

**PLUMBING NOTES:**  
GENERAL

DESCRIPTION OF WORK: THE EXTENT OF PLUMBING WORK INCLUDES ALL LABOR, MATERIALS, EQUIPMENT AND SERVICES NECESSARY TO COMPLETE THE PLUMBING SYSTEM SHOWN ON THE DRAWINGS AND HEREIN SPECIFIED. ALL WORK SHALL BE DONE IN A WORKMANLIKE MANNER IN ACCORDANCE WITH THE GOOD PRACTICE, MANUFACTURER'S RECOMMENDATIONS AND IN COMPLIANCE WITH THE 2001 BUILDING CODE. THE CONTRACTOR SHALL PAY ALL RELATED EXPENSES AND OBTAIN ALL PERMITS. ALL EQUIPMENT AND WORK SHALL BE GUARANTEED FOR ONE YEAR AFTER DATE OF ACCEPTANCE.

QUALITY ASSURANCE: FIRMS REGULARLY ENGAGED IN MANUFACTURE OF PLUMBING FIXTURES AND EQUIPMENT, DOMESTIC WATER, WASTE AND STORM PIPING SYSTEM PRODUCTS OF TYPES, MATERIALS AND SIZES REQUIRED, WHOSE PRODUCTS HAVE BEEN IN SATISFACTORY USE IN SIMILAR SERVICE FOR NOT LESS THAN FIVE (5) YEARS.

THE SUBCONTRACTOR FOR THE PLUMBING SYSTEM INSTALLATION SHALL BE LICENSED BY THE STATE OF FLORIDA AND THE LOCAL AUTHORITY REGULARLY ENGAGED IN THE INSTALLATION OF PLUMBING SYSTEMS AND OTHER RELATED EQUIPMENT AND FULLY FAMILIAR WITH ALL LOCAL CONDITIONS, CODES AND REQUIREMENTS WITH AT LEAST 5 YEARS OF SUCCESSFUL INSTALLATION EXPERIENCE ON SIMILAR PROJECTS.

**SUBMITTALS**

SUBMIT MANUFACTURER'S SPECIFICATIONS AND DATA SHEETS AND INSTALLATION INSTRUCTIONS FOR DOMESTIC HOT AND COLD WATER, SOIL AND VENT AND STORM PIPING MATERIALS, INCLUDING ALL PLUMBING FIXTURES, TRIM, PLUMBING EQUIPMENT PRODUCTS SPECIFIED HEREIN AND ON THE CONTRACT DOCUMENTS.

ALSO, INCLUDE OTHER DATA AS NECESSARY TO SHOW COMPLIANCE WITH THESE SPECIFICATIONS AND DISTRIBUTE ONE ADDITIONAL COPY OF THIS INFORMATION TO INSTALLER IN THE FIELD.

GENERAL: COMPLY WITH APPROPRIATE DIVISION 15 SECTIONS FOR PRODUCT, REQUIREMENTS OF PIPING MATERIALS. FOR EACH SERVICE, PROVIDE THE PIPING MATERIALS INDICATED INCLUDING PIPE, FITTINGS, JOINTS, HANGERS, SUPPORTS, ANCHORS AND ACCESSORIES, WHERE MORE THAN ONE TYPE IS INDICATED. SELECTION IS INSTA COMPLETE OPTION WHERE TYPE IS NOT OTHERWISE INDICATED. PROVIDE MATERIALS COMPLYING WITH GOVERNING REGULATIONS.

SANITARY SYSTEMS: SCHEDULE 40 PVC-DWV PIPE AND FITTINGS WITH NSF SEAL OF APPROVAL, ASTM D2665-82 (FV/C) AND ASTM D2661-82 (DRV), AS MANUFACTURED BY G.S.R., CHARLOTTE PLASTIC PIPE & FOUNDRY CO., OR EQUAL. MAKE PVC JOINTS W/ PVC-DWV SOLVENT CEMENT, ASTM D2864-80 'UNI-KELD' 200 UP TO 6" PIPE DI. 'UNI-KELD' 1500 UP TO 8" DIA. MAKE ABS JOINTS W/ ABS-DWV SOLVENT CEMENT, ASTM D2235-81 'UNI-KELD' 4400 (UNITED EL CHEM INDUSTRIES, INC.) PIPING AND FITTINGS FOR OUTSIDE BUILDING SEWERS AND STORM DRAINS MAY BE TYPE PSM PVC PER ASTM D3084-81.

**DOMESTIC WATER SYSTEM**

HOT AND COLD WATER PIPING ABOVE AND BELOW SLAB/GRADE, PIPE SIZE 1/2" TO 8" SHALL BE SCHEDULE 80 CPVC 33441-B OR BETTER PER ASTM F4411-82 AND FITTINGS PER ASTM F439-82 AND ASTM F437-82 WITH NSF SEAL OF APPROVAL. EXCEPTION: QESTPEX TUBING MAY BE USED IN ABOVE GRADE APPLICATIONS AS AN EQUAL REPLACEMENT FOR SCHEDULE 80 CPVC.

MAKE JOINTS WITH SOLVENT CEMENT PER ASTM D2864-82 WITH NSF SEAL OF APPROVAL. PIPE ENDS SHALL BE BEVELED FROM 1/8" TO 3/32" USING A COURSE FILE OR SPECIAL BEVELING TOOL. PRIOR TO JOINTING, PRIMERS AND CEMENTS SHALL BE APPLIED WITH DAUBERS AND SPECIAL ROLLERS. FOR CEMENTING AND PRIMING A DAUBER IS TO BE USED ON PIPE AND FITTINGS THROUGHOUT. TYPE 'L' COPPER PIPING SHALL BE USED FOR RUNOUTS TO PLUMBING FIXTURES, MINIMUM 2'-0" LONG, WITH COMPLETE THREADED BRASS CONNECTION FROM CPVC TO COPPER ADAPTERS. THERMAL EXPANSION COMPENSATION SHALL BE RESPONSIBILITY OF CONTRACTOR.

