Full Title of the Project: Diversion of 7.663 ha. of Forest land for Green Highway starts from jalbehra (KM 0.000) Near Ismailabad to Patti Kankra (KM 22.850) near Shahbad in the State of Haryana under Bharatmala priyojana under Forest Division & Distt. Kurukshetra.

File No. : FP/HR/ROAD/151373/2022

Date of Proposal: 25-05-2022

CHECK LIST SERIAL NUMBER-07

STATEMENT SHOWING DETAILS OF FOREST AREA PROPOSED FOR DIVERSION

| S. No. | District 2 | Division 3 | Range/ Tehsil/ Village | Khasra/ Survey or Compartment Number of Km. Stone | Forest Area proposed for Diversion (Ha.) | Legal status of Forest Area | Remarks |
|-----------|-------------|-------------|------------------------------|---|---|---|---------|
| | Kurukshetra | Kurukshetra | | 5 | 6 | 7 | 8 |
| | | Kuluksuetta | | Diversion of 7.663 ha. of Forest land for Green Highway starts from jalbehra (KM 0.000) Near Ismailabad to Patti Kankra (KM 22.850) near Shahbad in the State of Haryana under Bharatmala priyojana under Forest Division & Distt. Kurukshetra. | 7.663 | PF | |

Date

Place: Kurukshetra

Divisional Porest Officer
Kurukshetra Forest Division
Kurukshetra
Office Seal

Project Name:- Project Name:-

00.000) near Ismailabad to Patti Kankra (km 22.850) near Shahbad in the State of Haryana under Bharatmala Pariyojana (Lot 6/ Package 6).

FOR LOCATING THE PROJECT IN PROTECTED FOREST AREA

The Government of India has decided to take up the development of various road stretches/Corridors in the Northern part of the country to upgrade the road network to meet the growing traffic requirement in this part of the country by augmenting the road capacity for safe and efficient movement of the traffic.

The National Highways Authority of India (NHAI) has been entrusted with the work of Preparation of Detailed Project Report for Development of 4/6 lane green field highway starts of Haryana under Bharatmala Pariyojana (Lot 6/ Package 6).

Project stretch falls in the state of Haryana. Haryana is a North Indian state surrounding New Delhi on 3 sides. The Yamuna River runs along its eastern border with Uttar Pradesh and has a total area of 44,212 Km². It is bordered by Himachal Pradesh to the north-east, by river Yamuna along its eastern border with Uttar Pradesh, by Rajasthan to the west and south, and Ghaggar-Hakra River flows along its northern border with Punjab. Since Haryana surrounds the country's capital Delhi on three sides (north, west and south), consequently a large area of Haryana state is included in the economically important National Capital Region of India for the purposes of planning and development Haryana is a landlocked state in northern India. It is between 27°39' to 30°35' N latitude and between 74°28' and 77°36' E longitude.

The total geographical area of the state is 4.42 m ha, which is 1.4% of the geographical area of the country. The altitude of Haryana varies between 700 and 3600 ft (200 metres to 1200 metres) above sea level. Haryana has only 4% (compared with national 21.85%) area under forests. Karoh Peak, a 1,467-metre (4,813 ft) tall mountain peak in the Sivalik Hills range of the greater Himalayas range located near Morni Hills area of Panchkula district, is highest point in Haryana Forest cover in the state in 2013 was 3.59% (1586 km2) and the Tree Cover in the state was 2.90% (1282 km2), giving a total forest and tree cover of 6.49%. In 2016–17, 18,412 hectares were brought under tree cover by planting 14.1 million seedlings. Thorny, dry, deciduous forest and thorny shrubs can be found all over the state. During the monsoon, a carpet of grass covers the hills. Mulberry, eucalyptus, pine, kikar, shisham and babul are some of the trees found here. The species of fauna found in the state of Haryana include black buck, nilgai, panther, fox, mongoose, jackal and wild dog. More than 450 species of birds are found here.

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, provide better transportation facilities and other facilities such as way side amenities etc. Vehicles operating cost will also be reduced due to improved road quality.

