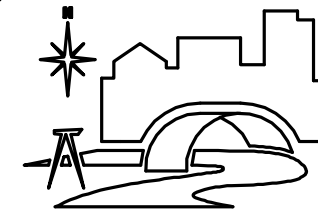


CONSULTANTS



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1000 Red River Avenue North
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REVISION _____ DATE _____

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Engineer under the laws of the state of Minnesota.

Perry R. Nistler
PERRY R. NISTLER, P.E.

3-31-10 Date 22468 License No.

PLUMBING DETAILS AND SCHEDULES

COMM. NO.: 10701
SCALE: AS SHOWN
DATE: MARCH 31, 2010
DRAWN BY: KLI

PLUMBING FIXTURE SCHEDULE

FIXTURE NUMBER	DESCRIPTION	WASTE PIPE SIZE	VENT PIPE SIZE	COLD WATER PIPE SIZE	HOT WATER PIPE SIZE
FD-1	FLOOR DRAIN 2" FLOOR DRAIN WITH CLEAN OUT MANUFACTURERS: WADE W-1100, JOSAM 30000, SMITH 2010, ZURN Z-415, ANCON FD-100 OR APPROVED EQUAL.	2"	---	---	---
HB-1	HOSE BIBB CAST BRONZE FREEZE-PROOF WALL HYDRANT W/ SATIN FINISH, NIKALOYFACE, INTEGRAL VACUUM BREAKER-BACKFLOW PREVENTER, PRESSURE RELIEF VALVE, BRONZE CASING W/ BRONZE OPERATING PARTS, 3/4" THREADED HOSE SPOUT, LOOSE KEY OPERATING HANDLE. MANUFACTURERS: JOSAM 71050 SERIES, WADE OR APPROVED EQUAL.	---	---	3/4"	---
UB-1	CLOTHES WASHER WALL UTILITY BOX MANUFACTURERS: OATEY #38981, IPS #82117 OR APPROVED EQUAL	2"	1 1/2"	1/2"	1/2"
DF-1 DF-2	DRINKING FOUNTAIN - ADA (DF-1) & STANDARD (DF-2) FOUNTAIN SHALL DELIVER 8.0 GPH OF 50 DEGREES AMBIENT. ONE PIECE POLISHED STAINLESS STEEL TOP W/ INTEGRAL DRAIN GRID. CABINET COLOR SHALL BE GRAY-BEIGE. SEPARATE VALVE AND DIAPHRAGM AUTOMATIC STREAM REGULATOR SHALL BE MOUNTED WITHIN THE CABINET. REFRIGERATION SYSTEM SHALL EMPLOY HERMETICALLY SEALED HIGH EFFICIENCY, POSITIVE START COMPRESSOR, NON-PRESSURIZED COUNTERFLOW COOLING COIL CONTROLLED BY POSITIVE SENSING THERMOSTAT AND FAN-COOLED COPPER TUBE/ALUMINUM FIN CONDENSER COIL. COOLER SHALL COMPLY WITH ADA AND ANSI 117.1 FOR BOTH VISUAL AND MOTION DISABILITIES. COOLER SHALL BE CERTIFIED BY ARI TO MEET STANDARD 1010-78. UNITS SHALL BE MOUNTED WITHIN THE CABINET. FOUNTAIN SHALL HAVE FRONT, LEFT AND RIGHT SIDE PUSH BARS AND FLEXIBLE POLYESTER ELASTOMER BUBBLE HOOD. MOUNT DF-1 AT ADA HEIGHT. MANUFACTURER: ELKAY EZSBL, OR APPROVED EQUAL.	1 1/2"	1 1/4"	1/2"	---
