

F.No. 10-62/2018-IA.III
Government of India
Ministry of Environment, Forest and Climate Change
(Impact Assessment Division)

Indira Paryavaran Bhawan,
JorBagh Road, Ali Ganj
New Delhi - 110 003

Dated: 29th March, 2019

To

The General Manager (Environment-II)
National Highways Authority of India
(Ministry of Road Transport and Highways)
G-5 & 6, Sector-10, Dwarka
New Delhi - 110 075

Sub: Construction of new link NH-133B (Ch. km.0.000) starts at Sahibganj Bypass and meet at Ch.200.870 of NH-33 (old NH-80) (Design Chainage 1.800 of NH 133B) and ends at Ch.25.240 of NH-131A at Junction of NH-131A & NH-133B (Design Chainage 15.885 of NH-133B) including construction of 4-lane Ganga Bridge in the states of Bihar and Jharkhand by M/s National Highways Authority of India (NHAI) - Environmental Clearance regarding.

Sir,

This has reference to your letter no. 1013/1/2k/Env./581 dated 24th December, 2018 submitting the above proposal online to this Ministry on 10th January, 2019 and for seeking of Environmental Clearance in term of the provisions of the Environment Impact Assessment (EIA) Notification, 2006 under the Environment (Protection) Act, 1986.

2. The above mentioned proposal was considered by the Expert Appraisal Committee (EAC) for Infrastructure, CRZ and other Miscellaneous projects, in its 206th meeting held on 25th January, 2019.

3. The details of the project, as per documents submitted by project proponent, and also as informed during the said EAC meetings with the help of EIA consultant M/s Aarvi Associates Architect, Engineers and Consultants Private Limited are reported to be as under:

- (i) The proposal involves Construction of new link National Highway 133B (Design Chainage km. 0.000) starts at proposed Sahibganj Bypass and meet at Ch. 200.870 of NH-80 (new name NH-33) (Design Chainage 1.800 of NH 133B) and ends at Ch. 25.240 of NH-131A at Junction of NH-131A & NH-133B (Design Chainage 15.885 of NH-133B) including construction of 4-lane Ganga Bridge in the states of Bihar and Jharkhand. The length of the proposed road is 15.885 km.



Proposal no.: IA/BR/NCP/89734/2018

- (ii) **Location:** Sahibganj, Sahibganj District, Jharkhand State and Manihari, Katihar district, Bihar.
- (iii) **Land Acquisition and Proposed RoW:** The proposed land acquisition for the proposed alignment is approx. 59.34 ha (Agriculture: 34 Ha, Waste/Barren: 5.34 & Grazing/community land: 20Ha). The proposed RoW is 60 m.
- (iv) **Land use of the site and around the site up to 10 km radius:** Cultivated and barren fields.
- (v) **Justification for selection of the site:** The environmental impact assessment is conducted in accordance with the requirement of the MoEF&CC norms and guidelines. Environment Impact Assessment Decision Supporting System (EIADSS) is used to identify the appropriate alignment of the project.
- (vi) **Total water requirement and its source:** Total requirement of water for the construction is estimated 4,40,617 KL. During operation stage about 1KL of is anticipated.
- (vii) **Waste water generation, treatment and disposal:** 0.8 KL, Treatment using bio-toilets during operation phase of the project.
- (viii) **Municipal solid waste generated disposal facility:** Surplus earth/ Construction & Demolition waste generation quantify of 646174 Cum is anticipated in the project and the same will be disposed at identified low lying areas in the project.
- (ix) **Rain Water Harvesting:** 40 nos. of Recharge pits are proposed in the project along the Right of Way. The budget provision of Rs 2.67 crores has been provided.
- (x) **Types of wastes, sources, collection, treatment, waste generation and disposal:** Sewage generating temporarily from labour camps will be discharged into septic tanks with soak pit facility. The solid wastes mainly of earth materials generated out of construction activities will be reused for rehabilitation of borrow area/quarry sites, camp sites and in temporary diversions and slopes. The municipal solid wastes generated in construction & workers camp will be disposed off to the nearest identified location of disposal/landfill sites of local authority with payments in environmentally acceptable manner. For sewerage disposal, septic tanks with soak pits will be provided at campsites. Salvage material/demolition wastes will be reused to the possible extent in embankments, shoulders, slopes, approach roads and temporary camp sites. Unused waste will be dumped in earmarked dump yard as per applicable guidelines.
- (xi) **Water bodies, diversion if any:** River Ganga is the major water body present in the core and study area.
- (xii) **Tree cutting, types, numbers, girth size etc.:** Prepare an action plan for about 36 nos. of trees to be felled in the project stretch. Proposed avenue and median plantation in the project are 15303 nos.
- (xiii) **Rehabilitation involved if any:** No rehabilitation is required for the proposed project.

