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enant Improvement ESD112 I Health Facility Phas

Mental |

	PLUMBING EQUIPMENT						
MARK	DESCRIPTION	ELECTRICAL					
<u>WH-1</u>	COMMERCIAL TANKLESS ELECTRIC WATER HEATER: NICKEL CROME ELEMENTS, NO STORAGE TANK, 0.3 GPM FLOW ACTIVATED TURN ON. 18.25 X 12.25 X 0.5" OVERAL DIMENSIONS, THERMOSTATIC TEMPERATURE CONTROL. 5 YEAR WARRANTY. SET TEMPERATURE TO 120 DEG. F. BASIS OF DESIGN: EEMAX ED03248T2T ML	480 VOLT 3 PHASE 32 KW					
HWRP-1	HOT WATER RECIRCULATING PUMP: IN-LINE WITH 1/2" SWEAT UNIONS, PROVIDE WITH AQUASTAT AND DIGITAL TIMER. PROVIDE WITH AQUASTAT AND TIMER. BASIS OF DESIGN: GRUNDFOS UP 15-18 B5/TLC	120V 1/25 HP					

WATER SERVICE PRESSURE LOSS CALCULATION								
Static Pressure:					60			
Total Building Fixture Units Design gpm Flow Rate (Flush Valves)								
Elevation Loss - 11 ft. x .433 psi Flush Valve Required Operating Pressure - psi Water Meter Loss - psi Double Check Valve Loss - psi								
Pressure Loss Available for Branch Piping - psi Design Friction Loss - psi/100 ft 446 ft								
PIPE SIZE inches	GPM	FT FU*	FV FU*	VELOCIT (FPS)	Υ			
1/2"	2	1	-	3				
3/4"	7	8	-	4				
1"	15	21	-	5.5				
1-1/4"	24	39	7	6.5				
1-1/2"	38	78	25	7.5				
2"	74	245	124	8				

FIXTURE	QTY	H2O F.U.'S	H2O F.U. TOTAL	WASTE F.U.'S	WASTE F.U TOTAL
WATER CLOSET, FLUSH VALVE	8	5	40	4	32
WATER CLOSET, FLUSH TANK	1	2.5	2.5	4	4
URINAL	2	4	8	2	4
LAVATORY	6	1	6	1	6
SINK	1	1.5	1.5	2	2
DRINKING FOUNTAIN	1	.5	0.5	.5	0.5
HOSE BIBB	3	1@2.5, 2@1	4.5	-	-
FLOOR DRAIN	6	-	-	2	12
TOTAL			63		62.5

FIXTURE LOAD SCHEDULE (NEW FIXTURES)							
FIXTURE	QTY	H2O F.U.'S	H2O F.U. TOTAL	WASTE F.U.'S	WASTE F.U. TOTAL		
WATER CLOSET, FLUSH VALVE	6	5	30	4	24		
URINAL	2	4	8	2	4		
LAVATORY	4	1	4	1	4		
SINK	5	1.5	7.5	2	10		
FLOOR DRAIN	3	-	-	2	6		
SERVICE SINK	1	3	3	3	3		
BOTTLE FILLER/DRINKING FOUNTAIN	5	.5	2.5	.5	2.5		
TOTAL			55		53.5		

