

1 EXECUTIVE SUMMARY

1.1 INTRODUCTION

The Government of India has taken up development of Economic Corridors, Inter Corridors, Feeder Corridors and National Corridors to improve the efficiency of Freight Movements in India under Bharatmala Pariyojana.

National Highway Authority of India has been appointed as Nodal Agency for proposed development of Durg Raipur section of NH-53, which is a part of Mumbai-Kolkata Economic Corridor under Bharatmala Pariyojana Lot 3/ Package-1.

1.2 DESCRIPTION OF THE PROJECT

Project starts from design Ch. 0+000 and terminates at Ch. 92+230 (existing Km 329+400 near Tendesara to 229+730 near Arang) under Bharatmala Pariyojana (Lot-3/Chhattisgarh/ Package-1, Mumbai – Kolkata economic corridor) in the State of Chhattisgarh.

The proposed project stretch is 92.200 km long and passes through three districts of Chhattisgarh viz. Rajnandgaon, Durg and Raipur. Right of Way (RoW) for the project is 70 m.

The proposed road doesn't cross any forest area or ESZ area.

Approximately 746.614 Hectares of land is proposed to be acquired for the project. Landuse pattern in the study area is predominantly agricultural, followed by habitations and barren land.

39 VUPs, 2 ROBs, 4 RUBs, 6 major bridges, 27 minor bridges and 167 culverts are proposed along the project stretch for free passage to locals, animals and avoid any impact on local hydrology.

Total requirement of water for construction is estimated to about 2972249 KL during construction which shall be arranged from tanker supply or ground water (if required).

The completion period of the construction is estimated to be about 36 months. The estimated civil cost is about INR 1383 crore.

1.3 DESCRIPTION OF THE ENVIRONMENT

The baseline data was collected during pre-monsoon season i.e. March to May, 2018. The baseline data has been provided in chapter 3 of this report which shows the concentration of most of environmental parameters are well within the prescribed limits.

1.4 ANTICIPATED ENVIRONMENTAL IMPACTS & MITIGATION MEASURES

- Slight change in the micro-climate of the area is expected due to Heat Island Effect.
- There will be a marginal rise in PM levels during the construction activities, which shall again be within prescribed limit after the construction activities are over.
- The area is likely to experience a marginal increase in noise level due to increase in vehicle density after construction of the road.
- Contamination to water bodies may result due to spilling of construction materials, oil, grease, fuel and paint etc. This will be more prominent in case of locations where the project

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road crosses rivers, canals, nallahs, etc. Mitigation measures have been planned to avoid contamination of these water bodies.

- The project road is not passing through any ecologically Protected Area under Wildlife Protection Act, 1972. Project road is a green field project, therefore, acquisition of land will be carried out as per LARR, 2013.
- During the construction of the proposed project, the topography may change marginally due to cuts & fills for project road and construction of project related structures etc. Provision of construction yard for material handling will also alter the existing topography.

1.5 Analysis of Alternatives (Technology & Site)

Detailed analyses of the alternatives have been conducted taking into account both with and without project. Comparative analysis of all the alternatives has also been conducted. The proposed development of the road is likely to have a positive impact on the economic value of the region. However, there are certain environment and social issues that need to be mitigated for sustainable development.

Proposed alignment option has been considered after assessment of 3 options. Alternative analysis was carried based on techno-commercial, environment and social impact.

1.6 ENVIRONMENTAL MONITORING PROGRAM

Regular monitoring of important and crucial environmental parameters is of immense importance to assess the status of environmental scenario during operation of the proposed project. With the knowledge of baseline conditions, the monitoring program can serve as an indicator for any deterioration in environmental conditions due to operation of the project and suitable mitigating steps could be taken in time to safeguard the environment. Monitoring is as important as that of control of pollution since the efficacy of control measures can only be determined by monitoring. A robust environment monitoring plan has been designed for continuous environment monitoring during construction and intermittent monitoring during operation.

1.7 ADDITIONAL STUDIES

The various additional studies have been undertaken for the project including Public Consultation, Risk assessment and Social Impact Assessment/ R&R Action Plans.

Public consultation is a continuous process and has been carried out at all stages throughout the project road. To ascertain the views of the affected families to be recorded and has been included in the Social Impact Assessment report.

1.8 BENEFITS OF THE PROJECT

The benefits of the Project are multi-fold. It will substantially reduce the travel time between Rajnandgaon and Arang and the other remote areas falling on the alignment. In addition to the improved connectivity, it will also provide a boost to the economic status of the villages / towns falling in the dedicated Project area.

1.9 ENVIRONMENT MANAGEMENT PLAN

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Project specific environmental management plan have been prepared for ensuring the implementation of the proposed measures during construction phase of the project, implementation and supervision responsibilities. The cost for environmental management during construction has also been indicated in EMP. The project impacts and management plan suggested thereof are summarized in the chapter.

The Environmental Management Plan (EMP) has been designed within the framework of various regulatory requirements on environmental and Socio-economic aspects aiming at the following:

- Minimize disturbance to native flora and fauna, if any.
- Prevent and to attenuate air, water, soil and noise pollution, if any.
- Encourage the socio-economic development.

The environmental management plan (EMP) would, therefore, consists of following main components:

- To integrate potential impacts (positive or negative), environmental mitigation measures, implementation schedule, and monitoring plans.
- To describe the potential environmental impacts and proposed management associated with each stage of the project development.
- To control environmental impacts to levels within acceptable standards, and to minimize possible impact on the community and the workforce of foreseeable risks during the construction and subsequent operational phases of the project.

1.10 CONCLUSION

Based on the EIA study and surveys conducted for the Project, it can be safely concluded that associated potential adverse environmental impacts can be mitigated to an acceptable level by adequate implementation of the measures as stated in the EIA Report. Adequate provisions shall be made in the Project to cover the environmental mitigation and monitoring requirements, and their associated costs as suggested in environmental budget. The proposed project shall improve communication efficiency and bring economic growth.