



File No: 10/25/2024-IA.III
Government of India
Ministry of Environment, Forest and Climate
Change
IA Division



Dated 22/10/2024



To,

M/s Bihar Rajya Pul Nirman Nigam Limited
Office of the Senior Project Engineer, Bihar Rajya Pul Nirman Nigam Limited, Works Division,
Champaran, Motihari, Bihar, Pashchim, Champaran, Bihar, 800015
spe-champaran@brpnn.co.in

Subject: The proposal is for Development of Newly declared NH-727AA to 2/4- Lane Standard Highway from Bettiah on NH-727 connecting Patzirwa, Paknaha in the state of Bihar, Pipraghat and terminate at Sewrahi Jn. with NH- 730 in the state of Uttar Pradesh with a total Length of 29.220 Km by M/s Bihar Rajya Pul Nirman Nigam Limited under RCD Govt. of Bihar-Terms of Reference reg.

Sir/Madam,

This is in reference to your application for Grant of Terms of Reference under the provision of the EIA Notification 2006-regarding in respect of project Development of Newly declared NH-727AA to 2/4- Lane Standard Highway from Bettiah on NH-727 connecting Patzirwa, Paknaha in the state of Bihar, Pipraghat and terminate at Sewrahi Jn. with NH- 730 in the State of Uttar Pradesh submitted to Ministry vide proposal number IA/BR/INFRA1/494755/2024 dated 31/08/2024.

2. The particulars of the proposal are as below :

(i) TOR Identification No.	TO24A3601BR5938419N
(ii) File No.	10/25/2024-IA.III
(iii) Clearance Type	TOR
(iv) Category	A
(v) Project/Activity Included Schedule No.	7(f) Road
(vi) Sector	INFRA-1
(vii) Name of Project	Development of Newly declared NH-727AA to 2/4- Lane Standard Highway from Bettiah on NH-727 connecting Patzirwa, Paknaha in the state of Bihar, Pipraghat and terminate at Sewrahi Jn. with NH- 730 in the State of Uttar Pradesh
(viii) Name of Company/Organization	Ram MOHAN singh

(ix) Location of Project (District, State)	PASHCHIM CHAMPARAN, BIHAR
(x) Issuing Authority	MoEF&CC
(xii) Applicability of General Conditions	no
(xiii) Applicability of Specific Conditions	no

3. The proposal is for 'Development of Newly declared NH-727AA to 2/4- Lane Standard Highway from Bettiah on NH-727 connecting Patzirwa, Paknaha in the state of Bihar, Pipraghat and terminate at Sewrahi Jn. with NH-730 in the state of Uttar Pradesh (Total Length-29.220 Km) by M/s Bihar Rajya Pul Nirman Nigam Limited under RCD Govt. of Bihar.

4. The proposed project is a 2/4 lane (green field) highway starts at Junction point with NH 727 at Manuapul (Bettiah) Ch. 0+000 in the state of Bihar and terminates at Tiwari Patti on NH-730 at Ch.29+220 in the state of Uttar Pradesh. The total length of the proposed highway is 29.220 Km. The proposed project highway passes through 02 districts of 02 states viz. West Champaran District in Bihar and Kushinagar district in UP. The geo-coordinates of project site falls in between 26°51'1.96" N, 84°28'14.42" E and 26°44'58.58" N, 84°12'42.91" E.

5. The proposed project activity is listed at schedule S.No.7 (f) National Highways under Category- 'A', of the schedule of the EIA Notification, 2006. Total Project Cost is Rs. 3,950.00 Cr.

6. The proposed Right of Way (RoW): The proposed alignment will have the Right of Way (RoW) in general is 60 m.

7. Land use/Land cover of project site: The details of Land-use/ Land-cover of project site are as follows:

Sl.No	Land use / Land cover	Area (ha)	Percentage (%)	Remarks if any
1.	Private/Government land	182.57	99.56	Agriculture/Barren/other Land
2.	Forest land	0.40	0.44	Protected Forest land
Total		183.37	100	-

8. Terrain and Topographical Features: The topography of the project stretch is undulating plain with varying elevations. The land use of the proposed stretch is mainly agricultural, water bodies with some patches of settlements and protected forest.

