

NOTES :

1. ALL DIMENSIONS ARE IN MM OTHERWISE STATED.
2. CONCRETE GRADE FOR C.C M-15, & P.C.C IN M-10.
3. 600 MM THK FILTER MEDIA BEHIND WALL AS PER MORTH SPECIFICATION.
4. 100 MM DIA WEEP HOLE 1000 MM C/C HORIZONTAL & VERTICAL SPACED IN STAGGERED FORMATION.
5. SBC BELOW PROTECTION WALL - 20 T/M² SHALL BE VERIFIED BEFORE EXECUTION.
6. STEEL SHALL BE USED FE 550 D CONFORMING RELATIVE IS CODE.

NAME OF WORK:-

CONSTRUCTION OF SLAB DRAIN ON MAHISAGAR
RIVER NEAR MUJPUR NARAN TEKARI ROAD AT
MUJPUR VILLAGE (V.R.) TA. :- PADRA
DIST. :- VADODARA

DEPUTY EXECUTIVE ENGINEER
PANCHAYAT (R & B) SUB DIVISION
PADRA

EXECUTIVE ENGINEER
PANCHAYAT (R & B) DIVISION
VADODARA

SCALE

NTS

APPROVED BY

VIRAL PATEL

M.E CIVIL

CHECKED BY

BIRAL PATEL

M.E CIVIL

DESIGNED BY

MANAN SHAH

B.E CIVIL

DRAWN BY

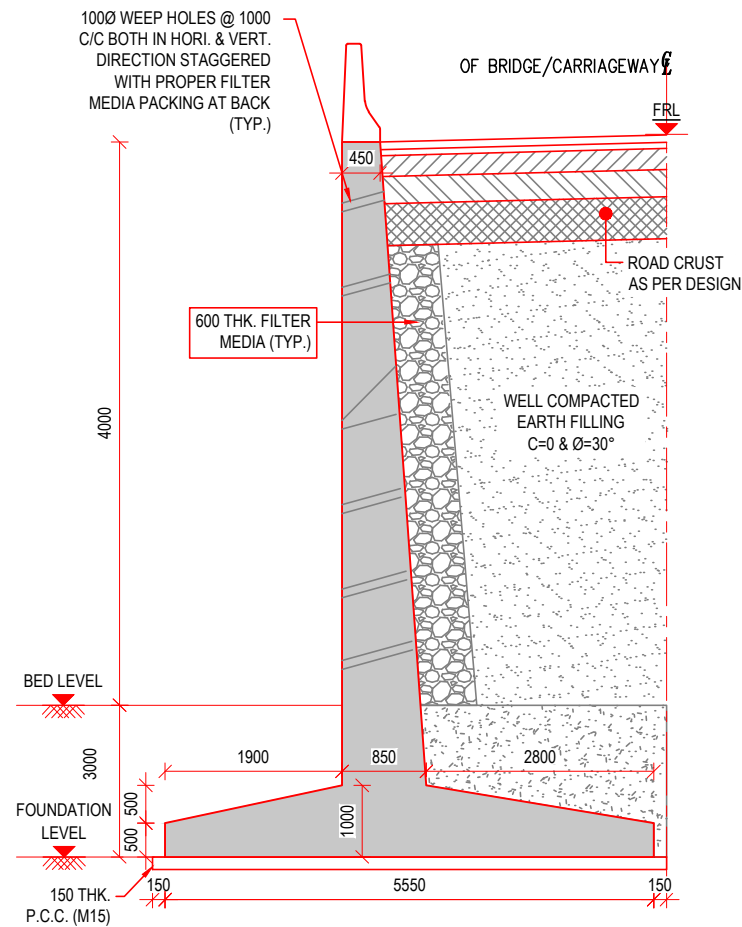
RAHUL PARMAR

DRAFTSMAN

CONSULTANT:-



LK ENGINEERING & DESIGN CONSULTANT
Office Address : 45,46 Third Floor, "Earth Eon" Opp.
Urmi School,
Sama Savli Road Vadodara-390008
Contact No.9313414355
Email id :-lkedc2020@lkedc.in



TYP. SECTION FOR RETAINING WALL LHS - RHS
(CONCRETE DIMENSIONS)
SCALE 1:50

NAME OF WORK:-

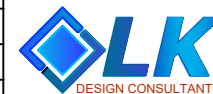
CONSTRUCTION OF SLAB DRAIN ON MAHISAGAR
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DEPUTY EXECUTIVE ENGINEER
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PADRA

