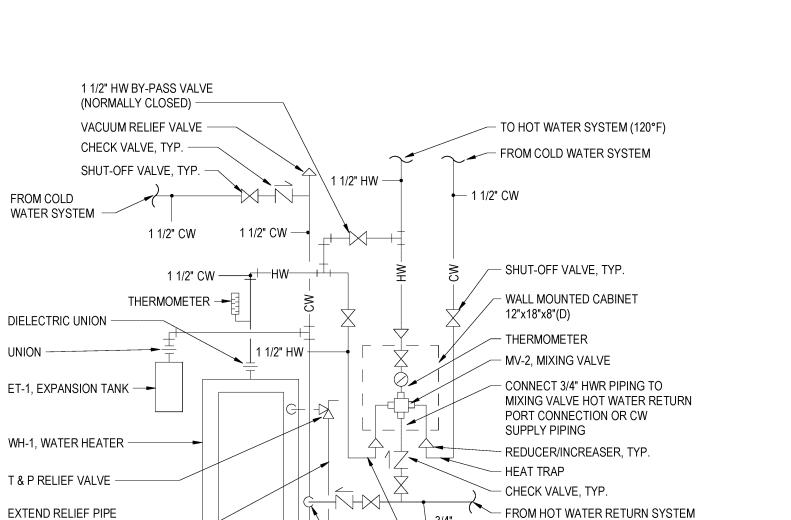
- CLEVIS HANGER FOR

PIPE OVER 4"

2022-11-18 FOR PERMIT



AND CIRCULATION PUMP, REFER TO

FIN. FLOOR

HANGER ROD -

- HEAT TRAP CIRCULATION PUMP DETAIL

- CONNECT 3/4" HWR PIPING TO

DIELECTRIC UNION

WATER HEATER CW SUPPLY PIPING

MULTIPLE FIXTURES PIPE FIXTURE SIZE SIZE UNIT LOAD 1/2" 1-11 3/4" 12-32 33-60 1-1/4" 61-113 1-1/2" 114-154 155-330

↑↑ INSTALL PER PDI

PDI SIZE "A" —

- ANCHOR PIPE TO ROOF DECK

AROUND PIPE AND ANGLE IRON

WELDED OR SCREWED TO DECK

- HUBLESS PIPE CONNECTOR ON

CAST IRON PIPE (IN RETURN

OR JOISTS WITH U-BOLT

OR JOIST.

AIR PLENUM)

REFER TO PLAN FOR VTR PIPE SIZES AND LOCATIONS. LOCATE VTR MINIMUM 10'-0" (OR

04 | VENT THROUGH ROOF

FIBERGLASS INSULATION WITH ALL-SERVICE JACKET ON VENT PIPE INSIDE BUILDING WITHIN

SIX FEET OF VENT THRU ROOF LOCATION. VERIFY FLASHING AND COUNTERFLASHING WITH

OWNER REQUIREMENT) HORIZONTAL FROM ANY OUTSIDE AIR INTAKE. PROVIDE 1"

ROOFING CONTRACTOR (DO NOT VOID ROOF WARRANTY).

NOT TO SCALE

FLOOR SLAB ON GRADE -

SAME SIZE AS SEWER UP

LONG SWEEP ELBOW AT

COMBINATION WYE AND EIGHTH

BEND IN RUN. ENTER TOP OF PIPE

CONSULT LOCAL CODES FOR OTHER FCO REQUIREMENTS.

END OR TURN OF RUN -

DIRECTION OF FLOW -

TO 4" MAXIMUM -

STANDARDS AND

INSTRUCTIONS

SINGLE FIXTURE

NOT TO SCALE

MANUFACTURER'S

HOT OR COLD

WATER SUPPLY -

IF HORIZONTAL BRANCH IS LESS THAN 20'

IF BRANCH IS GREATER THAN 20' LONG,

SIZED FOR HALF THE FIXTURE UNITS. -

LONG, PROVIDE ONE WHA AT END OF LINE.