9. Details of water bodies, impact on drainage: The proposed alignment is passing through Canals at 02 locations, Rivers at 02 locations, Nallahs at 03 locations and Pond at 01 location. There shall be no major impact on the drainage system as sufficient numbers of structures (such as culverts, minor bridges and major bridges) will be constructed. Also submitted that the proposed alignment is passing through the Pashchim Champaran River and proposed 11.1 km flyover over to avoid the disruptions to the water flow and to avoid the flood affects to the proposed alignment. The balancing culverts shall be provided to ensure no water logging in the area and all storm water shall be channelized systematically to the nearest natural stream. The details will be submitted along with the EIA/EMP report.

10. Water requirements: The total water demand of the project is approx. 3000 KLD. Water will be extracted from suitable surface sources (rivers/canals/streams etc) or ground water after obtaining necessary permissions from the competent authority. Drinking water shall be arranged from Tanker Supply and thus no permanent installation shall be required for the labourers.

11. Diversion of forestland: The proposed project highway will require diversion of 0.40 ha of forest land i.e. protected forest land. Therefore, Forest Clearances is applicable. The forest proposal shall be prepared after consultation with concerned forest officer. The alignment does not pass through any wild life sanctuary, protected area and its eco sensitive zone. However the nearest boundary of declared eco sensitive zone of Udaipur Wildlife Sanctuary is approx. 300 m away from the project alignment.

12. Waste Management: The approximate quantity of wastes to be generated from the project is 250 Kg per day. As

per CPHEEO Norms, 100 grams of solid wastes are generated per unit employee/worker. The solid waste generated by the workers shall be only municipal solid waste which shall be segregated at site itself by provision of colored bins. The wastes shall be collected from there and dumped as per provision of Municipal Solid waste rules. Industrial Waste: Defunct machineries or parts of the mixing plants shall be stored at designated place before selling the scrap to an approved vendor. Waste management shall be done as per Solid Waste Management Rules, 2016 & and Construction and demolition waste Management Rules 2016.

13. Details of Tree Cutting and Green Belt Development: About 500 trees are likely to be affected due to proposed RoW of 60 m out of which approx. 50 nos. of trees fall in forest land and remaining 450 falls in the private agriculture field.

14. Employment Potential: During the construction of the road project around 500 persons would be employed temporarily for a period of 4 years. However, due to construction of toll plaza approx. 50 persons will be employed on permanent basis. The total manpower requirement for the project is 550 per day. Preference will be given to local people for employment.

15. Land acquisition and R&R issues involved: About 30 nos. (Commercial, Residential – Pucca/Semi Pucca) will be affected due to proposed highway. The Bihar Rajya Pul Nirman Nigam Limited under RCD, Govt. of Bihar shall compensate the affected title holder as per NH Act 1956 and RFCTLARR Act, 2013. Rehabilitation and resettlement plan will be prepared after detailed census survey during EIA Study and will be submitted in EIA Report.

16. Benefits of the project: This is a green field alignment and is proposed for 2/4-Lane. The main objective of the proposed project is at present there is no bridge for crossing of Traffic and peoples and road user use Local boat to move with their vehicle (CAR, Jeep, Tractors, Bike etc.) from Bihar side to UP side in a length of missing 10 Km. The developed corridor and efficient Road network would facilitate the Investors to pump their money in private sector through Private – Public or PPP mode to meet the growing need of such several Institutions and Industries. This Project will definitely provide multidimensional growth in Education, Tourism, Industries, small scale Industries, and cultural as well as educational activities as it connects places of Historical Importance Buddhist Circuit and Nepal. Keeping in view the settlement of dense population in the project region and availability of vast landscape, With developed Road Network, the economic growth of area can be forecasted and generation of huge opportunity of employment can be assessed in addition of maintaining Law and Order in the surrounding District.

17. Details of Court cases: The instant proposal does not involve any court cases/ litigation.

18. The EAC based on the information submitted and clarifications provided by the project proponent and detailed discussions held on all the issues during 373rd meeting on 11th-12th September 2024 and recommended the project for grant of Terms of References(ToR) with stipulated specific conditions along with other Standard ToR Conditions.

