



PUBLIC WORKS REGION, AMRAVATI

PUBLIC WORKS CIRCLE, AKOLA

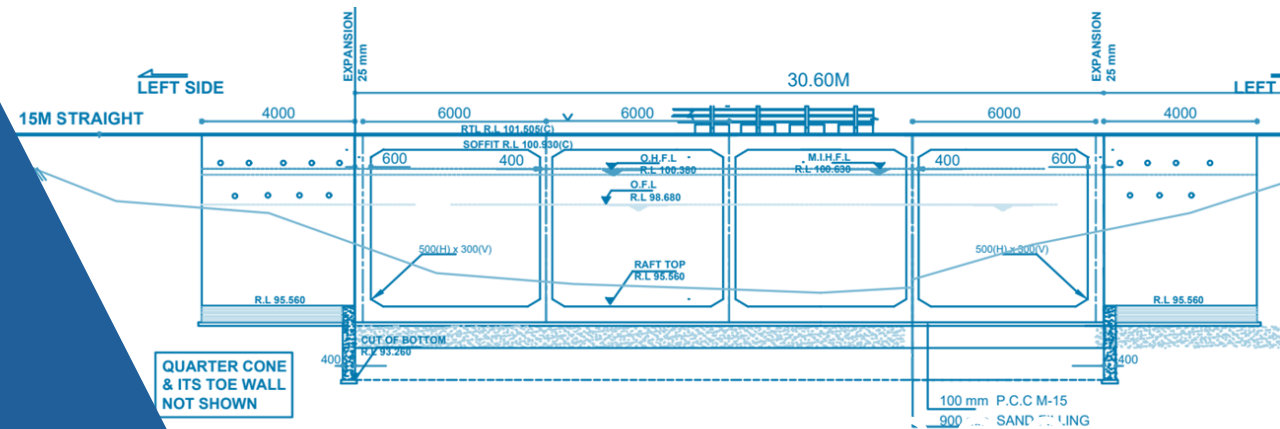
PUBLIC WORKS DIVISION, AKOLA

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NABARD

SUCCESS

STORY



6.000	97.850	6.000	96.200	6.000	96.160	6.000	95.900	6.000	96.880	6.000	98.800
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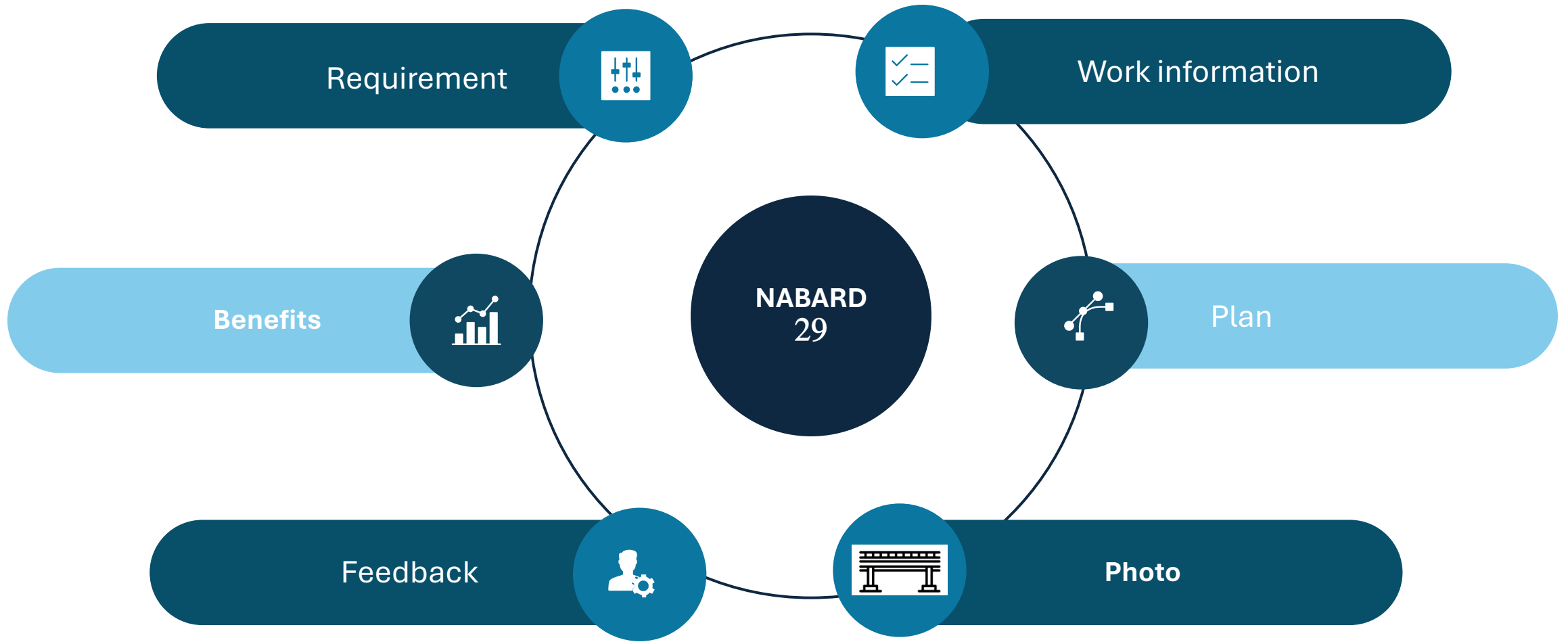
Construction of minor bridge including approaches at Ch. 6/600 on Murtijapur Chikhali Gajipur Palso Badhe Akola road SH-284 Taluka Murtijapur District Akola



