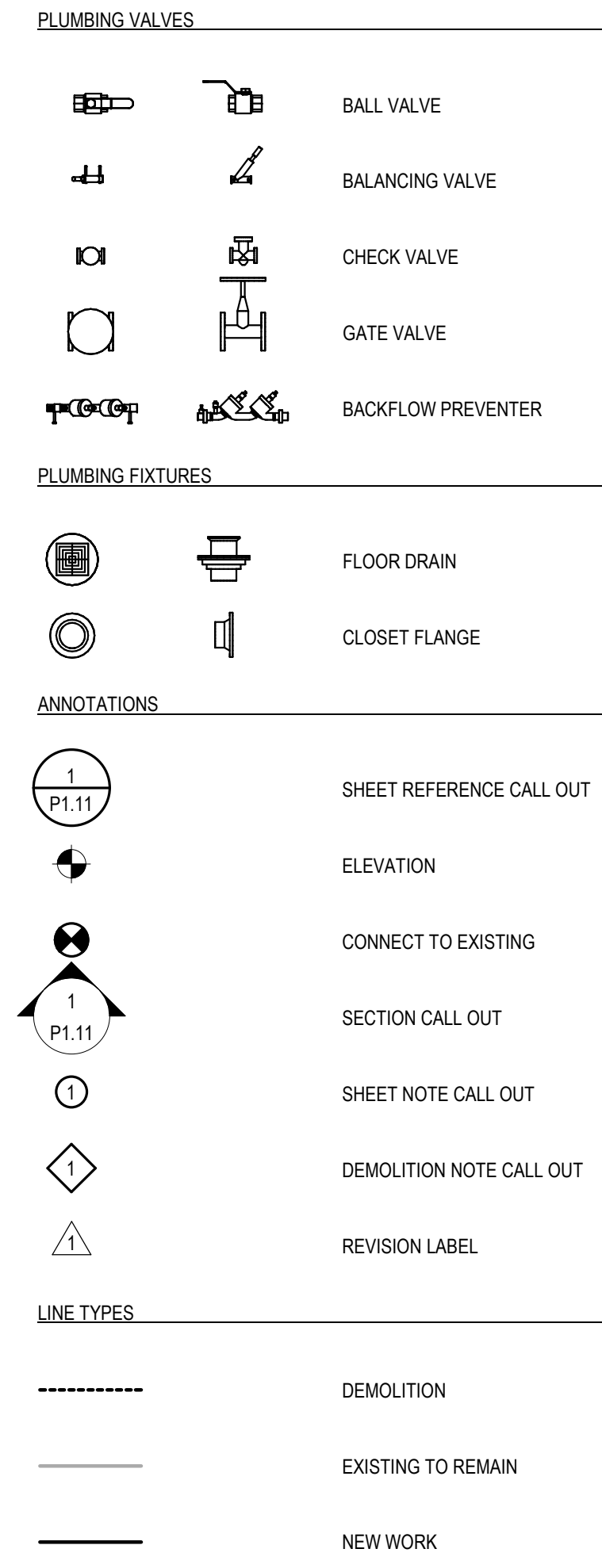
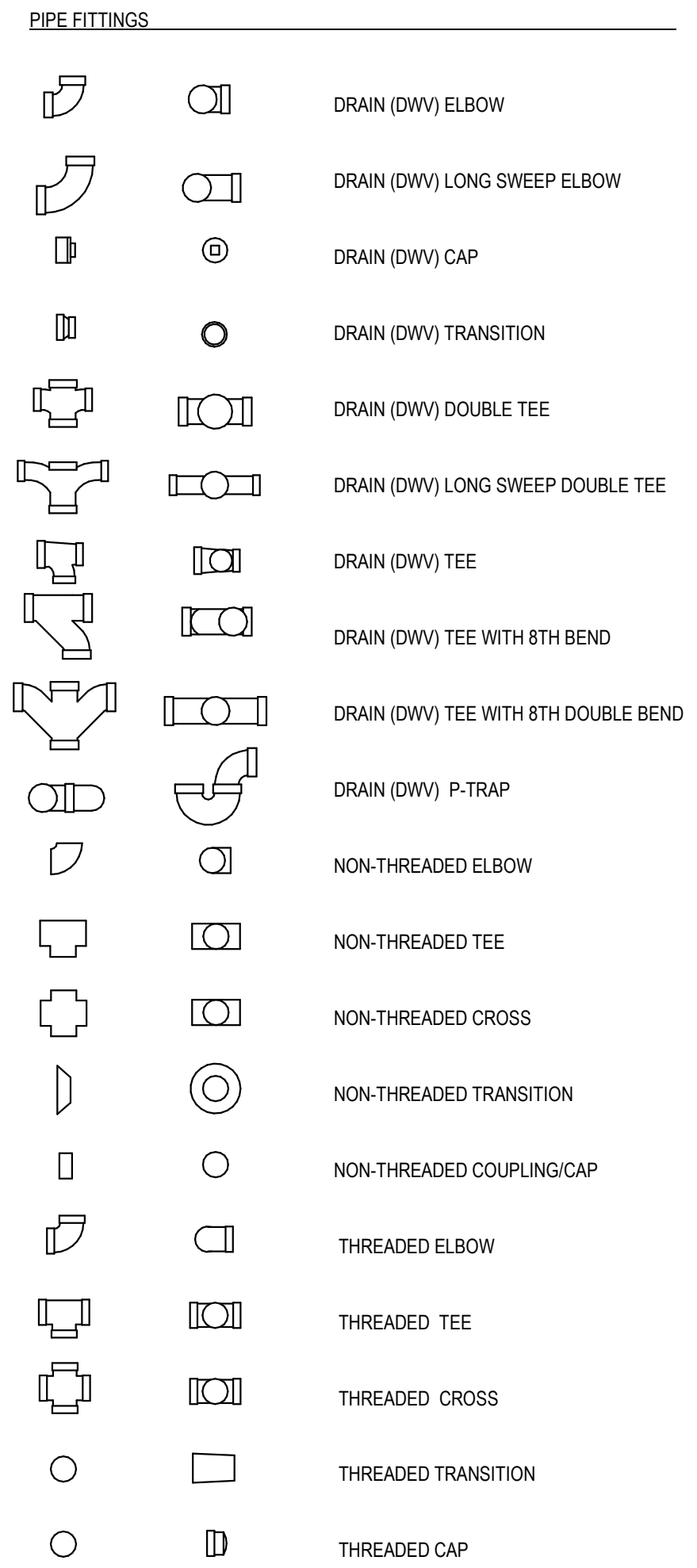


PLUMBING LEGEND



ABBREVIATIONS

ABV	CLG ABOVE FINISHED CEILING	MAX	MAXIMUM
AD	AREA DRAIN	MBH	THOUSANDS OF BTU'S
AFF	ABOVE FINISHED FLOOR	MCF	THOUSANDS OF CUBIC FEET
AP	ACCESS PANEL	MH	MANHOLE
AV	ACID VENT	MIN	MINUTE, MINIMUM
AW	ACID WASTE	MR	MOP RECEPTOR
BFP	BACKFLOW PREVENTER	MV	MEDICAL VACUUM
BTU	BRITISH THERMAL UNITS	N2	NITROGEN
BTUH	BTU PER HOUR	N2O	NITROUS OXIDE
B	BOILER	NC	NORMALLY CLOSED
CA	COMPRESSED AIR	NG	NATURAL GAS
CB	CATCH BASIN	NIC	NOT IN CONTRACT
CFH	CUBIC FEET PER HOUR	NO	NORMALLY OPEN, NUMBER
CFM	CUBIC FEET PER MINUTE	NTS	NOT TO SCALE
CI	CAST IRON	O2	OXYGEN
CMB	COMBUSTION AIR INTAKE	OC	ON CENTER
CO	CLEANOUT	OD	OUTSIDE DIAMETER
CO-UTG	CLEANOUT UP TO GRADE	P	PUMP
CWV	COMBINATION WASTE VENT	PH Ø	PHASE
D	INDIRECT DRAIN	PRESS	PRESSURE
DCW	DOMESTIC COLD WATER	PRV	PRESSURE REDUCING VALVE
DHW	DOMESTIC HOT WATER	PSI	POUNDS PER SQUARE INCH
DHR	DOMESTIC HOT WATER RETURN	PVC	POLYVINYL CHLORIDE
DI	DEIONIZED	RD	ROOF DRAIN
DI Ø	DIAMETER	RL	RAIN LEADER
DM	DEMINERALIZED	RBPBP	REDUCED PRESSURE BACKFLOW PREVENTER
ELEV	ELEVATION	RPM	REVOLUTIONS PER MINUTE
EWC	ELECTRIC WATER COOLER	RW	RAINWATER
EX	EXISTING TO REMAIN	SAN	SANITARY
°F	DEGREES FAHRENHEIT	SF	SQUARE FEET
FCO	FLOOR CLEANOUT	SM	SIMILAR
FD	FLOOR DRAIN	SK	SINK
FH	FUME HOOD	SPEC	SPECIFICATION
FL	FLUE	SS	SANITARY SEWER, STAINLESS STEEL
FT	FEET	SSD	SITE STORM DRAIN
FT WG	FEET OF WATER, GAUGE	STD	STANDARD
GA	GAUGE	ST	STORM
GAL	GALLONS	STL	STEEL
GALV	GALVANIZED	SW	SOFT WATER
GPH	GALLONS PER HOUR	TEMP	TEMPERATURE
GPM	GALLONS PER MINUTE	TP	TRAP PRIMER
HB	HOSE BIBB	TS	TEMPERED WATER
HP	HORSEPOWER	TYP	TYPICAL
HPW	HIGH PURITY WATER	UG	UNDERGROUND
HR	HOUR	UTG	UP TO GRADE
HW	HEADWALL	UR	URINAL
ID	INSIDE DIAMETER	V	VENT
IN	INCHES	VFD	VARIABLE FREQUENCY DRIVE
IN. WG	INCHES OF WATER, GAUGE	VFM	VENTURI FLOW METER
INV	INVERT	VYB	VALVE-IN-YARD-BOX
KW	KILOWATTS	VLV	VALVE
KWH	KILOWATT HOUR	W	WASTE OR SOIL
LAV, L	LAVATORY	WC	WATER CLOSET
LA	LABORATORY AIR	WCO	WALL CLEANOUT
LV	LABORATORY VENT	WH	WALL HYDRANT
LW	LABORATORY WASTE	WHAX	WATER HAMMER ARRESTOR, 'X' - PDI SIZE
LVAC	LABORATORY VACUUM	X	EXISTING TO BE REMOVED

DIVISION 22 CODES & STANDARDS

**GENERAL**

1. THE WORK COVERED BY THIS DIVISION CONSISTS OF PROVIDING ALL LABOR, EQUIPMENT AND MATERIALS AND PERFORMING ALL OPERATIONS NECESSARY FOR THE INSTALLATION OF THE MECHANICAL WORK AS HEREIN CALLED FOR AND SHOWN ON THE DRAWINGS.

**CODES**

1. ALL WORK UNDER DIVISION 22 SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CODES LISTED HEREIN. THE DESIGN HAS BEEN BASED ON THE REQUIREMENTS OF THESE CODES, AND WHILE IT IS NOT THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THAT ALL WORK CALLED FOR COMPLIES WITH THESE CODES, HE SHALL BE RESPONSIBLE FOR CALLING TO THE ARCHITECT/ENGINEER'S ATTENTION ANY DRAWINGS OR SPECIFICATIONS THAT ARE NOT IN CONFORMANCE WITH THESE OR OTHER CODES PRIOR TO ORDERING EQUIPMENT OR INSTALLING WORK.
2. COMPLY WITH REGULATIONS AND CODES OF UTILITY SUPPLIERS.
3. WHERE NO SPECIFIC METHOD OR FORM OF CONSTRUCTION IS CALLED FOR IN THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL COMPLY WITH CODE REQUIREMENTS WHEN CARRYING OUT SUCH WORK.
4. WHERE CODE CONFLICT EXISTS, GENERALLY THE MOST RESTRICTIVE REQUIREMENT APPLIES. COMPLY WITH CURRENT CODE EDITION, UNLESS NOTED.
5. ADDITIONAL CODES OR STANDARDS APPLYING TO A SPECIFIC PART OF THE WORK MAY BE INCLUDED IN THAT SECTION.
6. THE FOLLOWING CODES GOVERN THE WORK:
  - A. FLORIDA BUILDING CODE - BUILDING - EIGHTH EDITION (2023).
  - B. FLORIDA BUILDING CODE - PLUMBING - EIGHTH EDITION (2023).
  - C. FLORIDA BUILDING CODE - MECHANICAL - EIGHTH EDITION (2023).
  - D. FLORIDA BUILDING CODE - FUEL GAS - EIGHTH EDITION (2023).
  - E. FLORIDA BUILDING CODE - TEST PROTOCOLS FOR HIGH VELOCITY HURRICANE ZONES - EIGHTH EDITION (2023).
  - F. FLORIDA FIRE PREVENTION CODE - EIGHTH EDITION (2023).
    - a. FIRE CODE (NFPA 1) - 2021 FLORIDA EDITION
    - b. LIFE SAFETY CODE (NFPA 101) - 2021 FLORIDA EDITION
  - G. NATIONAL ELECTRIC CODE (NFPA 70) - 2020.
  - H. STANDARD FOR THE INSTALLATION OF AIR CONDITIONING AND VENTILATION SYSTEMS (NFPA 90A).
    - a. 2015 IN ACCORDANCE WITH FBC - MECHANICAL - EIGHTH EDITION (2023)
    - b. 2021 IN ACCORDANCE WITH FAC 69A-3.012 STANDARDS OF THE NATIONAL FIRE PROTECTION ASSOCIATION AND OTHER STANDARDS ADOPTED.
  - I. INSTALLATION OF SPRINKLER SYSTEMS (NFPA 13) - 2019.

**STANDARDS**

1. ALL DIVISION 22 MATERIALS, INSTALLATION AND SYSTEMS SHALL MEET THE REQUIREMENTS OF THE FOLLOWING STANDARDS, INCLUDING THE LATEST ADDENDA AND AMENDMENTS, TO THE EXTENT REFERENCED:
  - A. UNDERWRITERS LABORATORIES (UL)
  - B. AMERICAN NATIONAL STANDARDS INSTITUTION (ANSI)
  - C. AMERICAN SOCIETY OF TESTING MATERIALS (ASTM)
  - D. NATIONAL FIRE PROTECTION (NFPA)
  - E. NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION (NEMA)
  - F. AIR CONDITIONING AND REFRIGERATION INSTITUTE (ARI)
  - G. SHEET METAL AND AIR CONDITIONING CONTRACTORS' NATIONAL ASSOCIATION (SMACNA)
  - H. AMERICAN SOCIETY OF HEATING, REFRIGERATION, AND AIR CONDITIONING ENGINEERS (ASHRAE)
  - I. AIR MOVEMENT AND CONTROL ASSOCIATION (AMCA)
  - J. STANDARDS OF THE HYDRONIC INSTITUTE (IBR)

**GAS PIPE SIZING CALCULATIONS**

TOTAL EQUIVALENT LENGTH OF GAS PIPE (FT) FROM REMOTE OUTLET TO THE SOURCE 100

GAS PIPE IS SIZED PER 2023 FLORIDA BUILDING CODE-FUEL GAS TABLE 402.4(2) WITH PRESSURE DROP OF 0.5 IN W.C.

TOTAL GAS LOAD = CFH 156

DESIGN NARRATIVE

THIS PLUMBING DESIGN HAS BEEN DEVELOPED TO PROVIDE A COST-EFFECTIVE SOLUTION FOR PROVIDING BASIC PLUMBING SERVICES FOR THIS NEWLY CONSTRUCTED FACILITY. THIS PROJECT INCLUDES THE PROVISION OF ALL NEW PLUMBING SERVICES TO COMPLETE THE BUILDING'S FUNCTION. THIS INCLUDES NEW DOMESTIC COLD WATER DISTRIBUTION SYSTEM, NEW GAS FIRED WATER HEATER WITH DOMESTIC HOT WATER DISTRIBUTION SYSTEMS, AND NEW SANITARY DRAIN/VENT DISTRIBUTION SYSTEM. CONTRACTOR SHALL PROVIDE ALL COMPONENTS NECESSARY TO COMPLETE THE INDICATED WORK.

PLUMBING SHEET LIST

SHEET NUMBER	SHEET NAME
P001	LEGEND, ABBREVIATIONS, CODES AND STANDARDS
P002	SPECIFICATIONS
P101	FLOOR PLAN - SANITARY DRAIN AND VENT PIPING
P102	FLOOR PLAN - DOMESTIC WATER PIPING
P103	FLOOR PLAN - NATURAL GAS PIPING
P401	SANITARY AND VENT RISER DIAGRAM
P402	DOMESTIC WATER RISER DIAGRAM
P901	PRELIMINARY SELECTIONS
P902	PRELIMINARY SELECTIONS

PLUMBING FIXTURE SCHEDULE

TAG	FIXTURE	MFR	MODEL	FAUCET/TRIM		NOTES
				MFR	MODEL	
CW-1	CLOTHES WASHER	-	-	-	-	4, 6
HB-1	HOSE BIB	WOODFORD	MODEL 865	-	-	-
IK-1	ICE KIT	OATEY	F1992	-	-	-
L-1	LAVATORY (PRIVATE)	KOHLER	K-2699-1	DELTA	599LF-GPM-PP	5
L-2	LAVATORY (PUBLIC)	KOHLER	K-2031-0	DELTA	599LF-HGM-PP	2, 3, 5
LT-1	LAUNDRY TRAY	PROFLO	PFLT2024	DELTA	2131LF	5
SH-1	SHOWER	(4)	(4)	MOEN	L2352	1
SK-1	KITCHEN SINK	ELKAY	LRADQ332155	KOHLER	K-22033	5
WC-1	WATER CLOSET (PUBLIC)	KOHLER	K-3493	-	-	5
WC-2	WATER CLOSET (PRIVATE)	KOHLER	K-3493	-	-	5

**NOTES**

1. PROVIDE SHOWER TRIM KIT WITH PRESSURE BALANCING VALVE. INCLUDE INTEGRAL STOPS.
2. PROVIDE ADA COMPLIANT PIPE JACKET.
3. PROVIDE ASSE 1070 VALVE.
4. SEE ARCHITECTURAL SET FOR MFR, MODEL, ETC.
5. PROVIDE 1/4-TURN CHROME PLATED BRASS SHUTOFF VALVES AT FIXTURE.
6. PROVIDE CLOTHES WASHER OUTLET BOX WITH 1/4-TURN BRASS SHUTOFF VALVES AND ASSE 1010 WATER HAMMER ARRESTORS. BASIS OF DESIGN IS OATEY 38569.

