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Event parking

Georgia Street in Indy transformed into gathering place

Georgia Street is a street like no other.

In the heart of downtown Indianapolis, a streetscape project has transformed a six-lane roadway into a mixed-use event plaza that will benefit visitors, residents and the environment. A three-block section of Georgia Street that connects the newly expanded Indiana Convention Center to Bankers Life Fieldhouse has been uniquely repurposed.

With the completion of the reconstructed Georgia Street, the available convention space spills out of the doors and fills the outdoor area between the two popular sites. During special events, the shared-use space will accommodate vendors, performance stages and pavilions to serve and entertain visitors.

The project also increases green space and provides safer walkways, while providing an innovative model for managing storm water in an urban setting.

Taking the street to the people

"Most streets are built primarily for vehicles and include sidewalks to accommodate pedestrians. Georgia Street is primarily for pedestrians with a lane to accommodate vehicles," said Cassie Reiter, P.E., project manager for Crawford, Murphy & Tilly (CMT). CMT served as prime consultant on the project and led the completion of the design on a seven-month schedule.

"Selling a curbless street design concept to the city of Indianapolis and the Indiana Department of Transportation (INDOT) was a challenge because this is not normally how you would build a street," Reiter said.



Concrete beams fitted in place above the infiltration trench support the new Georgia Street boardwalk. Photo courtesy of Crawford, Murphy & Tilly Inc.

Adhering to Federal Highway Administration (FHWA) design criteria presented an initial challenge because there are no standards for this type of street. To meet criteria and earn approval, an appurtenance-free zone was created on both sides of the traveled way. The width of the reconstructed Georgia Street spans 90 ft, from building face to building face, and is completely curbsless. Sidewalks run adjacent to the buildings and then a single travel lane constructed of asphalt pavers is located on each side of the wide center median. The narrow lanes serve to slow traffic, as do the structural features and the presence of pedestrians.

Bollards and catenary pole bases delineate the separation of the driving lane from the pedestrian zone. Raised intersections, which applied the change in grades without a vertical curve, are used to alert drivers that they are entering a different environment. Asphalt paver characteristics were applied to

achieve the proper equivalent pavement design as required by the INDOT.

Of the many amenities included in the streetscape design, perhaps the most visually striking is the catenary system of overhead wires that support motorized sun shades. Specially designed poles and shrouds serve as the catenary's poles, and the system can be customized using special lighting and projectors to provide themes for special events.

"The catenary structure will instantly signal that something special is happening in this place," said Kenneth Boyce, senior associate with RATIO Architects, the firm responsible for facilitating the initial planning for the project and providing landscaping architecture design. The structure is located over a boardwalk constructed from ipè decking that runs along the center of the median, which varies in width up to 34 ft. Water, power, communication and drainage connections are available to vendors setting up shop in the median during events. Two

larger power shrouds will provide electricity for larger events, such as concerts.

Retractable bollards provide the city the option of closing portions or the entire three-block section of roadway to vehicular traffic. The bollards, along with the road's curbsless design, maximize accessibility for pedestrians.

Not only will Georgia Street prove a unique public space for visitors and for special events, but the people who work and live in the area also will enjoy the special streetscaping.

"It will be a place where people can meet a client for coffee in the morning or a place to relax at lunch time. Children can explore the boardwalk and its many features. The large trees in the middle of a downtown street make it really attractive. It's a unique project for Indianapolis and for the U.S.," Reiter said.

A super incentive

The city of Indianapolis and the state of Indiana have invested heavily

in developing this section of Indy's downtown, referred to as the Wholesale District. The area also is home to Lucas Oil Stadium, home of the Indianapolis Colts, two blocks to the south; a minor league baseball stadium; an urban mall; a state museum; and thousands of hotel rooms.

"The hope is the street will add to the already robust convention, entertainment and retail industries within this area," Boyce said.

A Georgia Street streetscape project had been on the city's drawing board for some time as part of its overall downtown revitalization plan. Two championship football games, while not the impetus for the project, eventually set a firm deadline for its completion: the Big 10 Conference selected the city as home for its inaugural football championship, held in December 2011, and the National Football League announced that the city would host the Super Bowl in 2012. The conditions of a transportation-enhancement grant, a key funding source, also contributed to a tight schedule. The project then proceeded on an accelerated schedule that tested the resourcefulness of the design team. From the notice to proceed in March 2010, the team had just seven months to complete the design, requiring extensive

coordination and close communication among the many stakeholders.

Hospitable and sustainable

The Georgia Street project was selected as a pilot program by the Sustainable Sites Initiative (SITES), an organization that promotes sustainable land development and management practices with an emphasis on sites and landscapes. Similar to LEED, which focuses on buildings, SITES offers certification levels that provide benchmarks for sustainable solutions.

