### HARYANA STATE POLLUTION CONTROL BOARD C-11, SECTOR-6, PANCHKULA

Website - www.hspcb.gov.in E-Mail:hspcbho@gmail.com Ph:0172-2577870-873

To

The Secretary,

Ministry of Environment, Forest and Climate Change Government of India, Paryavaran Bhawan, Jor Bagh Road, Aliganj New Delhi-110003.

Subject:

Proceeding of the consultation (Hearing) held on 29.04.2022 under the provision of EIA notification 2006 (amended to date) for Construction of 6 lane Greenfield connectivity from DND- Faridabad-Ballabgarh bypass (from km 32+600) to Jewar International Airport under Bharatmala Pariyojna (Lot-4/Pkg-1) in the State of Haryana and uttar Pradesh by M/s National Highway Authority of India (NHIA), Corridor Management Unit- Mathura (at Faridabad), Plot No. 8 Near Sarai Toll Plaza Building, Mathura Road, Faridabad

Kindly refer to the subject noted above.

In this connection, I have been directed to enclosed herewith the proceeding of public hearing (in original) conducted on 29.04.2022 at 11 A.M at the project site under Environment Impact Assessment Notification dated 14.09.2006 for Construction of 6 Iane Greenfield connectivity from DND- Faridabad-Ballabgarh bypass (from km 32+600) to Jewar International Airport under Bharatmala Pariyojna (Lot-4/Pkg-1) in the State of Haryana and uttar Pradesh by M/s National Highway Authority of India (NHIA), Corridor Management Unit- Mathura (at Faridabad), Plot No. 8 Near Sarai Toll Plaza Building, Mathura Road, Faridabad Haryana for information and further necessary action please.

Sr. Env. Engineer (HQ)
For Member Secretary
Ded ( 28 08 8028

Endst. 450CB/2028/3184-86

A copy of above is forwarded to the following for information and further necessary action:-

Sr. EE (IT) HSPCB, for uploading the proceeding on website of the Board.

Rgional Officer, Palwal w.r.t. his letter No.443 dated 08.06.2022.
 Further, He is advised to not to repeat the delay in future for sending the proceeding of public hearing, as in this case the time schedule of 08 days as prescribed in EIA notification dated 14.09.2006 has not been followed by you.

M/s National Highway Authority of India (NHAI), Corridor Management Unit-Mathura (at Faridabad), Plot No. 8 Near Sarai, Toll Plaza Building, Mathura Road, Faridabad.

Sr. Env. Engineer (HQ) For Member Secretary



### Regional Office, Palwal Region Haryana State Pollution Control Board Phagna Tower, Ward No. 10, NH-02, Near Red Rocks Cinema, Palwal

Website - www.hspcb.gov.in F-Mail - hspcbropal@gmail.com

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No. HSPCB/PAL/2022/ 443

Dated: 08 | 06 | 2022

The Chairman, Haryana State Pollution Control Board, Panchkula.

Sub: Proceeding of the public consultation (Hearing) held on 29.04.2022 under the provision of EIA notification 2006 (amended to date) for Construction of 6 lane Greenfield connectivity from DND-Faridbad-Ballabhgarh bypass (from km 32+600) to Jewar International Airport under Bharatmala Pariyojna (Lot-4/Pkg-1) in the State of Haryana and Uttar Pradesh by M/s National Highway Authority of India (NHAI), Corridor Management Unit-Mathura (at Faridabad), Plot No. 8 Near Sarai Toll Plaza Building, Mathura Road, Faridabad

