



भारतीय राष्ट्रीय राजमार्ग प्राधिकरण  
(महत्त्व परिवहन और राजमार्ग मंत्रालय)  
**National Highways Authority of India**  
(Ministry of Road Transport and Highways)  
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NHAI/Jalbehra-Shahbad/BM/FR/HAM/2022

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 state of Haryana on 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

*certified-*

Project Director  
NHAI, BHILWANI

**National Highways Authority of India**  
**Project Appraisal and Technical Scrutiny Committee meeting on 01.02.2022**

**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 47<sup>th</sup> meeting held on 19.07.2021 and land acquisition plan was also approved by LAC in its 54<sup>th</sup> meeting held 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]

  
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(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)	1 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 at 21+813)
(l)	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
(o)	Major junctions (No.)	-
(p)	Minor junctions (No.)	-
(q)	Bus shelters (No.)	-
(r)	Truck lay bye (No.)	-
(g)	Wayside amenities (No.)	-
(h)	Toll Plaza ( No. and the location)	1 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 excluding GST @ and shifting 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)+(viii)+(ix)+(x)]	944.30
(xii)	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.

  
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(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 29.12.2021. Draft EIA 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.

7. 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 excluding GST @ and shifting of utilities (Rs. crore)	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

  
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(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)	Estimated Bid Project Cost (Rs crore)	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.

  
Project Director  
NHAI, P.O.-BHIWANI

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

  
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