

GENERAL NOTES

- EACH CONTRACTOR, PROPOSER, SUPPLIER AND/OR MANUFACTURER SHALL REFER TO ALL DOCUMENTS PERTAINING TO THIS PROJECT AND COORDINATE ACCORDINGLY SO AS TO INSURE ADEQUACY OF FIT, COMPLIANCE WITH SPECIFICATIONS, PROPER VOLTAGE AND CURRENT CHARACTERISTICS TO AVOID CONFLICTS WITH ANY OTHER BUILDINGS SYSTEMS. VERIFY SAME WITH SHOP DRAWINGS.
- INSTALL NO PIPING, CONDUIT, DUCTWORK, ETC. IN A LOCATION OR IN A MANNER WHICH WILL ALLOW FREEZING AND THE COLLECTION OF CONDENSATION THEREON. IF IN DOUBT, CONTACT THE ARCHITECT.
- ADVISE ARCHITECT OF ANY CONFLICTS, ERRORS, OMISSIONS, ETC., AT LEAST TEN DAYS PRIOR TO BID DATE, TO ALLOW CLARIFICATIONS BY WRITTEN ADDENDUM.
- DEVIATIONS FROM SPECIFICATIONS OR PLANS REQUIRES PRIOR WRITTEN APPROVAL FROM THE ARCHITECT AND MUST BE SUBMITTED IN WRITING NO LATER THAN TEN DAYS PRIOR TO THE BID DATE.
- OBSERVE ALL CURRENT APPLICABLE CURRENT CODES, RULES AND REGULATIONS THAT MAY APPLY TO THE WORK UNDER THIS CONTRACT. (CITY, COUNTY, LOCAL, STATE, FEDERAL, MUNICIPALITY, UTILITY COMPANY, OSHA, ETC.)
- INSTALL EQUIPMENT, MATERIALS, ETC., IN STRICT ACCORD WITH MANUFACTURERS' RECOMMENDATIONS AND DIRECTIONS. IF IN CONFLICT WITH THE DESIGN INTENT IN CONTRACT DOCUMENTS, ADVISE THE ARCHITECT PRIOR TO INSTALLATION FOR CLARIFICATIONS.
- ALL SYSTEMS, EQUIPMENT, AND MATERIALS ARE TO BE INSTALLED IN A NEAT AND WORKMANLIKE MANNER. WORK NOT MEETING THIS CRITERION SHALL BE REMOVED AND REINSTALLED SATISFACTORILY. FINAL DETERMINATION OF THE ACCEPTABILITY OF THE QUALITY OF WORK RESIDES WITH THE ARCHITECT.
- ALL WORK, MATERIALS, EQUIPMENT, ETC. SHALL BE FULLY GUARANTEED FOR ONE FULL CALENDAR YEAR FROM THE DATE OF SUBSTANTIAL COMPLETION AS DOCUMENTED BY THE ARCHITECT, UNLESS LONGER WARRANTY PERIODS FOR EQUIPMENT ARE SPECIFIED.
- UNLESS OTHERWISE SPECIFIED OR INDICATED, ALL EQUIPMENT AND/OR MATERIALS WITHIN OCCUPIED SPACES OR EXPOSED TO VIEW ON THE BUILDING EXTERIOR SHALL BE PRIMED AND FINISHED SO AS TO COMPLEMENT ADJACENT SURFACE, UNLESS OTHERWISE NOTED. COORDINATE WORK WITH ARCHITECT.
- ALL ELECTRICAL COMPONENTS OR EQUIPMENT SHALL BE LABELED BY UNDERWRITER'S LABORATORIES OR OTHER APPROVED LISTING AGENCY. APPROVED AND LABELING OF INDIVIDUAL COMPONENTS ON AN ASSEMBLY IS NOT ACCEPTABLE AS MEETING THIS REQUIREMENT, UNLESS WAIVED BY ARCHITECT IN WRITING.
- ALL CONTRACTORS SHALL EXERCISE EXTREME CARE IN THE COURSE OF THEIR WORK SO AS TO INSURE THAT THEY DO NOT INTERRUPT ANY EXISTING SERVICE OR SUB-SERVICE FOR SAFETY PURPOSES. PAY PARTICULAR ATTENTION TO THIS PRECAUTION RELATIVE TO NATURAL GAS AND ELECTRIC LINES. VERIFY THE LOCATION, SIZE, TYPE, ETC. OF EACH UNDERGROUND OR OVERHEAD UTILITY. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL FEDERAL, STATE AND/OR LOCAL RULES, REGULATIONS, STANDARDS AND SAFETY REQUIREMENTS. UTILITIES SHALL BE INSTALLED IN ACCORDANCE WITH THE APPLICABLE MUNICIPALITY OR UTILITY COMPANY STANDARDS. IN ALL CASES, THE MOST STRINGENT REQUIREMENTS SHALL APPLY.
- ALL SUPPORTS FOR EQUIPMENT, DEVICES OR FIXTURES SHALL BE UNIQUE, SUPPORT FROM THE BUILDING STRUCTURE. DO NOT SUPPORT WORK FROM OTHER TRADES, EQUIPMENT OR SUPPORTS WITHOUT WRITTEN PERMISSION FROM THE ARCHITECT AND CONSENT OF THE OTHER TRADE, IN WRITING.
- WHERE INTERRUPTING AN EXISTING UTILITY OR SERVICE DELIBERATELY OR ACCIDENTALLY THE RESPONSIBLE CONTRACTOR SHALL WORK CONTINUOUSLY AS NEEDED TO RESTORE SAME PROVIDING PREMIUM TIME AS NEEDED.
- WHERE PENETRATING NEW ROOFING MEMBRANE OR OTHER MATERIALS USED FOR WEATHERPROOFING THE BUILDING, MAKE SUCH PENETRATION IN A WAY THAT WILL NOT VOID OR DIMINISH THE ROOFING WARRANTY OR INTEGRITY IN ANYWAY. COORDINATE ALL SUCH PENETRATIONS WITH THE ROOFING INSTALLER/ARCHITECT.
- THE CONTRACTOR IS RESPONSIBLE FOR ALL UTILITY COMPANY FEES, CASH CONTRIBUTIONS OR OTHER COSTS THAT THE UTILITY COMPANY MAY REQUIRE TO COMPLETE THEIR WORK. (ELECTRIC, TELEPHONE, TELEVISION, ETC.)
- DEVIATIONS IN SIZE, CAPACITIES, FIT, FINISH, ETC. FOR EQUIPMENT FROM THAT PRIME SPECIFIED SHALL BE THE RESPONSIBILITY OF THE PURCHASER OF THAT EQUIPMENT. ANY PROVISIONS REQUIRED TO ACCOMMODATE A DEVIATION, WHETHER APPROVED BY THE ARCHITECT OR NOT SHALL BE THE RESPONSIBILITY OF THE PURCHASER.
- INTERRUPTION OF ANY EXISTING SERVICES SHALL BE COORDINATED WITH THE GENERAL CONTRACTOR, UTILITY COMPANY, ARCHITECT, AND OWNER AS NECESSARY, WITH AT LEAST ONE WEEK IN ADVANCE OF ANTICIPATED INTERRUPTION. A SCHEDULE FOR THESE OUTAGES SHALL BE DEVELOPED AND AGREED UPON BETWEEN PARTIES MENTIONED, TO AVOID UNNECESSARY INCONVENIENCE TO THE OWNER OR ANY AFFECTED PARTY. NOTIFY THE UTILITY COMPANY OF ANY ANTICIPATED SERVICES REQUIRED TWO WEEKS IN ADVANCE, IN WRITING, IF UTILITY COMPANY REQUIRES A LONGER NOTIFICATION PERIOD, SO PROVIDE.
- ALL WORK SHALL BE CONCEALED UNLESS SPECIFICALLY INDICATED TO BE EXPOSED, OR REQUIRED TO BE EXPOSED. IF IN DOUBT, CONTACT THE ARCHITECT FOR CLARIFICATION PRIOR TO INSTALLING ANY SUCH WORK.
- DO NOT SCALE FROM DRAWINGS, AS PRINTING DISTORTS SCALE. WORK SHALL BE Laid OUT FROM DIMENSIONED DRAWINGS, OR DIMENSIONED SUPPLIED TO THE CONTRACTOR.
- WHERE PIPING PENETRATES FOOTING, REFER TO STRUCTURAL SHEET, FOR SLEEVING METHOD.
- IT IS NOT INTENDED THAT THE PLANS SHOW ALL OFFSETS IN PIPES, CONDUITS, AND DUCTS REQUIRED FOR INSTALLATION OF THE WORK DETAILS AND SECTIONS ARE INCLUDED FOR SOME AREAS TO SHOW INTENDED RELATIONSHIP OF THE WORK OF VARIOUS TRADES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SUB-CONTRACTORS TO COORDINATE INSTALLATION OF THE WORK AND TO PROVIDE THE NECESSARY OFFSETS, TRANSFORMATIONS, AND FITTINGS REQUIRED. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR CORRECTING CONFLICTS BETWEEN THE WORK OF VARIOUS TRADES. DETAILS AND SECTIONS ARE SHOWN FOR THE CONTRACTORS' CONVENIENCE AND SHALL NOT BE CONSIDERED COMPLETE IN EVERY DETAIL.
- ALL WORK SHOWN ON DRAWINGS (EQUIPMENT, DUCTWORK, PIPING FIXTURES, RACEWAYS, WIRING, ETC.) ARE NEW, TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR UNLESS NOTED OTHERWISE.
- ALL INTERIOR FLOOR DRAINS, FLOOR SINKS AND TRENCH DRAINS SHALL BE TRAP PRIMED TO THE NEAREST FAUCET OR TO AN ELECTRICAL TRAP SEAL PRIMER WITH AIR-GAP (MIFAB M-100, 200 OR 300). CONTRACTOR TO COORDINATE ELECTRICAL REQUIREMENTS. TRAP GUARDS ARE ACCEPTABLE IF ALLOWED BY OWNER AND LOCAL JURISDICTION, CONTRACTOR TO VERIFY.
- ALL PIPING SHALL BE INSTALLED AS HIGH AS POSSIBLE. COORDINATION WITH ALL TRADES WILL BE REQUIRED.
- REFER TO DOMESTIC WATER RISER DIAGRAM FOR LOCATIONS OF ALL VALVES AND ACCESSORIES TO BE INSTALLED.
- WATER HAMMER ARRESTORS, TRAP PRIMERS, VALVES, AIR ADMITTANCE VALVES, ETC. SHALL BE ACCESSIBLE. PROVIDE ACCESS PANELS WHERE ANY ITEM IS INSTALLED IN AN INACCESSIBLE SPACE.
- INSULATE HOT AND COLD WATER IN ACCORDANCE WITH FLORIDA ENERGY EFFICIENCY CODE. HOT WATER RETURN LINE INSULATION SHALL BE NO LESS THAN 1" IN THICKNESS.
- METALLIC PIPING SHALL BE INSTALLED IN FIRE RATED WALL. (TYPICAL)
- SEAL ALL PIPING PENETRATIONS WITH NON-SHRINK MASTIC.
- WHEN NONMETALLIC PIPE IS USED IN COMBINATION SYSTEMS UTILIZING STEEL PIPING INTERNALLY COATED WITH CORROSION INHIBITORS AND NONMETALLIC PIPING, THE STEEL PIPE COATING SHALL BE INVESTIGATED FOR COMPATIBILITY WITH THE NONMETALLIC PIPING BY A TESTING LABORATORY.
- WHEN FABRICATING STEEL PIPE FOR A COMBINATION (CPVC-STEEL) SYSTEM, THE CUTTING OIL AND LUBRICANTS CAN CAUSE PERFORMANCE DEGRADATION OF THE CPVC PIPING. CUTTING OILS AND LUBRICANTS FOUND TO BE COMPATIBLE ARE AVAILABLE AND SHALL BE USED.
- WHEN NONMETALLIC PIPE IS USED IN COMBINATION SYSTEMS UTILIZING STEEL PIPE THAT IS NOT INTERNALLY COATED WITH CHEMICAL CORROSION INHIBITORS, NO ADDITIONAL EVALUATIONS SHALL BE REQUIRED.
- WHEN NONMETALLIC PIPE IS USED IN COMBINATION SYSTEMS UTILIZING STEEL PIPE, CUTTING OILS AND LUBRICANTS USED FOR FABRICATION OF THE STEEL PIPING SHALL BE COMPATIBLE WITH THE NONMETALLIC PIPE MATERIALS.
- FIRE-STOPPING MATERIALS INTENDED FOR USE ON NONMETALLIC PIPING PENETRATIONS SHALL BE INVESTIGATED FOR COMPATIBILITY WITH THE NONMETALLIC PIPE MATERIALS.
- ALL CPVC PIPING, FITTINGS AND SOLVENTS SHALL BE FROM A SINGLE MANUFACTURERS. MIXING OF MANUFACTURERS IS NOT PERMITTED.
- CPVC PIPING INSTALLATION SHALL BE IN CONFORMANCE WITH MANUFACTURES SPECIFICATIONS AND GUIDELINES.
- DOMESTIC WATER PIPING WITHIN 5 FEET OF THE BUILDING SEWER/DRAIN PIPING IS TO BE A MINIMUM OF 12 INCHES ABOVE THE HIGHEST POINT OF THE BUILDING SEWER/DRAIN PIPING AND THE PIPE MATERIALS MUST CONFORM TO SECTION 703.1 OF THE FLORIDA BUILDING CODE 2020 - PLUMBING.
- PLUMBING CONTRACTOR SHALL COORDINATE UNDERGROUND PIPING WITH BUILDING FOUNDATION.
- METAL HAMMER TO BE INSTALLED IN ALL QUICK OPENING FIXTURES.

