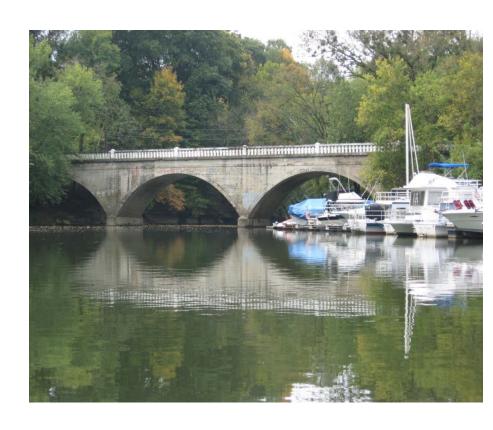
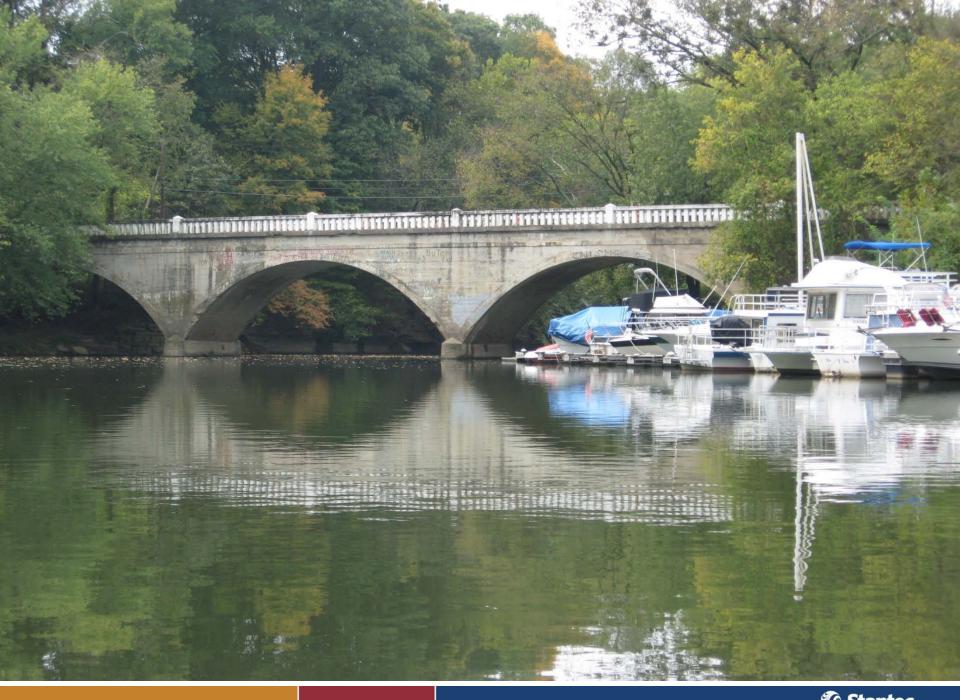
Widening the Historic **Harrods Creek Bridge**

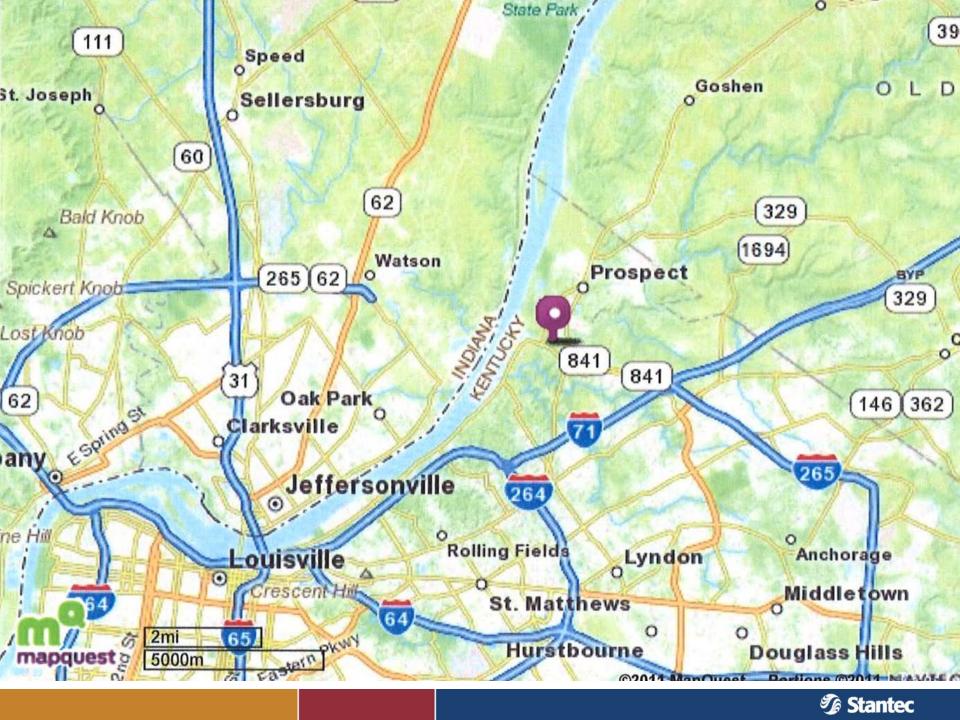
Richard Sutherland, P.E. Daryl Carter, P.E.



One Team. Infinite Solutions









- Deteriorating rapidly
- Initially NOT eligible for the NHR
- Deemed eligible during the LSIORB later



• JCPW initiated a bridge replacement project in 2000

• Finished under Metro in 2010



Project Scope

"Widen existing one lane bridge to two lanes while preserving the historic character of the structure."



