

SYMBOLS	
	COLD WATER
	HOT WATER SUPPLY
	HOT WATER RETURN
	WASTE OR SANITARY
	WASTE OR SANITARY BELOW GRADE
	VENT AND SIZE
	STORM PIPE BELOW GRADE
	STORM PIPE ABOVE GRADE
	CONDENSATE DRAIN
	BALANCING VALVE
	CHECK VALVE VALVE
	HOSE BIBB/WALL HYDRANT
	PRESSURE REDUCING VALVE
	SHUT OFF VALVE
	DIRECTION OF FLOW
	REDUCER OR INCREASER
	TOP CONNECTION, 45 OR 90 DEGREES
	BOTTOM CONNECTION, 45 OR 90 DEGREES
	SIDE CONNECTION
	CAPPED OUTLET
	DROP IN PIPING
	RISE IN PIPING
	UNION
	SOLENOID VALVE
	WATER FLOW MEASURING DEVICE
	PRESSURE GAUGE
	VALVE IN RISER

PLUMBING ABBREVIATIONS	
A/E	ARCHITECT/ENGINEER
ACW	AUTOMATIC CLOTHES WASHER
ADA	AMERICANS WITH DISABILITIES ACT
ASME	AMERICAN SOCIETY OF MECHANICAL ENGINEERS
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
BFF	BELOW FINISHED FLOOR
BHP	BRAKE HORSEPOWER
BTU	BRITISH THERMAL UNIT
C/I	CONTRACTORS INSTALLED
CD	CONDENSATE
CO	CLEANOUT
CONN	CONNECTION
CONT	CONTINUOUS
CV	CHECK VALVE
CW	COLD WATER
DIA	DIAMETER
DN	DOWN
DOMW	DOMESTIC WATER
DWG	DRAWING
ECO	EXTERIOR CLEAN OUT
F	DEGREES FAHRENHEIT
FCO	FLOOR CLEAN OUT
FD	FLOOR DRAIN
FBC	FLORIDA BUILDING CODE
FCW	FILTERED COLD WATER
GAL	GALLONS
GPM	GALLONS PER MINUTE
HB	HOSE BIBB
HR	HOUR
HW	HOT WATER
I.E.	INVERT ELEVATION
IR	INDIRECT RECEPTOR
MAX	MAXIMUM
MIN	MINIMUM
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NTS	NOT TO SCALE
O/F	OWNER FURNISHED
PD	PUMP FURNISHED
PDI	PLUMBING DRAINAGE INSTITUTE
PRL	PRESSURE RELIEF LINE
PSIG	POUNDS PER SQUARE INCH
RWL	RAIN WATER LEADER
RM	ROOM
SPC	STANDARD PLUMBING CODE
ST	STORM
STO	STORM OVERFLOW
T&P	TEMPERATURE & PRESSURE
TPV	TRAP PRIMER VALVE
TYP	TYPICAL
U/G	UNDERGROUND
W	WITH
WCO	WALL CLEAN OUT

GENERAL NOTES	
A.	CONTRACTOR SHALL BE RESPONSIBLE TO PERFORM ALL WORK IN STRICT ACCORDANCE WITH THE 2014 FLORIDA BUILDING CODE, WITH ALL APPLICABLE LOCAL CODES AND ORDINANCES.
B.	CONTRACTOR SHALL VERIFY AND CORRECT AS REQUIRED TO MEET ALL CODES AND REGULATIONS ANY POSSIBLE DISCREPANCIES BETWEEN TYPE AND SIZE OF CONNECTION SPECIFIED IN PLUMBING FIXTURE SCHEDULE AND FIXTURES ACTUALLY INSTALLED ON THE SITE.
C.	VALVES AND FITTINGS SHALL BE OF SAME SIZE OF LINE ON WHICH THEY ARE LOCATED.
D.	CONTRACTOR SHALL COORDINATE ALL WORK WITH OTHER TRADES.
	CONTRACTOR SHALL FIELD VERIFY ALL GIVEN MEASUREMENTS PRIOR TO LAYING AND CONNECTING ALL PIPING SYSTEMS AND NOTIFY ARCHITECT OF ANY DISCREPANCIES.
E.	CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING FIRE RATING AND WEATHERPROOFING INTEGRITY OF ALL PIPING AND PENETRATIONS.
F.	ALL WATER SUPPLY AND SANITARY LINES SHALL BE RUN AS CLOSE TO PLANS AS POSSIBLE WITH NO CHANGES IN SIZING.
H.	CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL NECESSARY SUPPORTING DEVICES FOR ALL FIXTURES INCLUDED IN CONTRACT OR HEREIN SPECIFIED OR OTHERWISE.
I.	ROUTE ALL PIPING CONCEALED ABOVE CEILINGS, WITHIN WALLS, OR IN CHASES, PIPING EXPOSED SHALL BE SLOPED AND PAINTED TO MATCH ARCHITECTURAL FINISHES. PIPING IN MECHANICAL ROOMS MAY BE EXPOSED.
J.	SEE ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS OF PLUMBING FIXTURE MOUNTING HEIGHTS, AND DIMENSIONS.
K.	CONTRACTOR SHALL INSTALL DIELECTRIC UNIONS AT CONNECTIONS OF DISSIMILAR METALS.
L.	CONTRACTOR SHALL ROUGH-IN, ALL WASTES AND SUPPLIES TO SPECIAL EQUIPMENT ACCORDING TO MANUFACTURER'S SHOP DRAWINGS AND MAKE FINAL CONNECTIONS. ALL SUPPLIES SHALL BE VALVED, INSTALL VACUUM BREAKERS WHERE REQUIRED BY CODE.
M.	ALL WATER PIPING INSTALLED IN EXTERIOR WALLS SHALL BE PLACED ON THE INTERIOR SIDE OF THE WALL, SO THAT WALL INSULATION CAN BE PLACED ON THE EXTERIOR SIDE OF THE PIPING.
N.	DO NOT PENETRATE WALL FOOTINGS WITH PIPING, COORDINATE WITH GENERAL CONTRACTOR TO DROP FOOTINGS AS REQUIRED TO CLEAR PLUMBING SERVICES WHERE ABSOLUTELY NECESSARY. ALL PIPING PENETRATING A BEARING WALL OR FOOTING MUST BE SLEEVED AND LOCATION APPROVED BY STRUCTURAL ENGINEER.
O.	PIPING SHALL ESSENTIALLY BE ROUTED AND LOCATED AS INDICATED ON THE DRAWINGS; HOWEVER, ACTUAL PLACEMENT SHALL BE VERIFIED BY CONFIRMING EXACT LOCATION OF STRUCTURES AND OTHER UTILITIES IN THE FIELD AND BY CAREFUL LAYOUT PRIOR TO EXECUTION OF THE WORK. DRAWINGS ARE GENERALLY DIAGRAMMATIC. PIPING SHALL BE CONCEALED EXCEPT WHERE SPECIFICALLY NOTED OTHERWISE.
P.	VALVES ABOVE HARD CEILINGS SHALL BE PROVIDED WITH CEILING ACCESS HATCHES PER ARCHITECTURAL SPECIFICATIONS.
Q.	VALVES ABOVE HARD CEILINGS SHALL BE PROVIDED WITH CEILING ACCESS HATCHES PER ARCHITECTURAL SPECIFICATIONS.
R.	IN ADDITION TO PROVIDE VALVE TAGS, CONTRACTOR SHALL AFFIX A LABEL TO CEILING GRID OR ACCESS DOOR INDICATING VALVE FUNCTION AND NUMBER.
S.	CONTRACTOR SHALL COORDINATE EXACT PLUMBING FIXTURE LOCATION WITH ARCHITECTURAL DIMENSIONED ARCHITECTURAL PLANS PRIOR TO ROUGHING IN. THE PLUMBING DRAWINGS ARE DIAGRAMMATIC AND DO NOT REPRESENT EXACT LOCATIONS.
T.	PROVIDE WALL CLEANOUT AT THE BASE OF EACH SANITARY AND STORM VERTICAL STACK AS REQUIRED PER FLORIDA PLUMBING CODE. PROVIDE CLEANOUT ACCESS COVERS.
U.	THE PLANS HAVE BEEN PREPARED BASED ON A RECENT SURVEY AND CONSTRUCTION DOCUMENTS FROM PREVIOUS PROJECTS AND ARE THE BEST SOURCES OF INFORMATION TO DATE. ALL PIPING, EQUIPMENT, UTILITIES, ETC. SHALL BE FIELD VERIFIED. PLANS SHALL NOT BE SCALED.

PLUMBING FIXTURE SCHEDULE							
PROJECT: MARCO ISLAND EXECUTIVE AIRPORT							
DATE: MAY 2017							
NOTES: 1. COORDINATE COLOR OPTIONS W/ INT. DESIGN SHEETS PRIOR TO ORDERING. PRICE AS STANDARD COLOR OPTIONS. 2. SEE ARCHITECTURE SHEETS FOR MOUNTING HEIGHTS.							
FIXTURE TAG	DESCRIPTION & ACCESSORIES	MANUFACTURER	MODEL NUMBER	WASTE	VENT	CW	HW
WC-1	ELONGATED VITREOUS CHINA, WALL MOUNTED, 1-PIECE (14" HIGH) SIPHON JET SENSOR ACTIVATED FLUSH VALVE, 12V AC TRANSFORMER FOR MULTIPLE VALVES, DIAPHRAGM TYPE 1.28 GPF, WITH OPEN TOILET SEAT & HARDWARE PROVIDE MOUNTING RING, BOLTS, STOP, PROVIDE ZURN NARROW WALL CARRIER SYSTEM ZN1201-ND4 OR ZN1209-N4 OR APPROVED EQUAL.	KOHLER MOEN	K-4325 8311AC12	4"	2"	1"	
WC-2 (ADA)	ELONGATED VITREOUS CHINA, WALL MOUNTED, 1-PIECE (17" HIGH) SIPHON JET SENSOR ACTIVATED FLUSH VALVE, 12V AC TRANSFORMER FOR MULTIPLE VALVES, DIAPHRAGM TYPE 1.28 GPF, WITH OPEN TOILET SEAT & HARDWARE PROVIDE MOUNTING RING, BOLTS, STOP, ADA COMPLIANT. PROVIDE ZURN NARROW WALL CARRIER SYSTEM ZN1201-ND4 OR ZN1209-N4 OR APPROVED EQUAL.	KOHLER MOEN	K-4325 8311AC12	4"	2"	1"	
U-1	VITREOUS CHINA, BARRIER FREE, LOW CONSUMPTION 0.125 GPF, WASHOUT, 3/4" INLET SPUD, SENSOR ACTIVATED FLUSH VALVE, 12V AC TRANSFORMER FOR MULTIPLE VALVES, DIAPHRAGM TYPE	KOHLER MOEN	K-5452-ET 8316AC	2"	2"	3/4"	
U-2 (ADA)	VITREOUS CHINA, BARRIER FREE, LOW CONSUMPTION 0.125 GPF, WASHOUT, 3/4" INLET SPUD, SENSOR ACTIVATED FLUSH VALVE, 12V AC TRANSFORMER FOR MULTIPLE VALVES, DIAPHRAGM TYPE, ADA COMPLIANT	KOHLER MOEN	K-5452-ET 8316AC	2"	2"	3/4"	
L-1	VITREOUS CHINA, COUNTERTOP MOUNT, 0.35 GPM AERATOR, FRONT OVERFLOW, SINGLE HOLE, SENSOR ACTIVATED FAUCET, 12V AC TRANSFORMER, STRAINER, TRAP, STOPS, CW ONLY	KOHLER KOHLER	K-2196-1 K-13463	2"	1 1/2"	1/2"	
L-2 (ADA)	VITREOUS CHINA, WALL HUNG, CONCEALED ARC CARRIER, SINGLE HOLE, SENSOR ACTIVATED FAUCET, 12V AC TRANSFORMER, STRAINER, TRAP, STOPS, CW ONLY, ADA COMPLIANT	KOHLER KOHLER	K-2007 K-13463	2"	1 1/2"	1/2"	
S-1	DOUBLE BOWL SINK, DROP-IN STAINLESS STEEL, 8" DEEP SINK, STRAINER, TRAP, STOPS, TOP MOUNT FAUCET WITH GOOSENECK SWING SPOUT, LEVER HANDLES, 1.5 GPM, 1.0 HP HEAVY DUTY DISPOSAL, REVERSING MOTOR	ELKAY T&S BRASS INSINKERATOR	LR3322 B-1142-QT5KPF15 EVOLUTION EXCEL	2"	2"	1/2"	1/2"
S-2	SINGLE BOWL SINK, UNDERMOUNT STAINLESS STEEL, 6" DEEP SINK, STRAINER, TRAP, STOPS, DECK MOUNT FAUCET WITH GOOSENECK SWING SPOUT, LEVER HANDLES, 1.5 GPM	ELKAY ELKAY	DXUH1318 LKD208813C	2"	2"	1/2"	1/2"
SH-1 (ADA)	HAND SHOWER W/ 60" HOSE, 24" METAL SLIDE BAR, 1.5 GPM ANTI-SCALD THERMOSTATIC MIXING VALVE, CI BODY, ADJUSTABLE COLLAR W/ 5" SQ NICKLE BRONZE VANDAL RESISTANT STRAINER	SYMMONS ZURN	S-96-300-B30-L-X-1.5 ZN415B-A5	2"	2"	1/2"	1/2"
EW-1	WALL MOUNTED, STAINLESS STEEL, BI-LEVEL, VANDAL RESISTANT 50F OUTLET, 3/8" STOP, INSULATED COLD LINES CHROME PLATED P-TRAP, CARRIER WITH P-TRAP HANGER PLATE AND BACKING, CARBON FILTER, BOT ILE FILLING STATION	HALSEY TAYLOR	HTHB-HACBLWF	2"	1 1/2"	1/2"	
HB-1	HOSE BIBB, VANDAL RESISTANT, 3/4" MALE HOSE CONNECTION, LOOSE KEY, VACUUM BREAKER	WOODFORD	24			3/4"	
WH-1	WALL HYDRANT, EXPOSED, FREEZE PROOF, ANTI-SIPHON, BRASS CASING, VACUUM BREAKER, ALL BRONZE INTERIOR PARTS AND NON TURNING OPERATING ROD WITH FREE FLOATING COMPRESSION CLOSURE VALVE WITH CHROME FINISH AND OPERATING KEY, PROVIDE ROUND BOX ON TILT WALL CONSTRUCTION.	WATTS	HY-725-R			3/4"	
IB-1	ICE MAKER OUTLET BOX, NO-LEAD VALVES, W/ ARRESTOR	SIoux CHEIF	696-G1010			1/2"	
MS-1	FLOOR MOUNTED 24X24X12 MOP SINK WITH STAINLESS STEEL CURB CAP, PROVIDE TRAP, STRAINER PROVIDE SERVICE FAUCET, MOP BRACKET, HOSE RACK, STAINLESS STEEL WALL GUARD.	FIAT TS BRASS	TSB3000-MSG B0665-BSTR	3"	2"	3/4"	3/4"
PDI	WATER HAMMER ARRESTOR	SIoux CHIEF	HYDRA-RESTER			VARIES	VARIES
WCO	WALL CLEAN OUT	WATTS	CO-590-RD			VARIES	
FCO	FLOOR CLEAN OUT, POLISHED BRONZE, COORDINATE FLOORING MATERIALS WITH FINAL FINISH	WATTS	CO-200-P-R			VARIES	
ECO	EXTERIOR CLEAN OUT, HEAVY DUTY ROUND SCORATED DUCTILE IRON TOP, PROVIDE 18"x4" THICK CONCRETE COLLAR.	WATTS	CO-200P-RX4			VARIES	
FD-1	CAST IRON BODY, FLASHING CLAMP AND ADJUSTABLE SQUARE NICKEL BRONZE TOP, TRAP PRIMER CONNECTION.	ZURN	ZN-415B-P	3" OR 4"	2"	1/2"	
FD-2	EQUIPMENT ROOM FLOOR DRAIN, CAST IRON BODY, FLASHING CLAMP AND ADJUSTABLE NICKEL BRONZE TOP, SEDIMENT BUCKET, TRAP PRIMER	ZURN	ZN-415-7N-P	VARIES	2"	1/2"	
HD-1	COATED CAST IRON BODY, FLASHING CLAMP RAISED FLANGE, GALVANIZED CAST IRON STRAINER.	ZURN	Z-415I-GU	VARIES			
BWV	BACKWATER VALVE (W/ VALVE BOX U/G OR IN SLAB)	WATTS	BV-200	VARIES			
FS-1	FLOOR SINK, 12"x12"x8" DEEP, SQUARE SLOTTED MEDIUM DUTY GRATE, ACID RESISTANT PORCELAIN ENAMEL, INTERIOR AND TOP, ALUMINUM DOME STRAINER, TRAP PRIMER CONNECTION, COORDINATE GRATES AND FUNNELS AS INDICATED BY KITCHEN CONSULTANT.	ZURN	Z-1901-32	VARIES	2"	1/2"	
LB-1	WASHING MACHINE SHUT-OFF VALVES MOUNTED IN HIGH IMPACT ENCLOSURE WITH 2" DRAIN CONNECTION, 1/2" HOT AND COLD WATER CONNECTIONS AND 1/4 TURN BALL VALVES, STUD MOUNTING BRACKETS, PROVIDED WITH WATER HAMMER ARRESTORS.	OATEY	38393	2"	1 1/2"	1/2"	1/2"

ELECTRIC WATER HEATER SCHEDULE						
MARK	STORAGE CAPACITY	KW	ELECTRICAL			MANUFACTURER MODEL NO.
			VOLTS	PHASE	HZ	
EW-1-1	40	6.0	277	1	60	STATE PCE 40 20LSA-6
EW-1-2	20	4.0	277	1	60	STATE PCE 20 10MSA-4
EW-1-1	20	4.0	277	1	60	STATE PCE 20 10MSA-4
EW-1-2	20	3.0	277	1	60	STATE PCE 20 10MSA-3

NOTES:  
1. PROVIDE A 2 GALLON EXPANSION TANK AND PRE CHARGE TO SYSTEM PRESSURE.  
2. RECIRCULATION PUMPS RCP-1-1, RCP-1-2, RCP-2-1, RCP-2-2 SHALL HAVE CAPACITY OF 1.0 GPM AT 5' TDH, GRUNDFOS UP 15-10B5, 1/25 HP, 120V/1PH.