NABARD - 29

Goregaon, Maharashtra,  
Goregaon, Maharashtra 444102, India,  
Maharashtra 444102, India  
Lat 20.729744° Long 77.295651°  
Thursday, 20/11/2025 12:11 PM GMT +0

# • Project Information •





## Requirement

- ❖ **As per the demand of Hon. MLA Mr. Harish Pimple, the said bridge goes under water due to rain water and creates hindrance to traffic, hence the construction of the said bridge was essential.**
- ❖ **As rainwater was flowing over the bridge, it caused traffic congestion, affecting school students, farmers transporting agricultural produce, and many users traveling for daily trade and work. Therefore, it was necessary to increase the height of the bridge to remove this recurring obstacle.**
- ❖ **This road is the main road connecting Daryapur Murtijapur Karanja S.H - 282 and Akola city, hence many villages in Murtijapur taluka are connected to the city.**
- ❖ **Now, farmers, citizens and school children are expressing satisfaction with the construction of a 24.60 m long unsinkable bridge at this location.**



## Work information

**Name of Work - Construction of minor bridge including approaches at Ch. 6/600 on Murtijapur Chikhali Gajipur Palso Badhe Akola road SH-284 Taluka Murtijapur District Akola**

- ❖ **Project ID- P2024600000000000287**
- ❖ **Administrative Approval -No.NBD-2023/C.R.8451/Plan-3, Dt.21/11/2023 Amount -232.86 Lakhs**
- ❖ **Structure – 4 span of 6 M each, Length = 24.60 m, Foundation - Raft Foundation**
- ❖ **Datul RL – 89.00 M , RTL R.L- 101.505 M , RAFT TOP R.L- 95.560 M, O.F.LR.L- 98.680 M, SOFFIT R.L- 100.930 M**
- ❖ **RCC Pier, PCC Abutment , Solid Deck Slab , Crash Barrier Railing, Approach Road- 110 M, Width- 5.5 M**
- ❖ **1 UNIT OF 4 CELLS Each OF 6M C/C m**
- ❖ **Concrete Grade- 1) Box Cell- R.C.C. M 30 Grade, 2) Cut Off Wall- R.C.C. M 25 Grade, 3) Cantilever Returns- R.C.C. M 30 Grade 4) Cantilever Retaining Wall- R.C.C. M 30 Grade**
- ❖ **Contractor Name - S.D.Bajaj , Work Order Date. 12/03/2024 , Agreement No. - B -1/890/ 2023-24**



## Benefits

- ❖ **Perennial transportation possible.**
- ❖ **The main crops are sugarcane, soybean and cotton. The connection of Murtijapur Karanja and Akola taluka markets has made transportation and communication of agricultural products easier.**
- ❖ **The inconvenience and loss caused to farmers, citizens and school children here due to the lack of this bridge during the monsoon season has been curbed.**
- ❖ **"This road is a connecting road for Daryapur, Murtizapur, Karanja, SH282 & Akola. Due to this, many villages and urban areas are connected, and many opportunities are created as a result.**