PROVIDE ANOTHER WHA IN MIDDLE, EACH

PROVIDE WATER HAMMER ARRESTERS BY ZURN Z-1700 SERIES OR APPROVED EQUIVALENT BY J.R. SMITH, WADE, JOSAM, WATTS, OR MIFAB WITH PISTON & 0-RING CONSTRUCTION, HAVING PDI #WH-201, ASSE #1010 AND ANSI #A112.26.1M CERTIFICATION. INSTALL IN HORIZONTAL OR VERTICAL POSITION. BUT NEVER UPSIDE DOWN. INSTALL INLINE WITH WATER FLOW DIRECTION IF POSSIBLE. SIZE UNITS PER TABLES ABOVE.

03 | WHA - WATER HAMMER ARRESTERS

INSTALL THE FOLLOWING IF REQUIRED: A HOSE BIBB SHALL BE INSTALLED BETWEEN THE PUMP AND THE WATER HEATING EQUIPMENT. AN ISOLATION VALVE SHALL BE INSTALLED BETWEEN THE HOSE BIBB AND THE WATER HEATING EQUIPMENT. THIS HOSE BIBB IS USED FOR BLEEDING AIR OUT OF THE PUMP AFTER PUMP

02 | MV-2 MIXING VALVE PIPING DETAIL SCALE: 12" = 1'-0"

01 | WH-1 WATER HEATER DETAIL SCALE: 1/4" = 1'-0"

TOP BEAM C-CLAMP

IF STEEL BAR JOIST -

ADJUSTABLE BAND HANGER =

FOR PIPING 4" OR LESS -

ALL EXPOSED DOMESTIC WATER PIPING &

VALVES SHALL BE INSULATED WITH GLASS

FIBER INSULATION AND PVC JACKETING

PER SPECIFICATION SECTION 22 0719

2"ø CW

♀──3/4"ø HW

-: -:

____ 2" CW, 1-1/2" HW, & 3/4" HWR.

−1 1/2"ø HW

-3/4"ø HWR

REFER TO P111 FOR CONTINUATION.

- MV-2, MIXING VALVE IN SURFACE MOUNTED

CABINET, 5'-0" AFF. REFER TO DETAIL 2/P301

1/2" CW FROM TPV. EXTEND 1/2" CW FROM TPV

TO FLOOR DRAIN. REFER TO DETAIL 12/P301

— ALL-THREAD ROD -

COPPER PIPE

PROVIDE UPPER ATTACHMENT AS REQUIRED FOR CASES NOT SHOWN. DO NOT INSTALL HANGER INSIDE

HANGERS MAY BE USED FOR MULTIPLE PARALLEL PIPES. LOCATE HANGERS AS CLOSE AS POSSIBLE TO

INSULATION OR OTHERWISE PENETRATE VAPOR BARRIER. DO NOT HANG ONE PIPE FROM ANOTHER. TRAPEZE

TURNS AND TEES OF PIPE. PROVIDE SUPPLEMENTARY STEEL STRUTS BETWEEN JOISTS IF REQUIRED. LOCATE

HANGERS TO TAKE LOAD OFF OF EQUIPMENT CONNECTIONS. ANCHOR WATER PIPE AGAINST SWAYING DUE

TO CHANGES IN WATER VELOCITY. PROVIDE SEISMIC BRACING IF/AS REQUIRED BY LOCAL AUTHORITIES.

CHAINS OR PERFORATED STRAP IRON OR STEEL IS NOT ACCEPTABLE. REFER TO CODES FOR FURTHER

05 | PIPE HANGER

NOT TO SCALE

PROVIDE GALVANIZED STEEL SADDLE FOR ALL INSULATED PIPE LARGER

THAN 3/4" AND VERIFY INSULATION SIZE WHEN SIZING HANGERS

INFORMATION. HANGER SPACING FOR PIPE SIZE AND MATERIAL:

STEEL: 4"=12' 3"=12' 2-1/2"=11' 2"=10' 1-1/2"=9' 1"=7' 3/4"=6' 1/2"=5'

CAST IRON: 10' AND ONE NEAR ALL JOINTS

COPPER: 4"=12' 3"=11' 2-1/2"=10' 2"=9' 1-1/2"=8' 1-1/4"=7' 1"=6' 3/4"=6' 1/2"=5'

