

# 2018

## ENGINEERING EXCELLENCE AWARD WINNERS

The 2018 Engineering Excellence Awards Gala—known as the Academy Awards of the engineering industry—showcased 146 projects from across the country and around the world at a black-tie event on April 17.

A panel of 35 judges representing a wide spectrum of built environment disciplines had selected 36 top winners—including 20 Honor Awards, 15 Grand Awards and a Grand Conceptor Award for the year's most outstanding engineering achievement.

Comedian and actor Kevin Nealon again hosted the Gala, which was attended by more than 600 members, guests and dignitaries.



ALAN SCHINDLER



Joe LaBuono (left), HDR director of major bridges, and WSP USA Senior Supervisory Engineer Roger Haight (right) react at the EEA Gala after their project Bayonne Bridge: Raising the Roadway was named the 2018 Grand Conceptor Award winner, signifying the year's most outstanding engineering achievement.



# 2018 Grand Conceptor Award

Bayonne Bridge: Raising the Roadway  
Bayonne, New Jersey & Staten Island, New York  
**HDR | WSP USA (Joint Venture)**  
New York, New York

Imaginative engineering delivered a new highway 64 feet above the highway it was to replace, all within the tight confines of the same arch bridge. The bridge's 151-foot navigation clearance was too low to accommodate the huge Panamax ships that will soon be plying the river, so the project increased the clearance by constructing a roadway above the existing one, which was then demolished. More than 4,000 tons of steel strengthening plates were needed to support the structure's temporary double-roadway condition during construction. Adding to the challenge, both the original roadway and the critical underlying shipping channel had to be kept open. In addition to increasing the vertical clearance, the bridge now has wider lanes, concrete medians, a shared-use path and can incorporate a light-rail line in the future.



▶ **150 North Riverside**  
Chicago, Illinois  
**Magnusson Klemencic**  
**Associates**  
Seattle, Washington

A dazzling example of superstructure design, this new 54-story office building has transformed a previously barren, undeveloped site into a vibrant public complex. To overcome extremely tight site constraints, the project team developed a cutting-edge, blade core design that requires half the support pilings of a comparable building. At 750 feet, the 1.25-million-square-foot tower balances atop a base that is only 39 feet wide. Twelve water tanks at the top of the building contain 700 tons of water to help minimize building sway in strong wind conditions. A precast, prestressed concrete lid atop nearby railroad tracks provides space for a new public park featuring an amphitheater, pedestrian pathways and retail venues.





▲  
**Tempe Town Lake  
Downstream Dam  
Replacement**  
Tempe, Arizona  
Gannett Fleming  
Phoenix, Arizona

As a shining example of innovative dam design, the new 880-foot-long dam is one of the largest hydraulically controlled hinged steel-gate dams of its kind. The dam replaces a previous structure that failed, draining 1 billion gallons of water from the lake within 24 hours. The dam has eight hydraulically operated steel gates, each weighing approximately 300,000 pounds. The new dam allows the river to flow during high-water events to prevent upstream flooding and maintains the lake's key role in the city's economy. Expected to last at least 50 years, this essential infrastructure ensures that Tempe Town Lake will remain a destination for recreation and center of economic development.



▲  
**Second Avenue Subway—Phase 1**  
New York, New York  
AECOM & Arup (JV), New York, New York

The 1.8-mile project is the first major expansion of New York's subway system in 50 years, with three new stations at 72nd, 86th and 96th streets, and upgrades to the existing 63rd Street station. The stations rank among North America's largest underground excavations, at nearly 64 feet wide, 100 feet deep and 1,600 feet long. The project team overcame the challenges of building below some of the world's most congested infrastructure and dealing with difficult ground conditions. The \$4.45 billion project was completed on time and within budget—a major accomplishment for a project of this scope and size.



▲  
**Dixie Drain Phosphorus  
Removal Facility**

Parma, Idaho  
**Brown and Caldwell**  
Boise, Idaho

An addition to the existing Dixie Drain—an agricultural and groundwater drain that discharges into the Boise River—has led to 50 percent more phosphorus being removed from treated water before it's discharged into the river, which is a key provider of economic, aesthetic, wildlife and recreational benefits. The new facility processes up to 130 million gallons of ground and surface water daily while removing 140 pounds of phosphorus per day. The result is a cost-effective solution, resulting in significantly greater water quality and a model for other areas facing similar pollutant removal concerns.

▶  
**University of Massachusetts  
Design Building**  
Amherst, Massachusetts  
**Simpson Gumpertz & Heger**  
Waltham, Massachusetts

One of the largest timber-framed buildings in the United States, the new UMass Design Building includes glue-laminated beams and columns and a cross-laminated timber composite with a concrete topping slab for the flooring. Combined, they provide the strength and the ductility needed to meet building code and user requirements. The structure also incorporates several sustainable design features, including rainwater retention systems, a green roof and natural lighting, while encouraging the use of timber framing for other large building applications.





▲  
**Basin Creek Water  
Treatment Plant**  
Butte, Montana  
HDR; Robert Peccia &  
Associates  
Missoula, Montana

The new \$30 million treatment plant is the first in the United States to use a cutting-edge ceramic membrane filtration system. Common in Japan and Europe, ceramic is more durable and chemical resistant, and has a longer life expectancy than commonly used polymer filters. Ceramic filters also waste significantly less water, resulting in 99.95 percent backwash recovery, well above the standard 85 to 95 percent recovery rate of conventional treatment technology. The treatment plant can process up to 7 million gallons of water per day and employs gravity to reduce energy consumption and make it unnecessary to pump water to the distribution system, except in instances of extreme demand.



