

The Severud Associates' project team with their 2022 Engineering Excellence Awards, including the Grand Conceptor Award for best engineering achievement.

## 2022 GRAND CONCEPTOR AWARD

### Moynihan Train Hall New York

**Severud Associates**  
Client: Skidmore, Owings & Merrill

More than five decades after demolition of the original Penn Station and almost 30 years after conception of a plan to augment it, the new Moynihan Train Hall now provides visitors with a breathtaking entrance and dignified sense of arrival to New York City. The 255,000-square-foot hall expands Penn Station across Eighth Avenue and into the landmarked James A. Farley building, the former main city post office. It includes a 30,000-square-foot main boarding concourse, formerly the mail sorting room, and a 92-foot-high roof featuring dramatically arched skylights supported by original but previously hidden and reinforced latticed steel trusses. Other Moynihan Train Hall enhancements include multiple new station entrances, an expanded West End Concourse, and the intermodal Midblock Hall. It restores a grand entrance to New York City, greatly improves access and interconnectivity, and provides many amenities to improve visitors' experience.

The new Moynihan Train Hall in New York City received the 2022 Grand Conceptor Award representing the year's most outstanding engineering achievement. Severud Associates of New York City was the structural engineer, with Skidmore, Owings & Merrill serving as the architect for the project.

# 2022 ENGINEERING EXCELLENCE AWARD WINNERS

**T**he 2022 Engineering Excellence Awards Gala Dinner and Awards Program, considered the greatest celebration of engineering excellence in the world, recently showcased 195 ACEC member firm achievements from throughout the nation and internationally.

A panel of 29 judges representing a wide spectrum of built environment disciplines selected 36 projects for top awards: 20 Honor Awards, 16 Grand Awards, and the Grand Conceptor Award for the year's most outstanding engineering achievement.

Hosted by comedian and Emmy Award-winning television host Ross Shafer, the black-tie Gala drew more than 500 members and guests to witness nearly 200 examples of exceptional engineering innovation.



◀ **The Pavilion at Penn Medicine, Philadelphia**  
HDR on behalf of Penn First  
Client: University of Pennsylvania Health System

This new \$1.6 billion, 17-story hospital provides more than 500 new private patient rooms and 47 operating/interventional rooms, while also providing a benchmark for the future of hospital design. Rising majestically from a 690-stall underground parking garage, the 1.25-million-square-foot high-rise will house inpatient care for the Abramson Cancer Center, heart and vascular medicine and surgery, neurology and neurosurgery services, and an emergency department. The project delivery team used another warehouse to create a 30,000-square-foot model of the hospital to refine project elements and spatial relationships.



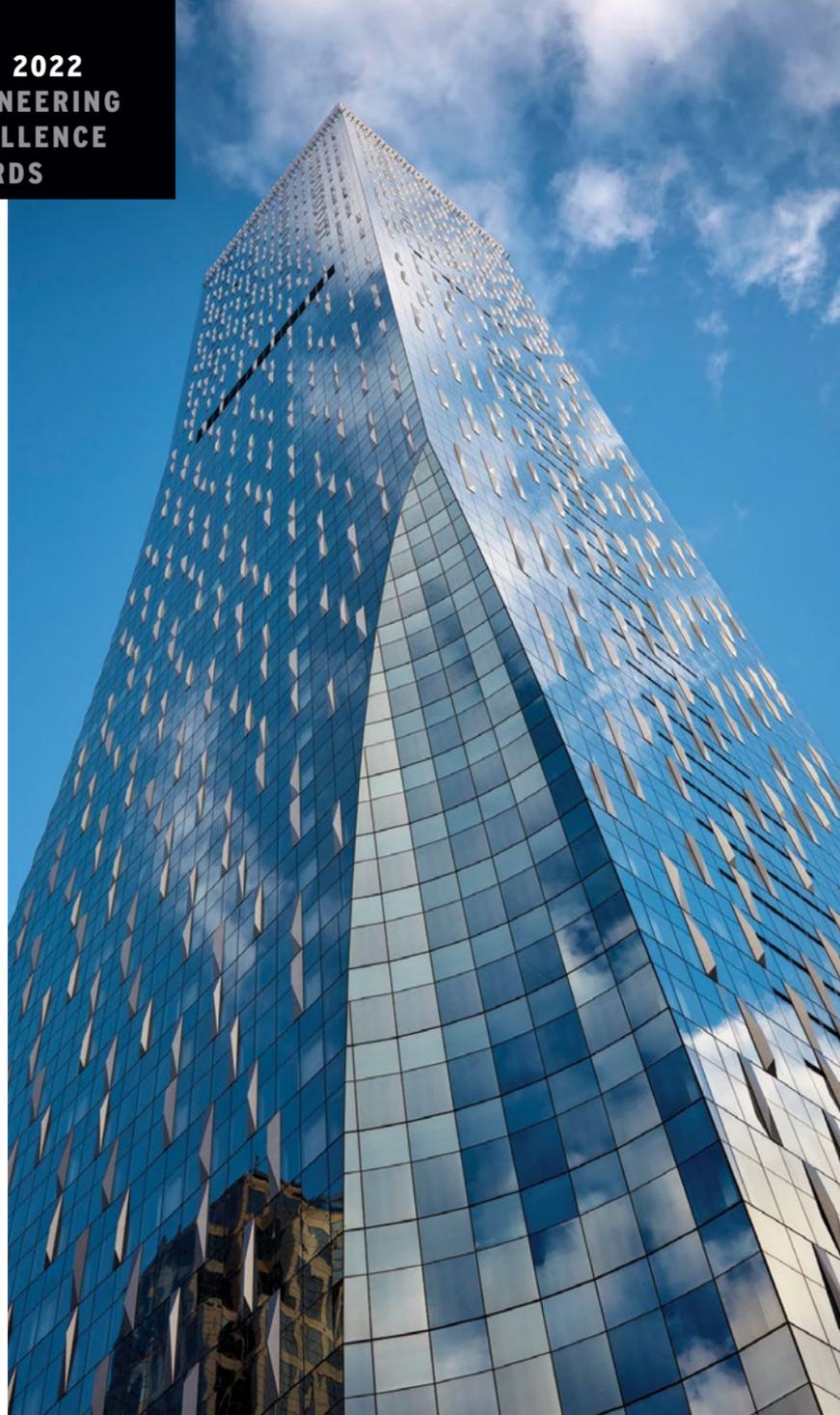
◀ **Hernando de Soto Bridge Emergency Repairs, Memphis, Tennessee**  
Michael Baker International  
Client: Tennessee Department of Transportation

Within hours after Michael Baker inspectors discovered a fractured tie girder in the bridge, a multipronged effort was underway to determine the extent of the damage and how quickly the key Mississippi River crossing could be restored to traffic. After a quick scan of the structure using unmanned aerial systems finding no additional damage, the project team developed a three-phased repair effort beginning with installation of temporary stabilization plating, then post tensioning to reduce the stresses in the tie girder, and eliminating the potential of future tie girder cracks. Just 83 days following the initial fracture, the de Soto Bridge was again safely handling local and cross-country traffic.



◀ **SoFi Stadium Inglewood, California**  
Walter P Moore  
Client: Hollywood Park

Already hailed as being a stunning example of building design, the new SoFi Stadium is also a marvel for structural system innovation. The project team overcame myriad technical, management, and site challenges to create the now-iconic facility, which is near an active earthquake fault and directly below the two primary flight approach paths to Los Angeles International Airport. The project features three seismically independent structural systems that help define the beautiful project aesthetic but will also help keep patrons safe during seismic events. Serving as the home of two Los Angeles professional football teams, the stadium is one of three venues—including American Airlines Plaza and the YouTube Theater—all under the single 800-foot-long span canopy.



