

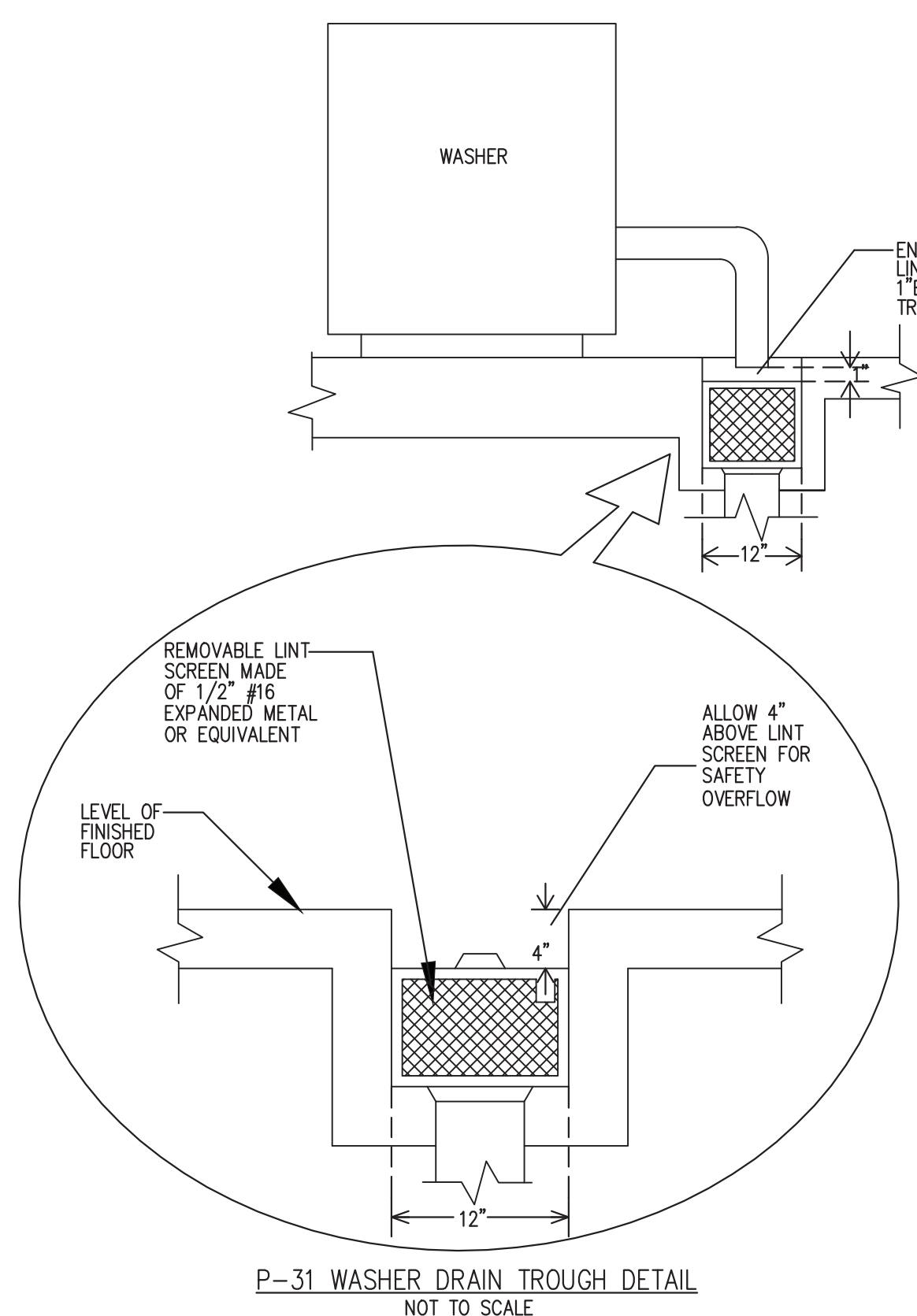
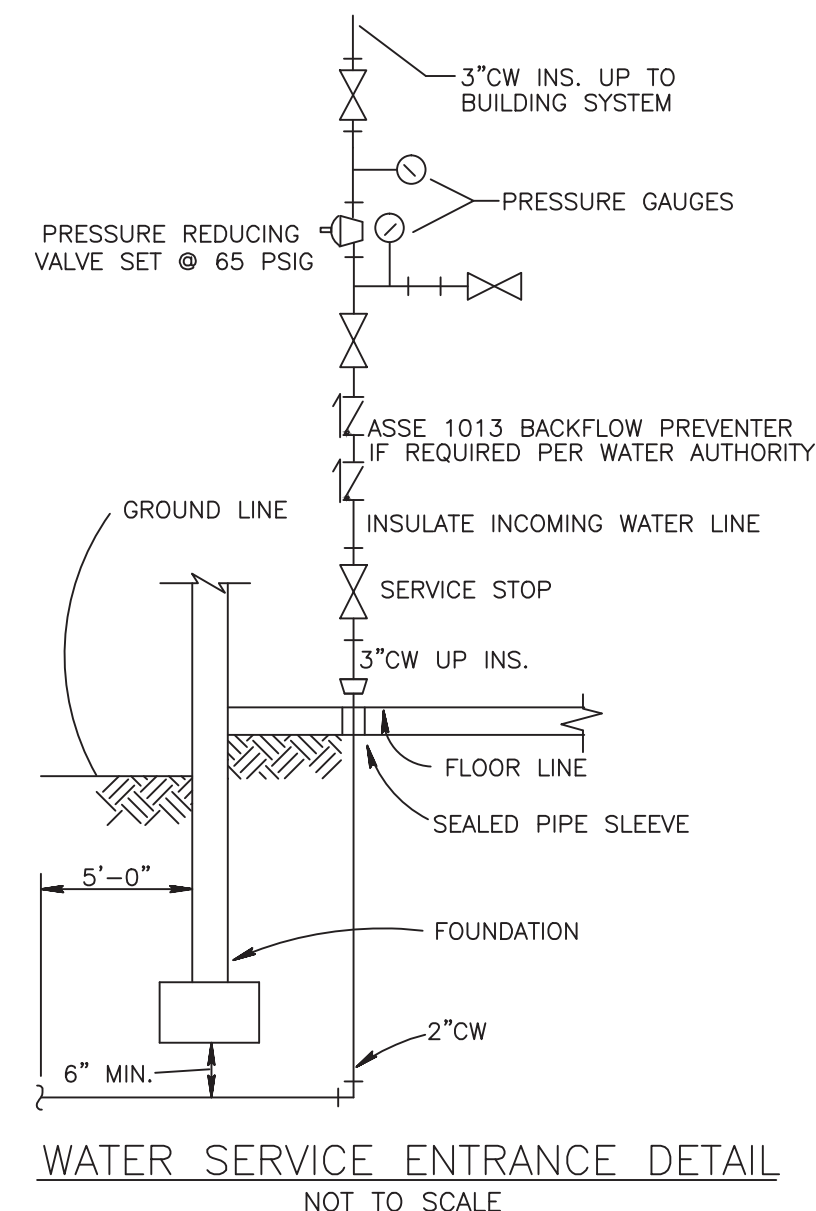
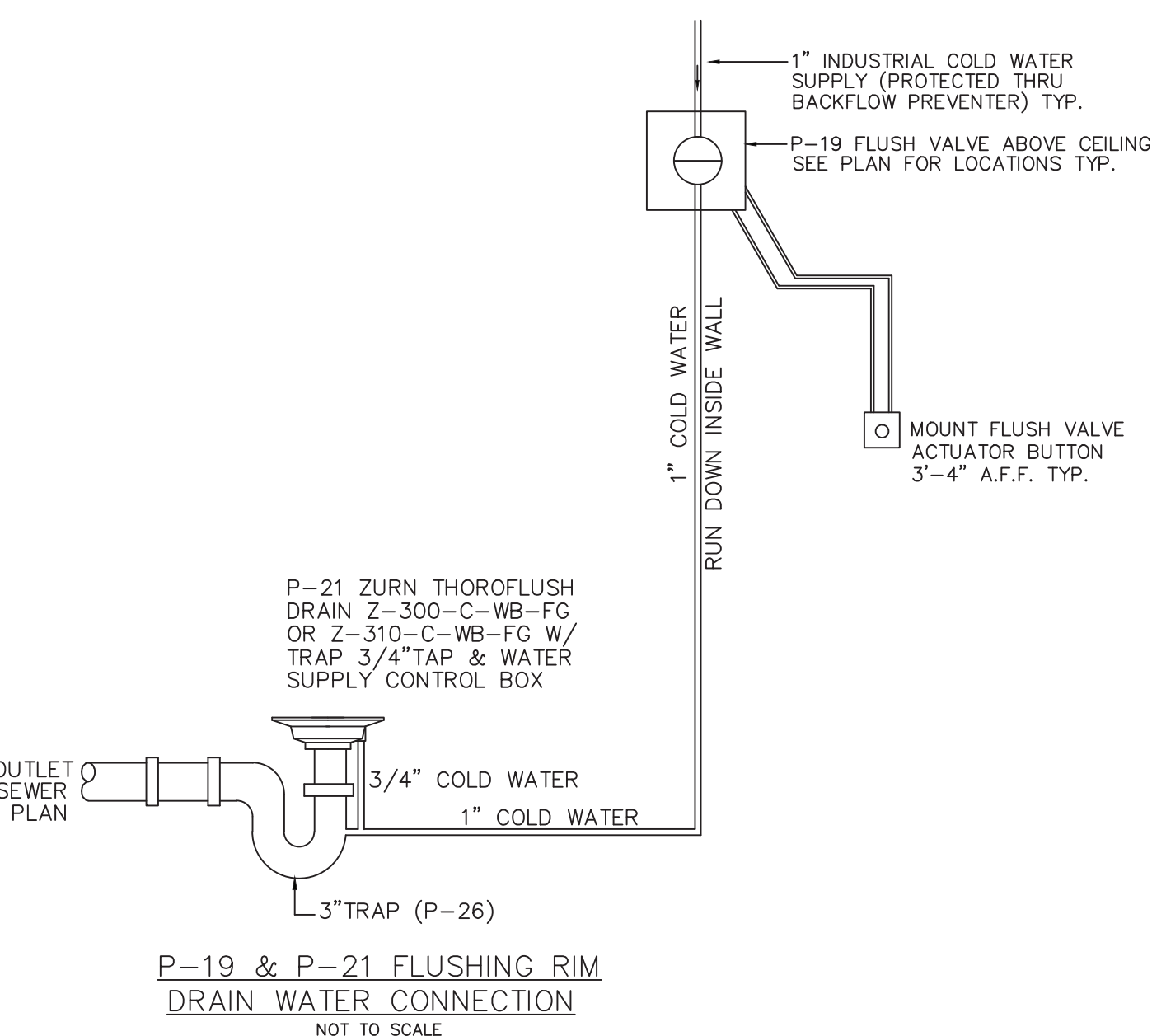
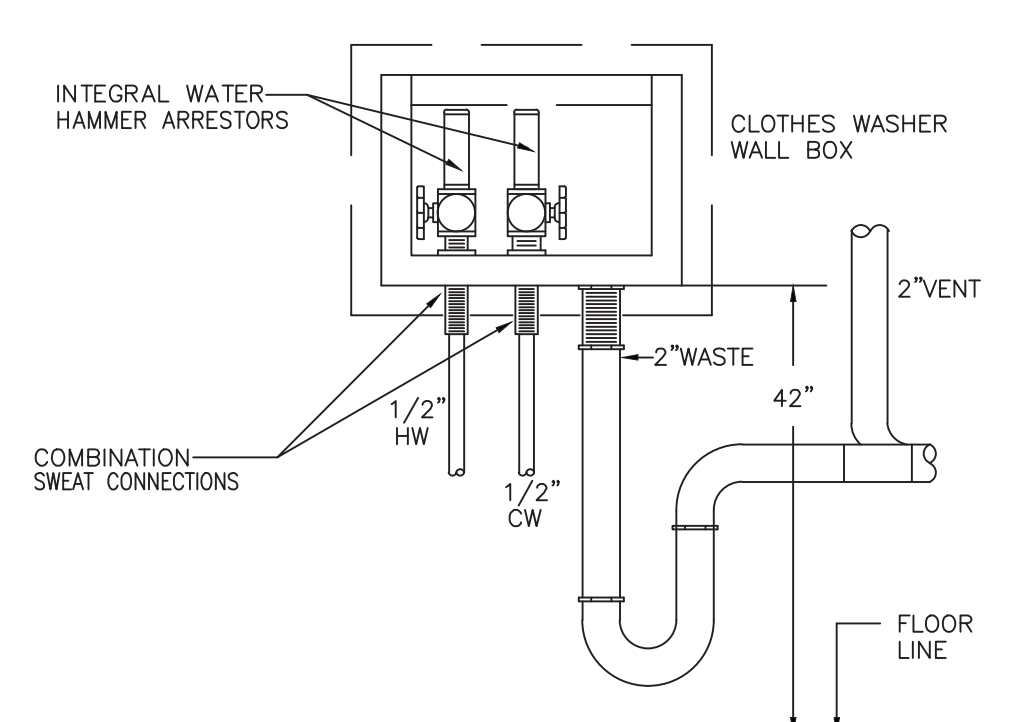
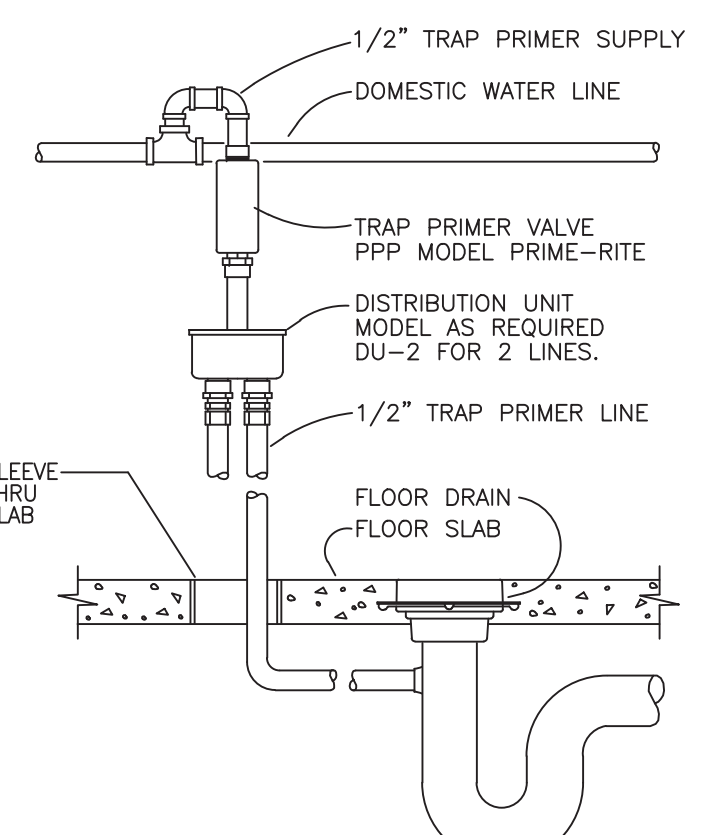
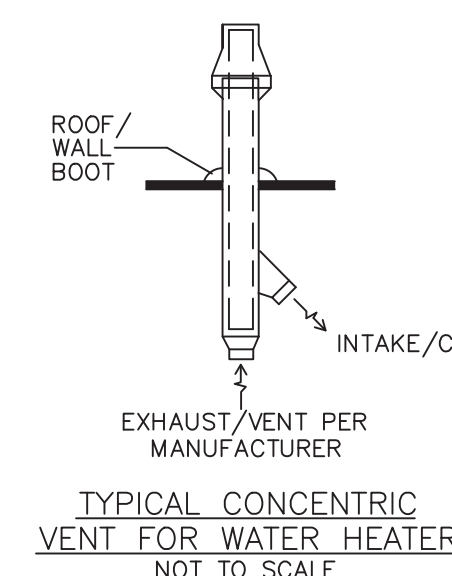
