



Above

The poles in Georgia Street's median are designed to support event-specific themed lighting and infrastructure for a retractable solar shading device. Power outlets are available in the bases of the poles on each of the three city blocks, and two bases per block contain water spigots. Data feeds for video and audio run the length of the street to large-format video screens so onlookers can view street performances.

"Meet me at Georgia Street" became an instant refrain when Indianapolis' new outdoor event space was inaugurated for the 2012 Super Bowl, serving as an attraction-filled Super Bowl Village for thousands of locals and fans.

Turning the three blocks of West Georgia Street in Indianapolis, Ind., into a flexible venue for concerts, conventions, festivals, community celebrations, art shows and outdoor dining at the heart of the city's historic Wholesale District was an idea that had gestated for a decade.

The short street is bookended by the Indiana Convention Center and Banker's Life Fieldhouse, home of the NBA's Indiana Pacers. It is also adjacent to the highly popular Circle Centre Mall, and a short walk from Lucas Oil Stadium, home of the Indianapolis Colts.

Although finishing the \$12.5-million project was fast-tracked to prepare the area near the football stadium for 2012 Super Bowl activities, the city and designers were committed to creating a space that could be equally as captivating for city residents to enjoy events and activities year round.

Curb-Free Shared Space

The new Georgia Street is a curb-free, pedestrianfirst, shared use environment designed for a high level of accessibility. Integrated design elements provide cues to pedestrians and motorists for easy navigation of the area.

The absence of curbs and the provision of ADAcompliant paved surface cross slopes (less than two percent) throughout the project area were central elements to the design. Wheelchair-bound visitors, parents pushing strollers, the elderly, bicyclists and the





mobility challenged can all move freely throughout the corridor. The design also has the added advantage of eliminating puddled water at the curb line, often an annoyance for pedestrians.

Since there were no documented standards for a curb-free street, earning approval from the necessary permitting bodies required a different approach to design criteria.

The design team collaborated with the city, state, and Federal Highway Administration (FHWA) to establish an "appurtenance-free" zone on both sides of the streetscape. Since this was the first project administered by the Indianapolis Department of Public Works, reconciling design requirements and contracting documents with Indiana Department of Transportation (INDOT) and FHWA regulations was a major challenge.

Four vehicular travel lanes and two dedicated parallel parking lanes were reduced to one travel lane in each direction, with limited on-street parking. Reducing the emphasis on automobiles led to the inclusion of a central median that ranges from 23 to 34 feet wide. With 12 to 15-foot wide sidewalks flanking the 90-ft wide corridor, the enhanced public space provides pedestrian-friendly amenities, including special lighting and signage, sidewalk and boardwalk cafes, adjustable solar shares, retail kiosks, historic markers and public art aimed at showcasing Hoosier history.

Ten "Hoosier Pillars" commemorating historically significant leaders dot the streetscape. U.S. presidents Benjamin Harrison and Abraham Lincoln are profiled, along with Ernie Pyle, Booth Tarkington and Madam C.J. Walker. Each marker is seven feet tall, with a biography and a likeness drawn by Indianapolis artist James Kelly.

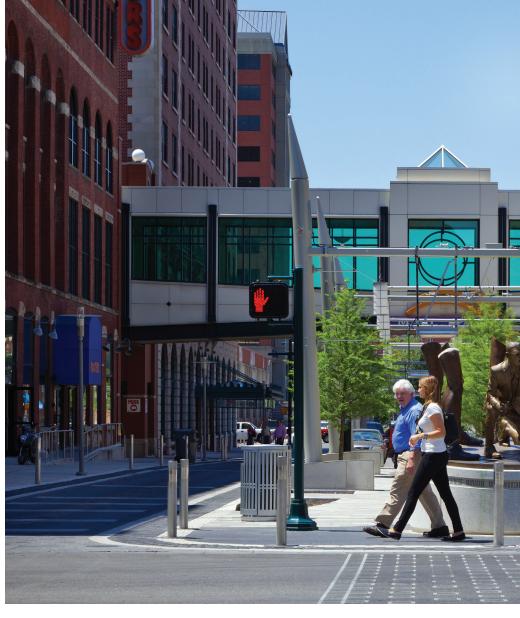
Above

The original street's four vehicle lanes and two parallel parking lanes were reduced to one travel lane in each direction, and on-street parking is now limited. The new central median ranges from 23 to 34 feet wide, and complements the expanded sidewalks.

