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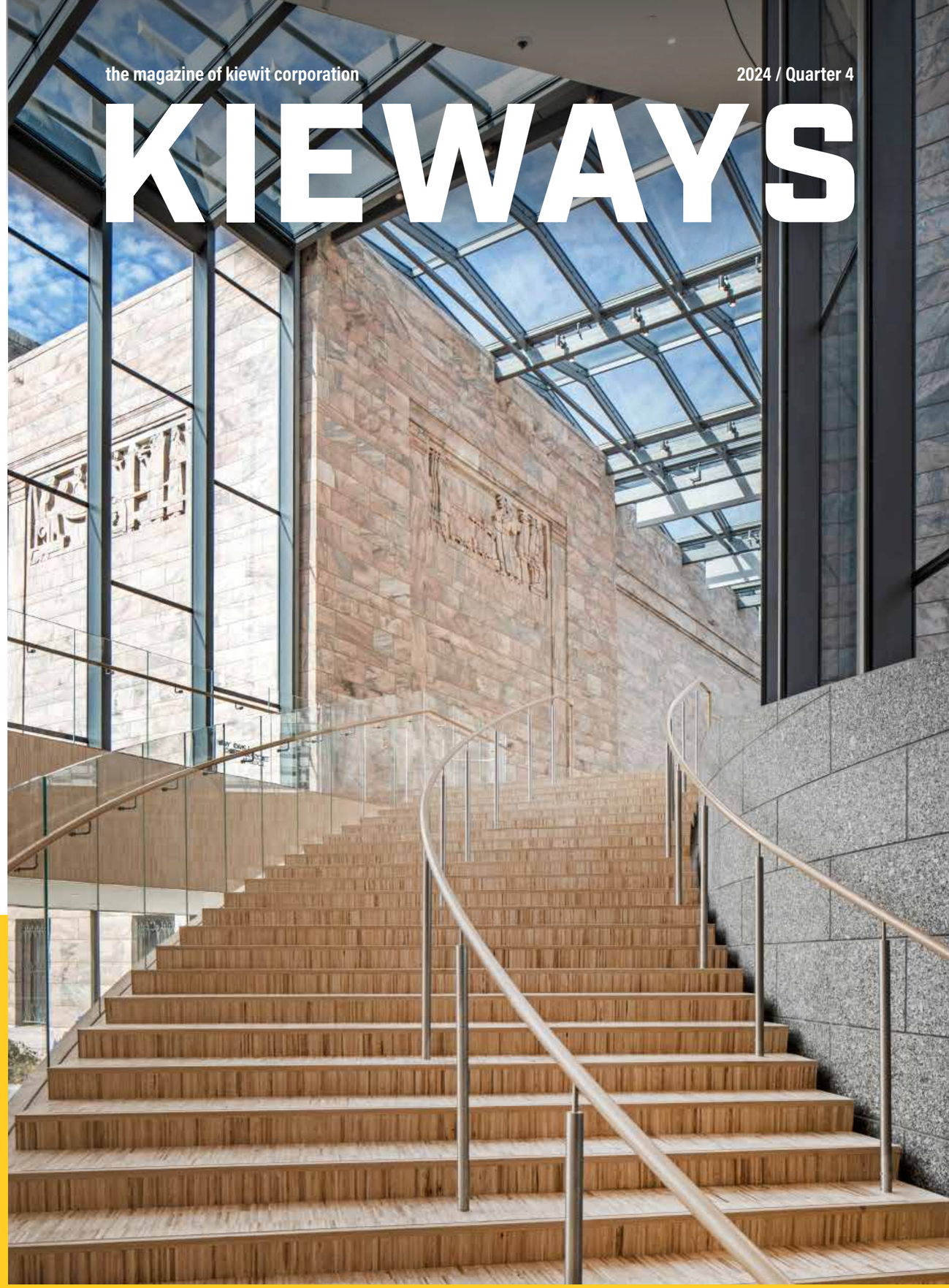
SINCE 1884

the magazine of kiewit corporation

2024 / Quarter 4

KIEWAYS



BRIDGING GAPS
One of two 260-foot temporary bridges built for the project, this structure at the base of Iron Gate Dam in California allowed the team to move heavy equipment across the river more efficiently without relying on cranes.

Kiewit

Kiewit is one of North America's largest and most respected construction and engineering organizations. With its roots dating back to 1884, the employee-owned organization operates through a network of subsidiaries in the United States, Canada, Mexico and Guam. Kiewit offers construction and engineering services in a variety of markets including transportation; oil, gas and chemical; power; building; water; industrial; mining and marine. Kiewit had 2023 revenues of $17.1 billion and employs 31,100 staff and craft employees.

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OUR MARKETS:

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KIEWAYS
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A CULTURE OF COMMITMENT

At Kiewit, honoring our commitments means more than meeting deadlines. It's about tackling complex challenges head-on and delivering solutions that fit each project's specific demands.

Take the Northwater Treatment Plant job near Denver, Colorado, for example. On page 12, we show you how our team combined groundbreaking engineering and a focus on sustainability to secure a vital water source for over a million residents in the Front Range.

In Omaha, Nebraska, people visiting the city's iconic Joslyn art museum (built by Kiewit in the 1930s) now have access to an impressive new space that's a work of art in and of itself. Flip to page 6 to see what it took to deliver on the museum's vision and what it means for the community.

Further west, our work on the Klamath River stands as a powerful example of river restoration and commitment to environmental stewardship for future generations. As detailed on page 24, completing the largest dam removal project in the Western Hemisphere ahead of schedule was no small feat.

Honoring our commitments doesn't stop at delivering complex projects. It also means supporting our people in every way we can, especially when it comes to their health and safety. In an industry that faces critical mental health challenges, Kiewit and its peers are leading by example. Read about how we're making mental health the new standard in safety on page 18.

This is what commitment looks like at Kiewit: real challenges, real solutions and real impact — delivered with purpose, every time.

RICK LANOHA
President and Chief Executive Officer

SAFETY AND SUSTAINABILITY
The Northwater Treatment Plant received eight awards, commending the team's dedication to innovation, safety and sustainability.

ON THE COVER

ALSO INSIDE

KIEWIT NEWS

What began in 1884 with two hard-working brothers has grown into a construction and engineering industry leader. As a multi-billion dollar organization, Kiewit can tackle projects of all sizes, in any market. Here's a brief collection of recent news and information from around the company.

