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3. PROVIDE CLEARANCE AROUND HVAC EQUIPMENT FOR SERVICE IN ACCORDANCE WITH INSTALLATION MANUAL AND ALL APPLICABLE CODE REQUIREMENT AND REGULATIONS MANUAL.
4. ADJUST DUCTWORK SIZE WHERE REQUIRED. DO NOT DECREASE NET AREA SHOWN TO FIT BETWEEN STRUCTURE.
5. INSULATE REFRIGERANT PIPING AND CONNECTION TO UNIT PER MANUFACTURER'S MANUAL.
6. PROVIDE VOLUME DAMPER AT ALL INDIVIDUAL BRANCH TAKEOFFS TO PROPERLY BALANCE SYSTEM.
7. DUCTWORK LAYOUT IS DIAGRAMMATIC. IT IS CONTRACTOR RESPONSIBILITY TO PROVIDE FIELD COORDINATION WITH STRUCTURAL DRAWING AND ALL TRADES AND MAKE ADJUSTMENT.
8. PROVIDE FIRE DAMPERS (FD) / OR CEILING RADIATION DAMPER WHERE DUCTS PENETRATE STRUCTURES REQUIRING A FIRE RATING BY CODE AND/OR REQUIRED PER ARCHITECTURAL DRAWINGS. VERIFY WITH ARCHITECTURAL DRAWINGS. PROVIDE MOTORIZED COMBINATION FIRE/SMOKE DAMPERS (FD/SD) WHERE DUCTS PENETRATE STRUCTURES REQUIRING A FIRE/SMOKE RATING BY CODE AND/OR REQUIRED PER ARCHITECTURAL DRAWINGS. VERIFY WITH ARCHITECTURAL DRAWINGS. DAMPERS SHALL BE INSTALLED IN ACCORDANCE WITH NFPA 90A AND UL555, WITH RATING EQUAL TO PARTITION TYPE. PROVIDE ACCESS DOOR IN THE DUCT FOR FIRE DAMPER SERVICE. ACCESS PANEL IN DUCT ENCLOSURE/CEILING SHALL BE BY G.C. THIS CONTRACTOR TO COORDINATE SPACING AND SIZE. VERIFY EXACT LOCATION AND QUANTITY OF FIRE AND/OR FIRE/SMOKE DAMPERS, PER SHEET METAL SHOP DRAWINGS.
9. PROVIDE SLEEVE AT PIPE PENETRATIONS THROUGH HORIZONTAL AND/OR VERTICAL FIRE AND/OR SMOKE BARRIER. FILL-IN AND FINISH WITH FIRE AND/OR SMOKE STOPPING MATERIALS AND METHODS PER CODE.

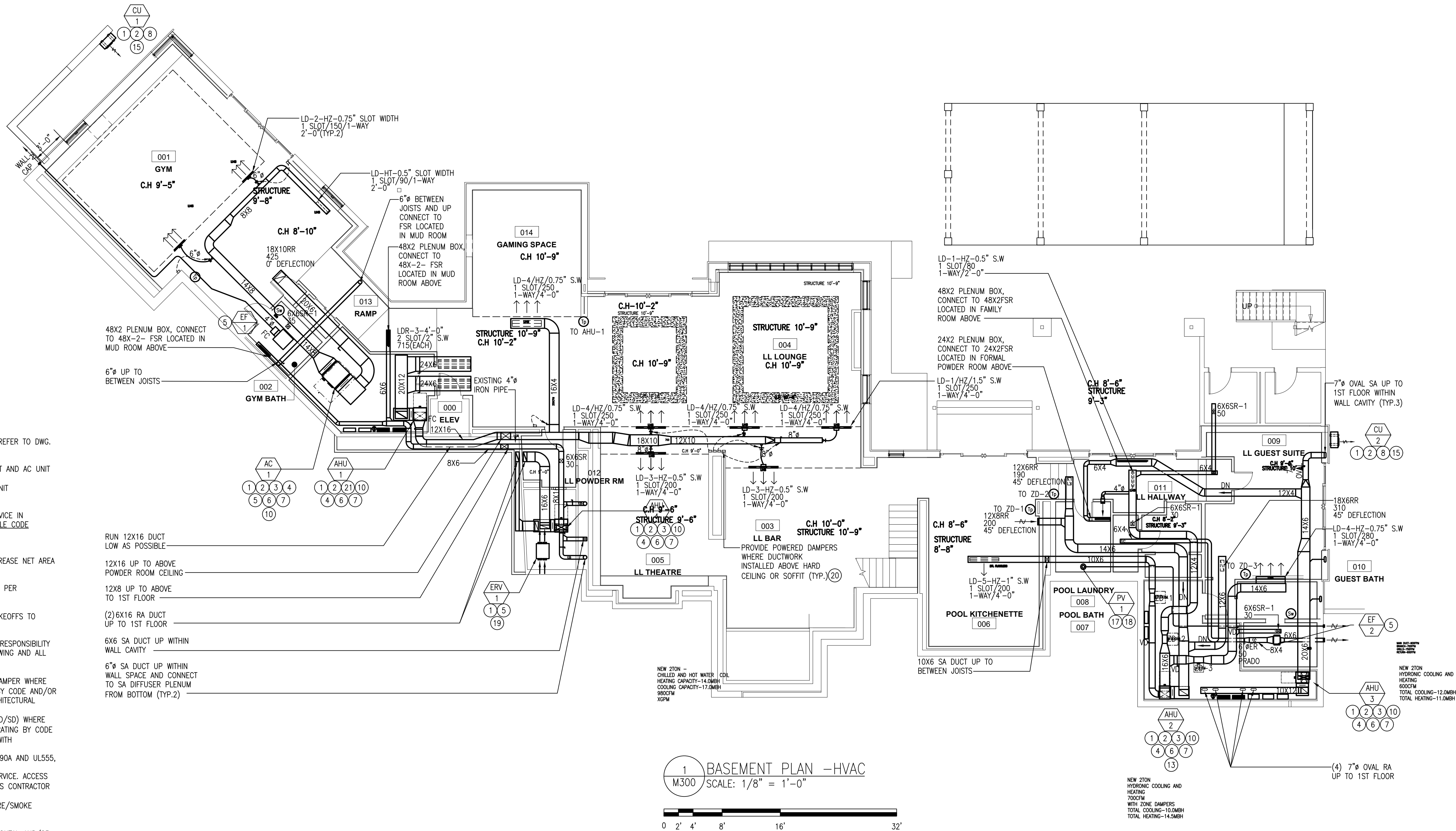
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- 3 ¾" CONDENSATE DRAIN PIPE RUN AT ¼" SLOPE. EXTEND AND DISCHARGE TO THE NEAREST FLOOR DRAIN IN PARKING GARAGE. FINISH OPEN END WITH 1" AIR GAP. PROVIDE CONDENSATE PUMP AS REQUIRED.
- 4 INSTALL UNIT PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.
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- 10 TRANSFER TO FULL SIZE DISCHARGE AND/OR INLET UNIT OPENING. MAINTAIN TRANSITION SIZE PER SMACNA REQUIREMENTS AS SPECIFIED. PROVIDE FLEXIBLE CONNECTION IN VERTICAL/OR HORIZONTAL. COORDINATE SA AND RA OPENINGS WITH UNIT MANUFACTURER.
- 11 MAINTAIN MINIMUM 10'-0" HORIZONTAL DISTANCE BETWEEN ALL OUTSIDE AIR INTAKES, VENTS, FLUES AND/OR EXHAUST OPENINGS. RELOCATE/REROUTE EXISTING VENTS AS REQUIRED TO MAINTAIN CLEARANCE WHERE HORIZONTAL DISTANCE IS BELOW 10'-0". EXTEND ANY EXHAUST, VENT OR FLUE DISCHARGE TO 3'-0" MINIMUM ABOVE FRESH AIR INTAKE.