FIXTURE LOAD SCHEDULE AFTER REMODEL						
			H2O F.U. TOTAL		WASTE F.U. TOTAL	
TOTAL			118		116	

	T		1			1	4
MARK	FIXTURE	CW	HW	V	W	BASIS OF DESIGN	4
<u>WC-1</u>	WATER CLOSET, FLUSH VALVE	1-1/4"		2"	4"	AMERICAN STANDARD MODEL 2257.101, "AFWALL" WALL MOUNTED, WHITE VITREOUS CHINA, 1.1 TO 1.6 GPF TOILET. SLOAN ROYAL 111 MANUAL 1.28 GPF, CHROME PLATED FLUSH VALVE. COMMERCIAL HEAVY DUTY OPEN FRONT SEAT WITHOUT LID. FLOOR MOUNTED WALL CARRIER SET TO STANDARD HEIGHT.	
<u>WC-2</u>	WATER CLOSET, FLUSH VALVE, ADA, SEE NOTE 1	1-1/2"		2"	4"	AMERICAN STANDARD MODEL 2257.101, "AFWALL" WALL MOUNTED, WHITE VITREOUS CHINA, 1.1 TO 1.6 GPF TOILET. SLOAN ROYAL 111 MANUAL 1.28 GPF, CHROME PLATED FLUSH VALVE. COMMERCIAL HEAVY DUTY OPEN FRONT SEAT WITHOUT LID. FLOOR MOUNTED WALL CARRIER SET TO ADA HEIGHT.	
U-1 & U-2	URINAL, ADA	3/4"	•	2"	1-1/2"	AMERICAN STANDARD MODEL 6590.001, "WASHBROOK" WALL MOUNTED, WHITE VITREOUS CHINA, 0.125 TO 1.0 GPF URINAL. SLOAN ROYAL 186MANUAL 0.5 GPF, CHROME PLATED FLUSH VALVE. FLOOR MOUNTED WALL CARRIER SET TO ADA HEIGHT.	
			\wedge	<u> </u>			
<u>L-1</u>	LAVATORY, ADA, SEE NOTE 2	1/2"	1/2"	1-1/4"	1-1/2"	AMERICAN STANDARD MODEL 0356.015, "LUCERNE" WALL MOUNTED, CONCEALED ARMED SUPPORT, WHITE VITREOUS CHINA DELTA 591T258 SENSOR OPERATED FAUCET, 0.5 GPM VANDAL RESISTANT AERATOR, THERMOSTATIC MIXING VALVE IN RECESSED MOUNTING BOX. BATTERY OPERATED. FLOOR MOUNTED WALL CARRIER SET TO ADA HEIGHT. GRID STRAINERS.	
<u>S-1</u>	SINK, ADA, SEE NOTE 2	1/2"	1/2"	1-1/2"	2"	ELKAY LUSTERTONE LRAD2918, 18 GAUGE TYPE 304 STAINLESS STEEL, DOUBLE BOWL, 29"X18"X 6"DEEP OVERALL DIMENSIONS, DROP IN SELF RIMMING WITH FAUCET LEDGE HOLE PUNCHED TO MATCH FAUCET. DELTA 26T3924 CAST BRASS, CHROME PLATED FAUCET WITH GOOSENECK SPOUT 1.5 GPM VANDAL RESISTANT AERATOR AND ADA COMPLIANT BLADE HANDLES. GRID STRAINERS.	
