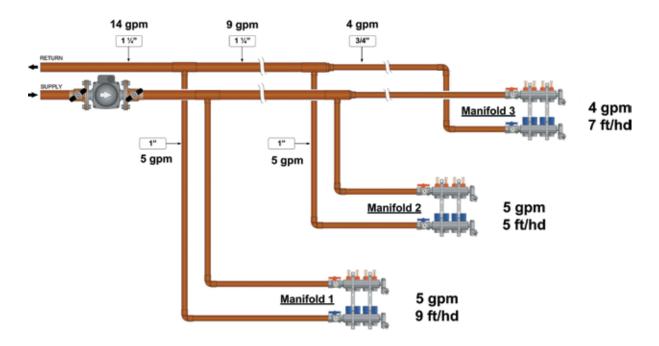
## **INSTALLING MAINS**

## **ROUTING OF MAINS**

There are two methods used to route the mains from the mechanical room to the manifold(s), Home Run or Branch and Tee. The decision of which to use depend on a couple of things. If the manifolds are zoned using zone valves or zone pumps, the Home Run method seems to work best since the zone valve and pumps are typically located in the mechanical room. This method does however utilize more piping for mains. If the manifolds are zoned using actuators, you can use either method. In either method, make sure to size the mains and pump to accommodate the flow for all the manifolds served by that pump, then as you branch off and flow is reduced, you can down size as needed.

Fluid Velocities should be between 1.5 and 4 feet per second for mains 1/2" through 2", and between 1.5 and 5 feet per second for mains 2.5" and larger.

GENERAL GUIDELINES	
GPM	MAIN SIZE
0–4	3/4"
4–8	1"
8–14	1.25"
14–25	1.5"
25–45	2"



Example of zoned loops (Branch System)