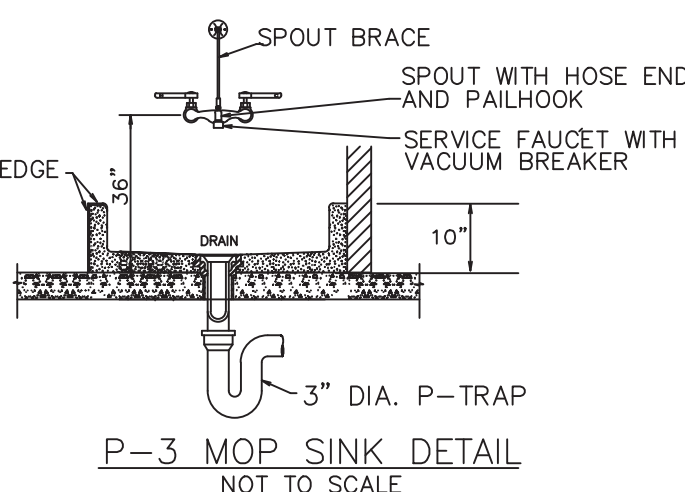
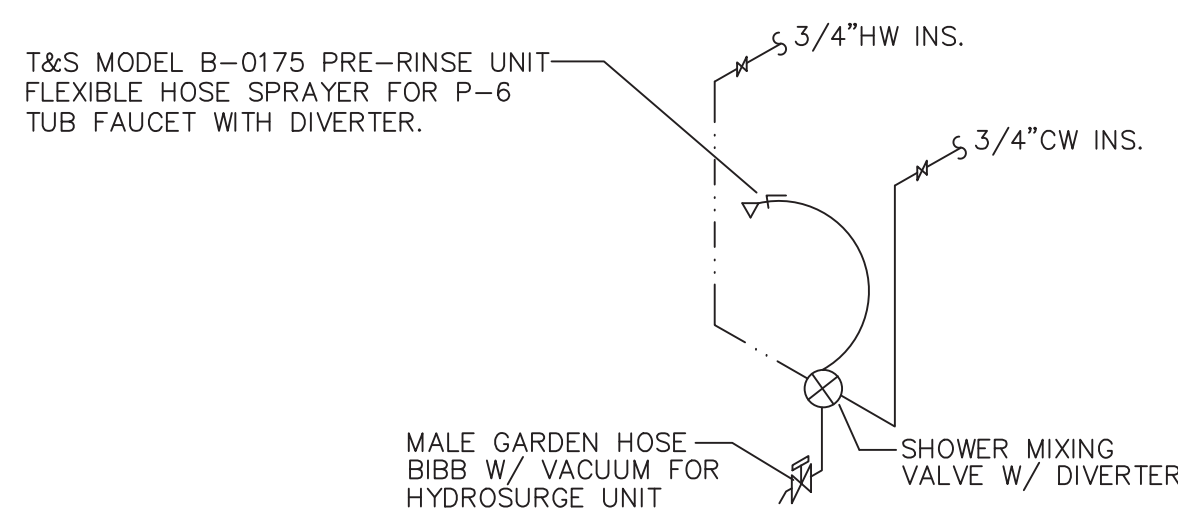
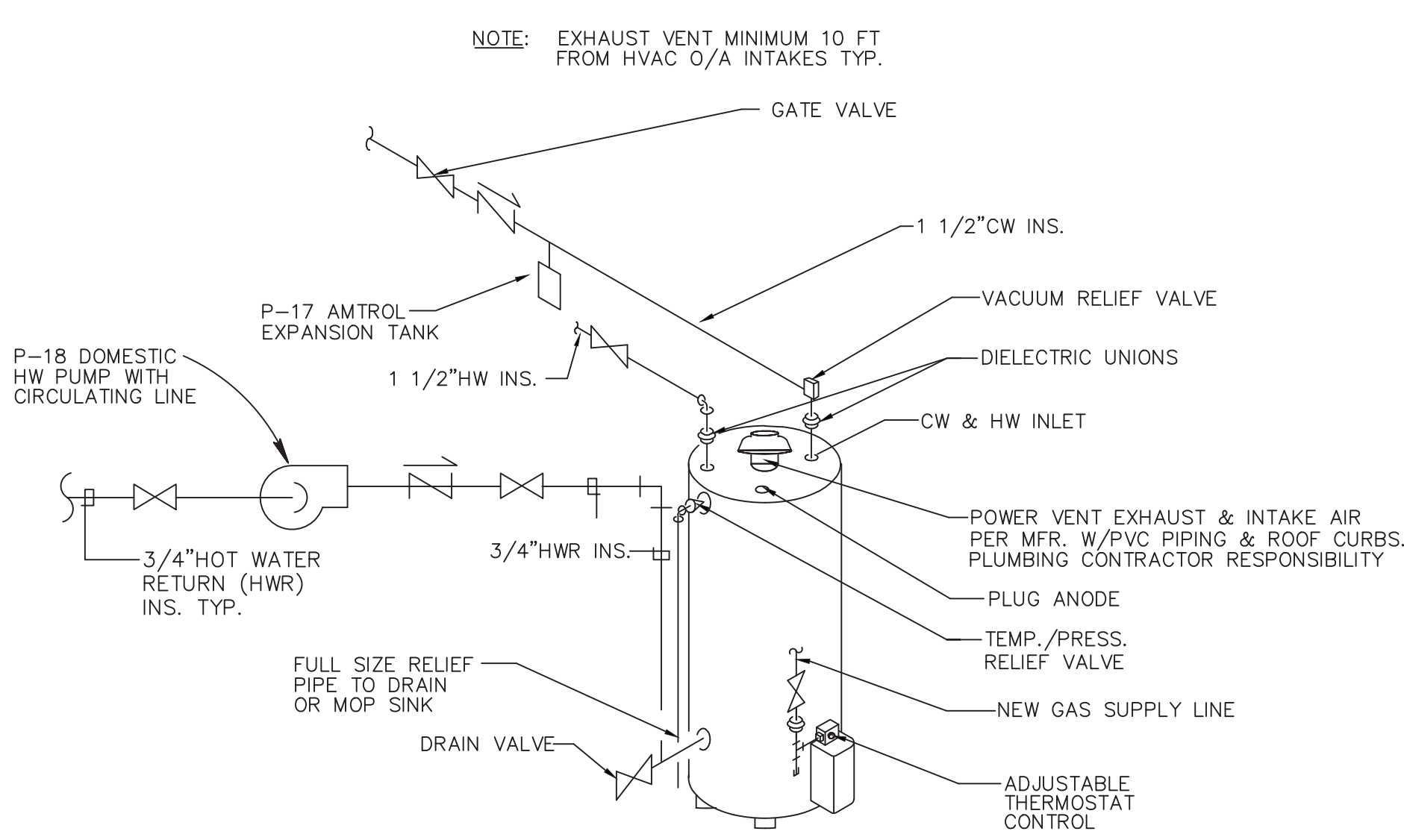
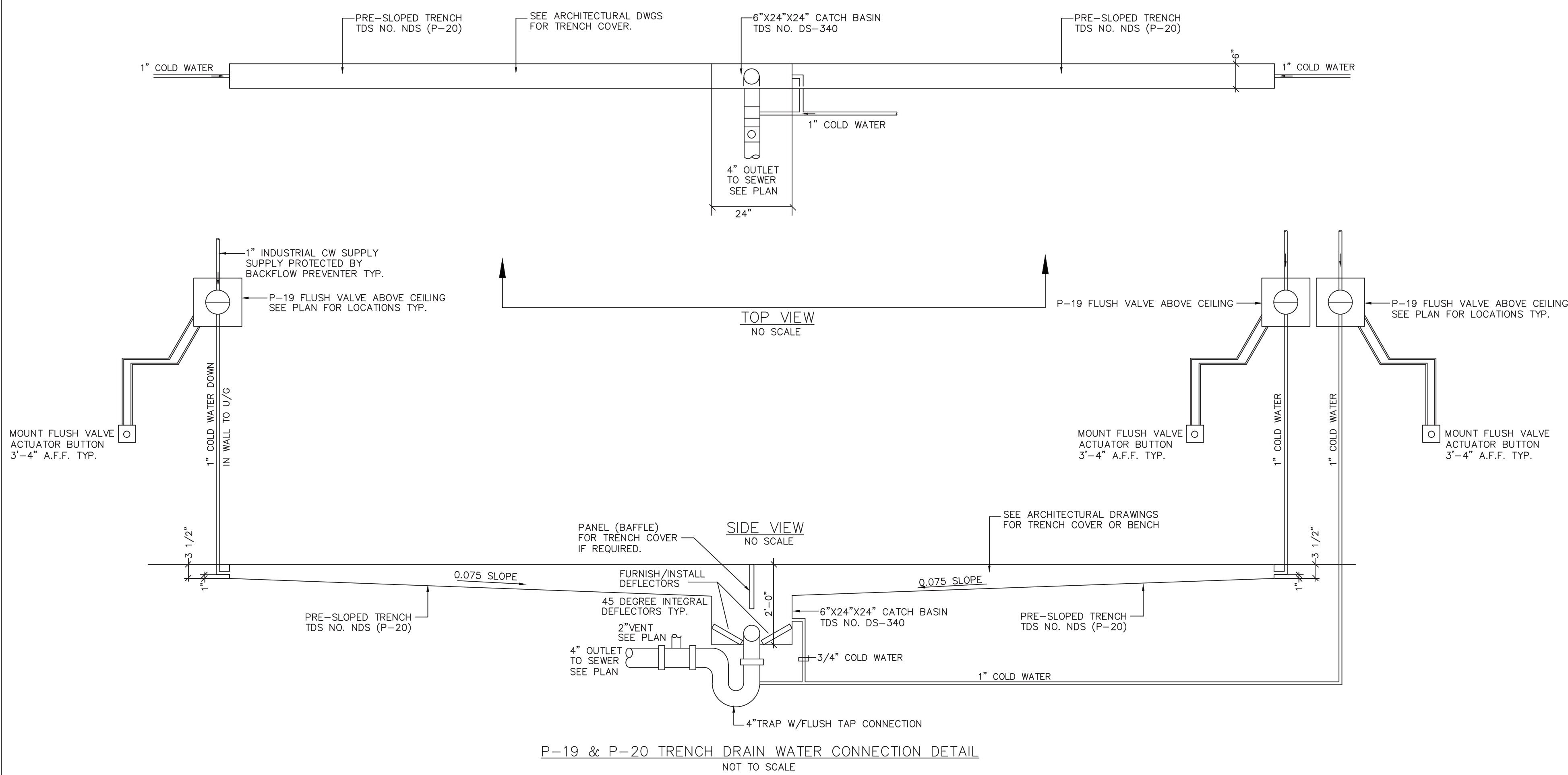
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NOTES:







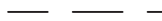


































































2. ALL FIXTURES SHALL BE WHITE UNLESS NOTED OTHERWISE.
3. ALL WORK SHALL COMPLY WITH ALL LOCAL AND STATE GOVERNING CODES AND PERMITS. CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PLUMBING PERMITS AND INSTALL PER LOCAL CODE AND STATE PERMIT REQUIREMENTS.
4. ALL INTERIOR HOT AND COLD WATER LINES SHALL BE INSULATED. HOT WATER LINES AND EXPOSED DRAINS SHALL BE INSULATED W/ WHITE PLASTIC JACKET (MINIMUM 1/2" THICK). EXPOSED COLD WATER LINES SHALL BE INSULATED W/ FIBERGLASS INSULATION (MINIMUM 1/2" THICK). ALL ABOVE GRADE SANITARY AND STORM DRAINAGE LINES SHALL BE CAST IRON. ALL HORIZONTAL STORM DRAINAGE LINES SHALL BE INSULATED.
5. CONTRACTOR SHALL PROVIDE ALL NECESSARY FITTINGS, FIXTURES, & VALVES TO MAKE A COMPLETE AND OPERATING SYSTEM. ALL PIPING SHALL BE RUN UNLESS OTHERWISE NOTED. CONTRACTOR SHALL PROVIDE ALL NECESSARY FITTINGS, VALVES, AND ACCESSORIES TO INSTALL ALL WATER SYSTEMS W/ SITE CONTRACTOR AND LOCAL UTILITY COMPANIES.
6. CONTRACTOR SHALL PROVIDE ALL MOUNTING HARDWARE AND ACCESSORIES TO INSTALL ALL FIXTURES. INSTALL HANDICAP COMPLIANCE IN COMPLIANCE W/ ADA AND LOCAL CODES.
7. CONTRACTOR SHALL ENSURE THAT PIPES ARE ADEQUATELY INSULATED TO PREVENT FREEZING. PLUMBER SHALL USE FIBERGLASS INSULATION W/ VAPOR BARRIER (OWENS CORNING OR EQUAL). COLD WATER LINES SHALL HAVE MINIMUM 1/2"THICK INSULATION AND HOT WATER AND HOT WATER RETURN LINES SHALL HAVE MINIMUM 1"THICK INSULATION.
8. CONTRACTOR SHALL PROVIDE FIELD COORDINATE FINAL LOCATION OF WATER, SANITARY SEWER, GAS, AND VENT, PIPING W/ G.C., STRUCTURAL, MECHANICAL, AND ELECTRICAL CONTRACTORS AND ADJUST FINAL LOCATIONS BASED ON FINAL FIELD CONDITIONS TO AVOID INTERFERENCES.
9. PROVIDE INSTALLED PRESSURE OF ALL NEW GAS FIRED EQUIPMENT. PROVIDE SHUTOFF VALVES, MEDIUM PRESSURE (2 PS) REGULATORS, AND DRIP LEGS (ON UNITS IN CONDITIONED SPACE ONLY).
10. PERFORM A WATER ANALYSIS. IF HARDNESS EXCEEDS 7 GRAINS PER GALLON, PROPOSE A WATER SOFTENING SYSTEM TO PROVIDE WATER W/ HARDNESS LESS THAN 7 GRAINS PER GALLON.
11. MEDICAL GAS SYSTEM DESIGN (INCLUDING EQUIPMENT AND PIPE SIZING) TO BE CONFIRMED AND ADJUSTED AS REQUIRED BY MEDICAL GAS SUPPLIER/INSTALLER.

FIRE PROTECTION SCOPE OF WORK:

OBTAIN THE SERVICES OF A STATE QUALIFIED AND LICENSED SPRINKLER CONTRACTOR TO DESIGN, OBTAIN NECESSARY STATE AND LOCAL APPROVALS OF DESIGN, AND REVISE THE EXISTING FIRE PROTECTION SPRINKLER SYSTEM PER LOCAL AND NEPA 13 CODE. FIRE PROTECTION CONTRACTOR SHALL SUBMIT 3 COPIES OF THE DESIGN CALCULATIONS, FLOW TESTS, ETC. FOR ARCHITECT/ENGINEER APPROVAL AND SUBMIT REQUIRED COPIES TO LOCAL FIRE AUTHORITIES FOR APPROVAL PRIOR TO INSTALLATION. MECHANICAL, PLUMBING AND ELECTRICAL CONTRACTOR TO ADJUST FOR INTERFERENCES AND ADJUST SPRINKLER DESIGN AND LAYOUT ACCORDINGLY. FIRE PROTECTION CONTRACTOR SHALL FIELD TEST THE SPRINKLER SYSTEM PER STATE AND LOCAL CODE AND NEPA 13 STANDARD.



PLUMBING LEGEND

	SANITARY SEWER (W) UNDERGROUND
	SANITARY SEWER (W) ABOVE GROUND
	VENT (V)
	COLD WATER (CW) INSULATED 1" THICK W/ VAPOR BARRIER
	COLD WATER (CW) UNDER FLOOR
	HOT WATER (HW) INSULATED 1" THICK W/ VAPOR BARRIER
	HOT WATER RETURN (HWR) INSULATED 1" THICK W/ VAPOR BARRIER
	NATURAL GAS SCH 40 STEEL PIPING W/ LABEL PER CODE
	FIXTURE NUMBER — SEE PLUMBING SCHEDULE
	CLEAN OUT
	FLOOR CLEAN-OUT W/ BRASS COVER
	WALL CLEAN-OUT W/ CHROME COVER
	VENT THRU ROOF
	UNDERGROUND INSTALLATION
	UNDERLOOR INSTALLATION
	FLOOR DRAIN W/ TRAP PRIMER VALVE & CONNECTION AS SPECIFIED
	F.F.P.H.B.
	FREEZE PROOF HOSE BIBB W/ INTEGRAL VACUUM BREAKER
	PIPE UP — INSULATED 1" THICK W/ VAPOR BARRIER
	PIPE DOWN — INSULATED 1" THICK W/ VAPOR BARRIER
	SANITARY RISER REFERENCE NUMBER
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	

HANDICAP ACCESSIBILITY NOTES:

WATER CLOSETS:	17"-19" A.F.F. TO RIM 18" FROM SIDEWALL TO CENTER (IN PLAN)
LAVATORIES	34" MAX. A.F.F. TO TOP OF RIM 29" MIN. CLEAR A.F.F. @ APRON 17" MIN. PROJECTION 30" CLEAR CENTERED (IN PLAN)

NOTES:

GENERAL

- A. SEE MECHANICAL COVER SHEET – GENERAL PROJECT NOTES FOR ADDITIONAL REQUIREMENTS.
- B. BEFORE COMMENCING ANY WORK, THE CONTRACTOR SHALL VERIFY ALL GOVERNING DIMENSIONS AT THE SITE AND EXAMINE ADJOINING WORK ON WHICH ITS WORK WILL BE DEPENDENT AND REPORT ANY CONFLICTS OR DISCREPANCIES TO THE ARCHITECT /ENGINEER.
- C. PROVIDE ALL WORK INDICATED ON THE CONTRACT DOCUMENTS.
- D. THE DRAWINGS SHALL BE CONSIDERED AS DIAGRAMMATIC. ATTENTION IS CALLED TO THE FACT THAT WHILE THE DRAWINGS ARE GENERALLY TO SCALE AND ARE AS ACCURATE AS THE SCALE WILL PERMIT, ALL IMPORTANT DIMENSIONS SHALL BE DETERMINED IN THE FIELD. THE DRAWINGS ARE NOT TO BE CONSIDERED AS CONSTRUCTION DRAWINGS. THE DRAWINGS DO NOT INDICATE EVERY FITTING, ELBOW, OFFSET, VALVE OR SIMILAR COMPONENTS WHICH ARE REQUIRED TO COMPLETE THE WORK.
- E. THE CONTRACTOR SHALL INSTALL AND CONNECT ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH THE BEST ENGINEERING PRACTICE AND UNLESS OTHERWISE INDICATED SHALL FOLLOW THE MANUFACTURER'S PUBLISHED INSTRUCTIONS AND RECOMMENDATIONS. FURNISH AND INSTALL ALL REQUIRED AUXILIARY ITEMS TO PROVIDE A COMPLETE & OPERABLE SYSTEM.
- F. WITHIN THIRTY (30) DAYS OF CONTRACT AWARD, THE CONTRACTOR SHALL SUBMIT FOR REVIEW TO THE ARCHITECT ALL DEVICES TO BE USED IN THE WORK. SUBMITTALS SHALL INCLUDE PIPE, FITTINGS, HANGERS AND SUPPORTS, INSULATION, FIXTURES AND RELATED EQUIPMENT.
- G. THE DRAWINGS SHALL NOT BE SCALED FOR EXACT MEASUREMENTS -- USE DIMENSIONED ARCHITECTURAL DRAWINGS. REFER TO MANUFACTURER'S STANDARD ROUGH-IN DRAWINGS FOR PLUMBING FIXTURES AND TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS.
- H. COORDINATE WITH THE WORK OF OTHER SECTIONS AND TRADES, WITH EQUIPMENT FURNISHED BY OTHERS, AND WITHIN THE CONSTRAINTS OF THE EXISTING CONDITIONS OF THE PROJECT SITE.
- I. MISCELLANEOUS EXPENSES SUCH AS HOOK –UP CHARGES, PERMITS, INSPECTIONS, AND OTHER EXPENSES RELATED TO A COMPLETE AND FUNCTIONING SYSTEM ARE INCLUDED AS PART OF THIS SECTION.
- J. ACCESS PANELS SHALL BE PROVIDED IN CEILINGS OR WALLS WHERE CONCEALED DEVICES ARE LOCATED, EXCEPT WHERE ACCESS FOR ADJUSTMENT AND MAINTENANCE IS POSSIBLE THROUGH OTHER MEANS.
- K. PIPING SYSTEMS, GENERAL: ALL PIPING SHALL BE RUN PARALLEL TO BUILDING LINES AND SUPPORTED AND ANCHORED AS REQUIRED TO FACILITATE EXPANSION AND CONTRACTION. ALL PIPING SHALL BE CONCEALED EXCEPT IN UNFINISHED SPACES. INSTALL AS REQUIRED TO MEET ALL CONSTRUCTION CONDITIONS AND TO ALLOW FOR INSTALLATION OF OTHER WORK INCLUDING DUCTS AND ELECTRICAL CONDUIT. AT ALL CONNECTIONS BETWEEN FERROUS PIPING AND NONFERROUS PIPING, PROVIDE AN ISOLATING DIELECTRIC UNION. SEAL PIPE PENETRATIONS OF FIRE FLOORS AND FIREWALLS WITH FIREPROOF PUTTY OR GROUT. PROVIDE SUMNER OR EQUIVALENT PIPE HANGING SYSTEM IN CHASES. PROVIDE HANGERS AS RECOMMENDED BY HANGER MANUFACTURER.
- L. ALL SINK INSTALLATION WILL BE EQUIPPED WITH HOT AND COLD RUNNING WATER THROUGH A MIXING VALVE OR COMBINATION FAUCET. ALL HANDICAP (ADA) SINK INSTALLATION SHALL BE EQUIPPED WITH ASSE 1070 TEMPERING VALVE ON THE HOT WATER. SET LIMIT AT 109F.
- M. (IF APPLICABLE) ALL WASTEWATER FROM FOOD SERVICE EQUIPMENT WILL BE INDIVIDUALLY PLUMBED TO AN OPEN SITE DRAIN WITH A MIN. OF 1" AIR GAP.
- N. WHERE PIPING PENETRATES FIRE–RATED WALLS, PIPING SHALL BE INSTALLED AT 90 DEGREE ANGLE. PIPE SLEEVES SHALL NOT BE INSTALLED AT 45 DEGREE ANGLE.
- O. ALL FIXTURES SHALL BE PROPERLY VENTED TO THE ATMOSPHERE.
- P. WATER AND VENT PIPING SHALL BE RUN HIGH AS POSSIBLE UNLESS OTHERWISE NOTED.
- Q. THE WORK INCLUDES CONNECTION OF PLUMBING UTILITIES TO PUBLIC UTILITIES AND INSTALLATION OF A COMPLETE PLUMBING SYSTEM WITHIN THE BUILDING. PROVIDE NEW MATERIALS, FITTINGS, ACCESSORIES, FIXTURES AND EQUIPMENT NECESSARY FOR A COMPLETE AND PROPERLY FUNCTIONING SYSTEM AS SHOWN ON THE PLANS AND AS REQUIRED. THE WORK INCLUDES FINAL CONNECTIONS TO EQUIPMENT AND FIXTURES PROVIDED BY OTHERS. FURNISH ALL NEW MATERIALS. WORK SHALL BE PERFORMED BY EXPERIENCED TRADESMEN, AND THEIR WORKMANSHIP SHALL BE HIGH STANDARD & ACCEPTABLE TO THE ARCHITECT, GENERAL CONTRACTOR, AND OWNER.
- R. ALL PLUMBING VENTS IN EXTERIOR WALLS SHALL BE OFFSET A MINIMUM OF 3' –0" IN CEILING AT ROOF BEFORE PENETRATION.
- S. ALL PLUMBING VENTS WITHIN A 10'–0" RADIUS OF EXHAUST VENTS SHALL BE EXTENDED TO A HEIGHT OF 3' –0" ABOVE EXHAUST VENT CROWN.
- T. ALL PLUMBING VENTS WITHIN A 10' –0" RADIUS OF ANY ROOFTOP UNIT OR INTAKE LOUVER SHALL BE EXTENDED TO A HEIGHT OF 3'–0" ABOVE FRESH AIR INTAKE.
- U. ALL HOSE BIBS SHALL BE MOUNTED 18" ABOVE FINISHED FLOOR, UNLESS OTHERWISE SPECIFIED.
- V. ALL WALL HYDRANTS SHALL BE MOUNTED 24" ABOVE FINISHED GRADE UNLESS OTHERWISE SPECIFIED.
- W. SLOPES AND INVERT ELEVATIONS OF ALL INTERIOR PIPING SHALL BE ESTABLISHED BEFORE ANY PIPING IS INSTALLED IN ORDER THAT PIPE SHALL BE LOCATED AND DETERMINED WHERE TO BE RUN TO AVOID CONFLICT WITH OTHER TRADES.
- X. CLEANOUTS SHALL BE PROVIDED NEAR BASE OF EACH VERTICAL WASTE OR SOLID STACK. PROVIDE 18" MINIMUM CLEARANCE FOR ACCESS.
- Y. UNLESS OTHERWISE NOTED, HORIZONTAL SANITARY PIPING SHALL BE PITCHED PER A.1.a.
- Z. LABEL ALL NEW PIPING. LABEL TO DESCRIBE SERVICE AND DIRECTION OF FLOW.
- AA. FLOOR SLABS SHALL BE X–RAYED BEFORE ANY CORE DRILLING IS COMMENCED.
- AB. ALL BUILDING SYSTEMS SHALL REMAIN IN SERVICE UNLESS INDICATED OTHERWISE. ALL OUTAGES OR INTERRUPTIONS SHALL BE KEPT TO MINIMUM DURATION. NOTIFY THE OWNER 48 HOURS IN ADVANCE OF ANY OUTAGE OR INTERRUPTION.
- AC. THE CONTRACTOR SHALL REPAIR ALL WALL, CEILING, FLOOR, OR ROOF OPENINGS WHICH ARE CREATED BY DEMOLITION OR PENETRATION. THE REPAIRS SHALL BE WITH MATERIALS AND FINISHES TO MATCH EXISTING. ALL FIRE RATED PENETRATIONS SHALL BE SEALED WITH SUITABLE MATERIALS TO PRESERVE FIRE RATED INTEGRITY.
- AD. ALL EQUIPMENT INSTALLED SHALL BE NEW AND SHALL CONFORM IN ALL RESPECTS TO THE LATEST APPROVED STANDARDS OF IEEE, ANSI, NEMA AND UNDERWRITERS LABORATORIES, INC., UNLESS INDICATED OTHERWISE. SUBSTITUTIONS SHALL ONLY BE ACCOMPLISHED AT THE DISCRETION OF THE ENGINEER.
- AE. PROTECT ADJACENT MATERIALS INDICATED TO REMAIN. INSTALL AND MAINTAIN DUST AND NOISE BARRIERS TO KEEP DIRT, DUST, AND NOISE FROM BEING TRANSMITTED TO ADJACENT AREAS. REMOVE PROTECTION AND BARRIERS AFTER DEMOLITION OPERATIONS ARE COMPLETE.
- AF. THE WORK SHALL CONFORM TO THE LATEST STATE AND LOCAL PLUMBING CODES.