- 12 PROVIDE ACCESS DOOR/ PANEL FOR ALL UNIT COMPONENTS FOR SERVICE & MAINTENANCE , SEE MANUFACTURER REQUIREMENT FOR AP IN UNIT INSTALLATION MANUAL
- 13 M.C SHALL PROVIDE BYPASS BETWEEN SA AND RA WITH BAROMETRIC RELIEF TO ALLOW AIR FLOW BACK TO THE UNIT RA DUCT FROM SA DUCT WHEN ZONE DAMPER IS CLOSED
- 14 PROVIDE FIRE DAMPERS WHERE DUCTS PENETRATE STRUCTURES REQUIRING A FIRE RATING BY CODE. FIRE DAMPERS SHALL BE INSTALLED IN ACCORDANCE WITH NFPA 90A AND IN ACCORDANCE W/UL 555, WITH AN HOUR RATING APPLICABLE FOR CONSTRUCTION INSTALLED IN CEILING RADIATION DAMPERS SHALL BE INSTALLED IN ACCORDANCE WITH NFPA 90A AND TESTED IN ACCORDANCE W/UL 555C. PROVIDE ACCESS DOOR IN THE DUCT FOR FIRE DAMPER SERVICE. ACCESS PANEL IN DUCT ENCLOSURE/CEILING SHALL BE BY G.C. THIS CONTRACTOR TO COORDINATE SPACING AND SIZE.
- 15 PROVIDE ON EQUIPMENT SUPPORT. HEIGHT SUFFICIENT KEEP CONDENSER ABOVE SNOW LEVEL. (MIN. 24")
- 16 INTERLOCK OA MOD WITH UNIT OPERATION
- 17 THE MAXIMUM LENGTH OF VENTS SHALL NOT EXCEED MAXIMUM ALLOWED PER MANUFACTURER'S REQUIREMENTS. VERIFY EXACT SIZE(S) AND ALLOWED LENGTH WITH UNIT MANUFACTURER'S DRAWINGS. INSTALL DRYER EXHAUST DUCT POWER VENTILATOR IF MAXIMUM LENGTH EXCEED MAXIMUM ALLOWED PER MANUFACTURER'S REQUIREMENTS AND RECOMMENDATIONS. INSTALL LINT TRAP WHERE DRYER EXHAUST DUCT POWER VENTILATOR LOCATED CLOSER THAN 15 FEET FROM THE DRYER OUTLET.
- 18 DRYER VENTS SHALL BE ALUMINUM ROUND RIGID NOT LESS THAN 28 GA. FULL LENGTH OF DUCT RATED FOR DRYER USE. NO SCREWS ARE ALLOWED. CONSTRUCTED AND INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. COORDINATE WITH THE PLUMBING CONTRACTOR OR ARCHITECT TO OBTAIN EQUIPMENT SPECIFICATIONS AND INSTRUCTIONS. EXTEND DRYER VENT TO OUTSIDE. TERMINATE DRYER VENTS PER MANUFACTURER'S. TERMINATE 3'-0" IN ANY DIRECTION FROM OPENING INTO BUILDING. PROVIDE APPROVED VENT CAP AT TERMINATIONS. VENT CONNECTIONS TO DRYERS SHALL BE IN STRICT ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS INCLUDING ALL REQUIRED APPURTENANCES. TRANSITION DUCT SHALL BE SINGLE LENGTH LISTED AND LABELED IN ACCORDANCE WITH UL 2158A. PROVIDE BACKDRAFT DAMPERS AT TERMINATIONS. NO MESH SCREEN IS ALLOWED AT TERMINATION. PLACE PROTECTIVE SHIELD PLATES WHERE DRYER EXHAUST IS SUBJECT TO NAIL OR SCREW PENETRATIONS, PER IRC AND IFGC CODES. THE MAXIMUM LENGTH OF VENTS SHALL NOT EXCEED MAXIMUM ALLOWED PER MANUFACTURER'S REQUIREMENTS. VERIFY EXACT SIZE(S) AND ALLOWED LENGTH WITH UNIT MANUFACTURER DRAWINGS. PROVIDE CLEAN-OUT AT THE BOTTOM OF THE RISER.

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- 20 WALL PLATE WITH PORTS. LABEL TO INDICATE INDIVIDUAL DAMPER NUMBER AND/OR DOCUMENT NUMBER FOR OWNER'S USE. COORDINATE LOCATION WITH ARCHITECT.
- 21 1" CONDENSATE DRAIN PIPE RUN AT ¼" SLOPE. EXTEND AND DISCHARGE TO THE NEAREST FLOOR DRAIN IN PARKING GARAGE. FINISH OPEN END WITH 1" AIR GAP. PROVIDE CONDENSATE PUMP AS REQUIRED.

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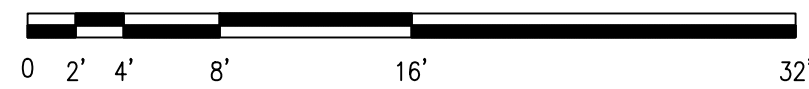
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1 FIRST FLOOR PLAN -HVAC

SCALE: 1/8" = 1'-0"



