Minutes of 197th Meeting of Expert Appraisal Committee for Projects related to Infrastructure Development, Industrial Estate/Parks/Complexes/Areas, Export Processing Zones, Special Economic Zones, Biotech Parks, Leather Complexes and National Highways projects held on 17th September, 2018 at Indira Paryavaran Bhawan, Ministry of Environment, Forest and Climate Change, Jor Bagh Road, New Delhi

1. Opening remarks of the Chairman.

2. Confirmation of the minutes of the 195th meeting of EAC held on 30-31 August, 2018 in the Indira Paryavaran Bhawan, Ministry of Environment, Forest and Climate Change, Jor Bagh Road, New Delhi.

3. Consideration of Proposals:

<table>
<thead>
<tr>
<th>3.1</th>
<th>Development of Industrial Growth Centre Saha, at Phase-II, Ambala, Haryana by M/s Haryana State Industrial and Infrastructure Development Corporation Ltd. – Extension of Terms of Reference</th>
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</thead>
<tbody>
<tr>
<td>3.1.1</td>
<td>The project proponent along with the EIA consultant M/s Grass Roots Research and Creation India Private Limited made a presentation and provided the following information to the Committee:</td>
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(i) The proposed project is for the ‘Development of Industrial Growth Centre Saha, at Phase-II, Ambala, Haryana’ by M/s Haryana State Industrial and Infrastructure Development Corporation Ltd. Total area of the proposed Phase 2 of the project is 250.94 acre (101.55 ha).

(ii) **Justification for selection of the site**: The proposed Site has been acquired on the basis of its connectivity to the major cities through the National Highway and the State Highway no 31. The Site does not fall under any biological sensitive areas such as forest, wild life sanctuaries, ecologically sensitive areas, water reserves etc. The land has been declared for Industrial land use and the same has been demarcated in the proposed master plan being developed for this region.

(iii) **Rain Water Harvesting**: Provision of storm water drain has been made for the project. The surface water drains/storm water drainage scheme has been divided into two heads-

- Collection system
- Disposal system

Effective drainage increases the life of the road, Proper camber, slope properly constructed kerb channel and then placing of road gullies at
proper spacing can help in collection of surface water effectively.

It has been proposed to construct Storm Water Disposal works at the Tail End of the Storm Water Line from where it will be pumped into Drain by installing pumping station of adequate capacity. Storm water drainage system is proposed to cater for rainfall intensity @ 5.00 mm/hr. The storm water drainage system is proposed to be of NP2, NP3 & NP4 RCC pipe of size varying from 300 mm to 1400 mm diameter.

(iv) **Rehabilitation involved, if any:** Approximately 1500-2000 persons are likely to be affected on account of acquisition of land in Saha (Phase-II). Government of Haryana has formulated a policy vide notification dated 9th November, 10 for rehabilitation and resettlement of land owners and oustees which will be followed for the project.

(v) **Terrain, level with respect of MSL, requirement of filling if any:** No.

(vi) **Tree cutting, types, numbers, girth size etc.:** No.

(vii) **Total water requirement and its source:** Water requirement, source, status of clearance – Total water requirement will be 10 MLD (Phase-I & Phase-II), Source of the water will be ground & Prior approval from CGWA is pending.

(viii) **Waste water generation, treatment and disposal:** Waste water generated will be treated in CETP and treated water will be used for the horticulture purpose etc.

(ix) **Water bodies, diversion if any:** No.

(x) **Whether the project is in Critically Polluted area:** No.

(xi) **Municipal solid waste generated disposal facility:** The total municipal(domestic) solid waste would be collected in environmentally sound manner and sent to sanitary landfills after segregations of recycled materials.

(xii) **Hazardous wastes (as per Hazardous Waste Management Rules):** The hazardous wastes along with other wastes in the project will be used oil from DG sets, which is classified as per The Hazardous Waste Category 5.1 as per The Hazardous Wastes (Management, Handling & Transboundary Movement) Rules, 2008. Used oil from DG sets will be stored in HDPE drums in isolated covered facility. This used oil will be sold to authorized recyclers. Suitable care will be taken so that spills/leaks of used oil from storage.

(xiii) **National Park/ Wild Life Sanctuary in 10 km radius area & Eco-Sensitive Zone in 10 km radius area:** No Wildlife Sanctuary within 15 km Buffer Zone of the project site.
If the project involves diversion of forest land, extend of the forest land: No.

Investment/Cost of the project: INR 194.55 crore.

Benefits of the project: The project aims at development of growth centre phase II at Saha, which would help in creation state-of-the-art industrial infrastructure in the district. The project will facilitate in creation of employment opportunities both direct & indirect for local population. The project will help in the urban development by creating all essential amenities and hence the projects will hence immense benefits for social upliftment. The project also aims at development of better landscaping in the vicinity as well as creation of green belt in the area which would eventually help in the improvement of visual and aesthetic quality of the area. With the implementation of the project, other utilities would also be created like development of road network, sewerage network, augmentation of water supply system & waste water treatment, solid waste collection facility, educational and health facilities etc. in nutshell, project aims at amelioration of the socio-economy of the areas as well as providing basic amenities to people.


