

Sub-Div. of W.D. XV (NH)
Ponda-Goa

Entry 157

Date: 31/5/21

No. PWD/WDXV(NH)/ASW/F8231(1)/21-22/ 415

Government of Goa.
Office of the Executive Engineer,
Works Division, XV (NH),
P.W.D., Ponda - Goa.
Dated: -28/05/2021

To,
The Deputy Conservator of Forest,
Monitoring & Evaluation,
"Goa Van Bhawan",
Forest Department,
Altinho, Panaji - Goa.

Sub:- Minutes of the Fiftieth meeting of the Regional Empowered Committee held on 23.02.2021 - reg.

Ref :- 1. Letter No. 6-868-2020-21-FD/Vol.I/6032 dt.12/03/2021.
2. Letter No.4-GOC1238/2020-BAN/303 dt.05/03/2021.

Sir,

With reference to above please find enclosed herewith the parawise justification as desired, for necessary action thereof.

Yours faithfully,

EXECUTIVE ENGINEER.

Copy To:-

1. The Deputy Conservator of Forest, North / Wild Life & Eco-Tourism (North), Panjim - Goa for information please.
2. The Deputy Conservator of Forest, North / Wild Life & Eco-Tourism (North), Ponda - Goa for information please.
- ✓ 3. The Assistant Engineer SDI, WDXV(NH), PWD, Ponda-Goa for information.

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- i) Recently approval is given for diversion of forest land for doubling the existing Tinaighat – Castlerock – Kulem railway line. The railway line will facilitate large scale movement of passengers and goods. Therefore, State Government may re-examine the need for widening the proposed highway in ghat areas of the Wildlife Sanctuary/National Park.

Expansion of the highway to four lane configuration is need of the hour as the existing road is of 2 lane configuration with deficient geometrics. The existing traffic itself warrants the need of four lane. Even though the railway line is approved, the traffic on highway will not affect, since survey reveals that, interstate traffic abutting Karnataka & Maharashtra state which are used to operate on NH opts only road travel. Four laning of the highway not only benefits the traffic, but also eliminates the man – animal conflict substantially thereby reducing the road fatalities.

It is to clarify that, during the virtual meeting held on 12.04.2021 with Supreme Court's Central Empowered Committee, the proposal of National Highway has been agreed with few modifications mentioned below:

- The span of Animal Overpass at Km.93.850 R be increased from the present 12m to 50m.
- The span of Animal Underpass at Km. 84.400 L be increased from the present 12m to 100m.
- The proposed 4 lane road in plain terrain be converted to 4 lane elevated road(viaduct) between chainage Km. 92.000 to Km. 93.500 Km and consequently the proposed animal underpasses at chainage 92.150 R and 93.170 R are no longer required.
- The length of the proposed 4 lane elevated road(viaduct bridge) between chainage 84.207 and 84.287 be increased from 80m to 200m.

The User Agency has also agreed to comply with above modifications in the proposal.

- ii) In Karnataka portion of NH-4A (adjacent to Goa border) only a 2 lane road is existing and is proposed to be maintained as such in the protected area and therefore justification for a 4 lane road in the protected area of Goa needs to be provided by the State Government.

Widening of the existing road to 4 lane configuration is essential in the state of Goa. Details of the existing condition of the road and advantages of the proposed 4 lane road over the existing road is discussed below:

- Existing length of the Package : 12.867 Km.

- Proposed length of the package: 11.620 km. (10.550 Km. In PA + 1.070 Km. In proposed reserve forest)

Physical Condition of the existing road:

- The existing road is 2 lane configuration with two way traffic.
- The stretch in the state of Goa is having several hairpin bends and sub standard curves with steep gradient. However, the terrain in the state of Karnataka is Plain/Rolling terrain.
- The existing road has no safe passages for wildlife which is leads to human and animal conflict.

Advantages of the proposed alignment:

- On the existing road there are no cross passages for the animals and the proposal with 4 wildlife passages creates safe passage zones and thus enhances and ensures their safety.
- The area between the piers and under the elevated section provides shelter to the animals during adverse climate like heavy rains and scorching heat.
- The area between the piers and elevated section will in any case be used for afforestation.
- With the reduction in length of the road, the consumption of fuel decreases thereby effecting savings in depletion of fossil fuels.
- The reduced length of road and improved carriageway reduces the maintenance cost of vehicles.
- The existing road has sharp curves and hairpin bends which have been removed in the proposal and geometrics have been improved thus making the road much safer for the commuters.
- The proposal is designed for 30 years and the existing traffic itself warrants a four lane highway. Considering the increase in traffic in these times, if the existing road is maintained, the number of fatal accidents will be many fold and loss of human life will increase substantially. The scenario can be taken care of only if the expansion of road takes place.
- The existing road is with flexible pavement and needs repairs every 3 years not to speak of the additional damages during monsoons. The proposed road is in rigid pavement and doesn't require maintenance for long periods, thus effecting savings.
- Periodic repairs also cause noise pollution which disturbs the animals and with the proposed road this aspect is also taken care of.
- The improved carriageway of the proposal will result in reduction in carbon emissions, thus enhancing the environmental aspect.

As the proposed road is along the existing road, it hardly adds to the already fragmented eco-systems and rather unites the fragmented eco-systems wherever all the four lanes are in elevated section thereby giving additional safe passages to wildlife to cross over from one side to the other.

Although, the forest land for permanent diversion has been mentioned as 11.100 Ha., an area of around 4 Ha. of length 4.350 Km. of the existing road which is not part of the proposed road becomes part of the forest and as a result the net permanent diversion of forest land will be only to the tune of about 7 Ha.

With regard to this proposal, the Supreme Court's Central Empowered Committee visited the site on 21.01.2021. During the virtual meeting held on 12.04.2021, the CEC asked to offer the views on the following recommendations, which eventually agreed by the user agency.

- The span of Animal Overpass at Km.93.850 R be increased from the present 12m to 50m.
- The span of Animal Underpass at Km. 84.400 L be increased from the present 12m to 100m.
- The proposed 4 lane road in plain terrain be converted to 4 lane elevated road(viaduct) between chainage Km. 92.000 to Km. 93.500 Km and consequently the proposed animal underpasses at chainage 92.150 R and 93.170 R are no longer required.
- The length of the proposed 4 lane elevated road(viaduct bridge) between chainage 84.207 and 84.287 be increased from 80m to 200m.

iii) While the proposal to have viaducts is found suitable, the User Agency is directed look into the possibility of restricting the requirement of forest land to existing width of 2 lane with provision for geometrical improvement in ghat section wherever it is essential.

The existing road is of 2 lane configuration with two-way traffic. The existing traffic itself warrants the need of four lane road as it doesn't cater the needs of future traffic. Considering the increase in traffic in these times, even if the existing road is maintained with the provision of geometrical improvement, the number of fatal accidents will be many fold and loss of human life will increase substantially. The scenario can be taken care of only if the expansion of road takes place.

iv) Provision for Canopy bridges at suitable distance in consultation with CWLW may be made in the revised proposal.

The present proposal is having 3 Animal underpasses and 1 overpass in addition to the viaduct proposals. The Central Empowered Committee also suggested elevate the road from Km. 92.000 to Km. 93.500 so that the plain terrain portion will be completely utilised by the Wild animals without any man – animal conflict. The User Agency is ready to include the Canopy bridges also in consultation with CWLW.