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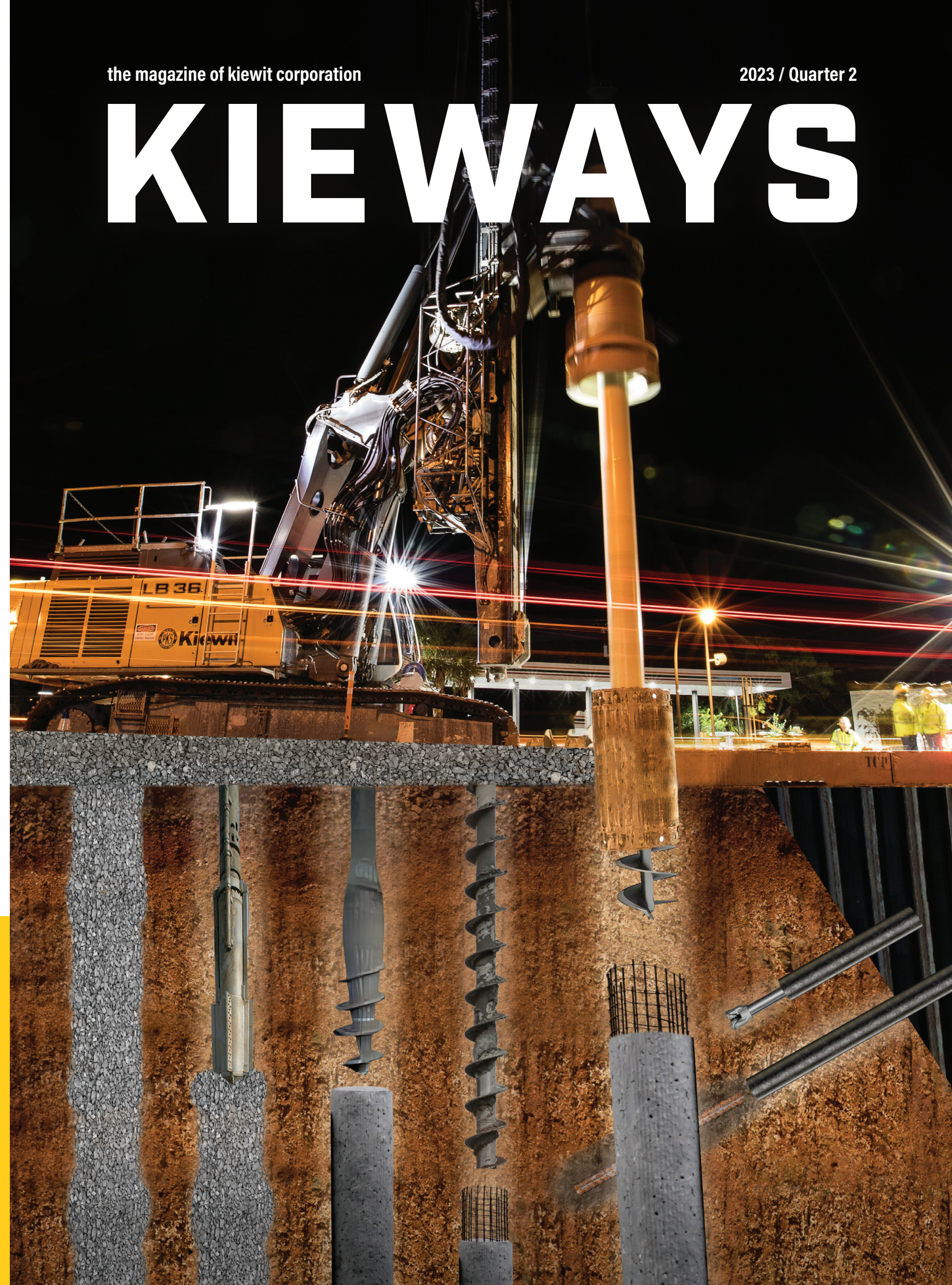


SINCE 1884

the magazine of kiewit corporation

2023 / Quarter 2

# KIEWAYS







### DELIVERING EXCELLENCE TOGETHER

Weeks Marine and Kiewit have been partners since the 1960s, forming a strong bond based on shared core values and a commitment to delivering high-quality work. The success of their joint venture projects is a testament to this enduring partnership. Learn more about Weeks Marine on page 20.



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 and Mexico. Kiewit offers construction and engineering services in a variety of markets including transportation; oil, gas and chemical; power; building; water; industrial and mining. Kiewit had 2022 revenues of \$13.7 billion and employs 25,700 staff and craft employees.

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### KIEWAYS

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## EXPANDING AND SHARING OUR EXPERTISE

We have a lot to be proud of at Kiewit. From the impressive projects we design and build, to the continued development of our workforce, we work hard to deliver innovative solutions to clients and strategically grow our organization across all disciplines and markets. In this issue of Kieways, you'll find great examples of how we're doing exactly that.

First, you'll see how Kiewit is increasing training opportunities for our craft teams. With the use of Mobile Training Facilities (Page 6), Kiewit is expanding how we help our craft develop new and enhanced skills beyond the walls of our fixed training locations. It's crucial to invest in the ongoing training of our craft to help them grow their careers while making sure our teams in the field are well positioned to safely build high-quality work.

For us, the growth of our business often comes from within. Our Kiewit Foundations Group (Page 10) is one more example of where we saw a great opportunity to help clients and partners get more of what they need from one company. For the last five years, we've grown our in-house foundations expertise to deliver pre-construction, design and technical foundation solutions.

