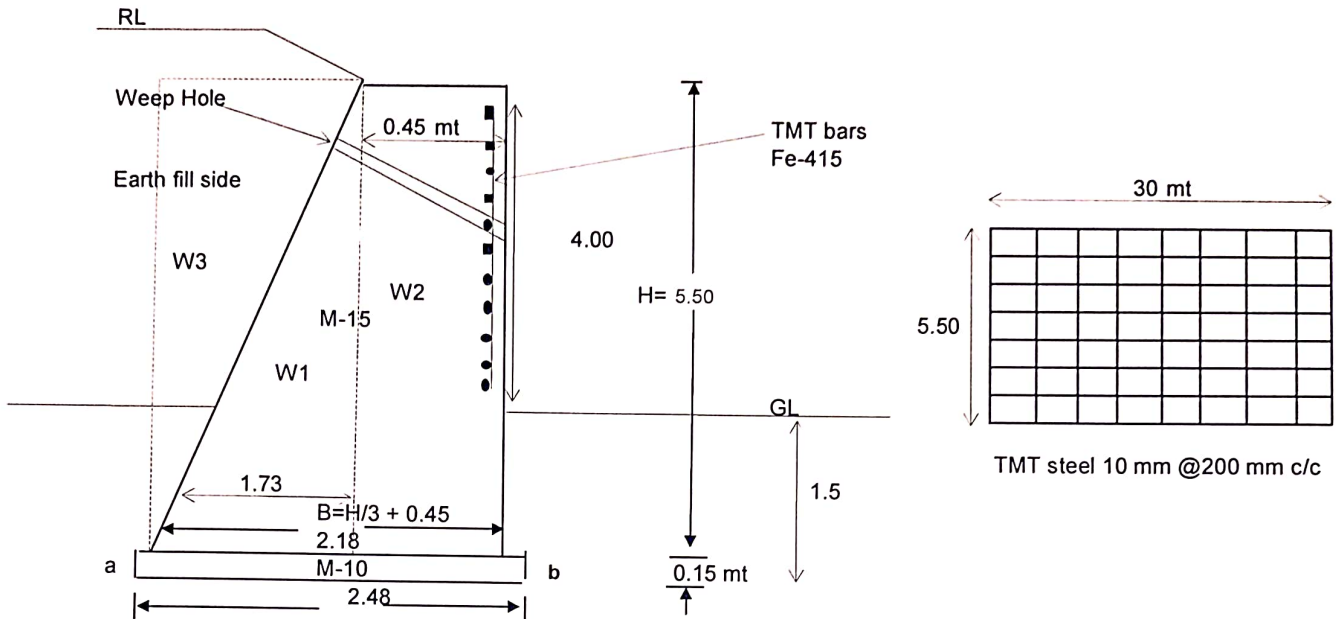


# TCS For Mota ora Ramaji Nal Road

	CLIENT:	ROADS & BUILDINGS DEPARTMENT, GANDHINAGAR. DEPUTY EXECUTIVE ENGINEER (R&B) SUB DIVISION, SANTRAMPUR. EXECUTIVE ENGINEER (R&B) DIVISION, MAHISAGAR.	DESIGN CONSULTANT:		PROJECT NAME :- CONSTRUCTION OF MINOR BRIDGE ON MOTA ORA RAMAJI NAL ROAD TALUKA, SANTRAMPUR, DIST. MAHISAGAR CH. 2/80	DWG TITLE :- TCS	DRAWING No : DATE :	Revision : RO SIGNATURE
	PREPARED BY MARENDAR GONKER	NAME DHAWALJANI	CHECKED BY DHAWALJANI	APPROVED BY RONAK BHUDHRANI	SIGNATURE 	SIGNATURE 	SIGNATURE 	SIGNATURE 

# Construction of minor Bridge on Naal Faliya at Vankdi to faliya village on connecting Road Taluka, Santrampur, Dist, Mahisagar Ch 0/0

