

# Evergreen State College

Olympia, Washington

*The objective with the chosen pavement solution was to infiltrate the 100-year, 24-hour storm without surface runoff.*



**A new campus building created the need for additional parking.** Based on a Zero Impact\* Feasibility Study ("Zero Impact" referring to a set of development standards with regard to environmental impact), the college decided to intensify its use of existing parking areas rather than clearing more forest. This meant that the required 350 new parking spaces needed to be added without increasing the existing footprint.

With every maintenance or redevelopment project on the campus, the goal is to reduce the environmental impact wherever practical. The objective with the chosen pavement solution was to infiltrate the 100-year, 24-hour storm without surface runoff. A permeable paving approach was favored also because it negated the need to clear and grade surrounding forest areas for detention ponds.

The College was presented with three alternate solutions to choose from: GrassPave<sup>2</sup><sup>™</sup>, an extruded plastic product; GravelPave<sup>2</sup><sup>™</sup>, a system of crushed rock with cellular confinement, and Uni Eco-Stone<sup>®</sup>. Uni-Ecoloc<sup>®</sup>, a fourth alternative, was approved just prior to bidding because of its mechanical installation efficiency.



Uni-Ecoloc was chosen because it offered the College an environmentally responsible choice that was also durable and reasonably economical. The costs were determined to be the same as, or lower than, traditional alternatives using new treatment and detention systems would be.

Available in a wide array of shapes, textures and colors, Mutual Materials has an interlocking concrete paver to meet your aesthetic and technical needs.

Mutual Materials also produces full lines of segmental retaining walls, architectural slabs, brick and concrete masonry units.

#### Location:

Olympia, Washington

#### Engineering:

SCA Engineering.

#### General Contractor:

Fox Island Construction.

#### Hardscape Contractor:

Steele & Associates.

#### Completion:

2004

#### Mutual Materials Products:

Uni-Ecoloc<sup>®</sup> 8cm



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In addition, as the EcoLoc pavers were mechanically installed, additional time and labor savings would be realized.

Monitoring and teaching opportunities for students in the college's environmental studies program are also possible. Students will be able to observe surface infiltration rates and be able to easily remove a few pavers and examine the base materials to analyze pollutants being leached out of the water.

The system is designed to control stormwater runoff, treat it, and re-infiltrate it into the water table. The innovative design added new parking by removing and reshaping planting islands and reorganizing lanes. The design included infiltration to the subgrade and storage in rock ballast under the pavement.

Because runoff from the parking lots currently discharges to the nearby East Fork of Houston Creek without treatment or detention, the College felt the ideal solution would reduce the amount of runoff to the Creek. The combination of adding new permeable paving and converting existing paving to permeable surfaces is expected to result in the desired net reduction in runoff.



## Uni-Ecoloc<sup>®</sup>

Uni-Ecoloc<sup>®</sup> is an environmentally beneficial heavy-duty paving system designed to reduce stormwater runoff on industrial and commercial pavements.

Uni-Ecoloc is a L-shaped interlocking concrete paver and part of the Uni-Anchorlock family of pavers. Ecoloc pavers provide a highly durable, yet permeable pavement capable of supporting the highest vehicle loads. When installed, the unique patented design creates drainage openings in the pavement's surface, which facilitate rainwater infiltration like the Uni-Eco-Stone<sup>®</sup> system. Uni-Ecoloc is a mechanically installed product.

Uni-Ecoloc pavers are perfect for municipal, commercial and industrial applications.



$3 \frac{1}{8}'' \times 8 \frac{7}{8}'' \times 8 \frac{7}{8}''$   
8 cm x 22.5 cm x 22.5 cm