ABBREVIATIONS

- APPROX APPROXIMATELY
- BFF BELOW FINISHED FLOOR
- BWV BACK WATER VALVE
- CFH CUBIC FEET PER HOUR
- CO CLEAN-OUT
- COND CONDENSATE OR CONDENSER
- CW DOMESTIC COLD WATER
- DF DRINKING FOUNTAIN
- DN DOWN
- ECO EXTERIOR CLEANOUT
- EWV ELECTRIC WATER COOLER
- EMH ELECTRIC WATER HEATER
- EL ELEVATION
- FCO FLOOR CLEANOUT
- FD FLOOR DRAIN
- FS FLOOR SINK
- G GAS (LP)
- GPM GALLONS PER MINUTE
- GR GREASE WASTE LINE
- GWH GAS WATER HEATER
- HB HOSE BIBB
- HD HUB DRAIN
- HW DOMESTIC HOT WATER
- HWR DOMESTIC HOT WATER RETURN
- IWH INSTANTANEOUS WATER HEATER
- L LAVATORY
- LP LIQUID PROPANE GAS
- MAX MAXIMUM
- MECH MECHANICAL
- MIN MINIMUM
- MS MOP SINK
- RCP RECIRCULATING PUMP (HWR)
- RM ROOM
- S SINK
- SH SHOWER
- ST STORAGE TANK (HOT WATER)
- TYP TYPICAL
- TV TEMPERING VALVE (THERMOSTATIC)
- VTR VENT THRU ROOF
- WC WATER CLOSET
- WCO WALL CLEANOUT
- WH WALL HYDRANT
- WMB WASHER WALL BOX
- BSI BEVERAGE SYSTEM INSTALLER

GENERAL LEGEND

- DIRECTION OF FLOW IN PIPE
- PIPE UP
- PIPE DOWN
- BALL VALVE
- CHECK VALVE, HORIZONTAL SWING
- GATE VALVE
- BALANCING VALVE
- GAS COCK, GAS STOP
- PRESSURE REDUCING VALVE
- VALVE IN SERVICE BOX WITH CAST IRON COVER
- SOLENOID VALVE, 24V
- FLOOR CLEANOUT
- EXTERIOR CLEANOUT
- EXTERIOR 2-WAY CLEANOUT
- WALL CLEANOUT
- HORIZONTAL CLEANOUT
- CAPPED LINE
- HOT WATER RECIRCULATOR PUMP
- HOSE BIBB
- FLOOR DRAIN
- HUB DRAIN
- WATER HAMMER
- DOMESTIC COLD WATER PIPING
- BOOSTED DOMESTIC COLD WATER PIPING
- DOMESTIC HOT WATER PIPING
- DOMESTIC HOT WATER RETURN PIPING
- SOIL, WASTE, OR SANITARY SEWER PIPING
- GREASE WASTE PIPING
- VENT PIPING
- CONDENSATE PIPING
- GAS PIPING
- DETAIL OR RISER DESIGNATION
SHEET WHERE DETAIL OR RISER APPEAR

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FOR: INDIAN RIVER COUNTY FIRE DISTRICT
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NO.	DATE	REVISIONS

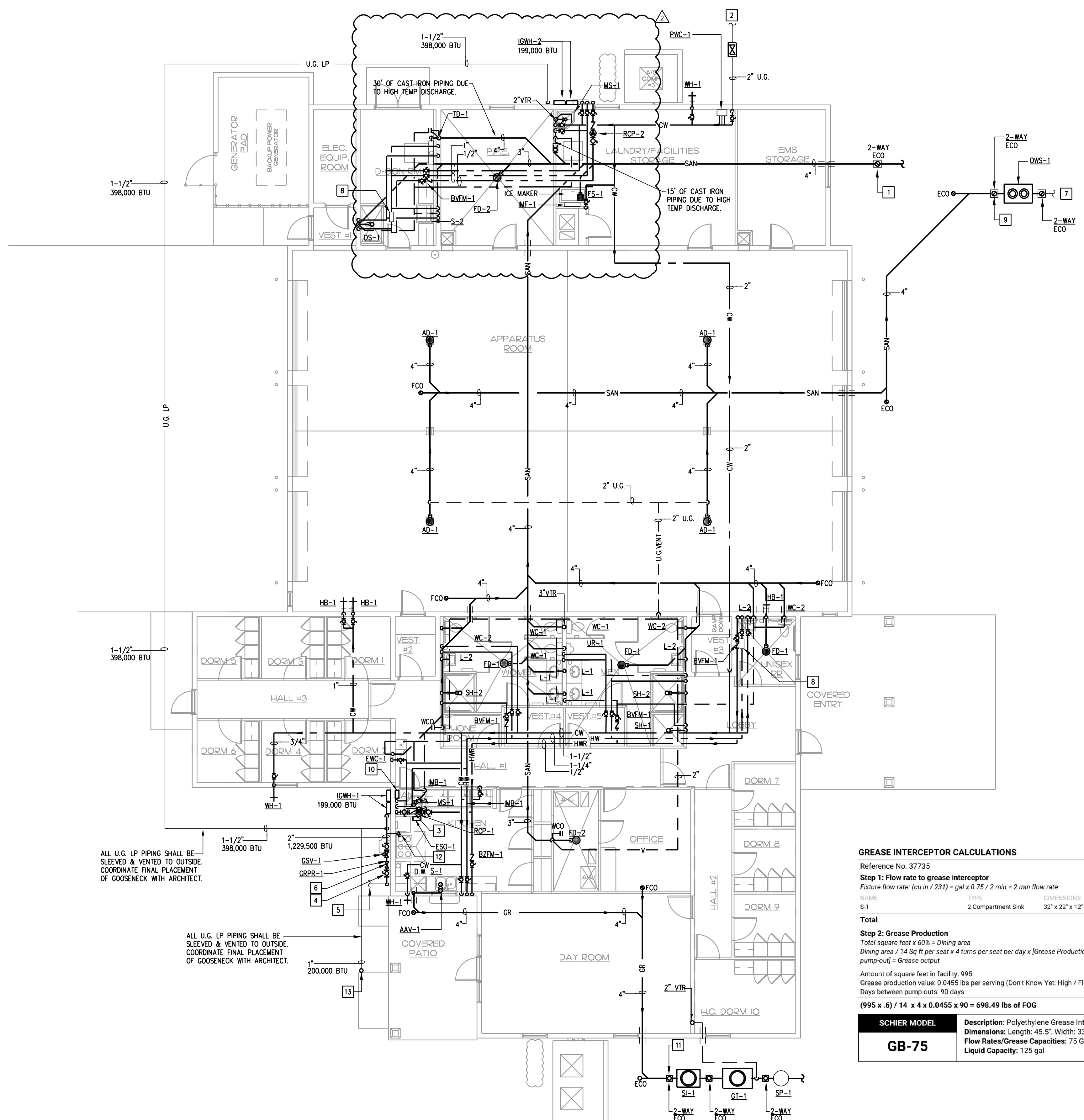
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GENERAL NOTES - PLUMBING
SCALE: N.T.S.

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GENERAL NOTES:

- INSULATE HOT AND COLD WATER IN ACCORDANCE WITH FLORIDA ENERGY EFFICIENCY CODE.
- METALLIC PIPING SHALL BE INSTALLED IN FIRE RATED WALL. (TYPICAL)
- SEAL ALL PIPING PENETRATIONS WITH NON-SHRINK MASTIC.

PLUMBING KEY NOTES:

- 4" SANITARY/SEWER PIPING BELOW GRADE WITH 2-WAY EXTERNAL CLEANOUT. REFER TO CIVIL UTILITY SITE PLAN FOR CONTINUATION. (74 DRAINAGE FIXTURES UNITS AND INVERT ELEVATION @ 53" BELOW FINISHED FLOOR)
- 2" DOMESTIC WATER PIPING BELOW GRADE WITH SHUT-OFF VALVE IN SERVICE BOX WITH CAST IRON COVER. REFER TO CIVIL UTILITY SITE PLAN FOR CONTINUATION. (143 WATER FIXTURES UNITS @ 81 GPM)
- CONTRACTOR TO LOCATE RCP-1 WITHIN JANITORIAL CLOSET.
- GAS MANUAL SHUT-OFF VALVE.
- LP GAS SERVICE BELOW GRADE. REFER TO UTILITY SITE PLAN FOR LOCATION OF PROPANE TANK AND ASSOCIATED MATERIALS. CONTRACTOR SHALL COORDINATE WITH PROPANE PROVIDER TO ENSURE REGULATOR AT PROPANE TANK OUTGOING PRESSURE IS SET TO 5 PSI
- 2" LP GAS PIPING @ 11" W.C., GAS LINE TOTAL LOAD = 1,230 CFH DEVELOPED LENGTH = 250'-0".
- 4" AREA DRAIN DISCHARGE. ROUTE AND TIE INTO SANITARY PIPING. SEE CIVIL DWGS. FOR CONTINUATION
- TACO SMARTPLUS TEMPERATURE SENSOR.
- 4" SANITARY/SEWER PIPING BELOW GRADE WITH 2-WAY EXTERNAL CLEANOUT. REFER TO CIVIL UTILITY SITE PLAN FOR CONTINUATION. (24 DRAINAGE FIXTURES UNITS AND INVERT ELEVATION @ 32" BELOW FINISHED FLOOR)
- CS IMA ALARM PANEL.
- 3" SANITARY/SEWER PIPING BELOW GRADE WITH 2-WAY EXTERNAL CLEANOUT. REFER TO CIVIL UTILITY SITE PLAN FOR CONTINUATION. (4 DRAINAGE FIXTURES UNITS AND INVERT ELEVATION @ 26" BELOW FINISHED FLOOR)
- 1-1/4" GAS PIPING TO SERVE GAS RANGE (233,500 BTU)
- 1" GAS PIPING TO SERVE GAS GRILL (200,000 BTU)

ALL U.G. LP PIPING SHALL BE SLEEVED & VENTED TO OUTSIDE. COORDINATE FINAL PLACEMENT OF GOOSENECK WITH ARCHITECT.

ALL U.G. LP PIPING SHALL BE SLEEVED & VENTED TO OUTSIDE. COORDINATE FINAL PLACEMENT OF GOOSENECK WITH ARCHITECT.