## Feedback



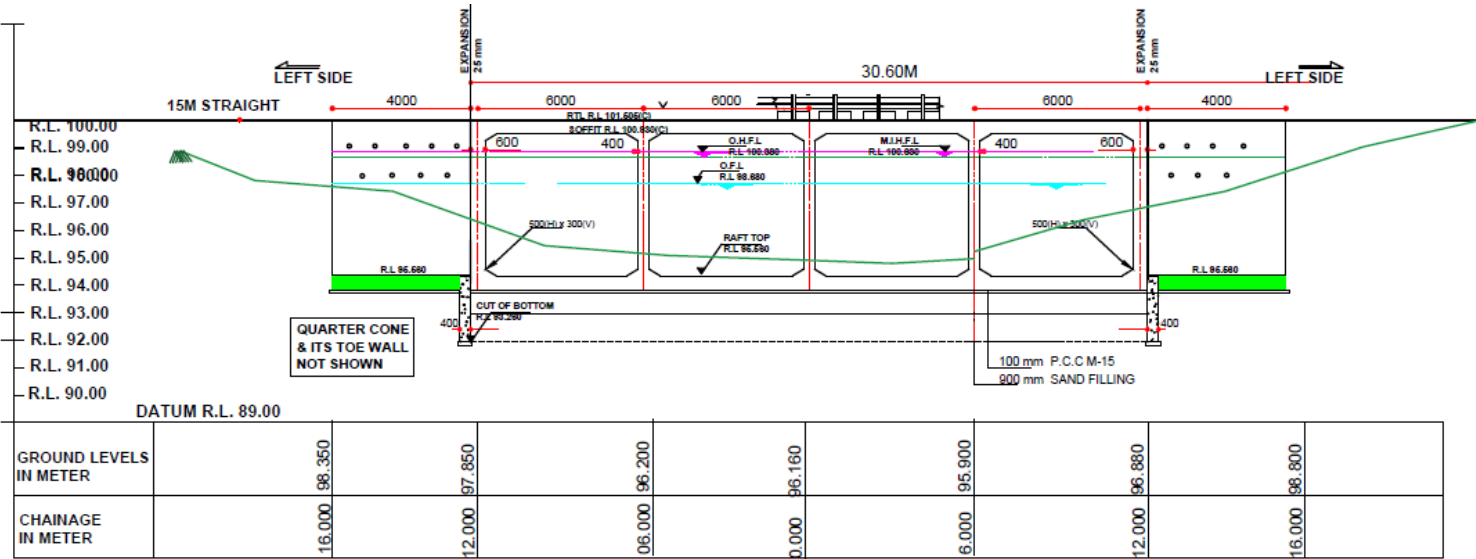
### **Mr. Gajanan Gawande, Village Goregaon, Tal. Murtijapur, Dist. Akola**

“This bridge is located between my farm and the village. For the past few years, it used to get submerged under rainwater, which severely affected road usage, disrupted traffic, and created major obstacles for transporting my farm produce. Currently, this road is operational throughout the year, providing great relief for the transport of farm goods”

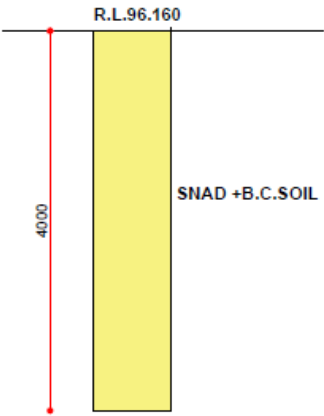
### **Mr. Prajwal Umale, Village Goregaon, Tal. Murtijapur, Dist. Akola**

“I am a resident of Goregaon and this is the main road bridge connecting my village and Akola district. This bridge is very useful for traffic and transportation and has become very convenient for going to Akola district ”

