

APPENDIX I
(See paragraph – 6)
FORM I

(I) Basic Information

Sl.No	Item	Details
1.	Name of the Project/s	6 – Laning of 4-lane NH – 2 from Barwa – Adda (km 398.240) in Dhanbad district of Jharkhand to Panagargh (km 521.213) in Bardhwan district in the State of West Bengal. The project is being taken up by National Highways Authority of India towards augmentation of capacity for safe and efficient movement of traffic by strengthening and upgrading to desired width. Location Map of the Project is attached as Annexure I.
2.	Sl. No in the Schedule	7(f)
3.	Proposed capacity/area/length/tonnage to be handled/command area/lease area/ number of wells to be drilled	The proposed length of this section of NH -2 is 122.973 km with proposed Right of Way (RoW) of 60m.
4.	New/Expansion/modernization	Expansion and Modernization
5.	Existing Capacity/Area etc	The length of existing road 120.99 km and this is a four lane road, Existing RoW is 60 m
6.	Category of Project i.e 'A' or 'B'	A
7.	Does it attract the general condition? If yes, please specify.	The General Condition Number- iii is applicable for this project since its passes through interstate boundaries of Jharkhand and West Bengal
8.	Does it attract the specific condition? If yes, please specify.	Not Applicable
9.	Location	Land Acquisition required.
	Plot/Survey / Khasra No.	
	Village	
	Tehsil	
	District	
	State	

10.	Nearest railway station /airport along with distance in kms.	The nearest railway stations are Durgapur, Asansol and Dhanbad railway station at 5 to 10 km from proposed road. The nearest Airport is Kolkata airport which is 140 Km from proposed road.
11.	Nearest Town, City, District Headquarters along with distance in kms.	The project road is passing through districts of Dhanbad and Bardhaman and towns of Durgapur, Asansol, Nirsa, Panagarh.
12.	Village Panchayaths, Zilla parishad, Municipal Corporation, Local Body (complete address with telephone nos. to be given)	The project road is passing through above referred towns and cities.
13.	Name of the Applicant	NHAI
14.	Registered Address	National Highways Authority of India (Ministry of Road Transport &Highways) G-5 & 6, Sector-10 Dwarka, New Delhi - 110075
15.	Address for Correspondence:	
	Name	Shri V.K.Sharma
	Designation (Owner/Partner/CEO)	Chief General Manager (LA & Env.)
	Address	National Highways Authority of India (Ministry of Road Transport &Highways) G-5 & 6, Sector-10 Dwarka, New Delhi -
	Pin Code	110 075.
	Email	vksharma@nhai.org
	Telephone No	011-25074100 & 25074200
	Fax No.	91-011-25093543
16.	Details of Alternative Sites examined, if any location of these sites should be shown on a topo sheet.	The proposed road is existing road, hence no alternatives has been examined.
17.	Interlinked Projects	Not Applicable
18.	Weather separate application for interlinked projects submitted?	Not Applicable
19.	If yes, date of submission	Not Applicable
20.	If no, reason	Not Applicable
21.	Weather the proposal involves approval/clearance under –If yes, details of the same and their status to be given.	Permission for tree cutting under Forest (Conservation) Act 1980 is required.

	(a) The Forest (Conservation) Act - 1980 (b) The Wildlife (Protection) Act - 1972 (c) CRZ Notification - 1991	
22.	Whether there is any Government Order/ Policy relevant/	No
23.	Forest Land involved (hectares)	Some trees along the existing road will be fell down in order to widen the road.
24.	Whether there is any litigation pending against the project and /or land in which the project is propose to be set up? (a) Name of the Court (b) Case No. (c) Orders /directions of the Court, if any and its relevance with the proposed project.	No

I hereby given undertaking that the data and information given in the application and enclosures are true to the best of my knowledge and belief and I am aware that if any part of the data and information submitted is found to be false or misleading at any stage, the project will be rejected and clearance give, if any to the project will be revoked at our risk and cost.