LAV-1	OVAL COUNTERTOP LAVATORY - ADA COMPATIBLE - 4" CENTERS FIXTURE: VITREOUS CHINA, OVAL SHAPE, APPROXIMATE OVERALL DIMENSIONS 20"x17", SELF-RIMMING, 4 INCH CENTERS. MANUFACTURER: AMERICAN STANDARD 0475.028 AQUALYN, GERBER 12-844 LUXOVAL, KOHLER K-2196-4 PENNINGTON, TRIM: LEVER HANDLE, ONE PIECE SELF-CONTAINED VALVE CARTRIDGE ALLOWING BOTH VOLUME AND TEMPERATURE CONTROL, 4 3/8" SPOUT WITH AERATOR, 4" CENTERS, GRID STRAINER, 1 1/2" TAILPIECE, CHROME FINISH W/ PLUMBER VALVE AND TRAP PROTECTORS. MANUFACTURERS: AMERICAN STANDARD 2385.000 RELIANT, DELTA 501, GERBER CO-44-522, KOHLER K-15198 CORALAIS.	1 1/2"	1 1/4"	1/2"	1/2"
S-1	18 GAUGE, 1 COMPARTMENT STAINLESS STEEL KITCHEN SINK SINK: 20" x 20" x 8" DEEP BOWL, 18 GAUGE TYPE 304 STAINLESS STEEL, SELF-RIMMING, SINGLE COMPARTMENT, (3) HOLE SINK. MANUFACTURER: KOHLER K-3382-3, ELKAY, ZEGLER-HARRIS. TRIM: INDIVIDUAL HOT AND COLD VALVES WITH LEVER BLADES ON 8" CENTERS, 9" SWING SPOUT WITH AERATOR. MANUFACTURER: KOHLER K-15888-K-CP, CHICAGO, ELKAY OR APPROVED EQUAL. DRAIN: STAINLESS STEEL BODY, STAINLESS CONICAL STRAINER, REMOVABLE LIFT UP KNOB WITH NEOPRENE STOPPER, 1-8" CHROME PLATED BRASS TAILPIECE. MANUFACTURER: KOHLER 'DUOSTRAINER', ELKAY, ZEGLER-HARRIS.	2"	1 1/2"	1/2"	1/2"
S-2	18 GAUGE, 2 COMPARTMENT STAINLESS STEEL KITCHEN SINK 1. FIXTURE: 33" x 22" 2 COMPARTMENT KITCHEN SINK, (2) 14" x 15 3/4" BOWLS, 6 1/2" DEEP BOWLS AND COVERED CORNERS. 18 GAUGE, TYPE 304 STAINLESS STEEL. (4) HOLES. MANUFACTURER: DAYTON D-23322, ELKAY, KOHLER, AMERICAN STANDARD. 2. FITTINGS: INDIVIDUAL HOT AND COLD VALVES WITH 4" WRIST BLADE HANDLES, 8" GOOSENECK SPOUT WITH AERATOR, 8" CENTERS, GRID STRAINER, 1 1/2" TAILPIECE, CHROME FINISH, W/ HAND SPRAY. MANUFACTURER: GERBER CO-44-116, AMERICAN STANDARD 6530.170.000 MONTERREY, KOHLER K-15888, ELKAY LK499A, DELTA OR APPROVED EQUAL. 3. DRAIN: STAINLESS STEEL BODY, STAINLESS CONICAL STRAINER, REMOVABLE LIFT UP KNOB WITH NEOPRENE STOPPER, 1 1/2" CHROME PLATED BRASS TAILPIECE. MANUFACTURER: ELKAY LK-99, ZEGLER-HARRIS 2H-316-BC.	2"	1 1/2"	1/2"	1/2"
