



Irrigation System Hydraulic Worksheet

Project Name: **Quik Trip #4273** Date: **April 21, 2025**
Project Location: **Wolfenberger Road & Caprice Drive**

Prepared by: **Matthew McFarling** Current TOCR Registration #

Tap Size **1.00 "** Source of Pressure **City Main**
Static Water Pressure: **43 psi**

Hydraulic Grade At Zone: **0** Company **Irrigation Design & Consulting**

	Ft. of Copper		Pipe Size (")	K Copper	Friction Loss (from chart)	Flow-GPM	Loss/Gain
Service Line to meter):	(tap) 75	LF	1.00	K Copper	4.21 /100 FT	7	3.16
Water Meter:			1.00			7	0.00
Service Line (meter to backflow):	5	LF	1.00	K Copper	4.21 /100 FT	7	0.21
Backflow:			1"		11.6	7	11.60
Master Valve:			1"		1.89	7	1.89

Pressure Required at Head: **20**

Lateral Allowance: **0.00**

Control Valve Allowance: **1.89**

Mainline Allowances:		Length of Mainline	Pipe Material	Size	Gals.			
			LF CL200BE	"@	7	GPM	 /100 FT	0.00
		1020	LF CL200BE	"@	7	GPM-Looped	0.48 /100 FT	4.90

Elevation: Tap elevation **6,168** High/Low: **6,168** 0.00

Green shading indicates required information you must provide

Total System requirements (PSI) 43.64

Available System Pressure (PSI) 43.00

Town of Castle Rock provides a minimum of 43 psi

Total irrigated area for tap # _____ is _____ sq. ft.