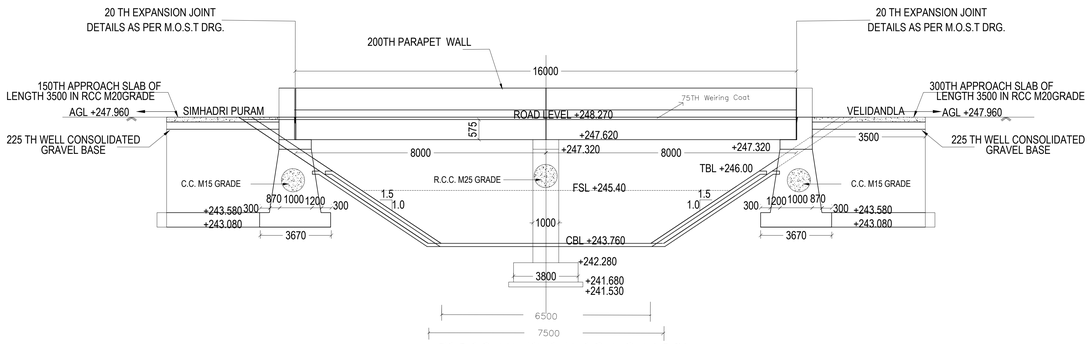
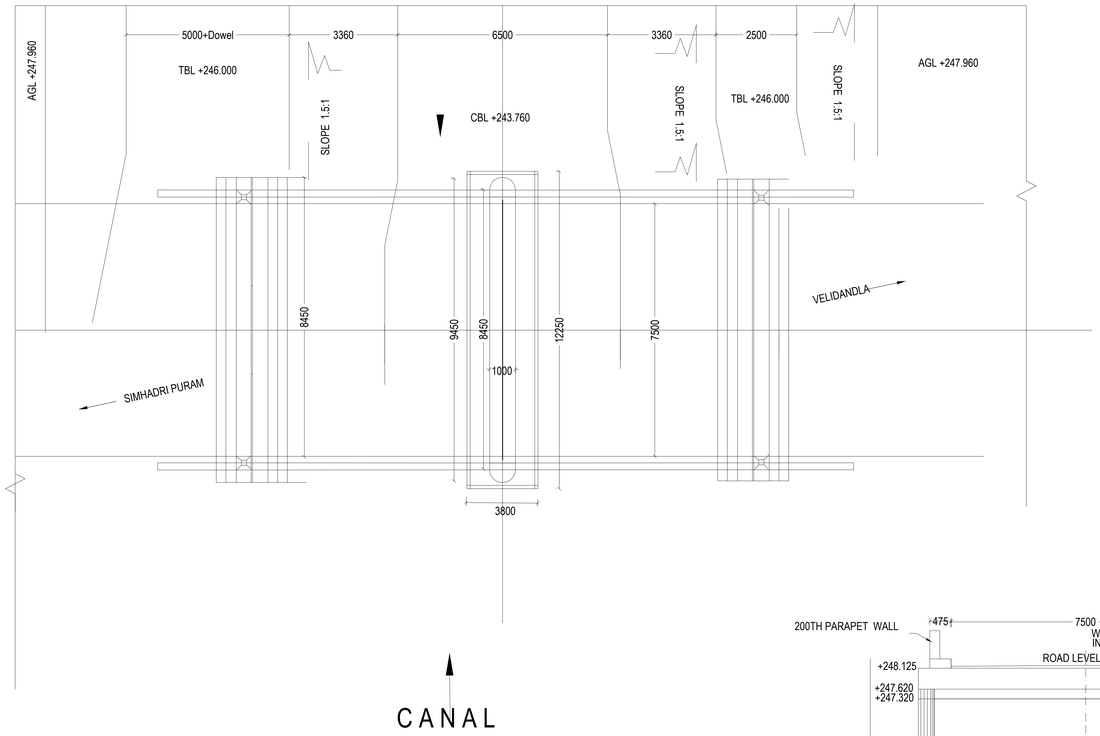
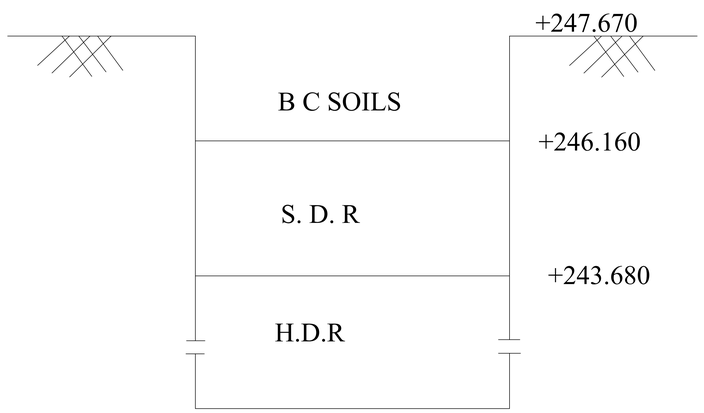
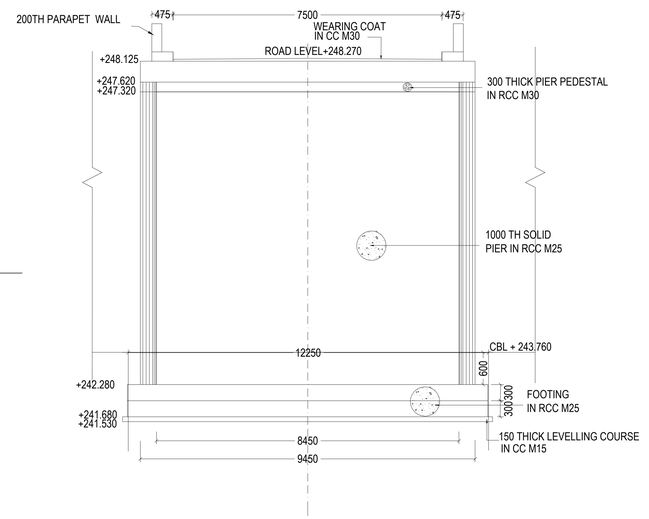