1" INSULATION FOR PIPE SIZES 3/8" THRU 2"; HOT WATER PIPING ABOVE AND BELOW SLAB/GRADE. ALSO INSULATE COLD WATER MAKE-UP LINES SUCH AS POOL MAKE-UP EQUIPMENT EXPOSED TO COLD WEATHER BELOW 35°F. (IF ANY) 1/2" THICK, FLEXIBLE GLOBBED CELL POLYETHYLENE PIPE INSULATION APPLIED AS RECOMMENDED BY THE MANUFACTURER, NOMACO, INC., 'ARMSTRONG INDUSTRY' SELF-SEAL ARMAFLEX 2000 (S6A2000) (ASTM E84-84(A)) INSULATION BURIED BELOW GRADE SHALL BE COVERED WITH 5" TO 5" CLEAN SAND PRIOR TO BACKFILLING. USE RUBATEX CORP.' R-180-F5, 1/2" THICKNESS FOR PIPE SIZES 2-1/2" THRU 8".

HANGERS AND SUPPORTS SHALL BE PROVIDED TO PROPERLY SUPPORT THE PIPING AND EQUIPMENT IN COMPLIANCE WITH STANDARD PLUMBING CODE. NO TEMPORARY TAPES OR BAILING WIRE SHALL BE USED, ALLOWED OR PERMITTED FOR ANY REASON ON THIS PROJECT. TAPES SHALL BE USED ONLY FOR DETAILS ON DRAWINGS FOR MAXIMUM HORIZONTAL AND VERTICAL SPACING.

ALL PIPE PROTRUSIONS INSIDE CABINETS AND AT EXPOSED LOCATIONS SHALL HAVE POLISHED CHROME PLATED BRASS ESCUTCHEONS, NICKEL OR ONE-PIECE, SHALLOW TYPE WHERE POSSIBLE.

PIPING ROUGH-IN POINTS TO ALL PLUMBING FIXTURES SHALL BE SECURED BY USE OF 'HOLDRITE SUPPORT SYSTEM' INCLUDING INSERTS, REPRESENTATIVE: DURAN SALES AGENCY, 12605 AUTOMOBILE, N. CLEARWATER, FL 33520, (813) 578-1855.

NO SWEAT PLUMBING CONNECTORS, TO SIMPLIFY PROJECT, SHALL BE AS MANUFACTURED BY AQUAFLO, 573 RANDY RD, CAROL STREAM, IL 60188, (800) 352-7197. CONNECTORS MAY BE USED IN LIEU OF RIGID/FLEXIBLE RISERS ON TYPE CONNECTIONS SUCH AS LAVATORY SINK FAUCETS, WATER CLOSET, WATER HEATERS, DISHWASHERS, ICE MACHINES, ETC.

**EXECUTION**

PREPARATION: DO ALL EXCAVATING FOR INSTALLING THE NECESSARY SYSTEMS, WHEN WORK HAS BEEN TESTED AND APPROVED, REFILL EXCAVATIONS AND TAMP THE APPLICABLE PROVISIONS OF THE SPECIFICATIONS.

**INSTALLATION PIPING LAYOUT:**

THE DRAWINGS ARE PARTLY DIAGRAMMATIC AND NOT INTENDED TO SHOW IN DETAIL ALL FEATURES OF THE WORK. ALL PIPING SHALL BE CONCEALED EXCEPT WHERE SPECIFICALLY NOTED OTHERWISE.

CONTRACTOR SHALL VISIT SITE AND VERIFY DATA ON EXISTING ITEMS 8% PRIOR TO BIDDING AND ADVISE ARCHITECT OF ANY DISCREPANCIES. AFTER SITE PREPARATION AND COMPANION IS COMPLETED, SERVICE LINES ARE TO BE INSTALLED.

DO NOT SCALE DRAWINGS. SEE ARCHITECT FOR EXACT LOCATION OF ALL EQUIPMENT.

PLUMBING FIXTURES: PROVIDE FACTORY-FABRICATED FIXTURES OF THE TYPE, STYLE AND MATERIAL INDICATED ON THE DRAWINGS. FOR EACH TYPE FIXTURE, PROVIDE MANUFACTURER'S STANDARD TRIM, SEATS, AND VALVES AS INDICATED BY THEIR PUBLISHED PRODUCT INFORMATION. EITHER AS DESIGNED AND CONSTRUCTED OR AS RECOMMENDED BY THE MANUFACTURER, AND AS REQUIRED FOR A COMPLETE INSTALLATION. COMPLY WITH APPLICABLE ANSI AND AIA-P-541 STANDARDS PERTAINING TO PLUMBING FIXTURES AND SYSTEMS.

WATER HEATERS: PROVIDE AUTOMATIC WATER HEATER WHERE SHOWN AS INDICATED ON THE DRAWINGS.

**PIPING SPECIALTIES:**

ALL VALVES SHALL BE BRONZE BODY UNION BONNET, 125 LBS. S.W.P., 200 LBS. W.G. MANUFACTURED BY STOKHAM, MILWAUKEE, GRADE, HAMMOND, NIBCO, OR APPROVED EQUAL, EXCEPT AS NOTED HEREIN.