<u>SH-1</u>	SHOWER, ADA	1/2"	1/2"	1-1/2"	2"	FIBERGLASS SHOWER, ADA COMPLIANT MINIMUM 36"X36" INTERNAL DIMENSIONS, PROVIDE WITH ADA GRAB BARS AND FOLD DOWN SEAT. DELTA TI3H153 FORGED BRASS BODY PRESSURE BALANCING VALVE WITH CHECKS AND LIMIT STOP, 1.5 GPMHAND SHOWER WITH VACUUM BREAKER, STAILNESS STEEL SLIDE BAR, ADA LEVER HANDLE	
<u>HB-1</u>	HOSE BIB	3/4"				WOODFORD, B67 FREEZE PROOF HOSE BIB WITH BACKFLOW PREVENTOR AND LOCKING BOX	1
							$\frac{1}{4}$
<u>SS-1</u>	SERVICE SINK	1/2"	1/2"	2"	3" (STERN WILLIAMKS HL-2000, 36"X36"X12" HILOW , TERRAZZO MOP SINIK WITH STAILESS STEEL CAP. DELTA 28T9 CAST BRASS MOP SINK FAUCET WITH VACUUM BREAKER, WALL BRACE, PAIL HOOK, PROVIDE WITH DELTA 28T911 HOSE AND HANGER, 28T910 MOP HOLDER.	
<u>FD-1</u>	FLOOR DRAIN			1-1/2"	2"	JAY R SMITH 2009C-P050-U FLOOR DRAIN. PROVID AUTOMATIC TRAP PRIMER AND PRIMING LINE.	
<u>S-2</u>	SINK	1/2"	1/2"	1-1/2"	2"	ELKAY LUSTERTONE LRAD22219L, 18 GAUGE TYPE 304 STAINLESS STEEL, DOUBLE BOWL, 22"X19-1/2"X 6"DEEP OVERALL DIMENSIONS, DROP IN SELF RIMMING WITH FAUCET LEDGE HOLE PUNCHED TO MATCH FAUCET. DELTA 26T3924 CAST BRASS, CHROME PLATED FAUCET WITH GOOSENECK SPOUT 1.5 GPM VANDAL RESISTANT AERATOR AND ADA COMPLIANT BLADE HANDLES. GRID STRAINER.	
DE-1	BOTTLE FILLING STAITION WITH DRIINKING FOUNTAIN	1/2"		1-1/2"	2"	ELKAY LZS8WSSK eZHZ20 BOTTLE FILLING STATION AND DRINKING FOUNTAIN WITH SINGLE ADA COOLER. FILTERED, REFRIGERATED, STAINLESS STEEL CABINET. 120 VOLT, STAMPS	
DF-2	DUAL HIEGHT DRINKING FOUNTAIN WITH BOTTLE FILLING STATION.	1/2"		1-1/2"	2"	ELKAY LZSTL8WSLK ezHZ20 BOTTLE FILLING STATION AND DUAL HIEGHT DRINKING FOUNTAIN. FILTERED, REFRIGERATED, STAINLESS STEEL CABINET. 120 VOLT, 6 AMPS.	
<u></u>	ELECTRONIC TRAP PRIMER	1/2"		1-1/2	2"	ELECTROMIC TRAP PRIMER, LISTED AND CERTIFIED TO ASSE 1044, SOLEMOID ACTUATING DEVICE, VACUUM BREAKER, ASSE 1010 WATER HAMMER ARRESTER, ADJUSTABLE FREQUENCY AND DURATION OF PRIMING OPERATION, CAPABLE OF SERVING UP TO 8 DRAINS. REFER TO DRAWINGS FOR NUMBER OF DRAINS SERVED AND PROVIDE APPROPRIATE SPLITTER AND ACCESSORIES TO SERVE MULTIPLE DRAINS. ELECTRICAL REQUIREMENTS: 120 V SUPPLY, 9.2 WATTS, 18 GA. WIRE SIZE.	