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- (xiv) **Whether the project is in Critically Polluted area:** No.
- (xv) **National Park/ Wild Life Sanctuary in 10 km radius area & Eco-Sensitive Zone in 10 km radius area:** The project neither passes through any National park/ Wildlife Sanctuary/ Conservation Reserve etc., nor falls within 10 km boundary of any Protected Area under Wildlife Protection Act 1972.
- (xvi) **If the project involves diversion of forest land, extend of the forest land:** The proposed project does not involve diversion of any forest land.
- (xvii) **ToR details:** The Ministry issued vide letter No. 10-62/2018-IA.III dated 08th October, 2018.
- (xviii) **Public Hearing:** Since the project is falling under two districts and two states, the Public Hearing was conducted at two locations. The details of the Public Hearings are:
1. 10th November, 2018: The Public Hearing was conducted at Manihari, Katihar District, Bihar.
 2. 20th November, 2018: Ambadiha village, Mandro Tehsil, Sahibganj, Jharkhand:
- (xix) The major issues raised during the public hearing and the response of PP are:

Major Issues raised	Response of PP
Asked for the information regarding present land value and amount to be given for resettlement and rehabilitation.	Project director said to contact DLO for related information.
Asked for the information regarding steps will be taken by government for the control of noise pollution and air pollution?	It was informed by the consultant that Noise pollution will control by planting 15303 trees in three rows. Water will be sprinkled three times in a day during construction period for control of air pollution. During operation the decrease in traffic congestion in the region will further reduce air pollution.
What is the solution of drainage system, connection of village roads with bridge and problem of cattle movement due to bridge construction?	The consultant replied that the provisions for the same are considered in design. The provision of Cattle underpasses also made in the project for their free movement without hindrance. Provision for Minor bridges and guide bund are also made in the project for the free flow natural water drainage system in the river Ganga.
What are the provisions made for soil erosion during floods?	Provision of stone pitching and guide bunds have been given in the design as informed by consultant.
What provisions are made for the connection of proposed bridge with other small roads and road going from Narayanpur to Azampur.	Consultant said that the provisions are made for connection between small village roads.

Major Issues raised	Response of PP
Proper safety should be given during the construction of bridge. In bridge construction while making any committee, villagers should also be appointed as member of committee. The water should be sprinkled, and trees should be planted in RoW of road. Also, the land compensation should be given.	This bridge will be constructed as per IRC guidelines. Based on the ability of the local people PD, NHAI will ensure their participation. There is a provision of sprinkling of water and tree plantation in the project.

(xx) **R&R Plan:** The proposed project has 648nos., of Project Affected Persons (PAPs) i.e., Sahibganj:383 nos&Manihari: 265nos. with a total area requirement of 59.34 ha and no Project Affected Families were reported in the project. About 98% of the land acquisition is already completed in the project and an amount of Rs. 49.22 Crores budgetary provision is made in the Project.

(xxi) **Investment/Cost of the project:** INR 2,598 Crore.

