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From the Desk of Steve and Alex Aldridge

It goes without saying that 2020 is unlike any year we have seen in our lifetime. Aldridge has remained strong, even during difficult times, because of our best-in-class people and a strong safety culture company-wide.

In this issue of the Pipeline, we are proud to showcase the breadth of work we perform. We are diverse in both geography and scope. There are, however, common themes in all that we do.

Safety is FIRST. This fall's Safety Week reinforced our commitment to being Incident and Injury Free and drove conversations about both physical and mental wellness.

Innovation is in our DNA. We are always looking for a new or better way to perform our work - whether that means customized equipment, PreFab opportunities, specialized tooling, or improved means and methods.

We excel at performing challenging work. The level of complexity and technology involved in all that we do may surprise some, but we continue to evolve as transportation and energy projects demand new solutions.

Passionate people drive our business. The Aldridge Team is among the finest in the industry. Smart, driven, and loyal, we take pride in the quality of our work.

We especially take pride in our customer relationships and want to take this opportunity to thank them all. This year, our customers have worked with us, and we, in turn, have worked to keep their projects safe, on schedule, and productive.

We remain committed to keeping our employees working, delivering safe and quality work to our customers, helping to keep the economy going, and keeping critical infrastructure work moving forward. Enjoy this look at some of that work!

Thank you and be safe,

Mr (y) Clex alleryo











Airport Transit Systems | Chicago, IL

Aldridge installed three different wireless communication systems to ensure complete integration of the Automatic Train Control necessary to run the driverless Airport Transit System at O'Hare Airport.

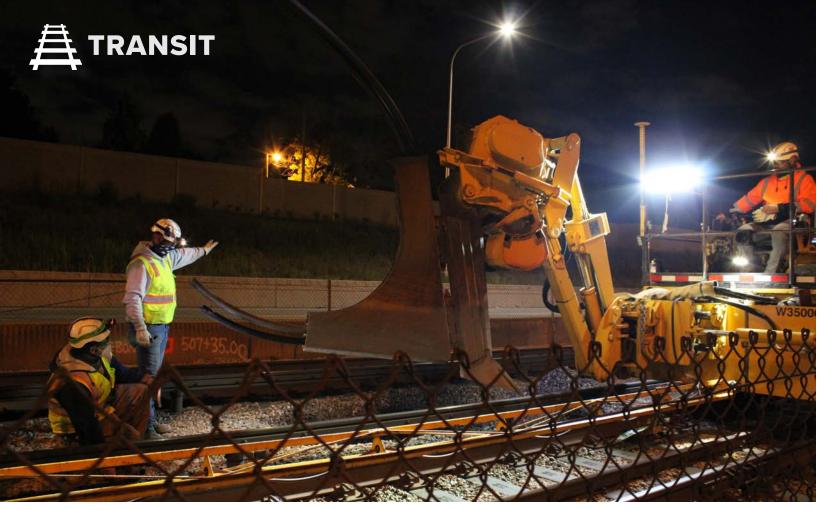
Utilizing radiofrequency, a door modem system was installed at each station platform allowing communication between the train and the door controller. This opens the doors when the trains arrive at each station, for passengers to board or deboard the fully automated driverless train.

The other two systems provide communications to the Operations Control Center (OCC) through a series of antennas located along the guideway. The vital wireless networks allow the train to communicate with the OCC to transmit and receive all critical communications for the automatic train control. The other system allows communication such as CCTV and public announcements.



Heavy Rail Extension | Milpitas, CA

As part of a billion-dollar design-build contract with the Santa Clara Valley Transportation Authority, Aldridge, as part of a Joint Venture, recently completed work on this complex, 10-mile heavy rail extension of the Bay Area Rapid Transit (BART) System into Santa Clara Valley. Aldridge's scope of work included an Automatic Train Control System, a complete fiber-optic communications network, and related communication subsystems. Critical to the success of this project was the seamless integration between the new and old train control systems. The system went into revenue service in June 2020.



