Relentless Perseverance, Flawless Execution

Construction firm marks its centennial with a first-of-its-kind concourse at one of the world's busiest airports

Photo courtesy Los Angeles World Airports

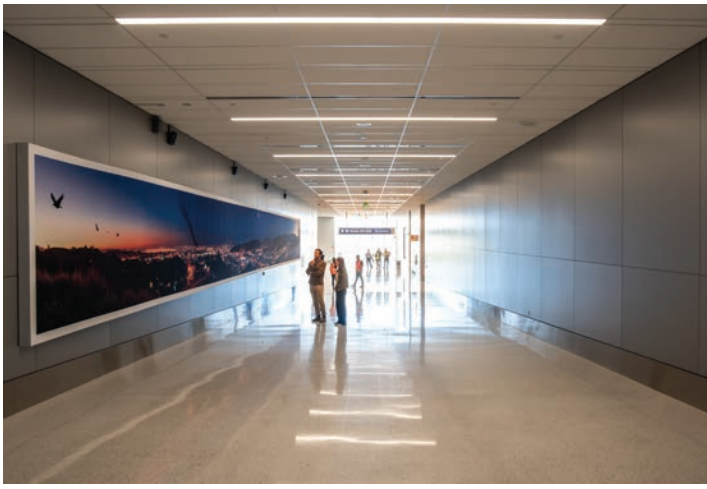
When Los Angeles welcomes the world for the 2028 Olympic and Paralympic Games, millions of travelers will pass through Los Angeles International Airport (LAX), welcomed in part by a brand-new concourse that was built in a way LAX had never seen before.

The Midfield Satellite Concourse (MSC) South began welcoming guests in October 2025, extending the West Gates at Tom Bradley International Terminal with eight new narrowbody gates and 146,000 square feet of purpose-built space. Behind it stands W.E. O'Neil Construction, a Chicago-founded, 100-percent employee-owned general contractor that completed the project the same year it celebrated its centennial. The timing was no coincidence—it was a statement.

The story of W.E. O'Neil began in 1925, when William Edward O'Neil, then working as an office boy for a Chicago architectural firm, set out to build something of his own. One hundred years later, the company he founded operates 13 offices across six states, has built in 35 states and generates $1.5 billion in annual revenue. It ranks among Engineering News-Record's Top 400 General Contractors and has done so as an entirely employee-owned enterprise—a structure that, according to leadership, is inseparable from its culture.

"We build great relationships—internal and external. We believe in that wholeheartedly. That's how we've become a 100-year-old company," says Chief Executive Officer John Finn. "Eighty percent of our clients are repeat because we value that relationship. One of the things I'm most proud of is our people. Our people are dedicated to our clients' and our design partners' vision."

That culture of trust and repeat clientele has carried W.E. O'Neil into increasingly complex work—none more so than MSC South.



W.E. O'Neil Construction

CEO
John Finn

REGIONAL PRESIDENT
Mike Byrne

VP, PRECONSTRUCTION
Brian Rush

PROJECT EXECUTIVE
Jim Nelson

LOCATION
Chicago, Illinois

Photo courtesy Los Angeles World Airports

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AN AIRPORT ISLAND OPPORTUNITY

MSC South presented a logistical challenge unlike almost any other construction job in the country. The concourse sits on an "airport island," surrounded on all sides by active runways and taxiways. LAX never closes. Every vehicle, piece of equipment and load of material that crosses onto the airfield represents a potential disruption to one of the busiest airports in the world. Los Angeles World Airports (LAWA) recognized this early on and issued an RFP, asking contractors to find ways to build more of the concourse off site and less amid ongoing airport operations.

The answer was the Offsite Construction and Relocation (OCR) technique—a technique never used before at LAX. The concept, as Vice President of Preconstruction Brian Rush describes it, is deceptively simple.

"The OCR technique builds the building off-site on temporary foundations and then moves the structure to its permanent location, setting them down on new foundations. Simply put, it's 'build the house and move the house,'" says Rush. "The benefits are time savings; improved-quality building in a controlled environment; and improved safety due to bringing less material, equipment and labor onto the active airfield."

The team evaluated prefabricated and panelized alternatives, but each required additional assembly at the job site. Only building the entire structure and relocating it fully addressed LAWA's goal—and it meant the team could erect a full airport concourse without ever requiring a crane on the airfield.

Even the less-visible elements of the project carried their own complexity. To create a vehicle path to the OCR yard, the team needed to cross the Argo Ditch—a federally protected waterway requiring sign-off from more than a dozen agencies, including the Army Corps of Engineers, U.S. Fish and Wildlife and the California Department of Water Resources. Permits took more than a year to secure. The land bridge itself was built in under 45 days.