▲  
**35th Street Pedestrian Bridge**

Chicago, Illinois

EXP

Chicago, Illinois

The striking 620-foot-long structure is Chicago's longest pedestrian bridge and one of only a few mono-cable, self-anchored suspension bridges in the United States. Replacing a deteriorating structure that was inaccessible to those with physical disabilities, the new bridge provides an eye-catching crossing of Lake Shore Drive and Metra railroad tracks. It is anchored by a central pylon soaring more than 120 feet above Lake Shore Drive, with suspension cables anchored at the ends of the deck rather than in massive anchor blocks at abutments. The design also features a reverse horizontal curve to provide visitors with a panoramic view of the scenic lakefront area.

▶  
**Crum Creek Viaduct**  
Swarthmore, Pennsylvania  
**Figg Bridge Engineers**  
Exton, Pennsylvania

The new five-span, 735-foot-long steel girder structure replaced an outdated rail viaduct bridge over Crum Creek by being slid into place. Before closure of the obsolete 121-year-old bridge, the project team assembled the superstructure and precast deck adjacent to the existing bridge supported by straddle bents built under the older structure. During the 11-week shutdown, the project team demolished the old bridge and laterally slid the new structure across the pier caps and onto permanent bearings using hydraulic jacks. Installation of rail connections, catenary transmission lines and signals quickly followed. Busy commuter train service resumed as scheduled on a safer and more contemporary structure.





**Chicago Riverwalk**  
Chicago, Illinois  
**Benesch & Infrastructure**  
**Engineering**  
Chicago, Illinois

A testament to imaginative infrastructure design and construction, the new Chicago Riverwalk connects downtown with the Chicago River's natural amenities. The Riverwalk is supported by an innovative system of canopied piers, or "underbridges," that connect the walkway at six historic bridges. The precast walkways were installed atop drilled shafts that extend 70 feet beneath the water's surface. New build-out sections ranging from 25 to 50 feet between each bridge provide diverse attractions and gathering spaces for people to enjoy the river and the enhancements to Chicago's second shoreline.



▲  
**Bahá'í Temple of  
South America**  
Santiago, Chile

**Simpson Gumpertz & Heger**  
Waltham, Massachusetts

Envisioned to “capture the sunlight and be transformed by it” during daylight and “glow with a dreamlike serenity” at night, the breathtaking Bahá'í temple more than accomplished its goals. Located in the foothills of the Andes Mountains outside of Santiago, Chile, the temple's superstructure is composed of nine translucent wings. The underlying structures are free-form tubular space trusses rising to a top ring at the structure's oculus. The space trusses are clad on the outside with borosilicate glass panels and on the interior with Portuguese marble panels. The project team constructed this complex, free-flowing design in a remote site with high seismic activity, creating one of the world's most breathtaking centers of worship.





**Lotte World Tower**  
Seoul, South Korea  
**Syska Hennessy**  
**Group**  
New York, New York

Ranked as the world's fifth-tallest building and the tallest in South Korea, the Lotte World Tower is also a technical marvel. The 1,821-foot-tall, 123-story state-of-the-art superstructure features geothermal, photovoltaics and windspire turbines to supplement conventional power with renewable energy sources. High-tech controls monitor and adjust power usage, external shading and dimming systems to fine-tune interior temperatures and light levels. The 3.2-million-square-foot tower features a luxury hotel, a shopping mall, offices, residences and entertainment venues.



