

## ARDOT BECOMING NATIONAL LEADER IN UTILIZING FAST TRACK HYDRO

## **By: Patrick Martens, PE**

The Arkansas Department of Transportation (ARDOT) is quickly becoming a national leader in the implementation of bridge deck preservation. One area in which they have excelled in recent years is the use of Fast Track Hydrodemolition (FTH) and High Performance Latex Modified Concrete (HPLMC) overlays. Since embracing the hydrodemolition technology for surface preparation and utilizing the FTH approach, ARDOT has been able to restore (or is in the process to restore) and preserve over 180 bridge decks with FTH, since 2012. They have let 33 projects

The use of FTH with HPLMC is making a gigantic impact on the Arkansas

landscape. with much of the work on interstate and high volume corridors. Agencies are finding out that the use of the combination of hydrodemolition and latex concrete to attack their bridge decks is a practical way to go in



involving 133 bridge decks, in just the last 3 ½ years. ARDOT has already pumped out almost 110,000 SY of FTH and HPLMC through the first half of 2020 alone. This includes a major rehab recently let in June 2020 to restore the surface on the I-430 bridge over the Arkansas River. That project specifies a FTH of 58,960 SY of bridge deck and overlaying with Very Early Strength HPLMC (VESHPLMC), to expedite the repairs and minimize traffic disruptions. stretch dollars.

The FTH surface preparation method is a real key in being able to attack and rehab so many bridge decks in such a short period of time, with minimal budget. It allows an agency to use a common sense approach to gaining quality preparation work of the bridge deck in short order. FTH utilizes high pressure water to perform a selective removal technique that provides for a rapid removal of only the bad concrete. This eliminates wasteful removal of otherwise sound concrete.



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HPLMC then can be placed to preserve the deck for an extended period of time. It also can be placed thinner  $(1 \frac{1}{2}")$  than other portland cement based overlays. Plus, when combined with HPLMC, the monolithic attachment can be achieved without having to get under partially exposed rebar in the top mat, provided the deck is solid. This greatly expedites the work.

The process should yield upwards of 25 years and beyond of deck protection and service life. There is no other product that has the proven track record or longevity that HPLMC has – over 50 years in the business of protecting bridge decks. It really is a "no-brainer" to incorporate the selective removal approach of FTH with HPLMC. Arkansas has figured that out in recent years, and it is making a huge impact within their preservation program.



FOR MORE INFORMATION ON HOW TO PRESERVE YOUR STRUCTURES WITH THE FAST TRACK METHOD OF HYDRODEMOLITION AND LATEX MODIFIED CONCRETE, CONTACT PAT MARTENS AT 636-441-1376, OR PMARTENS@BRIDGEPRESERVATION.NET. ASK ABOUT A LUNCH AND LEARN!