S-3	18 GAUGE, 2 COMPARTMENT STAINLESS STEEL KITCHEN SINK 1. FIXTURE: 45" x 21" 2 COMPARTMENT KITCHEN SINK, (2) 15" x 20" BOWLS, 12" DEEP BOWLS AND COVERED CORNERS. 18 GAUGE, TYPE 304 STAINLESS STEEL. (3) HOLES. MANUFACTURER: DAYTON D-23322, ELKAY, KOHLER, AMERICAN STANDARD. 2. FITTINGS: SINGLE CONTROL WITH 4" WRIST BLADE HANDLES, 10-1/8" SWING SPOUT WITH INTEGRAL PULLOUT SPRAYHEAD AND HOSE. AERATOR, GRID STRAINER, 1 1/2" TAILPIECE, CHROME FINISH. MANUFACTURER: KOHLER K-10433, GERBER, AMERICAN STANDARD, ELKAY, DELTA OR APPROVED EQUAL. 3. DRAIN: STAINLESS STEEL BODY, STAINLESS CONICAL STRAINER, REMOVABLE LIFT UP KNOB WITH NEOPRENE STOPPER, 1 1/2" CHROME PLATED BRASS TAILPIECE. MANUFACTURER: ELKAY LK-99, ZEGLER-HARRIS 2H-316-BC.	2"	1 1/2"	1/2"	1/2"
S-4	19 GAUGE, 1 COMPARTMENT STAINLESS STEEL KITCHEN SINK SINK: 12 1/2" x 9 1/2" DEEP BOWL, 19 GAUGE STAINLESS STEEL, SELF-RIMMING, SINGLE COMPARTMENT, (2) HOLE SINK. MANUFACTURER: KOHLER K-3348-2, ELKAY, ZEGLER-HARRIS. TRIM: INDIVIDUAL HOT AND COLD VALVES WITH LEVER BLADES ON 4" CENTERS, 5-3/16" STATIONARY SPOUT WITH AERATOR. MANUFACTURER: KOHLER K-16112, CHICAGO, ELKAY OR APPROVED EQUAL. DRAIN: STAINLESS STEEL BODY, STAINLESS CONICAL STRAINER, REMOVABLE LIFT UP KNOB WITH NEOPRENE STOPPER, 1-8" CHROME PLATED BRASS TAILPIECE. MANUFACTURER: KOHLER 'DUOSTRAINER', ELKAY, ZEGLER-HARRIS.	2"	1 1/2"	1/2"	1/2"
UR-1	URINAL, WASHOUT, .125GPF 1. FIXTURE: WHITE VITREOUS CHINA, WASHOUT ACTION, 3/4" TOP INLET SPOUT, 2" THREADED OUTLET, BEEHIVE STRAINER. MANUFACTURER: ZURN 25798.206.00. OR APPROVED EQUAL. MOUNT AT HANDICAP HEIGHT. 2. FLUSH VALVE: .125 GPF/5 GPF EXPOSED CHROME PLATED WITH 3/4" SCREWDRIWER ANGLE STOP WITH PROTECTIVE CAP, ADJUSTABLE TAILPIECE, VACUUM BREAKER FLUSH CONNECTION, SPUD COUPLING FOR 3/4" TOP SPOUT, WALL AND SPUD FLANGES. MANUFACTURER: SLOAN ROYAL, DELANEY FLUSHBOY, ZURN, KOHLER, AMERICAN STANDARD 3. CARRIER: HEAVY DUTY CAST IRON WITH BACKUP WASHERS, ADJUSTABLE EXTENSION AND RUBBER GASKET. MANUFACTURER: ZURN OR APPROVED EQUAL. MOUNT AT HANDICAP HEIGHT.	3"	2"	3/4"	---