Right

Grade changes at the intersections make drivers aware of the pedestrian-first environment, and a wide, single walking lane of asphalt pavers was installed at both ends of the median to meet the Indiana Department of Transportation's quidelines for the street. The first of an eventual series of bronze statues is located at the east end of the central median. immortalizing Hoosier and UCLA basketball legend coach John Wooden.





Above

Twelve to 15-foot wide expanded sidewalks provide room for pedestrian-friendly amenities, including special pole lights (Bega), adjustable solar shades, sidewalk and boardwalk cafes, retail kiosks, historic markers and public art showcasing Hoosier history.

A series of large bronze sculptures, the first of which was installed in March 2012, are also planned for the area. The first bronze sculpture, designed by Jeffrey Rouse, recognizes the legacy of Purdue University's well-known All-American Hoosier, UCLA coaching legend John Wooden. Nearby, a historic pavement exhibit, paved with granite cobbles, brick and trolley rails, details the history of street improvements, showing a portion of the street as it once was.

Sustainable Infrastructure

The Georgia Street project is part of the Sustainable Sites Initiative (SITES) pilot program, a collaboration between the American Society of Landscape Architects, the Lady Bird Johnson Wildflower Center at the University of Texas at Austin and the United States Botanic Garden, that seeks to transform and foster more sustainable site development projects, particularly in urban settings.

The SITES initiative employs a rating system developed in tandem with the U.S. Green Building Council's LEED program. Areas like soil restoration, use of recycled materials and land maintenance are measured and earn points within the system. Popular trends among projects submitted to SITES have included xeriscaping with native vegetation, green roofs, removing invasive plants and stormwater management. Several of these elements were incorporated into Georgia Street's design, chiefly in the plant selection and the stormwater management system.

The commitment to sustainable design is evident throughout the remodel of Georgia Street, most notably in the system managing the street's stormwater. Unlike traditional positively-crowned streets, where the slope reverses at a curb line and intermediate low points, Georgia Street's design features large and





basic grading gestures in place of a complex system of points. The inverted street cross slope collects rainwater across the entire three-block area with a continuous trench system, avoiding the aesthetic challenge of defining a series of lows and highs for point drains.

The wide boardwalk, constructed of sustainable ipe hardwood, traverses the length of the corridor's center median and provides a semi-open cover for the rainwater management forebay and infiltration system. The boardwalk itself begins the process by capturing large debris as the water passes through the ¼-inch to ½-inch-wide joints.

Rainwater enters the hidden concrete forebays, ponds to a shallow depth and deposits the heavy sediments, along with the sediment-bound pollutants, before flowing into the buried landscape irrigation cisterns. When the cisterns are filled, water overflows the forebay weirs into the infiltration chamber below. Moving through the sand filter, the water percolates into the native subsoils, ultimately recharging the aquifer.

To maximize the benefit of this rainwater management system, roof discharges from the buildings lining both sides of the street were redirected and piped into the infiltration chambers as well. Access hatches at key points along the boardwalk allow for the removal of forebay sediment and long-term, infrequent renewal of the spent sand filter.

This rainwater capture and disposal system prevents rainwater from being directed to overloaded combined sewers, reducing overflows into the nearby White River and the occurrences of downstream flood events.

Above

Ten "Hoosier Pillars" commemorating historically significant leaders were placed throughout the streetscape, including U.S. presidents Abraham Lincoln and Benjamin Harrison, suffrage leader May Wright Sewall, Pulitzer Prize-winning novelist Booth Tarkington, and jazz guitarist Wes Montgomery. The city plans to add as many as 30 of the 7-foot pillars to Georgia Street.



Above

An ipe hardwood boardwalk runs down the corridor's expanded center median, functioning as a semiopen cover above the rainwater management system. Water passes through the ¼-inch to ½-inch wide joints to enter concrete forebays, where it forms ponds that deposit heavy sediments and pollutants. The filtered water percolates through a sand filter and native sub-soils and eventually recharges the aquifer.

A number of planting beds within the median serve as rain gardens, filtering the rainwater and providing another means for water to infiltrate into the subsoils. *Taxodium distichum* 'Bald Cypress' and *Platanus acerifolia* 'London Plane' trees provide green shade throughout Georgia Street, and *Dalea purpurea* 'Purple Prairie Clover', *Allium cernuum* 'Nodding Wild Onion' and *Liatris aspera* 'Rough Blazing Star', among other plantings, contribute to re-establishing a food chain base for native first-order consumers, and, ultimately, address the need to slow the decay of the Earth's biodiversity. These rain gardens will also reduce the heat-island effect, sequester CO2 and begin to recreate a native plant landscape.