19. The Ministry of Environment, Forest and Climate Change has considered the proposal based on the recommendations of the Expert Appraisal Committee (Infrastructure, CRZ and other Miscellaneous projects) and hereby decided to grant Terms of Reference to 'Development of Newly declared NH-727AA to 2/4- Lane Standard Highway from Bettiah on NH-727 connecting Patzirwa, Paknaha in the state of Bihar, Pipraghat and terminate at Sewrahi Jn. with NH- 730 in the state of Uttar Pradesh. The total length of the alignment is 29.220 Km by M/s Bihar Rajya Pul Nirman Nigam Limited under RCD Govt. of Bihar.' and for preparation of EIA/EMP report with public consultations under the EIA Notification, 2006 as amended, subject to strict compliance of the following specific conditions, in addition to all standard ToR conditions applicable for such projects.

20. A detailed draft EIA/EMP report shall be prepared in terms of the above additional TOR and should be submitted to the State Pollution Control Board for Public Hearing. Public Hearing to be conducted for the project in accordance with the provisions of Environmental Impact Assessment Notification, 2006 and the issues raised by the public should be addressed in the Environmental Management Plan. The Public Hearing shall be conducted based on the TOR letter issued by the Ministry and not on the basis of Minutes of the Meeting available on the website.

21. The project proponent shall submit the detailed final EIA/EMP report prepared as per TOR including issues raised during Public Hearing to the Ministry for considering the proposal for environmental clearance before expiry of validity of ToR.

22. The consultants involved in preparation of EIA/EMP report after accreditation with Quality Council of India/National Accreditation Board of Education and Training (QCI/NABET) would need to include a certificate in this regard in the EIA/EMP reports prepared by them and data provided by other Organization(s)/Laboratories including their status of approvals etc. vide notification of the MoEF dated 19th July, 2013.

23. The prescribed TOR would be valid for a period of four years for submission of the EIA/EMP Reports.

24. This issues with the approval of Competent Authority.

Copy To

1. The Member Secretary, Bihar State Pollution Control Board, Beltron Bhawan, Shastri Nagar, Jawahar Lal Nehru Marg, Patna (Bihar) - 800 023.
2. The Deputy Director General of Forests (C), Ministry of Environment, Forest and Climate Change, Integrated Regional Office Kendriya Bhawan, 5th Floor, Sector 'H', Aliganj, Lucknow – 226020.
3. The Uttar Pradesh Pollution Control Board Building. No.TC-12V, Vibhuti Khand, Gomti Nagar Lucknow-226 010, Uttar Pradesh Pollution Control Board Building.No. TC-12V, Vibhuti Khand, Gomti Nagar Lucknow-226 010.
4. The Deputy Director General of Forests (C), Ministry of Environment, Forest and Climate Change, Integrated Regional Office, 2nd floor, Headquarter, Jharkhand State Housing Board Harmu Chowk, Harmu Housing Colony, Argora, Jharkhand 834002.
5. Parivesh Portal.
6. Guard file.

Annexure 1

Specific Terms of Reference for (Road)

1. Specific Conditions

S. No	Terms of Reference
1.1	The proposed alignment is passing through the Pashchim Champaran River and falls under the catchment area and PP proposed the 11.1 km flyover to avoid the abstraction of the river and flood prone area the details of the same shall be submit along with the EIA/EMP report.
1.2	Number of pillars for the overbridged proposed over Pashchim Champaran River should be kept bare minimum by increasing the length of span between pillars to maximum possible without compromising road safety and stability.
1.3	Hydrodynamic modelling study for flood hazard risk assessment studies shall be carried out.
1.4	All the major, minor bridges and culverts should not affect the drainage systems. Flood plains of the rivers/ drainage systems are not to be disturbed.
1.5	No tree can be felled/transplant unless exigencies demand. Preference should be given for transplantation of trees wherever possible. Where absolutely necessary, tree felling shall be with prior permission from the concern Authority. Old, large and heritage value trees should be retained based on girth and age regulations as may be prescribed by the Forest Department. Where the trees