PRODUCTS:

A. PIPING AND FITTINGS:

1. WASTE PIPING:

- a. SHALL BE TYPE PVC OR CAST IRON. FITTINGS SHALL BE TYPE PVC OR CAST IRON. ABS CAN BE USED IF SHELL BUILDING SEWER & VENT PIPES ARE ABS. MUST BE APPROVED BY LOCAL CODES. PROVIDE ALL DRAIN, WASTE AND SEWER PIPING WITHIN THE PROJECT SPACE WITH CONNECTION TO THE PUBLIC SANITARY WASTE SYSTEM ON SITE. ALL PIPING BELOW FLOOR SLAB SHALL BE PVC OR SERVICE WEIGHT HUB AND SPIGOT PIPE AND FITTINGS WITH NEOPRENE GASKET JOINTS, OR HUBLESS PIPE WITH CAST IRON COUPLINGS AND STAINLESS STEEL BOLTS COATED WITH MASTIC. ALL WASTE PIPING ABOVE FLOOR SHALL BE PVC OR SERVICE WEIGHT COPPER HUBLESS PIPE, CONNECTORS AND FITTINGS. ALL PIPING SHALL BE SLOPED UNIFORMLY AT 1.04% (3" AND ABOVE) OR 2.08% (2" AND BELOW) UNLESS OTHERWISE REQUIRED BY EXISTING CONDITIONS. ALL INDOOR ABOVE GRADE SANITARY PIPING SHALL BE CAST IRON OR PVC INSULATED FOR SOUND.
- b. HUB–AND–SPIGOT, CAST –IRON SOIL PIPE AND FITTINGS
b.a.a. Pipe and Fittings: ASTM A 74,[Service] class.
b.a.b. Gaskets: ASTM C 564, rubber.
b.a.c. Caulking Materials: ASTM B 29, pure lead and oakum or hemp fiber.
- c. HUBLESS, CAST –IRON SOIL PIPE AND FITTINGS
c.a.a. Pipe and Fittings: ASTM A 888 or CISPI 301.
c.a.a.1. Standards: ASTM C 1277 and CISPI 310.
c.a.a.2. Description: Stainless–steel corrugated shield with stainless–steel bands and tightening devices; and ASTM C 564, rubber sleeve with integral, center pipe stop.
c.a.a.3. Description: Stainless–steel shield with stainless–steel bands and tightening devices; and ASTM C564, rubber sleeve with integral, center pipe stop.
- d. COPPER TUBE AND FITTING
d.a. Copper DWV Tube: ASTM B 306, drainage tube, drown temper.
d.b. Copper Drainage Fittings: ASME B16.23, cast copper or ASME B16.29, wrought copper, solder–joint fittings.
d.c. Copper Ranges: ASME B16.24, Class 150, cast copper with solder–joint end.
d.d. Solder. ASTM B 32, lead free with ASTM B 813, water–flushable flux.
- e. PVC PIPE AND FITTINGS
e.a. Solid–Well PVC Pipe: ASTM D 2665, drain, waste, and vent.
e.b. PVC Socket Fittings: ASTM D 2665, made to ASTM D 3311, drain, waste, and vent patterns and to fit Schedule 40 pipe.
e.c. Adhesive Primer. ASTM F 656.
e.c.a. Adhesive primer shall have a VOC content of 550 g/L or less when calculated according to 40 CFR 59, Subpart D (EPA Method 24).
e.d. Solvent Cement ASTM D 2564.
e.d.a. PVC solvent cement shall have a VOC content of 51 0 g/L or less when calculated according to 40 CFR 59, Subpart D (EPA Method 24).

2. INDIRECT WASTE PIPING (IF APPLICABLE):

- a. HARD DRAWN COPPER TUBE TYPE "M".

3. VENT PIPING:

- a. PROVIDE A COMPLETE SYSTEM OF VENT PIPING, CONSISTING OF SERVICE WEIGHT CAST IRON HUBLESS PIPE, CONNECTORS AND FITTINGS. COMBINE THE VENT RISERS IN THE CEILING SPACE AND CONNECT TO NEW VENT MAIN.

4. WATER PIPING:

- a. PROVIDE NEW DOMESTIC WATER PIPING SYSTEM INSIDE THE BUILDING AS SHOWN ON DRAWINGS. HOT AND COLD WATER PIPING SHALL BE COPPER TUBING & FITTINGS OR CCPVC PIPING & FITTINGS. PROVIDE WATER HAMMER ARRESTORS AS REQUIRED. LAY OUT WATER PIPING SO THAT ENTIRE SYSTEM CAN BE DRAINED. FLUSH THE WATER PIPING CLEAR OF DEBRIS AND CLEAN THE ERATORS AND STRAINERS AT THE TERMINATION OF THE INSTALLATION.

b. COPPER TUBE AND FITTINGS

- b.a. Hard Copper Tube: ASTM B 88, Type L and ASTM B 88, Type M water tube, drawn temper.
b.b. Soft Copper Tube: ASTM B 88, Type K and ASTM B 88, Type L water tube, annealed temper.
b.c. Cast–Copper, Solder–Joint Fittings: ASME B16.18, pressure fittings.
b.d. Wrought–Copper, Solder–Joint Fittings: ASME B16.22, wrought–copper pressure fittings.
b.e. Bronze Flanges: ASME B16.24, Class 150, with solder–joint ends.
b.f. Copper Unions:
b.f.1. MSS SP–123.
b.f.2. Cast–copper–alloy, hexagonal–stock body.
b.f.3. Ball–and–socket, motel–to–motel seating surfaces.
b.f.4. Solder–joint or threaded ends.
b.f.5. Copper Pressure–Seal–Joint Fittings:
b.f.6. Fittings for NPS 2 and Smaller. Wrought–copper fitting with EPDM–rubber, O–ring seal in each end.
b.1. 7. Fittings for NPS 2–1/2 to NPS 4: Cast–bronze or wrought–copper fitting with EPDM–rubber, D–ring seal in each end.

5. PIPE INSULATION:

INSULATE ALL COLD WATER AND CONDENSATE PIPING WITH 1/2", AND HOT WATER PIPING WITH 1", PREFORMED FIBERGLASS PER ASTM C335 WITH ALL –SERVICE JACKET AND VAPOR BARRIER (BY CT, OC, JM, PPG, OR KNAUF). INSULATION SHALL COMPLY WITH NFPA 255 AND ASTM EB4 WITH A MAXIMUM FLAME SPREAD OF 25 AND MAXIMUM SMOKE DEVELOPED OF 50. PROVIDE PRE– MOLDED FITTING COVERS EQUAL TO STARR DAVIS. AT CONTRACTOR'S OPTION, PLENUM–RATED ELASTOMERIC INSULATION (BY ARMSTRONG, RUBATEX OR EQUAL) MAY BE USED.

6. SHUT –OFF VALVES:

VALVES WITH UNIONS SHALL BE PROVIDED AT BRANCHES TO GROUPS OF MORE THAN TWO FIXTURES AND AT THE WATER HEATER TO FACILITATE ISOLATION FOR REPAIR OR REPLACEMENT. USE CHROME–FINISHED FORGED BRONZE BODY, FULL PORT BALL VALVES, LEAD FREE, PTFE SEATS AND PACKING, 400 LB. RATING WITH THREADED OR SOLDER ENDS, EQUAL TO NIBCO #FP600. VALVES SHALL BE ALL BRONZE FABRICATED VALVES FOR SCREWED PIPE. BY WALWORTH, ROCKWELL, NORDSTROM OR APPROVED EQUIVALENT.

7. AIR ADMITTANCE VALVE (A.A.V.) (IF REQUIRED):

STUDER MINIVENT, MAXIVENT, REDIVENT, TECVENT AND ULTRAVENT.

8. FLOOR DRAINS, CLEAN OUTS, TRAP SEALERS, HOSE BIBS AND BACKFLOW PREVENTERS:

SEE SCHEDULE ON PLUMBING DRAWINGS.

9. SUPPLIES AND TRAPS:

PROVIDE WATER SEALED TRAPS AND SUPPLIES INSTALLED AS CLOSE AS POSSIBLE TO ALL PLUMBING FIXTURES, DRAINS, AND/OR EQUIPMENT ITEMS FURNISHED BY OTHERS, HAVING A WASTE CONNECTION, OR REQUIRING WATER SERVICE. EXPOSED TRAPS AND SUPPLIES IN EXPOSED AREAS INCLUDING CABINET INTERIORS) SHALL BE CHROME PLATED BRASS.

10. DIELECTRIC FITTINGS:

SHALL BE EQUAL TO EPCO SALES, INC.

EXECUTION

- A. PROVIDE ALL WORK, EQUIPMENT, AND MATERIALS INDICATED.
B. ALL PIPE SHALL BE INSTALLED ABOVE CEILINGS, INSIDE WALLS OR IN CONCEALED SPACES.
C. DISINFECTION OF POTABLE WATER SHALL BE PERFORMED IN ACCORDANCE WITH THE LOCAL AUTHORITY HAVING JURISDICTION. THOROUGHLY CLEAN ITEMS BEFORE INSTALLATION. CAP PIPE OPENINGS TO EXCLUDE DIRT UNTIL FIXTURES ARE INSTALLED AND FINAL CONNECTIONS HAVE BEEN MADE. PROCEED AS RAPIDLY AS CONSTRUCTION WILL PERMIT. SET FIXTURES LEVEL AND IN PROPER ALIGNMENT. INSTALL SUPPLIES IN PROPER ALIGNMENT WITH FIXTURES PER MANUFACTURER'S ROUGH–IN DIMENSIONS. INSTALL SILICONE SEALANT BETWEEN FIXTURES AND ADJACENT MATERIAL, FOR SANITARY JOINT. REPAIR ANY DAMAGE DONE TO EXISTING FEATURES AND RESTORE TO ORIGINAL CONDITIONS. PROVIDE CLEAN CONDITIONS AT TERMINATION OF WORK.
D. TEST WASTE AND WATER UNDER ACTUAL OPERATING CONDITIONS. REPAIR LEAKS AND RETURN TO SERVICE. TEST WASTE PIPING AT 15 FEET OF HEAD FOR 24 HOURS. TEST WATER PIPING AT 125 PSI FOR 2 HOURS. MAKE REPAIRS WITH NEW MATERIALS. REPLACE LEAKING MATERIALS, DO NOT REPAIR BY PATCHING. REPEAT TEST UNTIL STANDARDS ARE ACHIEVED.
E. PROVIDE DOMESTIC WATER BACKFLOW PREVENTERS AT ALL COFFEE MAKERS, ICE MAKERS, DISHWASHERS, WATER COOLERS, AIR CONDITIONING UNIT HUMIDIFIERS AND OR ANY OTHER DEVICE REQUIRED BY THE LOCAL AUTHORITY HAVING JURISDICTION. BACK FLOW PREVENTERS SHALL BE APPROVED BY THE LOCAL AUTHORITY HAVING JURISDICTION.
F. INSULATE ALL DOMESTIC HOT AND COLD WATER PIPING.
G. PROVIDE DIELECTRIC COUPLINGS AT ALL FERROUS TO NONFERROUS PIPE CONNECTIONS AND FLANGE UNION ISOLATING JOINTS TO PREVENT ANY ELECTROLYTIC ACTION BETWEEN DISSIMILAR METALS.
H. ALL SAW CUT OF FLOOR SHALL BE PATCHED BACK TO MATCH EXISTING FINISHES. BACKFILL PER SOILS ENGINEER'S RECOMMENDATIONS. SEAL WITH WATERPROOF MEMBRANE ALL SLAB PENETRATIONS 6" OUT FROM AND 6" UP THE DEMISING WALL
I. GUARANTEE THE WORK AND THE INSTALLATION FOR ONE YEAR AFTER FORMAL ACCEPTANCE BY THE OWNER.
J. ALL PIPES SHALL BE HUNG FROM BUILDING STRUCTURE WITH INSERTS EMBEDDED NO MORE THAN 2".

