

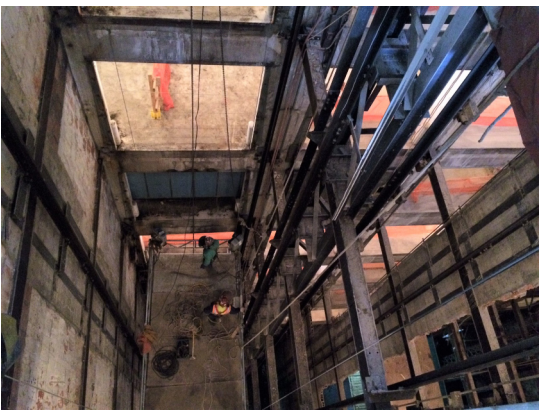


Diversified Experience Informs R. Baker & Son Precon Services



Some of the most important construction project decisions are made before the actual construction begins. This phase is known as **preconstruction**, or **precon**, when project details such as timeline, costs, feasibility, layout, permitting, execution, and various other activities are planned.

With a comprehensive preconstruction plan in place, owners and construction managers can effectively identify and organize tasks, considerably lower project costs, define and streamline scheduling, reduce waste, and improve overall quality. Preconstruction can also prevent the last-minute value engineering that tends to occur when projects go over budget.



As a contractor that specializes in rigging, dismantling, and demolition, R. Baker & Son brings a wealth of unique preconstruction expertise to construction and renovation projects and provides a variety of related services.

- **Demolition planning** is an area that is often overlooked on construction and renovation projects and omitted from drawings. The Baker team can provide on-site exploratory services including 3D building information modeling (BIM) to assess the existing structure and develop the most efficient, cost-effective selective demolition approach.

- **Rigging and routing plans** determine the most efficient way to remove old equipment and bring in new, taking into account equipment weight and dimensions, separation points, and building layout, while minimizing or eliminating the need to remove walls or other structural elements.
- **Mobilization planning** defines job site preparation, access for cranes, excavators, and other heavy equipment, debris disposal, staging areas for building materials and equipment, and various other project details.
- Demolition contractors are often the first to arrive on a job site, so it's important to start off with **accurate and efficient scheduling** of a project's early phases. These schedules can often include dust, noise, and vibration planning, and can also tie in rigging and routing plans to save additional time and money.

Continued on page 2



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Also in this issue:

Ancient Rome & Self-Healing Concrete
7 R's of Asset Recovery · HAZWOPER

R. Baker & Son Preconstruction Services

Continued from page 1

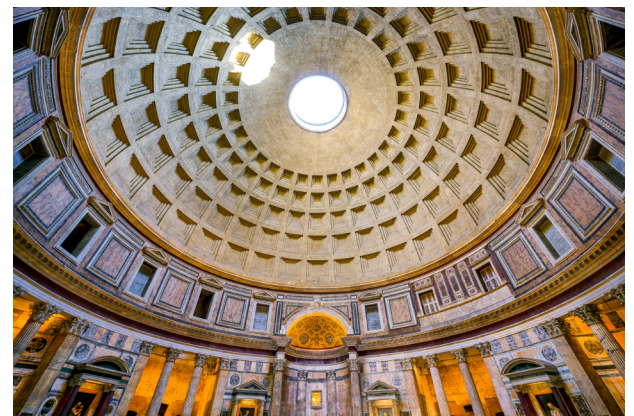
- R. Baker & Son can provide **cost and budgeting assistance** to help determine upfront costs by task and/or discipline. As mentioned, demolition and rigging details are often sparse on project plans, and estimating accurate costs for these unknowns helps to formulate a more precise overall project budget.
- **Environmental testing** services help identify potential hazards such as lead or asbestos and provide insights on abatement costs and schedule impact.
- We assist clients and safety managers with **identifying task hazards** related to demolition, rigging, and equipment assembly upfront so they don't cause issues later in the project.

With nearly 90 years of industrial rigging, dismantling, and demolition expertise under our belts, R. Baker & Son has provided instrumental preconstruction services on numerous successful and cost-effective projects. For more information or to discuss your next project, please contact us at (732) 222-3553.