## TYPICAL PROTECTIVE WALL




Sr.No	Particular			L.A.	Moment V.R. x L.A.
W1	1.73	5.50	11385.00	1.15	13092.75
W2	0.45	5.50	5940.00	1.95	11583.00
W3	1.73	5.50	8538.75	0.575	4909.78
			25863.75		29585.53

$$Z = \frac{\sum M}{V.R.} = \frac{29585.53}{25863.75} = 1.1439 \text{ (Z)}$$

$$e = |b/2 - Z| = 0.09$$

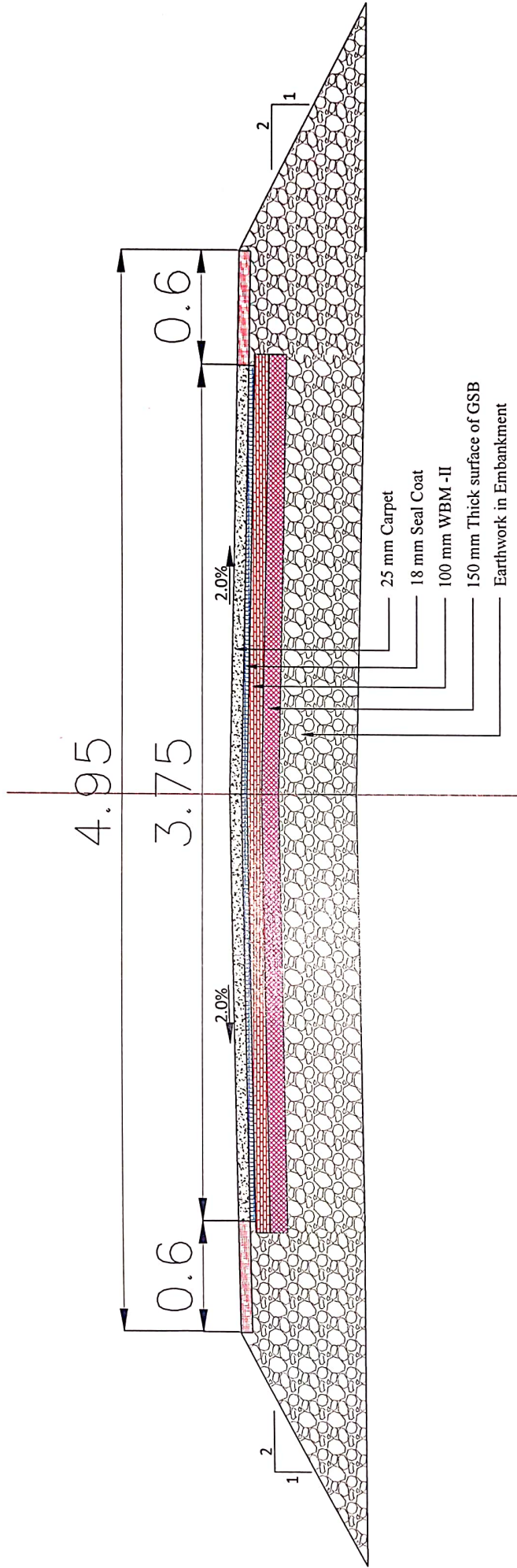
$$b/6 = 0.4125$$

Here  $e < b/6$  Hence Safe

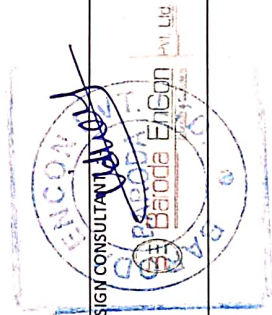
  
 Deputy Executive Engineer  
 Panchayat R&B Sub Division  
 Santrampur

  
 Executive Engineer  
 Panchayat R&B Division  
 Mahisagar





## Typical Cross Section For Diversion Plan



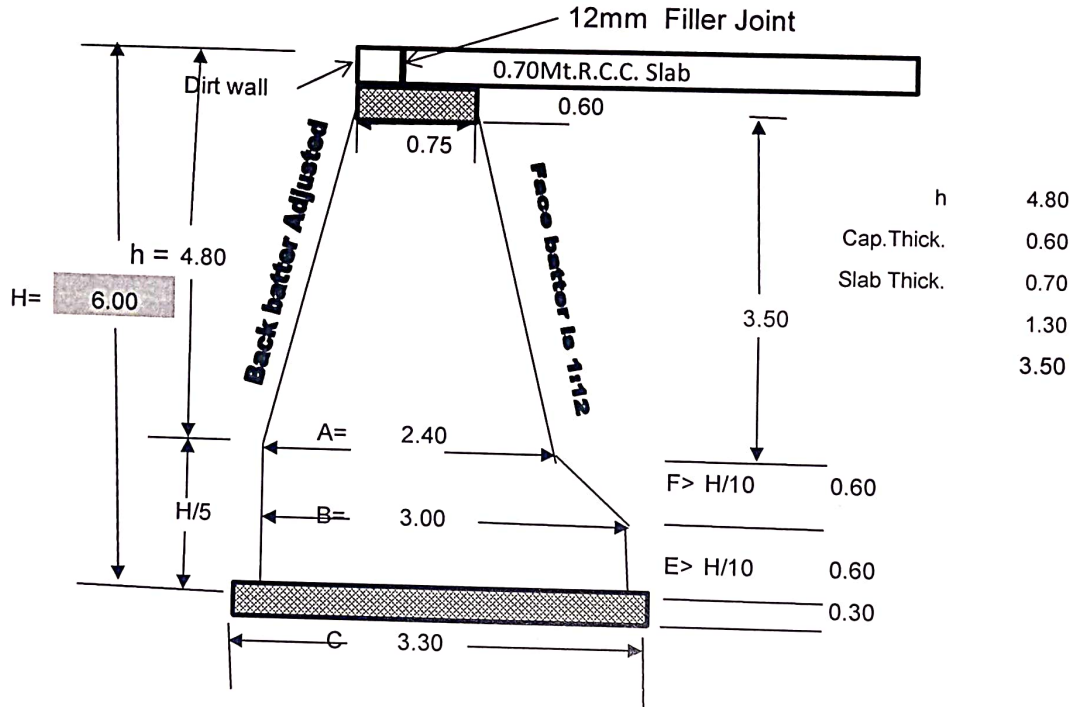
	CLIENT :- ROADS & BUILDINGS DEPARTMENT, GANDHINAGAR, DEPUTY EXECUTIVE ENGINEER PANCHAYAT (R&B) SUB DIVISION SANTRAMPUR, EXECUTIVE ENGINEER PANCHAYAT (R&B) DIVISION, MAHISAGAR.		DESIGN CONSULTANT :- <b>Baroda Engcon Pvt Ltd</b>		DWG TITLE :- <b>Typical Cross Section For Diversion Plan</b>		DRAWING No : DATE :	
			PREPARED BY : MARENDAR GONKER CHECKED BY : DHAWALJAIN APPROVED BY : RONAK BRUDHRANI		REVISION : RO SIGNATURE			



Name of Work :- Construction of minor Bridge on Navagam Khakhara to Vadbara Primary School to Samashan Road Taluka, Santrampur, Dist, Mahisagar Ch 0/60

## DESIGN OF ABUTMENT

(As per Natu's Circular)



