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PLUMBING FIXTURE SCHEDULE

MARK	DESCRIPTION	MFR	MODEL	CW	HW	WASTE	VENT	NOTES
P1	ADA WATER CLOSET FLUSH VALVE	KOHLER	HIGHLINE K-4405	1"	-	3"	2"	1.28 GPF WC WITH BATTERY POWERED AUTOMATIC FLUSH VALVE, KOHLER MODEL K-10956-SV, AND K-4731-C SEAT
P2	WATER CLOSET FLUSH VALVE	KOHLER	WELLCOMME ULTRA K-96053	1"	-	3"	2"	1.28 GPF WC WITH BATTERY POWERED AUTOMATIC FLUSH VALVE, KOHLER MODEL K-10956-SV, AND K-4731-C SEAT
P3	ADA URINAL	KOHLER	DEXTER K-5016-ET	3/4"	-	2"	1 1/2"	VITREOUS CHINA, WALL MOUNTED URINAL WITH BATTERY POWERED AUTOMATIC FLUSH VALVE, KOHLER MODEL K-10958-SV
P4	ADA LAVATORY COUNTERTOP	KOHLER	TRESHAM K-2992	1/2"	1/2"	1 1/2"	1 1/2"	INCLUDE CORALAIS K-15198 FAUCET AND DRAIN
P5	WATER COOLER, BARRIER FREE	ELKAY	EZSTL8C	1/2"	-	1 1/2"	1 1/2"	TWO STATION WALL MOUNTED WATER COOLER, ADA COMPLIANT
P6	MOP BASIN	FIAT	TSB-3003	1/2"	1/2"	3"	1 1/2"	PRECAST TERRAZZO ONE PIECE MOP SERVICE BASIN, 36"x24" WITH FIAT 830-AA WALL MOUNTED SERVICE FAUCET WITH HOSE THREAD ON SPOUT, FLAT STAINLESS STEEL STRAINER, AND STAINLESS STEEL GUARD ON REAR WALL
P7	2 COMPARTMENT SINK	ELKAY SSP	14-2C16X20-0X	3/4"	3/4"	2"	1 1/2"	2 COMPARTMENT STAINLESS STEEL SINK WITH LEGS, INCLUDE FAUCET OPTION
P8	HAND SINK	ELKAY SSP	EHS-18X	1/2"	1/2"	1 1/2"	1 1/2"	STAINLESS STEEL WALL MOUNTED SINK, GOOSE NECK FAUCET INCLUDED
P9	LAVATORY SINGLE BOWL	ELKAY	LR2521PD	1/2"	1/2"	1 1/2"	1 1/2"	SINGLE HOLE STAINLESS STEEL SINK WITH ELKAY CONCEALED DECK FAUCET LK500GN0SL2
FCO	FLOOR CLEANOUT	ZURN	CO-2450	-	-	3"	-	-
FD	INTERIOR FLOOR DRAIN	ZURN	FD2210	-	-	3"	SEE PLAN	6" ADJUSTABLE FLOOR DRAIN, ABS BODY, PROVIDE J.R. SMITH "QUAD CLOSE TRAP SEAL" OR EQUAL
FS	FLOOR SINK	ZURN	Z1900	-	-	SEE PLAN	SEE PLAN	-
GO	GRADE CLEANOUT	ZURN	Z-1400-NL	-	-	3"	-	-
HB	HOSE BIBB	WATTS	SC-6	3/4"	-	-	-	-
IMB	ICEMAKER OUTLET BOX	OATEY	POLYSTYRENE	1/2"	-	-	-	6"x6" HIGH IMPACT POLYSTYRENE WITH QUARTER-TURN BALL VALVE
WH	FROST PROOF WALL HYDRANT	WATTS	LFFHB	3/4"	-	-	-	-

GAS WATER HEATER SCHEDULE

MARK	MFR	MODEL	VOLTS	PHASE	MBH-INPUT	EFFICIENCY	NOTES
GWH-1	RINNAI	C1991	120V	1	199	95%	1. MIN FLOW = 0.4 GPM; MAX FLOW = 9.8 GPM 2. REU-MSB-M COMMERCIAL CONTROLLER 3. NATURAL GAS 4. 140F SUPPLY TEMPERATURE 5. INDOOR UNIT 6. INCLUDE MANUFACTURER'S LOW PROFILE CONCENTRIC VENT TERMINATION KIT, VENT THROUGH SIDEWALL PER MANUFACTURER'S INSTRUCTIONS 7. BOTTOM OF UNIT = 4'-0" AFF
GWH-2	RINNAI	C1991	120V	1	199	95%	1. MIN FLOW = 0.4 GPM; MAX FLOW = 9.8 GPM 2. REU-MSB-M COMMERCIAL CONTROLLER 3. NATURAL GAS 4. 120F SUPPLY TEMPERATURE 5. INDOOR UNIT 6. INCLUDE MANUFACTURER'S LOW PROFILE CONCENTRIC VENT TERMINATION KIT, VENT THROUGH SIDEWALL PER MANUFACTURER'S INSTRUCTIONS 7. BOTTOM OF UNIT = 4'-0" AFF

