

History and Development of UHPC Applications in New York State

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UHPC Applications
Structures

October 15, 2018

Extended Abstract

There is a wide range of applications for UHPC within the bridge industry. Nationwide, more than 100 transportation projects have utilized UHPC in the form of overlays, structural connections, link slabs, live load continuity, and various repairs. Early on, NYSDOT was working with FHWA to develop UHPC details for bridge applications. NYSDOT started installing these details in 2009 and since then, more than half of the nation-wide bridge projects that utilize UHPC have been completed in New York State. In addition, many more UHPC projects within New York State are under construction, in design, or in the planning phases. As a result, NYSDOT has afforded UHPC enthusiasts the ability to observe the performance of these details that have been in service for the past 10 years.

From project case studies, to developing connection details, NYSDOT has been in the forefront working with FHWA to standardize the use of UHPC components in the bridge industry. NYSDOT has successfully utilized the beneficial properties of UHPC in a large number of accelerated bridge construction projects.

This presentation will address the topics discussed above as well as showcasing UHPC related bridge projects completed by NYSDOT. This will include lessons learned, giving the whole perspective of the history and development of UHPC applications in New York State.

Second International Interactive Symposium on Ultra-High Performance Concrete
Extended Abstract (no paper submission)

Symposium attendees will have the opportunity to visit a wide variety of bridges that are completed and in-service as well as those under construction that utilize UHPC components and this presentation will serve as an introductory precursor to the Day 2 site visit activities.