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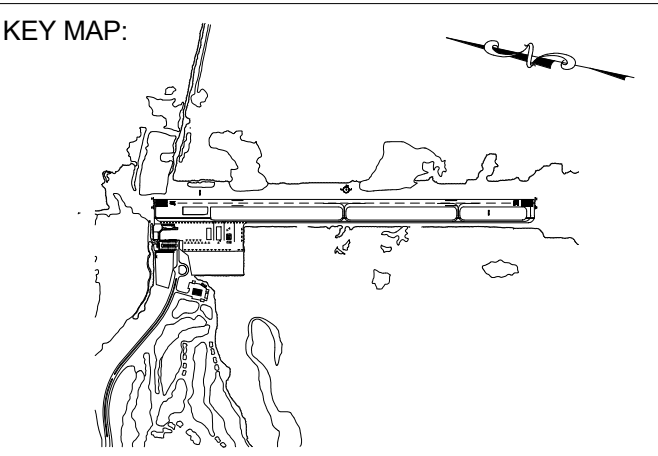
MARCO ISLAND  
EXECUTIVE AIRPORT  
COLLIER COUNTY, FLORIDA



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**SCHENKELSHULTZ**  
ARCHITECTURE



DRAWING SCALE:

REVISIONS		
MARK	DESCRIPTION	DATE

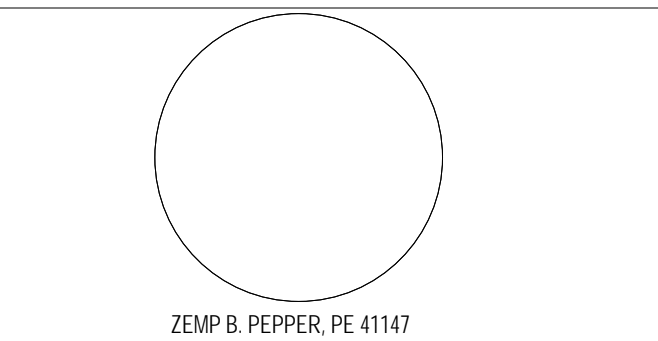
PROJECT NAME:  
**NEW TERMINAL FACILITY  
AND ASSOCIATED  
IMPROVEMENTS**

SHEET TITLE:

**PLUMBING SYMBOLS AND  
LEGEND**

VOLUME 2

ENGINEER OF RECORD:



JOB NO.: 1620729  
DATE: May 2017  
DRAWN: SB  
DESIGN: ZP  
CHECKED: ZP

NOTE: GENERAL CONTRACTORS (GC) BIDDING SHALL PROVIDE WRITTEN VERIFICATION WITH THEIR BIDS THAT ALL OF THEIR SUBCONTRACTORS BIDDING THIS PROJECT HAVE BECOME FAMILIAR WITH ALL CONSTRUCTION DRAWING SHEETS & PROJECT MANUAL SPECIFICATIONS TO ENSURE THE GC AND SUB-CONTRACTORS CONSTRUCTION BIDS SHALL PROVIDE THE TOTALITY OF THE ENTIRE CONTRACT DOCUMENT REQUIREMENTS.

SHEET NO.

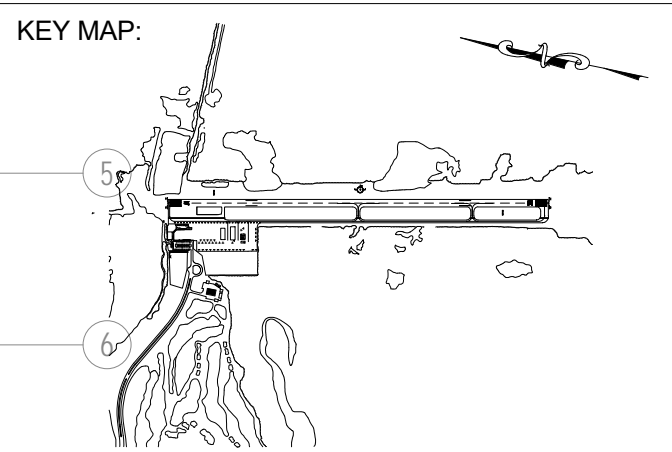
**P001**



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

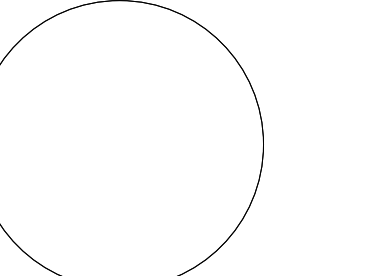
REVISIONS		
MARK	DESCRIPTION	DATE
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PROJECT NAME:  
**NEW TERMINAL FACILITY  
AND ASSOCIATED  
IMPROVEMENTS**

SHEET TITLE:  
**PLUMBING FIRST FLOOR  
PLAN**

**VOLUME 2**

ENGINEER OF RECORD:



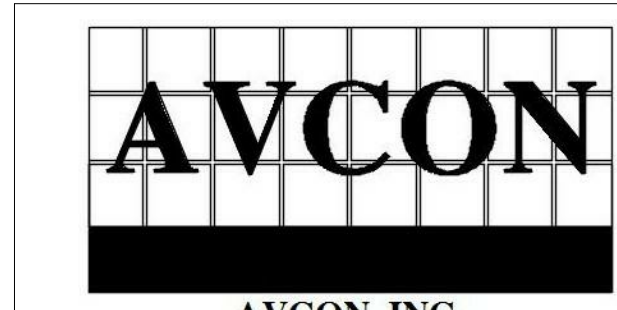
ZEMP B. PEPPER, PE #1147

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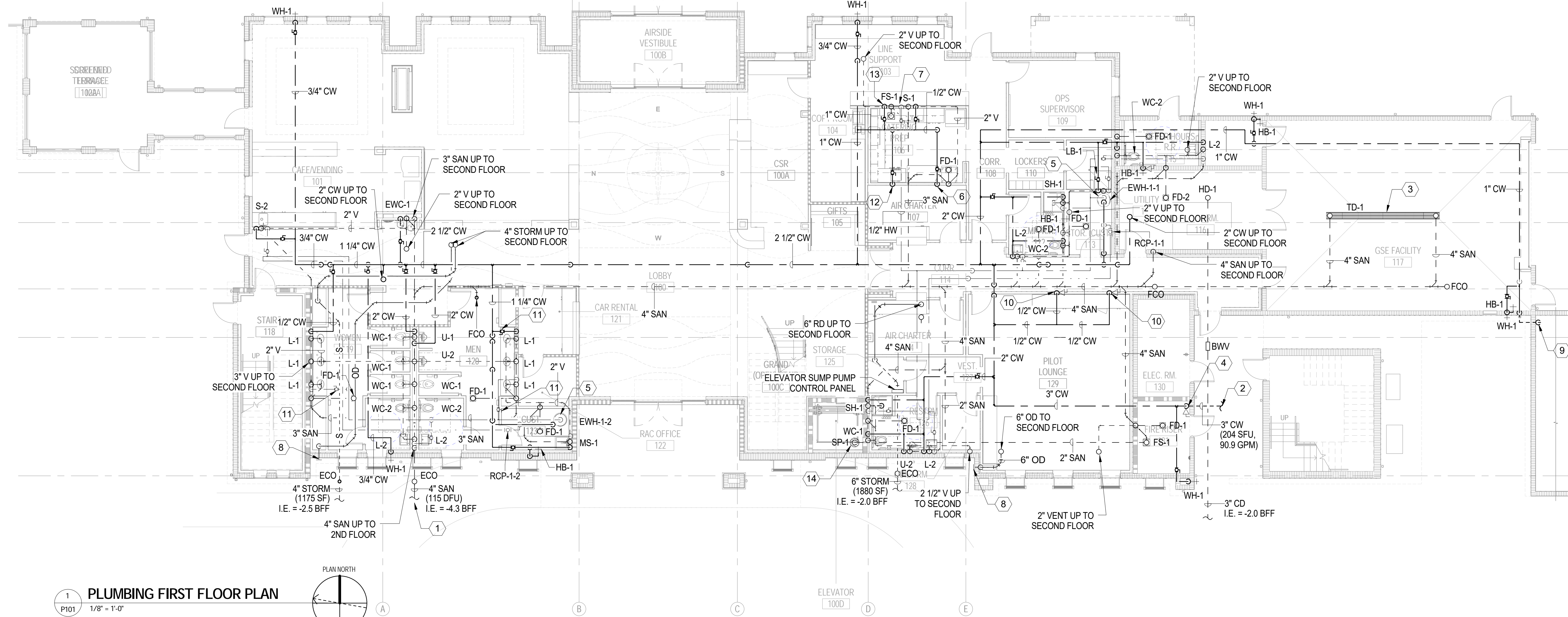
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**P101**



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**1**  
P101 1/8" = 1'-0"

**PLUMBING GENERAL NOTES**

- A. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS PRIOR TO CONSTRUCTION AND SHALL BRING ANY DISCREPANCIES, UNFORESEEN CONDITIONS OR INTERFERENCES TO THE ATTENTION OF THE ARCHITECT/ENGINEER. NO CLAIMS FOR ADDITIONAL WORK DO TO OBSERVABLE CONDITIONS WILL BE CONSIDERED.
- B. ALL WORK AND EQUIPMENT SHALL MEET THE REQUIREMENTS OF THE MOST RECENTLY REVISED VERSION OF ALL APPLICABLE LAWS, RULES, REGULATIONS, AND ORDINANCES OF FEDERAL, STATE, AND LOCAL AUTHORITIES, WHETHER INDICATED ON THE DRAWINGS OR NOT.
- C. ADHERE TO THE DRAWINGS WHEN REQUIREMENTS ARE STRICTER THAN CODE REQUIREMENTS AND ARE PERMITTED UNDER THE CODE.
- D. REPORT ANY ALTERATION TO AND/OR DEVIATIONS FROM THE DRAWING AS REQUIRED BY THE ABOVE AUTHORITIES TO THE ARCHITECT/ENGINEER AND SECURE HIS APPROVAL BEFORE STARTING ALTERATIONS.
- E. THE CONTRACTOR SHALL REQUEST SUPPLEMENTARY INSTRUCTIONS FROM THE ARCHITECT/ENGINEER IN ALL CASES OF DOUBT AS TO THE WORK INTENDED, OR IF ADDITIONAL EXPLANATION IS NEEDED.
- F. PIPE ROUTING SHOWN IS SCHEMATIC AND IS INTENDED TO INDICATE GENERAL ROUTING. PLUMBING CONTRACTOR SHALL PROVIDE ANY ADDITIONAL OFFSETS AND FITTINGS REQUIRED FOR PROPER INSTALLATION AND TO MAINTAIN CLEARANCES AS ENCOUNTERED IN THE FIELD.
- G. PROVIDE EQUIPMENT CLEARANCES IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS AND IN ACCORDANCE WITH ALL APPLICABLE CODES.
- H. PROVIDE FIRE STOPPING AT ALL PENETRATIONS OF RATED ASSEMBLIES (SLAB AND ANY RATED WALLS).
- I. NOTE ALL GRAVITY DRAINAGE PIPING SHALL BE SLOPED AT 1/8" PER FOOT UNLESS NOTED OTHERWISE.
- J. REFER TO ARCHITECTURAL PLANS FOR DRAINAGE SYSTEM UTILIZING DOWNSPOUTS AND GUTTERS.

**PLUMBING KEYNOTES**

1	SANITARY POINT OF CONNECTION TO SITE CIVIL. REFERENCE CIVIL PLANS FOR CONTINUATION.
2	DOMESTIC WATER SERVICE CONNECTION TO SITE CIVIL. REFERENCE CIVIL PLANS FOR CONTINUATION.
3	6" WIDE TRENCH DRAIN ASSEMBLY. TRENCH DRAIN ASSEMBLY SHALL BE RATED FOR CLASS H20 LOADING FOR TUGS. REFERENCE DETAIL 02/P502.
4	PROVIDE DOMESTIC WATER SHUT-OFF VALVE AT 5'-0" AFF, MAXIMUM.
5	FLOOR MOUNTED ELECTRIC WATER HEATER, REFERENCE DETAIL 03/P501.
6	1/2" CW WITH SHUT-OFF VALVE TO OATEY #39140 RECESSED BOX FOR ICE MACHINE. PROVIDE INLINE FILTER IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. RUN CONDENSATE AND BIN DRAINS TO FLOOR DRAIN.
7	PROVIDE 1/2" HW VALVE CONNECTION FOR DISHWASHER. PROVIDE DRAIN CONNECTION FROM DISHWASHER TO S-1 TRAP. REFER TO ARCHITECTURE PLANS FOR DISHWASHER SPECIFICATIONS.
8	PROVIDE SIDEWALL DOWNSPOUT NOZZLE SIMILAR TO J.R. SMITH 1700-NB FOR OVERFLOW DRAIN TERMINATION. REFER TO ARCHITECTURAL PLANS FOR OVERFLOW NOZZLE ELEVATION.
9	1" MAKE-UP WATER. REFERENCE SHEET M201 FOR CONTINUATION. PROVIDE BACKFLOW PREVENTER AND PIPE ANCILLARIES AS SHOWN ON MECHANICAL PLANS.
10	PROVIDE 1/2" VALVED CONNECTIONS ABOVE COUNTER FOR COFFEE MACHINE AND TABLE TOP WATER COOLER. EXACT LOCATIONS TO BE COORDINATE WITH ARCHITECT/OWNER.
11	SHUT-OFF VALVES FOR LAVATORY GROUP SHALL BE ACCESSIBLE IN WALL UNDERCOUNTER WITH ACCESS PANEL.
12	PROVIDE 1/2" VALVED CONNECTION ABOVE COUNTER FOR COFFEE MACHINE. EXACT LOCATION TO BE COORDINATED WITH ARCHITECT/OWNER.
13	PROVIDE 1/2" VALVED CONNECTION, STRAINER, VACUUM BREAKER IF REQUIRED, AND FITTING FOR FLEX CONNECTION TO DISHWASHER PER MANUFACTURER'S REQUIREMENTS. PROVIDE INDIRECT DRAIN CONNECTION TO FLOOR SINK PER MANUFACTURER'S REQUIREMENTS.
14	REFERENCE DETAIL 03/P503 FOR ELEVATOR SUMP PUMP SPECIFICATIONS AND INSTALLATION DETAIL.