PLUMBING FIXTURE SCHEDULE NOTES:
1. MINIMUM 2" UNDERGROUND WASTE PIPE SIZE.

PLUMBING FIXTURE SCHEDULE

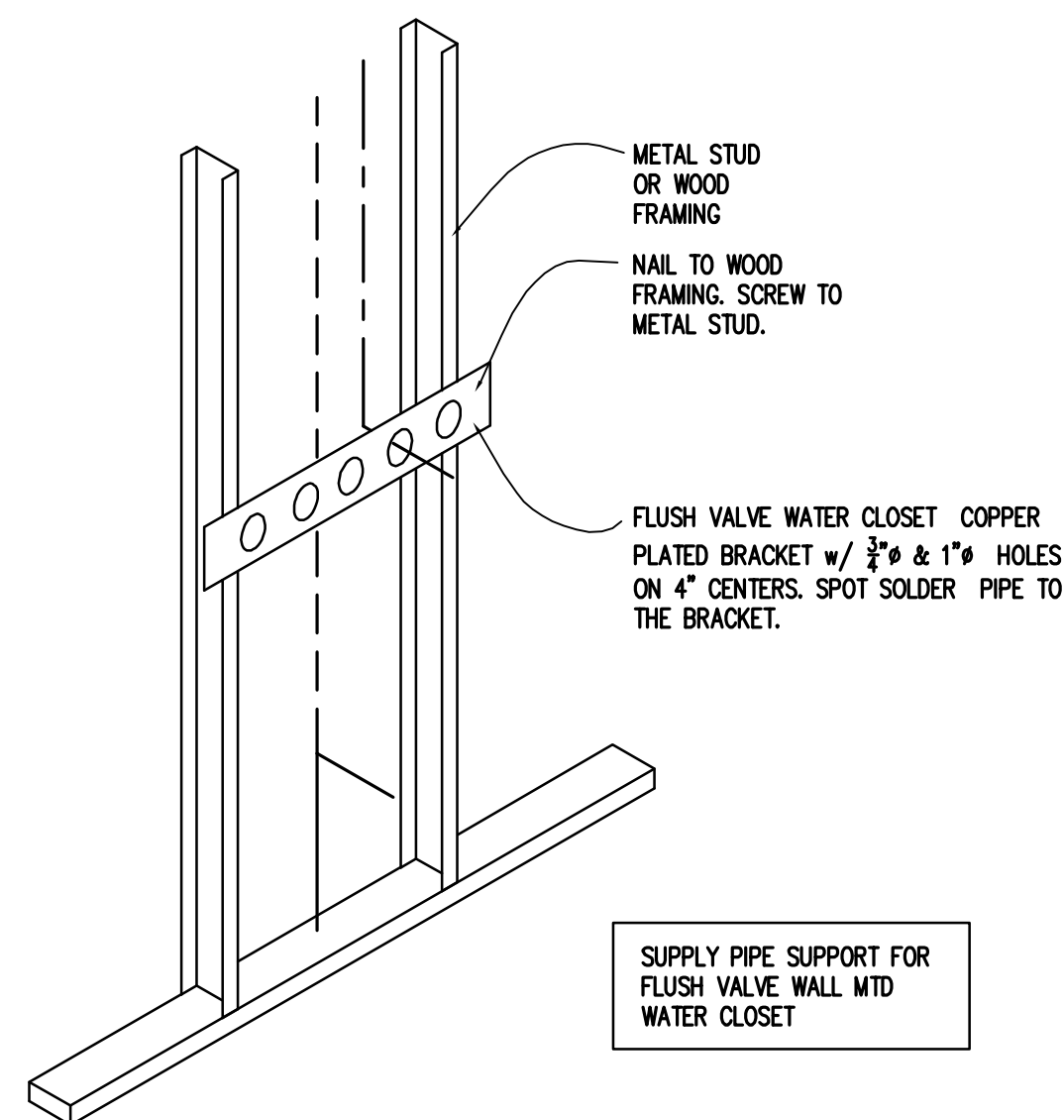
FIXTURE NUMBER	DESCRIPTION	WASTE PIPE SIZE	VENT PIPE SIZE	COLD WATER PIPE SIZE	HOT WATER PIPE SIZE
WC-1	FLOOR MOUNTED-FLUSH VALVE TOILET, 17" HANDICAPPED ELONGATED BOWL, 1.28 GPF 1. FIXTURE: ELONGATED VITREOUS CHINA BOWL, LOW CONSUMPTION 1.28 GPF, DIRECT-FED SIPHON JET ACTION, FULLY GLAZED 2" BALLPASS TRAPWAY, FLOOR MOUNTED, 10 INCH ROUGH-IN, BOLT CAPS. MANUFACTURER: ZURN Z5665, KOHLER K-4405, AMERICAN STANDARD 3461.128. 2. SEAT: HEAVY DUTY SOLID PLASTIC FOR ELONGATED BOWL, OPEN FRONT, WHITE, STAINLESS STEEL POSTS, SELF-SUSTAINING CHECK HINGE. MANUFACTURER: ZURN Z5665, KOHLER K-4731-C. 3. FLUSH VALVE: 1.28 GPF, EXPOSED CHROME PLATED WITH 1 INCH SCREWDRIWER ANGLE STOP WITH PROTECTIVE CAP, ADJUSTABLE TAILPIECE, VACUUM BREAKER FLUSH CONNECTION, SPUD COUPLING FOR 1 1/2" TOP SPOUT, WALL AND SPUD FLANGES. MANUFACTURER: SLOAN-ROYAL, ZURN. AMERICAN STANDARD SELECTRONIC FLOWSE, KOHLER OR APPROVED EQUAL.	4"	3"	1"	---