**Augmentation & Relief Sewer**  
Columbus, Ohio  
**DLZ Corporation**, Columbus, Ohio

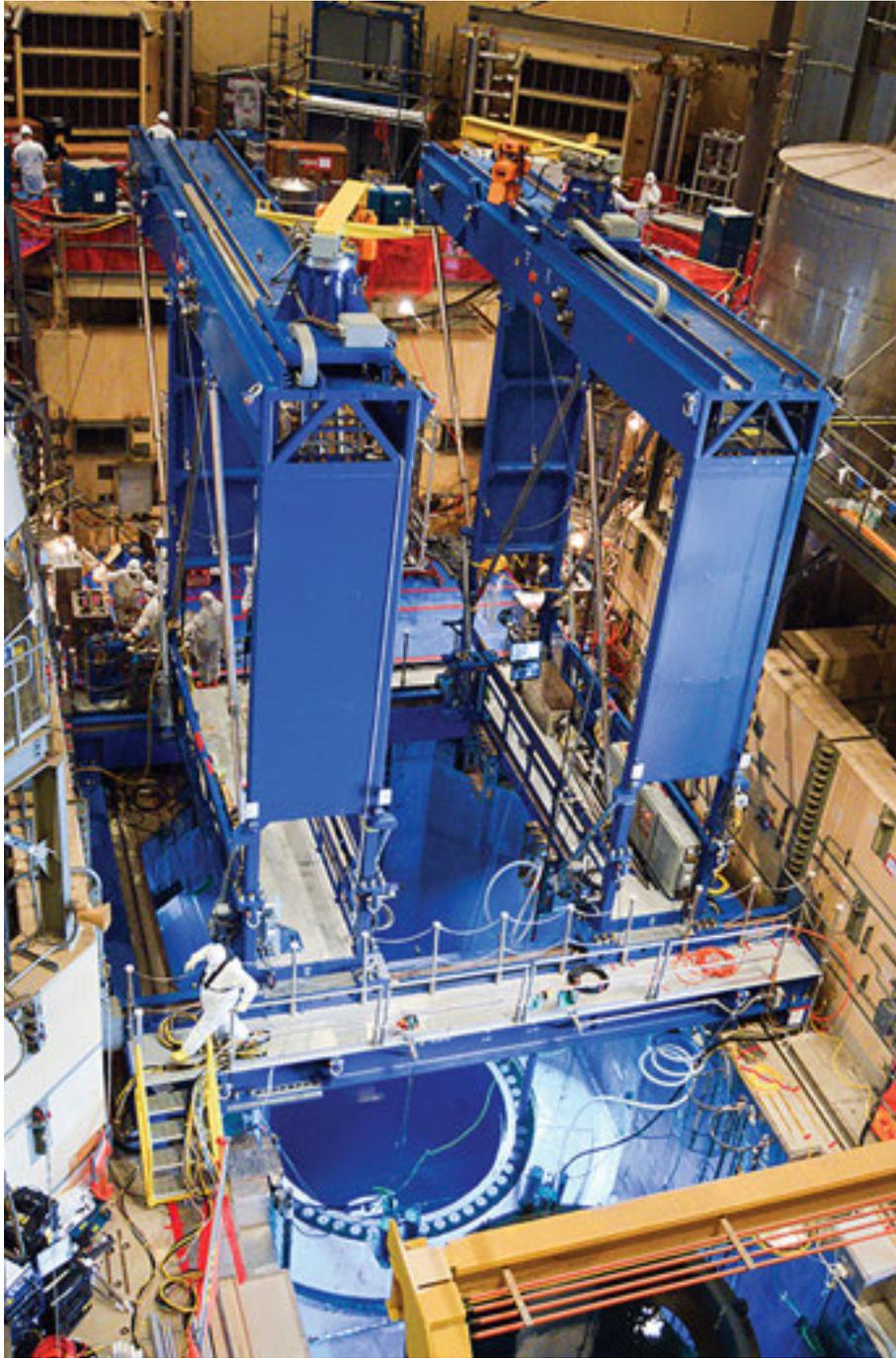
The new relief sewer reduces combined sewer overflows in the rapidly growing Columbus downtown area and brings the city into compliance with new clean water regulations. Nearly 2 billion gallons of combined sewage that previously overflowed directly to the Scioto River each year now flows through a new 23,000-foot-long, 20-foot-diameter tunnel for proper treatment at a nearby treatment plant. The additional storage volume eliminates the need for future above-ground structures and treatment systems, saving the city as much as \$175 million.



▲  
**Washington Wabash  
Elevated Train Station**  
Chicago, Illinois  
EXP  
Chicago, Illinois

The striking new elevated train station features canopies of skeletal steel and faceted glass that undulate along Chicago's Jewelers Row while producing a dynamic play of light on the platform and street below. The project team implemented unique construction phasing and sequencing to build the station in a dense urban environment, maintain active transit service in a heavily traveled corridor, and minimize the impact on vehicular and pedestrian traffic. The station serves as a beautiful gateway to downtown Chicago attractions while enhancing perceptions of public transportation.





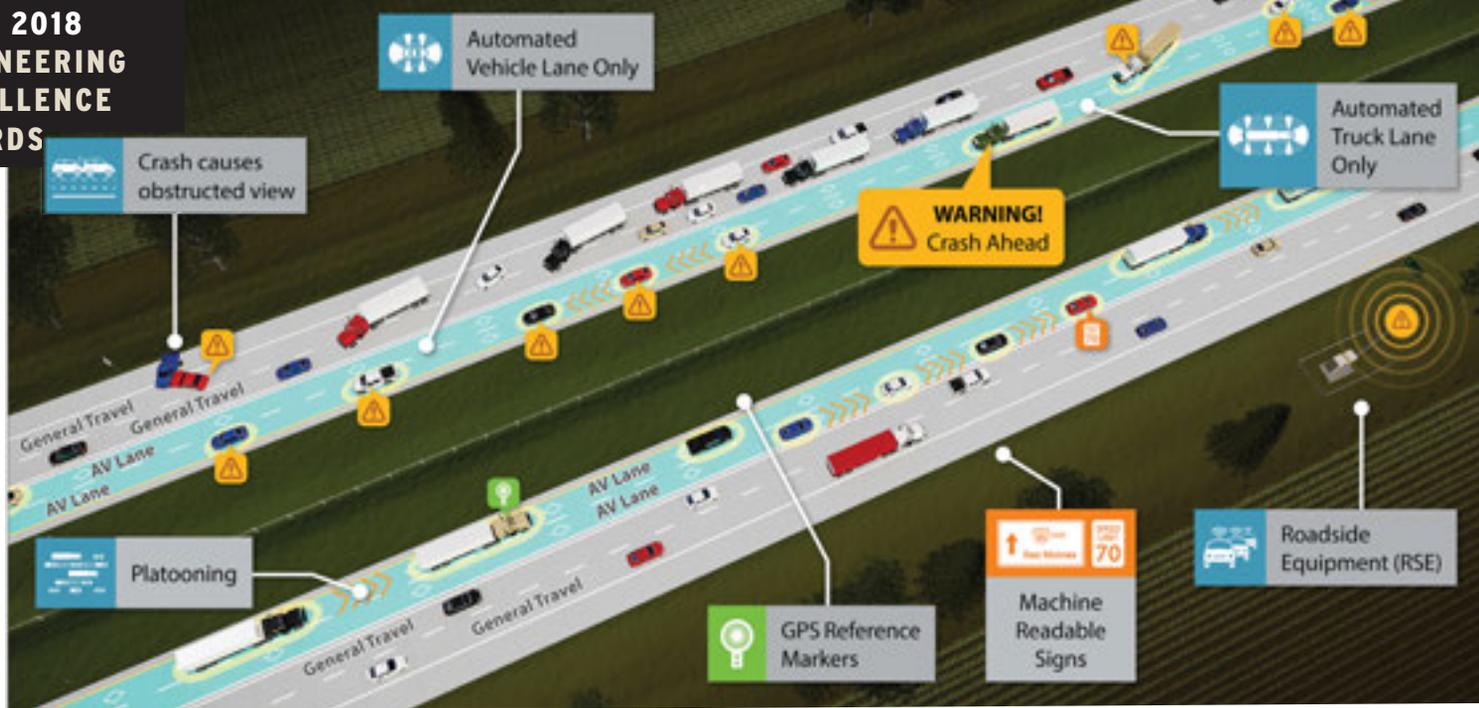
◀ **Water Jet Peening  
Bridge Crane System**  
Burlington, Kansas  
Merrick & Company  
Greenwood Village,  
Colorado