228 Vine St
Philadelphia, PA 19106
Ph: 215.592.9300
www.motodesignshop.com

Project:
CROSBY BROWN RD
Crosby Brown Road
Gladwyne, PA 19035
2507

Owner:
Haldon House
Bryn Mawr, PA 19010
215.284.1407

Structural Engineer

Civil Engineer

Landscape Designer

Lighting Designer

Submission & Revisions

#	DATE	DESCRIPTION
10/30/2025	PERMIT SET	

Date 7/11/2025

Project number 25D068.1

Drawn by ----

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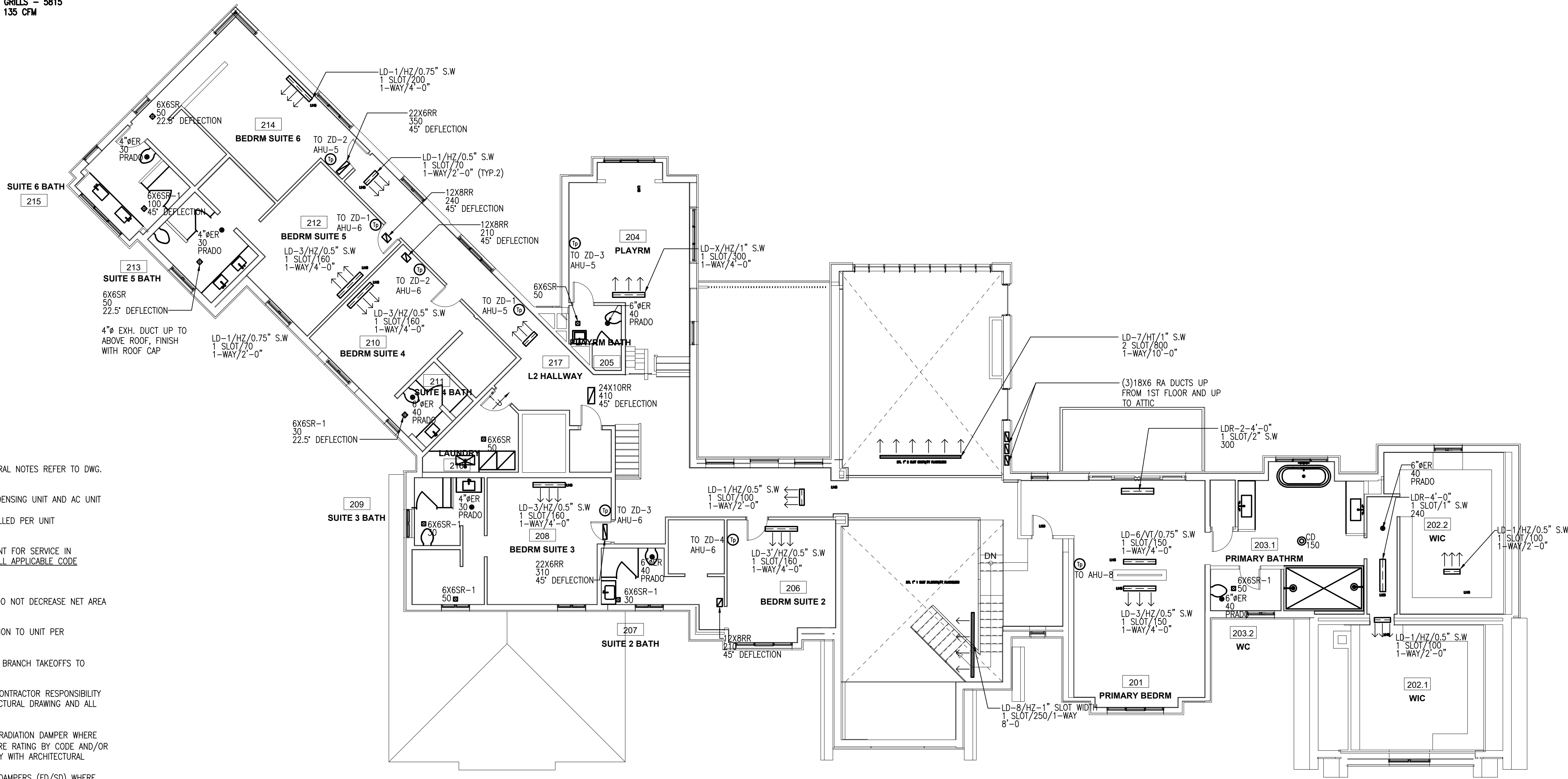
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FIRST FLOOR
PLAN

Sheet

M301

BATHROOMS GRILLS – 5815
6X6 UP TO 135 CFM



1 SECOND FLOOR PLAN – HVAC
M302 SCALE: 1/8" = 1'-0"
0 2' 4' 8' 16' 32'

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- 16 INTERLOCK OA MOD WITH UNIT OPERATION
- 17 THE MAXIMUM LENGTH OF VENTS SHALL NOT EXCEED MAXIMUM ALLOWED PER MANUFACTURER'S REQUIREMENTS. VERIFY EXACT SIZE(S) AND ALLOWED LENGTH WITH UNIT MANUFACTURER'S DRAWINGS. INSTALL DRYER EXHAUST DUCT POWER VENTILATOR IF MAXIMUM LENGTH EXCEED MAXIMUM ALLOWED PER MANUFACTURER'S REQUIREMENTS AND RECOMMENDATIONS. INSTALL UNIT TRAP WHERE DRYER EXHAUST DUCT POWER VENTILATOR LOCATED CLOSER THAN 15 FEET FROM THE DRYER OUTLET.
- 18 DRYER VENTS SHALL BE ALUMINUM ROUND RIGID NOT LESS THAN 28 GA. FULL LENGTH OF DUCT RATED FOR DRYER USE. NO SCREWS ARE ALLOWED. CONSTRUCTED AND INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. COORDINATE WITH THE PLUMBING CONTRACTOR OR ARCHITECT TO OBTAIN EQUIPMENT SPECIFICATIONS AND INSTRUCTIONS. EXTEND DRYER VENT TO OUTSIDE. TERMINATE DRYER VENTS PER MANUFACTURER'S. TERMINATE 3'-0" IN ANY DIRECTION FROM OPENING INTO BUILDING. PROVIDE APPROVED VENT CAP AT TERMINATIONS. VENT CONNECTIONS TO DRYERS SHALL BE IN STRICT ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS INCLUDING ALL REQUIRED APPURTENANCES. TRANSITION DUCT SHALL BE SINGLE LENGTH LISTED AND LABELED IN ACCORDANCE WITH UL 2158A. PROVIDE BACKDRAFT DAMPERS AT TERMINATIONS. NO MESH SCREEN IS ALLOWED AT TERMINATION. PLACE PROTECTIVE SHIELD PLATES WHERE DRYER EXHAUST IS SUBJECT TO NAIL OR SCREW PENETRATIONS. PER IRC AND IFGC CODES. THE MAXIMUM LENGTH OF VENTS SHALL NOT EXCEED MAXIMUM ALLOWED PER MANUFACTURER'S REQUIREMENTS. VERIFY EXACT SIZE(S) AND ALLOWED LENGTH WITH UNIT MANUFACTURER DRAWINGS. PROVIDE CLEAN-OUT AT THE BOTTOM OF THE RISER.

- 19 KEEP ERV RELIEF DUCT TO OUTSIDE, FRESH AIR INTAKE AND RETURN AIR DUCT AS EXISTING FOR ERV LOCATED AT THE LOWER LEVEL. CONNECT ERV SUPPLY AIR DUCT TO AHU-1 RA PLENUM. BALANCE TO 160CFM.
- 20 WALL PLATE WITH PORTS. LABEL TO INDICATE INDIVIDUAL DAMPER NUMBER AND/OR DOCUMENT NUMBER FOR OWNER'S USE. COORDINATE LOCATION WITH ARCHITECT.
- 21 1" CONDENSATE DRAIN PIPE RUN AT 1/8" SLOPE. EXTEND AND DISCHARGE TO THE NEAREST FLOOR DRAIN IN PARKING GARAGE. FINISH OPEN END WITH 1" AIR GAP. PROVIDE CONDENSATE PUMP AS REQUIRED.