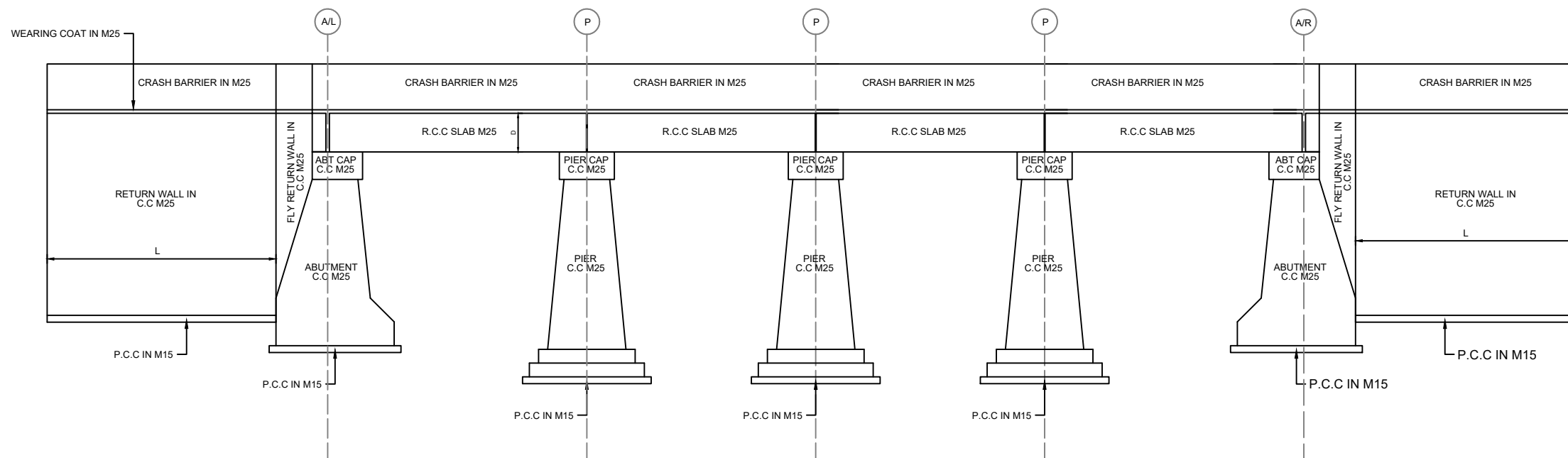
EXECUTIVE ENGINEER
PANCHAYAT (R&B) DIVISION
VADODARA

SCALE	NTS		
APPROVED BY	VIRAL PATEL	M.E CIVIL	
CHECKED BY	BIRAL PATEL	M.E CIVIL	
DESIGNED BY	MANAN SHAH	B.E CIVIL	
DRAWN BY	RAHUL PARMAR	DRAFTSMAN	

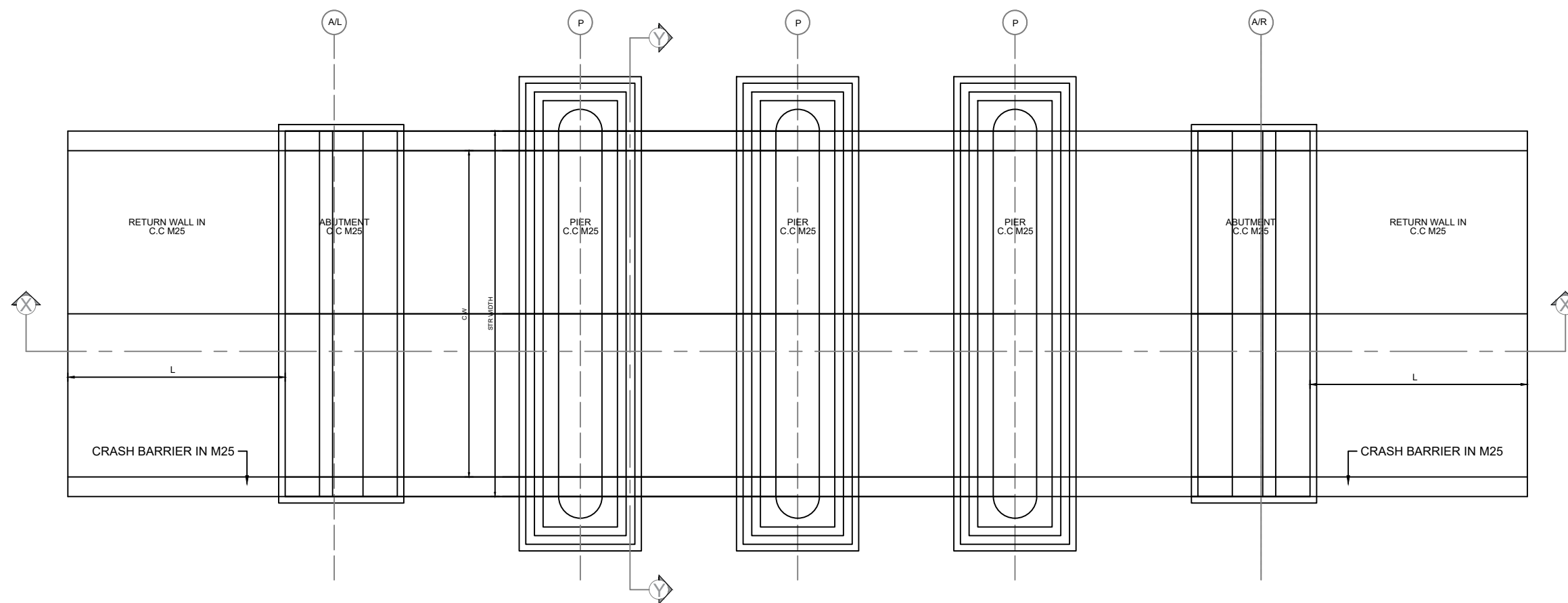
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SECTION XX