OUR VALUES IN ACTION

PEOPLE INTEGRITY EXCELLENCE STEWARDSHIP

SUCCESS IN STEWARDSHIP

Kiewit has a rich history of giving back to the communities where we live and work. This commitment takes center stage each September during Kiewit Volunteers Month, when employees across the company are encouraged to come together and make a meaningful impact. The timing honors Peter Kiewit's birthday, Sept. 12. While Kiewit's volunteer efforts continue year-round, September is a special time when the entire company unites in a shared mission of giving back.

This September, Kiewit employees served 73 organizations in 41 cities across the U.S. and Canada, engaging in activities that reflect the company's dedication to community and stewardship. By month's end, Kiewit employees had held nine collection drives, hosted 55 traditional volunteer activities, and participated in nine fundraisers. From park cleanups that revitalized local green spaces to hands-on projects improving homes for those in need, employees rallied around efforts that make a lasting difference.

#1

Kiewit is proud to be ranked No. 1 in ENR's 2024 Top Contractor Sourcebook across these submarkets:

- domestic heavy
- fossil fuel
- hydroelectric
- hydro plants
- marine and port facilities
- mass transit and rail
- sewer and solid waste
- transportation
- wastewater treatment

In addition to these No. 1 Contractors Sourcebook rankings, Kiewit also ranked No. 1 for fossil fuels in ENR's 2024 Designers Sourcebook.

JOB WIN

RECONNECTING BALTIMORE: KIEWIT AWARDED CONTRACT FOR FRANCIS SCOTT KEY BRIDGE

The Maryland Transportation Authority has awarded Kiewit Infrastructure Co. a contract to lead the progressive design-build of the Francis Scott Key Bridge replacement project. This first phase begins the careful process of rebuilding after the bridge's collapse in March 2024. Construction is set to begin in 2025, with the new bridge expected to open by 2028, restoring this crucial transportation link.

FUTURE WOMEN IN KIEWIT SUMMIT

FROM GRAD CAP TO HARD HAT

More than 100 collegiate women from a record-breaking 69 universities across the U.S. and Canada gathered at Kiewit University in Omaha, Nebraska, in November for the annual Future Women in Kiewit (FWIK) Summit. This two-day event serves as an opportunity for attendees to gain insider knowledge, build meaningful connections and see firsthand how a company like Kiewit supports its employees in reaching their full potential.

The summit opened with networking opportunities and partnered with Girl Scouts Spirit of Nebraska for a stewardship activity, where attendees created 167 encouragement cards for Girl Scout troops and their leaders.

The agenda covered a range of topics aimed at equipping attendees with valuable skills and insights for their professional journeys. Panels and discussions explored themes such as navigating challenges in the workplace, building confidence and fostering work-life balance. Sessions also delved into transitioning from college to career, mental health and wellbeing, and leveraging mentorship for personal and professional growth.

Statistics from this year highlighted the summit's success in fostering professional growth. Of the 104 attendees, 57 were current or former Kiewit interns, and 35 interviews were conducted during the event — more than double last year's interview totals. In addition, 63 attendees accepted offers for roles across the company.

Since its inception, the FWIK Summit has become a key initiative in strengthening Kiewit's talent pipeline and showcasing the company as a premier destination for ambitious women in the industry.

"This event has grown over the years, and so has our focus," said Nicole Rolling, senior HR manager and summit co-chair. "We want attendees to leave with a clear understanding of who we are, what we do, the meaningful work they can be a part of here at Kiewit and the impact they can make."

For attendees, the summit was more than just an event — it was a launchpad for future success.

"I feel so empowered, and we received great advice from women who have been exactly where we are," said Andrea Ordonez, a Purdue University student and summit participant. "It's amazing to be here with 100 other women. You actually feel like we're the future — raising our hands and making an impact, not only in the industry but in our own lives."

104 Attendees

69 Universities represented across the United States and Canada

63 Job offers accepted

35 Scheduled job interviews

BUILDING A WORK OF ART

Kiewit continues its legacy at The Joslyn.

Kiewit is no stranger to The Joslyn in Omaha, Nebraska. Originally built in 1931 by a Kiewit team that included Peter Kiewit himself, the Art Deco museum was expanded in 1994 with the addition of the Suzanne and Walter Scott Pavilion, also built by Kiewit.

When Kiewit Building Group Inc. (KBG) was awarded the contract for a $78 million expansion, they knew this Joslyn project would be particularly challenging and special.

The Joslyn wanted its new building, the Rhonda and Howard Hawks Pavilion, to stand out yet complement the original buildings. The museum hired Norwegian and American architectural firm Snøhetta to design the building. Snøhetta, with help from Alley Poyner Macchietto Architecture, came up with a design concept to mimic "clouds floating over a prairie."

“It was unlike anything Kiewit had built before,” said Project Manager Kevin Vrooman. “The two-story 42,000-square-foot building includes only two 90-degree corners — the remaining elevations are concave and convex curvatures that meet the sloping roof. It all comes together to connect into the two existing buildings.”

For the cloud look, the exterior of the building is adorned with 960 custom high-performance concrete (HPC) panels. Each three-dimensional shape is 5/8 inch thick, up to 11 feet long, and weighs up to 500 pounds. These HPC panels were fabricated in Nashville, Tennessee, and shipped by truck, 20 to 30 per load.

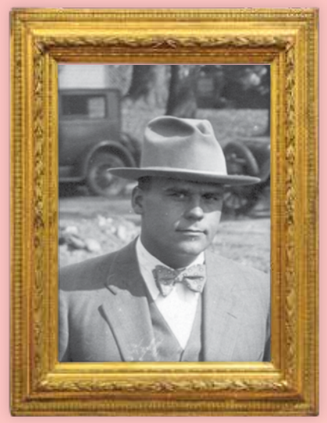
The concrete mix is also unique because of the addition of crushed Georgia pink marble to complement the marble of the original building.

“It’s a mix design that has never been used before, so we did a lot of research, extensive testing and quality control,” Vrooman said.

To bring the vision to life, the building also had to appear to be floating. Accomplishing that required a complex steel structure, according to Vrooman. The second floor is suspended from above. Large steel cantilevers extend 40 feet out and above the main level of the building, allowing covered access at the main entrance and the exit to the sculpture gardens.

Because of the weight, temporary columns were used until the structural steel was fully erected and the concrete decks were poured from above. Once they were at full strength, the temporary columns were removed one at a time and the building was surveyed to ensure it was within tolerance specifications.

