



ACEC

AMERICAN COUNCIL OF ENGINEERING COMPANIES
of Oregon

2019 Engineering Excellence Awards



WHAT IS ENGINEERING EXCELLENCE?

The Engineering Excellence Awards (EEA) competition recognizes engineering firms for projects that demonstrate an exceptional degree of innovation, complexity, achievement and value. The EEA program was created by ACEC to increase the public's perception of what engineers really do.

For more than 50 years engineering firms have entered their most innovative projects and studies in state competitions.

A distinguished panel of judges is convened for a day to evaluate and select the best engineering projects based on criteria such as uniqueness and/or innovative application of new or existing techniques; future value to the engineering profession and enhanced public awareness/enthusiasm for the role of engineering; social, economic and sustainable development considerations; complexity; and successful fulfillment of client/owner needs.

Projects procured through the Qualifications-Based Selection (QBS) process are highlighted in this publication with a red ribbon. QBS procurement ensures a competitive selection process for engineering that promotes innovation and cost-savings. These projects are real, award-winning examples of how the QBS process works to deliver successful and innovative projects that benefit the residents of Oregon.

2019 ENGINEERING EXCELLENCE AWARDS JUDGING PANEL

Chris Monsere, PhD, PE
Professor and Chair
Civil and Environmental Engineering
Portland State University

Mike Bisset, PE
Community Development Director
City of McMinnville

Bill Beyer
Advertising Director
Daily Journal of Commerce

Pete Chaput, PE
Chief
River and Hydrologic Engineering Section
U.S. Army Corps of Engineers
Portland District

Gayle Harley, PE (retired)
ACEC Oregon Past President
2009-10

LEADERSHIP DEVELOPMENT PROGRAMS

Presenters are key industry professionals. The seminars utilize a small group setting to maximize learning, interaction and exchange of ideas.

WHO SHOULD ATTEND

Project managers, designers and engineers who are interested in a leadership track in their career, and may be shifting their focus from projects to organizational and financial goals of the firm.

**ALL CLASSES ARE HELD THE FIRST WEDNESDAY OF THE MONTH AT
DAVID EVANS AND ASSOCIATES, PORTLAND. (EXCEPT FEBRUARY 6 IS IN SALEM)**



SCHEDULE

- 7:30 a.m.- Check-in & breakfast
- 8:00 a.m. - Programs begin (varying lengths from 2 to 4 hours)

Feb 6 – Political Involvement & QBS (Qualifications-Based Selection) *(Salem)*

Mar 6 – A/E Firm Financial Management

Apr 3 – Profitability and Risk Management in Engineering Practice

May 1 – From Doer to Leader: Lessons Learned

**MORE INFO/TO REGISTER: www.acecOregon.org > EVENTS
mwebber@acecOregon.org | (503) 292-2348**

Each session is good for accruing continuing professional development credits.

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**AMERICAN COUNCIL
OF ENGINEERING COMPANIES
OF OREGON**

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*Proud team member of the
Vancouver Waterfront Park Project*

ENGINEERING • ENVIRONMENTAL • SURVEY

PHOTO: LIONEYE AERIALS



About ACEC Oregon



Founded in 1956, the American Council of Engineering Companies of Oregon (ACEC Oregon) represents 122 firms, employing more than 3,700 employees. Our primary goal is to protect the public welfare and advance the professional quality of consulting engineers and land surveyors in private practice.

ACEC Oregon offers:

- **Advocacy** - ACEC Oregon is the only engineering association represented by a lobbyist in Salem.
- **Education** - ACEC Oregon offers educational programs presented by experts on a variety of business and management topics, including legal issues facing consultants, risk management, leadership development, ownership transition and more.
- **Resources and Networking** - Membership offers valuable business resources such as the annual Oregon/Washington Salary & Benefits Survey, access to expertise and best practice information and regular networking opportunities, which lead to improved firm business practices.
- **Client Committees** - Members find great value in the liaison committees

that facilitate communications and problem-solving with agency personnel. Current committees include: Oregon Department of Transportation, U.S. Army Corps of Engineers and SW Washington Public Agency Liaison.

- **National Representation** - In addition, ACEC Oregon is a member organization of ACEC National. The national organization is the voice of the engineering industry in Washington, D.C. ACEC promotes infrastructure investment and other important issues for the engineering industry.
- **Engineering Excellence** - The awards recognize and celebrate the important work ACEC member firms perform. We also acknowledge and celebrate the owners and public officials that provide the vision, support and leadership required to ensure the execution of these projects.

Congratulations to the 2019 award winners! Thank you to the sponsors and to the DJC for your support of this publication and for your support of Engineering Excellence.

Alison Davis
Executive Director
American Council of Engineering Companies of Oregon



Nehalem River [Lommen] Bridge Replacement

**Thank you,
Tillamook County,**
for investing in Oregon's
future! By replacing the
second-most hazardous
bridge in the state, the
County solved flooding
and emergency protection
concerns and spent taxpayer
funding wisely on a robust
infrastructure investment.

Otak

otak.com

2019 Legislative Session Preview



On January 22, 2019, the Oregon Legislature will convene for a six-month policy-making marathon dominated by a newly re-elected Democratic Governor Kate Brown and Democratic super

majorities in both the House and Senate. The agenda will include new and additional revenue to help with education, PERS, social issues and assistance, housing and a plethora of other issues that are aspiratory to supporters and potentially a bothersome nuisance to opponents. Within this wide open playing field the Oregon Legislature will attempt to leave its mark on the hearts and minds of all Oregonians and adjourn by June.

