

PLUMBING SYMBOLS AND ABBREVIATIONS

NOTE: ALL SYMBOLS AND ABBREVIATIONS SHOWN ARE NOT NECESSARILY USED ON THE DRAWINGS

GENERAL NOTES

- PERFORM ALL WORK IN ACCORDANCE WITH ALL APPLICABLE CODES AND AUTHORITIES HAVING JURISDICTION. PROVIDE ALL PERMITS, INSPECTIONS, LICENSES AND FEES. FURNISH ALL LABOR, EQUIPMENT, SUPPLIES AND MATERIALS NECESSARY TO PROVIDE COMPLETE AND OPERATIONAL SYSTEMS.
- THE DRAWINGS AND SPECIFICATIONS INDICATE THE GENERAL DESIGN AND ARRANGEMENT OF PIPES, FIXTURES, EQUIPMENT, SYSTEMS, ETC. INFORMATION SHOWN IS DIAGRAMMATIC IN CHARACTER AND DOES NOT NECESSARILY INDICATE EVERY REQUIRED OFFSET, FITTING, ETC. DO NOT SCALE THE DRAWINGS FOR DIMENSIONS. TAKE ALL DIMENSIONS, MEASUREMENTS, EQUIPMENT LOCATIONS, LEVELS, ETC FROM THE ARCHITECTURAL DRAWINGS AND FROM THE EQUIPMENT TO BE FURNISHED. PIPING MAY BE RELOCATED OR OFFSET FOR PROPER CLEARANCES OR TO AVOID CONFLICTS WITH OTHER TRADES. THE DESIGN INTENT (I.E. PITCHES, VELOCITIES, PRESSURE DROPS, VOLTAGE DROPS, ETC) CANNOT BE GREATLY ALTERED WITHOUT THE APPROVAL OF THE ARCHITECT. THE COST OF THESE DEVIATIONS TO AVOID INTERFERENCE'S SHALL BE PART OF THE ORIGINAL CONTRACT BID.
- EACH SUBCONTRACTOR SHALL CONFER AND COOPERATE WITH ALL OTHER TRADES TO COORDINATE THEIR WORK. COORDINATION SHALL INCLUDE, BUT SHALL NOT BE LIMITED TO MATERIALS AND EQUIPMENT ROUTED IN CEILING AND WALL CAVITIES, EQUIPMENT ARRANGEMENT IN MECHANICAL SPACES, INCLUDING EQUIPMENT CLEARANCE REQUIREMENTS, ELEVATIONS AND DIMENSIONS OF STRUCTURAL MEMBERS AND OPENINGS, ETC. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT OF ANY CONFLICTS.
- BASE FINAL INSTALLATION OF MATERIALS AND EQUIPMENT ON ACTUAL DIMENSIONS AND CONDITIONS AT THE PROJECT SITE. FIELD MEASURE FOR MATERIALS AND EQUIPMENT REQUIRING EXACT FIT. NO EXTRAS WILL BE GIVEN FOR THE CONTRACTORS FAILURE TO FIELD COORDINATE.
- THE OWNER OR ENGINEER ARE NOT RESPONSIBLE FOR THE CONTRACTOR'S SAFETY PRECAUTIONS OR FOR MEANS, METHODS, TECHNIQUES, CONSTRUCTION SEQUENCES, OR PROCEDURES REQUIRED TO PERFORM THE WORK.
- THE CONTRACTOR SHALL LOCATE ALL EQUIPMENT THAT MUST BE SERVICED, OPERATED, OR MAINTAINED IN FULLY ACCESSIBLE POSITIONS. EQUIPMENT SHALL INCLUDE (BUT NOT LIMITED TO) VALVES, SHOCK ABSORBERS, TRAPS, CLEANOUTS, MOTORS, CONTROLLERS, SWITCHGEAR, AND DRAIN POINTS IF REQUIRED FOR BETTER ACCESSIBILITY. FURNISH ACCESS DOORS FOR THIS PURPOSE. MINOR DEVIATIONS FROM THE DRAWINGS MAY BE ALLOWED TO PROVIDE FOR BETTER ACCESSIBILITY. ANY CHANGES SHALL BE APPROVED BY THE ARCHITECT AND CONSTRUCTION MANAGER/GENERAL CONTRACTOR PRIOR TO MAKING THE CHANGE.
- THE CONTRACTOR SHALL PROVIDE ACCESS DOORS, WALL OPENINGS, ROOF OPENINGS OR ANY OTHER CONSTRUCTION REQUIREMENT NEEDED TO ACCOMMODATE THE PLUMBING EQUIPMENT. LOCATIONS OF THESE OPENINGS SHALL BE SUBMITTED IN SUFFICIENT TIME TO BE INSTALLED IN THE NORMAL COURSE OF WORK.
- THE CONTRACTOR SHALL COORDINATE ELECTRICAL REQUIREMENTS OF PLUMBING EQUIPMENT WITH THE ELECTRICAL CONTRACTOR PRIOR TO THE PURCHASE AND INSTALLATION OF ANY ELECTRICAL GEAR OR CONDUIT.
- PROVIDE VIBRATION ISOLATORS FOR MOTOR DRIVEN PLUMBING EQUIPMENT UNLESS NOTED OTHERWISE. PROVIDE ISOLATION AS RECOMMENDED BY THE EQUIPMENT MANUFACTURER.
- THE CONTRACTOR SHALL COORDINATE THE LOCATION OF ALL WALL CLEANOUTS, ACCESS DOORS, ETC WITH THE ARCHITECT AND ALL OTHER TRADES PRIOR TO INSTALLATION. IF A CONFLICT WITH MILLWORK, LIGHT SWITCHES, WINDOWS, ETC EXISTS, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT OF THE POTENTIAL INTERFERENCE PRIOR TO INSTALLATION.
- PLUMBING VENTS THROUGH THE ROOF SHALL BE A MINIMUM OF 10 FEET FROM ALL OUTSIDE AIR INTAKES AND A MINIMUM OF 5 FEET FROM EXTERIOR PERIMETER WALLS.
- SOME PIPES SHOWN ON EACH FLOOR PLAN MAY BE SHOWN WITH AN OFFSET FOR CLARITY.
- PLUMBING FIXTURES AND TRIM OF LIKE KIND SHALL BE OF THE SAME MANUFACTURER THROUGHOUT THE PROJECT. TYPICAL CATEGORIES INCLUDE THE FOLLOWING:
A. WATER CLOSETS, LAVATORIES, URINALS
B. ELECTRIC WATER COOLERS, DRINKING FOUNTAINS
C. FAUCETS, MIXING VALVES
D. TAIL PIECE, FIXTURE TRAPS, ESCUTCHEONS, ARM EXTENSIONS, STRAINERS
E. FIXTURE CARRIERS, FLOOR DRAINS, FLOOR SINKS, ROOF DRAINS, OVERFLOW DRAINS
F. COUNTER TOP SINKS
- PROVIDE WATER HAMMER ARRESTERS BETWEEN THE NEXT TO LAST AND LAST FIXTURE AT EACH BATTERY OF PLUMBING FIXTURES IN ACCORDANCE WITH THE WATER HAMMER ARRESTER SCHEDULE AND THE PLUMBING AND DRAINAGE INSTITUTE STANDARD PDI-WH-201.
- ALL SANITARY WASTE PIPING WITHIN THE BUILDING ENVELOPE SHALL HAVE MINIMUM SLOPES AS REQUIRED BY THE LOCAL CODE AUTHORITY. CONTRACTOR SHALL VERIFY INVERT ELEVATIONS INDICATED ON FLOOR PLANS PRIOR TO INSTALLATION OF ANY SITE UTILITIES AND CONNECTION INTO EXISTING SERVICES.
- COMPLY WITH THE PROVISIONS OF THE AMERICANS WITH DISABILITIES ACT (ADA) AND THE TEXAS ACCESSIBILITY'S STANDARD (TAS). PLUMBING CONTRACTOR SHALL PROVIDE PLUMBING FIXTURES WITH FLUSH VALVE HANDLES LOCATED ON THE WIDE SIDE OF EACH STALL.
- SEAL ALL PIPE PENETRATIONS THROUGH FIRE RATED BUILDING ELEMENTS WITH AN APPROVED FIRE PROOFING MATERIAL.
- CONTRACTOR SHALL PROVIDE AND INSTALL OF 1/2" THICK PIPING INSULATION ON ALL CONDENSATE PIPING WITHIN BUILDING ENVELOPE.

ABBREVIATIONS

A/E	ARCHITECT/ENGINEER	KW	KILOWATT
AFF	ABOVE FINISHED FLOOR	L	LENGTH
AHU	AIR HANDLING UNIT	LB	POUNDS
APPROX	APPROXIMATE	LRA	LOCKED ROTOR AMPS
BATT	BATTERY	MAX	MAXIMUM
BD	BUILDING DRAIN (BELOW FLOOR)	MCA	MINIMUM CIRCUIT AMPACITY
B.F.G.	BELOW FINISHED GRADE	MIN	MINIMUM
BS	BUILDING SEWER (OUTSIDE OF BLDG)	MSB	MOP SINK BASIN
CU	COPPER, CONDENSING UNIT	N/A	NOT APPLICABLE
OW	DOMESTIC COLD WATER	NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
D	EQUIPMENT DRAIN	NFVH	NON-FREEZE WALL HYDRANT
(D)	DEMOLISH	NO/NC	NORMALLY OPEN, NORMALLY CLOSED
DCO	TWO-WAY GRADE CLEANOUT	O/C	ON CENTER
DEG	DEGREES	OFD	ROOF OVERFLOW DRAIN
DSN	DOWNSPOUT NOZZLE	PCO	PLUG CLEANOUT
(E)	EXISTING	PH	PHASE
EQUIP	EQUIPMENT	PROVIDE	FURNISH AND INSTALL
EWG	ELECTRIC WATER COOLER	PSI	POUNDS PER SQUARE INCH
'F	DEGREES FAHRENHEIT	RD	ROOF DRAIN
FCO	FLOOR CLEANOUT	RE	REFERENCE, REFER
FCU	FAN COIL UNIT	RLA	RUNNING LOAD AMPS
FD	FLOOR DRAIN	RM	ROOM
FS	FLOOR SINK	RPBFP	REDUCED PRESSURE PRINCIPLE
FT	FOOT, FEET	RFZ	BACKFLOW PREVENTER
FVC	FIRE VALVE CABINET	S	SINK
G	NATURAL GAS	SD	STORM DRAIN (BELOW FLOOR)
GCO	GRADE CLEANOUT	ST	STORM WATER (ABOVE CEILING)
GWH	NATURAL GAS WATER HEATER	STM	STEAM
H	HEIGHT	SSD	SUBSURFACE DRAIN
HB	HOSE BIBB	THRU	THROUGH
HP	HORSEPOWER	TYP	TYPICAL
HW	DOMESTIC HOT WATER	U	URINAL
HWC	DOMESTIC HOT WATER	UL	UNDERWRITERS LABORATORIES, INC.
HWTM	HOT WATER TEMPERATURE MAINTENANCE CABLE	V	SANITARY VENT
HZ	HERTZ	W	SANITARY WASTE (ABOVE FLOOR)
IE	INVERT ELEVATION	WC	WATER CLOSET
IN.	INCH, INCHES	WCO	WALL CLEANOUT
J-BOX	JUNCTION BOX	W/	WITH
		W/O	WITHOUT

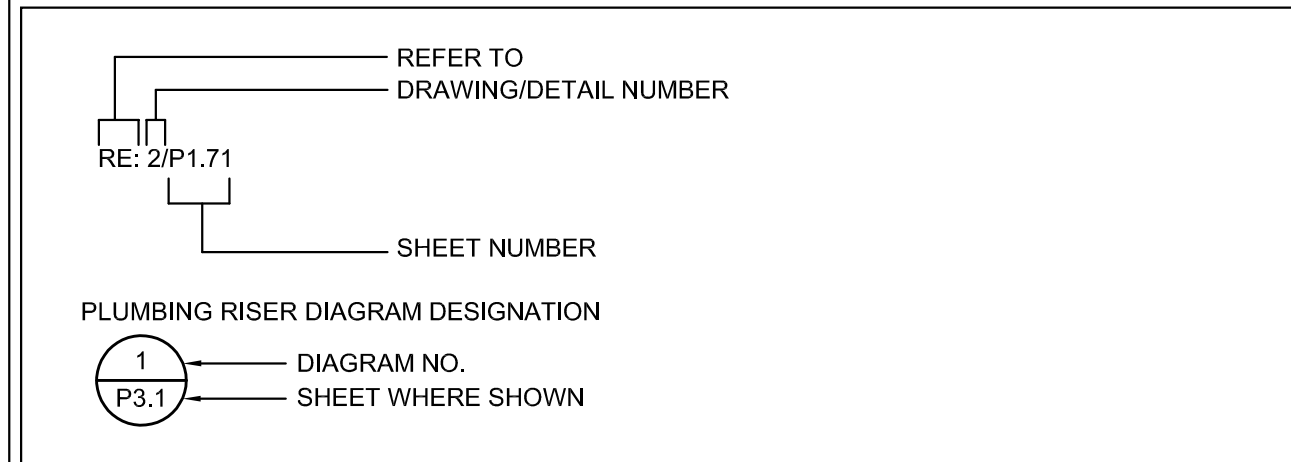
VALVES AND FITTINGS

SYMBOL	DESCRIPTION
	SHUT-OFF / ISOLATION VALVE
	BALL VALVE
	BUTTERFLY VALVE
	GLOBE VALVE
	PLUG VALVE / GAS COCK
	CHECK VALVE
	STRAINER
	CALIBRATED BALANCING VALVE
	GAS PRESSURE REGULATOR
	FLOW SWITCH
	UNION (DIELECTRIC)
	VALVE IN RISER
	END RISE (90° ELL)
	END DROP (90° ELL)
	RISE OR DROP
	TEE OUT OF TOP OF PIPE
	TEE OUT OF BOTTOM OF PIPE
	CAP ON END OF PIPE
	WALL CLEANOUT
	PLUG CLEANOUT
	TWO WAY CLEANOUT
	GRADE CLEANOUT
	NON-FREEZE WALL HYDRANT OR HOSE BIBB
	FLOOR DRAIN
	FLOOR CLEANOUT
	SHUT-OFF / ISOLATION VALVE
	OS&Y GATE VALVE
	FIRE DEPARTMENT SIAMESE CONNECTION (WALL)
	PRESSURE GAUGE
	ALARM CHECK VALVE

LINE TYPES

SYMBOL	DESCRIPTION
	SANITARY SEWER (ABOVE CEILING)
	SANITARY SEWER (BELOW FLOOR, BUILDING DRAIN)
	SANITARY SEWER (OUTSIDE OF BUILDING, BUILDING SEWER)
	EQUIPMENT DRAIN (ABOVE CEILING)
	STORM WATER PIPING (ABOVE CEILING)
	SUBSURFACE DRAINAGE
	SANITARY VENT
	DOMESTIC COLD WATER
	DOMESTIC HOT WATER
	DOMESTIC HOT WATER CIRCULATION
	FIRE PROTECTION MAIN WATER SUPPLY
	COMPRESSED AIR
	DIRECTION OF FLOW
	DIRECTION OF PIPE SLOPE DOWN
	PIPE DEMOLITION

DRAWING/DETAIL REFERENCE



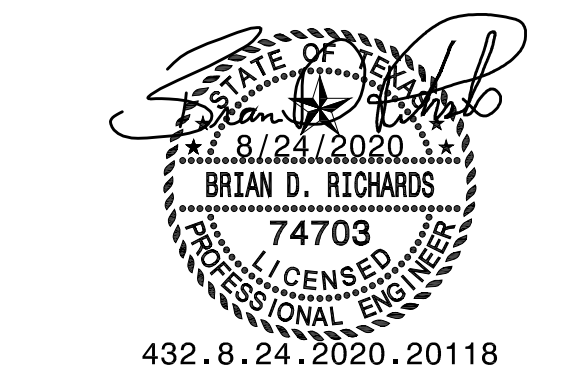
MISCELLANEOUS

- DRAWING NOTE REFERENCE (I.E., NOTES BY SYMBOL)
- CONNECTION INTO EXISTING
- CONNECTION POINT OF BASE BID AND ALTERNATE.

WATER HAMMER ARRESTER SCHEDULE

P.D.I. SIZE	A	B	C	D	E	F
FIXTURE UNITS	1-11	12-32	33-60	61-113	114-154	155-330

- NOTES:
- ALL WHA'S SHALL BE PISTON TYPE WITH EPDM O-RINGS, SIOUX CHIEF'S SERIES 650 OR EQUAL.
 - ALL WHA'S SHALL BE ANSISASSE 1010 2004 CERTIFIED AND APPROVED FOR INSTALLATION WITH NO ACCESS PANEL REQUIRED.
 - SIZE AND LOCATE WATER HAMMER ARRESTERS IN ACCORDANCE WITH PDI PAMPHLET PDI-WH-201.



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PLUMBING FIXTURE SCHEDULE

MARK	DESCRIPTION	ROUGH IN (MINIMUM)					MANUFACTURER AND MODEL NUMBER	ADA /TAS
		W	V	CW	HW	E		
WC1	WATERCLOSET, ADA COMPLIANT, FLOOR MOUNT, FLUSHOMETER VALVE, TOP SPUD, ELONGATED, SIPHON ACTION JETTED BOWL, VITREOUS CHINA, WHITE, ASME A112.19.2M, 2" FULLY GLAZED TRAPWAY, 10" ROUGH-IN, 1.28 GPF FLUSHOMETER VALVE, 1.28 GPF, BATTERY POWERED AUTOMATIC SENSOR ACTUATOR, EXPOSED DIAPHRAGM-TYPE, CHROME PLATED METAL COVER WITH MANUAL OVER-RIDE BUTTON, 1 1/2" TOP SPUD, SPUD COUPLING AND FLANGE, CHROME PLATED ANGLE STOP WITH STOP CAP, VACUUM BREAKER FLUSH CONNECTION, CAST WALL FLANGE WITH SET SCREW, ANSIA/SME 112.19.6 SEAT, EXTRA HEAVY WEIGHT, POSTURE MOLDED SOLID PLASTIC, ELONGATED, OPEN FRONT, LESS COVER, EXTERNAL CHECK HINGES, STAINLESS STEEL HINGE POSTS, WHITE	4"	2"	-	-	-	AMERICAN STANDARD, 3043.001; KOHLER, K-96057; SLOAN, ST-2029	Ⓒ
U1	URINAL, 0.5 GPF, WALL MOUNT, VITREOUS CHINA, 14" EXTENDED FLUSHING RIM, SIPHON JET ACTION, 3/4" INLET SPUD, INLET AND OUTLET SPUDS AND HANGERS, ASME/ANSI A112.19.2 FLUSHOMETER VALVE, 0.5 GPF, BATTERY POWERED AUTOMATIC SENSOR ACTUATOR, EXPOSED DIAPHRAGM-TYPE, CHROME PLATED METAL COVER WITH MANUAL OVER-RIDE BUTTON, 3/4" TOP SPUD, SPUD COUPLING AND FLANGE, CHROME PLATED ANGLE STOP WITH STOP CAP, VACUUM BREAKER FLUSH CONNECTION, CAST WALL FLANGE WITH SET SCREW, ANSIA/SME 112.19.6	2"	2"	-	-	AMERICAN STANDARD, 6550.001; KOHLER, K-5016-ET		
U2	URINAL, 0.5 GPF, WALL MOUNT, VITREOUS CHINA, 14" EXTENDED FLUSHING RIM, SIPHON JET ACTION, 3/4" INLET SPUD, INLET AND OUTLET SPUDS AND HANGERS, ASME/ANSI A112.19.2 FLUSHOMETER VALVE, 0.5 GPF, BATTERY POWERED AUTOMATIC SENSOR ACTUATOR, EXPOSED DIAPHRAGM-TYPE, CHROME PLATED METAL COVER WITH MANUAL OVER-RIDE BUTTON, 3/4" TOP SPUD, SPUD COUPLING AND FLANGE, CHROME PLATED ANGLE STOP WITH STOP CAP, VACUUM BREAKER FLUSH CONNECTION, CAST WALL FLANGE WITH SET SCREW, ANSIA/SME 112.19.6	2"	2"	-	-	AMERICAN STANDARD, 6550.001; KOHLER, K-5016-ET	Ⓒ	
L1	LAVATORY, 20"x17" OVAL SELF-RIMMING BASIN WITH FAUCET LEDGE, 4" CENTER FAUCET HOLES, VITREOUS CHINA, FRONT OVERFLOW, ANSI A112.19.2 FAUCET, DECK MOUNT, ELECTRONIC PROXIMITY WITH DUAL BEAM INFRARED SENSOR, CHROME PLATED FINISH, CAST BRASS SPOUT, SINGLE SUPPLY FOR TEMPERED WATER, SINGLE CENTER HOLE INSTALLATION, NSF 61 COMPLIANT, 0.5 GPM MAX. FLOW RATE SUPPLY AND STOPS, QUARTER-TURN BRASS BALL VALVE WITH HANDLE, CHROME PLATED BRASS VALVES AND CHROME PLATED COPPER RISERS P-TRAP, CHROME PLATED CAST BRASS BODY WITH CLEANOUT, SEAMLESS WALL BEND, 17 GA. OFFSET TAILPIECE AND STRAINER, CHROME PLATED CAST BRASS THERMOSTATIC MIXING VALVE, 0.25 GPM MINIMUM FLOW, INTEGRAL INLET CHECK VALVES AND STRAINER, SET TEMPERATURE TO 105°, ASSE 1070.	2"	1 1/2"	-	-	AMERICAN STANDARD, 0476.028; KOHLER, K-2196-4	Ⓒ	
L2	LAVATORY, 19"x16" OVAL UNDER MOUNT, VITREOUS CHINA, FRONT OVERFLOW, UNGLAZED RIM, ANSI A112.19.2 FAUCET, DECK MOUNT, ELECTRONIC PROXIMITY WITH DUAL BEAM INFRARED SENSOR, CHROME PLATED FINISH, CAST BRASS SPOUT, SINGLE SUPPLY FOR TEMPERED WATER, SINGLE CENTER HOLE INSTALLATION, NSF 61 COMPLIANT, 0.5 GPM MAX. FLOW RATE SUPPLY AND STOPS, QUARTER-TURN BRASS BALL VALVE WITH HANDLE, CHROME PLATED BRASS VALVES AND CHROME PLATED COPPER RISERS P-TRAP, CHROME PLATED CAST BRASS BODY WITH CLEANOUT, SEAMLESS WALL BEND, 17 GA. OFFSET TAILPIECE AND STRAINER, CHROME PLATED CAST BRASS THERMOSTATIC MIXING VALVE, 0.25 GPM MINIMUM FLOW, INTEGRAL INLET CHECK VALVES AND STRAINER, SET TEMPERATURE TO 105°, ASSE 1070.	2"	1 1/2"	-	-	AMERICAN STANDARD, 0496.221; KOHLER, K-2210; SLOAN, SS-3001	Ⓒ	
S1	SINK, SINGLE COMPARTMENT, 19"x21"x25", SELF RIMMING, SEAMLESS #18 GAUGE TYPE 304 STAINLESS STEEL, FAUCET LEDGE, MINIMUM 1 3/4" VERTICAL AND HORIZONTAL RADIUS BASIN CORNERS, FULLY UNDERCOATED, ANSI A112.19.3M. DRAIN CENTERED IN REAR OF BASIN. FAUCET, DECK MOUNT, CHROME PLATED BRASS, 6" RIGID / SWING GOOSENECK SPOUT, TWO-HANDLE, 1/4 TURN 2 1/2" LEVER HANDLES, 4" CENTERS, NSF 61 COMPLIANT, ANSI A112.18.1M, 1.5 GPM MAX. FLOW RATE SUPPLY AND STOPS, QUARTER-TURN BRASS BALL VALVE WITH HANDLE, CHROME PLATED BRASS VALVES AND CHROME PLATED COPPER RISERS P-TRAP, CHROME PLATED CAST BRASS BODY WITH CLEANOUT, SEAMLESS WALL BEND, 17 GA. TAILPIECE AND FORGED STAINLESS STEEL BASKET STRAINER	2"	1 1/2"	-	-	JUST, SL-ADA-1921-A-GR; ELKAY, LRAD221950	Ⓒ	

- NOTES:
- CONTRACTOR SHALL FURNISH AND INSTALL SUPPLIES, STOPS, TRAPS, TAILPIECES AND ALL APPURTENANCES NECESSARY FOR A COMPLETE INSTALLATION OF ALL FIXTURES.
 - ALL ADA ACCESSIBLE SINKS AND LAVATORIES SHALL BE EQUIPPED WITH TRUEBRO #103 UNDER SINK PROTECTIVE PIPE COVERS WHERE NOT CONCEALED BY MILLWORK.
 - COMPLY WITH THE PROVISIONS OF THE AMERICANS WITH DISABILITIES ACT (ADA) AND THE TEXAS ACCESSIBILITY STANDARD (TAS). PLUMBING CONTRACTOR SHALL PROVIDE PLUMBING FIXTURES WITH FLUSH VALVE HANDLES LOCATED ON THE WIDE SIDE OF EACH STALL OR ROOM.
 - FLOOR CLEANOUT ACCESS COVERS IN ALL FINISHED AREAS SHALL BE OF THE RECESSED TYPE TO ALLOW FOR INSERTION OF FINISHED FLOOR TREATMENT. TILE OR CARPET MARKER AS NECESSARY.
 - ABOVE THE FLOOR P-TRAPS ON LAVATORIES AND SINKS SHALL BE 17 GAUGE, CHROME PLATED BRASS. ACCEPTABLE MANUFACTURERS: MCGUIRE, T&S BRASS, OR BRASSCRAFT.

