

FOR IMMEDIATE RELEASE**Burns & McDonnell Projects Across the U.S. Earn Excellence Awards**

The three projects honored span multiple industries, including environmental, aviation and transportation.

KANSAS CITY, Missouri — Three Burns & McDonnell projects have received 2021 Engineering Excellence Awards from the [American Council of Engineering Companies \(ACEC\)](#) in the organization's respective regions.

Below are the award-winning projects and their stories.

ACEC California**Commendation Award****[Delta Air Lines Ground Support Equipment Maintenance Facility](#)****Los Angeles, California**

Los Angeles International Airport diligently has been working on improvements to prepare for the 2028 Summer Olympics. As such, Delta Air Lines recently relocated and rebuilt its ground support equipment (GSE) maintenance facility to accommodate its current and future fleet. Burns & McDonnell was selected to design and construct the new 27,000-square-foot GSE facility.

With the schedule demand, an integrated design-build project delivery method was used to rapidly progress the project, which included assisting the airline with moving management operations from the existing facility to the new building. During pre-construction planning, the team developed design packaging strategies to determine appropriate methods for a smooth move, limiting operation downtime.

Burns & McDonnell also designed and built aircraft-rated Portland cement concrete apron pavements. The design team evaluated the aircraft fleet intended to use the facility and revamped the structural pavement section to support nose gear loadings and the loading from the GSE vehicle fleet.

ACEC Missouri**Grand Award****More's Lake Coal Combustion Residuals Impoundment Closure and Restoration Project****Columbia, Missouri**

In 2015, Columbia elected to close the More's Lake coal combustion residuals (CCR) site to focus on removing and decontaminating all areas affected by coal ash to meet new U.S. Environmental Protection Agency regulations regarding the disposal of CCR in landfills and surface impoundments.

Burns & McDonnell was brought on to develop closure plans, design and construct the site groundwater monitoring well network, perform groundwater monitoring and reporting, provide regulatory

submittals, and certify the closure of the facility. The firm also performed the engineering design and completed the construction plans and specifications so the city could beneficially utilize the coal ash as an embankment fill to create a new landfill access road. This unique approach saved the city 13,000 cubic yards of landfill airspace and approximately \$600,000 in saved tipping fee revenue while also conserving valuable landfill cover soil.

Upon closure, the city retained Burns & McDonnell to continue restoration of the site by designing a public park featuring walking trails with benches, a picnic shelter, a fishing pier and green spaces. The park also includes a bioretention cell to manage stormwater drainage from the roadway and parking area.

ACEC Missouri**Grand Award****Portneuf River Culvert Replacement****Lava Hot Springs, Idaho**

This culvert replacement project used partial tunneling with tunnel liner plate to replace a severely deflected corrugated metal pipe (CMP) in the Portneuf River in Lava Hot Springs, Idaho. The team chose a trenchless replacement method, a first for the Idaho Transportation Department (ITD). The method was used to replace the 262-foot-long, 10-foot-diameter culvert because of multiple project constraints, including tall mechanically stabilized earth retaining walls with 45 feet of fill and geofoam above the culvert.

Environmental constraints included wetland impacts and mitigation, aquatic organism passage, presence of migratory birds and bats, protection of vegetation, and turbidity. Hydraulics challenges included performing a no-rise analysis, obtaining acceptable velocities for the pipe and avoiding a decrease in the hydraulic opening. In addition, the Portneuf-Marsh Valley Canal Co. limits the time frame for reducing river flows with an upstream flow control structure from October through March, when low flows are anticipated.

ITD partnered with Burns & McDonnell to solve these complex challenges. Ultimately, a partial tunneling solution was selected and included shoring of the existing culverts, sequentially removing sections of the existing CMP and constructing a new pipe inside the existing one. A galvanized steel tunnel liner plate and timely pressure grouting of the new culvert sections were used for the project. All culverts were retrofitted with a beveled headwall to improve hydraulics, and the overflow culverts' inverts were repaired with concrete as preventive maintenance.

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About Burns & McDonnell

Burns & McDonnell is a family of companies bringing together an unmatched team of 7,600 engineers, construction professionals, architects, planners, technologists and scientists to design and build our



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critical infrastructure. With an integrated construction and design mindset, we offer full-service capabilities with more than 55 offices, globally. Founded in 1898, Burns & McDonnell is a 100% employee-owned company and proud to be on *Fortune's* 2020 list of 100 Best Companies to Work For. Learn how we are [designed to build](#).