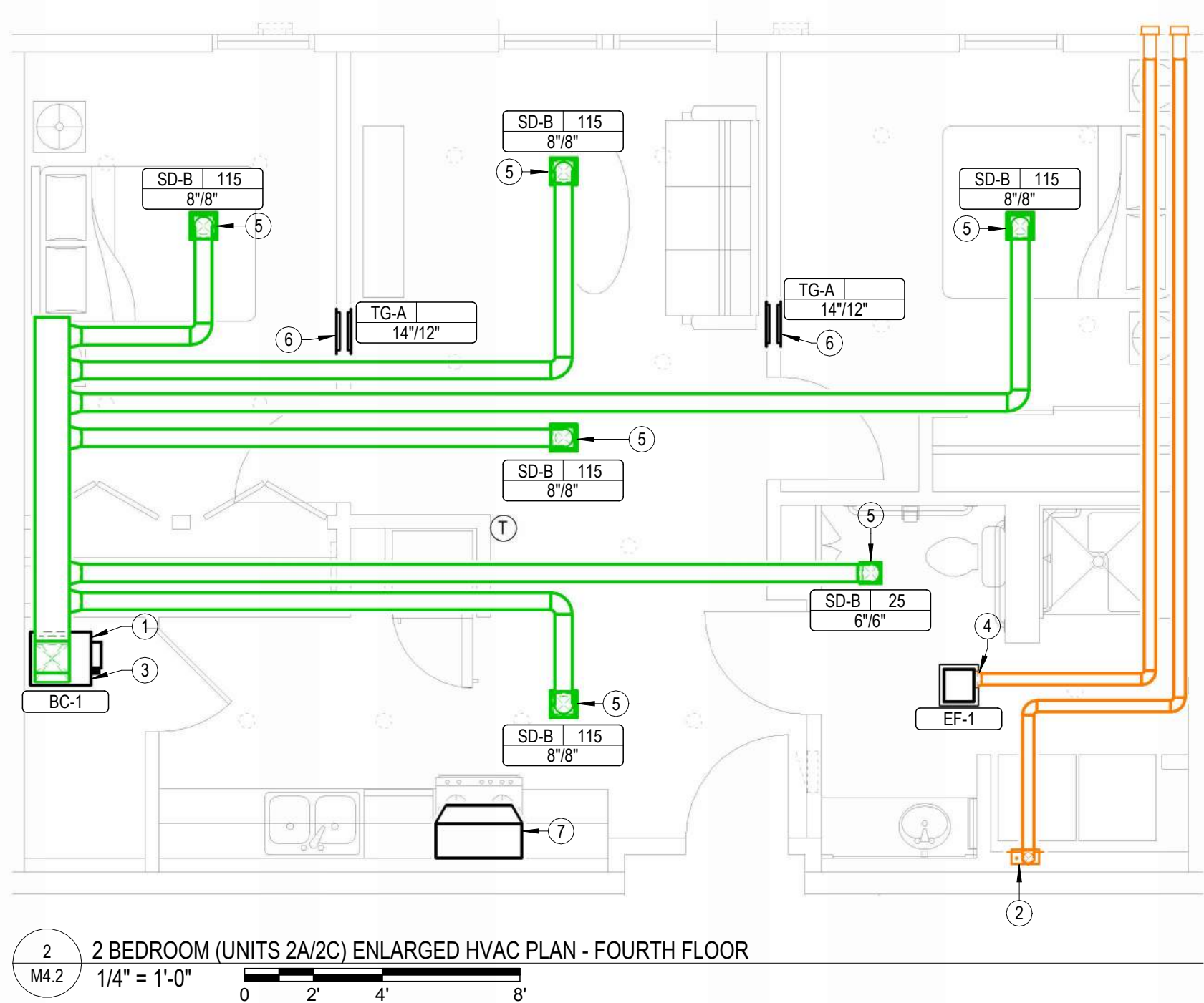
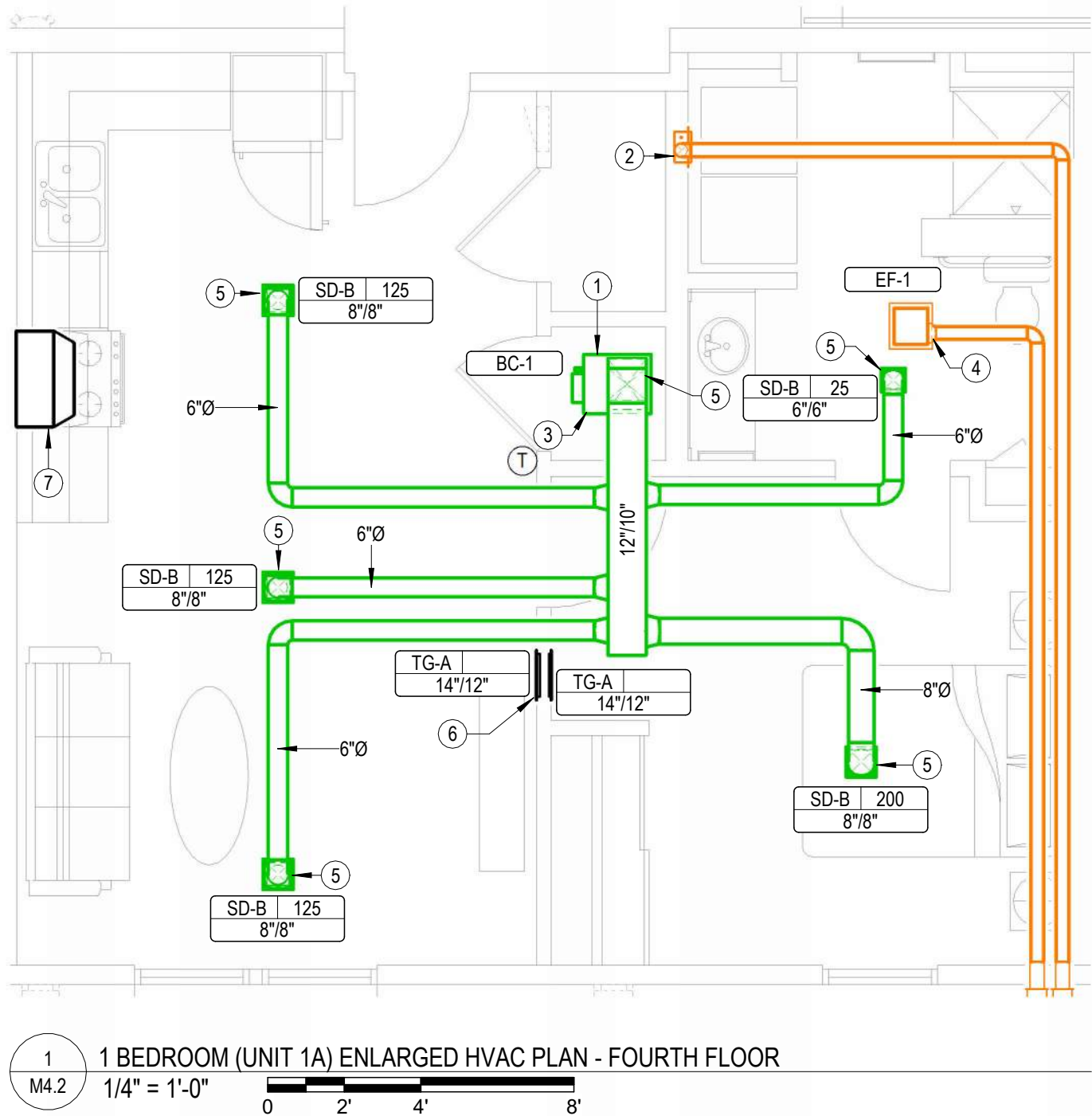
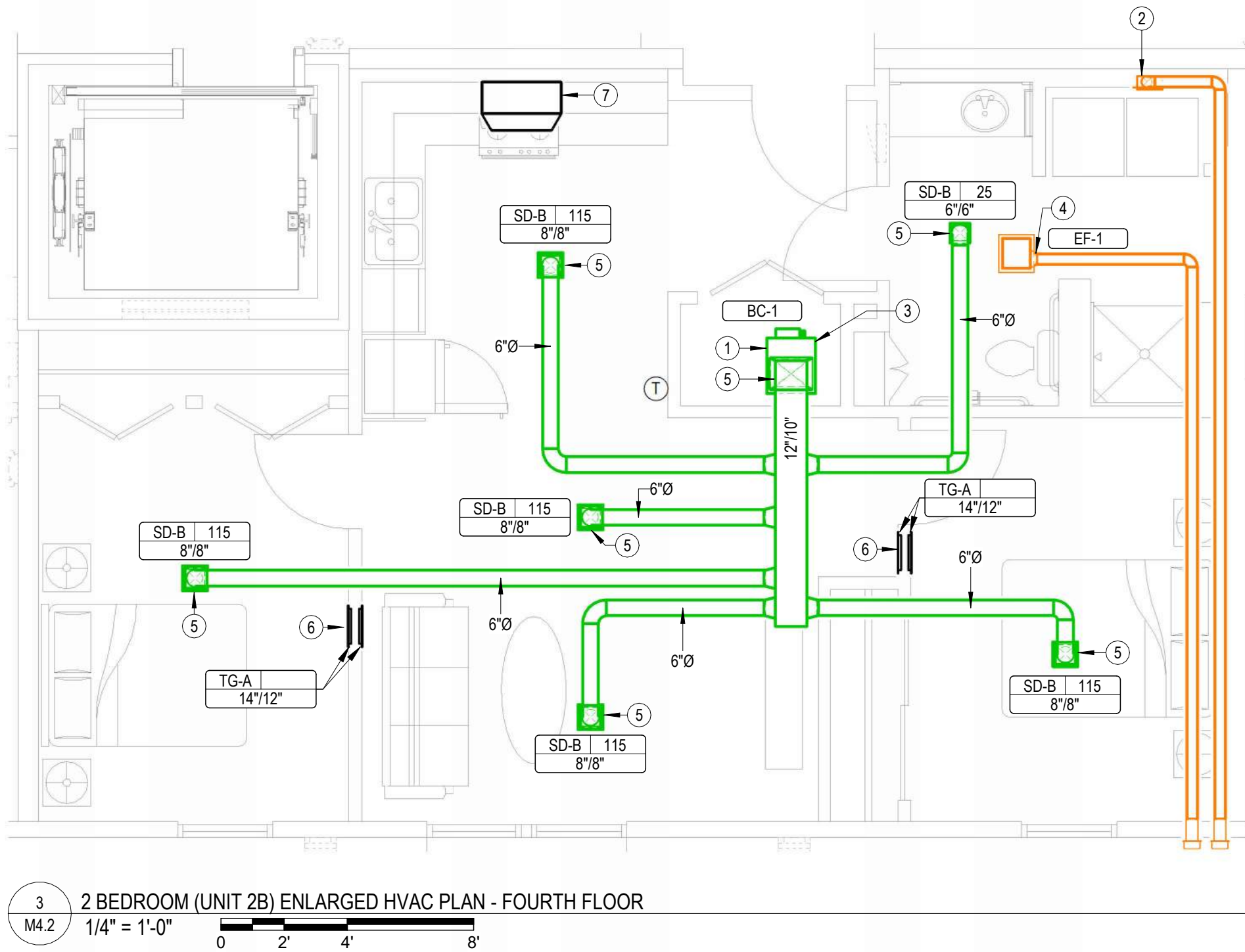
REVISIONS:

DATE: 01-10-2025
JOB: 24-3379
SHEET NO.:

M4.1

PROJECT SHALL COMPLY WITH ALL REQUIREMENTS OF THE 2018 IECC. REFERENCE SPECIFICATIONS FOR COMMISSIONING REQUIREMENTS

- NOTES BY SYMBOL**
- 1 ROUTE REFRIGERANT PIPING FROM BLOWER COIL TO HEAT PUMP. CONCEAL PIPING IN WALLS AND ABOVE CEILINGS. SEE ME1.2 FOR HEAT PUMP LOCATIONS.
 - 2 SEE M1.1 AND M1.2 FOR DRYER EXHAUST DUCT ROUTING.
 - 3 PROVIDE AUXILIARY DRAIN PAN BELOW BLOWER COIL, AND PIPE OVERFLOW DRAIN TO FLOOR DRAIN.
 - 4 SEE M1.1 AND M1.2 FOR BATHROOM EXHAUST DUCT ROUTING.
 - 5 PROVIDE ALL SUPPLY AIR PENETRATIONS OF CEILING WITH U.L. LISTED RADIATION DAMPER, GREENHECK CRD OR EQUIVALENT.
 - 6 MOUNT TRANSFER GRILLE IN BEDROOM 6" BELOW CEILING AND MOUNT TRANSFER GRILLE ON OPPOSITE SIDE OF WALL 6" ABOVE FINISHED FLOOR. LINE STUD CAVITY WITH SHEET METAL.
 - 7 RECIRCULATING RANGE HOOD BY OTHERS.



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SHEET NO.:

M4.2

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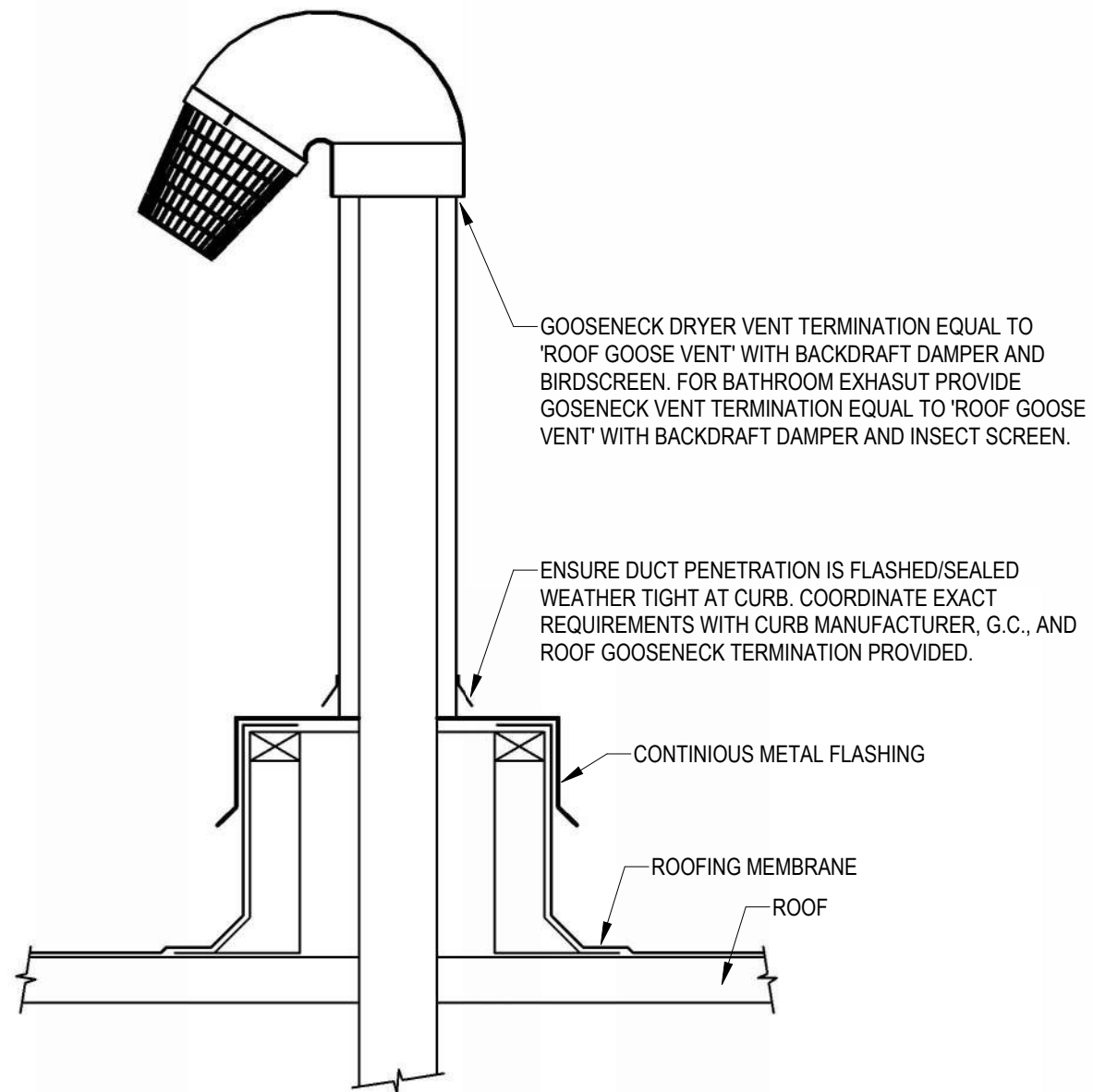
Grilles, Registers & Diffusers Schedule								
ID Type	Manufacturer	Model	Application				Mounting	Include Damper
			Supply	Return	Exhaust	Transfer		
RG-A	Titus	355RL	■	■			Surface Mount	No
SD-A	Titus	TMS	■				Lay-In Full Face	No
SD-B	Titus	300R	■				Surface Mount	Yes
SD-C	Titus	TBD-10	■				Lay-In Full Face	No
TG-A	Titus	355RL			■		Surface Mount	No
NOTES: <ul style="list-style-type: none">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.								