- CONTRACTOR SHALL VERIFY FIXTURE SUPPLIES AND APPURTENANCES FOR EACH FIXTURE PRIOR TO BIDDING AND PURCHASING.
- ALL FLOOR MOUNTED WATER CLOSETS SHALL HAVE 10" ROUGH-IN UNLESS OTHERWISE NOTED.
- CONTRACTOR SHALL VERIFY PLUMBING FIXTURES PROVIDED COMPLY WITH HANDICAPPED ACCESSIBILITY STANDARDS INCLUDING HEIGHT AND CLEARANCE REQUIREMENTS.
- ALL WATER CLOSET AND URINAL FLUSH VALVES SHALL INCLUDE CHROME PLATED CAST WALL FLANGE WITH SETSCREW AND COVER TUBE.
- WATER CLOSETS AND URINALS INDICATED WITH SENSOR OPERATED FLUSH VALVES SHALL INCLUDE METAL COVER AND MANUAL OVERRIDE BUTTON.

DOMESTIC ELECTRIC WATER HEATER SCHEDULE

MARK	SERVICE	TYPE	STORAGE CAPACITY (GAL)	RECOVERY RATE (80° RISE) (GPH)	LEAVING WATER TEMPERATURE (°F)	ELECTRICAL CHARACTERISTICS				MANUFACTURER AND MODEL NUMBER	REMARKS	
						# ELEMENTS	KW	VOLTS	PHASE			HZ
WH1	DOMESTIC HOT WATER	ELECTRIC TANK	66	23	120	2	4.5	208	1	60	A.O. SMITH, DEL-66	Ⓒ

Ⓐ TWO ELECTRIC HEATING ELEMENTS SET FOR NON-SIMULTANEOUS OPERATION Ⓑ ADJUST STORAGE WATER TEMPERATURE IN ACCORDANCE WITH LOCAL ENERGY CODE REQUIREMENTS.

THERMOSTATIC MIXING VALVE SCHEDULE

MARK	SERVICE	TYPE	FLOWRATE CAPACITY		PRESSURE DROP (PSIG)	INLET HOT WATER TEMPERATURE (°F)	INLET COLD WATER TEMPERATURE (°F)	LEAVING WATER TEMPERATURE (°F)	MANUFACTURER AND MODEL NUMBER	REMARKS
			HIGH (GPM)	LOW (GPM)						
TSMV1	TEMPERED HOT WATER	CENTRAL CIRCULATION	23	0.5	10	120	53	110	ARMSTRONG, RADA 425R	Ⓒ

Ⓐ PROVIDED WITH STAINLESS STEEL, RECESSED CABINET ASSEMBLY Ⓑ PROVIDED WITH PAINTED, SURFACE MOUNT CABINET ASSEMBLY. VERIFY WITH ARCHITECTURAL SPECIFICATIONS FOR COLOR.

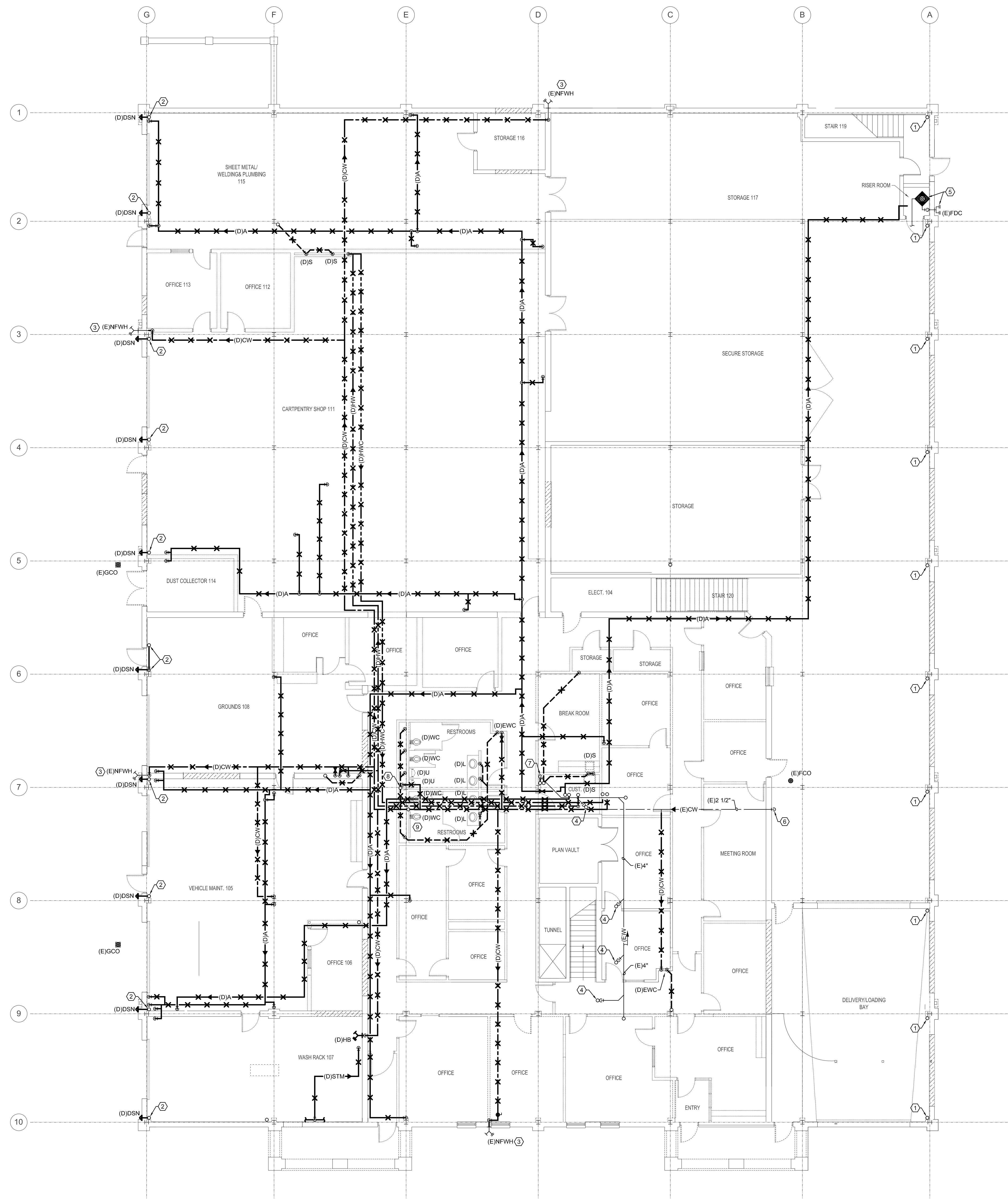
PUMP SCHEDULE

MARK	SERVICE	TYPE	FLOWRATE (GPM)	TOTAL DYNAMIC HEAD (FEET)	SPEED (RPM)	EFFIC (%)	ELECTRICAL CHARACTERISTICS			MANUFACTURER AND MODEL NUMBER	REMARKS	
							HP	VOLTS	PHASE			HZ
CP1	DOMESTIC HOT WATER CIRCULATION	INLINE, CENTRIFUGAL	4	14	1,750	65	0.125	115	1	60	TACO, 009-FS-0014	Ⓐ Ⓑ
SP1	ELEVATOR SUMP PUMP	SUMP AND EFFLUENT PUMP	50	15	1,750	65	0.5	115	1	60	LITTLE GIANT, 10EN-CB-SFS.	Ⓐ Ⓑ

Ⓐ PROVIDE 7-DAY TIME CLOCK FOR OPERATION OF CIRCULATION PUMP (SET TO OPERATE BETWEEN 5:00 AM TO 9:00 PM, ADJUSTABLE).
 Ⓑ PUMPS SHALL BE RATED FOR CONTINUOUS OPERATION AT WATER TEMPERATURES OF WATER SYSTEM
 Ⓒ PROVIDE PUMP WITH AUTOMATIC DISCHARGE CONTROLLED BY INTERNAL PRESSURE SWITCH.
 Ⓓ OR EQUAL.



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- ### GENERAL NOTES
- SANITARY WASTE & VENT AND DOMESTIC HOT & COLD WATER SYSTEMS INDICATED ARE ESTIMATED LOCATIONS AND SIZES BASED UPON LIMITED SITE OBSERVATIONS. THE CONTRACTOR SHALL FIELD VERIFY AND LOCATE EACH EXISTING SYSTEM PRIOR TO WORK. NOTIFY ARCHITECT IF DISCREPANCIES ARE FOUND THAT PREVENT COMPLETION OF WORK INTENDED IN THESE CONSTRUCTION DOCUMENTS.
 - BEFORE SAW CUTTING EXISTING CONCRETE SLAB OR EXCAVATING FOR NEW PIPE INSTALLATION THE CONTRACTOR SHALL FIELD VERIFY, LOCATE EACH EXISTING SYSTEM AND VERIFY FLOW LINE ELEVATIONS OF EXISTING SANITARY SEWER AND DETERMINE IF THE PROPOSED INVERT ELEVATIONS SHALL ALLOW FOR MINIMUM PIPE SLOPES PER APPLICABLE CODES. NEW SANITARY SEWER LINES SHALL NOT PENETRATE EXISTING CONCRETE GRADE BEAMS AT ANY POINT. IF DISCREPANCIES ARE FOUND, REPORT TO THE ARCHITECT/ENGINEER. PROVIDE AS-BUILT DRAWINGS UPON COMPLETION.
 - SAW CUT EXISTING CONCRETE SLAB AS REQUIRED FOR THE INSTALLATION OF NEW UNDER FLOOR PIPING. CONTRACTOR SHALL PATCH EXISTING CONCRETE SLAB AFTER INSTALLATION OF UNDER FLOOR PIPING TO MATCH EXISTING CONSTRUCTION.

- ### NOTES BY SYMBOL "Ⓢ"
- REMOVE EXISTING STORM DRAIN COMPLETE.
 - REMOVE EXISTING STORM DRAIN AND DOWNSPOUT NOZZLE COMPLETE.
 - EXISTING NON-FREEZE WALL HYDRANT TO REMAIN.
 - EXISTING FLOOR DRAIN ABOVE TO REMAIN.
 - REMOVE EXISTING DRY-PIPE ALARM VALVE COMPLETE. EXISTING FIRE DEPARTMENT CONNECTION TO REMAIN. REFER TO FIRE SUPPRESSION DRAWINGS FOR ADDITIONAL INFORMATION.
 - EXISTING 2 1/2" DOMESTIC COLD WATER DOWN TO REMAIN.
 - REMOVE PORTION OF EXISTING SANITARY SEWER WASTE PIPING DOWN, REWORK EXISTING SANITARY SEWER WASTE PIPING AS REQUIRED FOR THE INSTALLATION OF NEW SANITARY SEWER WASTE PIPING. REFER NEW CONSTRUCTION DRAWINGS FOR ADDITIONAL INFORMATION.
 - EXISTING 4" SANITARY SEWER VENT TO REMAIN.
 - CAP SANITARY SEWER AND DOMESTIC COLD WATER UP TO EXISTING SINK TO REMAIN ON SECOND FLOOR. CONTRACTOR VERIFY EXACT LOCATION.

1 FIRST FLOOR DEMOLITION PLUMBING PLAN
 SCALE: 1/8"=1'-0"
 0 4 8 16



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DANIEL BUILDING RENOVATION
 J.S. BRIDWELL ACTIVITIES CENTER &
 CANNEDY GREEK COMMONS

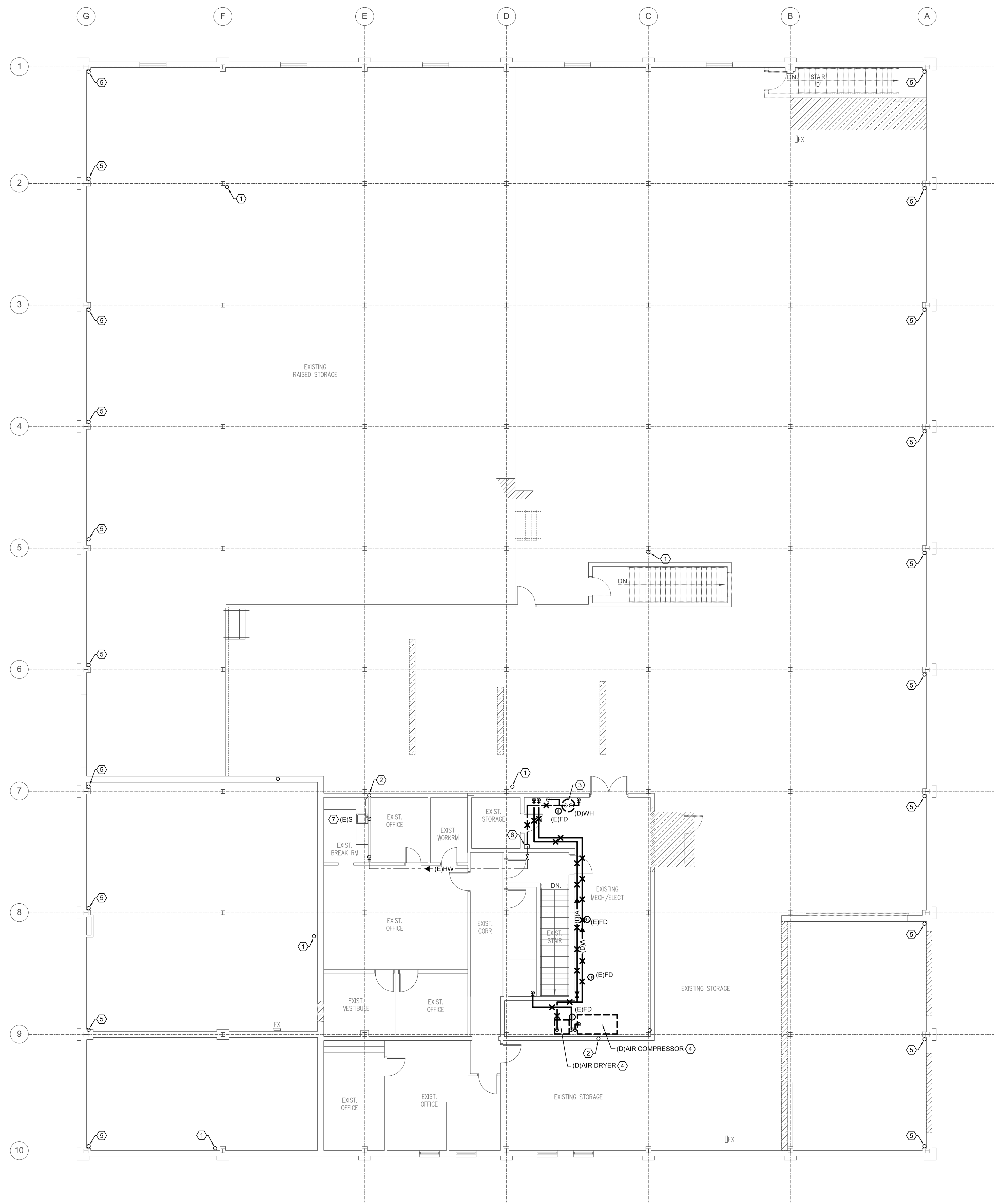
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 DATE 08/24/2020
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FIRST FLOOR
 DEMOLITION PLUMBING
 PLAN
P101

S:\P20118-MSU Daniel Building\BDR\DWG\2018 P101.dwg P101 08/24/2020 08:01:47 hch
 SHEET SIZE = ARCH E1 30X32



- GENERAL NOTES**
- SANITARY WASTE & VENT AND DOMESTIC HOT & COLD WATER SYSTEMS INDICATED ARE ESTIMATED LOCATIONS AND SIZES BASED UPON LIMITED SITE OBSERVATIONS. THE CONTRACTOR SHALL FIELD VERIFY AND LOCATE EACH EXISTING SYSTEM PRIOR TO WORK. NOTIFY ARCHITECT IF DISCREPANCIES ARE FOUND THAT PREVENT COMPLETION OF WORK INTENDED IN THESE CONSTRUCTION DOCUMENTS.
 - BEFORE SAW CUTTING EXISTING CONCRETE SLAB OR EXCAVATING FOR NEW PIPE INSTALLATION THE CONTRACTOR SHALL FIELD VERIFY, LOCATE EACH EXISTING SYSTEM AND VERIFY FLOW LINE ELEVATIONS OF EXISTING SANITARY SEWER AND DETERMINE IF THE PROPOSED INVERT ELEVATIONS SHALL ALLOW FOR MINIMUM PIPE SLOPES PER APPLICABLE CODES. NEW SANITARY SEWER LINES SHALL NOT PENETRATE EXISTING CONCRETE GRADE BEAMS AT ANY POINT. IF DISCREPANCIES ARE FOUND, REPORT TO THE ARCHITECT/ENGINEER. PROVIDE AS-BUILT DRAWINGS UPON COMPLETION.
 - SAW CUT EXISTING CONCRETE SLAB AS REQUIRED FOR THE INSTALLATION OF NEW UNDER FLOOR PIPING. CONTRACTOR SHALL PATCH EXISTING CONCRETE SLAB AFTER INSTALLATION OF UNDER FLOOR PIPING TO MATCH EXISTING CONSTRUCTION.

- NOTES BY SYMBOL "Ⓝ"**
- REMOVE EXISTING SANITARY SEWER VENT COMPLETE.
 - EXISTING SANITARY SEWER VENT TO REMAIN.
 - EXISTING WATER HEATER, MIXING VALVE AND CIRCULATION PUMP TO BE REMOVED COMPLETE.
 - EXISTING AIR COMPRESSOR, AIR DRYER AND ASSOCIATED DEVICES TO BE REMOVED COMPLETE.
 - REMOVE EXISTING STORM DRAIN COMPLETE.
 - CAP EXISTING 1/2" DOMESTIC HOT WATER.
 - CAP EXISTING SANITARY SEWER AND DOMESTIC COLD WATER TO EXISTING SINK TO REMAIN.

1 SECOND FLOOR DEMOLITION PLUMBING PLAN
 SCALE: 1/8"=1'-0"
 0 4 8 16



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 Office 214.420.9111

APPR

REV	DATE	DESCRIPTION

DANIEL BUILDING RENOVATION
 J.S. BRIDWELL ACTIVITIES CENTER &
 CANNEDY GREEK COMMONS

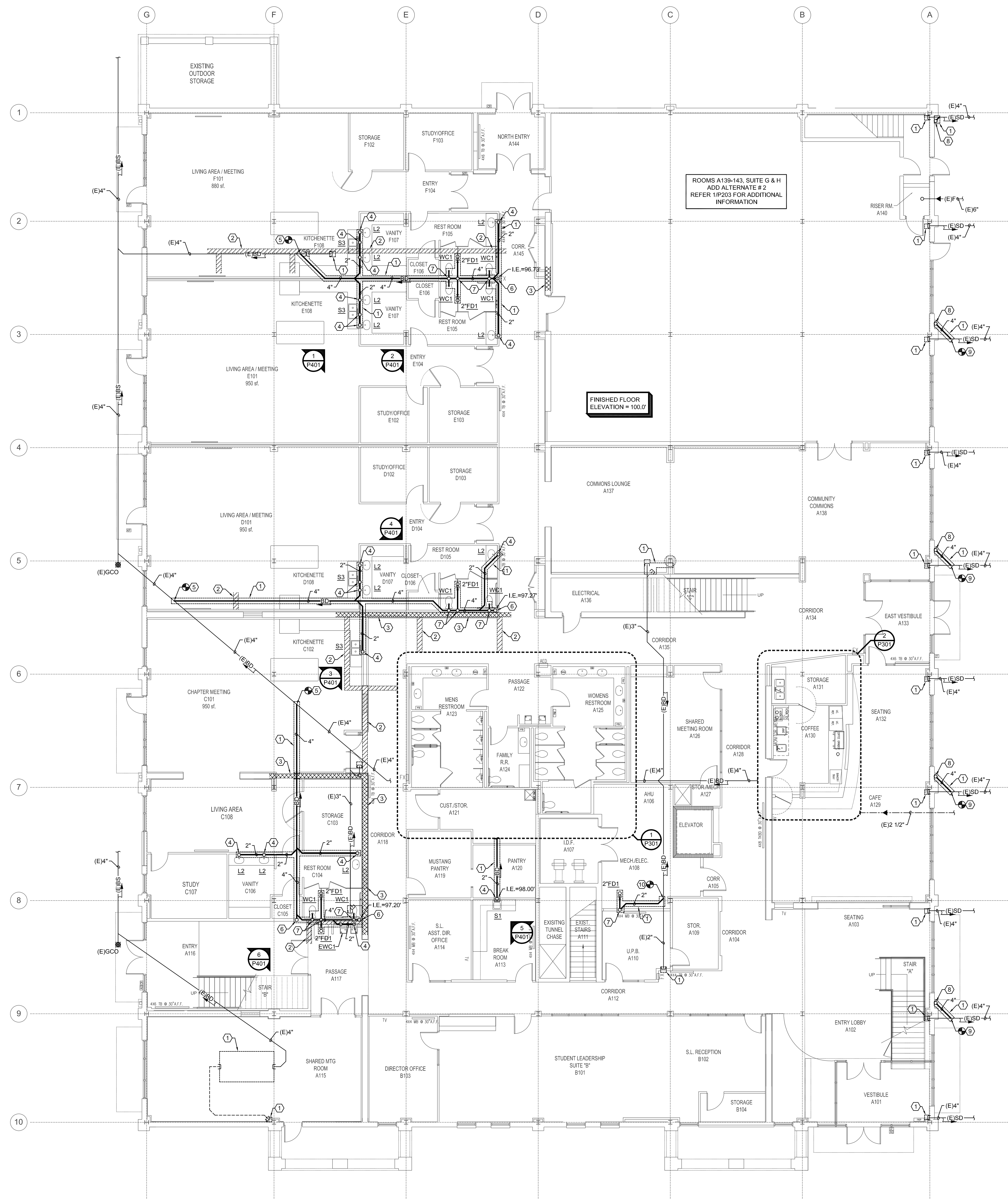
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DRAWN BY: HACKBUSCH, J.
 CHECKED BY: BDR
 DATE: 08/24/2020
 PROJECT NO.: 18071

SECOND FLOOR DEMOLITION PLUMBING PLAN
P102

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- ### GENERAL NOTES
- SANITARY WASTE & VENT AND DOMESTIC HOT & COLD WATER SYSTEMS INDICATED ARE ESTIMATED LOCATIONS AND SIZES BASED UPON LIMITED SITE OBSERVATIONS. THE CONTRACTOR SHALL FIELD VERIFY AND LOCATE EACH EXISTING SYSTEM PRIOR TO WORK. NOTIFY ARCHITECT IF DISCREPANCIES ARE FOUND THAT PREVENT COMPLETION OF WORK INTENDED IN THESE CONSTRUCTION DOCUMENTS.
 - BEFORE SAW CUTTING EXISTING CONCRETE SLAB OR EXCAVATING FOR NEW PIPE INSTALLATION THE CONTRACTOR SHALL FIELD VERIFY, LOCATE EACH EXISTING SYSTEM AND VERIFY FLOW LINE ELEVATIONS OF EXISTING SANITARY SEWER AND DETERMINE IF THE PROPOSED INVERT ELEVATIONS SHALL ALLOW FOR MINIMUM PIPE SLOPES PER APPLICABLE CODES. NEW SANITARY SEWER LINES SHALL NOT PENETRATE EXISTING CONCRETE GRADE BEAMS AT ANY POINT. IF DISCREPANCIES ARE FOUND, REPORT TO THE ARCHITECT/ENGINEER, PROVIDE AS-BUILT DRAWINGS UPON COMPLETION.
 - SAW CUT EXISTING CONCRETE SLAB AS REQUIRED FOR THE INSTALLATION OF NEW UNDER FLOOR PIPING. CONTRACTOR SHALL PATCH EXISTING CONCRETE SLAB AFTER INSTALLATION OF UNDER FLOOR PIPING TO MATCH EXISTING THICKNESS, CONSTRUCTION AND FINISH FLOOR ELEVATION.
 - CONTRACTORS TO USE ROOM IDENTIFICATION PER ARCHITECTURAL SHEET A105 FOR ALL REQUIRED LABELING.

