

## Robson Center, Gainesville, Georgia

Formerly known as the Southern Heritage Building, the Robson Center's 8,200 sf (760 m<sup>2</sup>) parking lot represents one of the first pavements of its type in Gainesville, a city of 25,000 on the shores of Lake Lanier in north-east Georgia. "The Robson Center pavement was installed (in 2003) in order to meet a new municipal limitation on impervious cover, while getting full economic development from the site's acreage," according to Bruce Ferguson, FASLA, Professor and Director, School of Environmental Design, University of Georgia and author of the book, *Porous Pavements* (2). The pavement surface located in the development's entry lanes used brick color to match the building.

"The base course or 'base reservoir' is made with open-graded No. 57 crushed granite rock, which has void space of 30%+ and very high permeability," said Ferguson. "The bedding layer and joint fill is similar but smaller No. 89 aggregate, which also has high porosity and permeability. The combination gives the pavement high permeability and water storage capacity."

Since the soil was largely clay fill that had to be compacted, very little infiltration into the soil is expected, explained Ferguson. "Instead, a perforated pipe at the bottom of the base reservoir drains to the city's storm sewer system. A previously installed stormwater detention basin had been designed for impervious surfaces throughout the development. This pavement's permeability and in-pavement storage are expected to make the project's stormwater performance exceed the design expectations. In the unlikely event the pavement should generate surface runoff due to an extremely intense storm or clogging occur somewhere in the system, the runoff will drain to grate inlets at the side of the pavement, then into the conventional storm sewer system."

### Typical Cross-section:

3<sup>1</sup>/<sub>8</sub> in. (80 mm) thick permeable pavers  
3 in. (75 mm) ASTM No. 89 bedding layer  
8 in. (200 mm) ASTM No. 57 crushed stone base  
Geotextile

### Subgrade:

Clay soil

### Designer:

Bruce Ferguson, FASLA,  
Athens, Georgia

### General Contractor:

U.S. General Construction,  
Alpharetta, Georgia



*Runoff from the impervious asphalt surfaces is infiltrated into the PICP. The runoff is detained, filtered and infiltrated into the soil subgrade. Excess water is drained to storm sewers through perforated drain pipes in the base.*



*Even with low infiltration clay soil, permeable pavements manage runoff from typical rainstorms that fall on the parking lot at the Southern Heritage Building.*