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	Voltage
HP-1	Trane	4TWR4018	1.5 ton	105 °F	78 °F	67 °F	13,300 Btu/h	17,800 Btu/h	14.3	47 °F	70 °F	16,500 Btu/h	7.5	1	15.0 A	25.0 A	208 V
HP-2	Trane	4TWR4024	2.0 ton	105 °F	78 °F	67 °F	15,700 Btu/h	22,200 Btu/h	14.3	47 °F	70 °F	22,800 Btu/h	7.5	1	15.0 A	25.0 A	208 V
HP-3	Trane	4TWR4042	3.5 ton	105 °F	78 °F	67 °F	27,100 Btu/h	37,100 Btu/h	14.3	47 °F	70 °F	40,000 Btu/h	7.5	1	24.0 A	40.0 A	208 V
NOTES: 1. Refrigerant lines shall be field fabricated. Coordinate line sizing requirements with equipment manufacturer for length. 2. Provide 7-day programmable thermostat.																	

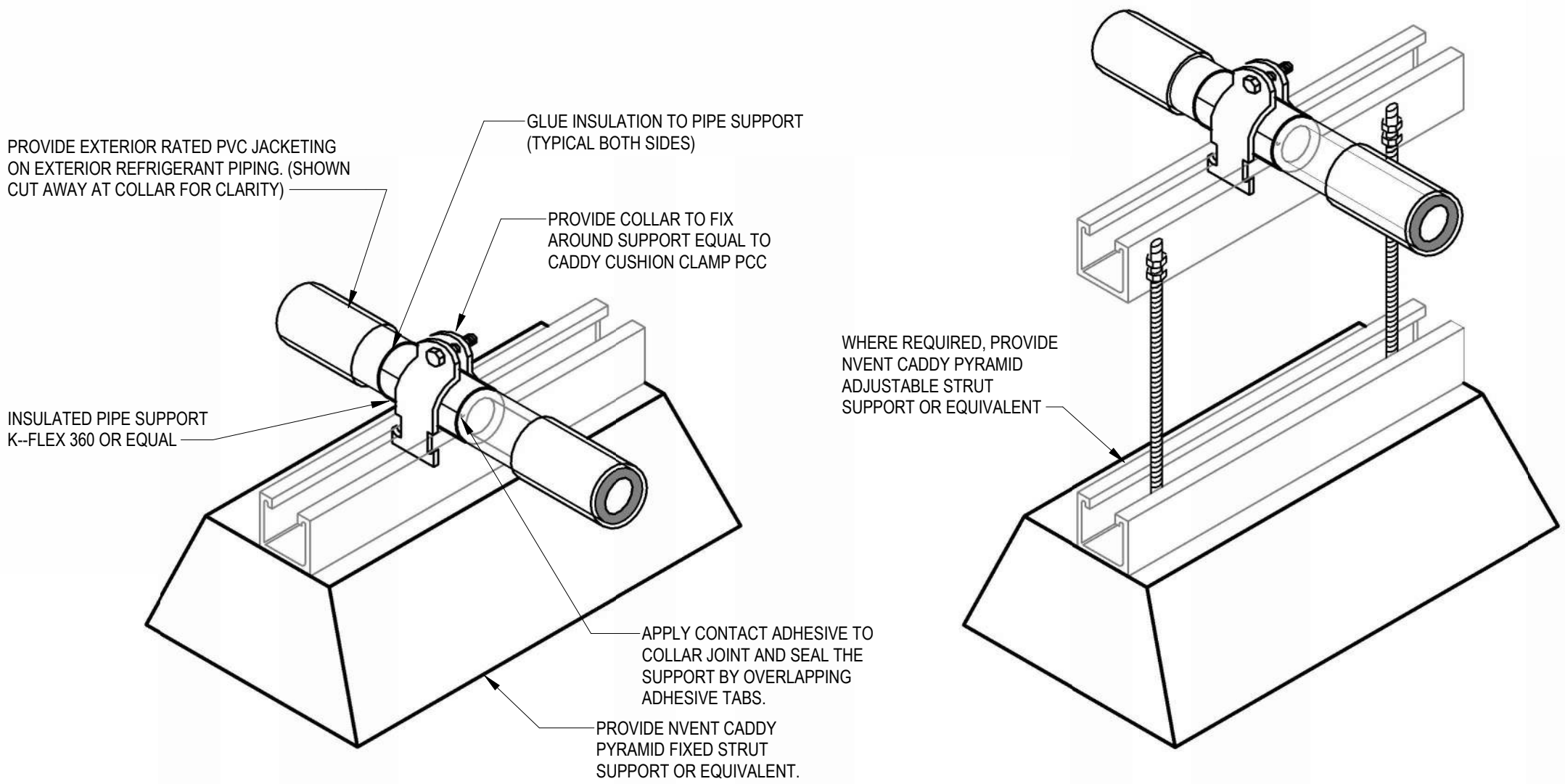
Blower Coil Schedule										
Identity	Manufacturer	Model	Fan			Heating	Electrical		MCA	MOCP
			Airflow	ESP	Speed		Voltage	Phase		
BC-1	Trane	TEM4A0B31	600 CFM	0.50 in-wg	LOW	3.6 kW	208 V	1	25.1 A	25.0 A
BC-2	Trane	TEM4A0B31	800 CFM	0.50 in-wg	MEDIUM	5.8 kW	208 V	1	38.1 A	40.0 A
BC-3	Trane	TEM4A0C43	1,220 CFM	0.50 in-wg	MED-HIGH	7.2 kW	208 V	1	48.4 A	50.0 A
NOTES: <ul style="list-style-type: none">Single point connection required, coordinate the exact electrical requirements of equipment provided with E.C.Electrical heater shall not operate simultaneously with heat pump. Electric heater shall be used as back-up heat only.Provide downflow units with condensate overflow switch.										

Electric Cabinet Heater Schedule								
Mark	Manufacturer	Model	Mounting	Watts	Voltage	Phase	Description	Notes
EW-H-1	Berko	FRC	Wall	1.5 kW	120 V	1	Architectural fan forced wall heater.	1,2,3
EW-H-3	Berko	FRC	Wall	1.5 kW	120 V	1	Architectural fan forced wall heater.	1,2,3
EW-H-4	Berko	FRC	Wall	4.0 kW	208 V	1	Architectural fan forced wall heater.	1,2,3
NOTES: <ul style="list-style-type: none">Provide with high temperature thermal cutout and fan delay.Provide with integral thermostat and unit mounted disconnect switch.Provide with manufacturer's surface mounting adapter sleeve. Coordinate exact mounting requirements and locations with Architect and rated construction.								

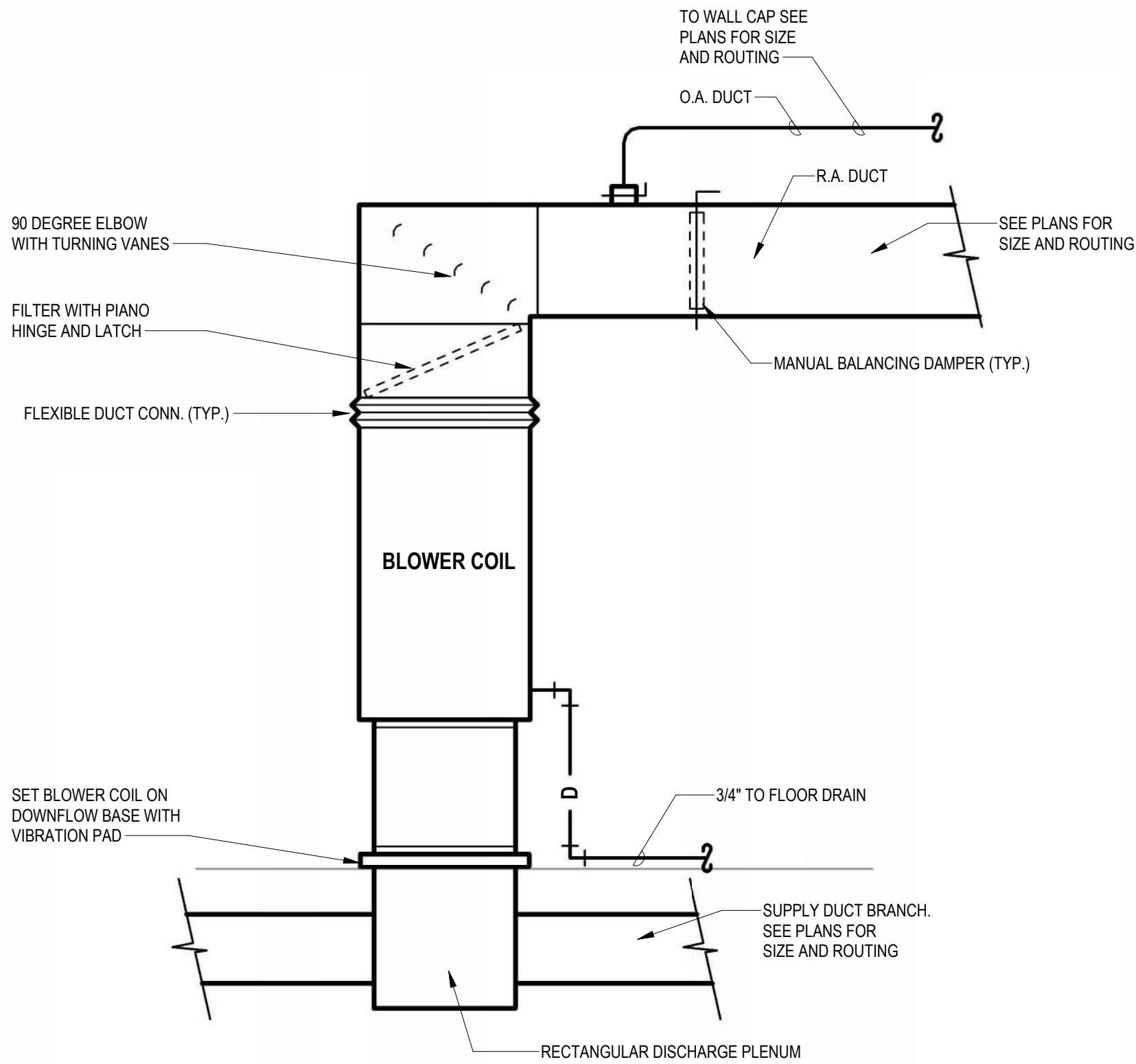
Exhaust Fan Schedule								
Mark	Manufacturer	Model	CFM	ESP	Power	Electrical		Notes
						Voltage	Phase	
EF-1	Panasonic	FV-0810VSS1	50 CFM	0.45 in-wg	21 W	120 V	1	1,2,3,4,5,6
NOTES: <ul style="list-style-type: none">Fixture shall be Energy Star listed.Fixture shall operate at < 1 SONE.Provide with EC motor with integral disconnect.Provide manufacturer's wall cap or roof jack, see plans.Provide integral backdraft damper.Provide with manufacturer's ceiling radiation damper. Omit radiation dampers where rated ceilings are not present, coordinate with Architect.								



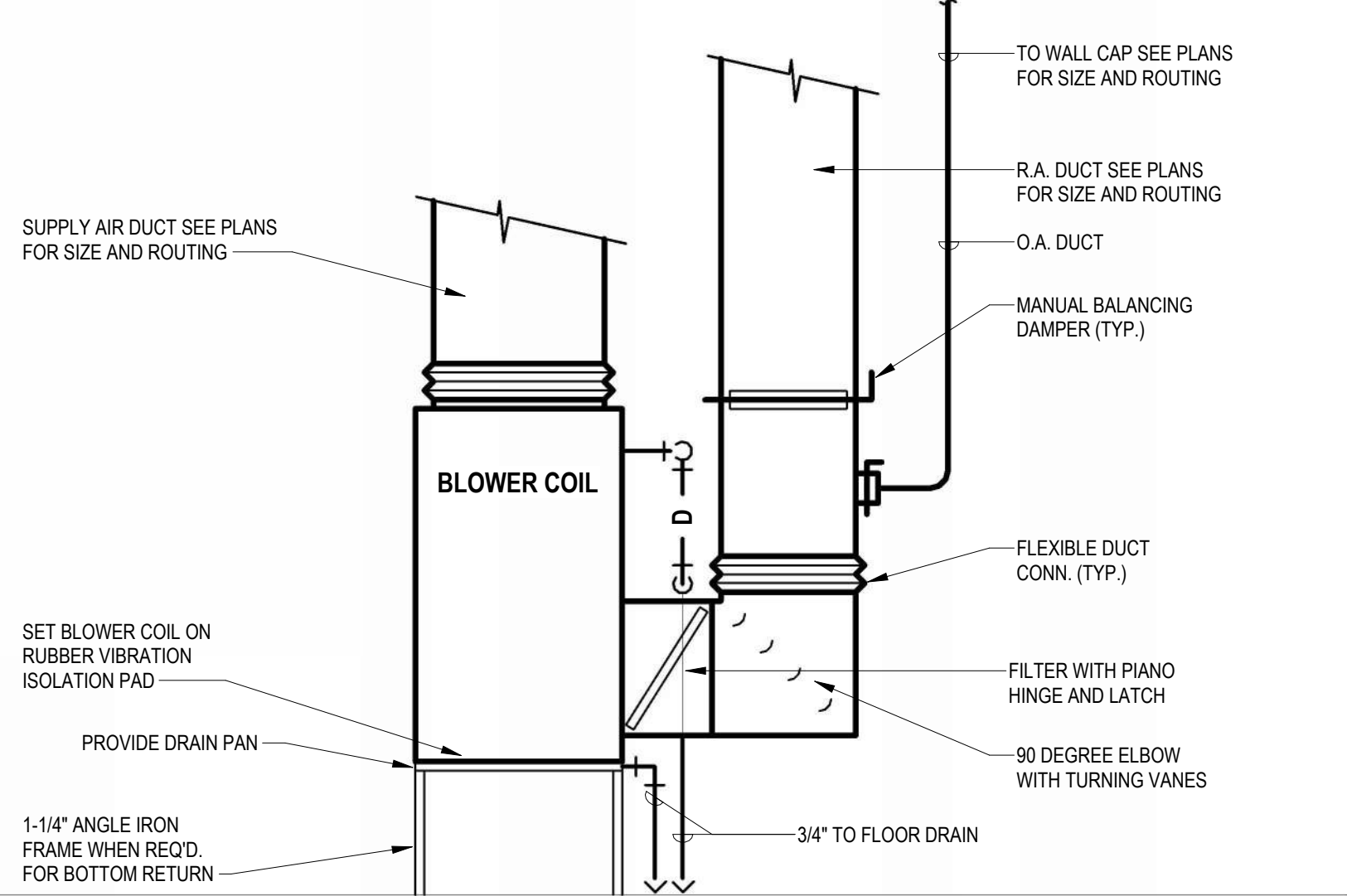
4
M6.1
GOOSENECK DUCT THROUGH ROOF DETAIL
NO SCALE