Sufficient care has been taken during the design stage to avoid acquisition of forest areas located along the project road. No Forest area identified along the proposed alignment, however at some locations (crossings point of roads/railway line/canal/drain/river bund etc.), the proposed project falls in notified protected forest areas declared for management purposes and diversion of protected forest land is unavoidable.

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Divisional Forest Officer
Kurukshetra Forest Division
Kurukshetra

Psoject Officer. Il

CERTIFICATE FOR MINIMUM USE OF FOREST LAND

This is to certify that the forest area involved in the proposal is unavoidable and barest minimum i.e. **7.663 Ha** under Forest Division Kurukshetra (Ismailabad to Shahbad Section from design Km 0+000 to design Km 22+850) is proposed for diversion for "Development of 4/6 lane green field highway starts from Jalbehra (km 00.000) near Ismailabad to Patti Kankra (km 22.850) near Shahbad in the State of Haryana under Bharatmala Pariyojana (Lot 6/ Package 6)."



Signature of User Agency

Divisional Forest Officer
Kumbahatra Forest Divisional e

2 UNDERTAKING (FOR PAYMENT OF COST OF COMPENSATORY AFFORESTATION)

I/We, Sh. K.M. Sharma, Project Director, PIU Bhiwani, NHAI, hereby, on behalf of National Highways Authority of India undertake to pay the entire amount for Compensatory Afforestation in lieu of the 7.663 Ha under Forest Division Kurukshetra (Ismailabad to Shahbad Section from design Km 0+000 to design Km 22+850 is proposed for diversion for "Development of 4/6 lane green field highway starts from Jalbehra (km 00.000) near Ismailabad to Patti Kankra (km 22.850) near Shahbad in the State of Haryana under Bharatmala Pariyojana (Lot 6/ Package 6)" per prevailing wage rates at the time of plantation.

Signature of Ector Project Agency

Divisional Forest Officer Kurukshetra Forest Division C

Kurukshetra

|3 <u>undertaking</u> (FOR PAYMENT OF NET PRESENT VALUE OF FOREST AREA)

I/We, Sh. K.M. Sharma, Project Director, PIU Bhiwani, NHAI, hereby, on behalf of National Highways Authority of India undertake to pay the entire amount for Net Present Value in lieu of the **7.663 Ha** under Forest Division Kurukshetra (Ismailabad to Shahbad Section from design Km 0+000 to design Km 22+850 is proposed for diversion for "Development of 4/6 lane green field highway starts from Jalbehra (km 00.000) near Ismailabad to Patti Kankra (km 22.850) near Shahbad in the State of Haryana under Bharatmala Pariyojana (Lot 6/ Package 6)".

I/We, hereby, on behalf of National Highways Authority of India undertake to pay the Net Present Value (NPV) of the above forest land and other cost if any as decided by the State Government. In case of revision of rates the difference amount will also be paid by the user agency.

Inyela St.

Signature of User, Agency

Divisional Forest Officer

Kurukshetra Forest Divisiona Kurukshetra

UNDERTAKING

(FOR PAYMENT OF ADDITIONAL NET PRESENT VALUE OF FOREST AREA)

I/We, Sh. K. M. Sharma, Project Director, PIU Bhiwani, NHAI, hereby, on behalf of National Highways Authority of India undertake to pay the entire amount for Net Present Value in lieu of the **7.663 Ha** under Forest Division Kurukshetra (Ismailabad to Shahbad Section from design Km 0+000 to design Km 22+850) is proposed for diversion for "Development of 4/6 lane green field highway starts from Jalbehra (km 00.000) near Ismailabad to Patti Kankra (km 22.850) near Shahbad in the State of Haryana under Bharatmala Pariyojana (Lot 6/ Package 6)".

I/We, hereby, on behalf of National Highways Authority of India undertake to pay the additional Net Present Value (NPV) of the above forest land and other cost if any as decided by the State Government or as per decision of the Hon'ble Supreme Court. In case of revision of rates the difference amount will also be paid by the user agency.