SECTIONAL ELEVATION ON 'PQ'



TRIAL PIT PARTICULARS AT KM. 12.235





SECTIONAL ELEVATION ON 'PQ'

SCALE 1 : 100

REFERENCE DRAWINGS

1. DETAILS OF PIER AND ABUTMENT
2. DETAILS OF DECK SLAB
3. SCHEDULE OF REINFORCEMENT

DRG.NO.: BD/12-74
DRG.NO.: BD/13-74
GLIP/FC/DLRB/002/2008

Approved By
Sd/ - Dated:30.10.2009
Superintending Engineer
QNSS Circle,Kadapa

NOTES AND SPECIFICATIONS

1/2

1. ALL THE DIMENSIONS ARE IN MILLMETRES AND THE LEVELS ARE IN METRES.
2. DO NOT SCALE THE DRAWING. ONLY FIGURED DIMENSIONS SHALL BE FOLLOWED.
3. THE DOUBLE LANE ROAD BRIDGE IS DESIGNED FOR A CARRIAGE WAY WIDTH OF 7.5 M AND FOR TWO LANE OF IRC CLASS 'A' LOADING OR ONE LANE OF CLASS AA LOADING THE DECK SLAB AND REINFORCEMENT ADOPTED FROM MOST DRAWINGS OF DLRB
4. THE BRIDGE IS DESIGNED ADOPTING THE FOLLOWING IRC AND IS CODES.
   (i) IRC - 5 - 1998, (ii) IRC - 6 - 2000, (iii) IRC - 21 - 2000, (iv) IRC - 78 - 2000, (v) IRC - 83 - 2000, (vi) IS 456 - 2000, (vii) IS 383
5. 100 THICK LINING IN C.C. M15 GRADE SHALL BE PROVIDED FOR BED AND SIDES OF THE CANAL FOR A LENGTH OF 30.0 M ON EITHER SIDE OR AS PER AGREEMENT.
6. BACK FILLING SHALL BE DONE SIMULTANEOUSLY WITH THE RAISING OF THE STRUCTURE WITH Ø VALUE OF SOIL NOT LESS THAN 28°.
7. IF THE STRATA METWITH AT FOUNDATION LEVEL DURING EXECUTION IS DIFFERENT FROM WHAT HAS BEEN CONSIDERED IN THE DESIGN (SHOWN IN THE STRESS TABLE), THE SECTION NEEDS TO BE REDESIGNED.
8. THE ROAD BRIDGE IS PROPOSED TO CROSS AT 12DEGREES ANGLE TO THE CANAL FLOW AND SUITABLE APPROACHES SHALL BE PROPOSED AS PER SITE CONDITIONS AND THE FIELD AUTHORITIES SHOULD ENSURE THE SAME.
9. SUITABLE APPROACHES SHALL BE FORMED TO CONNECT MAIN ROAD ON EITHER SIDE OF THE BRIDGE.
10. THE FIELD AUTHORITIES SHOULD SATISFY ABOUT THE SUITABILITY OF THE STRUCTURE AS PER SITE CONDITIONS BEFORE EXECUTION OF WORK.
11. WING RETURNS SHALL INVARIABLY BE PROVIDED FOR EFFECTIVE BANK CONNECTIONS.
12. THE SPECIFICATIONS PROPOSED FOR THE VARIOUS COMPONENTS OF THE STRUCTURE ARE AS FOLLOWS:

Sl.No	DETAILS OF COMPONENTS	GRADE OF CONCRETE AS PER IRC: 6-2000	MAX. SIZE OF C.A AS PER IS:383
1	WEARING COAT OF SLAB	CC M30	20 MM
2	SLAB OF DECK	RCC M25	20 MM
3	PIER CAP, ABUTMENT BED BLOCK	RCC M30	20 MM
4	PIER	RCC M25	20 MM
5	ABUTMENT & RETURN	CC M15	20 MM
6	PIER FOOTING	RCC M25	20 MM
7	ABUTMENT & RETURN FOUNDATION	CC M15	20 MM
8	APPROACH SLAB	CC M20	20 MM
9	LEVELLING COURSE FOR PIER	CC M10	20 MM
10	LINING	CC M15	20 MM

HYDRAULIC PARTICULARS

S.NO	DESCRIPTION OF ITEMS	QUANTITY & UNITS
1	DISCHARGE REQUIRED	9.068 CUMECS
2	DISCHARGE DESIGNED	9.135 CUMECS
3	BED WIDTH	6.50 M
4	FULL SUPPLY DEPTH	1.640 M
5	VELOCITY	0.622 M/SEC
6	BED FALL	1 / 10000
7	SIDE SLOPES	1.5 : 1
8	COEFFICIENT OF RUGOSITY	0.018
9	TOP WIDTH OF BANKS (L / R)	2.5 M / 5.0 M+Dowel
10	BED LEVEL	+ 243.760M
11	FULL SUPPLY LEVEL	+245.400 M
12	TOP OF BANK LEVEL	+246.000 M
13	AVE. GROUND LEVEL	+ 247.670 M
14	ROAD LEVEL	+ 248.270 M
15	FREE BOARD	0.600 M

STRESS TABLE

S.NO	DESCRIPTION OF ITEMS	STRESSES IN T / SQ.M			
		AT BASE		ON SOIL	
		MAX.	MIN.	MAX.	MIN.
1	ABUTMENT	30.17	(-) 3.593	25.854	0.687
2	RETURN	28.934	(-) 4.928	23.737	0.371
3	PIER Case-i	104.153	(+) 55.197	11.301	0.213
	PIER Case-ii	98.671	(+) 49.073	11.153	0.487

REVISION NO:	REFERENCE	DATE
CLIENT	GOVERNMENT OF ANDHRA PRADESH IRRIGATION & CAD DEPARTMENT	
PROJECT	GANDIKOTA LIFT IRRIGATION SCHEME FEEDER CHANNEL	
TITLE	DOUBLE LANE ROAD BRIDGE WITH RIGHT ANGLE AT KM. 12.235 GENERAL PLAN AND SECTIONAL ELEVATION	
CONTRACTORS		
CONSULTANTS		
DRAWING NO:	SCALE	DATE
GLIP/FEEDER CHANNL/DLRB /001/2008	AS INDICATED	