The new Rhonda and Howard Hawks Pavilion, shown under construction in the photo above, required a complex steel structure, including large cantilevers that extend 40 feet out and above the main level of the building. Its curves are in stark contrast to the original rectangular museum buildings.



A historic partnership

Joslyn Art Museum’s history comes full circle with the recent renovation completed by the same company that first constructed it nearly a century ago. Originally envisioned by Sarah Joslyn to honor her late husband, the museum’s grandeur was realized under the watchful eye of Project Superintendent Peter Kiewit, whose innovative solutions — such as custom-sized bricks and specialized anchors to secure its marble facade — saved valuable time and resources. The relationship between Kiewit and The Joslyn remains as tangible as the museum’s enduring stonework, with today’s project team carrying forward the same spirit of dedication and ingenuity that marked its beginnings.

Clockwise from top left: The Joslyn under construction in 1929; Project Superintendent Peter Kiewit; the original project team, including Peter Kiewit, second from left, and Sarah Joslyn, third from right; today’s project team, from left, Project Manager Kevin Vrooman, Project Sponsor Anayeli Martinez Real, General Superintendent Nick Fotoplos, and Kiewit Division Manager Joe Lempka.

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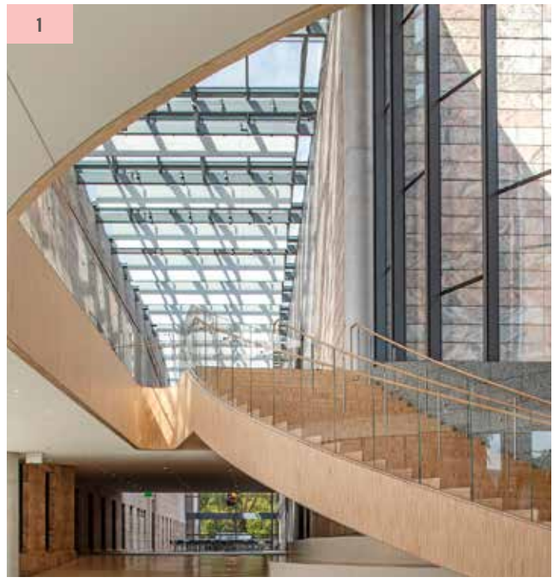

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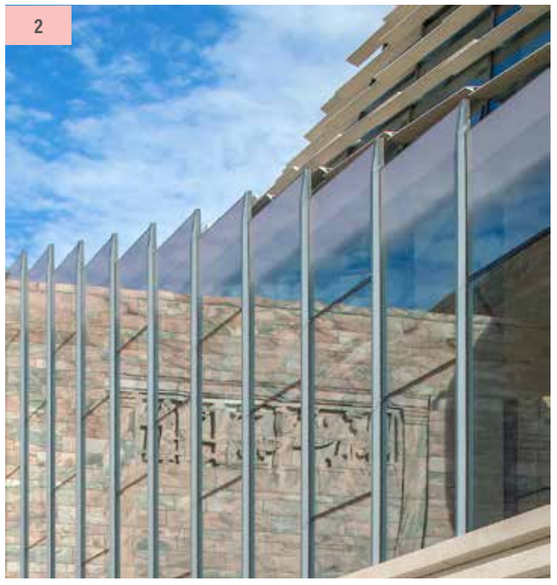


1. A winding staircase leads museum visitors from the entry atrium to new galleries on the second floor. The staircase and entire second floor are suspended from above. 2. In this photo, the original museum can be seen as a reflection in the floor-to-ceiling glass walls of the new addition.
Opposite Page: *Visitors to The Joslyn now enter through the Rhonda and Howard Hawks Pavilion into the new Phillip G. Schrager Atrium, a bright and inviting space with glass walls, a suspended grand staircase and views of surrounding gardens and historic architecture. The horizontal texture of the new façade and light-colored precast panels embedded with pink aggregate echo the 1931 Joslyn building's grand steps and the existing buildings' rose-colored marble.*

"The wow factor you get from 40-foot cantilevers without columns is incredible," said KBG Project Sponsor Anayeli Martinez Real. "It was a complex and rewarding operation for our project team."

Vrooman attributed the cantilever success in part to Kiewit Infrastructure Engineers, who did the project's erection sequence. "Every step was engineered by our internal team, which was great," he added.

"It was a very complex building design, and they knocked it out of the park," said KBG Area Manager Kevin Welker. "The design was a vision, and the team was nimble enough to adapt to changes and make that vision come true."

AN ARTFUL APPROACH

When KBG broke ground in July 2021, the museum was still open to the public. With irreplaceable art on the other side of the wall, the team needed to protect the art while it worked on ground-clearing and installation of deep foundations.

Seismic readers were brought in and placed strategically near the art, including three readers next to a large Chihuly glass exhibit. The team tested different types of equipment to establish a map of what equipment could go where and what areas were off-limits.

The readers were monitored constantly until the museum closed to the public, and the art was removed. The safety precautions paid off, as the careful monitoring and strategic precautions kept the museum's collection safe throughout the early stages of construction. But the challenges extended beyond physical protection — Vrooman emphasized that bringing the museum's vision to life required a unique mindset from the entire team.

"We needed everyone to understand that we weren't building another office building; we were building a one-of-a-kind piece of art for an iconic art museum."

While certain details in the design took more time and were more costly, Kiewit stuck to its culture of innovation, attention to detail and building at the lowest possible cost, ultimately delivering a work of art for the Omaha community.

In addition to the building's complexity, the KBG team faced obstacles procuring materials during the COVID-19 pandemic, and shipping delays with the terrazzo flooring when a mine in Turkey flooded.

"To me, the success was the job team. We had to show up and say we can do this, we are the best contracting

organization on Earth, and we can build anything," said Martinez Real. "The whole team came in with the understanding that we would roll up our sleeves to help with any constructability constraints that may arise with a one-of-a-kind building design."

Martinez Real said Kiewit's approach to this job had to be different because there was no historical equivalent to look back on. The team decided to invest time and money up front to build full-size mock-ups in the shop or on-site, including the exterior wall, interior walls, floors and ceilings.

"This allowed us to look at the details and identify challenges before we started installation on the job site," she said. "We brought the design team and the owner in and asked them if this is what they envisioned and if they had any modifications."

Changes were made to the mock-ups, reducing the amount of rework on the job.

"Part of our responsibility as builders is to be solution-driven, to find solutions to all challenges," said Martinez Real. "We knew we were going to have to do things differently, and that mindset made us successful."