In/Ha

Signature of the Cotor

Projector

NHAI, FILL SHIP

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Divisional Forest Officer

...shetia

UNDERTAKING

(For No Other Feasible Alternative of Alignment and Diversion of Barest Minimum Forest Land)

I/We, Sh. K. M. Sharma, Project Director, PIU Bhiwani, NHAI, hereby, undertake that, there are no other feasible alternative of alignment for have applied for "Development of 4/6 lane green field highway starts from Jalbehra (km 00.000) near Ismailabad to Patti Kankra (km 22.850) near Shahbad in the State of Haryana under Bharatmala Pariyojana (Lot 6/ Package 6)".

It is further state that the forest area **7.663 Ha** of Protected Forest Land under jurisdiction of Forest Division Kurukshetra (Ismailabad to Shahbad Section from design Km 0+000 to design Km 22+850) involved for the project is Protected Forest Land and it is barest minimum.

India to

Signature of User Agenty

Divisional Forest Officer

The Forest Division of e

Kurukshetra

Undertaking/ Certificate for No Muck Generation and Disposal

This is to certify that as the project road alignment of the project namely "Development of 4/6 lane green field highway starts from Jalbehra (km 00.000) near Ismailabad to Patti Kankra (km 22.850) near Shahbad in the State of Haryana under Bharatmala Pariyojana (Lot 6/ Package 6)." is entirely located in plane area having no scope of tunneling or hill cutting/ deep excavation and accordingly NO muck will be generated due to providing additional facilities, like drain, and minor geometrical improvement of project road. However, some construction debris is likely to be generated which will be utilized (like levelling, making approach road, haul road worker camp/ construction yard etc) in project work and no specific disposal is required.



Signature of User Agency

under Bharatmala Pariyojana (Lot 6/ Package 6).

Undertaking for No Wildlife Area

This is to certified that forest area which is required to be diverted of project namely "Development of 4/6 lane green field highway starts from Jalbehra (km 00.000) near Ismailabad to Patti Kankra (km 22.850) near Shahbad in the State of Haryana under Bharatmala Pariyojana (Lot 6/ Package 6)." is not a part of Wildlife Area. Also proposed project road alignment does NOT traverse through Wildlife Area, Eco-sensitive Zone (ESZ) of notified Ecologically Sensitive Area (ESA) of similar nature.

Undertaking for Non-starting of any activity without sanction from Competent <u>Authority</u>

This is to certify that the construction work of project road namely "Development of 4/6 lane green field highway starts from Jalbehra (km 00.000) near Ismailabad to Patti Kankra (km 22.850) near Shahbad in the State of Haryana under Bharatmala Pariyojana (Lot 6/ Package 6)." has yet not started in forest area/ land.

Any civil/construction work in the forest area in not started and No Violation of Forest Conservation Act, 1980 and or its guidelines have been committed. The work in forest land will be started only after Forest Department accords permission.



Signification of User Agency

4 UNDERTAKING FOR FRA CERTIFICATE

It is to certify that I/We, Sh. K. M. Sharma, Project Director, PIU Bhiwani, NHAI, hereby, on behalf of National Highways Authority of India undertakes that we have applied 7.663 Ha Protected Forest land under jurisdiction of Forest Division Kurukshetra (Ismailabad to Shahbad Section from design Km 0+000 to design Km 22+850) diverting for "Development of 4/6 lane green field highway starts from Jalbehra (km 00.000) near Ismailabad to Patti Kankra (km 22.850) near Shahbad in the State of Haryana under Bharatmala Pariyojana (Lot 6/ Package 6).", settlement of rights under the FRA has been initiated under Forest Right Act, 2006 and will be completed before the final approval.



Signature of User Agency

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भारतीय राष्ट्रीय राजमार्ग प्राधिकरण (सक्त प्रस्का और राजमा प्रमाण) National Highways Authority of India

\$500 / Fan : 91-11-20025074 10025074200 \$50 / Fan : 91-11-2002507 / 25093514

(Ministry of Road Transport and Highways) और 5 को ६, वेटरर 10, ब्राह्मा, नई दिल्ली 110075 G-8 & 6, Sector-10, Dwarte, New Dehi-110075

NHAI/Sahabad-Thol/DPR/2021/HR

Date:29.07.2021

To.

