

## **Project Justification**

### **INTRODUCTION**

Government of India has decided to develop ~42,000 km of Economic Corridors, Inter Corridors and Feeder Routes to improve the efficiency of freight movement in India under the Bharatmala Pariyojana. One of the projects of the Bharatmala Pariyojana is Delhi-Dehradun Greenfield Highway *via* Saharanpur.

The proposed Spur Road to Haridwar originates from Ch. 108+450 of Delhi-Dehradun economic corridor near Halgoya village in Saharanpur district of Uttar Pradesh and ends at existing Ch. 182+070 of NH-334 near Badheri Rajputan village in Haridwar district of Uttarakhand.

The important places through which the proposed alignment traverses are Halgoya, Baseda, Manakpur Adampur, Harchandpur Mazra, Madhopur Hazratpur, Saliyar, Mehwar Kalan, Rahmatpur and Badheri Rajputan.

### **PROJECT JUSTIFICATION**

The proposed project is a part of the proposed Delhi-Saharanpur-Dehradun Expressway, which interlinking different State & National highways while connecting Delhi to Dehradun. The project is planned as an ambitious high-speed corridor which provides high speed connectivity between states of North India.

The proposed highway will provide better connectivity to towns and cities viz. Shamli, Saharanpur, Haridwar, Roorkee, Dehradun etc. and give an infrastructure fillip to the states of Delhi, Uttar Pradesh, Uttarakhand. The highway will be access-controlled and ensure high speed traffic movement from Delhi to Dehradun.

At present, the connectivity between Delhi and Dehradun is via NH-334, which are 4/6 lane. The new proposed highway shall bring down the travel distance by approximately 40 Km (as compared to alternate routes) and result in time savings of over 2-3 hours. Moreover, the new highway facility is access controlled and hence will provide good riding quality, better safety and a reliable infrastructure. All of these elements will result in cost savings and efficiency improvement.









Diversion of forest land for the development of 6-lane (greenfield) access-controlled spur to Haridwar from Delhi-Saharanpur-Dehradun Economic Corridor Section of NH 344BG from 0.000 to Km19.070 in Saharanpur district of Uttar Pradesh State and Km. 19.070 to Km 50.700 in Haridwar District of Uttarakhand State under Bharatmala Pariyojana.

**OPTION ANALYSIS:**

S. No	Parameter	Option 1	Option 2	Option 3
1	Total Length (Km)	50.700	53.100	61.700
2	Length of Greenfield Alignment (Km)	50.700	53.10	61.70
3	Length of Brownfield Alignment (Km)	0.000	0.000	0.000
4	Start	At Ch. 108+450 of Delhi-Saharanpur Greenfield alignment near Halgoya Village	At Ch. 107+650 of Delhi-Saharanpur Greenfield alignment near Halgoya Village	At Ch. 94+600 of Delhi-Saharanpur Green field alignment near Mora Village
5	End	At Existing Ch. 182+000 of NH-334 (Old NH No. 58) near Badheri Rajputan Village	At Existing Ch. 1+100 of Roorkee bypass section of NH-344 (Old NH No. 73)	At Ch. 2+400 of Proposed Haridwar Ring Road/ Eastern end of Bahadarabad Bypass on NH-334 (Old NH No. 58)
6	Total Distance from EPE Delhi to Haridwar	162.15	163.80	156.30
7	Lane Configuration	6-lane Access Controlled	6-lane Access Controlled	6-lane Access Controlled
8	Districts	Saharanpur in Uttar Pradesh and Haridwar in Uttarakhand	Saharanpur in Uttar Pradesh and Haridwar in Uttarakhand	Saharanpur in Uttar Pradesh and Haridwar in Uttarakhand
9	Connecting Highways	Delhi-Dehradun Economic Corridor, SH-59, NH-344/73, NH-334/58	Delhi-Dehradun Economic Corridor, SH-59, NH-344/73, NH-334/58	Delhi-Dehradun Economic Corridor, SH-59, NH-344/73, NH-334/58
10	No. of NH Crossings	3	3	3
11	No. of SH Crossings	1	1	1
12	Major Built-up areas Connected	Roorkee and Haridwar	Roorkee and Haridwar	Roorkee and Haridwar
13	No. of settlements along prop. alignment	48	60	59