NOT ALL NOTES AND SHEET NOTES MAY APPEAR ON THIS DRAWING



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Owner:
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215.284.1407

Structural Engineer

Civil Engineer

Landscape Designer

Lighting Designer

Submission & Revisions

#	DATE	DESCRIPTION
	10/30/2025	PERMIT SET

Date	7/11/2025
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SECOND
FLOOR
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M302



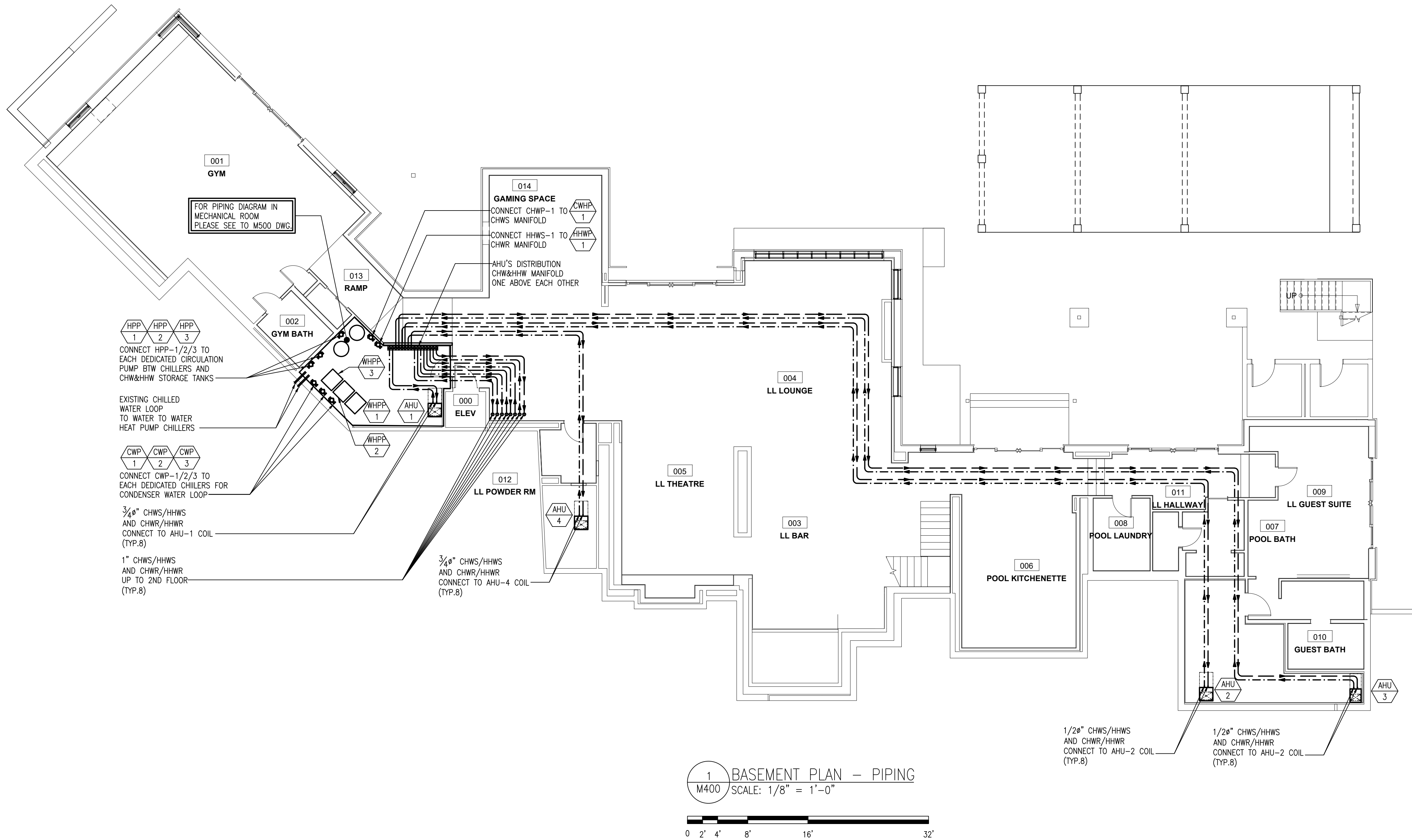
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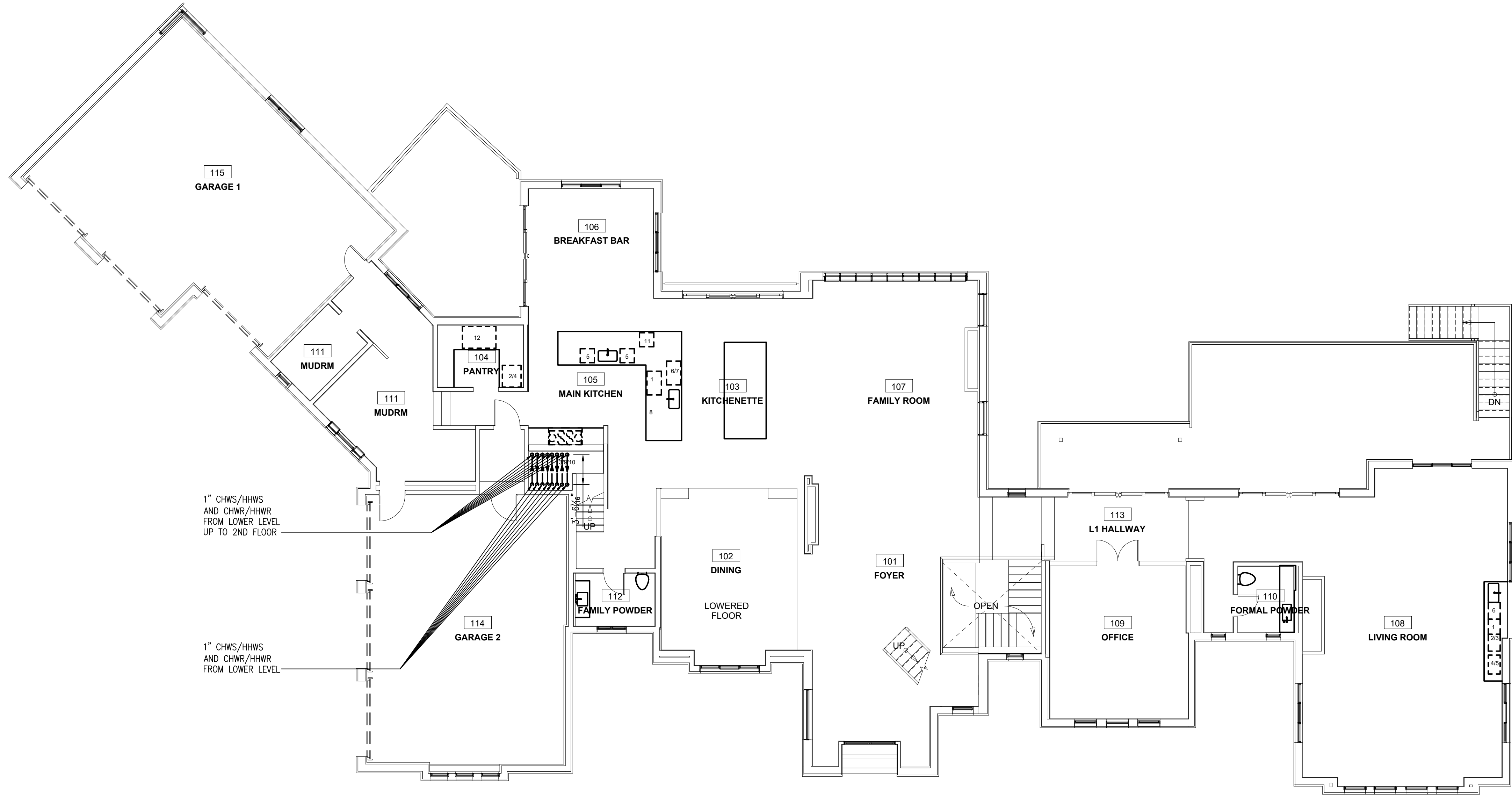