The Regional Officer (P&H)
Chandigarh
National Highways Authority of India
1st Floor, Bays No. 35-38, Sector-4, Panchkula-134112

Sub: 4 lanuing of Sahabad-Thol- LAC Stage-1 proposal-reg.

Ref: RO Chandigarh e-file -88355 note#3 dt. 17.06.2021;

Sir,

Please refer above correspondences cited under reference above. Based upon proposal submitted by RO Chandigarh, PD PIU Bhiwani & DPR Consultant vide above correspondences, the matter was placed before LA Committee to consider proposals for LAC Stage-1 i.e. Alignment approval.

2. In this context, LAC is its 47th meeting hold on 19.07:2021 (Minutes circulated vide letter dt. 26.07.2021)(Copy enclosed) under agenda no.32.01 following was decided:

Agenda 47.02: 4 laning Sahabad-Thol in the state of Haryana (Unique Project Code - N/06037/04001/HR)

Decision: The LAC approved the Green Filed alignment at option-02 with 45m ROW

 The copy of LAC agenda no. 47.02 along with decision of LAC is enclosed herewith for your kind perusal and to take further necessary action accordingly.

Encl: as above.

Yours faithfully,

(V.K. Joshi) GM (T) Haryana

Copy to: PD PIU Bhiwani - for information and necessary action please



भारतीय राष्ट्रीय राजमार्ग प्राधिकरण

(सड़क परिवास और राजिमार्ग मजलय)

National Highways Authority of India

ithinistry of Road Transport and Highways1 जी-5 एवं 6, सेक्टर-10, द्वारका, नई दिल्ली-110075 G-5 & 6, Sector-10, Dwarka, New Delhi-110075

NHAI/Jalbehra-Shahbad/BM/FR/HAM/2022

दूरभार / Phone 91 11 25074108/25074200 चंदरा , Fax 91 11 25093507 / 25093514

Dated: 17.02.2022

Office Memorandum

Sub: Construction of 4-lane Greenfield Jalbehra-Shahbad section of NH-152G start from km 0+000 to km 22+850 (Part of Shahbad-Thol Feeder Route) in the Hybrid Annuity Mode under Bharatmala Pariyojana Phase-I.

The PATSC under the Chairmanship of Shri R K Pandey, Member (Project) in its meeting held on 01.02.2022 deliberated the subject project proposal for its appraisal.

2. Minutes of the PATSC meeting held on 01.02.2022 is enclosed herewith for record and further necessary action.

(V K Joshi) General Manager (Tech)

To:

- (i) Shri Navin Kumar, CGM (Tech)-Member
- (ii) Shri B M Rao, CGM (Finance)-Member
- (iii) Shri Akhil Khare, CGM (Technical)-Member
- (iv) Shri A K Srivastava, Advisor (Technical)-Member
- (v) Shri Suvid Kapoor, Associate-Infrastructure & Connectivity, NITI Aayog-Member

Copy to:

- (i) PPS to Member (Project) RKP:
- (ii) PPS to Member (Project) MK

Projection NHAI, WHAII

Minutes of meeting

The meeting of Project Appraisal and Technical Scrutiny Committee (PATSC) under the Chairmanship of Shri R. K. Pandey. Member (Project) was held at 3:00 pm on 01.02.2022 at NHAI HQ (New Building), Sector-10, Dwarka, New Delhi-110 075 to discuss the following proposal for appraisal of the same. Some of the participants joined the meeting through Video Conference. The list of participants is enclosed at **Annexure-I**.