PLAN

PROJECT:-

CONSTRUCTION OF SLAB DRAIN ON MAHISAGAR RIVER NEAR MUJPUR NARAN
TEKARI ROAD AT MUJPUR VILLAGE (V.R.) TA. :- PADRA DIST. :- VADODARA

CLIENT :-



DEPUTY EXECUTIVE ENGINEER
PANCHAYAT (R & B) SUB DIVISION
PADRA

EXECUTIVE ENGINEER
PANCHAYAT (R & B) DIVISION
VADODARA

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PRIT PARIKH

B.E CIVIL

DESIGNED BY

MANAN SHAH

B.E CIVIL

DRAWN BY

RAHUL PARMAR

DRAFTSMAN

DATE

02/03/2026

SCALE

N.T.S

DRG NO

PANCHAYAT/BRIDGE/VADODARA/PADRA/09

TITLE

SLAB DRAIN (9 mt - 4 SPAN)

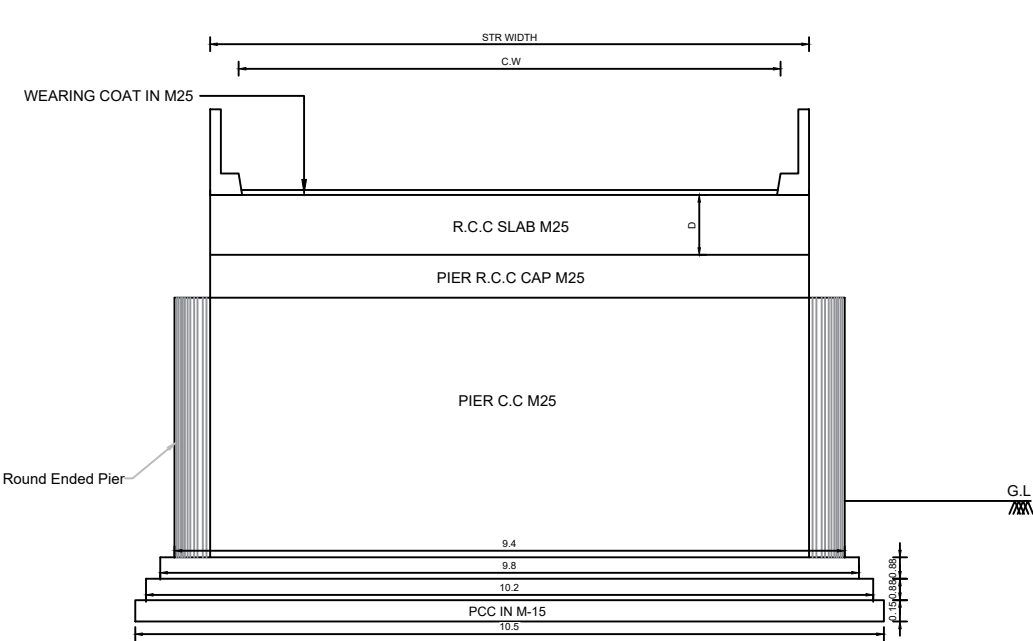
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REV :- R0