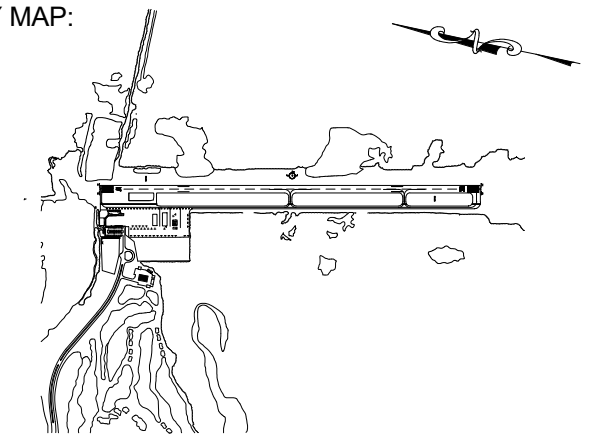


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**SCHENKELSHULTZ**  
ARCHITECTURE

KEY MAP:



DRAWING SCALE:

1/8" = 1'-0"

REVISIONS

MARK	DESCRIPTION	DATE

PROJECT NAME:

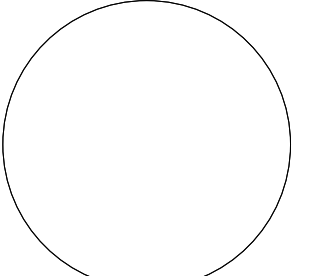
**NEW TERMINAL FACILITY  
AND ASSOCIATED  
IMPROVEMENTS**

SHEET TITLE:

**PLUMBING SECOND  
FLOOR PLAN**

**VOLUME 2**

ENGINEER OF RECORD:



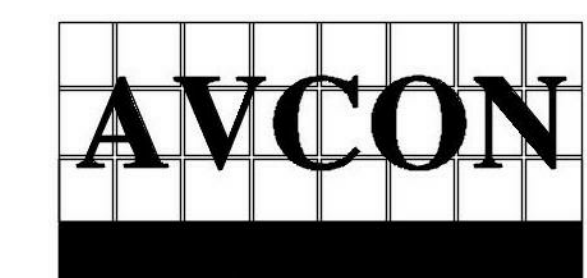
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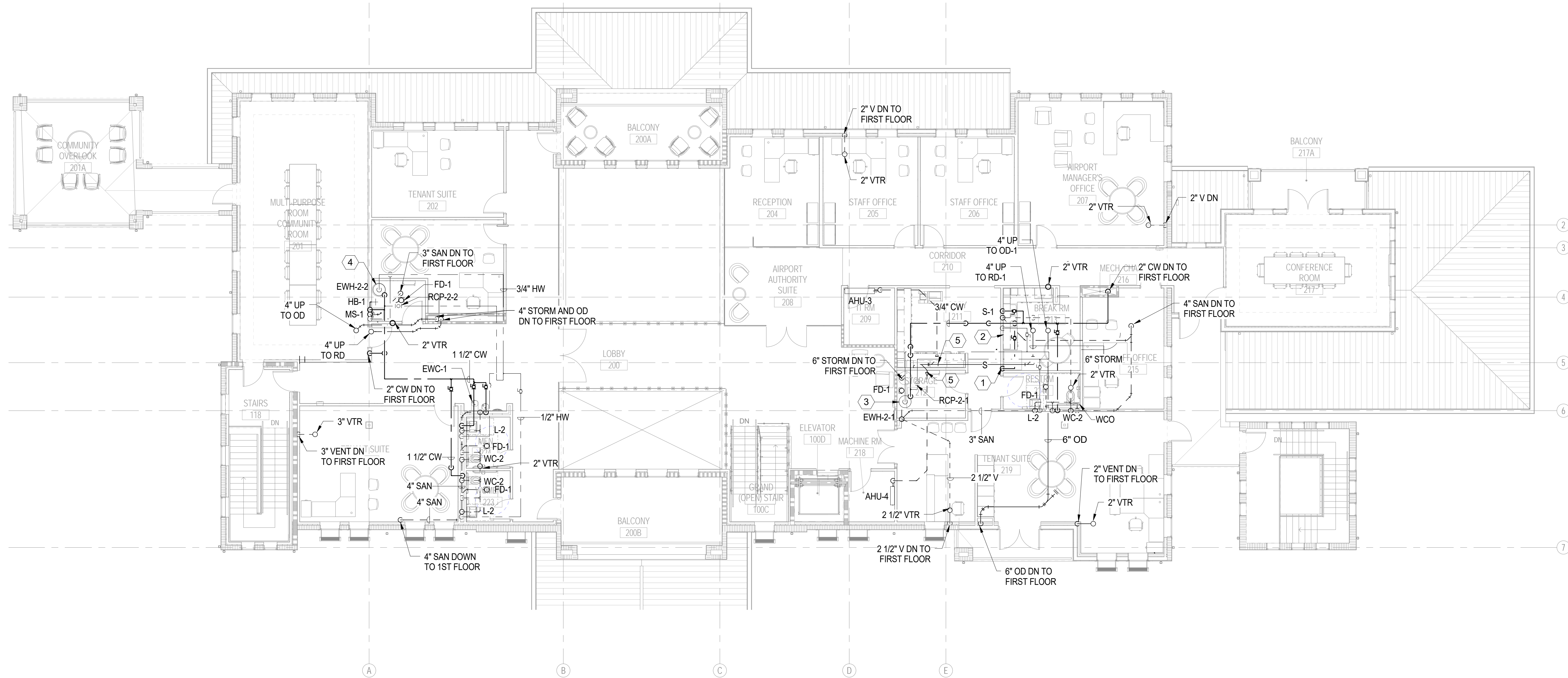
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SHEET NO.

**P102**

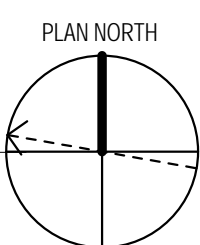


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**1 PLUMBING SECOND FLOOR PLAN**

P102 1/8" = 1'-0"



**PLUMBING GENERAL NOTES**

- A. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS PRIOR TO CONSTRUCTION AND SHALL BRING ANY DISCREPANCIES, UNFORESEEN CONDITIONS OR INTERFERENCES TO THE ATTENTION OF THE ARCHITECT/ENGINEER. NO CLAIMS FOR ADDITIONAL WORK DO TO OBSERVABLE CONDITIONS WILL BE CONSIDERED.
- B. ALL WORK AND EQUIPMENT SHALL MEET THE REQUIREMENTS OF THE MOST RECENTLY REVISED VERSION OF ALL APPLICABLE LAWS, RULES, REGULATIONS, AND ORDINANCES OF FEDERAL, STATE, AND LOCAL AUTHORITIES, WHETHER INDICATED ON THE DRAWINGS OR NOT.
- C. ADHERE TO THE DRAWINGS WHEN REQUIREMENTS ARE STRICTER THAN CODE REQUIREMENTS AND ARE PERMITTED UNDER THE CODE.
- D. REPORT ANY ALTERATION TO AND/OR DEVIATIONS FROM THE DRAWING AS REQUIRED BY THE ABOVE AUTHORITIES TO THE ARCHITECT/ENGINEER AND SECURE HIS APPROVAL BEFORE STARTING ALTERATIONS.
- E. THE CONTRACTOR SHALL REQUEST SUPPLEMENTARY INSTRUCTIONS FROM THE ARCHITECT/ENGINEER IN ALL CASES OF DOUBT AS TO THE WORK INTENDED, OR IF ADDITIONAL EXPLANATION IS NEEDED.
- F. PIPE ROUTING SHOWN IS SCHEMATIC AND IS INTENDED TO INDICATE GENERAL ROUTING. PLUMBING CONTRACTOR SHALL PROVIDE ANY ADDITIONAL OFFSETS AND FITTINGS REQUIRED FOR PROPER INSTALLATION AND TO MAINTAIN CLEARANCES AS ENCOUNTERED IN THE FIELD.
- G. PROVIDE EQUIPMENT CLEARANCES IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS AND IN ACCORDANCE WITH ALL APPLICABLE CODES.
- H. PROVIDE FIRE STOPPING AT ALL PENETRATIONS OF RATED ASSEMBLIES (SLAB AND ANY RATED WALLS).
- I. NOTE ALL GRAVITY DRAINAGE PIPING SHALL BE SLOPED AT 1/8" PER FOOT UNLESS NOTED OTHERWISE.
- J. REFER TO ARCHITECTURAL PLANS FOR DRAINAGE SYSTEM UTILIZING DOWNSPOUTS AND GUTTERS.

**PLUMBING KEYNOTES**

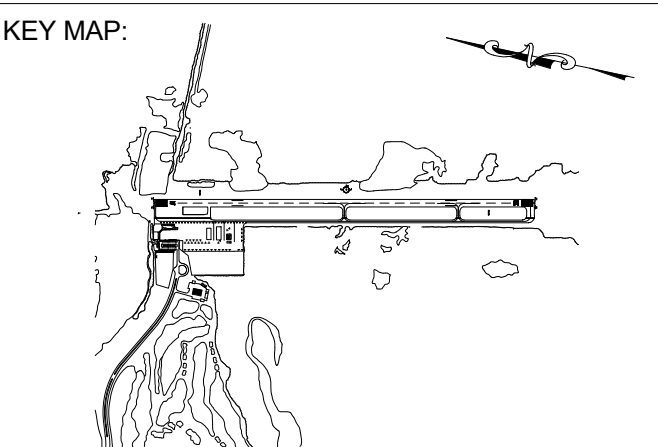
1	1/2" CW WITH SHUT-OFF VALVE TO OATEY #39140 RECESSED BOX FOR REFRIGERATOR ICE MAKER.
2	PROVIDE 1/2" HW VALVE CONNECTION FOR DISHWASHER. PROVIDE DRAIN CONNECTION FROM DISHWASHER TO S-1 TRAP. REFER TO ARCHITECTURE PLANS FOR DISHWASHER SPECIFICATIONS.
3	ELECTRIC WATER HEATER TO BE INSTALLED ON SIDEWALL RACK AND MOUNTED 7" ABOVE FINISHED FLOOR, REFERENCE DETAIL 04/P501.
4	FLOOR MOUNTED ELECTRIC WATER HEATER, REFERENCE DETAIL 03/P501.
5	CONNECT CONDENSATE TO STORM PIPING WITH WYE FITTING.*



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FBPR CA NO. 24

**SCHENKELSHULTZ**  
ARCHITECTURE



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

REVISIONS		
MARK	DESCRIPTION	DATE

PROJECT NAME:  
**NEW TERMINAL FACILITY  
AND ASSOCIATED  
IMPROVEMENTS**

SHEET TITLE:  
**PLUMBING ROOF PLAN**

**VOLUME 2**

ENGINEER OF RECORD:

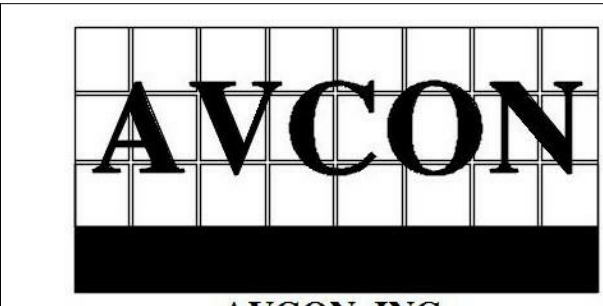
ZEMP B. PEPPER, PE 41147

JOB NO.: 1620729  
DATE: May 2017  
DRAWN: SB  
DESIGN: ZP  
CHECKED: ZP

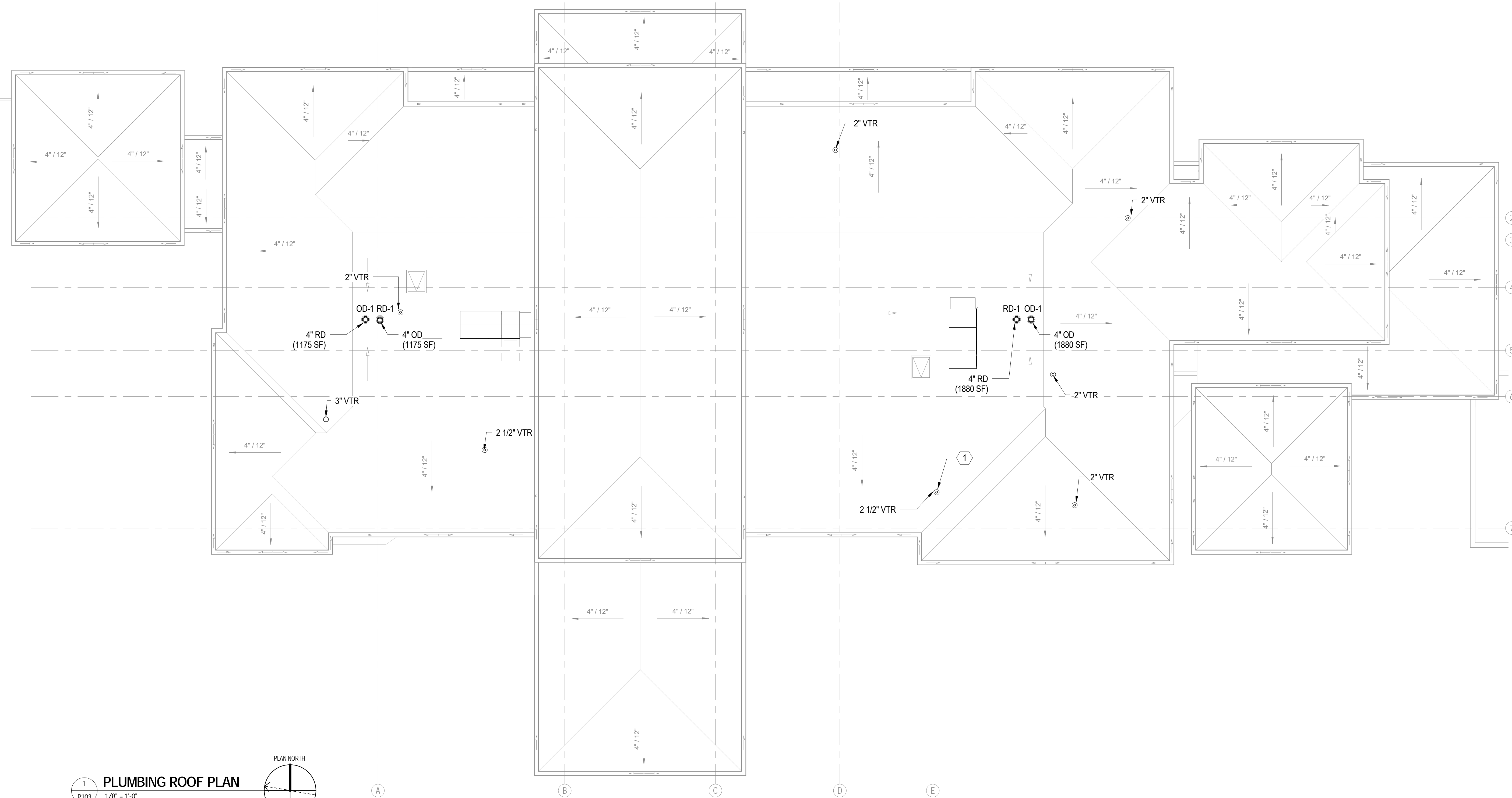
NOTE: GENERAL CONTRACTORS (GC) BIDDING SHALL PROVIDE WRITTEN VERIFICATION WITH THEIR BIDS THAT ALL OF THEIR SUBCONTRACTORS BIDDING THIS PROJECT HAVE BECOME FAMILIAR WITH ALL CONSTRUCTION DRAWING SHEETS & PROJECT MANUAL SPECIFICATIONS TO ENSURE THE GC AND SUB-CONTRACTORS CONSTRUCTION BIDS SHALL PROVIDE THE TOTALITY OF THE ENTIRE CONTRACT DOCUMENT REQUIREMENTS.

SHEET NO.

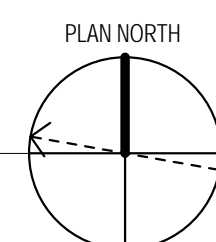
**P103**



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**1 PLUMBING ROOF PLAN**  
P103 1/8" = 1'-0"



**PLUMBING GENERAL NOTES**

- A. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS PRIOR TO CONSTRUCTION AND SHALL BRING ANY DISCREPANCIES, UNFORESEEN CONDITIONS OR INTERFERENCES TO THE ATTENTION OF THE ARCHITECT/ENGINEER. NO CLAIMS FOR ADDITIONAL WORK DO TO OBSERVABLE CONDITIONS WILL BE CONSIDERED.
- B. ALL WORK AND EQUIPMENT SHALL MEET THE REQUIREMENTS OF THE MOST RECENTLY REVISED VERSION OF ALL APPLICABLE LAWS, RULES, REGULATIONS, AND ORDINANCES OF FEDERAL, STATE, AND LOCAL AUTHORITIES, WHETHER INDICATED ON THE DRAWINGS OR NOT.
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- E. THE CONTRACTOR SHALL REQUEST SUPPLEMENTARY INSTRUCTIONS FROM THE ARCHITECT/ENGINEER IN ALL CASES OF DOUBT AS TO THE WORK INTENDED, OR IF ADDITIONAL EXPLANATION IS NEEDED.
- F. PIPE ROUTING SHOWN IS SCHEMATIC AND IS INTENDED TO INDICATE GENERAL ROUTING. PLUMBING CONTRACTOR SHALL PROVIDE ANY ADDITIONAL OFFSETS AND FITTINGS REQUIRED FOR PROPER INSTALLATION AND TO MAINTAIN CLEARANCES AS ENCOUNTERED IN THE FIELD.
- G. PROVIDE EQUIPMENT CLEARANCES IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS AND IN ACCORDANCE WITH ALL APPLICABLE CODES.
- H. PROVIDE FIRE STOPPING AT ALL PENETRATIONS OF RATED ASSEMBLIES (SLAB AND ANY RATED WALLS).
- I. NOTE ALL GRAVITY DRAINAGE PIPING SHALL BE SLOPED AT 1/8" PER FOOT UNLESS NOTED OTHERWISE.
- J. REFER TO ARCHITECTURAL PLANS FOR DRAINAGE SYSTEM UTILIZING DOWNSPOUTS AND GUTTERS.