If any court case pending for violation of the environmental laws: Yes. Following 10 court cases are undergoing

1. Deepak Aggarwal and Others CWP NO. 1048/08
2. Aditya Kumar CWP NO. 19199/08
3. Ramesh Chand and Others CWP NO. 19428/08
4. Kuldip Singh CWP NO. 13232/07
5. Puran Singh CWP NO. 10754/08
6. Puran Singh and Others CWP NO. 13019/07
7. Mohan Singh CWP NO. 19253/08
8. Dr. Madan Mohan Dutta CWP NO. 6029/08
9. Sonia CWP NO. 108/09
10. Sudesh and Others CWP NO. 13/08

3.1.2 After thorough examination of documents submitted and the presentation made before the EAC during its 197th meeting, the EAC observed following:

(i) Information provided in Form-1 and other documents is very sketchy and contradictory. Forms-1 indicates that there are 10 ongoing court cases, however, in documents submitted by the EIA consultation suggest that
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<td>(ii)</td>
<td>Almost nil or vague information is given in respect of landuse of project site &amp; its 10 km radius, water sources, waste water generation, its treatment, solid/hazardous waste management etc.</td>
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<td>(iii)</td>
<td>The first phase of the project was implemented in 2002, hence EC under EIA Notification, 2006 is not applicable. The present proposal is for Phase 2 of the project, which covers 250.94 acres (101.55 ha) and houses industrial units related to Food &amp; Beverages, Automobile Parts, Electrical &amp; Electronics, Agro-products, Scientific equipments, Garments beside Commercial, Residential and Institutional buildings.</td>
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<td>(iv)</td>
<td>Public hearing of the project was conducted on 12th April, 2018 after expiry of ToR. Application for extension of ToR was filed on 27th August, 2018.</td>
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3.1.3 In view of above, the EAC, after a detailed deliberation during 197th meeting held on 17 September, 2018, deferred the proposal for want of following information for further consideration:

- (i) Revised Form-1 in all respect and detailed information in respect of landuse of project site & its 10 km radius, water sources, waste water generation, its treatment, solid/hazardous waste management etc.
- (ii) Provide detailed description and present status of all the court cases.
- (iii) List of proposed industries category wise (A and B as per EIA Notification, 2006) along with the layout map.

3.2 Development of Industrial Park in area of 1877.79 ha at Orvakal, Orvakal Mandal, Kurnool District, Andhra Pradesh by M/s Andhra Pradesh Industrial Infrastructure Corporation Limited – Terms of Reference

[Proposal No. IA/AP/NCP/76057/20181] [F. No. 21-74/2018-IA.III]

3.2.1 The project proponent along with EIA consultant M/s Ramky Enviro Services Private Limited, Hyderabad, made a presentation and provided the following information to the Committee:

- (i) The proposed project is an Industrial Park within the Orvakal Mega Industrial Hub is being developed over 4640.11 Acres (1877.79 ha) land by Andhra Pradesh Industrial Infrastructure Corporation (APIIC) Limited. The proposed Industrial Park consists of steel based, Light Engineering, Non-metallic mineral, Aerospace & defense hardware, E-waste recyclers, Gems & Jewellers, inorganic chemical, Logistic hub, Renewable energy, textile & apparel industries.
- (ii) Location: Orvakal in Orvakal Mandal, Kurnool District, Andhra Pradesh.
- (iii) Land use of the site and around the site up to 10 km radius: Land
especially undeveloped or agricultural land.

(iv) **Total water requirement and its source:** Total water required is around 23 MLD for the proposed project. The water for the project would be drawn from Srisailam foreshore at HNSS lift station – Zero at Muchumarri village.

(v) **Waste water generation, treatment and disposal:** The total wastewater generated is 10340 KLD. Wastewater (Industrial & domestic) generated from industrial area will be treated in proposed CETP, while sewage from residential area (Hotel facility) will be treated in the proposed STP.

(vi) **Water bodies, diversion if any:** The following Water bodies are present within 15km from the boundary of project location.

- Konderu River Stream (Adjacent to project site towards E)
- Rock Garden Lake 1.5 km (N)
- Kommu Cheruvu 5.5 km (ESE)
- Bayanna Cheruvu 9.3 km (W)

(vii) **Municipal solid waste generated disposal facility:** Solid waste generated from the construction activities includes rubbles, used up cement, broken bricks etc., which shall be re-used for filling up of low lying areas during developmental stage.

(viii) **If the project involves diversion of forest land, extend of the forest land:** Not Applicable.

(ix) **Investment/Cost of the project:** INR 525 Crores.

(x) **Benefits of the project:** The proposed Orvakal Industrial Park, within Orvakal Mega Industrial Hub will provide impetus for the growth of large scale mineral based industries and also small and medium scale industries in value chain and other support infrastructure like logistics and other institutional facilities are expected to bring significant socio-economic and environmental benefits both at local level as listed below:

The proposed external infrastructure linkages are expected to provide excellent connectivity of the region with the International Airport, urban centres and other economic growth centers. Overall, the proposed project is expected to enhance the economic development in the region.