In this connection, please find enclosed herewith the Proceeding of the public consultation (Hearing) held on 29.04.2022 under the provision of EIA notification 2006 (amended to date) for Construction of 6 lane Greenfield connectivity from DND-Faridbad-Ballabhgarh bypass (from km 32+600) to Jewar International Airport under Bharatmala Pariyojna (Lot-4/Pkg-1) in the State of Haryana and Uttar Pradesh by M/s National Highway Authority of India (NHAI), Corridor Management Unit-Mathura (at Faridabad), Plot No. 8 Near Sarai Toll Plaza Building, Mathura Road, Faridabadat Playing ground near Bagpur Police Chowki, Tehsil and District Palwal, Haryana in original duly signed by the Additional Deputy Commissioner, Faridabad along with the following documents:

Sr. No.	Particular	Quantity
1.	Proceeding of Public Hearing	One number in original duly signed by Additional Deputy Commissioner, Palwal.
2.	Photographs of Public Hearing	Two set
3.	CDs of Public Hearing	Two set
4. Attendance register of Officers & Public One number in origination of the Public Hearing		One number in original
5.	Copy of project report	One number

It is submitted for you information & further necessary action please.

DA/ as above

Regional Officer Palwal Region

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Sub: Proceeding of the public consultation (Hearing) under the provision of EIA notification 2006 (amended to date) for Construction of 6 lane Greenfield connectivity from DND-Faridbad-Ballabhgarh bypass (from km 32+600) to Jewar International Airport under Bharatmala Pariyojna (Lot-4/Pkg-1) in the State of Haryana and Uttar Pradesh by M/s National Highway Authority of India (NHAI), Corridor Management Unit-Mathura (at Faridabad), Plot No. 8 Near Sarai Toll Plaza Building, Mathura Road, Faridabad.

Ref:- Public hearing held on dated 29.04.2022 at 11:00 AM at Playing ground near Bagpur Police Chowki, Tehsil and District Palwal.

The copy of proceeding of the public consultation (Hearing) under the provision of ELA notification 2006 (amended to date) for Construction of 6 lane Greenfield connectivity from DND-Faridbad-Ballabhgarh bypass (from km 32+600) to Jewar International Airport under Bharatmala Pariyojna (Lot-4/Pkg-1) in the State of Haryana and Uttar Pradesh by M/s National Highway Authority of India (NHAI), Corridor Management Unit-Mathura (at Faridabad). Plot No. 8 Near Sarai Toll Plaza Building, Mathura Road, Faridabad is attached for kind approval please.

Regional Officer HSPCB, Palwal

Additional Depart Commissioner

Palwal, Haryana

To
The Chairman,
Haryana State Pollution Control Board,
Panchkula, Haryana

Kind Attention: Sr. Environment Engineer- Coordination Cell (HQ)

Sub: Proceeding of the public consultation (Hearing) under the provision of EIA notification 2006 (amended to date) for Construction of 6 lane Greenfield connectivity from DND-Faridbad-Ballabhgarh bypass (from km 32+600) to Jewar International Airport under Bharatmala Pariyojna (Lot-4/Pkg-1) in the State of Haryana and Uttar Pradesh by M/s National Highway Authority of India (NHAI), Corridor Management Unit-Mathura (at Faridabad), Plot No. 8 Near Sarai Toll Plaza Building, Mathura Road, Faridabad.

Kindly refer to the subject noted above.

In this regard, please find enclosed herewith the duly signed proceeding of the Public Hearing under the provision of EIA notification 2006 (amended to date) for Construction of 6 lane Greenfield connectivity from DND-Faridbad-Ballabhgarh bypass (from km 32+600) to Jewar International Airport under Bharatmala Pariyojna (Lot-4/Pkg-1) in the State of Haryana and Uttar Pradesh by M/s National Highway Authority of India (NHAI), Corridor Management Unit-Mathura (at Faridabad), Plot No. 8 Near Sarai Toll Plaza Building, Mathura Road, Faridabad, under chairmanship of Shri Uttam Singh, Additional Deputy Commissioner, Palwal on 29.04.2022 at 11:00 AM. The original proceedings with two photo copies, three sets video recording (DVDs), two sets of Photo albums, copies of attendance register of officers & public and Annexures are also attached for further submission to Competent Authority for approval.