Ultimately, nine segments were constructed in the OCR yard, located nearly 2 miles from the final site, while foundation and underground utility work proceeded simultaneously on the airfield. Mike Byrne, Regional President, describes the preparation that made it possible.

"When you are about to embark on something that your firm has never done, especially something that no contractor has ever done at LAX, the planning and preparation is paramount to success of the outcome," says Byrne. "This is true for any project, but even more so at a critical, high-volume international airport because of the quantity of stakeholders and the risks of working on an active airfield."

EXECUTING THE MOVE

Throughout October 2024, the nine segments made their journey across the airfield on Self-Propelled Modular Transporters (SPMTs)—a choreographed operation that took the entire month and required more than a year of stakeholder preparation to execute. The W.E. O'Neil and LAWA teams met with every department and authority having jurisdiction, working through each concern individually and continuously refining the plan.

Selling a first-of-its-kind delivery method to more than 100 stakeholders, Project Executive Jim Nelson notes, was as critical to the project's success as any technical element. That precision paid off. Some nights, the segments moved through dense fog; driving the structures nearly blind across the airfield was nerve-racking, Nelson admits. Thankfully, the planning held.

"The precision preplanning resulted in zero adjustments to the foundation system outside the use of a 'come-along,'" says Nelson. "We had approved engineering for field adjustments in the event an anchor bolt was off, but we hit every mark."

For those on the ground, the experience was unlike any other. Finn was part of the "Foreign Object Debris (FOD) Squad" on the first night, walking the runway behind the moving segments to ensure nothing was left on the airfield.

"The first night was electrifying," says Finn. "The team with LAWA spent over a year meticulously planning and they took firm control of operations during every night of the move, guiding over 100 stakeholders through each step to ensure flawless execution."

Vice President of Preconstruction Brian Rush, who helped conceive the OCR strategy years earlier, found himself standing on the runway at LAX in the middle of the night.

"The actual move was the culmination of years of planning and coordination," says Rush. "Actually moving the building was really like a celebration of the years of planning that led up to that moment."

BEYOND THE BUILD

The completed concourse is expected to achieve Leadership in Energy and Environmental Design (LEED®) Silver certification and designed with architectural vocabulary drawn from California Modernism—a nod to the city it serves. Its exterior brise soleil draws inspiration from iconic modernist homes, creating what LAWA describes as a sense of place that celebrates Los Angeles while paying tribute to the architectural legacy of the airport.

The structure was also designed by architect Woods Bagot with the capability of being repurposed, building long-term adaptability into the design from the start. Delivering the fire suppression systems and serving as a key trade partner on MSC South was Wolverine Fire Protection, a family-owned firm with more than six decades of industry experience.

The project's impact extended well beyond its footprint. W.E. O'Neil exceeded the 30 percent local worker participation goal, and the OCR yard model opened the project to workers who might not have been qualified for airside access.

"The OCR yard approach allowed 84 disadvantaged workers who cannot work airside to work on the project," says Nelson. "I know our project put thousands of people to work, which helped contribute to our local economy and make the lives in our community better."

When MSC South opened its doors last fall, it marked the completion of the most complex project in W.E. O'Neil's 100-year history—and it's a preview of what the company intends to carry into its second century. Rush, who shared LAWA's vision of moving a building across an active airfield, spent years convincing skeptics that not only was it possible, but it was the right solution.

"Don't take no for an answer," he says. "There were a lot of doubters that this could be done at LAX. I was determined we could do it."

For a company founded on determination and built on relationships, that resolve feels like a throughline—from William O'Neil's drafting table in 1925, to the runway lights of LAX in the middle of the night.

WOLVERINE FIRE PROTECTION CO.
Congratulations to W.E. O'Neil and their outstanding team of professionals on 100 years of exemplary work! Wolverine Fire Protection just finished up the LAX MSC South project with the W.E. O'Neil team and is looking forward to continuing to grow our partnership on future projects. As a company who has experienced the trials and tribulations to reach 67 years in the construction industry, we are impressed with the success W.E. O'Neil has seen since 1925. We look forward to kicking off (and partnering) in the next 100+ years of W.E. O'Neil's success.

NEVELL GROUP, INC.
Nevell Group, Inc. was proud to work in lockstep with the W.E. O'Neil team to deliver the Midfield Satellite Concourse South project – an unprecedented terminal utilizing prefabrication and off-site construction techniques at LAX. Our partnership and detailed coordination with their team is what made the execution of our systems possible, including engineered metal stud framing, custom ceilings and baffles, code-compliant fireproofing, exceptional plaster, and elite drywall finish. We are grateful to have had the opportunity to work with them on MSC South, and we look forward to further developing our bond with their team to continue to build world-class buildings together.