**PLUMBING KEYNOTES**

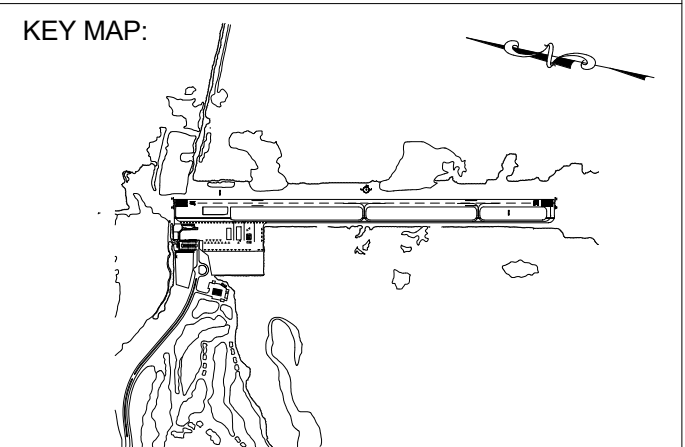
- 1** PLUMBING VENT THROUGH ROOF, REFER TO DETAIL 06/P501. VTR'S SHALL TERMINATE A MINIMUM OF 15' FROM ROOFTOP UNIT OUTSIDE AIR INTAKE OR AS REQUIRED BY CODE, WHICHEVER IS MORE STRINGENT, TYPICAL.



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**SCHENKELSHULTZ**  
ARCHITECTURE



DRAWING SCALE:  
12" = 1'-0"

REVISIONS

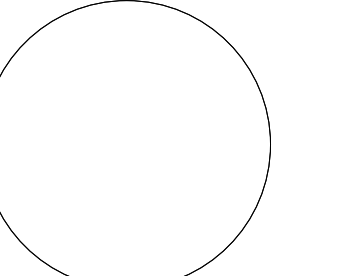
MARK	DESCRIPTION	DATE

PROJECT NAME:  
**NEW TERMINAL FACILITY  
AND ASSOCIATED  
IMPROVEMENTS**

SHEET TITLE:  
**PLUMBING RISERS**

VOLUME 2

ENGINEER OF RECORD:



ZEMP B. PEPPER, PE #1147

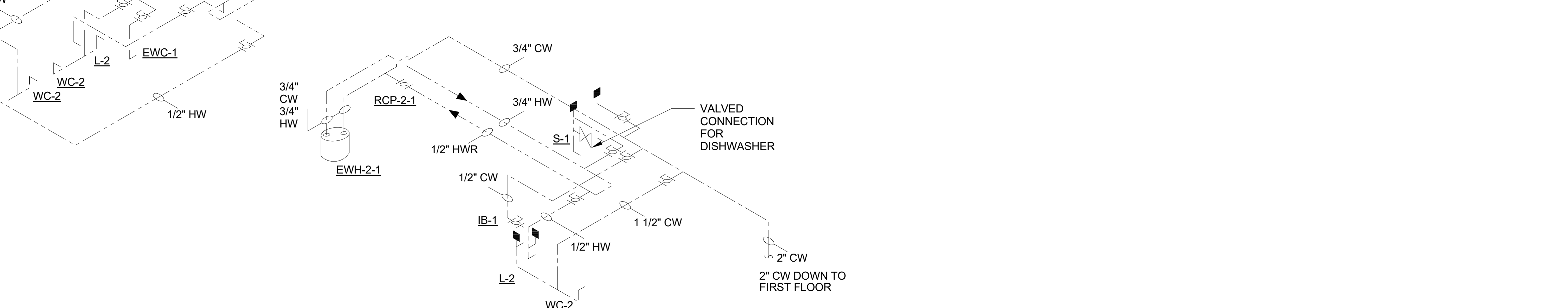
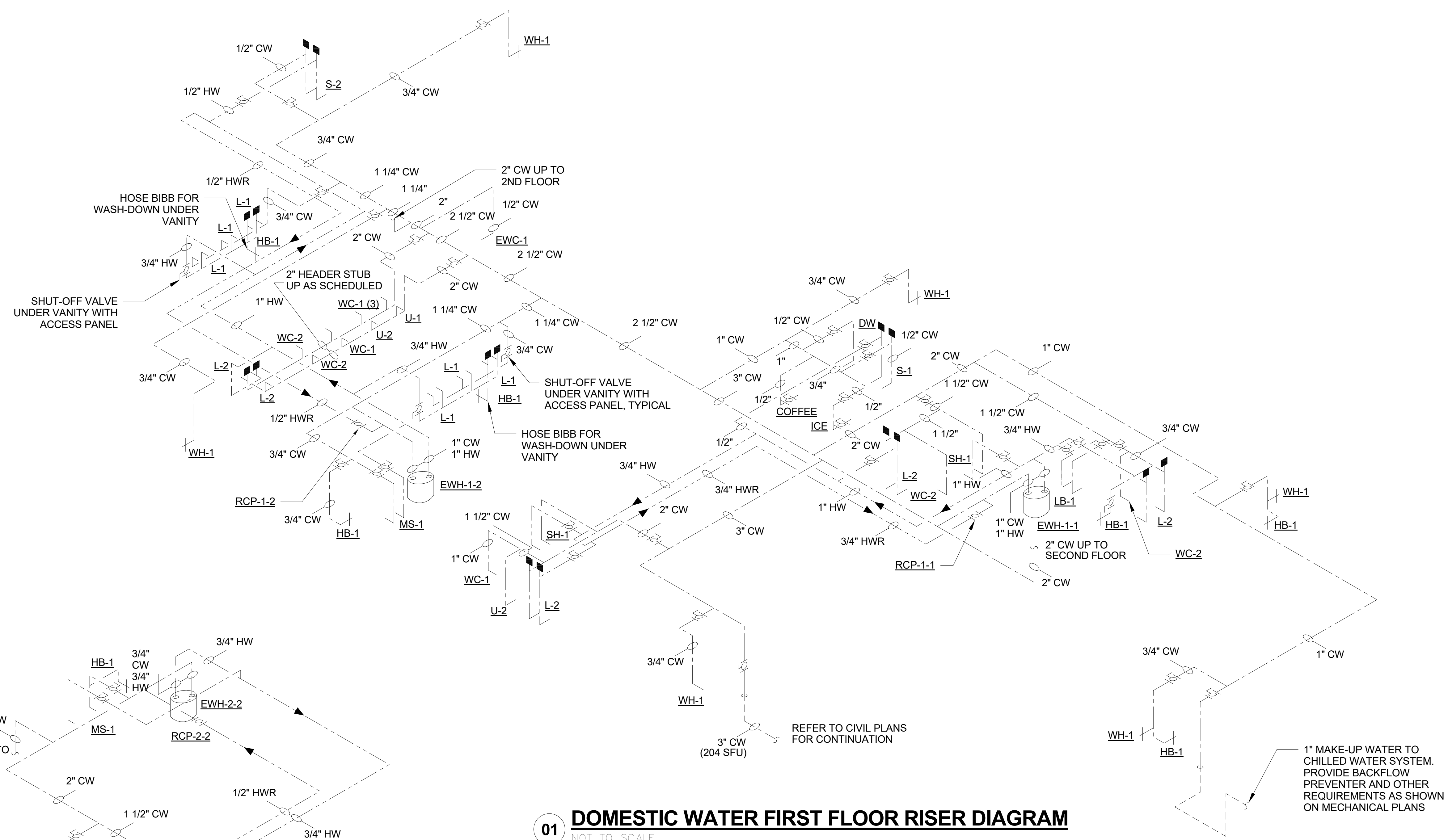
JOB NO.: 1620729  
DATE: May 2017  
DRAWN: SB  
DESIGN: ZP  
CHECKED: ZP

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SHEET NO.

**P301**

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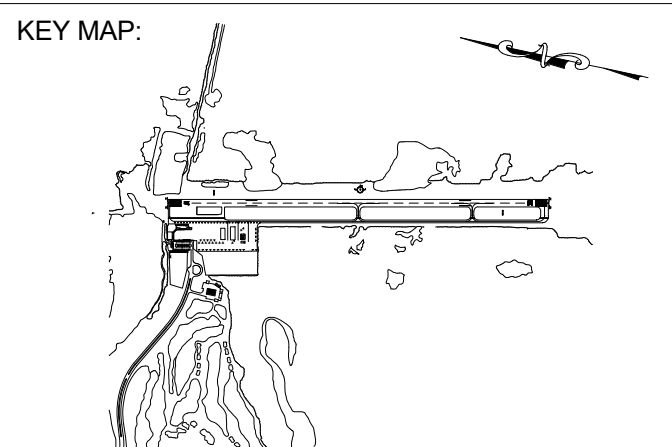




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FBPR CA NO. 24

**SCHENKELSHULTZ**  
ARCHITECTURE



DRAWING SCALE:  
12" = 1'-0"

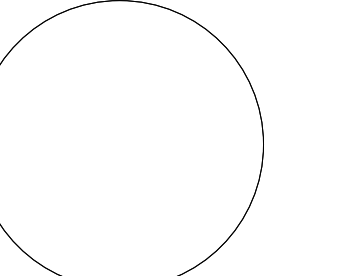
REVISIONS		
MARK	DESCRIPTION	DATE

PROJECT NAME:  
**NEW TERMINAL FACILITY  
AND ASSOCIATED  
IMPROVEMENTS**

SHEET TITLE:  
**PLUMBING RISERS**

VOLUME 2

ENGINEER OF RECORD:



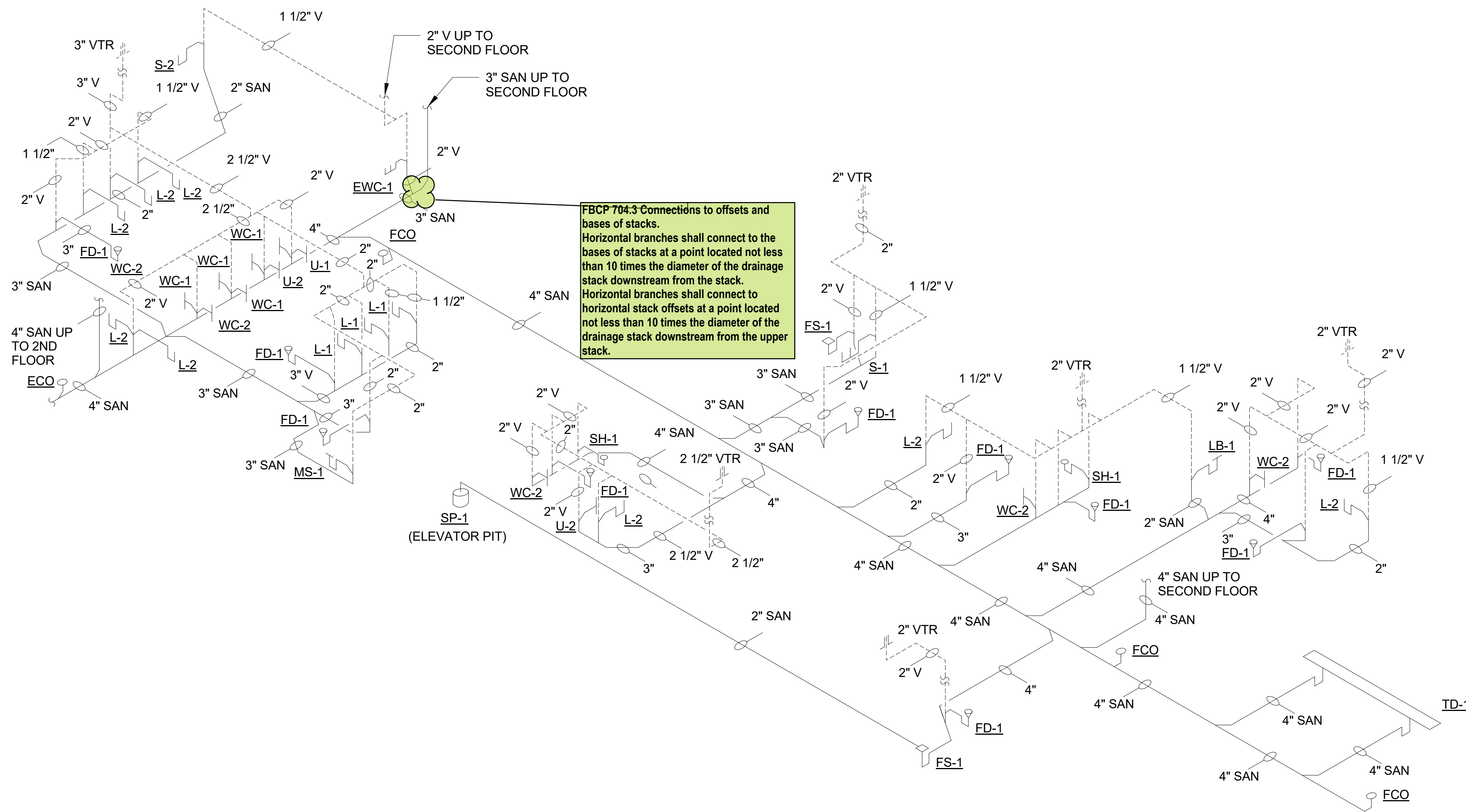
PETER CZUTRIN, PE 82478

JOB NO.: 1620729  
DATE: May 2017  
DRAWN: Author  
DESIGN: Designer  
CHECKED: Checker

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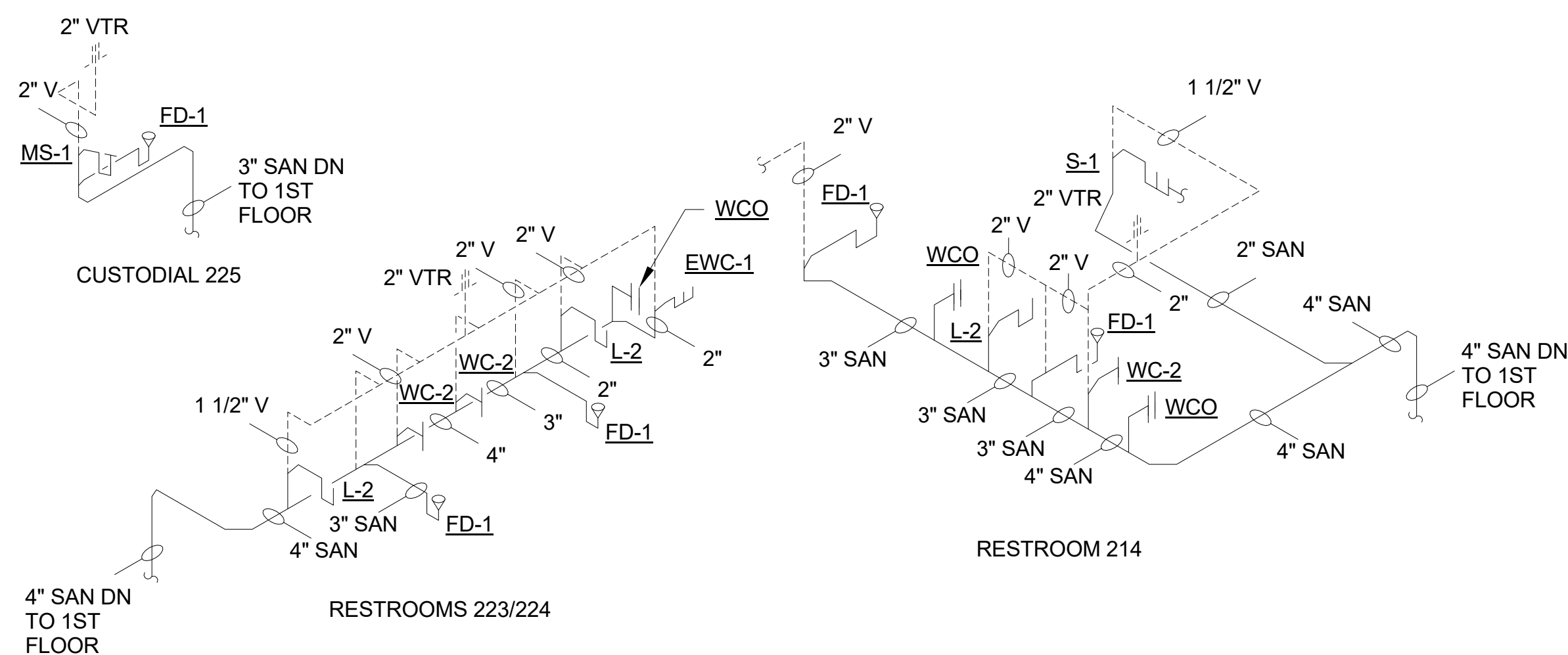
SHEET NO.  
**P302**

