CPR - REBUILT TO LAST





>>> FULL- AND PARTIAL-DEPTH REPAIR & DIAMOND GRINDING

WHITE BEAR LAKE, MINN., a suburb of St. Paul, has a population of approximately 25,000 and is known as a heritage site for Native Americans. US Highway 61 – a 1,400 mile picturesque highway spanning from New Orleans to Canada – travels through White Bear Lake. It is considered a scenic highway and it turns into the Trans-Canada Highway upon entering the country.

The four-lane highway was constructed in 1953 with 9-inch concrete and 15-foot panel spacing. Concrete Pavement Restoration (CPR) was used in 1987 to improve road smoothness. The project utilized full- and partial-depth repair, diamond grinding, re-saw and seal with silicone in the transverse joints and hot pour sealant in the longitudinal joints. The construction in 1987 spanned from Wheelock Parkway in St. Paul to White Bear Lake, totaling 7.8 miles of CPR repairs.

Interestingly, the portion of the road north of White Bear Lake used an asphalt overlay, while the portion south of White Bear Lake utilized CPR. The CPR portion of the road has performed well but the asphalt-surfaced portion was overlaid again in 1994 and is in need of yet another facelift due to extensive rutting and pothole repairs. This equates to an average life of less than 10 years from each overlay. In contrast, the CPR method has lasted 22 years.

The CPR methods performed more than two decades ago are still in good condition, lasting longer than originally predicted. "This is a great example of using good repair methods to preserve an old road. This pavement will last over 50 years with only one maintenance project," said Matt Zeller, Executive Director, Concrete Paving Association of Minnesota.

TEAM MEMBERS

- Minnesota Department of Transportation (Owner)
- PCi (Contractor)
- Burlington Pavers (Diamond grinding)
- Construction Materials, Inc. (Materials supplier)
- Safe-T-Flare (Traffic control)