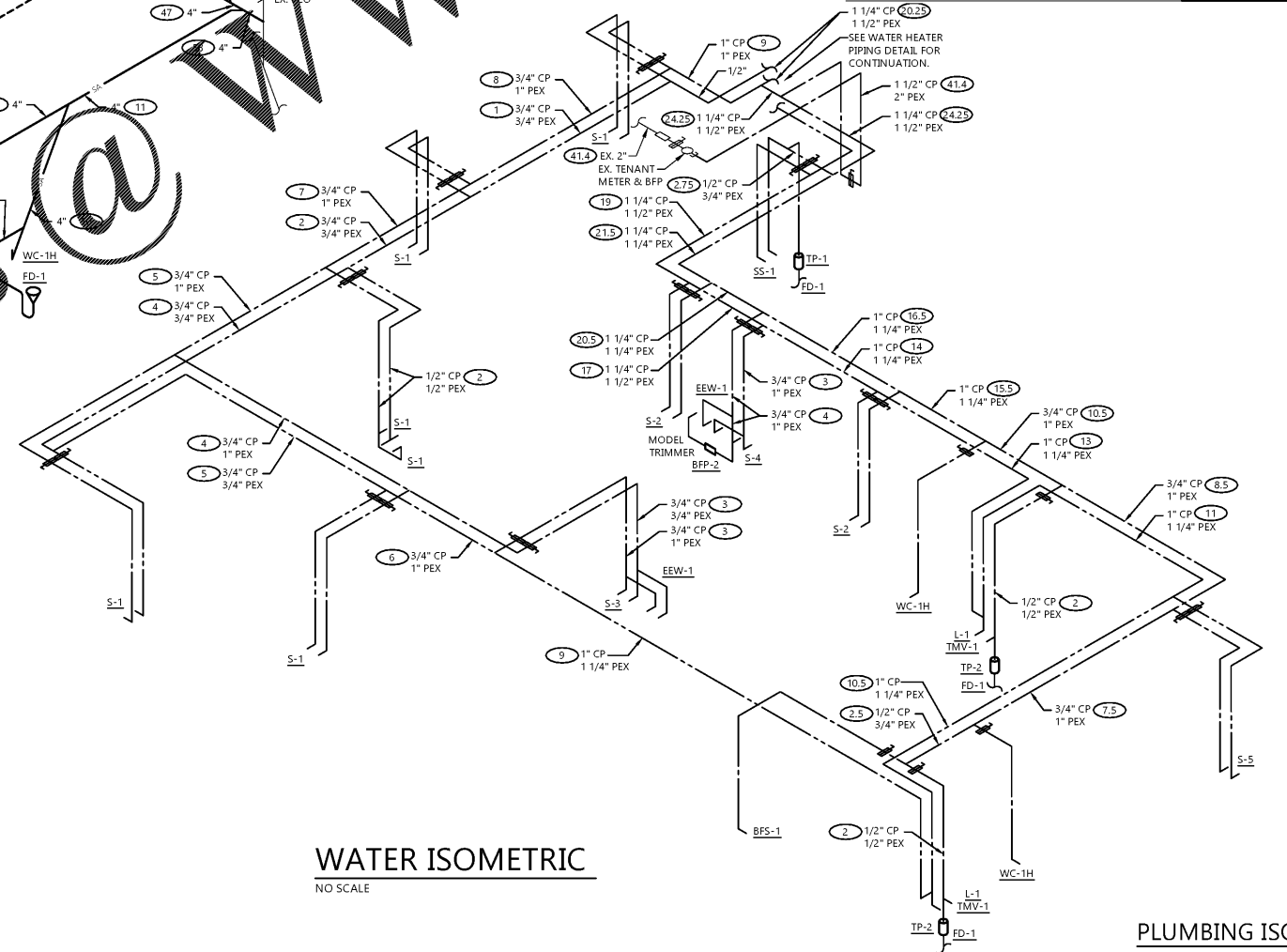


WASTE AND VENT ISOMETRIC
NO SCALE

FIXTURE UNITS

NO.	FIXTURE	WASTE		COLD WATER		HOT WATER		TOTAL WATER		
		UNITS	TOTAL	UNITS	TOTAL	UNITS	TOTAL	UNITS	TOTAL	
1	BOTTLING STATION	1	1	1 1/4"	0.5	0.5	1/2"	-	0.5	0.5
3	FLOOR DRAIN- 3"	5	15	3"	-	-	-	-	-	-
1	HUB OUTLET- 2"	3	3	2"	-	-	-	-	-	-
1	RAM-VAC	5	5	3"	-	-	-	-	-	-
2	LAV	1	2	1 1/4"	1	1 1/2"	1.5	3	1/2"	2
8	SINK- S-1 & 2	2	16	1 1/2"	2	1 1/2"	3	6	1/2"	12
2	SINK- S-3 & 4	2	2	1 1/2"	1	1 1/2"	1	2	1/2"	4
1	SINK- S-5	2	2	1 1/2"	1	1 1/2"	1	2	1/2"	4
1	SINK- SERVICE- 2"	2	2	2 1/2"	2.25	1/2"	2.25	2.25	1/2"	3
2	WATER CLO- TANK	-	-	10	1/2"	-	-	-	5	10
3	TRAP PRIMER	-	-	0.5	1.5	1/2"	-	-	0.5	1.5
1	MODEL TRIMMER	-	-	1	1	1/2"	-	-	-	1
26	TOTAL		58		33.25		20.25		41.4	