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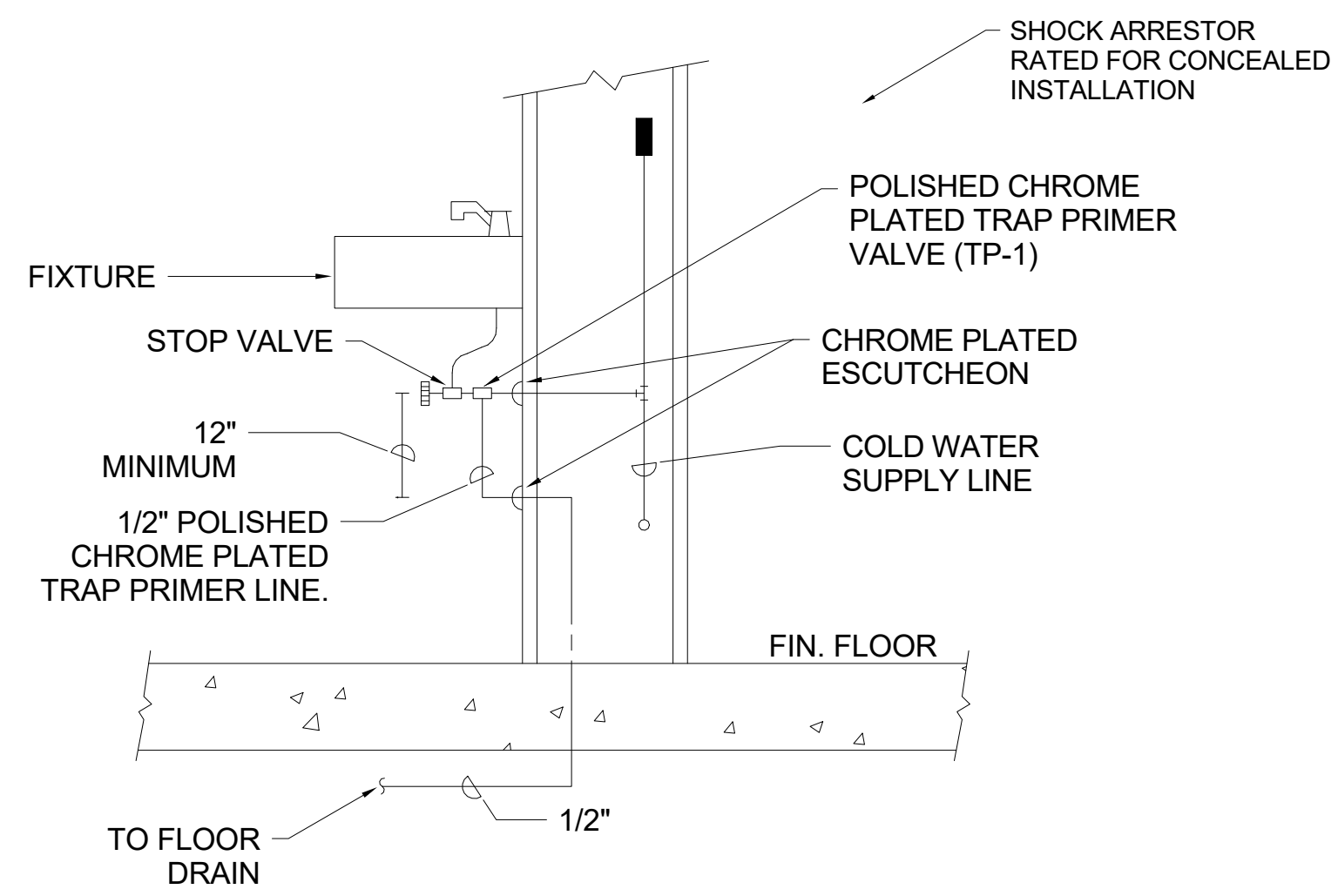


**FBCP 704.3** Connections to offsets and bases of stacks.  
Horizontal branches shall connect to the bases of stacks at a point located not less than 10 times the diameter of the drainage stack downstream from the stack.  
Horizontal branches shall connect to horizontal stack offsets at a point located not less than 10 times the diameter of the drainage stack downstream from the upper stack.

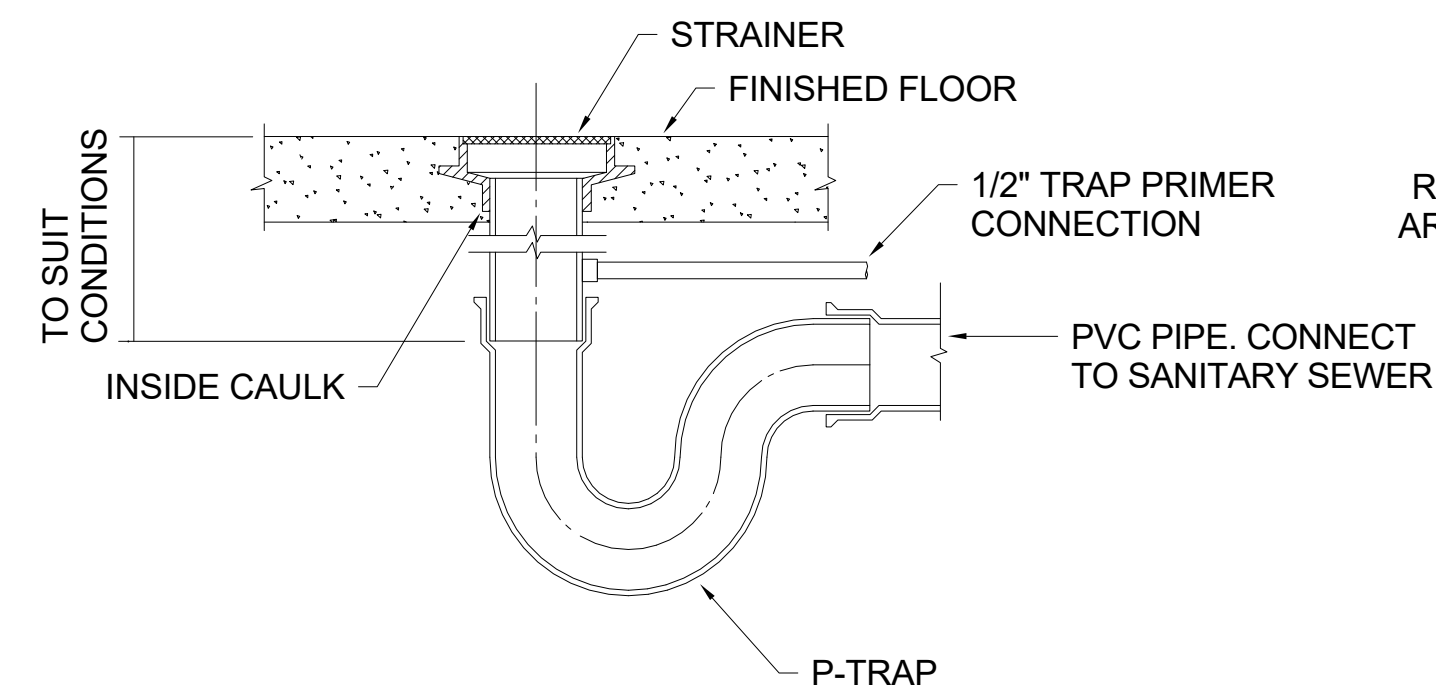
**01 FIRST FLOOR SANITARY RISER DIAGRAM**  
NOT TO SCALE



**02 SECOND FLOOR SANITARY RISER DIAGRAM**  
NOT TO SCALE

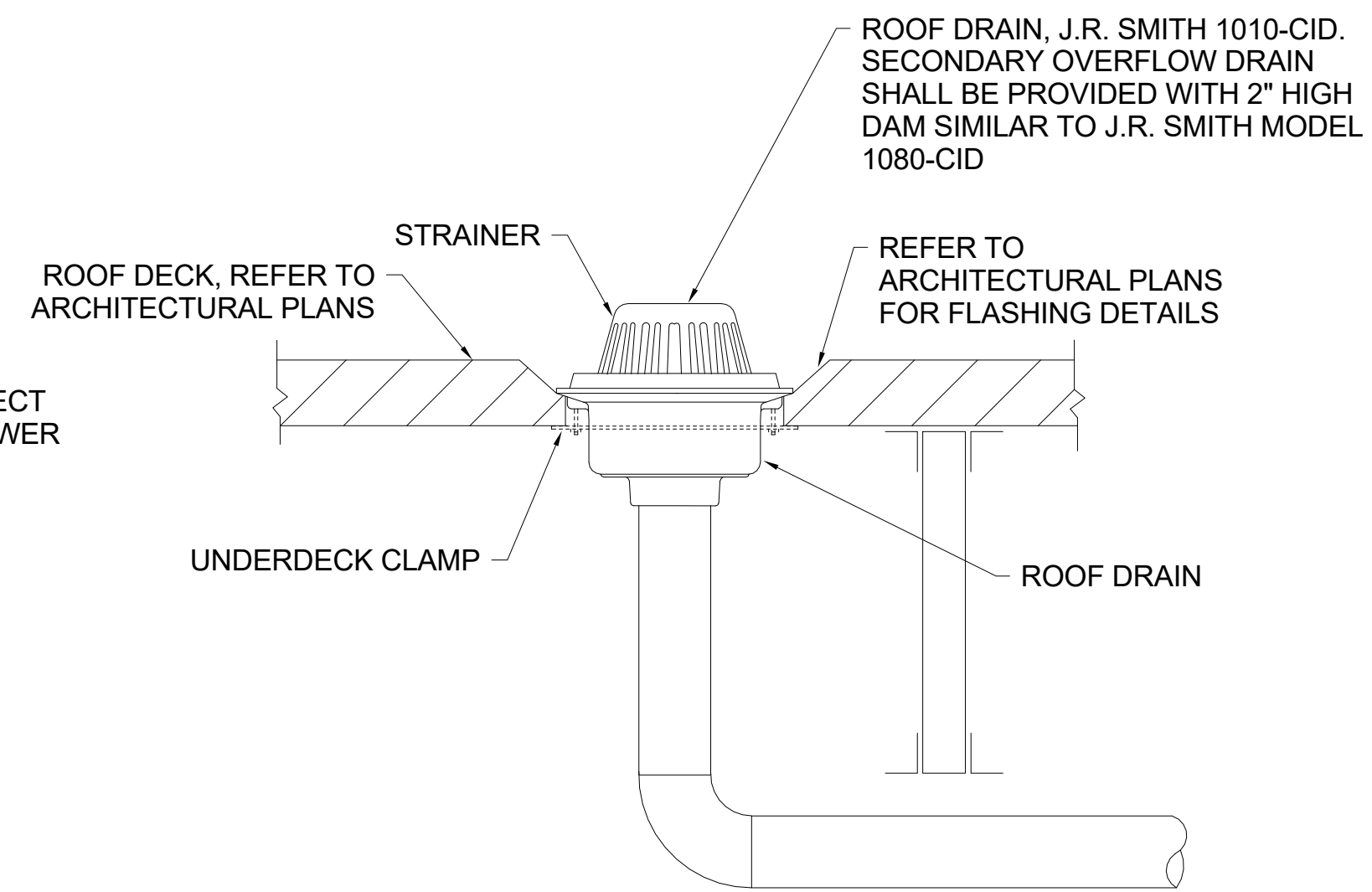


**01 TRAP PRIMER (TP-1) DETAIL**  
NOT TO SCALE

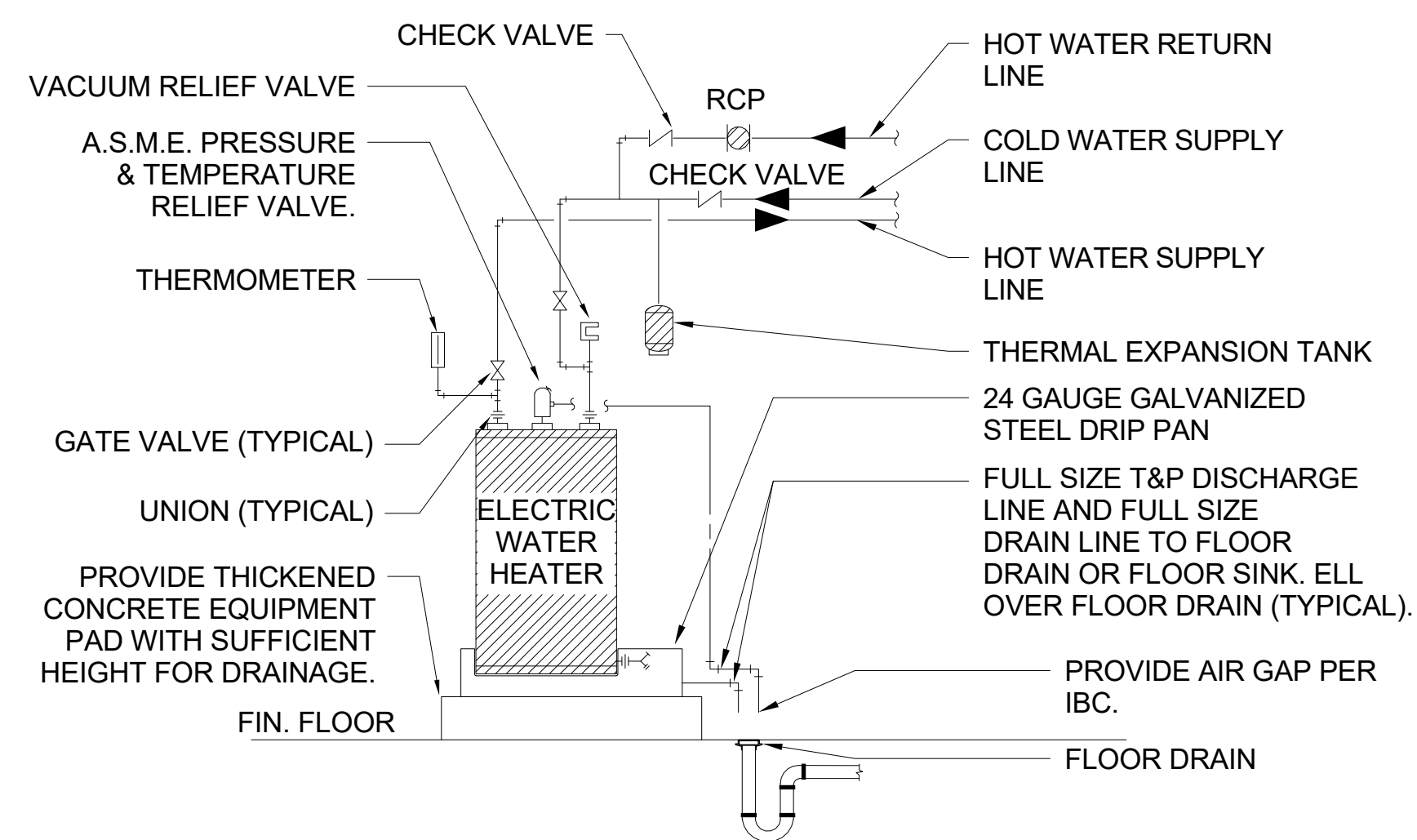


PROVIDE ALL FLOOR DRAINS WITH TRAP PRIMERS. SEE DETAILS TO THIS SHEET.