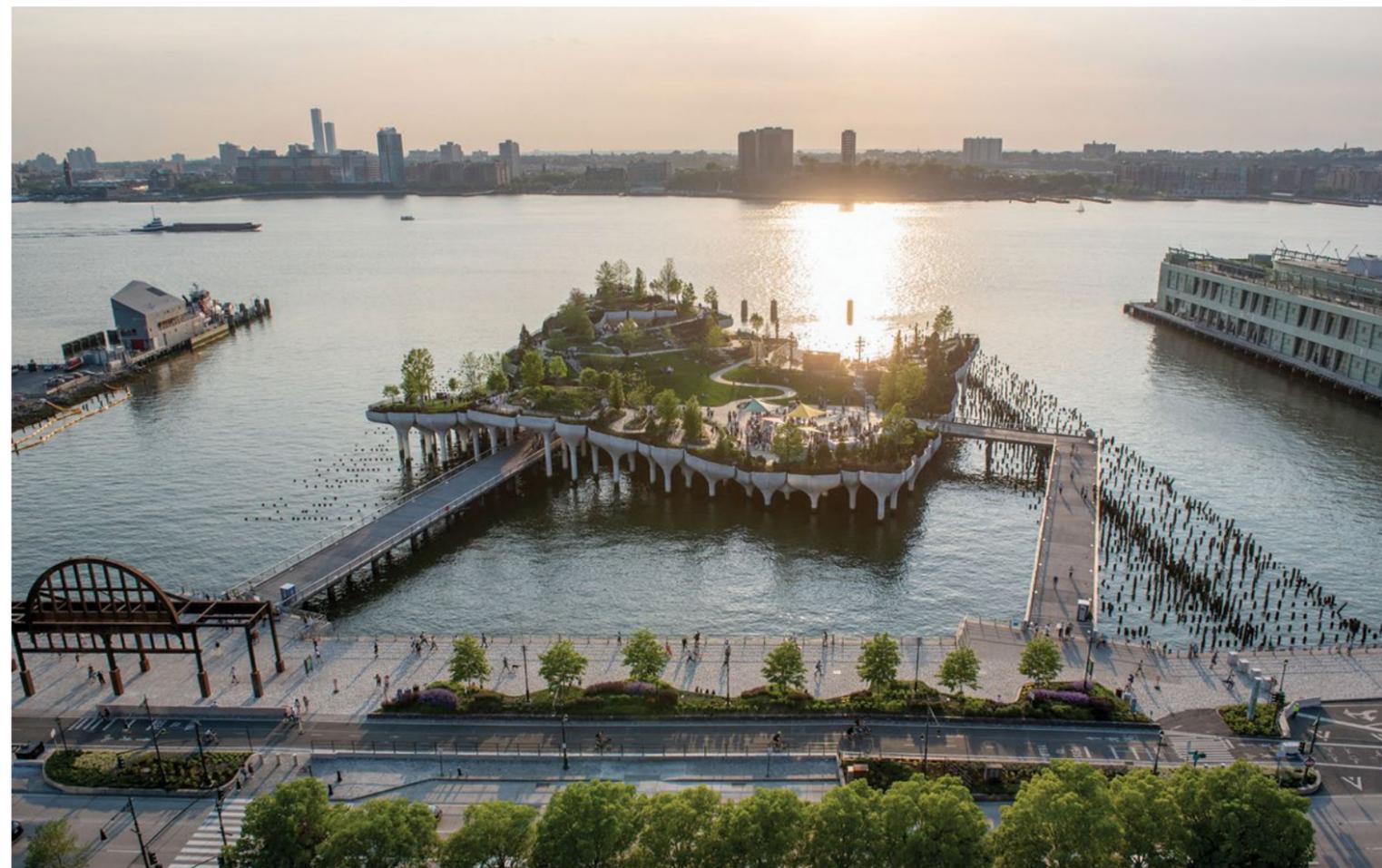
▲  
**Ranier Square, Seattle**  
**Magnusson Klemencic Associates**  
Client: RSQ Tower

The majestic 58-story tower utilizes a first-of-its-kind structural system that built environment experts believe will change the way high-rise structures are built throughout the world. Utilizing “SpeedCore” enabled the project team to cut nearly a year off the construction schedule and saved millions in construction costs. Instead of conventional concrete walls with steel reinforcing bars inside, the new system places large, prefabricated, steel-plate panels on the outside of the wall with only concrete inside, thus eliminating the need for concrete forms and rebar installation. SpeedCore has already been adopted for other high-rise projects from San Jose to Boston.

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**Rodney Cook Sr. Park  
at Vine City, Atlanta**

**Freese and Nichols / HDR**  
Client: City of Atlanta

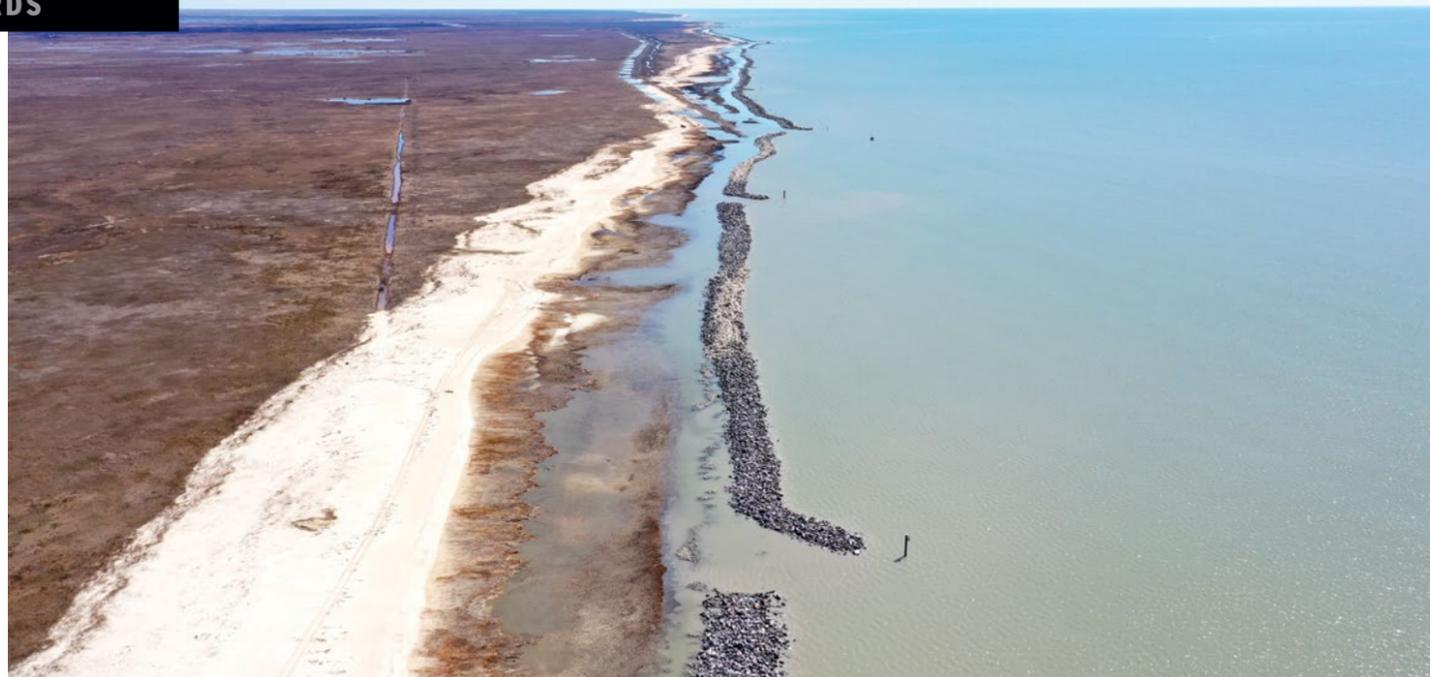
The new \$40 million park showcases how engineering can improve community health and economic well-being, combining innovative stormwater and flood design with an oasis of acres of recreational amenities. The 16-acre park’s vibrant green space doubles as a hardworking system to alleviate persistent area flooding by capturing and storing up to 10 million gallons of stormwater. Natural filtration systems also improve water quality without the need for additional infrastructure, a feature that helps lower park maintenance costs and peak loads on Atlanta’s wastewater treatment system. The urban oasis is a catalyst for future economic development, while highlighting the importance of stormwater resilience.