As the California Department of Water Resources took on its first design-build contract, it trusted Kiewit to build its first project to improve challenging environmental conditions in the Salton Sea as part of its 10-year Salton Sea Management Program (Page 16).

And, finally, on Jan 1, 2023, Kiewit acquired Weeks Marine (Page 20) and its subsidiaries, bringing leading maritime engineering and construction, dredging and tunneling capabilities into our portfolio of services. Kiewit has partnered with the Weeks organization since the 1960s. That extensive history and experience – not to mention our shared values and cultures – make us confident this will be a win-win for both companies.

I hope you enjoy this latest issue of Kieways.

### RICK LANOHA

President and Chief Executive Officer





#### A VERSATILE FLEET

The Species Conservation Habitat Project required over 150 pieces of equipment. With oversaturated soils in play, the team relied on the versatility of amphibious equipment. Read about it on Page 16.

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### WEEKS MARINE: A GENERATIONAL COMPANY BECOMES PART OF KIEWIT








Skilled in dredging, tunneling and maritime engineering and construction, the latest addition to the Kiewit family is making waves and expanding its market presence.



# 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 MARKETS:

-  BUILDING
-  INDUSTRIAL
-  MINING
-  OIL, GAS & CHEMICAL
-  POWER
-  TRANSPORTATION
-  WATER

## OUR VALUES:

-  PEOPLE
-  INTEGRITY
-  EXCELLENCE
-  STEWARDSHIP

[KIEWIT.COM](https://www.kiewit.com)

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### KIEWIT OPENS NEW OFFICE IN NEW YORK CITY

To better serve clients and communities, Kiewit opened a new office in the heart of New York City.

The new space will be home to the company's infrastructure engineering team, allowing them to further provide infrastructure design services in the Northeast and offer direct design engineering support on the East Coast and across the United States.

Kiewit modified the space to meet its growing business needs and accommodate future growth. The office is also conveniently located near all major public transit hubs.

### OMAHA'S NEWEST SCIENCE MUSEUM SPARKS INTEREST IN STEM OPPORTUNITIES

Kiewit Luminarium, Nebraska's largest interactive science museum, is now open to visitors.

The 82,000-square-foot center is designed to inspire interest in science, technology, engineering and math (STEM) opportunities for all ages in a hands-on and engaging manner, with more than 100 exhibits to explore.

The building in downtown Omaha reflects the area's rich heritage of discovery, design, engineering and construction, and includes views of the Missouri River.



### KIEWIT FOCUSES ON MANAGING ENVIRONMENTAL IMPACT WITH FIRST FULLY ELECTRIC LATTICE BOOM CRAWLER CRANE

Late last year, Kiewit Offshore Services commissioned the first fully electric lattice boom crawler crane in North America.

The Liebherr LR1250 Unplugged is a milestone in Kiewit's efforts to identify, demonstrate and implement decarbonization solutions in its equipment fleet.

Kiewit worked closely with the manufacturer to understand important details about the crane and prepare crews to make it part of its operations safely and effectively.

Teams continue to collect and analyze performance, battery charge duration and energy usage data to inform how crews operate the crane and their overall ongoing equipment decarbonization efforts.

### KIEWIT ENGINEERING WRAPS UP SUCCESSFUL 2023 TECHNICAL SUMMIT

The 2023 Kiewit Engineering Technical Summit in February saw record attendance of over 2,500 participants.

The event included Kiewit engineers, external clients, college students and faculty with 27 technical presentations

throughout the virtual event.

The theme of the Summit focused on how Kiewit's Engineering Group collaborates across all engineering divisions in the execution of projects, sharing of the best technology resources and continually adapting as the industry and markets transition.

### WMATA YELLOW LINE OPENING

After eight months of crucial construction repairs, Washington Metropolitan Area Transit Authority's (WMATA) Yellow Line rail is back open for residents.

This train service gets travelers across the Potomac River between Virginia and downtown D.C. faster than ever before, and includes service to Ronald Reagan Washington National Airport.

The 24/7 Yellow Line construction started in September. Leak mitigation was initiated quickly to enable necessary structural repairs to the tunnel and stop problematic tunnel water infiltration.

More than 1,000 individual steel plates were welded into the deteriorated sections of the steel tunnel. Additionally, over 14,000 new bolts were installed at steel flanges and ribs.

Bridge work over the Potomac included the replacement of 88 deteriorated bearings, a new fire suppression system, new bridge grounding systems and the replacement of key communication cables and devices.







**GO WHERE THE WORK IS.**

**TRAIN WHERE THE WORK IS.**

Craft workers are in high demand on construction projects across North America and Kiewit projects are no exception.

With an established, formal craft training program, partnered closely with the National Center for Construction Education and Research (NCCER), Kiewit is not only prepared to meet this need, but it expands development opportunities beyond the walls of its Training Center in Colorado.

To help craft workers build long-lasting careers, no matter where they are, Kiewit has figured out a way to replicate its state-of-the-art training facility in fully loaded, mobile Conex box classrooms.

**CONEX BOXES TO CLASSROOMS**

Kiewit’s Talent Development team worked closely with craft instructors to quickly and cost effectively expand upon the training opportunities already available. These Mobile Training Facilities (MTFs) began as two empty 20-foot Conex boxes; one with workstations for learners and one to store the tools, equipment and materials required to

complete the training for a specified craft discipline. The team assembles and stocks the facilities at the Training Center before shipping them to project sites.

“These facilities allow us to provide career-changing training opportunities on the project, meeting workers where they are,” said Ron Duce, Field and Craft Operations Director.

The MTF for concrete includes supplies for the hands-on portion of training, such as building formwork for foundations and pouring a concrete slab. Similarly, the electrical facility is entirely self-contained with materials and tools included to run conduit, wire switches and more.