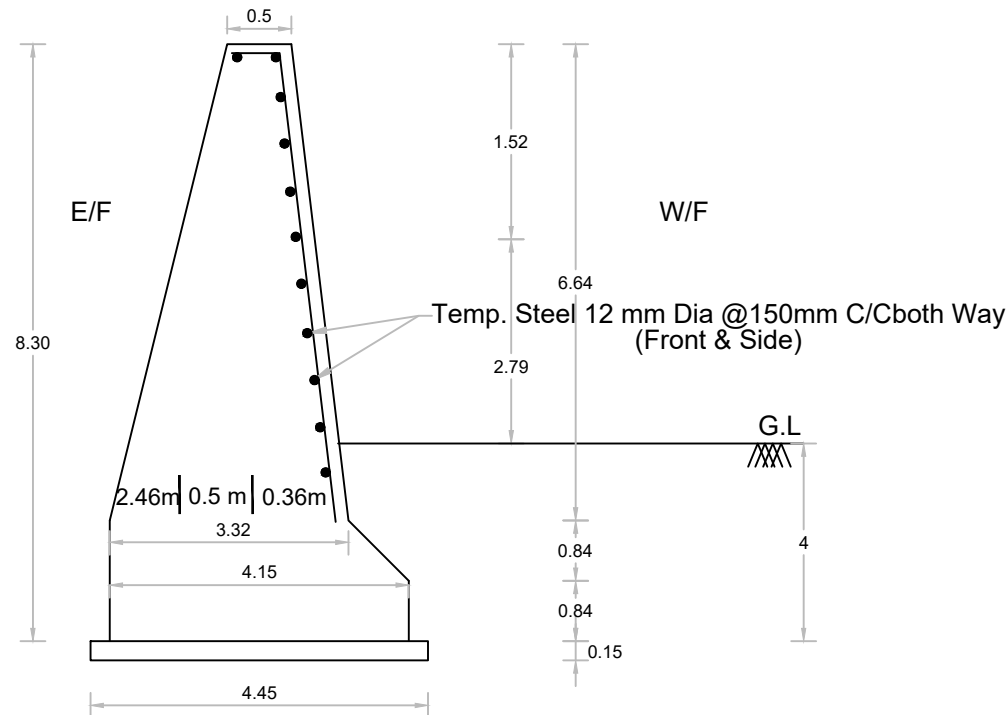
CONSULTANTS :-



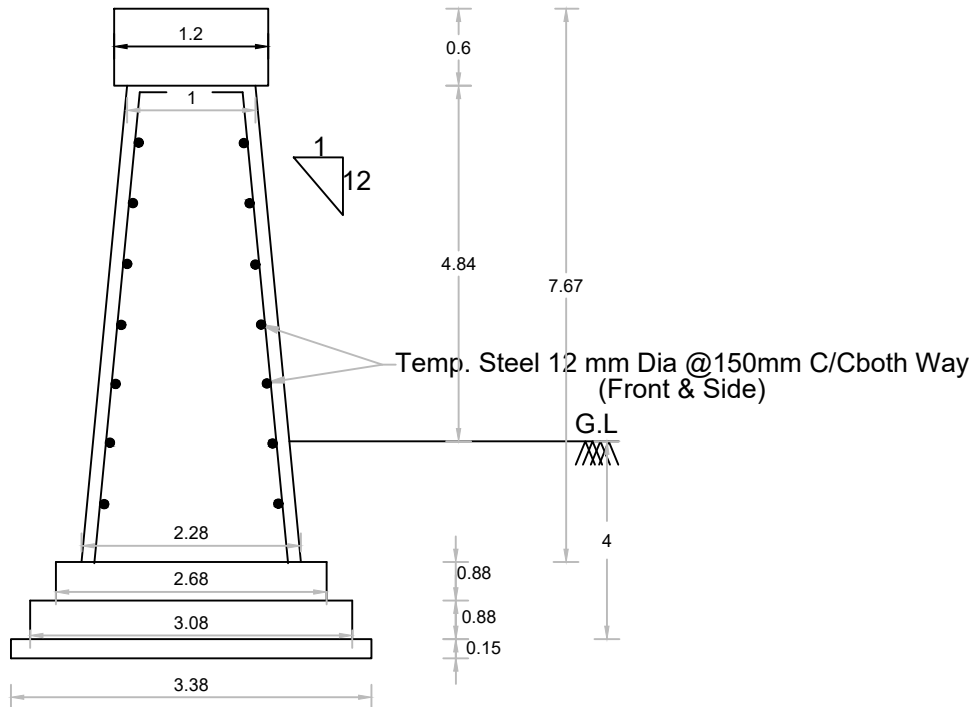
LK ENGINEERING & DESIGN CONSULTANT
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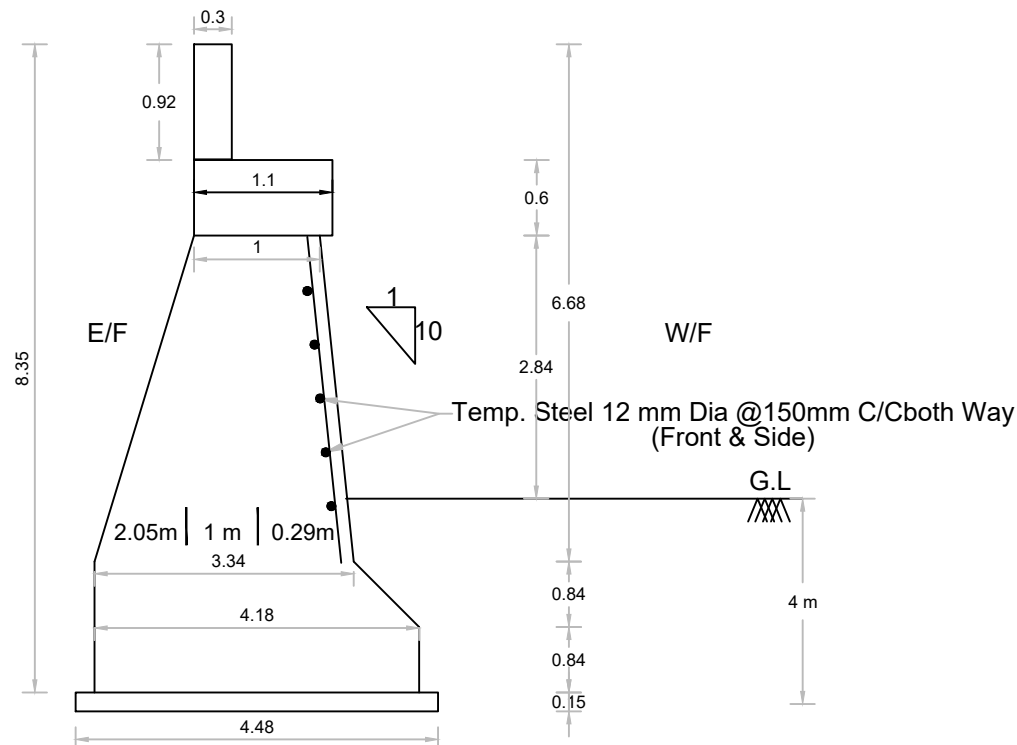
SECTION Y-Y