VALVES SHOWN ON PLANS AS 'GATE VALVE' OR 'GLOBE VALVE' SHALL BE HAMMOND VALVE CORP. #8401/8411 BALL VALVE, TEFLO SEATS, 600 PSI WOG NON-SHOCK, 1/4" THRU 2". BRONZE BODY WITH THREADED OR SOLDER ENDS, FED. SPEC. X4V-35B; 2-1/2" AND 3" TO BE #8504/8514.

CHECK VALVES 1/4" THRU 3", SCREWED OR SOLDER ENDS, CLASS 125, BRONZE BODY, SCREWED CAP, HORIZONTAL SWING, RENEWABLE BRONZE DISC, HAMMOND VALVE CORP. 1B401/1B411, FED. SPEC. X4V(S), TYPE IV, CLASS A.

DIELECTRIC UNIONS SHALL BE PROVIDED AT ALL CONNECTIONS BETWEEN COPPER AND FERROUS PIPE AND EQUIPMENT, SUCH AS WATER HEATERS, ETC. WATS 5000 SERIES.

**WATER PIPING:**

CONNECT TO ALL WATER SUPPLIED FIXTURES OR EQUIPMENT THAT ARE SHOWN SPECIFIED OR PROVIDED BY OTHERS. CARE MUST BE EXERCISED TO INSURE THAT COPPER PIPING OR QESTPEX TUBING WILL NOT COME INTO DIRECT CONTACT WITH ANY TREATED LUMBER OR METAL STUDS. PROVIDE PIPE INSULATION AS A PROTECTIVE SLEEVE (AGAINST COPPER DETERIORATION RESULTING FROM FIRE TREATMENT SALTS) COMPLETELY THROUGH ANY LUMBER PENETRATION INCURRED BY COPPER PIPING. EXTEND WATER SERVICE PIPING OF SIZE AND LOCATION INDICATED TO WATER SERVICE ENTRANCE AT BUILDING. PROVIDE BALL VALVE AT WATER SERVICE ENTRY AT 5'0" OUTSIDE BUILDING IN VALVE BOX, MAXIMUM BURY IS 2'-0".

**FLOOR DRAINS:**

INSTALL DRAINS IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS AND IN LOCATIONS INDICATED. SEE PLUMBING EQUIPMENT SCHEDULE ON DRAWINGS. INSTALL DRAINS IN THE LOW POINTS OF THE SURFACE AREAS TO BE DRAINED. SET TOPS OF DRAINS FLUSH WITH FINISHED FLOOR. INSTALL DRAIN FLASHING COLLAR OR FLANGE SO THAT NO LEAKAGE OCCURS BETWEEN DRAIN AND ADJOINING ROOFING OR FLOORING. MAINTAIN INTEGRITY OF WATERPROOF MEMBRANES, WHERE PENETRATED, POSITION DRAINS SO THAT THEY ARE ACCESSIBLE AND EASY TO MAINTAIN. THE INSTALLER OF THE DRAINS ADVISE THE CONTRACTOR OF REQUIRED PROTECTION FOR THE DRAINS DURING THE REMAINDER OF THE CONSTRUCTION PERIOD TO AVOID CLOGGING WITH CONSTRUCTION MATERIALS AND DEBRIS AND TO PREVENT DAMAGE FROM TRAFFIC AND CONSTRUCTION WORK. USE OF COMMON DUCT TAPE IS TO BE DISCOURAGED DUE TO DIFFICULTY OF REMOVAL AT A LATER DATE.

**FIELD QUALITY CONTROL:**

BUILDING DRAIN AND SEWER: INSTALL PER FLORIDA PLUMBING CODE.

INSPECTION AND TEST: SHALL BE PER FLORIDA PLUMBING CODE.

DISINFECTION: DISINFECTATION OF POTABLE WATER SYSTEM PIPING SHALL BE PER FLORIDA PLUMBING CODE.

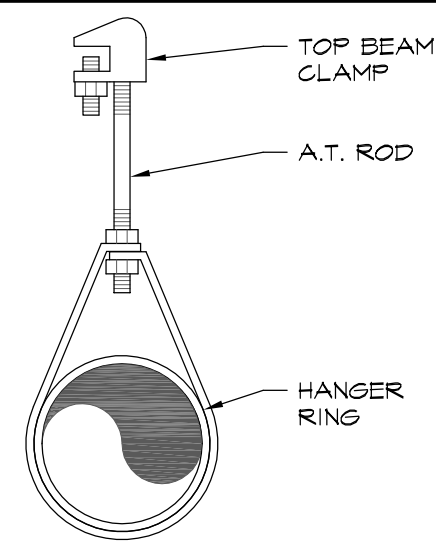
**SANITARY AND VENT PIPING:**

THE INSTALLATION OF PIPING SHALL BE CAREFULLY PLANNED. PIPING SHALL BE INSTALLED IN SUCH A MANNER AS TO PREVENT THE FORMING OF BAGS OR ROCKETS.