The electrical MTF has separate workstations for each learner simulating an electrical room. MTFs for pipefitting, millwright and ironworking each have toolboxes for learners filled with everything they need to perform their respective trades.

While MTFs have a smaller square footage than their fixed

facility counterparts, the impact is still the same. “We didn’t take any shortcuts when creating these Conex facilities,” said Josh Domme, Training Center manager. “They’re a replication of the workstations used at the Training Center.”

That means learners in the field are getting the same quality of education they receive in Colorado. Look no further than their test scores for proof of success. In the concrete module, learners must take a pre- and post-course exam. Once they’re finished with mobile training, Domme says their scores increase by about 40 percent.

**ADDING VALUE TO CAREERS AND CLIENTS**

The NCCER accreditation that craft receive from Kiewit training is the industry standard. These universal skills, paired with additional leadership-focused and career development workshops, set craft up for success on Kiewit projects and across the industry.

Once a training session is underway, craft will walk away with new skills and a NCCER learner identification number. All trainings use learning materials from the NCCER

program with learners taking written and performance testing at the completion of each module, obtaining industry recognized credits during the courses.

Currently, the MTFs are being utilized for predominantly Level 1 and Level 2 trainings in each discipline. Kiewit plans to investigate expanding the training to higher levels and to more projects.

These credentials document the knowledge and skills of craft, which can result in career advancement and ensure clients know our workforce is well equipped to build the work. Additionally, craft who have received training at Kiewit typically remain with the company longer.

“Training is an investment, and as we invest in these employees we can expect to retain more craft on our projects,” said Domme. “Regardless of background, this program will set you up for success.”

Craft professionals are paid throughout the training and schedules are set up to take advantage of projects’





Learners pose in front of a MTF. Feedback collected from learners at the end of training confirms a high level of engagement, especially with hands-on activities.

fluctuating workloads. Meaning, when there is a decline in work happening on the job, there is an increase in on-site training opportunities.

Projects vary in their level of schedule flexibility and training needs. According to Domme, the MTFs serve as an extension of the Training Center to be used on projects with a bigger workforce and greater training demands.

On-site training also provides a collaborative and comfortable environment for craft. Kermit Feser, electrical craft instructor, has seen an increase in learners' focus

during his MTF courses. "They're more comfortable and more tuned in. They want to do well because their foreman might come walking by and see them working and they want to present a good image," said Feser.

Not only do craft benefit from mobile training — but the entire project benefits from increased onsite expertise.

"Since we're on the project, if they have something that other workers are not familiar with, we can incorporate that into a lesson and provide real-time training for these students," said Feser.

Shane McDougall, concrete craft instructor, has been running concrete trainings out of an MTF since 2022. McDougall says the real value comes from teaching craft not only how to do a skill correctly, but why it is so important to complete the work in a specific way.

"The goal here is to develop our next generation of foreman, superintendents, even project managers," said McDougall. "So letting our workers develop not only their technical skills, but also some of the simple but necessary tools to grow their career is huge," said McDougall.

Since the first MTF was launched, over 150 craft professionals have received training. Kiewit's Talent Development team plans to increase that number to 300 by the end of 2023. Approximately 50% of Level 1 and 2 trainings already take place in MTFs.

These trainings cover basic core construction topics and the entry level coursework needed for a discipline, part of the NCCER's level 1 and 2 standardized training modules. Learners are required to pass both written knowledge and hands-on performance tests to receive credit for the school and advance to the next level.

"By going out and training our craft on the job helps show how much they are valued. It makes them want to perform their work better, be more attentive and ask the right questions," said McDougall. "When everyone on the crew has the ability to ask questions and say, 'That doesn't look right,' that's when we know this has been a success." **K**

1. Level 1 concrete training uses a mix of hands-on activities and classroom work. 2. All the materials and tools the pipe fitting students need are stored in MTFs. 3. Training is completed on site, limiting travel and costs.

"When everyone on the crew has the ability to ask questions and say, 'That doesn't look right,' that's when we know this has been a success."

**SHANE MCDOUGALL**  
Concrete Craft Instructor



## Taking training on the road

Currently five disciplines are part of the MTF program. Each training involves a combination of hands-on learning and classroom work. Specialized training provides learners with the skills to deliver high-quality work across the industry.







# **KIEWIT FOUNDATIONS COMPANY:** **OUR FOUNDATION** **FOR SUCCESS**

Since 2018, Kiewit Foundations Company has set the tone for landmark Kiewit projects to ensure its work comes out of the ground the right way. With a team of in-house foundations experts, Kiewit can tackle any project from the ground down.

“Kiewit Foundations works with Kiewit’s construction and engineering teams to develop solutions that make sense,” said Kiewit Foundations President Mike Ostlund. “The seamless integration between Kiewit Foundations and the rest of the company helps us solve complex problems and keeps our jobs going.”

From pre-construction and design to performing technical foundation work, Kiewit Foundations collaborates with its Kiewit counterparts through every aspect of foundational work to ensure success.

“Our team gives Kiewit a competitive edge,” Ostlund said. “Our in-house group of specialized foundation experts helps strengthen our reputation as one of North America’s top construction and engineering companies because our clients can get everything they need with one company.”





## RESILIENT FOUNDATIONS

The city of Portland is making the largest upgrade since the 1970's to its only wastewater facility, the Columbia Boulevard Wastewater Treatment Plant. To better protect and preserve the community's health and surrounding waterways, Portland is adding two new wastewater clarifiers, large tanks where water is separated from the solids. Additionally they are improving the solids handling and loadout systems and updating the electrical and piping systems.

