

Nehru Bridge across river Tapi



Project Technical Details

1	Location	:	Surat – Rander – Olpad road
2	River/ Nala/ Creek	:	Tapi river
3	Lane	:	Two lane
4	Year of Construction	:	1966
5	Cost	:	Rs. 69.97 Lacs
6	Details of Bridge	:	
7	(i) Length of Bridge (Between ends of Decking)	:	603.50 mt.
	(ii) Width of Bridge	:	11.56 mt.
	(iii) Number of Span	:	13 nos.
	(iv) Span Length	:	10 nos. 50.6 mt. + 2 nos. 44.50 mt. + 1 no. 8.50 mt. = 603.50 mt.
	(v) Carriage Way	:	6.70 mt. + 2.43 mt. Wide footpath on both sides
	(vi) Length of Returns	:	Left side – 7.62 mt.
		:	Right side - 9.15 mt.
8	(i) Design Discharge	:	24100 Cumecs
	(ii) Design H.F.L.	:	G.T.S.R.L. + 11.515 mt.
	(iii) Type of Bridge	:	High level bridge
	(iv) F.R.L.	:	G.T.S.R.L. + 15.715 mt.
9	Structural Details	:	
	(i) Foundation	:	Concrete caisson – 8 shaped well 4.57 dia (ext) x 8.85 mt., 18.90 mt. Deep below well cap.
	(ii) Substructure	:	Mass concrete C.C. 1:3:6 pier encased with C.C. 1:2:4
	(iii) Superstructure	:	Pre – stressed concrete decking in 4 girders simply supported system with cross prestressed diaphragms supporting RCC closed box for conveyance of water lines.
	(iv) General Items	:	RCC parapet
10	Name of Contractor	:	Shah Construction Co., Bombay
11	Name of Consultant	:	Design Circle (R&B), Govt. of Gujarat

12	Note	:	<ul style="list-style-type: none">• The bridge was transferred to Surat Municipal Corporation, Surat after construction vide Gujarat Govt. Road and Building Department Res. No. M.L.A. 86/153/D Sachivalaya Gandhinagar dated 21-07-'87.• In the year 2007, Rehabilitation work at the cost of Rs. 260 Lacs was completed by S.M.C.<ul style="list-style-type: none">○ Contractor : Rebuild Struct Associates, Mumbai○ Design Consultant : S. J. Group, Mumbai○ Major activities carried out :<ul style="list-style-type: none">▪ - Replacement of Rocker & Roller type Bearings with POT - PTFE type▪ - Replacement of Expansion Joint with Strip Seal type▪ - Replacement of wearing coat▪ - Recasting of Footpath and parapet▪ - After rehabilitation work, the carriage way was increase from 6.70 mt. to 8.30 mt.
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