Hydrodemolition

This construction advisory serves as a reminder for projects involving hydrodemolition and deep overlays. Some contractors are cleaning debris after deep hydrodemolition with vacuum trucks. This involves driving across the bridge deck with exposed steel reinforcement and a thinned bridge deck section, even though there is a plan note to address the issue. Section 712.03.G of the 2003 Standard Specifications for Construction states, “Remove debris by hand or mechanical means directly following the hydrodemolition process.” It also states, “Avoid damage to the remaining sound concrete or exposed reinforcement.” There is also a note on the bridge rehabilitation plans for deck repair that states, “Concrete trucks and other heavy equipment shall not be allowed on the deck when reinforcing steel is tied in place and exposed.” A vacuum truck is considered to be heavy equipment. It is the intent to keep the equipment from damaging the steel reinforcement and the remaining deck concrete. Bridge load analysis has shown that the weight of vacuum trucks used to remove the debris can damage the remaining sound bridge deck concrete. The wheels of the vacuum trucks have loosened and bent the existing steel reinforcement.