- ### NOTES BY SYMBOL "Ⓝ"
- DASHED LINE INDICATES APPROXIMATE EXTENT OF CONCRETE SLAB TO BE SAW CUT FOR DEMOLITION OF EXISTING UNDER FLOOR PLUMBING PIPING AND/OR INSTALLATION OF NEW UNDER FLOOR PLUMBING PIPING. CONTRACTOR SHALL COORDINATE WITH NEW CONSTRUCTION DOCUMENTS FOR ADDITIONAL INFORMATION.
 - SINGLE LINE HATCHED AREA REPRESENTS PORTION OF EXISTING 1'-0" DEEP CONCRETE THICKENED SLAB.
 - DOUBLE CROSS HATCHED AREA REPRESENTS PORTION OF EXISTING 2'-0" DEEP CONCRETE GRADE BEAM. NEW SANITARY SEWER LINES SHALL NOT PENETRATE EXISTING CONCRETE GRADE BEAMS AT ANY POINT.
 - 2" SANITARY SEWER UP.
 - CONNECT NEW 4" SANITARY SEWER TO EXISTING 4" SANITARY SEWER BELOW CONCRETE SLAB.
 - 4" SANITARY SEWER UP.
 - 2" SANITARY SEWER VENT UP.
 - 4" STORM DRAIN UP. REFER DETAIL 2/P501.
 - CONNECT NEW 4" STORM DRAIN TO EXISTING 4" STORM DRAIN BELOW FINISHED GRADE.
 - CONNECT NEW 2" SANITARY SEWER TO EXISTING 2" SANITARY SEWER BELOW CONCRETE SLAB.

1 FIRST FLOOR UNDER FLOOR PLUMBING PLAN
 SCALE: 1/8"=1'-0"
 0 4 8 16



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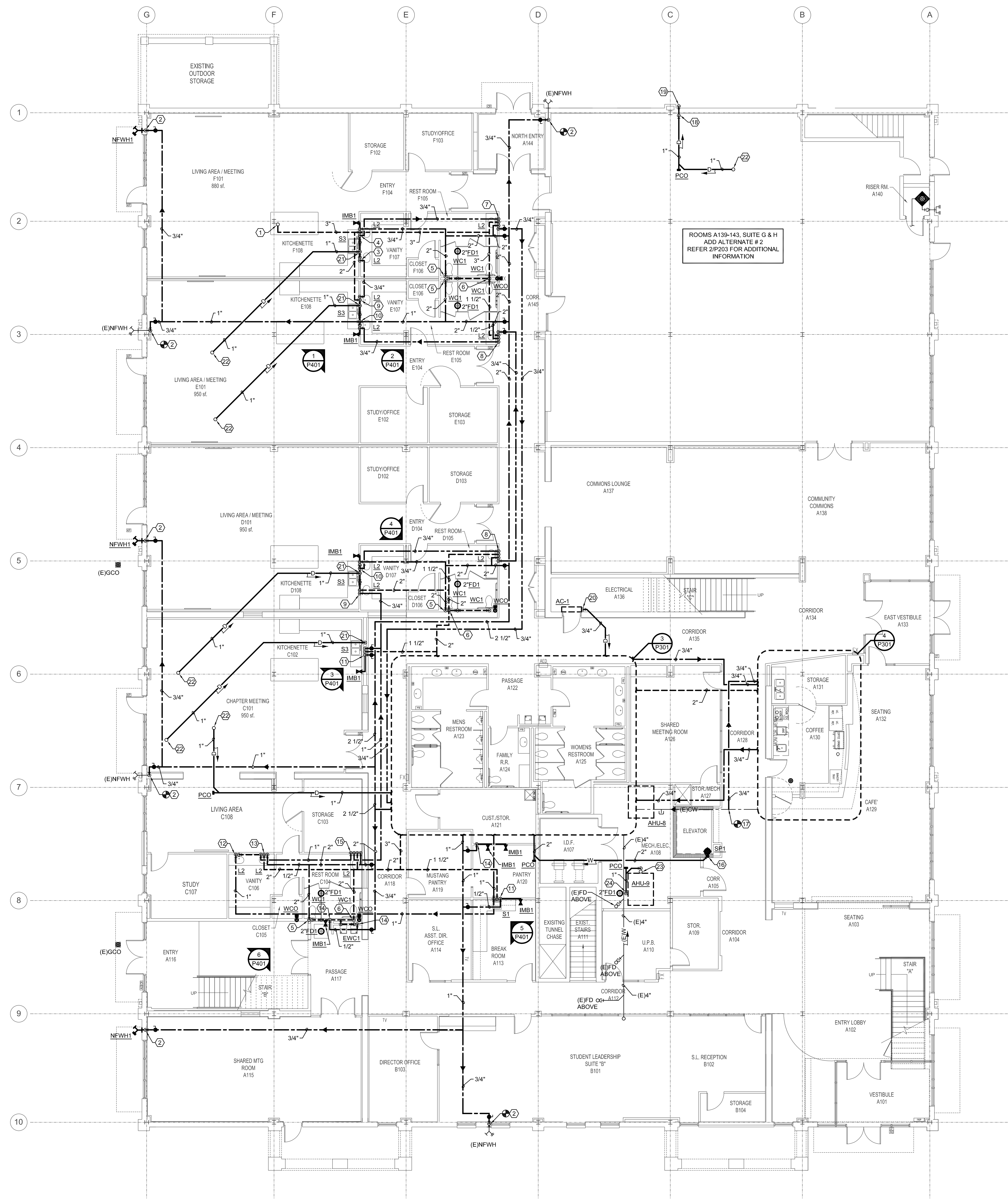
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DRAWN BY HACKBUS01,3
 CHECKED BY BDR
 DATE 08/24/2020
 PROJECT NO. 18071
 FIRST FLOOR UNDER FLOOR PLUMBING PLAN
P200



- ### GENERAL NOTES
- SANITARY WASTE & VENT AND DOMESTIC HOT & COLD WATER SYSTEMS INDICATED ARE ESTIMATED LOCATIONS AND SIZES BASED UPON LIMITED SITE OBSERVATIONS. THE CONTRACTOR SHALL FIELD VERIFY AND LOCATE EACH EXISTING SYSTEM PRIOR TO WORK. NOTIFY ARCHITECT IF DISCREPANCIES ARE FOUND THAT PREVENT COMPLETION OF WORK INTENDED IN THESE CONSTRUCTION DOCUMENTS.
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 - SAW CUT EXISTING CONCRETE SLAB AS REQUIRED FOR THE INSTALLATION OF NEW UNDER FLOOR PIPING. CONTRACTOR SHALL PATCH EXISTING CONCRETE SLAB AFTER INSTALLATION OF UNDER FLOOR PIPING TO MATCH EXISTING CONSTRUCTION.
 - CONTRACTORS TO USE ROOM IDENTIFICATION PER ARCHITECTURAL SHEET A105 FOR ALL REQUIRED LABELING.

- ### NOTES BY SYMBOL "Ⓝ"
- 3" SANITARY SEWER VENT UP.
 - 3/4" DOMESTIC COLD WATER DOWN.
 - 3/4" DOMESTIC HOT WATER DOWN.
 - 3/4" DOMESTIC COLD WATER & 3/4" DOMESTIC HOT WATER AND 2" SANITARY SEWER DOWN.
 - 2" DOMESTIC COLD WATER DOWN.
 - 2" SANITARY SEWER VENT DOWN.
 - 1/2" DOMESTIC COLD WATER, 3/4" DOMESTIC HOT WATER, 3/4" DOMESTIC HOT WATER CIRCULATION AND 1 1/2" SANITARY SEWER VENT DOWN.
 - 1/2" DOMESTIC COLD WATER, (2)-3/4" DOMESTIC HOT WATER AND 1 1/2" SANITARY SEWER VENT DOWN.
 - 3/4" DOMESTIC HOT WATER AND 2" SANITARY SEWER VENT DOWN.
 - 3/4" DOMESTIC COLD WATER AND 3/4" DOMESTIC HOT WATER DOWN.
 - 1/2" DOMESTIC COLD WATER, 1/2" DOMESTIC HOT WATER AND 1 1/2" SANITARY SEWER DOWN.
 - 1" DOMESTIC HOT WATER DOWN.
 - 1/2" DOMESTIC COLD WATER, 1" DOMESTIC HOT WATER AND 2" SANITARY SEWER VENT DOWN.
 - 1/2" DOMESTIC COLD WATER DOWN.
 - 1/2" DOMESTIC COLD WATER, (2)-1" DOMESTIC HOT WATER AND 1 1/2" SANITARY SEWER DOWN.
 - 2" ELEVATOR SUMP PUMP DRAIN DOWN. REFER DETAIL 3/P501.
 - CONNECT NEW 3/4" DOMESTIC COLD WATER TO EXISTING 2 1/2" DOMESTIC COLD WATER.
 - 1" CONDENSATE DRAIN DOWN.
 - 1" CONDENSATE DRAIN DOWN. DISCHARGE CONDENSATE DRAIN 6" MIN. ABOVE FINISHED GRADE.
 - 3/4" CONDENSATE DRAIN DOWN TO WALL MOUNTED AIR CONDITIONER CONDENSATE PUMP.
 - 1" CONDENSATE DRAIN DOWN TO BRANCH TAIL PIECE OF SINK. REFER DETAIL 7/P501.
 - 1" CONDENSATE DRAIN UP.
 - TYPICAL CONDENSATE CONNECTION. REFER DETAIL 5/P501.
 - 1" CONDENSATE DRAIN DOWN TO INDIRECT DISCHARGE AT FLOOR DRAIN. DISCHARGE CONDENSATE DRAIN 1" ABOVE FLOOD RIM OF FLOOR DRAIN.

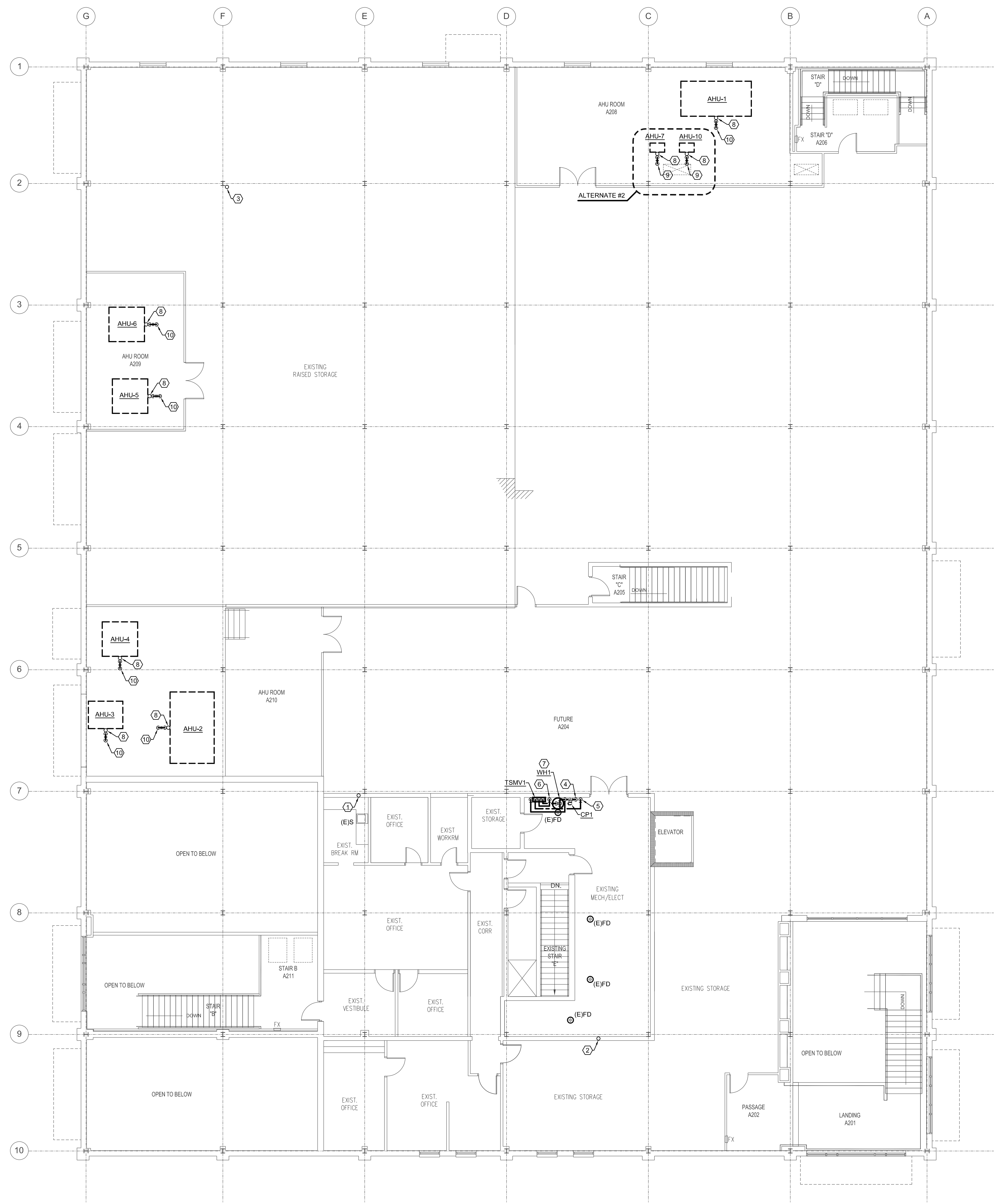
1 FIRST FLOOR PLUMBING PLAN
 SCALE: 1/8"=1'-0"
 0 4 8 16

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 BYSP architects
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 DATE 08/24/2020
 PROJECT NO. 18071
 FIRST FLOOR PLUMBING PLAN
 P201



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- ### GENERAL NOTES
- SANITARY WASTE & VENT AND DOMESTIC HOT & COLD WATER SYSTEMS INDICATED ARE ESTIMATED LOCATIONS AND SIZES BASED UPON LIMITED SITE OBSERVATIONS. THE CONTRACTOR SHALL FIELD VERIFY AND LOCATE EACH EXISTING SYSTEM PRIOR TO WORK. NOTIFY ARCHITECT IF DISCREPANCIES ARE FOUND THAT PREVENT COMPLETION OF WORK INTENDED IN THESE CONSTRUCTION DOCUMENTS.
 - BEFORE SAW CUTTING EXISTING CONCRETE SLAB OR EXCAVATING FOR NEW PIPE INSTALLATION THE CONTRACTOR SHALL FIELD VERIFY, LOCATE EACH EXISTING SYSTEM AND VERIFY FLOW LINE ELEVATIONS OF EXISTING SANITARY SEWER AND DETERMINE IF THE PROPOSED INVERT ELEVATIONS SHALL ALLOW FOR MINIMUM PIPE SLOPES PER APPLICABLE CODES. NEW SANITARY SEWER LINES SHALL NOT PENETRATE EXISTING CONCRETE GRADE BEAMS AT ANY POINT. IF DISCREPANCIES ARE FOUND, REPORT TO THE ARCHITECT/ENGINEER. PROVIDE AS-BUILT DRAWINGS UPON COMPLETION.
 - SAW CUT EXISTING CONCRETE SLAB AS REQUIRED FOR THE INSTALLATION OF NEW UNDER FLOOR PIPING. CONTRACTOR SHALL PATCH EXISTING CONCRETE SLAB AFTER INSTALLATION OF UNDER FLOOR PIPING TO MATCH EXISTING CONSTRUCTION.
 - CONTRACTORS TO USE ROOM IDENTIFICATION PER ARCHITECTURAL SHEET A105 FOR ALL REQUIRED LABELING.

- ### NOTES BY SYMBOL "Ⓢ"
- EXISTING 4" SANITARY SEWER VENT UP THRU ROOF.
 - EXISTING 3" SANITARY SEWER VENT UP THRU ROOF.
 - NEW 3" SANITARY SEWER VENT UP THRU ROOF.
 - 1" HOT WATER CIRCULATION DOWN. REFER 3/P301 FOR CONTINUATION.
 - 1 1/2" DOMESTIC COLD WATER DOWN. REFER 3/P301 FOR CONTINUATION.
 - 1 1/2" DOMESTIC HOT WATER DOWN. REFER 3/P301 FOR CONTINUATION.
 - ELECTRIC WATER HEATER WH1, THERMOSTATIC MIXING VALVE TSMV1 AND CIRCULATION PUMP CP1. REFER DETAIL 4/P501.
 - TYPICAL CONDENSATE CONNECTION. REFER DETAIL 5/P501.
 - 3/4" CONDENSATE DRAIN DOWN THRU FLOOR. REFER P201 FOR CONTINUATION.
 - 1" CONDENSATE DRAIN DOWN THRU FLOOR. REFER P201 FOR CONTINUATION.

1 SECOND FLOOR PLUMBING PLAN
 SCALE: 1/8"=1'-0"
 0 4 8 16



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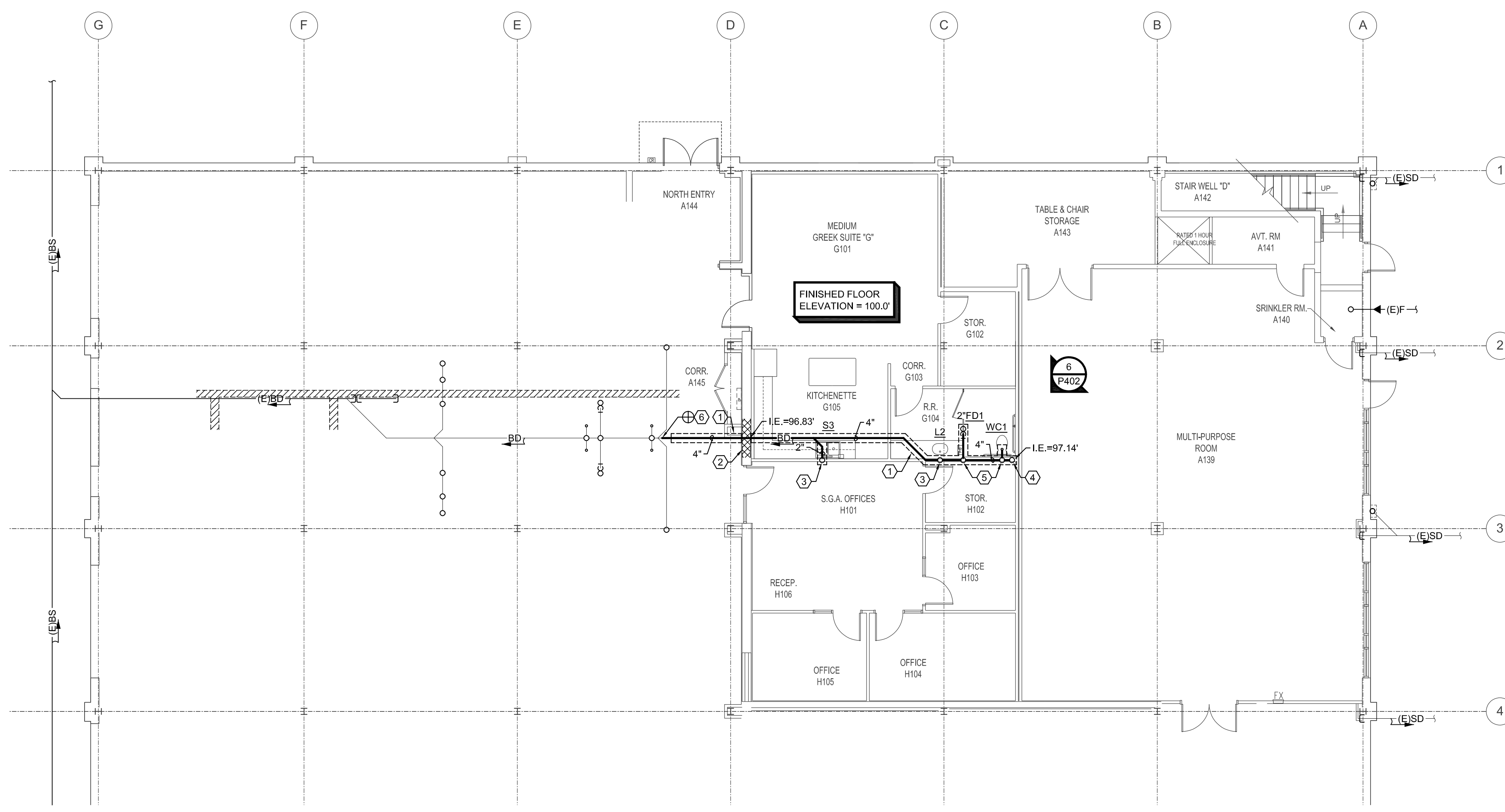
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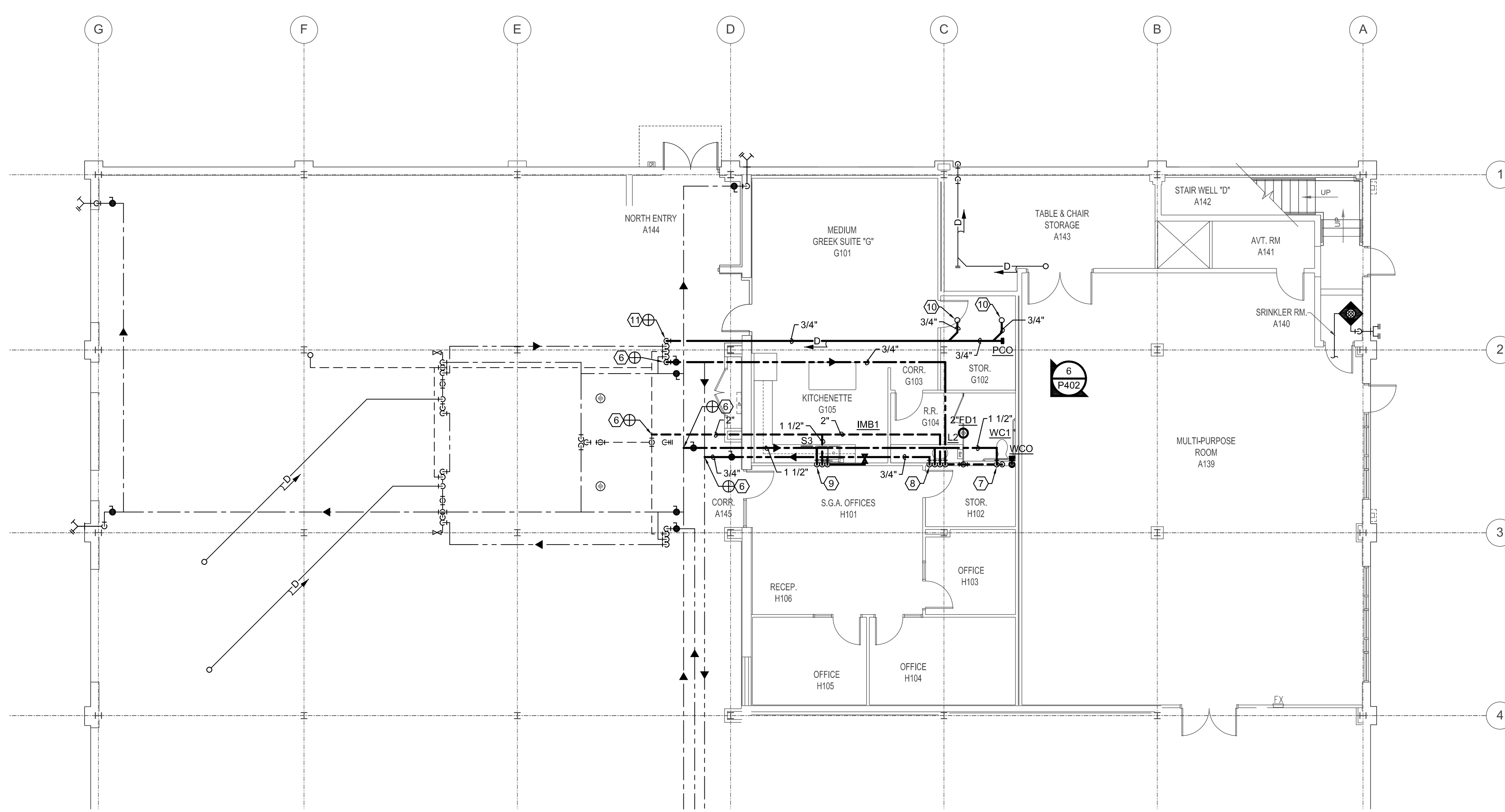
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 PROJECT NO.: 18071

