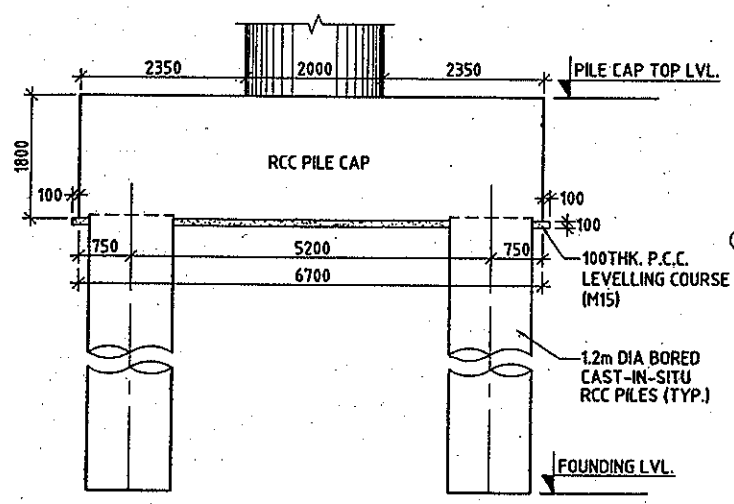
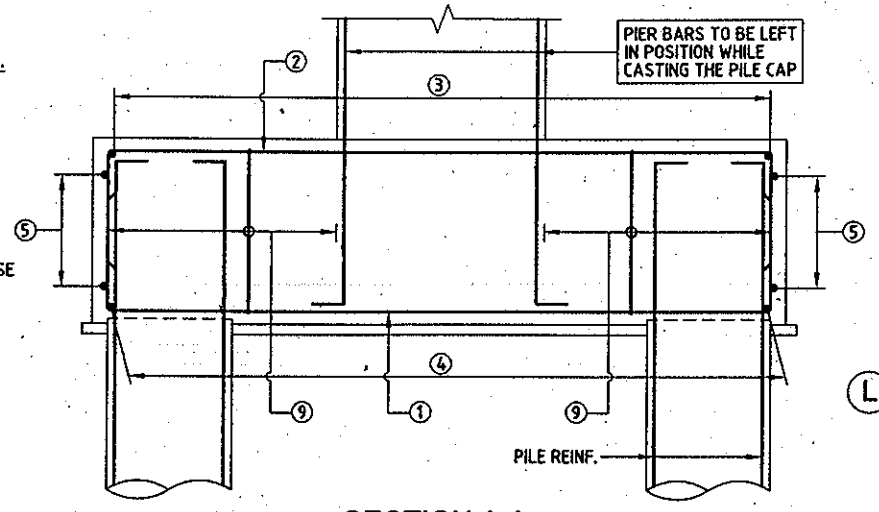
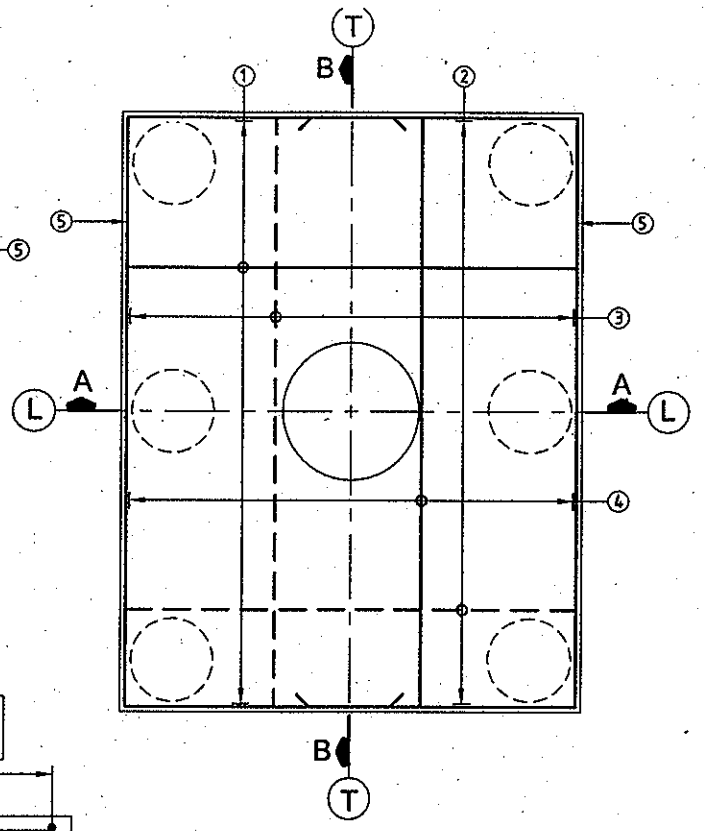


