

1. A new 1.5" tap and water meter is proposed for building use. (Domestic Water Service)
2. A new 4" tap for the fire line is proposed for sprinkler use. (Fire Line Service)

Domestic Water Service

The preliminary water loading for the building according to preliminary plumbing design is as follows:

WATER FIXTURE LOAD CALCULATIONS						
MARK	FIXTURE OR EQUIPMENT	QUANTITY	WATER			
			CW F.U. PER FIXTURE	HW F U PER FIXTURE	TOTAL WSFU PER TYPE	TOTAL F.U. PER FIXTURE
HWC-1	WATER CLOSET	2	5.0	-	5.0	10.0
L-1	LAVATORY	2	1.5	1.5	2.0	4.0
S-1	HAND SINK	3	1.5	1.5	2.0	6.0
S-2	MOP SINK	1	3.0	3.0	4.0	4.0
S-3	3 COMP. SINK	1	3.0	3.0	4.0	4.0
S-4	PREP SINK	1	1.5	1.5	2.0	2.0
FPWH-1	FREEZE PROOF HOSE BIBB	2	3.0	-	3.0	6.0
C-107	RETHEMALIZER	1	-	1.0	1.0	1.0
P-452	HOT WATER FILTER	2	1.0	-	1.0	2.0
P-315	REVERSE OSMOSIS	1	1.0	-	1.0	1.0
S-286	WATER FILTER	1	5.0	-	5.0	5.0
TOTALS						45.0
MAXIMUM WATER DEMAND AT 45.0 F.U. = 28.0 GPM = 1½" WATER MAIN SUPPLY						

Therefore, the minimum service size is 1-1/2".

According to DSPM Figure 6-1.2 (Average Day Water Demands), the total use for a restaurant in GPD is 1.3 GPD per square foot of gross building area. The preliminary gross building area for the building is 2281 SF. Therefore, the average domestic water demand is 1.3 x 2281 = 2966 GPD (2.1 GPM).

Fire Line Service

The proposed building will be Type VB construction, with an automated fire sprinkler system. In accordance with DSPM 6-1.501, the minimum required fire flow is 1500 GPM. Preliminary estimated sprinkler demand is anticipated not to exceed 250 GPM. Therefore, total flow should not exceed 1750 GPM. See the fire flow test appended to this report.

Please send all direct comments and questions to Josh Graber (GPD Group), at jgraber@gpdgroup.com, 330.572.3521.

Sincerely,

GPD Group, Professional Corporation


 Leonardo A. Sferra, P.E.
 Director of Site Development



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