PLUMBING GENERAL NOTES

1. THE CONTRACTOR SHALL COMPLY WITH THE BUILDING, MECHANICAL, AND PLUMBING CODES OF THE STATE OF NEW YORK, AND ALL THE LAWS, ORDINANCES, RULES, CODES AND REGULATIONS OF ALL GOVERNMENTAL AUTHORITIES HAVING JURISDICTION AND THE NATIONAL FIRE PROTECTION ASSOCIATION.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VISITING THE SITE AND DETERMINING THE EXISTING CONDITIONS IN WHICH THE WORK IS TO BE PERFORMED. PROVIDE ALL WORK INDICATED ON THE CONTRACT DOCUMENTS.
3. THE CONTRACTOR SHALL REMOVE AND DISCONNECT ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH THE BEST ENGINEERING PRACTICE AND UNLESS OTHERWISE INDICATED.
4. UPON COMPLETION OF THE WORK, THE CONTRACTOR SHALL THOROUGHLY CLEAN THE CONTRACT AREA AND ALL OTHER AREAS USED FOR STORAGE, STAGING, ETC. THIS SHALL INCLUDE. BUT NOT BE LIMITED TO: WASHING (AND REPAIRING), REMOVING SPOTS AND STAINS, CLEANING ALL FIXTURES AND WASHING ALL FLOORS, WALLS AND CEILINGS (IF APPROPRIATE).
5. REFER TO MECHANICAL SHEETS FOR LOCATIONS OF MECHANICAL EQUIPMENT AND DUCTWORK AND COORDINATE ALL WORK TO BE REMOVED.
6. THE CONTRACTOR SHALL PROVIDE NECESSARY PIPING, VALVES, TRAPS, TEMPORARY FEEDS, DRIPS, ETC. AS REQUIRED. DRAIN AND REFILL PIPING SYSTEMS AS OFTEN AS NECESSARY TO ACCOMMODATE PHASING AND TO MINIMIZE TIME LENGTH OF OUTAGES.
7. WHERE REQUIRED TO MAINTAIN THE EXISTING SYSTEMS IN OPERATION, THE CONTRACTOR SHALL TEMPORARILY EXTEND EXISTING PIPING SYSTEMS TO NEW PIPING SYSTEMS WITH THE APPROPRIATE SHUT –OFF VALVES.
8. AT COMPLETION OF PROJECT ALL TEMPORARY PIPING, VALVES, CONTROLS, ETC. SHALL BE REMOVED IN THEIR ENTIRETY.

CAPITOL PROJECT 1483
CONSTRUCTION OF A NEW ANIMAL SHELTER FACILITY
65 FIREMANS MEMORIAL DRIVE, POMONA, NY 10970

PLUMBING NOTES

P0.02

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Comfort Design Inc.
Mechanical & Electrical
Engineers

Job # E2119

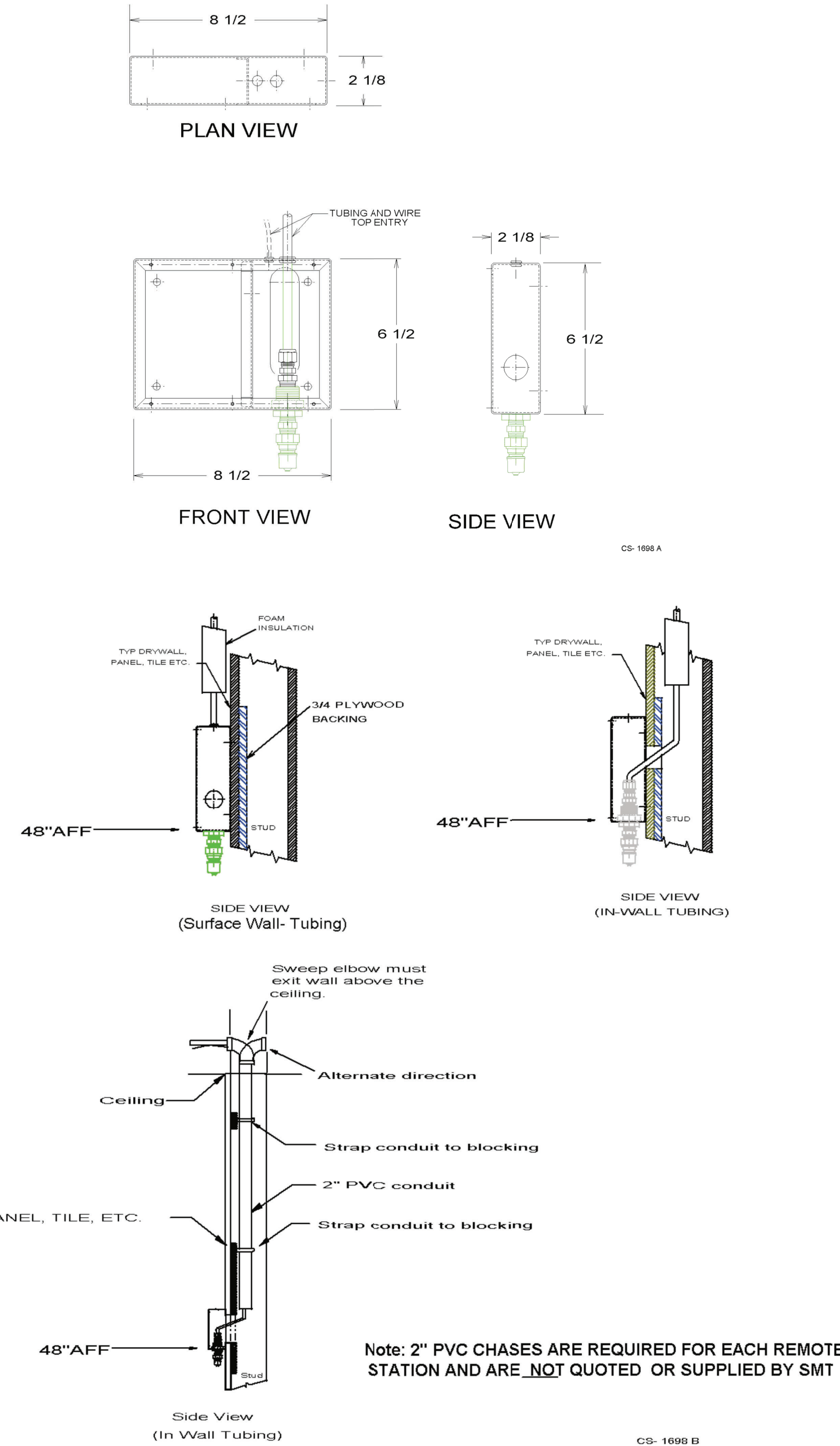
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CHECKED BY:		AS NOTED	
SCALE:		DATE: 20 OCT 2021	
PROJECT NO: 2019		CONSTRUCTION SET <input type="checkbox"/>	
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PERMIT SET <input type="checkbox"/>			

CAPITOL PROJECT 1483	
CONSTRUCTION OF A NEW ANIMAL SHELTER FACILITY	
65 FIREMANS MEMORIAL DRIVE, POMONA, NY 10970	

r&	
rauhaus freedreinfeld & associates	
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F. 617 428 2857	
West Coast Office	
2310 Mulberry Pkwy #106	
P.O. Box 1000	
T. 949 716 8898	
F. 949 716 8959	

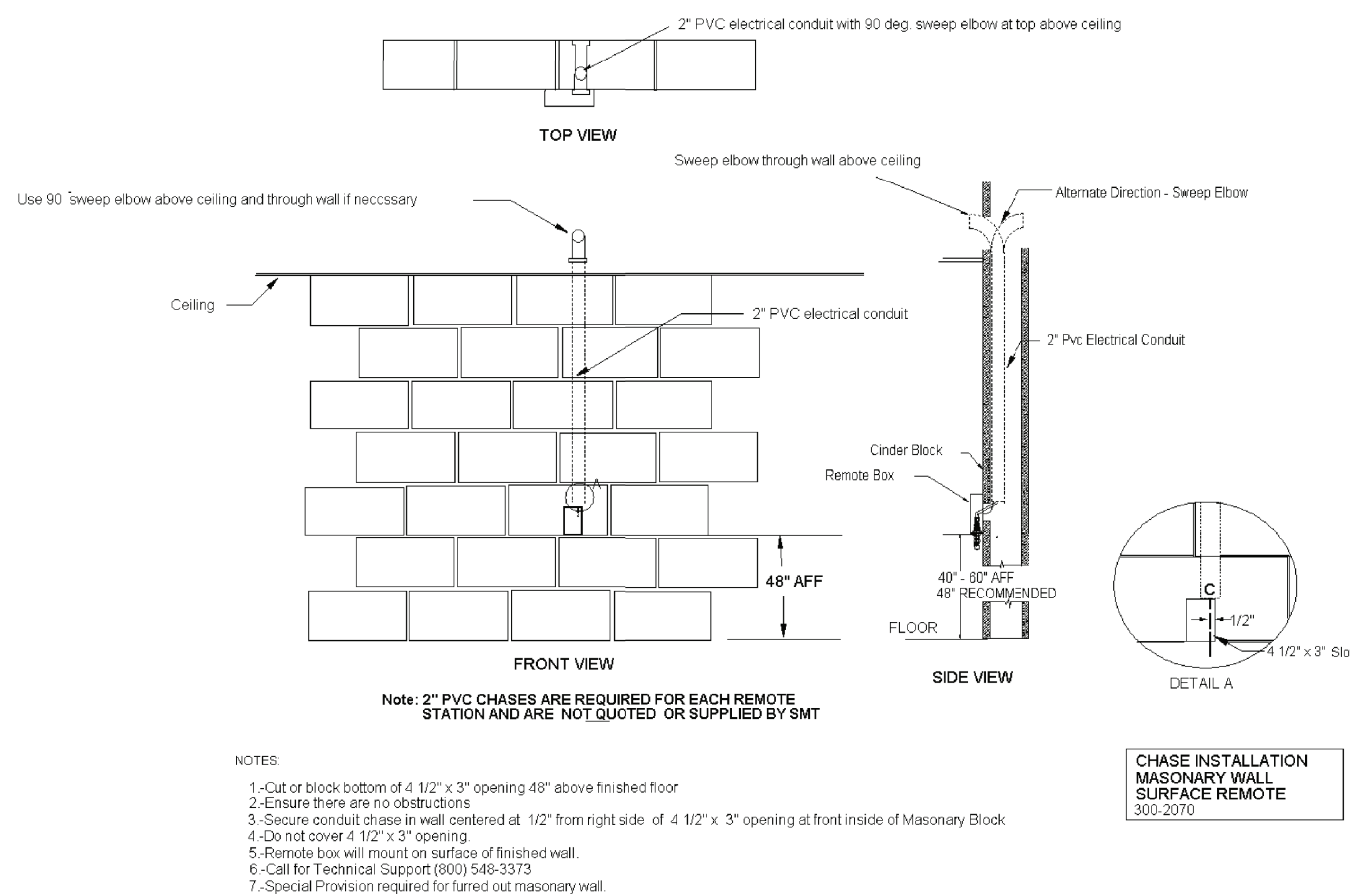
ARCHITECT'S SEAL:		REVISION		DATE	
NO.	DESCRIPTION	NO.	DESCRIPTION	NO.	DESCRIPTION

SMT - Surface Mount Remote



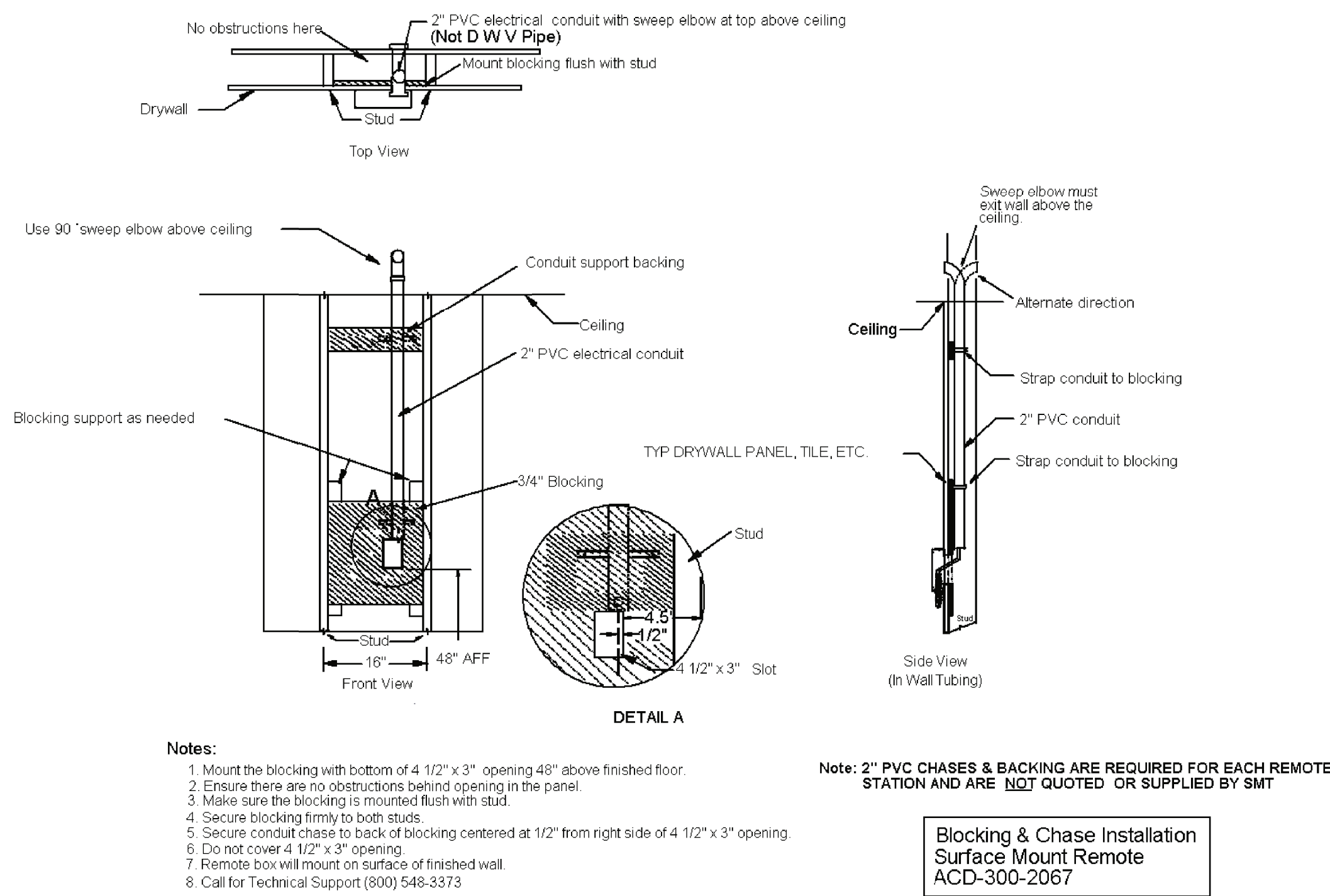
P-29 INTERIOR HIGH PRESSURE WASHER REMOTE STATION ROUGH-IN DETAIL #1
NOT TO SCALE

