

ANALYSIS OF IMPACTS TO PUBLIC FACILITIES AND SERVICES

A. Public Water Facilities

Public water shall be provided by the Newport News Waterworks (NNWW) system. The water shall be extended to the site from multiple locations in order to create a looped system. One connection will be to the existing 16-inch water main located along Newman Road at the northwest portion of the proposed development. The other connection will be provided by jack and bore under the interstate to tie into the existing 12-inch water main at the end of Oaktree Road at the southern end of the proposed development. Per coordination with NNWW, the proposed looped system along with internal waterlines constructed on site will provide the required demand for the various uses proposed within the development, including a future school site at the eastern portion of the site.

In addition to providing water service for the proposed development, through coordination with NNWW we will provide waterline extensions for the adjacent Skimino Hills subdivision at two locations (near Indiana Lane and Wichita Lane). These connections will significantly increase flows and pressures within the adjacent subdivision.

A more detailed water analysis will be conducted prior to or with the final site plan. NNWW will then update their water model in order to examine volume and pressures throughout the immediate water system area.

B. Public Sewer Facilities

Sanitary sewer service is provided to the site by a proposed on-site gravity sewer collection system which will convey wastewater flows to multiple existing off-site and proposed on-site sewage pumping stations. The two on-site sewage pumping stations shall convey the wastewater through a proposed force main to the existing off-site pump station (LS#72) located along Newman Road. A portion of the site that does not direct flows to the proposed on-site pump stations will be designed to send sewage flows directly to the two nearby existing pump stations via gravity sewer.

Per coordination with York County, the existing pump station (LS#72) at Newman Road has been designed to handle the flows associated with this development. The only reason on-site pump stations are proposed is due to the existing terrain and wetlands associated with the large tract of land.

All system components shall be designed to York County standards for acceptance into the York County system. Please find below "Table 1" which shows the anticipated sewage flows for the project.

Table 1 – Projected Wastewater Flows from Fenton Mill

Type of Development	No. of Units	Flow (GPD/Unit)	Average Daily Flow (GPD)	Duration (hrs)	Avg. Flow (GPM)	Peak Flow (GPM)
RESIDENTIAL						
Single-family and Townhome Units	736	310	228,160	24	158.44	396.10
Active Adult Units	100	225	22,500	24	15.63	39.08
Subtotal	836		250,660		174.07	435.18
NON-RESIDENTIAL						
Clubhouse (x2)	7,500 sf	0.2	1,500	16	1.56	4.68
Commercial	40,000 sf	0.2	8,000	12	11.11	33.33
Elementary School	550 students/faculty	10	5,500	8	11.46	34.38
Subtotal			15,000		24.13	72.39
TOTAL			265,660		198.20	507.57

C. Fire Protection and Emergency Services

There are currently six (6) fire stations providing fire protection and Emergency Medical Services (EMS) services to York County with support from James City County and the City of Williamsburg. Five (5) of the stations are located within a reasonable distance to the project site from the three Jurisdictions. Three of the five stations are located in James City County, one in York County, and one in the City of Williamsburg. The closest fire station to the project site is York County Station #5, 2000 Newman Road, which is immediately adjacent to the subject property.

Response time to the site is well within appropriate limits if an emergency event occurs which requires additional fire and life safety support. The mutual aid agreement between these municipalities affords the future residents of the project more than adequate response to potential emergencies.

D. Solid Waste

The proposed development on the subject property will generate solid wastes that will require collection and disposal to promote a safe and healthy environment. Collection of solid waste will be handled by County waste pick-up with both trash and recyclable materials being removed from the site to a solid waste transfer station.

E. Utility Service Providers

Virginia Natural Gas, Dominion Virginia Power, Cox Communications and Verizon Communications provide, respectively, natural gas, electricity, cable TV service, and telephone service to this area. The current policy of these utility service providers is to extend service to the development at no cost to the developer when positive revenue is identified; plus, with new land development, these utility service providers are required to place all new utility service underground.

ANALYSIS OF STORMWATER MANAGEMENT

This project is not located within the York County Watershed Management and Protection Buffer and is also not located within a designated Watershed Protection Area. The project does fall within the Resource Management Area (RMA) and therefore water quality (and quantity) will be provided through on-site stormwater management facilities.

Stormwater management for the site shall be met primarily through the installation of a combination of BMPs (wet ponds and dry ponds) as well as the dedication of a large amount of natural open space. The proposed BMPs will provide both flow attenuation and pollutant removal for the project in accordance with the Virginia Runoff Reduction Method (VRRM). This plan achieves the required pollutant removal through the combination of the proposed BMPs and significant natural open space. A copy of the VRRM worksheet is provided with the rezoning package.