

Sabi River Bridge is situated on the river Sabi on NH 8 of Delhi-Jaipur Highway. The bridge is about 290 mt. long and having 80 number of span. It was originally designed as a causeway in the year 1960 but due to construction of a dam of about 2 - 3 km upstream of the causeway, the overtopping did not occur except in 1975 and more recently in 1995.

The bridge was reported to be having some unusual vibration in several spans and also considerable cracks were found in the piers. Concrete slab and also spoilage of concrete were observed at different places. Regarding the unusual vibration it was found that there exists a clear gap of about 2 - 3 mm between the bottom of the slab and the pier cap top.

After understanding the distresses and considering all the requirement of a bridge structure, **CICO** made a detailed study on how to restore the structure. The most difficult part was how to fill up the gap between deck slab and top of pier cap without any change in the existing design. As the degree of distresses was high, high strength epoxy base grout and mortar were recommended.

After starting the work, **CICO** faced many problems, namely, the approach to the portion under the bridge was difficult, and also it was found that the concrete was damaged so much that drilling and chipping of concrete might cause serious damage to the structure.

However, with the **CICO** professionals and expertise, the drilling of the hole was done diagonally and had tools were used to get the perfect result without any damage to the structure.

Timely completion of the work was on the high alert teamwork the assignment was completed prior to the target date.