It is for kind information, and further necessary action, please.

DA: As Above

Regional Officer Palwal Region

Sub: Proceeding of the public consultation (Hearing) under the provision of EIA notification 2006 (amended to date) for Construction of 6 lane Greenfield connectivity from DND-Faridbad-Ballabhgarh bypass (from km 32+600) to Jewar International Airport under Bharatmala Pariyojna (Lot-4/Pkg-1) in the State of Haryana and Uttar Pradesh by M/s National Highway Authority of India (NHAI), Corridor Management Unit-Mathura (at Faridabad), Plot No. 8 Near Sarai Toll Plaza Building, Mathura Road, Faridabad.

Ref:- Public hearing held on dated 29.04.2022 at 11:00 AM at Playing ground near Bagpur Police Chowki, Tehsil and District Palwal.

In this connection, please find enclosed herewith the duly singed proceeding of the Public Hearing under the provision of EIA notification 2006 (amended to date) for Construction of 6 lane Greenfield connectivity from DND-Faridbad-Ballabhgarh bypass (from km 32·600) to Jewar International Airport under Bharatmala Pariyojna (Lot-4/Pkg-1) in the State of Haryana and Uttar Pradesh by M/s National Highway Authority of India (NHAI). Corridor Management Unit-Mathura (at Faridabad), Plot No. 8 Near Sarai Toll Plaza Building, Mathura Road. Faridabad, under chairmanship of Shri Uttam Singh, Additional Deputy Commissioner, palwal on 29.04.2022 at 11:00 AM.

It is for kind information, and further necessary action, please.

Regional Officer HSPCB, Palwal

Additional Deputy Commissioner Palwal, Haryana

Proceeding of the public consultation (Hearing) under the provision of EIA notification 2006 (amended to date) for Construction of 6 lane Greenfield connectivity from DND-Faridbad-Ballabhgarh bypass (from km 32+600) to Jewar International Airport under Bharatmala Pariyojna (Lot-4/Pkg-1) in the State of Haryana and Uttar Pradesh by M/s National Highway Authority of India (NHAI), Corridor Management Unit-Mathura (at Faridabad), Plot No. 8 Near Sarai Toll Plaza Building, Mathura Road, Faridabad.

The public consultation (hearing) was held as a mandatory requirement under EIA notification dated 14.09.2006 amended thereof. Public information was published by Haryana State Pollution Control Board (HSPCB) Panchkula on Date 25.03.2022 in newspapers such as The Tribune & Danik Bhaskar for the conduct of public hearing for environmental clearanceof the project scheduled on 16.03.2022.

PROJECT- 6 lane Greenfield connectivity from DND-Faridbad-Ballabhgarh bypass (from km 32+600) to Jewar International Airport under Bharatmala Pariyojna (Lot-4/Pkg-1)

Date & Time: 29.04.2022, 11:00 AM

Venue: Playing ground near Bagpur Police Chowki, Tehsil and District Palwal.

### Officer/Official present:

- 1. Sh. Uttam Singh, Additional Deputy Commissioner, Palwal
- 2. Sh. Vijay Chaudhary, Regional Officer, HSPCB, Palwal
- 3. Sh. Randeep Sindhu, AEE, HSPCB, Palwal
- 4. Sh. Dheeraj Singh DGM (NHAI), Faridabad
- 5. Sh. Dinesh Kumar, Naib Tehsildar, Palwal
- 6. Sh. Nanak Chand, Patwari

All the people of the area were informed through Public announcement to attend this hearing.

Sh. Uttam Singh, Additional Deputy Commissioner, Palwal presided over this hearing held on 16.03.2022. Besides Govt. Officers/ officials of the District Administration, approx. 21 persons from Palwal and other nearby villages attended the hearing at Playing ground near Bagpur Police Chowki, Tehsil and District Palwal. The hearing was also attended by the NHAl officials and other representatives of NHAI and the residents of nearby villages given as per Annexure-"B".