GREASE INTERCEPTOR CALCULATIONS

Reference No. 37735 Project Name: IRC FS NO 7

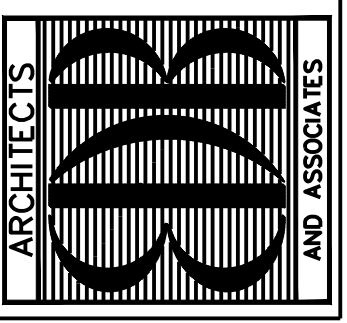
Step 1: Flow rate to grease interceptor
 Fixture flow rate: (cu in / 231) = gal x 0.75 / 2 min = 2 min flow rate

NAME	TYPE	QUANTITY	CU IN	FLOW RATE
S-1	2 Compartment Sink	32' x 22' x 12" (2)	1	16,896
Total				27.43 GPM

Step 2: Grease Production
 Total square feet x 60% = Dining area
 Dining area / 14 Sq. Ft. per seat x 4 turns per seat per day x [Grease Production Value] x [Days between pump-out] = Grease output
 Amount of square feet in facility: 995
 Grease production value: 0.0455 lbs per serving (Don't Know Yet: High / Flatware)
 Days between pump-outs: 90 days
 (995 x .6) / 14 x 4 x 0.0455 x 90 = 698.49 lbs of FOG

SCHIER MODEL	Description: Polyethylene Grease Interceptor
GB-75	Dimensions: Length: 45.5", Width: 32", Height: 40" Flow Rates/Grease Capacities: 75 GPM / 861.8 lbs Liquid Capacity: 125 gal

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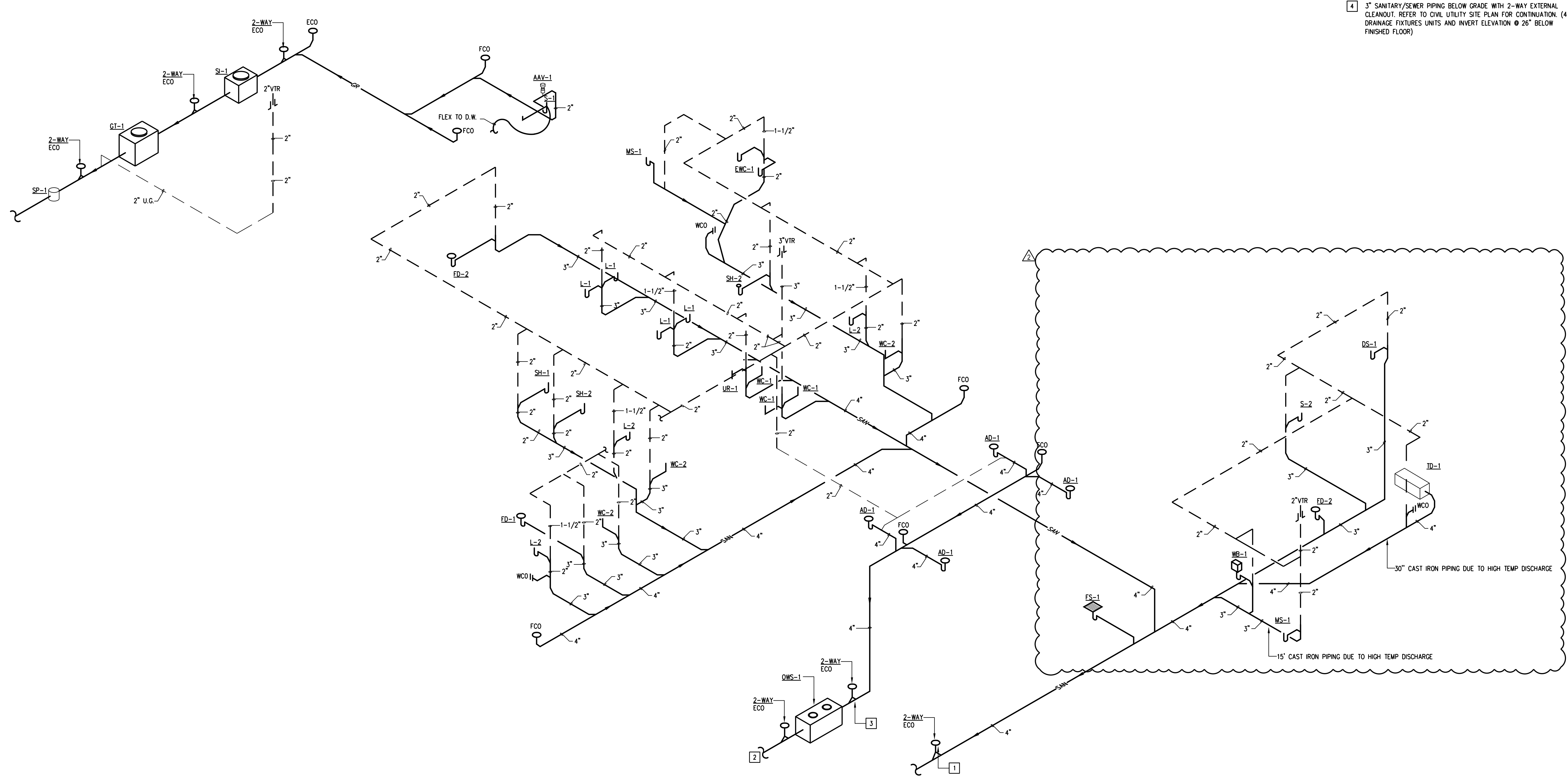
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- PLUMBING KEY NOTES:**
- 1 4" SANITARY/SEWER PIPING BELOW GRADE WITH 2-WAY EXTERNAL CLEANOUT. REFER TO CIVIL UTILITY SITE PLAN FOR CONTINUATION. (74 DRAINAGE FIXTURES UNITS AND INVERT ELEVATION @ 53" BELOW FINISHED FLOOR)
 - 2 4" AREA DRAIN DISCHARGE. ROUTE AND TIE INTO SANITARY PIPING. SEE CIVIL DWGS. FOR CONTINUATION
 - 3 4" SANITARY/SEWER PIPING BELOW GRADE WITH 2-WAY EXTERNAL CLEANOUT. REFER TO CIVIL UTILITY SITE PLAN FOR CONTINUATION. (24 DRAINAGE FIXTURES UNITS AND INVERT ELEVATION @ 32" BELOW FINISHED FLOOR)
 - 4 3" SANITARY/SEWER PIPING BELOW GRADE WITH 2-WAY EXTERNAL CLEANOUT. REFER TO CIVIL UTILITY SITE PLAN FOR CONTINUATION. (4 DRAINAGE FIXTURES UNITS AND INVERT ELEVATION @ 26" BELOW FINISHED FLOOR)

SANITARY RISER DIAGRAM- PLUMBING

SCALE: NTS

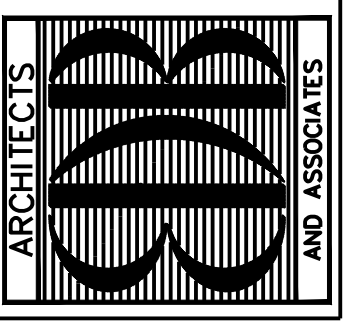
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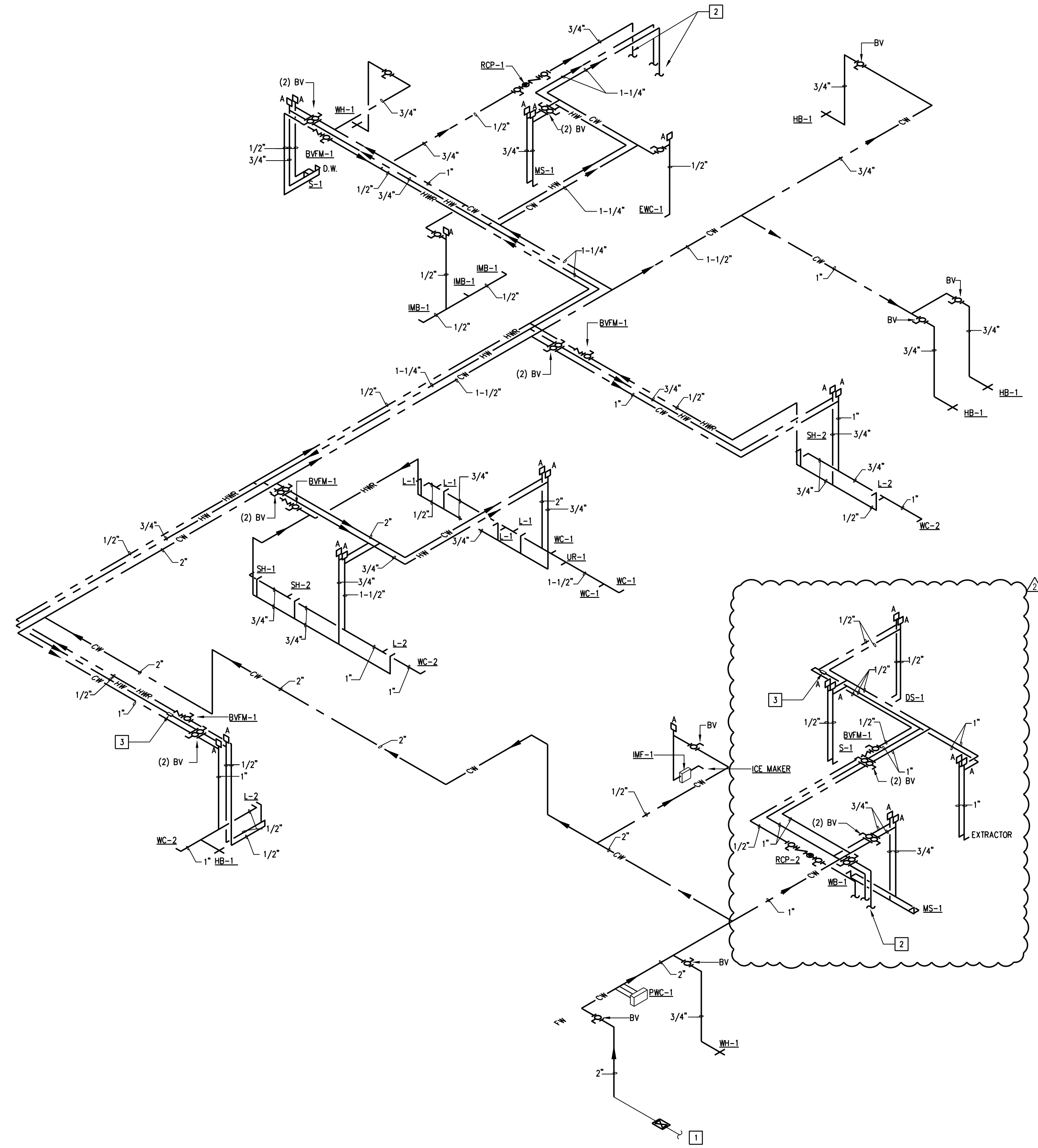
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PLUMBING KEY NOTES:

- 1 2" DOMESTIC WATER PIPING BELOW GRADE WITH SHUT-OFF VALVE IN SERVICE BOX WITH CAST IRON COVER. REFER TO CIVIL UTILITY SITE PLAN FOR CONTINUATION (143 WATER FIXTURES UNITS @ 75 CFM)
- 2 REFER TO SHEET P-5 FOR TANKLESS WATER HEATER DETAIL.
- 3 TACO SMARTPLUS TEMPERATURE SENSOR.