Qualifications-Based Selection (QBS) will again be an issue as some local governments will bring legislation to allow price bidding as an element of design procurement. ACEC has worked for several months with proponents of the change and we remain optimistic that a fair and reasonable resolution that maintains the current statutory commitment to QBS will be agreed to. No matter the outcome, ACEC remains ready to implement an educational campaign including seminars and peer-to-peer outreach to ensure that local government procurement staff are aware of the benefits of QBS and comfortable with the QBS process. As always, we welcome public hearings on the QBS issue which help educate many new legislators who are not familiar with this proven procurement methodology.

Another issue of interest will be the Department of Justice legislation to find

a resolution to the recent court case that impacted the professional engineer registration act. This is expected to be a relatively simple fix but one that is needed after an individual held himself out as an engineer on issues related to traffic light timing. The court ruled that he can call himself an engineer as long as he doesn't do it within the context of an employment or contractual agreement.

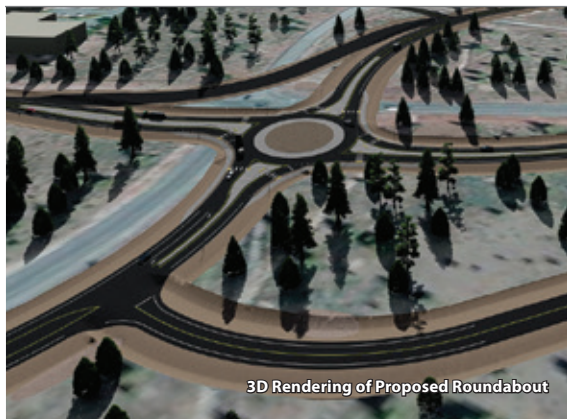
As always, ACEC Oregon will be actively engaged supporting or opposing a number of issues during the 2019 legislative session. We look forward to active member involvement to help protect and promote the engineering profession in Oregon.

Marshall Coba

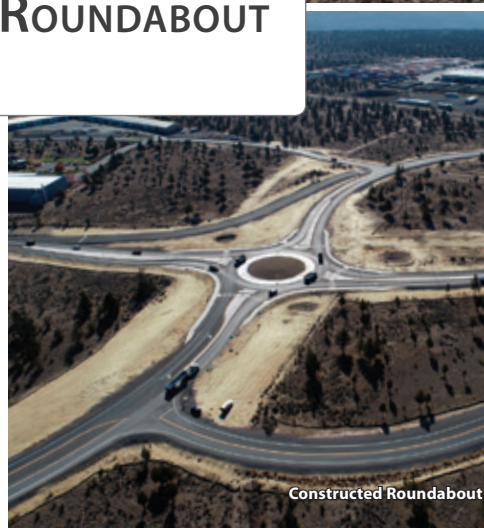
**ACEC Oregon Lobbyist
CobaCo Government Relations**



OR126 AT TOM MCCALL ROUNDABOUT PRINEVILLE, OREGON



3D Rendering of Proposed Roundabout



Constructed Roundabout

CIVIL ENGINEERING
STRUCTURAL ENGINEERING
LAND SURVEY
LANDSCAPE ARCHITECTURE
PLANNING & DEVELOPMENT
NATURAL RESOURCES
WATER RESOURCE DESIGN
CONSTRUCTION SERVICES
PUBLIC INVOLVEMENT
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ACEC Oregon Member Firms

1 Alliance Geomatics LLC	Cornforth Consultants Inc.	Golder Associates Inc.	Kramer Gehlen & Associates Inc.
2G Associates Inc.	Crow Engineering Inc.	GRI	Land Mark Surveying Inc.
3J Consulting Inc.	Curran-McLeod Inc.	Haner Ross & Sporseen Inc.	Lewis & Van Vleet Inc.
AAI Engineering	David Evans and Associates Inc.	Harper Houf Peterson Righellis Inc.	Locke Engineers Inc.
Adapt Engineering	DJ&A P.C.	Hart Crowser Inc.	McCann Engineering LLC
Advanced Remediation Technologies Inc.	DKS Associates	HDR	McMillen Jacobs Associates
AECOM	DOWL	Herrera Environmental Consultants	Mead & Hunt Inc.
Akana	Emerio Design	HK Electrical Engineers	MEGI Engineering Inc.
Aligned Engineering LLC	Engineered Monitoring Solutions (EMS)	Hood River Consulting Engineers Inc.	Miller Consulting Engineers
Anderson Engineering & Surveying Inc.	Epoch Geospatial and Land Surveying Services LLC	Hood-McNees Inc.	MKE & Associates Inc.
Anderson Perry & Associates Inc.	E-PUR LLC	Humber Design Group Inc.	Mott MacDonald
Aspect Consulting LLC	ESA	ICHTHYS Engineering PLLC	Murraysmith
BergerABAM Inc.	Exeltech Consulting Inc.	Inter-Fluve Inc.	Nemariam Engineers & Associates
Boatwright Engineering Inc.	Focused Engineering LLC	Jackola Engineering & Architecture PC	Nishkian Dean
Brown and Caldwell	Forensic & Mechanical Engineering Inc.	Jacobs	Northwest Engineering Service Inc.
Burgess & Niple Inc.	Foundation Engineering Inc.	JAS Engineering Inc.	OBEC Consulting Engineers
Cascade Forensic Engineering	Froelich Engineers Inc.	J-U-B Engineers Inc.	Otak Inc
Cascadia Associates LLC	GeoDesign Inc.	Keller Associates Inc.	PACE Engineers Inc.
Casso Consulting Inc.	GeoEngineers Inc.	Kennedy/Jenks Consultants Inc.	Pacific Building Insight
Central Geotechnical Services LLC	GeoPacific Engineering Inc.	Kittelson & Associates Inc.	PAE
Century West Engineering Corp.	GHD	Kleinschmidt Associates	Pali Consulting Inc.
Compass Land Surveyors		KPFF	Parametrix Inc.