GAS EQUIPMENT SCHEDULE

TAG	TYPE	MANUFACTURER	MODEL	CAPACITY (GAL)	FUEL SOURCE	INPUT (BTUH)	EWT (F)	LWT (F)	VOLTS-PHASE	SCHEDULE NOTES
GWH-1	DOMESTIC WATER HEATER	AO SMITH	BPD-80	75	NATURAL GAS	76,000	70	120	120-1	1
RA-1	COOKING RANGE	-	-	-	NATURAL GAS	80,000	-	-	120-1	2

**NOTES**

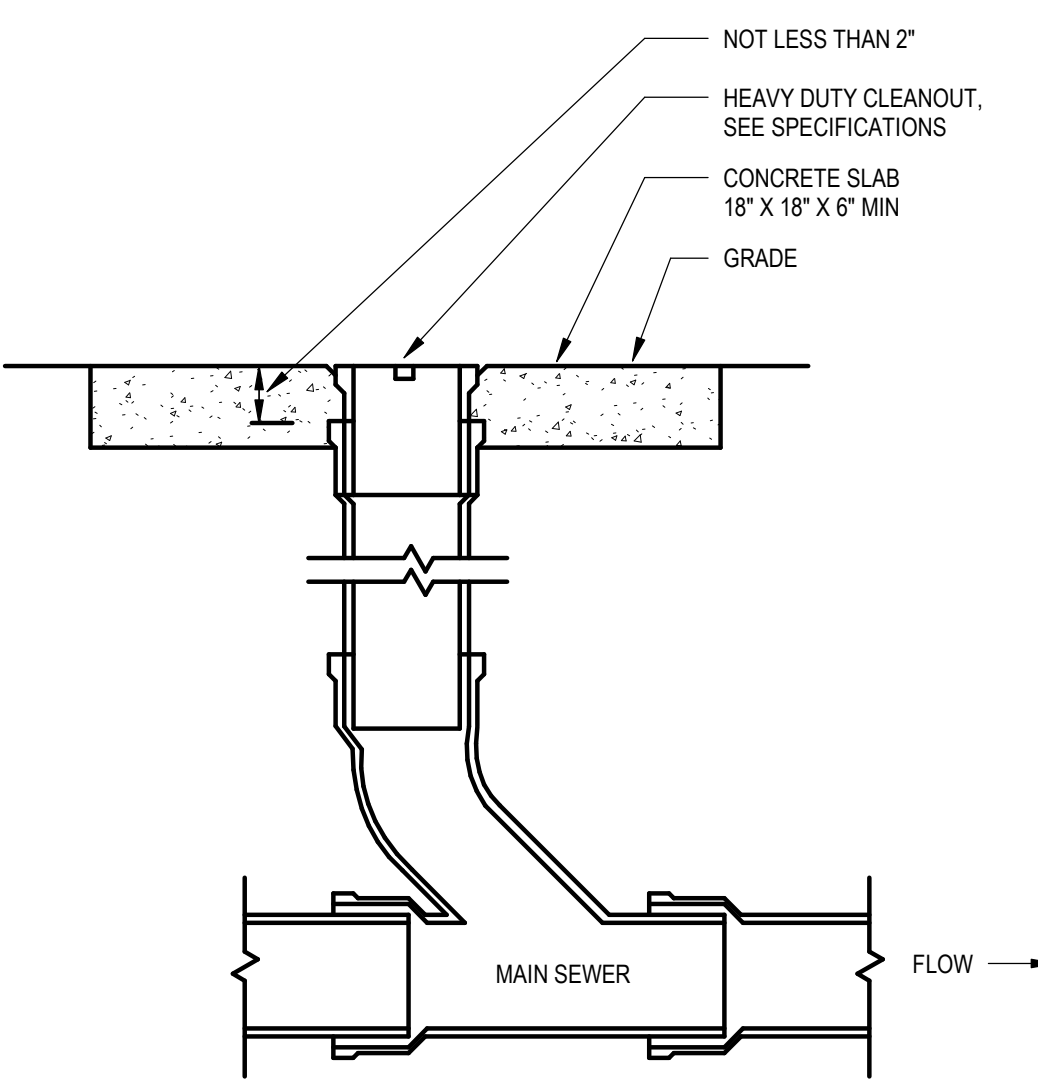
1. UNIT SHALL BE DIRECT-VENT DESIGN WITH A TWO-PIPE AIR INTAKE AND EXHAUST SYSTEM COMMUNICATING DIRECTLY WITH THE OUTSIDE OF THE BUILDING. THE BLOWER SHALL HAVE A SAFETY DEVICE THAT WILL NOT ALLOW THE OPERATION OF THE MAIN BURNERS UNLESS THE BLOWER IS IN OPERATION. USE 9" SCHEDULE 40 CPVC PIPE FOR INTAKE AND VENTING RUNS.
2. SEE ARCHITECTURAL SET FOR MFR, MODEL, ETC.

RECIRCULATION PUMP SCHEDULE

TAG	DUTY	MANUFACTURER	MODEL	CAPACITY (GPM)	HEAD (FT-HD)	MOTOR SECTION			SCHEDULE NOTES
						POWER (W)	VOLTS-PHASE	ECM	
RCP-1	DOMESTIC HOT WATER	BELL & GOSSETT	ECOCIRC 20-18	1	10	70	120/1	YES	-

**NOTES**

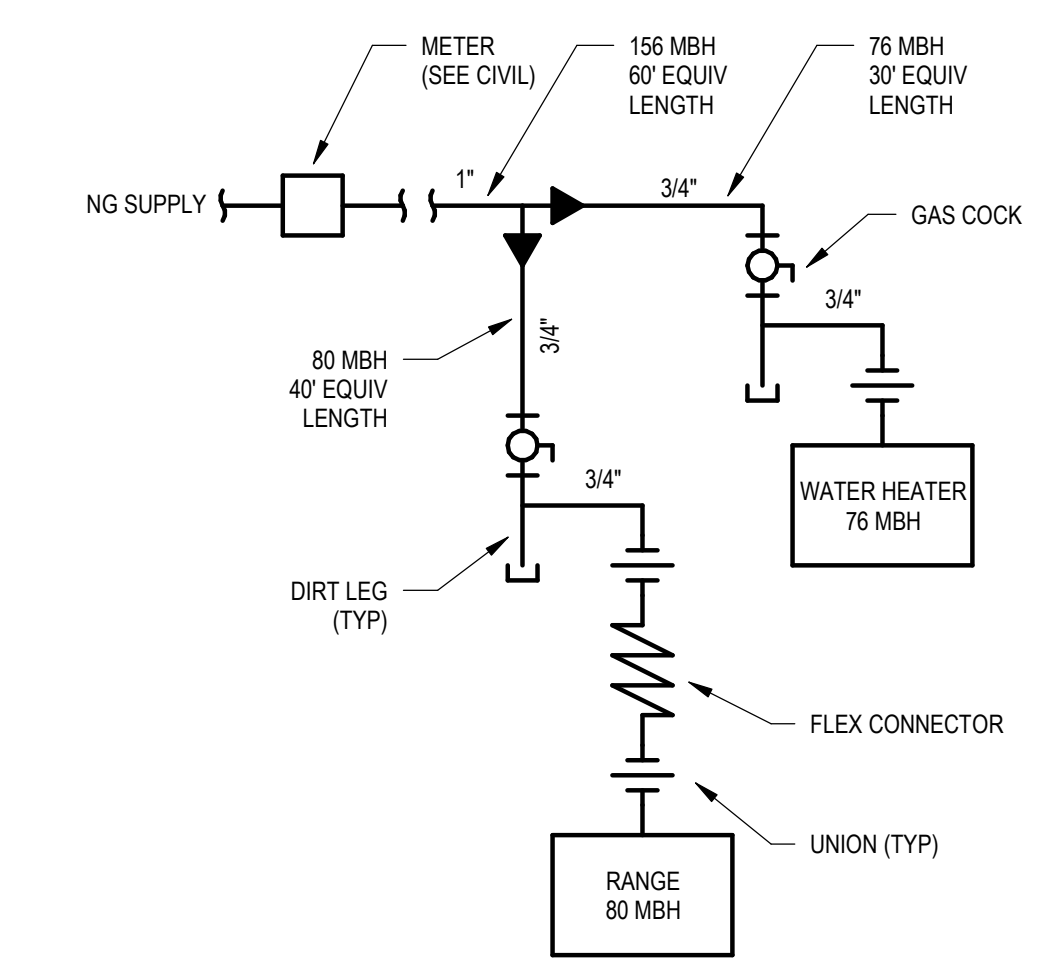
1. NONE.



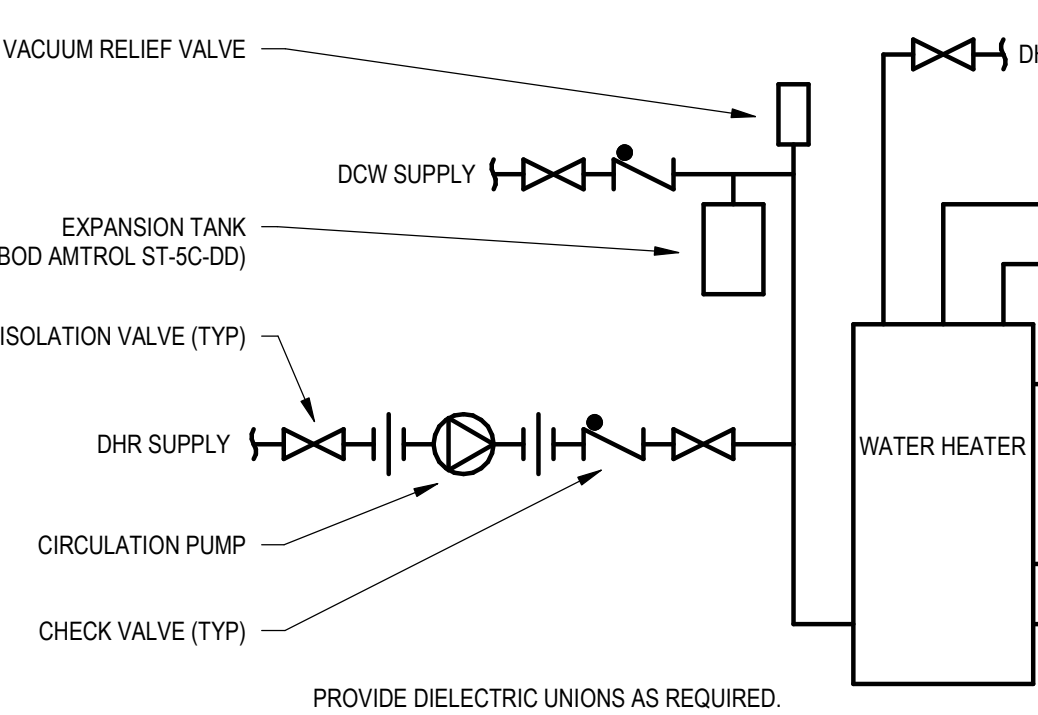
**NOTE:**

1. ONE-WAY CLEANOUT IS SHOWN FOR ILLUSTRATION PURPOSES. PROVIDE ONE-WAY OR TWO-WAY CLEANOUT WHERE INDICATED.

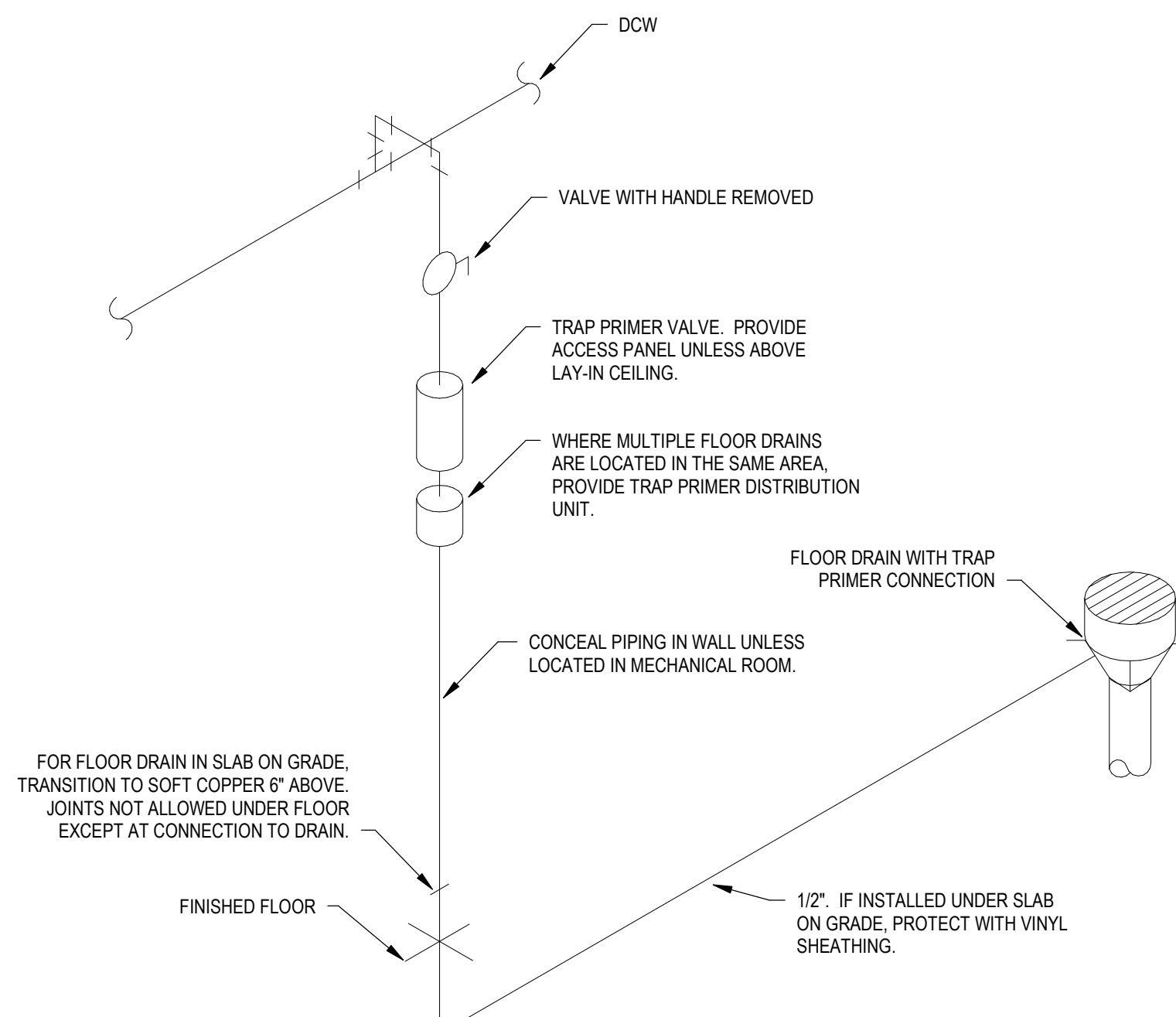
4 EXTERIOR CLEANOUT DETAIL



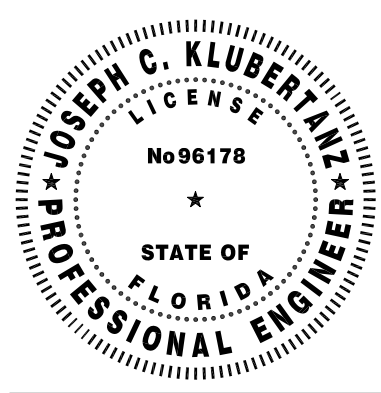
3 NATURAL GAS RISER DIAGRAM



2 WATER HEATER DIAGRAM



1 TRAP PRIMER DIAGRAM



TO THE BEST OF THE ARCHITECT'S OR THE ENGINEER'S KNOWLEDGE, THESE PLANS AND SPECIFICATIONS COMPLY WITH ALL CITY, COUNTY, STATE AND FEDERAL REQUIREMENTS APPLICABLE TO THE PROJECT. THE ARCHITECT/ENGINEER'S LIABILITY IS LIMITED TO THE PROFESSIONAL ENGINEERING ACT AND THE LOCAL AUTHORITY IN THE SECTION AND CHAPTER OF THE FLORIDA STATUTES.



