



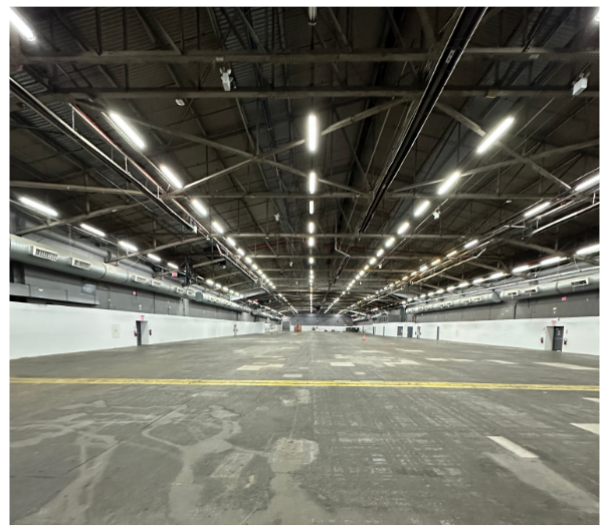
R. BAKER
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OUTRIGGER

Rigging, Dismantling & Demolition News from R. BAKER & SON

October 2024 | Volume 17 Issue 4
www.rbaker.com
2453638 USDOT
DMV 89-889

R. Baker's Precision Dismantling: Paving the Way for Pier 94's Future



Pier 94, an iconic venue on the Hudson River, opened in 1965 as a cargo terminal to accommodate New York City's growing shipping needs. Over the following decades, it hosted various trade shows, exhibits, cultural events, and the New York Boat Show, among other large gatherings.

To meet the city's changing needs once again, the pier is being repurposed, renewed, and reborn. R Baker was there to assist with this transformation.

R Baker was tasked with dismantling two structures: the Bulkhead shed and the Pier shed. The Bulkhead shed measured 585' long x 175' wide x 36' high, consisting of a steel frame with a metal roof and siding. The larger Pier shed, at 742' long x 120' wide x 43' high, also featured a steel frame with metal roof and siding. The Pier shed dismantling required careful preservation of the existing steel structure.

The dismantling was meticulously designed, planned, and laid out by area and column line. The process followed five color-coded sequences, primarily involving mechanical dismantling, equipment-assisted dismantling, and hand dismantling for critical and sensitive areas.

As with any dismantling project, safety was a top priority. R Baker implemented a site-specific safety plan and lock-out/tag-out procedures, along with daily toolbox talks. On this project, all R Baker technicians were required to wear life preservers within the designated perimeter.

The dismantling included the removal of mechanical rooms, electrical panels, wiring, bathrooms, ductwork, lighting, piping, sprinklers, and more. All utilities and systems were carefully identified, shut down, and locked out.

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R. Baker & Son holds the distinction of being the oldest and largest Minority/Women-Owned Business Enterprise (M/WBE) Rigging, Dismantling & Demolition Contractor in North America





The design team predetermined and engineered the use of dismantling equipment based on type, operating weight, rated capacity, and function for both the bulkhead and pier shed dismantling. This included, but was not limited to, excavators, forklifts, loaders, scissor lifts, bobcats, and hand tools. A crane was also used to carefully lift debris from various areas to waiting trucks and dumpsters for recycling.

R Baker worked closely with the client to ensure a clean job site and protect the waterways from debris. They followed a clean dismantling process, which included maintaining a turbidity curtain daily, despite the challenges of ever-changing tides and currents.

The dismantling portion of the project was completed and inspected three weeks ahead of schedule, allowing new construction to mobilize. Today, Pier 94 is under construction to become the new Sunset Pier 94 Studios, a 266,000 square foot state of the art TV and movie studios set to be completed Fall of 2025.

10 Ways AI Is Revolutionizing the Construction Industry

AI is revolutionizing the construction industry by enhancing efficiency, safety, and decision-making. Key areas of impact include:

- **Project Planning and Design:** Optimizing layouts and predicting issues.
- **Predictive Analytics:** Forecasting outcomes and mitigating risks.
- **Safety Management:** Identifying hazards and predicting incidents
- **Resource Management:** Optimizing allocation of labor, materials, and equipment.
- **Quality Control:** Detecting defects using image recognition.
- **Construction Automation:** Integrating AI into machinery for tasks such as bricklaying.
- **Supply Chain Optimization:** Improving inventory management and procurement.
- **Enhanced Collaboration:** Streamlining communication among stakeholders.
- **Cost Estimation:** Providing more accurate budgets and estimates.
- **Training:** Offering personalized learning experiences for workers.



AI is transforming the construction industry by driving innovation, increasing efficiency, and enhancing safety. Its ability to analyze vast amounts of data and provide actionable insights enables construction companies to make informed decisions, leading to better project outcomes and reduced costs. The integration of AI is expected to continue growing, further reshaping the industry's future.



Quality Award Winner

Congratulations to Steve Kirka, this quarter's recipient of the R. Baker & Son Quality Award. This program was established to recognize individuals for their outstanding achievements in safety, project execution, and customer satisfaction, and for their continuing dedication to R. Baker & Son's growth and success.

Thank You, Steve, for a job well done!

Reconstructing History: The Ingenious Building Methods of Ancient Rome



Recent archaeological excavations in Regio IX of Pompeii have uncovered a remarkably well-preserved Roman construction site, providing unprecedented insights into ancient building practices. This discovery, frozen in time by the eruption of Mount Vesuvius in 79 AD, offers a rare glimpse into construction techniques similar to those used in iconic Roman structures like the Colosseum and the Pantheon.

The excavation site, located between Via di Nola, Via Stabiana, and Via dell'Abbondanza, reveals a wealth of construction materials and tools, including:

1. Stacked roof tiles and tuff bricks
2. Piles of lime, sand, and stones
3. Various construction tools for preparing mortar and erecting vertical walls
4. Materials for making *cocciopesto*, a type of Roman concrete



These findings paint a vivid picture of active construction work at the moment of the city's destruction. The discovery includes a house under construction, with work materials such as bricks, tools, lime, and plaster found on-site. Particularly noteworthy is the house containing the *Rustio Vero* bakery, where renovation materials were found stacked both on the ground and on a doorjamb.



The excavation revealed that workers used quicklime mixed with sand as a primary construction material. This mixture, when combined with water, produces heat and forms a putty. Researchers noted that the still-hot mixture of lime, sand, and stones dried more quickly, significantly reducing construction time. Remarkably, this method is still employed in modern construction.

Gabriel Zuchtriegel, director of the Pompeii Archaeological Park, emphasized the importance of this cement-like material in ancient Roman construction. He stated that without this type of cement, iconic structures like the Colosseum, Pantheon, and Baths of Caracalla could not have been built.

The discovery suggests that construction was widespread in Pompeii before the volcanic eruption, with this efficient cementing technique enabling rapid urban development. Adjacent buildings also displayed signs of construction activity, with tools discovered in multiple rooms, indicating ongoing renovation and building projects throughout the neighborhood.

This excavation provides archaeologists with a detailed snapshot of Roman construction processes, offering valuable insights into the sophisticated building techniques employed nearly two millennia ago. The site stands as a testament to the advanced state of Roman engineering and construction, bridging the gap between ancient practices and modern building techniques, all frozen at the moment of Pompeii's tragic end.