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Congratulations to all Excellence Award nominees!



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U.S. Postal Service Processing & Distribution Center, Portland, OR
Photo courtesy of The Korte Company

Congratulations!
to all of the award winners **kpff**

ACEC Oregon Member Firms

ParsonsWater Consulting LLC	Summit Building Engineering
Pavement Services Inc.	Tennessee Engineering Corp.
PBS	Terracon
Peterson Structural Engineers Inc.	Tetra Tech Inc.
Professional Service Industries Inc. (PSI)	TY Lin International
Quincy Engineering Inc.	Tye Engineering & Surveying Inc.
R & W Engineering Inc.	VALAR Consulting Engineering
RDH Building Sciences Inc.	VLMK Engineering and Design
Reynolds Engineering LLC	Wallace Group Inc.
RH2 Engineering Inc.	Waypoint Engineering Inc.
Ridge Engineering LLC	WDY Inc.
Rieke Consulting Services LLC	WEST Consultants Inc.
SEFT Consulting Group	Westech Engineering Inc.
Shannon & Wilson Inc.	Western Testing LLC
Singh & Associates Inc.	WHPacific Inc.
Smith Monroe Gray Engineers Inc.	Wolf Water Resources
Standridge Design Inc.	WRK Engineers Inc.
Streamline West Engineering	WSP USA

Affiliate Member Firms

Advanced Drainage Systems Inc. (ADS)
Aldrich CPAs + Advisors LLP
Chartwell Financial Advisory Inc.
Cosgrave Vergeer Kester LLP
Cushman & Wakefield of Oregon
Dealey, Renton & Associates
Durham and Bates Insurance Brokers and Agents
ECONorthwest
Envirolssues
Epic Land Solutions Inc.
GSI Water Solutions Inc.
ICF
JLA Public Involvement
Marvin Chorzempa & Larson PC
Mason, Bruce & Girard Inc.
Moss Adams LLP
Newforma
Shipley & Pease
SRWalker & Associates Inc.
Stewart Sokol & Larkin, LLC
SWCA Environmental Consultants
The PPI Group
Universal Field Services Inc.
USI Insurance Services
Woodruff Sawyer & Co.



Vancouver Waterfront Park
Vancouver, Washington

Congratulations

to the 2019 ACEC Engineering Excellence award winners!

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- » Strategic Planning and Communications
- » Construction Management and Support
- » Underwater Inspection

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ACEC Oregon NETWORKING DAY GOLF TOURNAMENT

Wed., June 19, 2019
Langdon Farms Golf Club

Bring your clients!

Tournament format. Modified shotgun.
Scoring method is gross.
(Singles and twosomes will be grouped.)

Golf registration includes warm-up range balls, use of practice facility prior to play, box lunch and BBQ dinner.

Be a hole sponsor!

SCHEDULE
12:00 NOON – Check-in begins
1:30 P.M. – Shotgun start
6:30 P.M. – Social and BBQ dinner

MORE INFO/INQUIRIES

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Project of the Year

VANCOUVER WATERFRONT PARK

Submitting Firms: BergerABAM (prime consultant, project manager, landscape architect, structural engineer); GRI (geotechnical engineering); Martin/Martin Consulting Engineers (structural engineering/pier superstructure); PBS Engineering and Environmental (civil engineering)

Client/Owner: City of Vancouver

Other Consultants/Key Participants: Athay & Associates (electrical engineering); FMS (lighting design); Larry Kirkland (public artwork, pier design); Mott McDonald (hydraulics, shoreline design); ProDims (cost estimating services); PWL Partnership (park design)



Making a connection

Project transforms Vancouver Waterfront Park into gateway

A 75-year-old problem was solved in 2018 thanks to work on the Vancouver Waterfront Park.

For three-quarters of a century, downtown Vancouver was separated from the Columbia

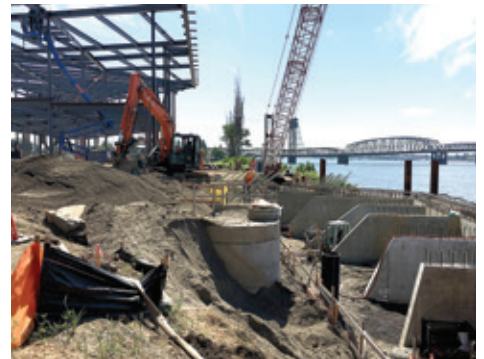
River by industrial development, a railroad and Interstate 5. But today, thanks to the work of project manager BergerABAM and structural engineering firm Martin/Martin

Consulting Engineers, residents and visitors can walk directly from the city center to a new and vibrant riverfront.

The new Vancouver Waterfront Park officially opened to the public on Sept. 29, 2018. The park is the main public amenity that is part of the ambitious Vancouver Waterfront master plan, which was crafted to reconnect the city of Vancouver to the Columbia River. The new 7.3-acre park creates public access to the river for the first time in almost a century.