S. No	Terms of Reference
	need to be cut/transplanted with prior permission from the concerned local Authority, compensatory plantation in the ratio of 1:10 (i.e. planting of 10 trees for every 1 tree that is cut/ non-survival of any transplanted tree) shall be done and maintained. Plantations to be ensured species (cut) to species (planted). All the plantation will be done by state forest department as deposit work and not by private contractors.
1.6	Measure above and below ground carbon stocks in biomass and soil in individual trees through scientifically established and verifiable methods using expert services from ICFRE/IIFM or any other reputed expert agency. Geo-tag each individual (seedling/sapling) plantation spot for future reference. A progress in this regard may be submitted in 6-monthly compliance report.
1.7	Green belt development (tree plantation) in lieu of the trees being felled in non-forest land should be carried out by the State forest department as deposit work and not by the private contractor. Green belt must be developed using exclusively native species including significant number of ficus trees. No exotic species to be used for the same. A comprehensive plan for plantation shall be prepared in consultation with state forest department (executing agency) including the costs involved. Such compensatory plantation will be over and above the compensatory afforestation to be carried in lieu of the diversion of forest land, if any.
1.8	Measure above and below ground carbon stocks in biomass and soil in individual trees within forests and trees outside forest through scientifically established and verifiable methods using expert services. Maintain yearly growth measurements (diameter and height) records of individuals for a period of 20 years. Geo-tag each individual (seedling/sapling) plantation spot for future reference.
1.9	Trees with heronry (breeding ground for herons, egrets, etc.), pelicanary or community nesting of birds like Painted Storks, Ibis, Egrets, Pelican, etc. will not be allowed to fell. In case of presence of such, alignment will be required to be changed to save such trees.
1.10	Project alignment should be managed in such a way to save the Heritage/old trees supposed to be affected by the proposed alignment.
1.11	The proponent shall obtain permission from the competent authorities for tree felling along the proposed alignment.
1.12	In borrow pits, the depth of the pit shall be regulated such that the sides of the excavation will have a slope not steeper than 1:2, from the edge of the final section of bank. Soil erosion checking measures shall be carried out. Details for borrow area operation and rehabilitation given in EIA report shall be followed.
1.13	Quarry areas shall be barricaded during mining operations. The abandoned quarry shall be developed as water reservoirs with proper fencing around quarry area.
1.14	In all the construction sites within 150 m of the nearest habitation, noisy construction work such as crushing, concrete mixing will be stopped during the night time between 10.00 pm to 6.00 am. No noisy construction activities will be permitted around educational institutions/health centres (silence zones) up to a distance of 100 m from the sensitive receptors. All plants and equipment used in construction shall strictly conform to the CPCB/SPCB noise standards.
1.15	Traffic Control Devices/Road Safety Devices/Roadside Furniture including various types of cautionary, informatory, regulatory as mandatory signboards, road markers, studs, etc. shall be

S. No	Terms of Reference
	provided at appropriate locations all along the project stretch in accordance with the specifications laid down in Manual of Specifications and Standards for Expressways (IRC: SP:99-2013) and IRC:8, IRC:25, IRC:26, IRC:35, IRC:67, IRC:79, IRC:103 and Section 800 of MORTH Specifications.
1.16	Rain water harvesting pit shall be at least 3-5 m above the highest ground water table.
1.17	No Ground water shall be extracted and used. Approval/permission of concerned authority shall be obtained before drawing surface water from canal or any other sources.
1.18	All the major, minor bridges and culverts should not affect the drainage systems. Flood plains of the rivers/ drainage systems are not to be disturbed.
1.19	Proponent shall keep the finish road level sufficiently elevated from ground level with provision of railing on both sides to restrict animal crossing in order to avoid the possibility of wildlife injury/death. Animal underpasses, watch tower, water holes and other mitigation measures proposed shall be constructed in supervision of forest department.
1.20	While constructing the over bridges as proposed over major water bodies efforts should be made to avoid construction of pillars in beds of water bodies.
1.21	As per the Ministry's Office Memorandum F. No. 22-65/2017-IA.III dated 30th September, 2020, the project proponent shall abide by all the commitments made by them to address the concerns raised during the public consultation. The project proponent shall initiate the activities proposed by them, based on the commitment made in the public hearing, and incorporate in the Environmental Management Plan and submit to the Ministry. All other activities including pollution control, environmental protection and conservation, R&R, wildlife and forest conservation/protection measures including the NPV, Compensatory afforestation etc., either proposed by the project proponent based on the social impact assessment and R&R action plan carried out during the preparation of EIA report or prescribed by EAC, shall also become part of EMP and shall be implemented.

