

**Mark Dougherty, P.E.**



## **Engineering Experience**

**Professional Registration: New York, Pennsylvania, Virginia**

### **Representative Experience:**

**Project Engineer**, Anderson and Associates, Inc., Blacksburg, VA, September 1999 - September 2000

Preliminary Engineering Report, Pulaski County, Virginia. Prepared a preliminary engineering report to provide sewer service to the Orchard Hills and Vista subdivisions and assisted the County with the preparation of a funding application for the project.

Roadway and Utility Plans, Villas at the River Townhomes, Pulaski County, Virginia. Completed design plans and specifications for a 5.5-ac site for 34 townhomes in the new Heron's Landing subdivision, an exclusive golfing community in Pulaski Co., situated along the bluffs of the New River. Plans and specifications included roadway, drainage, and grading plans, as well as a utility plan, water and sewer line profiles, and an erosion and sedimentation control plan. The unique feature of this site is the high density of housing units and associated drainage and utility lines required, including almost complete underground conveyance of roof runoff to the storm water drainage system. An 8' wide walking path surrounds the back side of the site as part of a 25' vegetated greenway.

Water and Sewer Improvements, Floyd-Floyd County Public Services Authority, Floyd County, Virginia. Prepared the Agreement for Engineering Services for a Combined Water and Sewer Project in the town of Floyd, including utility service for the proposed Floyd Regional Commerce Center industrial park. This project is funded in part by Rural Development through loans and grants. Water improvements include about 4500 L.F. of 8" water main, about 20 new services, a new pump station, 200,000-gallon storage tank, painting of the town's existing water tank, and a chemical feed system at the town's well heads. Sewer improvements include approximately 4600 L.F. of 8" gravity sewer line, approximately 4 new service connections, and an extensive upgrade to the Floyd WWTP, including several new rotating biological contactors, upgraded disinfection facilities, and a sludge dewatering system.

**Staff Engineer**, Natural Resource, Agriculture, and Engineering Service, Ithaca, NY, March 1995 - August 1998

Wrote and edited national engineering publications. As part of Cooperative Extension team, helped organize large (200-300 person) educational conferences. Communicated with regional and national extension specialists to compile and edit technical manuscripts. Passed New York State Professional Engineering examination (Sanitary and Structural), 1996.

**Assistant Design Engineer**, Hayter Engineering, Inc., Paris, TX, June 1990 - June 1993

Designed water and wastewater improvements for towns and rural communities. This has included the preparation of construction drawings and technical specifications for wastewater lines, elevated storage tanks, booster pumping stations, water transmissions mains, and wastewater plant upgrades. Prepared preliminary engineering reports and master studies, including facilities inspections, population projections, and drainage studies. Designed pipe bridge crossings, water pipe encasements, and hydraulic flow monitoring systems, including weirs and flumes. Wrote and submitted studies in compliance with state and federal environmental regulations, including; Registration of a Land Application for Beneficial Use Site, Water Balance and Storage Volume Requirements for Irrigation of Effluent, Sludge Management Plan, Wastewater Discharge Permit Application, and Fluoride Tracer Study.

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