

**Terrells Ridge Subdivision
Water and Wastewater System Descriptions
January 2007**

Introduction

Chatham Landholdings (CL) has submitted for sketch review the plans for a subdivision named Terrells Ridge consisting of 106 lots on 206 acres.

Water supply system

The subdivision is to have a community water supply system consisting of two wells, at grade storage tank and supporting pumps and filters. We hope to be able to incorporate fire hydrants into the distribution system.

One of the two wells is existing and yields 55 gallons per minute. The second well location is identified on the sketch drawing for the Property. A one hundred feet setback has been established on the sketch drawing for each well.

Water from the wells will be pumped to the at-grade storage tank to be located on the north end of the Property. The north end of the Property is approximately 200 feet higher than the south end thereby allowing gravity feed from the tank to the most of the rest of the neighborhood.

Should the second well not have the yield anticipated then CL has several contingency plans. First, there are other open areas within the neighborhood which would be suitable for installation of a well. Second, we have arranged with Gloria Ripperton, owner of Terrell's Creek Farm and adjacent property owner to Terrells Ridge, to purchase her well, which produces 65 gallons per minute, and then provide Ms. Ripperton with water from the community supply.

Permitting for the water supply system in Terrells Ridge will be from the State of North Carolina.

Wastewater system

Terrells Ridge will have individual conventional septic systems permitted through the County on about 36 of the lots. The remaining 70 lots will use community subsurface drip infiltration systems.

This community subsurface system is an engineered system approved by the State and permitted by the State. Each house will have a collection tank, pump tank, and pump. Wastewater from the house will be pumped into a common force main running along the street to the treatment system located near the subsurface infiltration fields. The wastewater is biologically pretreated in a series of treatment tanks and a recirculation

tank. Treated wastewater is then pumped by the dosing pumps to the subsurface infiltration fields for disposal. There will be no surface application of wastewater.

In addition, as this is an engineered system, each subsurface field must be tested and evaluated by a licensed soil scientist and the treatment system itself must be designed and stamped by a professional engineer. The soil testing work is extensive and includes onsite tests at each application field. This includes hydraulic testing of the soil, slope analysis, CAD simulation of infiltration line layouts, in addition to the more routine tests of determining soil types and depth.

Being very conservative with the existing soils data, we have estimated that 70 lots can be served by the community subsurface systems. However, the testing required by the State for permitting may show that all 106 lots can be supported by the community system. If the testing shows more lots can be supported then CL would strongly consider switching the lots with conventional septic systems to the community system.

Utilities and Community Lighting

Terrells Ridge is designed to incorporate underground utilities throughout the entire neighborhood. CL is exploring the feasibility of installing a digital coax and/or fiber optic cable ring throughout the community to be positioned for future high-speed interconnectivity service(s) as they may become available from either BellSouth or other providers to this region of Chatham County.

Terrells Ridge will incorporate attractive street lighting throughout the community. The style and type of lighting has not been determined at this time, however, selection criteria will be in keeping with the ambiance of the overall community. Terrells Ridge will provide matching USPS mail boxes to every lot as well. Again, the style has not yet been determined, but will be in keeping with the neighborhood ambiance.