Integrated townships consisting of residential, commercial, institutional with requisite physical and social infrastructure facilities are definite means of social development expected from the project. Technology development is also anticipated with world class R&D centres being proposed in the project.
The goods and products manufactured from the industries of proposed project would fill the demand-supply gap and hence improve the domestic markets.

(xi) **Employment potential:** The proposed project would have positive impact by providing employment to local people during construction and operation phases. Also, the project will better the infrastructure of surroundings as various projects such as controlled expressway, and railwaysiding are proposed, escalating potential new business opportunities, recreation in functional and attractive environment in the region.

(xii) **If any court case pending for violation of environmental laws:** No.

**3.2.2**

After thorough examination of documents submitted by EIA consultation on behalf of project proponent and the details provided during 197th meeting of EAC on 17th September, 2017, it was observed that:

(i) The legal status of the proposed Industrial Park within Orvakal Mega Industrial Hub is not clear. Also it is not clear whether these units are recognised by the Ministry of Commerce and Industries or some Competent Authority at State Level.

(ii) No information provided regarding rehabilitation involved, habitation, land uses, number of employment to be generated and status of wildlife sanctuaries or ESZ around project site.

(iii) It is not clear whether the proposed Industrial Park also encompasses the integrated Steel Plant, which has already been granted EC by this Ministry vide letter No.J-11011/110/2016-IA.II(I) dated 7th August, 2018.

(iv) There is a dam located in the downstream of the proposed project site and the Steel Plants. The proponent has not provided alternative sites to avoid citing upstream of dam.

**3.2.3**

Based on detailed deliberations during its 197th meeting of EAC on 17th September, 2018, the proposal was **deferred** for reasons mentioned in preceding para and for want of following information:

(i) Submission of additional information regarding rehabilitation involved, habitation, land uses, number of employment to be generated and status of wildlife sanctuaries or ESZ around project site and revision of Form-1 accordingly.

(ii) Submission of notification or Government Order regarding proposed Industrial Park from a competent authority at central or state level and revision of Form-1 accordingly.

(iii) Land allotment letter from Government of Andhra Pradesh for the proposed steel plant and the Industrial Park.
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<tr>
<td>(iv)</td>
<td>Reasons for not submitting simultaneous applications for integrated and inter-linked proposals for proposed Steel Plant and Industrial Park as per directions given by this Ministry’s vide OM No. 11013/41/2006.IA.II(I) dated 24th December, 2010.</td>
</tr>
<tr>
<td>(v)</td>
<td>As per EC granted to proposed steel plant on 7th August, 2018, the location of project is Guttapadu village, Orvakal mandal, Kurnool district, Andhra Pradesh. However, as per information given in the Form-1 of application for ToR, the location of proposed Industrial Park is Orvakal in Orvakal mandal in Kurnool district. It is also mentioned that proposed Industrial Park encompasses the proposed Steel Plant. Clarification is to be provided in this regard.</td>
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<td>(vi)</td>
<td>Submission of drainage flow pattern and details of catchment area on Sol toposheets for the project site and surrounding areas including dam located in the downstream of the project site.</td>
</tr>
<tr>
<td>(vii)</td>
<td>A broad analysis and prediction of potential environmental impact of existing Steel plant on the dam and also provide the alternative sites, at least three options.</td>
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### 3.3 Construction of Eight lane road (newly declared NH-148N) from Kandarwasa Village to Kher Khunta village in Ratlam District from CH:150+000 to 181+000 (31 km) in the State of Madhya Pradesh (sub package-2, part of Delhi-Mumbai Expressway) by M/s National Highways Authority of India – Terms of Reference [Proposal No. IA/MP/MIS/75677/2018] [F. No. 10-64/2018-IA.III]

#### 3.3.1

The project proponent along with the EIA consultant Chaitanya Projects Consultancy Private Limited made a presentation and provided the following information to the Committee:

(i) The proposed project is a new 8 lane road (newly declared NH 148N) connecting from Kandarwasa village to KherKhunta village in Ratlam district from CH:150+000 to 181+000 in the state of Madhya Pradesh. This is a part of Delhi Mumbai Expressway under BharatmalaPariyojana. The length of the proposed alignment is 31.0 km. It is a newly declared NH-148N vide MoRTH notification no. S.O. 1842 (E) dated May 8, 2018.

(ii) **Location:** Starts from Kandarwasa village to KherKhunta village in Ratlam district in the state of Madhya Pradesh from CH:150+000 to 181+000 in the state of Madhya Pradesh.

(iii) **Land use of the site and around the site up to 10 km radius:** Agricultural, Barren and forest land.
(iv) **Proposed RoW:** The proposed RoW of the project is 100m.

(v) **Tree cutting, types, numbers, girth size etc.:** The alignment will require cutting of approximately 675 no. of trees.

