



St. Ignatius

High School Mall Renovation

Landscape Architecture by Behnke Associates

Over two summers, the common area bisecting Cleveland, Ohio's St. Ignatius High School was overhauled with expansive new brick and concrete walkways, mounded lawns and a variety of new plantings. The project included sustainable solutions like permeable paving and reusing historic roadway bricks, and correcting safety and maintenance issues. A semicircular 18" brick seat wall with sandstone cap matches the historic brick architecture, and is partially shaded by a mature oak. Backless, armless benches are arranged in the atrium for other seating options.



Above

About 940 square feet of road pavers were transplanted from West 30th Street and reused in a concentric running bond in the atrium, which also features new benches, drainage and shade trees planted in structural soil under stabilized aggregate. The circular seating area focuses on a six-foot diameter St. Ignatius sandstone seal.

St. Ignatius High School, in the urban heart of

Cleveland, Ohio, has served as a leading Jesuit college preparatory high school for boys for over 125 years. In the early 1980's, the high school vacated West 30th Street, dividing the campus and creating a pedestrian mall down the center.

Over time, the space was fractured by a variety of building projects, and safety, drainage, and maintenance issues developed. Area lighting was uneven, heavy pedestrian traffic turned planting beds into mud, and students commonly referred to the "river" in the middle of the courtyard that they had to cross to reach a building's door. Even the salvageable portions of West 30th street were uneven, and did not meet ADA requirements. Several exterior building basement walls needed waterproofing, and a 110-year old 12-inch water main threatened to wreak havoc on the school's operations if it broke.

Behnke Associates was commissioned to address these issues, while maintaining the intimate park setting beloved by students, staff, and the local neighborhood. During the master planning phase, existing circulation routes, gathering spaces, vegetation, paving materials, signage, drainage, and utilities were analyzed for what worked, and what needed to be improved.

Design

The school administration and Behnke's design team collaborated on design goals for the mall renovation. The final concept specified a clean, unified look that matched the rest of the campus; providing for efficient pedestrian flow, with no sharp corners on the pavement edges; a sense of arrival for the mall entry, mall core and building entrances; gathering spaces for small or large groups of students, staff or visitors; an increased sense of safety; reuse of the West 30th Street

brick road pavers; preserve the many large (up to 36-inch caliper) mature trees on the mall; and repair existing utility concerns. The school also required the project be built over the weeks of summer vacation.

Construction

Arrival sequences were created with a variety of clay brick paver color blends and paving patterns selected to match the reused street bricks. A simple color blend was used in a running bond pattern at all entry points to the mall and the building entries on the mall to act as "doormats". Between the mall entries and the core, concrete pavement delineates outdoor hallways. At the mall core, a rich, custom blend of brick colors in a herringbone pattern tells pedestrians they have arrived.

At the heart of the core, the reused road pavers are laid in a concentric running bond, encompassing a

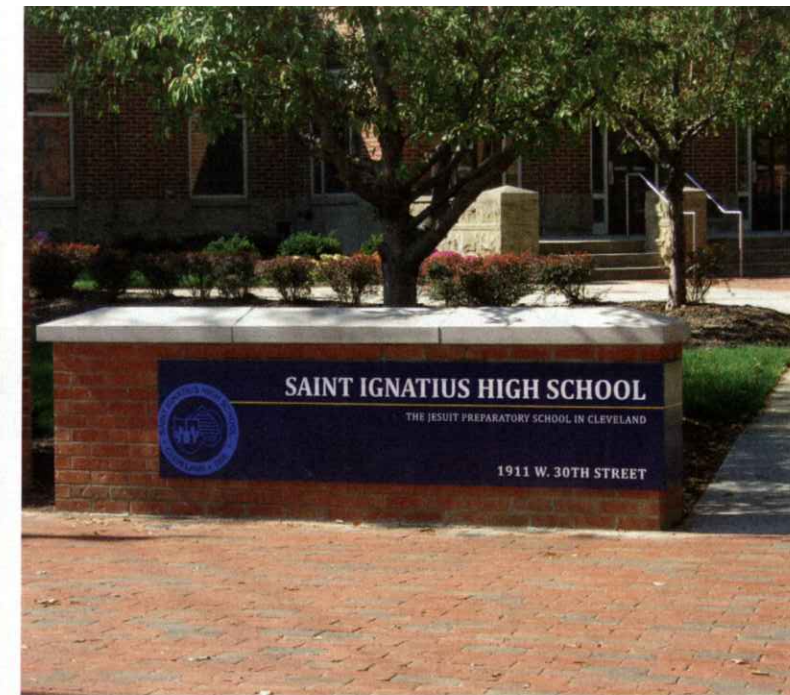
circular seating area that focuses on a six-foot diameter sandstone seal of the school. All pavement edges follow the dominant routes of travel, to eliminate desire paths or cut corners across landscaped areas.

Many opportunities for gathering are available for faculty, students and visitors. A semicircular brick seat wall with sandstone cap matches the historic surrounding architecture, facing the mall core where students often congregate. Backless, armless benches are arranged in the circular center of the mall for a number of other seating options, and mounded lawn areas provide places for students to relax in the sun on a cool day, or beneath a shady tree on a hot one.