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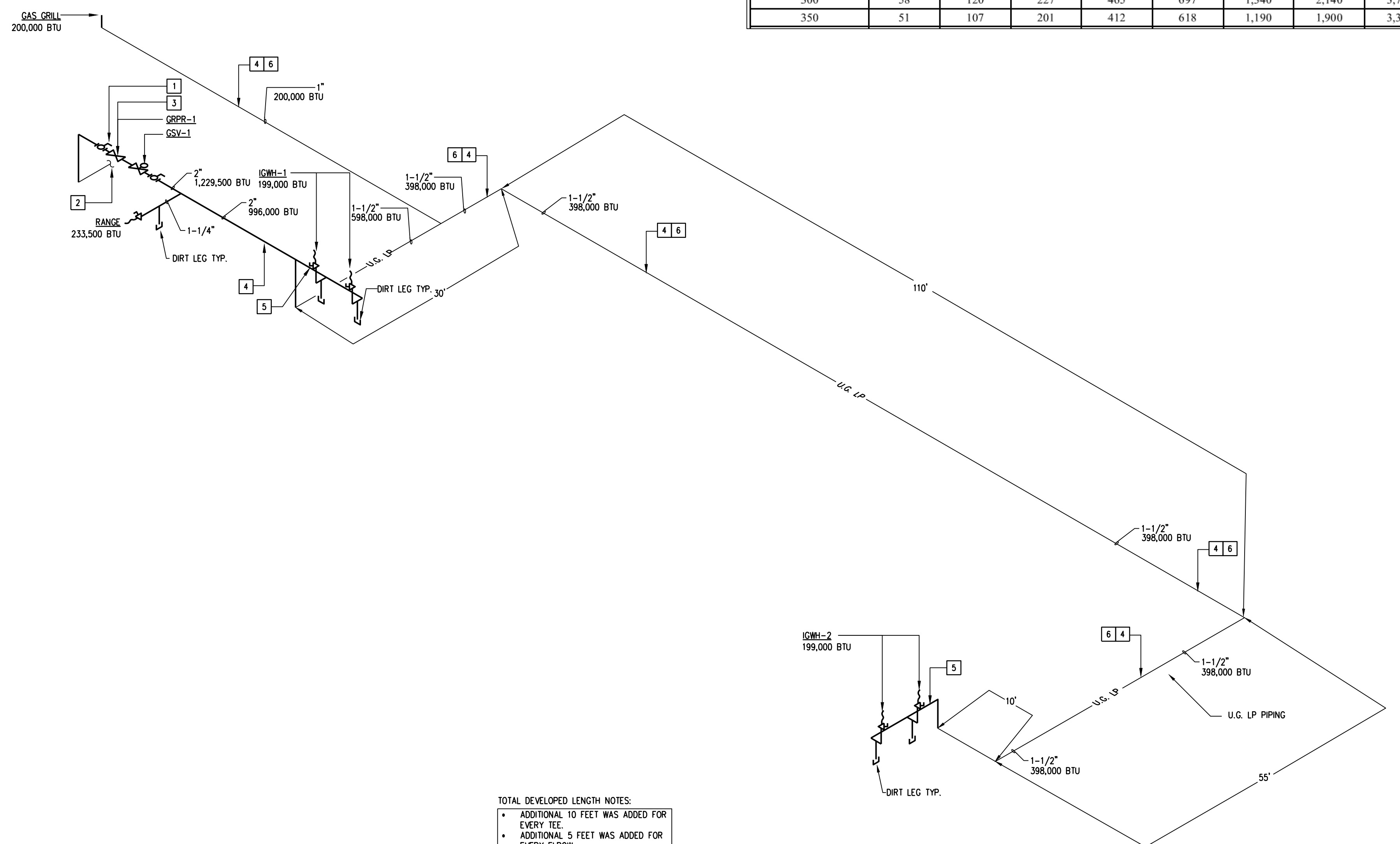
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DOMESTIC RISER DIAGRAM - PLUMBING

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TABLE 402.4(28) SCHEDULE 40 METALLIC PIPE		Gas Undiluted Propane							
		Inlet Pressure	11.0 in. w.c.						
		Pressure Drop	0.5 in. w.c.						
		Specific Gravity	1.50						
INTENDED USE	Pipe sizing between single- or second-stage (low pressure) regulator and appliance.								
	PIPE SIZE (inch)								
Nominal	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4
Actual ID	0.622	0.824	1.049	1.380	1.610	2.067	2.469	3.068	4.026
Length (ft)	Capacity in Thousands of Btu per Hour								
10	291	608	1,150	2,350	3,520	6,790	10,800	19,100	39,000
20	200	418	787	1,620	2,420	4,660	7,430	13,100	26,800
30	160	336	632	1,300	1,940	3,750	5,970	10,600	21,500
40	137	287	541	1,110	1,660	3,210	5,110	9,030	18,400
50	122	255	480	985	1,480	2,840	4,530	8,000	16,300
60	110	231	434	892	1,340	2,570	4,100	7,250	14,800
80	101	212	400	821	1,230	2,370	3,770	6,670	13,600
100	94	197	372	763	1,140	2,200	3,510	6,210	12,700
125	89	185	349	716	1,070	2,070	3,290	5,820	11,900
150	84	175	330	677	1,010	1,950	3,110	5,500	11,200
175	74	155	292	600	899	1,730	2,760	4,880	9,950
200	67	140	265	543	814	1,570	2,500	4,420	9,010
250	62	129	243	500	749	1,440	2,300	4,060	8,290
300	58	120	227	465	697	1,340	2,140	3,780	7,710
350	51	107	201	412	618	1,190	1,900	3,350	6,840



TOTAL DEVELOPED LENGTH NOTES:

- ADDITIONAL 10 FEET WAS ADDED FOR EVERY TEE.
- ADDITIONAL 5 FEET WAS ADDED FOR EVERY ELBOW.

- PLUMBING KEY NOTES:**
- GAS MANUAL SHUT-OFF VALVE.
 - LP GAS SERVICE BELOW GRADE. REFER TO UTILITY SITE PLAN FOR LOCATION OF PROPANE TANK AND ASSOCIATED MATERIALS. CONTRACTOR SHALL COORDINATE WITH PROPANE PROVIDER TO ENSURE REGULATOR AT PROPANE TANK OUTGOING PRESSURE IS SET TO 5 PSI.
 - 2" LP GAS PIPING @ 11" W.C. GAS LINE TOTAL LOAD = 1,230 CFH DEVELOPED LENGTH = 250'-0".
 - 11-14" W.C. REFER TO TABLE 402.4(4).
 - REFER TO TANKLESS GAS WATER HEATER DETAIL ON PLUMBING SHEET P-5 FOR SIZING AND ROUTING.
 - ALL U.G. LP PIPING SHALL BE SLEEVED & VENTED TO OUTSIDE. COORDINATE FINAL PLACEMENT OF GOOSENECK WITH ARCHITECT.

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AR-1A 000088
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PHONE: (772) 569-4320

SEAL:
JASON L. SMITH, P.E.
600 S. OCEAN DRIVE, SUITE 100
VERO BEACH, FLORIDA 32960
FL. REG. NO. 12574

PROJECT: STATION #7
FOR: INDIAN RIVER COUNTY FIRE DISTRICT
1840 25TH STREET
VERO BEACH FL 32960

NO.	DATE	REVISIONS

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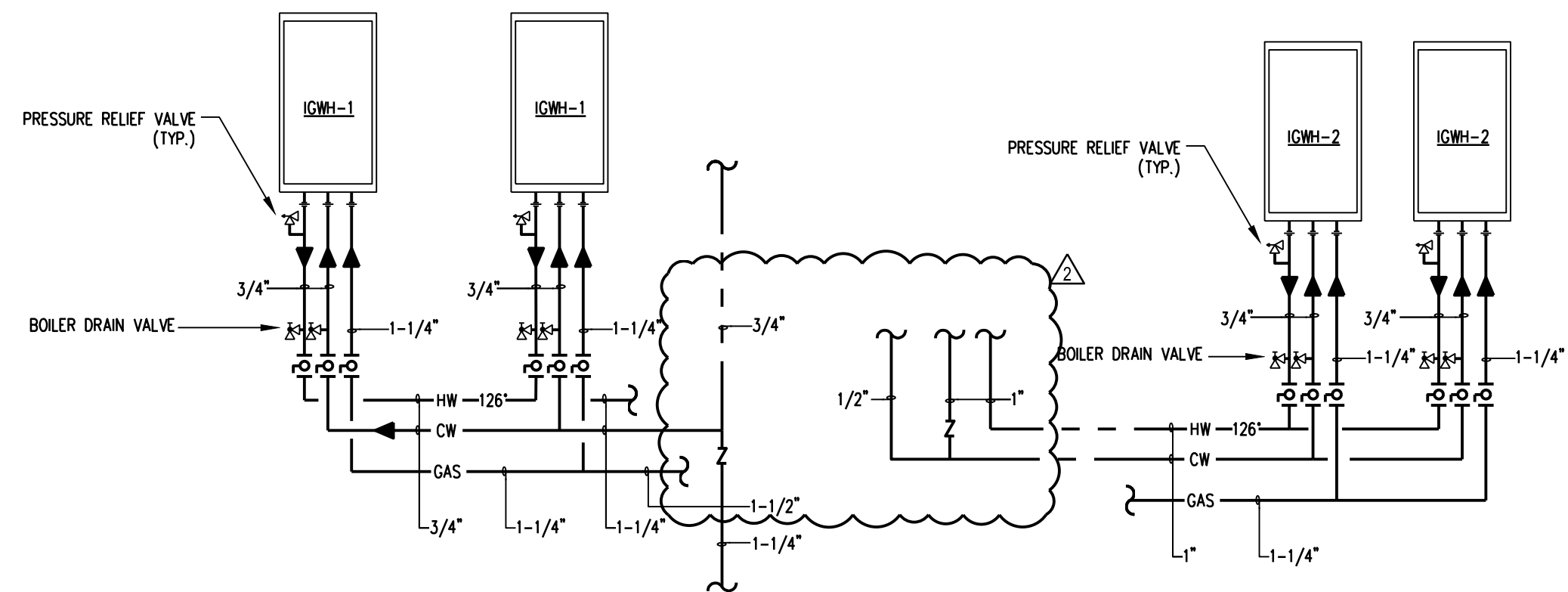
COMM. NO: C50299/B
DATE: 16 MAY 2022
BY: DJ
CHKD: JS

SHEET NO.
P-4
OF

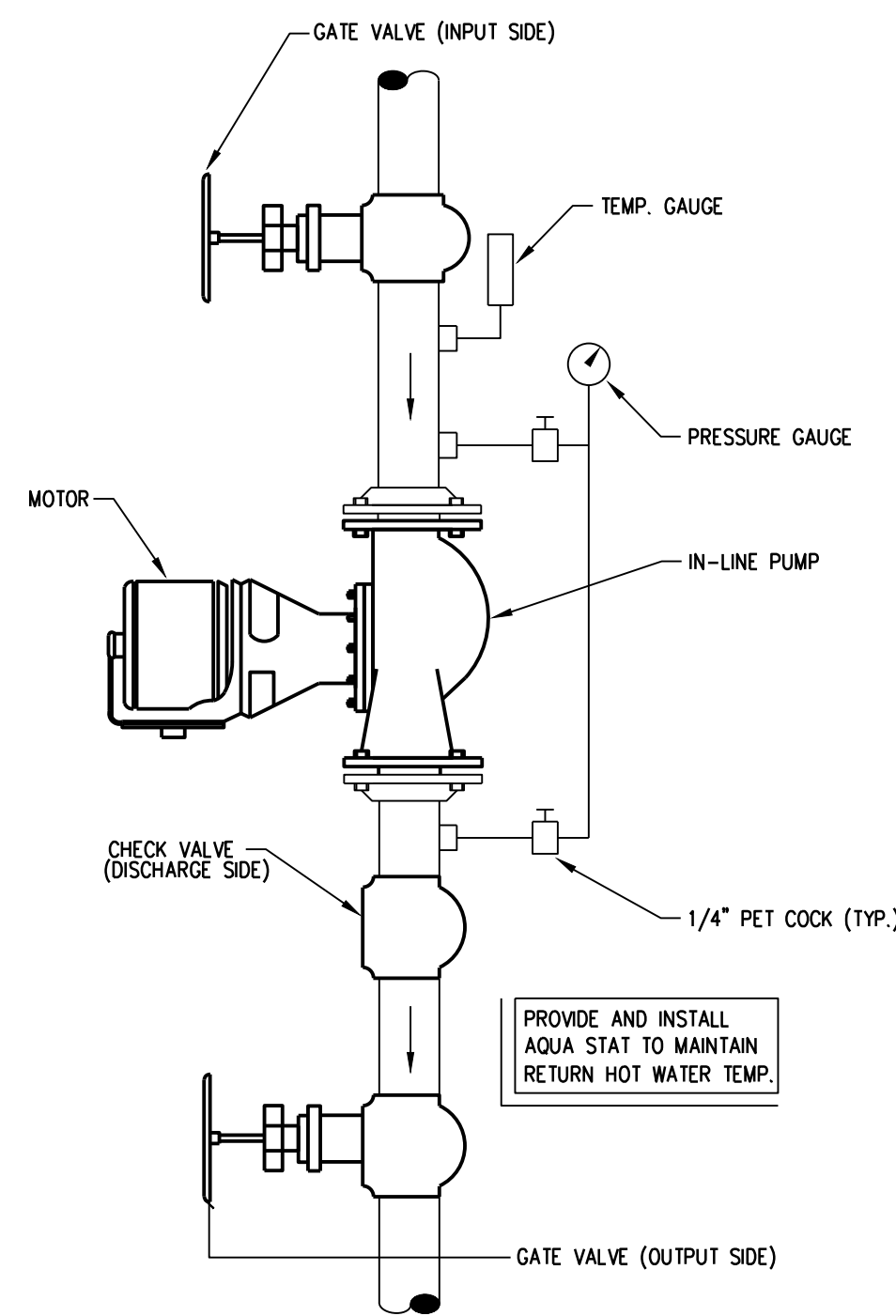
GAS RISER DIAGRAM- PLUMBING
SCALE: 1/8" = 1'-0"

