

Baker Construction

Why Sustainability Matters



Bob Nussmeier
Baker Construction

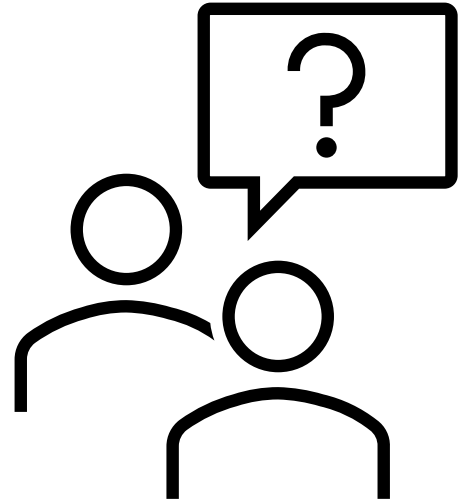
07.25.24



An ACI Center of Excellence
for Carbon Neutral Concrete

Presentation Notes

- Find presentation slides and post event recording at:
 - <https://www.neuconcrete.org/events-and-education>
- Attendees are in listen only mode.
- Ask questions via the Q&A dialog box in the zoom platform



Disclaimer

As with all concrete mixtures, trial batches should be performed to verify concrete properties. Results may vary due to a variety of circumstances, including temperature and mixture components, among other things.

You should consult your materials, cement, and concrete professionals for design assistance. Nothing contained herein shall be considered or construed as a warranty or guarantee, either expressed or implied, including any warranty of fitness for a particular purpose.

Today's Speaker



Bob Nussmeier

■ Bob Nussmeier is the Vice President of Strategic Clients at Baker Construction. Bob is based in Houston, TX, and Denver, CO, and supports Baker's strategic clients nationally. He is a true professional in executive-level relationship support with more than 32 years of experience in the industrial construction industry. His specialization includes the construction of LNG Terminals, oil and gas facilities, petrochemical plants, nuclear fuels and waste, clean energy power plants, and microchip plants; EPCM execution teams; and embedded carbon emissions reductions through concrete technologies. Bob holds a bachelor's degree in construction management from Purdue University and currently serves as a founding and voting member of ACI 376 - Concrete Structures for the Containment of Refrigerated Liquefied Gases. In addition, Bob is an executive committee member on the board of advisors for the Construction Industry Institute (CII) and previously served as the chair of strategic planning. Baker is the largest concrete and foundations contractor in the U.S., with a strong focus on clean power and energy transition projects.

Presentation Overview

- History of Baker Construction
- Why Sustainability Matters
- Baker's Sustainability Commitment
- Baker's Sustainability Practices
- Questions
- Conclusion

The Baker Story

- Baker Construction was founded in Oxford, Ohio, in 1968 — built by the hands of Dan Baker, with grit and the fundamental belief in doing the right thing.
- Those values have developed into what we call **The Baker Way** — the way we work and do business today.
 - People – We practice the Golden Rule
 - Honor – We are dedicated to our word
 - Grit – We approach every project with disciplined tenacity, will, & drive.

The Nation's Leading Concrete Construction Contractor

- Baker Construction has offices across the country and has completed projects in 1,400+ cities across the country.
- We have completed 14,000+ projects in virtually every market segment, from commercial high-rises to projects in the nuclear industry.
- We have more than 5,500 skilled co-workers across the U.S.
- We are consistently ranked #1 in ENR's Top Concrete Specialty Contractor category.
- On average, we place more than 1 million square feet every week and 1.5 million cubic yards of concrete each year.
- We are committed to being an industry leader in sustainable construction practices and operations.

Our Commitment to Sustainability

As the nation's largest concrete construction contractor, we know that our work will be part of the landscape long after our projects have wrapped up. We want to leave a legacy that speaks not just to the quality of the job, but to our values as well. By adopting sustainable project management practices, we commit to operating in a way that is honorable and good for our people, our clients, and the global community.

Baker's Sustainability Practices

- Expand the number of LEED -certified co -workers (and other certifications as needed)
- Reduce waste generation and overproduction by maintaining focus on “Done right the first time” quality work
- Implement measures to reduce and recycle construction waste
- Reduce greenhouse emissions where practical
- Investigate, evaluate, and use construction materials that reduce embodied carbon emissions in concrete mix designs
- Track the use of environmental product declarations from concrete, supplemental cementitious materials, and reinforcing and other construction materials
- Establish protocols to incorporate sustainability measures into the value engineering process
- Evolve with our environmental, social, and governance (ESG) reporting
- Promote a culture of health, sustainability, and safety

Committed to Reducing Embodied Carbon



Collaboration

- Member of NEU, ACI's Center of Excellence for Carbon Neutral Concrete
- Working early and closely with clients and suppliers to identify opportunities to reduce our embodied carbon in mix designs where requested
- Providing progressive involvement with industry leadership groups charged with reducing the embodied carbon footprint of concrete



Education

- Engaging and educating co-workers at all levels of the organization about the importance of environmental sustainability
- Participating in educational presentations and discussions to keep up with the ever-changing sustainability environment
- Embracing the culture change surrounding ESG improvements

