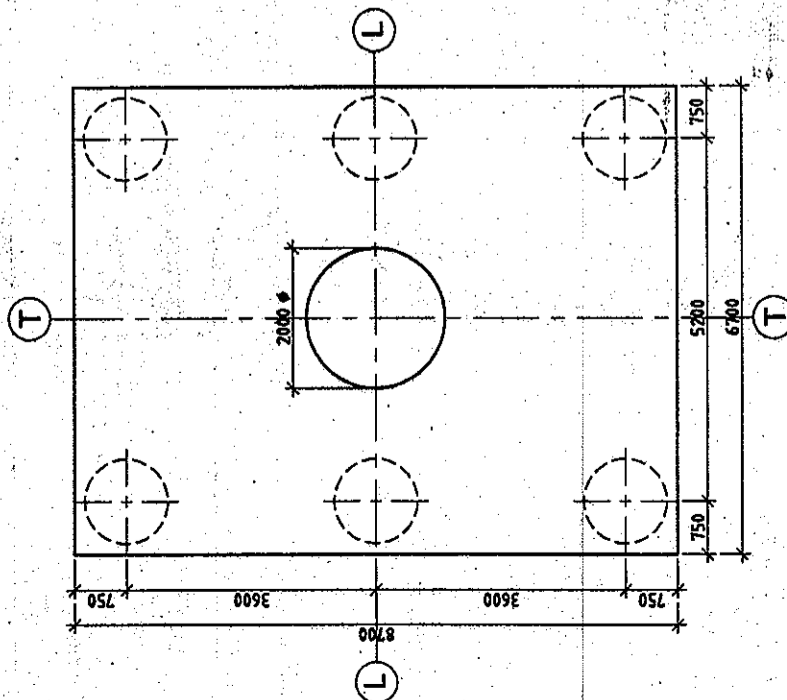
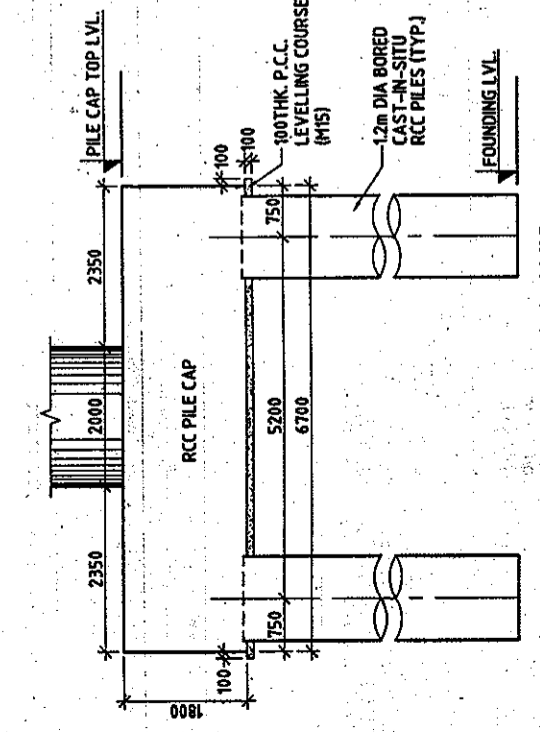
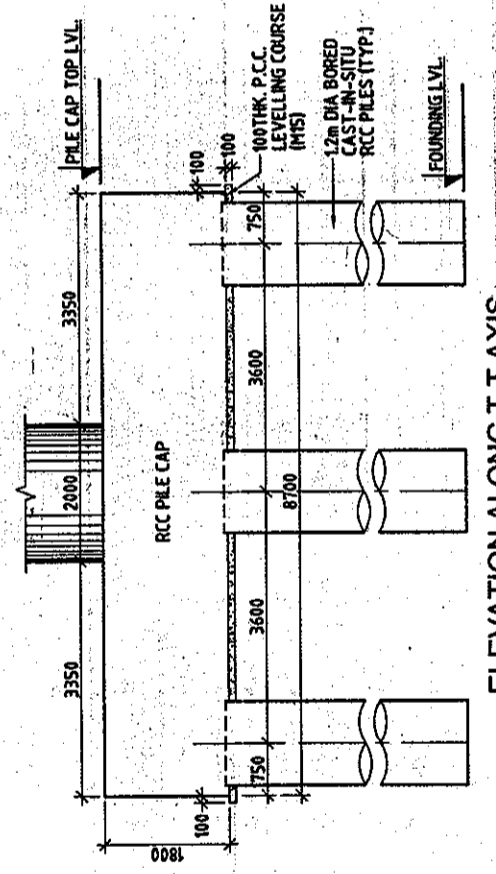
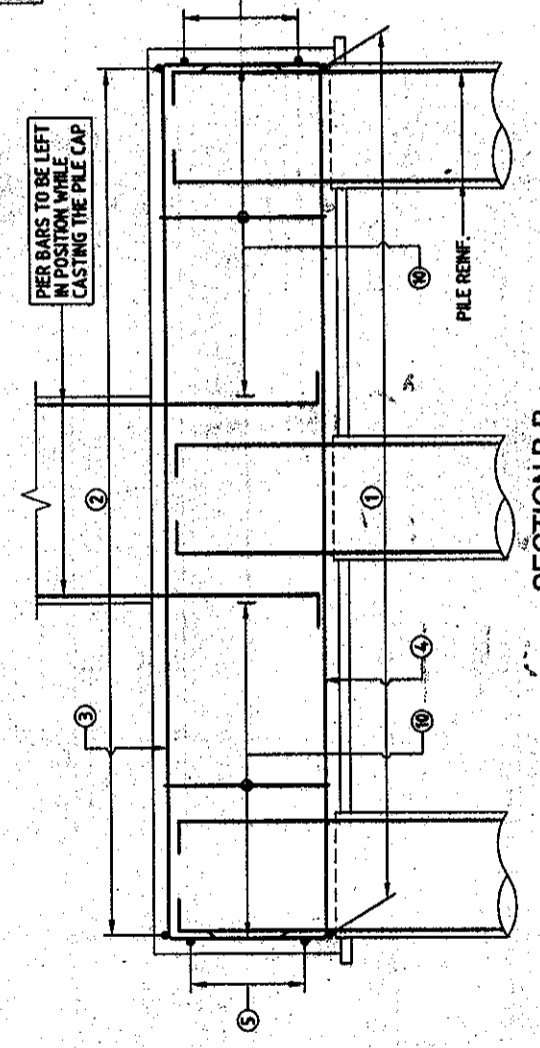