All enhancements for the facility were designed with seismic resiliency in mind, which is crucial for structures to withstand events like earthquakes. The facility's upgrades are supported by foundations self-performed by Kiewit Foundations.

"The project team brought us in straight out of the gate and that was key," said Andy Anderson, Kiewit Foundations sponsor. "The Foundations crew worked seamlessly on the project and was able to incorporate several experienced hires into the team, creating an exceptionally cohesive unit."

With this expertise, the team geared up to perform multiple below-ground scopes over two years.

First out of the gate was the installation of secant pile shoring walls. This shoring is the support of excavation for the new tanks. Drawing on past experience and vast equipment knowledge, the team selected a dual-rotary, cased-auger drilling approach. This ensured the 70-foot-



1. The soil mixing and jet grouting combination batching plant set-up.  
2. The Columbia Boulevard team included experience staff and craft from across the company to provide in-house expertise to the project.

long piles would be installed vertically, preventing deflection and increasing production capacity, compared to more-traditional methods. In just under eight months, the support of excavation systems was completed.

Meanwhile, two ground improvement operations were preparing to install soil-cement shear panels to enhance seismic resiliency: cutter soil mixing (CSM), a technique of pumping cementitious grout into the soil while mechanically mixing with cutter wheels and jet grouting, a technique of injecting high-pressure grout into soil to improve the soil strength and permeability characteristics. Where possible, CSM panels were installed to a depth of over 70 feet, as this soil mixing technique can be cost-

effectively performed. In areas where the CSM equipment could not fit, or improved ground was only required 35 feet below the clarifier footprints, yet to be excavated, jet grouting was used.

## SELF-PERFORMED JET GROUT

According to Anderson, jet grouting offered multiple key advantages beyond constructability and cost benefit.

The team considered a variety of uncertainties and scenarios while coming up with a plan and determining a specific technique. "For example," explained Anderson, "If the CSM panels didn't reach full depth, crews could complete the panels by drilling through the soil mix and through or around an obstruction and then jet grout the remaining portion."

Not just limited to ground improvement, jet grout could also provide backstop for the shoring operation. "If the crew encountered a similar issue with the secant piles, reinforced steel retaining walls built before excavation, or in the unlikely event that unacceptable leaks were discovered later, jet grouting could supplement the support of the excavation system."

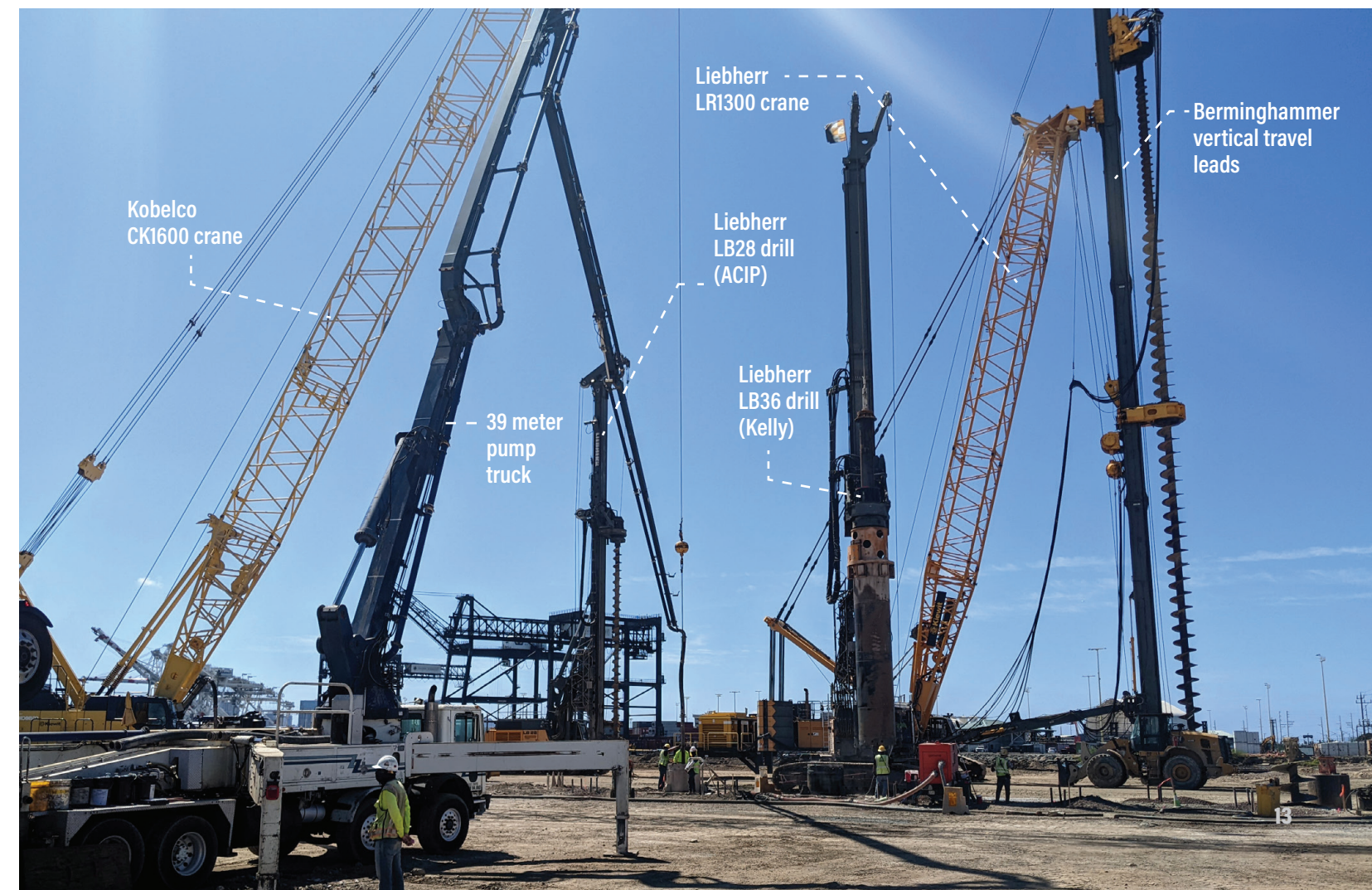
In fact, jet grouting worked so well that it was used again in the second phase of the project. A tied-back jet grout