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1 FIRST FLOOR PLAN - PIPING
M401 SCALE: 1/8" = 1'-0"

0 2' 4' 8' 16' 32'



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FIRST FLOOR
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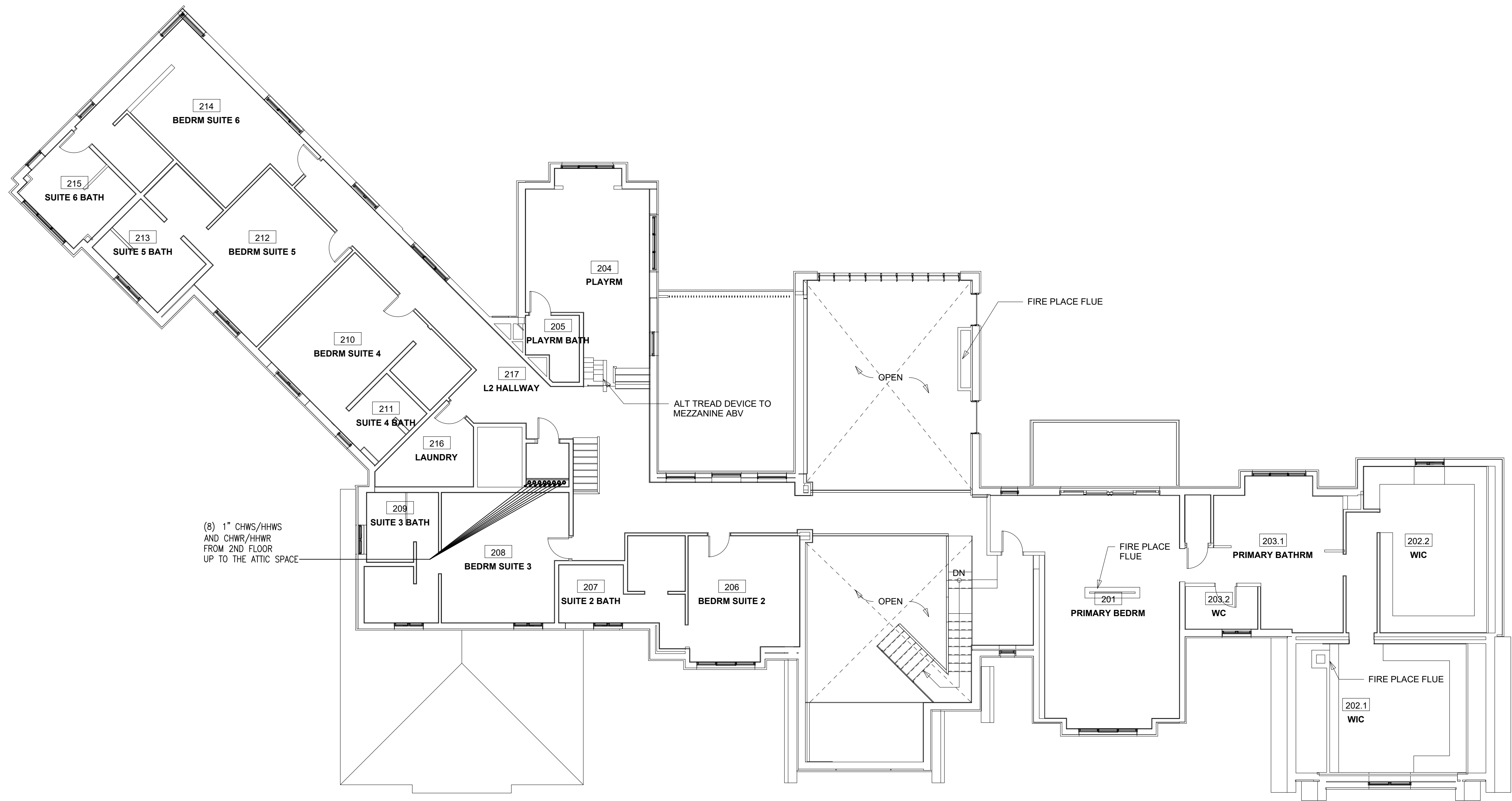
M401

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1 SECOND FLOOR PLAN - PIPING
M402 SCALE: 1/8" = 1'-0"