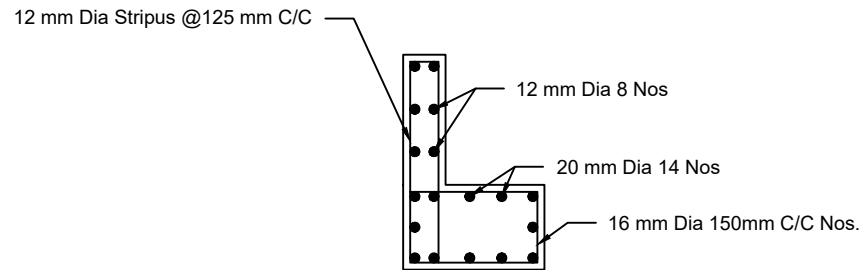
RETURN WALL



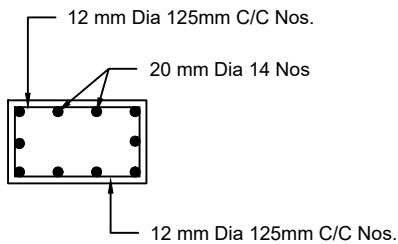
PIER



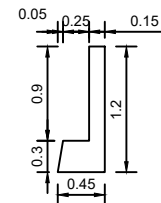
ABUTMENT



ABUTMENT CAP & DIRT WALL REINFORCEMENT DETAILS



PIER CAP REINFORCEMENT DETAILS



DETAIL OF CRASH BARRIER

SLAB DRAIN DETAIL				
SR.NO	DESCRIPTION	NOTATION	VALUE	UNITS
1	CARRIAGE WAY	C.W	7.50	mt
2	STRUCTURE WIDTH	STR WIDTH	8.40	mt
3	SOLID SLAB DEPTH	D	0.84	mt
4	RETURN WALL LENGTH	L	10	mt
5	NO OF SPAN		4	
6	SPAN LENGTH C/C		8	mt
7	CLEAR HEIGHT		5.44	mt

HYDRAULICS DETAIL			
SR.NO	DESCRIPTION	VALUE	UNITS
1	DISCHARGE	359	Cumecs
2	AFFLUX	0.681	mt
3	HFL	16	mt
4	A.H.F.L	16.68	mt
5	FRL	20.30	mt
6	VELOCITY	7.59	mt/sec
7	BED SLOPE	1 IN 39	
8	Value of n	0.0350	

NOTES:

- GENERAL :-
 - ALL DIMENSIONS ARE IN MILLIMETER AND LEVELS ARE IN METER UNLESS OTHERWISE MENTIONED.
 - DIMENSIONS SHALL NOT BE SCALED OFF FROM THE DRAWING.
 - ALL DRAINAGE SPOUT BOTTOMS SHALL BE TAKEN AT LEAST 300mm BELOW SOFFIT OF SLAB & SHALL BE PROPERLY SUPPORTED AS DIRECTED BY THE ENGINEER-IN-CHARGE.
 - RIVER BED PROFILE TO BE RESTORED AFTER CONSTRUCTION OF BRIDGE WITH SUITABLE MATERIAL.
 - PROPOSED STRUCTURE IS DESIGNED FOR MAX OF FOLLOWING IRC LOADING (2 LANE OF CLASS A) OR (1 LANE OF 70R)
- SUB STRUCTURE :-
 - WEEP HOLES WITH BACKING OF FILTER MATERIALS SHALL BE PROVIDED IN ABUTMENT AND SQUARE RETURNS IN ACCORDANCE WITH THE LATEST IRC CODES.
- FOUNDATION :-
 - THE FOUNDATION LEVELS SHOWN ARE TENTATIVE BASED ON THE RESULTS OF TRIAL PIT AVAILABLE. IN DETAILING, THE SAME SHALL BE FINALIZED ON THE BASIS OF ACTUAL SOIL STRATA MET WITH AND THE SAFE BEARING CAPACITY OF THE STRATA AT FOUNDATION LEVEL.
 - DURING ACTUAL EXECUTION IN THE FOUNDATION LEVELS OF ABUTMENTS, PIERS, RETURNS ETC. ARE DIFFERENT FROM THOSE SHOWN IN DRAWING .THE SECTION OF THE SAME SHALL BE MODIFIED CORRESPONDING TO THEIR ACTUAL HEIGHTS ACCORDING TO THE DESIGN REQUIREMENTS.

IMPORTANT NOTE :-
1. IF ANY DISCREPANCY IS OBSERVED WITH RESPECTIVE BORE HOLE DATA OF SOIL INVESTIGATION REPORT SAME SHALL BE IMMEDIATELY REPORTED TO CONSULTANT.

STRUCTURAL AND OTHER DATA: -

- SPAN ARRANGEMENT : 4 SPANS OF 9 m C/C
- SUB STRUCTURE : RCC PIER, PIER CAP, ABUTMENT, ABUTMENT CAP, FOUNDATION(OPEN)
- SUPER STRUCTURE : R.C.C. SOLID SLAB
- WEARING COAT : 75mm THK. (CONCRETE)
- EXPANSION JOINT : 20 MM THK ASPHALT FILLER JOINT
- DRAINAGE SPOUTS : AT 2.5m c/c
- CRASH BARRIER : AS PER IRC-5

CONCRETE GRADE:

- OPEN FOUNDATION : M25
- PIER, ABUTMENT, RETURN WALL : M25
- ABUTMENT CAP & DIRT WALL, PIER CAP : M25
- SOLID SLAB & APPROACH SLAB : M25
- CRASH BARRIER : M25
- PCC LEVELING COURSE : M15
- STEEL GRADE : Fe500 D

PROJECT:-

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CLIENT :-

EXECUTIVE ENGINEER
PANCHAYAT (R & B) DIVISION
VADODARA

DEPUTY EXECUTIVE ENGINEER
PANCHAYAT (R & B) SUB DIVISION
PADRA

EXECUTIVE ENGINEER
PANCHAYAT (R & B) DIVISION
VADODARA

APPROVED BY

VIRAL PATEL

M.E CIVIL

CHECKED BY

PRIT PARIKH

B.E CIVIL

DESIGNED BY

MANAN SHAH

B.E CIVIL

DRAWN BY

RAHUL PARMAR

DRAFTSMAN

DATE

02/03/2026

SCALE

N.T.S

DRG NO

PANCHAYAT/BRIDGE/VADODARA/PADRA/09

TITLE

SLAB DRAIN (9 mt - 4 SPAN)