Signature of the Applicant with
Name and full Address



V.K.SHARMA

Chief General Manager (LA & Env.)
National Highways Authority of India,
Ministry of Road Transport & Highways
G - 5 & 6, Sector 10, Dwaraka
New Delhi, 110 075.

Date:

Place:

(II) Activity

1. Construction, operation or decommissioning of the project involving actions, which will cause physical changes in the locality (topography, land use, changes in water bodies, etc.)

S.No.	Information/ Checklist confirmation	Yes/No	Details thereof (with approximate quantities/ rates, wherever possible) with source of information
1.1	Permanent or temporary change in land use, land cover or topography including increase in intensity of land use (with respect to local land use plan)	Yes	<p><u>CHANGE IN LAND USE</u></p> <p>Yes, there will be both temporary and permanent change in the land use of the area. The temporary change in land use will be due to setting up of Labour Camps, Hot mix plant, Crusher, WMM Plant, etc. Permanent Change of land use will be in the area falling in Proposed Right of way for the construction of 6 lane Highway and other ancillary services like Toll Plaza, wayside amenities etc.</p> <p><u>MINOR CHANGE IN TOPOGRAPHY</u></p> <p>There will not be any major change in the topography of the area. Bridge approaches will have higher embankments. Therefore there will be minor changes in the topography of the area.</p>
1.2	Clearance of existing land, vegetation and buildings?	Yes	The land and building falling in proposed right of way will be cleared after acquisition of land and 44626 numbers of trees which are falling along the PROW proposed to be cut.
1.3	Creation of new land uses?	Yes	The new land use of Highway will be created along the stretches of widened portions of the existing alignment. The new land use will also be created where Toll plaza, truck laybye and way side amenities has been proposed.
1.4	Pre- construction investigations e.g. bore house, soil testing?	Yes	Pre – Construction investigation like Bore-House, Soil testing etc will be done
1.5	Construction works?	Yes	The Highway will be constructed which will include Sub grades, Bituminous Surfaces, Bridges, Drains, Culverts, Underpasses Toll Plaza etc.
1.6	Demolition Works?	Yes	Structures falling within PROW will be demolished.
1.7	Temporary sites used for construction works or Housing of Construction workers?	Yes	Labor Camps for 250-350 labors will be established, for this land will be acquired temporarily
1.8	Above ground buildings, structures	Yes	Toll Plaza, Highway at an elevation of 1m

S.No.	Information/ Checklist confirmation	Yes/No	Details thereof (with approximate quantities/ rates, wherever possible) with source of information
	or earthworks including linear structures, cut and fill or excavations		above the HFL (1 to 3m above the ground level) will be constructed. The above ground structures include major, minor Bridges, flyovers toll plaza, wayside amenities and truck lay byes.
1.9	Under ground works including mining or tunneling	No	
1.10	Reclamation Works?	No	
1.11	Dredging?	No	
1.12	Offshore structures?	No	
1.13	Production and manufacturing processes?	Yes	There will be no manufacturing, only concreting work; bituminous work will be carried out on site.
1.14	Facilities for Storages of goods or materials?	Yes	Construction material like aggregates, sand, cement, fuel and bitumen will be stored in covered sheds in construction camp.
1.15	Facilities for treatment or disposal of solid waste or liquid effluents?	Yes	<p><u>LIQUID EFFLUENT</u></p> <p>Liquid effluent will be generated from labour and construction camps, these effluents will be treated in septic tank / sedimentation tank before diverting to the soak pit.</p> <p><u>SOLID WASTE</u></p> <p>Solid waste generated from labour and construction camp will be segregated from source itself. Organic waste will be treated at site, inert waste will be sold to recycler and inorganic waste will be disposed at designated landfill site or disposed as per the guidelines.</p>
1.16	Facilities for long term housing of operational workers?	Yes	Housing and Project office will be provided at Toll Plaza and wayside amenities for Offices and staff accommodation during operation phase of the project h
1.17	New road, rail or sea traffic during construction or operation?	No	
1.18	New road, rail, air waterborne or other transport infrastructure including new or altered routes and stations, ports, airports etc?	Yes	
1.19	Closure or diversion of existing	Yes	Diversion along the existing NH 2 during