SECOND FLOOR PLUMBING PLAN
P202

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1 FIRST FLOOR UNDER FLOOR PLUMBING PLAN - ALTERNATE #2
 SCALE: 1/8"=1'-0"
 0 4 8 16



2 FIRST FLOOR PLUMBING PLAN - ALTERNATE #2
 SCALE: 1/8"=1'-0"
 0 4 8 16

- GENERAL NOTES**
- SANITARY WASTE & VENT AND DOMESTIC HOT & COLD WATER SYSTEMS INDICATED ARE ESTIMATED LOCATIONS AND SIZES BASED UPON LIMITED SITE OBSERVATIONS. THE CONTRACTOR SHALL FIELD VERIFY AND LOCATE EACH EXISTING SYSTEM PRIOR TO WORK. NOTIFY ARCHITECT IF DISCREPANCIES ARE FOUND THAT PREVENT COMPLETION OF WORK INTENDED IN THESE CONSTRUCTION DOCUMENTS.
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 - SAW CUT EXISTING CONCRETE SLAB AS REQUIRED FOR THE INSTALLATION OF NEW UNDER FLOOR PIPING. CONTRACTOR SHALL PATCH EXISTING CONCRETE SLAB AFTER INSTALLATION OF UNDER FLOOR PIPING TO MATCH EXISTING CONSTRUCTION.
 - CONTRACTORS TO USE ROOM IDENTIFICATION PER ARCHITECTURAL SHEET A105 FOR ALL REQUIRED LABELING.

- NOTES BY SYMBOL "Ø"**
- DASHED LINE INDICATES APPROXIMATE EXTENT OF CONCRETE SLAB TO BE SAW CUT FOR DEMOLITION OF EXISTING UNDER FLOOR PLUMBING PIPING AND/OR INSTALLATION OF NEW UNDER FLOOR PLUMBING PIPING. CONTRACTOR SHALL COORDINATE WITH NEW CONSTRUCTION DOCUMENTS FOR ADDITIONAL INFORMATION.
 - DOUBLE CROSS HATCHED AREA REPRESENTS PORTION OF EXISTING 2'-0" DEEP CONCRETE GRADE BEAM. NEW SANITARY SEWER LINES SHALL NOT PENETRATE EXISTING CONCRETE GRADE BEAMS AT ANY POINT.
 - 2" SANITARY SEWER UP.
 - 4" SANITARY SEWER UP.
 - 2" SANITARY SEWER VENT UP.
 - CONNECTION POINT OF ALTERNATE #2 TO BASE BID.
 - 1 1/2" DOMESTIC COLD WATER DOWN.
 - 1/2" DOMESTIC COLD WATER, (2)-3/4" DOMESTIC HOT WATER AND 2" SANITARY SEWER VENT DOWN.
 - 1/2" DOMESTIC COLD WATER, 1/2" DOMESTIC HOT WATER AND 1 1/2" SANITARY SEWER VENT DOWN.
 - 3/4" CONDENSATE DRAIN UP. REFER SHEET P202 FOR CONTINUATION.
 - 3/4" CONDENSATE DRAIN DOWN TO BRANCH TAIL PIECE OF LAVATORY. REFER DETAIL 6P901.

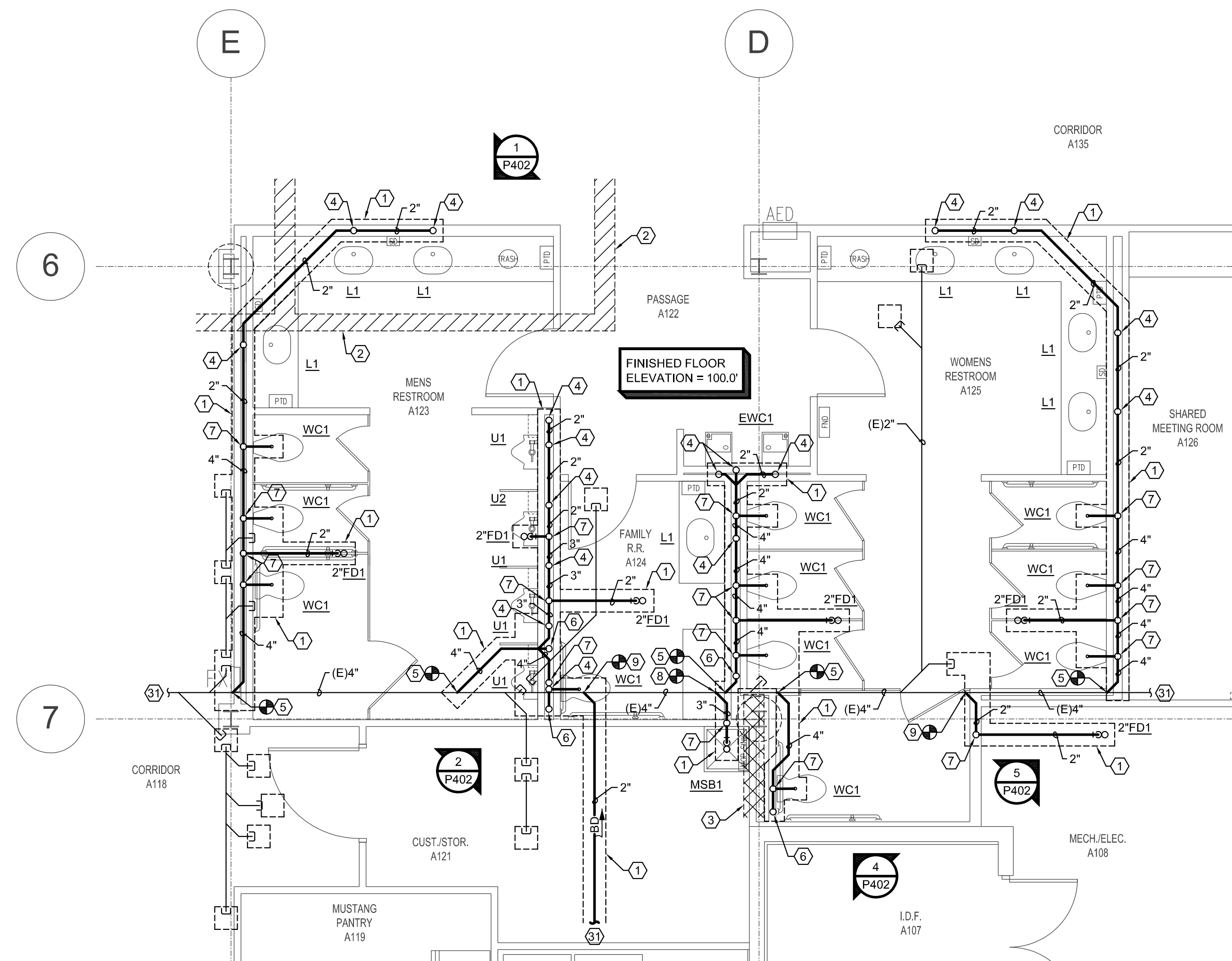


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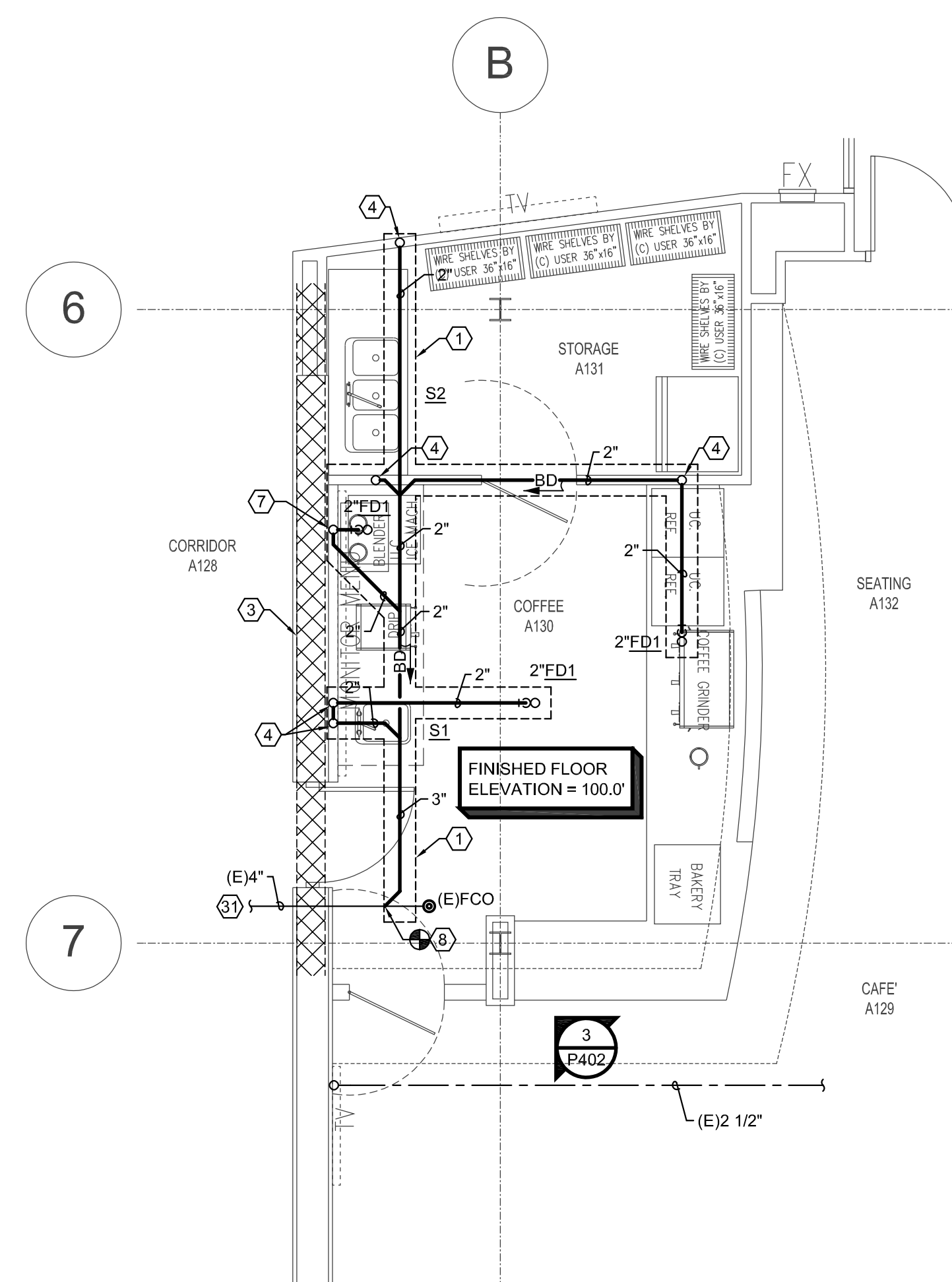
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 DATE 08/24/2020
 PROJECT NO. 18071
 FIRST FLOOR PLUMBING PLANS ALTERNATE #2
 P203

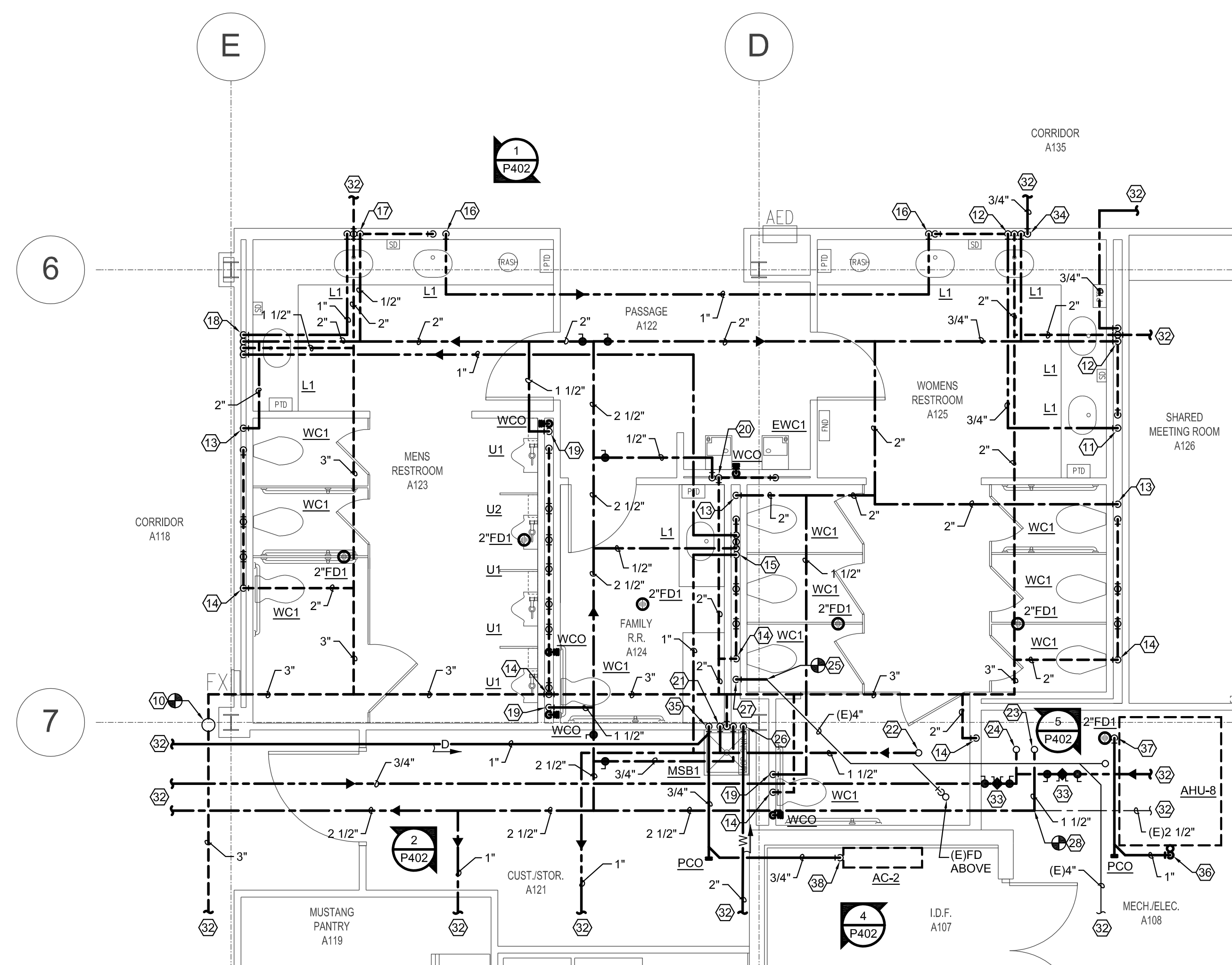
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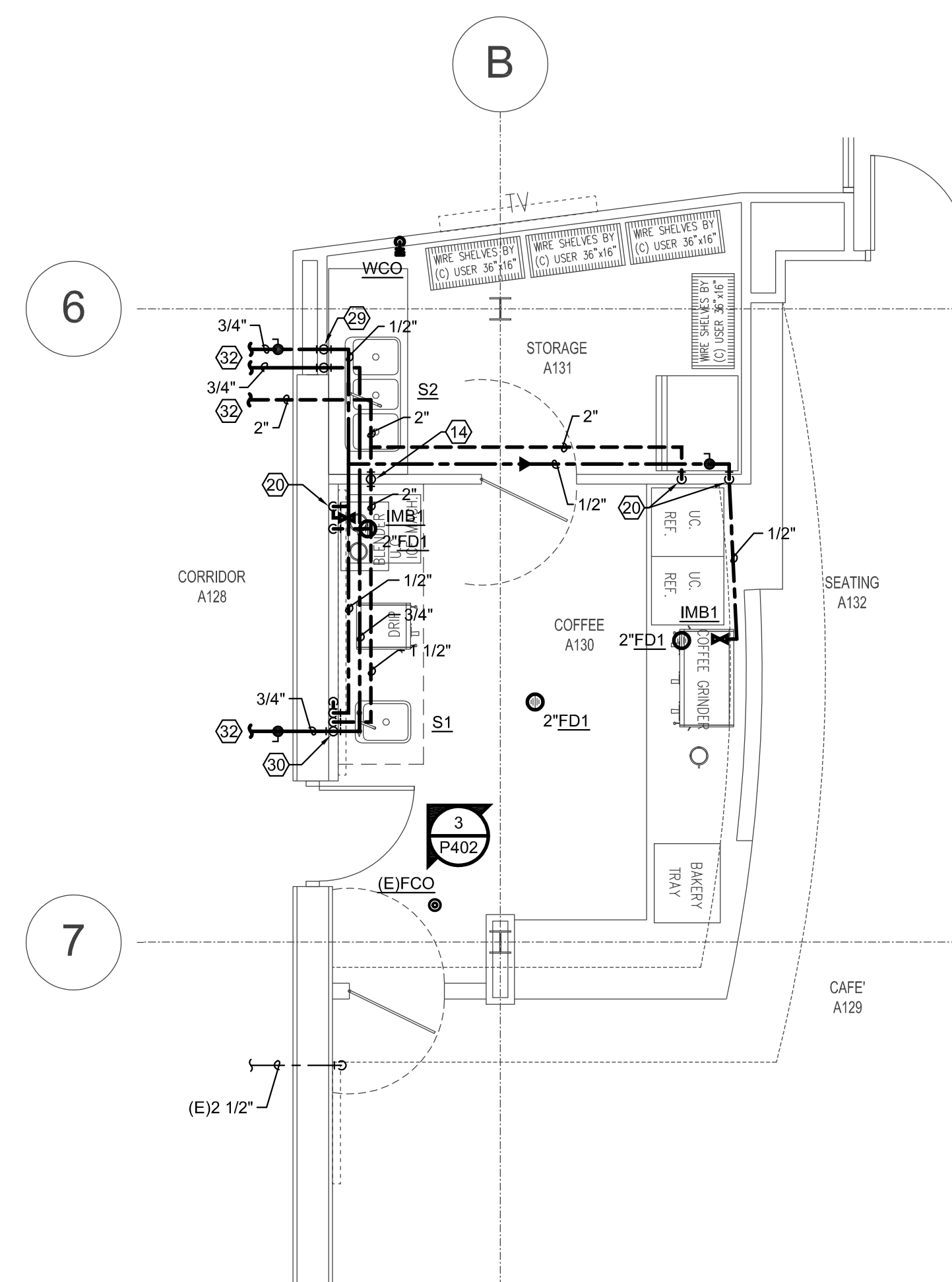
1 ENLARGED UNDER FLOOR PLUMBING PLAN
 SCALE: 1/4"=1'-0"
 0 4 8



2 ENLARGED UNDER FLOOR PLUMBING PLAN
 SCALE: 1/4"=1'-0"
 0 4 8



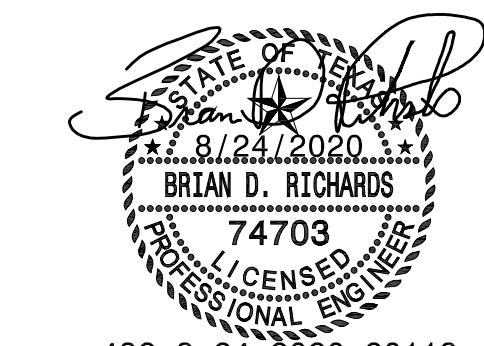
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 SCALE: 1/4"=1'-0"
 0 4 8



4 ENLARGED PLUMBING PLAN
 SCALE: 1/4"=1'-0"
 0 4 8

- ### GENERAL NOTES
- SANITARY WASTE & VENT AND DOMESTIC HOT & COLD WATER SYSTEMS INDICATED ARE ESTIMATED LOCATIONS AND SIZES BASED UPON LIMITED SITE OBSERVATIONS. THE CONTRACTOR SHALL FIELD VERIFY AND LOCATE EACH EXISTING SYSTEM PRIOR TO WORK. NOTIFY ARCHITECT IF DISCREPANCIES ARE FOUND THAT PREVENT COMPLETION OF WORK INTENDED IN THESE CONSTRUCTION DOCUMENTS.
 - BEFORE SAW CUTTING EXISTING CONCRETE SLAB OR EXCAVATING FOR NEW PIPE INSTALLATION THE CONTRACTOR SHALL FIELD VERIFY, LOCATE EACH EXISTING SYSTEM AND VERIFY FLOW LINE ELEVATIONS OF EXISTING SANITARY SEWER AND DETERMINE IF THE PROPOSED INVERT ELEVATIONS SHALL ALLOW FOR MINIMUM PIPE SLOPES PER APPLICABLE CODES. NEW SANITARY SEWER LINES SHALL NOT PENETRATE EXISTING CONCRETE GRADE BEAMS AT ANY POINT. IF DISCREPANCIES ARE FOUND, REPORT TO THE ARCHITECT/ENGINEER. PROVIDE AS-BUILT DRAWINGS UPON COMPLETION.
 - SAW CUT EXISTING CONCRETE SLAB AS REQUIRED FOR THE INSTALLATION OF NEW UNDER FLOOR PIPING. CONTRACTOR SHALL PATCH EXISTING CONCRETE SLAB AFTER INSTALLATION OF UNDER FLOOR PIPING TO MATCH EXISTING CONSTRUCTION.
 - CONTRACTORS TO USE ROOM IDENTIFICATION PER ARCHITECTURAL SHEET A105 FOR ALL REQUIRED LABELING.