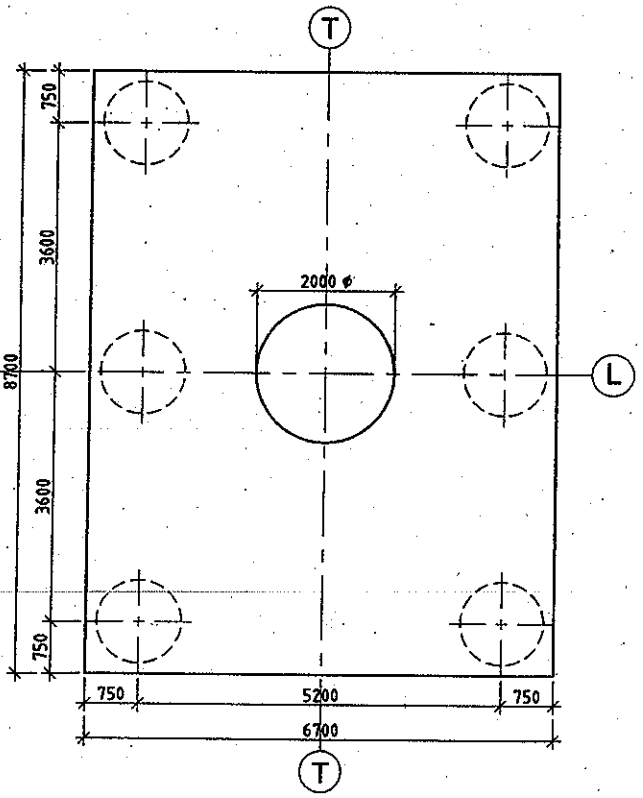
ELEVATION ALONG L-L AXIS
(SCALE 1:75)



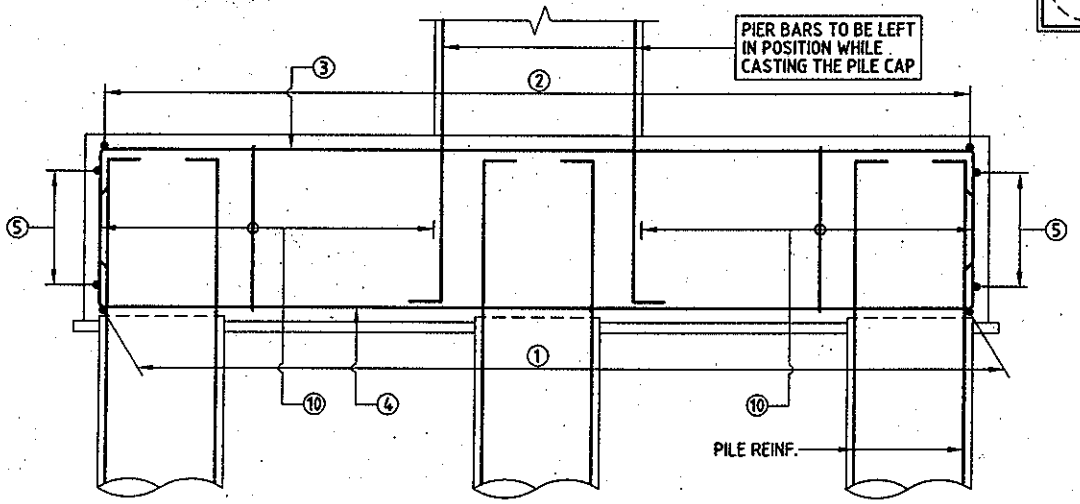
SECTION A-A
(SCALE 1:50)