Copy of the attendance Sheet, CD and Photographs prepared during hearing are enclosed for reference as Annexure-'C'.

Copy of the executive summary of the EIA for "Development of 6 lane Greenfield connectivity from DND-Faridbad-Ballabhgarh bypass (from km 32+600) to Jewar International Airport under Bharatmala Pariyojna (Lot-4/Pkg-1)" were distributed to the audience present in the hearing.

Mr. Vijay Chaudhary, Regional Officer, HSPCB. Palwal Region, welcomed Additional Deputy Commissioner, Palwal, other officers of the District Administration and public present in the hearing. He briefed about the project and necessity of the public hearing being held under provision of EIA Notification of 2006, amended thereof .Further, formal permission to inaugurate the process of public hearing was granted by the Chairman Shri Uttam Singh. Additional Deputy Commissioner, Palwal.

Thereafter Mr. Vijay Chaudhary, Regional Officer, HSPCB, Palwal requested to Environment Consultant to give the presentation of the project in detail and remedies taken by the project proponent to control the environmental impacts which may arise after expansion of the existing project.

**DR Radhey Shyam Gangwar** (Environment Consultant) welcomed the officials and began the presentation with their due permission. He explained about the development of 6 lane Greenfield connectivity from DND- Faridbad - Ballabhgarh bypass (from km 32+600) at Palwal. The Environment Consultant also briefed in details about the project:

- Project Location
- Environmental settings of 10km radius study area
- Description of the project
- · Baseline monitoring results of air, water, noise and soil
- · Air and noise quality control
- Greenbelt/ planation development
- CSR/ESC activities will be carried out

After the presentation, **Mr. Vijay Chaudhary**, Regional Officer, HSPCB, Palwal requested to the public to raise their suggestions, objections, views, queries and doubts about any problem which may rise during **construction**.

	Details of query/statement /information /clarification sought by		/inform	ation	/cla	rification	
	the person pre	esent		given	by	the	project
				propone	ent		

श्री रविंद्र सिंह मान सिंह फार्म बागपुर कलां हमारी जो ज़मीन जा ही है २४ मुसतील के ५ नंबर है उसमे मेरा कुछ हिस्सा बच रहा है तो उसका हम क्या करे दूसरी बात जो भूमि ली जा रही हैं। उसका मुआवजा क्या दे रहे हैं मीटर के हिसाब से दे रहे हैं ? UP. में कुछ जानकरी मिली है की ५०००-5100 मीटर दी जा रही है सर मैं यह बताना चाहता हु की पहले ये ज़मीन गुड़गाँव जिले इ थी फिर फरीदाबाद में आ गयी और अब पलवल में जिसका सर्किल रेट २५ लाख रूपये है मोहना का ५५ लाख रूपये है हमारी ज़मीन की पैदावार भी वह से अच्छा है श्री धीरज जी द्वारा बताया गया की जैसा की आपको बताया गया है की जो मीटिंग राखी गयी है पर्यावरण से सम्बंधित रखी गयी है लेकिन अगर कोई छोटी मोटी बातों ा जवाब दे देइया जायेगा अतः आपसे हाथ जोड़कर निवेदन है की पर्यावरण से सम्बंधित प्रश्न पूछे |

अगर आपको रेट जानना है तो अपने सर्किल ऑफिस जाकर पूछ सकते हैं आप जो रेट बता रहे हैं उसका डिसिशन DRO के दफ्तर से लिया जाता है आपका कलक्ट्रेट रेट और ३ साल में रजिस्टरी होती है उसके हायर साइड लिया जाता है इसमें कलक्ट्रेट रेट ज्यादा है या रजिस्ट्री रेट को एनालाइज करके जो ज्यादा होता है उसे लेते हैं