COGO
CONSULTING ENGINEERS
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Washington DC - Baltimore - Norfolk - Dallas - San Francisco
181 Melody Lane, Suite 107 Ft. Pierce, FL 34950
Phone: (772) 466-1165 Fax: (772) 466-1134
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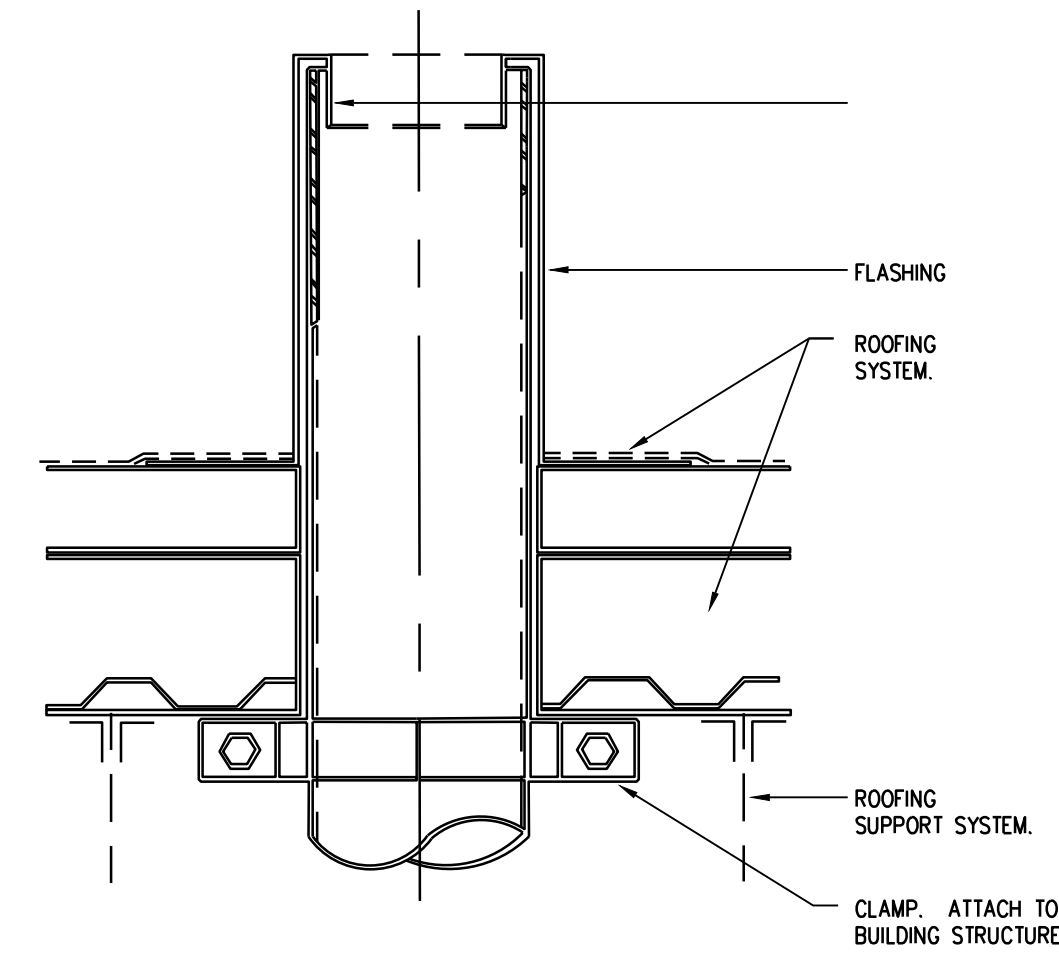
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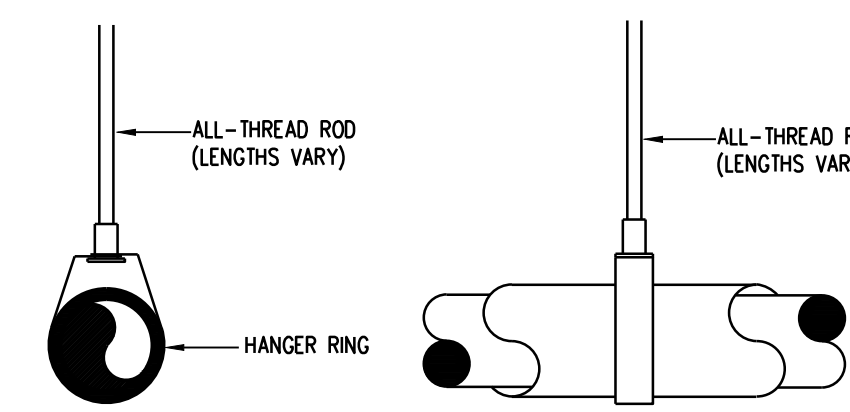
TANKLESS GAS WATER HEATER DETAIL
NTS



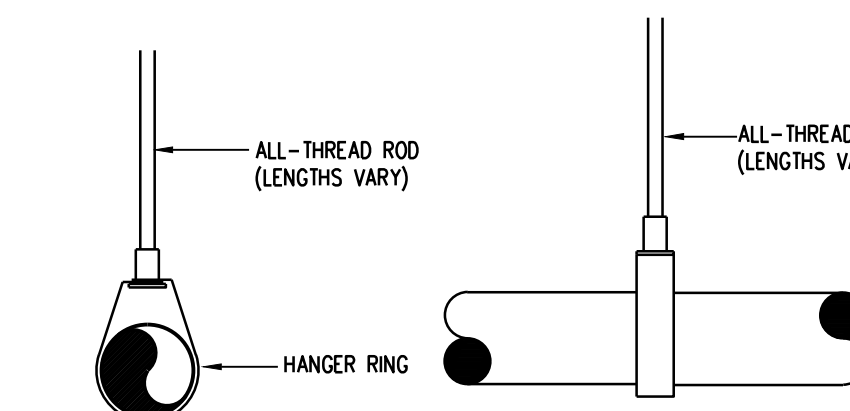
TYPICAL IN-LINE PUMP DETAIL
NTS



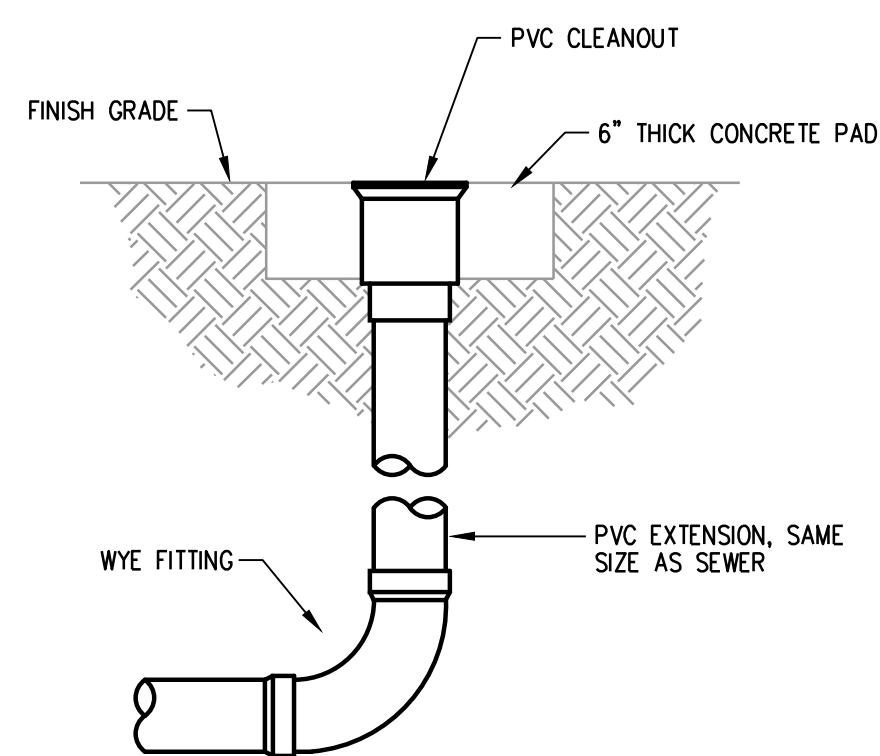
VENT THRU ROOF DETAIL
NTS



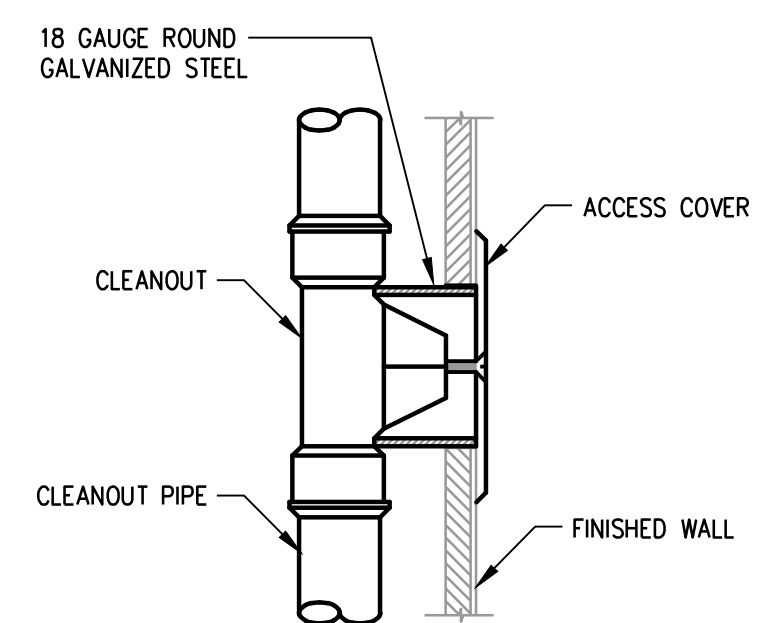
INSULATED HANGER DETAIL
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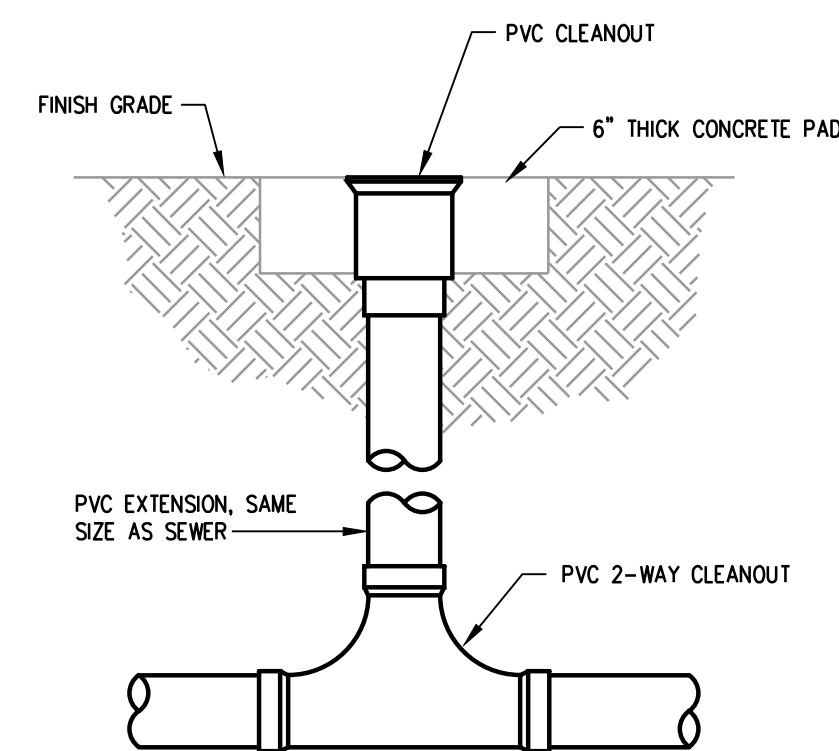
NON-INSULATED HANGER DETAIL
NTS