A unique specialty crane deploys a process called Water Jet Peening (WJP), which extends the operational life of key nuclear reactor components by preventing corrosion and cracking. Weighing more than 179,000 pounds and operated by remote control, the specialty crane—which can hoist 3 tons—lifts, lowers, positions and supports two WJP tools—each the size of a small car—into the reactor vessel during an outage. The process uses only water to relieve stresses thus eliminating the potential for any foreign materials entering the reactor pool. The combined crane and WJP process reduces maintenance and operation costs, shortens outage durations, extends reactor life and minimizes risk to both the reactor vessel and plant personnel.



◀ **I-91 Brattleboro Bridge Improvements**  
Brattleboro, Vermont  
Figg Bridge Engineers  
Exton, Pennsylvania

Soaring 100 feet above the West River, the new three-span, 1,036-foot-long arching bridge provides a dynamic gateway to Vermont. The innovative design includes two “quad wall” piers made of concrete columns that curve symmetrically outward in two directions. The quad wall system provides stability and allows the segmental construction of the bridge superstructure to be assembled from above without temporary falsework in the river. The bridge’s landmark aesthetics and innovative structural design will safely and reliably serve regional motorists for at least 150 years.



▲ **Interstate 80  
Automated Corridors  
Planning Study**  
Statewide, Iowa  
HDR  
Omaha, Nebraska

Advanced engineering helped the state of Iowa align its future transportation strategy to correspond more effectively with rapidly progressing transportation technologies, such as the growing use of autonomous vehicles. The project team analyzed a 300-mile portion of I-80—one of the state’s most critical east-west links—to determine design and operational requirements to preserve and enhance safety, mobility and travel-time reliability. The study identified strategies for balancing mobility and access, along with designing for future needs, and right-sizing the corridor. Study results will give the state added flexibility for incorporating transportation technologies in the future.



▲ **Interdisciplinary Science and  
Engineering Complex**  
Boston, Massachusetts  
Arup  
Boston, Massachusetts

A former brownfield site is home to a new science facility that affirms Northeastern University’s status as a premier research institution. The 234,000-square-foot Interdisciplinary Science and Engineering Complex houses four research disciplines—engineering, health sciences, basic sciences and computer science. The facility far surpasses current standards for energy efficiency—a difficult goal for laboratories, which typically require significant energy to ensure precise, consistent conditions for research. The complex achieves 33 percent energy-cost savings and 75 percent energy savings compared with typical laboratories.





▼  
**The Bridge at Cornell Tech**  
 New York, New York  
 Thornton Tomasetti;  
 Weiss/Manfredi | Turner  
 Construction  
 New York, New York

The six-story, 240,000-square-foot building blends Cornell Tech academic facilities with offices of private technology firms to more effectively “bridge” educational and private technology sectors and improve collaboration. The bridge features two separate towers, connected at each floor by a central causeway, which provide spectacular views of midtown Manhattan and Long Island City. The glass facade exposes the building’s unique structural system, which allows the upper five stories to cantilever up to 80 feet above the landscaped campus, reflecting Cornell Tech’s aspirational and innovative mission in striking fashion.

▼  
**Davis Barracks, U.S. Military Academy**  
 West Point, New York  
 Clark Nexsen  
 Virginia Beach, Virginia

The design of a new military barracks—the first new residential facility built at West Point since 1972—raises the standard for the next generation of military housing. The six-story, 287,000-square-foot facility houses up to 975 cadets and features innovative building systems that use only half the energy of a comparable structure. Advances include a 100 percent solar-heated hot water system and radiant floor heating and cooling providing 50 percent savings in energy consumption. Integrated with its neighboring buildings in a unified style, scale and form, the barracks support West Point’s goal of a net-zero energy campus.



▲  
**Olin Library Transformation**  
 St. Louis, Missouri  
 Alper Audi & Geotechnology, Inc.  
 St. Louis, Missouri

The historic campus library needed additional space for its special collections and rare traveling exhibits. Full facility replacement was not possible. The most feasible option was to expand the 50-year-old building downward 30 feet. The project team crafted an innovative temporary steel shoring system to support upper floors while piers were removed and replaced. The library remained in use throughout the excavation and subsequent phases of the construction.



▲ **California Incline Bridge & Idaho Avenue Pedestrian Overcrossing**  
Santa Monica, California  
**T.Y. Lin International**  
San Diego, California

A picturesque new 750-foot-long bridge now carries vehicles, pedestrians and bicyclists from atop the bluff slopes of Pacific Palisades Park down to the Pacific Coast Highway near Santa Monica State Beach. The California Incline Bridge is designed to withstand the site's corrosive marine environment and high seismic demands, including up to 20 feet of potential bluff erosion that could occur over its life span. The Idaho Avenue Pedestrian Overcrossing is an aesthetic, curving structure with a V-shaped pier that emerges from the historic Idaho Trail and spirals down to connect to a multiuse bicycle and pedestrian path.



