

The Village At Discovery Park Zone 1 Public Water Main With Fire Flow At Maximum Day Demand

		ID	Base Demand (gpm)	Base Pressure (psi)	Fire Demand (gpm)	Combined Demand (gpm)	Residual Pressure (psi)
1	<input type="checkbox"/>	J1032	0.00	116.10	0.00	0.00	93.72
2	<input type="checkbox"/>	6112	0.00	91.45	0.00	0.00	68.37
3	<input type="checkbox"/>	6113	156.23	103.10	1,326.00	1,482.23	79.14
4	<input type="checkbox"/>	6128	315.17	91.43	2,674.00	2,989.17	66.80
5	<input type="checkbox"/>	6109	0.00	91.43	0.00	0.00	67.12



11/22/2023

The Village At Discovery Park Zone 1 Public Water Main With No Fire Flow At Peak Hour Demand

		ID	Base Demand (gpm)	Base Pressure (psi)	Fire Demand (gpm)	Combined Demand (gpm)	Residual Pressure (psi)
1	<input type="checkbox"/>	J1032	0.00	92.12	0.00	0.00	92.12
2	<input type="checkbox"/>	6112	0.00	67.66	0.00	0.00	67.66
3	<input type="checkbox"/>	6113	380.48	79.11	0.00	380.48	79.11
4	<input type="checkbox"/>	6128	562.33	67.59	0.00	562.33	67.59
5	<input type="checkbox"/>	6109	0.00	67.61	0.00	0.00	67.61

Water Demand supplied by the proposed 12-inch water main						
368.7	gpm Max Day Demand for 724 apartments					
62.0	gpm Max Day Demand for 40,000 square feet of restaurant space					
8.3	gpm Max Day Demand for 13,500 square feet of fitness space					
3.7	gpm Max Day Demand for 28,000 square feet of office / retail space					
28.7	gpm Max Day Demand for 219 hotel rooms					
471.4	Total Max Day Demand					
942.8	Total Peak Hour Demand					
Fire Flow Requirements						
4,000.0	gpm Maximum fire flow required for a building with a sprinkler system					
	Proposed construction type and size were not available to calculate fire flow requirements					
Divide Max Day Demand and Fire Flow between the following two nodes:						
Node 1268	2,989.4	gpm (Max Day Demand = 315.17 gpm, Fire Flow = 2,674 gpm)				
Node 6113	1,482.0	gpm (Max Day Demand = 156.23 gpm, Fire Flow = 1,326 gpm)				
Divide Peak Hour Demand between the following two nodes:						
Node 1268	562.33	gpm				
Node 6113	380.48	gpm				