Top width of Abutment      0.75 mt

H = Difference between top of formation level and top of the concrete =

$$h = H - H/5 = 6.00 - 6.00 / 5 = 4.80 \text{ Mt.} \quad 6.00 \text{ Mt.}$$

$$\text{Base width at A} = 0.5 h = 0.50 \times 4.80 = 2.40 \text{ Mt.}$$

$$\text{Base width at B} = 0.5 h \times H/10 = 2.40 + 0.60 = 3.00 \text{ Mt.}$$

$$\text{Base width at C} = B + 0.30 = 3.00 + 0.3 = 3.30 \text{ Mt.}$$

$$D = \text{Thickness of concrete} = 0.30 \text{ Mt.}$$

$$E = H/10 = 6.00 / 10 = 0.60 \text{ Mt.}$$

$$F = H/10 = 6.00 / 10 = 0.60 \text{ Mt.}$$

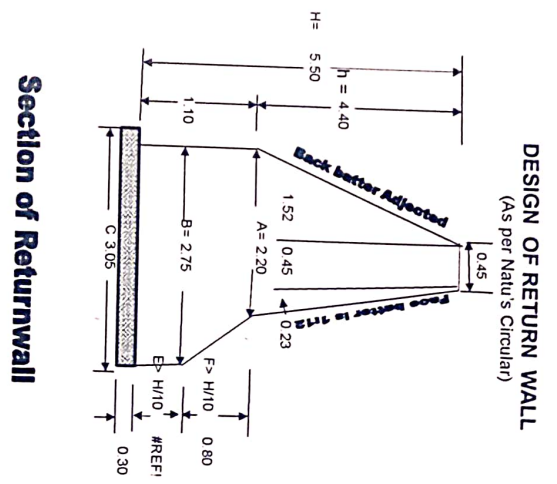
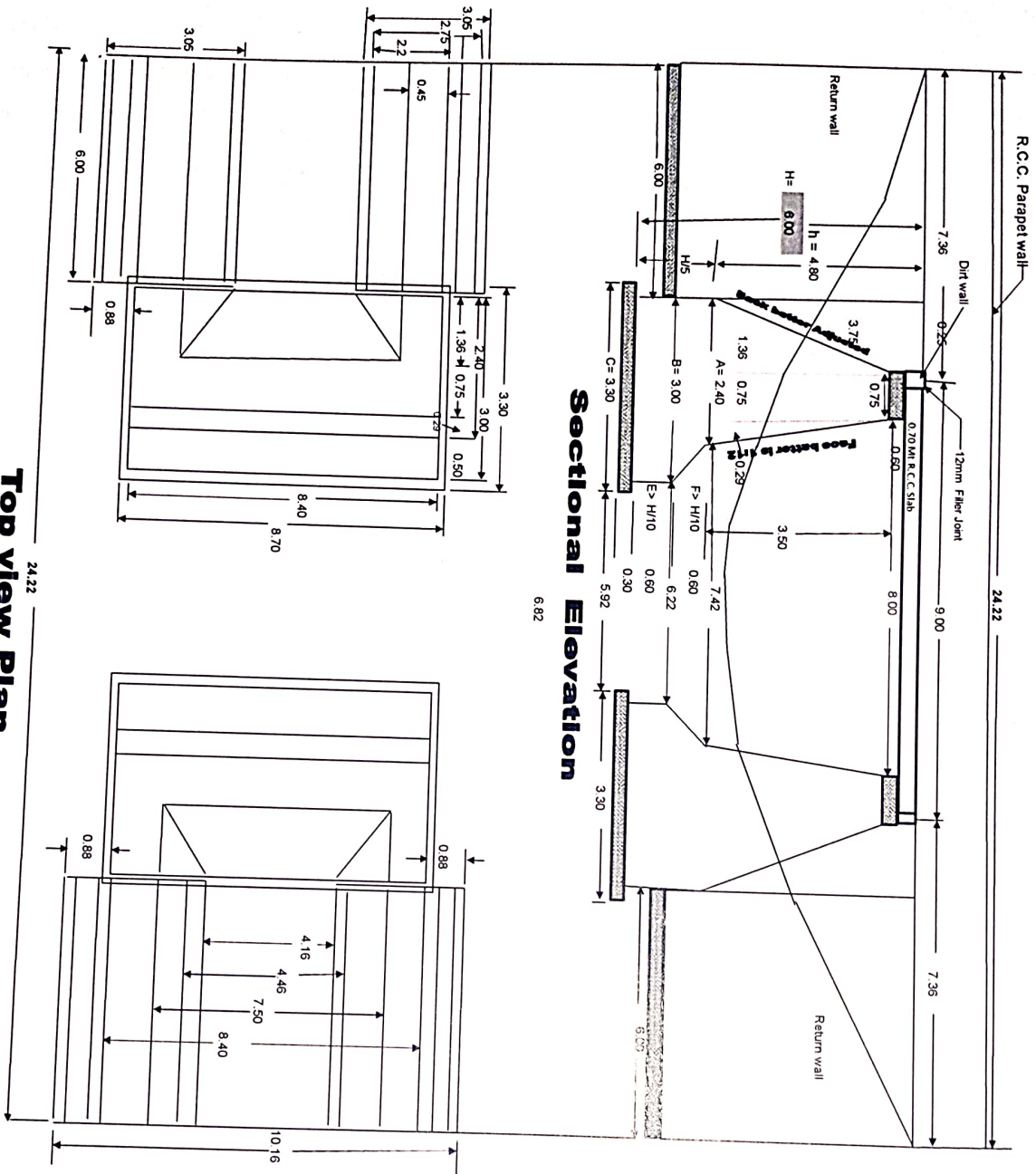
Face batter is 1 : 12 Up to Section "A"

