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HYDRAULIC LOAD CALCULATION

Complete the following to determine City Water Service Pipe Size and Private Water Service Pipe Size requirements (see over for instruction)

Table A - Fixture Hydraulic Load Calculation for Water Service Pipe Size:

Single Family Dwelling, Garden Suites or Duplexes

Indicate all buildings or areas serviced by your metered water connection. Each meter connection requires a separate form.

Single Family Dwelling Duplex Secondary Suite Garden Suite

Fixture or Device	Fixture Units (A)	Qty of Fixtures (B)	Load (A x B)
Bathroom Group - three fixtures only (1 toilet, 1 basin and 1 bathtub or 1 shower stall = 1 Bathroom group)	3.6		
Bathtub	1.4		
Clothes Washer	1.4		
Dishwasher	1.4		
Hose babb – ½" (Outside Tap)	2.5		
Sink, bar	1		
Sink, Bathroom (Lavatory or Basin)	0.7		
Sink, kitchen	1.4		
Sink, laundry (1 or 2 compartments)	1.4		
Shower stall (1 shower valve)	1.4		
Water closet (Toilet)	2.2		
Use TOTAL to determine Size Requirements in Tables B and C			TOTAL LOAD =

Table B - Private Water Service Pipe (Private Property)

If existing size is under the proposed total load number, please select the proposed increased size under required.

MAX ALLOWED TOTAL LOAD	Required Pipe Size	<u>Completed by Applicant</u>	
		Existing	Required
7	½"	<input type="checkbox"/>	<input type="checkbox"/>
16	¾"	<input type="checkbox"/>	<input type="checkbox"/>
31	1"	<input type="checkbox"/>	<input type="checkbox"/>
57	1¼"	<input type="checkbox"/>	<input type="checkbox"/>

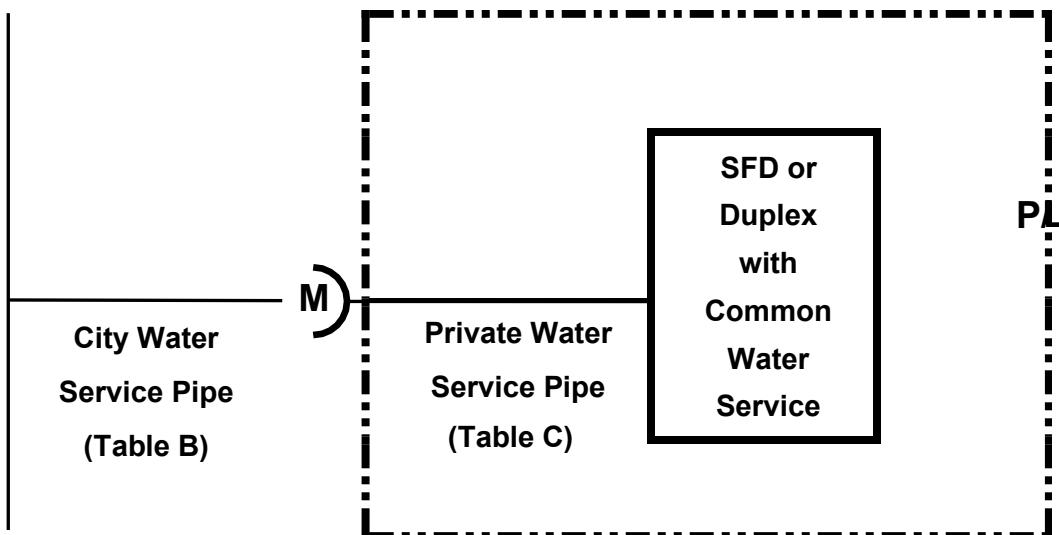
Table C - City Water Service Pipe Size (Street to Property Line)

MAX ALLOWED TOTAL LOAD	Required Pipe Size	Internal Use Only	
		Existing	Required
16.4	Existing ½" (meter size)	<input type="checkbox"/>	<input type="checkbox"/>
23.6	Existing ¾" (meter size)	<input type="checkbox"/>	<input type="checkbox"/>
21	New ¾"	<input type="checkbox"/>	<input type="checkbox"/>
43	1"	<input type="checkbox"/>	<input type="checkbox"/>
146	1½"	<input type="checkbox"/>	<input type="checkbox"/>

Fixture Hydraulic Load Calculation

Water Service Pipe and Meter Size — SFD and Duplexes

Diagram 1



Sizing Procedure

1. Determine TOTAL LOAD value by completing Table A
2. Determine Private Water Service Pipe Size requirements from Table B using TOTAL LOAD from Table A.
3. Determine City Water Service Pipe Size requirements from Table C using TOTAL LOAD from Table A.

Note:

- When completing Table A, include ALL fixture units serviced by a single meter connection. This might include plumbing fixture unit loads for accessory buildings or other features on the property.