- (i) Construction of 4-lane Greenfield Jalbehra-Shahbad section of NH-152G start from km 0+000 to km 22+850 (Part of Shahbad-Thol Feeder Route) in the state of Haryana on Hybrid Annuity Mode under Bharatmala Pariyojana Phase-I.
- 2. At the outset, CGM (Tech) welcome the participants and made a detailed presentation on the project. The PATSC was apprised following:
 - (i) The proposed project is a part of Panchkula-Shazadpur-Saha-Thol Feeder Route under Bharatmala Pariyojana Phase-I for implementation by NHAI. Saha-Shahab section of this corridor has already been awarded by NHAI and at present work on this section is in progress. This corridor will improve connectivity between Ambala-Kotputli corridor with Panipat-Jalandhar section of NH-44.
 - (ii) Alignment of the project stretch was approved by LAC in its 47th meeting held on 19.07.2021 and land acquisition plan was also approved by LAC in its 54th meeting helfd on 06.09.2021.
 - (iii) The Competent Authority on 30.12.2021 has approved Hybrid Annuity Mode for implementation of the instant project.
- 3. The PATSC was also apprised about proposed features of the project. Details of project features is as under:

| S. No. | Project Features | Details |
|-----------|-----------------------------------|---|
| (a) | Length (km) | 22.850 |
| (b) | Type of Pavement (Rigid/Flexible) | Flexible |
| (c) | Major bridge (No.) | 1 Nos. (30.793+62.264+59.481m at 7+850) |
| (d) | Minor bridge cum underpass (No.) | 1 Nos. [1x35m at 9+960] |



| (e) | Minor bridge on Service Road (No.) | 3 Nos. of MNB has to be widened [0+956(S1) of 8m on RHS, 0+215(S2) of 10m on LHS and 8m on RHS and 0+357(S2) of 10m on LHS and 8m on RHS] |
|-----|------------------------------------|---|
| (f) | Flyover(Trumpet) (No.) | 1 Nos. [2x30m at 0+000] |
| (g) | Overpass (No.) | Nil |
| (h) | VUP (No.)(30m x5.5m) | I No. |
| (i) | LVUP (12mx4.5m) and SVUP (7mx4.5m) | LVUP = 7 Nos.; SVUP = 10 Nos. |
| (j) | FOB (No.) | - |
| (k) | ROB Cum Flyover (No.) | 1 Nos. (12x30+1x37.2+4x30+1x50+12x30m a(21+813) |
| (1) | Ramps | 2 Nos. (4x15+9x30 at 21+813) |
| (m) | Culvert (No.) | Box culverts-23Nos. Pipe culverts-21 Nos. |
| (n) | Service/Slip Road (km) | 7.97 km |
| (0) | Major junctions (No.) | #. |
| (p) | Minor junctions (No.) | - |
| (q) | Bus shelters (No.) | ~ |
| (r) | Truck lay bye (No.) | - |
| (g) | Wayside amenities (No.) | - 4 |
| (h) | Toll Plaza (No. and the location) | I Nos. at 5+077 on MCW |

4. The PATSC was apprised about estimated cost of the project. Details of cost estimate project is as under:

| S. No. | Particulars | Cost (Rs in crore) |
|--------|---|--|
| (i) | Civil Construction Cost excludingGST @ andshifting of utilities (Rs. crore) | 521.06 (Civil cost-502.85 + Utility shifting cost-18.21) |
| (ii) | IC & pre-operative expenses (Rs. crore) | 5.21 |
| (iii) | Financing cost (Rs. crore) | 2.93 |
| (iv) | Interest during construction (Rs. crore) | 15.50 |
| (v) | Estimated Project Cost (Rs.crore) [(i) to (iv)] | 544.70 |
| (vi) | Civil Construction Cost per km (Rs. Crore) | 22.00 |
| (vii) | Land Acquisition cost including R&R and compensation for structures (Rs. Crore) | 328.86 |
| (viii) | Other Cost (like Forest clearance, environmental mitigation measures etc. (Rs. Crore) | 3.00 |
| (ix) | Contingency @ 1% of (i) | 5.21 |
| (x) | GST@12% of (i) | 62.53 |
| (xi) | Total Capital cost (Rs. crore) [(v)+(vii)+(vii)+(ix)+(x)] | 944.30 |
| (iix) | Estimated Bid Project Cost (Rs crore) | 664.04 |
| (xiii) | Estimated first year O&M cost (Rs crore) | 7.79 |
| (xiv) | Estimated Bid Price (Rs in crore) | 679.88 |

- 5. The detail of deliberations for the subject proposal is as under:
- (i) The PATSC desired that peer review of the project may be done in the first instance. In this regard it was apprised that peer review of the project is in progress and any suggestions by peer review expert, if any, shall be incorporated in the project proposal.