The centerpiece of Georgia Street's sustainable features is the storm-water drainage system.

"From previous projects completed in the area, we knew that there are very drainable soils so utilizing the natural environment and reducing the amount of storm water entering the city's combined sewer system provided a highly beneficial solution," Reiter said.

The key design feature of the storm-water system is a continuous infiltration trench, running the length of the entire corridor. The design team adopted an inverted crown concept that creates a slope from the edge of adjacent buildings to a low point in the center of the corridor cross section where the trench is aligned.

"The inverted crown addressed the design objective of having a curb-free pedestrian zone," Boyce said. "Integrating it with the boardwalk provides a highly ornamental trench drain and manages storm water on-site in a contemporary and sustainable manner."

The drainage system design was a combined effort of CMT and RATIO, and features the application of sustainable elements such as forebays, sand media filters and cisterns for irrigation systems. The benefits of these features include less impervious pavement, less runoff to combined sewers and reduced treatment costs.

The Georgia Street project is expected to earn a Two-Star certification from SITES. In addition to the innovative drainage solution, other features are contributing to its sustainable merits.

Bicycle racks are installed in the area to encourage commuters and visitors to use the Indianapolis Cultural Trail, an 8-mile recreational trail that runs through downtown. Electric car charging stations are installed to support other alternative transportation methods.

Among the buildings on Georgia Street is the 98-year-old Omni Severin Hotel and the 140-year-old St. John the Evangelist Church. It was important to provide a context-sensitive design that

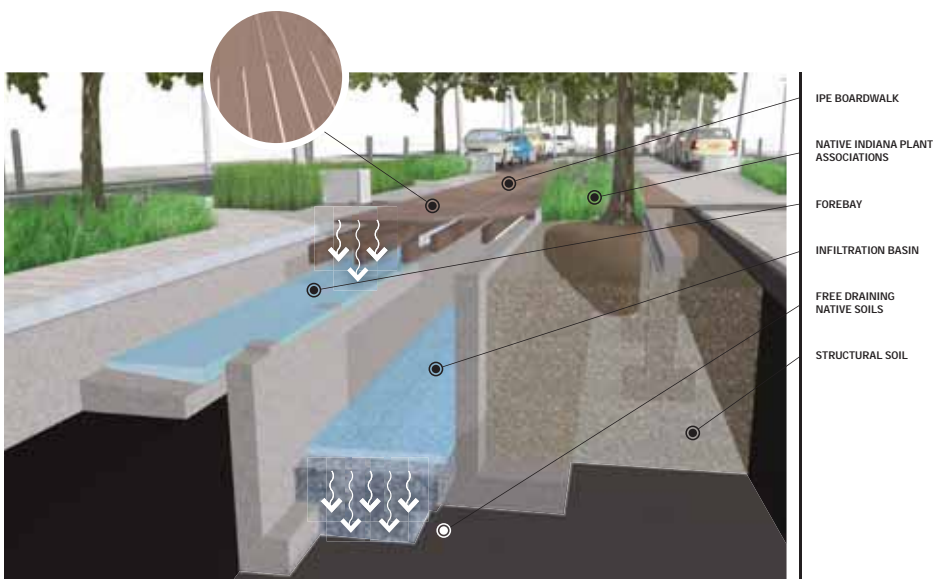


Inverted crown and curbless design were nonstandard elements for this FHWA-funded project. *Image courtesy of RATIO Architects Inc.*

would respect the aesthetics of these landmark structures. As part of the memorandum of agreement with FHWA and the Indiana State Historic Preservation Office, it was stipulated that the sidewalks adjacent to the structures be given a monolithic appearance with historical patterning. Interpretive signage will honor the history and architecture of the district, and old building materials that were uncovered during construction—including wood, brick, granite pavers and streetcar rails—will be put on display.

Construction methods, material selection and landscaping also were focused on sustainability. Incorporating these features into the overall design required an extra degree of detail, especially given the accelerated construction schedule.

“Planting trees with 90-in. root balls while constructing the boardwalk around it required precise plans and specifications so that the contractor was aware of how all of the features fit together,” Reiter said.



The city of Indianapolis has been transitioning to more sustainable approaches for the management of storm water. The continuous infiltration trench through the middle of the corridor takes advantage of the highly pervious soils within the downtown and addresses the city's search for a broadly acceptable tool for the use of infiltration systems for the area. *Image courtesy of RATIO Architects Inc.*

Construction was completed in November 2011. On Dec. 3, college football fans enjoyed a campus-like setting on Georgia Street as they gathered in the street and visited the numerous

area establishments before and after the Big Ten championship game. On Feb. 5, visitors from around the world descended upon Indianapolis for Super Bowl XLV. **R&B**

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