▲ **Governors Island Park and Public Space**  
New York, New York  
**Hart Crowser**  
Seattle, Washington

The languishing landscape on Governors Island has been transformed into an exciting new park destination for New York City. Since 2012, the 10-acre island near lower Manhattan had been a dumping ground for construction fill dirt from a new subway line. The project team creatively converted mounds of fill dirt into steep man-made hills that soar approximately 80 feet above the nearby harbor. Innovative soil reinforcement and specialty surface elements help maintain slopes and promote protective vegetation. More than a million people visit the island annually to enjoy unobstructed views of the Statue of Liberty, the New York City skyline and the Brooklyn Bridge—all from a height similar to an eight-story building.

▶ **Lake View Dual Zone Reservoir**  
Madison, Wisconsin  
**Short Elliott Hendrickson**  
La Crosse, Wisconsin

A complex new water supply storage tower features two separate storage tanks within a single reservoir structure to uniquely accommodate two supply zones and two pressure levels. The system provides storage of 300,000 gallons of water for one pressure zone and 1 million gallons of water for the other. The project required the demolition of a 55,000-gallon water tower, a process that was complicated by the proximity of a busy airport, a historically significant building and multiple cellular communications systems. Now seamlessly integrated into the environment, the unique dual-zone water tower will serve Madison for more than 100 years.



**Meriden Green**  
 Meriden, Connecticut  
 Milone & MacBroom  
 Cheshire, Connecticut

Creative engineering transformed a long-existing flood zone into a vibrant catalyst for Meriden's downtown economic revival. The project team repurposed a long-closed shopping mall and parking lot—which also was a major contributor to flooding problems—into a new centrally located urban open space that doubles as a flood storage area. The conversion also restored 1,700 linear feet of once-buried Harbor Brook, creating a new, more natural channel and floodplain. The site now includes an outdoor amphitheater, a naturally flowing waterway, accessible walkways and an expansive great lawn for hosting seasonal events.



**New York Harbor Water Siphon**  
 New York, New York  
 Mott MacDonald & CDM Smith  
 Iselin, New Jersey

Dredging deeper channels in New York Harbor to accommodate the huge Panamax ships in the Port of New York and New Jersey threatened two critical water mains, called siphons, that deliver drinking water to Staten Island. The project team incorporated a 2-mile-long, 72-inch diameter steel siphon inside a tunnel bored at more than 100 feet beneath the Hudson River, preserving the water supply and allowing dredging to proceed. It prepared the nation's third-largest port for the next generation of cargo mega-ships.



**▲**  
**Division 14 Rail  
Operations and  
Maintenance  
Facility**  
Los Angeles,  
California  
**HDR & Maintenance  
Design Group**  
Pasadena, California

A new state-of-the-art maintenance facility supports the latest extension of the Expo light-rail line, which provides service from Los Angeles to Santa Monica. Within a constrained site of less than 10 acres, the project team delivered a facility that provides a multitude of cutting-edge enhancements. It features a complete track network for rail car storage and maintenance, six service and inspection positions with upper- and lower-level work platforms, mechanical and electronics shops, and room for administration offices, operations and training. Early collaboration with residents mitigated issues regarding noise, vibration, safety and aesthetics, so the facility seamlessly blends into its surroundings.



**▲**  
**Biosolids Dryer Facility**  
Detroit, Michigan  
**Wade Trim Associates & NEFCO**  
Detroit, Michigan

As the largest of its kind in North America, the new 47,500-square-foot facility provides a sustainable alternative to the incineration and landfilling of biosolids produced during the wastewater treatment process. The system consistently produces high-grade biosolids that can be safely sold for agricultural and landscaping uses. The facility also features advanced air pollution, noise and odor control systems that reduce impacts on adjacent areas. Completed \$8 million under budget, the facility is on track to pay for itself in less than nine years through operations and maintenance savings.





**St. Croix Crossing**  
Oak Park Heights, Minnesota, and  
St. Joseph, Wisconsin  
HDR - COWI  
Minneapolis, Minnesota

The nation's longest extradosed bridge replaces a historic but outdated vertical-lift bridge while providing a blueprint for integrating major new infrastructure into a sensitive natural setting. To address environmental concerns, the project team optimized its mile-long, structurally complex design by eliminating two towers from the water and adding piers that resembled reeds and cattails. Extreme care was needed to prevent disturbances to nearby bald eagle nests, and to relocate mussels and endangered flowers. The new bridge reduces congestion and is a model for environmental stewardship.



**Dallas Horseshoe Design-Build**  
Dallas, Texas  
WSP USA  
Dallas, Texas

This massive new highway infrastructure in downtown Dallas replaces a collection of severely deteriorated highways, bridges and support components dating back to the 1950s. The four-year project includes construction of more than 73 lane-miles of new highway, 37 conventional bridges, more than 60 retaining walls and two major long-span river crossing bridges. All lanes of traffic were preserved throughout construction, with freeway closures conducted overnight to minimize inconveniences to travelers. Despite multiple lengthy rainstorms and floods that forced temporary halts to construction, the project was completed on schedule and on budget.