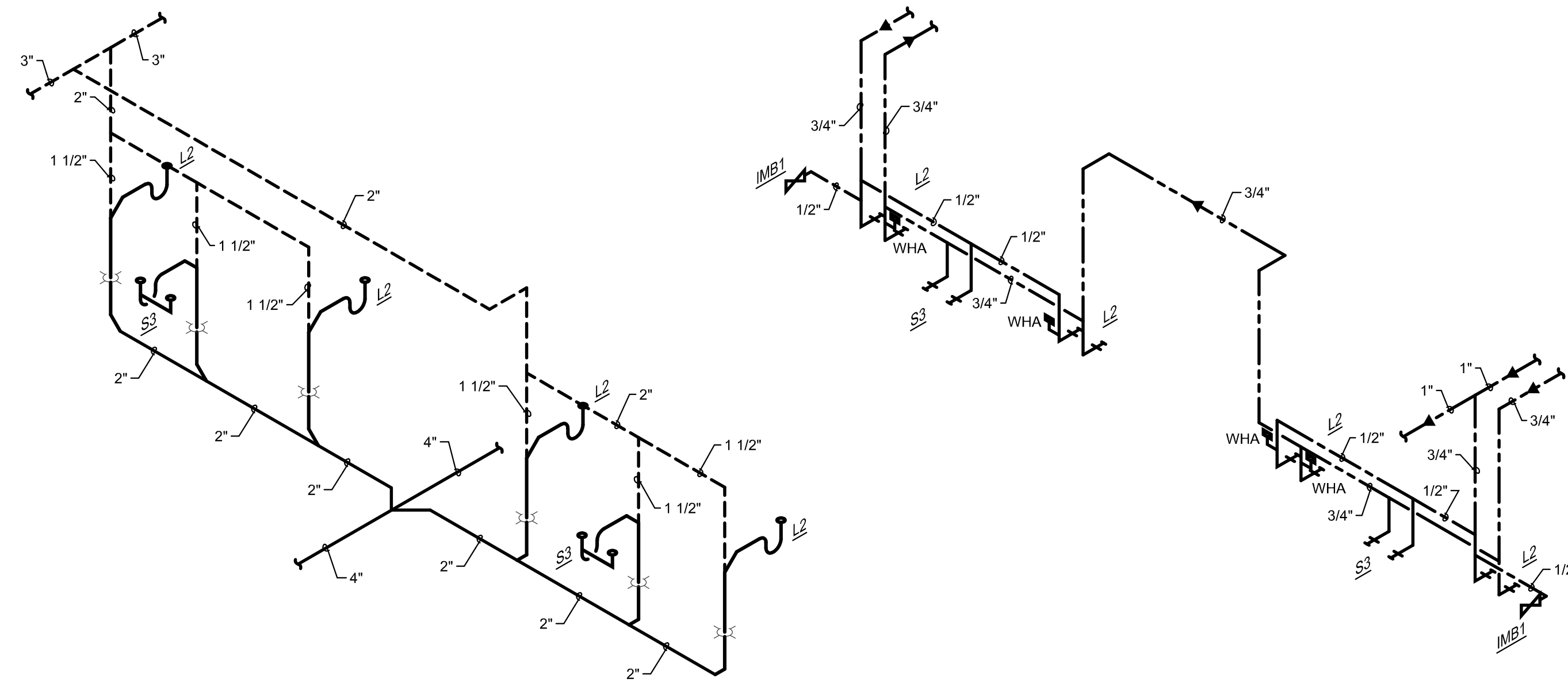
- ### NOTES BY SYMBOL "a"
- DASHED LINE INDICATES APPROXIMATE EXTENT OF CONCRETE SLAB TO BE SAW CUT FOR DEMOLITION OF EXISTING UNDER FLOOR PLUMBING PIPING AND/OR INSTALLATION OF NEW UNDER FLOOR PLUMBING PIPING. CONTRACTOR SHALL COORDINATE WITH NEW CONSTRUCTION DOCUMENTS FOR ADDITIONAL INFORMATION.
 - SINGLE LINE HATCHED AREA REPRESENTS PORTION OF EXISTING 1'-0" DEEP CONCRETE THICKENED SLAB.
 - DOUBLE CROSS HATCHED AREA REPRESENTS PORTION OF EXISTING 2'-0" DEEP CONCRETE GRADE BEAM. NEW SANITARY SEWER LINES SHALL NOT PENETRATE EXISTING CONCRETE GRADE BEAMS AT ANY POINT.
 - 2" SANITARY SEWER UP.
 - CONNECT NEW 4" SANITARY SEWER TO EXISTING 4" SANITARY SEWER BELOW CONCRETE SLAB.
 - 4" SANITARY SEWER UP.
 - 2" SANITARY SEWER VENT UP.
 - CONNECT NEW 3" SANITARY SEWER TO EXISTING 4" SANITARY SEWER BELOW CONCRETE SLAB.
 - CONNECT NEW 2" SANITARY SEWER TO EXISTING 4" SANITARY SEWER BELOW CONCRETE SLAB.
 - CONNECT NEW 3" SANITARY SEWER VENT TO EXISTING 4" SANITARY SEWER VENT UP.
 - 3/4" DOMESTIC HOT WATER DOWN.
 - 1/2" DOMESTIC COLD WATER & 3/4" DOMESTIC HOT WATER AND 2" SANITARY SEWER DOWN.
 - 2" DOMESTIC COLD WATER DOWN.
 - 2" SANITARY SEWER VENT DOWN.
 - 1/2" DOMESTIC COLD WATER AND (2)-1" DOMESTIC HOT WATER DOWN.
 - 1" DOMESTIC HOT WATER DOWN.
 - 1/2" DOMESTIC COLD WATER, 1" DOMESTIC HOT WATER AND 2" SANITARY SEWER VENT DOWN.
 - 1/2" DOMESTIC COLD WATER, (2)-1" DOMESTIC HOT WATER AND 1 1/2" SANITARY SEWER DOWN.
 - 1 1/2" DOMESTIC COLD WATER DOWN.
 - 1/2" DOMESTIC COLD WATER AND 2" SANITARY SEWER VENT DOWN.
 - 3/4" DOMESTIC COLD WATER, 3/4" DOMESTIC HOT WATER AND 2" SANITARY SEWER DOWN.
 - 1 1/2" DOMESTIC HOT WATER UP. REFER P202 FOR CONTINUATION.
 - 1 1/2" DOMESTIC COLD WATER UP. REFER P202 FOR CONTINUATION.
 - 1" DOMESTIC HOT WATER CIRCULATION UP. REFER P202 FOR CONTINUATION.
 - CONNECT NEW 4" SANITARY WASTE TO EXISTING 4" SANITARY WASTE ABOVE CEILING.
 - 2" ELEVATOR SUMP PUMP DRAIN DOWN TO INDIRECT DISCHARGE AT MOP SINK. DISCHARGE SUMP PUMP DRAIN 1" MIN. ABOVE FLOOR RIM OF FLOOR MOUNTED MOP SINK.
 - 4" SANITARY WASTE DOWN. REFER 1/P301 FOR CONTINUATION.
 - CONNECT NEW 2 1/2" DOMESTIC COLD WATER TO EXISTING 2 1/2" DOMESTIC WATER.
 - 1/2" DOMESTIC COLD WATER AND 1/2" DOMESTIC HOT WATER DOWN.
 - 1/2" DOMESTIC COLD WATER & 1/2" DOMESTIC HOT WATER AND 2" SANITARY SEWER DOWN.
 - REFER 1/P200 FOR CONTINUATION.
 - REFER 1/P201 FOR CONTINUATION.
 - BALANCING VALVE. SET TO 2 GPM.
 - 3/4" CONDENSATE DRAIN DOWN TO BRANCH TAIL PIECE OF LAVATORY. REFER DETAIL 6/P501.
 - 1" CONDENSATE DRAIN DOWN TO INDIRECT DISCHARGE AT FLOOR MOUNTED MOP SINK. DISCHARGE CONDENSATE DRAIN 1" MIN ABOVE FLOOR RIM OF MOP SINK.
 - TYPICAL CONDENSATE CONNECTION. REFER DETAIL 6/P501.
 - 1" CONDENSATE DRAIN DOWN TO INDIRECT DISCHARGE AT FLOOR DRAIN. DISCHARGE CONDENSATE DRAIN 1" ABOVE FLOOR RIM OF FLOOR DRAIN.
 - 3/4" CONDENSATE DRAIN DOWN TO WALL MOUNTED AIR CONDITIONER CONDENSATE PUMP.



432.8.24.2020.20118

Summit
 CONSULTANTS, INC.
 Texas BPE Registration # F-207
 1300 Summit Avenue Suite 500 Fort Worth, Texas 76102
 Office 817.378.4242 www.summitcpi.com
 4144 N. Central Expressway Suite 635 Dallas, Texas 75204
 Office 214.420.9111

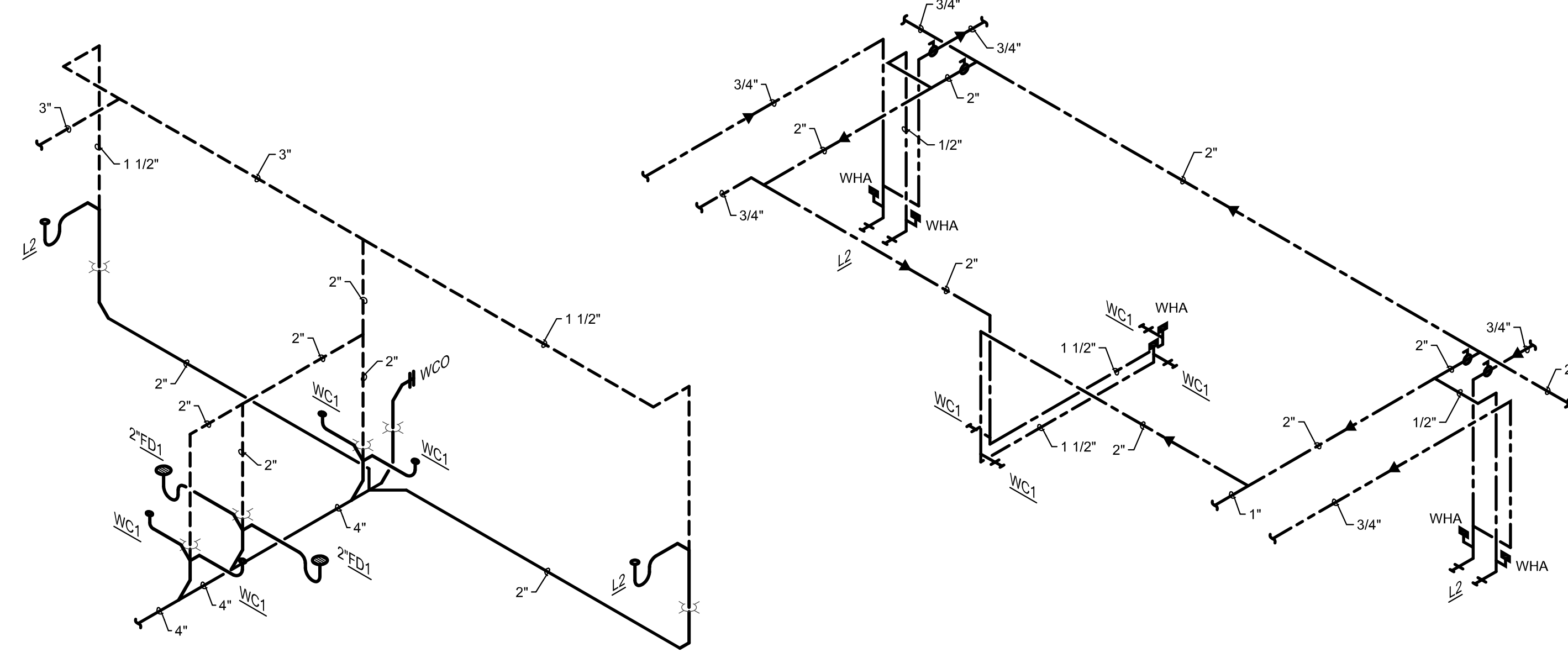
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SANITARY WASTE AND VENT

DOMESTIC WATER

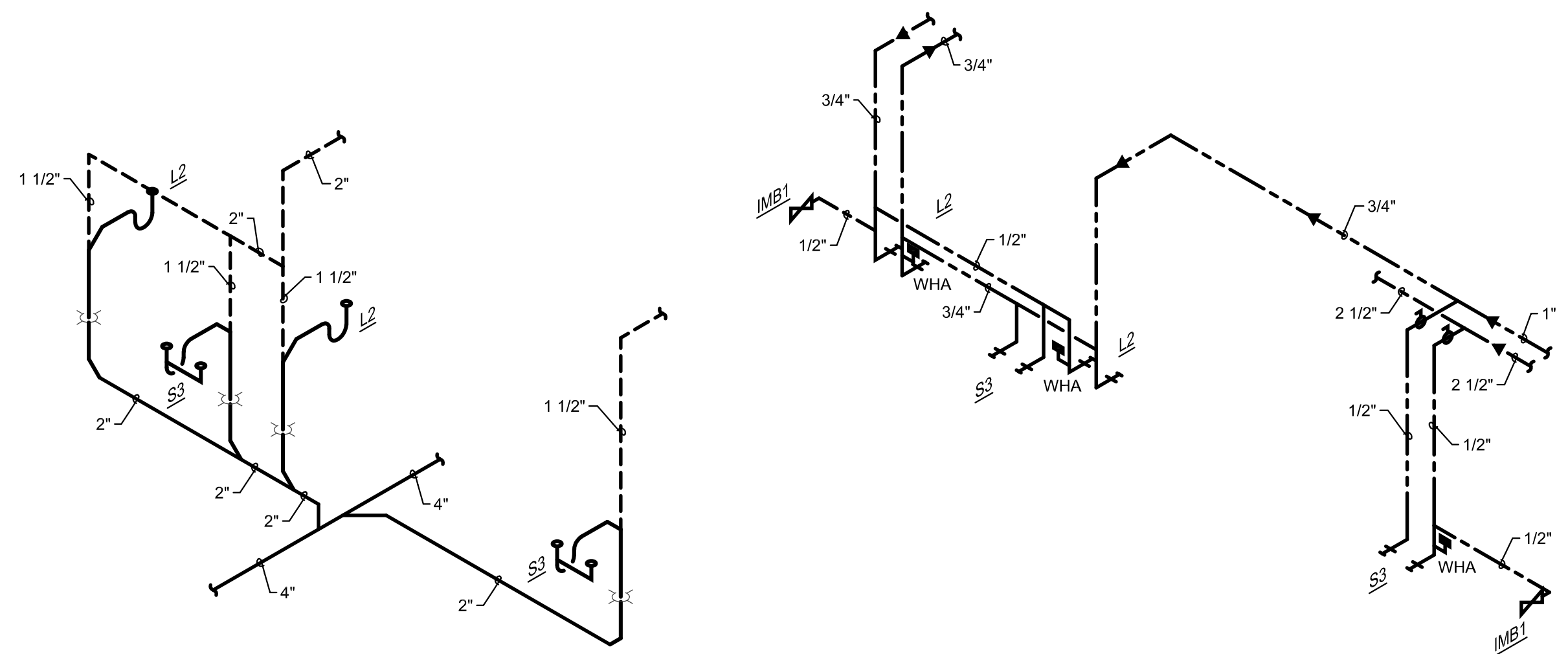
1 PLUMBING ISOMETRIC RISER DIAGRAM
NO SCALE



SANITARY WASTE AND VENT

DOMESTIC WATER

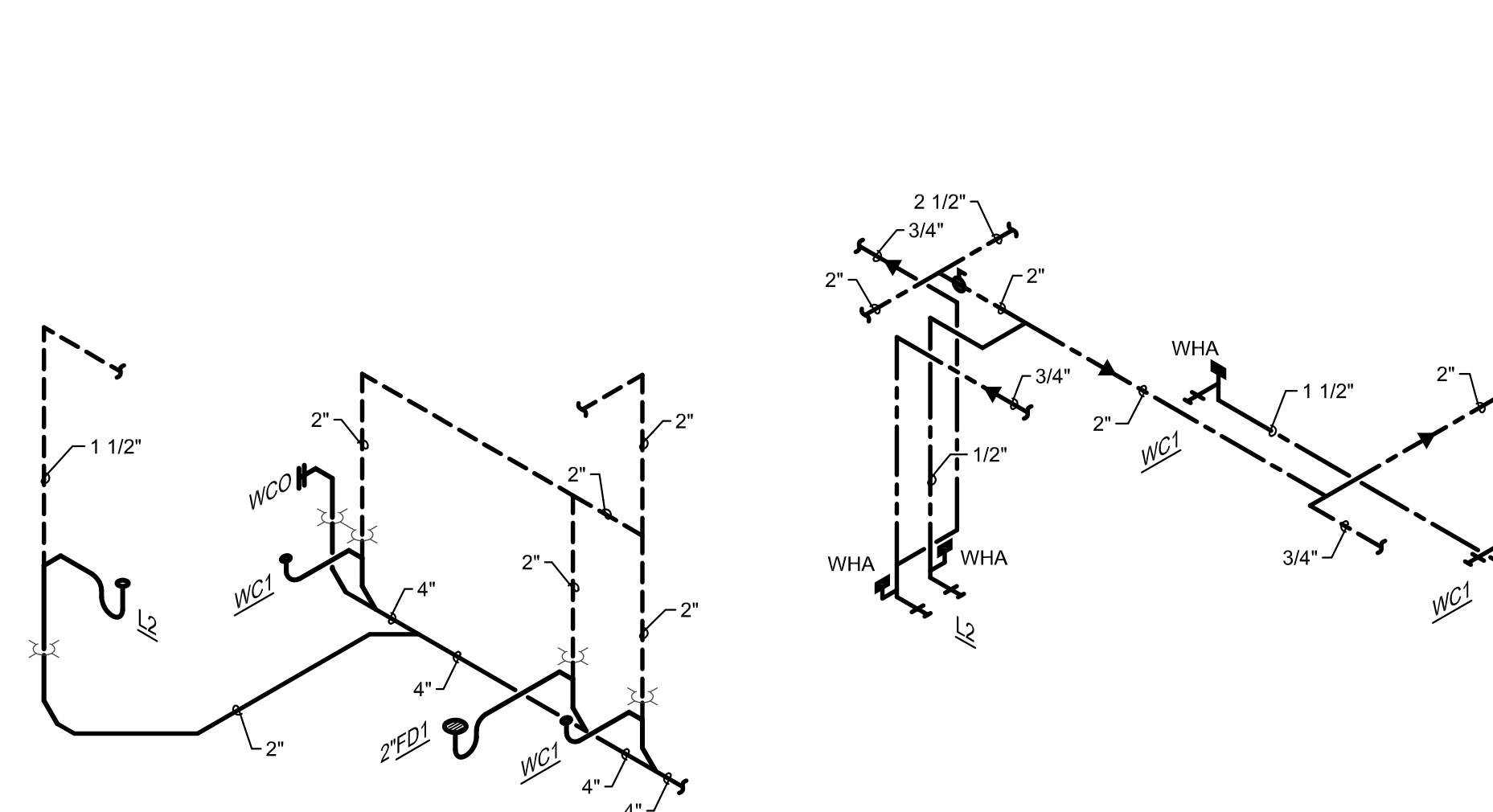
2 PLUMBING ISOMETRIC RISER DIAGRAM
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SANITARY WASTE AND VENT

DOMESTIC WATER

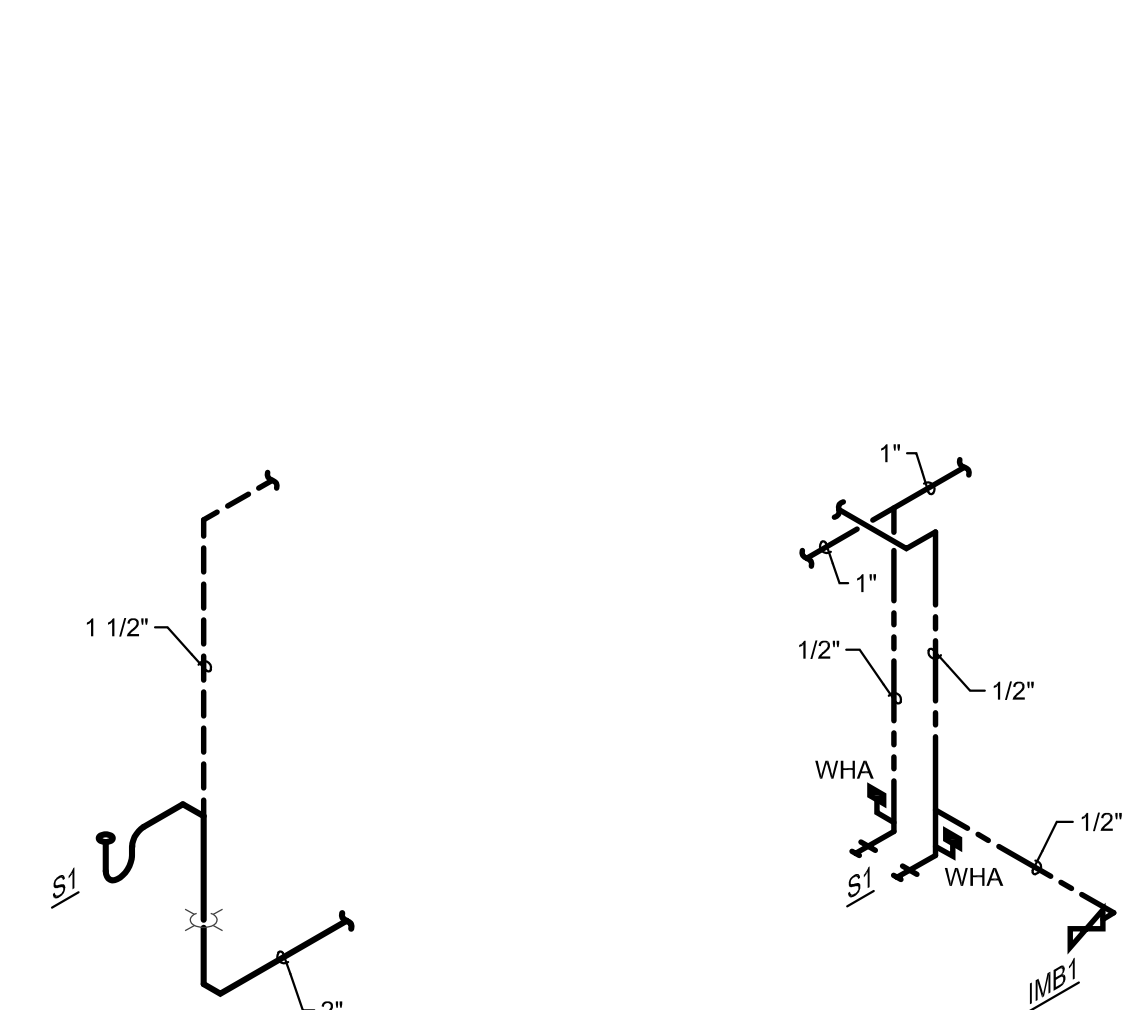
3 PLUMBING ISOMETRIC RISER DIAGRAM
NO SCALE