◀  
**Little Island, New York**

**Arup**  
Client: Hudson River Park Trust

An eye-catching 2.4-acre public green space and performance venue appears to “float” about the Hudson River. Utilizing a system of precast pots, the design creates an underlying pattern that maintains randomness while allowing for the efficient use of precast concrete. The project team incorporated a complex geometry into a precise framework of 12 basic pentagon patterns. Instead of 132 unique precast molds, the entirety of Little Island was achieved with fewer than 40 repeatable pots. As a dual community park and event space, Little Island serves as an acoustic oasis amidst the hustle and bustle of New York City that is also conducive to concerts thanks to new landscaping that helps create a sound barrier between the event stages and the highway.



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**Rockefeller Refuge Gulf  
Shoreline Stabilization  
Grand Chenier, Louisiana**

**HDR**  
Client: Coastal Protection and  
Restoration Authority

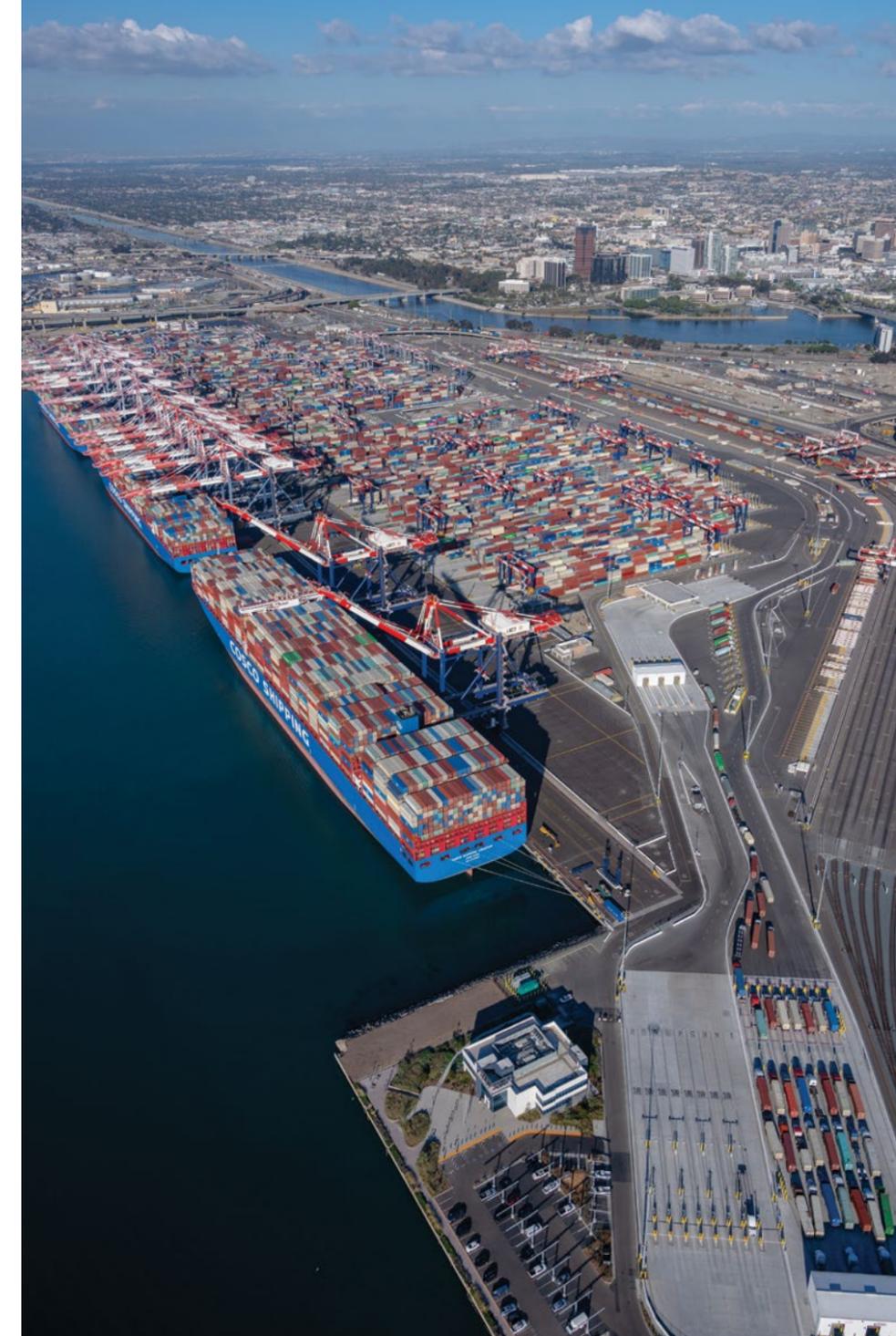
The 71,000-acre biologically diverse refuge provides a habitat for abundant fish, migratory birds, and alligators. However, the marshland has lost more than 15,000 acres over the past century and continues to erode at a rate of more than 50 feet each year. The project team designed a unique stabilization system featuring a four-mile lightweight aggregate core breakwater that significantly reduces the quantity and severity of waves hitting the shoreline. The final design recovered more than 5,500 tons of armor stone and utilized locally sourced core aggregate. It represents a valuable example for other coastal areas in safeguarding environmentally sensitive shorelines from accelerating erosion.



▼  
**Lick Run Valley Conveyance  
System and Greenway, Cincinnati**

**Strand Associates**  
Client: Metropolitan Sewer District of  
Greater Cincinnati

The new conveyance system and greenway project reduces combined sewer overflows by 370 million gallons annually and reintroduces South Fairmount to its historic creek, while simultaneously reinvigorating a struggling community and constructing a beautiful new civic park amenity. The project team's sustainable and community-based solution provides the same high level of treatment and flood control and is less than half the cost of the originally planned \$500 million deep tunnel. Restoration of the historic Lick Run waterway includes reconstruction of roadways and 11 intersections, streetscape improvements with five new vehicular bridges, and two miles of shared-use paths and sidewalks.



▲  
**Middle Harbor, Long Beach, California**

**Moffatt & Nichol**  
Client: Port of Long Beach

The decade-long, \$1.5 billion redevelopment project combined two aging shipping terminals into a single, fully automated, 304-acre complex with an annual capacity of 3.3 million 20-foot equivalent units (TEUs)—more than double the two terminals' previous capacity. Middle Harbor is also one of the world's cleanest container terminals, with electric-powered cargo-handling equipment and shoreside electrical access that allows vessels at berth to shut down their diesel engines. The project team was responsible for operational master planning and facilities planning, design of dredging and fill, and permitting assistance and support during construction. The firm also designed the 4,250-foot-long wharf and container yard structures, including the automated stacking crane foundations.