Built on a former industrial paper mill site, the \$24.2 million project features plazas, an extended Vancouver Renaissance Trail, viewpoints, a water feature, playground and an urban beach. The project also features the Grant Street Pier, a concrete, cable-stayed structure projecting almost 100 feet over the Columbia River that serves as the park's focal point.

As part of the city of Vancouver's \$1 billion waterfront revitalization program, the new park anchors the plan for multifamily and commercial growth in the Vancouver downtown area.



Artist Larry Kirkland, inspired by the river sailboats of Vancouver's heritage, designed the Grant Street Pier that serves as the centerpiece of the park. The iconic pier design is a combination of architecture and engineering, while providing a safe and accessible waterfront experience at the Columbia River shoreline.

The project team faced many challenges on the complex brownfield site because of its industrial legacy and because a half mile of the shoreline runs along a swift and high-wave energy section of the Columbia River. These site conditions required extensive shoreline

restoration, creative engineering solutions, and a robust environmental planning and permitting process.

But BergerABAM — the prime consultant, project manager, landscape architect and structural engineer of record for the Vancouver Waterfront Park and Grant Street Pier project — was able to overcome those obstacles thanks to PWL Partnership's park design, Athay & Associates' electrical engineering, Mott MacDonald's hydraulics and shoreline design, FMS' lighting design and ProDims' cost estimating services.

BergerABAM's work on the project also included master planning, public outreach, natural resource assessment, landscape architecture, structural design of the pier substructure and site structures, and environmental and land-use permitting. Martin/Martin Consulting Engineers provided structural engineering for the pier superstructure, while GRI provided geotechnical engineering for the project. PBS Engineering and Environmental provided the civil engineering.

A strong relationship between the project team, city of Vancouver, community and regulatory agencies was required to complete the project over the course of six years. Despite the complexity and unique nature of the work, the park was completed on time and under budget — with client and public satisfaction.

Best in Category: Transportation

NEHALEM RIVER (LOMMEN) BRIDGE REPLACEMENT

Submitting Firm: Otak Inc.

Client/Owner: Tillamook County Public Works

Other Consultants/Key Participants:

Ankrom Moisan Architects (bridge architecture); Archaeological Investigations Northwest (cultural/archaeological services); Bayside Surveying (surveying services); David Evans and Associates (bathymetry, environmental permitting, traffic engineering, QA/QC lead); Shannon & Wilson (geotechnical engineering); Universal Field Services (right-of-way services)



Detour ahead

Innovative bridge project overcomes obstacles to keep traffic moving

On its surface, a bridge project for a route detour may not seem like an earth-moving project. But when you combine the facts that the detour route is critical to the livelihood of Tillamook County and that the bridge was structurally deficient and susceptible to earthquakes, it's easy to understand why this crucial project needed to come to fruition.

State Highway 101 in Tillamook County frequently receives storm damage and is often closed due to slide repair. When that happens, traffic is detoured to the county's Lommen Bridge, which spans the Nehalem River. There

was only one problem: The structurally deficient bridge was vulnerable to seismic activities and the route is identified as a tsunami critical route.

In one of the latest examples of the need for a new Lommen Bridge, the Nehalem River rose 12 feet over a six-hour period. Not only was the existing bridge exhibiting cracking and leaning, but it was also vulnerable to an earthquake or tsunami. The bridge often experienced heavy flooding, with storms blocking the road at both ends of the bridge. Large masses of debris piled up on the interior bents and caused lateral pressure on the bridge. Several floods caused large scour holes around the interior bents, founded on spread footings in the channel.

In short, the bridge was a mess.

That's one of the many reasons why Tillamook County selected Otak Inc. as the preferred consultant for a new bridge design. Completed on Feb. 28, 2018, the new \$9.86 million span is a shining example of how engineering and construction can overcome challenges to provide a critically needed project

to aid the community.

But it wasn't always easy.

Otak and its key partners — David Evans and Associates (bathymetry, environmental permitting, traffic engineering, QA/QC lead), Bayside Surveying (surveying), Shannon & Wilson (geotechnical engineering), Archaeological Investigations Northwest (cultural and archaeological services), Ankrom Moisan Architects (bridge architecture) and Universal Field Services (right-of-way services) — overcame many challenges and provided solutions that removed in-water piers to avoid debris impacts, reduced uplift concerns and used lead-rubber seismic isolation bearings.

The result is a unique three-span structure with a 300-foot center span and 125-foot end spans. To compensate for the uplift at the ends, Otak incorporated a massive end diaphragm.

Seismic liquefaction was solved with stout 9-foot-diameter drilled shafts extending 100 feet deep and socketed into the bedrock. The stout substructure, however, complicated the seismic performance, as it didn't allow for energy dissipation through yielding. The solution was to use the latest seismic resilience technology: lead-rubber seismic isolation bearings between the superstructure and the substructure. Lommen Bridge is one of two bridges in Oregon to use the new technology.

Otak also resolved hydraulic and flooding issues with distinct re-grading around the bridge, a result of 2-D hydraulic modeling.

In the end, the bridge was built under budget while maintaining traffic during construction.

Small Project Award

SANDY RIVER LOG JAMS

Submitting Firms: Wolf Water Resources (lead consultant); Natural Systems Design (modeling, engineered log jams design); Biohabitat (contractor)

Client/Owner: City of Portland Water Bureau

Other Consultants/Key

Participants: Brian Bair LLC (fish biologist); Ron Bush Surveying and Engineering (surveying); Geotechnics (geotechnical engineering); Rivero Design (drafting assistance)



Despite challenges, Sandy River project doesn't run into jams

When Wolf Water Resources took on the Sandy River Engineered Log Jams project at Oxbow Regional Park in 2017, it knew the work wouldn't be easy.