(xxii) **Benefits of the project:**

- **Social:** There will be improvements in economic growth of the surrounding areas due to establishment of more shops, industries, institutions, MNCs and other organizations. Improvement in economic and social welfare of nearby people. Increase in access to markets, jobs, education and health services.
- **Environmental:** Three rows of avenue plantations are proposed on both side of the road at most of the sections as per IRC SP 21, 2009. Considerable reduction in Air emission due to reduction of travel distance of 160 Kms.
- **Financial:** The proposed project stretch across river Ganga will reduce travel distance from approx. 180 km to approx. 15 km and it will enhance the traffic and goods transport to northern and north-eastern region. It will also provide connectivity between Jharkhand State and Bihar State. Project road will reduce transportation cost for both freight and passengers and increase in road safety.

(xxiii) **Employment potential:**

- (a) Permanent -During Construction: 300 nos. of person.
- (b) Permanent -During Operation: 25 nos. of person.
- (c) Temporary - During Construction: 2650 nos. of person.
- (d) Temporary - During Operation: 25 nos. of person.
- (e) Total Manpower: 3000 nos. of person.

(xxiv) **If any court case pending for violation of the environmental laws:** No court cases are present for the present proposed project.

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- (xxv) The NoC has been obtained from National Mission for Clean Ganga (NMCG). The minimum navigation height of 10m considered in the design of the bridge duly studying the comprehensive Hydrological studies in the project area. All the vents of the proposed bridge have a minimum clear span of 100m. The obstruction due to the piers causes negligible afflux of only 5mm. Thus, it can be assured that the flow pattern of the river will not be affected by the construction of this bridge for minimum navigation height of 10 m considered in the design of the bridge and all the vents of the proposed bridge have a minimum clear span of 100m.
- (xxvi) No water bodies are falling within the Right of Way (RoW) of the alignment except, crossing of River Ganga. The only pond is located towards the LHS of the RoW near SriramChauki Village (Chainage Km. 0.800) at a distance of 350m in the project. The construction camp suggested near Sahibganj, which is about 1.0 Km away from this pond. The muck generation of 6,46,174 cum in the project shall be disposed in identified low lying areas i.e., Karni, Daminbhitu, Gobindnagar and BalvaGhati falling within 5 Km of the study area.
- (xxvii) The NOCs has been obtained from Additional Principal Chief Conservator of Forest cum-Chief Wildlife Warden, Bihar, and Principal Chief Conservator of Forest, Jharkhand. Gangetic Dolphin Conservation Plan, which has been prepared in consultation with concerned forests officials & Bhagalpur University Expert. An amount of Rs.147.7 lakhs budgetary provision is also made in the EMP towards this aspect.
- (xxviii) The social indicators developed for understanding the socio-economic profile of the project study area considered are i.e., economic growth, literacy rate, employment rate, fertility rate, health expenditure, income rates and standard of living. Duly considering the same an amount of Rs. 13.0 Crores provision is made towards the Corporate Environmental Responsibility (CER) to address the above social indicators aspects in the project.
- (xxix) NoC was granted from Inland Waterways Authority of India for construction of the River Ganga Bridge.
- (xxx) The cost of environmental protection measures is estimated Rs. 22.2397 crores.

4. The EAC, in its 206th meeting held on 25th January, 2019, has recommended the project for grant of Environmental Clearance for the development of the said project, subject to compliance of all generic conditions applicable for such projects, and the additional conditions as mentioned below. As per recommendations of the EAC, the Ministry of Environment, Forest and Climate Change hereby accords Environmental Clearance to the project **'Construction of new link NH-133B (Ch. km. 0.000) starts at Sahibganj Bypass and meet at Ch.200.870 of NH-33 (old NH-80) (Design Chainage 1.800 of NH 133B) and ends at Ch.25.240 of NH-131A at**