The rainwater management systems are expected to reduce runoff into the existing sewer system by more than 50 percent during a 10-year rain event, and 40 percent during a 100-year event.

Hard-Working Civic Space

The three-block street can be divided into one, two or three sections to easily accommodate activities of any size. The city has made the street – or one block at a time – available for rent for special events, and much of the infrastructure necessary to support vendors and exhibitors is located in the catenary system, the centerpiece of the median. Traditionally, catenary systems were used for light rail applications, similar to the streetcars and electric light rail systems that once crisscrossed the streets of Indianapolis. Here, supported by columns running the length of the street, the catenary system was adapted to hold the primary sources of light for the median, offering opportunities for event-specific themed lighting and support for the retractable solar shading device.

Two catenary bases per block contain water spigot hookups. The top of each pole includes two to







three duplexes that can accommodate special event lighting. The catenary columns and the shrouds over their bases were specially designed to hold an extensive amount of electrical infrastructure inside each base.

Each base contains an electrical panel with 10 electrical outlets, making a variety of amperages available, along with data connections that allow hookups for concerts, kiosks and exhibitions. The data and power supply systems offer flexible service to media, vendors, public safety officials and entertainment groups that use the space.

Video and audio feeds from street performances can be fed the length of the street to large format video screens at various points along the street.

A Work-in-Progress Destination

In the five months since thousands of Super Bowl visitors left town, the finishing touches that the street needs have taken longer than expected. Reports of the wood stain wearing off the central boardwalk, safety bollards knocked loose by trucks and oil-stained pavement have motivated city officials and Indianapolis Downtown Inc. (IDI), the organization tasked with managing Georgia Street, to bring back work crews for repairs. Sidewalk repairs and other miscellaneous work should be complete by September, and the boardwalk should be resealed and finished by November.

Local restaurateurs and retailers, encouraged to occupy the sidewalks and median with patio seating, cafes and retail

Top

To maximize rainwater management, stormwater discharges from roofs on both sides of the street were redirected into the infiltration chambers via a continuous trench system, avoiding the need for traditional, positively-crowned streets. Stormwater flows into buried irrigation cisterns, and when the cisterns are filled, water overflows into the infiltration chamber below.

Bottom, Left & Right

Georgia Street is designed with ADA-compliant paved cross slopes (Hanover) instead of traditional curbs. The inverted cross slopes direct stormwater to a continuous trench system that runs through the three-block area, sidestepping the need to define a series of lows and highs for point drains, and making the sidewalks easily accessible for pedestrians with strollers or wheelchairs.



Above

Turfgrass and tree plantings within the median serve as rain gardens, filtering stormwater and providing another means for infiltration into the subsoils. london plane and bald cypress trees fill out the plantings, with purple prairie clover, wild lupine and rough blazing star added as featured flowers.

kiosks, have run into problems with the permitting process and attracting customers to the area. Representatives from IDI are working with business owners and event planners to create solutions.

New summer plans are already turning Georgia Street around. Beginning in August, the city will host free street concerts the second Thursday of each month. Once the repairs are done and more restaurants and retailers start using their outdoor spaces, the area will fulfill the project's vision, retaining flexibility for special events without sacrificing day-to-day functionality for vendors and locals.

Indianapolis officials and the project designers hope that one day, "Meet me at Georgia Street" will be as familiar to locals and visitors as the pedestrian-friendly Las Ramblas in Barcelona, New Brighton Street in London or Bourbon Street in New Orleans.

Project Team

Architects/Landscape Architects: RATIO

Civil Engineers:

Crawford, Murphy & Tilly, Inc.

Associate Civil Engineers:

Associate Civil Engineers: Infrastructure Engineering, Inc.

Environmental Engineers:

Shrewsberry & Associates **Irrigation Consultants:**

Lighting Consultants:

CD+M Lighting Group, LLC

Mechanical/Flectrical/Plumbin

Mechanical/Electrical/Plumbing Engineers:

Heapy Engineering

Surveyors:

Land Tech

The Schneider Corporation

Vendors

Architectural Precast: CGM Precast Concrete

Catenary Frame Fabrication: Valmont

Catenary Frame Painting:

Bruce Burkett

Catenary Lantern Lights: Lumos Custom Lighting &

Pole Lights: Bega Pavers: Hanover

Fabrication

Parking Signs: Wagner Signs

Roman Shades: Duvall Design Specialty Metal Fabrication: D&V Precision Sheetmetal, Inc.

Structural Soils: Greendell Mulch

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Waste Receptacles: Landscape Forms