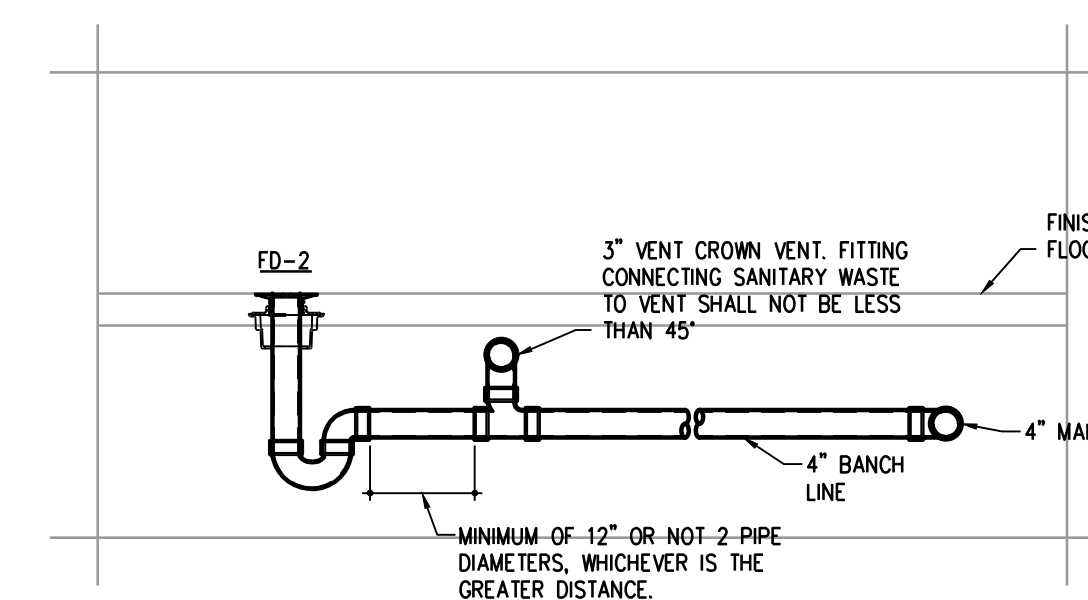
EXTERIOR 1-WAY CLEANOUT DETAIL
NTS



2-WAY WALL CLEANOUT DETAIL
NTS

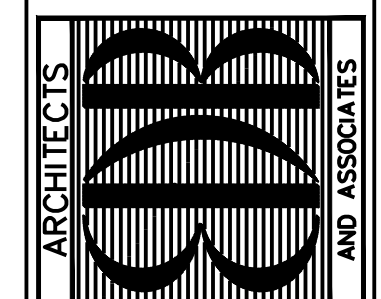


2-WAY EXTERIOR CLEAN OUT DETAIL
NTS



DETAIL OF CROWN VENT AT FLOOR DRAIN
NTS

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PROJECT: STATION #7
FOR: INDIAN RIVER COUNTY FIRE DISTRICT
1840 25TH STREET
VERO BEACH FL 32960

NO.	DATE	OWNER CHANGES	REVISIONS
1	9/15/23	OWNER CHANGES	

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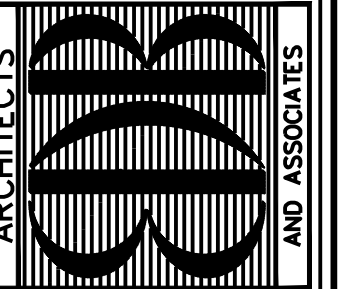
COMM. NO: C50239/B
DATE: 16 MAY 2022
BY: DJ
CHKD: JS

SHEET NO.
P-5
OF

DETAILS - PLUMBING
SCALE: N.T.S.



PRINT DATE: 10/18/2023 5:08 PM SAVE DATE: 9/13/2023 4:02 PM FILE LOCATION: J:\22 JOBS\2022 - IRC FS NO 7\OWNS\2022P-5.DWG



ARCHITECTS
AND ASSOCIATES
JASON L. SMITH, P.E.
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WEST PALM BEACH, FLORIDA 33409
TEL: (561) 965-1234

SEAL:

These details are intended to be used as a guide only. The user is responsible for verifying the details against the applicable code requirements and the manufacturer's instructions. The user is responsible for verifying the details against the applicable code requirements and the manufacturer's instructions.

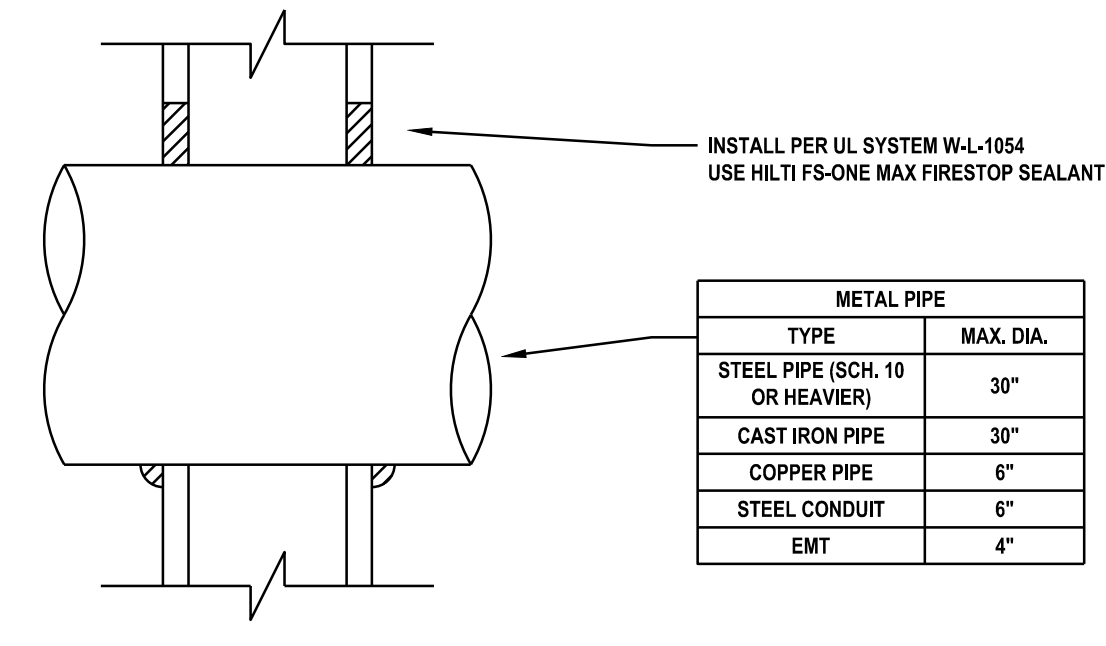
PROJECT: STATION #7
FOR: INDIAN RIVER COUNTY FIRE DISTRICT
1840 25TH STREET
VERO BEACH, FL 32960

NO.	DATE	REVISIONS

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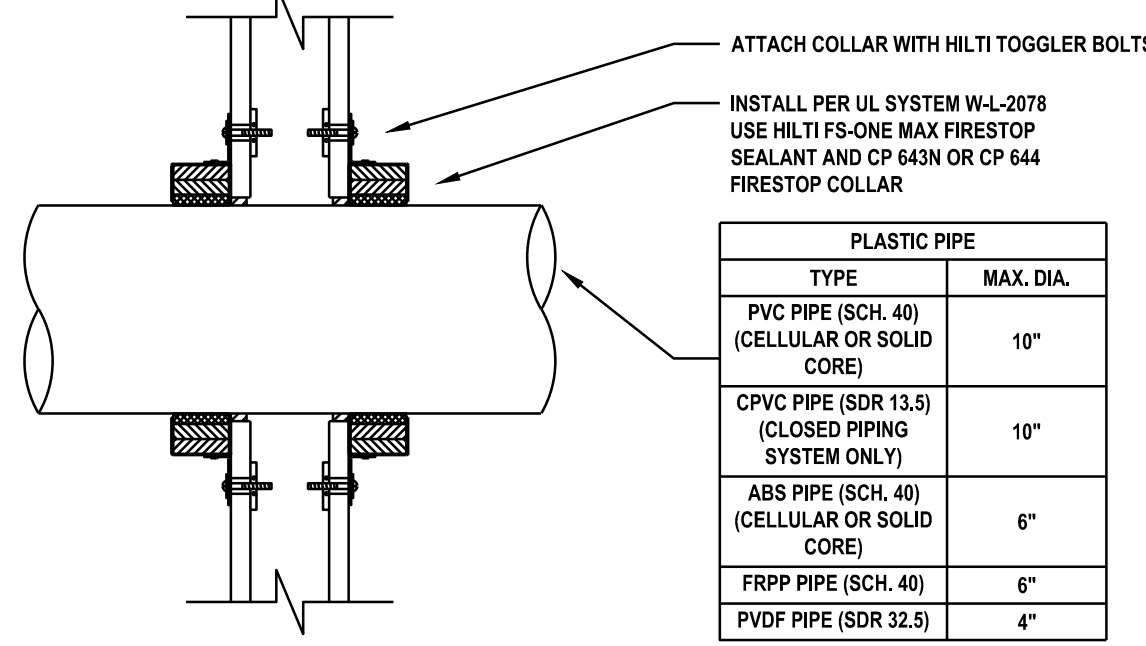
COMM. NO: C50299/B
DATE: 16 MAY 2022
BY: DJ
CHK'D: J.S