▲ **International Gateway Bridge**  
**Long Beach, California**

**WSP USA**  
Client: Port of Long Beach

Nicknamed “the bridge to everywhere,” the six-lane, nearly two-mile-long cable-stayed bridge rises 205 feet above the port’s access channel to accommodate today’s larger cargo ships and the dramatic increase in trucking traffic. Supported by two 515-foot-tall towers, the new bridge’s main span stretches approximately 2,000 feet across the channel. Along with additional traffic lanes in each direction for improved traffic flow, the bridge provides emergency lanes on both the inner and outer shoulders in each direction to reduce delays and safety hazards from accidents and vehicle breakdowns, gentler approach grades, and a dedicated bicycle path/pedestrian walkway with scenic overlooks.



▼ **Mid-Coast Extension of the UC San Diego Blue Line, San Diego**

**WSP USA**  
Client: San Diego Association of Governments

The \$2.17 billion trolley extension provides much-needed additional transportation capacity for a fast-growing corridor that includes the University of California–San Diego campus, considered to be San Diego’s second downtown. The 11-mile extension to the existing San Diego Trolley Blue Line offers connections to nearby communities and promotes the use of transit, walking, and biking for travel while creating job opportunities, providing access to education, and boosting economic activity. WSP was the lead engineer and was responsible for environmental, planning, and preliminary and final engineering. Transportation models indicate that the new extension will attract 20,000 new transit riders a day to the system.



▲ **Northgate Link Extension, Seattle**

**McMillen Jacobs Associates**  
Client: Sound Transit

Northgate Link connects Sound Transit’s University Link light rail segment to the Northgate business/retail center, helping connect four major urban centers to the existing Central Link, which extends from downtown Seattle to SeaTac airport. The new link features 4.3 miles of double-track light rail, three-quarters of which are in twin bored soft-ground tunnels built using precast concrete segments. The project also includes two underground transit stations, an elevated station at Northgate, a portal structure, and more than 20 cross passages. The project team was challenged by the area’s dense, urban neighborhoods and complex subsurface and groundwater conditions.

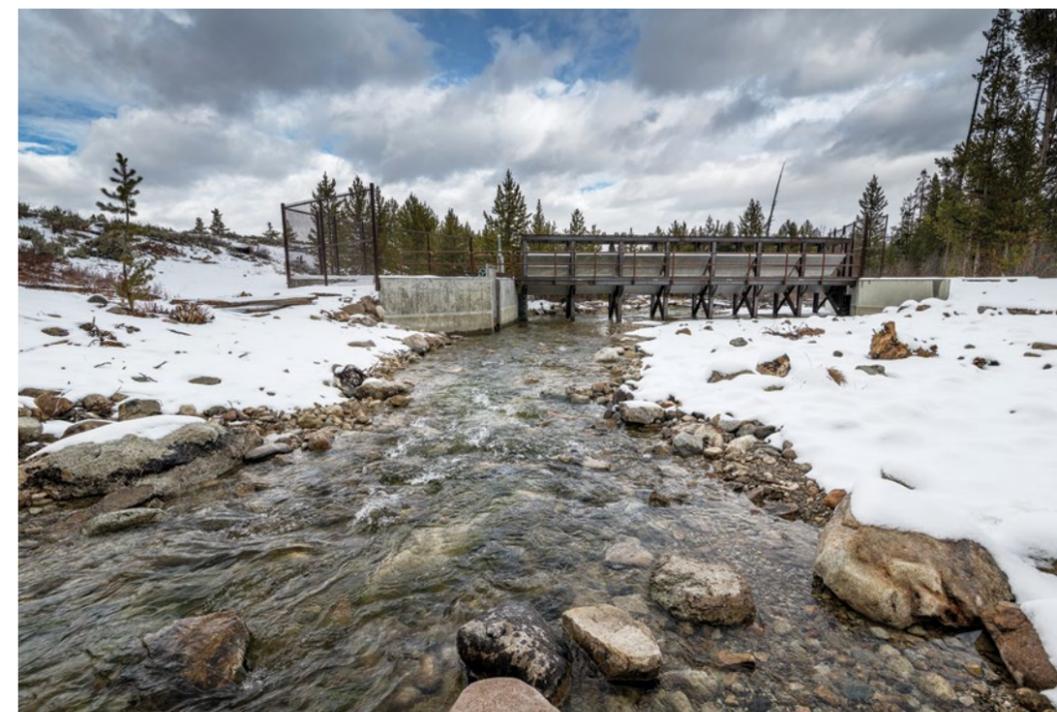


**Mason Mega Rail, Garden City, Georgia**

**Moffatt & Nichol**

Client: Georgia Ports Authority

The project effectively extends the reach of the Port of Savannah's Garden City Terminal to better serve existing destinations and expand into new destinations across inland U.S. markets. The project team identified nearly 200 acres of underutilized property well suited for connecting two existing rail yards, creating a continuous rail facility capable of serving both the Norfolk Southern and CSX railroads. The project features 18 separate 2,700-foot-long working tracks and a series of run-around tracks totaling 20 miles of new rail. With a large portion of the expansion area located atop a former landfill, the project team developed a dynamic compaction solution that allowed the existing material to remain in place, saving millions of dollars in remediation costs.



**Pettit Lake Creek Weir, Blaine County, Idaho**

**HDR**

Client: Shoshone-Bannock Tribes

A long-standing obstruction to fully restoring the Snake River as a migration route for sockeye salmon has been eliminated by replacing the existing Pettit Lake Creek Weir with a new structure tailored to the creek's peak flow. Its innovative design is also friendlier for fish and the Shoshone-Bannock Tribes, as it traps juveniles and, for the first time, adults to help biologists gather data for implementing additional measures to restore salmon migration. The project is part of a plan to ensure a healthy future for sockeye in Redfish, Pettit, and Alturas Lakes, where they spend two years growing before embarking on a two-year, 1,800-mile round trip to the Pacific Ocean and back—the longest and highest distance to travel for any fish.

**Climate Pledge Arena, Seattle**

**Haley & Aldrich**

Client: CAA Icon

The arena home for the WNBA's Seattle Storm and the NHL's Seattle Kraken was being challenged by its 57-year-old and brittle 22,000-ton roof. Under and around this fragile structure, the project team guided design and construction of more than a mile of excavation shoring and 187 temporary and permanent foundation-drilled shafts. The goal was to safely expand the interior and create a modern facility for the arena customers and fans. A sophisticated automatic survey monitoring system alerted engineers to any movement of 700 points on the roof and around the site every four hours. Throughout renovation, the roof moved no more than ¼ inch.





◀ **One Vanderbilt Avenue  
New York**

**Jaros, Baum & Bolles (JB&B)**  
Client: SL Green Realty Corp.

One of the newest and most picturesque New York City towers also sets a new benchmark for sustainability in high-rise structures. The project team aimed to create a future-oriented building that could be adapted in step with evolving building codes and technology. With one of the smallest carbon footprints compared with similarly sized buildings in New York City, the new tower features a high-performance glazing system that regulates insulation for heating and cooling and a highly efficient mechanical distribution system. These technologies allow the mechanical systems to provide enhanced filtration, thereby increasing the volume of outside air circulating through the interior and offering flexibility for future air cleaning technology.



◀ **Little Island, New York**  
**Mueser Rutledge**  
Client: Hudson River Park Trust

Little Island is a 2.5-acre park featuring an innovative foundation system that allows the park to seemingly float in the Hudson River. The park is situated atop more than 130 huge tulip-shaped pots carefully installed on slender columns created with unique pre-cast concrete composite piles. The composite foundation piles are set at different heights to create an almost futuristic undulating topography of artificial hills. It also features winding paths along a gentle, rolling grade through beautiful plantings that connect several open-air performance areas—one capable of seating 5,000 people.