WC-2	FLOOR MOUNTED-FLUSH VALVE TOILET- ELONGATED BOWL-1.28 GPF 1. FIXTURE: ELONGATED VITREOUS CHINA BOWL, LOW CONSUMPTION 1.28 GPF, DIRECT-FED SIPHON JET ACTION, FULLY GLAZED 2" BALLPASS TRAPWAY, FLOOR MOUNTED, 10 INCH ROUGH-IN, BOLT CAPS. MANUFACTURER: ZURN Z5655, KOHLER K-4406, AMERICAN STANDARD 3451.128. 2. SEAT: HEAVY DUTY SOLID PLASTIC FOR ELONGATED BOWL, OPEN FRONT, WHITE, STAINLESS STEEL POSTS, SELF-SUSTAINING CHECK HINGE. MANUFACTURER: ZURN Z5655, KOHLER K-4731-C, AMERICAN STANDARD. 3. FLUSH VALVE: 1.28 GPF, EXPOSED CHROME PLATED WITH 1 INCH SCREWDRIWER ANGLE STOP WITH PROTECTIVE CAP, ADJUSTABLE TAILPIECE, VACUUM BREAKER FLUSH CONNECTION, SPUD COUPLING FOR 1 1/2" TOP SPOUT, WALL AND SPUD FLANGES. MANUFACTURER: SLOAN-ROYAL, ZURN. AMERICAN STANDARD SELECTRONIC FLOWSE, KOHLER OR APPROVED EQUAL.	4"	3"	1"	---

