

May 6, 2022

RIDGEHAVEN
Water & Sewer Demand
Overall Water System

SUMMARY

The improvements associated with this project include the construction of 202 single-family residential homes and 96 residential duplexes with associated paving, drainage, and utilities infrastructure.

ANALYSIS

Design Type and Number of Service Connections, Calculation Units, Total Average Daily Flow, and Peak Hour Flow, in the Entire Area to Be Served by the Water and Sewer Mains Being Constructed Under this Project:

WATER				
Type of Service Connection	Water Demand Calculation Units	Average Daily Water Demand Per Service Connection	Total Average Daily Flow (gpd)	Peak Hour Flow ^a (gph)
Single Family Homes	202 units	300 gpd/unit	60,600	7,575
Duplexes	96 units	300 gpd/unit	28,800	3,600
TOTAL WATER DEMAND			89,400	11,175

SEWER				
Type of Service Connection	Sewer Demand Calculation Units	Average Daily Sewer Demand Per Service Connection	Total Average Daily Flow (gpd)	Peak Hour Flow ^a (gph)
Single Family Homes	202 units	281 gpd/unit	56,762	7,095
Duplexes	96 units	281 gpd/unit	26,976	3,372
TOTAL SEWER DEMAND			83,738	10,467

a. Explanation of Peaking Factor(s) or Method(s) Used to Estimate Peak Hour Flow:

Peaking Factor = 3.0 (typical)

Peak Hour Flow = Total Average Daily Flow x 3.0 x (1 day/24 hrs)

Sincerely,