 श्री राजबीर सिंह बागपुर कलां नमस्कार जी मैं राजबीर सिंह बागपुर से यह क्षेत्र 18-22 गांव में है जिसकी लगभग आबादी 50-55 हज़ार है इसमें अगर क्षेत्र के लिए एक ट्रैक बन जाता तो ठीक है वर्ण खेत्र के लोगो को समस्याएं आएँगी अगर ऐसा नहीं है तो हम लोग इसका प्रयास करें श्री धीरज जी द्वारा बताया गया कीयह एक एक्सेस कंट्रोल हाईवे बनाया जा रहा जो फरीदाबाद को जेवर एयरपोर्ट को कनेक्ट करता है अगर आप ेल्ही एयरपोर्ट जातें ऐन तो 3-4 घंटे लगते हैं यह जो कनेक्टिविटी दी जा रही है छैसा के पास एक लूप दे रहे हैं जिसे इस पर चढ़ सकते हैं जो ताज एक्सप्रेस वे, KMP और जेवर एयरपोर्ट को जोड़ती हैं तो इसमें ऐसा नहीं है की हर जगह इंटरचेंज देना पॉसिबल नहीं है इसकी स्पीड को १२० kmph पर डिज़ाइन किया गया है इसमें यह भी ध्यान रखा गया है की सेफ्टी के बिच कोई बाँधा ना आये जगह जगह रास्ता देना पॉसिबल नहीं है।

श्री धीरज जी द्वारा बताया गया की जो भी आपकी ज़मीन बच रही है वो आपकी है सरकार को जितनी श्री राजबीर सिंह बागपुर कलां

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श्री रजबीर सिंह द्वारा फिर कहा गया की जो बातें की गयी बहुत अच्छी हैं फिर भी एक प्रश्न ले आया हु की इसकी उचाई कितनी होगी जिसकी ज़मीन आ ही क्या वह इस सीजन फसल लगा सकते हैं

श्री राजबीर सिंह बागपुर कलां श्री रजबीर सिंह द्वारा बताया गया की कुछ किसान भाइयों के प्रस्तावित परियोजना में वृक्ष आ रहे क्या उन वृक्षों के बारे में या प्रक्रिया के बारे में या आपके कोई सुझाव हमें बताने की कृपा करें। आवश्यकता है उतना ही लेगी जो ज़मीन आपकी बचती हैं वो आपकी है आने वाले समय में आप खुद इसका आभास करेंगे इस परियोजना से आपके क्षेत्र में बहुत अच्छा डेवलपमेंट होने जा है जो आपके क्षेत्र के लिए मील का पत्थर साबित होगा जैसे गुडगाँव का डेवलपमेंट हुआ है एक्साक्ट्ली एयरपोर्ट से १५ किमी के रेडियस में वैसे ही इस क्षेत्र का विकास होने जा रहा थोड़ा सा धैर्य रखेंगे तो यह ज़मीन आपके ही काम आने वाली है कमर्शियल एक्टिविटी को बढ़ावा मिलेगा शायद उस समय आभाष होगा की जो ज़मीन बच रही उसकी या क़ीमत है

श्री धीरज जी द्वारा बताया गया की इसमें नोटिफिकेशन होते है इसमें 3A से 3G तक होता है जिसमे 3A और 3D हो चूका है 3G अवार्ड आपके DRO के पास वेरिफिकेशन क लिए गया हुआ है अवार्ड के बाद आपके पैसे देने का कार्य शुरू हो जायेगा तब तक आप कुछ भी कर लीजिये अवार्ड के बाद आप कुछ ना करें जिससे आपको नुकसान हो मात्र २ महीने बाद पैसे बटने की प्रक्रिया स्टार्ट हो जाएगी इसमें ज्यादा समय नहीं लगेगा कुकी आपके दो ही गांव हैं