Junction of NH-131A & NH-133B (Design Chainage 15.885 of NH-133B) including construction of 4-lane Ganga Bridge in the states of Bihar and Jharkhand by M/s National Highways Authority of India (NHAI)', under the provisions of the EIA Notification, 2006 and subsequent amendments/circulars issued thereon, and subject to the specific and general conditions as under:

PART A - SPECIFIC CONDITIONS

- (i) Construction should be in dry season not in flood seasons.
- (ii) The minimum navigation height of 10 m considered in the design of the bridge and all the vents of the proposed bridge have a minimum clear span of 100m and all NoC granted conditions by National Mission for Clean Ganga should be followed.
- (iii) NoC granted conditions by Inland Waterways Authority of India for Construction of the River Ganga Bridge should be followed.
- (iv) Gangetic Dolphin Conservation Plan along with protection measures should be implemented in consultation with Principal Chief Conservator of Forest (Wildlife), Government of Bihar with a fund provision of Rs. 147.70 lakhs and report shall be submitted to the concerned Regional Office of the Ministry.
- (v) Conservation plan to be prepared for smooth coated Otter in consultation with the Principal Chief Conservator of Forest (Wildlife), Govt. of Bihar.
- (vi) Permission shall be obtained from Competent Authority, before drawing of water from surface source for project activities. The State Pollution Control Board shall not issue Consent to Operate till the project proponent obtains such permission.
- (vii) The fund provisions provided for CER i.e. Rs. 13.00 Crores, the expenditure details shall be submitted to the concerned Regional Office of the Ministry.
- (viii) Soil erosion control measures to be taken during flood season.

PART – B: GENERAL CONDITIONS

- (i) Responsibility for implementation of EC conditions rests with the project proponent only.
- (ii) Cut and fill works shall be carried out strictly in accordance with the design drawings proposed at the time of appraisal of the project.
- (iii) The project proponent shall obtain necessary permission from the owning agencies of water bodies/temple/tanks etc., as applicable, before execution of works.
- (iv) The project proponent shall obtain necessary permission from the concerned State(s) Irrigation Department(s) before drawing water from the river sources for the purpose of the proposed construction activity.

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- (v) Blasting shall be carried out during fixed hours (preferably during mid-day) or as permitted by the concerned authority. The timing shall be made known to all the people within 1000 m (200 m for pre-splitting) from the blasting site in all directions.
- (vi) The fly ash shall be used for the proposed project to comply with the Fly Ash Notification, 1999, as amended.
- (vii) Rehabilitation of project affected families (PAFs) and payment of compensation to PAFs shall be carried out as per the extant policy of the Central/State Government, as provided under the law. All the Indian Road Congress (IRC) guidelines wherever applicable may be followed.
- (viii) All entry/exit/access points on this highway shall be appropriately designed and preferably frozen to avoid traffic congestion and pollution.
- (ix) Rain water harvesting including oil and grease trap shall be provided. Water harvesting structures shall be located at every 500m along the road. Vertical drain type rainwater harvesting structures shall be set up to minimize surface runoff losses of rainwater.
- (x) All the recommendations of the EMP shall be complied in both letter and spirit. All the mitigation measures submitted in the EIA report shall be prepared in a matrix format and the compliance for each mitigation plan shall be submitted to MoEF&CC.
- (xi) Green belt development shall be undertaken as suggested in EMP.
- (xii) Sidewalk shall be provided along the bridges.
- (xiii) The seismic nature of the area shall be taken into account while designing the project.
- (xiv) IRC guidelines shall be followed for widening & up-gradation of road.
- (xv) The drain shall be at least 1 m away from the toe of the embankment of the road adopting IRC guidelines.
- (xvi) Longitudinal drains shall be provided all along the project road to ensure proper drainage of the area. In addition, adequate number of under passes and culverts to act as cross drainage structures shall also be provided.
- (xvii) The solid waste generated shall be used for rehabilitating the borrow areas.
- (xviii) For providing safety to the crossing animals and avoid road accidents speed breakers/rumbled strips shall be constructed at the identified locations of the animal movements. Enough hoardings and signages shall also be put up for the public and vehicles convenience.
- (xix) Necessary clearance/approval shall be obtained for extraction of sand from the rivers.
- (xx) The embankments/slopes and the slopes left after cutting shall be provided with vegetative growth to avoid soil erosion.