DESIGN LOAD CRITERIA

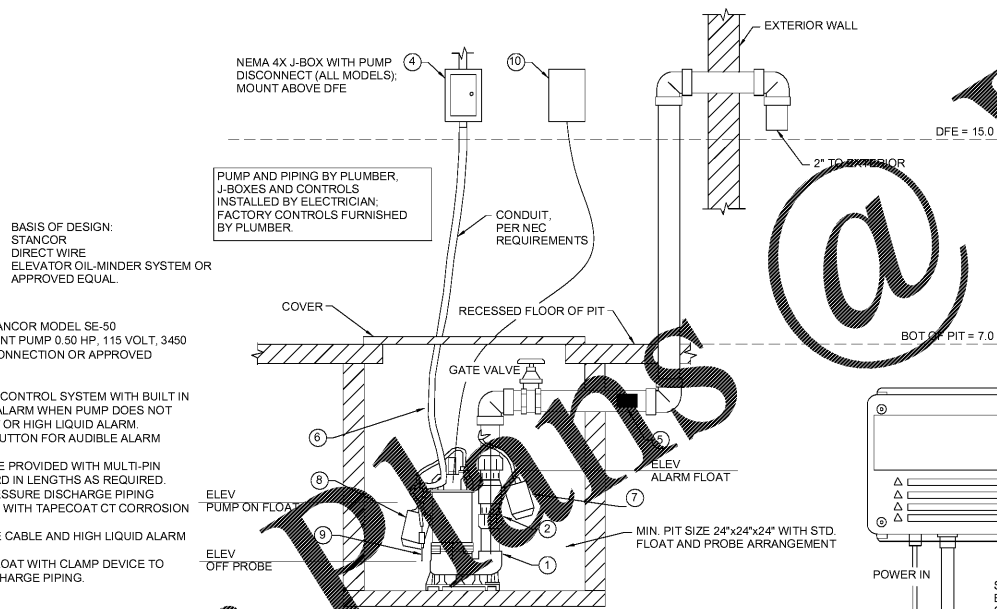
WIND RESTRAINT LOADING		SEISMIC RESTRAINT LOADING						
BASIC WIND SPEED	BUILDING CLASSIFICATION CATEGORY	SITE CLASS	BUILDING CATEGORY	IMPORTANCE FACTOR	RESPONSE MODIFICATION FACTOR	AMPLIFICATION FACTOR	SPECTRAL RESPONSE ACCELERATION (SHORT PERIODS) S _{0.5}	SPECTRAL RESPONSE ACCELERATION (1-SEC PERIODS) S _{0.1}
SEE STRUCTURAL		D	A-2	1.0	SEE STRUCTURAL		0.800G	0.408G

SEISMIC DESIGN CATEGORY D

- GENERAL NOTES
- PER THE 2015 SOUTH CAROLINA BUILDING CODE, MECHANICAL, PLUMBING AND ELECTRICAL EQUIPMENT AND COMPONENTS, INCLUDING THEIR SUPPORTS AND ATTACHMENTS, SHALL BE DESIGNED FOR SEISMIC FORCES IN ACCORDANCE WITH CHAPTER 13 OF ASCE 7-16.
 - EXTERIOR EQUIPMENT (INCLUDING ROOF CURBS AND SUPPORTS) EXPOSED TO WIND SHALL BE DESIGNED AND INSTALLED TO RESIST THE WIND PRESSURES DETERMINED IN ACCORDANCE WITH CHAPTERS 26 TO 29 OF ASCE 7-16.
 - WHERE DESIGN FOR SEISMIC LOADS IS REQUIRED, THE MORE DEMANDING FORCE MUST BE USED.
 - REFERENCE THE STRUCTURAL DRAWINGS FOR SITE SPECIFIC INFORMATION ON SEISMIC DESIGN CATEGORY, WIND SPEEDS, ETC.
 - SEE DESIGN LOAD CRITERIA TABLE FOR SPECIFIC COMPONENT IMPORTANCE FACTOR DESIGNATIONS.
 - USE TABLE BELOW TO DETERMINE SEISMIC RESTRAINT REQUIREMENTS FOR EACH COMPONENT.
 - FOR ALL COMPONENTS REQUIRING SEISMIC RESTRAINT, THE COMPONENT SUPPORTS AND ATTACHMENTS SHALL BE DESIGNED BY A REGISTERED DESIGN PROFESSIONAL.
 - SEISMIC RESTRAINTS FOR DUCTWORK AND PIPING MUST BE SHOWN ON LAYOUT DRAWINGS FOLLOWING SPECIFIC RESTRAINT LOCATIONS ALONG WITH ACCOMPANYING DETAILS AND CALCULATIONS.

