

Metra Permeable Pavement Parking

As you pass the area of Compass Road across from the Glen of North Glenview Metra Station, you might notice a new parking lot. Normally, large parking lots of typical black asphalt are of little note, but this is not your average parking lot. On closer inspection, you will see that instead of asphalt the surface has a slightly rougher concrete texture. Also, low swales like the one at the west end of the lot are vegetated with native plants. These are examples of the new green paving methods employed by the Village to establish a more ecologically sensitive profile.

The concrete is of a special pervious type, allowing water to pass directly through it because of its high porosity. This reduces runoff at the site and improves water quality by reducing the time that water stays on the surface of the pavement collecting pollutants. For example, during a rainstorm, the precipitation will quickly enter the void spaces in the concrete and percolate into the

ground. The many trees on the site benefit because water becomes available near their roots, as opposed to a typical parking lot in which precipitation runs over the impenetrable surface toward a curb or gutter.

The Village will observe the performance of this parking lot to determine whether the new techniques can be more broadly applied. The Village will be able to see the impact of plowing, salting and other activity on this permeable surface for the first time on such a scale. The Illinois Department of Transportation is also monitoring the project to determine the viability of such methods on their own projects.

The vegetated bioswales in the parking lot have cutouts on the curb to allow more water to be absorbed by the plants or infiltrated into the ground through their root channels. The bioswales are planted with a diverse selection of native vegetation, including little bluestem grass, swamp milkweed, Black Eyed Susan and many other native sedges, grasses and flowers.

Location: Compass Road and Lehigh Avenue

Construction complete: Fall 2011
Bioswale area: 13,000 square feet

Benefits:

- Infiltration of runoff through permeable pavement
- Infiltration of runoff through vegetated swale
- Energy-saving LED lighting
- Sidewalk on west end improves pedestrian connection between Gallery Park and the Kent Fuller Air Station Prairie
- Public display of the benefits of green infrastructure

Bioswale: Drainageway with gently sloped sides filled with native vegetation that intercepts pollutants and silt.

Permeable Paving: Materials and techniques for paving roads, parking lots, bike paths, etc., that allows movement of water and air through the pavement and into the ground below



Above: Close-up of pervious concrete at the site
Below: Bioswale before vegetation



The Village of
Glenview