



BranchPattern

Preliminary calculations show an incoming domestic water pipe size of 2-1/2". The combined domestic and cold water gpm load, calculated using methods described in 2012 IPC, is 72.0 GPM. The main sanitary building drain pipe size is 4".

PROJECT NAME: East Lees Summit Library
 JOB NUMBER: 1013.004
 DATE: August 16, 2018
 CALCULATED BY: DRS
 CHECKED BY: RDH

INTERNATIONAL PLUMBING CODE - 2012									
FIXTURE TYPE	QTY	FIXTURE UNITS PER FIXTURE				TOTAL FIXTURE UNITS			
		WASTE	COLD	HOT	COMB. C/H	WASTE	COLD	HOT	COMB. C/H
Bathroom Group - Priv. FI		5.0	2.7	1.5	3.6	0	0	0	0
Bathroom Group - Priv. FV		6.0	6.0	3.0	8.0	0	0	0	0
Bathtub - Private		2.0	1.0	1.0	1.4	0	0	0	0
Bathtub - Public		2.0	3.0	3.0	4.0	0	0	0	0
Bidet - Private		1.0	1.5	1.5	2.0	0	0	0	0
Dishwashing Mach. - Resid.	1	2.0	0.0	1.4	1.4	2	0	1.4	1.4
Dishwashing Mach. - Comm.		4.0	0.0	6.0	6.0	0	0	0	0
Hose Bibb	8	0.0	1.5	0.0	1.5	0	12	0	12
Drinking Fountain	1	0.5	0.25	0.0	0.25	0.5	0.25	0	0.25
Kitchen Sink - Single	2	2.0	1.0	1.0	1.4	4	2	2	2.8
Kitchen Sink - Double		2.0	3.0	3.0	4.0	0	0	0	0
3 Compartment Sink		3.0	3.0	3.0	5.0	0	0	0	0
Laundry Tray/Tub - Priv.		2.0	1.0	1.0	1.4	0	0	0	0
Lavatory - Private		1.0	0.5	0.5	0.7	0	0	0	0
Lavatory - Public	9	1.0	1.5	1.5	2.0	9	13.5	13.5	18
Service Sink	1	2.0	2.25	2.25	3.0	2	2.25	2.25	3
Shower Valve - Public		2.0	3.0	3.0	4.0	0	0	0	0
Shower Valve - Private		2.0	1.0	1.0	1.4	0	0	0	0
Urinal - 1" FV		4.0	10.0	0.0	10.0	0	0	0	0
Urinal - 3/4" FV	1	2.0	5.0	0.0	5.0	2	5	0	5
Clothes Wash. Mach. - 8		2.0	1.0	1.0	1.4	0	0	0	0
Clothes Wash. Mach. - 15		2.0	3.0	3.0	4.0	0	0	0	0
Clothes Wash. Mach. - C		3.0	4.0	4.0	6.0	0	0	0	0
Water Closet - Private FV		4.0	6.0	0.0	6.0	0	0	0	0
Water Closet - Private FT		4.0	2.2	0.0	2.2	0	0	0	0
Water Closet - Public FV	7	4.0	10.0	0.0	10.0	28	70	0	70
Water Closet - Public FT		4.0	5.0	0.0	5.0	0	0	0	0
Water Closet - FMT		4.0	2.0	0.0	2.0	0	0	0	0
Floor Drain - Emergency		0.0	0.0	0.0	0.0	0	0	0	0
Floor Drain	5	2.0	0.0	0.0	0.0	10	0	0	0
3/8" Supply		1.0	1.0	1.0	1.5	0	0	0	0
1/2" Supply		1.5	1.0	1.0	1.5	0	0	0	0
1/2" CW Supply	3	1.5	1.0	0.0	1.0	4.5	3	0	3
1" Supply		3.0	2.5	2.5	3.0	0	0	0	0

FU Totals:	62	108	19.15	115.45
GPM:		69.7	19.6	72.0
Minimum Pipe Size:	4"	2"	1-1/2"	2-1/2"

*Please note that calculations are based on preliminary design drawings as of 7-30-2018, and may change during the building construction document process