William A. Thompson (Tony), marketing Manager for Vulcan Materials Company Northern Concrete Division, has worked in the ready-mixed concrete and pre-cast concrete industries in northern Virginia for more than 20 years. Tony has held positions in Technical Services and Ready-Mixed Concrete Sales and has served as the Sales Manager for Cardinal Concrete and the Technical Services Manager for Virginia Concrete. Tony holds various ACI technical certifications as well as NRMCA Concrete Technologist, NRMCA Certified Concrete Sales Professional and NRMCA Certified Pervious Technician Certification. Tony has been active in the promotion of concrete with the VRMCA Concrete Advisory Council and is the current president of the ACI National Capital Chapter.

Project Background

This $30M project was awarded in 2006 and completed in 2011 by Wm. V. Walsh Construction Co. It encompasses a complete renovation and expansion of the Elephant Facility and habitat at the National Zoo. The existing enclosure was renovated with a barn extension housing state of the art facilities for the elephants.

The elephant habitat was expanded to twice its former size with diverse outdoor habitats incorporating elements to stimulate natural elephant behavior, such as mud wallows, pools and sand piles.

The project includes an elephant walking trail which passes through the outdoor habitats and provides the elephants with exercise, foraging opportunities and outdoor shaded and heated spots.

ACI Definition of Hot Weather

• Not precisely defined like Cold Weather
• More like another hard to define topic “I know it when I see it…”
ACI Definition of Hot Weather

- **Hot Weather** – one or a combination of the following conditions that tends to impair the quality of freshly mixed or hardened concrete by accelerating the rate of moisture loss and rate of cement hydration, or otherwise causing detrimental results: high ambient temperature; high concrete temperature; low relative humidity; and high wind speed.

So, it doesn’t have to be “hot” to be hot

And it doesn’t have to be decorative to be decorative

- Traditional Decorative
  - Noticeable
  - Bright
  - Distinct

- Natural Decorative
  - Blend with Environment
  - Create Illusion
  - Muted

- Ultimately, Expectation of Owner

Practices for Success

- Communicate Reality
- Travel Time
- Traffic
- Slump Loss
- Cancellation
- Placement Time

Practices for Success

- Communication (All)
- Specification
- Actual Conditions
- Parameters Tighter

- Contractor Cooperation (be ready)
- Forming
- Tools
- Personnel
- Conveyance

KEEP CALM AND CARRY ON
Practices for Success

- Advance Scheduling
- Anticipate Weather
- Anticipate Traffic
- Ensure Ice Available
- Ensure Chilled Water
- Ensure No Conditions that Prevent Delivery

Practices for Success

- Quality Assurance & Control
- Preparation
- Empty Bins
- Water Stockpiles
- Technical Services
- Review Mixes
- Technician at Plant

Project Images

Questions?