SMT - Surface Mount Remote



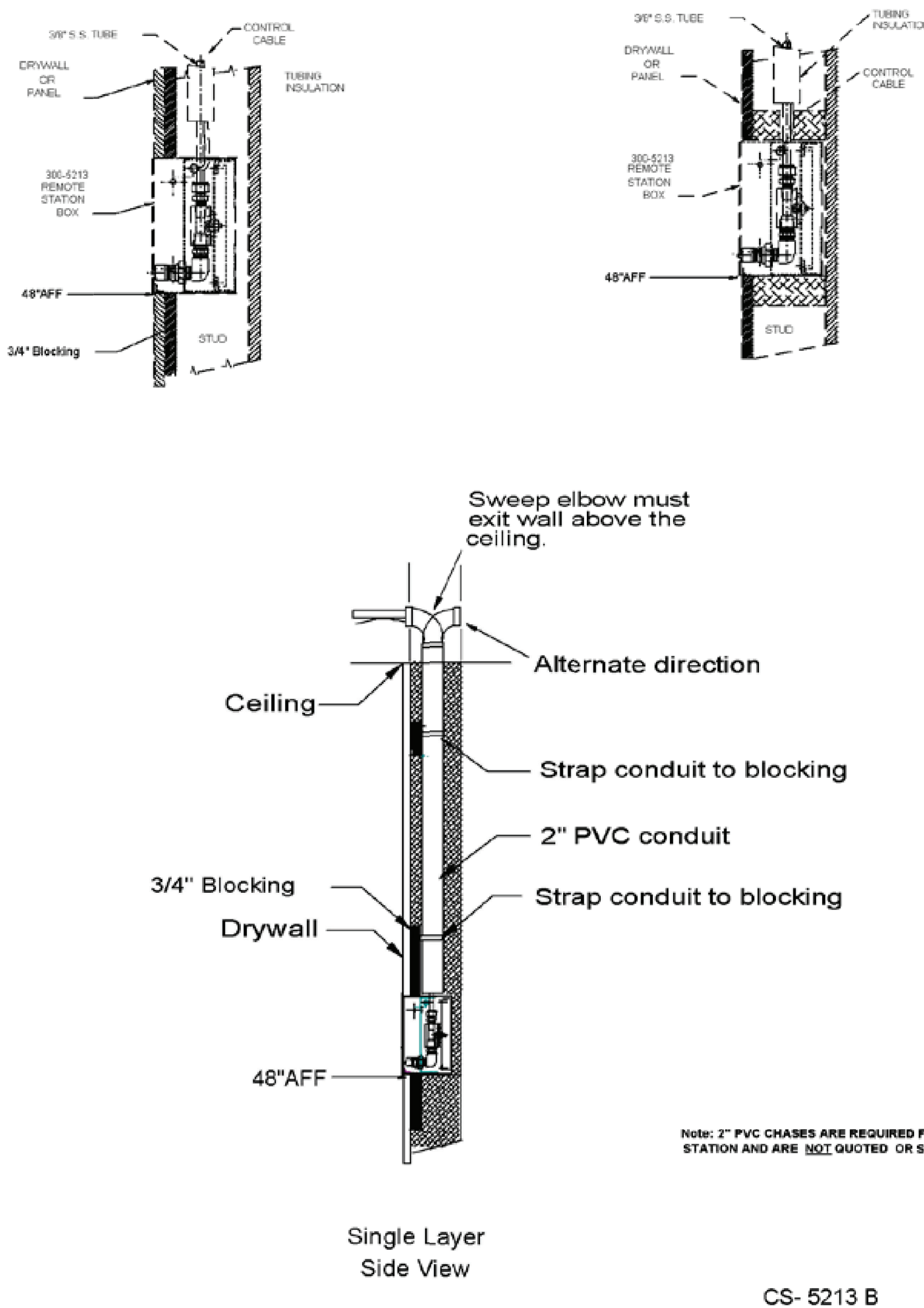
P-29 INTERIOR HIGH PRESSURE WASHER REMOTE STATION ROUGH-IN DETAIL #3
NOT TO SCALE

SMT - Surface Mount Remote



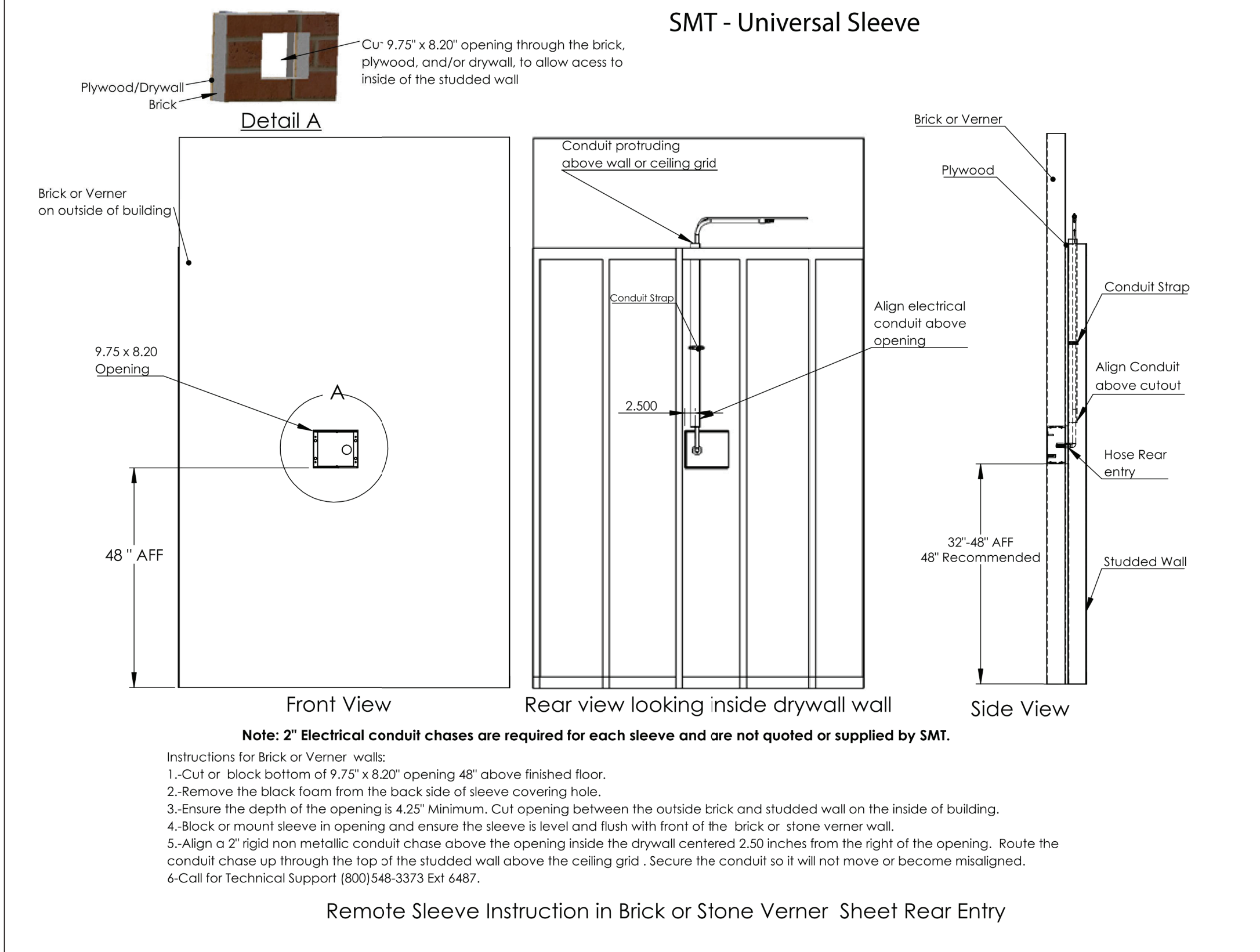
P-29 INTERIOR HIGH PRESSURE WASHER REMOTE STATION ROUGH-IN DETAIL #2
NOT TO SCALE

SMT - Non-Masonry Remote



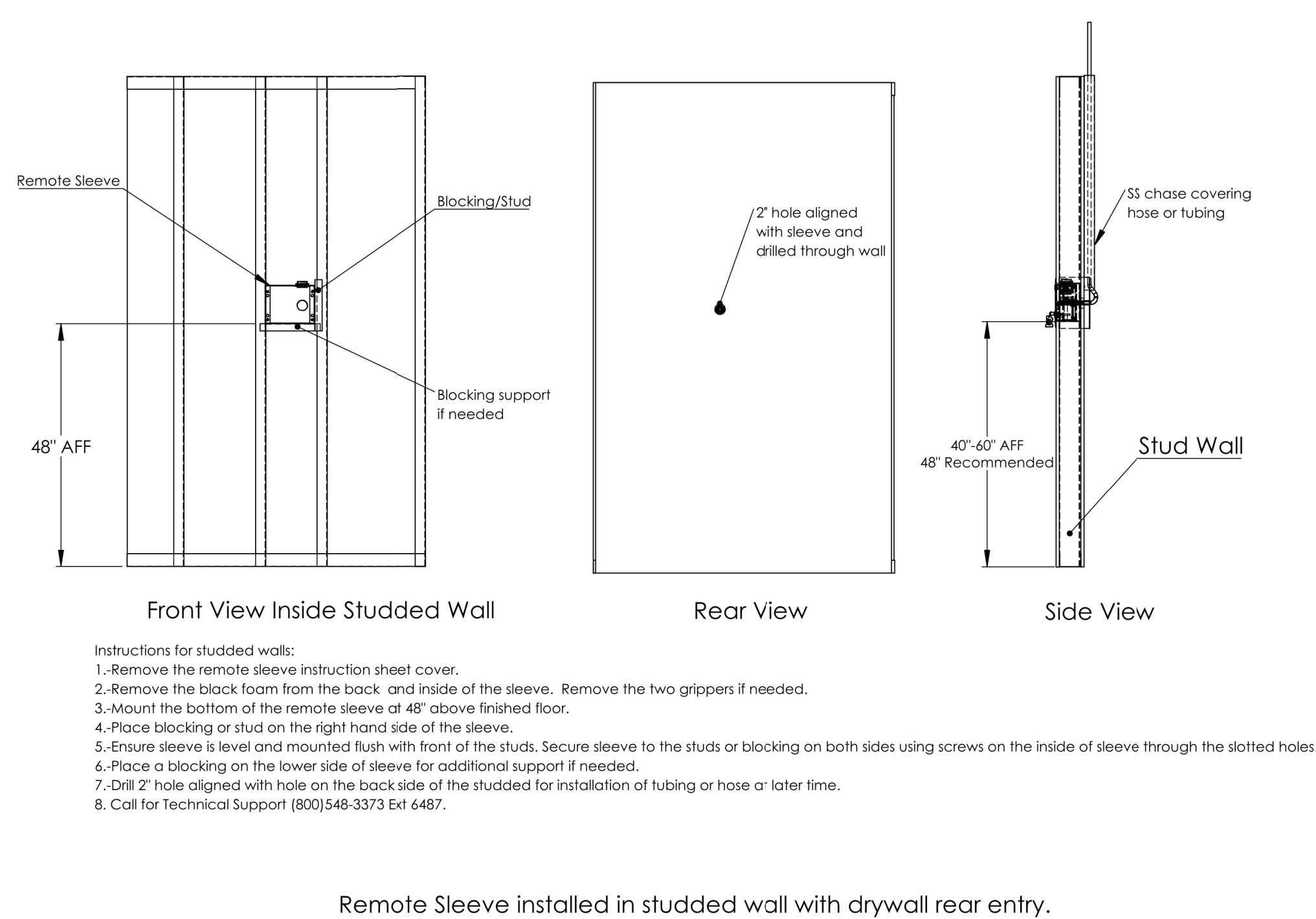
P-29 EXTERIOR HIGH PRESSURE WASHER REMOTE STATION ROUGH-IN DETAIL #1
NOT TO SCALE

SMT - Universal Sleeve



P-29 EXTERIOR HIGH PRESSURE WASHER REMOTE STATION ROUGH-IN DETAIL #2
NOT TO SCALE

SMT - Universal Sleeve



P-29 EXTERIOR HIGH PRESSURE WASHER REMOTE STATION ROUGH-IN DETAIL #3
NOT TO SCALE

CAPITOL PROJECT 1483
CONSTRUCTION OF A NEW ANIMAL SHELTER FACILITY
65 FIREMANS MEMORIAL DRIVE, POMONA, NY 10970

100% CONSTRUCTION DEVELOPMENT

SMT ROUGH-IN DETAILS

DRAWN BY:	CRS	PROJECT NO:	2019
CHECKED BY:	JLC	CONSTRUCTION SET	
SCALE:	AS NOTED	DATE:	20 OCT 2021
BID SET	PERMIT SET		
PROGRESS SET			