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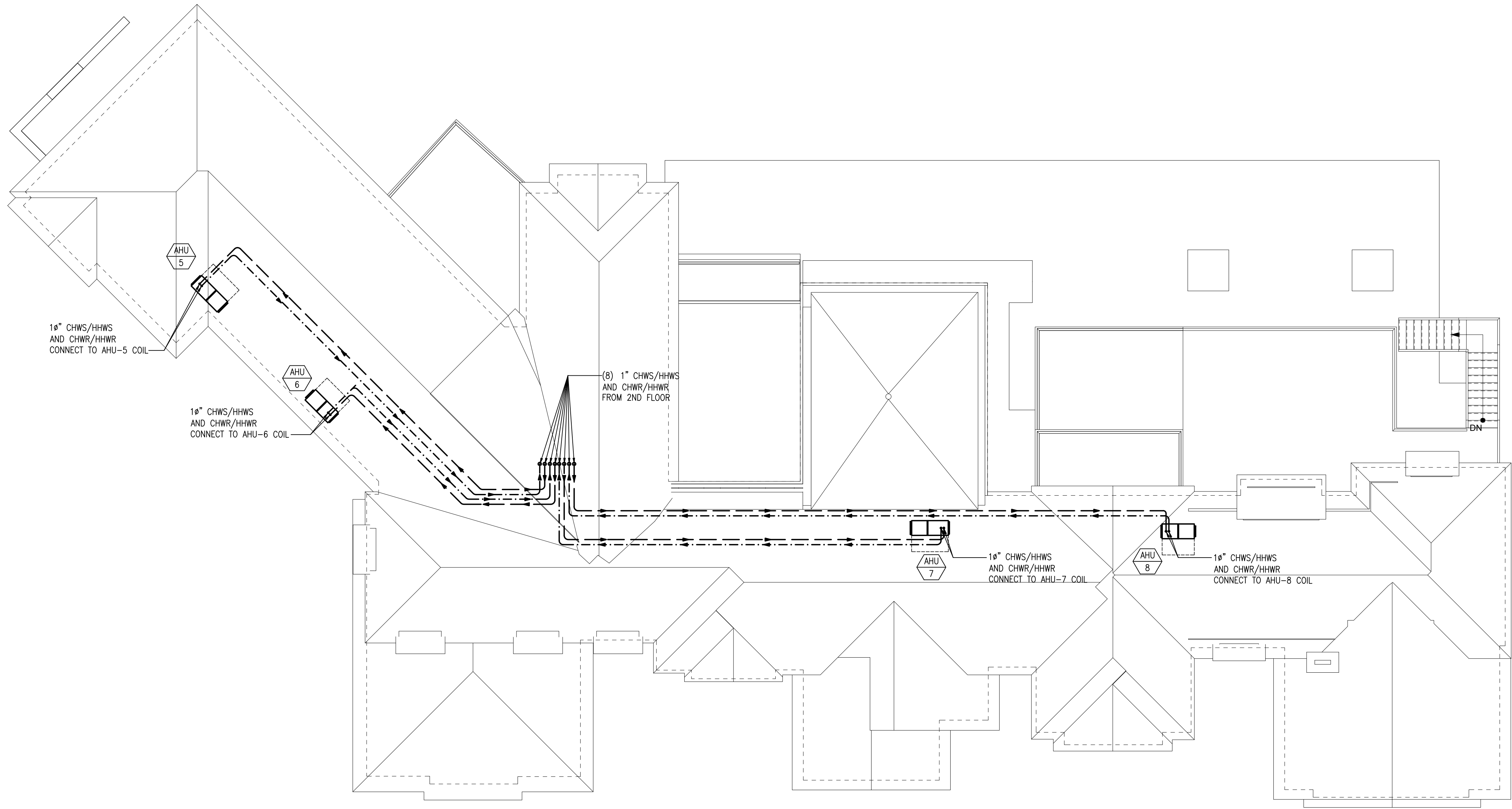
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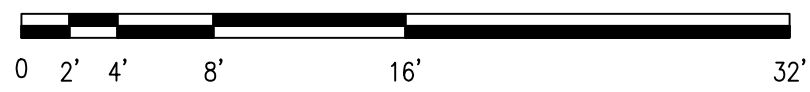
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1 ATTIC PLAN — PIPING
M403 SCALE: 1/8" = 1'-0"



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CHILLED WATER AND HOT WATER PIPING IS SHOWN DIAGRAMMATICALLY. CONTRACTOR SHALL PROVIDE ALL SHUT-OFF AND CONTROL VALVES AND SENSORS, AND APPURTENANCES FOR A COMPLETE OPERATIONAL SYSTEM

1 CHILLED WATER & HOT WATER PIPING DIAGRAM
M500 SCALE: NTS

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A

PUMP'S														CWPCHPFWP		
NO	SYSTEM	Qty	GPM EACH	TDH	HP / WATT EA	TYPE	FLUID TYPE	DRIVE	ELECTRICAL DATA				OPERATING WEIGHT LBS, EA	OPTIONS & ACCESSORIES	MANUFACTURER/ MODEL NO.	
									v	PH	HZ	AMPS				
CWP-1&CWP-2	CONDENSER WATER PUMP CHILLERS 1&1-1	2	18	14	1/6	IN-LINE	30% PROPYLENE GLYCOL	DIRECT	208/230	1	60	1.8	30	NOTE 1	GEO-FLO-FL SERIES PRESSURIZED FLOW CENTER, DOUBLE PUMP	
CWP-3	CONDENSER WATER PUMP CHILLER-2	1	12	12	1/6	IN-LINE	30% PROPYLENE GLYCOL	DIRECT	208/230	1	60	1.8	30	NOTE 1	GEO-FLO-FL SERIES PRESSURIZED FLOW CENTER, DOUBLE PUMP	
HPP-1&HPP-2	CHILLER 1&2 TO STORAGE TANKS	2	18	14	1/8	IN-LINE	30% PROPYLENE GLYCOL	DIRECT	115	1	60	/	12.0	NOTE 2	TACO 0011 CARTRIDGE CIRCULATOR	
HPP-3	CHILLER-3 TO STORAGE TANKS	1	12	12	1/8	IN-LINE	30% PROPYLENE GLYCOL	DIRECT	115	1	60	/	12.0	NOTE 2	TACO 0014 CARTRIDGE CIRCULATOR	
CHWP-1	CHILLED WATER PUMP STORAGE TO MANIFOLD	1	31	25	0.6	IN-LINE	30% PROPYLENE GLYCOL	DIRECT	115	1	60	/	32.0	NOTE 3	TACO 1900e SERIES	
HHWP-1	HOT WATER PUMP STORAGE TO MANIFOLD	1	31	25	/	IN-LINE	30% PROPYLENE GLYCOL	DIRECT	115	1	60	/	10.5	NOTE /	TACO 0034E-F1	

- NOTES:
- GRUNDFOS UP26-116 (SINGLE SPEED) CIRCULATOR; HIGH IMPACT POLYSTYRENE PLASTIC CABINET ;CFC-FREE, POLYURETHANE FOAM INSULATION ;1" FULL-PORT, 3-WAY, 4-POSITION FLUSHING AND ISOLATION/SERVICE VALVE, BRASS BODY AND SPOOL, NBR SEALS, STAINLESS STEEL RETAINING RING; MOTOR: 208-230V, 60 HZ, SINGLE PHASE, 2-POLE, UL AND CSA APPROVED, INTERNAL THERMAL OVERLOAD PROTECTION, INSULATION CLASS F.
 - EXCLUSIVE ACB ANTI-CONDENSATE BAFFLE WITH AMBIENT AIR FLOW-PROTECTS MOTOR WINDINGS AGAINST CONDENSATE BUILDUP; HIGH VELOCITY PERFORMANCE; COMPACT DESIGN; QUIET, EFFICIENT OPERATION; DIRECT DRIVE-LOW POWER CONSUMPTION; UNIQUE REPLACEABLE CARTRIDGE DESIGN;FIELD SERVICEABLE; SELF LUBRICATING; NO MECHANICAL SEAL; UNMATCHED RELIABILITY-MAINTENANCE FREE; UNIVERSAL FLANGE TO FLANGE DIMENSIONS;
 - * CAST IRON OR STAINLESS STEEL CONSTRUCTION;
 - * CASING (VOLUTE): CAST IRON OR ST. STEEL
 - * STATOR HOUSING: ALUMINUM
 - * CARTRIDGE: STAINLESS STEEL
 - * IMPELLER: NON-METALLIC
 - * SHAFT: CERAMIC
 - * BEARINGS: CARBON
 - * O-RING & GASKETS:EPDM
 - CLOSED LOOP, PRESSURIZED CHILLED WATER HVAC SYSTEMS; INSULATION CLASS H (180°C); ENCLOSURE: TYPE 2 (IP44) TOTALLY ENCLOSED; INTEGRATED MOTOR PROTECTION (ELECTRONICALLY PROTECTED); CONTINUOUS DUTY; UL778, 1004-1, 508C; FLANGE TYPE: 2 BOLT, COMMERCIAL OVAL.