Specialty Railborne Equipment - Rail Plow

Aldridge has long provided innovative solutions for the Chicago Transit Authority (CTA), having worked on multiple track and signal rehabilitation projects on every line of Chicago's mass transit system. We typically use a conventional track or rubber tire plow on the right of way (ROW). However, on the current Blue (O'Hare) Line project, the signal devices are located between the tracks and elevated third rail instead of on the ROW.

This nine-mile project required a different approach, and Aldridge subject matter experts decided to use an in-house designed rail plow. This rail plow installs new conduit by plowing between the tracks, eliminating the need to excavate hundreds of track crossings, and a potential conflict with the underdrain located between the barrier wall and the track.

Using the rail plow instead of manually excavating, trucking out spoils, and trucking in three types of aggregate backfill has saved both time and money. Without using this innovative piece of rail-borne equipment, it would have taken at least five times the workforce and more equipment on each plow run.

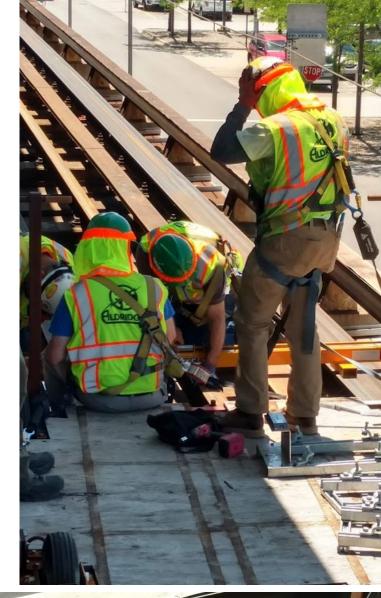
Specialty Tooling - Norming Point Laser Jig

Aldridge created a laser jig to install critical train controls called norming points for use on an Airport Transit System project. A norming point is a transponder that the train passes over, identifying that the train is in its intended position. The train must pass over the transponders at the exact same time, or a corrective action occurs.

Aldridge designed a jig concept that establishes positioning between the power rail guides. The power rails' separation tolerance may differ by a certain amount, but the pair of norming points must always be the same separation off the center on the rails. The jig establishes an exact center.

Each of the 440 norming points were fitted with a fabricated clamp to match the existing rail system and marked to identify the center of the point. The team also designed and fabricated a rail platform cart to aid with installation.

With the use of the rail carts and laser jig, norming point installation was performed uniformly and with pinpoint accuracy throughout the entire system.





















Aldridge was recently awarded a large civil/site package for a state-of-the-art data center in DeKalb, Illinois. Providing power and communications for cloud storage for one of the world's top tech giants, Aldridge is utilizing many innovations and technology systems to work smarter and build a more accurate project.

The field and leadership teams are a blend of utility, foundations, and transportation subject matter experts that have made it possible to expedite and effectively execute this massive project on an aggressive schedule. Our crews and site leadership have been recognized by the Customer and General Contractor for their safety best practices and project execution, further establishing Aldridge as a key player for data center construction.

Aldridge is utilizing Trimble Technology to enhance efficiency and accuracy on-site. Equipment operators utilize this technology to improve coordination with other trades, identify prefabrication opportunities and out of sequence work, and decrease work hours.

Trimble Earthworks delivers grade control for excavators, which creates smooth, flat, or sloped surfaces more easily. The software's Global Navigation Satellite System (GNSS) and GPS help stay within a half-inch tolerance when installing objects into the field. The SiteVision AR program allows operators to use their Android phones to give a rough layout prior to digging. This technology allows for 6" tolerance precision when trenching. The program's connectivity provides ease of information sharing back to the office and crew access to the latest drawings. Through the use of this technology, Aldridge has been very productive on this high-profile project.

Pipeline | Winter 2020



The lowa-Illinois Bridge is a major bottleneck, causing delays for the bi-state communities linked by the I-74 Corridor. As part of the new bridge's reconstruction, Aldridge is installing streetlights, LED architectural fixtures, miles of suspended conduit under the bridge for future expansion, a network of power necessary to ventilate and illuminate the arches, and electronic sensor equipment to continually monitor the structural health of the bridge. Aldridge planned and executed an innovative approach to the work by installing conduit within the arches prior to their delivery on-site. With the keystones set, crews focused on connecting the prefabricated systems and tying them into their permanent utility feeds to complete the arch work. This project reached a major milestone when the westbound portion of the bridge opened to traffic in November 2020.