shoring wall was designed and installed along, and underneath, an effluent tunnel, where access limitations and tight tolerances prevented the implementation of conventional shoring methods. "Yet again, jet grout has proven itself to be a most versatile tool in challenging, complicated situations," said Anderson. This process has led to the development of one of the more unique shoring walls Anderson has seen. "We're proud to have successfully demonstrated Kiewit's ability to self-perform this technical work."

## MAHALO PIER SUPPORT

This cohesion could also be seen on the Kapalama Container Terminal Project. Kiewit Foundations supported Kiewit's efforts to modernize and expand the hub of Hawaii's commercial harbor system, which at the time was the largest capital improvement in Hawaii harbor history.

"This project is part of Hawaii Department of Transportation's modernization of Honolulu Harbor, which they've been planning for more than 20 years," said Kyle Nakamura, project manager. "The Kapalama Container Terminal Project increases the capacity of ocean freight delivered to the islands, which is necessary for the continued population growth here and on the neighboring islands."





# Support from the ground down

The Kiewit Foundations Company uses a wide range of specialized foundations techniques to solve technical challenges.



## DEEP FOUNDATIONS

- ACIP/CFA piles
- Displacement piles
- Drilled shafts
- Driven piles
- Micropiles



## GROUND IMPROVEMENT

- Cutter soil mixing
- Deep soil mixing
- Rigid inclusions
- Vibro compaction
- Non-vibratory stone columns
- Vibro stone columns
- Vibratory displacement
- Jet grouting
- Permeation grouting



## EARTH RETENTION

- Anchors
- Combi & O-piles
- Secant & tangent piles
- Sheet piles
- Soldier pile & lagging
- Slurry walls (Structural & cut-off)
- Cutter soil mixing
- Soil nails



*Crews at Kapalama self-performed the stone column work. The incorporation of stone columns to reinforce soils against seismic loads and liquefaction is relatively new for Hawaii Department of Transportation designs.*

Kiewit relied on Kiewit Foundations' expertise to support Phase 2 work, which includes the waterside construction at Piers 40-43 and adds 1,800 feet of new berthing space. Foundations' scope also includes dredging along the waterfront and the harbor channel and widening the slips between piers 40 and 43.

"Due to the large structures and critical crane work on the project, ground improvements were necessary prior to any crane work," Nakamura said. "As a result, the Foundations work was one of the first critical path activities on the schedule."

### ANOTHER FOUNDATIONS' FIRST: SELF-PERFORMED STONE COLUMNS

To provide ground support for heavy equipment, Kiewit Foundations expanded its expertise to build stone columns for the first time on the Kapalama project. This design increased the load-bearing capacity of existing soils and reduced potential soil liquefaction onsite.

"Kiewit Foundations develops solutions that are the best for the project and the best for Kiewit," Ostlund said. "We're all one company, so we come out of the ground prioritizing what will bring each project the most success."

In addition to stone columns, the Foundations team drilled cast-in drilled hole (CIDH) piles to depths varying from 60 to 80 feet with immediate proximity to the ocean. These CIDH piles provided structural support for the landslide crane rail beam at Piers 42 and 43, and the combination wall, at Pier 41.

"By having the support of Kiewit Foundations on Kapalama Phase 2, we were able to build very technical foundation

work," said Nakamura. "They took care of the work like any other Kiewit operation and had the same safety culture, work ethic and priorities. We had confidence in what was being built."

### DUAL-PROBE VIBRO-COMPACTION

At the Connecticut State Pier Infrastructure Improvements project in New London, Connecticut, Kiewit Foundations helped perform ground improvement work.

"The improvements to the Connecticut State Pier are helping transform the existing pier into a state-of-the-art, heavy-life-capable port facility," said Field Engineer Shelby Palisoul. "When finished, the port will accommodate a wide variety of cargoes, including wind turbine generator staging and assembly."

According to Palisoul, her team needed to join the two existing piers together by filling the 7-acre-area between the two — this meant placing and compacting 400,000 cubic yards of material through 40 feet of water.

"The material was placed in the area using dump trucks and then compacted in a specific grid pattern," said Area Manager Pete Maglicic. "This helped consolidate the fill to allow wind-marshalling capabilities that require large load-bearing capacities."

To compact the fill, the Foundations team used vibro-

compaction with a dual-probe set-up. This set-up uses two vibratory probes, rather than one, to densify existing soils. "We believe this the first time that a dual-probe set-up had been used in the United States," Palisoul said.

Based on the Foundations team's vibro-compaction test actions, they were able to expand the width of their probes, working up to a 12-foot pattern, allowing the crew to compact a bigger section of ground more quickly.

"The ability for Kiewit Foundations and the Connecticut State Pier team to be agile throughout construction and earn the trust of the client was really impressive," Maglicic said. "As a well-respected industry expert, Kiewit Foundations has shown our client that we don't need to go out to market to solve their technical challenges."