**02 FLOOR DRAIN DETAIL**  
NOT TO SCALE

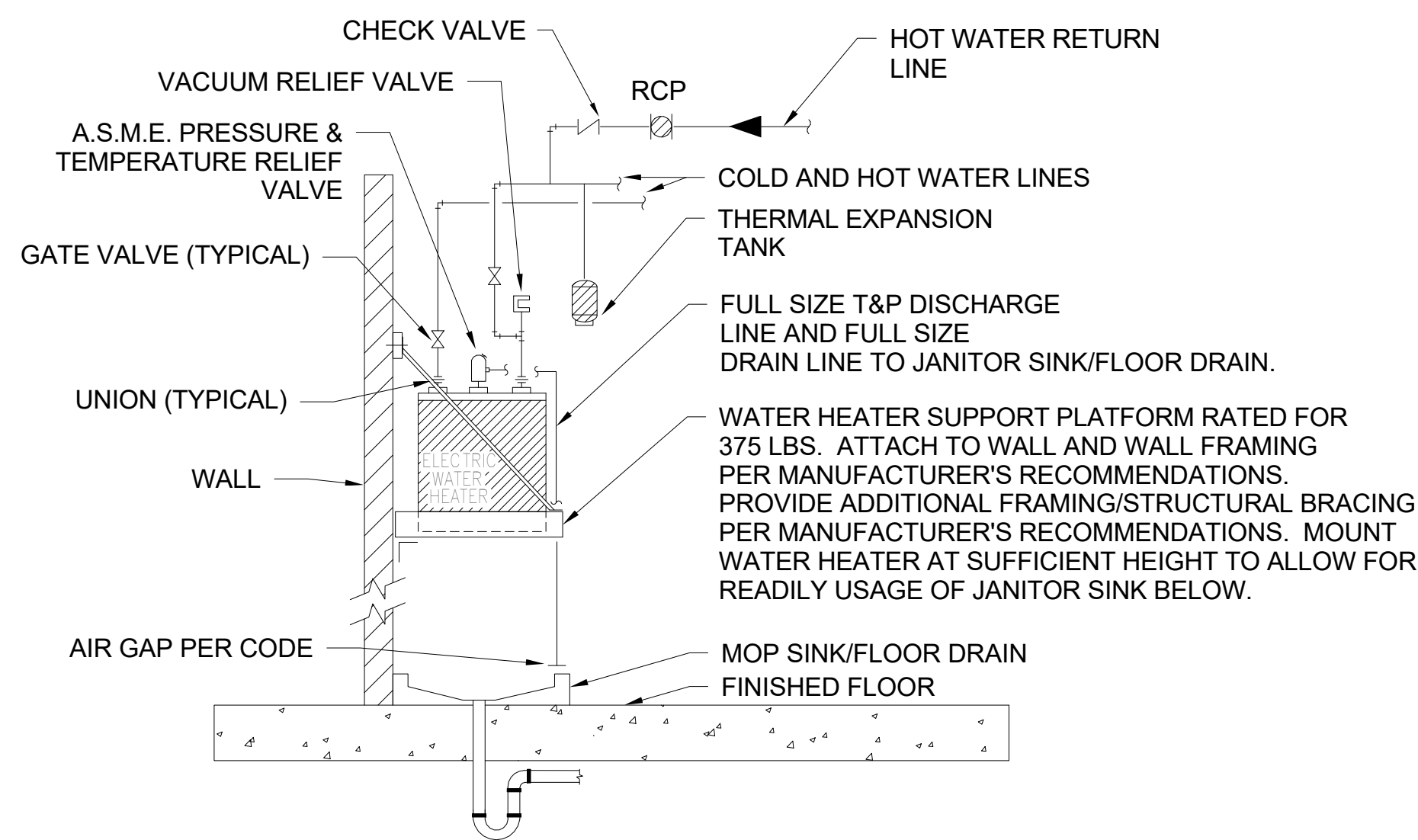


**07 ROOF DRAIN DETAIL**  
NOT TO SCALE



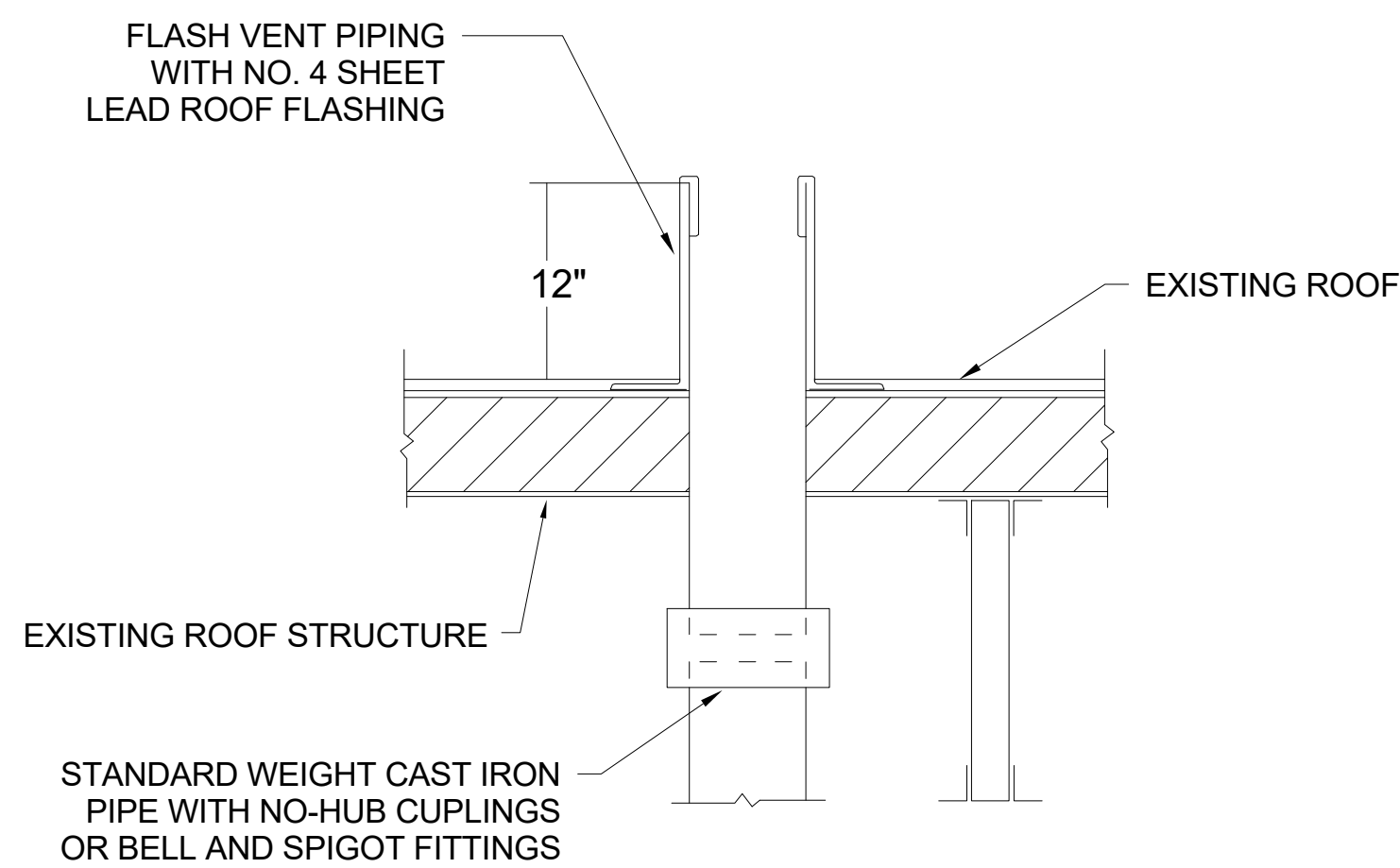
**03 ELECTRIC WATER HEATER PIPING DIAGRAM**  
NOT TO SCALE

- NOTE:**
1. ALL PIPING SHALL BE SECURED TO MAKE RIGID.
  2. ALL LINES TO BE FULL SIZE TO POINT OF CONNECTION AT HEATER.

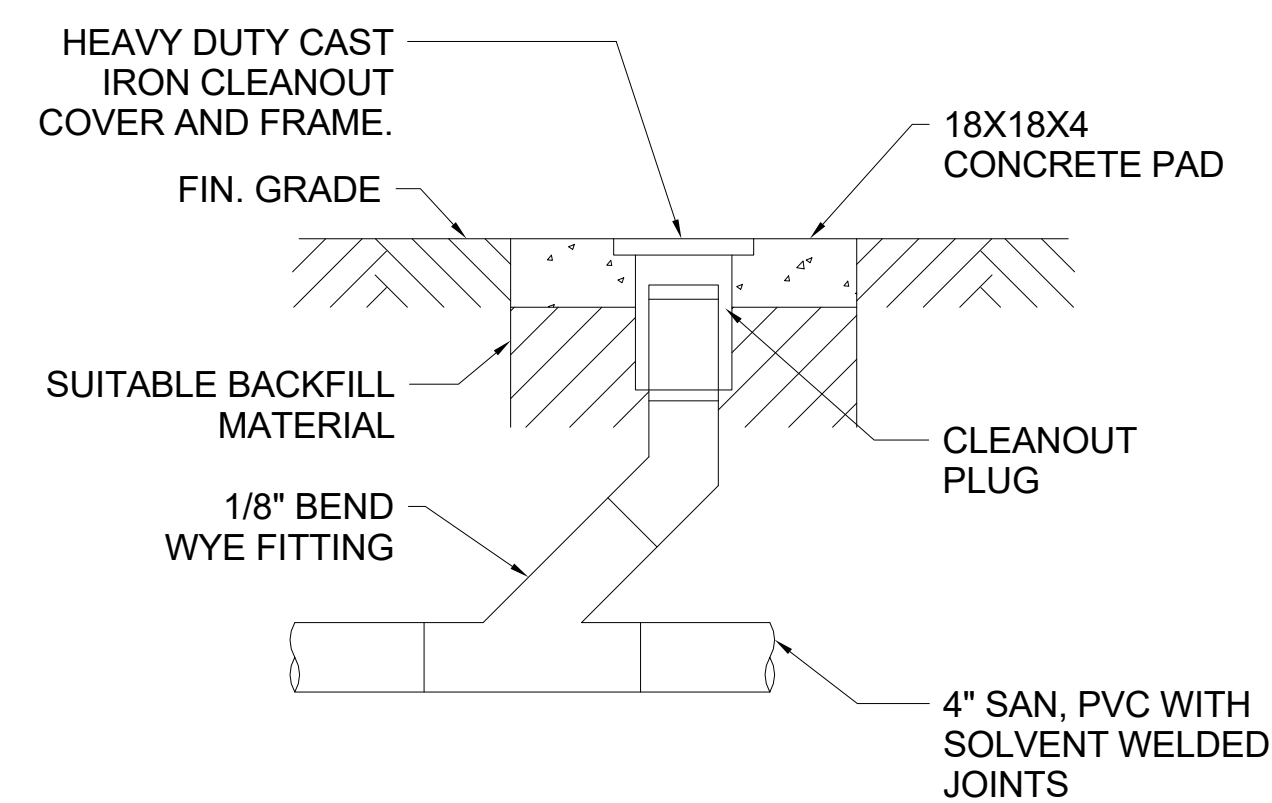


**04 ELEVATED ELECTRIC WATER HEATER PIPING DIAGRAM**  
NOT TO SCALE

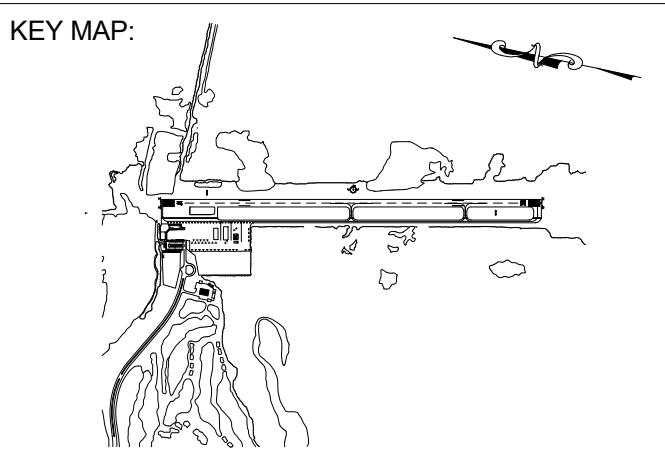
- NOTE:**
1. ALL PIPING SHALL BE SECURED TO MAKE RIGID.
  2. ALL LINES TO BE FULL SIZE TO POINT OF CONNECTION AT HEATER.



**05 VENT PENETRATION THROUGH ROOF DETAIL**  
NOT TO SCALE



**06 EXTERIOR CLEANOUT DETAIL**  
NOT TO SCALE



KEY MAP:  
DRAWING SCALE:  
12" = 1'-0"

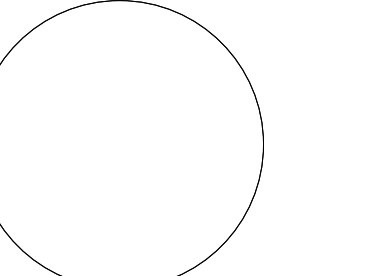
REVISIONS		
MARK	DESCRIPTION	DATE

PROJECT NAME:  
**NEW TERMINAL FACILITY  
AND ASSOCIATED  
IMPROVEMENTS**

SHEET TITLE:  
**PLUMBING DETAILS**

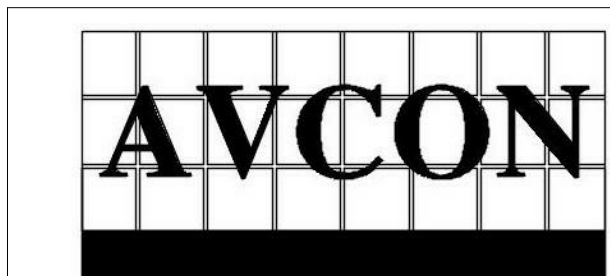
VOLUME 2

ENGINEER OF RECORD:



ZEMP B. PEPPER, PE 41147

JOB NO.: 1620729  
DATE: May 2017  
DRAWN: SB  
DESIGN: ZP  
CHECKED: ZP



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SHEET NO.

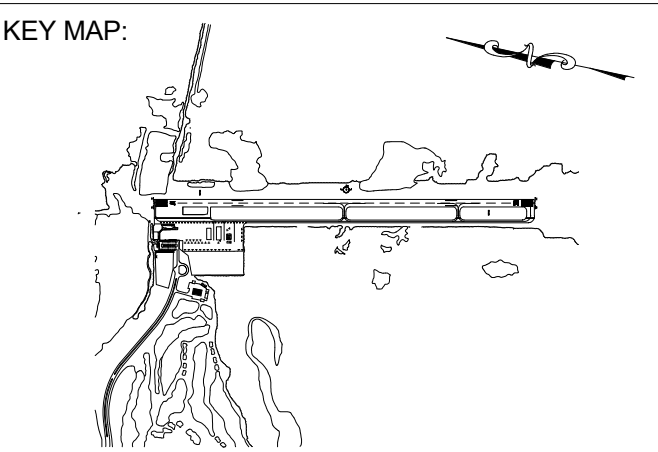
**P501**



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FBPR CA NO. 24

**SCHENKELSHULTZ**  
ARCHITECTURE



DRAWING SCALE:  
12" = 1'-0"

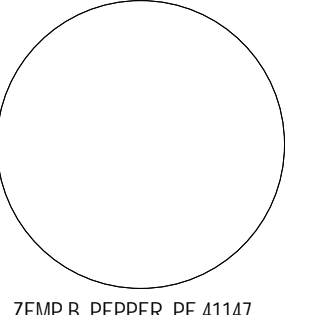
REVISIONS		
MARK	DESCRIPTION	DATE

PROJECT NAME:  
**NEW TERMINAL FACILITY  
AND ASSOCIATED  
IMPROVEMENTS**

SHEET TITLE:  
**PLUMBING DETAILS**

**VOLUME 2**

ENGINEER OF RECORD:



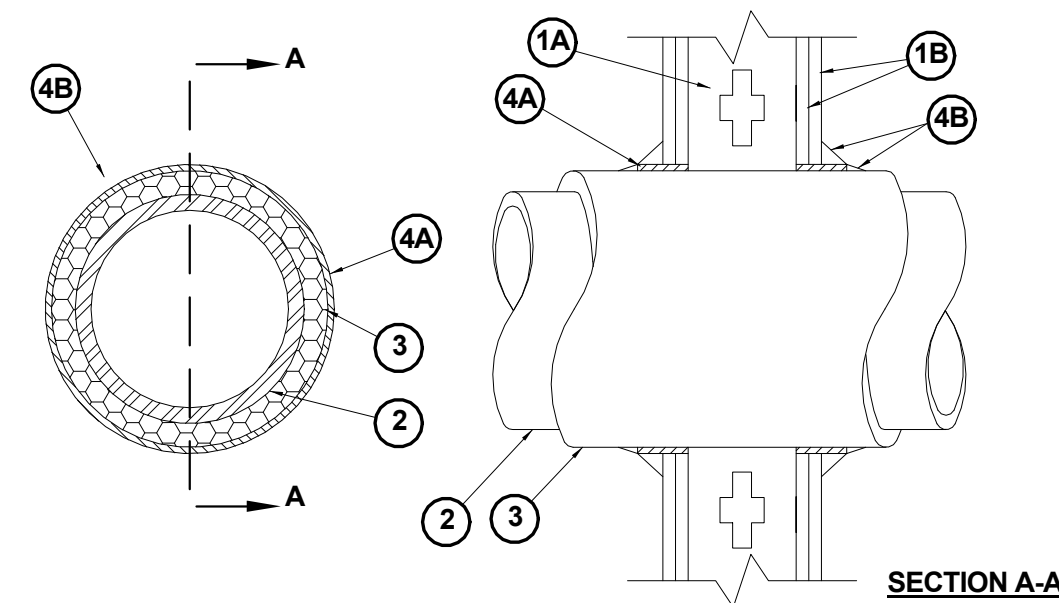
ZEMP B. PEPPER, PE #1147

JOB NO.: 1620729  
DATE: May 2017  
DRAWN: SB  
DESIGN: ZP  
CHECKED: ZP

SHEET NO.

**P502**

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CORPORATE CERTIFICATE OF AUTHORIZATION NUMBER: 5057  
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System No. W-L-5010  
May 19, 2005  
F Rating - 2 Hr.  
T Rating - 1-1/2 Hr.  
L Rating At Ambient - 2 CFM/sq ft  
L Rating At 400 F - less than 1 CFM/sq ft

**NOTE:**  
THIS MATERIAL WAS EXTRACTED BY  
3M FIRE PROTECTION PRODUCTS  
FROM THE 2004 EDITION OF THE UL  
FIRE RESISTANCE DIRECTORY.

1. Wall Assembly - The 1 or 2 hr fire-rated gypsum wallboard/stud wall assembly shall be constructed of the materials and in the manner described in the individual U300, U400 or V400 Series Wall or Partition Design in the UL Fire Resistance Directory and shall include the following construction features:

- A. Studs - Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 in. by 4 in. (25 mm by 102 mm) lumber spaced 16 in. (406 mm) OC with nom 2 by 4 in. lumber end plates and cross braces. Steel studs to be min 3-5/8 in. (92 mm) wide by 1-3/8 in. (35 mm) deep channels spaced max 24 in. (610 mm) OC.
- B. Gypsum Board\* - Nom 5/8 in. (16 mm) thick, 4 ft (122 cm) wide with square or tapered edges. The gypsum wallboard type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the individual U300 or U400 Series Design in the UL Fire Resistance Directory. Max diam of opening is 14-1/2 in (368 mm) for wood stud walls and 18 in. (457 mm) for steel stud walls.

The hourly F Rating of the firestop system is 1 hr when installed in a 1 hr fire rated wall and 2 hr when installed in a 2 hr fire rated wall.