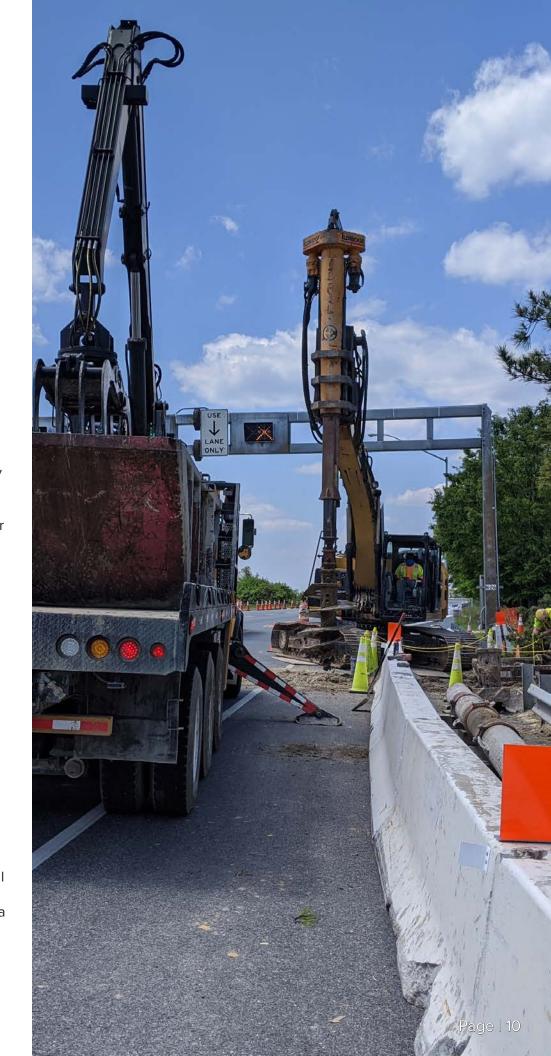


Bay Bridge Automated Lane Closure System Stevensville, MD

This Intelligent Transportation System (ITS) project is the first of its kind in the United States. The project scope includes the installation of an Automated Lane Closure System (ALCS) consisting of ITS devices that advise motorists of closed lanes as they are approaching the eastern shore two-way traffic crossover. Aldridge will install three miles of in-pavement lights and a series of swing gates to remotely switch traffic patterns during high traffic periods. The system will be used by William Preston Lane Jr. Memorial Bridge (Bay Bridge) operations and maintenance staff to remotely close lanes, allow contra-flow operations on the North or South bridges, and address incidents.

Express LanesLos Angeles, CA

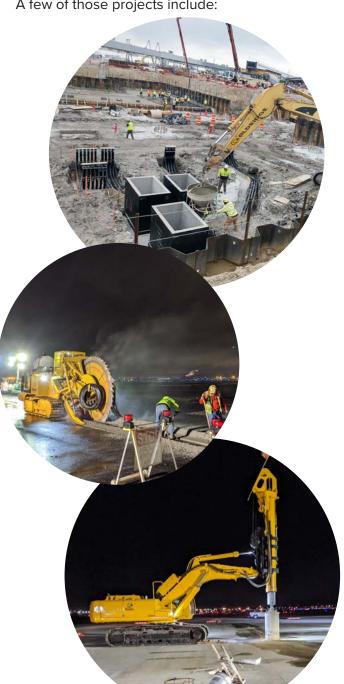
Crews are working to maintain communications infrastructure for this high-traffic toll system. The scope includes maintenance and repair of the fiber optic/copper and communication, network, and electrical systems. For this on-call maintenance project, field leaders and crews leveraged their strong local relationships and vast knowledge of the existing infrastructure to become a preferred contractor with the client.





