Information from Gateway Geotechnical, LLC

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# SAVE THE DATE "GEOTECHNICAL ISSUES THAT AFFECT SITE DEVELOPMENT"

**IN THIS ISSUE** 

SAVE THE DATE:
"GEOTECHNICAL
ISSUES THAT AFFECT
SITE DEVELOPMENT"

WHAT'S HOT?

100 YEARS OF MISSOURI STATE PARKS

### GEO-STRUCTURES CONFLUENCE

Are you dealing with or have questions about a geotechnical issue? If so, send us an email.

We'll get you the solution!

Plan to spend some time with us at our office in Chesterfield Valley, from 4 to 7 pm on Thursday, October 6. Network with civil engineers, developers, and architects, and enjoy drinks and snacks. Not to mention learning how to address some of the pitfalls associated with getting your projects padready. And a free PDH for your participation - what more could you want?

If there is a particular issue you would like to see discussed, feel free to let us know any time.

SPACE WILL BE LIMITED, so save the date if you plan to come, and watch for more details as we get closer to show time!

#### WHAT'S HOT?

We all know that it's the weather, but what can we do about it? Scheduling of work early morning (or even night time) and avoiding mid-day heat is a help with almost any outdoor construction activity.



In addition, if you're concreting consider -

- Moistening tools, subgrade, steel reinforcement, and formwork
- Cooling aggregates and mixing water
- Reducing mixing and transport time
- Minimizing placing and finishing time
- Using plastic sheeting or evaporation retarders to limit rapid moisture loss
- Fogging, misting, sun or wind screens to maintain moisture
- Using Superplasticizer rather than adding excessive water

Or, placing mortar -

· Moistening tools and using cool mixing water

- Selecting a mix with increased water retentivity and workability
- Covering or shading units and materials before and after placement
- Fogging, misting, sun or wind screens to maintain moisture

If you are excavating for foundations or floor slabs, reduce as much as possible the time excavations are left open to sunshine and heat. And, particularly in clayey soils, maintain the moisture content of the exposed soils close to their natural moisture by applying a controlled light sprinkling – do not let them dry out.

Most importantly, we have to watch out for our worker's and our own health on these hot days. Heat Exhaustion (may be characterized by cold clammy skin with heavy sweating, headache, dizziness or light headedness, nausea or vomiting, or fast heartbeat) can easily occur with exposure to the heat. We're talking heat like St. Louis has experienced over the past few weeks, in the 90s and up beyond 100 heat index. The victim should sit or lie down in a cool shady place, with plenty of water or cool non-alcoholic non-caffeine beverage, with cold compresses or ice packs if available, and rest.

More serious Heat Stroke (may be characterized by red hot dry skin with lack of sweating, fainting or unconsciousness, seizures, or high body temperature) is life-threatening and should be treated by initially calling 911. While waiting for help to arrive, the victim should be moved to a cool place, clothing loosened or removed, and cooled with ice or in any way you can.

#### 100 YEARS OF MISSOURI STATE PARKS



Civilian Conservation Corps workers at Dr. Edmund A. Babler Memorial State Park in the 1930s.

Credit - Missouri Department of Natural Resources, Missouri Resources Magazine

Giving credit to Mr. Tom Uhlenbrock and his article in the Spring 2016 edition of the Missouri Department of Natural Resources, *Missouri Resources* magazine, we provide the following

highlights. We suggest you subscribe to this publication if you haven't done so already.

(www.dnr.mo.gov/magazine/subscription.htm)

Our state parks offer "prairies, battlefields, covered bridges, ancient Indian villages, forested hills and valleys with caves and springs, streams with trout, lakes with bass, and the homes and workplaces of honored artists, pioneers, soldiers, and statesmen." Starting with the creation of the National Parks Service in 1916 and the Missouri legislature's establishment of a state park fund in 1917, our system has continued to grow. By 1928 we had 14 parks with more acreage than all but four other states.

The Civilian Conservation Corps and Works Progress Administration provided several thousand workers in the 1930s, constructing infrastructure improvements to nearly every park in the system at that time. Their stone and timber building designs became known as "parkitecture." With continued citizen support, more than 26 new parks were added to the system in the 15-year period between 1955 and 1970, including Johnson's Shutlins, Table Rock, and Elephant Rocks.

Today the system's nearly 55 parks and 35 historic sites are funded on a continuing basis primarily by the one-tenth-cent sales tax, initially passed in 1984 and administered through the Missouri Department of Natural Resources, Missouri State Parks, and the Soil and Water Conservation Program. It has been renewed three times by overwhelming support and is due on the ballot again this November. We strongly encourage you to provide continuing support for the operation and development of our state park system.



Civilian Conservation Corps workers constructing a retaining wall at Arrow Rock State Historic Site in the 1930s.

Credit - Missouri Department of Natural Resources, Missouri Resources magazine



## **GEO-STRUCTURES CONFLUENCE**

November 4, 2016 at St. Charles Convention Center

Ever wonder why the geotechnical engineer thought the structural engineer was responsible OR why the structural engineer thought the geotechnical engineer was responsible? Stressing the importance of interaction among geotechnical and structural engineers is this year's GEO-STRUCTURES CONFLUENCE, sponsored by ASCE's Geo-Institute and Structural Engineering Institute, and SEA the Structural Engineers Association of Kansas and Missouri.

Building on the huge success and growth of the Geo-Confluence over the past few years, this event will be a multi-track, full-day conference focusing on soil-structure interaction. The joint morning session will address the overlap of geotechnical and geo-environmental engineering, with structural engineering on projects. The afternoon will feature two separated tracks.

More details on speakers, specific topics, registration, and exhibitor opportunities at http://sections.asce.org/stlouis/GEI/GEI.htm





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