

2019 International ABC Conference – Pre-Conference Workshop

W-06: Long-Term Performance of ABC Details

Wednesday, December 11, 2019 – 1:00 p.m. to 5:00 p.m.

Introduction:

This workshop covers the long-term performance of commonly used ABC details. Case studies of older ABC projects will be presented dating back to 1990. The performance of ABC technologies used in Utah are covered based on 10 years of performance inspections of ABC projects including precast full-depth deck panels, precast integral abutments, precast piers, and SPMT and lateral slide systems. The presentations covers good detailing practices and materials specifications that will lead to good long-term performance.

Workshop Organizer:

Michael P. Culmo, P.E., CME Associates, Inc.

Program:

1:00 p.m.	Welcome and Introduction to Workshop	Moderator - Michael Culmo, P.E.
1:05 p.m.	Why is Long-term Performance Important? Get in - Get out – <u>Stay Out</u>	Michael Culmo, P.E.
1:15 p.m.	Utah DOT Lessons Learned Inspections Program Purpose Scope History so far What we are seeing	Michael Culmo, P.E.
1:30 p.m.	Performance of Precast Full-Depth Decks Deck Elements Connections <ul style="list-style-type: none">• Mechanical Connections• Post-tensioned connections• UHPC connections• Closure Joints	Michael Culmo, P.E.
2:00 p.m.	Performance of Systems SPMT Systems Lateral Slide Systems	Michael Culmo, P.E.

2:30 p.m.	Performance of Other Elements Substructures Approach Slabs	Michael Culmo, P.E.
3:00 p.m.	<i>Break</i>	
3:20 p.m.	Designing and Detailing for Durability – AASHTO LRFD Guide Specifications for ABC <ul style="list-style-type: none"> • Grouts • High Early Strength Concretes • Joint preparation 	Michael Culmo, P.E.
3:45 p.m.	Future Inspection Requirements <ul style="list-style-type: none"> • Precast decks • Substructures 	Michael Culmo, P.E.

Speaker & Bio, W-06: Long-Term Performance of ABC Details

Mike Culmo, P.E., CME Associates, Inc., culmo@cmeengineering.com (**Organizer & Moderator**)

Mike is a Bridge Engineer with over 35 years of experience in the design of steel, concrete, prestressed concrete and timber bridges. He has special expertise is in the field of accelerated bridge construction technologies and constructability engineering. He is the principal author of numerous publications in the field of Accelerated Bridge Construction including the 2018 AASHTO LRFD Guide Specifications for Accelerated Bridge Construction. Mike is a licensed professional engineer.