

FOUR LANING OF NH – 1A FROM JAMMU TO SRINAGAR PATNITOP TUNNEL



The road section from Udhampur to Banihal (km 66 - km 188)

Country: India
Client: National Highways of India
 Louis Berger Group Inc.
Year 2006 – 2007



Project Description:

An operated road from Jammu to Srinagar in northern Indian state of Jammu and Kashmir is located in a very complicated terrain of Himalaya foothills. The road runs on steep slopes, through areas of frequent landslides, and crosses mountain ridges on its way to the central Kashmir valley. Recently, the decision about four-laning of the road has been made as a part of infrastructure development program for Northern India. Four-laning of the road should significantly increase its capacity and safety. A very long road tunnel has been proposed for the Patnitop range crossing.

Project Contribution:

D2 Consult has a completed tender documentation for the Patnitop tunnel. A single tube road tunnel is 9120 m long, the maximum tunnel overburden is 1050 m, the tunnel profile is from 147 m² to 175 m². The two-lane tunnel is bidirectional.

Services Provided:

- ◆ Tunnel profile design
- ◆ Determination of kvazihomogenous geotechnical sections
- ◆ Primary lining design (NATM excavation and support classes)
- ◆ Secondary (permanent) lining design
- ◆ M&E equipment (ventilation, signing, etc.)
- ◆ Bill of quantities for tender design
- ◆ Proposal for machinery to be used for the tunnel construction