BRADFORD COUNTY SLEEPING QUARTERS  
13641 SOUTHWEST COUNTY ROAD 227  
STARKE, FLORIDA 32091

REVISIONS

NO.	DATE	REF.	BY

**DRAWING STATUS:**  
100% CONSTRUCTION DOCUMENTS

**ISSUE DATE:**  
09/27/2024

**DRAWN BY:** TJM  
**CHECKED BY:** JCK

**PROJECT NUMBER:**  
24064

**DRAWING TITLE:**  
LEGEND, ABBREVIATIONS, CODES AND STANDARDS

**SHEET NO.**  
P001

**DATE/TIME STAMP:**  
9/30/2024 4:23:55 PM



PLUMBING SPECIFICATIONS

- 1. GENERAL PLUMBING
A. DEFINITIONS
a. PROVIDE SUPPLY, ERECT, INSTALL AND CONNECT IN READINESS FOR REGULAR OPERATION...
b. FURNISH SUPPLY AND DELIVER TO PROJECT SITE...
c. INSTALL EQUIPMENT SUPPLIED BY OWNER...
d. WORKING TO DRAWING, FINISH, PROTECTING, CLEANING, AND COMPLETE READY FOR INTENDED USE...
e. THE WORK COVERED BY THESE SPECIFICATIONS CONSISTS OF PROVIDING ALL LABOR, EQUIPMENT AND MATERIALS...
f. PRIOR TO COMMENCING WORK THE CONTRACTOR SHALL SATISFY HIMSELF AS TO THE ACCURACY OF ALL DATA...
g. MATERIALS DELIVERED TO THE SITE SHALL BE INSPECTED FOR DAMAGE...
h. EXTEND SLEEVES IN FLOOR SLABS 3" ABOVE FINISHED FLOOR...
i. CONTRACTOR SHALL PROVIDE ALL THE LABOR AND MATERIALS TO PERFORM THE DRAINAGE/VENT SYSTEM TESTS...
j. PER FBC, ALL FLOOR DRAINS SHALL INCLUDE A POTABLE WATER-SUPPLIED TRAP SEAL PRIMER VALVE...
k. CONTRACTOR TO VERIFY REQUIREMENTS PRIOR TO SLAB POUR...
l. AS-BUILTS: PROVIDE A MARKED-UP SET OF DRAWINGS FOR AS-BUILTS...
m. SUBMIT TEST REPORTS, CERTIFICATIONS, AND VERIFICATION LETTERS AS CALLED FOR IN OTHER SECTIONS...
n. ALL EQUIPMENT MODELS LISTED IN THIS DOCUMENT ARE BASIS OF DESIGN...
2. BASIC MATERIAL & METHODS
A. EQUIPMENT SHALL BE NEW AND THE MOST SUITABLE GRADE FOR THE PURPOSE INTENDED...
B. ALL MATERIALS AND EQUIPMENT SHALL BE INSTALLED AND COMPLETED IN A FIRST CLASS WORKMANLIKE MANNER...
C. THE LABEL OF THE APPROVING AGENCY, SUCH AS UL, IBC, ASME, ARI, AMCA, BY WHICH A STANDARD HAS BEEN ESTABLISHED...
D. MATERIALS AND EQUIPMENT ARE SPECIFIED HEREIN BY A SINGLE OR BY MULTIPLE MANUFACTURERS TO INDICATE QUALITY...
3. PIPE AND PIPE FITTINGS
A. GENERAL - PROVIDE PIPE AND TUBE OF TYPE, JOINT TYPE, GRADE, SIZE AND WEIGHT...
B. SUBMITTALS - CONTRACTOR TO SUBMIT MATERIAL DATA SHEETS DESCRIBING THE PIPE AND FITTINGS...
C. EXECUTION - INSTALL PIPES AND PIPE FITTINGS IN ACCORDANCE WITH RECOGNIZED INDUSTRY PRACTICES...
4. COORDINATION
A. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FULL COORDINATION OF THE PLUMBING SYSTEMS WITH SHOP DRAWINGS...
B. ANY ADDITIONAL STEEL SUPPORTS REQUIRED FOR THE INSTALLATION OF ANY PLUMBING EQUIPMENT...
C. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO SEE THAT ALL EQUIPMENT SUCH AS VALVES, PIPING, FIXTURES...
D. ALL CONNECTIONS TO FIXTURES AND EQUIPMENT SHOWN ON THE DRAWINGS SHALL BE CONSIDERED DIAGRAMMATIC...
E. BEFORE ANY EQUIPMENT IS SHUT DOWN FOR DISCONNECTING OR TIE-INS, ARRANGEMENTS SHALL BE MADE...
5. PIPING SPECIALTIES
A. GENERAL
a. PROVIDE FACTORY-FABRICATED PIPING SPECIALTIES RECOMMENDED BY MANUFACTURER FOR USE IN SERVICE INDICATED...
b. ESCUTCHEONS
a. PROVIDE PIPE ESCUTCHEONS AS SPECIFIED HEREIN WITH INSIDE DIAMETER CLOSELY FITTING PIPE...
c. DIELECTRIC UNIONS
a. PROVIDE STANDARD PRODUCTS RECOMMENDED BY MANUFACTURER FOR USE IN SERVICE INDICATED...
D. EXECUTION
a. PIPE ESCUTCHEONS - INSTALL PIPE ESCUTCHEONS ON EACH PIPE PENETRATION THROUGH FLOORS, WALLS, PARTITIONS...
b. DIELECTRIC UNIONS - INSTALL AT EACH PIPING JOINT BETWEEN FERROUS AND NON-FERROUS PIPING...
c. PIPE SLEEVES - INSTALL PIPE SLEEVES OF TYPES INDICATED WHERE PIPING PASSES THROUGH WALLS, FLOORS, CEILINGS...
6. SUPPORTS, ANCHORS, AND SEALS
A. GENERAL - PROVIDE PIPE HANGERS AND SUPPORTS OF WHICH MATERIALS, DESIGN, AND MANUFACTURE COMPLY...
B. EXECUTION
a. PROCEED WITH INSTALLATION OF HANGERS, SUPPORTS AND ANCHORS ONLY AFTER REQUIRED BUILDING STRUCTURAL WORK...
b. INSTALL HANGERS AND SUPPORTS TO ALLOW CONTROLLED MOVEMENT OF PIPING SYSTEMS...
c. LOAD DISTRIBUTION: INSTALL HANGERS AND SUPPORTS SO THAT PIPING LIVE AND DEAD LOADING AND STRESSES...
7. PLUMBING IDENTIFICATION
A. GENERAL - COMPLY WITH ANSI A13.1 FOR LETTERING SIZE, LENGTH OF COLOR FIELD, COLORS, AND VIEWING ANGLES...
B. EXECUTION
a. WHERE IDENTIFICATION IS TO BE APPLIED TO SURFACES WHICH REQUIRE INSULATION, PAINTING OR OTHER COVERING...
b. LOCATE PIPE MARKERS AS FOLLOWS WHEREVER PIPING IS EXPOSED TO VIEW IN OCCUPIED SPACES...
c. INSTALL ENGRAVED PLASTIC LAMINATE SIGN ON OR NEAR EACH MAJOR ITEM OF PLUMBING EQUIPMENT...
8. INSULATION FOR PLUMBING EQUIPMENT AND PIPING
A. GENERAL
a. PROVIDE COMPOSITE PLUMBING INSULATION (INSULATION, JACKETS, COVERINGS, SEALERS, MASTICS, AND ADHESIVE)...
B. PIPE INSULATION MATERIALS
a. FIBERGLASS PIPE INSULATION: ASTM C547, CLASS 1 UNLESS OTHERWISE INDICATED...
b. CELLULAR GLASS PIPE INSULATION: ASTM C552, TYPE II, CLASS 1, (UNCOVERED)
c. FLEXIBLE UNCELLULAR PIPE INSULATION: ASTM C534, TYPE I, (TUBULAR, SUITABLE FOR USE TO 200°F)
d. STAPLES, BANDS, WIRES, AND CEMENT: AS RECOMMENDED BY THE INSULATION MANUFACTURER...
e. ADHESIVES, SEALERS, PROTECTIVE FINISHES: PRODUCTS RECOMMENDED BY THE INSULATION MANUFACTURER...
f. JACKETS: ASTM C321, TYPE I (VAPOR BARRIER) FOR PIPING BELOW AMBIENT TEMPERATURE...
C. EXECUTION
a. INSTALL THERMAL INSULATION PRODUCTS IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS...
b. INSTALL INSULATION MATERIALS WITH SMOOTH AND EVEN SURFACES AND ON CLEAN AND DRY SURFACES...
c. DO NOT INSTALL INSULATION ON PIPE SYSTEMS UNTIL ACCEPTANCE TESTS HAVE BEEN COMPLETED...
d. DO NOT APPLY INSULATION TO SURFACES WHILE THEY ARE HOT OR WET...
e. DO NOT INSTALL INSULATION UNTIL SYSTEMS HAVE BEEN CHECKED AND ADEQUATELY FREE OF LEAKS...
f. ATTEMPTING TO APPLY INSULATION: A PROFESSIONAL INSULATOR WITH ADEQUATE EXPERIENCE AND ABILITY...
g. FIBERGLASS PIPE INSULATION - INSULATE THE FOLLOWING PIPING SYSTEMS (INDOOR LOCATIONS):
- DOMESTIC HOT WATER, GREATER THAN 140° F: UP TO 2" PIPE - 1-1/2" THICK, OVER 2" PIPE 2" THICK.
- DOMESTIC HOT WATER, 140° F AND LOWER: UP TO 1-1/2" PIPE - 1" THICK, OVER 1-1/2" PIPE - 1-1/2" THICK.
h. INSULATION TO PIPE WITH ALL SIDE AND END JOINTS BUTTED TIGHTLY. SEAL LONGITUDINAL LAP BY PRESSURIZING WITH PLASTIC SEALING TOOL...
i. PROVIDE HANGER OR PIPE SUPPORT SHIELDS OF 16 GAUGE (MINIMUM) GALVANIZED STEEL...
j. CELLULAR GLASS PIPE INSULATION (UNDERGROUND) - INSULATE THE FOLLOWING PIPING SYSTEMS:
- DOMESTIC HOT WATER, SMALLER THAN 6" PIPE - 1-1/2" THICK, 6" AND LARGER PIPE - 2" THICK.
k. CUT INSULATION IN SECTIONS AT FITTINGS AND CAREFULLY FIT TO THE PIPE AND FITTINGS...
9. TESTING, CLEANING, AND STERILIZATION OF PIPING SYSTEMS
A. GENERAL - ALL MATERIALS, TEST EQUIPMENT, AND DEVICES REQUIRED FOR CLEANING, TESTING, STERILIZING OR PURGING...
B. TEST PIPING SYSTEMS BEFORE INSULATION IS INSTALLED WHEREVER FEASIBLE AND REMOVE CONTROL DEVICES...
C. PRESSURE TEST REQUIREMENTS
a. SOIL, WASTE, VENT: TEST ALL PIPING WITHIN THE BUILDING WITH A 10-FOOT HEAD OF WATER...
b. DOMESTIC WATER: PERFORM HYDROSTATIC TEST ON ALL PIPING WITHIN THE BUILDING AT TWICE THE NORMAL STATIC PRESSURE...
c. GAS: TEST WITH AIR OR NITROGEN AT 150% OF NORMAL WORKING PRESSURE...
D. CLEANING AND STERILIZATION
a. CLEAN EXTERIOR SURFACES OF INSTALLED PIPING SYSTEMS OF SUPERFLUOUS MATERIALS...
b. FLUSH AND DRAIN ALL WATER SYSTEMS AT LEAST THREE TIMES. REVERSE FLUSH SYSTEMS FROM SMALLEST PIPING...
c. BLOWDOWN ALL GAS SYSTEMS WITH AIR OR NITROGEN (AT A RATE OF FLOW EXCEEDING DESIGN) AT LEAST THREE TIMES...
E. STERILIZATION OF DOMESTIC WATER SYSTEMS
a. PREREQUISITES: ALL NEW HOT AND COLD WATER PIPING INSTALLED (COMPLETE), ALL FIXTURES CONNECTED...
b. THE SHUT OFF VALVE AT THE WATER MAIN SHALL BE CLOSED, ALL FIXTURE OUTLETS OPENED SLIGHTLY...
c. THE SOLUTION SHALL CONTAIN 50 PARTS PER MILLION OF AVAILABLE CHLORINE...
d. AFTER FINAL FLUSHING, ALL AERATORS SHALL BE REMOVED, CLEANED, AND REINSTALLED...
e. PROVIDE SAMPLING AND CERTIFIED REPORT BY AN INDEPENDENT TESTING LAB...
f. FLUSHING, CLEANING, STERILIZATION, AND PRESSURE TESTING PROCEDURES SHALL COMPLY WITH STATE OF FLORIDA HEALTH STANDARDS...
10. POTABLE WATER SYSTEM
A. GENERAL - COMPLY WITH APPLICABLE PORTIONS OF FLORIDA BUILDING CODE-PLUMBING PERTAINING TO SELECTION AND INSTALLATION...
B. PRODUCTS
a. PROVIDE PIPING MATERIALS AND FACTORY-FABRICATED PIPING PRODUCTS OF SIZES, TYPES, PRESSURE RATINGS, TEMPERATURE RATINGS...
b. INTERIOR WATER PIPING:
- ABOVE GRADE: CHLORINATED POLYVINYL CHLORIDE PIPE (CPVC), SCHEDULE 40, CPVC SOCKET FITTINGS, SOLVENT CEMENT JOINTS.
- BELOW GRADE: SAME AS SITE.
C. EXECUTION
a. EXAMINE AREAS AND CONDITIONS UNDER WHICH POTABLE WATER SYSTEMS ARE TO BE INSTALLED...
b. INSTALL PIPING WITH 1/32" PER FOOT (1/4%) DOWNWARD SLOPE TOWARDS DRAIN POINT...
c. LOCATE GROUPS OF PIPES PARALLEL TO EACH OTHER, SPACED TO PERMIT APPLYING FULL INSULATION...
d. SECTIONAL VALVES: INSTALL ON EACH BRANCH AND RISER, CLOSE TO MAIN, WHERE BRANCH OR RISER SERVES TWO OR MORE PLUMBING FIXTURES...
e. SHUTOFF VALVES: INSTALL ON INLET OF EACH PLUMBING EQUIPMENT ITEM, AND ON INLET OF EACH PLUMBING FIXTURE...
f. DRAIN VALVES: INSTALL ON EACH PLUMBING EQUIPMENT ITEM LOCATED TO COMPLETELY DRAIN EQUIPMENT FOR SERVICE OR REPAIR...
g. HOSE BIBBS - INSTALL ON CONCEALED PIPING WHERE INDICATED WITH VACUUM BREAKER...
h. PROVIDE HOT AND COLD WATER PIPING RUNOUTS TO FIXTURES OF SIZES INDICATED...
i. INSTALL WATER HAMMER ARRESTERS IN UPRIGHT POSITION, IN LOCATIONS AND OF SIZES INDICATED...
11. SOIL, WASTE AND VENT SYSTEM
A. GENERAL - COMPLY WITH APPLICABLE PORTIONS OF FLORIDA BUILDING CODE-PLUMBING PERTAINING TO PLUMBING MATERIALS, CONSTRUCTION AND INSTALLATION...
B. PROVIDE PIPING MATERIALS AND FACTORY-FABRICATED PIPING PRODUCTS OF SIZES, TYPES, PRESSURE RATINGS, AND CAPACITIES...
C. CLEANOUTS
a. PROVIDE FACTORY-FABRICATED DRAINAGE PIPING PRODUCTS OF SIZE AND TYPE INDICATED...
b. CLEANOUT PLUGS: CAST-BRONZE OR BRASS, THREADS COMPLYING WITH ANSI B2.1 COUNTERSUNK HEAD.
c. CLEANOUTS FOR PVS SYSTEMS:
- FLOOR CLEANOUTS: CAST IRON BODY WITH ADJUSTABLE HEAD, BRASS PLUG, AND SCORATED NICK-BRASS COVER...
- FLOOR DRAINS - PROVIDE FLOOR DRAINS OF SIZE AS INDICATED ON DRAWINGS, AND TYPE, INCLUDING FEATURES, AS SPECIFIED...
D. EXECUTION
a. EXAMINE SUBSTRATES AND CONDITIONS UNDER WHICH SOIL AND WASTE SYSTEMS ARE TO BE INSTALLED...
b. INSTALL UNDERGROUND SOIL AND WASTE PIPES AS INDICATED AND IN ACCORDANCE WITH FLORIDA BUILDING CODE-PLUMBING...
c. PROTECT ALL FINISHED SURFACES OF CLEANOUTS WITH A SUITABLE ADHESIVE COVERING UNTIL CONSTRUCTION IS COMPLETED...
d. INSTALLATION OF CLEANOUTS: INSTALL IN ABOVE GROUND PIPING AND BUILDING DRAIN PIPING AS INDICATED...
e. CLEANOUTS SHALL BE FULL SIZE UP TO 4". PIPING OVER 4" SHALL HAVE A REDUCING FITTING TO ACCOMMODATE A 4" CLEANOUT...
f. INSTALL CLEANOUTS TO ALLOW ADEQUATE CLEARANCE FOR RODDING...
g. CLEARANCE: CLEANOUTS ON PIPING 8" AND LARGER SHALL HAVE 30" CLEARANCE...
h. FLASHING FLANGES - INSTALL FLASHING FLANGE AND CLAMPING DEVICE WITH EACH STACK AND CLEANOUT...
i. VENT FLASHING SLEEVES - INSTALL ON STACK PASSING THROUGH ROOF...
j. INSTALLATION OF FLOOR DRAINS - INSTALL FLOOR DRAINS IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS...
12. GAS SYSTEM
A. GENERAL - COMPLY WITH APPLICABLE PORTIONS OF FLORIDA BUILDING CODE-PLUMBING PERTAINING TO PLUMBING MATERIALS, CONSTRUCTION AND INSTALLATION...
B. PROVIDE PIPING MATERIALS AND FACTORY-FABRICATED PIPING PRODUCTS OF SIZES, TYPES, PRESSURE RATINGS, AND CAPACITIES...
C. PIPES AND FITTINGS
a. PIPE SIZE 2" AND SMALLER: BLACK STEEL PIPE; SCHEDULE 40; MALLEABLE-IRON THREADED FITTINGS.
b. PIPE SIZE 2-1/2" AND LARGER: BLACK STEEL PIPE; SCHEDULE 40; WROUGHT-STEEL BUTTWELDING FITTINGS.
D. VALVES
a. GAS COCKS 2" AND SMALLER: UL-LISTED, AGA APPROVED, 150 PSI NON-SHOCK WOG, TWO PIECE BALL TYPE, FULL PORT, BRONZE, LEVER HANDLE...
b. GAS COCKS 2-1/2" AND LARGER: UL-LISTED, CGA APPROVED, MSS SP-78; 175 PSI, LUBRICATED PLUG TYPE, FULL PORT, SEMI-STEEL BODY...
c. GAS APPLIANCE CONNECTORS: PROVIDE GAS APPLIANCE CONNECTORS OF ANNEALED 304 STAINLESS STEEL TUBING...
d. BRADING TO PROTECT TUBING FROM ELONGATION AND A PVC COATING SURROUNDING STEEL BRADING...
e. APPLIANCE RESTRAINING DEVICE SHALL PREVENT OVER EXTENSION OF CONNECTING TUBE.
F. EXECUTION
a. EXAMINE AREAS AND CONDITIONS UNDER WHICH GAS SYSTEMS MATERIALS AND PRODUCTS ARE TO BE INSTALLED...
b. COORDINATE WITH GAS SUPPLIER PRIOR TO STARTING WORK...
c. USE SEALANTS ON METAL GAS PIPING THREADS WHICH ARE CHEMICALLY RESISTANT TO GAS...
d. REMOVE CUTTING AND THREADING BURRS BEFORE ASSEMBLING PIPING...
e. DO NOT INSTALL DEFECTIVE PIPING OR FITTINGS...
f. FLUSH EACH GAS OUTLET, INCLUDING VALVES, WITH THREADED PLUG OR CAP IMMEDIATELY AFTER INSTALLATION...
g. GROUND GAS PIPING ELECTRICALLY AND CONTINUOUSLY WITHIN PROJECT, AND BOND TIGHTLY TO GROUNDING CONNECTION...
h. INSTALL DRIP-LEGS (DIRT LEG) IN GAS PIPING WHERE INDICATED, AND WHERE REQUIRED BY CODE OR GAS COMPANY REQUIREMENTS...
i. INSTALL "TEE" FITTING WITH BOTTOM OUTLET PLUGGED OR CAPPED, AT BOTTOM OF PIPE RISERS...
j. INSTALL PIPING PARALLEL TO OTHER PIPING...
k. GAS COCKS: PROVIDE AT CONNECTION TO GAS TRAIN FOR EACH GAS-FIRED EQUIPMENT ITEM...
l. KITCHEN APPLIANCE CONNECTORS: INSTALL TUBING, VALVES, CONNECTORS, FITTINGS IN ACCORDANCE WITH THEIR LISTING...
m. BEHIND MOVABLE APPLIANCES SHALL NOT BE CRIMPED WHEN APPLIANCE IS EXTENDED FROM WALL OR WHEN APPLIANCE IS SET IN WORKING POSITION...
n. APPLIANCE RESTRAINING DEVICE SHALL BE SET TO ENGAGE JUST PRIOR TO THE CONNECTOR BEING FULLY EXTENDED...

