
Water Supply and Wastewater Treatment

Customer: Lakeview Estates
Location: Carroll County, MD



Description:

Lakeview Estates is a small residential community in the Liberty Lake watershed, tributary to the Chesapeake Bay. HTG has provided the support needed to bring the water and wastewater systems into compliance with Maryland Department of Environment requirements for small community facilities. An innovative wastewater system has significantly reduced nutrient impacts to the watershed.

The water system upgrades included a new back-up supply well and treatment system improvements for disinfection and pH adjustment. The wastewater system upgrades included inflow and infiltration (I&I) smoke-testing and piping repair, a new low-profile treatment plant, and a unique drip/sand mound disposal system. We designed and built the plant to be in compliance with stringent discharge standards at an economical cost, using a high-efficiency continuous process of single-sludge/extended aeration with denitrification driven entirely by a single blower. The waste-water pressure distribution system maintains even dispersal across six zones over the drip-mound. The system is now exceeding performance requirements.

HTG Innovations:

- Identified, completed, and submitted all Carroll County Health Department and MDE permit applications, including NPDES permits, local building permits, and MDE construction permits.
- Potable water and wastewater sampling and analysis.
- Wastewater system design and construction permitting.
- Contracting, construction oversight, and mechanical, pump, blower, controls, and piping installation, with remote monitoring capability.
- Preparation of Operations & Maintenance Manual and ongoing operations support.
- Continued MDE compliance monitoring.