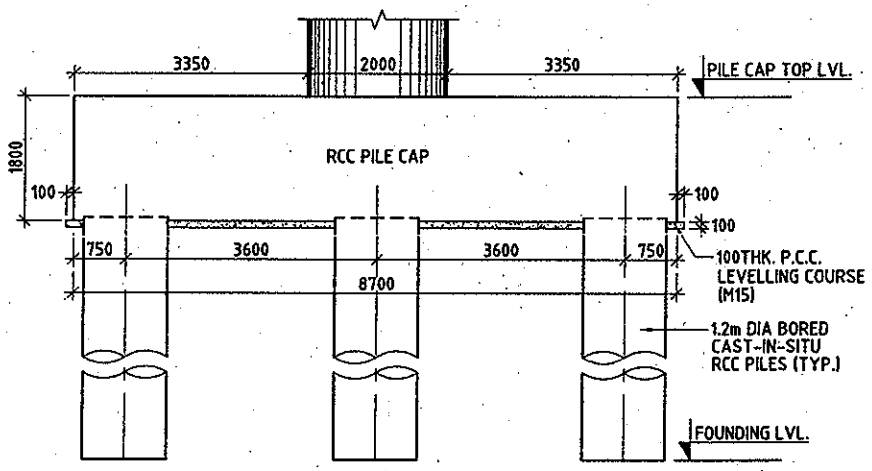
PLAN
(SHOWING PILE CAP REINFORCEMENT)
(SCALE 1:75)



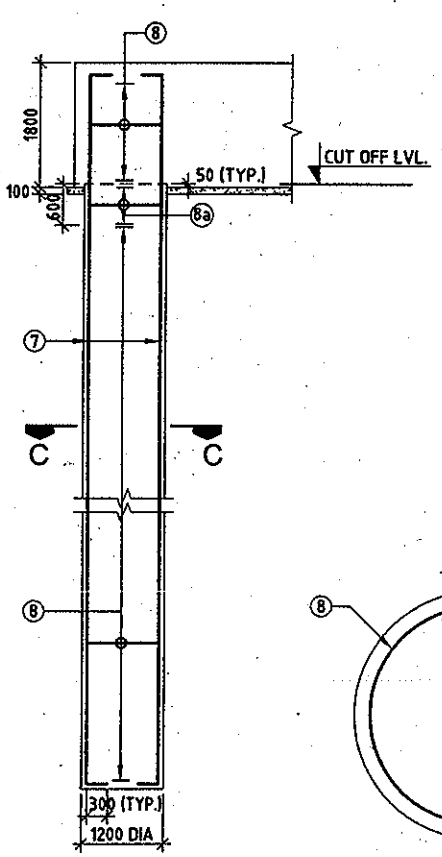
PLAN AT TOP OF PILE CAP
(SHOWING DIMENSIONS)
(SCALE 1:75)



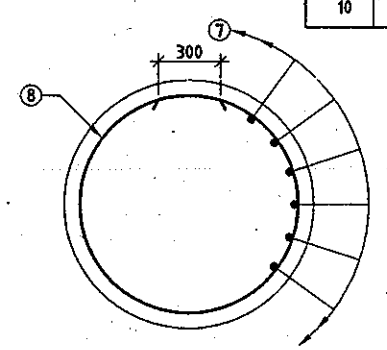
SECTION B-B
(SCALE 1:50)



ELEVATION ALONG T-T AXIS
(SCALE 1:75)



R.C.C. DETAILS OF PILE
(SCALE 1:75)



SECTION C-C
(SCALE 1:25)