What Wolf Water didn't know, however, was exactly how trying the restoration project in Gresham would become.

The Log Jams project turned out to be much more than a restoration project. Instead, the \$1.86 million project that was completed in September 2018, applies "green" science by working with the natural forces of the wild Sandy River to create habitat that will last. The project minimizes impacts to a floodplain forest, engages channel flows and works with the natural river dynamics to preserve connectivity while accommodating change.

The Wolf Water team — along with the City of Portland Water Bureau and Natural Systems Design — created a design that found a balance among needs of threatened fish species, desires of recreation enthusiasts and requirements for the municipal water supply for the people of Portland.

This project at the onset — due to the project locations, channel conditions and flow — was complex. Additional unexpected circumstances, like a nearby wildfire during construction and lack of on-site rock for ballast, added to the complexity of managing the budget and schedule. With adaptive and creative techniques, the W2r team was able to minimize costs and delays.



Grand Award

THE DALLES WASTEWATER TREATMENT PLANT PROGRESSIVE DESIGN-BUILD PHASE 2 UPGRADES

Submitting Firm: Kennedy/Jenks Consultants

Location: The Dalles, Oregon

Client/Owner: City of The Dalles

Other Consultants/Key

Participants: Jacobs (contract plant operator); Mortenson Construction (contractor); Portland Engineering and Controls (instrumentation/controls)

In 2015, the city of The Dalles began a comprehensive upgrade of its wastewater treatment plant (Phase 2 Upgrades) to improve deficiencies, boost capacity and ensure reliability.



Officials also wanted to improve visual aesthetics of the plant, which is located adjacent to the downtown business district.

The city selected the Progressive Design-Build delivery method for the project, with Kennedy/Jenks Consultants and Mortenson Construction selected as the design-build team. It is the first municipal PDB project for a major wastewater treatment plant project upgrade in Oregon.

Kennedy/Jenks, working with Mortenson and the city, provided an updated facility plan and preliminary design, primary filter pilot testing and completed applications for energy incentives and funding from the Clean Water State Revolving Fund. It also completed final design, assisted with permitting and handled engineering services during construction, plant startup and commissioning services.

Phase 2 work included: design of a new headworks, complete with grit removal, bypass channel, odor control ventilation, redundant bar screens and screenings washer compactors;

retrofitting of the existing influent pump station with three new 100-horsepower, non-clog pumps, new 24-inch diameter force main and diesel backup generator; and converting the former headworks channel and grit basin to a primary filtration facility. Other project elements included designing a new primary digester with associated mixing and heating systems and adding a digester gas conditioning system and 65-kilowatt microturbine to generate renewable energy.

As a result of the project, plant capacity increased from a peak flow rating of 7.7 million gallons per day to 13.2 mgd (the projected capacity for the year 2037). The treatment facilities and equipment were designed to treat peak wastewater flow rates while supporting sustainability by lowering blower operating costs and generating clean energy. The project also gave the city a way to enhance and continue its environmentally-responsible biosolids land application program and laid the groundwork for a community-based hauled waste program.

"Since 2006, Kennedy/Jenks has provided highly effective engineering, design, construction support, and start-up services, delivering successfully completed projects to the city. This project was no exception," wrote Dave Anderson, public works director, in a letter recommending the project for an ACEC award.

Grand Award

WEST VANCOUVER FREIGHT ACCESS

Submitting firm: HDR

Client/Owner: Port of Vancouver USA

Other Participants/Key

Contributors: BergerABAM (structural system design, lead trench designer); GRI (geotechnical engineering); Innovative Solutions in Signaling (rail signal design); MacKay Sposito (surveying, construction inspection); R&W Engineering (electrical system design); Shannon & Wilson (geotechnical engineering); Smith Monroe Gray Engineers (material handling design); Wilson Ihrig (vibration monitoring)

Some projects are worth the wait.

Work on the West Vancouver Freight Access program started in 2005 with plans to transform



the 1,643-acre Port of Vancouver USA into a world-class rail hub. What resulted was a project that relieved rail congestion and allowed the port to accommodate larger freight volumes by removing a chokepoint from the regional rail system.

Situated along the Columbia River, the 1,643-acre Port of Vancouver USA is now a major transportation hub. With 50 tenants from a broad range of industries, the facility loads or unloads 5 million tons of cargo and generates \$2.9 billion in regional economic activity.

The HDR-led team — along with partners BergerABAM (structural system design/lead trench designer); R&W Engineering (electrical system design); Innovative Solutions in Signaling (rail signal design); Smith Monroe Gray Engineers (material handling design); Shannon & Wilson and

GRI (geotechnical engineering); MacKay Sposito (surveying and construction inspection); and Wilson Ihrig (vibration monitoring) — wrapped up the largest project in port history in June 2018.

By increasing the port's internal tracks from 16 to 50 miles, it operates more efficiently and has reduced mainline congestion by up to 40 percent. The complete reconfiguration, along with a first-of-its-kind watertight rail trench, also boosted railcar capacity from 50,000 to 400,000 annually. Further, the project allowed the city to redevelop its waterfront by constructing roads under the BNSF mainline that split downtown from the waterway.