CHAINAGE :-

0/777 to 0/809

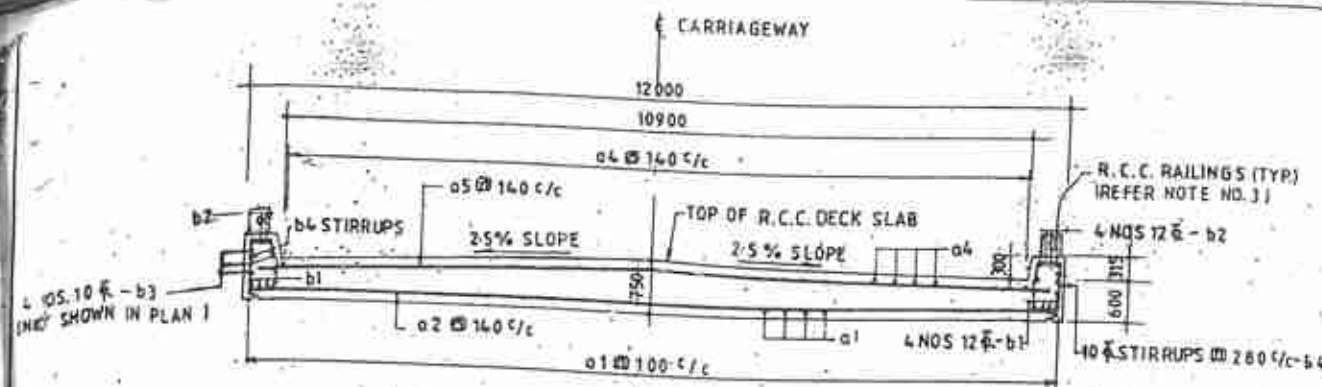
REV :-

R0

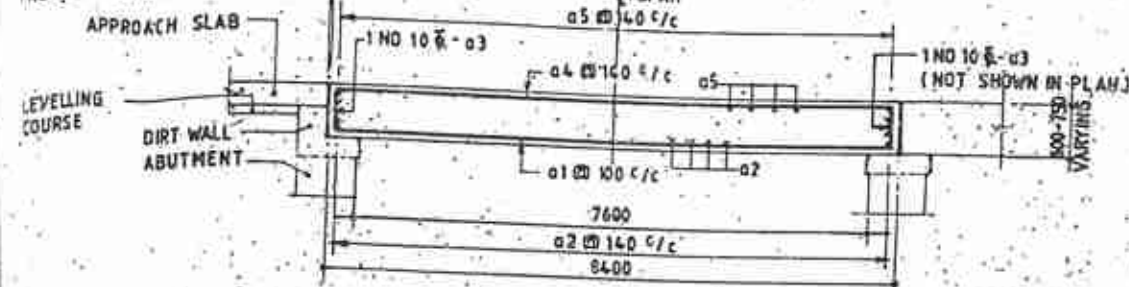
CONSULTANTS :-

LK
DESIGN CONSULTANT

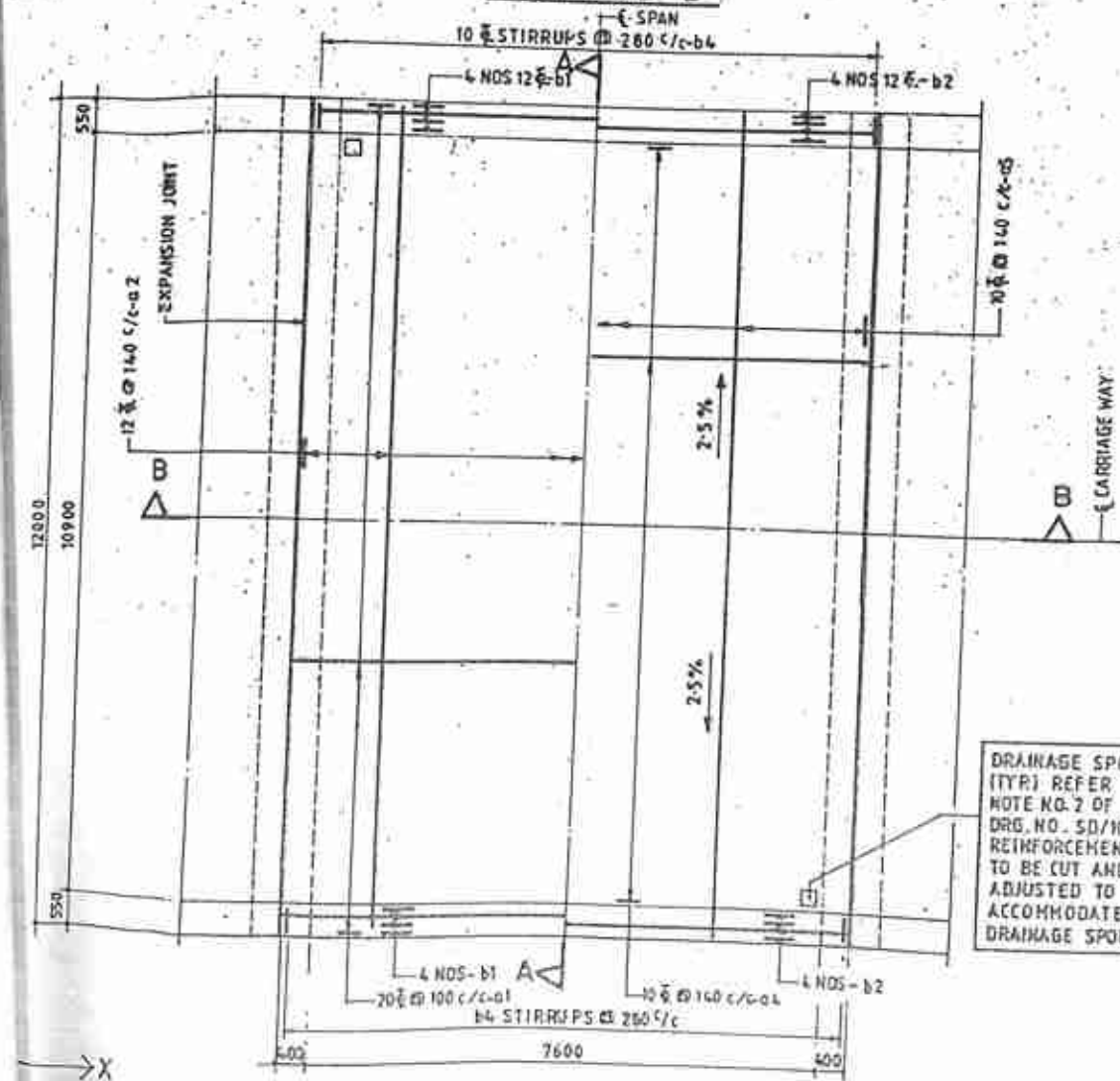
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Email id :-lkedc2020@lkedc.in