Standard Terms of Reference for (Road)

1. Project Details

S. No	Terms of Reference
1.1	Examine and submit a brief description of the project, project name, nature, size, its importance to the region/state and the country.
1.2	Submit detailed alignment plan, with details such as nature of terrain (plain, rolling, hilly), land use pattern, habitation, cropping pattern, forest area, environmentally sensitive places, mangroves, notified industrial areas, sand dunes, sea, river, lake, details of villages, teshils, districts and states, latitude and longitude for important locations falling on the alignment by employing remote sensing techniques followed by ground truthing and also through secondary data sources.
1.3	Describe various alternatives considered, procedures and criteria adopted for selection of the final alternative with reasons.

S. No	Terms of Reference
1.4	If the proposed route is passing through a city or town, with houses and human habitation on the either side of the road, the necessity for provision of bypasses/diversions/under passes shall be examined and submitted. The proposal should also indicate the location of wayside amenities, which should include petrol station/service centre, rest areas including public conveyance, etc. Noise reduction measures should also be indicated.
1.5	Submit details about measures taken for the pedestrian safety and construction of underpasses and foot-over bridges along with flyovers and interchanges. If any.
1.6	Assess whether there is a possibility that the proposed project will adversely affect road traffic in the surrounding areas (e.g. by causing increases in traffic congestion and traffic accidents). Specific care be also taken to ensure that by passes have a sufficient buffer to prevent unwanted obstructions defying the purpose of the by pass
1.7	If the proposed route involves cutting of earth, the details of area to be cut, depth of cut, locations, soil type, volume and quantity of earth and other materials to be removed with location of disposal/ dump site along with necessary permission.
1.8	If the proposed route is passing through low lying areas, details of fill materials and initial and final levels after filling above MSL, should be examined and submit.
1.9	Examine and submit the water bodies including the seasonal ones within the corridor of impacts along with their status, volumetric capacity, quality likely impacts on them due to the project.
1.10	Examine and submit the details of use of fly ash in the road construction, if the project road is located within the 100 km from the Thermal Power Plant.
1.11	Explore the possibilities of utilizing the debris/ waste materials available in and around the project area.

2. Forest

S. No	Terms of Reference
2.1	In case the project involves diversion of forests land, guidelines under OM dated 20.03.2013 may be followed and necessary action taken accordingly.
2.2	The information should be provided about the details of the trees to be cut including their species and whether it also involves any protected or endangered species. Measures taken to reduce the number of the trees to be removed should be explained in detail. Submit the details of compensatory plantation.
2.3	Necessary green belt shall be provided on both sides of the highway with proper central verge and cost provision should be made for regular maintenance
2.4	If there is a possibility that the construction/widening of road will cause impact such as destruction of forest, poaching, reductions in wetland areas, if so, examine the impact and submit details.

3. Court Matters

S. No	Terms of Reference
3.1	Details of any litigation(s) pending against the project and/or any directions or orders passed by any court of law/any statutory authority against the project to be detailed out.

4. Land Environment

S. No	Terms of Reference
4.1	Submit Land use map of the study area to a scale of 1: 25,000 based on recent satellite imagery delineating the crop lands (both single and double crop), agricultural plantations, fallow lands, waste lands, water bodies, built-up areas, forest area and other surface features such as railway tracks, ports, airports, roads, and major industries etc.
4.2	submit a detailed ground surveyed map on 1:2000 scale showing the existing features falling within the right of way namely trees, structures including Archeological& religious, monuments etc. if any.
4.3	If the proposed route is passing through any hilly area, examine and submit the stability of slopes, if the proposed road is to pass through cutting or embankment / control of soil erosion from embankment. Landslide, rock fall protection measures to be indicated.