From solving critical technical challenges to integrating seamlessly with the company, Kiewit Foundations helps Kiewit put its best foot forward. The Columbia Boulevard, Kapalama and Connecticut State Pier projects are only three examples. Foundations continues to lay the groundwork for ground breaking projects across the company.

"At Kiewit, we're a big believer in self-performing," said Greg Hill, Executive Vice President of Kiewit Infrastructure Group. "Because foundations work is crucial and the first thing out of the gate, we want to do it ourselves and make it better." **K**

*Vibro-compaction was completed with a dual-probe set-up on the Connecticut State Pier project.*





# SUPPORTING SPECIES CONSERVATION ON THE SALTON SEA

Two hours east of San Diego in the Southern California desert sits the Salton Sea, the state's largest lake.

Salton Sea is a manmade lake, albeit not purposefully. In 1905, Colorado River floodwater breached an irrigation canal being built in the Imperial Valley. Water flowed into the low point of a closed drainage basin, forming the lake.

The 35-mile-long and 15-mile-wide lake became an important habitat for residential and migratory birds, with more than 400 bird species recorded at the site.

In recent years, drought and evolving water agreements have caused water levels to recede and salinity to increase. More lakebed is being exposed, impacting both wildlife and humans. Fewer fish can survive in the saltier water, reducing the available food source for birds, and increased dust from the exposed lakebed causes harmful pollution. To address these concerns, the Salton Sea Management Program (SSMP) was created as part of California's strategic plan to improve environmental conditions at the Salton Sea.

## THE SPECIES CONSERVATION HABITAT PROJECT

The California Department of Water Resources (DWR) selected Kiewit Infrastructure West Co. as the design-build contractor for the Species Conservation Habitat (SCH) project, the first of many projects in the SSMP.

"This is an exciting, first-of-its-kind project to improve air quality and benefit local communities, while also providing habitat to migratory birds of the Pacific Flyway," DWR Director Karla Nemeth said at the time the department released its request for qualifications for the project.

When the SCH project is complete, 4,000 acres of exposed lakebed at the southern end of the Salton Sea will have been covered, suppressing dust, and providing much-needed habitat for wildlife.

Excavated material was used to build embankments and form a wetland habitat. The habitat includes three large ponds of varying water levels, ranging from a few inches to 10 feet. A new diversion structure diverts water from the New River to mixing basins, where it is mixed with water

that's pumped from the Salton Sea, before entering the habitat's ponds.

## DRYING OUT MATERIALS

A key to the project's success was processing over-saturated excavated material to make it suitable for the embankments. The optimum moisture content for the engineered embankments is 15% to 20%, depending on the material type. Many areas of the project had an initial moisture content of 50%.

Drying the material was a carefully managed and staged operation. Crews always needed 10,000 to 15,000 cubic yards of material available, ready to be taken to embankments. The disking and drying cycle took 10 to 20 days to complete. That meant over 100 acres of land was always open and in some stage of the process — disking, plowing or side casting.

"Our drying crews had to be well out in front to have material at optimum moisture ready for the scrapers to pick up," said Construction Manager Evan Phelps.

"Having multiple plans for drying material was key," said Project Engineer Lindsay Dugan. "We needed to have the flexibility to change how we used our resources depending on the actual conditions. When conditions in one area were different than expected, we needed to move resources around to not impact the overall schedule."

## SETTING THE STAGE FOR SUCCESS

Not only was SCH the first project in the 10-year SSMP, it was also DWR's first major design-build project. The Kiewit team understood the significance of their role on a project of firsts.

"Partnering has been a big, big help on the job," said Project Sponsor John Dunbar. "We have strong relationships at an executive level and at the local job level to be able to work through any issues. When you're the first ones to be part of a new program, it's not uncommon to have differences of opinion. But as a team, both sides have done a good job of making sure it's a good experience for everyone."

Kiewit plans to pursue future projects that are part of the SSMP.

## Amphibious equipment

The soil at Salton Sea is over-saturated and soft — more than 50% moisture content in many places.

"It's wet enough in some spots that you can't even walk," said Kiewit Sponsor John Dunbar.

Where people can't walk, traditional construction equipment can't work either. While estimating the project, the construction team — led by Project Manager Robert Falk, a 29-year Kiewit and construction industry veteran with experience working with over-saturated soils — worked closely with Kiewit Equipment Services to select the right machines for the job.

"Our equipment group was a key partner on the job," said Kiewit Construction Manager Evan Phelps. "They worked to understand our needs and come up with the best solutions based on equipment availability and time constraints."

For Salton Sea, the right equipment had to be low ground pressure and multiple solutions were needed. Many of the units are almost amphibious in nature. A pontoon excavator and low ground pressure dozers and scrapers were among more than 150 pieces of equipment on site.



Here is a pontoon excavator, a key piece of equipment on the project. It's amphibious and able to go to the most difficult areas of the project.



# Construction and conservation

While excavating and drying materials, building embankments and more, crews had to be very sensitive to local wildlife, including two endangered species — the desert pupfish and clapper rail, a marsh bird.

"Environmental sensitivity was a big part of the job and something we had to manage well to be successful," said Phelps.

Some of the measures in place to protect the animals during construction included:

- Training all crews to identify signs of wildlife and notify the biological team
- Meeting regularly with the biological team and regulatory agency representatives to review upcoming work and mitigation measures
- Sequencing work in sensitive habitat near nesting, breeding and spawning windows
- Protecting materials with netting and wildlife materials to minimize impacts
- Ensuring onsite biologists clear areas ahead of work and during construction
- Working with California Department of Fish & Wildlife to trap and relocate pupfish prior to any work in their habitat



Crews were made knowledgeable of the area's wildlife to ensure the safety of protected species in all stages of the project.