PLUMBING FIXTURE SCHEDULE NOTES:
1. MINIMUM 2" UNDERGROUND WASTE PIPE SIZE.

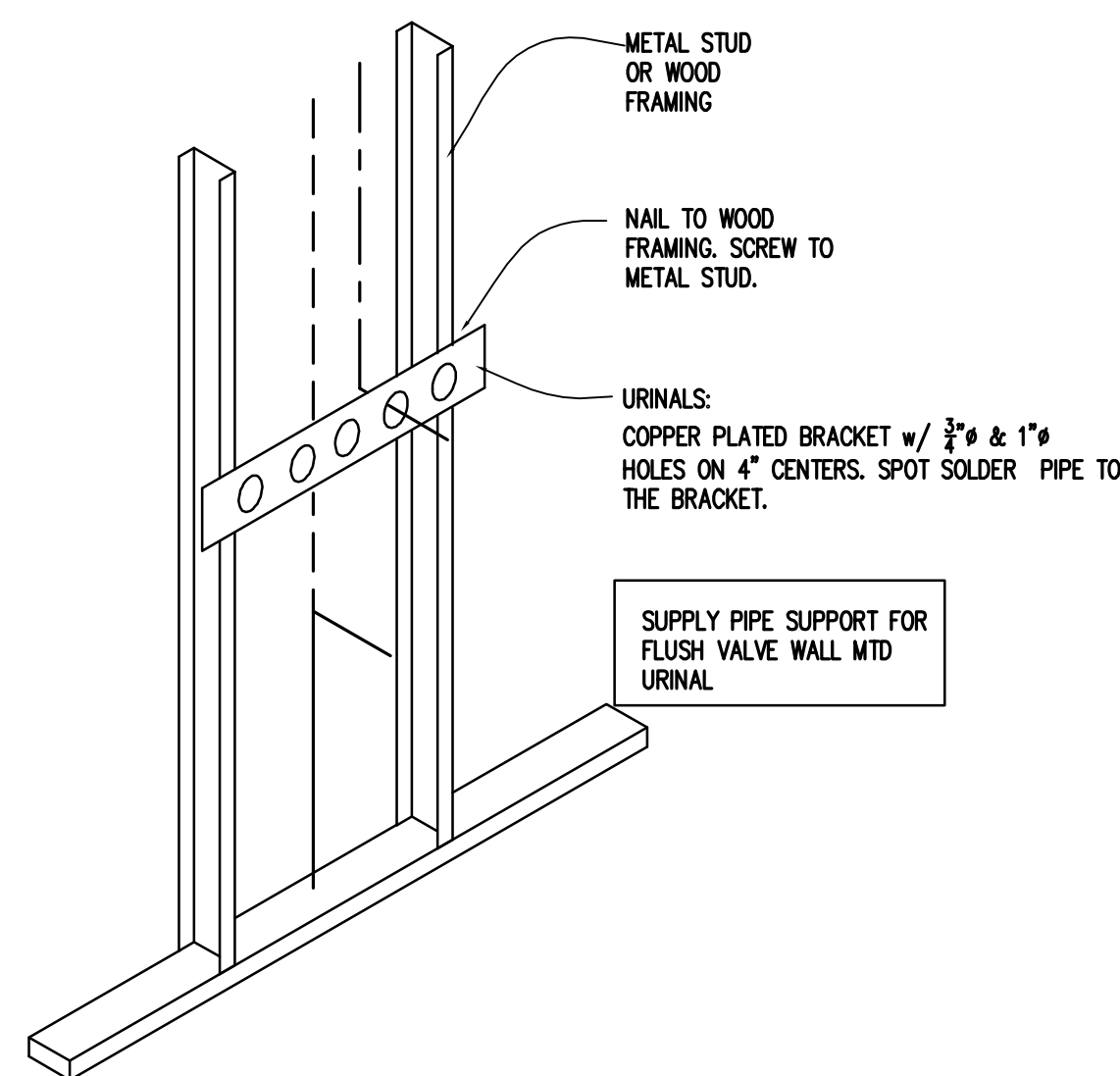
ELECTRIC WATER HEATER SCHEDULE

MARK	MANUFACTURER & MODEL NUMBER	STORAGE CAPACITY (GALLONS)	RECOVERY (GPM)	EWT DEG (F)	LWT DEG (F)	TEMP RISE (F)	HEATING				REMARKS
							KW	VOLT	PH	AMPS	
WH-1	RHEEM-RIUD EGSP6	6	30	40	120	80	6	240	1	28.8	SEE NOTES