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P0.03

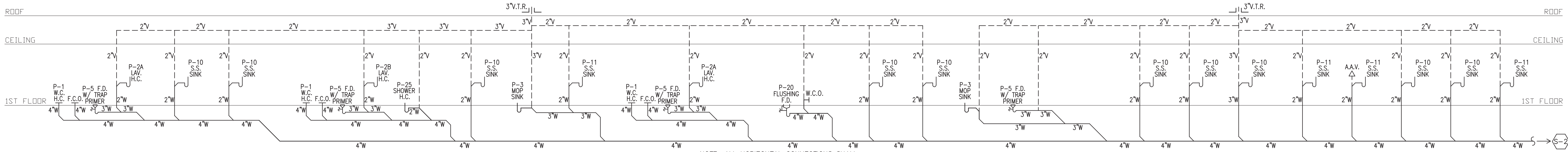
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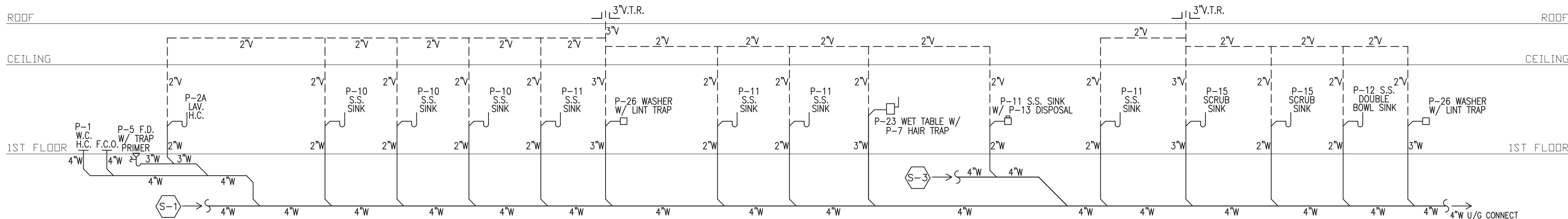
East Coast Office
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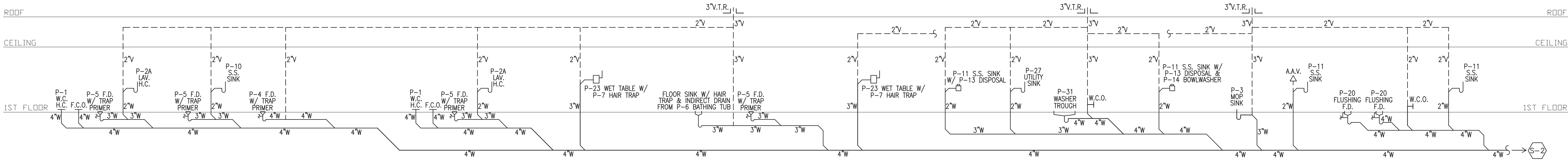
REVISION	DESCRIPTION	DATE
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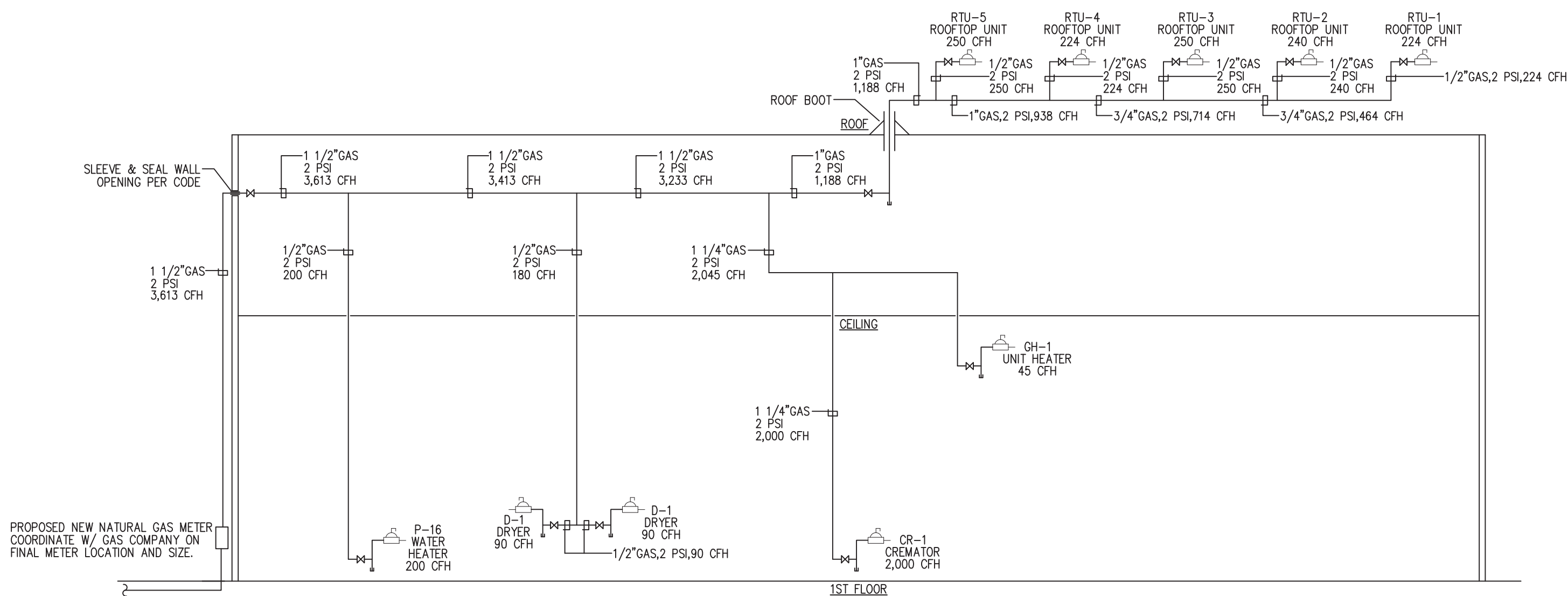
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S-1 SANITARY WASTE RISER DIAGRAM
NOT TO SCALE



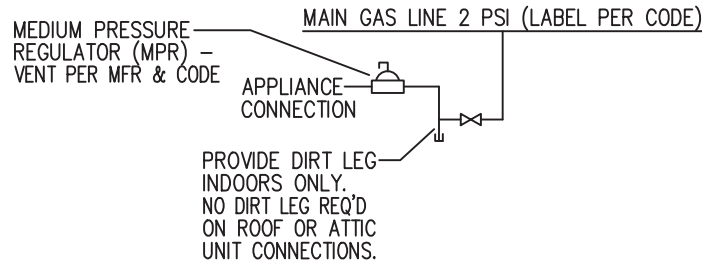
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S-2 SANITARY WASTE RISER DIAGRAM
NOT TO SCALE



NOTE: ALL HORIZONTAL CONNECTIONS SHALL BE WYE OR LONG SWEEP ELS TYPICAL.
S-3 SANITARY WASTE RISER DIAGRAM
NOT TO SCALE



NATURAL GAS RISER DIAGRAM
NOT TO SCALE



TYPICAL GAS CONNECTION DETAIL
NOT TO SCALE

100% CONSTRUCTION DEVELOPMENT

CAPITOL PROJECT 1483 CONSTRUCTION OF A NEW ANIMAL SHELTER FACILITY 65 FIREMANS MEMORIAL DRIVE, POMONA, NY 10970

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SCALE:	AS NOTED
DATE:	20 OCT 2021
PROJECT NO:	2019

PROGRESS SET	BID SET	PERMIT SET	CONSTRUCTION SET
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

NO.	REVISION	DESCRIPTION	DATE

ARCHITECT'S
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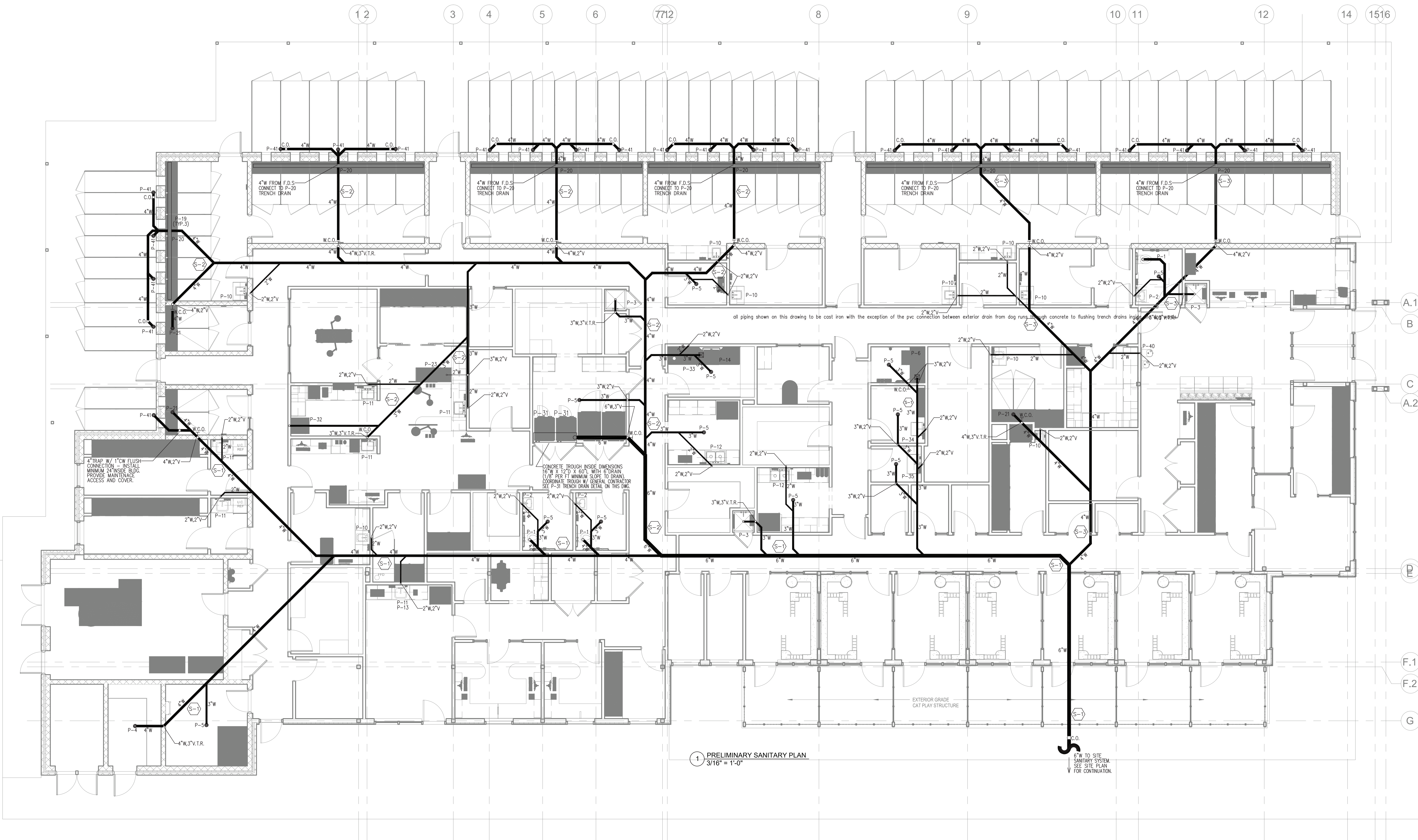
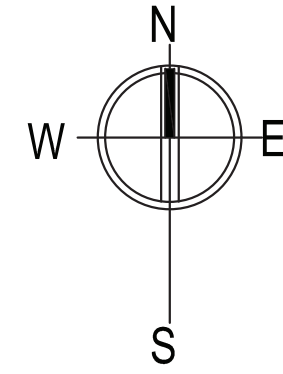
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P0.04