O'Hare 21 Program I Chicago, IL

This year, Aldridge was awarded multiple projects related to O'Hare 21 - Chicago's vision for a 21st Century airport. A few of those projects include:



Site/Civil for Terminal 5 Expansion

This project included constructing a new east extension to Terminal 5, which will provide ten new international flight gates. Aldridge's scope on this project included site infrastructure for utility duct banks and manholes, high mast lights, a grounding system, and installation of caisson foundations. The drilling scope included 300 caisson foundations for the new Terminal 5 east extension and east and west concourse boarding bridge foundations. Aldridge utilized BIM modeling and prefabrication to install the duct bank packages for the site utility.

Taxiway A&B Relocation

The purpose of this project is to relocate existing utilities to build out new terminals. As Prime Contractor, our scope includes the installation of large duct bank packages, manholes, handholes, jacked casings, directional bores, and multiple duct bank tie-ins to existing structures. Challenges included tight production windows and utilizing custom equipment and materials to complete tie-in work.

Runway 9C/27C NAVAIDS

As General Contractor, Aldridge self-performed the majority of construction for the FAA NAVAIDS Facilities Project. The coordination of the design documents was a major challenge. Since the scope of work was intertwined with other projects onsite, there were differences between the many design drawings. However, our experienced O'Hare team was able to quickly offer solutions that drove quick resolution of complex issues. Aldridge successfully completed this work to the owner's satisfaction by identifying and mitigating potential conflicts. This runway opened in November 2020.

California Airport Infrastructure

We are proud to be a longstanding construction contractor at Chicago's airports. As we began to pursue and be awarded similar scopes in California, subject matter experts from our Chicago-based team were instrumental in building a strong airport team on the west coast. These west coast airport teams are actively working on three major California airports.

LAX

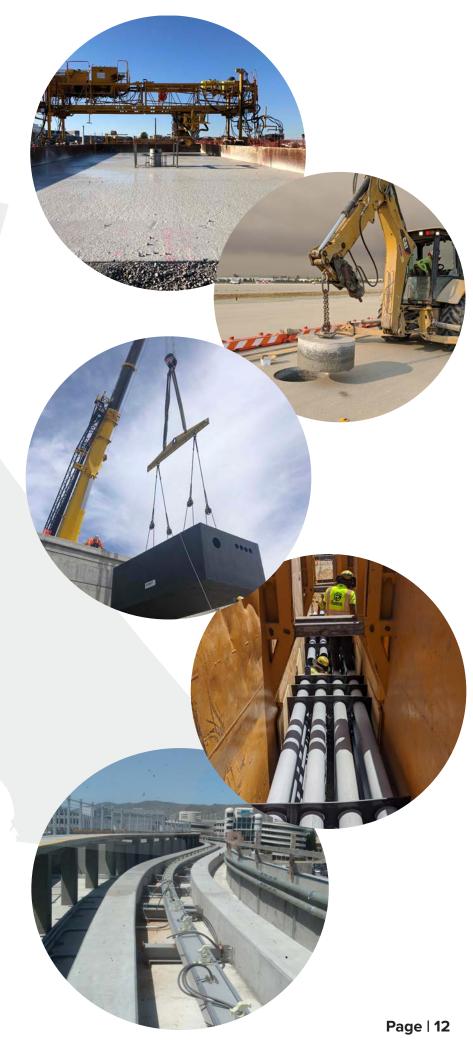
Aldridge decommissioned the existing electrical services to make room for the construction of a new 3,600 FT cross-field taxiway. In addition, crews performed extensive modifications to existing airfield lighting circuitry, installation of new lighting and associated duct bank, and rerouting public works power duct bank feeders. The 13-phase project was complex and therefore required heavy coordination to ensure seamless project execution with other project stakeholders and overlapping phase work.

Ontario

This project scope involved the site electrical, demolition, high-mast lighting, and power and communications distribution for a new state-of-the-art sorting facility. Associated work included relocating the duct bank for a new runway, airfield apron, and the installation of taxiway edge and centerline lighting. This project benefitted from nearly two miles of prefabricated duct bank that was installed on this immense 51-acre site expansion. Work required close coordination with over 50 contractors, the FAA, airport operations, and the City to avoid serious potential impacts to the traveling public.