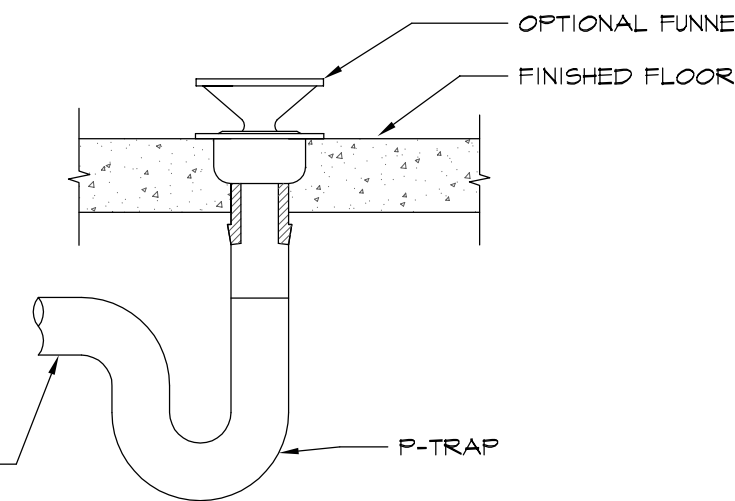
VENT PIPING THRU ROOF SHALL HAVE FLASHING SLEEVE WITH 3 LBS. SHEET LEAD TERMINATED WITHIN THE SLEEVE AND THE REMAINING ANNULAR SPACE CAULKED WITH MOLTEN LEAD, BASE FLASHING 12" SQUARE ON THE ROOF. OFFSET PIPING TO AVOID STRUCTURAL MEMBERS, GANTS, FLASHING, MECHANICAL, AND ELECTRICAL EQUIPMENT, ETC.

ALL VENTS THRU ROOF SHALL BE INSTALLED OFFSET MINIMUM OF 2'-0" FROM EDGE OF ROOF LINES, PARAPETS AND ALL OTHER FLASHING. VENT PIPING SHALL BE COLLECTED SO ROOF WILL BE PIERCED A MINIMUM NUMBER OF TIMES. EXPOSED PVC WASTE ARMS SHALL BE SPRAY PAINTED WITH TWO COATS OF SILVER. VENT PIPING INSTALLED ON SLOPING METAL ROOFS SHALL HAVE A 'STANDARD VENT PIPE FLASHING ACCESSORY' AS MANUFACTURED BY METAL ROOF MFG. CO. OR EQUAL. VENTS THROUGH ROOF, EXPOSED TO VIEW, SHALL BE PAINTED TO MATCH EXACT COLOR OF ADJACENT ROOFING ON SLOPING ROOFS BY THIS SECTION.

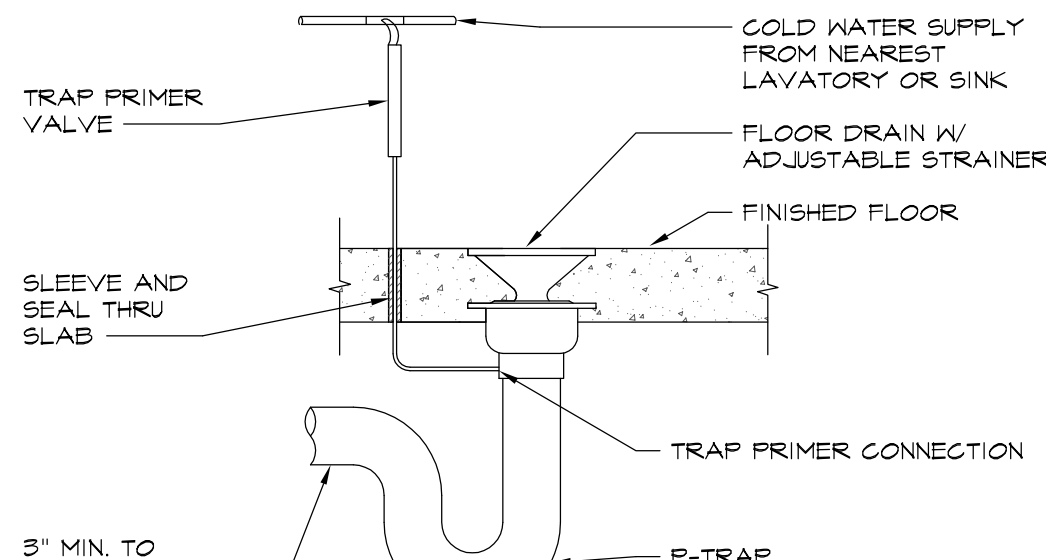
'STUDOR VENTS' MAY BE USED AT THE DISCRETION OF THE PLUMBING CONTRACTOR IN LIEU OF VENTS THRU ROOF WHERE PHYSICAL OBSTRUCTIONS MAKE VTRS IMPRACTICAL.