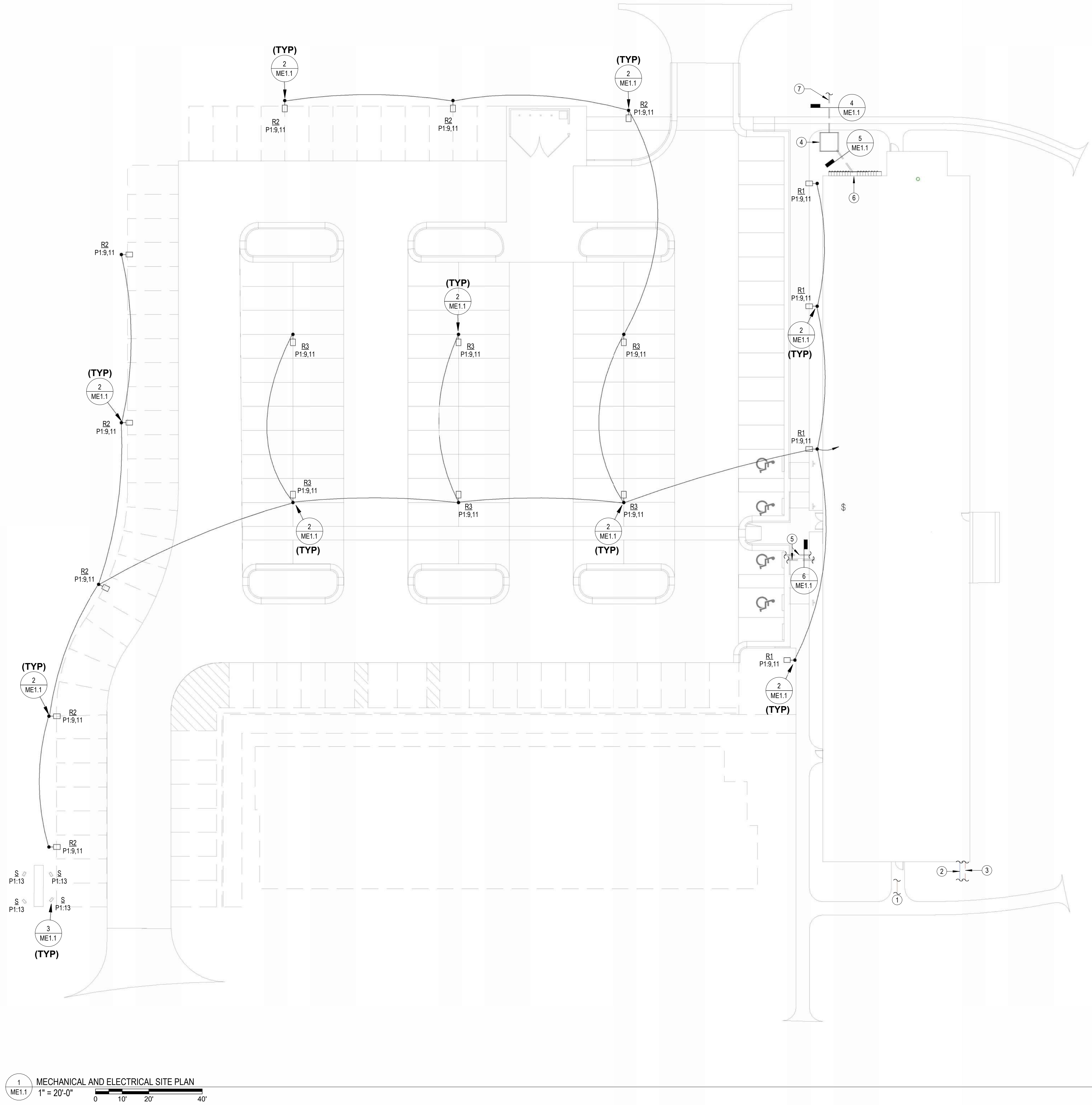
3
M6.1
REFRIGERANT ROOF AND EXTERIOR SUPPORT DETAIL
NO SCALE



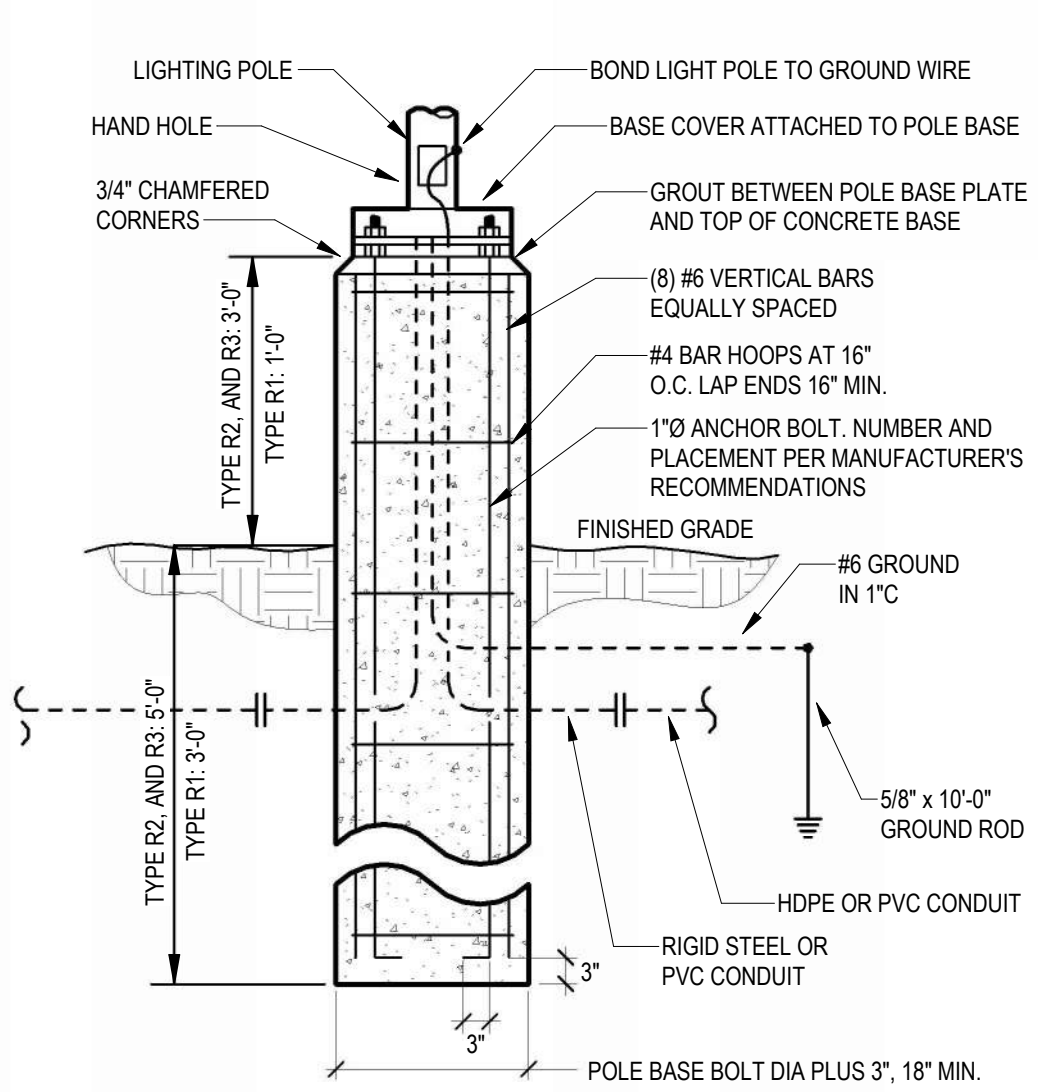
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M6.1
DOWNFLOW BLOWER COIL DETAIL
NO SCALE



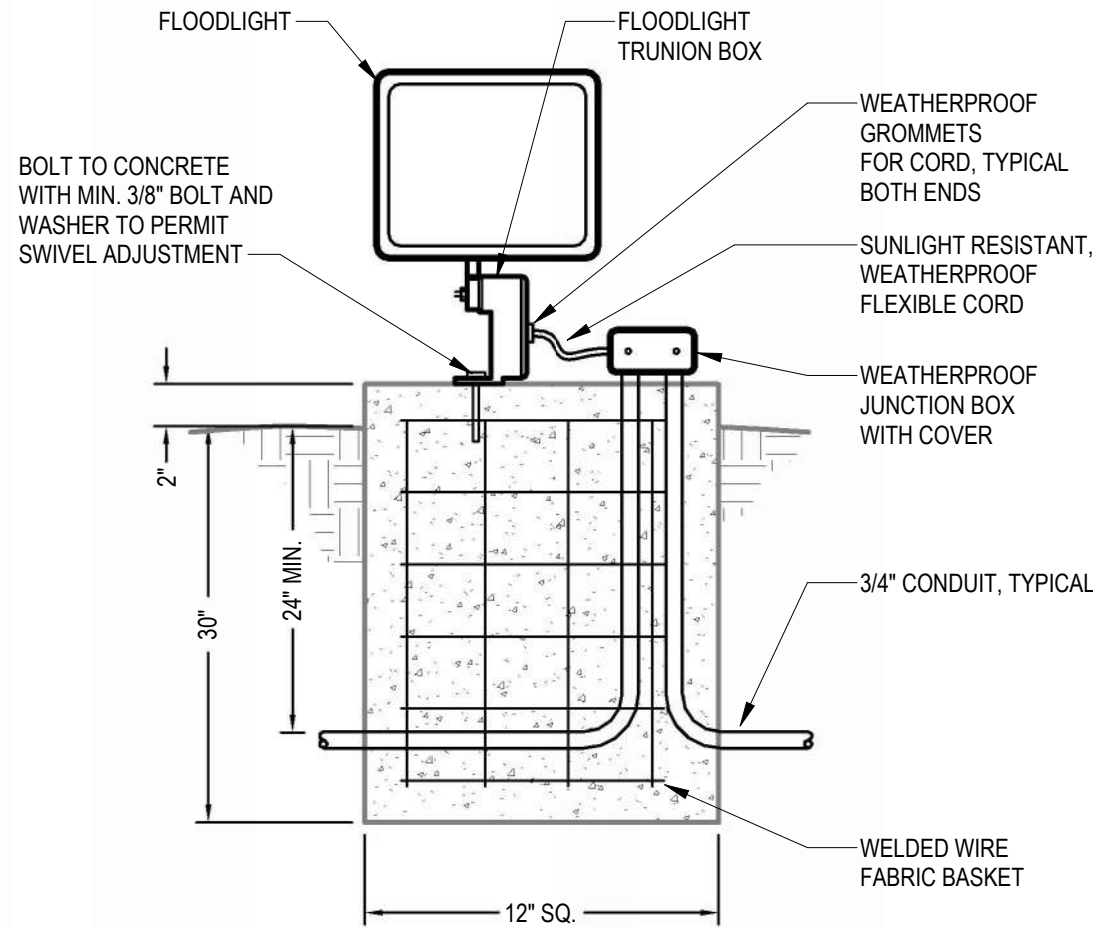
1
M6.1
UP FLOW BLOWER COIL DETAIL
NO SCALE



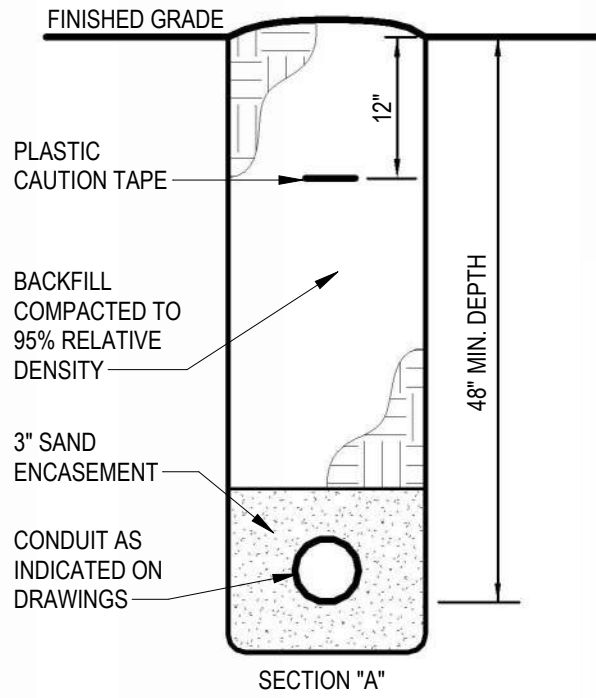
- NOTES BY SYMBOL**
- 1 SANITARY SEWER, SEE CIVIL DRAWINGS FOR CONTINUATION.
 - 2 DOMESTIC WATER SERVICE, SEE CIVIL DRAWINGS FOR CONTINUATION.
 - 3 FIRE SUPPRESSION SERVICE, SEE CIVIL DRAWINGS FOR CONTINUATION.
 - 4 POWER COMPANY PAD MOUNT TRANSFORMER. PROVIDE CONCRETE PAD PER EVERGY SERVICE STANDARDS. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH EVERGY PRIOR TO STARTING WORK.
 - 5 PROVIDE (2) 4" CONDUITS FOR COMMUNICATIONS SERVICES. PROVIDE PULL STRING IN EACH RACEWAY. VERIFY TERMINATION POINTS AT PROPERTY LINE WITH LOCAL COMMUNICATIONS SERVICE PROVIDERS.
 - 6 ELECTRIC SERVICE EQUIPMENT, SEE RISER DIAGRAM ON SHEET E6.2.
 - 7 UTILIZE EVERGY APPROVED TRENCHING CONTRACTOR TO ALLOW CONDUCTOR IN DUCT FOR PRIMARY CABLING. COORDINATE REQUIREMENTS WITH UTILITY.