## PURPOSE AND PEOPLE

The Species Conservation Habitat project location made for some challenging working conditions. The remote location and hot desert temperatures required flexibility.

But for the Kiewit team, challenging circumstances aren't uncommon. Building large, complex and remote jobs is standard. It's a task that's made worth it because of purpose and people.

"It's the people and the fact that you know every project impacts that community," said Dugan, when asked the best part about her job. "It's a fulfilling job being able to really feel like you're making an impact in the community. I've been fortunate to work with great people. They keep me coming back." **K**



1. More than 150 pieces of equipment were used to complete work on the Species Conservation Habitat Project. 2. Crews built a new diversion structure, which diverts water from the New River to mixing basins, where it is mixed with water that's pumped from the Salton Sea before entering the habitat's ponds. 3. The scope of the project included installing nearly 3 miles of 30-inch high-density polyethylene (HDPE) pipeline.

## By the numbers

- 4,000 CUBIC YARDS** of concrete
- 75,000 TONS** of rip rap
- 16,400 LINEAR FEET** or nearly 3 miles, of 30-inch HDPE pipeline to take water from the Salton Sea to the pump station and pipe it to mix with the water from the New River
- 400,000 CUBIC YARDS** of dredging to create an intake basin for the pump station and a 3-mile-long dredge channel for the water to feed to the pumps over the 35-year design life of the project while the sea continues to recede
- 1.25 MILE** causeway into the Salton Sea to house the pump station
- 4 MILLION CUBIC YARDS** of excavation and embankment for berms and habitat islands



# WEEKS MARINE

## A GENERATIONAL COMPANY CONTINUES ITS LEGACY UNDER KIEWIT

As 2022 drew to a close, those at Kiewit Corporation and Weeks Marine, Inc. had much more on their minds than traditional New Year's resolutions. On Jan. 1, 2023, Kiewit completed its strategic acquisition of Weeks Marine and its subsidiaries, Healy Tibbitts Builders, Inc., McNally International, Inc. and North American Aggregates.

As leaders from both companies agreed, it was a win-win morning for employees as they woke up to start the new year.

"This acquisition offers substantial opportunities for both companies," said Kiewit CEO Rick Lanoha. "For Weeks Marine employees, they join one of the largest, most diversified construction and engineering organizations in the world. For Kiewit, we gain a highly skilled workforce and the ability to add Weeks Marine's leading maritime engineering and construction capabilities, and strong dredging expertise and tunneling services to our portfolio of services."

The Weeks Marine and Kiewit organizations have worked together on several joint ventures since the 1960s.

These partnerships revealed shared core values and a unifying mission to excel in all aspects of the work.

"Our shared cultures and values, which focus on the success and growth of our people, a relentless commitment to safety and quality, and demanding excellence in everything we do, are what will make this acquisition a success," Lanoha said.

Weeks Marine and its subsidiaries are now independently branded subsidiaries of Kiewit.

### LONG, STORIED HISTORIES

Similar to the Peter Kiewit story, it was family that forged the legacy of Weeks Marine. Only the Weeks story began in 1919, at a crowded port in New York City where patriarch Francis Weeks and his son, Richard B. Weeks, saw and seized an opportunity.

The East Coast ports were bustling as thousands of cargo and passenger ships made their way to the United States from all over the world, and Francis saw the ports were in great need of stevedores. Stevedores, commonly referred to as longshoremen, dockers or dockworkers, are manual laborers who load and unload ships. The father and son team assembled two floating cranes and began handling bunker coal and dry ballast and thus, the Weeks Stevedoring Company was born.

By the time Francis died in 1940, the company, then 21 years old, had seven cranes in its fleet and was left in the



hands of his son, Richard B. To help fill the void of his father, Richard B. brought on his sons, Dick and Ted. Together, they initiated a period of growth beyond stevedoring into related maritime industries, including wreck removal, dredging and marine construction. Weeks began installing navigational aids for the U.S. Coast Guard and became the prime contractor assigned to remove abandoned piers and vessels for the Army Corps of Engineers — work that Weeks Marine continues to perform today.

### A CLOSE CONNECTION BEGINS

It was in the 1960s that a future Weeks acquisition – Healy Tibbitts, Inc. – began a longstanding relationship with Kiewit in California, including the massive Bay Area Rapid Transit Trans-Bay Tube Project, which at the time was the longest and deepest vehicular tube in service. It was the beginning of many strategic partnerships between Weeks Marine and its subsidiaries, and Kiewit.

In the 1970s, Dick's son, Richard S., joined the company's leadership team. Throughout the 1980s and 1990s, Weeks acquired a series of like-minded marine companies to grow and expand its market presence. These included M.P. Howlett (1983), Healy Tibbitts (1989), American Dredging Company (1993) and T.L. James (1998). It was also during this time that Weeks Stevedoring Company officially became Weeks Marine, Inc.

In 2011, Weeks Marine purchased McNally Construction, a leading tunneling and marine construction contractor, and strengthened its presence in Canada. In 2016, Weeks Marine entered the aggregates business, creating North American Aggregates, now the largest supplier of sand in the New York metropolitan area.

Weeks Marine, McNally and Healy Tibbitts worked closely with Kiewit on many strategic infrastructure projects across North America, including the Goethals Bridge, Willis Avenue Swing Bridge, the Euclid Storage Tunnel, the Toronto-York

Spadina Subway Extension Tunnel, and key projects for the Army Corps of Engineers.

"This strong partnership between the Weeks Marine organization and Kiewit, and the relationships they fostered, would be the foundation for the companies to finalize a deal to have Weeks Marine become a key part of the Kiewit family," said Kiewit Executive Vice President and Board Member Hank Adams.