SANITARY WASTE AND VENT

DOMESTIC WATER

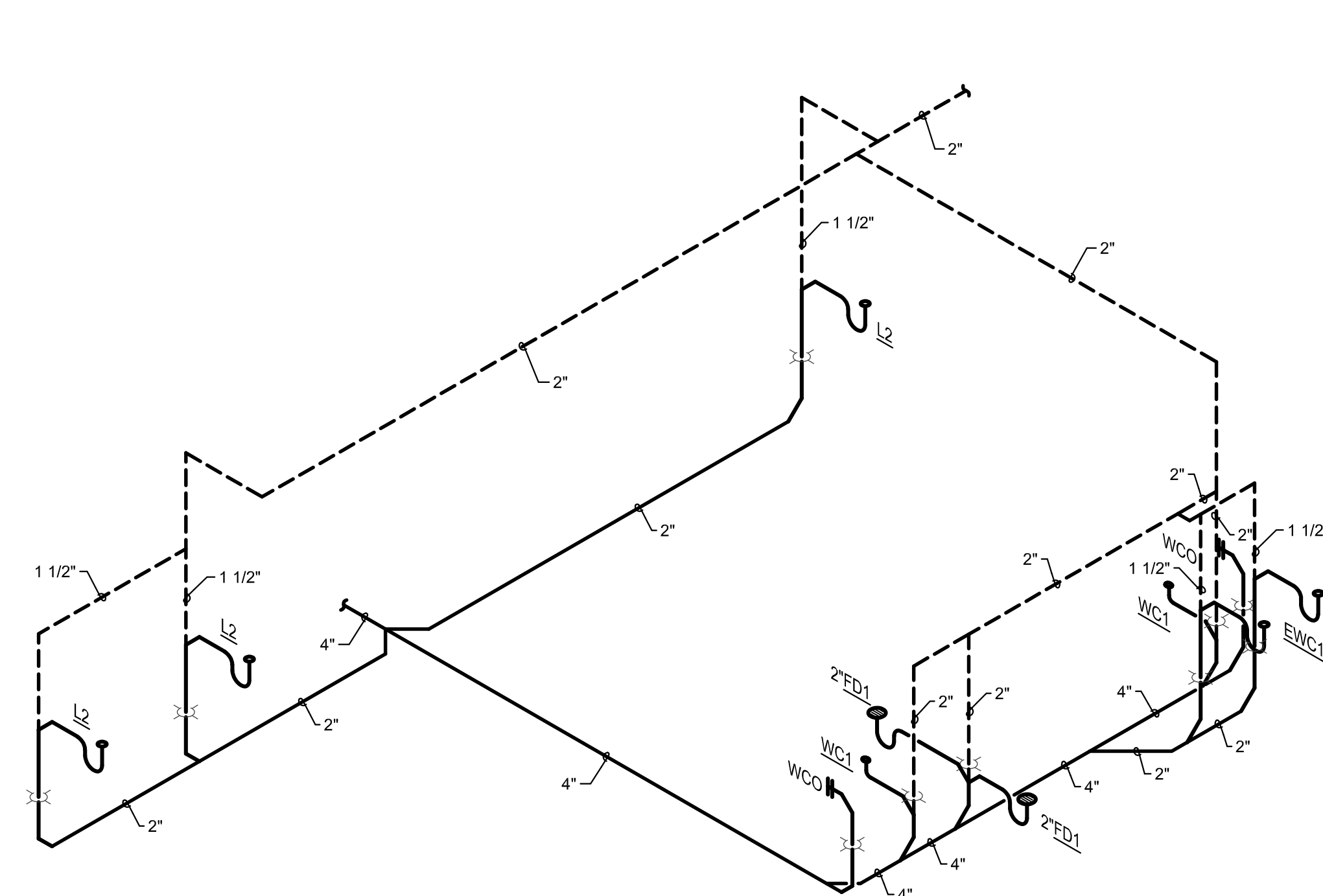
4 PLUMBING ISOMETRIC RISER DIAGRAM
NO SCALE



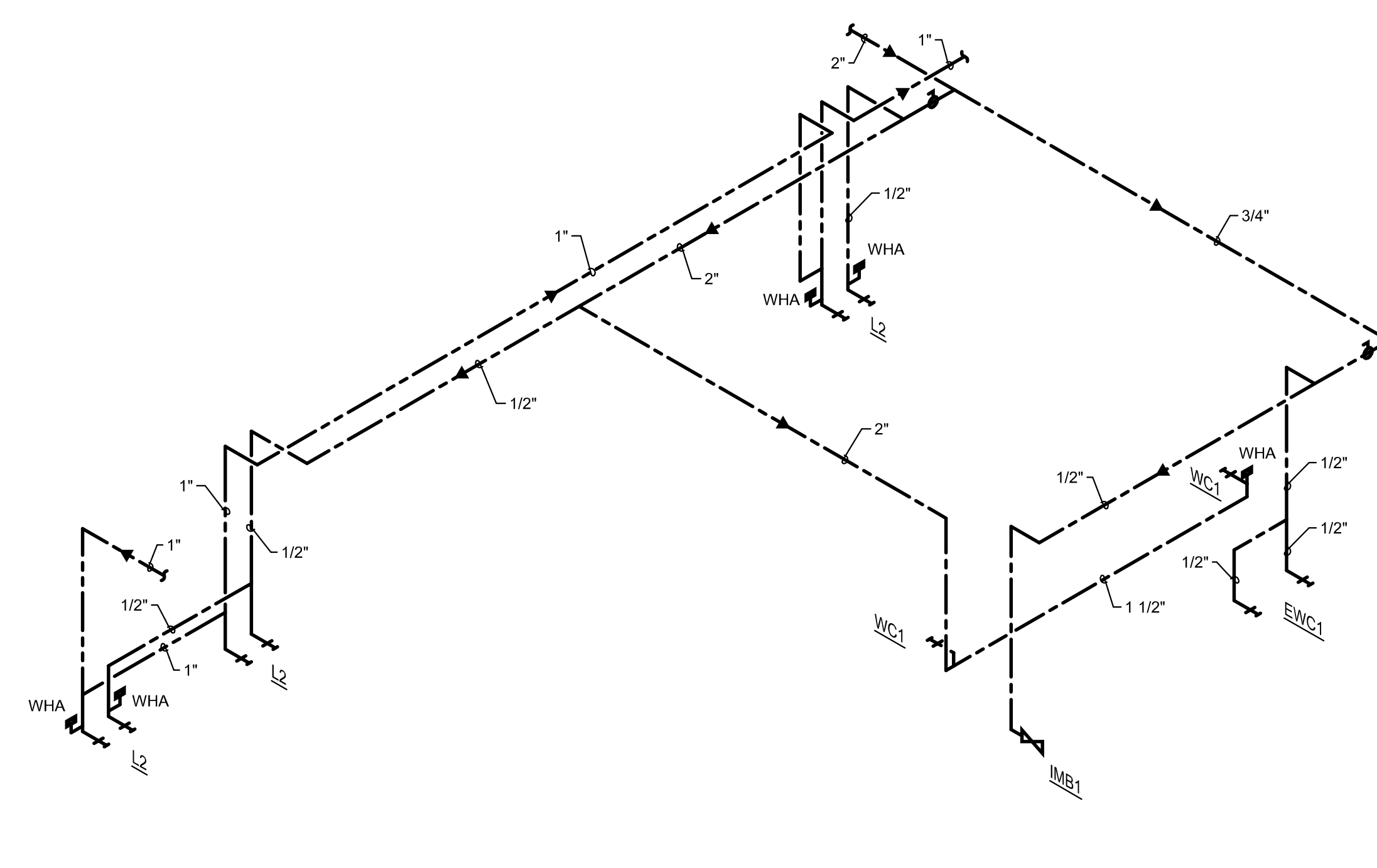
SANITARY WASTE AND VENT

DOMESTIC WATER

5 PLUMBING ISOMETRIC RISER DIAGRAM
NO SCALE



SANITARY WASTE AND VENT



DOMESTIC WATER

6 PLUMBING ISOMETRIC RISER DIAGRAM
NO SCALE

REV	DATE	DESCRIPTION

DANIEL BUILDING RENOVATION
J.S. BRIDWELL ACTIVITIES CENTER &
CANNEDY GREEK COMMONS



BYS architects
1005 Ninth Street, Suite 200 Wichita Falls, Texas 76301 (847) 763-2404
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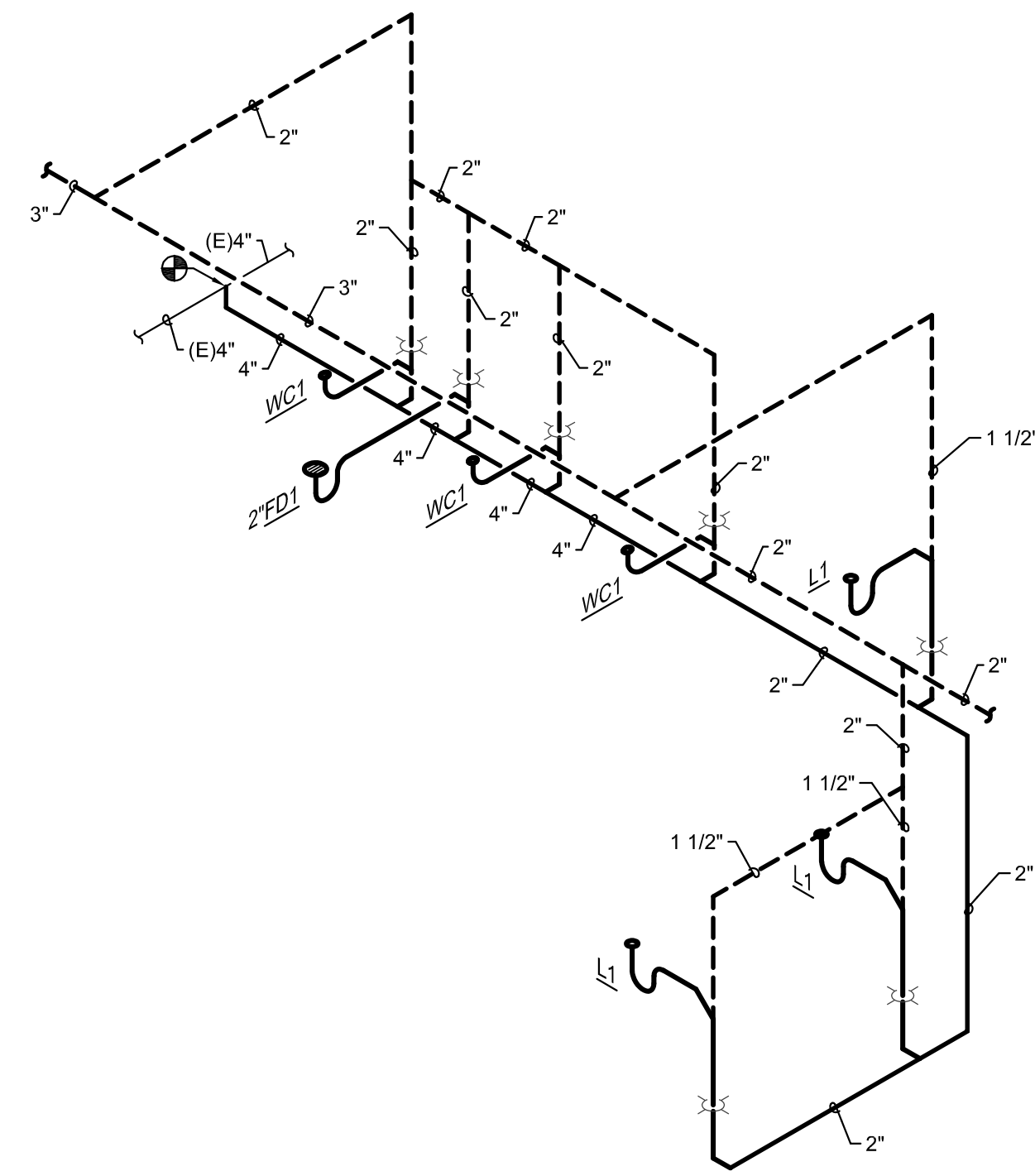
DRAWN BY	HACKBUSCH, J.
CHECKED BY	BDR
DATE	08/24/2020
PROJECT NO.	18071

PLUMBING ISOMETRIC RISER DIAGRAMS

P401

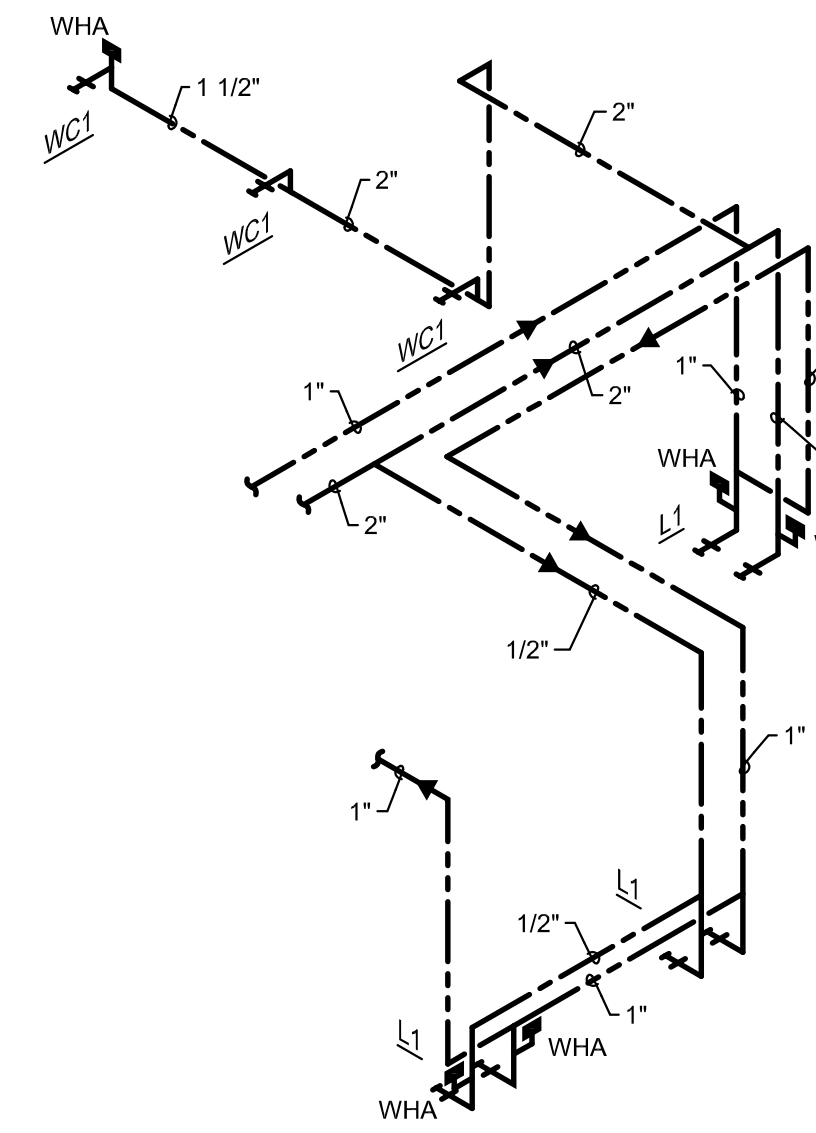
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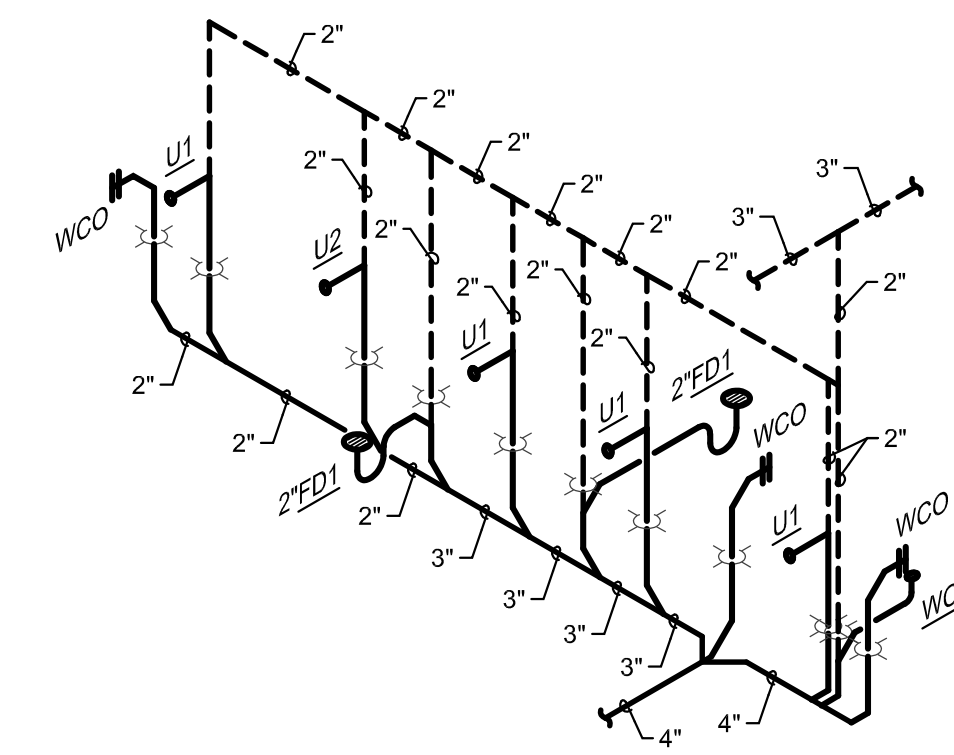