The World Needs Stronger, More Eco-Friendly Concrete. Does Ancient Roman Architecture Hold the Answer?

The Ancient Roman empire is famed for its impressive and lasting architecture, from massive buildings like the Colosseum and the Pantheon to public infrastructure like aqueducts, dams, and bridges. Many of these structures are still standing and remain in use today. So, what makes Ancient Roman concrete so durable after more than 2,000 years when modern concrete begins to crumble within a few decades? Thanks to a team of researchers at MIT, we might finally have the answer: the Romans used self-repairing concrete.

It's long been known that all Ancient Roman concrete contains a multitude of lime clasts, tiny pieces of hard white material made up of various types of calcium carbonate. Scientists have always attributed the lime clasts to poor mixing. The MIT team, however, noted that these inclusions don't occur in modern concrete, so they zeroed in on determining whether they play a role in the ancient concrete's durability. Their research revealed that the clasts were formed at extremely high temperatures caused by the use of quicklime in the concrete mix, rather than slaked lime, which is commonly used today. The team theorized that when cracks form in the Roman concrete, water seeps in and dissolves the calcium carbonate, which then quickly recrystallizes to seal the fissures and make the concrete even stronger.



To prove this theory, the researchers used quicklime to make blocks of concrete identical to the material found in Ancient Roman structures and tested them against modern concrete. All of the blocks were cracked and subjected to a continuous stream of running water. After several weeks, the cracks in the quicklime blocks had completely healed, whereas water continued to flow through the cracks in the modern concrete. This discovery holds tremendous promise for the future of concrete and cement production, which currently accounts for 8% of greenhouse gas emissions. The MIT researchers are now working to develop and commercialize a more durable material that will last far longer and greatly reduce the concrete industry's impact on our environment.

Investment Recovery Association: “7 R’s of Asset Recovery”

R. Baker & Son is a member of the Investment Recovery Association, the premier resource for managing and recovering surplus and idle assets. **Here are the IRA’s “7 R’s” listed by highest value to lowest:**



REUSE assets to reduce capital, depreciation, insurance, and taxes.

RECYCLE to save disposal costs, generate income, and preserve resources. Demolition recyclables include metal, brick, concrete, cardboard, drywall, plastic, wood, glass, carpet, insulation, and more.

RECONDITION assets and put them back into service or use them as backup.

RESELL recovered assets. IRA members actively network for the most effective, profitable marketing of recovered assets.

RECLAIM solvents, chemicals, lubricants, refrigerants, hydraulic fluid, etc., much of which can be reused, to reduce waste and help preserve the environment.

RETURN recovered equipment, parts, and other materials to the manufacturer where possible for cash or future credit.

REMOVE surplus or idle assets to lower tax base and increase returns on capital.

R. Baker & Son has performed numerous total-care projects involving asset recovery, relocation, repair, recycling, and installation while adhering to all LEED v4.1 guidelines. We provide equipment and machinery moving services and can expertly disconnect, disassemble, package, and ship for offsite repairs and modifications. Our clients’ recovered assets can be stored, prepared, and shipped throughout the world from our expansive, centrally-located outdoor and indoor climate-controlled warehouse facility in Marlboro, New Jersey. We handle over 100,000 tons of scrap metal per year, enabling us to command the highest value-per-ton and pass along the revenue credits to our customers.

HAZWOPER



Hazardous Waste Operations and Emergency Response, or HAZWOPER, is an [OSHA standard](#) that safeguards and trains workers who clean up, treat, transport, store, and dispose of hazardous substances. It applies to emergency response incidents in which there is an uncontrolled release of a hazardous substance or where an uncontrolled release is likely. HAZWOPER training is essential for employees who work with hazardous substances on a permanent or temporary basis. All R. Baker & Son project management and field workers receive a minimum of 40 hours HAZWOPER training as part of our stringent safety program.

Quality Award Winner

Congratulations to Juwan Augustin, this quarter’s recipient of the R. Baker & Son Quality Award.

The Quality Award 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,
Juwan, for
a job well
done!**