**South 200th Link Extension**  
Seattle/Tacoma, Washington  
HDR  
Bellevue, Washington

The extension of Seattle's popular transit system adds 1.6 miles of elevated rail line from Sea-Tac Airport to downtown and features the Northwest's first net-zero light-rail station. The new station includes solar reflectance roofing and photovoltaic arrays to offset electrical demand. The project also includes street improvements, bicycle and pedestrian access, transit-oriented development sites and public art. The light-rail extension will reduce nearly 26 million vehicle miles traveled annually, saving well over a million gallons of gasoline and eradicating more than 6,000 tons of greenhouse gases.



▲ **Union Station Western Expansion**  
Kansas City, Missouri  
Burns & McDonnell  
Kansas City, Missouri

The center of civic and commercial life early in the 20th century, Kansas City's 1914-era Union Station needed a massive upgrade. The project team's solutions included a new vehicular and pedestrian bridge that for the first time connects the main building directly to an adjacent parking garage, a semicircular pedestrian plaza, a raised and wide pedestrian walkway to the building and a new 90,000-plus-square-foot outdoor event space for concerts, festivals and other large events. The project succeeded in both renovating Union Station for the 21st century and restoring its place as a first-class regional transportation hub.

▶ **The Left Overloop**  
Lexington, Kentucky  
Qk4  
Louisville, Kentucky

Innovative redesign eliminated a treacherous intersection where traffic accidents occurred daily in the heart of Kentucky's scenic horse farm region. Constrained by nearby land belonging to historic Calumet Farm and the Keeneland Race Course, the intersection included two precarious curves that had become more hazardous over time. Installing traffic lights was deemed too obtrusive, and multiple flyovers were too expensive.

The project team instead incorporated a first-of-its-kind "left overloop," which realigned the interchange's existing right turn loop into a left-turn overpass. The ramp eliminated the traffic hazard at significantly less cost than full reconstruction while also meeting the region's aesthetic concerns.

◀ **Space Launch System Test Stands**  
Huntsville, Alabama  
Merrick & Company  
Decatur, Georgia

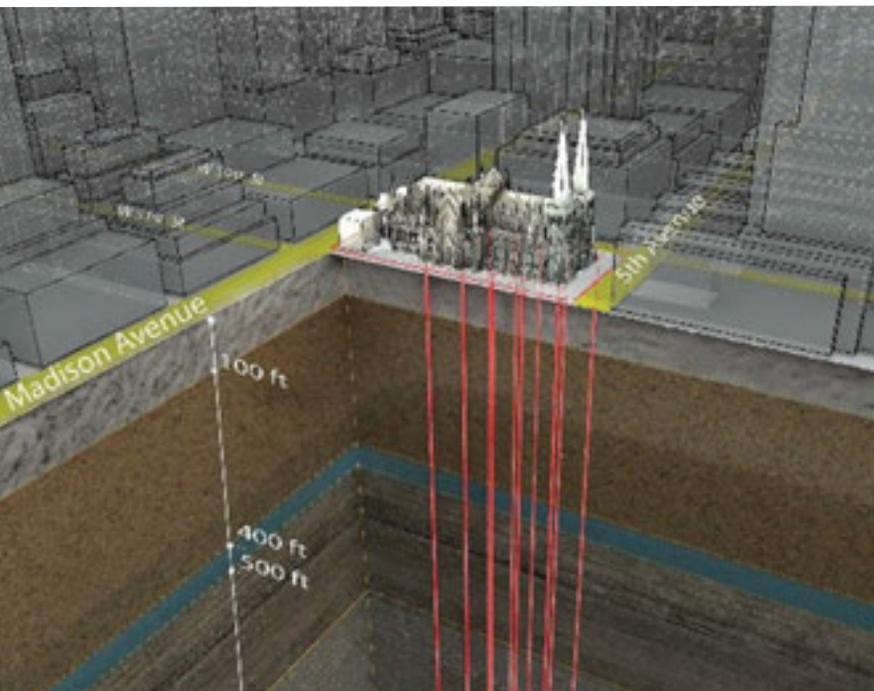
Groundbreaking engineering has yielded two new launch stands critical for propulsion tank testing prior to spaceflight. To validate that a rocket's liquid hydrogen and liquid oxygen fuel tanks can handle the thrust loads and stresses of launch and travel, the project team custom-designed 215-foot and 85-foot-tall test stands and associated substructures that can withstand millions of pounds of thrust under a variety of test scenarios. Unlike other similar structures worldwide, these new test stands can also be relocated or reconfigured as propulsion system technology evolves.





**Marshalltown Generating Station**  
Marshalltown, Iowa  
HDR  
Ann Arbor, Michigan

The new 650-megawatt generating station uses state-of-the-art gas turbine technology to power more than half a million homes and businesses at a cost—\$645 million—that is only half that of a comparable coal-fired facility. The system also significantly reduces carbon dioxide, nitrogen oxide, sulfur dioxide and mercury emissions compared with traditional coal-fired plants. The new station requires 90 percent less water supply than older natural gas units. It is the first facility in Iowa to receive the Envision Platinum Award for excellence in sustainability design from the Institute for Sustainable Infrastructure.