5. Wildlife

S. No	Terms of Reference
5.1	The projects is located within 10km. of the sanctuary a map duly authenticated by Chief Wildlife Warden showing these features vis-à-vis the project location and the recommendations or comments of the Chief Wildlife Warden thereon should be furnished at the stage of EC.
5.2	Details of blasting if any, methodology/technique adopted, applicable regulations/permissions, timing of blasting, mitigation measures proposed.keeping in view mating season of wild life.
5.3	Explore the possibilities of relocating the existing trees. Animal and wild life crossings to be provided in areas inhabited by wild life.
5.4	Study regarding the Animal bypasses / underpasses etc. across the habitation areas shall be carried out. Adequate cattle passes for the movement of agriculture material shall be provided at the stretches passing through habitation areas.
5.5	Provide compilation of road kill data on the wildlife on the existing roads (national and state highways) in the vicinity of the proposed project. Provide measures to avoid road kills of wildlife by the way of road kill management plan.

6. Soil Quality Analysis

S. No	Terms of Reference
6.1	Submit the details on compliance with respect to Research Track Notification of MoRTH 20) Examine and submit the details of sand quarry and borrow area as per OM no.2-30/2012-IA-III dated 18.12.2012 on 'Rationalization of procedure for Environmental Clearance for Highway

S. No	Terms of Reference
	Projects involving borrow areas for soil and earth as modified vide OM of even no. dated March 19, 2013.

7. Climate And Meteorology

S. No	Terms of Reference
7.1	Climate and meteorology (max and min temperature, relative humidity, rainfall, frequency of tropical cyclone and snow fall); the nearest IMD meteorological station from which climatological data have been obtained to be indicated.

8. Air Environment

S. No	Terms of Reference
8.1	The air quality monitoring should be carried out as per the new notification issued on 16th November, 2009.
8.2	Examine the impact during construction activities due to generation of fugitive dust from crusher units, air emissions from hot mix plants and vehicles used for transportation of materials and prediction of impact on ambient air quality using appropriate mathematical model.
8.3	Description of model, input requirement and reference of derivation, distribution of major pollutants and presentation in tabular form for easy interpretation shall be carried out.

9. Noise Environment

S. No	Terms of Reference
9.1	Identify project activities during construction and operation phases, which will affect the noise levels and the potential for increased noise resulting from this project.
9.2	Discuss the effect of noise levels on near by habitation during the construction and operational phases of the proposed highway
9.3	Identify noise reduction measures and traffic management strategies to be deployed for reducing the negative impact if any.
9.4	Prediction of noise levels should be done by using mathematical modeling at different representative locations.
9.5	Also examine and submit the details about the protection to existing habitations from dust, noise, odour etc. during construction stage.
9.6	If the proposed route is passing through low lying areas, details of fill materials and initial and final levels after filling above MSL, should be examined and submit.

10. Water Environment

S. No	Terms of Reference
10.1	Examine and submit the water bodies including the seasonal ones within the corridor of impacts along with their status, volumetric capacity, quality likely impacts on them due to the project.
10.2	Examine and submit details of water quantity required and source of water including water requirement during the construction stage with supporting data and also categorization of ground water based on the CGWB classification
10.3	Examine and submit the details of measures taken during constructions of bridges across river/canal/major or minor drains keeping in view the flooding of the rivers and the life span of the existing bridges.
10.4	In case of river/ creek crossing, details of the proposed bridges connecting on either banks, the design and traffic circulation at this junction with simulation studies.
10.5	Details to ensure free flow of water in case the alignment passes through water bodies/river/streams etc.

11. Drainage

S. No	Terms of Reference
11.1	If there will be any change in the drainage pattern after the proposed activity, details of changes shall be examined and submitted.
11.2	If the proposed route involves tunneling, the details of the tunnel and locations of tunneling with geological structural fraction should be provided. In case the road passes through a flood plain of the river, the details of micro drainage, flood passages and information on high levels flood periodicity at least of last 50 years in the area should be examined.

12. Rain Water Harvesting

S. No	Terms of Reference
12.1	Rain water harvesting pit should be at least 3 - 5 m. above the highest ground water table.
12.2	Provision shall be made for oil and grease removal from surface runoff

13. Road And Traffic

S. No	Terms of Reference
13.1	Submit the details of road safety, signage, service roads, vehicular under passes, accident prone zone and the mitigation measures.
13.2	IRC guidelines shall be followed for widening & upgradation of road.
13.3	IRC guidelines to be followed for traffic safety while passing through the habitat.