(vi) **Justification for selection of the site:** Three alternative green field alignments have been considered, option (i) on the extreme left hand side of the proposed alignment (ii) alignment on left side of proposed alignment and (iii) Proposed alignment on RHS. The final alignment option is fixed avoiding major habitations, built-up areas, major forests and is passing through predominantly agriculture, barren, forest and waste land.

(vii) **Rehabilitation involved, if any:** The Project requires approx. 310 ha land. Total 131 no. of structures are coming in the proposed RoW of the NH. The land will be acquired as per procedure laid down in Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement (RFCT LARR) Act, 2013.

(viii) **Total water requirement and its source:** The Peak water requirement is 2330 KLD during construction stage and will be extracted from local surface water sources.

(ix) **Waste water generation, treatment and disposal:** Yes, The liquid effluent generates from labour /construction camps will be treated in septic/sedimentation tank before diverting it to soak pit.

(x) **Water bodies, diversion if any:** Alignment is crossing 2 canals and 15 streams.

(xi) **Whether the project is in Critically Polluted area:** No.

(xii) **Municipal solid waste generated disposal facility:** Yes, The solid waste will be disposed as per Solid Waste Management rules, 2016.

(xiii) **National Park/ Wild Life Sanctuary in 10 km radius area & Eco-Sensitive Zone in 10 km radius area:** Yes, proposed alignment is passing through Sailana Kharmor Wildlife Sanctuary which comprises of three patches in three villages (i) Shikarwadi, (ii) Sherpur and (iii) Amba - The proposed road alignment is 3.2 km, 11.5 km and 12.5 km respectively from their boundary.

(xiii) If the project involves diversion of forest land, extend of the forest land: Yes, the forest proposal is under preparation.

(xiv) **Investment/Cost of the project:** INR 930 Crore.

(xv) **Benefits of the project:** The Project will enhance economic development in the area through industrial growth, agricultural and commercial development and consequent employment generation, savings in travel time and shall provide easy access to social
infrastructure. The proposed road would act as the prime artery for the economic flow to this region. It will enhance economic development, provide employment opportunities to locals, strengthen tourist development, ensure road safety, and provide better transportation facilities and other facilities such as way side amenities. Vehicle operating cost will also be reduced due to improved road quality. The compensatory plantation and road side plantation shall further improve the air quality of the region.

(xvi) **Employment potential:** During the construction of the road project around 150 persons would be employed temporarily for a period of 3 years. However due to construction of toll plazas approx. 30 persons will be employed on permanent basis. Preference will be given to local people for employment. The Project will enhance economic development in the area through industrial growth, agricultural, and commercial development and consequent employment generation, savings in travel time & shall provide easy access to social infrastructure.

(xvii) **If any court case pending for violation of the environmental laws:** Not Applicable.

### 3.3.2

The proposal was considered in this meeting (197th EAC meeting held on 17th September, 2018). The EAC after detailed deliberation **recommended the project for grant of Terms of Reference (ToR),** and for preparation of EIA/EMP report with public consultations subject to compliance of all conditions as notified in the standard ToR applicable for such projects and specific conditions, as mentioned below:

(i) Cumulative Impact Assessment to be carried out for the entire length of the highway including all packages/phases.

(ii) Water bodies along proposed alignment needs to be surveyed for their conservation and sustainability. Each water body should be clearly identified with its size, any important and threatened species associated with it, its usage by local community along with shape file of each of water body. Impact of proposed project on these water bodies to be identified along with mitigation measures. Emphasis should be given to avoid alignment passing through/over water bodies.

(iii) Certificate from the Chief Wildlife Warden of the state of Chattisgarh stating that no protected area/animal corridor are situated within the 10 km range of the proposed alignment.

(iv) Source of water availability to be ascertained for construction and domestic need. Necessary permissions to be obtained from State Authority/ CGWA if any.

(v) Rain water harvesting structures to be constructed at the either sides of
(vi) Social Indicators need to be developed for understand the socio-economic profile of the society/people living around the proposed alignment.

(vii) Provide compilation of road kill data on existing roads (national and state highways) in the vicinity of the proposed project.

(viii) ROW should not exceed 70m at any point of the proposed 8-lane alignment as per MoRT&H circular no. NH-15017/21/2018 dated 10th May, 2018. Since, the ROW of the proposed alignment shall be reduced from 100m to 70m, therefore it is important to assess the present and projected traffic densities on the highway/expressway.

3.4 Construction of 6/8-laning of Kanpur-Lucknow Expressway starting from Shaheedpath (11.000km) to Sukhlaganj Jn. (73.770km) of NH-25 in the State of Uttar Pradesh by M/s National Highways Authority of India – Terms of Reference


3.4.1 The project proponent along with the EIA consultant Egis India Consulting Engineers Pvt. Ltd. made a presentation and provided the following information to the Committee:

(i) The proposal involves construction of proposed 6/8-Lane Expressway from Lucknow to Kanpur in the State of Uttar Pradesh. The proposed road starts from Saheedpath (11.000 km) to Shuklaganj junction (73.770 km) of NH-25 in the state of Uttar Pradesh. Its length is approximately 75 km. Further, the proposed road traverses Lucknow and Unnao districts in the state of Uttar Pradesh.

