



Experts in non-sewered development

■ CASE STUDY:

Coweta Crossroads Coweta County, Georgia

Coweta Crossroads Shopping Center

Facilities:

Opening in the fall of 2001, Coweta Crossroads is a multi-use retail shopping center that serves a growing population south of Atlanta in Coweta County Georgia. The center is anchored by a 65,000 ft² Publix Supermarket and includes a diverse tenant mix heavily weighted to food service establishments. Aronov Realty Management, developer and owner, contracted with NCS Wastewater Solutions to design, build and provide ongoing operations management for a private wastewater treatment and dispersal system at the site.

Food Service Tenants:

- Publix Supermarket
- Chic-fil-A Restaurant
- Wendy's Restaurant
- Zaxby's Restaurant
- Waffle House Restaurant
- Papa John's Pizza
- Jersey Mike's Sub Shop
- China Kitchen

Non-Food Service Tenants:

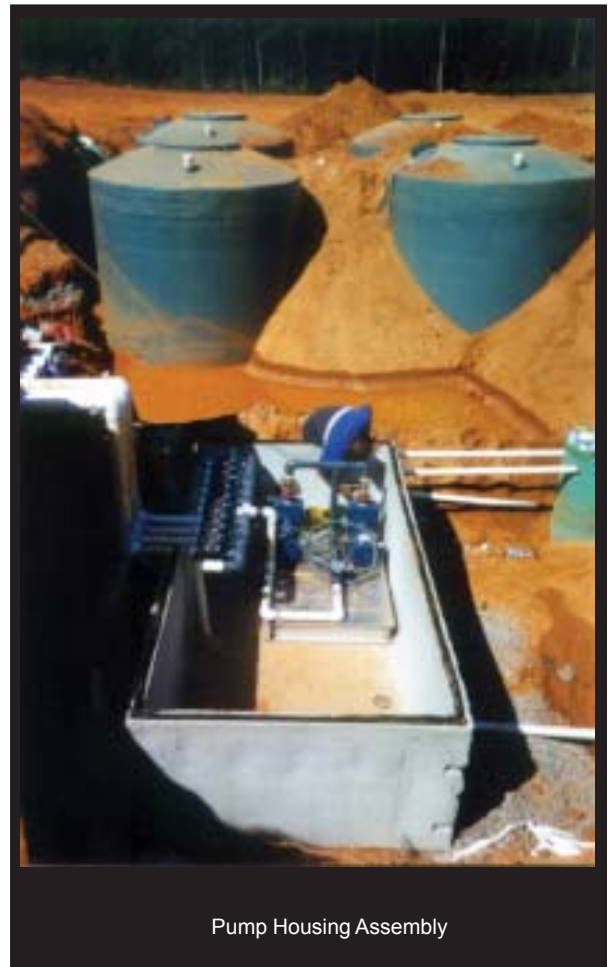
- Bank of America
- Flag Bank
- Cache Cleaners
- Jan's Hallmark
- The UPS Store
- Movie Gallery
- Dollar General
- Tanning, Hair & Nail Salons
- Other General Retail

Special Challenges:

The site has no sewer access and limited land availability for land application of treated wastewater onsite. In addition, the tenant profile is heavy to food service establishments that produce very high strength waste requiring special treatment. A groundwater discharge permit through Georgia Environmental Protection Division (EPD) requires tight standards for limiting Nitrogen discharged to groundwater.



Concrete Tank Foundation



Pump Housing Assembly

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The Solution:

To provide pretreatment and eliminate heavy concentrations of oils and grease in the waste stream, NCS specified the use of Nibbler® high strength pretreatment units. Bioclere® trickling filters were installed to provide reliable secondary treatment and nitrogen reduction to < 15 mg/L total N. A Surflo Control System provides automated dosing controls to the drainfield separated into 10 zones. Shallow gravel trenches installed in the drainfield optimize the hydraulic capacity of the soils and minimize the land area required for wastewater dispersal.

Coweta Crossroads Sewer LLC was formed as the organization entity responsible for providing sewer utility services to the site with NCS providing ongoing operations management.

Results:

After four years of operation and based on monthly discharge monitoring reports submitted to Georgia EPD over this period, following are the treatment facility performance results:

	Permit Limit	Actual Results
BOD ⁵ (mg/L)	50	18.2
TSS (mg/L)	50	16.7
Total N	15	10.4



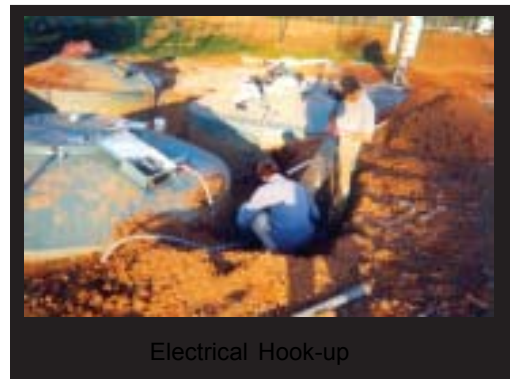
Pressure Distribution



Treatment Operation



Bioclere® Installation



Electrical Hook-up