S. No	Terms of Reference
13.4	Provision of speed breakers, safety signals, service lanes and foot paths should be examined at appropriate locations throughout the proposed road to avoid the accidents.
13.5	In case of bye passes, the details of access control from the nearby habitation/habitation which may come up after the establishment of road.
13.6	Submit details of social impact assessment due to the proposed construction of road.
13.7	Examine road design standards, safety equipment specifications and Management System training to ensure that design details take account of safety concerns and submit the traffic management plan.
13.8	Accident data and geographic distribution should be reviewed and analyzed to predict and identify trends - incase of expansion of the existing highway and provide Post accident emergency assistance and medical care to accident victims.
13.9	The proponent shall carry out a detailed traffic flow study to assess inflow of traffic from adjoining areas like airport/urban cities. The detailed traffic planning studies shall include complete design, drawings and traffic circulation plans (taking into consideration integration with proposed alignment and other state roads etc.). Wherever required, adequate connectivity in terms of VUP (vehicle underpass)/ PUP (Pedestrian underpass) needs to be included.

14. Land Acquisition And R&r

S. No	Terms of Reference
14.1	Details of the properties, houses, businesses religious and social places etc. activities likely to be effected by land acquisition and their financial losses annually.
14.2	Detailed R&R plan with data on the existing socio-economic status of the population in the study area and broad plan for resettlement of the displaced population, site for the resettlement colony, alternative livelihood concerns/employment and rehabilitation of the displaced people, civil and housing amenities being offered, etc and the schedule of the implementation of the project specific.
14.3	whether governmental or on the basis of BOT etc and provide details of budget provisions (capital & recurring) for the project specific R&R Plan.
14.4	Examine and submit the details of sand quarry, borrow area and rehabilitation
14.5	If the proposed project involves any land reclamation, details to be provided for which activity land to reclaim and the area of land to be reclaimed.

15. Socio-economic Environment

S. No	Terms of Reference
15.1	The proponent shall carry out a comprehensive socio-economic assessment and also impact on biodiversity with emphasis on impact of ongoing land acquisition on the local people living

S. No	Terms of Reference
	around the proposed alignment. The Social Impact Assessment should have social indicators which can reflect on impact of acquisition on fertile land. The Social Impact Assessment shall take into consideration of key parameters like people's dependency on fertile agricultural land, socio-economics spectrum, impact of the project at local and regional levels.
15.2	As per the Ministry's Office Memorandum F.No.22-65/2017-IA.III dated 30th September, 2020, the project proponent, based on the commitments made during the public hearing, shall include all the activities required to be taken to fulfil these commitments in the Environment Management Plan along with cost estimates of these activities in addition to the activities proposed as per recommendations of EIA Studies and the same shall be submitted to the ministry as part of the EIA Report. The EMP shall be implemented at the project cost or any other funding source available with the project proponent.

16. Environmental Monitoring and Management

S. No	Terms of Reference
16.1	Estimated cost of the project including environmental monitoring cost and funding agencies. Submit environmental management and monitoring plan for all phases of the project viz. construction and operation.
16.2	The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.
16.3	Any further clarification on carrying out the above studies including anticipated impacts due to the project and mitigative measure.

17. Alignment, Esz & Crz

S. No	Terms of Reference
17.1	In case of alignment passing through coastal zones
17.2	HTL/LTL map prepared by authorized agencies superimposed with alignment and recommendation of Coastal Zone Management Authority
17.3	Details of CRZ-I areas, mangroves required to be removed for the project along with the compensatory afforestation, area and location with budget
17.4	Details of road on stilt in CRZ-I areas, design details to ensure free tidal flow

18. Employment

S. No	Terms of Reference
18.1	Details of Labour camps, machinery location.

19. Miscellaneous

S. No	Terms of Reference
19.1	The Action Plan on the compliance of the recommendations of the CAG as per Ministry's Circular No. J-11013/71/2016-IA. I (M), dated 25th October, 2017 needs to be submitted at the time of appraisal of the project and included in the EIA/EMP Report.

Additional Terms of Reference

N/A

Annexure 2

Details of Products & By-products

Name of the product /By-product	Product / By-product	Quantity	Unit	Mode of Transport / Transmission	Remarks (eg. CAS number)
Construction of new highway	Construction of new highway	29.22	Kilometers (Km)	Road	