Industrial Projects



Guernsey Power Station
Byesville, OH

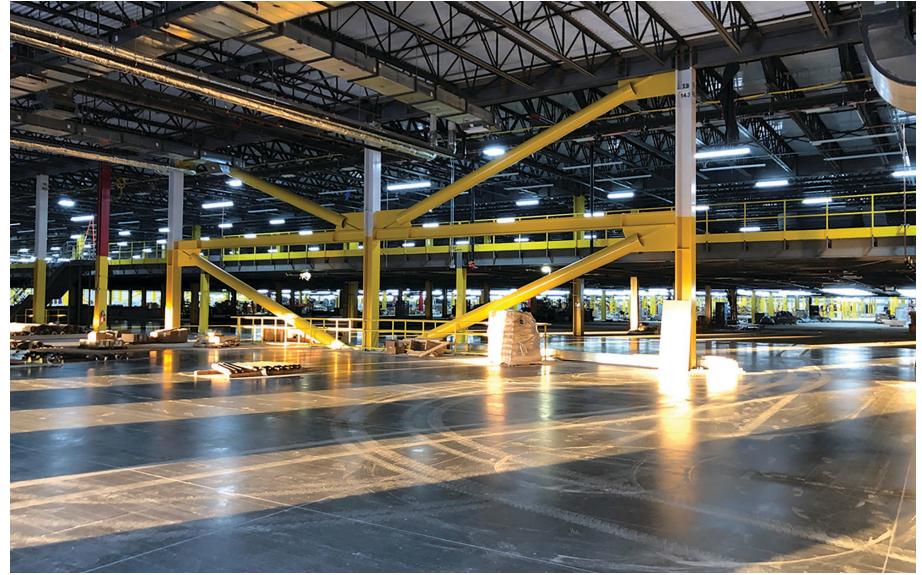


Tacoma LNG Tank
Tacoma, WA

Industrial Distribution Projects



IKEA
Orlando, FL



Project Miriam
Richmond, TX

Restoration Projects



Union Terminal
Cincinnati, OH



John A. Roebling Bridge
Cincinnati, OH

Structural Projects



National Veterans Memorial
Museum - Columbus, OH



Empower Field
Denver, CO

Project Case Study: 400 Central – Tampa, FL



Project Details:

- **Structure:** 1.4-million -square -foot residential tower
- **Components:** 10-level garage and office building
- **Completion:** Early 2025
- **Significance:** Tallest building on Florida's Gulf Coast

Project Overview:

- **Location:** St. Petersburg, Florida
- **Date:** May 2023
- **Project:** The Residences at 400 Central

Key Participants:

- BC's Southeast Region
- Suffolk Construction
- CEMEX
- FCU Pumping

Record Achievement:

- **Largest Continuous Pour:**
 - **Concrete Volume:** 22 million pounds
 - **Duration:** 19 hours
 - **Concrete Trucks:** 570
- **Comparison:** Equivalent to filling five basketball courts to a depth of eight feet

Holcim U.S. & AWS: Sustainable Data Center Construction

Project Overview:

- **Partners:** Holcim U.S. and Amazon Web Services (AWS)
- **Location:** Northern Virginia
- **Objective:** Reduce carbon footprint in data center construction

Key Achievements:

- **ECOPact® Concrete Mix:**
 - 35-45% CO2 reduction vs. standard concrete
 - Exceeds AWS's 20% reduction requirement
 - Estimated 39% CO2 reduction for the project

Sustainability Goals:

- **Holcim:**
 - 25% emissions reduction by 2030
 - Leading with low -carbon materials
- **AWS:**
 - Net-zero carbon by 2040
 - 100% renewable energy by 2025

Collaborative Approach:

- **Stakeholder Engagement:**
 - Early planning with HITT Contracting and Baker Construction
- **Innovative Solutions:**
 - Overcame barriers to using low -carbon concrete

Community Impact:

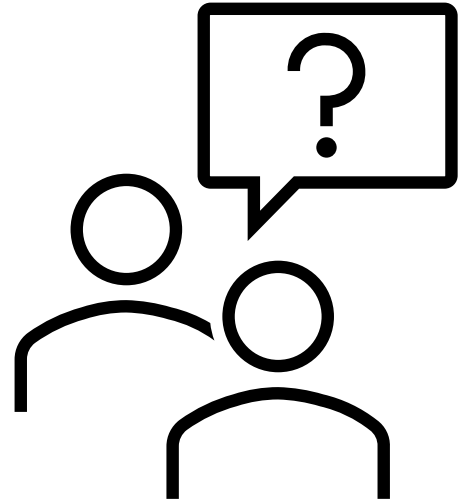
- **Local Growth:**
 - Expanding AWS's presence in Northern Virginia
- **Environmental Leadership:**
 - Commitment to sustainable building practices

Future Outlook :

- **Continuous Innovation:**
 - Improving low -carbon solutions for future projects

Questions?

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Thank you!

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