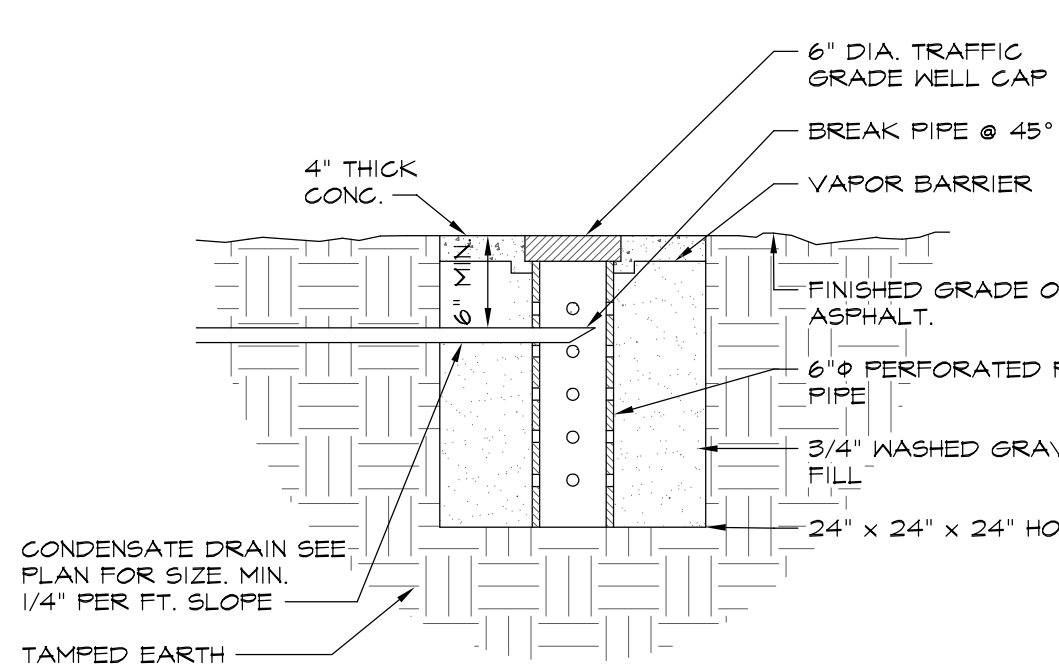
1 HANGER DETAIL  
NO SCALE



2 FLOOR FUNNEL DRAIN  
NO SCALE



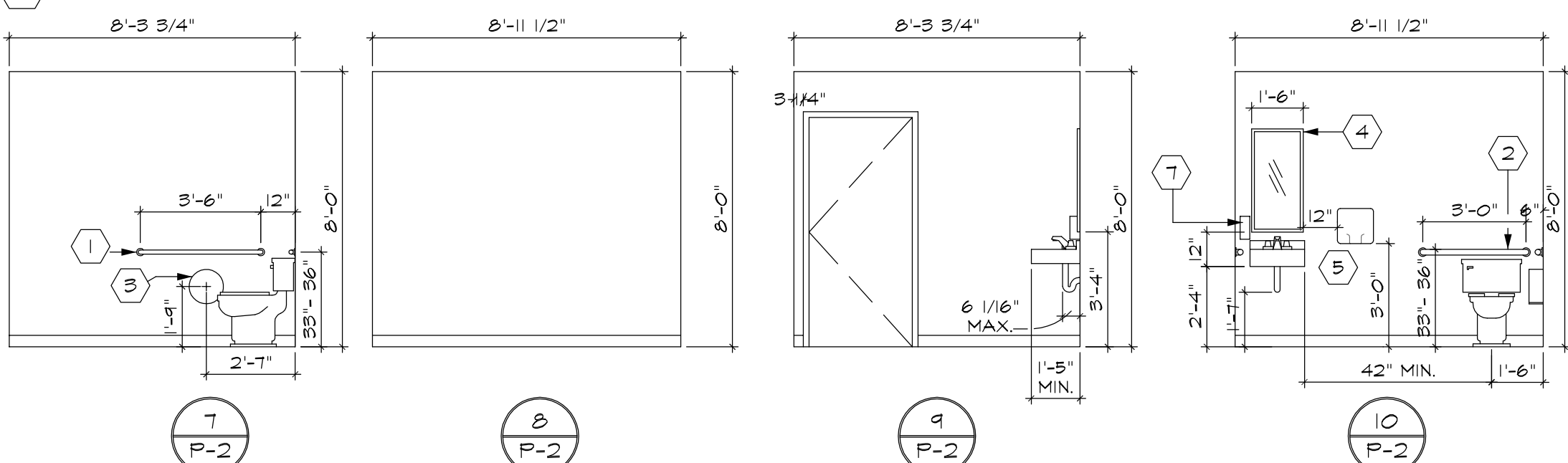
3 FLOOR DRAIN WITH TRAP PRIMER  
NO SCALE



