The City of Cincinnati has over 100 public parks and other green spaces available for enjoyment by its 310,000 city residents and the more than two million regional residents. One park is particularly unique with its new system of concrete paths that are innovative in their safety design, and have tastefully subtle decorative aspects incorporated into their viewing platform destinations.

**All Persons paths**

The Bettman Nature Preserve is a six-acre property located in the Evanston community, adjacent to Hyde Park, one of Cincinnati’s eastside neighborhoods. The “all persons” path project was conceived to offer universal accessibility. To provide the park with paths that are accessible to all persons, a local landscape architect worked with park staff and a committee of donors to develop designs of plant materials and leaf shaped interpretations that were added to the concrete surfaces in the overlook areas, using a staining process. These simple but elegant design elements helped to tie the trail experience to the local environment. The concept of accessible planting beds and interpretive signage to make the trail route an even richer outdoor experience was developed.

A total of 1,318 ft (1/4 mile) of sidewalk-like paths were installed using 5” of 4,000 psi concrete at a width of six ft. The width was determined to facilitate wheelchair passage along the path. The project’s contractor, Prus Construction, worked closely with park personnel to refine the path alignments and to assure accessibility guidelines were met through the sometimes-challenging terrain. The donors had requested a custom rolled curb detail be integrated into the pathways throughout the project to facilitate use by blind or wheelchair bound individuals.

To accomplish the colored staining details at the overlooks, the contractor cut stencils for the leaves out of plywood then lightly sandblasted the leaf motifs onto the concrete. Circular rings in the overlook areas suggest tree growth and were achieved by saw cutting the concrete to a depth of 3/8 in. to contain the stain. Concrete stains were chosen from a selection of water born extra strength stains. The colors used in the park were seafoam green, fawn, terra cotta, dark adobe and bark brown. Prus Construction found they could enhance the rings by applying varying coats of stain to different rings to improve the overall effect while limiting the color palette. The stained area cured for three days before it was sealed using a clear acrylic clear sealer with a 30 percent solid content.

**Pervious concrete**

As an added feature of the All Persons Path project, the Bettman Nature Preserve also now has the City of Cincinnati’s first installation of pervious concrete pavement in the parking lot. The 4,120 ft² parking lot was constructed using 8” of pervious concrete placed over a 12” base of clean No. 57 gravel. The concrete supplier, Spurlino Materials, of Middletown, OH, designed the pervious concrete using a mix of portland cement, No. 8 coarse aggregate, water and admixtures. Without the fine aggregates, the structure of the hardened pervious concrete contains many voids allowing water to pass through. This allows for a practical solution to the basic storm water management.

The pervious mixture used in this project was similar to those used by ready mix producers across the country, and consists of a combination of a water reducing admixture, a hydration controlling admixture, and a viscosity-modifying admixture. The three admixtures assist in achieving the desired strength, achieving a longer working window for placement, and helping in lubricating the mix.

Submitted by Ohio Ready Mixed Concrete Association