• Initial project didn't include Section 106

Added by contract modification



 Section 106 of the National Historic Preservation Act

• Required due to the Coast Guard permit (404)



Steps in Section 106 Process

• Initiation of the Section 106 Review

Identification of Historic Properties

Assessment of Adverse Effects

Resolution of Adverse Effects



Section 106

- Initial public meeting September 21, 2000
- Section 106 public meeting October 2, 2001
- Consulting parties' meeting November 1, 2001
- Consulting parties' meeting April 16, 2002
- Consulting parties' meeting September 24, 2002



Opposition

Organized opponents

Frequent opponent challenges

• Filed suit to block the Coast Guard permit

• Delays tripled the initial construction estimates



Benefits of Section 106

• "By-the-book" process insulated against future legal actions

Stakeholder and agency engagement critical

MOA led to successful project

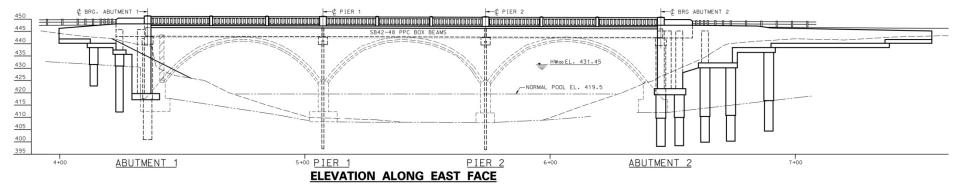


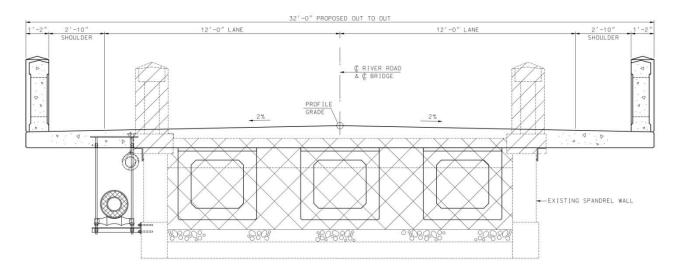
MOA

- Width of lanes and shoulders
- Boating traffic was not disrupted
- Wolf Pen Branch Road NOT listed as a detour
- Landscaping replaced scrub trees
- Curve revision improved sight distance

Design of the Structure







INDICATES PORTIONS OF EXISTING STRUCTURE TO BE REMOVED.

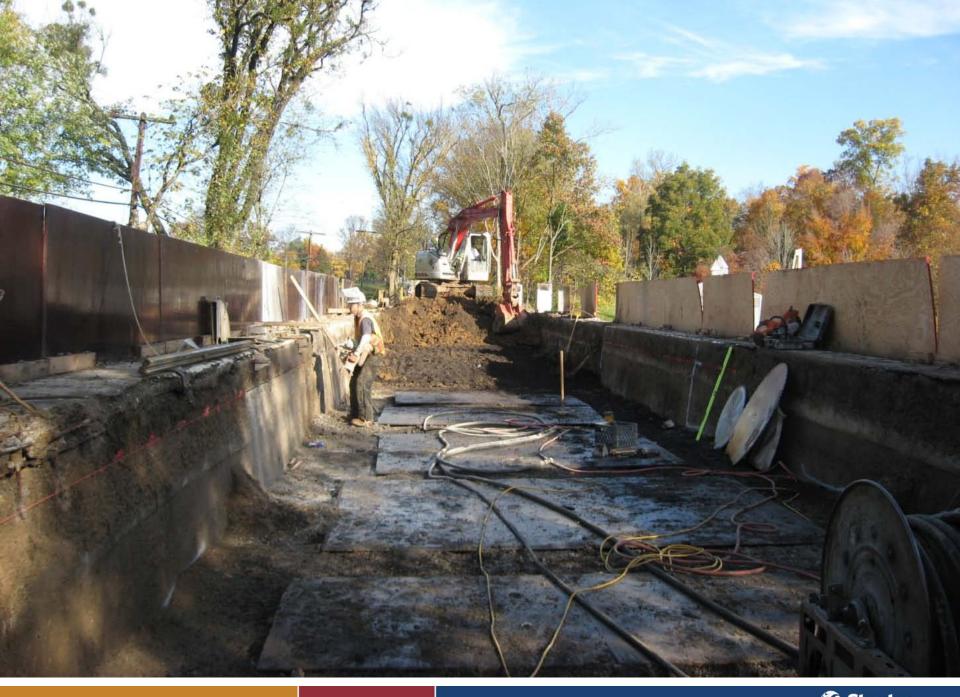
INDICATES EXISTING ASPHALT PAVEMENT & ARCH INFILL TO BE REMOVED.

INDICATES PORTION OF EXISTING ARCH INFILL TO REMAIN.

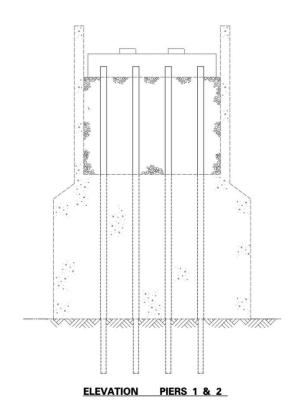
TYPICAL MID-SPAN DECK SECTION

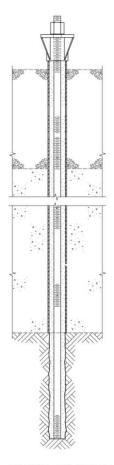
(LOOKING AHEAD STATION)











TYPICAL MICROPILE