PROVIDE COPPER OR NON-

HANGERS CONTACT BARE

METALLIC COATING WHERE 🗐

CP-1 RECIRCULATION PUMP. MOUNT ON WALL, 4'-6" AFF, REFER TO

PROVIDE CHECK VALVE, BALL VALVE, FLEX CONNECTION, AND UNION

PIPING AND WATER HEATER COLD WATER SUPPLY PIPING. REFER TO

DETAIL 11/P301. ANCHOR UNISTRUT TO WALL TO SUPPORT PUMP

AND PIPING. KEEP ENTIRE ASSEMBLY AS COMPACT AS POSSIBLE.

ON PUMP OUTLET. PROVIDE BALL VALVE, AQUASTAT, STRAINER,

FLEX CONNECTION, & UNION ON PUMP INLET. CONNECT HWR TO

MIXING VALVE HWR CONNECTION PORT OR COLD WATER SUPPLY

WHA, WATER HAMMER ARRESTER

DETAIL 11/P301

2" DOMESTIC WATER SERVICE -

LIGHT FIXTURE —

PROVIDE BY-PASS WITH VALVE AT

3/4" CW & HW TO MB-1 —

MIXING VALVE (NORMALLY

PROVIDE WATTS LFN36-MI

PIPING TO WATER HEATER -

PROVIDE THERMOMETER

ET-1, EXPANSION TANK —

WH-1, WATER HEATER -

INSTALL WH-1 ON 4"(H)

PROVIDE DIELECTRIC

PIPE CONNECTIONS

CONCRETE PAD. REFER TO

UNIONS ON WATER HEATER

- LOCKING NUT

SUPPORT NUT

16 GAUGE ZINC COATED

SHEET STEEL SHIELDS AT

LEAST 12" LONG FOR PIPING

2" AND SMALLER, PROVIDE

12" LONG SADDLES FOR ALL

2-1/2" PIPE AND LARGER.

ARCH. DRAWINGS FOR DETAIL -

(0-250°F), 6'-0" AFF MAX.

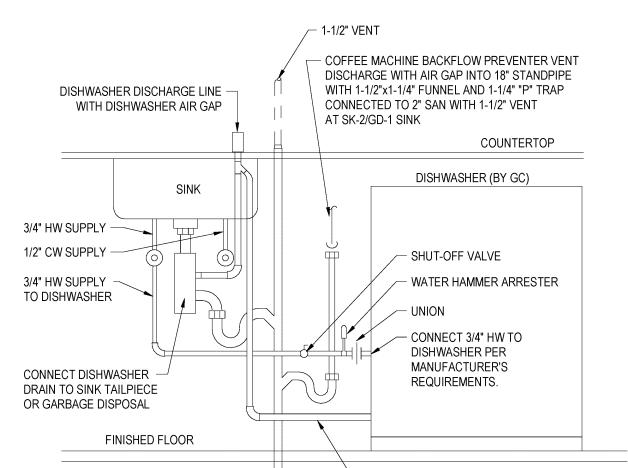
VACUUM RELIEF VALVE ON CW

CONNECTION TO WATER HEATER -

PROVIDE CHECK VALVE AND SHUT-

OFF VALVE AT COLD WATER SUPPLY

CLOSED VALVE) -



PROVIDE ONE PIECE SPUN

STEPPED PVC BOOT, AND

MASTIC —

ADJUSTABLE STAINLESS STEEL

CLAMPS. SET BASE IN BED OF

ROOF INSULATION

ROOF DECK

PROVIDE SLEEVE IF REQUIRED

BY TYPE OF ROOF DECK ———

PROVIDE PIPE INCREASER WHERE

REQUIRED TO MAKE MINIMUM 3"

VENT THRU ROOF -

ALUMINUM BASE WITH, GRADUATED



MEMBRANE CLAMP

AS REQUIRED FOR

DEPTH OF SEWER

LOCATE AT BUILDING EXIT, AT ENDS OF RUNS, AT TURNS OF PIPE GREATER THAN 45 DEGREES, AT

100' INTERVALS ON STRAIGHT RUNS, AND WHERE SHOWN ON PLANS. PROVIDE BACKFILL PER

ARCHITECTURAL SPECIFICATIONS. LOCATE CLEANOUTS WHERE THERE IS 18" CLEAR AROUND.