20 EXPANSION JOINT
REFER DRG. NO. SD/103



SECTION B-B



BOTTOM REINFORCEMENT TOP REINFORCEMENT

PLAN SHOWING REINFORCEMENT DETAILS OF DECK SLAB

SCHEDULE OF REINFORCEMENT (PER SPAN)

SL NO	LOCATION	BAR MKD	SHAPE	DIA (mm)	SPACING (mm)	LENGTH (mm)	NOS	TOTAL LENGTH (mm)	WEIGHT (kg)
1	SLAB-BOTTOM ALONG-X	a1		20	100	8980	120	1077.60	26.62
2	SLAB-BOTTOM ALONG-Y	a2		12	140	12430	61	758.23	6.73
3	SLAB-SIDE ALONG-Y	a3		10	—	11900	2	23.80	.15
4	SLAB-TOP ALONG-X	a4		10	140	9040	79	714.36	4.41
5	SLAB-TOP ALONG-Y	a5		10	140	11600	61	707.60	4.37
6	KERB-BOTTOM	b1		12	—	9210	8	73.68	.65
7	KERB-TOP	b2		12	—	9230	8	73.84	.66
8	KERB-SIDE	b3		10	—	8850	8	70.80	.61
9	KERB-STIRRUPS	b4		10	280	2580	62	159.96	.99

② DOES NOT INCLUDE THE ADDITIONAL STIRRUPS AT LAPS OF LONGITUDINAL BARS - REFER DRG. NO. SD/103

Dead load of the superstructure per span including R.C.C. railings = 1933 kN
3 kN/m and wearing coat @ 2 kN/sqm

REFERENCE DRAWINGS

DRAWING NO.	TITLE
SD/101	GENERAL NOTES
SD/102	GENERAL ARRANGEMENT
SD/103 & SD/104	MISCELLANEOUS DETAILS
SD/105	DETAILS OF R.C.C. RAILINGS (WITHOUT FOOTPATHS)

QUANTITIES (PER SPAN)

EFFECTIVE SPAN (m)	8.0
CONCRETE (cu. m.)	70.61
STEEL INCLUDING 5% EXTRA FOR LAPS AND WASTAGE (kg)	4721
ASPHALTIC WEARING COAT (sq.m)	91.56

NOTES:-

- All dimensions are in millimetres unless otherwise mentioned. Only written dimensions are to be followed.
- Special attention is invited to note no. 18H of drawing no SD/101 regarding the design mix to be adopted.
- The reinforcement of railing posts shall be incorporated before casting of the deck slab. The railings shall conform to drawing no SD/105 or any other approved type.
- Dimensions in schedule of reinforcement are given as per IS:2502.
- Reinforcement of adjacent span superstructure, approach slab not shown.

MNO		DATE	DESCRIPTION	BY
REVISION				
GOVERNMENT OF INDIA MINISTRY OF SURFACE TRANSPORT (ROADS WING), NEW DELHI				
STANDARD DRAWINGS FOR ROAD BRIDGES				
R.C.C. SOLID SLAB SUPERSTRUCTURE (RIGHT) SPAN 8.0m (WITHOUT FOOTPATHS)				
RECOMMENDED BY		APPROVED BY		1990
I.U. JAYARAO E.E.		S.K. RAISTHA S.E.		DRG NO. SD/112