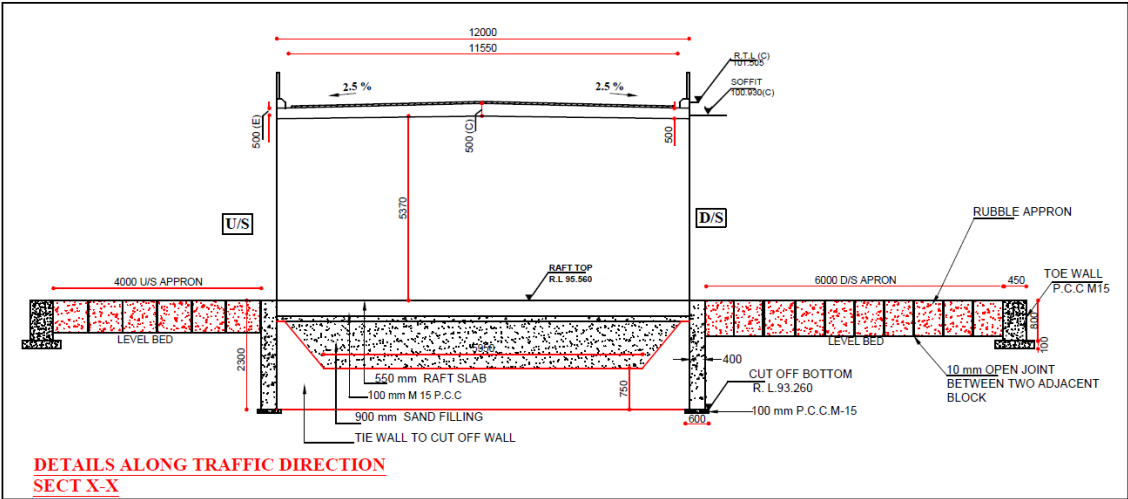




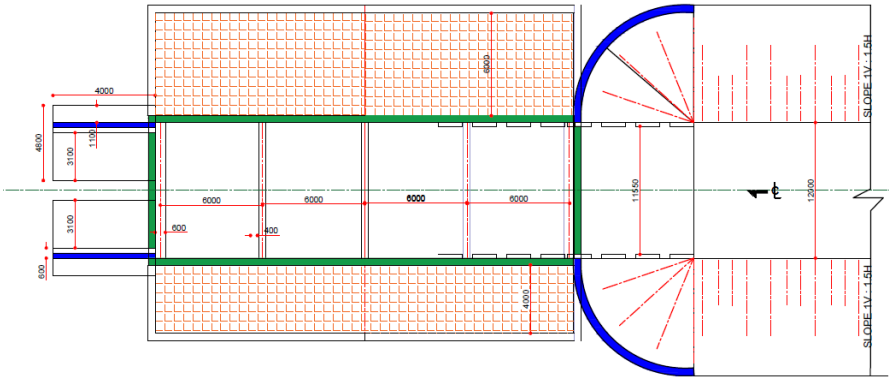
SECTIONAL ELEVATION



TRIAL PIT RESULT AT CENTER



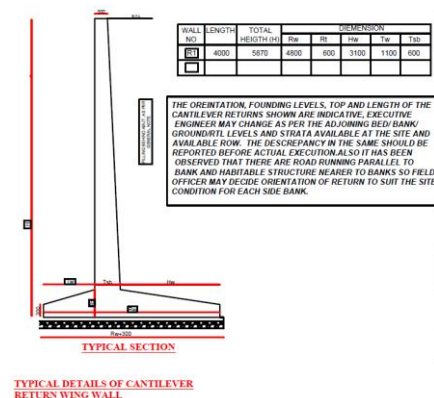
DETAILS ALONG TRAFFIC DIRECTION  
SECT X-X