4 DRYWELL DETAIL  
SCALE: 1" = 1'-0"

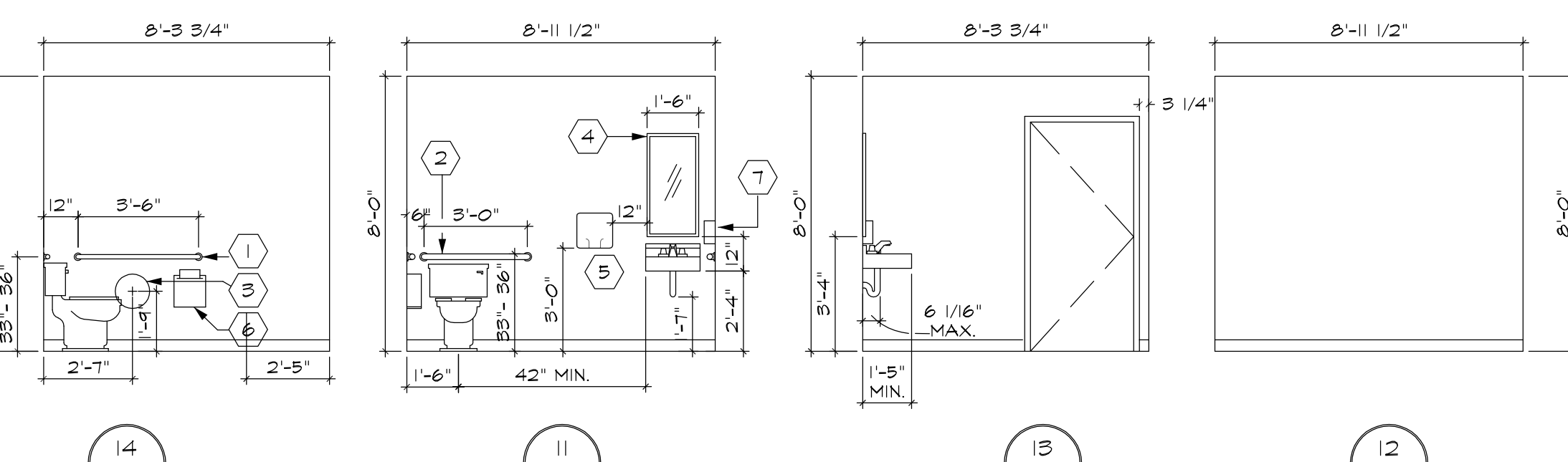
**TOILET RM. FIXTURE SCHEDULE**

- 1 H/C GRAB BAR BOBRICK B6806X42 W/ (3) SHEET-METAL SCREWS (PART #252-30) TO BE INSTALLED ON 2X SOLID BLOCKING.
- 2 H/C GRAB BAR BOBRICK B6806X36 W/ (3) SHEET-METAL SCREWS (PART #252-30) TO BE INSTALLED ON 2X SOLID BLOCKING.
- 3 TOILET PAPER DISPENSER, COMPACT 537101 MANUF. BY GOURIA-PACIFIC PROVIDED BY OWNER.
- 4 MIRROR WITH WOOD FRAME
- 5 XLERATOR SERIES, MODEL XL-N AUTOMATIC HAND DRYER PROVIDED BY OWNER.
- 6 SANITARY DISPOSAL FOR WOMEN
- 7 SOAP DISPENSER PROVIDED BY OWNER.



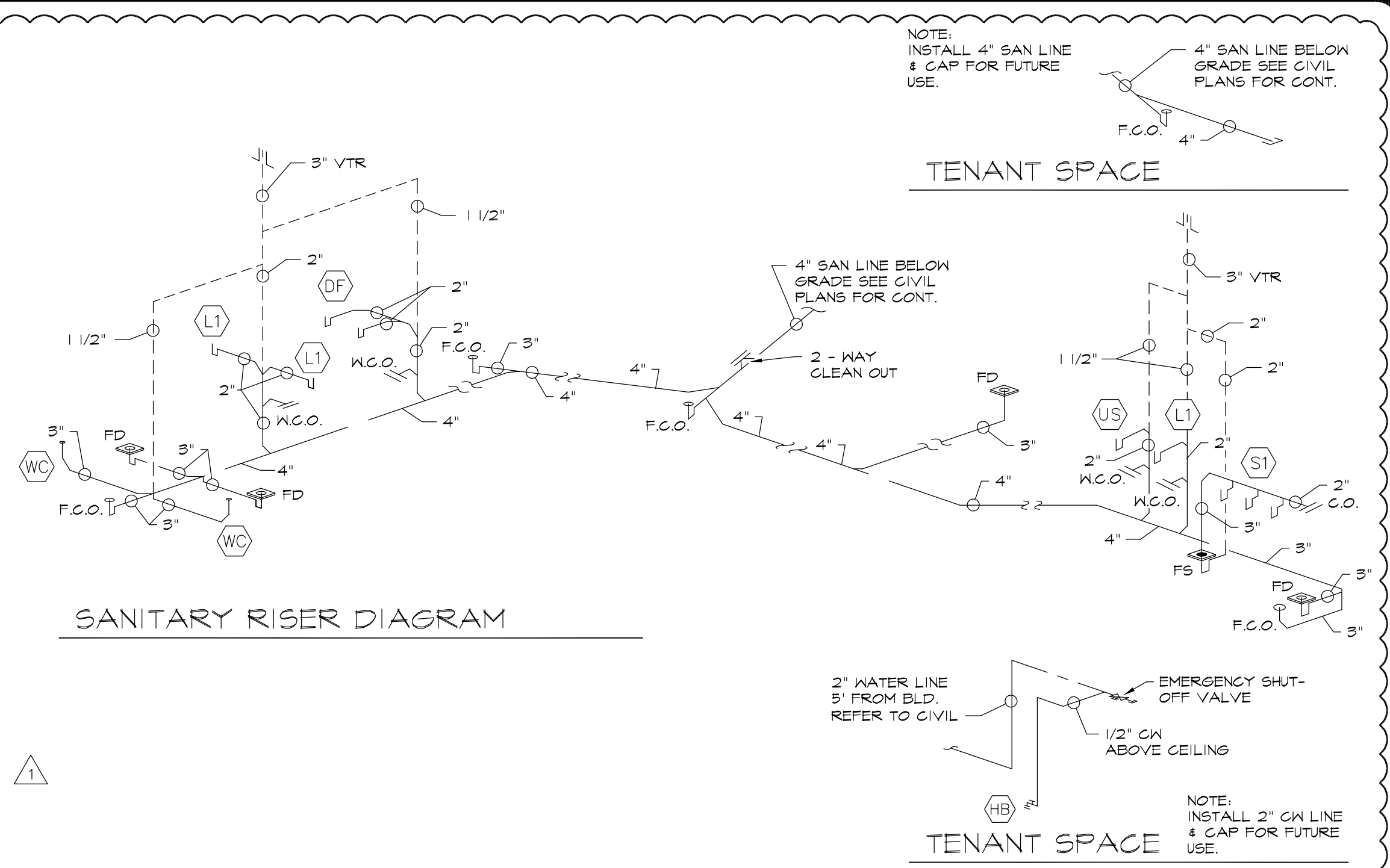
MEN'S H/C RESTROOM

SCALE: 1/4" = 1'-0"