SANITARY WASTE AND VENT

1 PLUMBING ISOMETRIC RISER DIAGRAM
NO SCALE

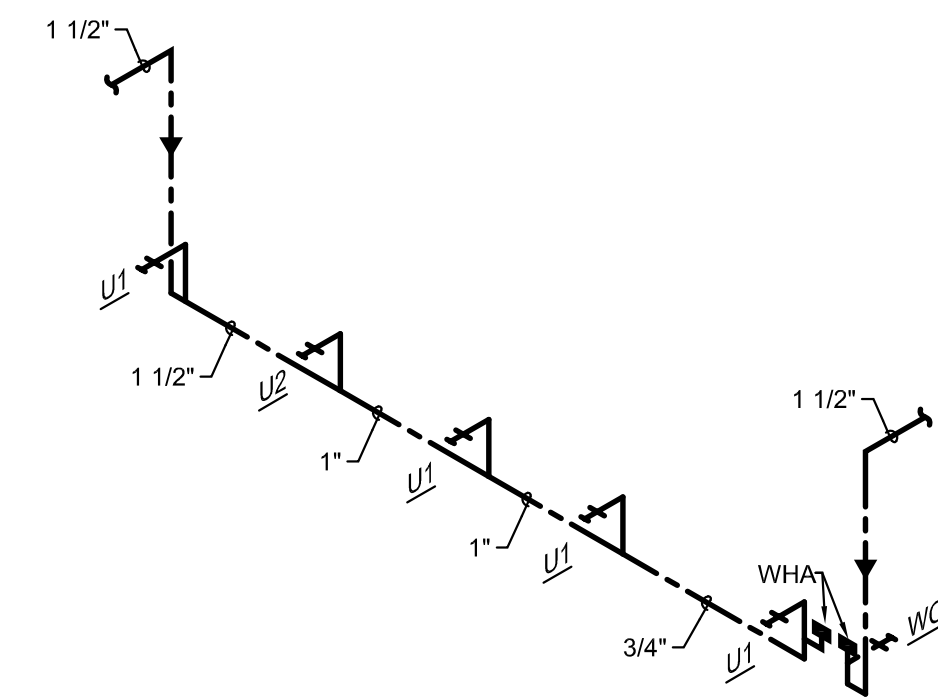


DOMESTIC WATER

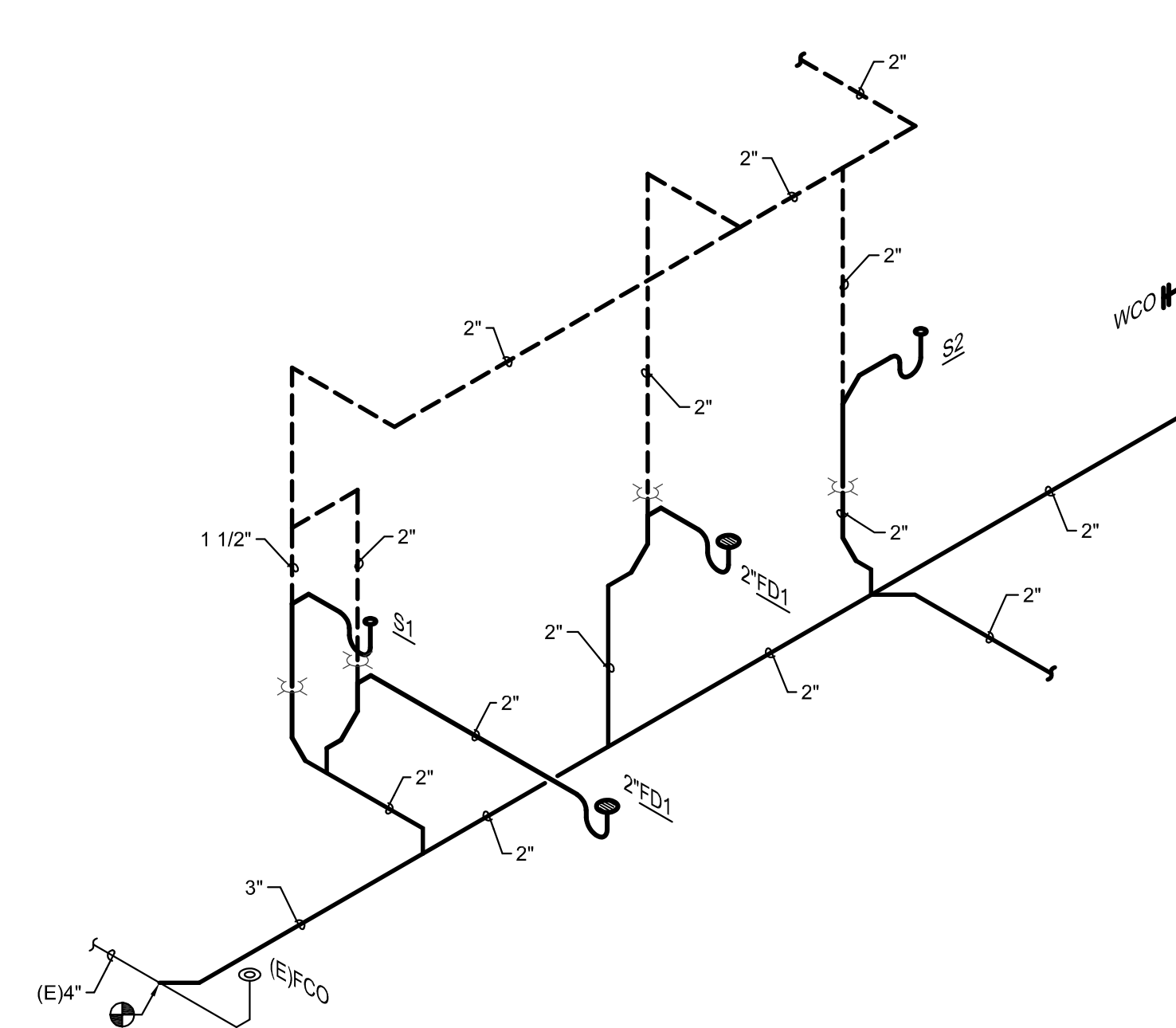


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2 PLUMBING ISOMETRIC RISER DIAGRAM
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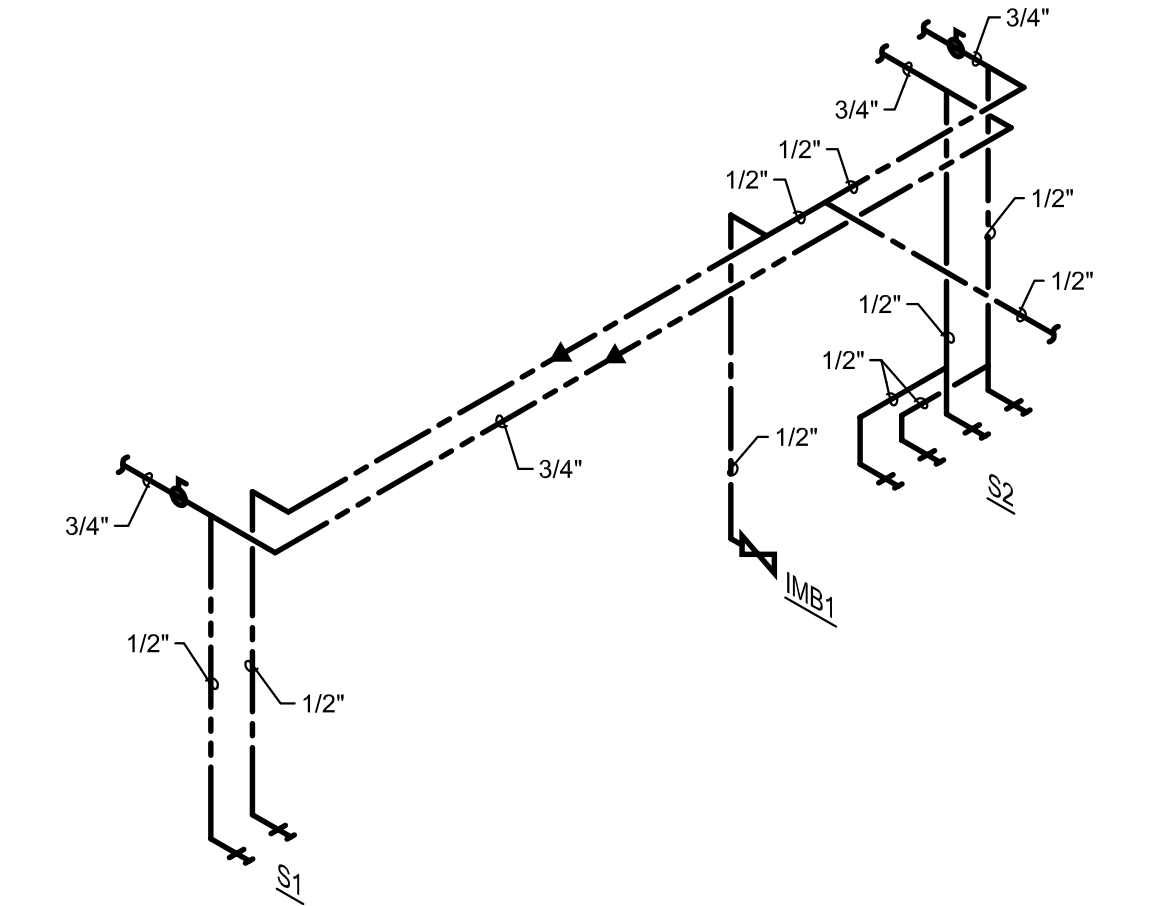


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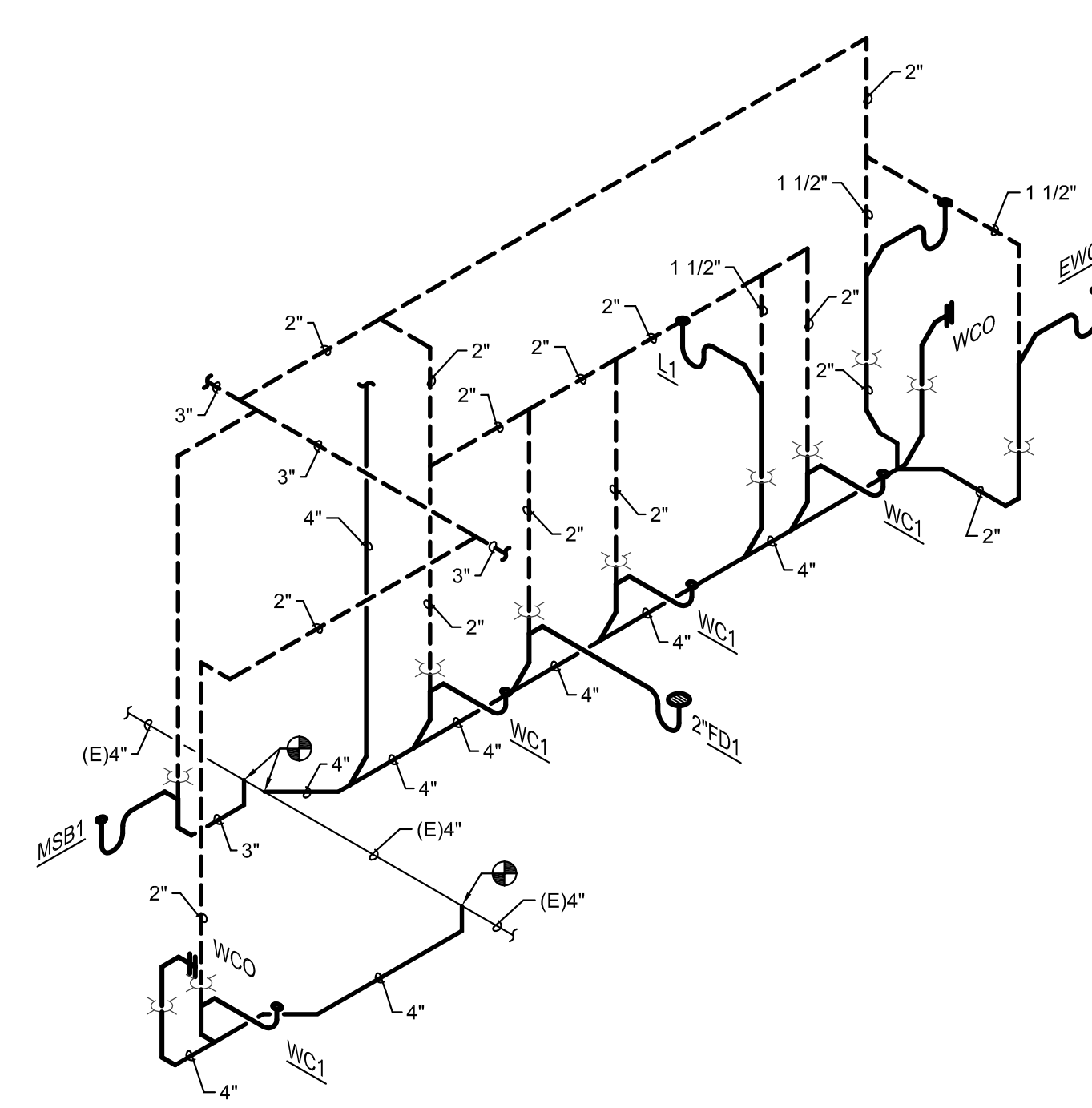


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3 PLUMBING ISOMETRIC RISER DIAGRAM
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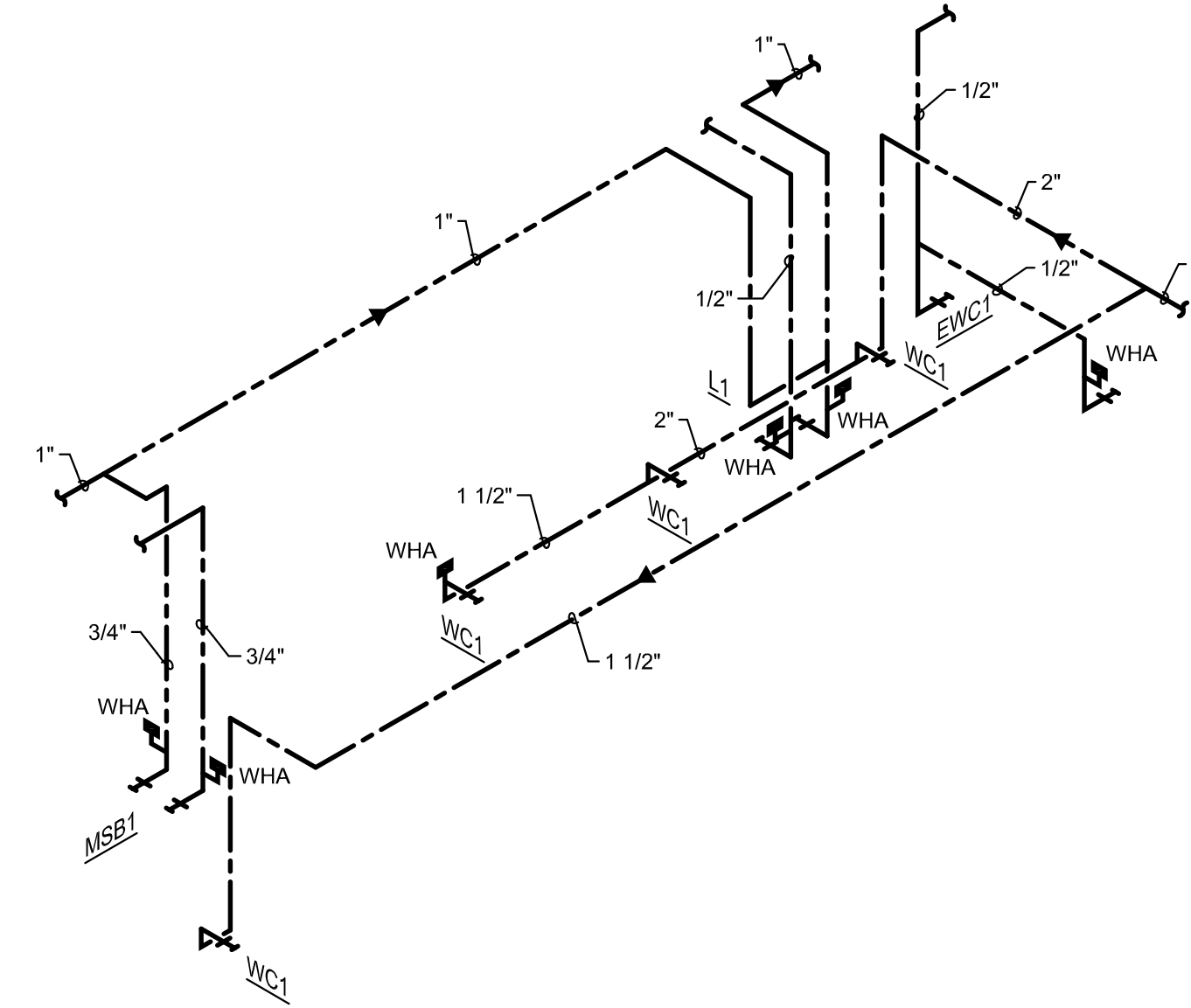


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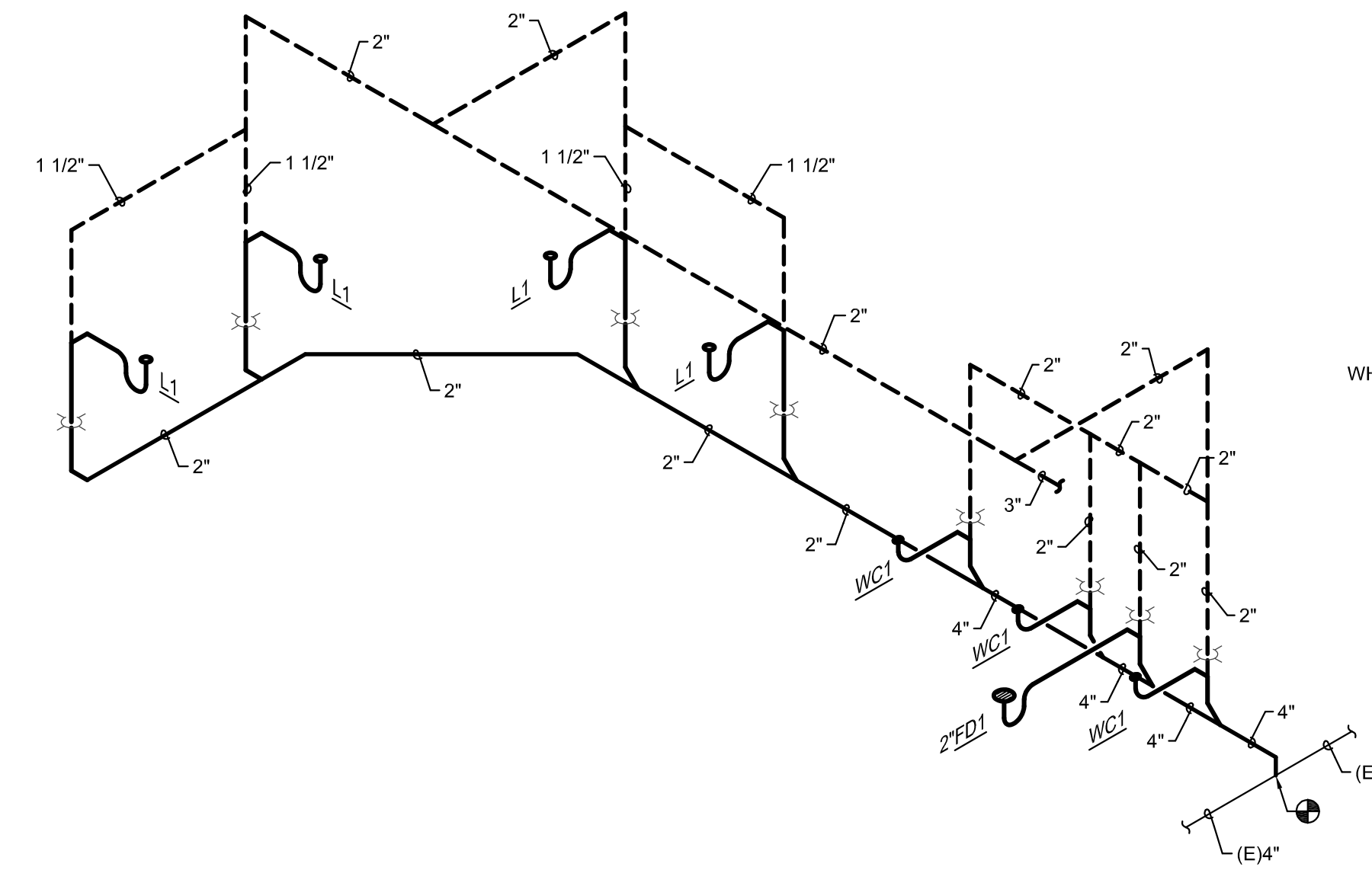


SANITARY WASTE AND VENT

4 PLUMBING ISOMETRIC RISER DIAGRAM
NO SCALE

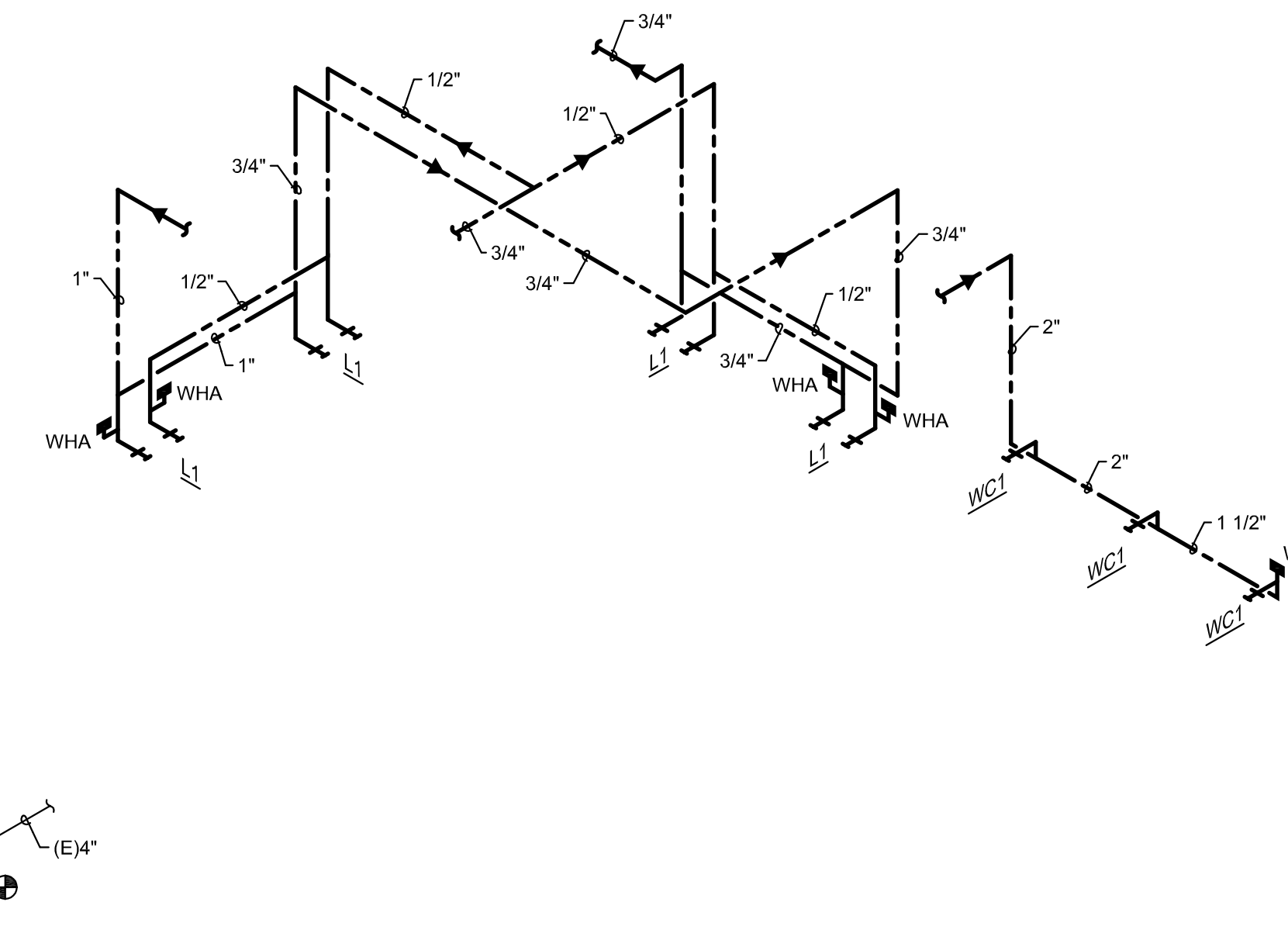


DOMESTIC WATER

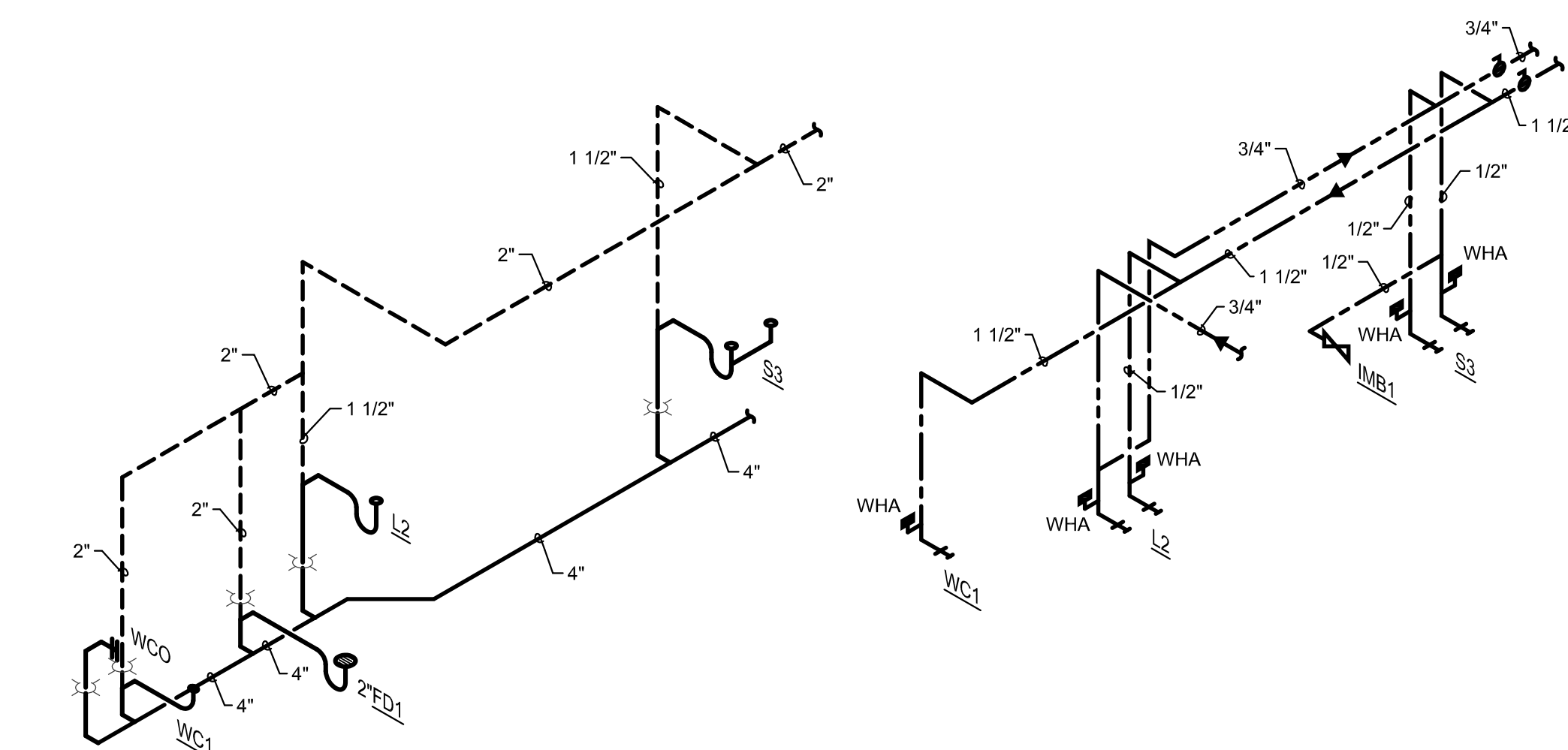


SANITARY WASTE AND VENT

5 PLUMBING ISOMETRIC RISER DIAGRAM
NO SCALE

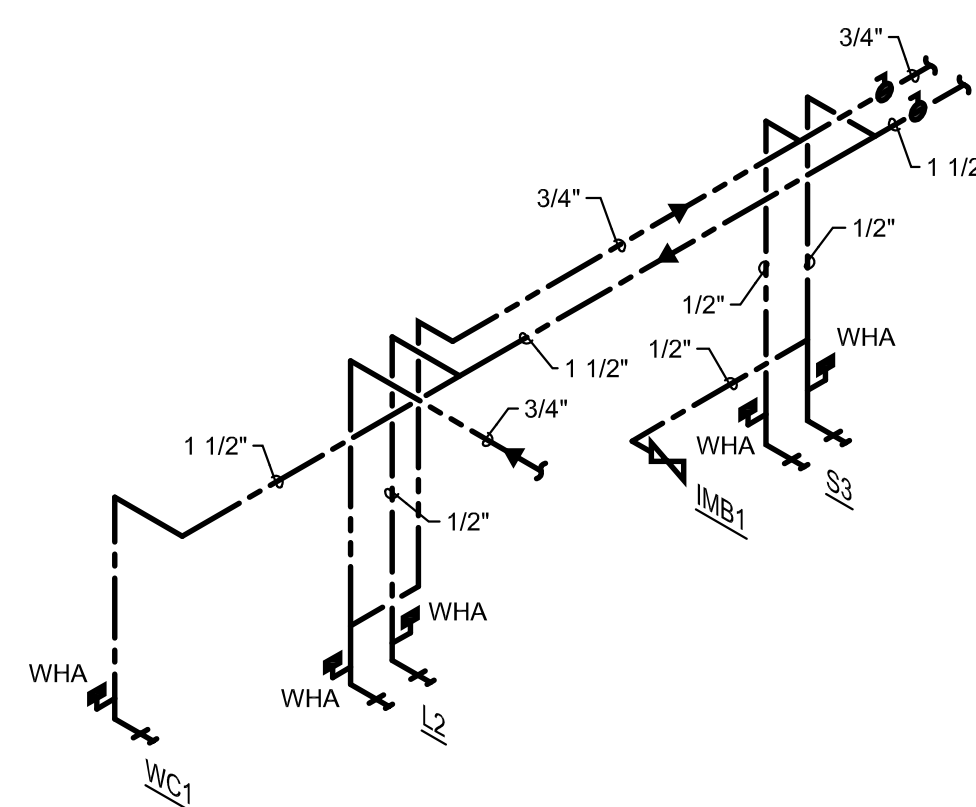


DOMESTIC WATER



SANITARY WASTE AND VENT

6 PLUMBING ISOMETRIC RISER DIAGRAM - (ALTERNATE #2)
NO SCALE



DOMESTIC WATER



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1300 Summit Avenue Suite 500 Fort Worth, Texas 76102
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REV	DATE	DESCRIPTION