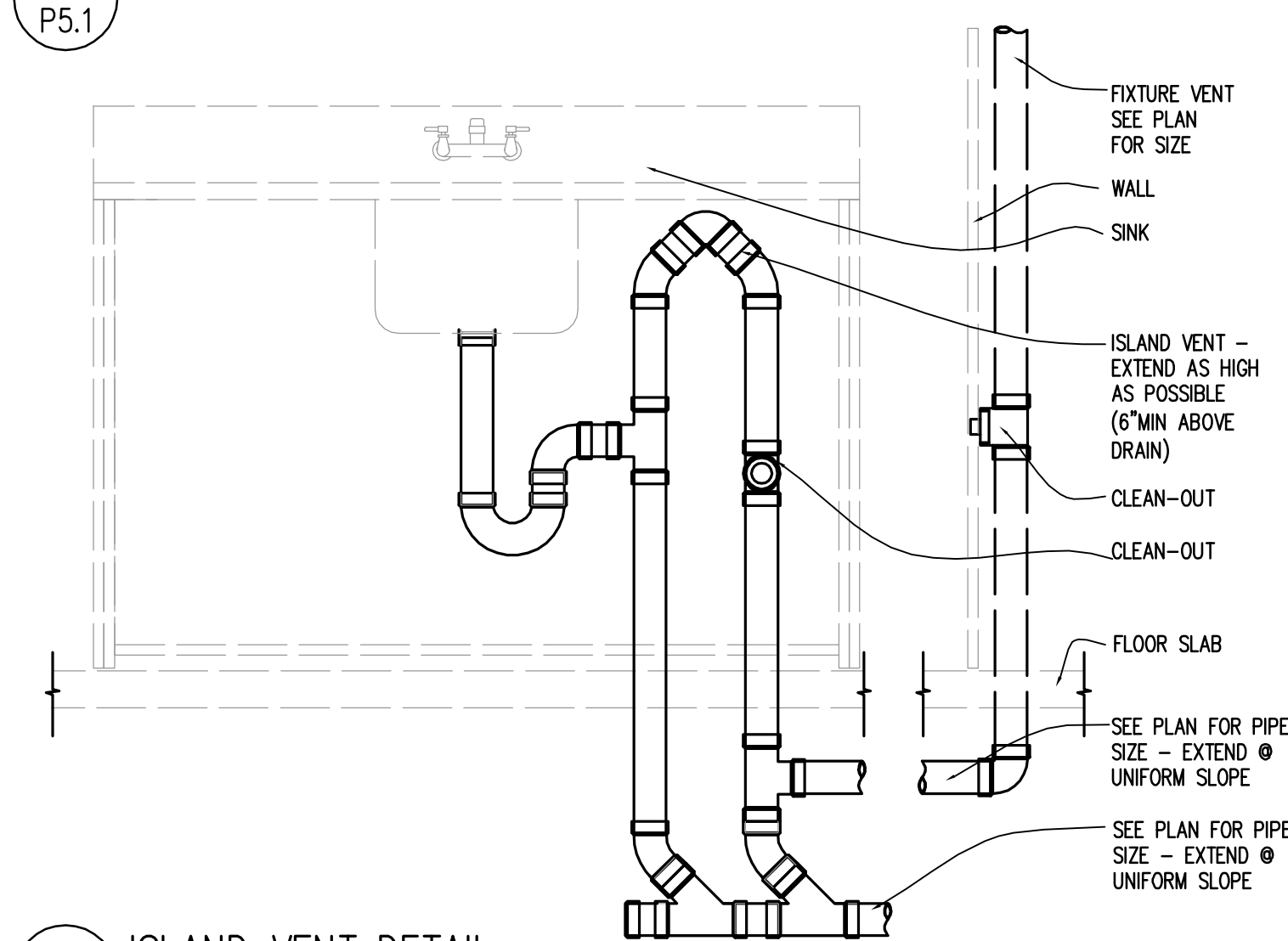
ELECTRIC WATER HEATER SCHEDULE NOTES:
1. PROVIDE T & P RELIEF VALVE AND PIPE TO SERVICE SINK OR FLOOR DRAIN.
2. CONNECTION BY ELECTRICAL.



1 WATER CLOSET SUPPORT DETAIL
P5.1



2 URINAL SUPPORT DETAIL
P5.1



3 ISLAND VENT DETAIL
P5.1