▶ **Olbrich Botanical Gardens  
Frautschi Family Learning  
Center, Madison, Wisconsin**

**Salas O'Brien**  
Client: City of Madison

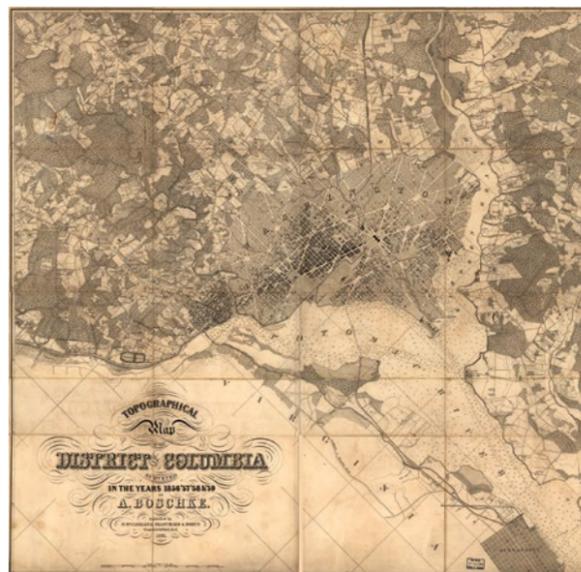
For the new 9,700-square-foot Learning Center, the project team engineered mechanical, electrical, and plumbing systems that use two-thirds less energy than conventional technologies. The facility combines low-energy radiant heating and cooling slab technology to provide year-round indoor comfort. The project team also designed a stormwater collection and filtration system that supplies 75 percent of the water for a new 11,500-square-foot greenhouse, minimizing impacts to the area's watershed. This all helped the Learning Center achieve a LEED Platinum rating from the U.S. Green Building Council.



▶ **Uncovering the History of D.C.'s  
Buried Streams, Washington, D.C.**

**Straughan Environmental**  
Client: District Department of Energy and Environment

An analysis of maps spanning more than 200 years concluded that since 1792, more than 70 percent of known surface waterways in the District of Columbia have been permanently lost. To identify the modern location of underground streams that might be suitable for restoration into surface waterways and natural habitat, the project team developed a geographic information system-based comparison of the historic stream network against the modern drainage and sewer network. Out of more than 500 storm drain networks studied, the project team identified 100 candidates for restoration, of which four streams considered the most promising are undergoing grant-funded restorations.



◀ **Route 7 and Battlefield Parkway Interchange  
Leesburg, Virginia**

**Parsons Transportation Group**  
Client: Virginia Department of Transportation

The new highway grade separation eliminates the last signalized intersection along a nine-mile stretch of Route 7 around Leesburg. Along with easing congestion for the 100,000 motorists who traverse the area each day, the project facilitates continued economic and population growth in and around the city. The new Battlefield Parkway Bridge, along with new sidewalks and a shared-use path, allow for safe and direct access to the Washington & Old Dominion Trail and adjacent mixed-use developments, providing alternative transportation options to pedestrians and cyclists. The project team's innovative design approach serves as a benchmark for ultra-wide, joint-free, low-maintenance decks in Virginia.



▲  
**Globe Life Field  
Arlington, Texas**  
**Walter P Moore**  
Client: Texas Rangers  
Baseball Club

Home of Major League Baseball's Texas Rangers, the facility features an exterior design that blends a historic brick façade with structural steel accents and a sprawling glass wall that frames the main entry for the adjacent Texas Live! Entertainment District. A distinctive retractable roof—featuring a 300,000-square-foot “racing stripe” of fluorine-based plastic—protects players and fans from rain and the sweltering Texas sun while ensuring an abundance of sunlight within. Structural elements in the stadium's two 360-degree concourses—the first of their kind in major league stadiums—were intentionally placed away from the field to prevent visual obstructions.



▲  
**Delaware Memorial Bridge UHPC Pilot Project, New Castle, Delaware**  
**WSP USA**  
Client: The Delaware River and Bay Authority

When it was determined that the northbound deck of the 1950s-era Delaware Memorial Bridge was reaching the end of its service life, the owners considered complete deck replacement. But in coordination with the project team, it was determined that an ultra-high-performance concrete (UHPC) overlay, which greatly outperforms conventional concrete, could be a tool to rehabilitate the deck, providing an extended life cycle at substantially less cost and with less disruption to traffic. The result was the first-ever application of an UHPC overlay on a suspension bridge. The project is now a model for bridge deck repair at significant savings, while extending the life of an entire bridge deck by 50 years or more compared to other replacement options.



◀  
**Central Industrial District Green Infrastructure and Improvements Project, Kansas City, Missouri**  
**HNTB**  
Client: City of Kansas City

An eight-acre public green space built on a former gravel parking lot contains an interactive boardwalk system that invites the public to observe the native plants and innovative nature-based rainwater harvesting system. Also known as the West Bottoms, the area had lacked an adequate stormwater management system and parks to complement years of significant residential growth. The creative approach allows the capture of 18,050 gallons of rainwater per cistern, providing a long-term water supply to the community. The collected water is currently being used by a local nonprofit that maintains green infrastructure plantings.

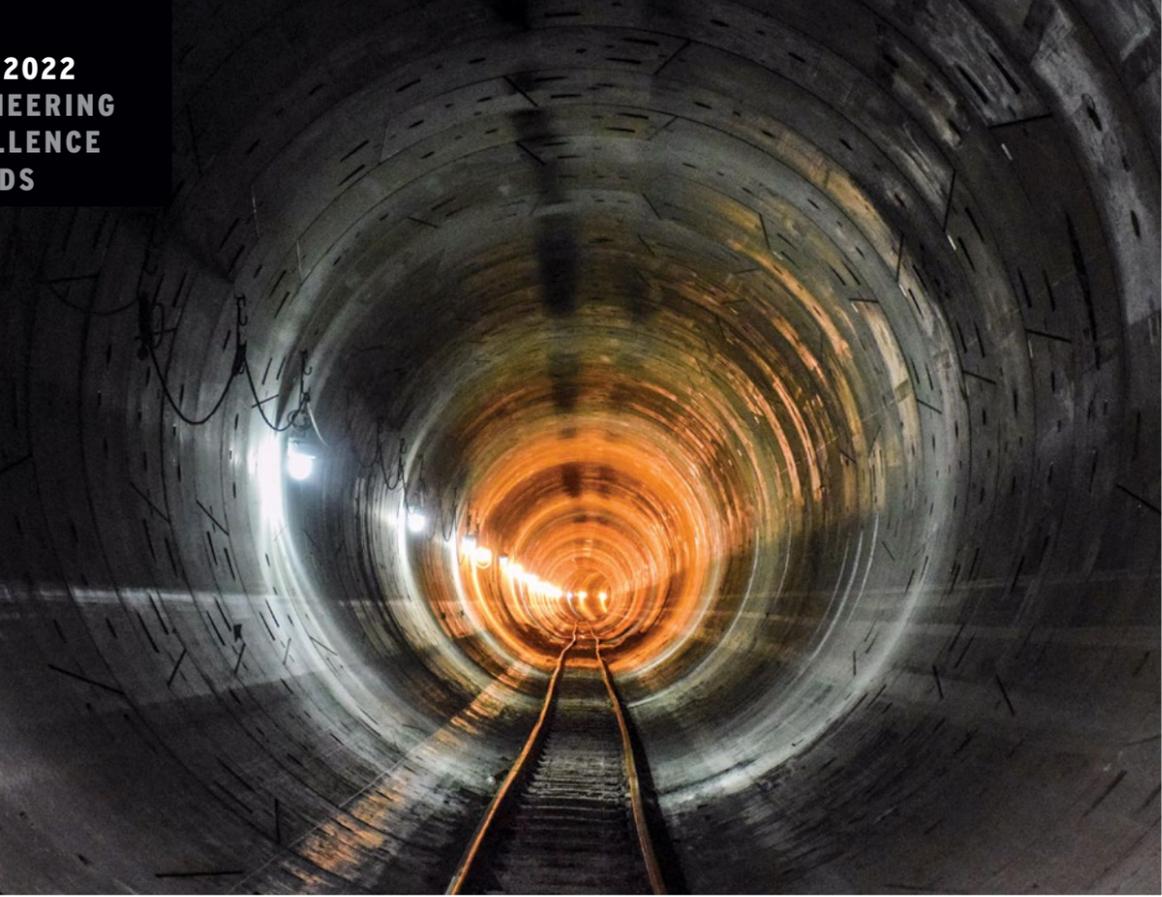
▶  
**Citizens Reservoir  
Fishers, Indiana**  
**Arcadis U.S.**  
Client: Citizens Energy Group

