June 29, 2022

To: Engineering Services
City of Bend

Water and Sewer calculation estimates for 325 Cyber Drive proposed development.

Restaurant, Office, and Residential Estimate: 1,732 gallons per day

1,732 gallons per day / 12 hour per day

144.33 gallons per hour / 60 minute per hour

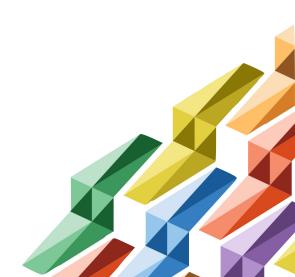
0.016 gallons per minute.

Sincerely yours,

Samantha Freson

STEMACH
DESIGN + ARCHITECTURE
550 SW Industrial Way, Ste. 135

Bend, OR 97702 p: 541.647.5661



Daily Water Use (gal)
240
720
300
113
165
600
2,138
260
555,750
Daily Water Use (gal)
192
576
150
113
165
600
1,796
260
466,830
88,920
-16.0%
Daily Water Hee Igall
Daily Water Use (gal)
18
18
60
123
44,822
Daily Water Use (gal)
12
12
60
111
111
40,442
4,380
-9.8%
5.670

### Suite 101: Restaurant

Fixture Type	Consumption	Daily Uses	Duration	Occupants	Daily Water Use (gal)
1.6 gpf toilet - male (gallons per flush)	1.6	1	1	91.5	146
1.6 gpf toilet - female (gallons per flush)	1.6	3	1	91.5	439
1.0 gpf urinal - male (gallons per flush)	1	2	1	91.5	183
Commercial Lavatory Faucet - 0.5 gpm	0.5	3	0.25	183	69
Kitchen sink - 2.2 gpm	2.2	1	0.25	9	5
Hobart AM15VLT-6 Commercial Dishwasher	0.74	120	0.1	2	18
Total Daily Volume					860
			Annual Work Days		260
Total Annual Usage		223,583			

#### Suite 102: Office

Fixture Type	Consumption	Daily Uses	Duration	Occupants	Daily Water Use (gal)
1.6 gpf toilet - male (gallons per flush)	1.6	1	1	10	16
1.6 gpf toilet - female (gallons per flush)	1.6	3	1	10	48
Commercial Lavatory Faucet - 0.5 gpm	0.5	3	0.25	20	8
Kitchen sink - 2.2 gpm	2.2	1	0.25	8	4
	'		Total	Daily Volume	76
Annual Work Days			260		
Total Annual Usage			19,734		

# Residential Building: All Units

Fixture Type	Consumption	Daily Uses	Duration	Occupants	Daily Water Use (gal)
1.6 gpf toilet	1.6	3	1	108	518
Lavatory Faucet - 2.2 gpm	0.5	3	0.25	108	41
Kitchen sink - 2.2 gpm	2.2	3	0.25	108	178
Showered - 2.5 gpm	2.5	2	1	108	540
Dishwasher - Energy Star	3.8	1	1	40	152
	·		Total	Daily Volume	737
			,		
Annual Work Days			260		
Total Annual Usage			191,646		

# Residential Building: Other

Fixture Type	Consumption	Daily Uses	Duration	Occupants	Daily Water Use (gal)
Kitchen sink - 2.2 gpm	2.2	1	0.25	108	59
Drinking Fountain - 8 gph	0.13	1	1	40	5
Total Daily Volume				59	
Annual Work Days				260	
			Total Annual Usage		15,444

#### Totals

Total Daily Volume (gpm)	1,732
Total Annual Usage	450,407