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	transport routes or infrastructure leading to changes in traffic movements?		construction period will be undertaken as per IRC:SP:55-2001 guidelines on safety in construction Zone.
1.20	New or diverted transmission lines or pipelines?	Yes	Electric Poles, High Transmission (HT) lines and other utility lines passes through the ROW will shifted in consultation with the concerned department
1.21	Impoundment, damming, culverting, realignment or other changes to the hydrology of watercourses or aquifers?	Yes	It is proposed to provide 202 culvert in the project corridor and this will not affect the natural hydrology of the area
1.22	Stream crossings?	Yes	There are Four Major River and 7 minor streams/ nallahs/ canals traversing the area and alignment is crossing four major Rivers at four locations viz Badakar River Km 441.100, Barwa River Km 420.06 Ghagarguri River Km 464.550 and Kajada River 482.60 and the other minors streams were crossing at the following locations, Seasonal Streams at Km 415.120, Km 429.900 and Km 450.200, Nallahs at Km 409.750, Km 484.990 and Km 492.680 and DPC Canal at Km 509.820
1.23	Abstraction or transfers of water form ground or surface waters?	Yes	The water will be abstracted from surface and ground source both for construction period only.
1.24	Changes in water bodies or the land surface affecting drainage or run-off?	No	4 major and 20 minor bridges has been proposed in the project corridor to maintain natural flow of the rivers/streams/canals etc
1.25	Transport of personnel or materials for construction, operation or decommissioning?	Yes	The construction materials will be transported during construction from different sources which have been detailed in Volume 1 (Project Report)
1.26	Long-Term dismantling or decommissioning or restoration works?	No	
1.27	Ongoing activity during decommissioning which could have an impact on the environment?	No	
1.28	Influx of people to an area in either temporarily or permanently?	Yes	Yes, there will be temporary influx of people to the project area as labors and other people who will be involved directly or indirectly in the construction of highway. However preference will be given to local people in the employment.

S.No.	Information/ Checklist confirmation	Yes/No	Details thereof (with approximate quantities/ rates, wherever possible) with source of information
1.29	Introduction of alien species?	No	
1.30	Loss of native species or genetic diversity?	No	
1.31	Any other actions?	No	

2. Use of Natural resources for Construction or operation of the Project (such as land, water, materials or energy, especially any resources which are non-renewable or in short supply) :

S.No	Information /Checklist confirmation	Yes/No	Details thereof (with approximate quantities / rates wherever possible) with source of information data
2.1	Land especially undeveloped or agricultural land (ha)	Yes	Total 230.00 Ha. (Agriculture, Homestead).
2.2	Water (expected source & competing users) unit: KLD	Yes	Surface Water – 2000 KI /day Ground Water – 1500 KI /day
2.3	Minerals (MT)	No	-
2.4	Construction material- stone, aggregates, and /soil (expected source- MT)	Yes	Aggregates 2705035 MT Sand 1547424 MT Cement 98514 MT Soil 200000 Cum
2.5	Forests and Timber (source- MT)	No	-
2.6	Energy including electricity and fuels (source, competing users) Unit: fuel (MT), energy (MW)	Yes	Construction Stage • 2 MW (Civil Supply) and generator Operating Stage • 700 KL /year of Fuel • 9 MW civil supply connection • 4.5 MW standby generator.
2.7	Any other natural resources (Use appropriate standard units)	No	

3. Use, storage, transport, handling or production of substances or materials, which could be harmful to human health or the environment or raise concerns about actual or perceived risks to human health.