As the newest addition to Citizens Energy Group's surface water supplies, the reservoir increases raw water storage capacity by 3 billion gallons via the repurposing of a decommissioned rock quarry. The project also enhances Central Indiana's drought preparedness by allowing use of stored raw water under abnormally dry conditions. The project team adapted the large decommissioned quarry and its natural bedrock as integral design elements that achieve both simplicity and longevity. The reservoir also features pumps with energy-saving variable frequency drives, spill containment facilities, noise barriers, and native prairie plantings.



◀  
**Great Northern Transmission Line, Grand Rapids, Minnesota**  
**HDR**  
Client: Minnesota Power

The 224-mile transmission line connects Minnesota Power's transmission system to Manitoba Hydro's grid in Canada. Along with helping the utility achieve an important milestone toward its goal of using 100 percent renewable energy, the new transmission line complements an existing 500 kV tie line to enhance the overall transmission system's performance and reliability. Due to border crossing complexities and permitting requirements in both countries, the project team involved agencies early in the route development process. This early participation allowed the team to build relationships, understand permitting needs, and address concerns that might have delayed the project.



**Doan Valley Storage Tunnel, Cleveland**  
**McMillan Jacobs Associates/Wade Trim (Joint Venture)**  
Client: Northeast Ohio Regional Sewer District

A major component of a program seeks to reduce the Cleveland area's combined sewer overflow (CSO) discharges by nearly 4 billion gallons a year. The new tunnel and associated infrastructure system will control overflows, flooding, and pollution at 11 permitted CSO locations along Doan Brook, a major tributary to Lake Erie, and reduce CSO volumes by 350 million gallons each year. The system consists of 3.7 miles of tunnel through rock, ranging from 8.5 feet to 18 feet in diameter, routed through a major medical and cultural hub just east of downtown Cleveland. The project also includes five drop shafts, near-surface structures with consolidation sewers, and an emergency overflow basin.



**Issaquah-Fall City Road Widening, 242nd to Klahanie Drive, Sammamish, Washington**  
**HW Lochner**  
Client: City of Sammamish

Innovative public engagement strategies helped achieve consensus to replace existing traffic signals with three roundabouts. Along with improving safety and access to the Seattle metro area, the one-mile arterial street improvement eliminated a blocked fish passage, opened a wildlife migration route, preserved established trees, and restored a key wetland. Sustainability priorities were achieved by eliminating 5,000 truckloads of fill material from city streets, replacing an area of engineered fill with a bridge, and reducing area impervious surfaces for more than 27,000 square feet to improve surface water runoff quality.

**SR 167/70th Avenue East Vicinity Bridge Replacement, Fife, Washington**  
**Jacobs**

Client: Washington State Department of Transportation

Using an innovative concurrent design-build project delivery method, the project team designed a replacement structure for the 70th Avenue East Bridge over Interstate 5 and a new roundabout intersection with SR99. The project included an innovative roadway alignment that allowed for a single-span bridge with no median pier, eliminating the need for a median work zone and any temporary and permanent widening of I-5 to accommodate the new structure. The design also reduced permanent wetland impacts for more than two acres. The new bridge carries four lanes of traffic and completes a new link for the multiuse InterUrban Trail.



**LIRR Train Hall Renovation—33rd Street Entrance, New York**  
**AECOM**  
Client: MTA-Long Island Rail Road

In the first major upgrade in 50 years to the iconic train station, the project team incorporated a more spacious east concourse and wayfinding upgrades, in addition to a new glass canopy entrance that provides direct access to the LIRR concourse. The 50-foot-high canopy incorporates pretensioned steel cables with a smooth, curved, glass enclosure. The innovative use of high-performance glass allows natural light to penetrate the concourses, increasing the station's energy efficiency. The canopy is also furnished with an air curtain that promotes faster pedestrian traffic flow in and out of the station while maintaining overall efficient climate control.



**Core and Rail Redevelopment, Kalispell, Montana**  
**KLJ**  
Client: City of Kalispell

An obsolete gravel pit overlapping a Superfund site has been transformed into a new economic-generating industrial rail park. As part of the \$40 million project, the team relocated rail-served operations to the park from downtown, replaced the old rail line with a 1.6-mile linear park and trail, and created a new "complete street" and signaled intersection on U.S. Route 2. The project also includes new stormwater, lighting, and other infrastructure systems. By mitigating environmental impacts and reorganizing rail service, the project has already spurred an estimated \$200 million worth of new housing, commercial, and lifestyle amenities across Kalispell's core area.



▲ **Mukilteo Multimodal Ferry Terminal, Mukilteo, Washington**

**KPFF**  
Client: WSDOT, Washington State Ferries Division

The new terminal improves safety for motorists, creates seamless connections with other transportation modes, and provides pedestrians with direct access to the ferry's passenger deck. Inspired by traditional Native American longhouse architecture, the new facility also features movable passenger and vehicle loading bridges, berthing structures, a vehicle holding area, a six-bay transit center, a waterfront promenade, a public fishing pier, a city street, and an extension of State Route 525. By relocating ferry operations to a new terminal away from Mukilteo's town center, the project team was able to utilize an innovative seismic system of concrete-filled steel tubes, developed at the University of Washington, which provides safeguards in the event of an earthquake, while building and site elevations accommodate projected rises in sea level.



◀ **Pathway to Hope, Tulsa, Oklahoma**

**Garver**  
Client: Oklahoma Department of Transportation

Engineering innovation was needed for a rare task to design a special project for Tulsa in the healing process of the 1921 Tulsa Race Massacre, which resulted in at least 176 deaths. To mark the 100-year anniversary of the massacre, the project team incorporated special structural elements, including a unique 22-foot soil nail wall adjacent to a major highway to combat landslides and a 20-foot-wide corridor with other retaining walls. Visitors can travel the pedestrian Pathway to Hope and view historic and artistic contributions before connecting with the John Hope Franklin Reconciliation Park.



◀ **City of Brodhead Water Quality Trading Brodhead, Wisconsin**

**MSA Professional Services**  
Client: City of Brodhead

Water quality trading (WQT) offers municipalities the ability to generate "credits" to meet U.S. EPA effluent standards and improve stream health. To help Brodhead reduce the amount of phosphorus entering the greater Sugar River watershed and Decatur Lake, the project team developed a strategy that included stabilizing more than 60 actively eroding streambanks along Searles Creek and working with local farmers to make sustainable changes to their manure management practices. Over time, these upgrades are expected to offset approximately 1,090 pounds of total phosphorus per year—substantially more than the 190 pounds that would have been achieved annually with a costly \$4.2 million wastewater facility upgrade.

