The GEOBLOCK® porous pavement system, manufactured by Presto Geosystems®, offered a green alternative to traditional asphalt paving for 1,200 ft. of roadway and two stabilized parking areas at the Gainesville Regional Utilities’ Eastside Operations Center. More than 106,000 sf of roadway was designed to be accessed by emergency vehicles and utility trucks waiting to dispatch during storm events.

**Selection Criteria & Stormwater Benefits**

Project engineer, Bentley Architects & Engineers, Inc. was charged with finding a roadway solution for the City that not only met all the design load requirements, but was aesthetically pleasing and pervious. The stabilized grass solution was required to meet the following criteria:

- handle load capacities to 80,000 lbs. (H-20 loading).
- reduce the amount of fill.
- be a low impact solution with reduction of stormwater runoff.
Grass Roadways Support Convergence of City’s Emergency Vehicles

The roadway will be utilized mainly for emergency vehicles and utility trucks during the occurrence of a major storm (i.e. hurricanes). During category 4 or 5 hurricane events in the state, all of the City’s emergency vehicles convene at this center before being dispatched to emergency areas. The roadway functions as the waiting area for the line of vehicles. A stabilized surface is critical to ensure that the vehicles do not cause rutting, turf damage or become stuck in the soil.

The two parking areas will be used as overflow parking for employees at the center.

Challenges & Performance Results

As is typical in Florida, the roadway site is surrounded by wetland areas. There was very soft mucky soils before the GEOBLOCK system’s engineered base of aggregate/topsoil mix was installed. The ground was so soft that the contractor’s dozer became stuck a few times while clearing the site.

The GEOBLOCK porous grass roadway handles light to moderate traffic from utility trucks and emergency vehicles on normal occasions and heavy traffic during emergency events. The porous system with well-established and hardy Bermuda grass growth stands ready to support vehicles during the next emergency event.