AIR DEVICES SCHEDULE – LINEAR SUPPLY AND RETURN DIFFUSERS					
TYPE	AIR QUANTITY CFM & INLET DIA.	SLOTS / SLOT WIDTH	MNFR/MODEL BASED ON PRICE	LOCATION / TYPE	DESCRIPTION
LD-1 HT	SEE PLAN	0.5" WIDTH SLOT/ 1 SLOT, W/6" INLET, 2'-0" LONG	INVI/L145	GYM / HALLWAY 113 HALLWAY 217 / W.I.C 202.1 & W.I.C 202.2	ARCHITECTURAL LINEAR DIFFUSER;1 SLOT 45' OPENING, FLUSH MOUNT,TAPE AND SPACKLE INSTALLATION, COORDIANTE COLOR WITH ARCHITECT BEFORE ORDERING
LD-2 HT	SEE PLAN	0.75" WIDTH SLOT/ 1 SLOT, W/6" INLET, 2'-0" LONG	INVI/L145	GYM & DINING	ARCHITECTURAL LINEAR DIFFUSER;1 SLOT 45' OPENING, FLUSH MOUNT,TAPE AND SPACKLE INSTALLATION, COORDIANTE COLOR WITH ARCHITECT BEFORE ORDERING
LD-3 HT	SEE PLAN	0.5" WIDTH SLOT/ 1 SLOT, W/6" INLET, 4'-0" LONG	INVI/L145	BEDROOMS 210/212 208/206;PRIMARY BEDROOM; BREAKFAST BAR; KITCHEN; THEATER	ARCHITECTURAL LINEAR DIFFUSER;1 SLOT 45' OPENING, FLUSH MOUNT,TAPE AND SPACKLE INSTALLATION, COORDIANTE COLOR WITH ARCHITECT BEFORE ORDERING
LD-4 HT	SEE PLAN	0.75" WIDTH SLOT/ 1 SLOT, W/8" INLET, 4'-0" LONG	INVI/L145	GAMING SPACE 014 LL LOUNGE 004 LL GUEST SUITE 009 LIVING ROOM 108	ARCHITECTURAL LINEAR DIFFUSER;1 SLOT 45' OPENING, FLUSH MOUNT,TAPE AND SPACKLE INSTALLATION, COORDIANTE COLOR WITH ARCHITECT BEFORE ORDERING
LD-5 HT	SEE PLAN	0.5" WIDTH SLOT/ 1 SLOT, 4'-0" LONG	INVI/L145	OFFICE 109	ARCHITECTURAL LINEAR DIFFUSER;1 SLOT 45' OPENING, FLUSH MOUNT,TAPE AND SPACKLE INSTALLATION, COORDIANTE COLOR WITH ARCHITECT BEFORE ORDERING
LD-6 VT	SEE PLAN	0.75" WIDTH SLOT/ 1 SLOT, 4'-0" LONG	INVI/L100	KITCHENETTE	ARCHITECTURAL LINEAR DIFFUSER;1 SLOT 90' OPENING, FLUSH MOUNT,TAPE AND SPACKLE INSTALLATION, COORDIANTE COLOR WITH ARCHITECT BEFORE ORDERING
LD-7 HT	800	1" WIDTH SLOT/ 2 SLOT, 10'-0" LONG	KRUEGER/DFL	FAMILY ROOM	EXTRUDED ALUMINUM LINEAR SLOT DIFFUSERS; INSULATED PLENUM & INLET COLLAR (NOTE 3); ADJUSTABLE BLADES SNAP AND PATTERN CONTROLLER; HORIZONTAL THROW; FLANGELESS APPLICATION FRAME BB . VERIFY FINISH WITH ARCHITECT BEFORE ORDERING
LD-8 HT	250	1" WIDTH SLOT/ 2 SLOT, 8'-0" LONG	KRUEGER/DFL	FOYER	EXTRUDED ALUMINUM LINEAR SLOT DIFFUSERS; INSULATED PLENUM & INLET COLLAR (NOTE 3); ADJUSTABLE BLADES SNAP AND PATTERN CONTROLLER; HORIZONTAL THROW; FLANGELESS APPLICATION FRAME BB . VERIFY FINISH WITH ARCHITECT BEFORE ORDERING
LDR-1	350	1" WIDTH SLOT/ 2 SLOT, 4'-0" LONG	KRUEGER/DFL	FAMILY ROOM	RETURN EXTRUDED ALUMINUM LINEAR SLOT DIFFUSERS; INSULATED PLENUM & INLET COLLAR (NOTE 3); ADJUSTABLE BLADES SNAP AND PATTERN CONTROLLER; HORIZONTAL THROW; FLANGELESS APPLICATION FRAME BB . VERIFY FINISH WITH ARCHITECT BEFORE ORDERING
LDR-2	300	1" WIDTH SLOT/ 2 SLOT, 4'-0" LONG	INVI/L200	PRIMARY BEDROOM	ARCHITECTURAL LINEAR DIFFUSER;1 SLOT 90' OPENING, FLUSH MOUNT,TAPE AND SPACKLE INSTALLATION, COORDIANTE COLOR WITH ARCHITECT BEFORE ORDERING
LDR-3	715	2" WIDTH SLOT/ 2 SLOT, 4'-0" LONG	INVI/L200	LL AHU-1	ARCHITECTURAL LINEAR DIFFUSER;1 SLOT 90' OPENING, FLUSH MOUNT,TAPE AND SPACKLE INSTALLATION, COORDIANTE COLOR WITH ARCHITECT BEFORE ORDERING

- NOTE:
- VERIFY SLOT WIDTH AND NUMBER OF SLOTS BEFORE ORDERING ACCORDING WITH FINAL SIZE OF WOOD CEILING PLANKS.
 - VERIFY CEILING TYPE WITH ARCHITECT BEFORE DIFFUSERS ORDERING.
 - FOR PLENUM INLET SIZE AND PLENUM/DIFFUSER LENGTH OR WIDTH SEE PLAN.
 - VERIFY FRAME TYPE WITH ARCHITECT BEFORE DIFFUSERS ORDERING.

NOTE:
ALL PRODUCTS LISTED HERE MAY NOT APPEAR ON THIS DRAWING.

