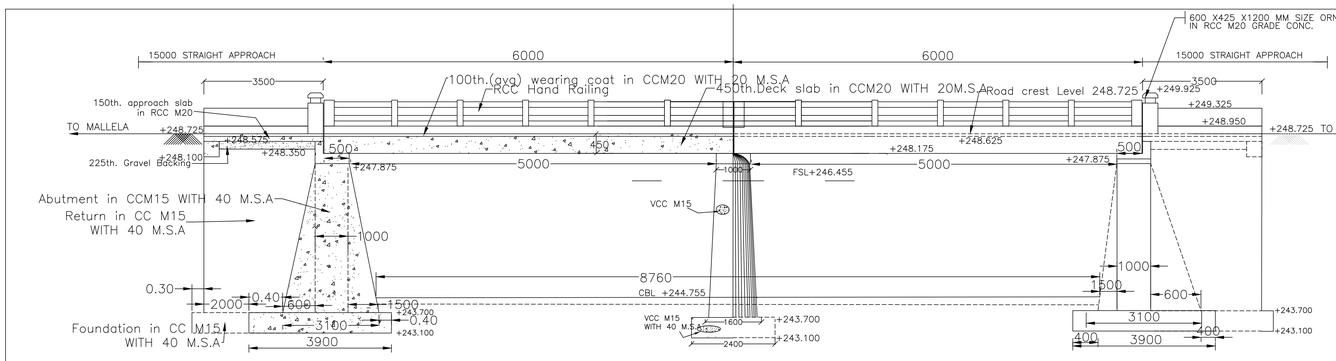
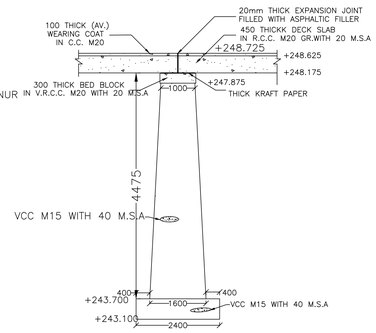
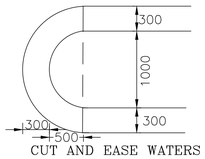


LONGITUDINAL SECTION



CROSS SECTION OF PIER
SECTION B-B
(HAND RAILS NOT SHOWN)



CUT AND EASE WATERS

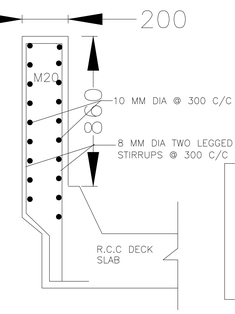
NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES AND LEVELS ARE IN METRES UNLESS OTHERWISE SPECIFIED.
2. DO NOT SCALE THE DRAWING, WRITTEN DIMENSIONS SHALL ONLY BE CONSIDERED.
3. THE DRAWING IS APPLICABLE FOR SQUARE CROSSING ONLY.
4. THE CART TRACK CROSSING IS 7500 MM WIDE IN BETWEEN THE KERBS AND IS DESIGNED FOR ONE LANE OF IRC: CLASS–A LOADING.
5. THE ABUTMENTS ARE DESIGNED FOR EARTH PRESSURE BASED ON TVA PROCEDURE WITH BACKFILL SOILS OF NON COHESSIVE NATURE AND AN ANGLE OF INTERNAL FRICTION OF ø = 32° DEGREES AND WITH UNIT WEIGHT OF SATURATED EARTH AS 2.10 T/CUM.
6. a.) ABUTMENTS SHALL BE CONSTRUCTED IN V.C.C. M15 USING 40mm MSA .
   b) PIERS SHALL BE CONSTRUCTED IN VCC M15 GRADE USING 40mm MSA.
   c.) PIER AND ABUTMENT(WATER FACE) SHALL BE PROVIDED WITH SKIN REINFORCEMENT OF 8mm AT 160C/C(5 KG/SQM OF EXPOSED AREA)
7. 600mm THICK FOUNDATION IN C.C. M15 GRADE IS TO BE PROVIDED UNDER ABUTMENTS AND PIERS. 600 mm THICK IS TO BE PROVIDED UNDER RETURNS
8. WEARING COAT OVER DECK SLAB AND APPROACH SLAB SHALL BE 100 mm THICK (AVE.) IN C.C. M20 GRADE WITH MESH REINFORCEMENT OF 6mm ø AT 200mm C/C BOTH WAYS.
9. APPROACH SLAB SHALL BE 150mm THICK IN RCC M20 GRADE WITH 12mm BARS AT 200 C/C BOTH WAYS AT TOP AND BOTTOM LAID OVER 225mm THICK MOURAM+METAL COMPACTED TO MDD @ OMC.
10. BED BLOCKS ON ABUTMENTS AND PIER SHALL BE IN RCC M20 GRADE WITH REINFORCEMNT.
11. 20mm THICK EXPANSION JOINTS ARE TO BE PROVIDED AT THE FACE ENDS OF DECK SLAB OVER ABUTMENT & PIER AND FILLED WITH ASPHALTIC FILLER.
12. WEEP HOLES OF SIZE 75mm ø WITH REVERSE FILTER ARE TO BE PROVIDED AT 1.50M C/C STAGGERED IN ABUTMENTS ABOVE F.S.L.
13. DECK SHALL BE IN VRCC M20 GRADE CONCRETE USING 20mm MSA.
14. 100mm THICK LININGS SHALL BE PROVIDED IN VCC M15 GR. WITH MAX. OF 40 MM SIZE GRADED COARSE METAL 10 MTS ON EITHER SIDE OF THE STRUCTURE or AS PER THE AGREEMENT WHICH EVER IS LENTHIER. RAMP MAY BE PROVIDED ON EITHER SIDE OF BRIDGE.
15. THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH AGREEMENT CONDITIONS.
15. THE REINFORCEMENT DETAILS MAY BE PROVIDED AS PER MOST DRAWING BD/2–74.