- 13. PLUMBING IDENTIFICATION
A. GENERAL - COMPLY WITH ANSI A13.1 FOR LETTERING SIZE, LENGTH OF COLOR FIELD, COLORS, AND VIEWING ANGLES...
B. EXECUTION
a. WHERE IDENTIFICATION IS TO BE APPLIED TO SURFACES WHICH REQUIRE INSULATION, PAINTING OR OTHER COVERING...
b. LOCATE PIPE MARKERS AS FOLLOWS WHEREVER PIPING IS EXPOSED TO VIEW IN OCCUPIED SPACES...
c. INSTALL ENGRAVED PLASTIC LAMINATE SIGN ON OR NEAR EACH MAJOR ITEM OF PLUMBING EQUIPMENT...
14. SUPPORTS, ANCHORS, AND SEALS
A. GENERAL - PROVIDE PIPE HANGERS AND SUPPORTS OF WHICH MATERIALS, DESIGN, AND MANUFACTURE COMPLY...
B. EXECUTION
a. PROCEED WITH INSTALLATION OF HANGERS, SUPPORTS AND ANCHORS ONLY AFTER REQUIRED BUILDING STRUCTURAL WORK...
b. INSTALL HANGERS AND SUPPORTS TO ALLOW CONTROLLED MOVEMENT OF PIPING SYSTEMS...
c. LOAD DISTRIBUTION: INSTALL HANGERS AND SUPPORTS SO THAT PIPING LIVE AND DEAD LOADING AND STRESSES...
15. PLUMBING IDENTIFICATION
A. GENERAL - COMPLY WITH ANSI A13.1 FOR LETTERING SIZE, LENGTH OF COLOR FIELD, COLORS, AND VIEWING ANGLES...
B. EXECUTION
a. WHERE IDENTIFICATION IS TO BE APPLIED TO SURFACES WHICH REQUIRE INSULATION, PAINTING OR OTHER COVERING...
b. LOCATE PIPE MARKERS AS FOLLOWS WHEREVER PIPING IS EXPOSED TO VIEW IN OCCUPIED SPACES...
c. INSTALL ENGRAVED PLASTIC LAMINATE SIGN ON OR NEAR EACH MAJOR ITEM OF PLUMBING EQUIPMENT...
16. INSULATION FOR PLUMBING EQUIPMENT AND PIPING
A. GENERAL
a. PROVIDE COMPOSITE PLUMBING INSULATION (INSULATION, JACKETS, COVERINGS, SEALERS, MASTICS, AND ADHESIVE)...
B. PIPE INSULATION MATERIALS
a. FIBERGLASS PIPE INSULATION: ASTM C547, CLASS 1 UNLESS OTHERWISE INDICATED...
b. CELLULAR GLASS PIPE INSULATION: ASTM C552, TYPE II, CLASS 1, (UNCOVERED)
c. FLEXIBLE UNCELLULAR PIPE INSULATION: ASTM C534, TYPE I, (TUBULAR, SUITABLE FOR USE TO 200°F)
d. STAPLES, BANDS, WIRES, AND CEMENT: AS RECOMMENDED BY THE INSULATION MANUFACTURER...
e. ADHESIVES, SEALERS, PROTECTIVE FINISHES: PRODUCTS RECOMMENDED BY THE INSULATION MANUFACTURER...
f. JACKETS: ASTM C321, TYPE I (VAPOR BARRIER) FOR PIPING BELOW AMBIENT TEMPERATURE...
C. EXECUTION
a. INSTALL THERMAL INSULATION PRODUCTS IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS...
b. INSTALL INSULATION MATERIALS WITH SMOOTH AND EVEN SURFACES AND ON CLEAN AND DRY SURFACES...
c. DO NOT INSTALL INSULATION ON PIPE SYSTEMS UNTIL ACCEPTANCE TESTS HAVE BEEN COMPLETED...
d. DO NOT APPLY INSULATION TO SURFACES WHILE THEY ARE HOT OR WET...
e. DO NOT INSTALL INSULATION UNTIL SYSTEMS HAVE BEEN CHECKED AND ADEQUATELY FREE OF LEAKS...
f. ATTEMPTING TO APPLY INSULATION: A PROFESSIONAL INSULATOR WITH ADEQUATE EXPERIENCE AND ABILITY...
g. FIBERGLASS PIPE INSULATION - INSULATE THE FOLLOWING PIPING SYSTEMS (INDOOR LOCATIONS):
- DOMESTIC HOT WATER, GREATER THAN 140° F: UP TO 2" PIPE - 1-1/2" THICK, OVER 2" PIPE 2" THICK.
- DOMESTIC HOT WATER, 140° F AND LOWER: UP TO 1-1/2" PIPE - 1" THICK, OVER 1-1/2" PIPE - 1-1/2" THICK.
h. INSULATION TO PIPE WITH ALL SIDE AND END JOINTS BUTTED TIGHTLY. SEAL LONGITUDINAL LAP BY PRESSURIZING WITH PLASTIC SEALING TOOL...
i. PROVIDE HANGER OR PIPE SUPPORT SHIELDS OF 16 GAUGE (MINIMUM) GALVANIZED STEEL...
j. CELLULAR GLASS PIPE INSULATION (UNDERGROUND) - INSULATE THE FOLLOWING PIPING SYSTEMS:
- DOMESTIC HOT WATER, SMALLER THAN 6" PIPE - 1-1/2" THICK, 6" AND LARGER PIPE - 2" THICK.
k. CUT INSULATION IN SECTIONS AT FITTINGS AND CAREFULLY FIT TO THE PIPE AND FITTINGS...
17. TESTING, CLEANING, AND STERILIZATION OF PIPING SYSTEMS
A. GENERAL - ALL MATERIALS, TEST EQUIPMENT, AND DEVICES REQUIRED FOR CLEANING, TESTING, STERILIZING OR PURGING...
B. TEST PIPING SYSTEMS BEFORE INSULATION IS INSTALLED WHEREVER FEASIBLE AND REMOVE CONTROL DEVICES...
C. PRESSURE TEST REQUIREMENTS
a. SOIL, WASTE, VENT: TEST ALL PIPING WITHIN THE BUILDING WITH A 10-FOOT HEAD OF WATER...
b. DOMESTIC WATER: PERFORM HYDROSTATIC TEST ON ALL PIPING WITHIN THE BUILDING AT TWICE THE NORMAL STATIC PRESSURE...
c. GAS: TEST WITH AIR OR NITROGEN AT 150% OF NORMAL WORKING PRESSURE...
D. CLEANING AND STERILIZATION
a. CLEAN EXTERIOR SURFACES OF INSTALLED PIPING SYSTEMS OF SUPERFLUOUS MATERIALS...
b. FLUSH AND DRAIN ALL WATER SYSTEMS AT LEAST THREE TIMES. REVERSE FLUSH SYSTEMS FROM SMALLEST PIPING...
c. BLOWDOWN ALL GAS SYSTEMS WITH AIR OR NITROGEN (AT A RATE OF FLOW EXCEEDING DESIGN) AT LEAST THREE TIMES...
E. STERILIZATION OF DOMESTIC WATER SYSTEMS
a. PREREQUISITES: ALL NEW HOT AND COLD WATER PIPING INSTALLED (COMPLETE), ALL FIXTURES CONNECTED...
b. THE SHUT OFF VALVE AT THE WATER MAIN SHALL BE CLOSED, ALL FIXTURE OUTLETS OPENED SLIGHTLY...
c. THE SOLUTION SHALL CONTAIN 50 PARTS PER MILLION OF AVAILABLE CHLORINE...
d. AFTER FINAL FLUSHING, ALL AERATORS SHALL BE REMOVED, CLEANED, AND REINSTALLED...
e. PROVIDE SAMPLING AND CERTIFIED REPORT BY AN INDEPENDENT TESTING LAB...
f. FLUSHING, CLEANING, STERILIZATION, AND PRESSURE TESTING PROCEDURES SHALL COMPLY WITH STATE OF FLORIDA HEALTH STANDARDS...
18. POTABLE WATER SYSTEM
A. GENERAL - COMPLY WITH APPLICABLE PORTIONS OF FLORIDA BUILDING CODE-PLUMBING PERTAINING TO SELECTION AND INSTALLATION...
B. PRODUCTS
a. PROVIDE PIPING MATERIALS AND FACTORY-FABRICATED PIPING PRODUCTS OF SIZES, TYPES, PRESSURE RATINGS, TEMPERATURE RATINGS...
b. INTERIOR WATER PIPING:
- ABOVE GRADE: CHLORINATED POLYVINYL CHLORIDE PIPE (CPVC), SCHEDULE 40, CPVC SOCKET FITTINGS, SOLVENT CEMENT JOINTS.
- BELOW GRADE: SAME AS SITE.
C. EXECUTION
a. EXAMINE AREAS AND CONDITIONS UNDER WHICH POTABLE WATER SYSTEMS ARE TO BE INSTALLED...
b. INSTALL PIPING WITH 1/32" PER FOOT (1/4%) DOWNWARD SLOPE TOWARDS DRAIN POINT...
c. LOCATE GROUPS OF PIPES PARALLEL TO EACH OTHER, SPACED TO PERMIT APPLYING FULL INSULATION...
d. SECTIONAL VALVES: INSTALL ON EACH BRANCH AND RISER, CLOSE TO MAIN, WHERE BRANCH OR RISER SERVES TWO OR MORE PLUMBING FIXTURES...
e. SHUTOFF VALVES: INSTALL ON INLET OF EACH PLUMBING EQUIPMENT ITEM, AND ON INLET OF EACH PLUMBING FIXTURE...
f. DRAIN VALVES: INSTALL ON EACH PLUMBING EQUIPMENT ITEM LOCATED TO COMPLETELY DRAIN EQUIPMENT FOR SERVICE OR REPAIR...
g. HOSE BIBBS - INSTALL ON CONCEALED PIPING WHERE INDICATED WITH VACUUM BREAKER...
h. PROVIDE HOT AND COLD WATER PIPING RUNOUTS TO FIXTURES OF SIZES INDICATED...
i. INSTALL WATER HAMMER ARRESTERS IN UPRIGHT POSITION, IN LOCATIONS AND OF SIZES INDICATED...
19. SOIL, WASTE AND VENT SYSTEM
A. GENERAL - COMPLY WITH APPLICABLE PORTIONS OF FLORIDA BUILDING CODE-PLUMBING PERTAINING TO PLUMBING MATERIALS, CONSTRUCTION AND INSTALLATION...
B. PROVIDE PIPING MATERIALS AND FACTORY-FABRICATED PIPING PRODUCTS OF SIZES, TYPES, PRESSURE RATINGS, AND CAPACITIES...
C. CLEANOUTS
a. PROVIDE FACTORY-FABRICATED DRAINAGE PIPING PRODUCTS OF SIZE AND TYPE INDICATED...
b. CLEANOUT PLUGS: CAST-BRONZE OR BRASS, THREADS COMPLYING WITH ANSI B2.1 COUNTERSUNK HEAD.
c. CLEANOUTS FOR PVS SYSTEMS:
- FLOOR CLEANOUTS: CAST IRON BODY WITH ADJUSTABLE HEAD, BRASS PLUG, AND SCORATED NICK-BRASS COVER...
- FLOOR DRAINS - PROVIDE FLOOR DRAINS OF SIZE AS INDICATED ON DRAWINGS, AND TYPE, INCLUDING FEATURES, AS SPECIFIED...
D. EXECUTION
a. EXAMINE SUBSTRATES AND CONDITIONS UNDER WHICH SOIL AND WASTE SYSTEMS ARE TO BE INSTALLED...
b. INSTALL UNDERGROUND SOIL AND WASTE PIPES AS INDICATED AND IN ACCORDANCE WITH FLORIDA BUILDING CODE-PLUMBING...
c. PROTECT ALL FINISHED SURFACES OF CLEANOUTS WITH A SUITABLE ADHESIVE COVERING UNTIL CONSTRUCTION IS COMPLETED...
d. INSTALLATION OF CLEANOUTS: INSTALL IN ABOVE GROUND PIPING AND BUILDING DRAIN PIPING AS INDICATED...
e. CLEANOUTS SHALL BE FULL SIZE UP TO 4". PIPING OVER 4" SHALL HAVE A REDUCING FITTING TO ACCOMMODATE A 4" CLEANOUT...
f. INSTALL CLEANOUTS TO ALLOW ADEQUATE CLEARANCE FOR RODDING...
g. CLEARANCE: CLEANOUTS ON PIPING 8" AND LARGER SHALL HAVE 30" CLEARANCE...
h. FLASHING FLANGES - INSTALL FLASHING FLANGE AND CLAMPING DEVICE WITH EACH STACK AND CLEANOUT...
i. VENT FLASHING SLEEVES - INSTALL ON STACK PASSING THROUGH ROOF...
j. INSTALLATION OF FLOOR DRAINS - INSTALL FLOOR DRAINS IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS...
20. GAS SYSTEM
A. GENERAL - COMPLY WITH APPLICABLE PORTIONS OF FLORIDA BUILDING CODE-PLUMBING PERTAINING TO PLUMBING MATERIALS, CONSTRUCTION AND INSTALLATION...
B. PROVIDE PIPING MATERIALS AND FACTORY-FABRICATED PIPING PRODUCTS OF SIZES, TYPES, PRESSURE RATINGS, AND CAPACITIES...
C. PIPES AND FITTINGS
a. PIPE SIZE 2" AND SMALLER: BLACK STEEL PIPE; SCHEDULE 40; MALLEABLE-IRON THREADED FITTINGS.
b. PIPE SIZE 2-1/2" AND LARGER: BLACK STEEL PIPE; SCHEDULE 40; WROUGHT-STEEL BUTTWELDING FITTINGS.
D. VALVES
a. GAS COCKS 2" AND SMALLER: UL-LISTED, AGA APPROVED, 150 PSI NON-SHOCK WOG, TWO PIECE BALL TYPE, FULL PORT, BRONZE, LEVER HANDLE...
b. GAS COCKS 2-1/2" AND LARGER: UL-LISTED, CGA APPROVED, MSS SP-78; 175 PSI, LUBRICATED PLUG TYPE, FULL PORT, SEMI-STEEL BODY...
c. GAS APPLIANCE CONNECTORS: PROVIDE GAS APPLIANCE CONNECTORS OF ANNEALED 304 STAINLESS STEEL TUBING...
d. BRADING TO PROTECT TUBING FROM ELONGATION AND A PVC COATING SURROUNDING STEEL BRADING...
e. APPLIANCE RESTRAINING DEVICE SHALL PREVENT OVER EXTENSION OF CONNECTING TUBE.
F. EXECUTION
a. EXAMINE AREAS AND CONDITIONS UNDER WHICH GAS SYSTEMS MATERIALS AND PRODUCTS ARE TO BE INSTALLED...
b. COORDINATE WITH GAS SUPPLIER PRIOR TO STARTING WORK...
c. USE SEALANTS ON METAL GAS PIPING THREADS WHICH ARE CHEMICALLY RESISTANT TO GAS...
d. REMOVE CUTTING AND THREADING BURRS BEFORE ASSEMBLING PIPING...
e. DO NOT INSTALL DEFECTIVE PIPING OR FITTINGS...
f. FLUSH EACH GAS OUTLET, INCLUDING VALVES, WITH THREADED PLUG OR CAP IMMEDIATELY AFTER INSTALLATION...
g. GROUND GAS PIPING ELECTRICALLY AND CONTINUOUSLY WITHIN PROJECT, AND BOND TIGHTLY TO GROUNDING CONNECTION...
h. INSTALL DRIP-LEGS (DIRT LEG) IN GAS PIPING WHERE INDICATED, AND WHERE REQUIRED BY CODE OR GAS COMPANY REQUIREMENTS...
i. INSTALL "TEE" FITTING WITH BOTTOM OUTLET PLUGGED OR CAPPED, AT BOTTOM OF PIPE RISERS...
j. INSTALL PIPING PARALLEL TO OTHER PIPING...
k. GAS COCKS: PROVIDE AT CONNECTION TO GAS TRAIN FOR EACH GAS-FIRED EQUIPMENT ITEM...
l. KITCHEN APPLIANCE CONNECTORS: INSTALL TUBING, VALVES, CONNECTORS, FITTINGS IN ACCORDANCE WITH THEIR LISTING...
m. BEHIND MOVABLE APPLIANCES SHALL NOT BE CRIMPED WHEN APPLIANCE IS EXTENDED FROM WALL OR WHEN APPLIANCE IS SET IN WORKING POSITION...
n. APPLIANCE RESTRAINING DEVICE SHALL BE SET TO ENGAGE JUST PRIOR TO THE CONNECTOR BEING FULLY EXTENDED...

- 21. SOIL, WASTE AND VENT SYSTEM
A. GENERAL - COMPLY WITH APPLICABLE PORTIONS OF FLORIDA BUILDING CODE-PLUMBING PERTAINING TO PLUMBING MATERIALS, CONSTRUCTION AND INSTALLATION...
B. PROVIDE PIPING MATERIALS AND FACTORY-FABRICATED PIPING PRODUCTS OF SIZES, TYPES, PRESSURE RATINGS, AND CAPACITIES...
C. CLEANOUTS
a. PROVIDE FACTORY-FABRICATED DRAINAGE PIPING PRODUCTS OF SIZE AND TYPE INDICATED...
b. CLEANOUT PLUGS: CAST-BRONZE OR BRASS, THREADS COMPLYING WITH ANSI B2.1 COUNTERSUNK HEAD.
c. CLEANOUTS FOR PVS SYSTEMS:
- FLOOR CLEANOUTS: CAST IRON BODY WITH ADJUSTABLE HEAD, BRASS PLUG, AND SCORATED NICK-BRASS COVER...
- FLOOR DRAINS - PROVIDE FLOOR DRAINS OF SIZE AS INDICATED ON DRAWINGS, AND TYPE, INCLUDING FEATURES, AS SPECIFIED...
D. EXECUTION
a. EXAMINE SUBSTRATES AND CONDITIONS UNDER WHICH SOIL AND WASTE SYSTEMS ARE TO BE INSTALLED...
b. INSTALL UNDERGROUND SOIL AND WASTE PIPES AS INDICATED AND IN ACCORDANCE WITH FLORIDA BUILDING CODE-PLUMBING...
c. PROTECT ALL FINISHED SURFACES OF CLEANOUTS WITH A SUITABLE ADHESIVE COVERING UNTIL CONSTRUCTION IS COMPLETED...
d. INSTALLATION OF CLEANOUTS: INSTALL IN ABOVE GROUND PIPING AND BUILDING DRAIN PIPING AS INDICATED...
e. CLEANOUTS SHALL BE FULL SIZE UP TO 4". PIPING OVER 4" SHALL HAVE A REDUCING FITTING TO ACCOMMODATE A 4" CLEANOUT...
f. INSTALL CLEANOUTS TO ALLOW ADEQUATE CLEARANCE FOR RODDING...
g. CLEARANCE: CLEANOUTS ON PIPING 8" AND LARGER SHALL HAVE 30" CLEARANCE...
h. FLASHING FLANGES - INSTALL FLASHING FLANGE AND CLAMPING DEVICE WITH EACH STACK AND CLEANOUT...
i. VENT FLASHING SLEEVES - INSTALL ON STACK PASSING THROUGH ROOF...
j. INSTALLATION OF FLOOR DRAINS - INSTALL FLOOR DRAINS IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS...
22. GAS SYSTEM
A. GENERAL - COMPLY WITH APPLICABLE PORTIONS OF FLORIDA BUILDING CODE-PLUMBING PERTAINING TO PLUMBING MATERIALS, CONSTRUCTION AND INSTALLATION...
B. PROVIDE PIPING MATERIALS AND FACTORY-FABRICATED PIPING PRODUCTS OF SIZES, TYPES, PRESSURE RATINGS, AND CAPACITIES...
C. PIPES AND FITTINGS
a. PIPE SIZE 2" AND SMALLER: BLACK STEEL PIPE; SCHEDULE 40; MALLEABLE-IRON THREADED FITTINGS.
b. PIPE SIZE 2-1/2" AND LARGER: BLACK STEEL PIPE; SCHEDULE 40; WROUGHT-STEEL BUTTWELDING FITTINGS.
D. VALVES
a. GAS COCKS 2" AND SMALLER: UL-LISTED, AGA APPROVED, 150 PSI NON-SHOCK WOG, TWO PIECE BALL TYPE, FULL PORT, BRONZE, LEVER HANDLE...
b. GAS COCKS 2-1/2" AND LARGER: UL-LISTED, CGA APPROVED, MSS SP-78; 175 PSI, LUBRICATED PLUG TYPE, FULL PORT, SEMI-STEEL BODY...
c. GAS APPLIANCE CONNECTORS: PROVIDE GAS APPLIANCE CONNECTORS OF ANNEALED 304 STAINLESS STEEL TUBING...
d. BRADING TO PROTECT TUBING FROM ELONGATION AND A PVC COATING SURROUNDING STEEL BRADING...
e. APPLIANCE RESTRAINING DEVICE SHALL PREVENT OVER EXTENSION OF CONNECTING TUBE.
F. EXECUTION
a. EXAMINE AREAS AND CONDITIONS UNDER WHICH GAS SYSTEMS MATERIALS AND PRODUCTS ARE TO BE INSTALLED...
b. COORDINATE WITH GAS SUPPLIER PRIOR TO STARTING WORK...
c. USE SEALANTS ON METAL GAS PIPING THREADS WHICH ARE CHEMICALLY RESISTANT TO GAS...
d. REMOVE CUTTING AND THREADING BURRS BEFORE ASSEMBLING PIPING...
e. DO NOT INSTALL DEFECTIVE PIPING OR FITTINGS...
f. FLUSH EACH GAS OUTLET, INCLUDING VALVES, WITH THREADED PLUG OR CAP IMMEDIATELY AFTER INSTALLATION...
g. GROUND GAS PIPING ELECTRICALLY AND CONTINUOUSLY WITHIN PROJECT, AND BOND TIGHTLY TO GROUNDING CONNECTION...
h. INSTALL DRIP-LEGS (DIRT LEG) IN GAS PIPING WHERE INDICATED, AND WHERE REQUIRED BY CODE OR GAS COMPANY REQUIREMENTS...
i. INSTALL "TEE" FITTING WITH BOTTOM OUTLET PLUGGED OR CAPPED, AT BOTTOM OF PIPE RISERS...
j. INSTALL PIPING PARALLEL TO OTHER PIPING...
k. GAS COCKS: PROVIDE AT CONNECTION TO GAS TRAIN FOR EACH GAS-FIRED EQUIPMENT ITEM...
l. KITCHEN APPLIANCE CONNECTORS: INSTALL TUBING, VALVES, CONNECTORS, FITTINGS IN ACCORDANCE WITH THEIR LISTING...
m. BEHIND MOVABLE APPLIANCES SHALL NOT BE CRIMPED WHEN APPLIANCE IS EXTENDED FROM WALL OR WHEN APPLIANCE IS SET IN WORKING POSITION...
n. APPLIANCE RESTRAINING DEVICE SHALL BE SET TO ENGAGE JUST PRIOR TO THE CONNECTOR BEING FULLY EXTENDED...