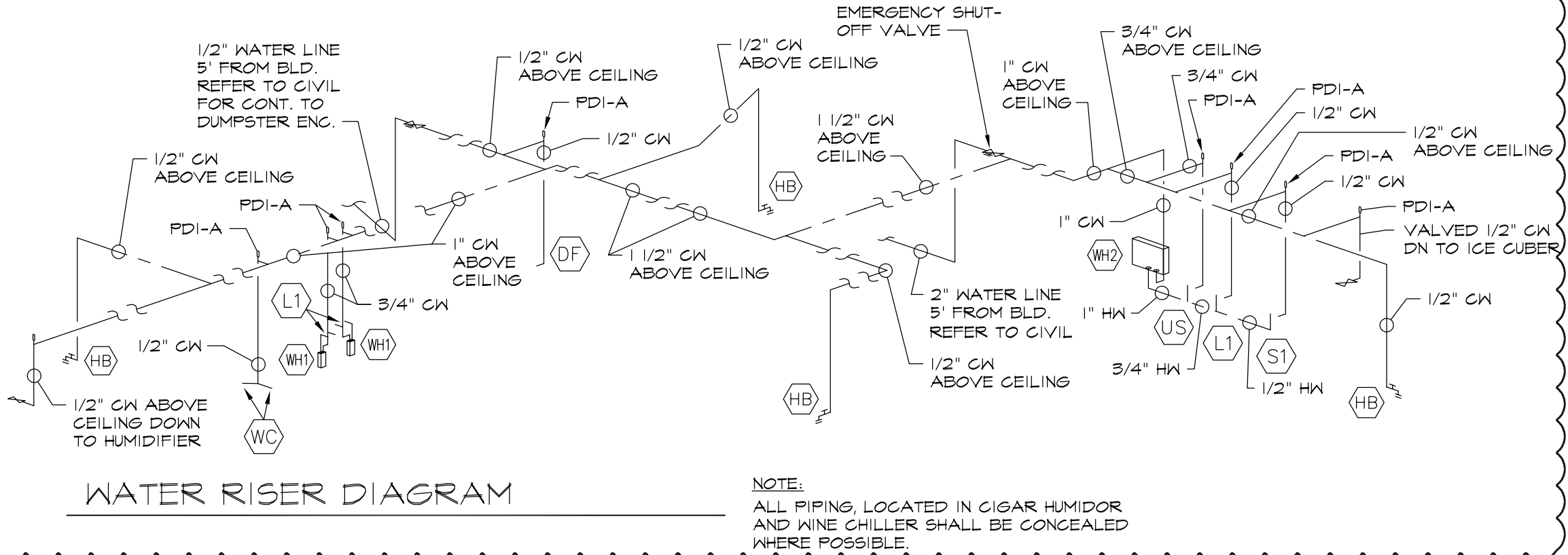


WOMEN'S H/C RESTROOM

SCALE: 1/4" = 1'-0"