(ii) Location: The Entire project stretch is located in in the state of Uttar Pradesh. The proposed road passes through Lucknow, Sarojininagar, Banthara, Junabganj, Sohramau, Ashakhera, Nawabganj, Chamrauli, Dahichauki, Unnao and Kanpur.

(iii) Proposed RoW: 90m to 120 m

(iv) Land use of the site and around the site up to 10 km radius:

Proposed project is a Greenfield Project. The land use pattern on either side of 10 Km of the project road is predominantly agriculture followed by habitation area.

The proposed alignment does not pass through any wildlife sanctuary, national park or notified eco sensitive area. The alignment is located within 10 km radius at a distance of 9 km from the outer boundary from Nawabganj bird Sanctuary towards south eastern direction.
(v) **Rehabilitation involved, if any:** All the temporary sites used for construction activities will be rehabilitated properly before handing over back to the land owner.

The solid waste generated due to construction and allied activities will be reused for rehabilitation of borrow area / quarries sites, campsite and in temporary diversions and slopes.

(vi) **Justification for selection of the site:** The proposed Expressway is a new alignment. The proposed alignment is finalized after reviewing different alternative alignments. Lucknow is capital of Uttar Pradesh and Kanpur industrial area. The Kanpur-Lucknow Expressway between Lucknow and Kanpur.

Map of alternative alignments are enclosed as annexure in the Form I under the heading of basic information Sl. No. 16.

(vii) **Tree cutting, types, numbers, girth size etc.:** Approximately 5000 trees exist along the proposed alignment. Efforts will be made to minimize the trees loss by restricting tree cutting within formation width. Avenue plantation shall be carried out as per IRC SP: 21:2009 on available ROW apart from statutory requirements.

Required tree cutting will be done after having requisite permission from competent authority. Tree cutting will be managed through plantation. The Plantation program would rigorously be done using indigenous species.

(viii) **Total water requirement and its source:** Water will be required mainly during construction period. About 2351 KL/day water will be consumed during peak construction period for the project road during construction.

Drinking water for construction workers will be sourced from groundwater after having requisite permission from competent Authority.

**Waste water generation, treatment and disposal:** Yes, the liquid effluent generated from labour/construction camps will be treated in septic /sedimentation tank before diverting it to soak pit.

(ix) **Water bodies, diversion if any:** The project alignment is passing through 1 river and 9 no of canals & nallahs.

(x) **Whether the project is in Critically Polluted area:** No.

(xi) **Terrain, level with respect to MSL, requirement of filling if any:** The project road is in plain terrain. Spoil, overburden will be generated during excavation for alignment and at borrow areas. It is proposed to reuse these materials for construction of embankment, rehabilitation of borrow areas and other allied sites and or filling of low lying/disfigured wasteland.
(xii) Municipal solid waste generated disposal facility: Solid waste generated in Construction and workers camp will be segregated at source and will be disposed off/buried at nearest municipal disposal site after approval of concerned authority in environmentally acceptable manner.

(xiii) Hazardous wastes (as per Hazardous Waste Management Rules): Waste oil and lubricants will be stored in containers and periodically will be sold to third parties authorized by Pollution Control Board for their further usage.

(xiv) National Park/ Wild Life Sanctuary in 10 km radius area & Eco-Sensitive Zone in 10 km radius area: The proposed alignment is located at a distance of 9 km from the outer boundary of Nawabganj bird Sanctuary towards south eastern direction.

(xv) If the project involves diversion of forest land, extend of the forest land: Yes, 27.224 ha of forest land involved in the project. Application for forest clearance and wildlife clearance will be submitted later.

(xvi) Investment/Cost of the project: INR 4467.41 Crore.

(xvii) Benefits of the project: This Road projects will improve the economic and social welfare of those using the road or served by it. Increased road capacity and improved pavements can reduce travel times and lower the costs of vehicle use. Benefits include increased access to markets, jobs, education and health services, and reduced transport costs for both freight and passengers, reduce fuel consumption and exhaust emissions from the vehicle plying on the road.

Further, expressway construction will lead to economic development of the region that might propel change in land use as ribbon development in the neighboring area in future.

(xviii) Employment potential: This Road projects will improve the economic and social welfare of those using the road or served by it. Ultimately it will create jobs by increasing access to markets, education and health services etc.

(xix) If any court case pending for violation of the environmental laws: No Court case is Involved.

3.4.2 The proposal was considered in this meeting (197th EAC meeting held on 17th September, 2018). The EAC after detailed deliberation recommended the project for grant of ToR, and for preparation of EIA/EMP report with public consultations subject to compliance of all conditions as notified in the standard ToR applicable for such projects and specific conditions, as mentioned below:

(i) Suitable arrangements should be made to avoid the congestion at both
the exit points of proposed highway.