- (ii) PATSC desired to submit comparison of cost of various items vis-à-vis new normative cost. In this regard, desired cost comparison along-with justification is enclosed herewith at **Annexure-II**.
- (iii) PATSC noted that total number of structures in the project is on the higher side and the same may be reviewed.

In this regard, it was apprised that the instant project is proposed to be developed along the Greenfield alignment and grade separated structures are proposed on all the cross roads. Since the alignment is passing through the irrigated land on the both sides SVUPs and Box culverts in suitable numbers are proposed for cross movement in the fields as well as to nearby villages. Peer Review expert has also endorsed the recommendation of NHAI in this regard.

6. The PATSC was apprise about the status of pre-construction activities, which is as below:

| S. No. | Name of activity | Status | |
|-----------|------------------------|--|--|
| 1 | Environment Clearance | TOR has been approved by MoEF&CC on 29.12.20 Draft ElA is under preparation. | |
| 2 | Forest Clearance | Proposal for diversion of 5.279 ha forest land has been submitted to DFO. | |
| 3 | Land Acquisition | 3(A) has been completed for additional 145 hectare land required for the project. 3(D) for 145 ha land submitted to CALA for approval. | |
| 4 | Approval of GAD of ROB | GAD of proposed one ROB has been submitted for approval. | |

- Reply of observations of Advisor (Technical) and NITI Aayog is enclosed at Annexure-III. Based on the observation during the meeting, cost of the project has been reviewed due to modified pavement design adopting cement treated pavement layer(s) as well as design of pile foundations in the structures. The cost is modified on this account from Rs 521.06 crore (Civil cost-502.85 + Utility shifting cost-18.21) to Rs 506.67 (Civil cost-488.46 + Utility shifting cost-18.21).
- 8. After deliberations, the PATSC recommended for approval of the proposal as per following details:

| S. No. | Particulars | Details |
|--------|---|---|
| (i) | Project length | 22.850 |
| (ii) | Civil Construction Cost excludingGST @ andshifting of utilities (Rs. erore) | Rs 506.67 crore (Civil cost-488.46 + Utility shifting cost-18.21) |
| (iii) | IC & pre-operative expenses (Rs. crore) | 5.07 |
| (iv) | Financing cost (Rs. crore) | 2.87 |
| (v) | Interest during construction (Rs. crore) | 14.88 |
| (vi) | Estimated Project Cost (Rs.crore) [(i) to (iv)] | 529.49 |
| (vii) | Civil Construction Cost per km (Rs. Crore) | 21.37 |
| (viii) | Land Acquisition cost including R&R and compensation for structures (Rs. Crore) | 328.86 |

Projector NHAI, FYO-SHIV/ANI

| (ix) | Other Cost (like Forest clearance, environmental mitigation measures etc. (Rs. Crore) | 3.00 |
|--------|---|--------|
| (x) | Contingency @ 1% of (i) | 5.07 |
| (xi) | GST@12% of (i) | 60.80 |
| (xii) | Total Capital cost (Rs. crore) [(v)+(vii)+(viii)+(ix)+(x)] | 927.22 |
| (xiii) | | 639.73 |
| (xiv) | Estimated first year O&M cost (Rs crore) | 7.77 |
| (xv) | Estimated Bid Price (Rs in crore) | 656.53 |

The meeting ended with vote of thanks to the Chair.

Projection Projector

National Highways Authority of India

Project Appraisal and Technical Scrutiny Committee meeting on 01.02.2022

List of Participants

1. National Highways Authority of India

- (i) Shri R K Pandey, Member (Project) (In Chair)
- (ii) Shri Navin Kumar, CGM (Technical)
- (iii) Shri B M Rao, CGM (Finance)
- (iv) Shri Akhil Khare, CGM (Technical)
- (v) Shri A K Srivastava, Advisor (Technical)
- (vi) Shri V K Joshi, GM (Technical)

2. NITI Aayog:

(i) Shri Suvid Kapoor, Associate-Infrastructure & Connectivity, NITI Aayog