"We were able to build this iconic museum for the Omaha community and visitors to enjoy as a local contractor, using local subcontractors. That, to me, is part of the success of this project," she said.

Jack Becker, executive director and CEO at The Joslyn, agreed.

"This is a very complex building, and it pushed everyone to do the best they could. Kiewit has been a great partner, and I think we ended up with a great product," said Becker. "We've had a long history with Kiewit, and we know that Kiewit will be here long after this building opens, which is important."

CHANGES IMPROVE VISITOR EXPERIENCE

The Joslyn has been a focus of cultural activity in the Omaha area for over 90 years. However, the visitor experience received a major upgrade when the renovated and expanded museum opened to the public in September.

Upon entering the museum, visitors are now greeted with a light and airy open space with glass walls and a suspended staircase that leads to new galleries on the second floor. The entire second floor is also suspended from above.

On the main floor, visitors can find a new museum shop, meeting space for up to 100 people and access to the new sculpture gardens and the two existing museum buildings.

With the expansion, The Joslyn now has 40 percent more gallery space, two additional classrooms and an upgraded lecture hall with new seating, new lighting and better acoustics. In addition to the new building, KBG did some renovation in the older buildings, including new HVAC and electrical systems, updated gallery lighting and landscaping.

"Our goal with the expansion was to increase gallery space, create more education space and address challenges for visitors finding the main entrance," said Becker. "It's a museum that will serve the community for the 21st century. It makes the Omaha community better." K

NORTHWATER
TREATMENT PLANT

CLEAN WATER FOR COLORADANS

Every time a Denver Water customer makes a cup of coffee or takes a shower, they can thank a new source of reliable water treatment.

After eight years of design and construction, the Northwater Treatment Plant came online in May 2024. The plant is located near Golden, Colorado, on Denver Water's Ralston Reservoir site. It has a capacity of 75 million gallons per day (MGD) and is expandable to 150 MGD.

One of four potable water treatment plants in the Denver Water system, Northwater is part of a larger program to upgrade the existing North System that dates back to the early 1930s. The new plant ensures that the 1.5 million customers in the Front Range will have clean water for many years to come.

FINDING A SOLUTION

Efficiency, reliability and sustainability are at the heart of the new facility built by Kiewit Infrastructure Co. as part of its Construction Manager at Risk (CMAR) contract with the Denver Board of Water Commissioners. The team self-performed all the yard pipe, process mechanical work, site finishes and startup.

It was a steady, if long, road to the finish line for a project that began in 2016. Early in the preconstruction phase, Denver Water approached the team to ask if the plant could be designed as a 100 percent off-the-grid facility, able to sustain itself without drawing from the power grid.

Kiewit was charged with staying in the parameters of the contract yet aiming to give the owner a solution as close as possible to its vision, said Project Manager Travis Baumgartner.

"As a CMAR, we're there to help Denver Water value engineer better ways to do things — how do we make the schedule better, how do we make the cost cheaper?" Baumgartner said.

The Kiewit team focused on collaboration. They held regular executive partner meetings with Denver Water to ensure project leadership was aligned and driving toward shared, common goals. Weekly discipline-specific task forces were conducted throughout construction to drive solutions, make decisions at all levels and improve submittal and information request turnaround times. Kiewit also introduced the Decision and Resolution Tracking (DART) process to the project, which drove early visibility of quantity, cost and schedule implications of each design decision.

Kiewit tailored its original plan to satisfy Denver Water, said Colin Bunker, assistant project manager.

"We had very good processes set up. As the owner team was going through key decisions, we were supporting with cost evaluation, schedule evaluation and, at the same time, adding content to its technical evaluations," he said.

After much consideration, including running many different scenarios about what those solutions could look like, Kiewit and the owner landed on a solution that met the owner's goal of being sustainable and budget friendly.

"We got the highest sustainability certifications that you can get for both the campus and on-site administration building," said Pete McCormick, Denver Water project manager. "That makes Northwater one of the most sustainable and decorated treatment plants in the country, definitely the only one in Colorado."

INNOVATIVE SOFTWARE SOLUTIONS

When construction started in 2018, Kiewit recommended the use of InEight Document to manage all document controls and workflows project wide. Due to the project's complex team and GMP structure, the software needed some additional features to meet the job's overall needs. Kiewit deployed resources to the job site to brainstorm improvements with the client, which led to InEight ultimately making 50 software enhancements that made a significant, positive difference. Kiewit provided on-the-job training to ensure everyone was able to navigate and use the software effectively.

They also implemented the "close-as-you-go process." On water projects of this magnitude, the client and its representatives typically spend a year or more after final completion collating and archiving project quality, financial and contractual records. With close-as-you-go, records were archived to the client's database upon reaching partial substantial completion. Due to these early efforts, and InEight's module integration for Completions, Contract, Change and Document, the archival process was simplified and expedited — resulting in full archival into the client's system prior to final completion.

PRIORITIZING SUSTAINABILITY

Sustainability was a priority for the owner. Kiewit implemented three important elements to achieve that goal:

- **Ultraviolet disinfection (UV)** — By introducing UV into the treatment process, the need for a disinfection contact basin was eliminated and replaced by a buried, 120-inch diameter contact pipeline, which led to less overall concrete needed on the project.
- **A hydroelectric generator** — When the plant and hydrogenerator are running, the generator creates more energy than the plant needs annually and the remaining electricity can be distributed to the existing power grid.
- **Plant layout** — The team made use of the natural slopes of the plant's foothills location where the major structures were buried, reducing the amount of energy required to heat and cool them year-round. The layout also resulted in the ability to reuse all excavated materials, reducing off-site hauling.

In another nod to the future, the plant is set up to be operated remotely, using a high-performance human-machine interface. Northwater is the first of Denver Water's existing plants to use the technology.

1. Built in 2019, the filter building houses seven deep-bed, dual-media filters that make Northwater more resilient to changes in influent water quality. The walls of the building are 3 feet thick. 2. The plant also contains a 3,500-kilowatt diesel generator for emergencies. The main electrical building serves as the hub for incoming medium-voltage power to the entire plant. 3. The filter and pretreatment buildings were the two largest structures on-site and drove the critical construction path.

1

2

3

Building into the natural slopes of the hillside provided for a reduction in the heating and cooling energy required for the plant. It also allowed for all excavated materials to be used at the job site.