### A BRIGHT FUTURE TOGETHER

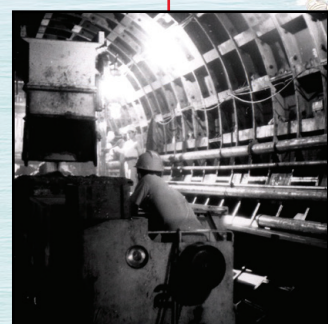
Today, Weeks Marine specializes in maritime construction and transportation, dredging, tunneling and aggregates production — and is still in the bulk stevedoring business where it all started.

"Weeks Marine's unique and extensive fleet, together with Kiewit's existing marine assets, will be unparalleled in the United States," Adams said.



Weeks' crews work to restore a beach off the Delaware coast.

## Notable Kiewit and Weeks Marine projects



**1969**

In 1969, Peter Kiewit Sons' and Healy Tibbitts, as part of the joint venture Trans-Bay Constructors, completed the rapid transit tube below the San Francisco Bay. The project was the longest and deepest vehicular tube in service at the time and the first to have both horizontal and vertical curves.



**2009**

Weeks Marine used the Weeks 533 to lift the *Miracle* on the Hudson U.S. Airways A320 passenger jet out of the Hudson River after its infamous emergency landing that saved all onboard. The Weeks 533 swings a 248-foot long boom that can lift up to 500 tons, and is one of the largest rotating maritime cranes in the eastern United States.



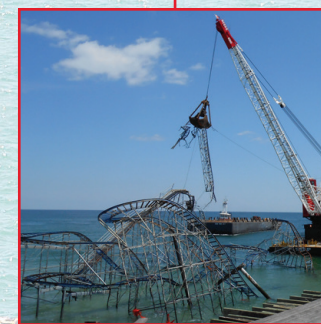
**2012**

Kiewit and Weeks Marine replaced the existing Willis Avenue Swing Bridge with a four-lane structure fabricated off-site. The project, completed in 2012, connects Manhattan and the Bronx over the Harlem River.



**2012**

Weeks Marine delivered the retired Space Shuttle *Enterprise* from JFK International Airport to the Intrepid Sea, Air & Space Museum by barge. The shuttle was hoisted by the Weeks 533, a floating crane that towers 295 feet off the water.



**2013**

After sitting in the ocean for six months following a pier collapse during Superstorm Sandy, the iconic Seaside Heights rollercoaster — the *JetStar* — was removed by Weeks Marine using the Weeks 500.



**2015**

Kiewit and McNally constructed the three-mile-long Euclid Creek Storage Tunnel in Cleveland that can hold 70-million gallons of combined stormwater and wastewater.



**2018**

Weeks Marine towed the British Airways *Concorde*, a supersonic jet, from Floyd Bennett Field in Brooklyn to the Intrepid Sea, Air & Space Museum. Crews used the Weeks 533 to lift the plane onto the aircraft carrier.



**2018**

Kiewit partnered with Weeks Marine to replace the 80-year-old Goethals toll bridge connecting Elizabeth, New Jersey, and Staten Island. This award-winning project improved safety and traffic congestion with wider lanes and pedestrian access.

■ WEEKS MARINE AND KIEWIT PROJECT

■ WEEKS MARINE PROJECT





## A tribute to a founding father

More than a 100 years ago, a young Richard B. Weeks likely never imagined the small company he and his father started with two cranes would grow into a billion-dollar business and become a key part of a leading construction and engineering organization in Kiewit.

This year, Weeks Marine, Inc. will honor Richard B's legacy with a new trailing suction hopper dredge (TSHD), the R.B. Weeks, which will soon embark on its maiden voyage where it will perform coastal restoration in the northeastern United States.

### R.B. WEEKS

Hopper capacity of 8,500 cubic yards, equivalent of over 700 haul truckloads of material

Breadth of 79 feet

Overall length 356 feet

Weeks Marine CEO Eric Ellefsen agrees.

"It was never about money for the Weeks family," he said. "Their goal was to leave the company in the custody and care of an organization that would continue to build upon the vision that Francis and Richard N. Weeks laid out decades ago and Dick and Richard S. steered until Richard S. decided the right thing to do for the company was to sell. Ultimately, they didn't want any other company to buy it except Kiewit."

For Weeks Marine, being part of the Kiewit family of companies makes sense, said Ellefsen.

"Both are generational companies that make generational decisions," he said. "We come from similar cultures and our core values align. With Kiewit, Weeks Marine will be able to accomplish much more, much faster than we ever could without them."

And that is exactly what Kiewit looks for when it makes acquisitions. According to Scott Schmidt, vice president of Strategy & Development, when Kiewit invests in an acquisition, it does so with the goal of expanding that company's market presence.

"Weeks Marine is the leader in maritime contracting," Schmidt said. "Kiewit has been wanting to expand in the maritime space, but to do that organically would take decades — not to mention cost billions of dollars when you consider the specialized equipment fleet and expertise needed to get to where we wanted to be, which is where the Weeks Marine organization already sits. Now we look forward to taking Weeks Marine further, faster using Kiewit's existing resources."

According to Ellefsen, the acquisition is advantageous for all parties.

"We have outstanding, highly skilled people with leading dredging, maritime engineering and construction capabilities that nicely complement what Kiewit offers its clients and the markets it serves," he said. "Kiewit offers Weeks Marine employees opportunities to grow their careers in new, exciting ways."

"Both organizations have excellent client relationships and strong reputations of being solutions providers," Adams added. "I'm excited to see what we can accomplish together." **K**