SHEET NO.
P-6
OF



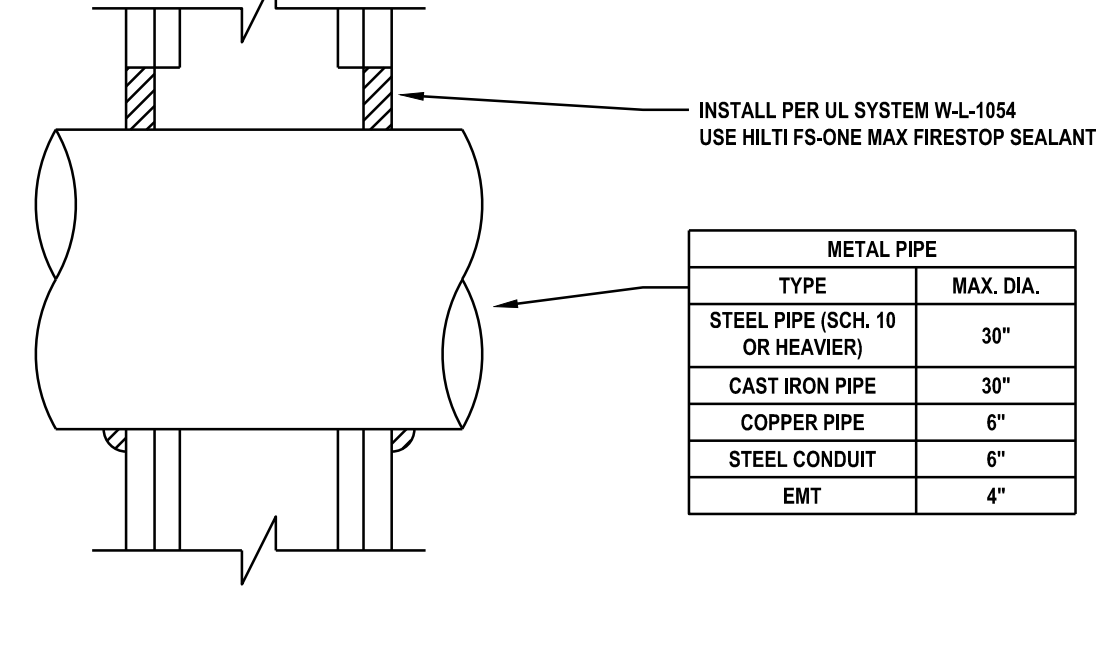
METAL PIPE	
TYPE	MAX. DIA.
STEEL PIPE (SCH. 10 OR HEAVIER)	30"
CAST IRON PIPE	30"
COPPER PIPE	6"
STEEL CONDUIT	6"
EMT	4"

METAL PIPE THROUGH GYPSUM WALL ASSEMBLY (1-HR.)
NTS



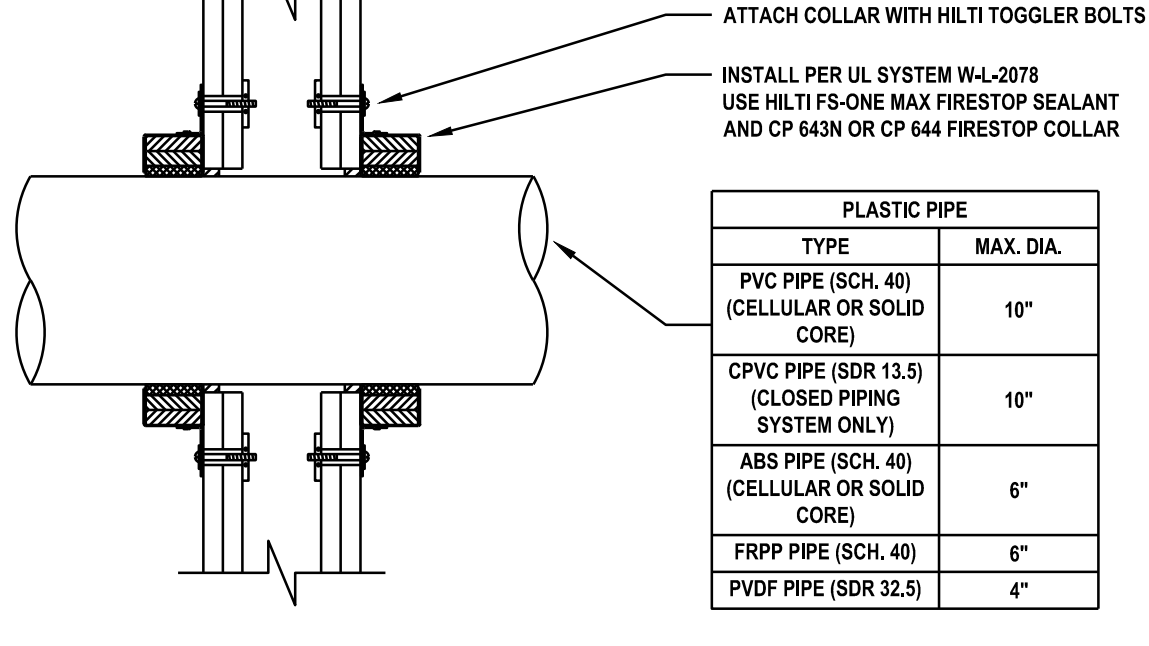
PLASTIC PIPE	
TYPE	MAX. DIA.
PVC PIPE (SCH. 40) (CELLULAR OR SOLID CORE)	10"
CPVC PIPE (SDR 13.5) (CLOSED PIPING SYSTEM ONLY)	10"
ABS PIPE (SCH. 40) (CELLULAR OR SOLID CORE)	6"
FRPP PIPE (SCH. 40)	6"
PVDF PIPE (SDR 32.5)	4"

PLASTIC PIPE THROUGH GYPSUM WALL ASSEMBLY (1-HR.)
NTS



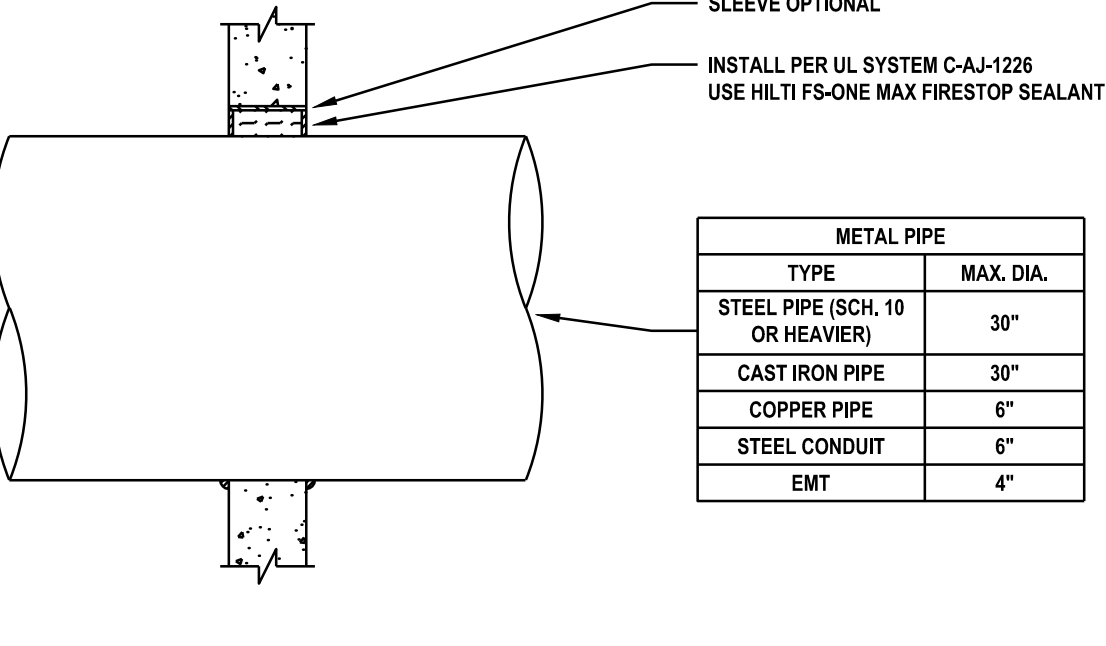
METAL PIPE	
TYPE	MAX. DIA.
STEEL PIPE (SCH. 10 OR HEAVIER)	30"
CAST IRON PIPE	30"
COPPER PIPE	6"
STEEL CONDUIT	6"
EMT	4"

METAL PIPE THROUGH GYPSUM WALL ASSEMBLY (2-HR.)
NTS



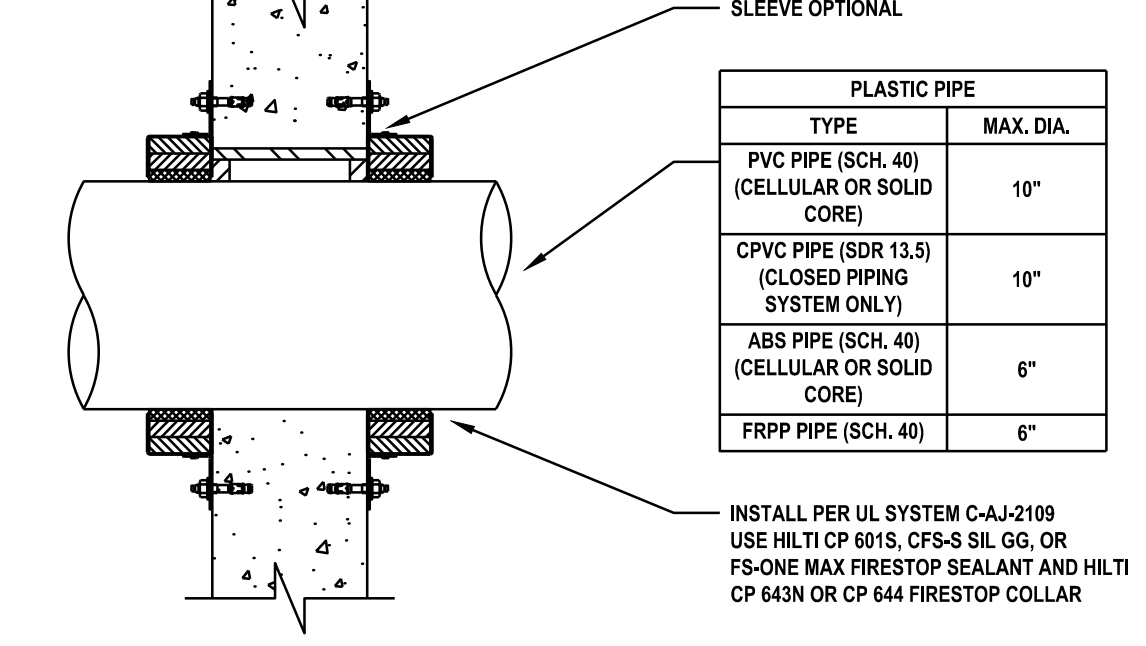
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FRPP PIPE (SCH. 40)	6"
PVDF PIPE (SDR 32.5)	4"

PLASTIC PIPE THROUGH GYPSUM WALL ASSEMBLY (2-HR.)
NTS



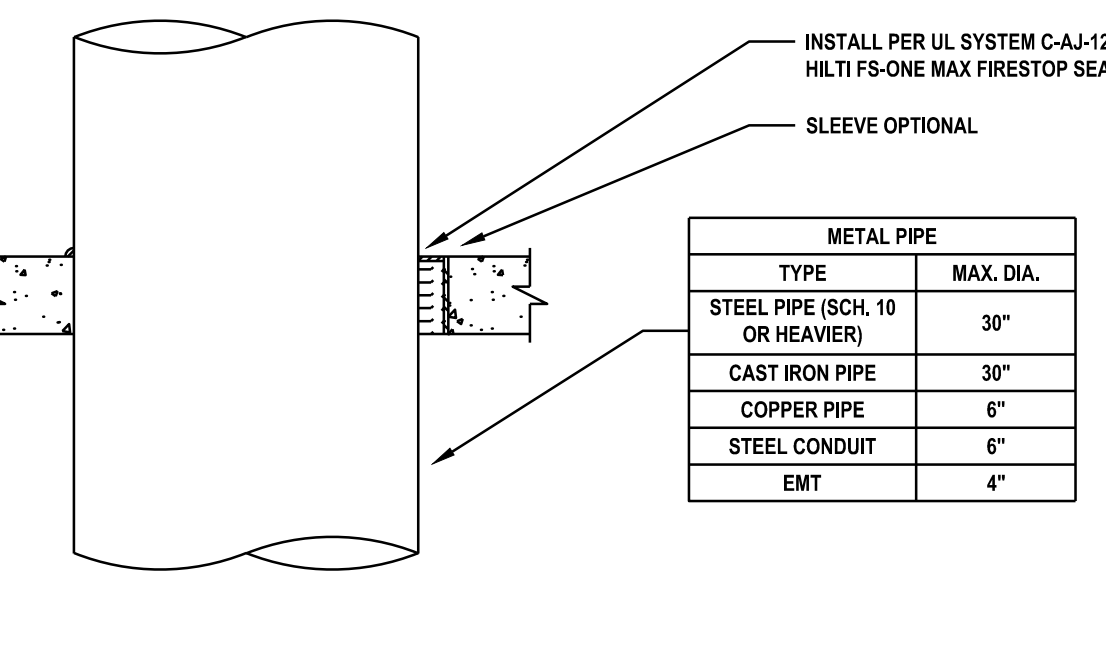
METAL PIPE	
TYPE	MAX. DIA.
STEEL PIPE (SCH. 10 OR HEAVIER)	30"
CAST IRON PIPE	30"
COPPER PIPE	6"
STEEL CONDUIT	6"
EMT	4"