HYDRAULIC PARTICULARS @ Km. 2.378

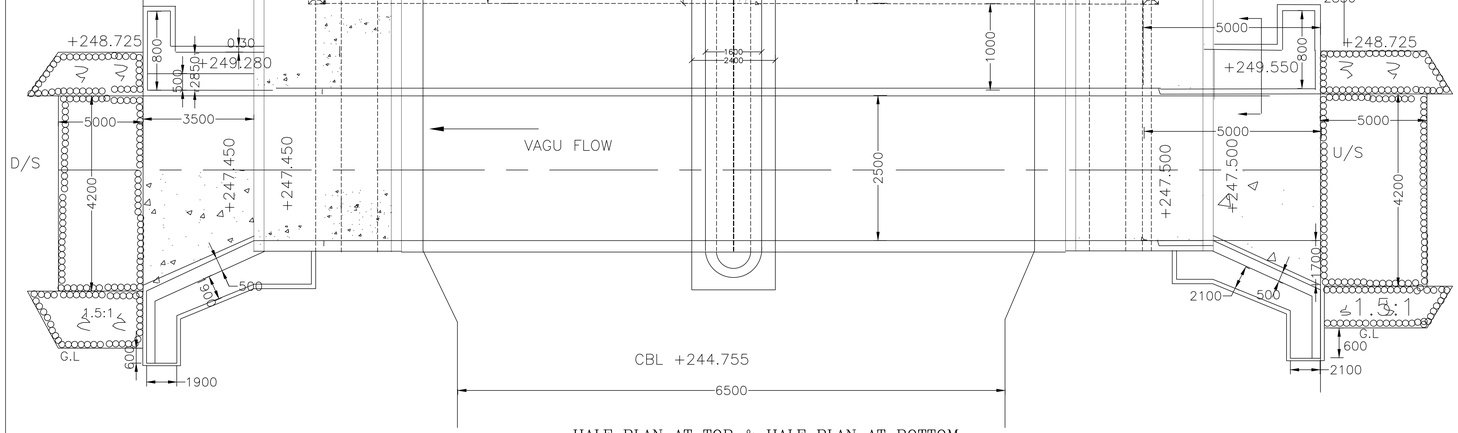
Sl. No.	DESCRIPTION	UNITS	PARTICULARS
1.	DISCHARGE (REQUIRED)	Cumecs	10.017
2.	DISCHARGE (DESIGNED)	Cumecs	10.2765
3.	BED WIDTH	m	6.50
4.	F.S.D.	m	1.70
5.	SIDE SLOPES (INNER / OUTER)	---	1.5 : 1
6.	BED FALL	---	1 in 9000
7.	VALUE OF 'n'	---	0.018
8.	VELOCITY	m/sec	0.668
9.	FREE BOARD	m	0.750
10.	TOP WIDTH OF BANKS (L/R)	m	2.50m./5.05m
11.	C.B.L.	m	+244.755
12.	F.S.L.	m	+246.455
13.	T.B.L.	m	+247.205
14.	G.L./R.L	m	+248.460