2. Through Penetrants - One metallic pipe or tubing to be centered within the firestop system. Pipe or tubing to be rigidly supported on both sides of wall assembly. The following types and sizes of metallic pipes or tubing may be used:

- A. Steel Pipe - Nom 12 in. (305 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.
- B. Copper Tubing - Nom 6 in. (152 mm) diam (or smaller) Type L (or heavier) copper tubing.
- C. Copper Pipe - Nom 6 in. (152 mm) diam (or smaller) Regular (or heavier) copper pipe.

3. Pipe Covering\* - Nom 1 in. or 2 in. (25 mm or 51 mm) thick hollow cylindrical heavy density glass fiber units jacketed on the outside with an all service jacket. Longitudinal joints sealed with metal fasteners or factory-applied self-sealing lap tape. Transverse joints sealed with metal fasteners or with butt strip tape supplied with the product. When nom 1 in. (25 mm) thick pipe covering is used, the annular space between the pipe covering and the circular cutout in the gypsum wallboard layers on each side of the wall shall be min 1/4 in. to max 3/8 in. (6 mm to max 10 mm). When nom 2 in. (51 mm) thick pipe covering is used, the annular space between the pipe covering and the circular cutout in the gypsum wallboard layers on each side of the wall shall be min 1/2 in. to max 3/4 in. (13 mm to max 19 mm).

See Pipe and Equipment Covering - Materials (BRGU) category in Building Materials Directory for names of manufacturers. Any pipe covering material meeting the above specifications and bearing the UL Classification Marking with a Flame Spread Index of 25 or less and a Smoke Developed Index of 50 or less may be used.

The hourly T Rating of the firestop system is 3/4 hr when nom 1 in. (25 mm) thick pipe covering is used.

The hourly T Rating of the firestop system is 1 hr and 1-1/2 hr when nom 2 in. (51 mm) thick pipe covering is used with 1 hr and 2 hr fire rated walls, respectively.

4. Firestop System - Installed symmetrically on both sides of wall assembly. The details of the firestop system shall be as follows:

- A. Fill, Void or Cavity Materials\* - Wrap Strip - Nom 1/4 in. (6 mm) thick intumescent elastomeric material faced on one side with aluminum foil, supplied in 2 in. (51 mm) wide strips. Nom 2 in. (51 mm) wide strip tightly wrapped around pipe covering (foil side out) with seam butted. Wrap strip layer securely bound with steel wire or aluminum foil tape and slid into annular space approx 1-1/4 in. (32 mm) such that approx 3/4 in. (19 mm) of the wrap strip width protrudes from the wall surface. One layer of wrap strip is required when nom 1 in. (25 mm) thick pipe covering is used. Two layers of wrap strip are required when nom 2 in. (51 mm) thick pipe covering is used.

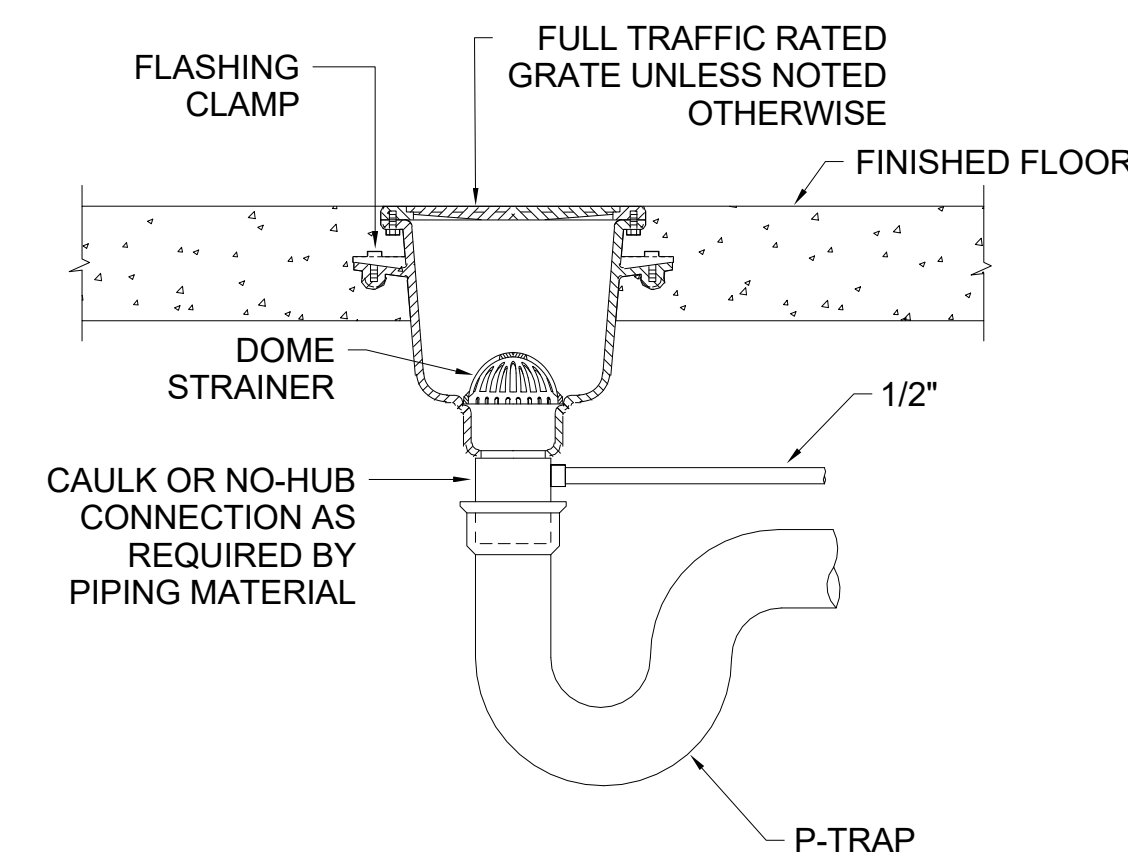
3M COMPANY - FS-195+

- B. Fill, Void or Cavity Materials\* - Caulk or Sealant - Min 1/4 in. (6 mm) diam continuous bead applied to the wrap strip/wall interface and to the exposed edge of the wrap strip layer approx 3/4 in. (19 mm) from the wall surface.

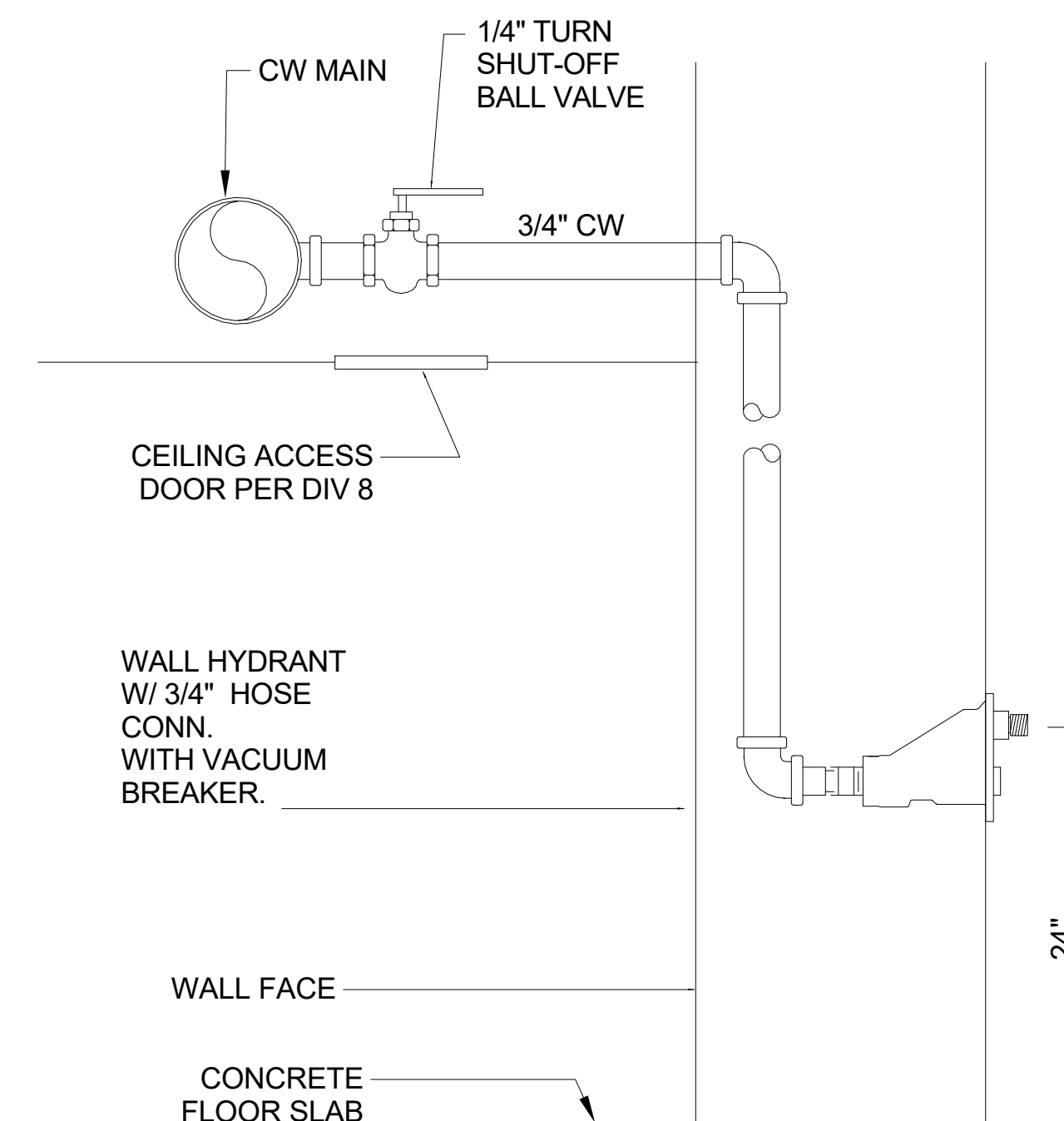
3M COMPANY - CP 25WB+, IC 15WB+, FireDam 150+ caulk or FB-3000 WT sealant

\*Bearing the UL Classification Marking

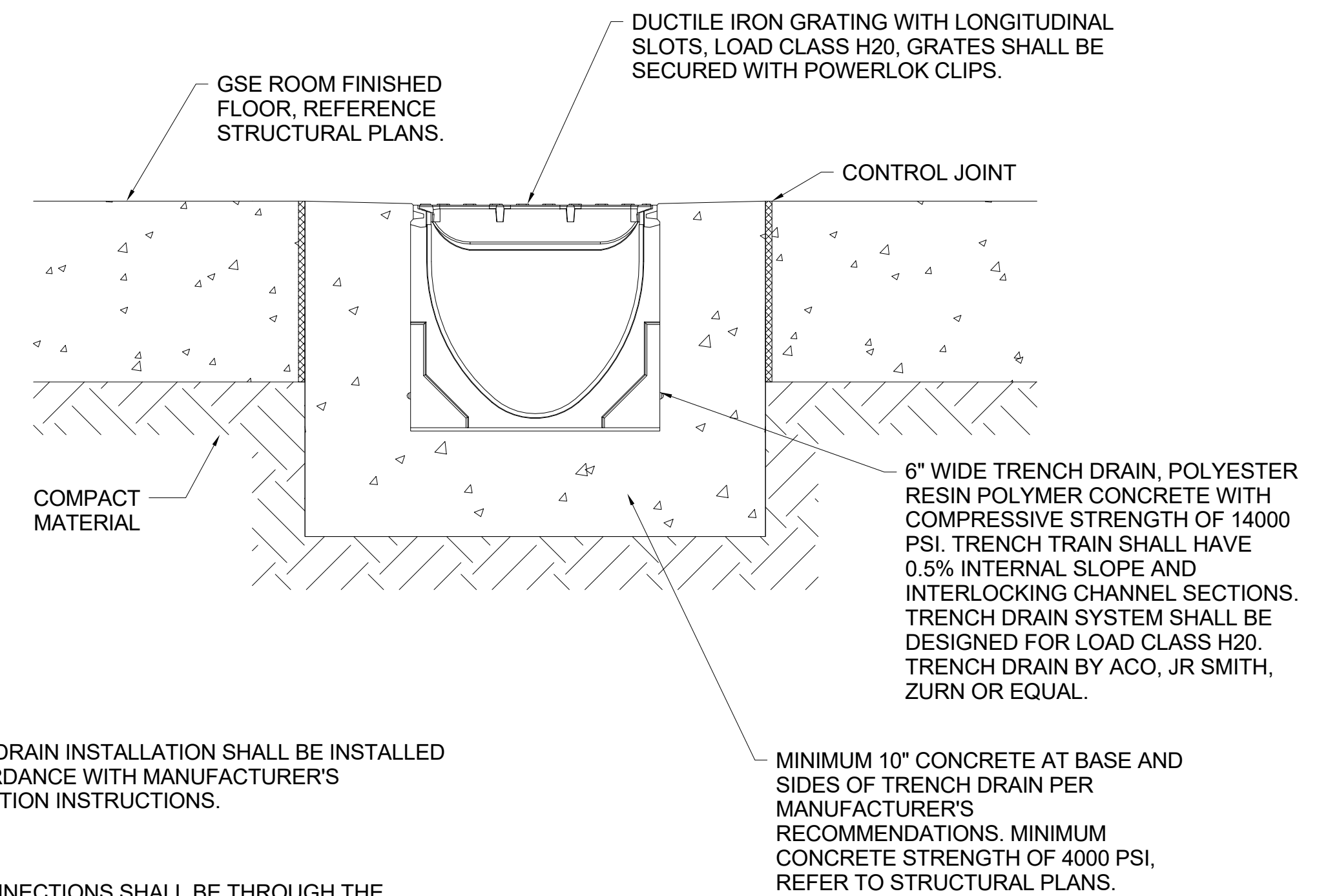
**01 FIRESTOP SYSTEM-GYPSUM BOARD WALL INSULATED METAL PIPE**  
NOT TO SCALE



**04 FLOOR SINK DETAIL**  
NOT TO SCALE



**03 WALL HYDRANT DETAIL**  
NOT TO SCALE



**NOTE:**  
TRENCH DRAIN INSTALLATION SHALL BE INSTALLED  
IN ACCORDANCE WITH MANUFACTURER'S  
INSTALLATION INSTRUCTIONS.

**NOTE:**  
PIPE CONNECTIONS SHALL BE THROUGH THE  
SIDEWALL OR BOTTOM OF TRENCH DRAIN, NOT  
SHOWN.

**02 TRENCH DRAIN DETAIL**  
NOT TO SCALE



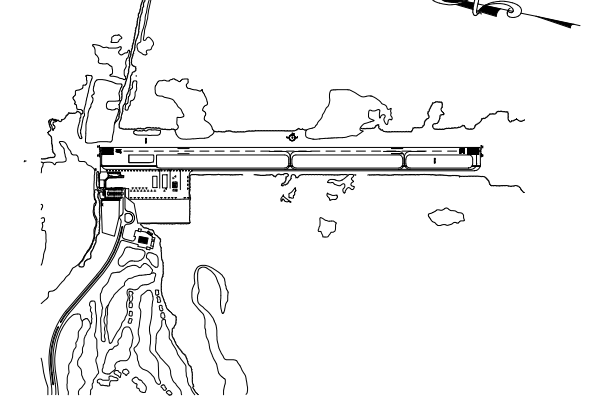


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FBPR CA NO. 24

**SCHENKELSHULTZ**  
ARCHITECTURE

KEY MAP:



DRAWING SCALE:  
12" = 1'-0"

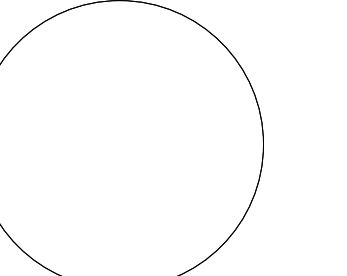
REVISIONS		
MARK	DESCRIPTION	DATE

PROJECT NAME:  
**NEW TERMINAL FACILITY  
AND ASSOCIATED  
IMPROVEMENTS**

SHEET TITLE:  
**PLUMBING DETAILS**

VOLUME 2

ENGINEER OF RECORD:

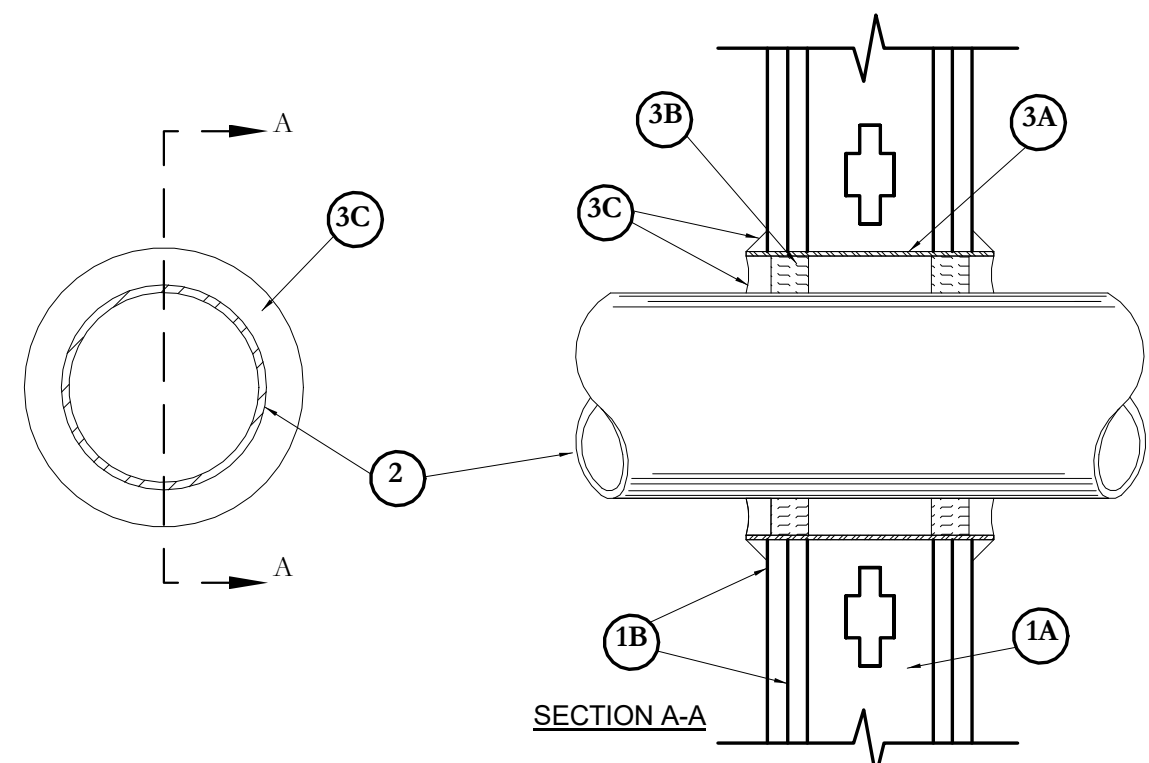


ZEMP B. PEPPER, PE 41147

JOB NO.: 1620729  
DATE: May 2017  
DRAWN: SB  
DESIGN: ZP  
CHECKED: ZP

NOTE: GENERAL CONTRACTORS (GC) BIDDING SHALL PROVIDE WRITTEN VERIFICATION WITH THEIR BIDS THAT ALL OF THEIR SUBCONTRACTORS BIDDING THIS PROJECT HAVE BECOME FAMILIAR WITH ALL CONSTRUCTION DRAWING SHEETS & PROJECT MANUAL SPECIFICATIONS TO ENSURE THE GC AND SUB-CONTRACTORS CONSTRUCTION BIDS SHALL PROVIDE THE TOTALITY OF THE ENTIRE CONTRACT DOCUMENT REQUIREMENTS.