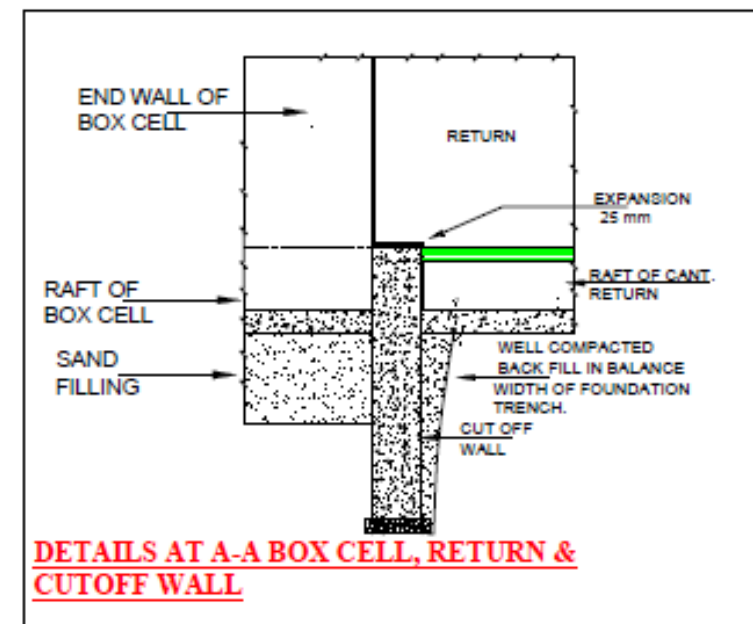
HALF PLAN AT BOTTOM

HALF PLAN AT TOP





DESIGN PARAMETERS			
SR. NO	PARAMETERS	VALUES	REMARKS
1	BRIDGE TYPE	Submersible	
2	NO OF LANE	TWO LANE (7.50 M CARRIAGEWAY)	
3	ANGLE OF SKEW	00 DEGREE	
4	SEISMIC ZONE	II	
5	EXPOSURE	MODERATE	
6	LOADING CLASS	2 LANE OF CLASS A OR ONE LANE OF 70 R	AS PER IRC 6
7	S.B.C	RAFT	
8	BOUYANCY	100 %	



HYDRAULIC DETAILS			
SR. NO	PARTICULARS	VALUES	REMARKS
1	ALIGNMENT	----	As Proposed By Executive Engineer.
2	CATCHMENT AREA	40.00 sqkm	
3	IRRIGATION AFFECTED	----	No
4	BED SLOPE	0.0030	
5	RUGOCITY COEFFICIENT (L.BANK/BED/R. BANK)	0.045/ 0.03/ 0.045	
6	MAXIMUM COMPARTMENTAL VELOCITY	2.86/3.91/3.98	OFL / OHFL/ MI HFL
7	LOWEST BED LEVEL	96.160	
8	% OBSTRUCTION	10/14.80	OFL / MI HFL
9	AFFLUX	0.05/0.08	OFL / MI HFL
10	SCOUR LEVEL	93.260	RAFT FOUNDATION
11	BRIDGE TYPE	High level Submersible	

ANGLE OF THE SKEW AND DIRECTION OF THE SKEW SHOULD BE CONFIRMED ANY DESCREPNACY IF FOUND SHOULD BE REPORTED.

### MATERIAL TABLE (FOR ESTIMATE PURPOSE ONLY)

SR.NO	ITEM	DESCRIPTION	TYPE DRAWING NOS.	STEEL FOR ESTIMATION
1	R.C.C WEARING COAT	75 mm THICK R.C.C WEARING COAT	TP/DC-BR/MISC/2018-66-1/1	5 Kg/ Sqm
2	RAILING / KERB	DISCONTINUOUS KERBS IN M-30 WITH R.C.C. POST & G.I. PIPER RAILLING	TP/DC-BR/MISC/2018-67-1-1	5.50 Kg/Rmt
3	BOX CELL	R.C.C. M 30 GRADE CONC WITH TMT 500D BARS	DRAWING TO BE OBTAINED FROM DESIGN CIRCLE.	75 Kg/Cum. (Raft+Walls+Deck Slab)
4	EXPANSION JOINT	25 mm THICK PREMOULDED BITUMINOUS PAD	TP/DC-BR/MISC/2018-64-1/1	-----
5	CUT OFF WALL ( DETACHED )	R.C.C. M 25 WITH MINIMUM REINFORCEMENT	TP/DC-BR/BOX/2018-27-1/2	45 Kg/Cum
6	CANTILEVER RETURNS	R.C.C. M30 GRADE CONC. WITH TMT 500D. BAR	DRAWING TO BE OBTAINED FROM DESIGN CIRCLE.	65 Kg/Cum
7	FLEXIBLE STONE MAT	900 mm THICK		-----
8.	CANTILEVER RETAINING WALL	R.C.C M-30 GRADE CONC. WITH TMT 500D BAR	DRAWING TO BE OBTAINED FROM DESIGN CIRCLE	65 Kg/Cum
9.	PLUM CONCRETE M 15	PLUM CONCRETE WITH 60:40 CONCRETE TO PLUM RATIO FOR APPRON C.C BLOCK		



 **Information Board**



**Bridge Traffic**





Photo





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**THANK YOU !!!**