Answering the call

During construction, Denver Water found themselves in need of emergency assistance to get their largest plant, the Foothills Treatment Plant, online in time for peak load season.

"Kiewit understood the urgency and criticality of the situation and immediately deployed staff and equipment from across the region to Foothills over the Easter holiday weekend. Working in close collaboration with Denver Water's engineers and operations staff, Kiewit got the job done and the plant back online within two weeks," said McCormick.

In recognition of the partnership and service that Kiewit, their subcontractors and consultants committed to Denver Water, the names of each team member were memorialized in a decorative brick sidewalk adjacent to the Northwater operations building.

VALUABLE IN-HOUSE ASSISTANCE

The project also showcased the depth of in-house resources Kiewit can offer clients and what a game-changer that can be for the project schedule, said Boyd Dunham, construction manager.

During concrete placement, the team noticed some cracking. Kiewit's concrete experts were brought in to troubleshoot the issue. Together, they rolled up their sleeves, set up a thermal testing plan for the remaining pours, tweaked the mix and poured sample panels.

"Anytime we needed support on specialized things like that, the Kiewit team jumped on it in a hurry," Dunham said.

McCormick emphasized Denver Water's appreciation of the wide-reaching expertise, tools and resources that Kiewit brought to the project.

"At the end of the day, it's all about people, and we're fortunate that we have had such great people from Kiewit on this assignment for the entire project."

Kiewit's in-house team delivered expertise when the initial concrete pours needed adjustment, creating and testing a new mix in just a few weeks. The pour pictured above was performed by subcontractor Garney Construction.

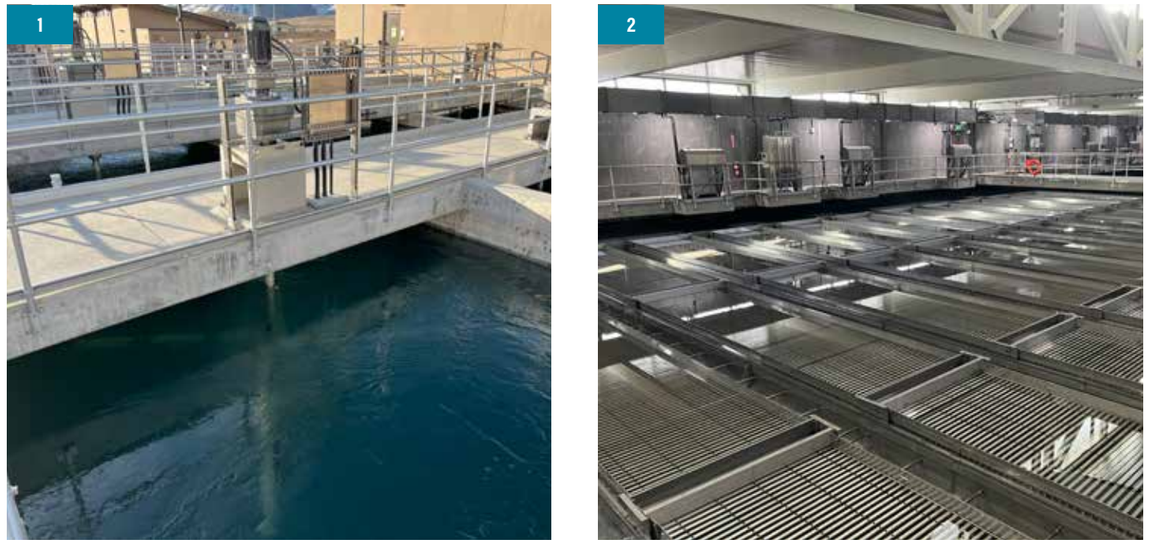
CELEBRATING STARTUP

When it was time to test the water treatment process and bring Northwater online, Kiewit and Denver Water worked together to ensure the process would go smoothly. It ended up being a model for how to do a startup well, explained Startup Manager Jeremy Trujillo.

"Even from day one when we started testing some of the equipment, a lot of their operations and maintenance folks were involved. They were able to ask the vendors questions and really get to know and own their equipment." Trujillo stated.

This collaborative approach fostered a sense of teamwork and camaraderie between client and contractor. According to Trujillo, after the project officially went online, there was a sense of celebration in the air.

"Everybody had a smile on their face and was excited to see the finish line. All that time we spent building; it was starting to come to an end and the owner could make beneficial use of its plant." **K**



Flocculation basins (1) are connected by concrete baffle walls with sedimentation basins (2). Together, they capture and remove sediment and debris prior to filtration. Northwater features three floc-sed trains each capable of treating 25 MGD, with provisions for future expansion.

Award-winning work

Kiewit and Denver Water received several honors for the team's work on the Northwater Treatment Plant:

U.S. GREEN BUILDING COUNCIL LEED GOLD CERTIFICATION
Received for the Administration Building.

INSTITUTE FOR SUSTAINABLE INFRASTRUCTURE ENVISION GOLD CERTIFICATION

NATIONAL SAFETY COUNCIL PERFECT RECORD AWARD
Awarded twice, once in 2017 and once in 2022, for completing at least 12 consecutive months without incurring a recordable injury.

2022 AMERICAN WATER WORKS ASSOCIATION INNOVATION AWARD

2023 AMERICAN PUBLIC WORKS ASSOCIATION EXCEPTIONAL PERFORMANCE IN SAFETY AWARD

2024 AMERICAN PUBLIC WORKS ASSOCIATION COLORADO CHAPTER AWARD FOR ENVIRONMENT

ENGINEERING NEWS-RECORD MOUNTAIN STATES 2024 REGIONAL BEST PROJECT FOR WATER/ENVIRONMENT

THE NEW STANDARD IN SAFETY

The construction industry is redefining worker protection by normalizing mental health conversations and offering tools to help build a resilient workforce — a growing response to persistently high suicide rates.

Every morning, Shaleen Parker greets craft workers as they arrive at the Golden Triangle Polymers Plant in Orange, Texas. As the Craft Voice in Safety (CVIS) lead, this is her way of checking on their mental and emotional well-being.

"If they're not in the right headspace, they cannot be here and work safe. If their mind is on their family back home, or a divorce, or a suicide... if that is their focus, they cannot be here safe," Parker emphasized.

This is Parker's fourth project at TIC — The Industrial Company, a Kiewit subsidiary — where the commitment to "Nobody Gets Hurt" is nonnegotiable. Alarming mental health statistics in the construction industry have companies like Kiewit addressing the issue head-on.