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- (xxi) The hot mix plant shall be located at least 500m away from habitation and on the barren land to avoid its adverse impact on the human population.
- (xxii) For road safety, IRC guidelines in respect of road signages, service roads, bus bays, inter-sections, pedestrian crossings, etc. shall be strictly adhered to.
- (xxiii) The responses/commitments made to the issues raised during public hearing shall be complied in both letter and spirit. A hard copy of the action taken shall be submitted to the MoEF&CC and also to its concerned Regional Office.
- (xxiv) Beside fulfilling obligations under Corporate Social Responsibilities as per Company's Act, 2013, the proponent has to adhere to the followings Corporate Environment Responsibilities:
 - (a) The Company shall have a well laid down Environment Policy approved by the Board of Directors.
 - (b) The Environment Policy shall prescribe for standard operating process/ procedures to bring into focus any infringements/ deviation/violation of the environmental or forest norms/ conditions.
 - (c) The hierarchical system or Administrative Order of the company to deal with environmental issues and for ensuring compliance with the environmental clearance conditions shall be furnished.
 - (d) To have proper checks and balances, the company shall have a well laid down system of reporting of non-compliances/ violations of environmental norms to the Board of Directors of the company and/or shareholders or stakeholders at large.
- (xxv) Appropriate measures must be taken while undertaking digging activities to avoid any likely degradation of water quality.
- (xxvi) Borrow sites for each quarry sites for road construction material and dump sites must be identified keeping in view the following:
 - (a) No excavation or dumping on private property is carried out without written consent of the owner.
 - (b) No excavation or dumping shall be allowed on wetlands, forest areas or other ecologically valuable or sensitive locations.
 - (c) Excavation work shall be done in close consultation with the Soil Conservation and Watershed Development Agencies working in the area, and
 - (d) Construction spoils including bituminous material and other hazardous materials must not be allowed to contaminate water courses and the dump sites for such materials must be secured so that they shall not leach into the ground water.
- (xxvii) As per MoEF&CC's circular no. J-11013/41/2006-IA.II(I) dated 22.09.2008, provision shall be made for supply of kerosene or cooking gas and pressure cooker to the labourers, mobile toilets, mobile STP, safe drinking water,

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medical health care, Crèche and temporary structures for living during construction phase.

- (xxviii) Adequate precautions shall be taken during transportation of the construction material so that it does not affect the environment adversely.
- (xxix) Borrow pits and other scars created during the road construction shall be properly levelled and treated.
- (xxx) The project proponent will set up separate environmental management cell for effective implementation of the stipulated environmental safeguards under the supervision of a Senior Executive.
- (xxxi) Full support shall be extended to the officers of this MoEF&CC and its Regional Office by the project proponent during inspection of the project for monitoring purposes by furnishing full details and action plan including action taken reports in respect of mitigation measures and other environmental protection activities.
- (xxxii) MoEF&CC or any other competent authority may stipulate any additional conditions or modify the existing ones, if necessary in the interest of environment and the same shall be complied with.
- (xxxiii) In the event of a change in project profile or change in the implementation agency, a fresh reference shall be made to the MoEF&CC.
- (xxxiv) The project proponents shall inform the Regional Office concerned as well as the MoEF&CC, the date of financial closure and final approval of the project by the concerned authorities and the date of start of land development work.
- (xxxv) The funds earmarked for environmental protection measures shall be kept in separate account and shall not be diverted for other purpose. Year-wise expenditure shall be reported to MoEF&CC and its concerned Regional Office.