- 23. SOIL, WASTE AND VENT SYSTEM
A. GENERAL - COMPLY WITH APPLICABLE PORTIONS OF FLORIDA BUILDING CODE-PLUMBING PERTAINING TO PLUMBING MATERIALS, CONSTRUCTION AND INSTALLATION...
B. PROVIDE PIPING MATERIALS AND FACTORY-FABRICATED PIPING PRODUCTS OF SIZES, TYPES, PRESSURE RATINGS, AND CAPACITIES...
C. CLEANOUTS
a. PROVIDE FACTORY-FABRICATED DRAINAGE PIPING PRODUCTS OF SIZE AND TYPE INDICATED...
b. CLEANOUT PLUGS: CAST-BRONZE OR BRASS, THREADS COMPLYING WITH ANSI B2.1 COUNTERSUNK HEAD.
c. CLEANOUTS FOR PVS SYSTEMS:
- FLOOR CLEANOUTS: CAST IRON BODY WITH ADJUSTABLE HEAD, BRASS PLUG, AND SCORATED NICK-BRASS COVER...
- FLOOR DRAINS - PROVIDE FLOOR DRAINS OF SIZE AS INDICATED ON DRAWINGS, AND TYPE, INCLUDING FEATURES, AS SPECIFIED...
D. EXECUTION
a. EXAMINE SUBSTRATES AND CONDITIONS UNDER WHICH SOIL AND WASTE SYSTEMS ARE TO BE INSTALLED...
b. INSTALL UNDERGROUND SOIL AND WASTE PIPES AS INDICATED AND IN ACCORDANCE WITH FLORIDA BUILDING CODE-PLUMBING...
c. PROTECT ALL FINISHED SURFACES OF CLEANOUTS WITH A SUITABLE ADHESIVE COVERING UNTIL CONSTRUCTION IS COMPLETED...
d. INSTALLATION OF CLEANOUTS: INSTALL IN ABOVE GROUND PIPING AND BUILDING DRAIN PIPING AS INDICATED...
e. CLEANOUTS SHALL BE FULL SIZE UP TO 4". PIPING OVER 4" SHALL HAVE A REDUCING FITTING TO ACCOMMODATE A 4" CLEANOUT...
f. INSTALL CLEANOUTS TO ALLOW ADEQUATE CLEARANCE FOR RODDING...
g. CLEARANCE: CLEANOUTS ON PIPING 8" AND LARGER SHALL HAVE 30" CLEARANCE...
h. FLASHING FLANGES - INSTALL FLASHING FLANGE AND CLAMPING DEVICE WITH EACH STACK AND CLEANOUT...
i. VENT FLASHING SLEEVES - INSTALL ON STACK PASSING THROUGH ROOF...
j. INSTALLATION OF FLOOR DRAINS - INSTALL FLOOR DRAINS IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS...
24. GAS SYSTEM
A. GENERAL - COMPLY WITH APPLICABLE PORTIONS OF FLORIDA BUILDING CODE-PLUMBING PERTAINING TO PLUMBING MATERIALS, CONSTRUCTION AND INSTALLATION...
B. PROVIDE PIPING MATERIALS AND FACTORY-FABRICATED PIPING PRODUCTS OF SIZES, TYPES, PRESSURE RATINGS, AND CAPACITIES...
C. PIPES AND FITTINGS
a. PIPE SIZE 2" AND SMALLER: BLACK STEEL PIPE; SCHEDULE 40; MALLEABLE-IRON THREADED FITTINGS.
b. PIPE SIZE 2-1/2" AND LARGER: BLACK STEEL PIPE; SCHEDULE 40; WROUGHT-STEEL BUTTWELDING FITTINGS.
D. VALVES
a. GAS COCKS 2" AND SMALLER: UL-LISTED, AGA APPROVED, 150 PSI NON-SHOCK WOG, TWO PIECE BALL TYPE, FULL PORT, BRONZE, LEVER HANDLE...
b. GAS COCKS 2-1/2" AND LARGER: UL-LISTED, CGA APPROVED, MSS SP-78; 175 PSI, LUBRICATED PLUG TYPE, FULL PORT, SEMI-STEEL BODY...
c. GAS APPLIANCE CONNECTORS: PROVIDE GAS APPLIANCE CONNECTORS OF ANNEALED 304 STAINLESS STEEL TUBING...
d. BRADING TO PROTECT TUBING FROM ELONGATION AND A PVC COATING SURROUNDING STEEL BRADING...
e. APPLIANCE RESTRAINING DEVICE SHALL PREVENT OVER EXTENSION OF CONNECTING TUBE.
F. EXECUTION
a. EXAMINE AREAS AND CONDITIONS UNDER WHICH GAS SYSTEMS MATERIALS AND PRODUCTS ARE TO BE INSTALLED...
b. COORDINATE WITH GAS SUPPLIER PRIOR TO STARTING WORK...
c. USE SEALANTS ON METAL GAS PIPING THREADS WHICH ARE CHEMICALLY RESISTANT TO GAS...
d. REMOVE CUTTING AND THREADING BURRS BEFORE ASSEMBLING PIPING...
e. DO NOT INSTALL DEFECTIVE PIPING OR FITTINGS...
f. FLUSH EACH GAS OUTLET, INCLUDING VALVES, WITH THREADED PLUG OR CAP IMMEDIATELY AFTER INSTALLATION...
g. GROUND GAS PIPING ELECTRICALLY AND CONTINUOUSLY WITHIN PROJECT, AND BOND TIGHTLY TO GROUNDING CONNECTION...
h. INSTALL DRIP-LEGS (DIRT LEG) IN GAS PIPING WHERE INDICATED, AND WHERE REQUIRED BY CODE OR GAS COMPANY REQUIREMENTS...
i. INSTALL "TEE" FITTING WITH BOTTOM OUTLET PLUGGED OR CAPPED, AT BOTTOM OF PIPE RISERS...
j. INSTALL PIPING PARALLEL TO OTHER PIPING...
k. GAS COCKS: PROVIDE AT CONNECTION TO GAS TRAIN FOR EACH GAS-FIRED EQUIPMENT ITEM...
l. KITCHEN APPLIANCE CONNECTORS: INSTALL TUBING, VALVES, CONNECTORS, FITTINGS IN ACCORDANCE WITH THEIR LISTING...
m. BEHIND MOVABLE APPLIANCES SHALL NOT BE CRIMPED WHEN APPLIANCE IS EXTENDED FROM WALL OR WHEN APPLIANCE IS SET IN WORKING POSITION...
n. APPLIANCE RESTRAINING DEVICE SHALL BE SET TO ENGAGE JUST PRIOR TO THE CONNECTOR BEING FULLY EXTENDED...

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352-256-6785
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STATE OF FLORIDA
Professional Engineer
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BRADFORD COUNTY FIRE RESCUE
BRADFORD COUNTY SLEEPING QUARTERS
13641 SOUTHWEST COUNTY ROAD 227
STARKE, FLORIDA 32091

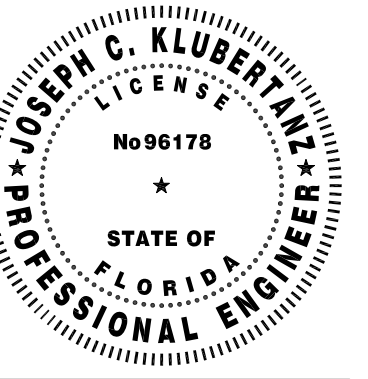
BRADFORD COUNTY SLEEPING QUARTERS
13641 SOUTHWEST COUNTY ROAD 227
STARKE, FLORIDA 32091

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DRAWING STATUS: 100% CONSTRUCTION DOCUMENTS
ISSUE DATE: 09/27/2024
DRAWN BY: TJM, CHECKED BY: JCK
PROJECT NUMBER: 24064
DRAWING TITLE: SPECIFICATIONS
SHEET NO. P002
DATE/TIME STAMP: 9/30/2024 4:23:56 PM

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13641 SOUTHWEST COUNTY ROAD 227  
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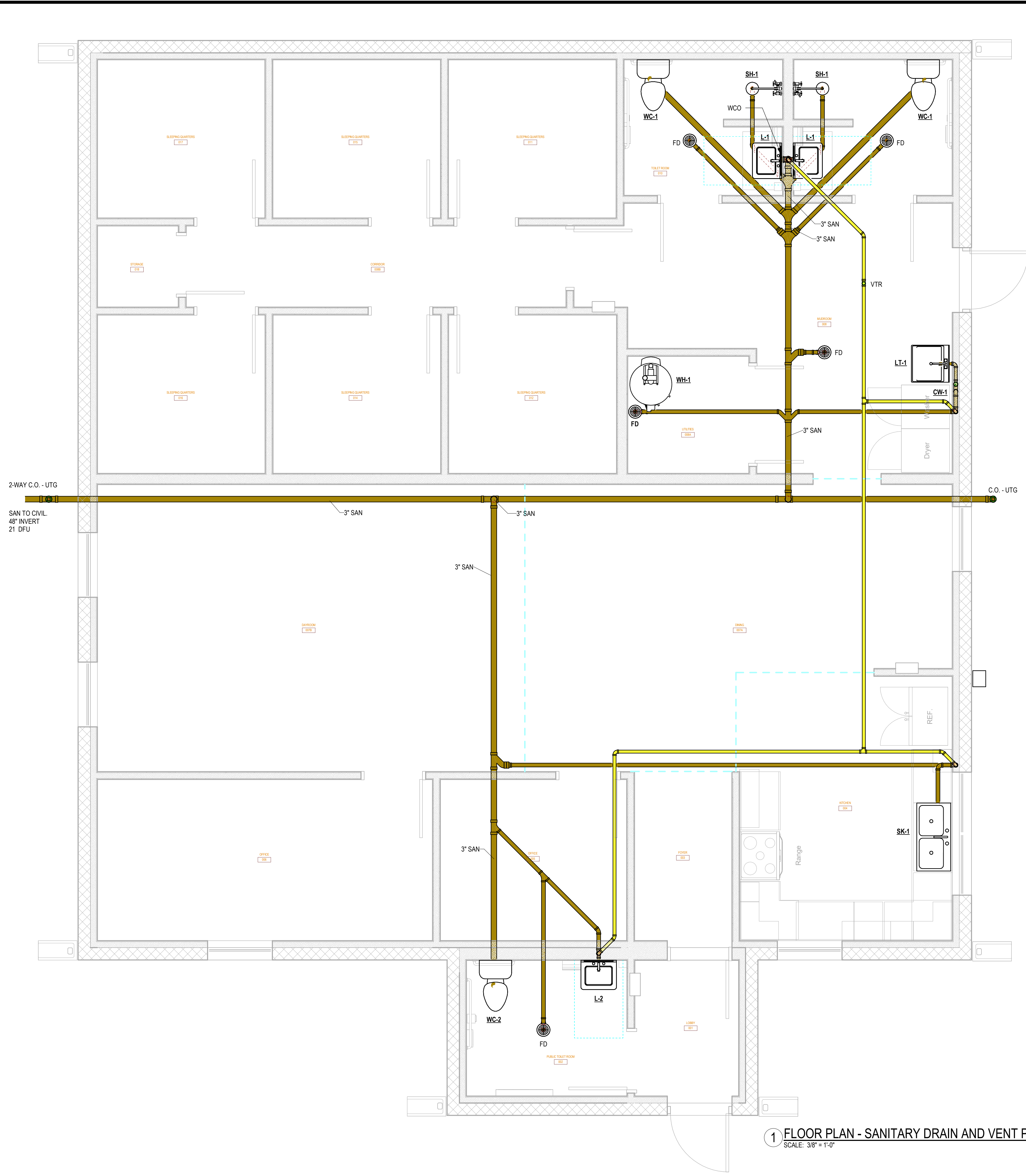
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24064

**DRAWING TITLE:**  
FLOOR PLAN - SANITARY DRAIN AND VENT PIPING

**SHEET NO.**

**P101**

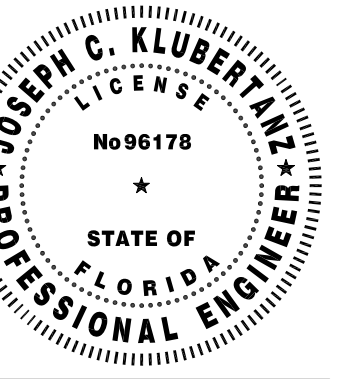
**DATE/TIME STAMP:**  
9/30/2024 4:23:59 PM



2-WAY C.O. - UTG  
SAN TO CIVIL  
48" INVERT  
21 DFU

**1 FLOOR PLAN - SANITARY DRAIN AND VENT PIPING**  
SCALE: 3/8" = 1'-0"





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**DRAWING STATUS:**

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**DRAWN BY:** TJM    **CHECKED BY:** JCK

**PROJECT NUMBER:** 24064

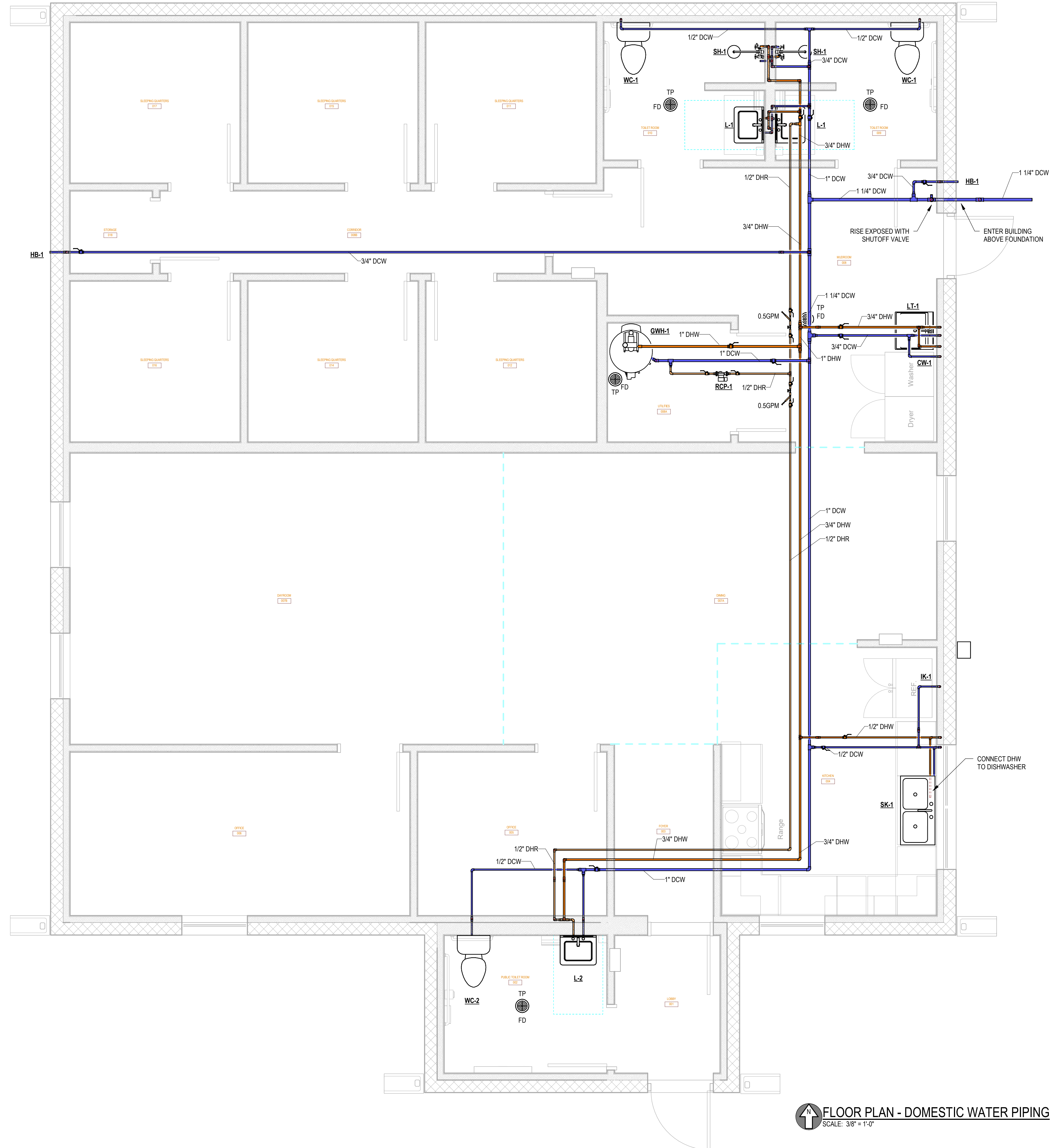
**DRAWING TITLE:** FLOOR PLAN - DOMESTIC WATER PIPING

**SHEET NO.**

**P102**

**DATE/TIME STAMP:**

9/30/2024 4:24:04 PM



**FLOOR PLAN - DOMESTIC WATER PIPING**  
SCALE: 3/8" = 1'-0"

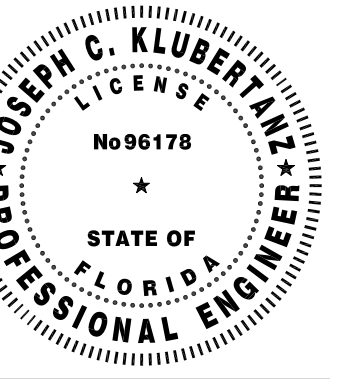


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**FLOOR PLAN - NATURAL GAS PIPING**  
SCALE: 3/8" = 1'-0"



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**PROJECT NUMBER:**  
24064

**DRAWING TITLE:**  
FLOOR PLAN - NATURAL GAS PIPING

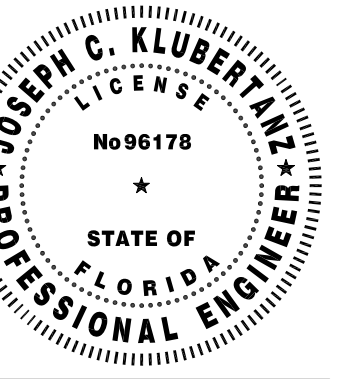
**SHEET NO.**  
**P103**

**DATE/TIME STAMP:**  
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BRADFORD COUNTY SLEEPING  
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TJM JCK

PROJECT NUMBER:

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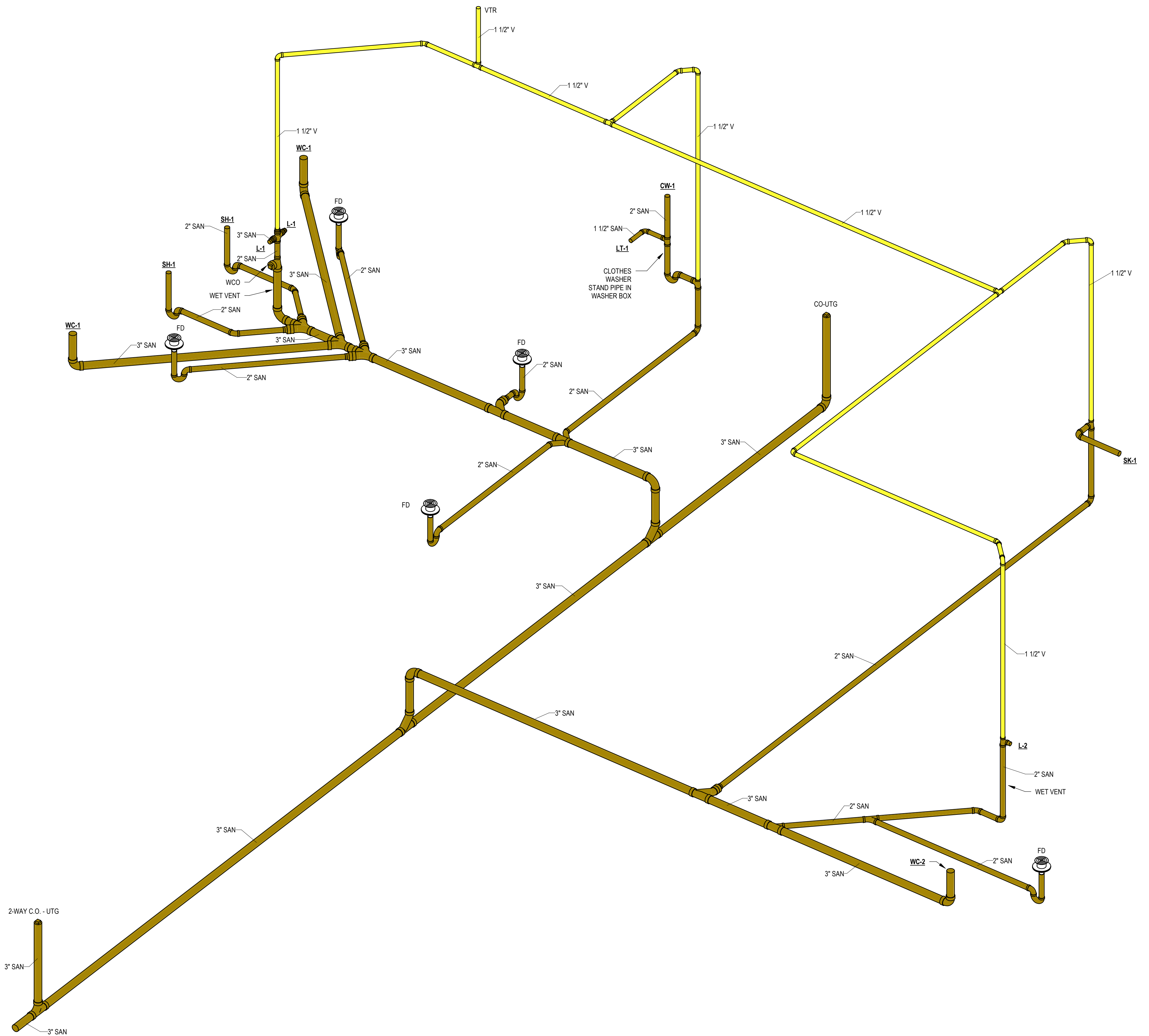
SANITARY AND VENT RISER DIAGRAM

SHEET NO.