**St. Patrick's Cathedral Geothermal Heating & Cooling System**  
New York, New York  
P.W. Grosser Consulting & Landmark  
Facilities Group  
Bohemia, New York

The venerable New York City landmark's energy costs have been cut 25 percent by tapping into the earth's natural heat. Ten geothermal wells were drilled from the terrace level to an average depth of 1,650 feet to power the new chilled and hot water piping distribution system. Existing hot water radiators were replaced with fan-coil units, while ornamental enclosures were re-used to blend the new technology into existing building interiors. The city's largest geothermal system heats and cools the cathedral, along with the Parish House, Rectory and Cardinal's Residence but is so compact that it is virtually invisible to the public.

| FIRM NAME   | PROJECT NAME  | FIRM NAME  | PROJECT NAME  |
|---|---|--|---|
| <b>ACEC/ALABAMA</b><br>CERM                           | Manufactured Gas Plant Remediation Project  | <b>ACEC/CONNECTICUT</b><br>Milone & MacBroom   | Meriden Green   |
| GARVER<br>Larry E. Speaks & Associates                | Wastewater Treatment Plant Improvements<br>Retrofitting a Dormant Mall                      | <b>ACEC/FLORIDA</b><br>DRMP  | Auxiliary Airfield Surveying and Mapping Services<br>I-75 at University Parkway<br>Divergent Diamond Interchange<br>The Ballpark of the Palm Beaches  |
| <b>ACEC/ALASKA - C/O BBFM ENGINEERS, INC.</b><br>HDR  | Strategic Management Plans  | HDR<br>Kimley-Horn   |   |
| <b>ACEC/ARIZONA</b><br>Gannett Fleming                | Tempe Town Lake Downstream Dam Replacement  | <b>ACEC/GEORGIA</b><br>Atkins North America & Arcadis (JV)<br>Kimley-Horn  | North Avenue Smart Corridor<br>SunTrust Park and the Battery Atlanta<br>Space Launch System Test Stands   |
| GHD   | Bell Road Force Main Improvements   | Merrick & Company  |   |
| <b>ACEC/CALIFORNIA</b><br>Arup<br>Burns & McDonnell   | The Rainbow Bridge at Seaside Way<br>Big Canyon Restoration and Water Quality Improvements  | <b>ACEC/IDAHO</b><br>Brown and Caldwell  | Dixie Drain Phosphorus Removal Facility<br>Pomona Energy Storage Facility   |
| HDR & Maintenance Design Group                        | Division 14 Rail Operations and Maintenance Facility  | POWER Engineers  |   |
| Kjeldsen, Sinnock & Neudeck                           | Mule Creek State Prison Infill Complex  | <b>ACEC/ILLINOIS</b><br>Baxter & Woodman   | Wastewater Treatment Plant Combined Heat & Power Improvements<br>Chicago Riverwalk<br>Aircraft Maintenance and Overhaul Facility<br>35th Street Pedestrian Bridge<br>Washington Wabash<br>Elevated Train Station<br>I-90 Rebuilding and Widening                                |
| Michael Baker International<br>T.Y. Lin International | I-5/La Novia Roundabout<br>California Incline Bridge & Idaho Avenue Pedestrian Overcrossing | <b>Benesch &amp; Infrastructure Engineering</b><br>Crawford, Murphy & Tilly<br>and Larson & Darby<br>EXP<br>EXP              |   |
| <b>ACEC/COLORADO</b><br>AECOM                         | Biotreatment Plant for Contaminated Soil  | <b>I-90 Design and Construct Partners</b>  |   |
| Felsburg Holt & Ullevig<br>Merrick & Company          | I-70 Vail Underpass<br>Water Jet Peening<br>Bridge Crane System                             | <b>ACEC/INDIANA</b><br>HNTB  | Southport Wastewater Treatment Plant Expansion<br>Ohio River Bridges<br>Downtown Crossing<br>Ohio River Bridges<br>East End Crossing<br>I-69 Section 4 Mitigation Plan  |
|   |   | Jacobs Engineering Group<br>Jacobs Engineering Group<br>Lochmueller Group  |   |
|   |   | <b>ACEC/IOWA</b><br>HDR  | 20th and 25th Avenue Pump Stations<br>Council Bluffs<br>Interchange Bridges<br>Interstate 80 Automated Corridors Planning Study<br>Marshalltown Generating Station  |
|   |   | HDR<br>HDR<br>HDR<br>HDR   |   |
|   |   | <b>ACEC/KANSAS</b><br>HDR<br>HNTB<br>Olsson Associates<br>TranSystems  | Johnson County Gateway – Phase 2<br>South Lawrence Trafficway East Leg<br>Chilled Water System Expansion<br>Kaw Point Park Connector Trail  |
|   |   | <b>ACEC/KENTUCKY</b><br>American Engineers<br>American Engineers   | Denes Field Transformation<br>The Cellar at Maker's Mark Distillery<br>Frankfort Plant Board Administration Building<br>Telecommunications Headend Facility<br>Town Branch Wet Weather Storage & Pumping Facilities<br>Louisville – Southern Indiana Ohio River Bridges Project |
|   |   | GRW<br>GRW<br>GRW  |   |
|   |   | <b>HMB Professional Engineers, Inc.;</b><br><b>Parsons Transportation Group;</b><br><b>and Beam, Longest &amp; Neff (JV)</b> |   |



MGM National Harbor, Oxon Hill, Maryland, by Sheladia Associates, Rockville, Maryland, is a 2018 National Recognition Award winner.