5. In addition to above mentioned conditions following general guidelines are to be adhered:

- (i) The above stipulations would be enforced among others under the provisions of Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and control of Pollution) act 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991, EIA Notification, 2006 and its subsequent amendments. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department, the Forest Conservation Act, 1980 and the Wildlife (Protection) Act, 1972 etc. shall be obtained, as applicable by project proponents from the respective competent authorities.
- (ii) Officials from the Regional Office of the Ministry who would be monitoring the implementation of environmental safeguards should be given full cooperation, facilities and documents/data by the project proponents during their inspection. A complete set of all the documents submitted to MoEF&CC should also be forwarded to its concerned Regional Office.

- (iii) In case of any change(s) in the scope, the project would require a fresh appraisal by the MoEF&CC.
- (iv) The project proponent shall advertise in at least two local Newspapers widely circulated in the region, one of which shall be in the vernacular language informing that the project has been accorded Environmental Clearance and copies of clearance letters are available with the State Pollution Control Board and may also be seen on the website of the Ministry of Environment, Forest and Climate Change at <http://www.envfor.nic.in>. The advertisement shall be made within Seven days from the date of receipt of the Clearance letter and a copy of the same shall be forwarded to the concerned Regional office of the MOEF&CC.
- (v) A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, ZilaParishad/Municipal Corporation, Urban Local Body and the Local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the company by the proponent.
- (vi) A copy of the environmental clearance letter shall also be displayed on the website of the concerned State Pollution Control Board. The EC letter shall also be displayed at the Regional Office, District Industries centre and Collector's Office/Tehsildar's office for 30 days.
- (vii) The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the Ministry, the respective Zonal Offices of CPCB and the SPCB. The criteria pollutant levels namely; PM₁₀, PM_{2.5}, SO₂, NO₂ (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.
- (viii) The project proponent shall also submit six monthly report on the status of the compliance of stipulated EC Conditions including results of monitored data (both in hard copies as well as by email) to the concerned Regional Offices of MoEF&CC/CPCB/SPCB.
- (ix) The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of EC conditions and shall also be sent to the respective Regional Offices of the Ministry/CPCB/SPCB by e-mail.

6. This clearance is subject to final order of the Hon'ble Supreme Court of India in the matter of Goa Foundation Vs Union of India in Writ Petition (Civil) No.460 of 2004 as may be applicable to this project.

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7. Any appeal against this clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

8. The Ministry reserves the right to add additional safeguard measures subsequently, if found necessary, and to take action including revoking of the environment clearance under the provisions of the Environmental (Protection) Act, 1986, to ensure effective implementation of the suggested safeguard measures in a time bound and satisfactory manner.

9. This issues with the approval of the Hon'ble MEF&CC.

Reena
29/3/2019
(RaghukumarKodali)
Director/Scientist-F

Copy to:

- 1) The Secretary, Department of Environment, Government of Jharkhand, Secretariat, Ranchi.
- 2) The Principal Secretary, Environment and Forest Department, Government of Bihar, Secretariat, Patna-800015.
- 3) The Addl. Principal Chief Conservator of Forests (C), Ministry of Environment, Forests and Climate Change, Regional Office (ECZ, Bungalow No. A-2, Shyamali Colony, Ranchi – 834 002.
- 4) The Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, New Delhi-110032.
- 5) The Member Secretary, Bihar State Pollution Control Board, Parivesh Bhawan, Plot No. NS-B/2 Paliputra Industrial Area, Patliputra, Patna (Bihar) - 800 023.
- 6) The Member Secretary, Jharkhand State Pollution Control Board, Parivesh Bhawan, Plot No. NS-B/2, T.A. Division Building (Ground Floor), HEC Campus, P.O. Dhurwa, Ranchi – 834 004.
- 7) Monitoring Cell, MoEF&CC, Indira Paryavaran Bhavan, New Delhi.
- 8) Guard File/Record File.
- 9) Notice Board.

Reena
29/3/2019
(Raghu kumar Kodali)
Director/Scientist-F