Hydraulic Particulars of Vagu
1. Catchment area of vagu =0.240 sqkm.
2. M.F.D = 6.686 cumecs.
3.Ground level at crossing = +247.500
4. Vagu flowing from left to right of the canal.

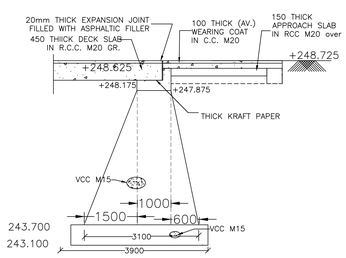


NOTE 1. THIS SIDE WALL IS PROPOSED IN PLACE OF HAND RAILING. REINFORCEMENT OF RAILING POST SHOULD BE SUITABLY ANCHORED INTO THE DECK SLAB.

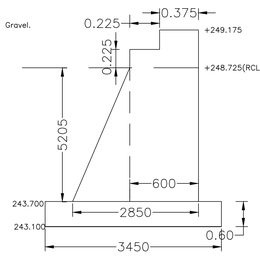
SECTION OF SIDE WALL OVER THE KERB



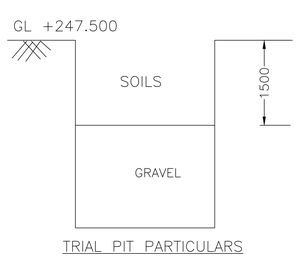
HALF PLAN AT TOP & HALF PLAN AT BOTTOM



SECTION OF ABUTMENT
SECTION A–A
(HAND RAILS NOT SHOWN)



CROSS SECTION OF RETURN WALL



TRIAL PIT PARTICULARS

STRESS TABLE					
Sl.No	DESCRIPTION	STRESS IN CONCRETE		STRESS ON SOIL	
		MAX. (t/Sqm)	MIN. (t/Sqm)	MAX. (t/Sqm)	MIX. (t/Sqm)
1.	BRIDGE ABUTMENTS	22.34	0.716	19.96	4.40
2.	BRIDGE PIER	23.660	3.290	14.380	5.160
3	RETURN	21.525	2.241	16.321	7.768
4	U/S OF DRAIN WING&RETURNS	13.842	2.843	10.368	6.3142
5	D/S OF DRAIN WING&RETURNS	12.975	2.455	9.481	5.934
6	ABUTMENT UNDER TROUGH	10.320	9.480	10.320	9.950

sd/-
Assistant Executive Engineer
G.K.L.I subdivision no 4,
KONDAPURAM

sd/-
Deputy Executive Engineer
G.K.L.I subdivision no 4,
KONDAPURAM

Prepared by
sd/-
For KBL- MCCL(J.V)
Authorised Signatory
Contractor,
KBL_MCCL(JV)

GOVERNMENT OF ANDHRA PRADESH

CLIENT :	IRRIGATION & C.A.D DEPARTMENT
CONTRACTOR :	KBL_MCCL(JV)
PROJECT :	GANDIKOTA LIFT IRRIGATION SCHEME
TITLE:	Superpassage Cum Double Lane Road Bridge at km: 2.378 of feeder channel from Paidipalem to Himakunta Sump GENERAL PLAN, ELEVATION, SECTION & NOTES

Drg.No:	Scale:	Drawn by:

Prepared by:	Submitted by:	Recommended by:	Approved by:
Contractor, KBL_MCCL(JV)	sd/- Executive Engineer G.K.L.I DIVISION, PULIVENDULA	sd/- Superintending Engineer, G.N.S.S Circle,KADAPA	sd/- Chief Engineer, IRRIGATION , KADAPA