(ii) Water bodies along proposed alignment needs to be surveyed for their conservation and sustainability. Each water body should be clearly identified with its size, any important and threatened species associated with it, its usage by local community along with shape file of each of water body. Impact of proposed project on these water bodies to be identified along with mitigation measures. Emphasis should be given to avoid alignment passing through/over water bodies.

(iii) Certificate from the Chief Wildlife Warden of the state of Chattisgarh stating that no protected area/animal corridor are situated within the 10 km range of the proposed alignment.

(iv) Source of water availability to be ascertained for construction and domestic need. Necessary permissions to be obtained from State Authority/ CGWA if any.

(v) Rain water harvesting structures to be constructed at the either sides of the road with special precaution of oil filters and de-silting chambers.

(vi) Social Indicators need to be developed for understand the socio-economic profile of the society/people living around the proposed alignment.

(vii) Provide compilation of road kill data on existing roads (national and state highways) in the vicinity of the proposed project.

(viii) ROW should not exceed 70m at any point of the proposed 8-lane alignment as per MoRT&H circular no. NH-15017/21/2018 dated 10th May, 2018. Since, the ROW of the proposed alignment shall be reduced from 120m to 70m, therefore it is important to assess the present and projected traffic densities on the highway/expressway.

3.5 Development of 8-lane (Greenfield Highway) from Etawa (Ch. 284.000 km) to after Chambal River near Durjanpura Village (Ch. 349.000 km) Section of NH-148 N (length 65.0 km) in the state of Rajasthan M/s National Highways Authority of India – Terms of Reference


3.5.1 The project proponent along with the EIA consultant M/s Feedback infra Private Limited made a presentation and provided the following information to the Committee:

(i) The proposal involves the Development of 8 lane (Greenfield Highway) from Itawa village (Ch. 284.000 Km) to after Chambal River near Durjanpura village at (Ch. 349.000 Km) Section of NH-148 N (Total length 65.0 Km), Under BHARATMALA PRIJOJANA Lot-4/Pkg-4 in the
state of Rajasthan by M/s National Highway Authority of India

(ii) **Location:** The proposed alignment starts from Ch. 284.000 km (26°01'57.36"N, 76°15'42.35"E) near Itawa village in Sawai Madhopur district and ends after Chambal River near Durjanpura village at Ch. 349.000 Km (25°28'20.34"N, 76°12'41.81"E) in Sawai Madhopur, Bundi and Kota district of Rajasthan State. Total Length of the proposed project is about 65.0 km.

(iii) **Land use of the site and around the site up to 10 km radius:** Agriculture, barren, habitation and forest areas.

(iv) **Proposed RoW:** 100m.

(v) **Rehabilitation involved, if any:** The details of structures to be rehabilitated or resettled shall be provided in the EIA report.

(vi) **Justification for selection of the site:** Three alignment options (3 Greenfield routes) were analyzed for the project and comparison has been drawn based on techno-commercial characteristics (details alternatives analysis provided in Form-1). Major technical aspects for comparative analysis were based on environment, social and design aspects. Efforts were made to avoid the forest, wildlife and settlement areas to the maximum extent possible.

The proposed alignment has been selected due to the following reasons:

- Minimum disturbance to the habitation areas
- Route selection in such a way, so that, forest area can be avoided to the maximum extent
- Better connectivity to Sawai Madhopur, Tonk, Bundi and Kota district in the state of Rajasthan and major towns connectivity with existing roads SH-1, SH-33 and NH-116.
- The new access controlled green field national highway will pave the way for economic development of the region.
- Better connectivity to major towns through existing roads SH-1, SH-33 and NH-116.
- Lesser the fuel consumption results in reduction of pollution level
- Avoid the Amli Tiger Safari, which is being developed by State Govt.
- Proposed project road is having significant distance from Ranthambore National Park (12.90km) and Sawai Madhopur WLS (10.58 km).

(vii) **Tree cutting, types, numbers, girth size etc:** Tree counting is under
(viii) **Total water requirement and its source:** It is estimated that the project will need about 3395000.0 KL water for construction phase. The water for the construction phase will be met by water tankers from approved vendors. Bore-well (if required) will be operated after approval from the competent authority. Total water requirement will be estimated during the detail EIA study.

(ix) **Waste water generation, treatment and disposal:** Waste water shall be generated by workers which shall be treated in septic tanks.

(x) **Water bodies, diversion if any:** Bridge shall be proposed, where the alignment crossing the water bodies. The proposed alignment is crossing the following rivers.

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<tr>
<th>S. No.</th>
<th>Location/Ch.(Km)</th>
<th>Type of structure</th>
<th>Type of crossing</th>
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<td>1.</td>
<td>309+840</td>
<td>Major Bridge</td>
<td>Chakan River</td>
<td>28X60</td>
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<tr>
<td>2.</td>
<td>316+950</td>
<td>Major Bridge</td>
<td>Mui River</td>
<td>2X30</td>
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<tr>
<td>3.</td>
<td>331+705</td>
<td>Major Bridge</td>
<td>Mej River</td>
<td>4X60</td>
</tr>
<tr>
<td>4.</td>
<td>347+025</td>
<td>Major Bridge</td>
<td>Chambal River</td>
<td>14X50</td>
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</table>

(xi) **Whether the project is in Critically Polluted area:** No.

