

## Brief Summary

### Improvement and up-gradation of Package VI - Stretch of Palia Shahjahanpur via Hardoi - Lucknow (in principle declared National Highway) in the State of Uttar Pradesh

Government of India has decided to take up the improvement and upgradation of state highways/ other roads in the state of Uttar Pradesh and has in principle declared the highways as National Highways. Total length of route is 266.014 Km.

The project is passing through five districts of Uttar Pradesh. The details are as given below;

Sr. No	Stretch of the Road	Chainage (Km)		Length (Km)	Existing status	Proposed Development
		From	To			
1	Palia to Start of Proposed Shahajahanpur Bypass	0	89	89	Two Lane	Widening to Two Lane with Paved Shoulder for existing road and construction of two lanes with paved shoulder with provision of four laning for Bypasses.
2	Start of Proposed Shahajahanpur Bypass to end of Proposed Hardoi Bypass	89	174.641	85.641	Four lanes	Geometric Improvement where ever required for existing road and construction of four lanes with paved shoulder for Bypasses.
3	End of Proposed Hardoi Bypass to End of Hardoi District	174.641	229.07	54.429	Two lane	Widening to four lanes
4	End of Hardoi District to Lucknow (Dubagga Chauraha)	229.07	266.014	36.944	Four laning is in Progress by PWD	Geometric Improvement where ever required for existing road and from chainage Km 257.212 provision of Service Roads on either side is also proposed where ever required.

SL. No	Salient Feature	Details		
1.0	Project Stretch	The proposed project road is brownfield highway which starts at Palia Kalan –at intersection of SH-90, outskirts of Palia Kalan, Lakhimpur District and ends at Baroura Husen Badi village after Dubagga Chowk, Lucknow District. The total length is approximately 266.014 Km.		
2.0	Width of Road	The existing alignment can be divided into four stretches based on the road width: 1) Palia to Start of Proposed Shahajahanpur Bypass (89km): Two Lane 6m 2) Start of Proposed Shahajahanpur Bypass to end of Proposed Hardoi Bypass (85.6km): Four Lane 12m 3) End of Proposed Hardoi Bypass to End of Hardoi District (54.4km): Two lane 6m 4) End of Hardoi District to Lucknow (Dubagga Chauraha) (36.9km): Four Lane 12m		
3.0	Right of Way	For the proposed road alignment the ROW width that has been estimated is about 12m.		
4.0	Land Use		Types of Land	Percentage (%)
			Built Up	6.27
			Agricultural Land	78.25
			Forest	5.51

SL. No	Salient Feature	Details	
		Barren Land	8.09
		Water Bodies	1.88
5.0	<b>Embankment height</b>	The average embankment height is expected to be around 3 to 2.50 m at the Pedestrian Underpass locations and higher at the Vehicular Underpass locations. At the remaining stretches, the embankment height will be governed by the drainage considerations.	
6.0	<b>Major Bridge</b>	There are about 3Major Bridges i.e. 1 in Hardoi bypass and 2 in Shahjahanpur bypass.	
7.0	<b>RUB/ROB</b>	There are 01 Railway crossings. Hence 1 ROB are proposed along the alignment.	
8.0	<b>Bypass and Realignments</b>	Alignment Passes through Congested Built up Area in following location, where Bypass will Be required: 1) Khutur 2) Powayan 3) Shahjahanpur 4) Shahabad 5) Hardoi Apart from this, there are two major realignments at Sehramaujanubi and Behta Gokul	
9.0	<b>Vehicular overpass / underpass</b>	There are about 20 Vehicular underpasses. 1) Khutur bypass-3nos 2) Powayan bypass -2nos 3) Shahajahanpur bypass- 5nos 4) Shahabad bypass- 3nos 5) Hardoi bypass- 3nos 6) Sehramou Janubi Realignment- 2nos 7) Behta Gokul Realignment- 2nos	
10.0	<b>Road Safety</b>	Metal Beam Crash Barriers will be provided along the outer edges of the carriageway. Additional Safety features will be ensured by providing adequate Sight Distances while designing the highway. Retro reflective road signage will be provided for better night visibility.	
11.0	<b>Reserve forest / wildlife areas</b>	The alignment passes through Reserved Forest / Kishanpur Wildlife Sanctuary. Total Length of highway passing through Wildlife Sanctuary is about 18 km.	
12.0	<b>Intersections</b>	Palia	MDR 2 C
		Bhira	SH 90
		Lalpur	SH 25
		Lalpur	SH 26
		Rujha Kala	SH 25
		Dhara	SH 25
		Powayan	Jankapur Rd
		Mainari	SH 25
		Paina Bujurg	SH 25
		Shahjahanpur	SH 29
		Shahjahanpur	NH 24
		Shahjahanpur	SH 29
		Shahjahanpur	NH 24
		Chauthera	SH 25
		Shahabad	SH 25
		Shahabad	SH 29
		Shahabad	SH 25
		Hardoi	SH 25
		Hardoi	Sandi Rd
		Hardoi	SH 21
		Hardoi	SH 25

SL. No	Salient Feature	Details	
		Lodhi	Baghauri Rd
		Ashraf Tola	Sandila Rd
		Malihabad	NH 25 A
		Malihabad	NH 25 A
		DUBAGGA	IIM Rd
		DUBAGGA	BYPASS Rd

**The estimated cost for the entire stretch of the project is Rs. 4136 Crores.**

#### **Components of the project:**

The project alignment has been divided in to four construction packages.

- i. Construction Pkg 1 – 0+000 Km to 89+000 Km
- ii. Construction Pkg 2 – 89+000 Km to 174+641 Km
- iii. Construction Pkg 3 – 174+641 Km to 229+070 Km
- iv. Construction Pkg 4 – 229+070 Km to 266+014 Km

#### **Widening of Existing Corridor:**

- For construction Package 1, the minimum ROW proposed for of the existing road widening is 20.00m & for the Built-up area sections minimum proposed ROW is 27.50m.
- For Construction Packages 2, 3 and 4, the minimum ROW proposed for the existing road widening is 30.00m & for the built-up sections minimum proposed ROW is 43.00m.
- For Bypasses & Realignments, ROW proposed is 45.00m.

The project will have bypasses at major congested areas identified at the project corridor as given below:

- 1) At Khutar (Chainage km. 41.105 to 45.833 – 4.728 km) – Two bypass alternative options are provided,
- 2) At Powayan (Chainage km. 64.236 to 72.061 - 7.825 km) – Two bypass alternative options are provided,
- 3) At Shahjahanpur (Chainage km. 89.000 to 107.885 – 18.885 km) – Three bypass alternative options are provided,
- 4) At Shahabad (Chainage km. 124.141 to 131.282 – 7.141 km) – One bypass is provided,
- 5) At Hardoi (Chainage Km. 159.263 to 174.591 – 15.328 km) – Two bypass alternative options are provided,

During the construction phase of the project manpower will be needed to take the part in various project activities. About 6000 persons per day, which includes, skilled, semi-skilled and unskilled labours, will likely to get work.

construction phase the project will provide social benefits to about 600 people in terms of direct employment by way of better commercial and industrial development of the area.

#### **Importance of the Project:**

- Technologies are available for construction of super infrastructure
- In terms of technology, viaducts the travel time will be reduced by 50%
- Quality of traffic forecasts
- Quality of project costs and their sequencing
- Associated VOC savings