_____ - ____ CW **COLD WATER** PIPE BELOW FLOOR OR GRADE HOT WATER RECIRCULATED HOT WATER _____ SANITARY WASTE ABOVE FLOOR OR GRADE SANITARY WASTE BELOW FLOOR OR GRADE CLEANOUT TO GRADE FLOOR CLEANOUT WCO,CO WALL CLEANOUT, CLEANOUT SHUTOFF VALVE, BALL VALVE BALANCING VALVE PIPE UP PIPE DOWN

INVERT ELEVATION ABOVE FINISHED FLOOR ABOVE FINISHED GRADE BELOW FINISHED FLOOR TYP TYPICAL SOPSC STATE OF OREGON PLUMBING SPECIALTY CODE VTR VENT THROUGH ROOF DN DOWN

ABANDON CONNECT TO EXISTING EXISTING TO REMAIN CAP OR PLUG

RELOCATE REMOVE EXISTING

- (3) INSTALL ALL PLUMBING WORK SO AS TO AVOID INTERFERENCE WITH ELECTRICAL AND MECHANICAL EQUIPMENT AND STRUCTURAL FRAMING
- EQUIPMENT, CABINETS, ETC., AND THE ARCHITECT PRIOR TO ANY INSTALLATION.
- 7) ALL WASTE PIPING SHALL SLOPE AT 1/4" PER FOOT UNLESS OTHERWISE INDICATED.
- (9) ROUTE ALL PIPING ON THE WARM SIDE OF BUILDING ENVELOPE INSULATION.
- 11) PRIME ALL FLOOR DRAINS, DECK DRAINS AND FLOOR SINKS.
- (2) COORDINATE THE LOCATION OF ALL CEILING ACCESS PANELS WITH ARCHITECTURAL REFLECTED CEILING PLANS AND LIGHTING LAYOUT.
- ALL PIPING DISCHARGING INTO FLOOR SINKS AND/OR FLOOR DRAINS TO HAVE A MINIMUM AIR GAP AS REQUIRED BY LOCAL CODES AND ARRANGED TO PERMIT EASY REMOVAL OF FLOOR SINK BASKET STRAINERS.
- (14) BEFORE FABRICATION OR INSTALLATION, VERIFY EXACT LOCATIONS OF ALL MECHANICAL EQUIPMENT AND OTHER EQUIPMENT PROVIDED UNDER OTHER SECTIONS OF THE SPECIFICATION. COORDINATE EXACT ROUGH-IN LOCATIONS AND REQUIREMENTS IN THE
- (15) INSTALL ALL VALVES, TRAP PRIMERS, WATER HAMMER ARRESTORS AND OTHER EQUIPMENT SHOWN IN WALLS OR ABOVE NON-ACCESSIBLE CEILINGS BEHIND AN ACCESS PANEL. COORDINATE LOCATION OF VALVES ABOVE CEILING WITH HVAC AND OTHER TRADES TO INSURE EASY ACCESSIBILITY. VALVES LOCATED ABOVE CEILING SHOULD BE ACCESSIBLE WITH IN ARMS REACH OF LADDER.

PLUMBING LEGEND

SYMBOLS

GENERAL PLUMBING NOTES

- ① OBTAIN EXACT LOCATIONS AND MOUNTING HEIGHTS OF PLUMBING FIXTURES FROM ARCHITECTURAL DRAWINGS.
- 2) SEE ARCHITECTURAL DRAWINGS FOR A.D.A. COMPLIANT FIXTURE LOCATIONS AND MOUNTING HEIGHTS.
- 4 INSTALL ALL CLEANOUTS WHERE READILY ACCESSIBLE AND AS PER SECTION 707 AND 719 OF THE SOPSC. COORDINATE ALL CLEANOUT LOCATIONS WITH
- 5 ALL VALVES, UNIONS, ETC. TO BE SAME SIZE AS LINE SIZE UNLESS OTHERWISE INDICATED ON DRAWINGS.
- 6 PROVIDE UNIONS AFTER EACH SCREW TYPE VALVE AND PRIOR TO EQUIPMENT CONNECTIONS.
- 8 ALL WORK AND MATERIALS SHALL BE IN FULL ACCORDANCE WITH THE LATEST RULES AND REGUALTIONS OF ANY STATE OR LOCAL LAWS OR ORDINANCES. OBTAIN AND PAY FOR ALL REQUIRED PERMITS, LICENSES, CODE INSPECTIONS, ECT.
- (10) COORDINATE ALL REQUIREMENTS FOR ALL POINTS OF CONNECTION WITH THE GENERAL CONTRACTOR AND OTHER TRADES PRIOR TO BID.

SYSTEM
DESIGN
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Progress set DRAWN: NLB CHECKED: Sheet Title Plumbing Floor Plan Sheet Number

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1) INSTALL FLUSH HANDLE TOWARDS OPEN SIDE OF STALL. 2) PROVIDE INSULATION KIT FOR P-TRAP AND EXPOSED WASTE AND WATER PIPE.