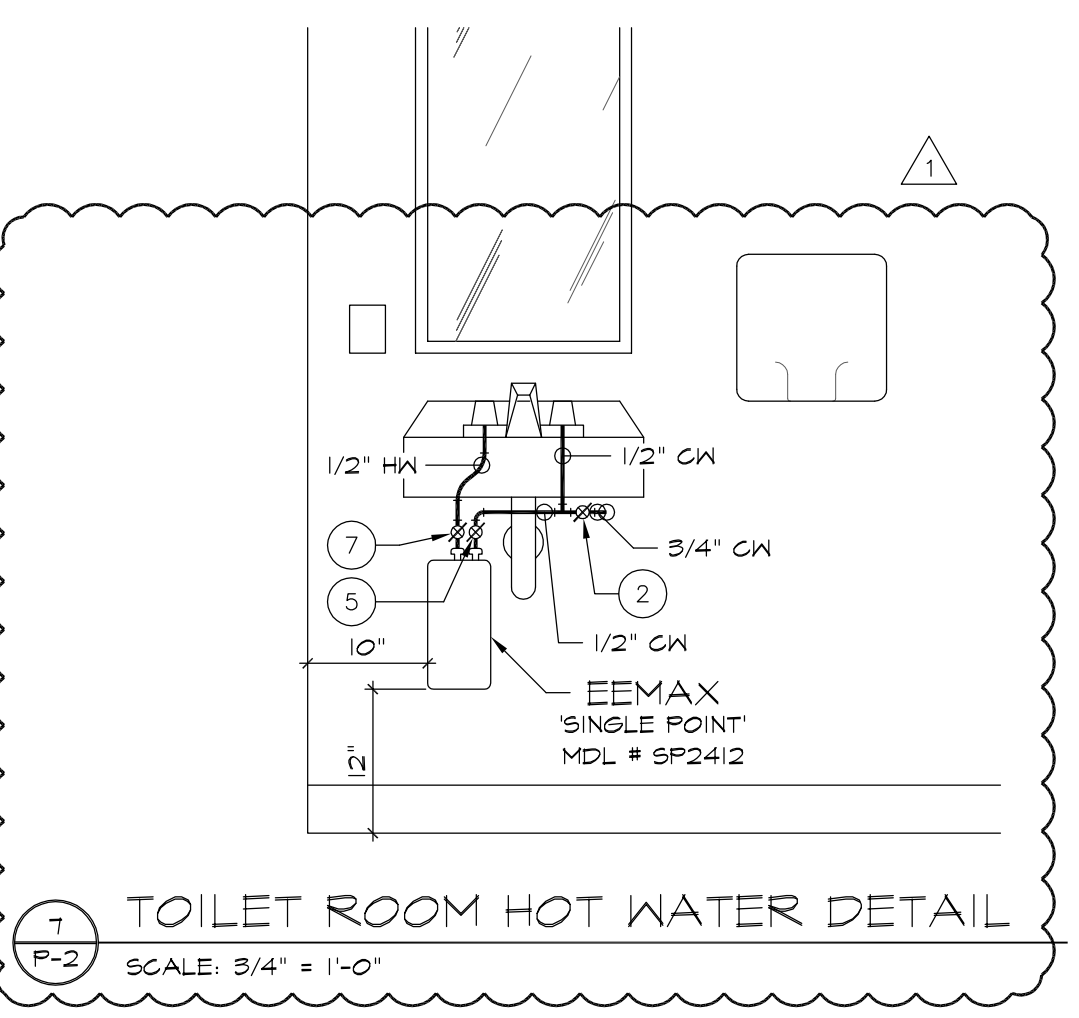


SANITARY RISER DIAGRAM



WATER RISER DIAGRAM

NOTE: ALL PIPING, LOCATED IN GIGAR HUMIDOR AND WINE CHILLER SHALL BE CONCEALED WHERE POSSIBLE.

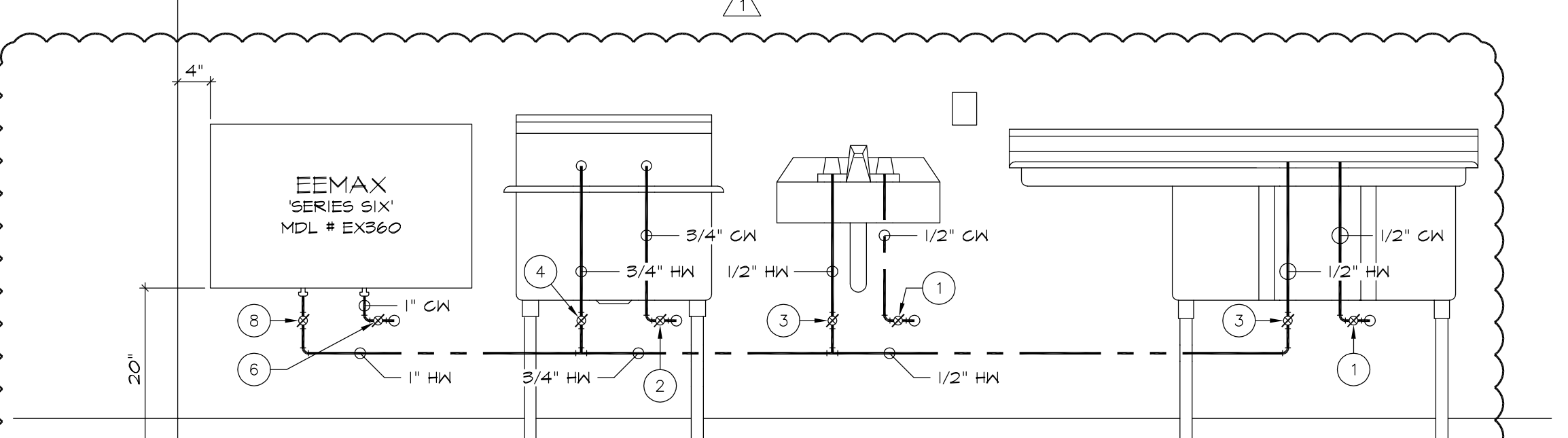


TOILET ROOM HOT WATER DETAIL

SCALE: 3/4" = 1'-0"

**TOILET RM. FIXTURE SCHEDULE**

- 1 1/2" SHUTOFF VALVE - INCOMING COLD WATER
- 2 3/4" SHUTOFF VALVE - INCOMING COLD WATER
- 3 1/2" SHUTOFF VALVE - INCOMING HOT WATER
- 4 3/4" SHUTOFF VALVE - INCOMING HOT WATER
- 5 1/2" SHUTOFF VALVE - GOLD WATER TO WATER HEATER (VALVE TO BE FULLY OPENED)
- 6 1" SHUTOFF VALVE - GOLD WATER TO WATER HEATER (VALVE TO BE FULLY OPENED)
- 7 1/2" SHUTOFF VALVE - HOT WATER FROM WATER HEATER (ADJUST VALVE TO GIVE APPROXIMATE DESIRED TEMPERATURE)
- 8 1" SHUTOFF VALVE - HOT WATER FROM WATER HEATER (ADJUST VALVE TO GIVE APPROXIMATE DESIRED TEMPERATURE)



STORAGE ROOM HOT WATER DETAIL

SCALE: 3/4" = 1'-0"

REVISIONS	BY
BUILDING DEPT. REV. 5-14-08	MCM

**ARTERBURY ARCHITECTS, INC.**  
A A 2 6 0 0 7 1 8  
2400 SAND LAKE ROAD  
LONGWOOD, FLORIDA 32779  
(407) 774-2233  
FAX (407) 774-7377

**ABC LIQUORS, INC.**  
8989 S. ORANGE AVE. - ORLANDO, FLA. 32809  
ABC STORE NO. 50  
SAWGRASS MILLS, SUNRISE, FLORIDA

DRAWN:	R. CARDONA
CHECKED:	S. RIVERA
DATE:	5-1-07
SCALE:	AS NOTED
JOB No:	50
SHEET	

P-2