S.No	Information /Checklist confirmation	Yes/No	Details thereof (with approximate quantities / rates. Wherever possible) with source of information data
3.1	Use of substances or materials, which are hazardous (as per MSIHC rules) to human health or the environment (flora, fauna, and water supplies)	Yes	DIESEL 371000kl Bitumen 54008 MT (Total quantity for construction)
3.2	Changes in occurrence of disease or affect disease vectors (e.g. insect or water borne diseases)	No	

3.3	Affect the welfare of people e.g. by changing living conditions?	Yes	The proposed project will result in appreciable welfare of the people with respect to Industrial, tourism, health care, educational and Agriculture due to improved movement of people and goods at much reduced travel time, road accident etc.
3.4	Vulnerable groups of people who could be affected by the project e.g. hospital patients, children, the elderly etc.	Yes	There will be positive impact on Vulnerable Group due to improved connectivity as travelling to educational institutions and health care facilities at the faster and easier.
3.5	Any other cause	No	

4. Production of solid wastes during construction or operation or decommissioning (MT/ month)

S.No	Information /Checklist confirmation	Yes/No	Details thereof (with approximate quantities / rates. Wherever possible) with source of information data
4.1	Spoil, overburden or mine wastes	No	
4.2	Municipal waste (domestic and or commercial wastes)	Yes	During construction and Operation phases of the project domestic waste will be produced from labour camps which will be disposed as per established rules.
4.3	Hazardous waste (as per Hazardous Waste Management Rules)	No	
4.4	Other industrial process wastes	No	
4.5	Surplus product	No	
4.6	Sewage sludge or other sludge from effluent treatment	No	
4.7	Construction or demolition wastes	Yes	32928 cum waste will be generated dismantling 2744 no. of structure.
4.8	Redundant machinery or equipment	No	
4.9	Contaminated soils or other materials	No	
4.10	Agricultural wastes	No	
4.11	Other solid wastes TOP SOIL	No	

5. Release of pollutants or any hazardous, toxic or noxious substances to air (Kg/hr)

S. No	Information /Checklist confirmation	Yes/No	Details thereof (with approximate quantities / rates. Wherever possible) with source of information data
5.1	Emissions from combustion of fossil fuels from stationery or mobile sources	Yes	During construction and operations phases the emissions will be from the mobile sources as vehicles will be running on Road.
5.2	Emissions from production processes	No	
5.3	Emissions from materials handling including storage or transport	No	
5.4	Emissions from construction activities including plant and equipment	Yes	During Construction period the emissions will be from Plant, Machineries, Hot Mix plant, Crusher plant, WMM plant Movement of Vehicles etc
5.5	Dust or odours from handling or materials including construction materials, sewage and waste	Yes	There will be dust generation during construction and loading, unloading of Construction Materials and at from the Crusher plant
5.6	Emissions form incineration of waste	No	
5.7	Emission from burning of waste in open air (e.g. slash materials, construction debris)	No	
5.8	Emissions from any other sources	No	

6. Generation of Noise and Vibration, and Emissions of Light and Heat :

S.No	Information /Checklist confirmation	Yes/No	Details thereof (with approximate quantities / rates. Wherever possible) with source of information data
6.1	From operation of equipment e.g. engines, ventilation plant, crushes	Yes	During Construction Period noise will be generated from equipments, machinery and, crushers plants.
6.2	From industrial or similar processes	No	
6.3	From construction or demolition	Yes	During Construction phase demolition of few structures present on the PROW may create noise
6.4	From blasting or piling	No	
6.5	From construction or operational traffic	Yes	During Construction and Operation Phase
6.6	From lighting or cooling systems	No	
6.7	From any other sources	No	

7. Risks of contamination of land or water from releases of pollutants into the ground or into sewers, surface waters, ground water, coastal waters or the sea:

S.No	Information /Checklist confirmation	Yes/No	Details thereof (with approximate quantities / rates. Wherever possible) with source of information data
7.1	From handling, storage, use or spillage	No	

S.No	Information /Checklist confirmation	Yes/No	Details thereof (with approximate quantities / rates. Wherever possible) with source of information data
	of hazardous materials.		
7.2	From discharge of sewage or other effluents to water or the land (expected mode and place of discharge)	Yes	Effluent from workers and construction camp will treated in septic tank / sedimentation tank and discharged to soak pit and shall be confirm to the norms
7.3	By deposition of pollutants emitted to air into the land or into water	No	
7.4	From any other sources	No	
7.5	Is there a risk of long term build up of pollutants in the environment from these sources?	No	

8. Risk of accidents during construction or operation of the Project, which could affect human health or the environment.