At night, a series of 12-foot pole lights illuminate the mall at a safe and comfortable level for pedestrians or evening gatherings. The light fixtures, poles, and site furnishings were selected with an eye toward

Above

A "recognition ring" was added to the signage plan to feature individuals significant to the St. Ignatius community, honor major donors and a school patriarch, and to state the St. Ignatius mission.



Top
New utility lines were threaded between drip lines for the existing trees to power the additional lights (Architectural Area Lighting) installed.

Middle
Plantings installed during the renovation included multiple chrysanthemum strains, new trees to complement the existing maples and pines, and half a dozen types of turfgrass.

Bottom
A curved concrete walk was installed to delineate outdoor hallways between the mall entries and the core. A subdrain was installed on the east edge of the path. About 5,500 cubic feet of concrete was poured during construction.

blending the traditional feel of the buildings with a progressive, contemporary look. A comprehensive signage and wayfinding plan developed a hierarchy of signs, to provide clear direction to campus destinations, to honor major donors and a school patriarch, and to state St. Ignatius' mission. Similar to the lighting, the masonry materials and arrangements honor the traditional architectural style, while the sleek, metal panel signage wrapped around the masonry corner looks to the future.

Phased construction helped the school complete the project, without having to interrupt classes. The summer before the main renovation, the general contractor prepared for the project by waterproofing

the building walls of concern and rerouting a gas line. The following summer, only the 12-inch water main, which ran through the middle of the mall, had to be replaced.

Sustainability
Sustainable strategies were employed throughout, for practical reasons and to lessen St. Ignatius' impact on the environment. Stabilized aggregate above structural soil creates a walkable surface at the circular core, while providing trees the soil volume they need to thrive and shade people seated on the benches. By setting the unevenly dimensioned reused roadway pavers individually, the landscape contractor created a smooth walking surface.

A tree root aeration system permitted mounding over a large existing pin oak's roots, creating a shaded place for students to unwind. Trenching for utilities was threaded through many drip lines to preserve the large existing trees on the mall. LED fixtures were used to moonlight trees and light signage.

When school resumed after construction finished, the Saint Ignatius Entrepreneurial Academy sold cleaned and coated bricks reclaimed from West 30th Street, with a plaque reading "Your own personal piece of West 30th Street" for students, alumni and faculty. About 4,200 square feet of original brick was salvaged in all. More importantly, campus maintenance and liability issues have been reduced, more seating and gathering opportunities for students were added to the courtyard, and the center of

- Plant Palette**
- Trees**
Amelanchier 'Autumn' · Brilliance Serviceberry' · Cypress 'Sullivan False'
Dogwood 'Milky Way' · Maple 'Pacific Sunset'
- Shrubs**
Barberry · Dogwood 'Ivory Halo' · Dogwood 'Siberian Red Gnome'
Holly 'Nordic' · Hydrangea 'Endless Summer' · Hydrangea 'Oakleaf'
Pine 'Mugho' · Winterberry 'Jim Dandy' · Winterberry 'Red Sprite'
Yew 'Dense' · Yew 'Everlow' · Yew 'Hicks'
- Groundcover**
Black Eyed Susan · Early Sunrise 'Coreopsis' · False Sunflower 'Venus'
Feather Reed Grass 'Karl Foerster' · Frikar's Aster · Geranium 'Johnson Blue'
Lavender 'Munstead' · Russian Sage · Siberian Iris 'Blue Moon'
Yarrow 'Coronation Gold'
- Annuals**
Chrysanthemum 'Autumn Fire' · Chrysanthemum 'Goldstrike'
Chrysanthemum 'Grape Glow' · Chrysanthemum 'Minruby'
Chrysanthemum 'Royal Knight' · Purple Flowering Cabbage
- Grasses**
Agrostis 'Redtop' · Dwarf Fountain Grass · Kentucky Bluegrass
Perennial Ryegrass · Red Fescue 'Chewings' · Rough Bluegrass

Top
Paneled metal wayfinding signs that "float" in front of the low brick signage walls provide a modern touch among the traditional brick architecture.

Bottom
A tree root aeration system over the roots of an existing oak made an additional mounded lawn area possible for student gathering.



Top

Clay brick pavers formed in a custom color blend were laid in a herringbone pattern to define arrival sequences. During the renovation, 7,225 square feet of new brick pavers were installed.

Bottom, Left

The pavement edges and pathways follow the dominant routes of travel through the mounded lawns, eliminating paths of convenience or corners cut across planted areas.

Bottom, Right

Nighttime view of the main building entry. The renovation was designed for long-term use and sustainability, which included reusing original brick pavers, and the installation of LED lights to reduce energy use.

campus has been clearly defined for another 125 years of educating young men in Northeast Ohio.

Construction was spread over two of the school's summer breaks; work lasted for two months during the first summer, and three months the following year. The project required 7,225 square feet of new clay brick, and workers reused 940 square feet of original brick salvaged from West 30th Street. The St. Ignatius Mall renovation also earned Behnke Associates a 2012 Brick in Architecture Bronze Award from the Brick Industry Association in the Paving and Landscape category. 

Vendors

Benches: SiteScapes

Contractor: Schirmer Construction

Distributor: The Thomas Brick Company

Hardscapes Manufacturer: Pine Hall Brick Company, Inc.

Landscape Architect: Behnke Associates

Light Fixtures: Architectural Area Lighting

Mason Contractor: Down to Earth Landscaping

Vertical Brick Mason: Metropolitan Builders General