

Kimberling City Center Parking Area Remodel A Stormwater Management and Demonstration Project



Project Partners



Kimberling City Center owners

Stalzer Engineering & Wolfe
Surveying

Oldcastle Architectural
Products Group (APG)

Lakeside Computer & Sign Co.

Table Rock Asphalt &
Construction Materials

AquaPaving Construction Co.

Advanced Sealing & Striping

Table Rock Garden Club and
our April 22nd and 25th
planting days volunteers.



The Environmental Protection Agency Region 7 through a MO Department of Natural Resources grant to Table Rock Lake Water Quality Inc. provided partial funding for this project under Section 319 of the Clean Water Act.



Project:

Stormwater runoff from parking areas may contain oil, antifreeze, detergents, metals, phosphorus, nitrogen, and other toxins, which contribute to overgrowth of algae and water pollution when these pollutants wash into lakes and streams.

This project helps mitigate the negative impacts of stormwater runoff from the Kimberling City Center's 3-acre lot.

The major change to the parking area was a new layout to include better traffic flow and the use of pervious (water soaks through) interlocking concrete pavers (PICP) throughout.

PICP allows stormwater to infiltrate between seams in the brick units, allowing water to soak down through the underlying two feet of gravel and into the soil below which acts as a filter to remove contaminants. The filtration and breakdown of contaminants in the gravel and soil occurs much the same way as a septic system's lateral/drain field.

Result:

An 24 pounds of nitrogen, 4.5 pounds of phosphorus, 12 pounds of metals (iron, copper, lead) and 375 pounds of soil will be prevented from entering the lake each year. One pound of phosphorus is all it takes to grow 700 pounds of algae! (studies by University of Michigan, University of Maryland, and others).

A potential 3,000 pounds of algae growth is prevented per year, less metals and other pollutants are washed into Table Rock Lake.

Better stormwater management on the site reduces pooling and runoff issues and provides a beautiful new parking area.