श्री धीरज जी द्वारा बताया गया की प्रस्तावित alignment में कुछ भी आता है तो वो आपकी सम्पति है और रही बात प्लांट्स की तो हम एक के बदले १० लगते हैं कोशिश यही होती है जितना भी प्रस्तावित परियोजना जा रहा है उसमे प्लांटेशन किया जायेगा उसमे आपको भी सहयोग कर सकते हैं जिससे आपको रोजगार के अवसर मिलेंगे

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2093	3911/2022/REGION PA	रहे हैं और एक कमरा बच रहा है तो उस एक कमरे का क्या किया जायेगा	बचा हुआ कमरा आपकी ही है अपन उससे १९ न
6	श्री रणदीप सिन्धु	श्री रणदीप सिन्धु ने पूछाकी किस प्रकार के पेड़ लगाये जायेंगे	बताया की यहाँ के वातावरण के अनुसार स्थानीय पींधे शीशम, नीम तथा फूलदार पोधे लगाये जायेंगे

As there were no further questions, Mrs. Vijay Chaudhary, RO, HSPCB, Palwal closed the ceremony of public hearing with the permission of Shri Uttam Singh, Additional Deputy Commissioner, Palwal.

During Public hearing, it was observed that participants from nearby villages were satisfied with the answers given by the representatives of the project proponent regarding questions raised by the participants.

The public hearing was conducted with the vote of thanks to the chair.

DA/ as above

Vijay Chaudhary, RO

HSPCB, Palwal

Uttam Singh, IAS
Additional Deputy Commissioner
Palwal











# **EXECUTIVE SUMMARY**

Construction of 6 lane Greenfield connectivity from DND-Faridabad-Ballabhgarh bypass (from km 32+600) to Jewar International Airport under Bharatmala Pariyojna (Lot-4/Pkg-1) in the State of Haryana and Uttar Pradesh.

Proposed Length - 31.060 Km

# **APPLICANT**

National Highway Authority of India, New Delhi



# **EIA Consultants**



CONSULTANT
P&M Solution
C-88, Sector 65, Noida -201301 – U.P
A QCI –NABET Accredited Organization



www.pmsolution.in

Accreditation No.: NABET/EIA/1992/IA0053

### **EXECUTIVE SUMMARY**

### 1.1 INTRODUCTION

Ministry of Road Transport and Highways, Government of India, has decided to improve the efficiency of freight movement in India. National Highways Authority of India (NHAI) has been entrusted for preparation of DPR to improve the road networks between Haryana and Uttar Pradesh. The proposed access controlled highway project with new alignment has been envisaged through an area that shall have the advantage of simultaneous development as well as shall result in a shorter distance to travel. The junctions with existing road will be planned in the form of interchanges and flyover to ensure uninterrupted flow of traffic.

The proposed road would act as connecting highway between Delhi-Mumbai expressways to Jewar Airport. It will enhance economic development, provide employment opportunities to locals, strengthen tourist development, ensure road safety, and provide better transportation facilities. Vehicle operating cost will also be reduced due to improved road quality. The compensatory plantation and roadside plantation shall further improve the air quality of the region.

# 1.2 DESCRIPTION OF THE PROJECT

The proposed highway starts from Junction with Ballabhgarh Bypass near village Chandawali CH: 0+000 (District-Faridabad, Haryana) and terminating at Jewar International Airport near Ballabh Nagar Urf Karol Bangar village CH: 31+060 (District- Gautam Buddh Nagar, Uttar Pradesh) passing through districts Faridabad, Palwal & Gautam Buddh Nagar in the state of Haryana & Uttar-Pradesh.

Scope of present report is confined to the (Ch. 0+000 to Ch. 31+060).

The Proposed ROW of this section is taken as 60m in which all the configurations shall be fitted with. This is a green field alignment, and is proposed for 6-Lane. The proposed length of Project Highway is about 31.060 kms.

This road passes through approximately 20 villages, 03 districts in the state of Haryana and Uttar Pradesh,

The proposed highway is part of the project under Gautam Buddha Nagar district – Ch.22.300Km to Ch.31.060Km and the total proposed length under Gautam Buddha Nagar district is approx – 9.0 Km.