ZONE DAMPERS								ZD	
SYSTEM	ZONE	SERVICE	CFM	SIZE, INCH	INPUT V	OPTIONS AND ACCESSORIES		MANUFACTURER / MODEL NO.	
AHU-2	1	LOWER LEVEL – POOL KITCHENETTE	200	10X6	24	24 VAC DIREVCT6 DRIVE ACTUATORS, 1/2" DIRECT DRIVE MOUNTING HUB, POSITION INDICATOR, ANGULAR ROTATION STOP		HONYWELL/ ZD6X10TZ	
	2	LOWER LEVEL – HALLWAY/POOL BATH	160	12X6	24			HONYWELL / ZD6X12TZ	
	3	LOWER LEVEL – GUEST SUITE	280	14X6	24			HONYWELL / ZD6X14TZ	
AHU-5	1	2ND FLOOR-HALLWAY 217	240	8X8	24	24 VAC DIREVCT6 DRIVE ACTUATORS, 1/2" DIRECT DRIVE MOUNTING HUB, POSITION INDICATOR, ANGULAR ROTATION STOP		HONYWELL / ZD8X8TZ	
	2	2ND FLOOR – BEDROOMS 6	350	14X6	24			HONYWELL / ZD6X14TZ	
	3	2ND FLOOR – PLAY ROOM 204	300	10X10	24			HONYWELL / ZD10X10TZ	
AHU-6	1	2ND FLOOR- BEDROOM 5	200	8X8	24	24 VAC DIREVCT6 DRIVE ACTUATORS, 1/2" DIRECT DRIVE MOUNTING HUB, POSITION INDICATOR, ANGULAR ROTATION STOP		HONYWELL / ZD8X8TZ	
	2	2ND FLOOR- BEDROOM 4	200	8X8	24			HONYWELL / ZD8X8TZ	
	3	2ND FLOOR – BEDROOM 2	190	8X8	24			HONYWELL / ZD8X8TZ	
	4	2ND FLOOR – BEDROOM 3/ LAUNDRY 216	290	10X10	24			HONYWELL / ZD10X10TZ	

AIR DEVICES SCHEDULE				
TYPE	AIR QUANTITY RANGE CFM	NECK SIZE	MNFR/MODEL BASED	DESCRIPTION
SR	30-100	6X6/6"ø	KRUEGER / AF580	SINGLE DEFLECTION AIRFOIL BLADE SUPPLY GRILLE ALUMINUM CONSTRUCTION INDIVIDUALLY ADJUSTABLE HORIZONTAL OR VERTICAL FRONT BLADES 3/4" AIRFOIL BLADE SPACING STANDARD FINISH IS BRITISH WHITE
CD	101-160	9X9/6"ø	INVI/IR-100 ROUND DIFFUSER	ALUMINUM ARCHITECTURAL ROUND DIFFUSERS R100WILL BE MANUFACTURED BY INVI AIR, CONSTRUCTED OF COMPOSITE MATERIAL WITH ALUMINUM FLANGES AS MOUNTING HARDWARE. COLOR BY ARCHITECT
RR	SEE PLAN	SEE PLAN	KRUEGER AFS80	FIXED BLADE ALUMINUM RETURN GRILL WITH ¾" BLADE SPACING 45' DEFLECTION ON HORIZONTAL OR VERTICAL FRONT BLADES EXTRUDED ALUMINUM CONSTRUCTION STANDARD FINISH 44 BRITISH WHITE, OPTIONAL FINISHES AVAILABLE COORDINATE WITH ARCH. BEFORE ORDERING
FSR FRR	SEE PLAN	SEE PLAN	KRUEGER 1500 / 1800 SERIES	1500 AND 1800 ARCHITECTURAL LINEAR BAR GRILLES SUPPLY AND RETURN 7/32" BARS ON 1/2" (PENCIL PROOF) CENTERS SUPPORT BARS (9" MAXIMUM SPACING), WALL, CEILING AND FLOOR MOUNT BARS SET AT 0°, 15°, OR 30° (PENCIL PROOF ONLY) DEFLECTION EXTRUDED ALUMINUM CONSTRUCTION OPTIONAL ACCESS DOORS, DAMPER, BLANK OFF STRIPS AND CURVING STANDARD FINISH IS BRITISH WHITE
ER	SEE PLAN	SEE PLAN	PRADO	BY OTHERS

- AIR DEVICES NOTES:
- ADJUST REGISTER SIZE TO MATCH DUCTWORK SIZE.
 - PROVIDE VOLUME DAMPER AT THE DIFFUSER NECK, WHERE GMB CEILING PROVIDED. SEE ARCH. DWGS FOR CEILING TYPE.
 - PROVIDE ALL DIFFUSERS WITH 24"x24" FACE PANEL, UNLESS OTHERWISE DIRECTED BY THE ARCHITECT.
 - FINISH ALL DEVICES WITH COLOR SELECTED BY THE ARCHITECT.
 - PROVIDE BALANCING DAMPERS AT POINTS ON SUPPLY, RETURN, AND EXHAUST SYSTEMS WHERE BRANCHES ARE TAKEN FROM LARGER DUCTS, AND WHERE INDICATED ON DRAWINGS, TO BALANCE AIR DISTRIBUTION SYSTEM. INSTALL MINIMUM 2 DUCT WIDTHS FROM DUCT TAKE-OFF. PROVIDE BALANCING DAMPERS ON DUCT TAKE-OFF TO DIFFUSERS, GRILLES, AND REGISTERS, REGARDLESS OF WHETHER DAMPERS ARE SPECIFIED AS PART OF THE DIFFUSER, GRILLE, OR REGISTER ASSEMBLY. DAMPERS SHALL BE CONSTRUCTED AND INSTALLED AS SHOWN IN THE LATEST EDITION OF SMACNA HVAC DUCT CONSTRUCTION STANDARDS.
 - INSTALL CEILING RADIATION DAMPER WHERE AIR DEVICE INSTALLED IN FIRE RATED FLOOR/CEILING ASSEMBLY.
 - BRANCH DUCTS TO INDIVIDUAL AIR DEVICES ARE NECK SIZE UNLESS INDICATED OTHERWISE.
 - PROVIDE WITH DIRECTIONAL THROWS AS SHOWN ON DRAWINGS. WHERE THROWS ARE NOT INDICATED, PROVIDE 4-WAY.
 - SEE PLANS FOR DEVICE SIZE DIFFERENT FROM SCHEDULED.
 - REFER TO ARCHITECTURAL DRAWINGS FOR TYPE OF CEILING.
 - PROVIDE SQUARE TO ROUND NECK ADAPTER AT SUPPLY AND RETURN CEILING DIFFUSERS AND REGISTERS WHERE REQUIRED.

CONDENSATE REMOVAL PUMP*										
NO.	SYSTEM	GPH	PSI/TDH	HP	TYPE	ELECTRICAL DATA			OPTIONS AND ACCESSORIES	MANUFACTURER/MODEL NO.
						V	PH	HZ		
1	HVAC UNITS AS NECESSARY	25	8.6/15'	1/30	IN-LINE	120	1	60	SAFETY SWITCH, POWER CORD, CHECK VALVE	LITTLE GIANT/VCC-20ULS

- NOTE:
- INSTALL WHERE REQUIRED TO LIFT CONDENSATE AND EXTEND BY GRAVITY TO NEAREST FLOOR DRAIN



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SCHEDULE

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M701

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A.

NOTE:
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1. INSTALL WHERE DRYER EXHAUST DUCT POWER VENTILATOR LOCATED CLOSER THAN 15 FEET FROM THE DRYER OUTLET.
2. INSTALL DRYER EXHAUST DUCT POWER VENTILATOR AS REQUIRED.

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M702