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S. No	Parameter	Option 1	Option 2	Option 3
14	Existing land use	Agricultural	Agricultural	Agricultural
15	Affected Forest Area	1.6518	3.42	5.56
16	Eco-sensitive/ Protected Area	Nil	Nil	Rajajii National Park within 10 Km Radius
17	Forest Clearance	Yes	Yes	Yes
18	Environmental Clearance	Yes	Yes	Yes
19	Description of Alignment	<p>a) Greenfield alignment in a length 43.90 km and then follows existing road (NH-334) in a length of 9.80 Km up to Haridwar;</p> <p>b) This alignment runs on northern side of Roorkee;</p> <p>a. Existing 4-lane highway beyond greenfield alignment in a length of 9.80 Km passes through built-up areas with no access control</p>	<p>a) Greenfield alignment for 30.50 km and then follows the existing Roorkee Bypass road for a length of 16.90 km and further follows the existing road (NH-334) up to Haridwar;</p> <p>b) Existing 4-lane Highway in a length of 9.800 km passes through built-up areas with no access control;</p> <p>c) At the junction with Roorkee Bypass Road, Ch 30.60, 2as are. 1km length of bypass road needs to reconstructed to match with the FRL of proposed trumpet interchange;</p> <p>d) After crossing the canal at 30.60 joins with NH-334 (Old NH No. 58) at grade, needs to use slip road to access the eastern part of Roorkee Bypass</p>	<p>a) Green field alignment with full access control up to Haridwar; Joins with proposed Haridwar Bypass Road;</p> <p>a. This alignment runs on southern side of Roorkee parallel existing bypass on NH-334 (Old NH No. 58)</p>
20	Merits	<p>a) Part of this alignment runs on northern side of Roorkee connecting</p>	Length of new construction is less compared to other options	<p>a) Shortest Route from Delhi to Haridwar;</p> <p>b) Access Control in entire length</p>

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S. No	Parameter	Option 1	Option 2	Option 3
		existing western and eastern bypasses, thus completes the total ring around Roorkee; b) Beneficial for both Delhi and Saharanpur bound traffic; c) Provide better connectivity to Roorkee and Haridwar		
21	Demerits	a) Length of new construction is more compared to Option 2; b) Existing 4-lane highway in a length of 9.80 km passes through built-up areas with no access control;	a) As this option connects to southern side of Roorkee Bypass, not beneficial to Saharanpur bound traffic; b) Traffic bound to Haridwar will have to follow existing highway in a length of 15.8 km with partially access control and 9.80 km with no access control, which is more than the other options	a) Length of New construction is more than the other options construction cost is more than other options; b) Runs parallel to Roorkee Bypass on NH-334/58; As this runs on southern side of Roorkee, not beneficial to Saharanpur bound traffic
22	Number of Structures	Flyover/Interchanges-4; VUP-9; LVUP-11; SVUP-29; MJB-5; MNB-10; ROB-2	Flyover/Interchanges-3; VUP-3; LVUP-8; SVUP-20; MJB-2; MNB-10; ROB-2	Flyover/Interchanges-4; VUP-8; LVUP-15; SVUP-41; MJB-3; MNB-23; ROB-3
23	Proposed ROW (m)	60.00	60.00	60.00
24	Total Additional land required (Ha.)	286.99	264.993	444.190
25	of Civil Works (in Cr.)	1088.80	614.50	1437.18
26	Centages (in Cr.)	207.05	116.87	273.33
27	Cost Non-Civil Works (in Cr.)	836.71	606.35	1070.36


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S. No	Parameter	Option 1	Option 2	Option 3
28	Total Project Cost (in Cr.)	2132.56	1337.73	2780.87

  
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