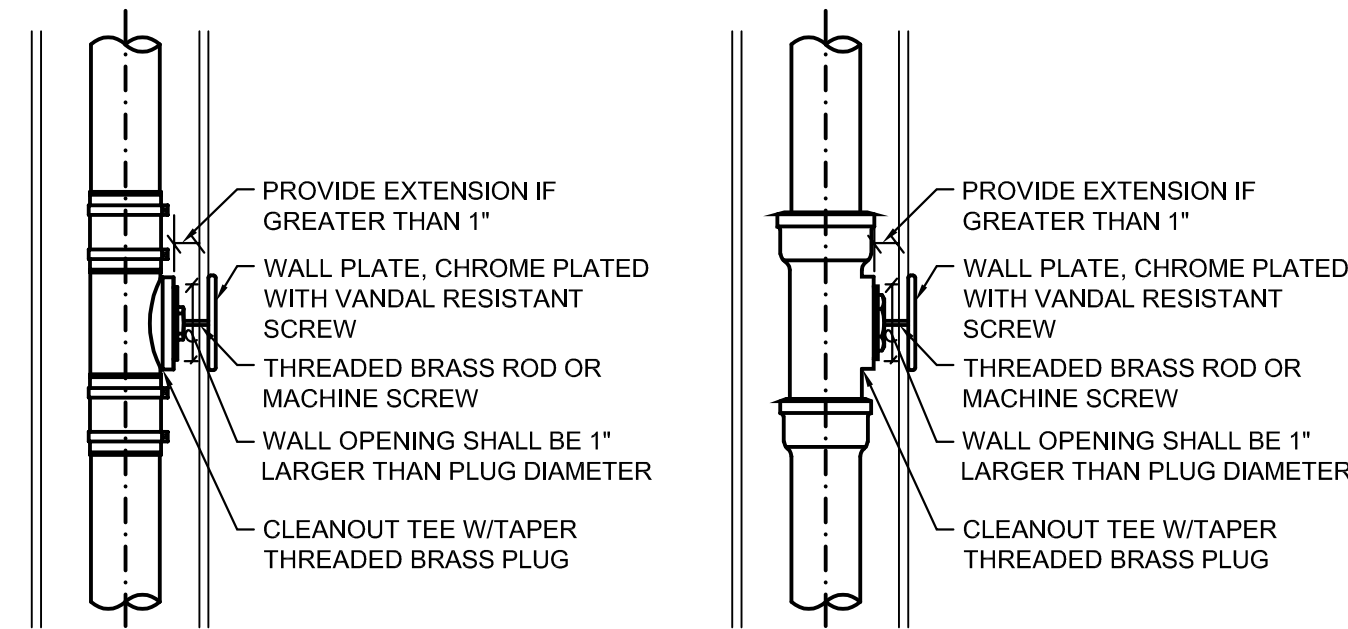
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J.S. BRIDWELL ACTIVITIES CENTER &
CANNEDY GREEK COMMONS



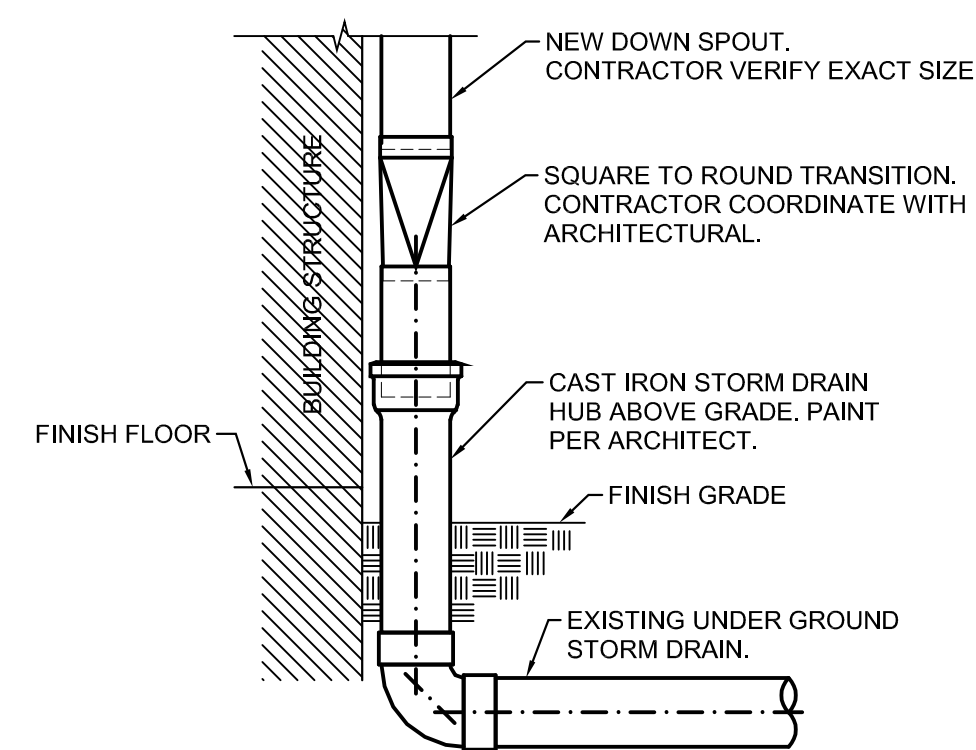
BYS architects
1005 Ninth Street, Suite 200 Wichita Falls, Texas 76701 (847) 763-2404
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DRAWN BY	HACKBUSCH, J
CHECKED BY	BDR
DATE	08/24/2020
PROJECT NO.	18071
PLUMBING ISOMETRIC RISER DIAGRAMS	
P402	

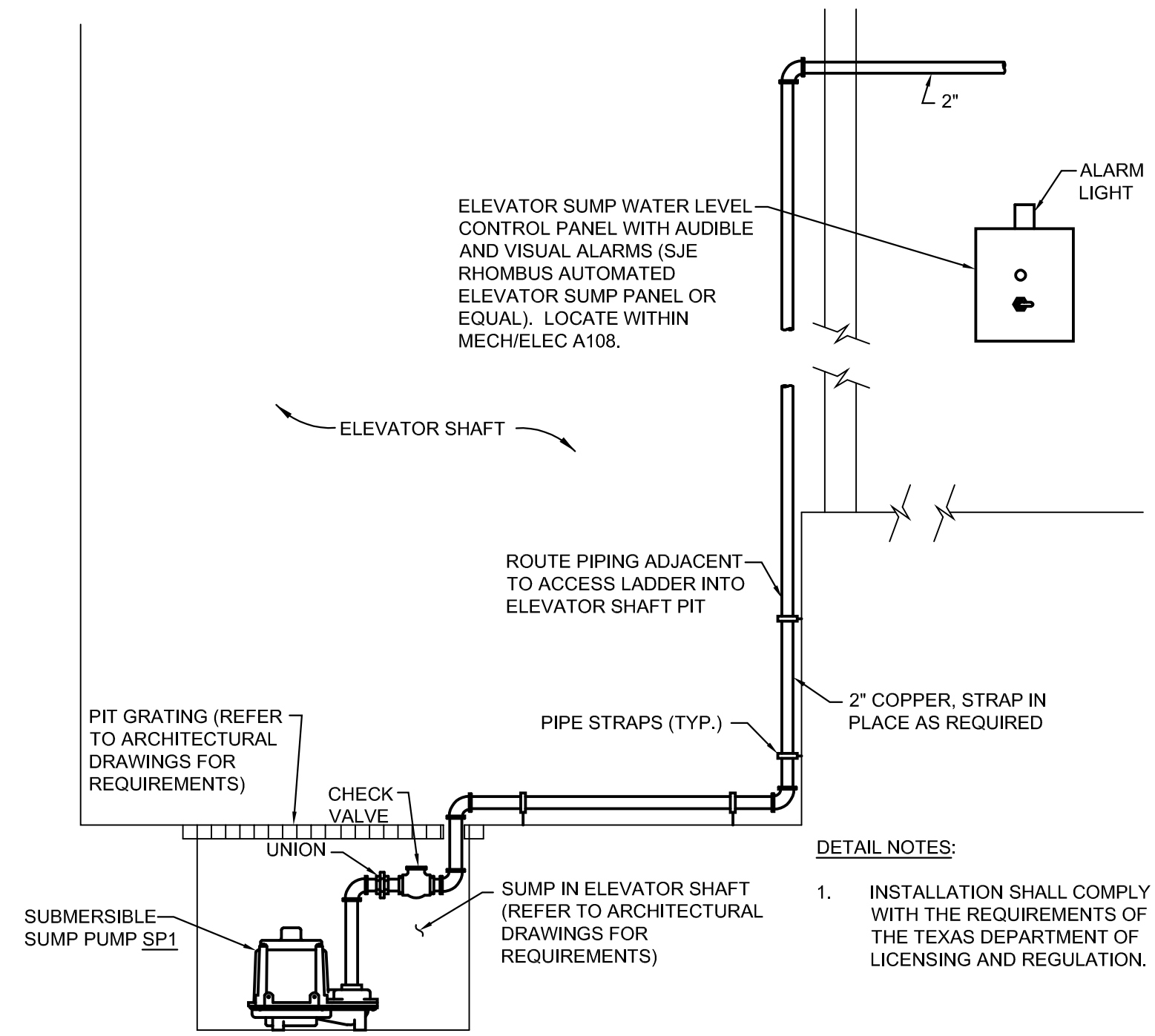
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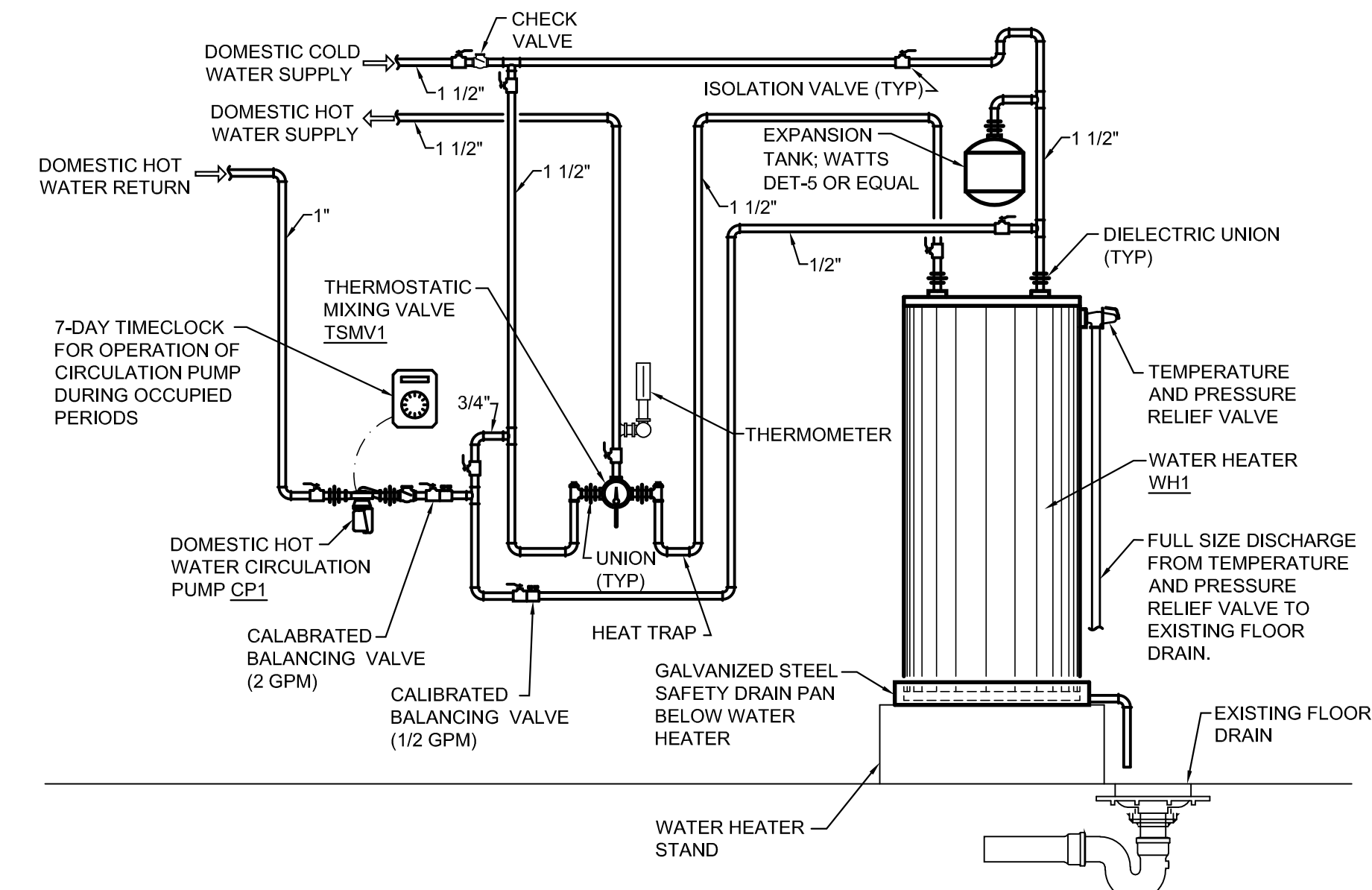
1 WALL CLEANOUT DETAIL
P501 NO SCALE



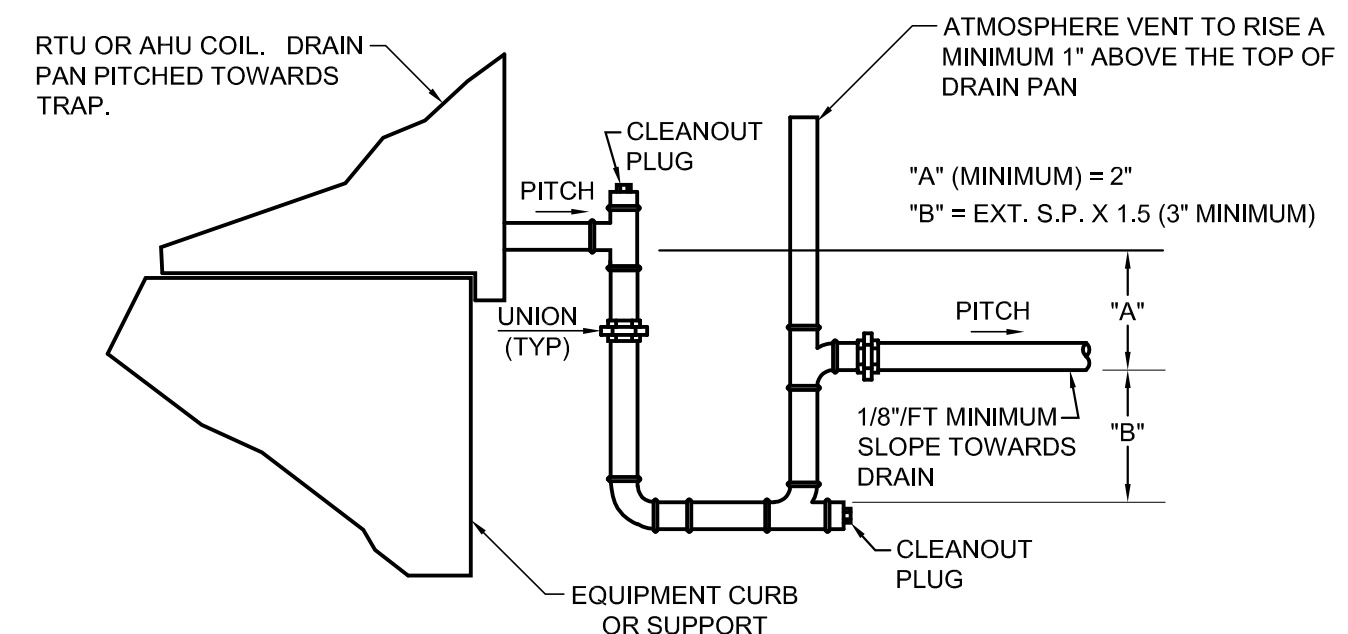
2 DOWNSPOUT TRANSITION DETAIL
P501 NO SCALE



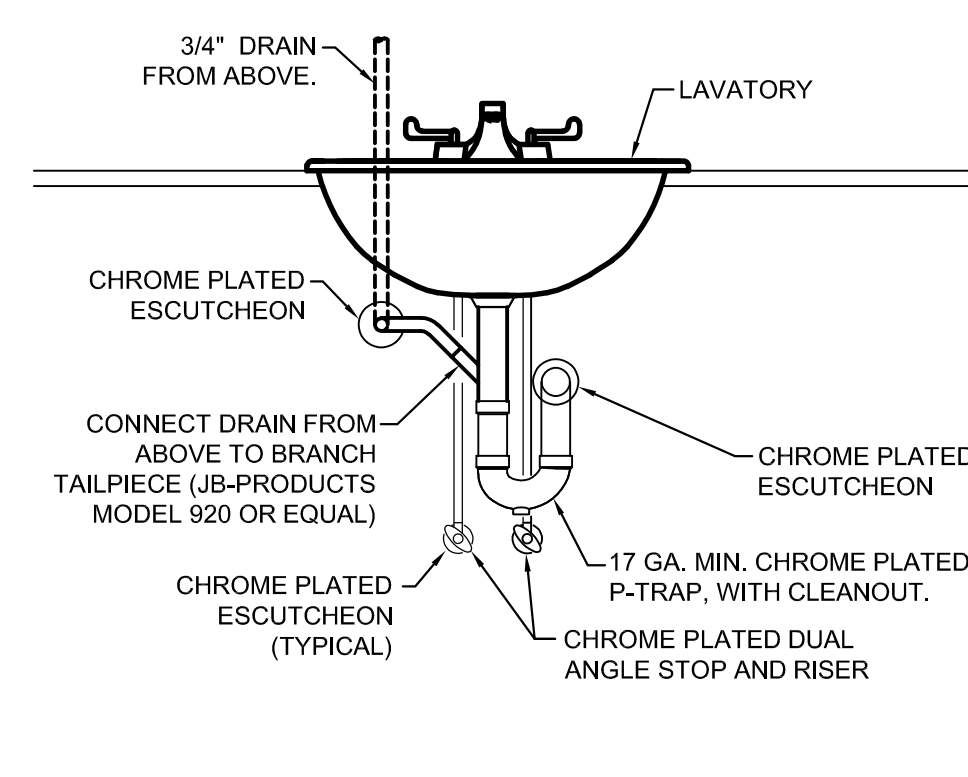
3 ELEVATOR SHAFT SUMP/SUMP PUMP DETAIL
P501 NO SCALE



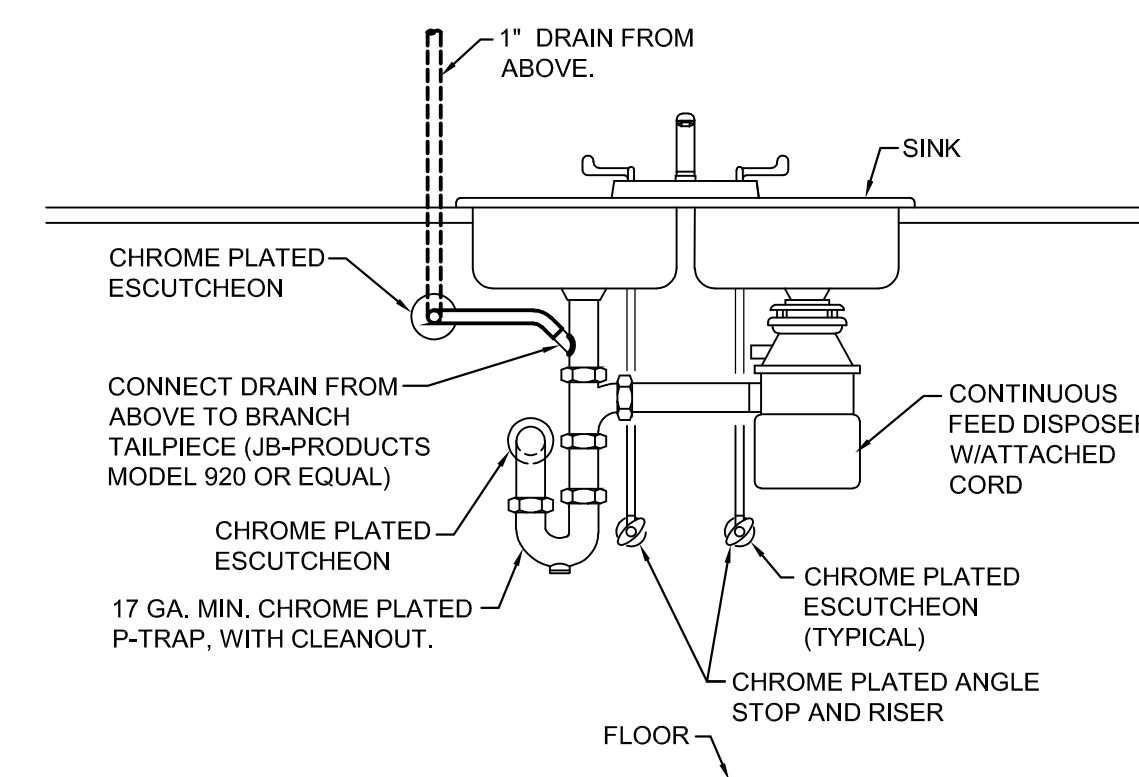
4 WATER HEATER DETAIL
P501 NO SCALE



5 CONDENSATE DRAINAGE DETAIL
P501 NO SCALE



6 TYPICAL LAVATORY BRANCH TAIL PIECE DETAIL
P501 NO SCALE



7 TYPICAL SINK BRANCH TAIL PIECE DETAIL
P501 NO SCALE