The proposed project passes through 05 villages (Falaida Khadar, Falaida Bangar, Karauli Bangar, Dayanat Pur, Ballabh Nagar Urf Karol Bangar) of Gautam Buddha Nagar district in the state of Uttar Pradesh.

Table 1.1: Salient features of the project:

S.no.	Parameters/Issues	Description
1.	Length (km)	31.060
2.	Total land acquired (ha)	224.435
3.	Govt. land (ha)	20.435
4.	Pvt. Land (ha)	200
5.	Forest land (ha)	4
6.	100 100 100 100 100 100 100 100 100 100	The alignment does not pass through any wild life sanctuary, protected area and its eco sensitive zone.
7.	No. of trees	3000
8.	No. of structure to be impacted due to proposed alignment	57
9.	No. of structure to be constructed	i. Major Bridges (01) ii. Minor Bridges (01) iii. Flyover (01) iv. Viaduct (01) v. Vehicular underpass (05) vi. LVUP (17) vii. ROB (01) viii. Box Culverts (57)

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10.	Total water requirement	9717 KL/day. Water will be extracted from surface sources. The ground water will be abstracted for campsite after obtaining the permission from competent authority.
11.	RoW	60 m as per the requirement keeping in view the fully access controlled Highway with 6-lane dual carriageway configuration.
12.	Construction material	Cement (T)- 664  Coarse Agg. (cum)- 3515  Fine Agg. (cum)- 56066  Steel (ton)- 9469  Bitumen (ton)- 15339  Bitumen Emulsion (ton)- 926
13.	Connectivity	The proposed highway starts from Junction with Ballabhgarh Bypass near village Chandawali(District-Faridabad, Haryana) and terminating at Jewar International Airport near Ballabh Nagar Urf Karol Bangar village (District- Gautam Buddh Nagar, Uttar Pradesh). CH: 0+000 to31+060
14.	Project cost (cr.)	1906

### 1.3 DESCRIPTION OF THE ENVIRONMENT

The baseline data was generated during Post-monsoon season of 2021 i.e. Oct to dec 2021. The baseline data has been provided in chapter 3 of this report, which shows the values of almost all of the parameters are well within the prescribed limits.

Attribute	Baseline status
Ambient Air Quality	Ambient Air Quality Monitoring reveals that the minimum

	and maximum level of PM2.5 recorded within the study area
	was in the range of 26.01 μg/m3 (at AAQ1- Shahupura -
	01+200) to 49.47 μg/m3 (at AAQ3- Mohna -14+900). The
	minimum and maximum level of PM10 recorded within the
	study area in the range of 53.40 µg/m3 (at AAQ4- Failada
	Bangar -30+600) to 85.75 μg/m3 (at AAQ1- Shahupura -
	01+200).
	The gaseous pollutants SO2 and NOx were within the
	prescribed CPCB limit of 80 µg/m3. For residential and rural
	areas at all stations.
	The minimum and maximum concentration of SO2 recorded
	within the study area was 8.16 μg/m3 (AAQ3- Mohna -
	14+900) to 13.14 μg/m3 (AAQ4- Failada Bangar -30+600).
	The minimum and maximum level of NO2 recorded within
	the study area was in the range of was 10.24 µg/m3 (AAQ5-
	Dayant Pur -31+100) to 16.78 µg/m3. (AAQ2- Panhera
	Khurd -08+800).
Noise Levels	Noise monitoring were carried out at 6 locations. The results
	of the monitoring program indicated that both the daytime
	and night time levels of noise were well within the
	prescribed limits of NAAQS to marginal rise in PM levels
	some locations monitored due to increase in vehicle density.
Water Quality	5 Groundwater samples were analyzed and concluded that:
	The ground water from all sources remains suitable for
	drinking purposes as all the constituents are within the limits
	prescribed by drinking water standards promulgated by
	Indian Standards IS: 10500.
Soil Quality	Soil pH plays an important role in the availability of
Sou Ammil	nutrients. Soil microbial activity as well as solubility of
	metal ions is also dependent on pH. In the study area,
	variations in the pH of the soil were found to be slightly

