

Project Description

1. Background

The excellence demonstration of Gujarat State Highway Project¹ by Government of Gujarat (GoG) - Roads and Buildings Department (R&BD) and the World Bank (WB) are now continuing with their successful partnership.

The Government of Gujarat (GoG) through Roads and Building Department (R & BD) has initiated the "Second Gujarat State Highway Project (GSHP-II)" under financial assistance from the World Bank which is another teaming up and effort towards empowering the communities with enhanced road infrastructure and building the capacities of stakeholders participating in Second Gujarat State Highway Project (GSHP II).

As part of the GSHP-II, Mehsana-Palanpur (SH-41) is proposed for upgradation from 4L to 6L^(Plus) configuration. The existing details of the corridor along with proposed upgradation are mentioned below:

Corridor	SH No	Chainage (km)		Total Length	Present Lane Configuration	Proposed Configuration
		From	To			
Mehsana-Palanpur	SH-41	79.3	141.1	61.8	4LPS with Wide Median	4LPS to 6L ^(Plus) Along with Paved Shoulder

Note: 4L: Four Lane; 4LPS: Four lane paved shoulders; 6L: Six Lane


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¹ GSHP, 2001-2007 one of the most successful WB assisted state highway project, set many benchmarks for others to follow.

The present forest diversion proposal is meant for upgradation of **Mehsana-Palanpur** (SH-41) corridor located in Mehsana, Patan and Banaskantha Districts & Forest Divisions.

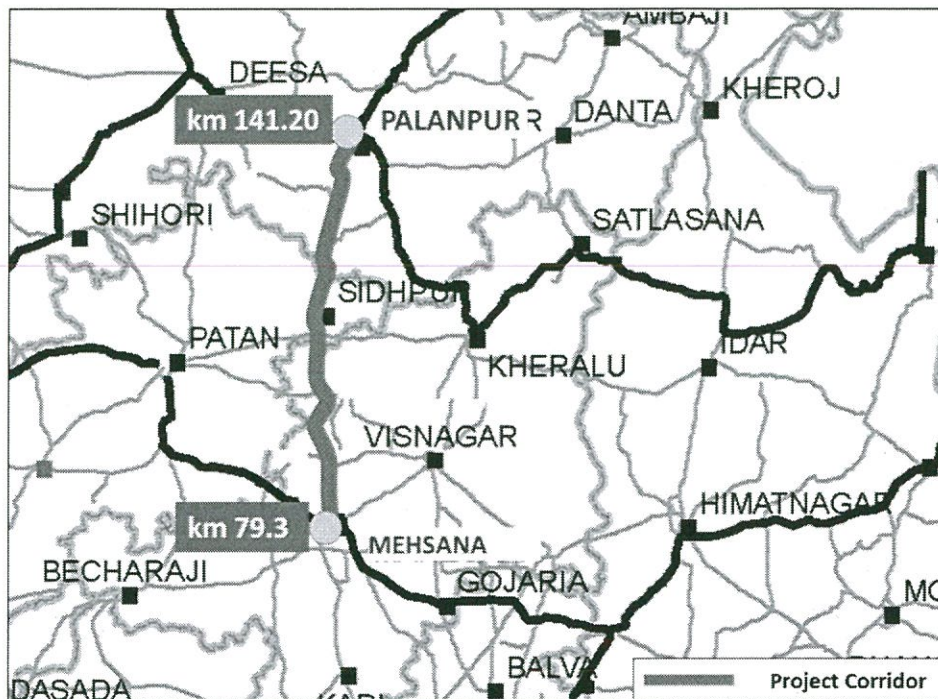


Figure 1: Project Corridor

2. The Project Road

The project corridor **Mehsana-Palanpur** (SH-41) falls in North region of the state, starts at km 79+300 near Mehsana town and ends at km 141+200 at Palanpur town, with a length of 61.80 km (SH-41). This corridor was earlier developed under Gujarat State Highway Project between 2003-2006 was first widened to 2Lanes with Paved Shoulders and then again widened to four Lanes in between the same period under World Bank Assistance by Roads and Buildings Department.

This road section (**Mehsana-Palanpur**) is a part of a corridor connecting two National Highways, at Ahmedabad and at Palanpur having four lane (Ahmedabad-Mehsana-Palanpur). This also acts as important link for interstate traffic as well as to regions of Northern and Central regions of Gujarat State.

For the commercial traffic plying from Gujarat to Rajasthan and up north it acts as strategic connector and acts as one of the important roads for boosting industrialisation in Northern Gujarat.