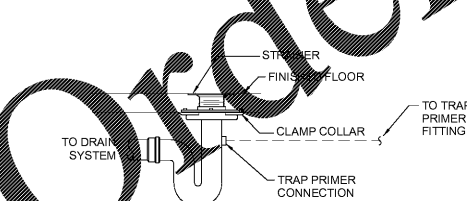
COMPONENT IDENTIFICATION	COMPONENT IMPORTANCE FACTOR (R)	
	SEISMIC RESTRAINT REQUIREMENT	ASCE 7-16 REFERENCE
ROOF MOUNTED	RESTRAIN ALL (SEE NOTE 1)	13.1.4.6
FLOOR MOUNTED	RESTRAIN ALL (SEE NOTES 1,2)	13.1.4.6
WALL MOUNTED	RESTRAIN ALL (SEE NOTE 1,2)	13.1.4.6
COMPONENT SUPPORTS	RESTRAIN ALL (SEE NOTE 1)	13.6.5
SUSPENDED EQUIPMENT	PIPE W/ DUCT/PIPE	RESTRAIN IF >75 LBS PROVIDE FLEX. CONN. (SEE NOTE 3)
	NOT PIPE W/ DUCT/PIPE	RESTRAIN ALL (SEE NOTE 1)
SUSPENDED DUCTILE PIPING (STEEL, ALUMINUM, COPPER, ETC.)	RESTRAIN IF > 3"	13.6.8.3.3.c
SUSPENDED NON DUCTILE PIPING (CAST IRON, PLASTIC, CERAMIC)	RESTRAIN ALL (SEE NOTE 4)	13.6.8.3.3
SUSPENDED PIPE ON TRAPEZE	RESTRAIN IF ANY PIPE ON TRAPEZE > 3" RESTRAIN IF TOTAL WEIGHT OF PIPES ON TRAPEZE > 10 LBS/FT (SEE NOTE 4)	13.6.8.3.1
DUCTWORK	RESTRAIN IF > 8.0 FT. AND > 17 LBS/FT (SEE NOTE 4.5)	13.6.7
MULTIPLE DUCTS ON TRAPEZE	RESTRAIN IF TOTAL WEIGHT OF DUCTS ON TRAPEZE > 10 LBS/FT (SEE NOTE 4.5)	13.6.7
SINGLE CONDUIT	RESTRAIN IF > 2.5" (SEE NOTE 4)	13.6.5.6
CABLE TRAY/DUCT/ TRAPEZED CONDUIT	RESTRAIN IF TOTAL WEIGHT OF RACEWAY > 10 LBS/FT (SEE NOTE 4)	13.6.5.6
PENDANT, LAY-IN & CAN LIGHTS	REQUIRED (SEE NOTE 6)	13.5.6.2
COMPONENT CERTIFICATION	NOT REQUIRED	13.2.2

- TABLE NOTES
- EQUIPMENT 20 LBS. OR LESS IS EXEMPT IF THE COMPONENT IS POSITIVELY ATTACHED TO THE STRUCTURE, AND FLEXIBLE CONNECTIONS ARE PROVIDED BETWEEN THE COMPONENT AND ASSOCIATED DUCTWORK, PIPING, AND CONDUIT.
 - RESTRAINTS ARE NOT REQUIRED IF THE COMPONENT WEIGHS 400 LBS. OR LESS, IS MOUNTED WITH THE CENTER OF MASS AT 4 FT. OR LESS ABOVE A FLOOR, IS POSITIVELY ATTACHED TO THE STRUCTURE, AND HAS FLEXIBLE CONNECTIONS BETWEEN THE COMPONENT AND ASSOCIATED DUCTWORK, PIPING, AND CONDUIT.
 - FLEXIBLE CONNECTIONS REQUIRED FOR PIPE CONNECTIONS ONLY.
 - RESTRAINT IS NOT REQUIRED IF THE PIPING/DUCTWORK/CONDUIT IS SUPPORTED BY HANGERS AND EACH HANGER IN THE PIPING RUN IS 12 IN. OR LESS IN LENGTH FROM THE TOP OF THE PIPE TO THE SUPPORTING STRUCTURE. WHERE PIPES ARE SUPPORTED ON A TRAPEZE, THE TRAPEZE SHALL BE SUPPORTED BY HANGERS HAVING A LENGTH OF 12 IN. OR LESS, WHERE ROD HANGERS ARE USED, THEY SHALL BE EQUIPPED WITH SWIVELS, EYE NUTS OR OTHER DEVICES TO PREVENT BENDING IN THE ROD.
 - ALL DUCTWORK, REGARDLESS OF SIZE, DESIGNED TO CARRY TOXIC, HIGHLY TOXIC, OR EXPLOSIVE GASES OR USED FOR SMOKE CONTROL MUST BE RESTRAINED.
 - THE RESTRAINT OF PENDANT, LAY-IN, & CAN LIGHTS IS ADDRESSED IN ASTM C636 & E580.
 - COMPONENT CERTIFICATION MUST BE SUPPLIED BY THE EQUIPMENT MANUFACTURER AT TIME OF SUBMITTAL FOR REVIEW BY ENGINEER OF RECORD.