(xii) **Municipal solid waste generated disposal facility:** 257.5 Kg/day (approx) during construction phase and 66.95 Kg/day (approx) during operation phase (@ 500 gm per person)

(xiii) **National Park/ Wild Life Sanctuary in 10 km radius area & Eco-Sensitive Zone in 10 km radius area:** The proposed alignment is passing through the National Chambal Sanctuary and buffer area of Ranthambore Tiger Reserve, while having sufficient distance about 12.90 km & 10.58 km from the Ranthambore National Park and Sawai Madhopur Wildlife Sanctuary respectively.

(xiv) **If the project involves diversion of forest land, extend of the forest land:** Yes.

- The proposed project is passing through the Papdi protected forest, tentative length of affected forest along the proposed alignment is about 1.41 km with approx. 13.99 ha of affected forest area considering the RoW of 100 m.

- The affected forest land is 2.25% of the total required land for the development of the project road.

(xv) **Investment/Cost of the project:** INR about 3500 Crore.

(xvi) **Benefits of the project:** As per MoRTH Notification dated 8th May,
2018, the proposed project is declared a part of NH-148 N. The project will provide a better connectivity of Sawai Madhopur, Tonk, Bundi and Kota districts in the state of Rajasthan. Proposed Green-field alignment will gear up the economical growth of the region by providing time optimised reach to the wide market of Capital City.

(xvii) **Employment potential:** Approx. 415 during construction and 130 (approx.) during Operation phase total 545 Nos.

(xviii) **If any court case pending for violation of the environmental laws:** No.

### 3.5.2

EAC, while deliberating the proposal its 197th meeting on 17th September, 2018, observed that the proposed stretch is important from ecological and environmental point of view. Therefore, it is **recommended to conduct a site visit by a sub-committee of the EAC** before the proposal is considered further.

### 3.6

**Development of 8-lane (Greenfield Highway) from after Chambal River near Durjanpura village (Ch. 349.000 km) to Banda Hera village (Ch. 392.800 km) Section of NH-148 N (length 43.8 km) in the state of Rajasthan by M/s National Highways Authority of India – Terms of Reference**


### 3.6.1

The project proponent along with the EIA consultant M/s Feedback Infra Private Limited made a presentation and provided the following information to the Committee:

(i) The proposal involves the Development of 8 lane (Greenfield Highway) from after Chambal River near Durjanpura village at (Ch. 349.000 Km) to Banda Hera village (Ch. 392.800 Km) Section of NH-148N (Total length 43.8Km), Under BHARATMALA PRIYOJANA Lot-4/Pkg-4 in the state of Rajasthan

(ii) **Location:** Tehsil Digod and Ladvura of Kota District, State Rajasthan.

(iii) **Land use of the site and around the site up to 10 km radius:** Agricultural & barren land.

(iv) **Proposed RoW:** 100m.

(v) **Rehabilitation involved, if any:** The details of structures to be rehabilitated or resettled shall be provided in the EIA report.

(vi) **Justification for selection of the site:** Three alignment options are considered in order to finalise the proposed alignment. All the three
alignments are compared in terms of techno-commercial aspect consisting minimum tree felling, minimum exorbitant cost, comparatively lower land degradation and lesser environmental impacts.

(vii) Proposed alignment was considered due to following reasons.

- Least affected forest Area
- Better connectivity to major towns through spurs at Alwar utilizing existing SH-18 & NH-248A.
- Avoids the Amli Tiger Safari, which is being developed by State Govt.
- Having significant distance from Ranthambore National Park and Sawai Madhopur WLS as compare to other options.
- Minimum number of settlements affected.

(viii) Tree cutting, types, numbers, girth size etc.: Tree enumeration is under process

(ix) Total water requirement and its source: Approx 2,826,000 KL water shall be required during the construction phase of the project. The water for the construction phase shall be met by water tankers from approved vendors. Bore-well, if required, shall be operated after approval from the competent authority. Total water requirement shall be estimated during the detail EIA study.

(x) Waste water generation, treatment and disposal: Waste water shall be generated by workers and diverted in septic tanks.

(xi) Water bodies, diversion if any: The proposed stretch passes through 11 streams. Bridges shall be provided at all the crossings.

(xii) Whether the project is in Critically Polluted area: No.

(xiii) Municipal solid waste generated disposal facility: 140.0 Kg/day (approx.) during construction phase and 65.0 kg/day (approx.) during operation phase.

(xiv) National Park/ Wild Life Sanctuary in 10 km radius area & Eco-Sensitive Zone in 10 km radius area: National Chambal Sanctuary approx. 1.7 km.