METAL PIPE THROUGH CONCRETE WALL (2-HR.)
NTS



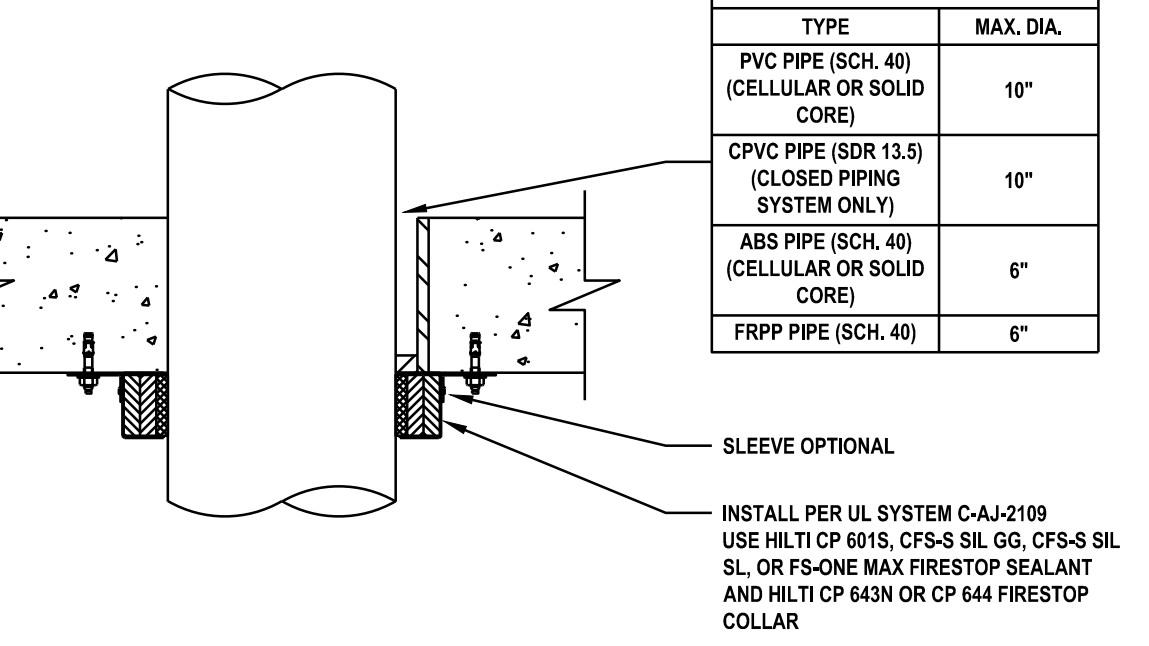
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CPVC PIPE (SDR 13.5) (CLOSED PIPING SYSTEM ONLY)	10"
ABS PIPE (SCH. 40) (CELLULAR OR SOLID CORE)	6"
FRPP PIPE (SCH. 40)	6"

PLASTIC PIPE THROUGH CONCRETE WALL (2-HR.)
NTS



METAL PIPE	
TYPE	MAX. DIA.
STEEL PIPE (SCH. 10 OR HEAVIER)	30"
CAST IRON PIPE	30"
COPPER PIPE	6"
STEEL CONDUIT	6"
EMT	4"

METAL PIPE THROUGH CONCRETE FLOOR (2-HR.)
NTS



PLASTIC PIPE	
TYPE	MAX. DIA.
PVC PIPE (SCH. 40) (CELLULAR OR SOLID CORE)	10"
CPVC PIPE (SDR 13.5) (CLOSED PIPING SYSTEM ONLY)	10"
ABS PIPE (SCH. 40) (CELLULAR OR SOLID CORE)	6"
FRPP PIPE (SCH. 40)	6"

PLASTIC PIPE THROUGH CONCRETE FLOOR (2-HR.)
NTS

PENETRATION DETAILS
NTS

DETAILS - PLUMBING
SCALE: N.T.S.

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PLUMBING FIXTURE SCHEDULE

Main plumbing fixture schedule table with columns for MARK, DESCRIPTION, and various fixture types like WC-1, WC-2, L-1, L-2, UR-1, SH-1, SH-2, S-1, S-2, EWC-1, MS-1, FD-1, FD-2, FS-1, WB-1, MB-1, HB-1, WH-1, AD-1, GI-1, ESO-1, SI-1, SP-1, GRPR-1, GSV-1, PWC-1, IMF-1, BVFM-1, ID-1, AAV-1, QWS-1. Rows include MANUFACTURER, MODEL NO., CARRIER, FLUSH VALVE, SUPPLY FITTING, FAUCET, DRAIN, and TRAP.

SPECIAL ITEMS (1) WITH ELONGATED OPEN FRONT SEAT BY OLSONITE LESS COVER. (2) PROVIDED BY PLUMBING CONTRACTOR. (3) MOUNTING HEIGHT PER LOCAL STATE HANDICAP CODES. (4) 832-AA HOSE AND BRACKET. (5) 5899-CC MOP HANGER, 1239-BB BUMPER GUARD AND WALL GUARD. (6) PROVIDE WITH LEAD-16-GARD WITH DRAIN COORDINATE SIZE WITH PLANS WITH MODEL TO BE USED. (7) PROVIDE WITH H-M COMPANY DRAIN THROUGH LINT INTERCEPTOR. CONTRACTOR SHALL COORDINATE SIZING OF DRAIN WITH FINAL SELECTION OF EXTRACTORS. (8) PROVIDE WITH QUICKSETTER + WITH FLOW SCALE 0.5-1.75 GPM. (9) PROVIDE WITH VACUUM BREAKER. (10) COORDINATE WITH THE ARCHITECTURAL DRAWINGS FOR LOCATION. (11) GOVERNOR REDUCED PRESSURE REGULATOR WITH OVER PRESSURE DEVICE SET AT 11-14" W.C. (12) PROVIDE AND INSTALL 24 VOLT DC TO SOLENOID VALVE EQUAL TO HONEYWELL MAXON 5000 SERIES. CONNECT TO FIRE ALARM BY FIRE ALARM CONTRACTOR. (13) CONNECT TO GSV-1. REFER TO PLUMBING SHEET P-1 FOR LOCATION. (14) PROVIDE WITH BADGER 5 FOOD WASTE DISPOSAL. (15) PROVIDE WITH WATTS HYDROGUARD SERIES LFLM495 POINT OF USE MIXING VALVE. SET TO 105°. (16) SET SHOWER THERMOSTATIC MIXING VALVE TO 110°.

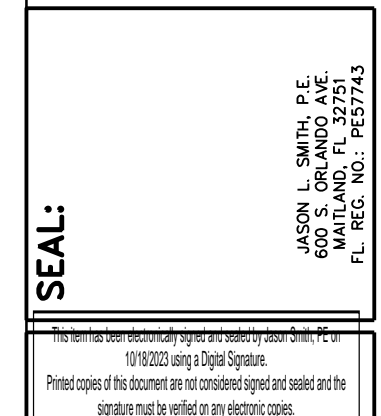
PLUMBING FIXTURE SCHEDULE (Summary): MARK DS-1, DESCRIPTION DECON SHOWER (1)(3), MANUFACTURER SPEAKMAN, MODEL NO. SM-3040-IS, CARRIER -, FLUSH VALVE -, SUPPLY FITTING (2), FAUCET (1), DRAIN (1), TRAP -, SPECIAL ITEMS (1) SET SHOWER THERMOSTATIC MIXING VALVE TO 110°, (2) PROVIDED BY PLUMBING CONTRACTOR, (3) MOUNTING HEIGHT PER LOCAL STATE HANDICAP CODES.

WATER HEATER SCHEDULE: MARK IGHM-1 (1)(2)(3)(4)(5)(6)(7)(8), IGHM-2 (1)(2)(3)(5)(6)(7)(8), MANUFACTURER A.O. SMITH GAS INSTANT WATER HEATER OUTDOOR MODEL, MODEL NO. ATO-540H-P, TYPE LP, INPUT 199,000 BTU/HR, WATTS -, VOLTAGE/PHASE 120/1/60. NOTES: 1. PROVIDE ALL GAUGES, HEAT TRAPS, THERMOSTATS, TEMPERATURE AND PRESSURE RELIEF VALVE AND SHUT-OFF VALVES AS REQUIRED BY LOCAL CODES AND MANUFACTURER'S RECOMMENDATIONS. 2. PROVIDE WITH REMOTE TEMPERATURE CONTROLLER MODEL# 9008172005. 3. PROVIDE WITH PIPE COVER MODEL# 9008331005. 4. MULTIPLE UNIT CONTROLLER MODEL# 9008300005. 5. PROVIDE WITH NEUTRALIZER MODEL# 9007607005. 6. PROVIDE WITH ISOLATION VALVE & A PRESSURE RELIEF VALVE MODEL# 9007605005. 7. PROVIDE PRODUCT PRESERVERS LG1.5L ANTI-SCALE SYSTEM MODEL# 323631-000. 8. SET TANKLESS AND TANK TYPE WATER HEATERS TO 126°.

RECIRCULATION PUMP SCHEDULE: MARK RCP-1, RCP-2, MANUFACTURER TACO, MODEL NO. 006-I06C7-1FC, 006-I06C7-1FC, GPM 1.25 GPM, 0.76 GPM, TOTAL HEAD-FEET 3.66, 2.24, VOLTAGE/PHASE/Hz 115/1/60, 115/1/60, AMPS .43, .43, RPM 3250, 3250, HP 1/40, 1/40. NOTES: 1. PROVIDE ALL GAUGES, UNIONS, VALVES, ETC. AS REQUIRED BY LOCAL CODES AND MANUFACTURER'S RECOMMENDATIONS. 2. COORDINATE WITH DIVISION 16 CONTRACTOR. 3. PROVIDE WITH TACO SMARTPLUS TEMPERATURE SENSOR. REFER TO PLUMBING SHEET FOR P-1 FOR LOCATION OF TEMPERATURE SENSOR.

CLEANOUT SCHEDULE: DESIGNATION FCO, WCO, ECO, MANUFACTURER WATTS, WATTS, WATTS, SERIES C0200-R, C0590-RD, C0200-RX-4. SHOCK ARRESTOR SCHEDULE: DESIGNATION A, B, C, D, E, F, MANUF. WATTS, WATTS, WATTS, WATTS, WATTS, WATTS, SERIES SS-A, SS-B, SS-C, SS-D, SS-E, SS-F, FIXTURE UNITS 1-11, 12-32, 33-60, 61-113, 114-154, 155-330.

EDLUND - DRITENBAS - BINKLEY ARCHITECTS AND ASSOCIATES, P.A. 65 ROYAL PALM POINTE, SUITE "D" VERO BEACH, FLORIDA 32960 PHONE: (772) 569-4320



PROJECT: STATION #7 FOR: INDIAN RIVER COUNTY FIRE DISTRICT 1840 25TH STREET VERO BEACH FL 32960

REVISIONS table with columns for NO., DATE, and REVISIONS.

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COMM. NO: C50299/B DATE: 16 MAY 2022 BY: DJZ CH'KD: JLS SHEET NO. P-7

SCHEDULES - PLUMBING SCALE: N.T.S.



PRINT DATE: 10/18/2023 5:08 PM. SAVE DATE: 9/13/2023 10:23 AM. FILE LOCATION: A:\22_0055\22022 - IRC FS NO 7\DWGS\22022P-7.DWG