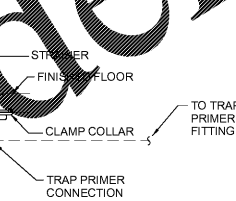


- NOTES:
- BASIS OF DESIGN: STANCOR MODEL SE-50 SUBMERSIBLE EFFLUENT PUMP 0.50 HP, 115 VOLT, 3450 RPM, 2" DISCHARGE CONNECTION OR APPROVED EQUAL.
 - CHECK VALVE.
 - OIL-MINDER 115V, 1PH CONTROL SYSTEM WITH BUILT IN AUDIBLE AND VISUAL ALARM WHEN PUMP DOES NOT RUN DUE TO OIL IN PIT OR HIGH LIQUID ALARM. PROVIDE SILENCING BUTTON FOR AUDIBLE ALARM BUILT INTO PANEL.
 - JUNCTION BOX WILL BE PROVIDED WITH MULTI-PIN CONNECTOR AND CORD IN LENGTHS AS REQUIRED.
 - ALL BURIED PUMP PRESSURE DISCHARGE PIPING SHALL BE PROTECTED WITH TAPECOAT CT CORROSION PROTECTION TAPE.
 - POWER CABLE, PROBE CABLE AND HIGH LIQUID ALARM CABLE.
 - HIGH LIQUID ALARM FLOAT WITH CLAMP DEVICE TO MOUNT TO PUMP DISCHARGE PIPING.
 - PUMP ON FLOAT.
 - OFF PROBE.
 - REMOTE ALARM.

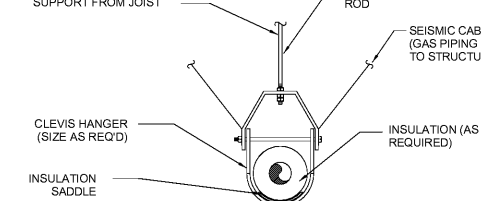
5 SUMP PUMP DETAIL NO SCALE



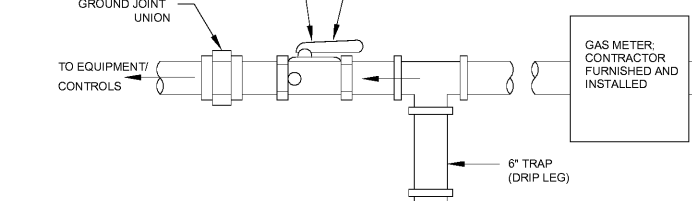
1 FLOOR DRAIN DETAIL NO SCALE



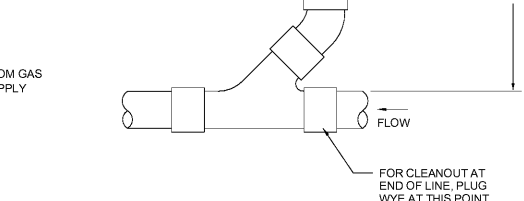
2 PIPE SUPPORT DETAIL NO SCALE



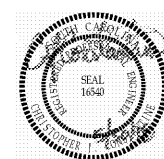
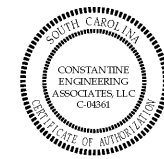
3 GAS CONNECTION TO EQUIPMENT DETAIL NO SCALE



4 GRADE CLEANOUT DETAIL NO SCALE



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BOATING CENTER REDEVELOPMENT - SWAIN BOATING CENTER
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THE MILITARY COLLEGE OF SOUTH CAROLINA

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PLUMBING SCHEDULES & DETAILS
1.P401

BID DOCUMENTS