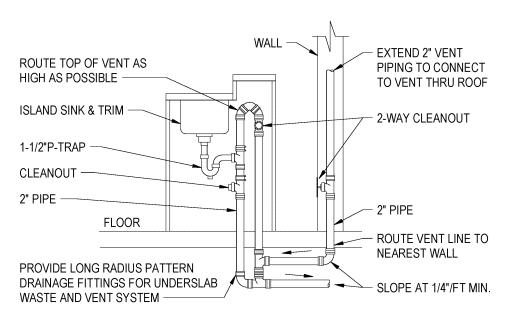
13 | FLOOR CLEANOUT

NOT TO SCALE

SANITARY PIPE

SANITARY OR STORM

SEWER LINE



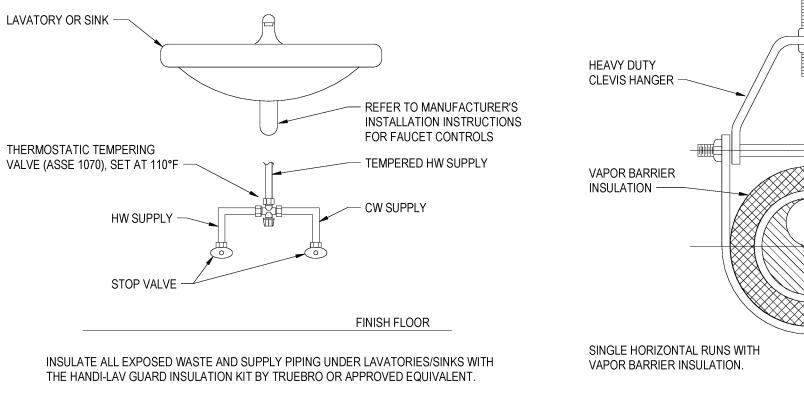
ARRANGEMENT SHOWN IS SCHEMATIC. ADJUST TO SUIT FIELD CONDITIONS. COMBINE VENTS FOR MORE THAN ONE FIXTURE MINIMUM 6" ABOVE HIGHEST FIXTURE FLOOD RIM IF POSSIBLE, OR PROVIDE SEPARATE LOOP FOR EACH ISLAND FIXTURE IF NOT POSSIBLE. REFER TO LOCAL CODE FOR ADDITIONAL INFORMATION.

(COPPER) FULL SIZE

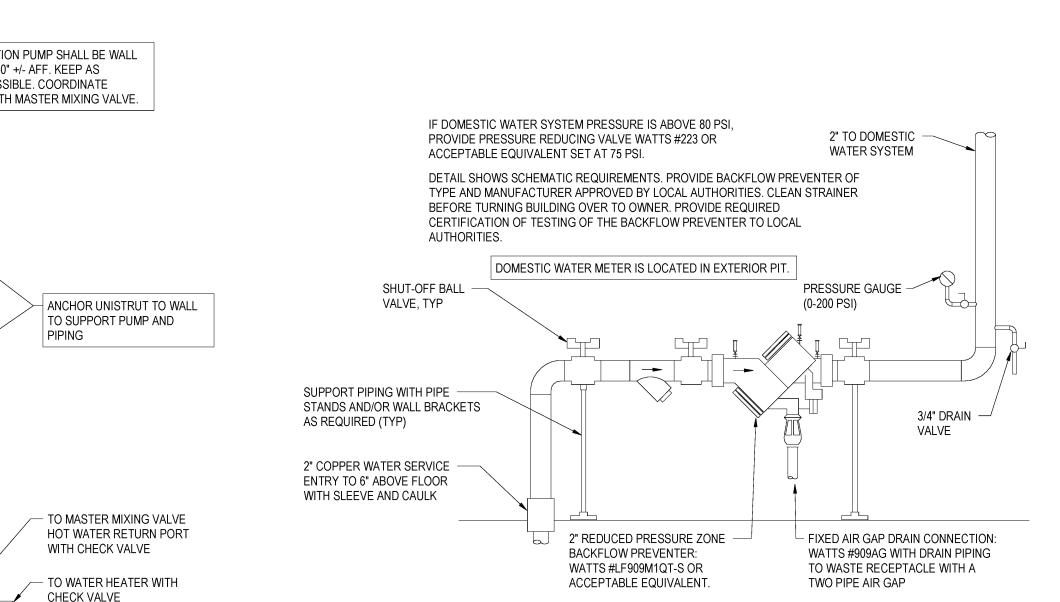
TO SPILL OVER FLOOR DRAIN.

