

PROJECT NOTE

Mumbai-Goa National Highway NH-66

The traffic growth in the past few decades, particularly last decade which saw a phenomenal growth in commercial and industrial activity has affected the road network system of India, which includes Highways, State Highways, Major District Roads and Rural Roads. In order to overcome such capacity shortage, the Ministry of Road Transport and Highways (MoRT&H) Govt. of India (GOI) has come up with major investment plan with Public Private Partnership under NHDP, which includes upgradation of existing facilities, construction of new corridors for ensuring safe, smooth and uninterrupted flow of traffic and maintenance thereof with modification, repairs and improvement to the project in compliance with specifications and standards.

In the lines of above endeavor by GOI, Public Works Department (PWD) of Government of Maharashtra (GOM) represented by Chief Engineer, National Highway (Public Works), Region, KonkanBhavan which is the authority engaged in maintenance and development of National Highways in Maharashtra has taken up the improvement and up gradation of priority sections of various National Highways in its jurisdiction by obtaining permission from MoRT&H which is the owner of all National Highways in the Country. GOI has already appointed concessionaire for 4 laning Panvel to Indapur Section (84 km) of NH-17. Further to this, PWD has decided to undertake Four Laning of the section from Km 84/00 (Indapur) to Km 161/00 (Kashedi) of NH17 through Public-Private Partnership on EPC Mode.

The Indapur – Kashedi section of NH-66 measuring a length of 77 Km is located in coastal districts of Raigad and Ratnagiri in the state of Maharashtra. The State lies in the western part of the Indian Peninsula and is surrounded by the States of Gujarat, Madhya Pradesh, Chattisgad, Andhra Pradesh and Karnataka.

National Highway No.66 starts from Panvel (Near Mumbai) and transverse on the coast side of Sahyadri hill range (Western Ghats) through the States of Maharashtra, Goa, Karnataka and Kerala connecting important cities like Pen, Mahad, Chiplun, Lanja, Rajapur, Kankavli, Kudal, Sawantwadi Panaji, Karwar, Udupi, Mangalore, Kasargod, Calicut and ends near Cochin at Junction of NH-47. The total length is about 1270 Km out of which 482 km is through Maharashtra (Konkan region). The project road starts at Km. 84/00 after God River crossing and passes through the urbanized villages of Indapur (Km 84), Mangaon (Km 94), Mahad (Km 125), Poladpur (Km 142) and Kashedi (Km 156) and ends at Km 161/00 in Kashedi Ghat. The project road stretch is a single carriageway comprising base two lanes with width ranging from 7m to 10m and soft shoulders on either side with width ranging from 0.5m to 2.5m.

Authority's requirements in clear and predictable manner with a view to ensuring:

- i) enhanced safety and level of service for the road users;
 - ii) superior operation and maintenance enabling enhanced operational efficiency of the Project Highway;
 - iii) minimal adverse impact on the local population and road users due to road construction;
 - iv) minimal adverse impact on environment;
 - v) minimal additional acquisition of land; and
 - vi) Phased development of the Project Highway for improving its financial viability consistent with the need to minimize frequent inconvenience to traffic that may be caused if additional works are undertaken within a period of seven years from the commencement of construction of the Project Highway.
- Indapur to Kashedi (Km 84/000 to Km 161/000) has three urbanized villages / towns viz Indapur, Mangaon and Poladpur with restricted road width while NH passing along existing bypass skirting Mahad town on its north with intermittent development. These areas are accident prone and need immediate attention.
 - As a part of Feasibility study of 4 laning the NH, bypass options have been studied for Indapur, Mangaon and Mahad towns. In case of Indapur, bypass on east side of NH out skirting Indapur is preferred as it bypasses Kashene village too.
 - The available land width in Mangaon town varies between 20-25m. As 4 laning with service roads through Mangaon does affect several houses (as many as 98 nos), a bypass option on east side of NH, is preferred. The option has the merit of passing through barren lands for nearly 75% of the length as compared to the bypass option alignment on west side, which runs over the fertile Irrigated agriculture lands prone to submergence.
 - Present Right of Way (ROW) is about 30m. The proposed ROW is 60m in plain /rolling, Area, 45m in ghat section and 30m in forest portions. The widening of NH to 4 lane will be mostly eccentric and the additional land needs to be acquired in the same pattern (from the centre of existing road, it is 36m on new carriageway side and 24m on existing carriageway side - in other words, 30m on either side of proposed centre line).
 - It is proposed to take up 4 laning of NH from Km 84/00 to Km 142/00 (Poladpur) in plain stretch along with 4 laning of existing Kashedighat stretch Km 142/00 to Km 148/00 by providing good geometrics, extra widening on the curves, grade improvements, retaining buttress walls, metal beam crash barriers on valley side and on hill side on the sharp curves, etc. A 9.0 Km long altogether a new alignment with long twin tube tunnel (1720 m) is proposed in the ghat to bypass the existing road from Km 148/000 to Km 161/000 which is accident prone thereby reducing distance by about 4.6 km apart from providing safe and comfortable travel through ghat portion. The proposed new alignment of length about 9.0 Km in ghat comprises of a twin tube each 3 lane tunnel of 1720m long at elevation about +166m right below the peak of Kashedi (Bunglow) (elevation + 395 m) with approaches together measuring about 7.280 Km.

By year 2032, when traffic on 4 lane road is expected to be nearing saturation level (LOS 'C'), there will be a demand for 6 lane road. In view of this, tunnels are proposed to be 3 lane each, Approaches to tunnels will be 2 + 2 lane.

Date :- /03/2019

Place:- Pen

Project Authority

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