



# SF-Rima - Project Report # 33

## Project:

**Greenwood Town Center  
aka The Sedges at Piper Village**  
Seattle, WA

8,100 sq.ft. SF-Rima™ pavers  
completed in 2009

*How deep do you have to go to hit hard soil? Seattle Public Utilities commissioned a study in 2003 in response to concerns in Greenwood about sinking soil. The study recommended that withdrawing water from the peat bog should be avoided, and that steps be taken to reintroduce water into the bog to maintain groundwater levels. The city has since prohibited developers from installing underground parking and other below-ground structures in the bog area.*



Geologists call the area the Greenwood bowl, a legacy of the last glacial push through the central Puget Sound area about 15,000 years ago. As the glacier retreated, the basin filled slowly with runoff from surrounding ridges and with dead plants and animals, becoming a peat bog - a type of wetland that helped absorb floodwater and fed the headwaters of nearby Piper's Creek.

Peat is soft and must stay bathed in groundwater year-round to prevent it from compressing.



Over the decades, groundwater levels in Greenwood have been declining and correspondingly, more areas have been sinking.

The city required from the developer, Greenwood Shopping Center Inc. to protect groundwater levels. The builders drilled as deep as 33 feet through the silt and peat to reach hard glacial deposits and then filled those holes with concrete to support the buildings.

The developer had chosen **SF-Rima® interlocking concrete permeable pavement** for the sidewalks and vehicular areas to allow water to infiltrate through spaces between the pavers. It then filters through a coarse bedding layer and open-graded gravel base to finally reach the groundwater level.



### **SF-Rima™ manufacturer:**

Mutual Materials, Co., Bellevue, WA T 425-452-2300

**Installer:** Eastern States Paving, Inc. - Mr. Dave Carlton  
Portland, OR T 503-282-5530

**General Contractor:** RAFN Co., Mr. Tim Lewis T 206-510-3781

**Owner:** Gary Brunt Management T 360-459-1487

Photo courtesy: Dave Carlton, Eastern States Paving, Inc.