Completed ahead of schedule and \$23 million under budget, the \$252 million West Vancouver Freight Access program now establishes the Port of Vancouver USA as an industry leader.

Grand Award

NE ALPINE AVENUE RECONSTRUCTION

Submitting Firm: HDR

Client/Owner: City of McMinnville

Other Participants/Key

Contributors: Hart Crowser (geotechnical analysis); OBEC Consulting Engineers (construction inspection/management); SERA Architecture (architect)

Six years ago, the city of McMinnville — Yamhill County's largest town — adopted the Northeast Gateway Plan. It was a vision to turn a 75-acre plot of land into the state's largest shared-use roadway and redevelopment project.

Today — thanks to HDR, Hart Crowser, OBEC Consulting Engineers and SERA Architects — Alpine Avenue features five blocks of



redevelopment. Viewed as a destination, the re-envisioned Alpine Avenue is a place where residents can live, work and play and reflects the historic and current land uses while creating a modern, pedestrian-friendly environment.

Planned as an infill and redevelopment project, the complex design addressed transportation needs and guides future development by creating a working neighborhood within walking distance of downtown McMinnville.

As the central spine and primary pedestrian route through the new district, Alpine Avenue is

now a unique street that complements the craft workshop atmosphere of the nearby businesses. The design team divided the corridor into two districts, a "festival" and a "craft" area, each with flexible, curb-less roadways, shared spaces, landscaping, ADA accessibility, various street surfaces, unique architectural elements and sustainable storm water facilities.

Completed on time and on budget, the \$3.5 million project is a transformative project not only for the city, but also the community.

Grand Award

BEAVER CREEK FISH PASSAGE

Submitting Firm: Anderson Perry & Associates

Client/Owner: City of La Grande

Other Participants/Key

Consultants: Steve Lindley Contracting (general contractor); Oldcastle Precast (precast producer)

The Beaver Creek Fish Passage project in La Grande was a project 20 years in the making.

The city of La Grande hired Anderson Perry & Associates to design improvements to restore fish passage over the 30-foot-high dam. Because of the remote location, fish passage needed to be maintenance-free and operational in a high mountain, deep snow, unattended environment. Also, the steep and confined ravine where the creek lies limited the area in which to construct a fishway.

Working with the city and numerous fish and wildlife agencies, AP designed a solution to



allow unobstructed fish passage upstream and downstream of the dam.

Due to the remote location, the design team devised a unique approach to having the major components of the fish ladder, 59 precast concrete vortex weirs, which were constructed off site.

Similar to LEGOs, the weirs were placed along the dam spillway for about 400 feet. Each weir weighed 27,000 pounds and had to be placed precisely horizontally and vertically. The weirs allow fish to ascend the nearly 10 percent steep grade from the natural channel below the dam to the

reservoir above, and on to high mountain waters.

The result of the project, which drew high praise from retired La Grande Public Works Director Norm Paullus, includes a significant increase of habitat for migratory fish and the potential resulting increase in fish reproduction. And for the first time in more than 100 years, migratory fish are able to access native, pristine streams above the La Grande Reservoir in northeast Oregon with the construction of a new \$1.6 million fish passageway on Beaver Creek.

HONOR AWARDS

DEARBORN AVENUE BRIDGE REPLACEMENT & STREET IMPROVEMENTS

Submitting Firm: AKS Engineering & Forestry LLC

Location: Keizer, Oregon

Client/Owner: City of Keizer

Other Consultants/Key Participants: Foundation Engineering (geotechnical engineering); K&E Excavating (contractor); MCE Engineers (structural engineering); WSP Parsons Brinckerhoff (hydraulic engineering)

Noteworthy: What is unique about this project is that the real story is hidden out of sight.



KNIGHT CANCER RESEARCH BUILDING

Submitting Firm: catena consulting engineers

Location: Portland, Oregon

Client/Owner: Oregon Health & Science University

Other Consultants/Key Participants: Andersen Construction; GeoDesign; KPFF Consulting Engineers; McCarthy Building Co.; PAE Engineers; SRG Partnership

Noteworthy: This project demonstrates that companies can collaborate to find solutions to every difficult challenge.

STEWART PARKWAY IMPROVEMENTS

Submitting Firm: Century West Engineering

Location: Roseburg, Oregon

Client/Owner: City of Roseburg

Other Consultants/Key Participants: DKS Associates (traffic engineer); Galli Group (geotechnical engineer/south phase); GRI – Geotechnical Resources Inc. (geotechnical engineer/north phase); Knife River (general contractor); i.e. engineering (surveyor); OBEC Consulting Engineers (structural engineer); Terra Science (environmental permitting); West Consultants (hydraulic services)

Noteworthy: This project created a safer roadway that is more accessible by a wide variety of users in all weather conditions.



MIRROR LAKE TRAILHEAD RELOCATION

Submitting Firm: David Evans and Associates

Location: Government Camp, Oregon

Client/Owner: Federal Highway Administration in collaboration with the Oregon Department of Transportation and United States Forest Service

Other Consultants/Key Participants: Archaeological Investigations Northwest (cultural resource services); GRI – Geotechnical Resources Inc. (geotechnical studies, pavement design); MacKay Sposito (construction manager); SWP Contracting & Paving (construction contractor)

Noteworthy: This project enhances the quality of life and demonstrates stewardship of the built and natural environment. These improvements provide safe access to the Mirror Lake Trail and improved safety for all users of US 26.

PORTLAND STATE UNIVERSITY SCHOOL OF BUSINESS

Submitting Firm: GRI (Geotechnical Resources Inc.)