▶ **Trans-Alaska Pipeline Lost Creek Thermal Improvements, Livengood, Alaska**

**Shannon & Wilson**  
Client: Alyeska Pipeline Service Company

The Lost Creek site is located on a steep slope with complex soil and thermal conditions caused by degrading permafrost. This resulted in continuous slope movement and posed the threat of a landslide that could disrupt the Trans-Alaska Pipeline System. The project team utilized emerging 3D thermal modeling and testing technologies to replace the pipeline's vertical support structures. They also stabilized the slope using passive permafrost cooling and surface insulation. The solution promotes environmental sustainability by reducing waste and nearly eliminating wetland impacts, and is a good example for future stability mitigation of slopes at risk from permafrost degradation.



◀ **Keauhou Beach Hotel and Site Demolition Kahalu'u, North Kona, Hawaii**

**Bowers + Kubota Consulting**  
Client: Kamehameha Schools

To make way for a new Hawaiian cultural educational program, the project removed a seven-story, 309-room hotel built in and over tide pools, close to wetlands and coral reefs, and on a parcel with 15 significant historic properties, including the remains of five ancient heiau—a traditional place of worship. To avoid disturbing the tide pools and nearby cultural sites, the hotel was removed in a controlled manner with the use of remote-controlled demolition robots and a high-reach excavator fitted with a concrete processor. Pollution-control devices such as silt curtains as well as archaeological, water quality, and wildlife monitors ensured that natural, historical, and cultural resources were protected throughout the construction.

**NATIONAL RECOGNITION AWARD WINNERS**

FIRM NAME	PROJECT NAME	FIRM NAME	PROJECT NAME
<b>ACEC ALABAMA</b> Building & Earth Sciences Sain Associates TTL, Inc.	VA Mental Health Clinic Carvana Bessemer Homewood Suites Hotel	<b>ACEC-FL</b> AECOM Chen Moore and Associates Halff Associates Hardesty & Hanover	Selmon West Extension HDD of 7 miles of 54 FAMU Way SW 1st Street Bridge over Miami River C-44 Reservoir and Stormwater Treatment Area
<b>ACEC ARIZONA</b> HDR	Tres Rios Water Reclamation Nutrient Recovery Project	<b>HDR</b>  <b>RS&amp;H</b>	Crosstown Parkway Extension Design-Build IKE Smart City Kiosks Project Turnpike Widening from Osceola Parkway to Beachlin
<b>ACEC CALIFORNIA</b> AZTEC Engineering Group  Degenkolb Engineers  HDR/BKF Engineers/ MNS Engineers  Kennedy/Jenks Consultants  Kleinfelder  Mott MacDonald/Bechtel  Ninyo & Moore Geotechnical & Environmental Sciences Consultants  Psomas	I-15 Express Lanes Project Design-Build 400-430 California Street Voluntary Seismic Retrofit Salinas Intermodal Transportation Center Pure Water Monterey Advanced Water Purification Facility Miramar Clearwell Improvements Project BART Silicon Valley Berryessa Extension, Phase 1 Los Angeles International Airport Terminal North Spring Street Viaduct Widening	<b>WGI</b> <b>WGI</b>  <b>ACEC GEORGIA</b> Heath & Lineback Engineers, Inc.  Parsons Transportation Group  Thomas & Hutton Walter P Moore  <b>ACEC ILLINOIS</b> Baxter & Woodman  Ciorba Group HNTB  HR Green  Jacobs Engineering Group  Klingner & Associates MSA Professional Services  TranSystems	SR 25 Savannah & Middle River Bridges Replacement I-285 at I-20 East Side Interchange Reconstruction Jackson Street Plaza Redevelopment Charlotte Convention Center Expansion Wastewater Treatment Plant Biological Improvements Edens Spur Reconstruction O'Hare International Airport Runway ATC Enhancements and Pedestrian Bridge over the Fox River Midway International Security Checkpoint Expansion Bill Klingner Trail Extensions Mount Carroll Wastewater Treatment Facility Randall Road Corridor Improvements
<b>ACEC COLORADO</b> Felsburg Holt & Ullevig HDR and Silman Martin/Martin Muller Engineering	39th Avenue Greenway Wyoming Capitol Square Project City Park Golf Course Redesign Chatfield Storage Reallocation Project	<b>ACEC INDIANA</b> American Structurepoint CHA Consulting Greeley and Hansen  <b>ACEC/IOWA</b> HDR  <b>ACEC KANSAS</b> HDR  HNTB HW Lochner  TranSystems  TranSystems  WSP USA	Newman Road Underpass Project Monon Trail Bridge over 38th Street West Wastewater Treatment Plant Expansion and CSO Council Bluffs Interstate System Dual, Divided Freeway Lone Elm and Old 56 Highway Improvements Mahaffie Street Extension Dwight D. Eisenhower Airport Pavement & Electrical SW Butler Road and SW 150th Street Turner Diagonal Interchange Design/Build Project East Kellogg Expansion and Improvements
<b>ACEC-CT</b> CDM Smith  WSP USA	Special Accelerated Water Main Replacement York Correctional Institution	<b>ACEC-KY</b> HDR  Heritage Engineering Michael Baker International	Blue Grass Airport Runway 4-22 Rehabilitation Portland CSO Basin Brent Spence Bridge Fire & Rehabilitation



The Charlotte Convention Center Expansion in Charlotte, North Carolina, designed by Walter P Moore, is a 2022 EEA National Recognition Award winner.

FIRM NAME	PROJECT NAME	FIRM NAME	PROJECT NAME
<b>ACEC OF LOUISIANA</b> Duplantis Design Group	Lakeshore Villages	<b>ACEC/MISSOURI</b> CDM Smith	Co-Digestion to Renewable Gas at Des Moines Water Reclamation Facility Webster County U.S. Highway 60 Rail Study
<b>ACEC/MD</b> Gannett Fleming HDR  McCormick Taylor	Fullerton Reservoirs Little Patuxent Water Reclamation Plant MD 30 Business (Main Street) Community Safety and Enhancement Project Replacement of Edmondson Avenue Bridge over Gwynn Falls Park	<b>Crawford, Murphy &amp; Tilly</b>  <b>ACEC-MONTANA</b> DJ&A  HDR HDR  Northern Engineering & Consulting	Little Bighorn Water/Wastewater System Landfill Drop-Off Facility St. Mary Canal Drop 2 & 5 Replacement Survey: Hotchpotch to Standardization
<b>ACEC/MA</b> AECOM  Arup  Environmental Partners Group  HDR  Howard Stein Hudson  Kleinfelder	Peirce Island Wastewater Treatment Upgrade Harold Alford Athletics & Recreation Center Restored Resilience in Coastal Cedar Point North End Pedestrian Path under the Connecticut River (Transit) Line Columbus Avenue Center Running Bus Lanes Port Flooding Resiliency Project: Parking Lot No. 6 Stormwater Tank Rehabilitation of the Arlington Memorial Bridge Emergency Repair of Water Main under I-83 Bridge Metro Platform LED Lighting Replacement	<b>ACEC NEBRASKA</b> HDR  HDR  HDR  <b>ACEC NJ</b> AKF Group  DeSimone Consulting Engineers Dewberry Hazen and Sawyer Hazen and Sawyer  HDR  H2M architects + engineers  Jacobs Engineering Group  Naik Consulting Group  R3M Engineering  Stantec  WSP USA	Children's Hospital & Medical Center — Hubbard Center Theresa Street Water Resource Recovery Facility Biogas Conditioning System Zorinsky Water Quality Basin No. 2 Dam Kroger High Tech Fulfillment Centers Greenpoint Landing Block D Route 206 Bypass Contract B Inundation Model Revitalization of Existing Water Supplies Southern Water Pollution Control Facility Cogeneration Improvements SUEZ Water N.J. Lead Service Line Replacement Phase Rt. 495, Rt. 1&9 / Paterson Plank Road Bridge Construction Management of Hubberson Substation Restore/Protect MCOA Sayreville Pump Station Rt. 3, Rt. 46, Valley Road & Notch Road Rebuild, Contract A MSLA 1-D Landfill Closure
<b>ACEC/MW</b> AECOM  EBA Engineering  M.C. Dean  <b>ACEC/MICHIGAN</b> HNTB Michigan  Hubbell, Roth & Clark Prein&Newhof SME  <b>ACEC/MN</b> Barr Engineering  Inter-Fluve  Kimley-Horn LHB LHB  Short Elliott Hendrickson (SEH®)  Short Elliott Hendrickson Inc. (SEH®)  Stantec  TKDA TKDA	I-375 Reconstruction Improvements Recreating Conventional Walker Avenue Bridge Removal Beekman on Broadway Grassy Point-Kingsbury Bay Habitat Restoration Minnehaha Creek, Arden Park Restoration Levee Park Dock Improvements Superior Street Reconstruction TH 61 Roadway Rehabilitation & Safety Improvements Detroit Lakes Wastewater Treatment Facility Trunk Highway 246 and Jefferson Parkway Reconstruction Baudette/Rainy River International Bridge Replacement Dale Street Bridge Reconstruction Runway Conversion to Dual Use Taxiway	<b>ACEC NEW YORK</b> Cameron Engineering & Associates  Dewberry Mains H2M architects + engineers Jacobs  Langan Langan Stantec  STV and AECOM  Thornton Tomasetti Wendel  WSP USA	FDNY Training Academy Live-Fire Training Building Two 20-Inch Sub-Aqueous Water to City Island Posillico Soil Wash Plant Flood Mitigation and Resiliency: 148th Street Yard Moynihan Train Hall One Vanderbilt N.Y. State Thruway Conversion to Cashless Tolling World Trade Center Vehicular Security Center Capital One Hall Hertel at Deer — Real Time Control Project Farley Building Redevelopment- Moynihan Train Hall

