

## Association for Bridge Construction & Design

Northeastern Ohio Chapter - www.abcdneoh.org

# **Monthly Meeting Notice**

## Tuesday, September 25th, 2018

## Norfolk Southern Seven Mile, Ohio Bridge Replacement Project

Speaker: Lisa Hoekenga, PE, SE Michael Baker International

**Program:** A storm event on May 24<sup>th</sup>, 2017 resulted in extreme flooding

of Cotton Run that nearly overtopped the existing rails of the Norfolk Southern Bridge CF-35.40 in Seven Mile, OH. The existing structure is 92 years old and comprised of three (3) 22'-6" concrete slab beam spans supported on concrete piers and concrete gravity abutments carrying one main line track. This flood exceeded the 100-year flood elevation by several feet, and created a scour condition at the base of the East Pier. The East Pier settled more than one foot, with a corresponding distortion of the superstructure resulting in loss of support at track level. Norfolk Southern immediately installed timber cribbing and rip rap around the piers to restore service under reduced speeds. The remedial repairs were effective but also complicated consideration of permanent repair schemes. A remote-monitored structure monitoring system was installed on the bridge while permanent improvements could be developed. A type study and final design plans were prepared within three months of this scour event and the new span was installed on May 19, 2018, one year after the storm event, during a 24-hour track outage. The replacement span is a 52'-0" single span





through-girder bridge supported on precast concrete abutment seats and 5'-0" diameter drilled shafts. The design accommodated construction of drilled shaft foundations outside the footprint of the existing bridge to allow for continuous rail operations up until the scheduled track outage.

Location: Holiday Inn Independence, 6001 Rockside Road, Independence, Ohio 44131 Choice of: Italian Sub Sandwich (Ham, Salami, Pepperoni, Cheese, Lettuce, Tomato, and Onions)

Mediterranean Vegetarian Wrap (Portobello Mushroom, Roasted Red Peppers, Basil, and Provolone Cheese served on a Sun-Dried Tomato Wrap)

Smoked Turkey Breast Wrap (Shaved Smoked Turkey Breast, Roasted Red Peppers, Provolone Cheese, Pesto Mayo served with Pasta Salad)

Soup du Jour comes with all lunches. Plate of Cookies & Brownies at each table also.

**Time**: 11:30 AM – 12:00 PM Registration

12:00 PM - 1:15 PM Lunch and Speaker

**Cost**: \$25 – ABCD Members/Students and \$30 – Non-Members/Guests

There is no charge for government agency attendees that are also ABCD members.

RSVP: Norfolk Southern Seven Mile, Ohio Bridge Replacement Project

One (1) Continuing Professional Development hour will be provided. If you attend and sign in at the meeting, and wish to obtain CPD credit, please go to our website (<a href="http://www.abcdneoh.org/professional-development.html">http://www.abcdneoh.org/professional-development.html</a>) following the meeting to obtain the sign-in sheet and announcement.

#### Kindly RSVP by Friday, September 21, 2018

No-shows and Cancellations after the reservation deadline will not be refunded.

#### ABCD Northeast Ohio 2018-2019 Officers

President: Gabe Liptak, P.E., Burgess & Niple Directors:

 Vice-President:
 Micah Pilat, P.E., Euthenics
 Eric Angyal, P.E., Terracon

 Secretary:
 Justin Rufener, P.E., Palmer
 Brandon Chavel, P.E., HDR

Treasurer: Brandon Sopko, P.E., Pennoni Mike Russell, P.E., Mott MacDonald

Ryan Franz, P.E., JMT

Chris Cummings, P.E., Michael Baker

Shelby Wilson, E.I., HDR