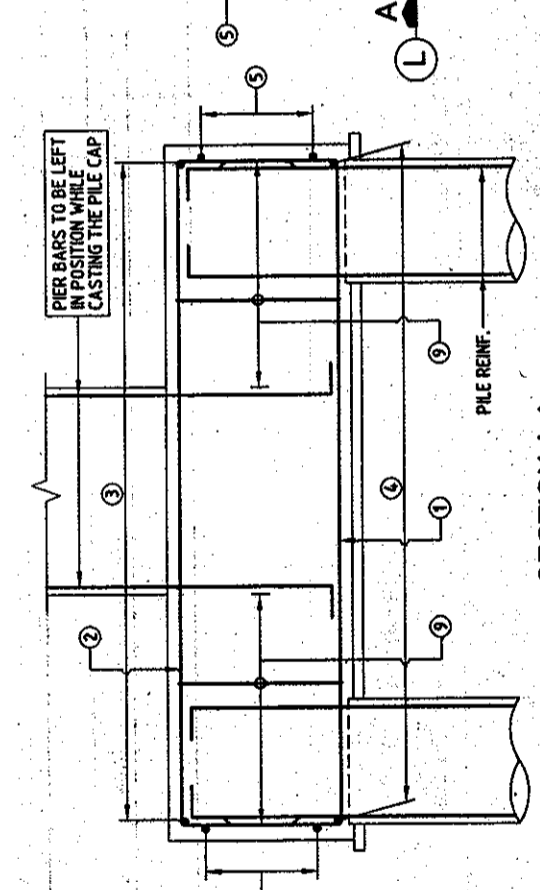
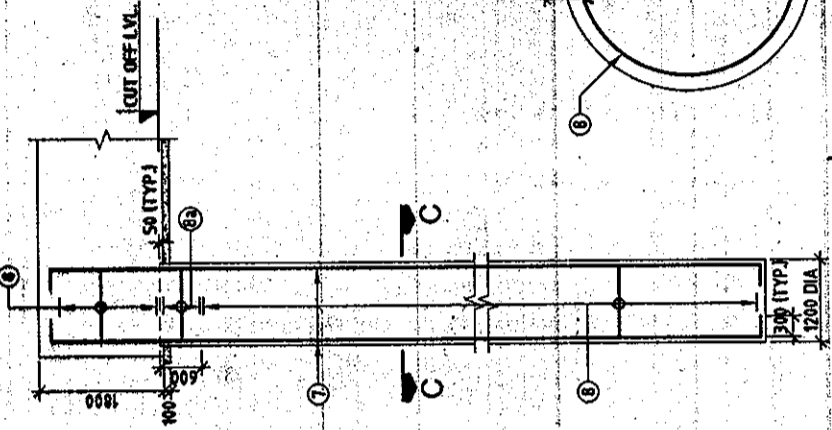
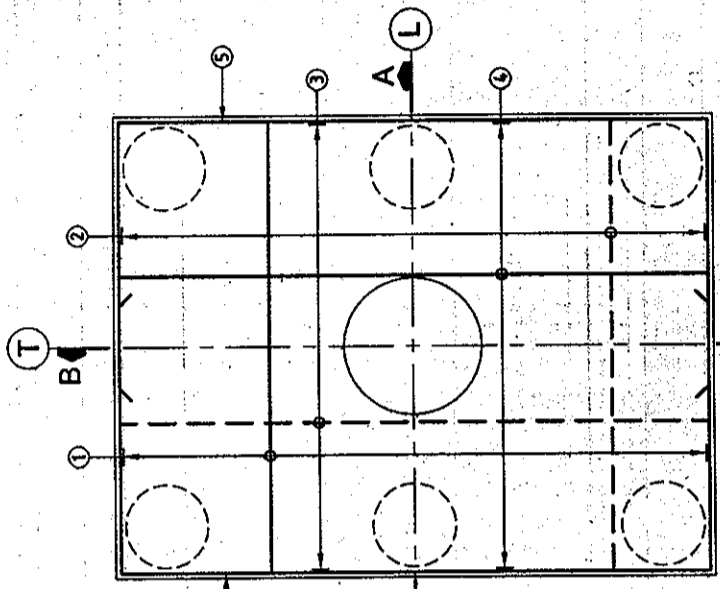