COPPER DRAIN WITH VALVE

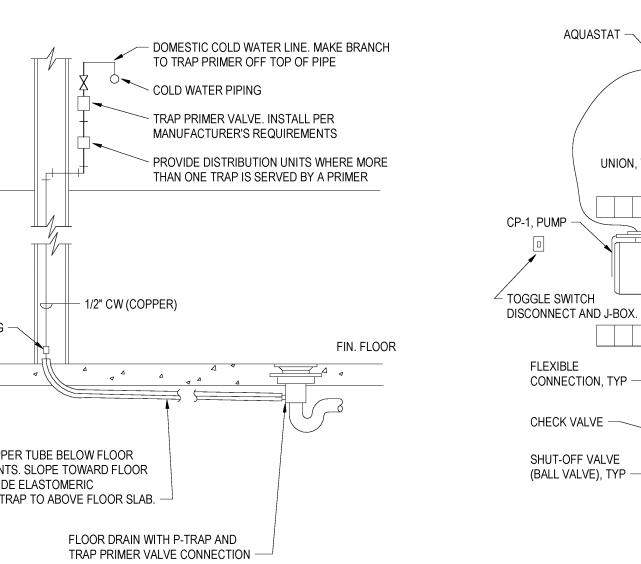
4"(H) CONCRETE

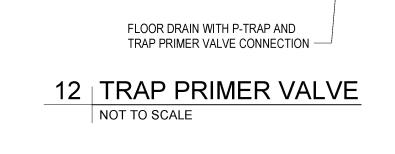


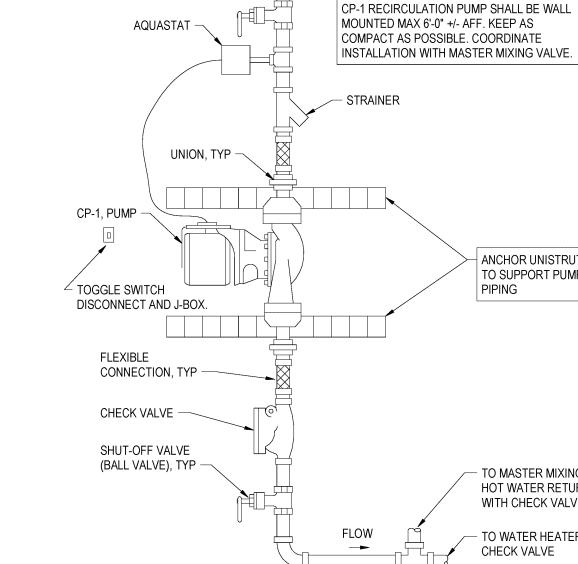




NOT TO SCALE







11 | CP-1 CIRCULATION PUMP (VERTICAL MOUNT) NOT TO SCALE

10 | DOMESTIC WATER SERVICE WITHOUT METER

08 ISLAND SINK VENT

LAY-IN CEILING PROVIDE COUPLING -TYPE "K" SOFT COPPER TUBE BELOW FLOOR SLAB WITHOUT JOINTS. SLOPE TOWARD FLOOR DRAIN TRAP. PROVIDE ELASTOMERIC INSULATION FROM TRAP TO ABOVE FLOOR SLAB.

P301

PLUMBING DETAILS