"We're always talking about it," Parker says of Kiewit's mental health program, Under the Hat.

Through gate greets, toolbox talks, training or reaching out to distressed peers, the focus is clear: Construction workers will no longer suffer in silence.

CHAMPIONS OF CHANGE

Before 2016, there wasn't much data to uncover this public health crisis, but after a study published by The Center for Disease Control and Prevention that July, the statistics started to trickle in. As word spread, the response came in waves.

"We started the Construction Industry Alliance for Suicide Prevention in October 2016," recalled Cal Beyer, now senior director for SAFE Project. "The most recent data for suicide in the construction industry shows 56 per 100,000 male workers died by suicide. That's almost four times higher than the U.S. national average."

Beyer notes that numbers are even higher for men in the mining industry, at 72 per 100,000. For perspective, construction workers are five times more likely to die by suicide than to get hurt on the job.

Before his current role, Beyer helped industry champions raise awareness of this silent crisis. SAFE Project is a national nonprofit that stands for Stop the Addiction Fatality Epidemic. He also serves on several national groups and committees, monitoring emerging data and developing responses to industry trends.

"We spend all this time on physical safety," he pointed out. "How can we not address behavioral health — the stress, the anxiety, the substance use, suicide and opioids?"

Today, he's connecting companies like Kiewit to help champion change. Many of them are in fact using their safety programs to open the door.

In 2021, Kiewit President and CEO Rick Lanoha linked mental health and safety in an all-company video message. "Each of us has a responsibility," he said. "If someone is hurting, reach out. Don't wait for someone else to act. I expect this from you in the same way I expect you to speak up on the job if you see something unsafe."

A few months later, Senior Vice President and Corporate Safety Head Alicia Edsen assembled a committee to streamline efforts and rebrand Kiewit's mental health focus as Under the Hat.

"We wanted our people and their families to have easy access to the tools and services they need when times get hard. We did a lot of research on training, resources and robust mental health care benefits," recalled Edsen.

Since the rollout of Under the Hat, Kiewit has made mental health part of the way it does business with monthly communication strategies, engaging CVIS teams and minimum signage standards. It's also helping lead the conversation among peers.

"Kiewit has long been a leader in safety, and my expectations are that we will also lead in mental health focus and awareness," said President and CEO Rick Lanoha. "This problem isn't going away, and it requires everyone, in any role, to take the time and show the leadership needed to learn and help."

Lanoha is a founding member of the recently assembled CEO Advisory Council, a group of construction CEOs and trade union leadership focused on developing solutions to target the high suicide rates among construction workers.

"I'm encouraged to see more of our peers having real conversations about mental health. These grim statistics aren't just numbers — they're people — our friends, colleagues and family members. In a profession like ours, where paths often cross, we all must commit to real solutions if we want to steer industry health in the right direction," he said.

Kiewit is also focusing on ways to build a more resilient workforce.

"Mental fitness should be part of how we care for ourselves every day, long before we reach a breaking point. It's about acknowledging that life is hard, and we need to learn how

Employees in Mexico gather around monitors to watch Senior Vice President Alicia Edsen's translated message during Construction Suicide Prevention Week.

to care for ourselves and each other through all of it," Edsen added.

Sundt Construction has also been moving in the same direction since 2021.

"Prior to that, we often heard, 'Leave your feelings at the gate,'" said Patricia Mason, who recruits, retains and develops craft at Sundt Construction. "Being a woman in the field, you don't want to be seen as emotional, so I bought into that culture."

Mason knew it was time for change. When Sundt Vice President-Corporate Director of Health, Safety and Environmental Paul Levin called for volunteers to attend the Construction Working Minds Train the Trainer Certification in 2022, Mason and Project Controls Manager Jessica Beyer stepped forward.

"That was really the pinnacle of what started," said Jessica Beyer. "We left knowing all the statistics and understanding the raw magnitude of what our industry was facing. In our overwhelmed state, it was hard to figure out what to do next."

The pair went from job site to job site giving mental health talks, hoping to influence a more open dialogue. In 2023, she lost a family friend, a fellow construction worker, to suicide.

"That's when I said, 'We really need to figure stuff out.'"

MENTAL HEALTH FIRST AID

Jessica Beyer and Patricia Mason learned about an eight-hour Mental Health First Aid (MHFA) course through the National Council of Mental Wellbeing, received instructor certification and then began encouraging enrollment in the course. Mental Health First Aid might sound intimidating, but Jessica Beyer said MHFA relieved some of the pressure to always know the answers by having a basis of training before engaging in peer-to-peer support.

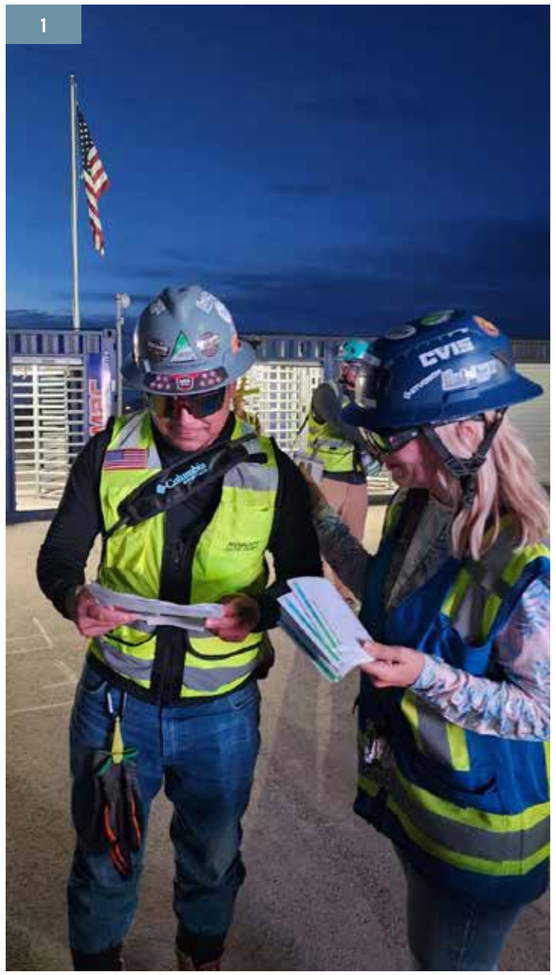
"When you complete first aid CPR, are you a doctor? No. Are you a surgeon? Absolutely not. Are you a good Samaritan? Absolutely. This is the same process," explained Jessica Beyer.