P401

DATE/TIME STAMP:

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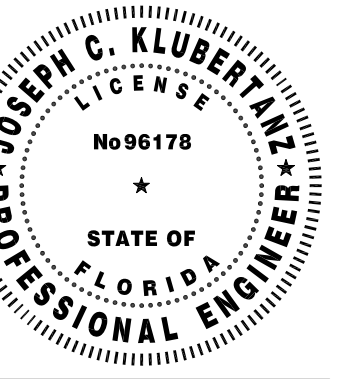


SANITARY AND VENT RISER DIAGRAM  
NOT TO SCALE



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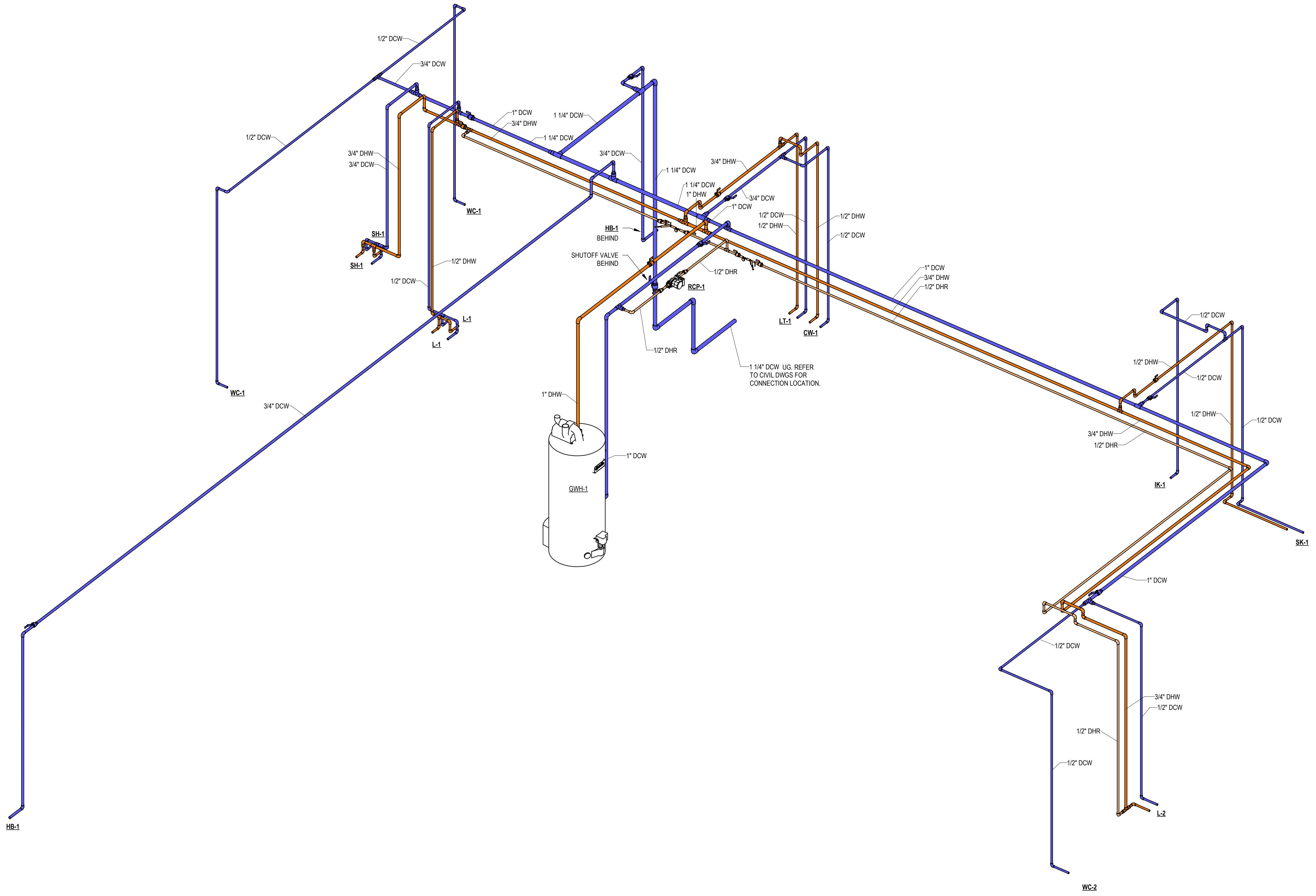
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24064

**DRAWING TITLE:**  
DOMESTIC WATER RISER DIAGRAM

**SHEET NO.**

**P402**

**DATE/TIME STAMP:**  
9/30/2024 4:24:10 PM



**DOMESTIC WATER RISER DIAGRAM**  
NOT TO SCALE



**KOHLER**

**Bryant®**  
20-1/4" oval drop-in bathroom sink  
K-2699-1

**Features**

- Single faucet hole
- Oval basin
- Overflow drain

**Material**

- Vitreous china

**Installation**

- Drop-in

**Recommended Products/Accessories**

- K-9018 P-Trap
- K-7129-A Bathroom sink grid drain with overflow
- K-23726 Drain treatment
- K-23725 Cast iron cleaner

ADA CSA B651 OBC

**Codes/Standards**  
ASME A112.19.2/CSA B45.1  
ADA  
ICC/ANSI A117.1  
CSA B651  
OBC  
IAPMO Certification

**KOHLER® One-Year Limited Warranty**

See website for detailed warranty information.

**Available Colors/Finishes**  
Color tiles intended for reference only.

Color	Code	Description
White	0	White
Biscuit	96	Biscuit
Black Black™	7	Black Black™

1-800-4KOHLER (1-800-456-4537)

Kohler Co. reserves the right to make revisions without notice to product specifications. For the most current Specification Sheet, go to [www.kohler.com](http://www.kohler.com) USA or [www.kohler.ca](http://www.kohler.ca) Canada  
7-2-2024 20:46 - US/CA

THE BOLD LOOK OF **KOHLER**

**KOHLER**

**Greenwich™**  
Wall-Mount Bathroom Sink  
K-2031

**Features**

- Made from premium materials that withstand high-volume usage
- 20-3/4" L x 18-1/4" W
- Faucet sold separately
- Includes wall hanger

**Material**

- Vitreous china

**Installation**

- Wall-mount
- Drilled for concealed arm carrier installation

**Recommended Products/Accessories**

- K-8998 P-Trap
- K-1808-P Wall-Mount Sink Brackets
- K-23726 Drain treatment
- K-23725 Cast iron cleaner

ADA

**Codes/Standards**  
ASME A112.19.2/CSA B45.1  
ADA  
ICC/ANSI A117.1  
IAPMO Certification

**KOHLER® One-Year Limited Warranty**

See website for detailed warranty information.

**Available Colors/Finishes**  
Color tiles intended for reference only.

Color	Code	Description
White	0	White

1-800-4KOHLER (1-800-456-4537)

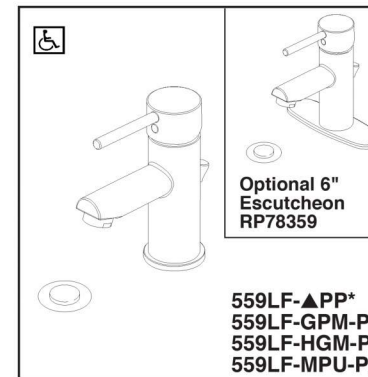
Kohler Co. reserves the right to make revisions without notice to product specifications. For the most current Specification Sheet, go to [www.kohler.com](http://www.kohler.com) USA or [www.kohler.ca](http://www.kohler.ca) Canada  
7-8-2024 22:14 - US

THE BOLD LOOK OF **KOHLER**

**DELTA**

**LAVATORY FAUCETS**

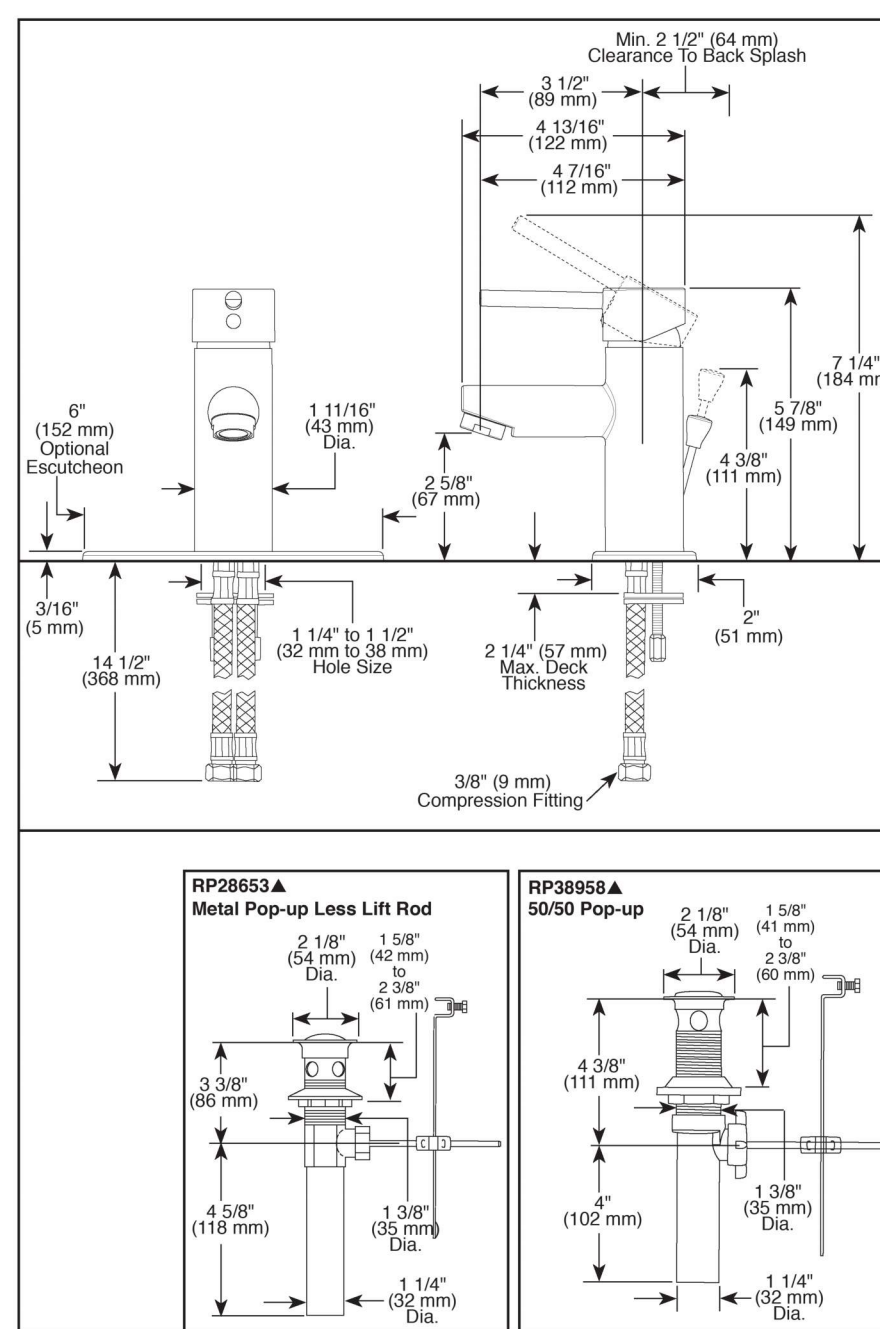
- Modern series
- Single Handle Deck Mount



L-1 & L-2

Submitted Model No.:

Specific Features:



**STANDARD SPECIFICATIONS:**

- Max flow rate 1.2 gpm @ 60 psi, 4.5 L/min @ 414 kPa
- GPM models provide 1.0 gpm @ 60 psi, 3.8 L/min @ 414 kPa
- HGM models provide 0.5 gpm @ 60 psi, 1.9 L/min @ 414 kPa
- One or three hole mount (Escutcheon optional, not included).
- Control mechanism is the ceramic disc cartridge with temperature limiter.
- Red/blue indicator markings.
- Control handle shall return to neutral position when valve is turned off.
- Solid brass body.
- Lift rod hole plug included.
- 1/4" threaded stud mounting.
- Models with suffix "MPU" have metal drain with pop-up type fitting with plated flange and stopper.

**WARRANTY**

- Lifetime limited warranty on parts (other than electronic parts and batteries) and finishes, or, for commercial users, for 5 years from date of purchase.
- 5 year limited warranty on electronic parts (other than batteries), or, for commercial users, for 1 year from the date of purchase. No warranty is provided on batteries.

**COMPLIES WITH:**

- ASME A112.18.1 / CSA B125.1
- ASME A112.18.2 / CSA B125.2
- Indicates compliance to ICC/ANSI A117.1
- EPA WaterSense®
- Verified compliant with 0.25% weighted average Pb content regulations

**DELTA**  
FAUCET COMPANY

55 E. 11th Street, Indianapolis, Indiana 46280  
350 South Edgeware Road, St. Thomas, Ontario Canada N5P 4L1  
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Delta reserves the right (1) to make changes in specifications and materials, and (2) to change or discontinue models, both without notice or obligation. Dimensions are for reference only. See current full-line price book or [www.deltafaucet.com](http://www.deltafaucet.com) for finish options and product availability.  
DSP-L-559LF-PP Rev. E

**Specifications**

PFLT2123

**Single Basin Laundry Sinks**



**Product Features**

- Made from a Sheet Molding Compound (SMC), a plastic composite made up of filler, fire retardant, thickener, and internal mold release that have been mixed with liquid resin and a catalyst, and molded under extreme heat and pressure to create a laundry tub with unparalleled strength.
- Floor-mounted units are equipped with white baked enamel steel angle legs with leveling devices.
- Knock-out holes provided for 4" center set faucet holes.
- Internal Basin Depth: 13"
- Capacity: 76 Liters (20 gal)

**Model Numbers**

- PFLT2123 Floor Mounted Multi-Purpose Sink
- PFLT2123W Wall Mounted Multi-Purpose Sink\*
- \*Wall-mounting hardware and filler panels included

**Available Parts**

Part #	Description
PFLTLEGS	LESS F/PFLT SET 4 WHITE
PFLTWM	WM PART KIT F/PFLT

**Optional Accessories**

- PF83BRSS Chrome plated stainless steel sink strainer
- PF93SS Stainless steel sink strainer

**Warranty and Codes**

These products come complete with installation, operating, care and maintenance instructions. All PROFLO laundry sinks carry a 1-year limited warranty. In an effort to continually improve our products, we will make design changes from time to time. We reserve the right to ship newly designed product to fill any order unless we agree in writing to do otherwise.

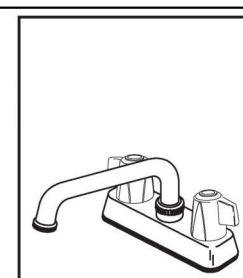


LT-1

PFLT2123

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FERGUSON.COM/PROFLO

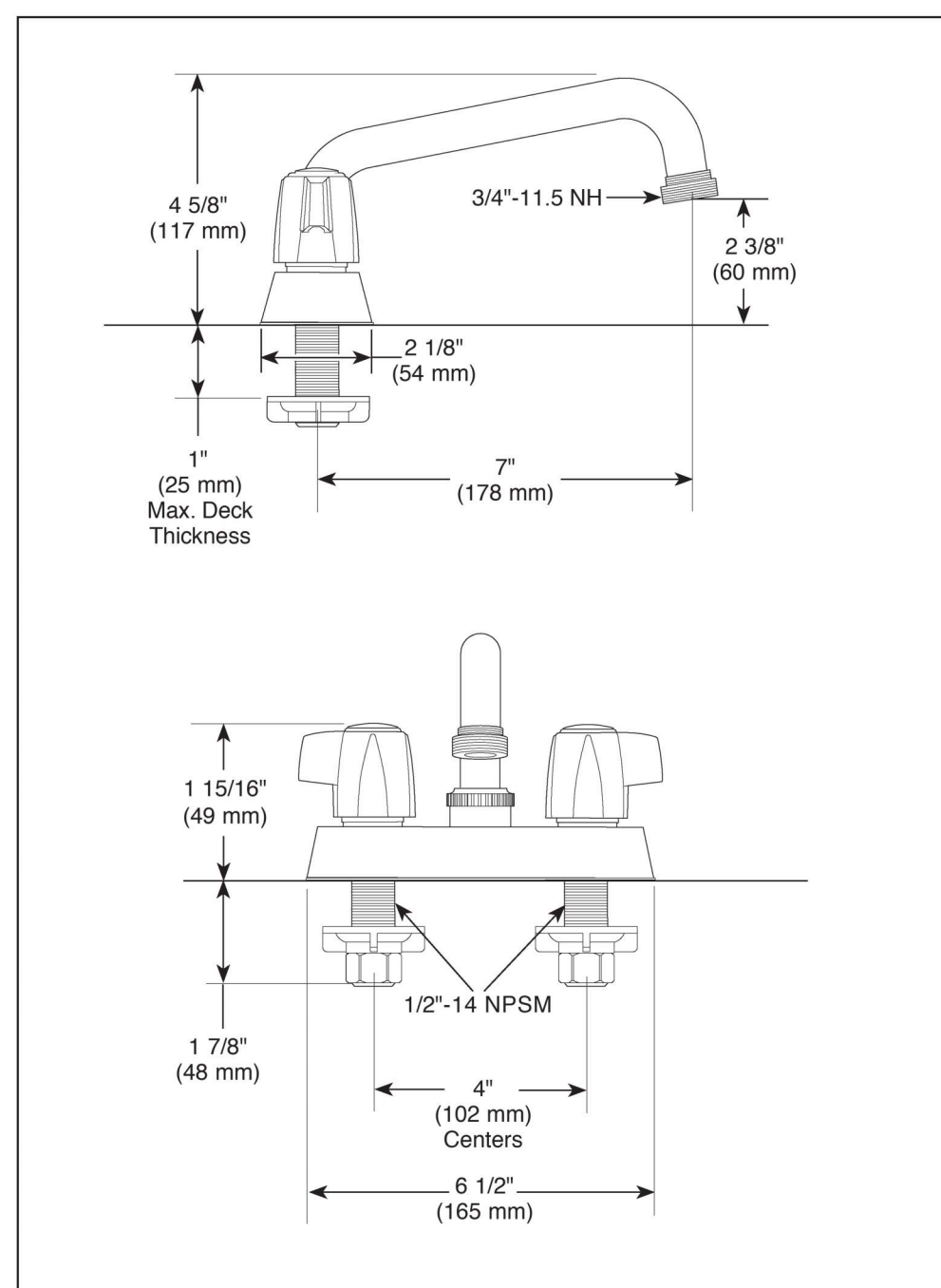


LT-1

2131LF

Submitted Model No.:

Specific Features:



**DELTA**

**SPECIALTY FAUCETS**

- Two Handle Laundry Faucet
- Deck Mount
- 2 or 3 Hole Sink Applications
- 4" (102 mm) Centerset

**STANDARD SPECIFICATIONS:**

- Two handle deck faucets for exposed mounting on 2 or 3 hole sinks.
- Solid brass cast body.
- 4" (102 mm) Centerset.
- 7" (178 mm) long, 4 5/8" (117 mm) high spout swings 360°.
- Hot and cold stems are interchangeable.
- Control mechanism shall be of the rotating cylinder type with stainless steel plate and 90° rotation, with replaceable non-metallic seats.
- 1/2"-14 NPSM threaded male shanks.
- Spout has hose thread.

**WARRANTY**

- Lifetime Faucet and Finish Limited Warranty to the original consumer purchaser to be free from defects in material and workmanship.
- 5 Year Limited Warranty for usage in all industrial, commercial and business applications.

**COMPLIES WITH:**

- ASME A112.18.1 / CSA B125.1
- Indicates compliance to ICC/ANSI A117.1
- Verified compliant with 0.25% weighted average Pb content regulations.