San Francisco

Aldridge replaced the existing people mover control system with radio-based train controls, extended the existing system, and added an additional stop. Modifications and additions were made to the central control system, blue light system, intrusion alarm system, public address system, and SCADA system. The new platform door system required specialized project staff to plan, build, and integrate new technology into the current system.



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In the heart of downtown Chicago, Aldridge constructed a retaining wall along the Southbound I-90/94 ramp to Westbound I-290, as part of a complete overhaul of the Jane Byrne Interchange. Major innovation was required for the logistical coordination when moving large equipment within the narrow limits of this project site. The 110-ton crane necessary for this work had to be disassembled and moved across four lanes of highway traffic, with local police performing traffic control, to get to the job site. The team rebuilt this machine on the side of the most congested interchange in the nation. Moving equipment on this narrow stretch involved extra planning and special sequencing of work. The challenging terrain required drilling shafts under polymer slurry to reduce soil destabilization.



Westar Program Kansas

Aldridge began working on Westar Energy projects in Kansas under a Contractor of Choice Program in early 2016. Because of our crews' responsiveness and quality work, a strong customer relationship was built and resulted in a continuous flow of repeat business that included over 50 projects. To date, Aldridge crews have completed an impressive 1,100 foundations for Westar. Aldridge is proud to have an established history of value-added strategic partnerships with our clients and vendors.

New River to Wire Road Zephyrhills, FL

Aldridge recently wrapped up work on a transmission line that included rebuilding the existing 69 kV line in a double circuit configuration, a 115 kV line in a double circuit configuration, and two miles of 69 kV lines. A majority of the project occurred under hot, energized lines and required temporary casing for hole stabilization. Some unique challenges included small production windows, extreme heat and storms, and dramatically different ground conditions from structure to structure.

Edgemont to Brownsville Edgemont, AR

This project included the 10-mile rebuild of an existing 61/161 kV overhead transmission line. The site terrain, underground conditions, and schedule made this an extremely challenging project that required an innovative approach. Crews had to excavate more than 800 CY of tough and abrasive quartzite sandstone rock, utilizing up to 20,000 PSI in compressive strength by means of a hydraulic rotary Kelly Bar and gravity auger to execute the boreholes. Due to site logistics and location, concrete traveled up to 2.5 hours to reach the site. The project team used admixtures to slow the set up of the concrete.



Windy Edge Substation Parkville, MD

Aldridge was contracted to install new high-security fencing and technology equipment at the Windy Edge Substation. This mile-long, 12 FT high-security fence includes high-tech security cameras and barbed wire. The cameras utilize thermal visioning and an outdoor perimeter intrusion detection system that uses both fiber optic and radar technology in zones that cover the perimeter of the substation. This detection system and all of this technology feed back to the security building, also installed by Aldridge. The project benefited from off-site prefabrication of over 1,000 panels and the barbed wire grounding, resulting in a significant decrease in labor hours.













Waukesha Schools | Waukesha, WI

Aldridge completed work on four schools within the Waukesha School District in preparation for a return to in-person learning. One unique aspect of this interior electrical work included the installation of lighting control systems. This intelligent network of individually addressable luminaires and control devices allows for programmability to adjust to a variety of needs throughout each classroom or lab. Additional technology included the installation of access control systems necessary to deliver security solutions.



Howard University Hospital Conversion Washington DC

Aldridge assisted in converting unusable portions of the hospital to critical care units in preparation for COVID-19 patients. Due to the pace and urgency of this work, crews worked six days a week, two shifts per day, for eight weeks. Upgrades were made to the lighting, normal/emergence power provisions, nurse call, telecommunication and fire alarm systems to allow these areas to be ready for an influx of patients.