Considering above aspects and importance of the corridor R&BD, GoG and the World Bank teamed up to develop this road considering corridor development concept, including widening of existing 4L to 6L^(Plus) configuration with paved shoulder, drains, bus stops with bus-bays, landscape and utility zone.


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3. Salient Features of the Corridor

a. Road Inventory

The existing carriage way is 4Lane with paved shoulder and hard shoulder accommodated within RoW of 60 m. The other details of corridors are presented in the table below.

As mentioned above the corridor was widened to four lane paved shoulder and hard shoulders (4L+PS+HS) from retaining existing 2L with PS during 2003-2006, hence the development of 4L+PS+HS has taken place eccentric to the RoW at major length of the Corridor and concentric at some places.

Sr. No	Components	Details
1	Corridor Name and SH Number	Mehsana-Palanpur (SH-41)
2	District	Mehsana, Patan and Banaskantha
3	Start Chainage (km)	79+300
4	End Chainage (km)	141+100
5	Total Length of Corridor (km)	61.80
6	Right of Way (m)	60
7	Carriageway width (m) including median (existing)	24m

b. Structure Inventory

The existing bridge structures and culverts on the corridor are presented below:

Link Name	Culverts			Bridges		Total Structures
	Pipe	Box	Slab	Minor	Major	
Mehsana - Palanpur	56	13	1	16	5+1(ROB)	92

c. Built-Up Sections

The table below provides details of settlement on the road corridor.

Sr. No.	Settlement Name	Type	Chainage (km)	
			Start	End
1	Nani Dav	Village	080+300	081+300
2	Moti Dav	Village	083+300	085+000
3	Bhandu	Village	086+100	088+350
4	Unava	Town	092+600	094+800
5	Unjha	Town	096+900	100+000
6	Siddpur	Town	110+600	115+000
7	Palanpur	Town	131+000	141+200


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d. Traffic Count

Total Traffic on the corridor is about 28780 Vehicle and 46539 PCU's. The traffic breakup on the corridor is provided in the table below:

Mode	Traffic
Passenger Vehicles	20,402
Trucks	8,320
NMT	46
Others	28,780
Total vehicles	28,780
PCU	46,539

e. Environmental and Social**Forest Area:**

As per the Gujarat Government Gazette Notification dated 28th June 1973 & 28th March, 1973, the project corridor (SH-41) is designated as "Notified Protected Forest".

Sensitive Areas:

No sensitive areas located within 10km radius of the project corridor.

Religious Features:

6 temple/Shrines are identified along the project corridor.

Water bodies:

1 Pond (93+675) and one open well located along the corridor

4. Project Development and Justification:**a. Road Capacity and Level of Service**

The traffic demand is estimated considering various social and economic parameters of the region. The table below presents the existing traffic, future traffic and Level of Service. The capacity of the project road has exhausted with the current traffic having V/C Ratio of 0.58 which is more than 0.5 (LOS B) and will cross level of service (LoS) of C in 2020, with the traffic growth in future. Hence traffic justifies an immediate requirement to enhance the capacity of the corridor by widening to 6 Lane^{Plus}.

Year	Traffic			
	Total Vehicle	Total PCU	V/C-4 Lane	LoS
2018	28,780	46,539	0.58	B
2020	33,483	53,540	0.67	C

Accordingly, considering traffic and the importance of the corridor discussed in the para No. 2, Upgradation of Mehsana (km 79+300) to Palanpur (km141+100), SH- 41 from 4-Lane to 6-Laning^{Plus} which includes paved shoulders and hard shoulders along with Pedestrian Path on LHS, Toe, Side Drain, Landscape, bus Stop with Bus-bay and Utility Zone is considered.


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5. Project Benefits

The benefits of the corridor are:

- Ease in traffic movement
- Provides faster and safer Connectivity to industries and Agricultural markets located between Gujarat and Rajasthan.
- Due to proposed development population residing in the project districts will get benefitted. The total population residing in these districts as per Census 2011 are 20,35,064 (Mehsana), 13,43,734 (Patan) and 31,20,506 (Banaskantha),.
- The proposed development is expected to generate employment during construction and operation period.
- The project also intends to make this corridor one of its kind having safety and environmental benefits through integrated non-motorised zones and landscaping aspects throughout the corridor.
- The link besides commercial importance holds social importance being one of the connecting links travelled by large assemblage of people for religious purpose reaching to Ambaji temple, and Ranuja, important pilgrim place visited during late months of the year. The corridor development hence will integrate the social purpose by providing a pilgrimage path on one side (LHS) of the corridor.
- The proposed development will bring overall development of region and State as well.


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