S.No	Information /Checklist confirmation	Yes/No	Details thereof (with approximate quantities / rates. Wherever possible) with source of information data
8.1	From explosions, spillages, fires etc from storage, handling, use or production of hazardous substances.	No	
8.2	From any other causes ?	No	
8.3	Could the project be affected by natural disasters causing environmental damage (e.g. floods, earthquake, landslides, cloudburst etc)?	No	The entire stretch of the project highway traverses partly through seismic zone III and as defined by IRC 6:1966, seismic zoning classification system, i.e., a zone of relative stability. Dhanbad and Bardhwan lies in seismic Zone III. The horizontal Seismic coefficient for zone III is 0.04 measured on a scale from I to V zones

9. Factors which should be considered (such as consequential development) which could lead to environmental effects or the potential for cumulative impacts with other existing or planned activities in the locality

S.No	Information /Checklist confirmation	Yes/No	Details thereof (with approximate quantities / rates. Wherever possible) with source of information data
9.1	Lead to development of supporting, utilities, ancillary development or development stimulated by the project, which could have impact on the environment e.g.	No	

S.No	Information /Checklist confirmation	Yes/No	Details thereof (with approximate quantities / rates. Wherever possible) with source of information data
	<ul style="list-style-type: none"> • Supporting infrastructure (roads, power supply, waste or waste water treatment, etc) • Housing development • Extractive industries • Supply industries • Other 		
9.2	Lead to after –use of the site, which could have an impact on the environment.	No	
9.3	Set a precedent for later developments.	Yes	The proposed project will set precedent for development as it is planned to be developed in the environment friendly manner
9.4	Have cumulative effects due to proximity to other existing or planned projects with similar effects.	No	

(III) Environmental Sensitivity

S.No	Areas	Name/Identity	Aerial distance (within 15 Km.) proposed project location boundary
1.	Areas protected under international conventions, national or local legislation for their ecological, landscape, cultural or other related value	No	
2.	Areas which are important or sensitive for ecological reasons- Wetlands, watercourse or other water bodies, coastal zone, biosphere, mountains, forests	Not Applicable	
3.	Areas used by protected, important or sensitive species of flora or fauna for breeding, nesting, foraging, resting, over wintering, migration	Not Applicable	
4.	Inland, coastal, marine or underground waters	Not Applicable	
5.	State, National boundaries	State Boundary	The Project Road passes through the States of Jharkhand and West Bengal and crosses the State Boundary
6.	Routes or facilities used by the public for access to recreation or other tourist, pilgrim area	Not Applicable	
7.	Defence Installations	Not Applicable	
8.	Densely populated or built-up area	Barwa-adda, Gopalganj, Nirsa, in the district of Dhanbad and, Raniganj More, Andal More, Durgapur, Mochipada, Panagarh in the district of Bardhwan, West Bengal	Along the Highway
9.	Areas occupied by sensitive	Hospital. Schools &	Along the Highway

S.No	Areas	Name/Identity	Aerial distance (within 15 Km.) proposed project location boundary
	man-made land uses (hospitals, schools, places of worship, community facilities)	Places of Worship is indirectly affected by the project.	
10.	Areas containing important, high quality or scarce resources (ground water resources, surface resources, forestry, agriculture, fisheries, tourism, minerals)	Not Applicable	
11.	Areas already subjected to pollution or environmental damage (those where existing legal environmental standards are exceeded)	No	
12.	Areas susceptible to natural hazard which could cause the project to present environmental problems (Earthquake, subsidence, landslides, erosion, flooding or extreme or adverse climatic conditions)	NO	