WATER ISOMETRIC
NO SCALE

WATER CALCULATIONS

WATER PRESSURE DATA

1	ASSUMED STATIC PRESSURE AT MAIN	60	PSIG
2	ASSUMED RESIDUAL PRESSURE AT MAIN	50	PSIG
3	ASSUMED RESIDUAL FLOW AT MAIN	1000	GPM
4	BUILDING FIXTURE UNITS	41.4	F.U.
5	PREDOMINATE FLUSH TYPE	TANK	
6	CONTINUOUS FLOW GPM	0	GPM
7	BUILDING DEMAND	244	GPM
8	RESIDUAL PRESSURE AT BUILDING DEMAND	60.0	PSIG
9	SAFETY FACTOR	0	PSIG
10	PRESSURE AVAILABLE FOR DOMESTIC USE	60.0	PSIG

WATER SERVICE AND DISTRIBUTION SIZING DATA

11	ELEVATION OF RESIDUAL TEST HYDRANT	100.00	FEET
12	ELEVATION OF WATER METER	105.00	FEET
13	ELEVATION DIFFERENCE TEST HYDRANT TO METER	5.00	FEET
14	WATER METER SIZE	1	INCHES
15	DEVELOPED LENGTH MAIN TO METER	155	FEET
16	WATER SERVICE SIZE	2	INCHES

PRESSURE AVAILABLE AFTER METER

17	PRESSURE DROP BETWEEN MAIN AND METER	0.65	PSIG/100'
18	FRICTION PRESSURE LOSS BETWEEN MAIN AND METER	1.0	PSIG/100'
19	ELEVATION PRESSURE LOSS BETWEEN MAIN AND METER	4	PSIG
20	METER PRESSURE LOSS	4	PSIG
21	BACKFLOW PREVENTER PRESSURE LOSS	13	PSIG
22	PRESSURE AVAILABLE AFTER METER	39.8	PSIG

WATER DISTRIBUTION SIZING - COLD WATER

A	AVAILABLE BUILDING WATER PRESSURE	39.8	PSIG
B	START POINT TAG (SEE ISOMETRIC FOR TAG LOCATION)		
C	DIST. PREVIOUS START POINT TO THIS START POINT		
D	UNIFORM LOSS PREV. START POINT TO THIS START POINT		
E	PIPE PRESSURE DROP FROM METER TO START POINT		
F	CONTROLLING FIXTURE ID:		
G	ELEV. DIFF. BETW. METER AND CONTROLLING FIXTURE		
H	PRESSURE LOSS DUE TO WATER SOFTENER		
I	PRESSURE LOSS DUE TO MIXING VALVE		
J	PRESSURE AVAILABLE FOR PIPING PRESSURE DROP		
K	DEVELOPED LENGTH START PT. TO CONTR. FIXTURE		
L	EQUIVALENT LENGTH START PT. TO CONTR. FIXTURE		
M	PRESSURE AVAILABLE FOR UNIFORM LOSS		

WATER DISTRIBUTION SIZING - HOT WATER

A	AVAILABLE BUILDING WATER PRESSURE	39.8	PSIG
B	START POINT TAG (SEE ISOMETRIC FOR TAG LOCATION)		
C	DIST. PREVIOUS START POINT TO THIS START POINT		
D	UNIFORM LOSS PREV. START POINT TO THIS START POINT		
E	PIPE PRESSURE DROP FROM METER TO START POINT		
F	CONTROLLING FIXTURE ID:		
G	ELEV. DIFF. BETW. METER AND CONTROLLING FIXTURE		
H	PRESSURE LOSS DUE TO WATER SOFTENER		
I	PRESSURE LOSS DUE TO MIXING VALVE		
J	PRESSURE AVAILABLE FOR PIPING PRESSURE DROP		
K	DEVELOPED LENGTH START PT. TO CONTR. FIXTURE		
L	EQUIVALENT LENGTH START PT. TO CONTR. FIXTURE		
M	PRESSURE AVAILABLE FOR UNIFORM LOSS		

GENERAL NOTES:

- SEE UNDERGROUND PLAN AND FIXTURE UNIT SCHEDULE FOR RUNOUT TRAP SIZE TO FIXTURE.
- SEE FIXTURE UNIT SCHEDULE THIS SHEET FOR RUNOUT PIPING SIZE TO FIXTURE.
- AIR ADMITTANCE VALVES NOT PERMITTED (I.E. STUDOR VENT).
- IF PEX IS USED IN LIEU OF COPPER, P.C. SHALL PROVIDE COMPLETE MATERIAL SUBMITTALS (PIPE, FITTINGS, ETC.) TO ASPEN DENTAL MANAGEMENT INC. FOR APPROVAL PRIOR TO INSTALLATION.
- P.C. SHALL PERFORM FIRE HYDRANT FLOW TEST TO VERIFY WATER PRESSURE INFORMATION PRIOR TO INSTALLATION OF ANY WATER PIPING. PROVIDE FLOW TEST INFORMATION TO EXCEL ENGINEERING AND ASPEN DENTAL MANAGEMENT INC. FOR EVALUATION.

Excel
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Phone: (920) 926-9800
www.EXCELENGINEER.com

COLLABORATION
AspenDental

PROJECT INFORMATION

TENANT BUILD-OUT FOR:
ASPEN DENTAL
660 W. LINTON BLVD., STE. 380 • DELRAY BEACH, FL 33444

PROFESSIONAL SEAL

SHEET DATES

ISSUE DATE: MAY 29, 2019

REVISIONS

JOB NUMBER

1931400

SHEET NUMBER

P2.0