**DELTA**  
FAUCET COMPANY

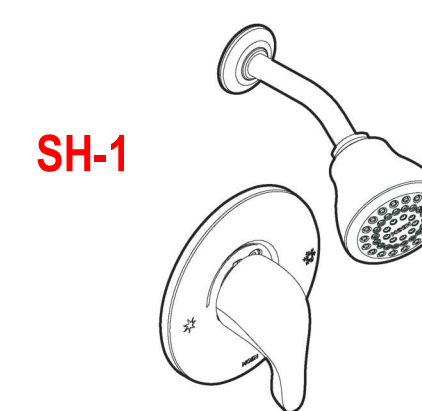
55 E. 11th Street, Indianapolis, Indiana 46280  
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DSP-S-2131LF Rev. B

**MOEN**

Buy it for looks. Buy it for life.®

**Specifications**



SH-1

**CHATEAU® POSI-TEMP® Single-Handle Shower Valve**

Model: L2352 series

Model: L2362 (with 1/4 Turn Stops)

**DESCRIPTION**

- Chrome plated metal construction with various finishes identified by suffix
- Pressure balancing cycle valve design with an adjustable temperature limit stop
- 1/2" CC connections
- Includes showerhead, arm and flange

**OPERATION**

- Lever style handle
- Handle operates counterclockwise through a 270° arc with off at 6 o'clock and maximum hot at the 9 o'clock position. Shut off in clockwise direction
- Adjustable temperature limit stop to control maximum hot water temperature
- Pressure balancing mechanism maintains selected discharge temperature to ± 3°

**FLOW**

- Showerhead is limited to 2.5 gpm (9.5 L/min) Max

**CARTRIDGE**

- 1222 cartridge design
- Nonmetallic/nonferrous and stainless steel materials
- Accommodates back to back installations

**STANDARDS**

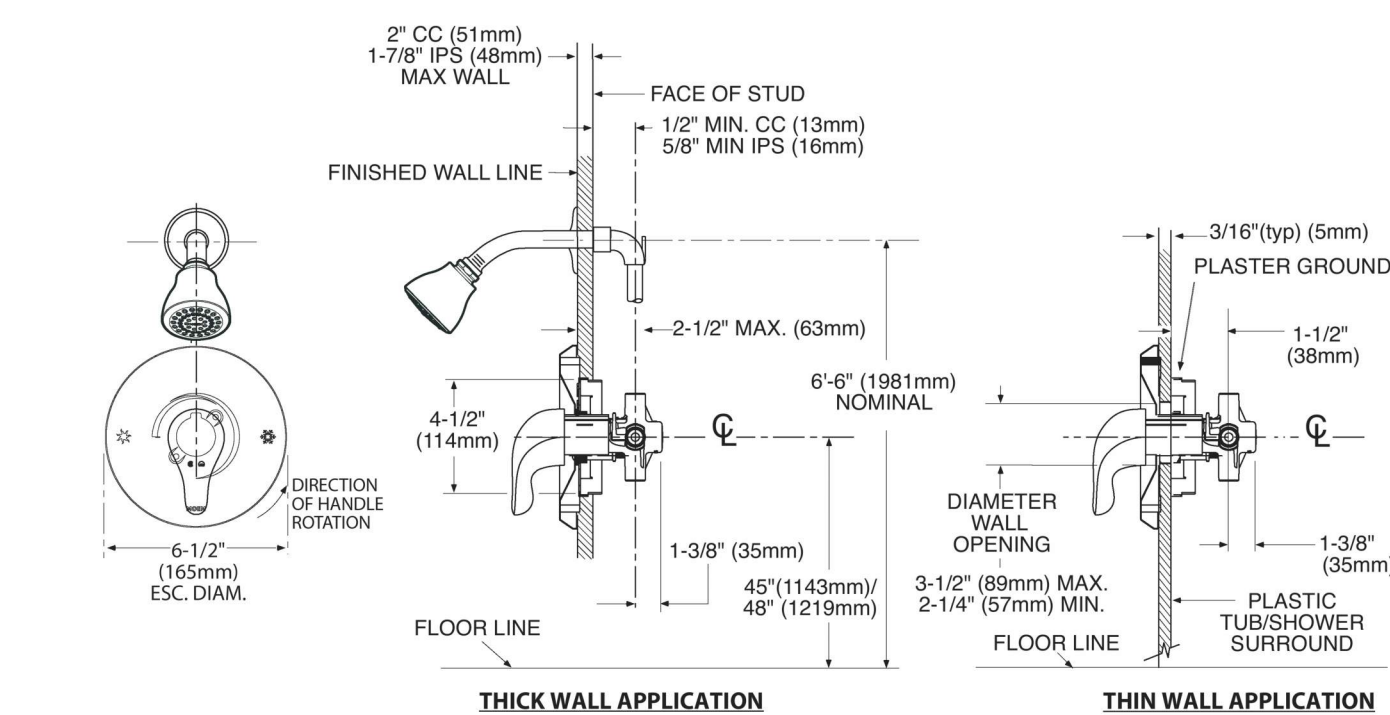
- Third party certified to meet ASSE 1016, ASME A112.18.1/CSA B125.1, A117.1 and all applicable requirements referenced therein

**ADA**

- ADA compliant for lever handle

**WARRANTY**

- Lifetime limited warranty against leaks, drips and finish defects to the original consumer purchaser
- 5 year warranty if used in commercial installations



**CRITICAL DIMENSIONS**

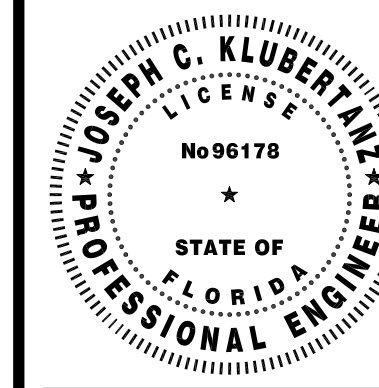
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Rev. 4/16

FOR MORE INFORMATION CALL: 1-800-BUY-MOEN  
[www.moen.com](http://www.moen.com)

Superlative

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352-256-6785  
[www.superlative.design](http://www.superlative.design)



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STARKE, FLORIDA 32091

**REVISIONS**

NO.	DATE	REF.	BY

**DRAWING STATUS:**

100% CONSTRUCTION DOCUMENTS

**ISSUE DATE:**

09/27/2024

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JCK

**CHECKED BY:**

JCK

**PROJECT NUMBER:**

24064

**DRAWING TITLE:**

PRELIMINARY SELECTIONS

**SHEET NO.**

P901

**DATE/TIME STAMP:**

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**Akin Brooks**  
Engineering

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14260 W NEWBERRY RD #115 352.281.7104  
NEWBERRY, FL 32669 ARB2302 AKINBROOKS.COM



**ELKAY**  
SPECIFICATIONS

Elkay Lustertone Classic Stainless Steel 33" x 21-1/4" x 5-1/2"  
Equal Double Bowl Drop-in ADA Sink with Quick-clip  
Model(s) LRADQ332155

**PRODUCT SPECIFICATIONS**

Elkay Lustertone™ Classic Stainless Steel 33" x 21-1/4" x 5-1/2". Equal Double Bowl Drop-in ADA Sink with Quick-clip. Sink is manufactured from 18 gauge 304 Stainless Steel with a Lustrous Satin finish, Rear Center drain placement, and Bottom only pads.

<b>Installation Type:</b>	Drop-in
<b>Material:</b>	304 Stainless Steel
<b>Special Features:</b>	Quick-Clip Mounting System
<b>Finish:</b>	Lustrous Satin
<b>Gauge:</b>	18
<b>Sound Deadening:</b>	Bottom only pads
<b>Number of Bowls:</b>	2
<b>Sink Dimensions:</b>	33" x 21-1/4" x 5-1/2"
<b>Bowl 1 Dimensions:</b>	13-1/2" x 16" x 5-3/8"
<b>Bowl 2 Dimensions:</b>	13-1/2" x 16" x 5-3/8"
<b>Drain Size:</b>	3-1/2" (88mm)
<b>Drain Location:</b>	Rear Center
<b>Minimum Cabinet Size:</b>	36"
<b>Mounting Hardware:</b>	Included for 3/4" (19mm) countertop
<b>Template Included:</b>	No
<b>Cutout Template #:</b>	1000001288

Template is available for download at [elkay.com](http://elkay.com). CAD software will be required to open the template.

**Cutout Dimensions for Drop-in Installation:**  
32-3/8" x 20-5/8" (822mm x 524mm) with 1-1/2" (38mm) corner radius

<b>Custom Options</b>	
<input type="checkbox"/> Type 316 Stainless Steel	
<b>Drain Location</b>	
<input type="checkbox"/> Right Rear	<input type="checkbox"/> Left Rear
<input type="checkbox"/> Center	<input type="checkbox"/> Center Rear
<b>Overflow Location</b>	
<input type="checkbox"/> Front	<input type="checkbox"/> Rear
<b>Alternate Punching</b>	
<input type="checkbox"/> Faucet Model:	<input type="checkbox"/> Punch Required:
<b>Sink Size</b>	
<input type="checkbox"/> Bowl Depth:	<input type="checkbox"/> Drainboard Width:

PART: \_\_\_\_\_ QTY: \_\_\_\_\_  
PROJECT: \_\_\_\_\_  
CONTACT: \_\_\_\_\_  
DATE: \_\_\_\_\_  
NOTES: \_\_\_\_\_  
APPROVAL: \_\_\_\_\_

In keeping with our policy of continuing product improvement, Elkay reserves the right to change product specifications without notice. Please visit [elkay.com](http://elkay.com) for the most current version of Elkay product specification sheets. This specification describes an Elkay product with design, quality, and functional benefits to the user. When making a comparison of other producers' offerings, be certain these features are not overlooked.

Elkay REV 06302022 1-800-476-4106 © 2022 Page 1  
LRADQ332155 CustCare@Elkay.com LRADQ332155\_spec.pdf

SK-1



A Century of Tradition and Quality. For more than 100 years, Elkay has been making innovative products and providing exceptional customer care. We take pride in offering plumbing products that make life easier, inspire change and leave the world a better place.

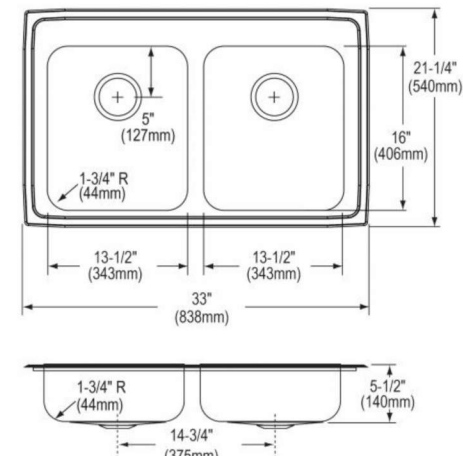
**Product Compliance:** ADA & ICC A117.1  
ASME A112.19.3/CSA B45.4  
Buy American Act

Sinks are listed by IAPMO® as meeting the applicable requirements of the Uniform Plumbing Code®, International Plumbing Code®, and National Plumbing Code of Canada.

Complies with ADA & ICC A117.1 accessibility requirements when installed according to the requirements outlined in these standards.

[Clean and Care Manual \(PDF\)](#)  
[Installation Instructions \(PDF\) - 1000005236](#)  
[Warranty \(PDF\)](#)

Similar models are available with: U Channel mounting system, additional ADA depths



**KOHLER** Faucets

Simplice®  
Semi-professional kitchen sink faucet with three-  
function sprayhead  
K-22033

SK-1



ADA CSA B651

**Codes/Standards**  
ASME A112.18.1/CSA B125.1  
NSF/ANSI CAN 61  
NSF/ANSI CAN 372  
All applicable US Federal and State material regulations  
DOE - Energy Policy Act 1992  
California Energy Commission (CEC)  
ADA  
ICC/ANSI A117.1  
CSA B651  
IAPMO Certification

**Features**

- Professional-style faucet with an easy-to-clean coated hose and removable coil
- Three-function pull-down sprayhead with touch control allows you to switch between aerated stream, Sweep® spray, and Boost technology
- Sweep® spray creates a wide, forceful blade of water for superior cleaning
- Boost technology increases the flow rate by 30% with the press of a button
- Magnetic docking arm keeps the sprayhead securely in place
- MasterClean™ sprayface features an easy-to-clean surface that withstands mineral buildup and maximizes spray performance
- Single lever handle is simple to use and makes adjusting water temperature easy
- Temperature memory allows faucet to be turned on and off at the temperature set during prior usage
- KOHLER® ceramic disc valves exceed industry longevity standards for a lifetime of durable performance
- 1.5 gpm (5.7 lpm) maximum flow rate at 60 psi (4.14 bar)

**Material**

- Premium metal construction for durability and reliability

**Installation**

- Single- or three-hole installation (escutcheon included)
- Flexible supply lines simplify installation

**Recommended Products/Accessories**

- K-77685 Single-cartridge water filtration system
- K-77686 Double-cartridge water filtration system
- K-77687 single replacement filter cartridge
- K-77688 Replacement Filter Cartridges, Two-Pack
- K-23723 Faucet cleaner

1-800-4KOHLER (1-800-456-4537)  
Kohler Co. reserves the right to make revisions without notice to product specifications.  
For the most current Specification Sheet, go to [www.kohler.com](http://www.kohler.com) USA or [www.kohler.ca](http://www.kohler.ca) Canada  
8-16-2024 23:03 - US/CA

THE BOLD LOOK  
OF KOHLER

**KOHLER**

Highline®  
Pressure-Lite® Toilet  
K-3493

WC-1



ADA CSA B651 OBC

**Features**

- Vitreous china.
- Elongated bowl.
- Equipped with Sloan FLUSHMATE®—Sloan® Valve Company.
- Polished chrome trip lever.
- Less seat and supply.
- 12" (305 mm) rough-in.
- 1.6 gpf (6.0 lpf).
- 2-1/4" (57 mm) glazed trapway.
- 12" (305 mm) x 10" (254 mm) water area.
- 30-1/8" (765 mm) x 21-1/4" (540 mm) x 31-1/4" (794 mm).

**Recommended Accessories**

- K-4650 Toilet Seat
- K-7637 Angle Supply with Stop (single)

**Components**

- Product includes:  
K-4304 Toilet Bowl  
K-4645 Toilet Tank
- Additional included component/s: Tank cover, Trip lever, Tank accessory pack, Bolt cap accessory pack, and Equipped with Sloan FLUSHMATE®—Sloan® Valve Company.

ADA CSA B651 OBC

**Codes/Standards**

ASME A112.19.2/CSA B45.1  
DOE - Energy Policy Act 1992  
ADA  
ICC/ANSI A117.1  
CSA B651  
OBC

**KOHLER® One-Year Limited Warranty**

See website for detailed warranty information.

**Available Color/Finishes**

Color tiles intended for reference only.

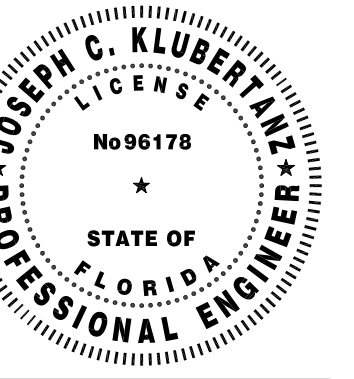
Color	Code	Description
	0	White
	96	Biscuit
	47	Almond
	7	Black Black™

USA/Canada: 1-800-4KOHLER (1-800-456-4537)  
Kohler Co. reserves the right to make revisions without notice to product specifications.  
For the most current Specification Sheet, go to [www.kohler.com](http://www.kohler.com).

THE BOLD LOOK  
OF KOHLER

Superalative

8129 SW 75TH STREET  
GAINESVILLE, FLORIDA 32608  
352-256-6785  
[www.superalative.design](http://www.superalative.design)



TO THE BEST OF THE ARCHITECTS OR THE SPECIFICATIONS COMPANY LEGAL OPINION AND WARRANTY BUILDING APPLICABLE FIRE SAFETY DETERMINED BY THE LOCAL AUTHORITY IN SECTION AND CHAPTER 633, FL. STATUTES.



BRADFORD COUNTY SLEEPING  
QUARTERS  
13641 SOUTHWEST COUNTY ROAD 227  
STARKE, FLORIDA 32091

**REVISIONS**

NO.	DATE	REF.	BY:

**DRAWING STATUS:**  
100% CONSTRUCTION DOCUMENTS

**ISSUE DATE:**  
09/27/2024

**DRAWN BY:** JCK **CHECKED BY:** JCK

**PROJECT NUMBER:**  
24064

**DRAWING TITLE:**  
PRELIMINARY SELECTIONS

**SHEET NO.**

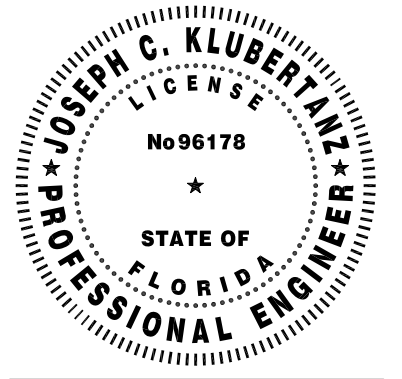
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**DATE/TIME STAMP:**  
9/30/2024 4:24:18 PM

**Akin Brooks Engineering**

AKIN BROOKS ENGINEERING, INC. FL LICENSE 35307  
14260 W NEWBERRY RD #115 352.281.7104  
NEWBERRY, FL 32669 AB23023 AKINBROOKS.COM





TO THE BEST OF THE ARCHITECT'S OR THE ENGINEER'S KNOWLEDGE, THESE PLANS AND SPECIFICATIONS COMPLY WITH ALL CITY, COUNTY, STATE AND FEDERAL BUILDING, PLUMBING, MECHANICAL, ELECTRICAL, AND FIRE SAFETY REQUIREMENTS. THE LOCAL AUTHORITY IN THE SECTION AND CHAPTER OF THE FLORIDA STATUTES.



**BRADFORD COUNTY SLEEPING QUARTERS**  
13641 SOUTHWEST COUNTY ROAD 227  
STARKE, FLORIDA 32091

REVISIONS			
NO.	DATE	REF.	BY

<b>DRAWING STATUS:</b> 100% CONSTRUCTION DOCUMENTS	
<b>ISSUE DATE:</b> 09/27/2024	
<b>DRAWN BY:</b> JCK	<b>CHECKED BY:</b> JCK
<b>PROJECT NUMBER:</b> 24064	
<b>DRAWING TITLE:</b> LEGEND, ABBREVIATIONS, CODES AND STANDARDS	

**SHEET NO.**  
**F001**  
**DATE/TIME STAMP:**  
9/30/2024 4:24:21 PM

### DIVISION 21 CODES & STANDARDS

- GENERAL**
- THE WORK COVERED BY THIS DIVISION CONSISTS OF PROVIDING ALL LABOR, EQUIPMENT AND MATERIALS AND PERFORMING ALL OPERATIONS NECESSARY FOR THE INSTALLATION OF THE MECHANICAL WORK AS HEREIN CALLED FOR AND SHOWN ON THE DRAWINGS.
- CODES**
- ALL WORK UNDER DIVISION 21 SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CODES LISTED HEREIN. THE DESIGN HAS BEEN BASED ON THE REQUIREMENTS OF THESE CODES, AND WHILE IT IS NOT THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THAT ALL WORK CALLED FOR COMPLIES WITH THESE CODES, HE SHALL BE RESPONSIBLE FOR CALLING TO THE ARCHITECT/ENGINEER'S ATTENTION ANY DRAWINGS OR SPECIFICATIONS THAT ARE NOT IN CONFORMANCE WITH THESE OR OTHER CODES PRIOR TO ORDERING EQUIPMENT OR INSTALLING WORK.
  - COMPLY WITH REGULATIONS AND CODES OF UTILITY SUPPLIERS.
  - WHERE NO SPECIFIC METHOD OR FORM OF CONSTRUCTION IS CALLED FOR IN THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL COMPLY WITH CODE REQUIREMENTS WHEN CARRYING OUT SUCH WORK.
  - WHERE CODE CONFLICT EXISTS, GENERALLY THE MOST RESTRICTIVE REQUIREMENT APPLIES. COMPLY WITH CURRENT CODE EDITION, UNLESS NOTED.
  - ADDITIONAL CODES OR STANDARDS APPLYING TO A SPECIFIC PART OF THE WORK MAY BE INCLUDED IN THAT SECTION.
  - THE FOLLOWING CODES GOVERN THE WORK:
    - FLORIDA BUILDING CODE - BUILDING - EIGHTH EDITION (2023).
    - FLORIDA BUILDING CODE - PLUMBING - EIGHTH EDITION (2023).
    - FLORIDA BUILDING CODE - MECHANICAL - EIGHTH EDITION (2023).
    - FLORIDA BUILDING CODE - FUEL GAS - EIGHTH EDITION (2023).
    - FLORIDA BUILDING CODE - TEST PROTOCOLS FOR HIGH VELOCITY HURRICANE ZONES - EIGHTH EDITION (2023).
    - FLORIDA FIRE PREVENTION CODE - EIGHTH EDITION (2023).
      - FIRE CODE (NFPA 1) - 2021 FLORIDA EDITION
      - LIFE SAFETY CODE (NFPA 101) - 2021 FLORIDA EDITION
    - NATIONAL ELECTRIC CODE (NFPA 70) - 2020.
    - STANDARD FOR THE INSTALLATION OF AIR CONDITIONING AND VENTILATION SYSTEMS (NFPA 90A).
      - 2015 IN ACCORDANCE WITH FBC - MECHANICAL - EIGHTH EDITION (2023)
      - 2021 IN ACCORDANCE WITH FAC 69A-3.012 STANDARDS OF THE NATIONAL FIRE PROTECTION ASSOCIATION AND OTHER STANDARDS ADOPTED.
    - INSTALLATION OF SPRINKLER SYSTEMS (NFPA 13) - 2019.