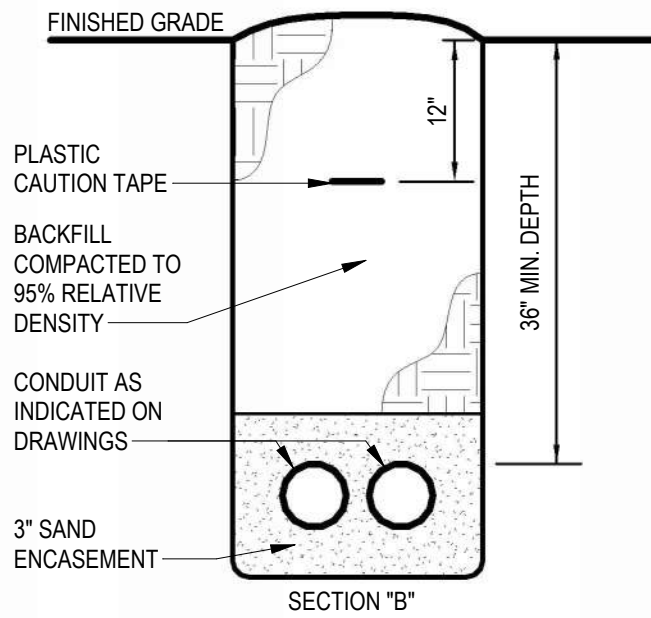
2 LIGHT POLE BASE DETAIL
NO SCALE



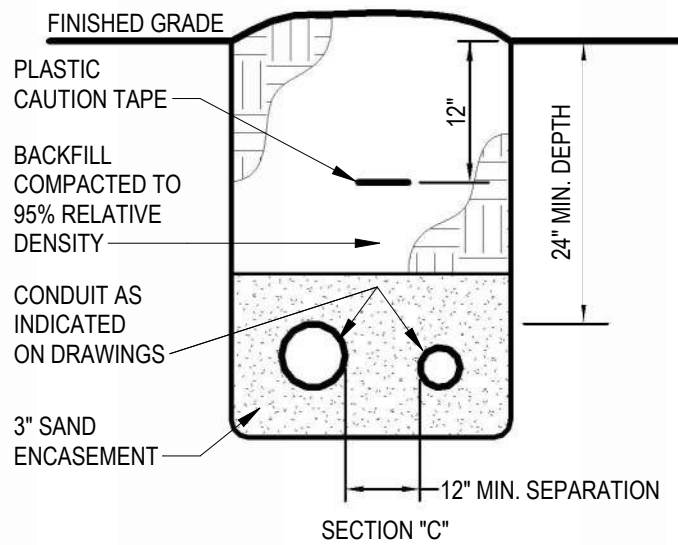
3 GROUND LIGHT DETAIL
NO SCALE



4 PRIMARY CONDUIT SECTION
NO SCALE



5 SERVICE LATERAL CONDUIT SECTION
NO SCALE



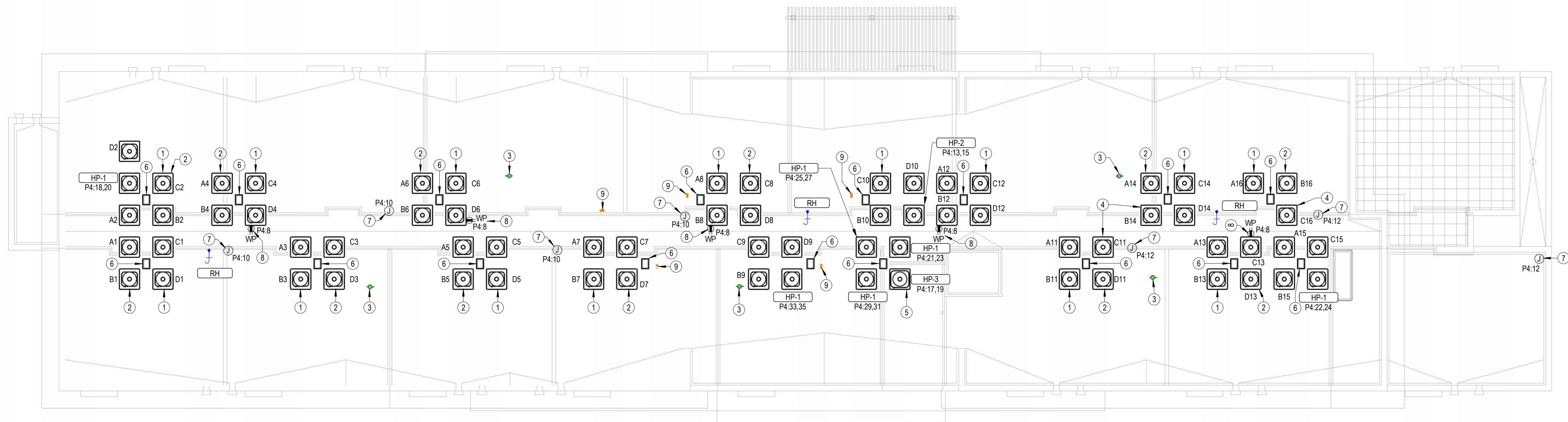
6 TELECOM CONDUIT SECTION
NO SCALE

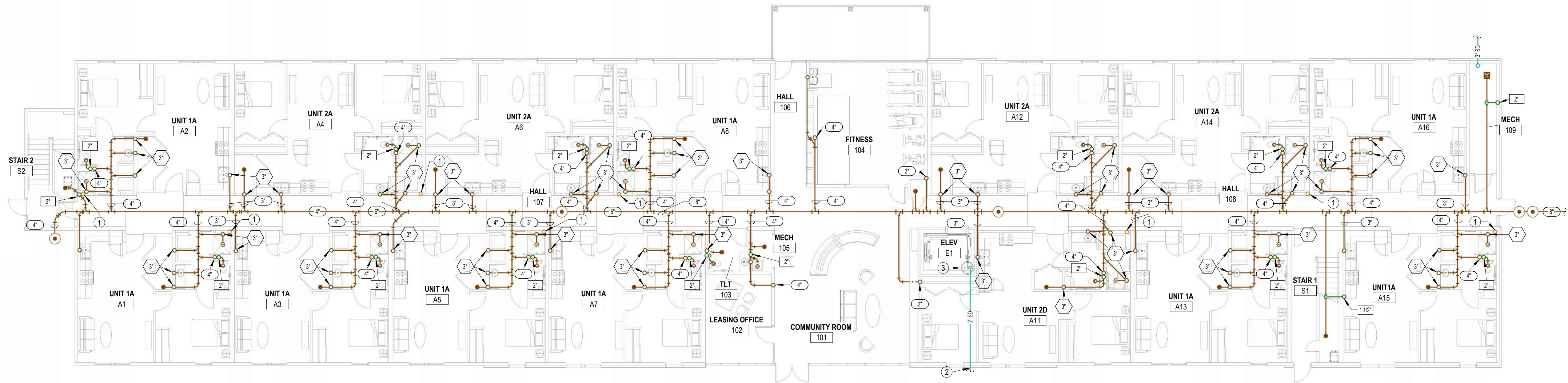
THE RESIDENCE AT HERATIGE WEST
NEW SENIOR LIVING FACILITY
ANDOVER, KANSAS

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DATE:	01-10-2025
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ME1.1

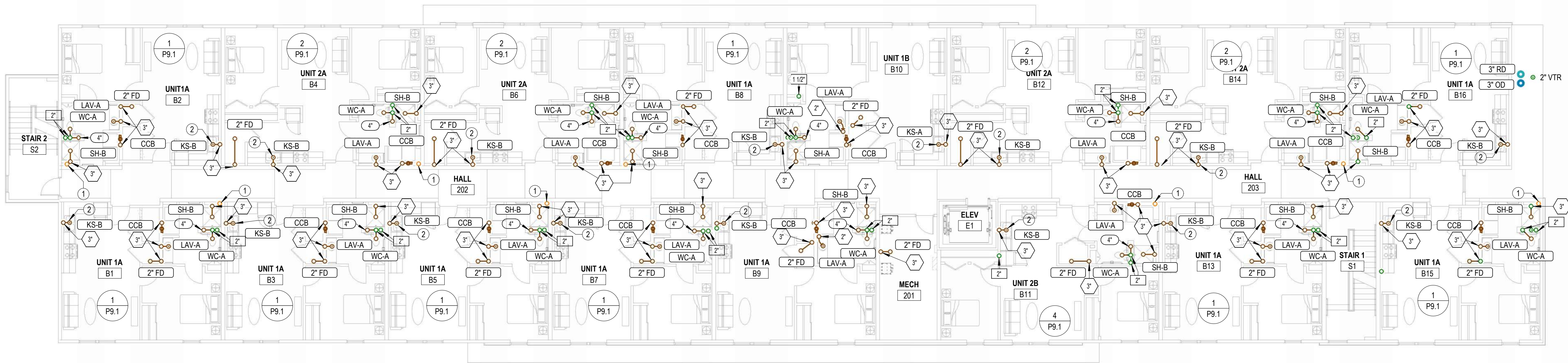
- NOTES BY SYMBOL**
- 1 ALL HEAT PUMPS, UNLESS NOTED OTHERWISE, ARE 'HP-1' AND CORRESPOND TO MATCHING BLOWER COIL FOR UNIT AS TAGGED. TYPICAL.
 - 2 MOUNT HEAT PUMP TO UNISTRUT FRAME SUPPORTED ON NVENT CADDY PYRAMID ROOF SUPPORTS. PROVIDE VIBRATION ISOLATOR BETWEEN ROOF SUPPORTS AND UNISTRUT FRAME. COORDINATE INSTALLATION WITH ROOFING CONTRACTOR. TYPICAL.
 - 3 3" PLUMBING VENT THROUGH ROOF.
 - 4 UNLESS NOTED OTHERWISE, PROVIDE 30A/2-POLE, 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. TAG SHOWN INDICATES PANEL OF ORIGIN FOR UNIT BEING SERVED.
 - 5 PROVIDE 60A/2-POLE, 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.
 - 6 ROUTE REFRIGERANT PIPING DOWN 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.
 - 7 INSTALL WEATHERPROOF JUNCTION BOX ON ROOF FOR FUTURE RADON FAN. PROVIDE ADEQUATE LENGTH OF CONDUCTOR FOR CONNECTION TO FUTURE RECEPTACLE.
 - 8 MOUNT RECEPTACLE TO UNISTRUT FRAME SUPPORTED FROM CONDENSING UNIT UNISTRUT FRAME.
 - 9 PROVIDE PIPE CURB EQUAL TO PATE AT DUCT PENETRATIONS OF ROOF. COORDINATE REQUIREMENTS WITH G.C. DO NOT USE PITCH POCKETS. TERMINATE WITH GOOSENECK. SEE DETAIL X.M6.X FOR MORE INFORMATION.



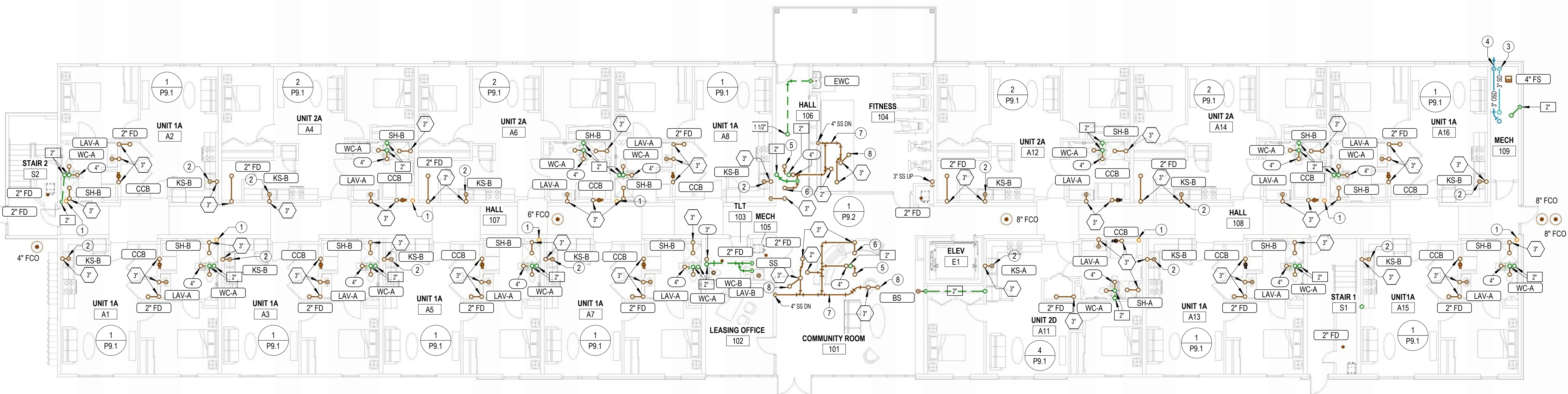


PLUMBING SIZING SYMBOLS	
	DRAIN (X = SIZE)
	VENT (X = SIZE)
	WASTE STACK VENT (X = SIZE)

- NOTES BY SYMBOL**
- 4" PVC PIPE FOR RADON SYSTEM. COORDINATE EXACT REQUIREMENTS WITH ARCHITECT.
 - ROUTE 2" DISCHARGE FROM SUMP PUMP TO CONNECT TO UNDERGROUND STORM SEWER SEE CIVIL FOR CONTINUATION. COORDINATE WITH G.C.
 - ELEVATOR PIT SUMP PUMP. SEE 3/P6.1 FOR MORE INFORMATION.



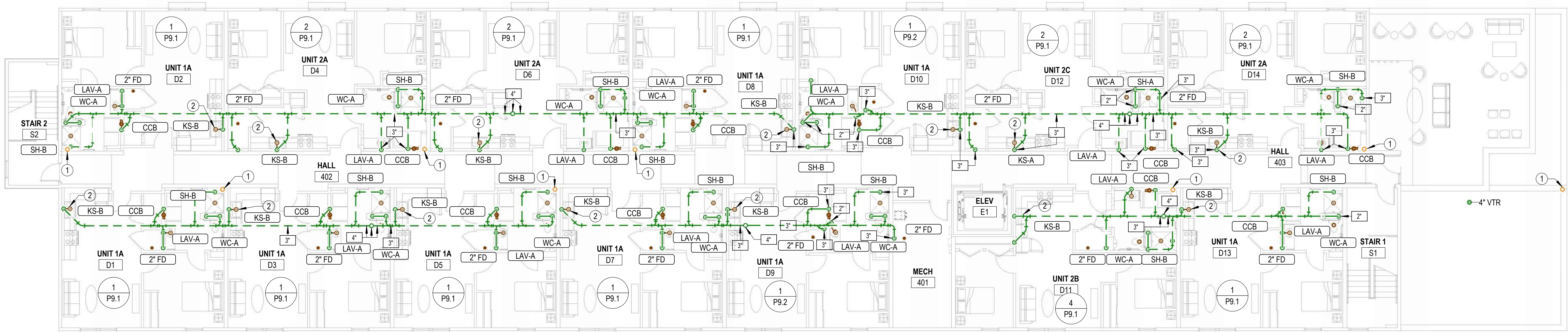
2 SECOND FLOOR WASTE AND VENT PLAN
3/32" = 1'-0"