**NOTES:-**

- 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.
- CONCRETE SHALL BE DESIGN MIX WITH A MINIMUM 28 DAYS CHARACTERISTIC STRENGTH OF 35MPa FOR BORED CAST-IN-SITU PILE AND PILE CAP.
- CLEAR COVER TO SHALL BE AS FOLLOWS.  
 (i) FOR PILE -----75mm  
 (ii) FOR PILE CAP -----75mm
- THE HIGH YIELD STRENGTH DEFORMED BARS SHALL BE OF GRADE DESIGNATION Fe-415 CONFORMING TO IS:1786 SHALL ONLY BE USED.
- MINIMUM BOND LENGTH SHALL BE 42 x DIA OF BAR.
- 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.
- LL REPRESENTS LONGITUDINAL AXIS OF BRIDGE AND TT REPRESENTS TRANSVERSE AXIS OF BRIDGE.
- 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:-**

- 1213/SM/EC/LUDHIANA/21-100/G-01 SHEET 1 OF 7 TO 7 OF 71
- 1213/SM/EC/LUDHIANA/21-100/E-09 (SHEET 2 OF 2)



**LEVEL CHART FOR PILE CAP LAYOUT**

PIER DESIGNATION	BED LEVEL	TOP OF PILE CAP LEVEL	CUT OFF LEVEL	FOUNDING LEVEL
P18	244.592	246.092	244.342	230.642

**REINFORCEMENT DETAIL:-**

BAR NO.	DIA (mm)	SPACING/Nos.	SHAPE
1	25	54 Nos.	□
2	16	150	□
3	16	150	□
4	25	59 Nos.	□
5	16	8 Nos.	□
7	25	37 Nos.	□
8	10	200	○
8a	10	100	○
9	16	150	□
10	16	150	□

**LEGENDS:**  
**APPROVED FOR EXECUTION**  
 DESIGNER ON FACE  
 P1 INJAB P.W.D. (B & R)

Assistant Engineer  
 Executive Engineer  
 Chief Engineer (IP)

**CLIENT:** PIDB  
 PUNJAB INFRASTRUCTURE DEVELOPMENT BOARD

**CONSULTANT:** SM/EC

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

**REVISIONS:**

REV	DATE	DRAWN	CHECKED	APPROVED	DETAILS OF REVISION
R1	27/08/2008	MKS	VNH	S WARI	REVISED AS PER P.B.P.W.D COMMENTS
R0	27/05/2008	MKS	VNH	S WARI	FIRST ISSUE

**SCALE:** AS SHOWN  
**SHEET SIZE:** A2  
**DRW:** DPR  
**PROJECT REPORT DIMENSIONAL & REINFT. DETAILS OF PILE, PILE CAP, PIER & PIER CAP**  
 SHEET 1 OF 2  
 1213/SM/EC/LUDHIANA/21-100/E-09  
 R1