	the project alignment.
<b>Ecology and Biodiversity</b>	There are no ecologically sensitive areas passing through
	from 31.92 to 35.98 (percentage) by mass.
	ranged from 378-518 µmhos/cm. Water holding capacity
	in the soil. In the collected soil samples the conductivity
	(EC) is a measure of the soluble salts and ionic activity
	neutral to alkaline (7.27 to 7.62). Electrical conductivity

# 1.4 ANTICIPATED ENVIRONMENTAL IMPACTS & MITIGATION MEASURES

- Slight change in the micro-climate of the area is expected due to Heat Island Effect.
- There will be a marginal rise in PM levels during the construction activities, which shall again be within prescribed limit after the construction activities are over.
- The area is likely to experience a marginal increase in noise level due to increase in vehicle density after construction of the road.
- Contamination to water bodies may result due to spilling of construction materials, oil, grease, fuel and paint etc. This will be more prominent in case of locations where the project road crosses rivers, canals, nallahs, etc. Mitigation measures have been planned to avoid contamination of these water bodies.
- Diversion of forest land has been envisaged for this project. Hence, Forest Clearance under the purview of Forest (Conservation) Act, 1980 is required. The application of forest clearance is under process. Adequate compensatory afforestation has been planned as a mitigation measure. The project road doesn't cross any Protected Area. Since the project road is a green field project, acquisition of land shall be required.
- During the construction of the proposed project, the topography may change marginally due to cuts & fills for project road and construction of project related structures etc.
- Provision of construction yard for material handling will also alter the existing topography.

# 1.5 ANALYSIS OF ALTERNATIVES (TECHNOLOGY & SITE)

Detailed analyses of the alternatives have been conducted taking into account both with and without project. Comparative analysis of all the alternatives has also been conducted. The proposed development of the road is likely to have a positive impact on the economic value of the

region. However, there are certain environment and social issues that need to be mitigated for sustainable development.

Three alternatives were studies and the first one was found out to be most suitable.

# 1.6 ENVIRONMENTAL MONITORING PROGRAM

Regular monitoring of important and crucial environmental parameters is of immense importance to assess the status of environment during operation of the proposed project.

With the knowledge of baseline conditions, the monitoring program can serve as an indicator for any deterioration in environmental conditions due to operation of the project and suitable mitigating steps could be taken in time to safeguard the environment. Monitoring is as important as that of control of pollution since the efficacy of control measures can only be determined by monitoring.

## 1.7 ADDITIONAL STUDIES

The various additional studies have been undertaken for the project including Public Consultation, Risk assessment and Social Impact Assessment/ R&R Action Plans. Public consultation is a continuous process and has been carried out at all stages throughout the project road. To ascertain the views of the affected families to be recorded and has been included in the Social Impact Assessment report.

# 1.8 BENEFITS OF THE PROJECT

The proposed highway starts from Junction with Ballabhgarh Bypass near village Chandawali (District-Faridabad, Haryana) and terminating at Jewar International Airport near Ballabh Nagar Urf Karol Bangar village (District- Gautam Buddh Nagar, Uttar Pradesh). The proposed access controlled project with new alignment has been envisaged through an area which shall have the advantage of simultaneous development as well as shall result in a shorter distance to travel. The junctions with existing road will be planned in the form of interchanges and flyover to ensure uninterrupted flow of traffic.

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 wayside amenities. Vehicle operating cost will also be reduced due to improved road quality. The compensatory plantation and roadside plantation shall further improve the air quality of the region.

# 1.9 ENVIRONMENT MANAGEMENT PLAN

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

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

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

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

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

### 1.10 CONCLUSION

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