Location: Portland, Oregon

Client/Owner: Portland State University

Other Participants/Key Consultants: Behnisch Architekten (design architect); catena consulting engineers (structural engineer); KPFF Consulting Engineers (civil engineer); Mayer/Reed (landscape architect); PAE Consulting Engineers (MEP engineer); RWDI (LEED); Skanska USA (general contractor); SRG Partnership Inc. (architect-of-record)

Noteworthy: Advanced geotechnical in-situ testing techniques and innovative engineering saved the client hundreds of thousands of dollars and months of schedule.



OR126 AT TOM MCCALL ROUNDABOUT

Submitting Firm: Harper Houf Peterson Righellis

Location: Prineville, Oregon

Client/Owner: Oregon Department of Transportation, Region 4

Other Participants/Key Consultants: City of Prineville (local agency/funding partner); Crook County (local agency/funding partner); Alex Hodge Construction (general contractor); Kittelson and Associates (traffic engineer)

Noteworthy: The OR 126 at Tom McCall Roundabout is an example of the state, county and city working together with businesses and community stakeholders to safely and efficiently further the economic viability of the region.

INFINITY LOOP

Submitting Firm: HDR

Location: Portland, Oregon

Client/Owner: N/A

Other Participants/Key Consultants: N/A

Noteworthy: A first in the world, the Infinity Loop solves the decades-old question of how to process multiple unit trains at a high-throughput facility while not impacting mainline traffic and quadrupling the land use density at the facility.



KERRY ISLAND ESTUARY RESTORATION

Submitting Firm: Inter-Fluve

Location: Clatskanie, Oregon

Client/Owner: Columbia Land Trust

Other Participants/Key Consultants: Henderson Environmental Design-Build Professionals

Noteworthy: In the fall of 2016, Kerry Island was reconnected to tidal hydrology for the first time in nearly 80 years, opening 99 acres of salmon and steelhead habitat and setting the site on a trajectory of healthy marsh function.

HONOR AWARDS

FRANKLIN BLVD. REDEVELOPMENT PROJECT

Submitting Firm: Jacobs Engineering Group

Location: Springfield, Oregon

Client/Owner: City of Springfield

Other Participants/Key Consultants: Cameron McCarthy (landscape architecture); Cogito Partners (public involvement); Epic Land Solutions (right-of-way acquisitions); NW Geotech (geotechnical engineering); OBEC Consulting Engineers (survey); Roundabouts & Traffic Engineering (roundabout design consulting)

Noteworthy: This redevelopment project transformed Franklin Boulevard from an outdated state highway into a modern urban multi-way boulevard that safely serves the needs of pedestrians, cyclists and drivers, and supports public transportation options, including buses. The project will also have a catalytic effect on land redevelopment in the Glenwood Riverfront District that includes properties along the boulevard.



BEND SOUTHEAST INTERCEPTOR SEWER

Submitting Firms: Jacobs Engineering Group, DOWL

Location: Bend, Oregon

Client/Owner: City of Bend

Other Participants/Key Consultants: DOWL (third-party construction manager)

Noteworthy: The Southeast Interceptor Sewer team accomplished all of the city's goals for the SEI project, providing a robust, corrosion-resistant collection system and taking multiple sewer systems offline. These accomplishments are an example of team unity, collaboration and communication overcoming challenges and adjusting to many changes during the 11-year span of the project.

TRANSPORTATION SYSTEM PLAN GUIDELINES 2018

Submitting Firm: Kittelson & Associates

Location: Statewide

Client/Owner: Oregon Department of Transportation

Other Participants/Key Consultants: Angelo Planning Group (consulting partner/author of 2008 TSP Guidelines)

Noteworthy: ODOT's new Transportation System Guidelines represent one of the first digital online tools for transportation system planning in the United States. In the dynamic, ever-changing field of transportation planning, the new guidelines website is an easily accessible and updatable resource to keep practitioners and policymakers not only compliant, but on the leading edge.



USPS PROCESSING & DISTRIBUTION CENTER

Submitting Firm: KPFF

Location: Portland, Oregon

Client/Owner: The Korte Co. (client), U.S. Postal Service (owner)

Other Participants/Key Consultants: ECI Electrical Construction (electrical design); GeoDesign (geotechnical and environmental); CE Jarrell Mechanical Contractors (mechanical and plumbing); The Korte Co. (contractor); Parsons Corp. (owner representative); Patriot Fire Protection (fire protection design); TKC Architect PC (division of The Korte Co., architect); Tapani (earthwork contractor)

Noteworthy: The KPFF team overcame weather challenges and site complications to deliver the USPS building ahead of schedule.

KINSMAN ROAD EXTENSION

Submitting Firm: OBEC Consulting Engineers

Location: Wilsonville, Oregon

Client/Owner: City of Wilsonville

Other Participants/Key Consultants: AINW (historical/cultural/archaeological); DKS Associates (traffic engineering); Harper Houf Peterson Righellis (stormwater and landscaping design); Jacobs Engineering Group (waterline engineering); JLA (public involvement); Michael Minor and Associates (noise); Pacific Habitat Services (environmental permitting); Shannon & Wilson (geotechnical engineering)

Noteworthy: This important new connection includes a multi-use path and bike lanes that provide direct public access to regional transit services and a new north-south route through the city to relieve congestion on surrounding roadways. Notable complications include the city partnering with the Willamette Water Supply Program to include the installation of a segment of a major 66-inch drinking water pipeline within the project limits during construction, resulting in a cost savings to both projects with fewer impacts to the public.