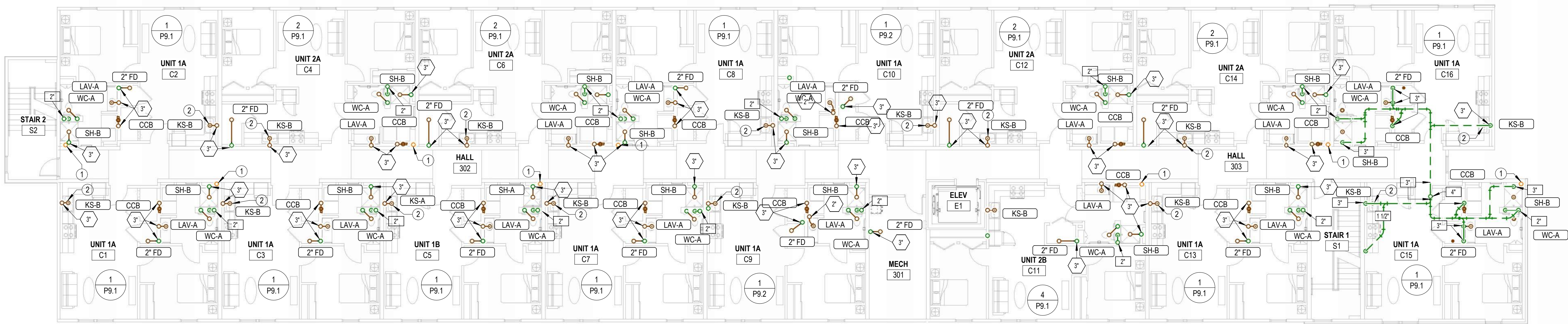
1 FIRST FLOOR WASTE AND VENT PLAN
3/32" = 1'-0"

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

- NOTES BY SYMBOL**
- 4" PVC PIPE FOR RADON SYSTEM. COORDINATE EXACT REQUIREMENTS WITH ARCHITECT.
 - PROVIDE INDIRECT CONNECTION AT GARBAGE DISPOSER AND CONNECT DISHWASHER. ROUTE DRAIN FROM DISHWASHER AT BACK OF CABINETRY. COORDINATE EXACT ROUTING WITH G.C.
 - ROUTE ROOF DRAIN PIPING DOWN ALONG WALL AND EXTEND TO UNDERGROUND STORM DRAIN PIPING IN THIS AREA. SEE CIVIL DRAWINGS FOR CONTINUATION.
 - ROUTE ROOF DRAIN PIPING DOWN ALONG WALL AND TERMINATE WITH DOWNSPOUT NOZZLE EQUAL TO ZURN MODEL ZF199 WITH THREADED OUTLET AND FLANGE TO SECURE NOZZLE TO WALL. INSTALL DOWNSPOUT 24" AFG. COORDINATE COLOR WITH ARCHITECT.
 - UP TO WATER CLOSET.
 - UP TO SHOWER.
 - COORDINATE ROUTING OF PIPING IN THIS AREA WITH STRUCTURE. ALL PENETRATIONS OF BEAMS IN THIS AREA MUST BE APPROVED BY STRUCTURAL ENGINEER IN WRITING.
 - UP TO FLOOR DRAIN.



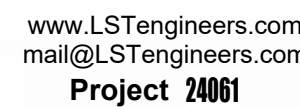
2
P1.3
FOURTH FLOOR WASTE AND VENT PLAN
3/32" = 1'-0"



1
P1.3
THIRD FLOOR WASTE AND VENT PLAN
3/32" = 1'-0"

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

- NOTES BY SYMBOL**
- 4" PVC PIPE FOR RADON SYSTEM. COORDINATE EXACT REQUIREMENTS WITH ARCHITECT.
 - PROVIDE INDIRECT CONNECTION AT GARBAGE DISPOSER AND CONNECT DISHWASHER. ROUTE DRAIN FROM DISHWASHER AT BACK OF CABINETRY. COORDINATE EXACT ROUTING WITH G.C.



gr

THE RESIDENCE AT HERATIGE WEST
NEW SENIOR LIVING FACILITY
ANDOVER, KANSAS

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SHEET NO.:	

P1.4

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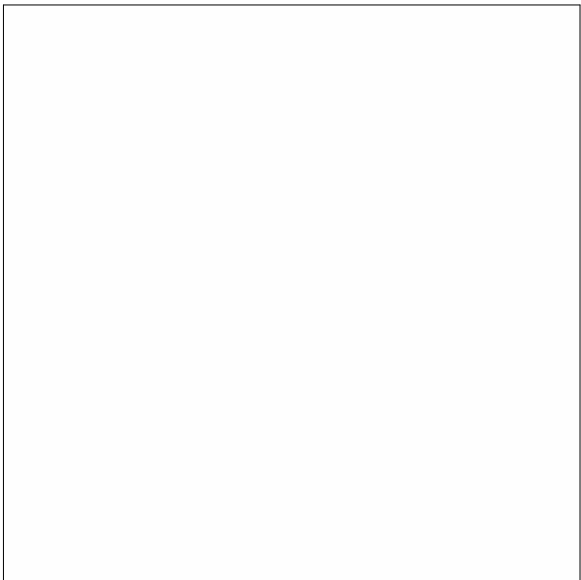


- ## NOTES BY SYMBOL
- 1 ELECTRICAL EQUIPMENT SHOWN FOR COORDINATION. DO NOT ROUTE PIPING ABOVE OR BELOW EQUIPMENT, AND MAINTAIN WORKING CLEARANCE SHOWN.
 - 2 FIRE PROTECTION SERVICE ENTRANCE. INSTALL IN ACCORDANCE WITH AHA 13. COORDINATE LOCATION OF ALL VALVES AND APPURTENANCES WITH AHA. SEE 4.P6.1 FOR MORE INFORMATION.
 - 3 PROVIDE SHUT-OFF VALVE AT WATER SERVICE ENTRANCE WITH PRESSURE REDUCING VALVE SET TO 80 PSI IF REQUIRED. COORDINATE REQUIREMENTS WITH CITY OF ANDOVER.
 - 4 SEE ENLARGED DOMESTIC WATER PLANS FOR CONTINUATION.
 - 5 1" DOMESTIC WATER FROM FLOOR BELOW. SEE ENLARGED DOMESTIC WATER PLANS FOR MORE INFORMATION.
 - 6 COORDINATE ROUTING OF PIPING IN THIS AREA WITH STRUCTURE. ALL PENETRATIONS OF BEAMS IN THIS AREA MUST BE APPROVED BY STRUCTURAL ENGINEER IN WRITING.

PIPING FOR DWELLING UNITS ON 2ND AND 4TH FLOORS SHALL BE ROUTED BELOW THE FLOOR. DO NOT DOMESTIC WATER PIPING IN THE ATTIC

This detailed floor plan illustrates the second floor of a building, featuring a grid of residential units and various common areas. The units are labeled as follows: UNIT 1A (A1, A2, A3, A4, A5, A6, A7, A11, A12, A13, A14, A15, A16), UNIT 2A (A4, A6), and UNIT 2D (A11). Common areas include STAIR 1 (S1), STAIR 2 (S2), HALL 106, HALL 107, HALL 108, HALL 109, LEASING OFFICE 102, MECH 105, MECH 109, COMMUNITY ROOM 101, ELEV E1, and FITNESS 104. The plan is overlaid with a complex blue piping system, likely for water or gas distribution. This system includes a central horizontal main line with several vertical支 lines connecting to individual units. Numbered callouts (1 through 6) are placed throughout the plan to identify specific components, valves, or flow paths within the piping network. For example, callout 1 is used for many unit inlets, while callout 4 is used for vertical risers. Callout 6 is located near the central horizontal main line. The plan also shows various other features like 'WH' (water heater) and 'CW' (cold water) labels.

PIPING FOR DWELLING UNITS ON 2ND AND 4TH FLOORS SHALL BE ROUTED BELOW THE FLOOR. DO NOT DOMESTIC WATER PIPING IN THE ATTIC



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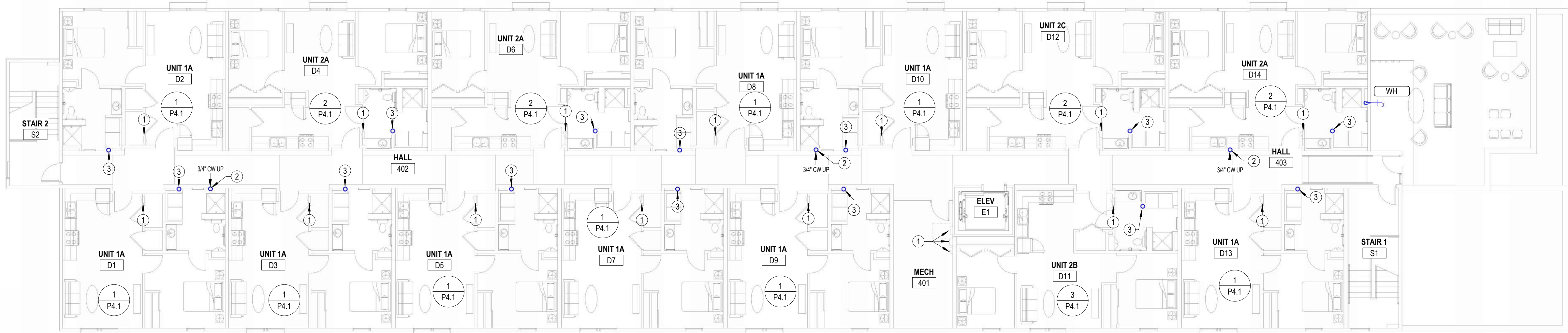
P1.5

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SEE SHEET P4.1 FOR PLUMBING FIXTURE TAGS

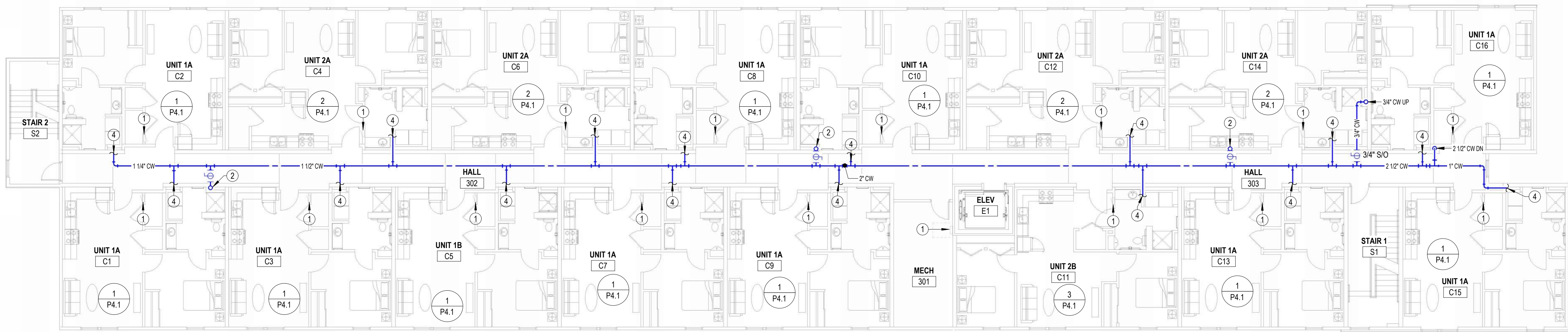
NOTES BY SYMBOL

- 1 ELECTRICAL EQUIPMENT SHOWN FOR COORDINATION. DO NOT ROUTE PIPING ABOVE OR BELOW EQUIPMENT, AND MAINTAIN WORKING CLEARANCE SHOWN.
- 2 3/4" COLD WATER UP TO ROOF HYDRANT.
- 3 1" DOMESTIC WATER FROM FLOOR BELOW. SEE ENLARGED DOMESTIC WATER PLANS FOR MORE INFORMATION.
- 4 SEE ENLARGED DOMESTIC WATER PLANS FOR CONTINUATION.



PIPING FOR DWELLING UNITS ON 2ND AND 4TH FLOORS SHALL BE ROUTED BELOW THE FLOOR. DO NOT DOMESTIC WATER PIPING IN THE ATTIC

2
P1.5
FOURTH FLOOR DOMESTIC WATER PLAN
3/32" = 1'-0"
0 8' 16' 24'



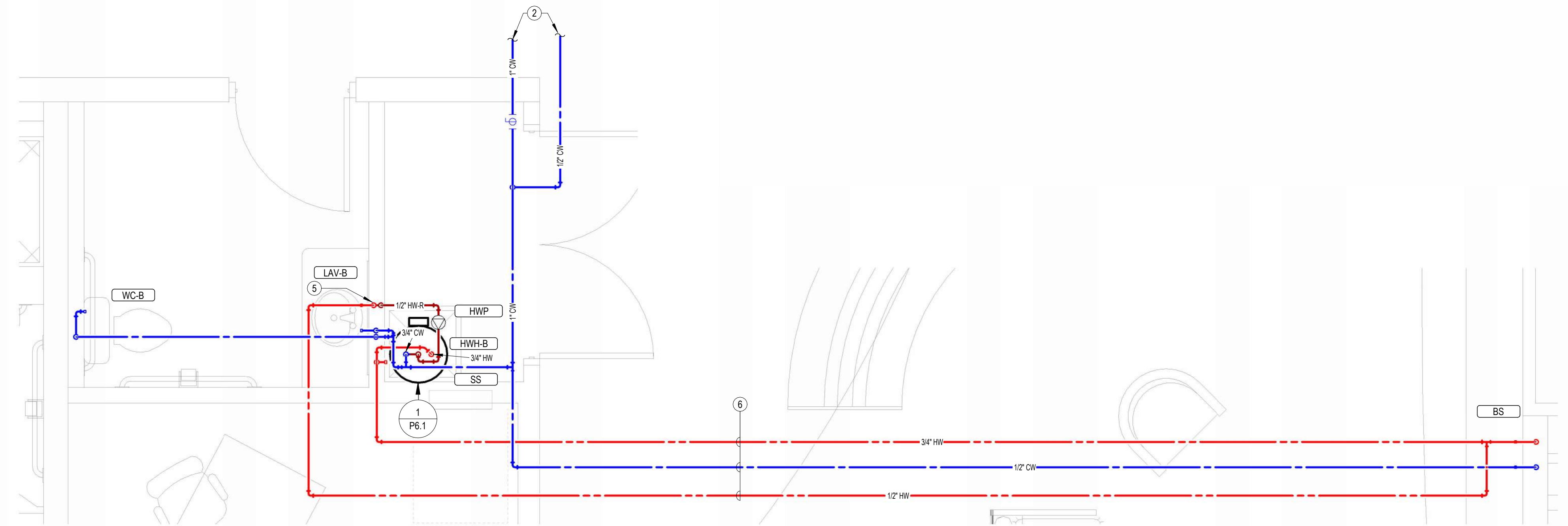
PIPING FOR DWELLING UNITS ON 2ND AND 4TH FLOORS SHALL BE ROUTED BELOW THE FLOOR. DO NOT DOMESTIC WATER PIPING IN THE ATTIC