SHEET NO.  
**P503**



System No. W-L-1003  
September 03, 2004  
(Formerly System No. 147)  
F Ratings - 1 and 2 Hr (See Item 1)  
T Rating - 0 Hr

**NOTE:**  
THIS MATERIAL WAS EXTRACTED BY  
3M FIRE PROTECTION PRODUCTS  
FROM THE 2004 EDITION OF THE UL  
FIRE RESISTANCE DIRECTORY.

1. Wall Assembly - The 1 or 2 hr fire-rated gypsum wallboard/stud wall assembly shall be constructed of the materials and in the manner described in the individual U300 or U400 Series Wall or Partition Design in the UL Fire Resistance Directory and shall include the following construction features:

- A. Studs - Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 in. lumber spaced 16 in. OC with nom 2 by 4 in. lumber end plates and cross braces. Steel studs to be min 3-1/2 in. wide by 1-3/8 in. deep channels spaced max 24 in. OC.
- B. Gypsum Board\* - Nom 5/8 in. thick, 4 ft. wide with square or tapered edges. The gypsum wallboard type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the individual U300 or U400 Series Design in the UL Fire Resistance Directory. Max diam of opening is 15 in.

The hourly F Rating of the firestop system is equal to the hourly fire rating of the wall assembly in which it is installed.

2. Through Penetrant - One metallic pipe, conduit or tubing to be installed either concentrically or eccentrically within the firestop system. The space between pipes, conduits or tubing and the steel sleeve (Item 3A) shall be min of 0 in. (point contact) to max 2-3/8 in. Pipe, conduit or tubing to be rigidly supported on both sides of wall assembly. The following types and sizes of metallic pipes, conduits or tubing may be used:

- A. Steel Pipe - Nom 12 in. diam (or smaller) Schedule 10 (or heavier) steel pipe.
- B. Iron Pipe - Nom 12 in. diam (or smaller) service weight (or heavier) cast iron soil pipe, nom 12 in. diam (or smaller) or Class 50 (or heavier) ductile iron pressure pipe.
- C. Conduit - Nom 6 in. diam (or smaller) steel conduit or nom 4 in. diam (or smaller) steel electrical metallic tubing.
- D. Copper Tubing - Nom 6 in. diam (or smaller) Type L (or heavier) copper tubing.
- E. Copper Pipe - Nom 6 in. diam (or smaller) Regular (or heavier) copper pipe.

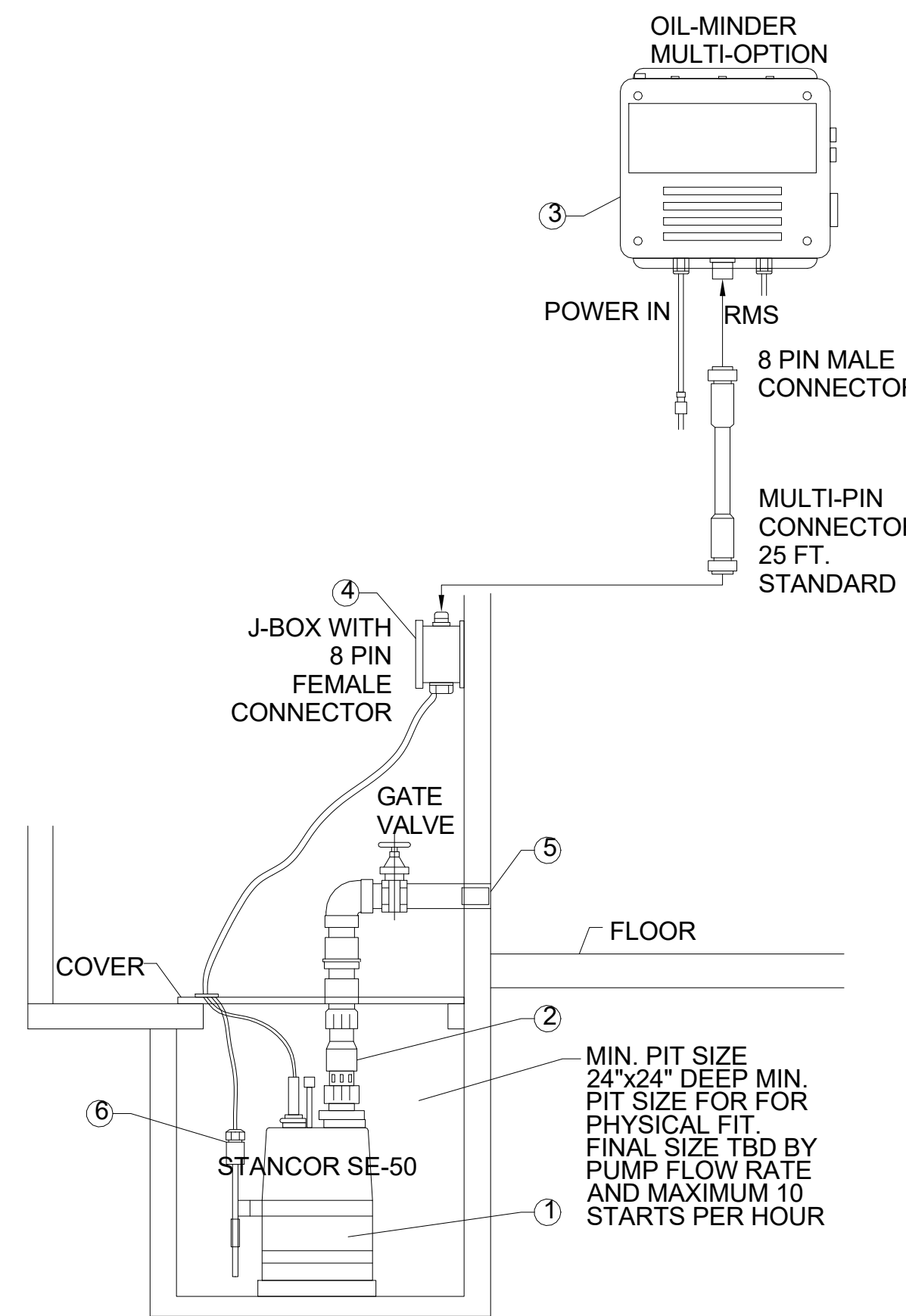
3. Firestop System - Installed symmetrically on both sides of wall assembly. The details of the firestop system shall be as follows.

- A. Steel Sleeve - Cylindrical sleeve fabricated from min 0.019 in. thick (No. 28 gauge) galv sheet steel and having a min 2 in. lap along the longitudinal seam. Length of steel sleeve to be equal to thickness of wall plus 1 to 4 in. such that, when installed, the ends of the sleeve will project approximately 1/2 to 2 in. beyond the surface of the wall on both sides of the wall assembly. Sleeve installed by coiling the sheet steel to a diam smaller than the through opening, inserting the coil through the openings and releasing the coil to let it uncoil against the circular cutouts in the gypsum wallboard layers.
- B. Packing Material - Min 1 in. thickness of mineral wool batt insulation firmly packed into steel sleeve on both sides of the wall assembly as permanent forms. Packing material to be recessed min 1/2 in. from end of steel sleeve (flush with or recessed into gypsum wallboard surface) on both sides of wall assembly.
- B1. Packing Material - (Not shown) - As an alternate to Item B, nom 1 in. thick polyethylene backer rod may be used. The backer rod is to be recessed within the steel sleeve a min of 1 in. from each surface of wall.
- C. Fill, Void or Cavity Materials\* - Caulk or Sealant - When mineral wool batt insulation is used, applied to fill the steel sleeve to a min depth of 1/2 in. on both sides of wall assembly. When backer rod is used, a min thickness of 1 in. of CP-25WB+ caulk is required flush with surface of wall. A nom 1/4 in. diam continuous bead of caulk or sealant shall be applied around the circumference of the steel sleeve at its egress from the gypsum wallboard layers on both sides of the wall assembly.

3M COMPANY - CP 25WB+ caulk or FB-3000 WT sealant.

\*Bearing the UL Classification Marking

**01 FIRESTOP SYSTEM-GYPSUM BOARD WALL UN-INSULATED METAL PIPE**  
NOT TO SCALE



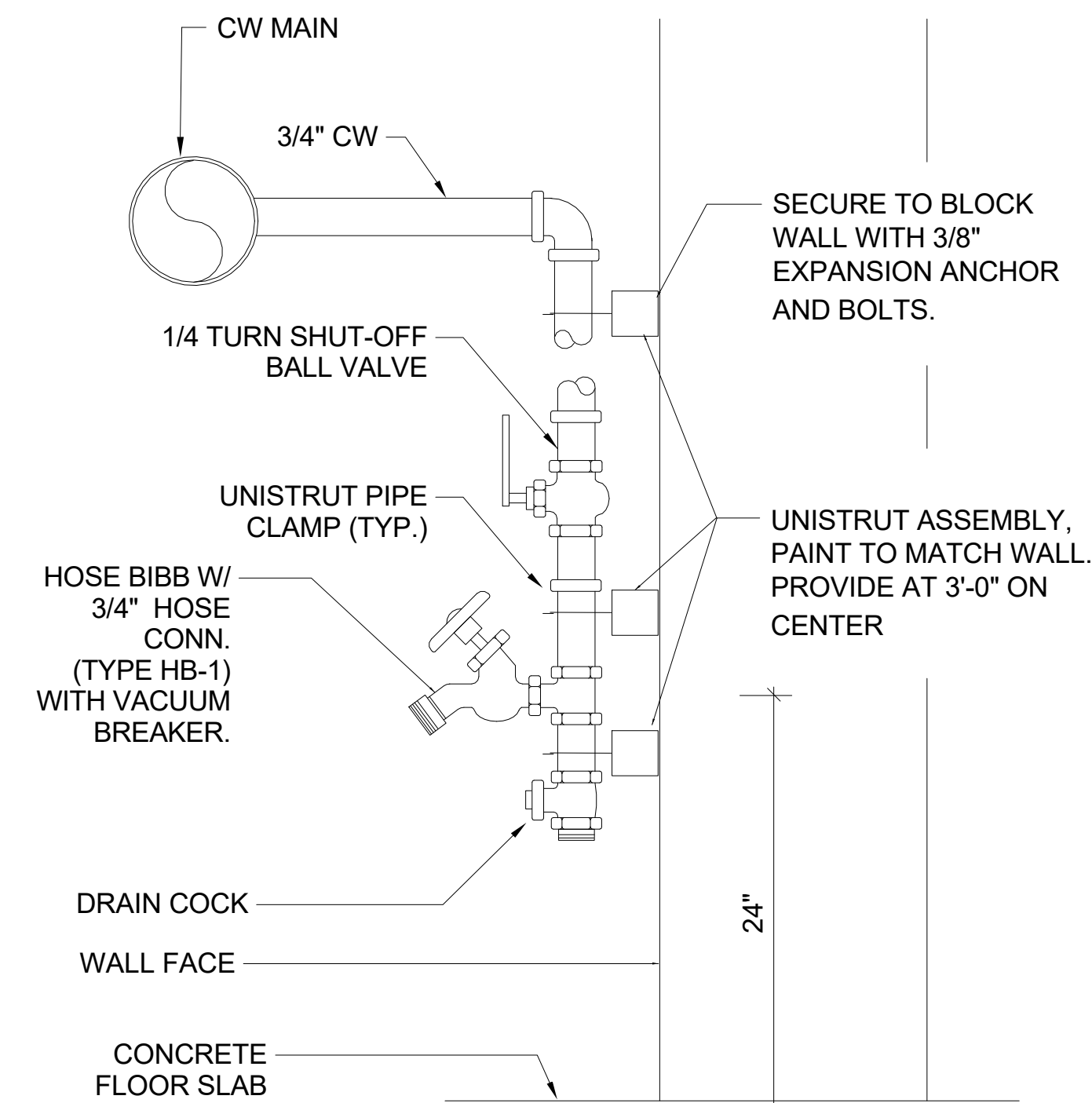
- NOTES:
- 1 STANCOR MODEL SE50 SUBMERSIBLE EFFLUENT PUMP 1/2 HP, 115 VOLT, 3600 RPM, 2" DISCHARGE (STD) CONNECTION.
  - 2 STANCOR 2" CHECK VALVE.
  - 3 STANCOR OIL MINDER 115V, 1Ø CONTROL SYSTEM WITH OPTIONAL BUILT IN AUDIBLE AND VISUAL ALARM WHEN PUMP DOES NOT RUN DUE TO OIL IN PIT OR HIGH LIQUID ALARM. PROVIDE SILENCING BUTTON FOR AUDIBLE ALARM BUILT INTO PANEL. PANEL SHALL HAVE ADDITIONAL CONTACT FOR A REMOTE ALARM LOCATION. JUNCTION BOX WILL BE PROVIDED WITH MULTI-PIN CONNECTOR & CORD IN LENGTHS AS REQUIRED. 25FT IS STANDARD. OPTIONAL 25FT INCREMENTS. LIGHTS FOR OIL SPILL, POWER HIGH LIQUID LEVEL OVERLOAD & PUMP RUN.
  - 4 JUNCTION BOX WILL BE PROVIDED WITH MULTI-PIN CONNECTOR AND CORD IN LIGHTS AS REQUIRED, 25 FT IS STANDARD, OPTIONAL 25 FT INCREMENTS AVAILABLE.
  - 5 ALL BURIED PUMP PRESSURE DISCHARGE PIPING SHALL BE PROTECTED WITH TAPECOAT CT CORROSION PROTECTION TAPE.
  - 6 OM-300S STAINLESS STEEL FLOAT AND PROBE ASSEMBLY INCLUDES OIL SENSING PROBE, ON FLOAT AND HIGH ALARM FLOAT
  - 7 ITEMS 1,3,4,5 AND 6 PROVIDED BY STANCOR AS A STANDARD PACKAGE.

MODEL	H.P.	VOLT.	RATED FLA	DISC. SIZE	MAX. HEAD FT.	MAX. FLOW GPM	WEIGHT LBS.	HEIGHT IN.	WIDTH IN.
SE50	0.50	115	8	2"	37'	74	34	13.2	8.1"

PUMP INFORMATION TYPE:  SUMP PUMPS(s)  GRINDER PUMPS(s)  NON-CLOG PUMP(s)  
DISCHARGE PIPE: 304 STAINLESS STEEL, SCH40 GALVANIZED STEEL, SCH80 PVC PIPE

MODEL NO: SE50  1"  
RATING: 74 GPM 37' TDH  2"  
MOTOR: 0.50 HP, 3600 RPM  
ELEC.: 1PH, 60HZ, 115V  
ELEC.: 8 FL AMPS

**03 ELEVATOR SUMP PUMP DETAIL**  
NOT TO SCALE



**02 EXPOSED HOSE BIBB DETAIL**  
NOT TO SCALE

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