  
Deputy Executive Engineer  
Panchayat R & B Sub Division  
Santrampur

  
Executive Engineer  
Panchayat (R&B) Division  
Mahisagar

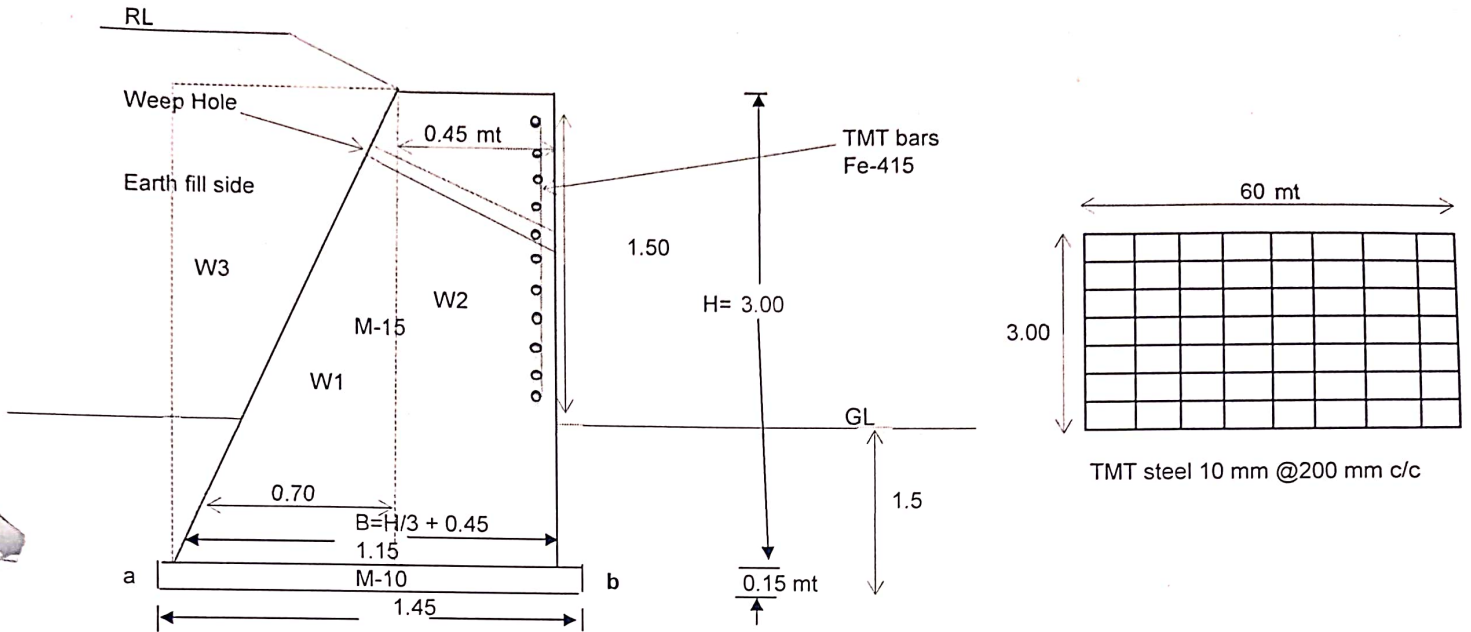






Name of Work :- Construction of minor Bridge on Navagam Khakhara to Vadbara Primary School to Samashan Road Taluka, Santrampur, Dist, Mahisagar Ch 0/60