1
P1.5
THIRD FLOOR DOMESTIC WATER PLAN
3/32" = 1'-0"
0 8' 16' 24'

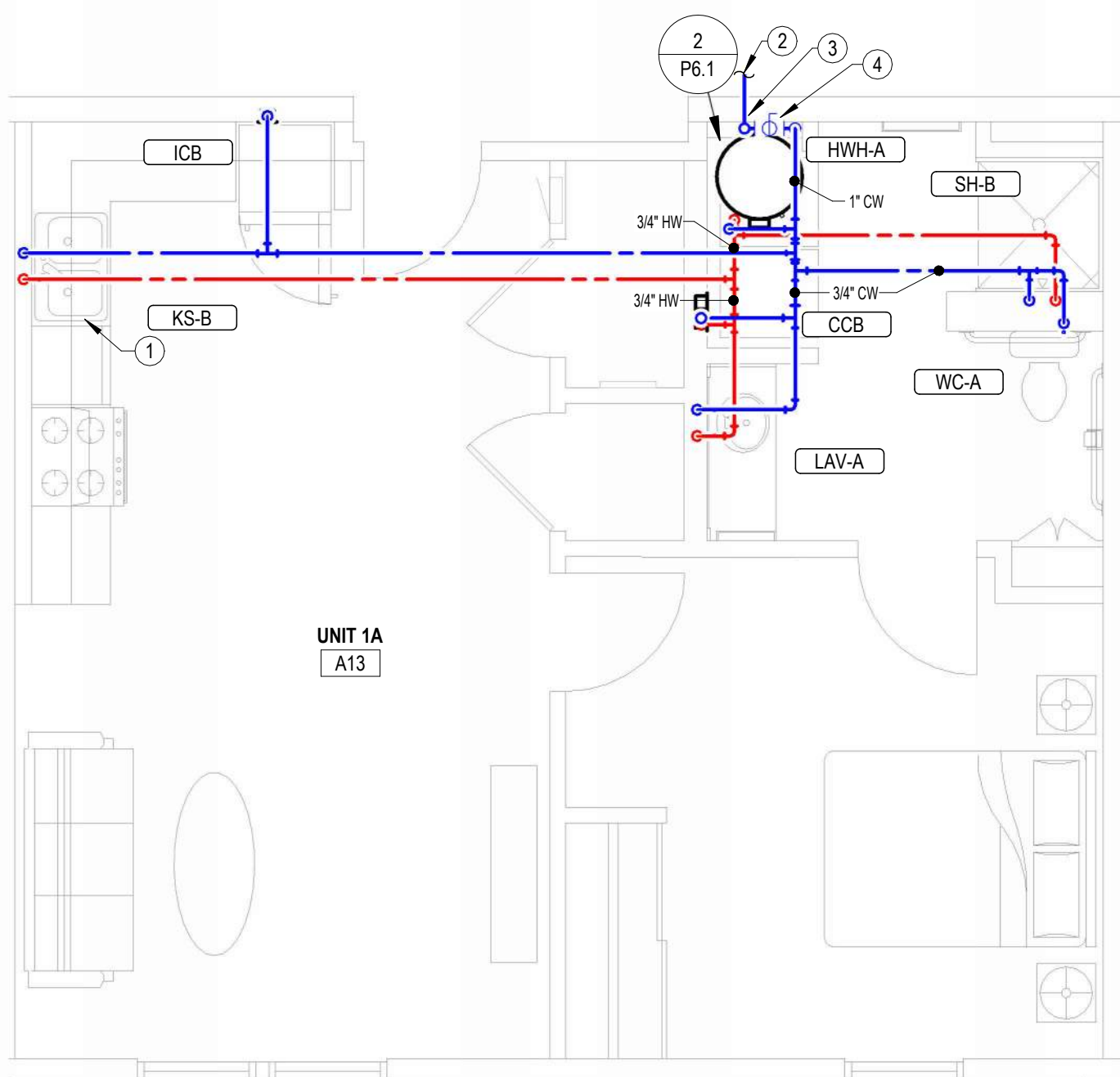
PIPING FOR DWELLING UNITS ON 2ND AND 4TH FLOORS SHALL BE ROUTED BELOW THE FLOOR. DO NOT DOMESTIC WATER PIPING IN THE ATTIC

NOTES BY SYMBOL

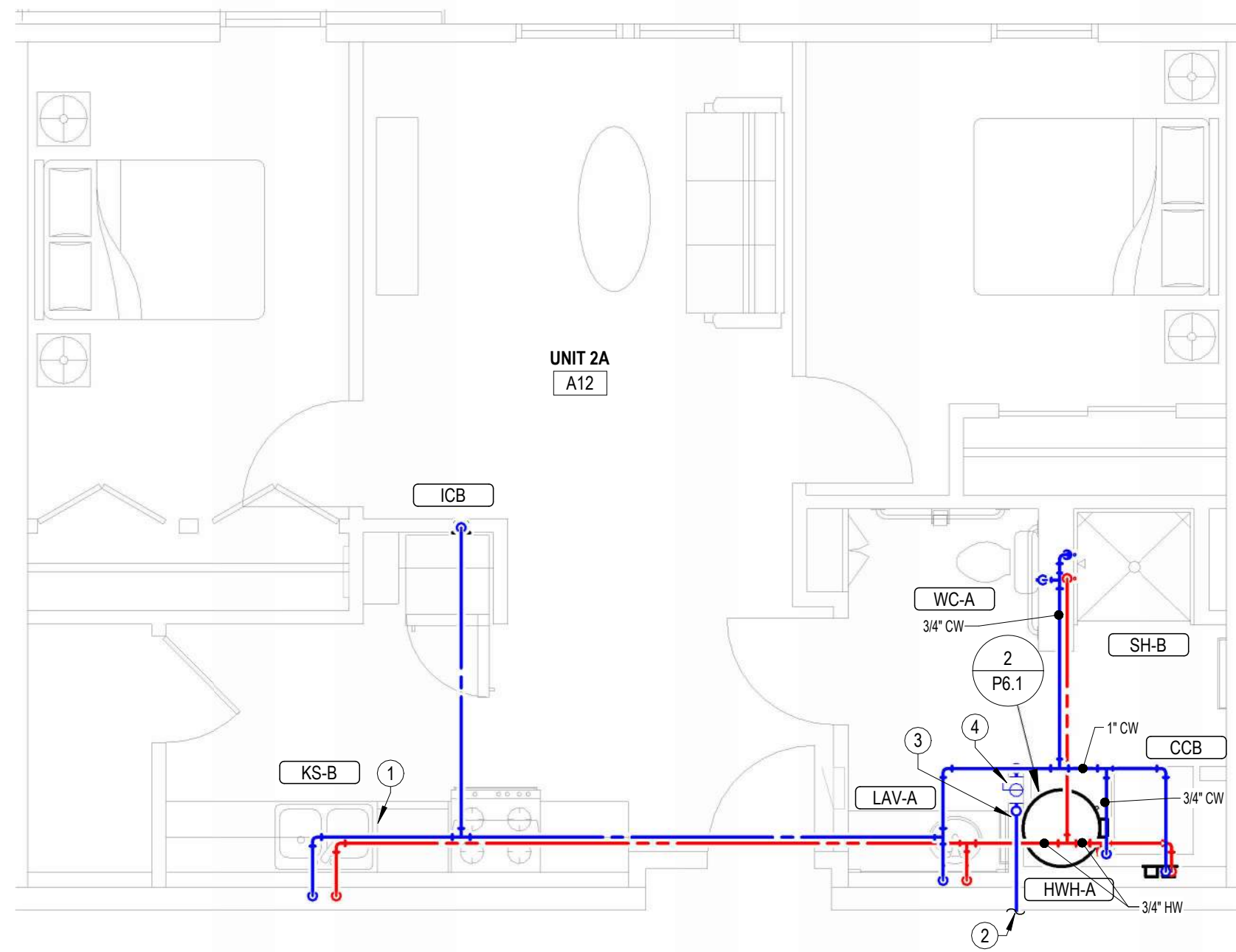
- 1 PROVIDE 1/2" VALVED BRANCH BELOW SINK AND CONNECT DISHWASHER. ROUTE PIPING ALONG BACK OF CABINETRY, COORDINATE EXACT ROUTING WITH G.C. COORDINATE EXACT REQUIREMENTS WITH DISHWASHER PROVIDED.
- 2 SEE OVERALL DOMESTIC WATER PLANS FOR CONTINUATION.
- 3 PROVIDE 1-1/4" DOMESTIC WATER PIPE TO APARTMENTS, PROVIDE WITH 1" TEE UP TO FLOOR ABOVE AND 1" DOWN TO APARTMENT SHUT-OFF VALVE. SEE TYPICAL RISER DIAGRAM 5-P4.1.
- 4 PROVIDE 1" WATER SERVICE TO APARTMENT WITH SHUT-OFF VALVE CONCEALED IN WALL, PROVIDE ACCESS PANELS ON LAUNDRY SIDE OF WALL.
- 5 HOT WATER RECIRC LOOP SHALL DROP IN WALL TO LIMIT HOT WATER BRANCH TO PUBLIC LAVATORY TO 2 FT MAX.
- 6 COORDINATE ROUTING OF PIPING IN THIS AREA WITH STRUCTURE. ALL PENETRATIONS OF BEAMS IN THIS AREA MUST BE APPROVED BY STRUCTURAL ENGINEER IN WRITING.



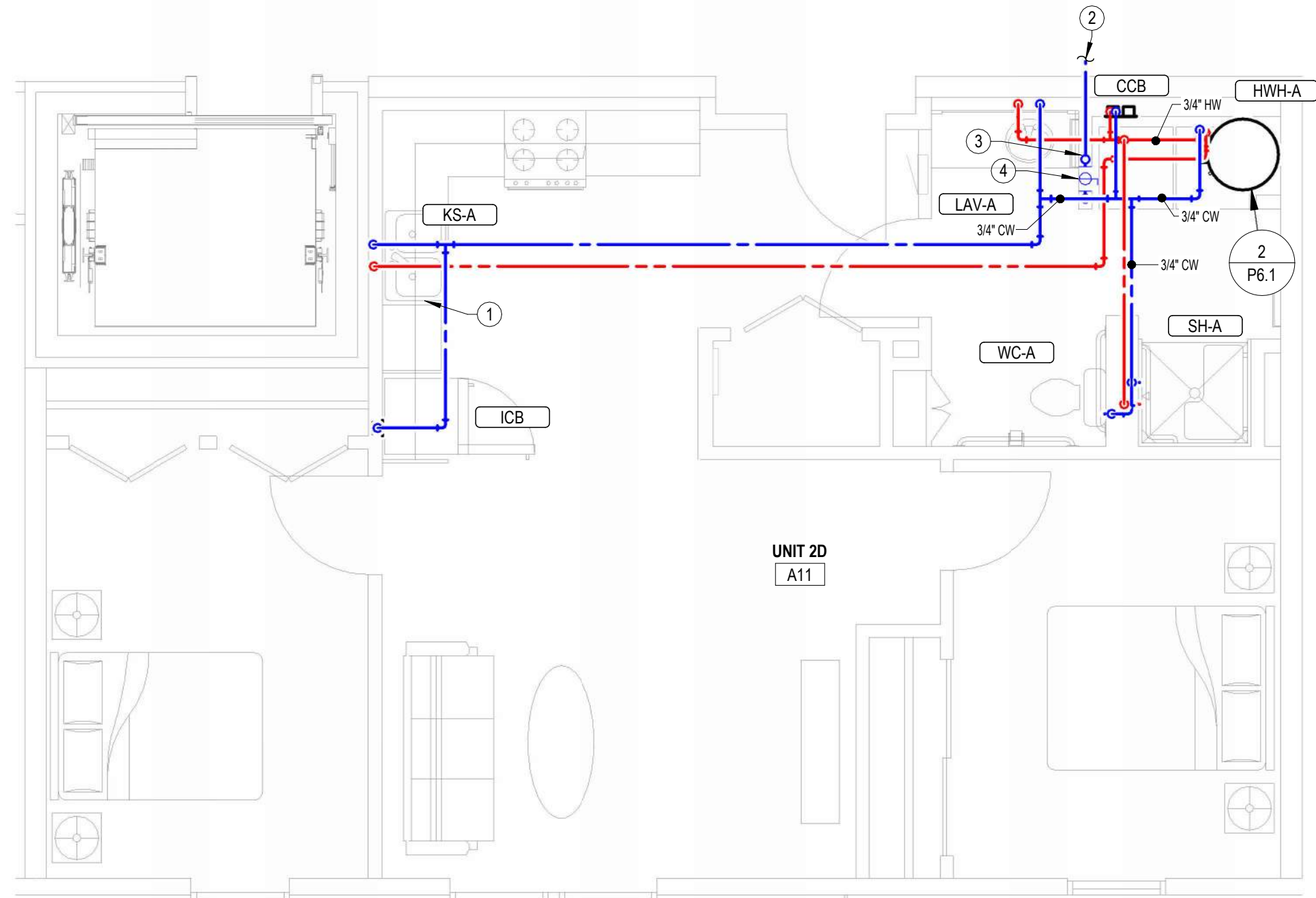
4
P4.1
ENLARGED COMMUNITY ROOM PLUMBING
1/2" = 1'-0"
0 1' 2' 4'



1
P4.1
1 BEDROOM (UNITS 1A/1B) ENLARGED DOMESTIC WATER PLAN
1/4" = 1'-0"
0 2' 4' 8'



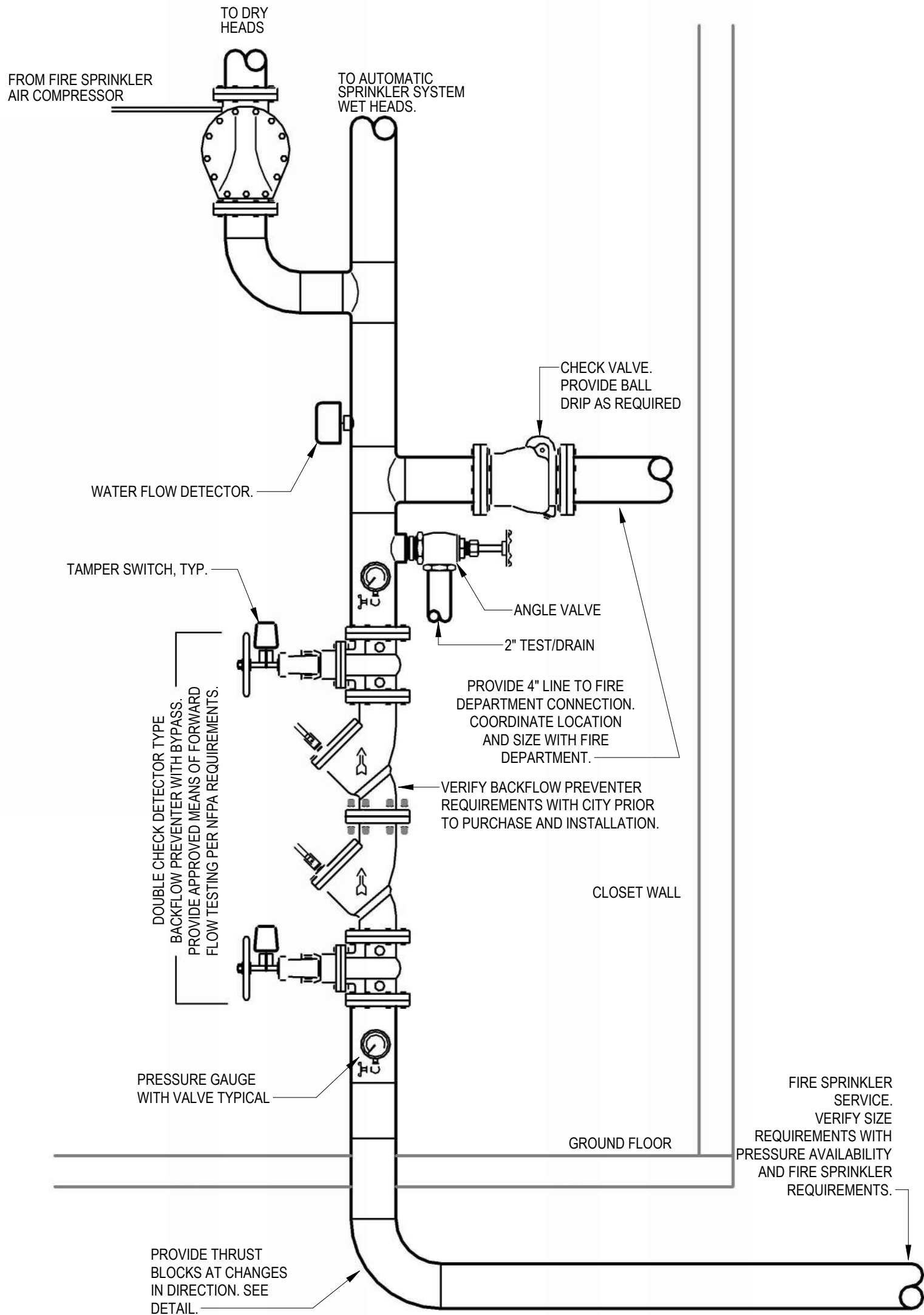
2
P4.1
2 BEDROOM (UNITS 2A/2C) ENLARGED DOMESTIC WATER PLAN
1/4" = 1'-0"
0 2' 4' 8'