Sundt aims to have two individuals trained in MHFA on every job site and a corporate craft trainer to provide the course in Spanish. This strategy, along with developing pre-job checklists, is part of their Emergency Action Plan.

Mason says it's working. "While there is often still a reluctance to start these conversations, once people participate in a mental health first aid training, you find gratitude that they have been given the experience, permission to be vulnerable and opportunity to serve their fellow construction workers."

They say support from superintendents and staff at all levels, up to executive teams, has been incredible.

1



1. Every morning, Shaleen Parker greets the job crew at the gate to ask questions and make sure everyone is in a good headspace before starting the day. 2. Former teacher Parker knows the power of visualization. To show that Kiewit's mental health services are free for all household members, she displayed a dollhouse with a family, along with informative signage and flyers. 3. Sundt Project Controls Manager Jessica Beyer is one of the company's Mental Health First Aid instructors. The MHFA program's official koala mascot is a nod to its Australian origins. Its name, ALGEE, is an acronym for Assess for risk of suicide or harm; Listen nonjudgmentally; Give reassurance and information; Encourage appropriate professional help; Encourage self-help and other support strategies.

2

3

CEO Advisory Council

In October 2024, top construction industry CEOs formed the CEO Advisory Council to help guide the industry toward solutions targeting high suicide rates and improving overall mental health. The council meets regularly to evaluate current mental health programs, identify gaps in support and design new initiatives that address challenges faced by construction professionals. Their efforts will include enhancing training programs, launching awareness campaigns and improving access to mental health resources throughout the industry.

Founding Members

Don Allan Jr., President and CEO, Stanley Black & Decker
Brendan Bechtel, Chairman and CEO, Bechtel
David Constable, Chairman and CEO, Fluor
Peter Davoren, President and CEO, Turner Construction
Rick Lanoha, President and CEO, Kiewit
Sean McGarvey, President, North America's Building Trades Unions
Robby Moser, CEO, Clark Construction
George Pfeffer, CEO, DPR Construction

"These grim statistics aren't just numbers — they're people — our friends, colleagues and family members. In a profession like ours, where paths often cross, we all must commit to real solutions if we want to steer industry health in the right direction."

RICK LANOHA
Kiewit President & CEO

SAFE Project Senior Director Cal Beyer says the challenge coins, long used among military members, police and firefighters as symbolic tokens given to those who display courage, have become a reminder for construction workers to prioritize mental wellbeing.

LEADING BY EXAMPLE

Kiewit Chairman Emeritus Ken Stinson reinforced that leadership support is key.

"For years, leadership in the construction industry had very little awareness of the manifestation of mental illness," he said.

Stinson, who retired as Kiewit's CEO in 2005, says the shortage of practitioners, rising mental health issues among young people and the aftermath of COVID have compounded an already devastating epidemic. He now channels his philanthropic efforts through the Mental Health Innovation Foundation, recently supporting the construction of Children's Nebraska Behavioral Health and Wellness Center in Omaha. Stinson believes that talking about mental health in the workplace comes down to values.

"I would almost guarantee that 99.9% of construction industry leadership, when asked what their most important asset was, would say our people. If that's your most important asset and their lives are at risk — their performance, their marital stability, their family life — all these things are at risk, why wouldn't you think about this as another threat to their health?"

Cal Beyer agrees, "Top-down leadership support is crucial, and leaders must be visible." He calls it the "three Vs": visible, vocal and vulnerable. "If you have those three, it becomes vertical up and down the organization. It takes away the fear of retaliation or reprisals."

While the numbers are still discouraging, Cal Beyer says he sees this as a story of hope. "Our industry has responded. We didn't sweep it under the carpet. We didn't ignore it."

He points to the construction companies that have adopted mental wellness programs, associations offering training and apprenticeship programs, union and nonunion, that are incorporating this into their curricula.

For the people like Parker, Mason and Jessica Beyer, who are leading the conversations, the proof is showing up on the front lines — in the field among the colleagues they care about.

"When you hear that a phone number you've shared with somebody really made a difference in their life, it's why I love my job so much," said Parker. "I think we've come so far, and I'm grateful for it because I see the difference it's making out there with our craft and on this job site particularly."

"I just love our people," said Mason. "That's why I do it. I don't want to lose any more of them." **K**

> "I would almost guarantee that 99.9% of construction industry leadership, when asked what their most important asset was, would say our people. Why wouldn't you think about this as another threat to their health?"
>
> **KEN STINSON**
> Kiewit Chairman Emeritus and Former CEO

Startling statistics

ONE PERSON DIES BY SUICIDE EVERY 11 MINUTES* IN THE U.S.

100,000+ AMERICANS DIED OF A DRUG OVERDOSE EACH YEAR FOR THE PAST THREE YEARS

UP TO 135 PEOPLE ON AVERAGE ARE AFFECTED BY ONE SUICIDE†

56 PER 100,000 MALE CONSTRUCTION WORKERS DIED BY SUICIDE IN 2022*

*Centers for Disease Control and Prevention
†National Institutes of Health

Resources

Construction Industry Alliance for Suicide Prevention | *PreventConstructionSuicide.com*
A collaborative effort to reduce suicide in construction by providing resources and tools.

Construction Suicide Prevention Week | *ConstructionSuicidePreventionWeek.com*
A dedicated week focusing on raising awareness and providing resources for suicide prevention in the construction industry.

American Foundation for Suicide Prevention (AFSP) | *AFSP.org*
A voluntary health organization that focuses on funding scientific research, educating the public, advocating for policies and supporting survivors.

National Alliance on Mental Illness (NAMI) | *NAMI.org*
Provides advocacy, education, and support for individuals affected by mental illness.

SAFE Project | *SAFEProject.us*
A national nonprofit initiative dedicated to stopping the addiction fatality epidemic.

Workplace Suicide Prevention | *WorkplaceSuicidePrevention.com*
A resource for creating workplace programs aimed at preventing suicide and promoting mental wellbeing.

FREEING THE KLAMATH

HISTORICAL DAM REMOVAL RESTORES SALMON'S JOURNEY

In a monumental environmental triumph, the lower Klamath River now runs unimpeded for the first time in more than a century, granting salmon a clear path to their ancestral spawning grounds. Kiewit Infrastructure West Co., utilizing a progressive design-build contract model, successfully dismantled four hydroelectric dams, restoring 35 miles of river in Oregon and California to their natural state. This marks the completion of the largest dam removal project ever undertaken in the Western Hemisphere.