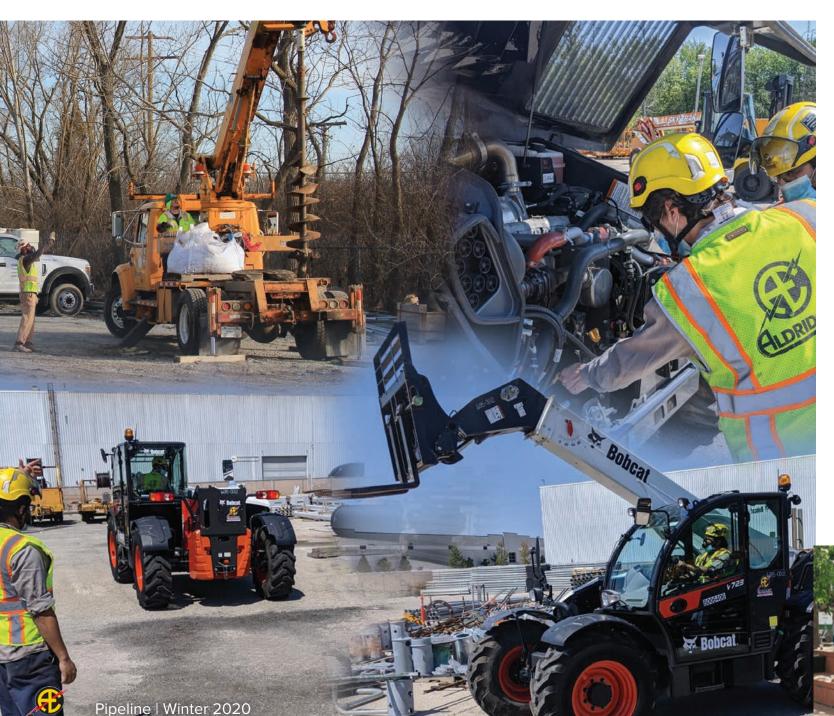
The Aldridge Way at Work

Learning Focused: Equipment Training Programs

Aldridge's Equipment Qualification Program is growing! This program, which started in our Foundation Group in 2018, recently expanded company-wide and now encompasses over 25 pieces of equipment.

Aldridge Safety Trainers and company-identified subject matter experts travel the country to internally qualify Aldridge operators on a variety of equipment, ranging from drill rigs to loaders to trenchers. Qualification is based on an operator's knowledge of specific topics related to each piece of equipment's operations as well as a demonstrated proficiency in the use of the equipment.

This evaluation process, along with the recent accreditation of an Aldridge employee as an NCCCO (National Commission for the Certification of Crane Operators) practical examiner, combines to create a best-in-class operator training program.



Aldridge Cares

Community giving is of the utmost importance to our organization. In times like these, we recognize that people need more help than ever before, and we look forward to continuing our commitment to helping those in need. Learn more about some of our other charitable efforts here: aldridgegroup.com/community



Feeding America

Over the summer, Aldridge employees generously donated to Feeding America. The Aldridge Family Foundation contributed a dollar-for-dollar match allowing a donation of 500,000 meals.



El Valor

The Aldridge Family Foundation contributed to El Valor, a non-profit community-based organization that empowers people with disabilities, the disenfranchised, and the underserved. This organization thrives on donations from community events, making it more imperative to support El Valor and see how you can help in a time of quarantine.



JDRF

While this year's fundraising activities will look different, Aldridge will continue to raise money to help this very important cause. The Aldridge Family Foundation donated a \$250 kick-starter donation to the first 400 walkers to reach \$500 in fundraising to their JDRF Illinois Walk fundraising page. In lieu of the yearly 'One Walk,' Aldridge encouraged employees to walk with their families at home, and we were able to raise over \$100,000.



GreenHouse Scholars

Aldridge is proud to support Sanah, as part of the Greenhouse Scholars program. We are committed to sponsoring her as she works towards finding a cure for Type 1 diabetes.



Bridges to Prosperity

While Aldridge's bridge build has been delayed, we had great success with our Annual Milwaukee Tool Raffle. This money is a strong start in fundraising to support the next team's build.



Employee Blood Drive

The need for blood is constant, and only volunteer donors can fulfill that need for patients in our community. Nationwide, someone needs a unit of blood every 2 to 3 seconds, and most of us will need blood in our lifetime. Aldridge hosted a blood drive event at our headquarters at the end of September to help combat this need.







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