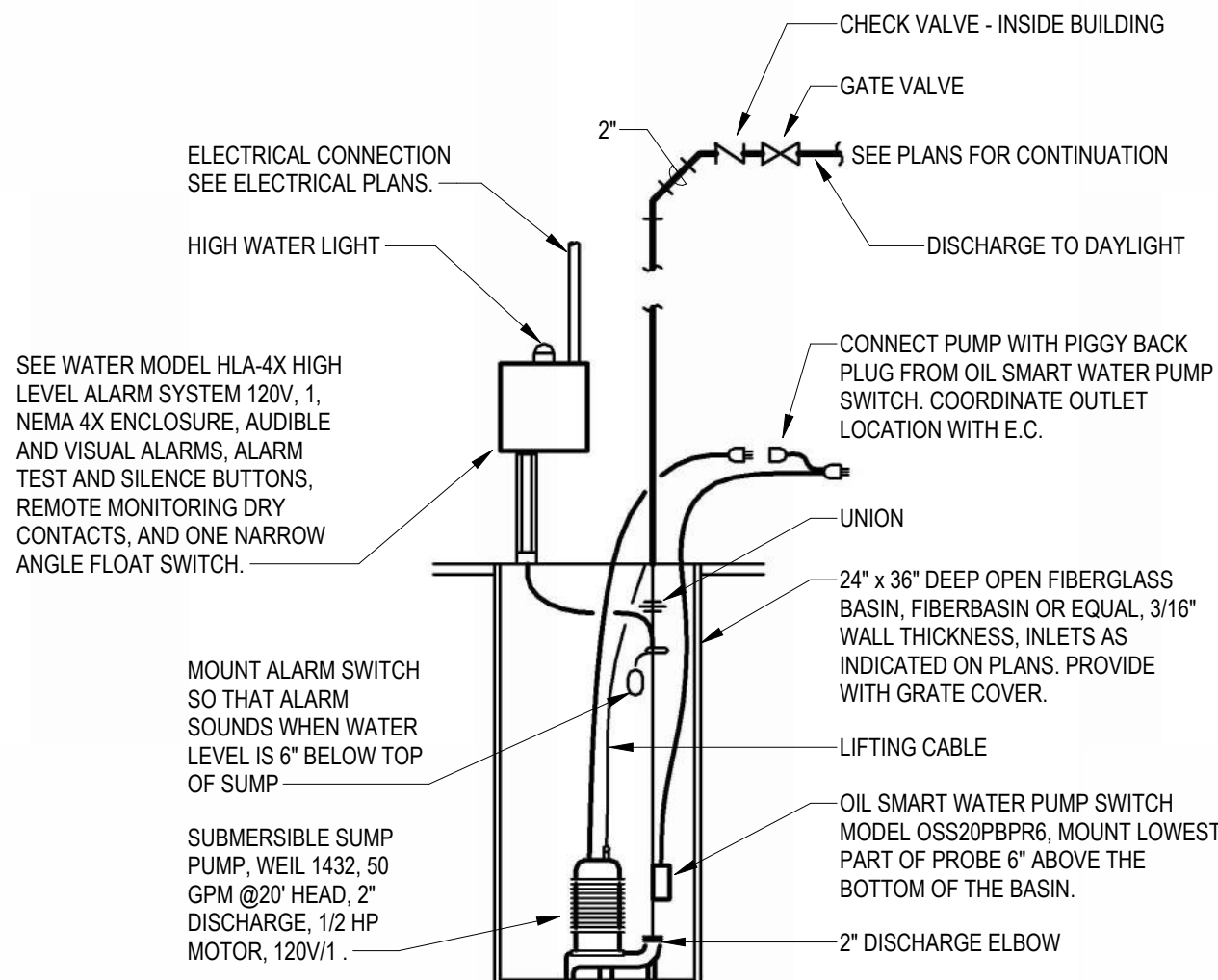
3
P4.1
2 BEDROOM (UNITS 2B/2D) ENLARGED DOMESTIC WATER PLAN
1/4" = 1'-0"
0 2' 4' 8'

Domestic Water Equipment Schedule				
Mark	Manufacturer	Model	Specification	Notes
HWH-A	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.	1
HWH-B	AO Smith	EJCS-20	20 Gallon electric water heater, 2500 watts, 120v heating element, 11 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.	1
HWP	Bell & Gossett	ECOCIRC e3-4V	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 2018 IECC.				

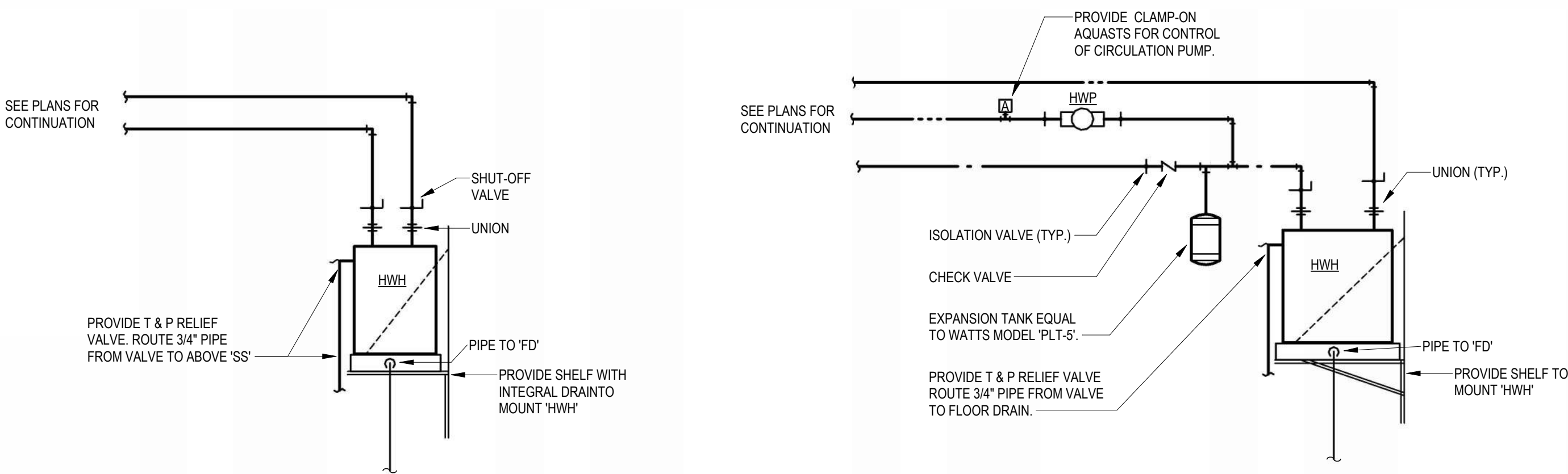
PLUMBING FIXTURE SCHEDULE			PRODUCT DESCRIPTION	TRIM	ROUGH-IN SIZES			COLD	HOT	ADA COMPLIANT	NOTES
MARK	MANUFACTURER	MODEL			DRAIN	VENT	WATER				
BS	Blanco	524755	17"W x 17" Single compartment, under mount, stainless steel satin polish sink.	Delta / 1980ZZ-SP-DST / Spot Shield Stainless	2"	1 1/2"	1/2"	Yes	Yes	Yes	1,2,3,5
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		2"	1 1/2"	1/2"	Yes	Yes		
EWC	Elkay	EMABFTLDDWSLK	Dual height, self-contained water cooler with stainless steel basin, front and side push bar actuator, lead-free, 120v. Provide with EZH2O bottle filling station, and model 98313C accessory apron.		2"	1 1/2"	1/2"	Yes	No	Yes	1
FD	Sioux Chief	833	Adjustable floor drain with nickel bronze strainer. Provide Proset Trappguard trap protection device.		2"	2"					
FS	Sioux Chief	861	PVC floor sink with PVC strainer. Provide Proset Trappguard trap protection device.		4"	2"					
ICB	IPS Corp.	FRIB12	Ice maker connection box with 1/4 turn ball valve and 1/2" sweat copper connection.				1/2"	Yes	No		
KS-A	Just	DLADA1829A65-J	Two compartment 20 GA stainless steel sink, self rimming, 14"x16"x10" inside, fully undercoated, faucet holes as required. Single handle kitchen sink faucet with hose spray, and basket strainer. IN-SINKERATOR: "Badger 5" garbage disposal, 1/2hp, 120V cord and plug connected.	Delta / 1980ZZ-SP-DST / Spot Shield Stainless	2"	1 1/2"	1/2"	Yes	Yes	No	1,2,3,4,5
KS-B	Just	DLADA1829A65-J	Two compartment 20 GA stainless steel sink, self rimming, 14"x16"x10" inside, fully undercoated, faucet holes as required. Single handle kitchen sink faucet with hose spray, and basket strainer. IN-SINKERATOR: "Badger 5" garbage disposal, 1/2hp, 120V cord and plug connected.	Delta / 1980ZZ-SP-DST / Spot Shield Stainless	2"	1 1/2"	1/2"	Yes	Yes	No	1,2,3,4,5
LAV-A	American Standard	0610.000.020	20"Wx16" Under mount, vitreous china lavatory. Single handled 1.2 GPM faucet. Provide with pop-drain, and front overflow drain.	Delta / 559HAR-SS-DST / Brilliance Stainless	2"	1 1/2"	1/2"	Yes	Yes	Yes	1,2,3,5
LAV-B	American Standard	0610.000.020	20"Wx16" Under mount, vitreous china lavatory. Single handled 1.2 GPM faucet. Provide with grid drain, front overflow drain, point of use thermostatic mixing valve, and chrome plated or braided stainless steel domestic water supply lines.	Delta / 559HAR-BL-DST / Matte Black	2"	1 1/2"	1/2"	Yes	Yes	Yes	1,2,3,5
OD	MIFAB	R1200-W	Deep Sump Roof Drain With 15" Diameter Anchor Flange, 2" High Cast Iron External Combined Water Dam And Waterproofing Membrane Clamp Ring, And Standard Self-Locking Dome Strainer With A Free Area Of 125 Square Inches.		3"						
RD	MIFAB	R1200-W	Deep Sump Roof Drain With 15" Diameter Anchor Flange, 2" High Cast Iron External Combined Water Dam And Waterproofing Membrane Clamp Ring, And Standard Self-Locking Dome Strainer With A Free Area Of 125 Square Inches.		3"						
RH	Woodford	RHY2-MS	Frost proof roof hydrant with ASSE 1052 double check backflow preventer that is field testable, integral vent that allows drainage with 1/8" drain hole drilled and lapped in body of hydrant. Provide with manufacturer's roof mounting system consisting of cast iron hydrant support, under deck flange, well seal, EPDM boot, and shims as required. Coordinate installation with G.C.		1/2"		3/4"	Yes	No	No	6
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.	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 80" hose / K-22163 hand shower / K-8524 and K-349 slide bar.	2"	1 1/2"	1/2"	Yes	Yes	Yes	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.	Kohler / K-8304-KS pressure balancing valve with integral temperature limits and stops / K-TS10583-4 valve trim	2"	1 1/2"	1/2"	Yes	Yes	No	
SS	Fiat	MSB-2424	One piece molded stone mop basin, 24" square, stainless steel integral drain body with caulk connection, stainless steel wall guards, Faucet with hose thread outlet, vacuum breaker, pail hook, wall brace, and metal lever handles.	Delta / 28T9	3"	1 1/2"	3/4"	Yes	Yes	No	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.	Kohler / K-5588	4"	2"	1/2"	Yes	No	No	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. Provide with 1/4" brass ball valve at wall connection.	Kohler / K-5588	4"	2"	1/2"	Yes	No	Yes	1
WH	WOODFORD	BZ5	Frost proof wall hydrant with anti-siphon vacuum breaker, with metal handle.				3/4"	Yes	No	No	
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 sink. Utilize insulation kit equivalent to LavGuard by Truebro. Provide Plumberex model #3071WD-N waste disposal cover. 4. Trim shall be provided with polished chrome finish. 5. Fixture selected by interior designer. Verify finish and selections with interior designer. 6. Transition from 1/8" drain tubing to 1/2" PVC drain and terminate with er gap at nearest tenant floor drain.											



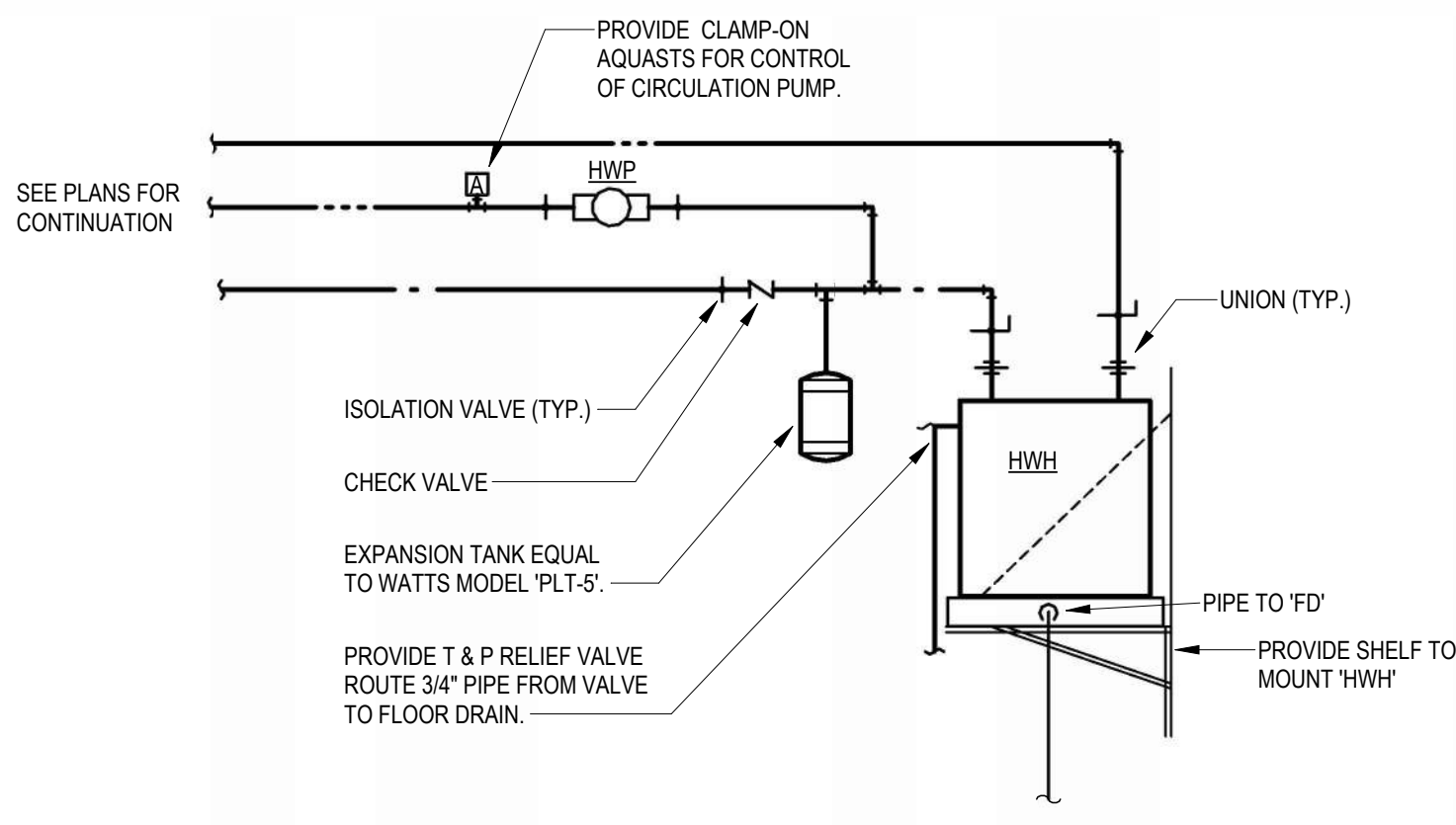
4 FIRE PROTECTION RISER DIAGRAM
P6.1 NO SCALE