TURNING THE TIDE: A COLLABORATIVE FEAT

Built between 1911 and 1962, the four dams along the Klamath River had severely impacted fish populations and water quality. What was once the third-largest salmon-producing river on the Pacific West Coast saw its salmon population plummet due to increased water temperatures and high algae content. Native American tribes downstream, who relied on the river's fish populations, were particularly affected, leading to a series of legal challenges beginning in 2006. These efforts culminated in the Klamath Hydroelectric Settlement Agreement and the formation of the Klamath River Renewal Corporation (KRRC) in 2016. The KRRC was funded with $450 million from California water bonds and PacifiCorp customer surcharges.

After six years of progressive design-build work, the ambitious joint effort with Knight Piésold, engineer of record, was finalized in October 2024. Extensive permitting from the Federal Energy Regulatory Commission and various federal, state and local agencies took four years, while construction was accomplished in just two.

Most of the work was self-performed by Kiewit, requiring meticulous access planning and approaches, including the use of temporary bridges, cofferdams and track-line excavators to rappel equipment down steep slopes. Other operations required to complete the project included dredging in front of the Copco No. 1 tunnel adit using Flexifloat barges and cranes; drilling and blasting of both rock and concrete; hazardous abatement; and electrical and mechanical removals.

ONE RIVER, FOUR DAMS, COUNTLESS CHALLENGES

"What made the project special was its size and magnitude," said Project Manager Dan Petersen. "We ran it as three individual project sites across two states, but they all had to be integrated and coordinated."
The dams each presented unique challenges.

- **A** Iron Gate Dam (California): The 160-foot-tall earthen embankment dam posed significant safety risks, as the emergency spillway was non-functional during its removal. With over 1 million cubic yards of embankment to excavate, seasonal timing and upstream flow control were crucial.
- **B** Copco No. 2 (California): Also built in the early 1900s, this dam was removed "in the dry" by balancing reservoirs weekly and working within dry outage periods.
- **C** Copco No. 1 (California): Built in the early 1900s, this concrete dam contained steel railroad rails for reinforcement instead of rebar. Removing it required mining a 10-foot-diameter, 90-foot-long tunnel through the base of the 100-foot-thick dam and blasting out the remaining plug to drain the reservoir.
- **D** J.C. Boyle Dam (Oregon): The 2-mile-long concrete conveyance canal along the Klamath River canyon led to two 10-foot diameter penstocks, dropping water 400 vertical feet to the powerhouse, required specialized winch-supported gear.

One of the most challenging aspects of demolishing the JC Boyle earthen dam in Oregon was the removal of double penstocks, each about 10 feet in diameter. Water was kept level for about two miles, then dropped down the steep mountain in penstocks to drive power. The team brought in track line excavators to repel equipment down the steep slopes.

"There were a lot of risks and not a lot of past projects with dam demolition to learn from," said Petersen. "We focused on fundamentals — detailed work plans, engaged 'play of the day' meetings, and a constant focus to improve something daily."

"Every aspect of this project required custom solutions," added Project Sponsor Nick Drury. "It wasn't just a matter of moving dirt; we had to navigate through regulatory requirements and safety protocols while working in rugged, remote locations."

BALANCING NATURE, DEADLINES AND RISKS

Managing the reservoirs while maintaining downstream water flow was one of the team's greatest challenges. They had to align work with salmon migration and spawning seasons, as even small delays could have pushed the project back by an entire year. Staying connected was crucial. The job required significant hydraulic analysis and planning during both preconstruction and construction. It was essential to align planned flow releases from upstream dams to remove dams within the safest windows, maximize sediment flushing, and provide for contingency plans if the project faced a high-flow event.

"The tight windows around salmon migration meant there was zero room for error," Drury said. "The timing had to be perfect, and the entire team knew that one slip-up could delay the project by a full year."

The team coordinated progress across the three sites through daily "play of the day" calls and manager meetings, ensuring alignment of efforts. Safety and environmental staff, along with the construction manager, were shared across all sites to keep resources efficient and consistent.

"We were trying to balance four reservoirs at one time — giving us access to work while keeping the right amount of water going downstream and protecting against a 100-year flood," said Drury.

BRIDGING TEAMS, BUILDING TRUST

Both the operation of multiple project sites and the remote nature of those sites presented specific challenges. Kiewit was able to implement an arrangement to conquer both.

Approximately 75 percent of the team lived on-site, with Kiewit establishing two temporary camps that housed 54 and 20 RVs, respectively. These camps featured laundry

> "Every day, we had the different sites present in front of each other and talk about their work. The jobs were competitive with each other, took pride in their projects and it really showed. That extra drive and energy to do well just made everything easier."

DAN PETERSEN
Project Manager

facilities, exercise equipment and a temporary cellphone tower to keep workers connected with their families. Petersen explained the importance of this unconventional arrangement, as well as how it shifted the team's mentality about the work.

"It was important because we were two hours away from any towns." He said, "You're not doing the nine-to-five grind. You come back to the camp and you're still talking about the work and what we're going to do tomorrow."

Having the team live on-site wasn't just a logistical necessity — it became a bonding experience that proved to be an important part of fostering collaboration, said Drury. Petersen agreed, "Every day, we had the different sites present in front of each other and talk about their work. The jobs were competitive with each other, took pride in their projects and it really showed. That extra drive and energy to do well just made everything easier," he said.

A RIVER REBORN

Infrastructure projects of this size are notorious for delays and budget overruns. Despite the size and complexity of the project, it was completed both ahead of schedule and on budget. Laura Hazlett, chief operations officer and chief financial officer for KRRC, emphasized the team's quick problem-solving ability and Kiewit's strong execution.

"This is the largest watershed project done in the U.S., and from the very beginning, a lot of people were concerned about all of the what-ifs. It was a risky project, but I always felt like we were in very good hands."

Hazlett said the team was able to put together prompt solutions to anything that came up, and Kiewit was able to implement those solutions almost instantly.

"I very much appreciate the opportunistic nature of how they work. I think, at the end of the day, that led to the success of the project," she said. "That leads to good results. I couldn't have hoped for anything better," she said. "I think Kiewit was wonderful to work with. I'd recommend them. I'd work with them again in a heartbeat."

With the dams removed, the Klamath River is poised to regain its status as a thriving habitat for salmon and other species. The project's completion is not only a significant environmental milestone but also a precedent for future large-scale restoration efforts. **K**