1 PRELIMINARY SANITARY PLAN
3/16" = 1'-0"

100% CONSTRUCTION DEVELOPMENT

CAPITOL PROJECT 1483
CONSTRUCTION OF A NEW ANIMAL SHELTER FACILITY
65 FIREMANS MEMORIAL DRIVE, POMONA, NY 10970

NO.	REVISION	DESCRIPTION	DATE

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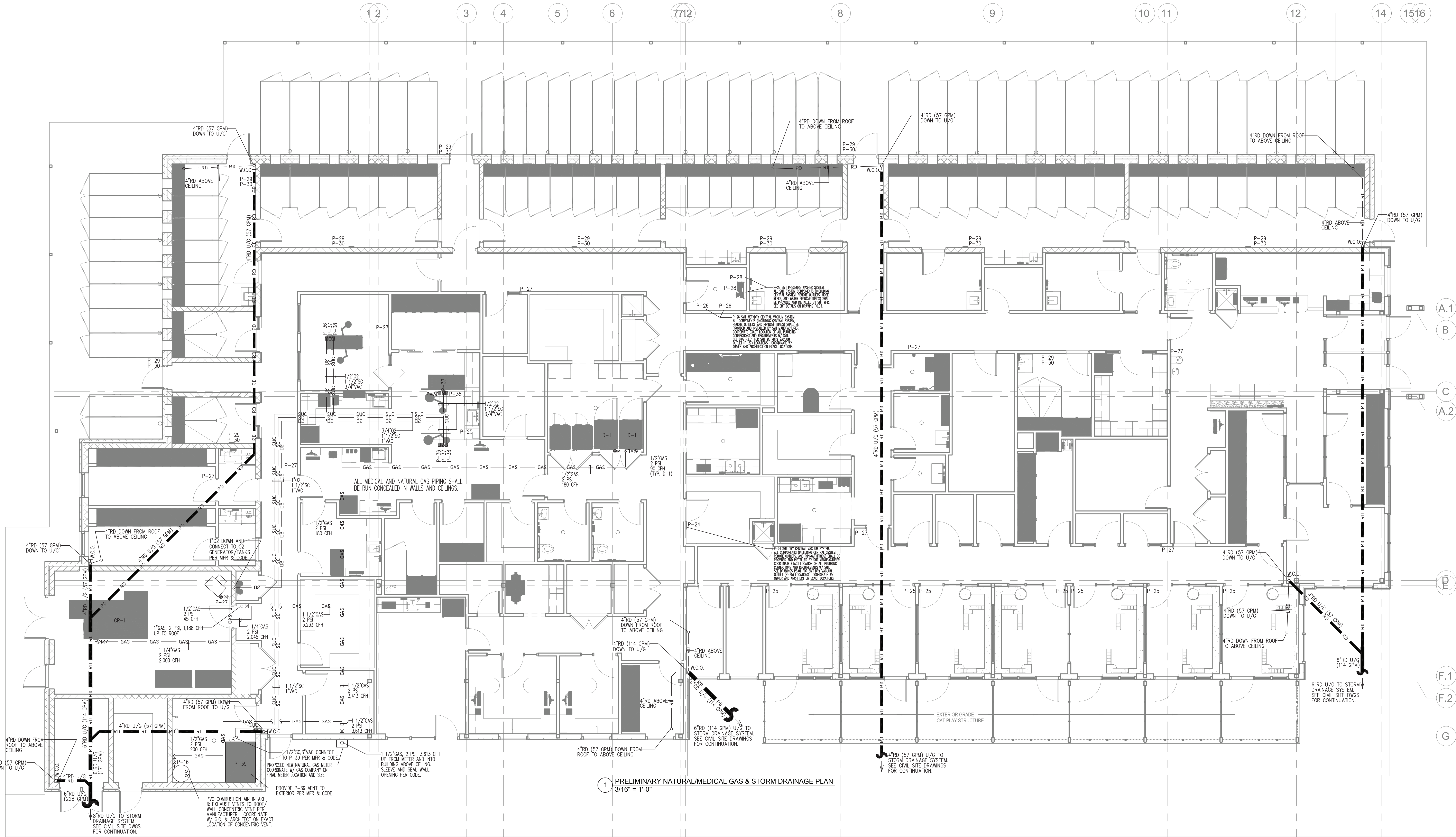
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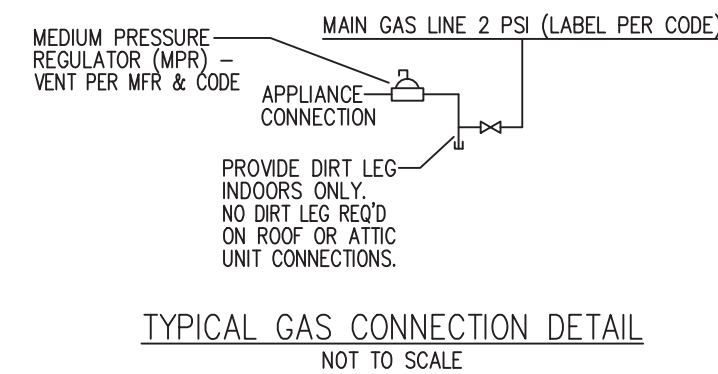
Job # E2119

P1.01



NATURAL GAS LOAD TABLE				
MARK	UNIT DESCRIPTION	MFR OR EQUAL	MODEL	INPUT BTU/H
P-16	WATER HEATER	A.O. SMITH	8TH-199	200,000
D-1	COMMERCIAL DRYER	GIRBAU	CG30-40	90,000
D-1	COMMERCIAL DRYER	GIRBAU	CG30-40	90,000
RTU-1	ROOFTOP UNIT	CARRIER	48HCFE08K2AA50WH	224,000
RTU-2	ROOFTOP UNIT	CARRIER	48HCFE14K2AA50WH	240,000
RTU-3	ROOFTOP UNIT	CARRIER	48HCFE12K2AA50WH	250,000
RTU-4	ROOFTOP UNIT	CARRIER	48HCFE08K2AA50WH	224,000
RTU-5	ROOFTOP UNIT	CARRIER	48HCFE12K2AA50TH	250,000
GH-1	UNIT HEATER	MOORE	HD45	45,000
CR-1	CREMATION UNIT	MES	IEB-16	2,000,000
SUMMARY TOTALS FOR GAS LOADS				3,613 CFH

NATURAL GAS PIPE SIZING BASED ON THE 2020 FUEL GAS CODE OF NY STATE, TABLE 402.4(5), 2 PSI PRESSURE W/ 1.0 PSI PRESSURE DROP, GAS = 0.60 SPECIFIC GRAVITY, SCHEDULE 40 PIPE AND 150 FEET. (1000 BTU/H = 1 CFH)



GAS PIPING LEGEND:

- O2 — O2 — O2 — MEDICAL GAS GRADE COPPER OXYGEN (O2) PIPING W/ HANGERS/SUPPORTS PER CODE.
- SC — SC — SC — MEDICAL GAS GRADE COPPER SUCTION (VAC) PIPING W/ HANGERS/SUPPORTS PER CODE.
- SC — SC — SC — SCH 40 PVC SCAVENGER (SC) PIPING W/ HANGERS/SUPPORTS PER CODE.
- GAS — GAS — GAS — NATURAL GAS SCH 40 STEEL PIPING W/ LABEL PER CODE.

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P3.01

100% CONSTRUCTION DEVELOPMENT

NATURAL/MEDICAL GAS & STORM DRAINAGE PLAN

DRAWN BY:	CRS
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CAPITOL PROJECT 1483
CONSTRUCTION OF A NEW ANIMAL SHELTER FACILITY
65 FIREMANS MEMORIAL DRIVE, POMONA, NY 10970

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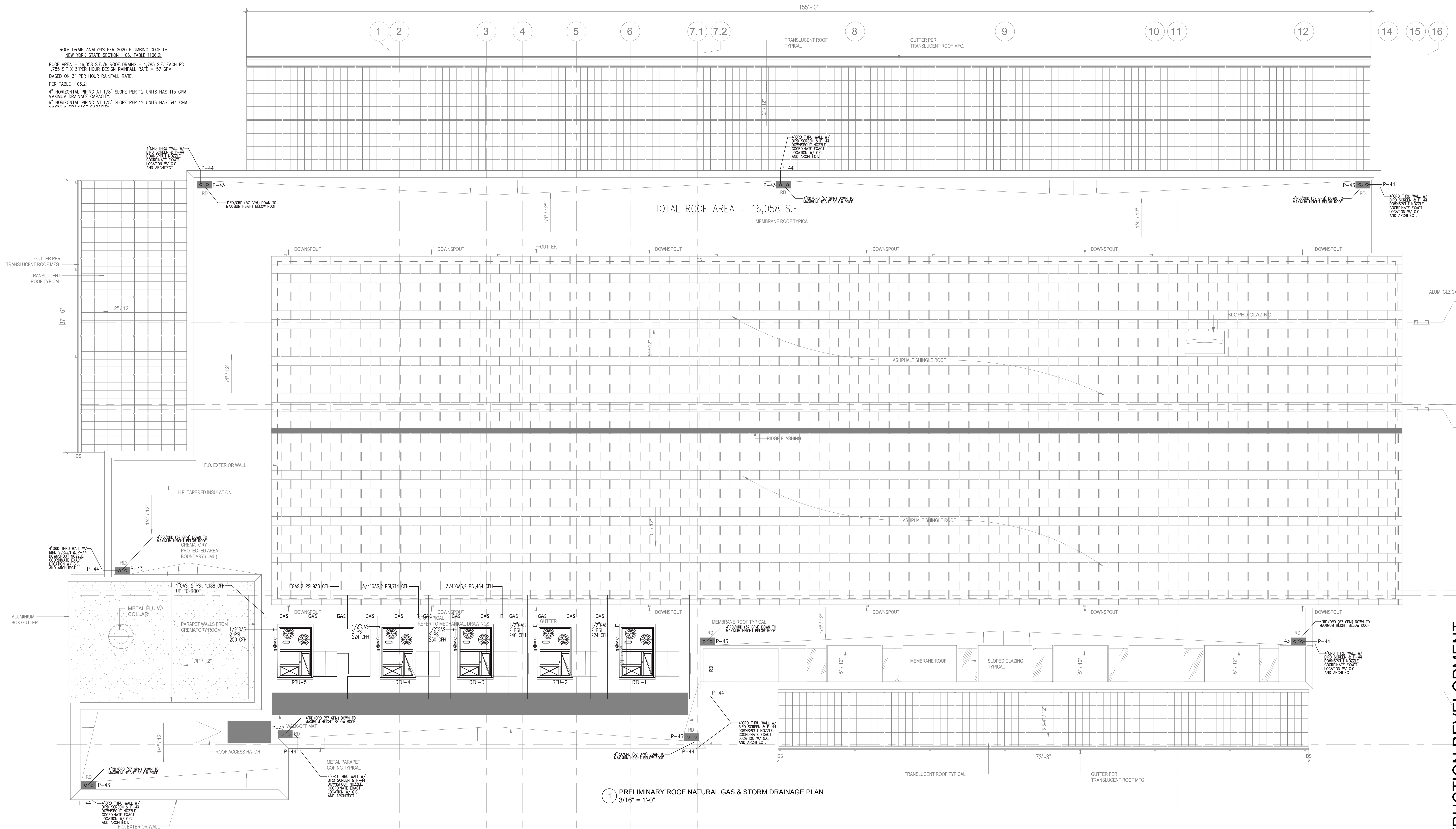
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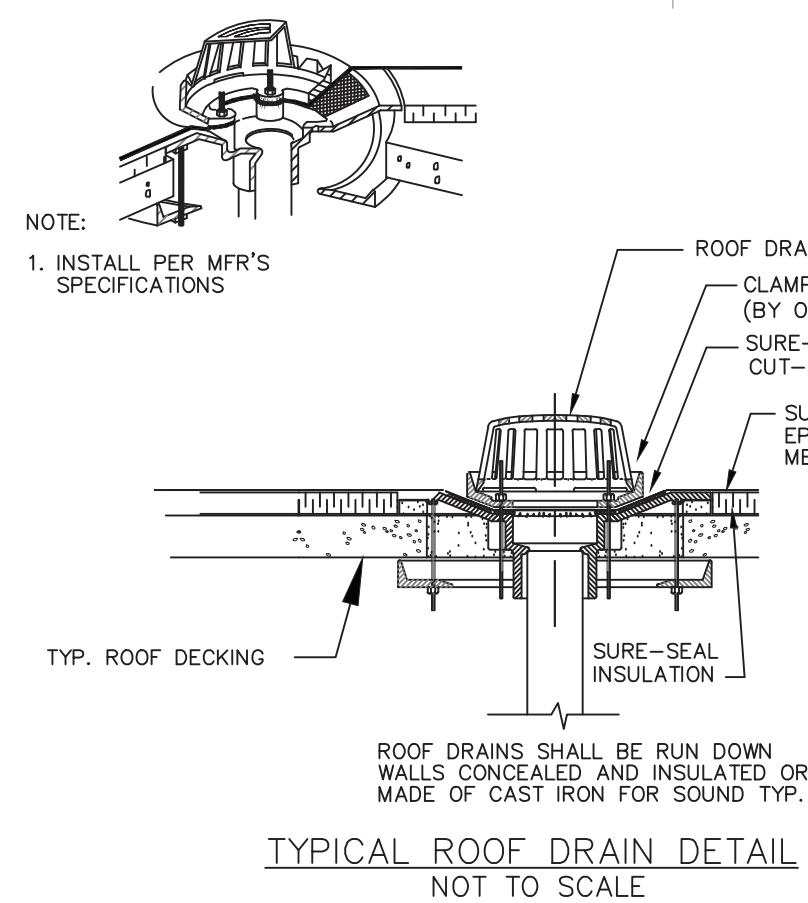
NO.	REVISION	DESCRIPTION	DATE

7" HORIZONTAL PIPING AT 1/8" SLOPE PER 12 UNITS HAS 115 GPM
MAXIMUM DRAINAGE CAPACITY.
6" HORIZONTAL PIPING AT 1/8" SLOPE PER 12 UNITS HAS 344 GPM
MAXIMUM DRAINAGE CAPACITY.
8" HORIZONTAL PIPING AT 1/8" SLOPE PER 12 UNITS HAS 714 GPM
MAXIMUM DRAINAGE CAPACITY.

ROOF DRAIN ANALYSIS PER 2020 PLUMBING CODE OF
NEW YORK STATE SECTION 1106, TABLE 1106.2.
ROOF AREA = 16,058 S.F. / 9 ROOF DRAINS = 1,785 S.F. EACH RD
1,785 S.F. X 3" PER HOUR DESIGN RAINFALL RATE = 57 GPM
BASED ON 3" PER HOUR RAINFALL RATE:
PER TABLE 1106.2:
4" HORIZONTAL PIPING AT 1/8" SLOPE PER 12 UNITS HAS 115 GPM
MAXIMUM DRAINAGE CAPACITY.
6" HORIZONTAL PIPING AT 1/8" SLOPE PER 12 UNITS HAS 344 GPM
MAXIMUM DRAINAGE CAPACITY.



1 PRELIMINARY ROOF NATURAL GAS & STORM DRAINAGE PLAN
3/16" = 1'-0"



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P3.02

100% CONSTRUCTION DEVELOPMENT

ROOF NATURAL GAS &
STORM DRAINAGE PLAN

DRAWN BY:	CRS
CHECKED BY:	JLC
SCALE:	AS NOTED
DATE:	20 OCT 2021
PROJECT NO:	2019
PROGRESS SET:	<input type="checkbox"/> BID SET <input checked="" type="checkbox"/> PERMIT SET <input type="checkbox"/> CONSTRUCTION SET

CAPITOL PROJECT 1483
CONSTRUCTION OF A NEW ANIMAL SHELTER FACILITY
65 FIREMANS MEMORIAL DRIVE, POMONA, NY 10970

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NO.	REVISION	DESCRIPTION	DATE