**NATIONAL RECOGNITION AWARD WINNERS**

FIRM NAME	PROJECT NAME	FIRM NAME	PROJECT NAME
<b>ACEC/NC</b> CDM Smith	River Arts District Transportation Improvement Project	<b>ACEC/PA</b> Gannett Fleming Gannett Fleming	I-83 Exit 4 Improvements Penn State Ancient Biomolecules Research Environment
<b>HDR</b> <b>HDR</b> STV	CONNECT Beyond Green Street Pedestrian Bridge	<b>Langan</b> <b>Urban Engineers</b>	UGIES Bethlehem LNG Facility Harrisburg International Airport Levee System Rehabilitation
<b>S&amp;ME</b>	Sanitary Sewer Improvements at Charlotte Douglas International Airport Dominion Energy Natural Gas Pipeline	<b>Whitney Bailey Cox &amp; Magnani</b> <b>WSP USA</b>	The Roundhouse at Hazelwood Green A 5-Year Capital Plan
<b>ACEC NORTH DAKOTA</b> <b>Barr Engineering</b> <b>Barr Engineering</b>	Karey Dam Rehabilitation Mouse River Enhanced Flood Protection, Phases 2&3	<b>ACEC-SC</b> <b>Civil Engineering Consulting Services</b>	S.C. 153 Extension, Pickens County, S.C. I-526 Wando River Bridge Tendon Repairs
<b>ACEC OHIO</b> <b>Hazen and Sawyer</b>	Celina Water Treatment Plant DAF-Bioreactor	<b>HDR</b>	U.S. 21 over Harbor River Bridge Replacement 85/385 Gateway Project
<b>HNTB</b>	Smart Columbus — U.S. DOT Smart City Challenge	<b>Infrastructure Consulting &amp; Engineering</b> <b>Infrastructure Consulting &amp; Engineering</b>	
<b>KS Associates</b> <b>Michael Baker International</b> <b>The Kleingers Group</b>	Wendy Park Access Bridge 33 Smart Mobility Corridor Blue Ash Road Corridor Improvements	<b>ACEC TENNESSEE</b> <b>CDM Smith</b>	WeGo Nolensville Bus Shelters Project West Hills Roundabout Commercial Development & Access Improvement
<b>Woolpert</b>	CVG CONRAC Terminal Drive Bridges	<b>CDM Smith</b>	Dave Donaldson Wildlife Management Area Hydrology
<b>ACEC OKLAHOMA</b> <b>CONSOR Engineers</b>	Pawnee Nation CM/GC Safety and Enhancement Project	<b>EnSafe Inc.</b>	
<b>HNTB</b> <b>Olsson</b>	Peoria AERO Bus Rapid Transit I-44 / Turnpike Interchange	<b>ACEC TEXAS</b> <b>BGE, Inc.</b>	IH 635 / Dallas North Tollway Traffic Signal
<b>ACEC OREGON</b> <b>HDR</b>	Elwert Road-Kruger Road Intersection	<b>Freese and Nichols</b>	Camp Mabry Building 1 Historical Renovation
		<b>Half Associates</b>	Storm Drain Rehabilitation Program
		<b>Huitt-Zollars</b>	Caruth Park Underground Detention
		<b>Huitt-Zollars</b>	North Operations Battery Electric Bus Yard
		<b>Mbroh Engineering</b> <b>Walter P Moore</b>	Giving the Power to Deliver Houston Botanic Garden
		<b>ACEC OF VERMONT</b> <b>HDR</b> <b>HDR</b>	I-91 Rockingham Bridges Roxbury Fish Culture Station
		<b>ACEC WASHINGTON</b> <b>AECOM</b>	Seattle-Tacoma Airport North Satellite Modernization
		<b>HDR</b>	Anacortes Water Treatment Plant Resiliency
		<b>HDR</b>	I-90, Barker Road Interchange Improvement
		<b>Inter-Fluve</b>	Nason Creek Upper White Pine Restoration
		<b>Otak, Inc.</b>	Manley Road and Stream Improvements Project
		<b>ACEC WISCONSIN</b> <b>IMEG</b> <b>Mead &amp; Hunt</b>	Verona High School City of Madison Nakoosa Trail Fleet/Fire/Radio Shop Facility
		<b>Michael Baker International</b>	Leo Frigo Software for Pile Deterioration
		<b>Strand Associates</b>	Verona Road Stage 2



Greenpoint Landing Block D in Brooklyn, New York, designed by DeSimone Consulting Engineers, is a 2022 EEA National Recognition Award winner.

**ACEC thanks the 2022 Engineering Excellence Awards (EEA) judges and EEA Committee members for their time and dedication to this year's competition.**

**2022 EEA JUDGES**

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<b>Mikita Browning</b> Department of Watershed Management, City of Atlanta Atlanta	<b>Sabrina Drago</b> Sacramento Transportation Authority Sacramento, California	<b>Clarita Lao</b> Illinois Tollway (Ret.) Downers Grove, Illinois	<b>Virginia Walsh</b> Miami-Dade Water and Sewer Department Miami
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<b>John Chun</b> Port of Long Beach Long Beach, California	<b>Cheri Gerou</b> State Architect of Colorado Evergreen, Colorado	<b>Julie Meredith</b> WSDOT Seattle	<b>Rocco Zuccherro</b> Illinois Tollway Downers Grove, Illinois
<b>John Classe, Jr.</b> Reedy Creek Improvement District Lake Buena Vista, Florida	<b>Marshall T. Hampton</b> City of St. Petersburg St. Petersburg, Florida	<b>Zorica Pantic</b> Wentworth Emerita Newton, Massachusetts	

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