NOTES:-

1. ALL DIMENSIONS ARE IN mm AND LEVELS IN METRES, UNLESS OTHERWISE MENTIONED. ONLY WRITTEN DIMENSIONS ARE TO BE FOLLOWED. NO DIMENSION IS TO BE SCALED.
2. CONCRETE SHALL BE DESIGN MIX WITH A MINIMUM 28 DAYS CHARACTERISTIC STRENGTH OF 35Mpa FOR BORED CAST-IN-SITU PILE AND PILE CAP.
3. CLEAR COVER TO SHALL BE AS FOLLOWS.
   (i) FOR PILE -- ----------75mm
   (ii) FOR PILE CAP -------- 75mm
4. TMT HIGH YIELD STRENGTH DEFORMED BARS SHALL BE OF GRADE DESIGNATION Fe-415 CONFORMING TO IS:1786 SHALL ONLY BE USED.
5. MINIMUM BOND LENGTH SHALL BE 42 x DIA OF BAR.
6. MINIMUM LAP LENGTH FOR REINFORCEMENT BAR SHALL BE 72 x DIA OF BAR.LAPS SHALL BE STAGGERED AND NOT MORE THAN 50% OF BARS SHALL BE LAPPED AT ANY ONE SECTION.
7. L.L REPRESENTS LONGITUDINAL AXIS OF BRIDGE AND TT REPRESENTS TRANSVERSE AXIS OF BRIDGE.
8. ACTUAL LOAD TEST SHALL BE CARRIED OUT ON A TEST PILE AS PER STANDARD SPECIFICATIONS TO DETERMINE VERTICAL AND LATERAL CAPACITY OF PILE. IT SHALL HOWEVER BE ENSURED THAT IT IS NOT LESS THAN DESIGN VALUES.

REFERENCE DRAWINGS:-

i) 1213/SMEC/LUDHIANA/21+100/G-01 (SHEET 1 OF 7 TO 7 OF 7)
ii) 1213/SMEC/LUDHIANA/21+100/E-02 (SHEET 2 OF 2)

REINFORCEMENT DETAIL:

BAR MKD.	DIA (mm)	SPACING/Nos.	SHAPE
1	25	54 Nos.	
2	16	150	
3	16	150	
4	25	58 Nos.	
5	16	8 Nos.	
7	25	30 Nos.	
8	10	200	
8a	10	100	
9	16	150	7 LEGGED
10	16	150	6 LEGGED

LEVEL CHART FOR PILE CAP LAYOUT

PIER DESIGNATION	BED LEVEL	TOP OF PILE CAP LEVEL	CUT OFF LEVEL	FOUNDING LEVEL
P1	246.697	246.197	244.448	230.747

LEGENDS:
BAR ON TOP FACE
BAR ON BOTTOM FACE

APPROVED FOR EXECUTION ISSUED
Assistant Engineer Design-II
Executive Engineer Design (IP)
Chief Engineer
PUNJAB P.W.D. (B & R)

THIS DRAWING HAS NOT BEEN PUBLISHED AND IS THE SOLE PROPERTY OF SMEC INDIA PVT. LTD. AND IS ISSUED TO THE PARTY FOR THE SPECIFIC PURPOSE AS STATED IN THE AGREEMENT AND IT SHALL NOT BE REPRODUCED, COPIED LENT OR OTHERWISE DISPOSED OFF DIRECTLY OR INDIRECTLY, NOR USED FOR ANY OTHER PURPOSE OTHER THAN FOR WHICH IT IS FURNISHED.

CLIENT : PIDB — PUNJAB INFRASTRUCTURE DEVELOPMENT BOARD

CONSULTANT : SMEC (India) Pvt. Ltd.
DLF BUILDING No 8, C TOWER, 5th FLOOR, CYBER CITY, PHASE-II,GURGAON, HARYANA, INDIA -122 002
Tel : 0124-4380042, 4501100

PROJECT TITLE : PREPARATION OF DETAILED PROJECT REPORT FOR UPGRADATION OF SOUTHERN BYE-PASS LUDHIANA

REV	DATE	DRAWN	DESIGN	CHECKED	APPROVED	DETAILS OF REVISION
R1	27/08/2009	MKS	VNM	VNM	S.LAHIRI	REVISED AS PER PB.PWD COMMENTS
R0	25/05/2009	MKS	VNM	VNM	S.LAHIRI	FIRST ISSUE

SCALE: AS SHOWN
SHEET SIZE: A2

DETAILED PROJECT REPORT
DIMENSIONAL & REINFT. DETAILS OF PILE, PILE CAP, PIER & PIER CAP
(SHEET 1 OF 2)

DPR | DRW | 1213/SMEC/LUDHIANA/21+100/E-02 | R1

CAD File Ref: H:\Structure\1213\FINAL DPR\Revised Drawings R2 (Feb 10)\Bridge CH. 21+100\ROB CH.21+100 E-02.dwg