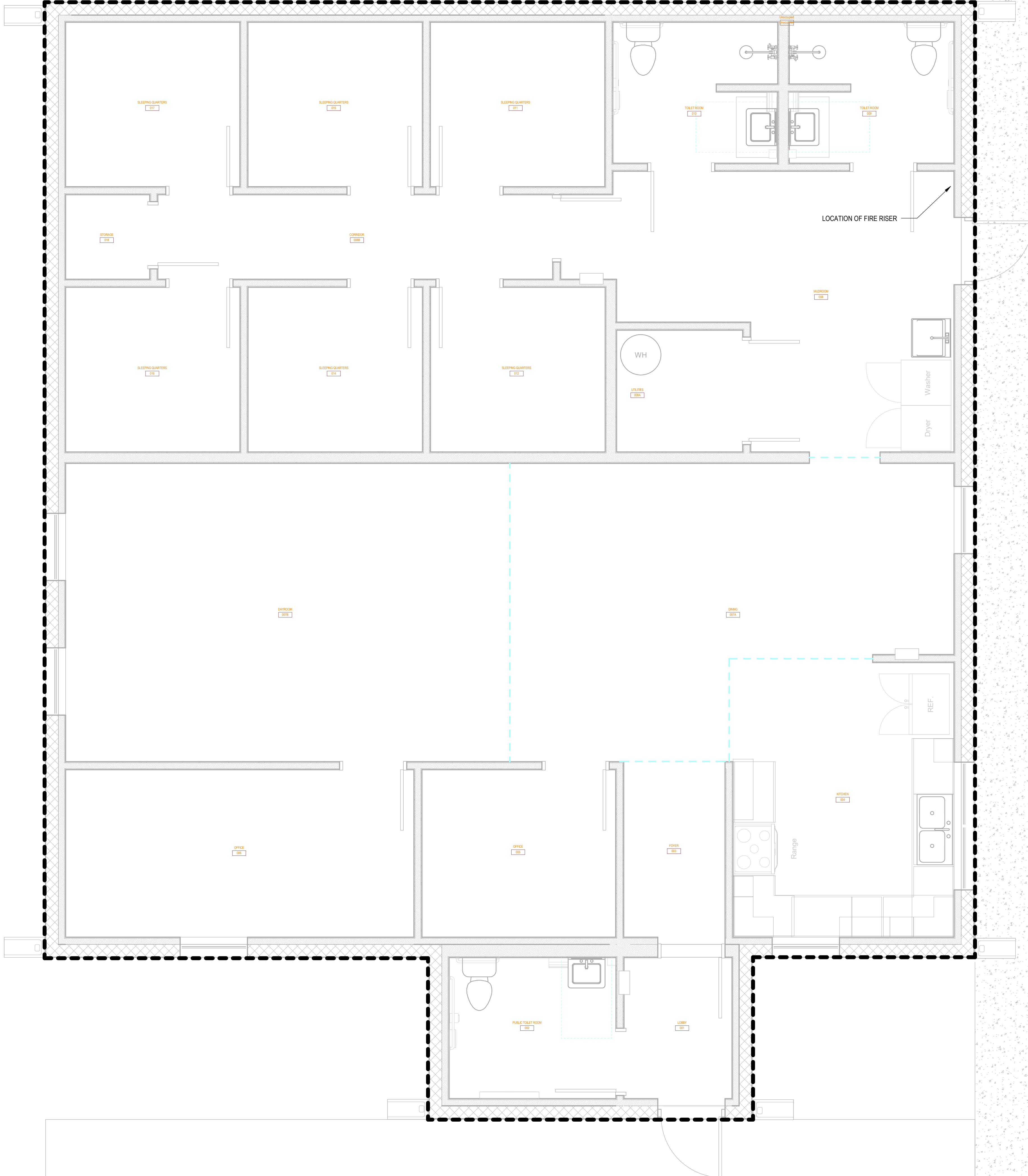
- STANDARDS**
- ALL DIVISION 21 MATERIALS, INSTALLATION AND SYSTEMS SHALL MEET THE REQUIREMENTS OF THE FOLLOWING STANDARDS, INCLUDING THE LATEST ADDENDA AND AMENDMENTS, TO THE EXTENT REFERENCED:
    - UNDERWRITERS' LABORATORIES (UL)
    - AMERICAN NATIONAL STANDARDS INSTITUTION (ANSI)
    - AMERICAN SOCIETY OF TESTING MATERIALS (ASTM)
    - NATIONAL FIRE PROTECTION (NFPA)
    - NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION (NEMA)
    - AIR CONDITIONING AND REFRIGERATION INSTITUTE (ARI)
    - SHEET METAL AND AIR CONDITIONING CONTRACTORS' NATIONAL ASSOCIATION (SMACNA)
    - AMERICAN SOCIETY OF HEATING, REFRIGERATION, AND AIR CONDITIONING ENGINEERS (ASHRAE)
    - AIR MOVEMENT AND CONTROL ASSOCIATION (AMCA)
    - STANDARDS OF THE HYDRONIC INSTITUTE (IBR)

### DESIGN NARRATIVE

THIS PROJECT CONSISTS OF THE CONSTRUCTION OF A NEW SINGLE-STORY FIRE STATION SLEEPING QUARTERS OF APPROXIMATELY 2,300 FT<sup>2</sup> WHICH INCLUDES SLEEPING AND LIVING QUARTERS. THIS IS A DELEGATED DESIGN APPROACH WHICH CALLS FOR A LICENSED FIRE PROTECTION CONTRACTOR TO PROVIDE WORKING PLANS TO THE AUTHORITY HAVING JURISDICTION (AHJ) FOR THE PROVISION OF A NEW WET SPRINKLER SYSTEM COMPLETE WITH STAND PIPES, HORIZONTAL DISTRIBUTION PIPING, AND MULTIPLE SPRINKLER HEADS FOR A COMPLETE AND FUNCTIONAL FIRE SUPPRESSION SYSTEM. ANALYSIS AND EVALUATION OF HYDRANT FLOW TEST DATA WILL BE REQUIRED TO ASCERTAIN WHETHER THERE IS SUFFICIENT PRESSURE AVAILABLE SO AS TO NOT REQUIRE THE PROVISION OF A FIRE PUMP.

### FIRE PROTECTION NOTES

- LICENSED FIRE PROTECTION ENGINEER: FIRE SUPPRESSION PLANS ARE SHOWN FOR BIDDING PURPOSES ONLY. THE FIRE SPRINKLER SUBCONTRACTOR SHALL OBTAIN A CURRENT WATER FLOW TEST AND PROVIDE SYSTEM HYDRAULIC CALCULATIONS FOR SYSTEM PIPE SIZING PER RELEVANT CODES AND STANDARDS. FIRE SPRINKLER SUBCONTRACTOR SHALL PROVIDE A COMPLETE DESIGN INCLUDING DRAWINGS, CALCULATIONS, AND SPECIFICATIONS TO SUPPORT REVIEW BY THE AUTHORITY HAVING JURISDICTION (AHJ). FIRE SPRINKLER SUBCONTRACTOR SHALL SUBMIT SHOP DRAWINGS WITH HYDRAULIC CALCULATIONS, PIPING DISTRIBUTION LAYOUT, AND PIPE SIZES FOR REVIEW. SHOP DRAWINGS AND CALCULATIONS SHALL BE SIGNED AND SEALED BY A FLORIDA STATE LICENSED ENGINEER (FPE).
- WHERE NOTED ON THESE DOCUMENTS, THE TERM "PROVIDE" OR "PROVISION" SHALL INDICATE FURNISH AND INSTALL.
- RELEVANT CODES AND STANDARDS: ALL WORK SHALL BE IN ACCORDANCE WITH NFPA 13, NFPA 14, NFPA 101, NFPA 1, FLORIDA BUILDING CODE 2020, FLORIDA RULE 61G15-32.004, AND ALL OTHER RELATED CODES UTILIZED FOR A COMPLETE AND CODE-COMPLIANT SYSTEM. ALL FIRE PROTECTION PIPING SHALL BE TESTED IN ACCORDANCE WITH NFPA 13.
- FINAL APPROVAL: BEFORE ASKING FOR APPROVAL OF THE FIRE SUPPRESSION SYSTEM INSTALLATION, THE FIRE SPRINKLER SUBCONTRACTOR SHALL FURNISH A WRITTEN STATEMENT THAT THE WORK HAS BEEN COMPLETED AND TESTED IN ACCORDANCE WITH THE APPROVED DRAWINGS AND SPECIFICATIONS.
- EXISTING FIELD CONDITIONS: THE CONTRACT DOCUMENTS INDICATE THE DESIGN INTENT USING AVAILABLE INFORMATION. THE FIRE SPRINKLER SUBCONTRACTOR IS TO ADVISE THE ARCHITECT AND ENGINEER IF CODE OR SAFETY CONFLICTS EXIST. THE FIRE SPRINKLER SUBCONTRACTOR IS REQUIRED TO VISIT THE SITE (PRIOR TO THE BID) TO BECOME FAMILIAR WITH THE EXISTING CONDITIONS THAT WILL AFFECT THE WORK. CHANGES IN THE CONTRACT SUM AT CONTRACT TIME SHALL NOT BE ALLOWED FOR FAILURE TO INVESTIGATE FIELD CONDITIONS. ALL WORK IS NEW UNLESS NOTED OTHERWISE.
- MULTIPLE DISCIPLINE COORDINATION: FIRE SPRINKLER SUBCONTRACTOR SHALL COORDINATE WITH OTHER TRADES (INCLUDING MECHANICAL, PLUMBING, ELECTRICAL, STRUCTURAL, AND ARCHITECTURAL) FOR AVAILABLE SPACE AND INSTALLATION REQUIREMENTS, PRIOR TO COMMENCING CONSTRUCTION. FIRE SPRINKLER SUBCONTRACTOR SHALL NOTIFY ARCHITECT AND ENGINEER OF ANY CHANGES IN THE CONTRACT DOCUMENTS THAT MAY BE REQUIRED FOR THE WORK TO BE PERFORMED. FIRE SPRINKLER SUBCONTRACTOR SHALL CONFIRM EXACT LOCATIONS OF SPRINKLERS, PIPING, FIRE HOSE VALVES, AND OTHER EQUIPMENT IN THE FIELD AS REQUIRED FOR A COMPLETE AND COORDINATED SYSTEM.
- FIRE SPRINKLER PIPING WORKING PLANS:
  - SPRINKLERS SHALL BE PROVIDED THROUGHOUT THE BUILDING. REFER TO THE COVERAGE MAPS FOR ADDITIONAL DETAILS REGARDING FIRE PROTECTION. FIRE SPRINKLER SUBCONTRACTOR SHALL ROUTE ALL FIRE SPRINKLER PIPING ABOVE THE CEILING AND AS LOW AS POSSIBLE TO ALLOW FREE SPACE FOR OTHER SYSTEM ROUTING. REFER TO ARCHITECTURAL & STRUCTURAL DRAWINGS FOR STRUCTURAL FRAMING PLANS, DETAILED REFLECTED CEILING PLANS, ELEVATIONS, AND SECTIONS.
  - PROVIDE AUTOMATIC SPRINKLERS, SPARE HEADS, PIPE ESCUTCHEONS, DIELECTRIC UNIONS, PIPE LABELS, VALVE TAGS, SPRINKLERS CABINETS, WRENCHES, ANCHORS, SUPPORTS, SLEEVES, SEALS, ETC. IN QUANTITIES ADEQUATE TO SATISFY THE INTENT OF THE CONTRACT DOCUMENTS.
  - ALL SPRINKLERS IN SPACES WITH FINISHED CEILINGS SHALL BE ALIGNED WITH CEILING COMPONENTS IN ACCORDANCE WITH ARCHITECTURAL REFLECTED CEILING PLAN (RCP), WITH NO VISIBLE DEVIATION. SPRINKLER HEADS SHALL BE IN ALIGNMENT WITH EACH OTHER FOR INDIVIDUAL LINE OF SIGHT. UPON DISCOVERED CONFLICTS WITH THE RCP, FIRE SPRINKLER SUBCONTRACTOR SHALL COMMUNICATE DETAILS WITH THE ARCHITECT ACCORDINGLY.
  - FIRE SPRINKLER SUBCONTRACTOR SHALL PROVIDE PIPING INSULATION FOR ALL SPRINKLER PIPING LOCATED IN WALKWAYS, STAIRWELLS, UNCONDITIONED ATTIC SPACE, AND EXTERIOR WALLS TO PREVENT FREEZING OF THE PIPING IN ACCORDANCE WITH NFPA 13.
  - FIRE SPRINKLER SUBCONTRACTOR SHALL PROVIDE ADDITIONAL SPRINKLERS BEYOND CODE REQUIRED MINIMUMS AS NECESSARY TO PROVIDE SYMMETRICAL LAYOUTS AS REFLECTED ON THE ARCHITECTURAL RCP.
  - ALL PIPING SHALL BE ARRANGED TO DRAIN BACK TO CONTROL VALVE ASSEMBLY. WHERE PIPING CANNOT DRAIN BACK TO CONTROL VALVE ASSEMBLY, FIRE SPRINKLER SUBCONTRACTOR SHALL PROVIDE ADDITIONAL DRAIN CONNECTIONS IN ACCORDANCE WITH NFPA 13 REQUIREMENTS. SPRINKLER SYSTEMS SHALL BE PROVIDED WITH FLUSHING CONNECTIONS. PROVIDE LOW DRAIN POINTS WHEREVER NECESSARY.
  - FIRE SPRINKLER SUBCONTRACTOR SHALL MAINTAIN SPRINKLER CLEARANCE FROM CEILING AND FLOOR MOUNTED OBSTRUCTIONS SIMILAR TO (BUT NOT LIMITED TO) SHELVING, ROOM DIVIDERS, LIGHT FIXTURES, EXIT SIGNS, SOFFITS AND CHANGES IN CEILING ELEVATION, IN ACCORDANCE WITH THE SPECIFIC REQUIREMENTS OF NFPA 13.
  - FIRE SPRINKLER SUBCONTRACTOR SHALL MAINTAIN A MINIMUM OF 18" CLEARANCE BETWEEN SPRINKLER DEFLECTORS AND TOP OF SHELVING.
  - ALL PAINTED AND/OR OTHERWISE DAMAGED SPRINKLERS OR COVER PLATES SHALL BE REPLACED WITH NEW.
  - FIRE SPRINKLER SUBCONTRACTOR SHALL PROVIDE GUARDS ON SPRINKLERS SUSCEPTIBLE TO MECHANICAL DAMAGE INCLUDING, BUT NOT LIMITED TO, SPRINKLERS IN MECHANICAL ROOMS, ELEVATOR PIT, AND SPRINKLERS INSTALLED LESS THAN 7 FEET ABOVE FINISHED FLOOR (AFF).
  - ALL CONTROL VALVES SHALL BE SUPERVISED AND INDICATING. FIRE SPRINKLER SUBCONTRACTOR SHALL PROVIDE ALL CONTROL VALVES TO HAVE TAMPER SWITCHES SUCH THAT OPERATION OF VALVE SHALL NOT AFFECT THE OPERATION OF SPRINKLER FLOW SWITCH.
  - FLOW SWITCHES SHALL BE CONNECTED TO FIRE ALARM SYSTEM AS AN AUTOMATIC INDICATING DEVICE. REFER TO ELECTRICAL DOCUMENTS FOR FIRE ALARM.
  - ALTHOUGH NOT SHOWN, ALL PIPING TO BE SUPPORTED FROM THE BUILDING STRUCTURE. IN ACCORDANCE WITH NFPA, FIRE SPRINKLER SUBCONTRACTOR SHALL USE EMBEDDED PLATES FOR CAST-IN-PLACE ANCHORS WHERE SUPPORTING FROM CONCRETE SLABS. DO NOT USE DRILL BOLTS IN POST-TENSIONED SLABS.
  - LONG RUNS OF PIPING SHALL BE PROVIDED WITH SUITABLE MEANS TO PERMIT FREE MOVEMENT RESULTING FROM PIPE EXPANSION AND CONTRACTION FORCES.
  - REDUCTION OF PIPE SIZE SHALL BE MADE WITH ONE-PIECE REDUCTION FITTINGS.
  - SEAL ALL PENETRATIONS OF FIRE RATED ASSEMBLIES USING APPROPRIATE UL RATED ASSEMBLIES. PROVIDE FIRE STOPPING AS REQUIRED. REFER TO ARCHITECTURAL DOCUMENTS FOR FIRE STOPPING REQUIREMENTS.
- ALL ELECTRICAL, CONTROL, AND / OR ALARM SYSTEM WIRING TO BE COORDINATED WITH ELECTRICAL SUBCONTRACTOR FOR PROVISION. REFER TO THE FIRE ALARM SYSTEM RISER DIAGRAM ON THE ELECTRICAL DOCUMENTS FOR ADDITIONAL REQUIREMENTS AND COORDINATION.
- NO SPRINKLER PIPING SHALL PASS OVER ELECTRICAL PANELS OR SWITCH BOARDS. FIRE SPRINKLER SUBCONTRACTOR SHALL COORDINATE ACCORDINGLY WITH THE ELECTRICAL SUBCONTRACTOR.
- FIRE SPRINKLER SUBCONTRACTOR SHALL FIELD VERIFY PIPE ROUTING AND ACTUAL LENGTHS OF PIPE PRIOR TO FABRICATION OR INSTALLATION.
- BEFORE ANY SPRINKLER PIPING IS CONCEALED, THE FIRE SPRINKLER SUBCONTRACTOR SHALL NOTIFY THE AHJ, AT LEAST 48 HOURS IN ADVANCE, SO THAT INSPECTION OF THE SYSTEM PIPING FOR CONFORMANCE WITH CODE REQUIREMENTS CAN BE COMPLETED.
- PROJECT CLOSEOUT:
  - FIRE SPRINKLER SUBCONTRACTOR SHALL TEST THE SYSTEMS CONTROLS, PIPING, AND MONITORING PER NFPA 25.
  - FIRE SPRINKLER SUBCONTRACTOR SHALL PROVIDE COPY OF MATERIAL AND TEST CERTIFICATE, WARRANTY INFO, AND INSTRUCTIONS TO THE OWNER.
  - FIRE SPRINKLER SUBCONTRACTOR SHALL PROVIDE SPARE HEAD CABINET WITH SPRINKLERS OF EACH TYPE PER NFPA.
  - FIRE SPRINKLER SUBCONTRACTOR SHALL PROVIDE HYDRAULIC PLACARDS ON BUILDING RISERS.



**FLOOR PLAN - FIRE PROTECTION**  
SCALE: 3/8" = 1'-0"

FIRE PROTECTION SHEET LIST	
SHEET NUMBER	SHEET NAME
F001	LEGEND, ABBREVIATIONS, CODES AND STANDARDS

**Akin Brooks Engineering**  
AKIN BROOKS ENGINEERING, INC. FL LICENSE 35307  
14260 W NEWBERRY RD #115 352.281.7104  
NEWBERRY, FL 32669 AB23023 AKINBROOKS.COM