



# Aquaworx™ IPC Panel and Plastic Septic Tanks from Infiltrator® Help Overcome Shallow Water Table Issues on Small Lot

## Project Name

Lisa & Jerry McClendon Residence  
Cordele, Georgia

## Installation Date

Summer 2011

## Contractor

Brian Lucas  
Lucas Soil Evaluation  
Cordele, Ga.  
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## System Designer

Matt Vinson,  
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## Health District

Georgia Dept. of Public Health  
Crisp County Health Department



A small lot on Lake Blackshear point in Cordele, Georgia sat vacant after several potential buyers unsuccessfully attempted to get a septic permit from the Crisp County Health Department. A shallow water table, less than 12,000 sf, of total space, and only a 50-foot setback to the lake made squeezing in a primary and replacement drainfield tricky. New owners determined to build a two-bedroom seasonal cabin on the lot turned to Matt Vinson of Vinson Septic Systems for help.

In his design of the system, Vinson had to accommodate the 50-foot setback from the lake, the County requirement for alternative systems to have replacement drainfields, a water table at only 20 inches below grade, and the intermittent usage of the cabin. Conventional systems were considered but space limitations prohibited enough square footage for a primary and the required replacement drainfield area and a mound system wasn't desirable due to limited space for the drainfield and required side slope.

Vinson chose a peat fiber biofiltration pretreatment system from Anua with direct discharge paired with a 1000-gallon plastic septic tank and a 500-gallon dosing tank, both from Infiltrator Systems, and an Aquaworx by Infiltrator Intelligent Control Panel.

Wastewater flows by gravity through 4-inch PVC pipe to the septic tank, then into the dosing tank. Every two hours, the pump in the dosing tank sends 25 gallons through a 1.5-inch PVC Schedule 40 force main to the modules. Effluent trickles down 30 inches of packed peat fiber to a 6-inch-deep gravel layer at the bottom of the modules before entering the gravel absorption bed. Microorganisms living on the media go dormant when the cabin is vacant and reactivate to optimal performance levels shortly after the homeowners return.

Vinson selected the Aquaworx IPC (Intelligent Pump Control) timed dose control panel for system control and monitoring. Designed specifically for the onsite industry, the IPC Panel leverages simple pressure transducer technology for the enhancement of pump system performance, and ease of installation. Relying on an embedded microprocessor in the pump controller and a floatless pressure transducer in the pump chamber, the IPC panel monitors liquid levels, controls pumping time intervals, and logs events in real time. "I really like the ease of programming offered by the Aquaworx panel and its ability to log data from the system," says Vinson. "This enhances the ability to diagnose any issues and to educate homeowners about their water usage."

Another important system component was the lightweight, compact Infiltrator septic tank and the dosing tank. The system was installed in a 30-by-40 foot area next to the cabin using a backhoe.

System startup went as planned and the homeowners were pleased to be able to landscape the area. Maintenance of the system is contracted to Anua and made simple by the logging capabilities of the Aquaworx control panel.



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