TYPICAL PROTECTIVE WALL



Sr.No	Particular			L.A.	Moment V.R. x L.A.
W1	0.70	3.00	2520.00	0.47	1176.00
W2	0.45	3.00	3240.00	0.93	2997.00
W3	0.70	3.00	1890.00	0.233	441.00
			7650.00		4614.00

$$Z = \frac{\sum M}{V.R.} = \frac{4614.00}{7650.00} = 0.6031 (Z)$$

$$e = |b/2 - Z| = 0.12$$

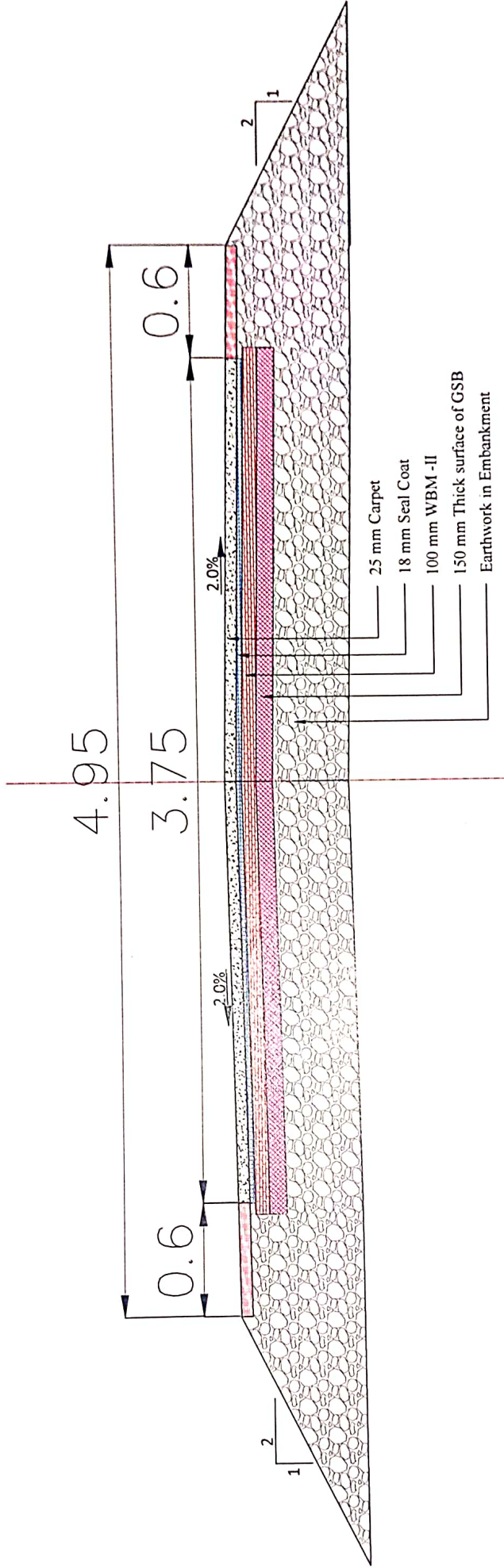
$$b/6 = 0.241667$$

Here  $e < b/6$  Hence Safe

Deputy Executive Engineer  
Panchayat ( R & B ) Sub Division  
Santrampur

Executive Engineer  
Panchayat ( R & B ) Division  
Mahisagar






# Typical Cross Section For Diversion Plan

DRAWING No. :		Revision: RD
DATE :		SIGNATURE
PREPARED BY	NAME	
CHECKED BY	NAME	
APPROVED BY	NAME	

DWG TITLE :-  
**Typical Cross Section For Diversion Plan**



DESIGN CONSULTANT :-  
**PANKAJ ENGINEERS & ARCHITECTS LTD.**

CLIENT :-  
  
**ROADS & BUILDINGS DEPARTMENT, GANDHINAGAR.**  
 DEPUTY EXECUTIVE ENGINEER  
 PANCHAYAT (R&B) SUB DIVISION SANTRAMPUR.  
 EXECUTIVE ENGINEER  
 PANCHAYAT (R&B) DIVISION, MAHISAGAR.

*[Handwritten Signature]*