| FIRM NAME   | PROJECT NAME  | FIRM NAME                                    | PROJECT NAME  |
|---|---|--|---|
| Qk4   | East Campus Roundabout & Gateway                      | <b>ACEC/NEW YORK</b>                         | Second Avenue Subway–Phase 1                        |
| Qk4   | The Left Overloop                                     | AECOM & Arup (JV)                            | Zaha Hadid, 520 West 28th Street                    |
| <b>ACEC/MAINE</b>   |   | AKF Group                                    | The Chrysalis at Symphony Woods                     |
| Hardesty & Hanover  | Gut Bridge Replacement                                | Arup   | Campus Master Systems Management and Virtual Models |
| <b>ACEC/MASSACHUSETTS</b>                                   |   | Delta Engineers, Architects & Land Surveyors | Bay Park Sewage Treatment Plant Improvements        |
| Arup  | Interdisciplinary Science Engineering Complex         | Gannett Fleming                              | Van Wyck Expressway Improvements                    |
| CDM Smith   | Turnpike All-Electronic Tolling System                | Hardesty & Hanover                           | Multi-Facility Residuals and Biosolids Master Plan  |
| Gannett Fleming   | Springfield Railcar Assembly Facility                 | Hazen and Sawyer                             | Bayonne Bridge: Raising the Roadway                 |
| Nitsch Engineering  | Johnson Building Renovation                           | HDR   WSP USA (JV)                           | Kosciuszko Bridge Replacement Phase 1               |
| Simpson Gumpertz & Heger                                    | Bahá'í Temple of South America                        | HNTB   | N.Y. University Langone Health Science Building     |
| Simpson Gumpertz & Heger                                    | University of Massachusetts Design Building           | Jaros, Baum & Bolles                         | 1501 Voorhies Avenue                                |
| STV   | Boston Landing Station                                | Langan Engineering & Environmental Services  |   |
| <b>ACEC/METROPOLITAN WASHINGTON</b>                         |   |  |   |
| Alpha Corporation   | Structural Investigation and Report                   |  |   |
| Rummel, Klepper & Kahl                                      | Anacostia Riverwalk Trail, Kenilworth Section         |  |   |
| Sheladia Associates   | MGM National Harbor                                   |  |   |
| <b>ACEC/MICHIGAN</b>  |   |  |   |
| Benesch   | I-96 at Cascade Road Diverging Diamond Interchange    |  |   |
| HDR; Progressive AE and Zachry Group (JV)                   | Holland Energy Park                                   |  |   |
| HNTB  | U.S. 23 Flex Route                                    |  |   |
| Wade Trim Associates & NEFCO                                | Biosolids Dryer Facility                              |  |   |
| <b>ACEC/MINNESOTA</b>                                       |   |  |   |
| American Engineering Testing and Ericksen Roed & Associates | Downtown East   |  |   |
| HDR – COWI  | St. Croix Crossing                                    |  |   |
| HGA Architects and Engineers                                | United Methodist Church of the Resurrection Sanctuary |  |   |
| Kimley-Horn   | Terminal 1-Lindbergh Landside Expansion               |  |   |
| Kimley-Horn   | Hennepin/Lyndale Avenue Reconstruction                |  |   |
| <b>ACEC/MISSOURI</b>  |   |  |   |
| Alper Audi & Geotechnology, Inc.                            | Olin Library Transformation                           |  |   |
| Burns & McDonnell   | Union Station Western Expansion                       |  |   |
| Crawford, Murphy & Tilly                                    | Wastewater Treatment Plant Design-Build               |  |   |
| <b>ACEC/MONTANA</b>   |   |  |   |
| DJ&A, P.C.  | South Reserve Pedestrian Bridge                       |  |   |
| Great West Engineering                                      | Water Treatment Plant Intake                          |  |   |
| HDR   | Capitol Interchange – Cedar Interchange               |  |   |
| HDR   | Compressed Natural Gas Fueling Station                |  |   |
| HDR; Robert Peccia & Associates                             | Basin Creek Water Treatment Plant                     |  |   |
| <b>ACEC/NEW JERSEY</b>                                      |   |  |   |
| Boswell Engineering   | Patroon Island Bridge Rehabilitation                  |  |   |
| Dewberry  | Hudson River Feasibility Study                        |  |   |
| Langan Engineering & Environmental Services                 | Accurate Box Headquarters Expansion                   |  |   |
| Langan Engineering & Environmental Services                 | Cranbury Logistics Center                             |  |   |
| Langan Engineering & Environmental Services                 | Dwight-Englewood School Improvements                  |  |   |
| Mott MacDonald  | Clinton Road Bridge Replacement                       |  |   |
| WSP USA   | Route 37 EB Mathis Bridge Rehabilitation              |  |   |



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| FIRM NAME  | PROJECT NAME   | FIRM NAME   | PROJECT NAME   |
|--|--|---|--|
| <b>ACEC/NEW YORK (cont.)</b><br>Mott MacDonald & CDM Smith<br>P.W. Grosser Consulting & Landmark Facilities Group<br>Stantec<br>STV/Tishman & AECOM (JV)<br>Syska Hennessy Group<br>Syska Hennessy Group | New York Harbor Water Siphon<br>St. Patrick's Cathedral Geothermal Heating & Cooling System<br>Inner Loop East Transformation<br>Moynihan Train Hall—Phase One<br>Lotte World Tower<br>World's First 3D-Printed Commercial Office Building<br>The Bridge at Cornell Tech | Michael Baker International<br>Michael Baker International<br>STV   | King Khalid Air Base<br>Lower Hill Infrastructure Project<br>Betsy Ross Bridge Interchange Reconstruction  |
| Thornton Tomasetti; Weiss/Manfredi   Turner Construction<br>WSP USA<br><br>WSP USA & HNTB (JV)   | Inspection and Load Rating for Brooklyn-Queens Expressway Conversion to Open Road Tolling at RFK Bridge  | <b>ACEC/SOUTH CAROLINA</b><br>HDR<br>Michael Baker International<br>SAM Companies<br>Thomas & Hutton  | Road Evaluations Over Flood Damaged Dams<br>Steeplechase Industrial Boulevard Extension<br>South Main Street Streetscaping Improvements Program, Design & Construction Management, Volvo Industrial Site   |
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