TILLAMOOK COUNTY STORM RECOVERY

Submitting Firm: OBEC Consulting Engineers

Location: Tillamook County, Oregon

Client/Owner: Tillamook County Public Works

Other Participants/Key Consultants: Advanced Excavating (prime contractor); FEMA (funding partner); Hart Crowder (geotechnical engineering); HRA (cultural resources), Oregon Office of Emergency Management (funding partner); Oregon State Bridge (prime contractor); Universal Field Services (right-of-way acquisition services)

Noteworthy: When a catastrophic storm caused \$8 million in damages at more than 30 sites across Tillamook County, OBEC responded within hours to restore access to residents and businesses who were impacted. Last year was the culmination of repairs to the worst-hit areas of the 2015 storm, as the county completed construction for three of the storm-damaged sites, including installation of the new bridge on Sollie Smith Road, a new culvert at Harbor View Drive, and the replacement of four culverts in the community of Twin Rocks. This effort is a testimony to community spirit and public-private partners in a time of need.

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HONOR AWARDS

PRINEVILLE AIRPORT INDUSTRIAL PARK UTILITY EXTENSIONS

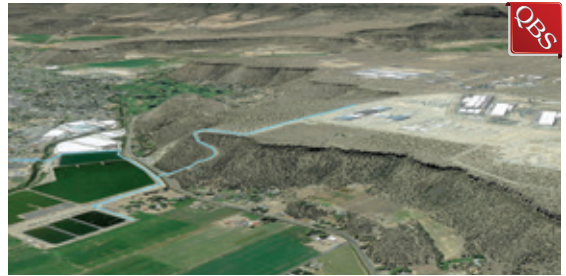
Submitting Firm: Parametrix

Location: Prineville, Oregon

Client/Owner: City of Prineville

Other Participants/Key Consultants: Taylor NW (contractor)

Noteworthy: The city of Prineville used a relatively new form of project delivery, progressive design-build, to work with the right team that could extend utilities through extreme site conditions quickly, allowing continued progress on new data centers that are contributing significantly to the city's economy.



LUUWIT VIEW PARK

Submitting Firm: Peterson Structural Engineers

Location: Portland, Oregon

Client/Owner: City of Portland, Parks & Recreation

Other Consultants/Key Participants: 2.ink Studio Landscape Architecture (landscape architect and land use planner – prime); 3J Consulting (civil engineer); R&W Engineering (MEP engineer); Skylab Architecture (architect); Stacy and Witbeck (contractor)

Noteworthy: This innovative team came together to deliver a high-quality, recreational park to a previously underserved community as part of the Portland Parks 2020 Vision program. With a beautiful design and cutting-edge engineering, Luuwit View Park allows for a better quality of life for the community by providing a place for children to play and where families can be active together.

SHAKEALERT PILOT PROGRAM IMPLEMENTATION

Submitting Firm: RH2 Engineering

Location: Grants Pass, Oregon

Client/Owner: City of Grants Pass

Other Consultants/Key Participants: RH2 hired a software development firm to work with its staff to optimize the programming of RH2's ASC device. RH2 is also working with a manufacturer to produce the hardware for the ASC device.

Noteworthy: The ShakeAlert Pilot Program allows agencies on the West Coast to obtain live, early warning information, and determine automatic actions that can protect their tanks, pumps and other facilities, which can lessen the negative economic and social impacts of a Cascadia Subduction Zone earthquake.



FERNHILL WESTERN WETLANDS

Submitting Firm: Shannon & Wilson

Location: Forest Grove, Oregon

Client/Owner: Kennedy/Jenks Consultants (client), Clean Water Services (owner)

Other Consultants/Key Participants: Kennedy/Jenks Consultants

Noteworthy: The subsurface conditions that make this site an excellent location for wetlands also created geotechnical challenges for the design and construction of the project that needed Shannon & Wilson's ingenuity, judgment and experience to solve.

CORNELIUS PASS-TV HIGHWAY INTERSECTION PROJECT

Submitting Firm: WSP

Location: Hillsboro, Oregon

Client/Owner: Newland Communities

Other Consultants/Key Participants: Epic Land Solutions (right-of-way acquisitions); MacKay Spósito (surveying, utility coordination); Wiser Rail Engineering (rail plans)

Noteworthy: The Cornelius Pass/TV Highway Intersection Project is a unique public works project undertaken by a private developer. It not only improves mobility and safety along two of the area's busiest roadways, but will also serve as the primary transportation corridor connecting the highly anticipated South Hillsboro community, which is expected to provide homes for 20,000 people when completed, with the employment centers and amenities of Hillsboro and Washington County.



PORTLAND METRO AREA VALUE PRICING FEASIBILITY ANALYSIS

Submitting Firm: WSP

Location: Portland, Oregon

Client/Owner: Oregon Department of Transportation

Other Consultants/Key Participants: DKS Associates (regional traffic modeling interpretation); ECONorthwest (toll optimization modeling); EnviroIssues (public outreach); Myron Swisher (federal process); Oregon Metro (regional modeling); Southwest Washington Regional Transportation Council (modeling support)

Noteworthy: The groundbreaking Portland Metro Area Value Pricing Feasibility Analysis is the first of its kind in the United States, and involved a transparent, innovative approach for the successful implementation of congestion pricing in the region. No other state in the country has implemented congestion pricing on existing infrastructure without reconstruction or highway expansion.



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