

TECHNICAL VISIT REPORT OF EXTRADOSED BRIDGE OVER NARMADA RIVER

Date: 30/01/2017

M.E. Construction Engineering & Management section of Civil Engineering Department had organized a technical visit for First and Second Year, total 31 students along with one faculty member. They have visited Gujarat's First ever Extra Dosed Cable Stayed Bridge constructed on Narmada River, on 30/01/2017. Students were guided about the different structural components of Bridge like Pile Foundation, Pile Cap, Pylon, Cable Strings, Construction Joints, Steel Designs and some of the management aspects like how they have managed and updated the Schedule of projects, Quality inspection, Quality control and how actually they are using tools of Project Management like Primavera & M.S. Project. Also Students were taught regarding the Safety Measures and Resource Allocation work. In addition, as fact from Safety Engineer it was came to know that it is the second safest bridge work in terms of onsite accidents. They have also explained the problem of high tide and low tide and how difficult it was to carry out the lifting work of component to complete the whole bridge work. Some Technical Knowledge regarding how the location of Toll collection was fixed and why rigid pavements was selected at every toll collection was also explained. Information about how C.C. TV Camera and ETC lane will work in Toll collection was briefly explained to students.

The bridge work was assigned to Larsen & Toubro and Dywidag Systems International (DSI-Bridgecon) in EPC (Engineering Procure and Commencing) mode and its estimated duration was initially 30 months but due to some reasons it was extended 6 more months and now it is under the finishing touch and expected to start after march 2017. The estimated cost is about 380 Crores. It is the first "Extradosed Bridge" to be built in Gujarat and the "longest" in the country as it is having deck span of 144 m and deck width is 20.8 m.

It was a nice experience for students in terms of learning the Construction Project Management perspective as it was nicely executed by the Larsen & Toubro and Dywidag Systems International (DSI-Bridgecon).



Fig 1: Cable Stayed Bridge Constructed on Narmada River



Fig 2: View of the Narmada Bridge