(xv) If the project involves diversion of forest land, extend of the forest land: No forest land shall be diverted for the project.

(xvi) Investment/Cost of the project: INR 1900 Crore (approx.).

(xvii) Benefits of the project: As per MoRTH Notification dated 8th May, 2018, the proposed project is declared a part of NH-148 N.

- The project will provide a better connectivity of Project district and in
turn to the Rajasthan State.

- Proposed Green-field alignment will gear up the economic growth of the region by providing time optimised reach to the wide market of Capital City.
- Direct Employment: During construction phase; and Temporary Indirect Employment: Vendors, suppliers, electricians, plumbers and other allied industries will benefit during implementation phase;
- Permanent Indirect Employment: During the operations phase, the implementation will result in employment generation for cleaners, guards, local vendors, kiosk operators, drivers, doctors etc.

(xviii) **Employment potential:** Approx. 280 during construction and 130 (approx.) during Operation phase.

(xix) **If any court case pending for violation of the environmental laws:** No.

| 3.6.2 | EAC, while deliberating the proposal its 197\textsuperscript{th} meeting on 17\textsuperscript{th} September, 2018, observed that the proposed stretch is important from ecological and environmental point of view. Therefore, it is **recommended to conduct a site visit by a sub-committee of the EAC** before the proposal is considered further. |
| 3.7 | **Any other item with the approval of the Chair:**

The proposals of M/s Maharashtra State Road Development Corporation for development of Nagpur- Mumbai Expressway (Phase – II and Phase V) were recommended by EAC in its 191\textsuperscript{st} meeting held on 25\textsuperscript{th} June, 2018. However, while processing the file, it is observed that there are large number of trees to be cut for both the projects. It is therefore decided to put up both the proposals before EAC for further appraisal. Accordingly, the matter was discussed in the 197\textsuperscript{th} meeting held on 17\textsuperscript{th} September, 2018 wherein **EAC recommended to grant the EC subject to following modifications to existing conditions recommended by EAC:**

(i) **Third party audit of plantations should be carried out by independent agency of national repute.**

(ii) **Three rows the plantation of mixed species to be maintained along both sides of the proposed highway.**
List of the Members attended 197th meeting of Expert Appraisal Committee for Projects related to Infrastructure Development, Industrial Estate and Miscellaneous projects held on 17th September, 2018 and approved the above minutes

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Name of the EAC member</th>
<th>Role/Designation</th>
<th>Signature</th>
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<tbody>
<tr>
<td>1</td>
<td>Dr. Deepak ArunApte, Director, Bombay Natural History Society (BNHS), Mumbai</td>
<td>Chairman</td>
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<tr>
<td>2</td>
<td>Dr. V.K. Jain, Professor of Chemistry, School of Sciences, Gujarat University, Ahmedabad</td>
<td>Member</td>
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<td>3</td>
<td>Dr. M.V. Ramana Murthy, Project Director, NIOT Campus, Pallikarai, Chennai</td>
<td>Member</td>
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<td>4</td>
<td>Shri T.P. Singh, Advisor, MEITY, New Delhi</td>
<td>Member</td>
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<td>5</td>
<td>Dr. N.K. Verma, Former AD, CPCB, New Delhi</td>
<td>Member</td>
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<td>6</td>
<td>Dr. Manoranjan Hota, Former Advisor/Scientist-G, MoEF&amp;CC</td>
<td>Member</td>
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<td>7</td>
<td>Dr. Anil Kumar Singh, IFS (Retd), Ex PCCF Assam, Tower F, Float No. 103 Grand Ajnara Heritage, Sector 74, Noida, UP</td>
<td>Member</td>
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<td>8</td>
<td>Dr. Mohan Singh Panwar, Associate Professor, Garhwal University, Uttarakhand</td>
<td>Member</td>
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<td>9</td>
<td>Shri Narendra Surana, Managing Director, Bhagyanagar India Limited and Surana Telecom. AndPower Limited, Hyderabad</td>
<td>Member</td>
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<td>10</td>
<td>Shri Prabhakar Singh, Special DG, CPWD, Delhi Region, Nirman Bhawan, New Delhi (Building Construction Sector</td>
<td>Member</td>
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<td>11</td>
<td>Dr. Anuradha Shukla, Central Road Research Institute (CRRI), Mathura Road, New Delhi</td>
<td>Member</td>
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<td>12</td>
<td>Dr. D. Chakraborty, Scientist MoWR, RD &amp; GR, New Delhi</td>
<td>Member</td>
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<td>13</td>
<td>Shri N.K. Gupta, Member (EAC), Scientist E &amp; In-charge (ESS), Central Pollution Control Board,</td>
<td>Member</td>
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<td>14.</td>
<td>Smt. Bindu Manghat, Director Survey of India, New Delhi</td>
<td>Member</td>
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<td>15.</td>
<td>Shri Raghu Kumar Kodali, Director/Scientist-F, IA-III Division, MoEF&amp;CC</td>
<td>Member Secretary (Infra-EAC)</td>
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