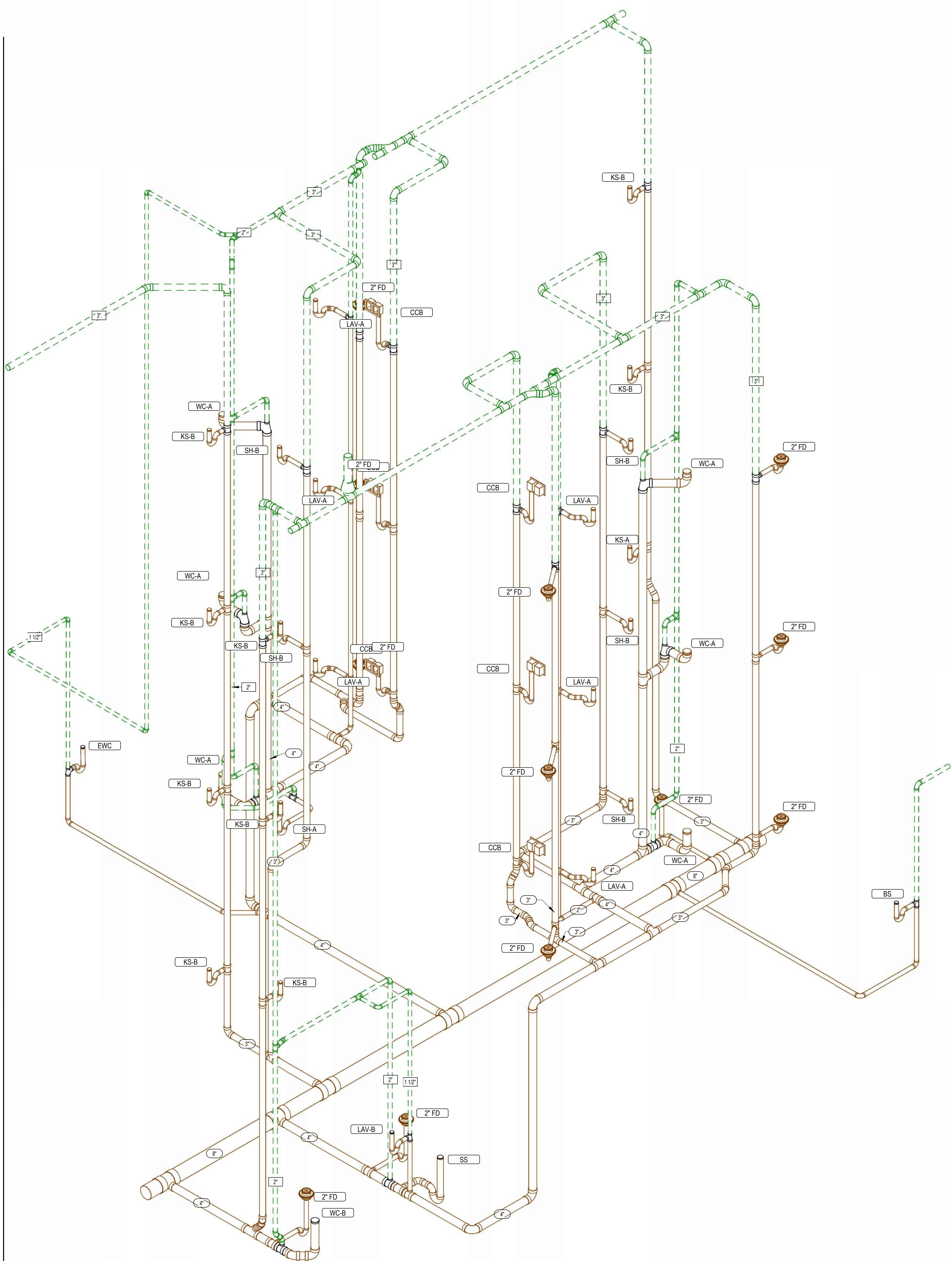
3 ELEVATOR SUMP PUMP
P6.1 NO SCALE



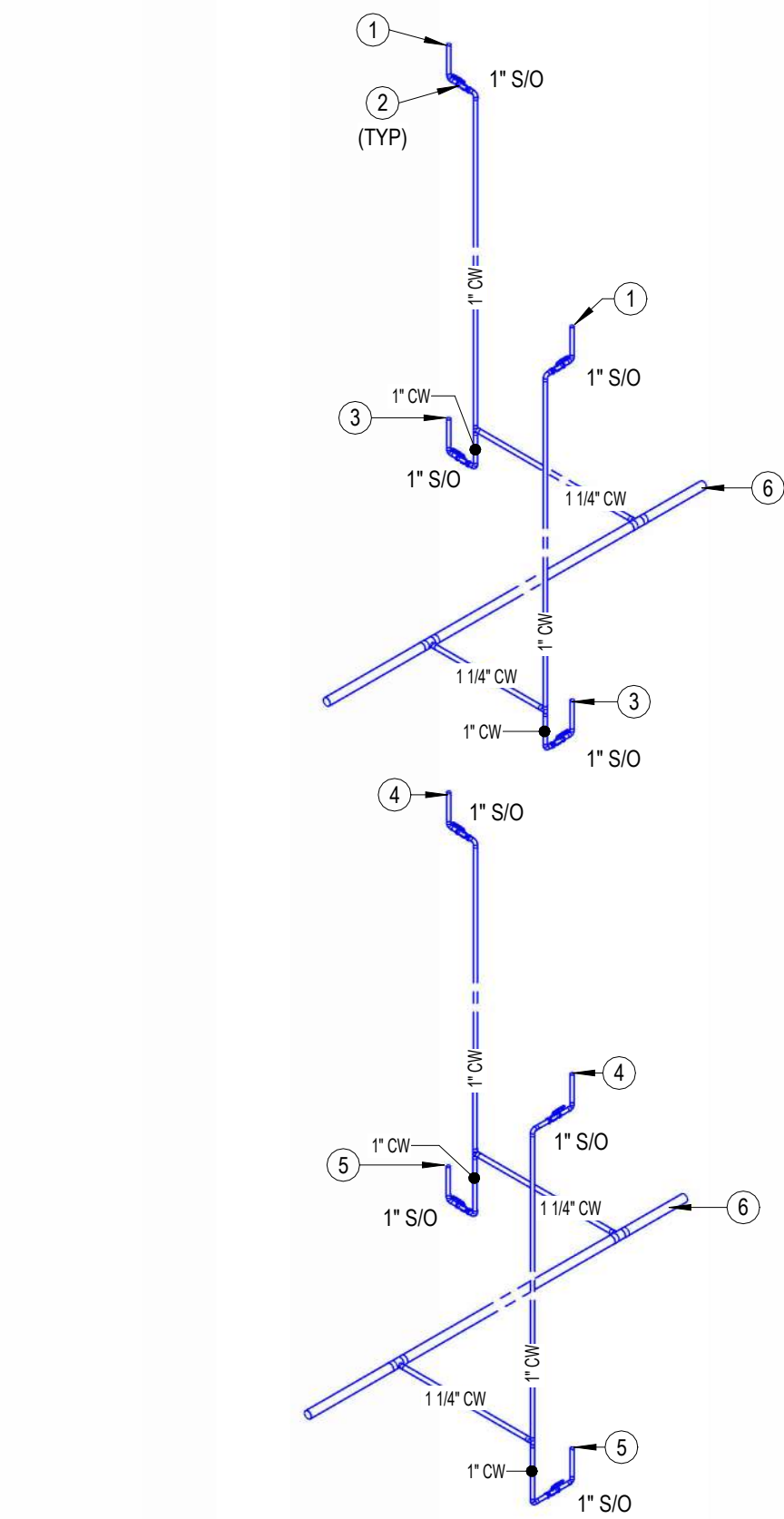
2 APPARTMENT WATER HEATER DIAGRAM
P6.1 NO SCALE



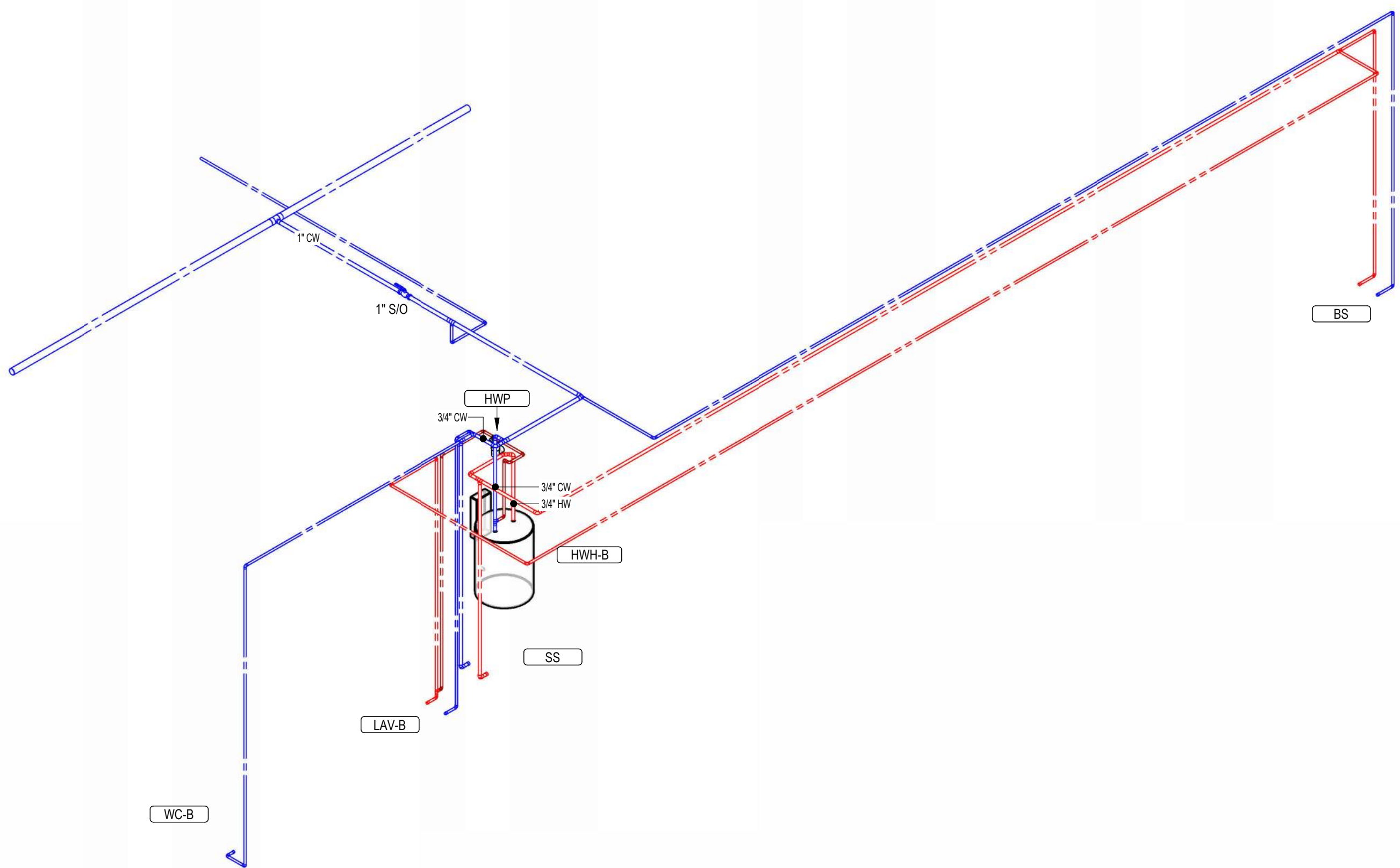
1 WATER HEATER ON SHELF PIPING DIAGRAM
P6.1 NO SCALE



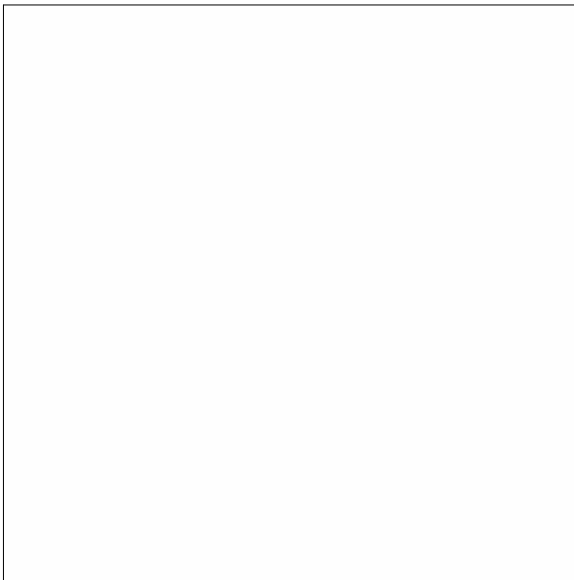
1
P9.2 COMMON AREA WASTE AND VENT RISER



3
P9.2 TYPICAL APARTMENT DOMESTIC WATER SERVICE RISER DIAGRAM



2
P9.2 COMMON AREA DOMESTIC WATER RISER



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

- NOTES BY SYMBOL
- 1 DOMESTIC WATER SERVICE TO 4TH FLOOR DWELLING UNIT. SEE P4.1 FOR CONTINUATION.
 - 2 INSTALL SHUT OFF VALVE IN ACCESSIBLE LOCATION. PROVIDE ACCESS PANELS AS REQUIRED.
 - 3 DOMESTIC WATER SERVICE TO 3RD FLOOR DWELLING UNIT. SEE P4.1 FOR CONTINUATION.
 - 4 DOMESTIC WATER SERVICE TO 2ND FLOOR DWELLING UNIT. SEE P4.1 FOR CONTINUATION.
 - 5 DOMESTIC WATER SERVICE TO 1ST FLOOR DWELLING UNIT. SEE P4.1 FOR CONTINUATION.
 - 6 SEE OVERALL PLANS FOR SIZE AND ROUTING OF PLUMBING MAINS.

REVISIONS:	
DATE:	01-10-2025
JOB:	24-3379
SHEET NO.:	