Low Impact Access Road
Offers Minimal Disturbance through Wetlands
ALABAMA POWER COMPANY

PROJECT TEAM:

PROJECT OWNER
City of Mobile, Alabama

PROJECT MANAGER
Pamela McDaniel, Storm Water Environmental Compliance, Alabama Power Company

MATERIAL SUPPLIER
Sunshine Supplies, Inc., Birmingham

GEOWEB®
Soil Stabilization System
Allows Access; Minimizes Impervious Surfaces

Excerpts from Bob Crossen, Storm Water Solutions article

PROTECTING A WETLANDS
The Alabama Power Company (APC) planned a second substation to provide an alternative power source to Providence Hospital in Mobile, Alabama. However, a wetlands adjacent to the project site impacted the plans as construction of an access road to install the substation and power line raised environmental concerns with officials and citizens. The US Army Corps or Engineers (ACOE) also sought to minimize wetland disturbance and had strict requirements for limiting impervious area.

A PERVERIOUS ROAD SOLUTION
The head of APC’s storm water environmental compliance, Pamela McDaniel, developed a plan that addressed concerns and complied with regulatory limitations. Because the wetlands could not be impacted without building a storm water retention area along the right-of-way to retain the runoff, McDaniel instead suggested the Presto GEOWEB roadway system to stabilize aggregate for a ‘permeable’ access road in the upland portion of the project. Unlike hard surface pavements that are impervious, the GEOWEB system infiltrates water at a high rate, allowing stormwater to drain naturally into the soil. The City of Mobile accepted this solution, waiving its requirement for a retention pond at this site.

LOW IMPACT INSTALLATION
The routing of the power line from the substation to the hospital stretched electric cable through a forested wetland on the south side of Providence Hospital. McDaniel noted that to ensure the wetland was not disrupted by large machinery, workers cut out the foliage in the area by hand as well as hauled debris away via helicopter.
LOW IMPACT INSTALLATION
For installation of the utility poles, APC would normally load the poles onto trucks, deliver to a site, and then use excavators to bore holes for the foundation. To avoid undue impact to the area deemed ‘extremely sensitive’, the 70-ft. concrete transmission poles were brought to the site via a helicopter and guided into caissons by workers.

THE RESULTS
The new substation provided Providence Hospital with two sources of power to assure uninterrupted power in the event of failure at one.

By working together and utilizing the GEOWEB soil stabilization system, APC and the City of Mobile were able to accomplish the project goals:

- Allow access with a permeable roadway that infiltrates stormwater runoff
- Minimize disturbance of the sensitive wetlands area
- Adhere to the City’s and the ACOE’s requirements.

“We are pleased this project was possible because of the GEOWEB System manufactured by Presto Geosystems. Patients and their doctors at the hospital will be confident power will not be disrupted just when it is most needed. This was a great service to the Mobile, Alabama area.” noted material supplier Skip Ragsdale, sunshine Supplies, Birmingham, Alabama.