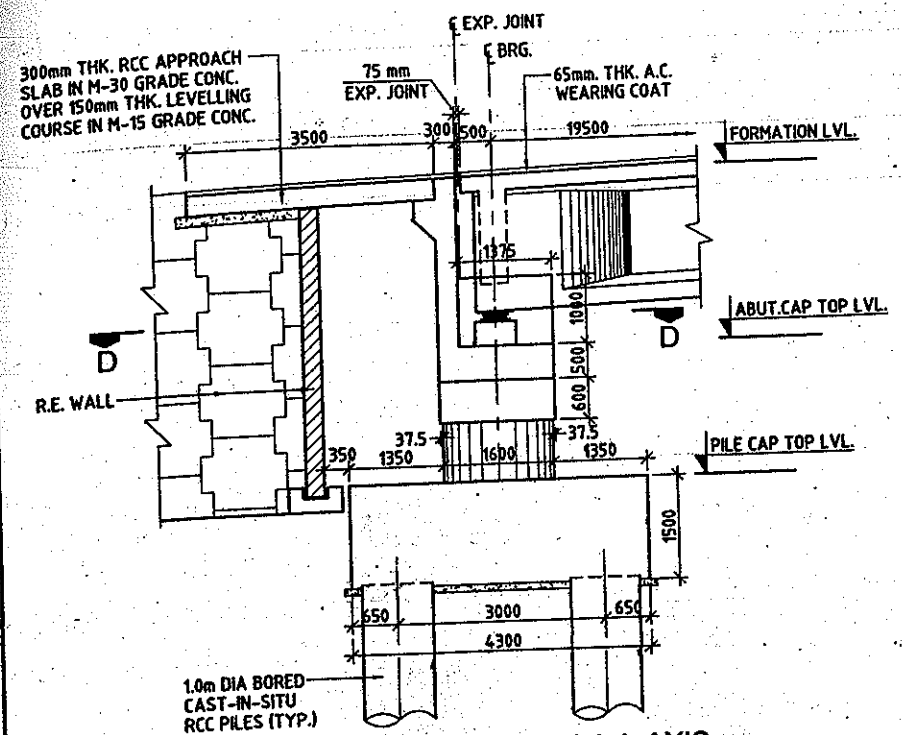
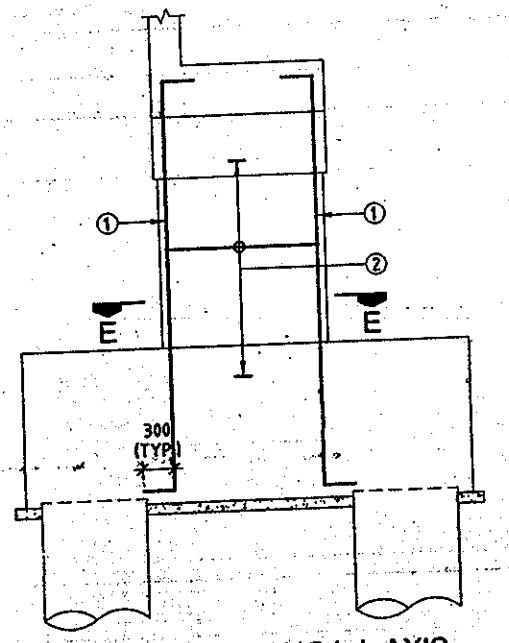
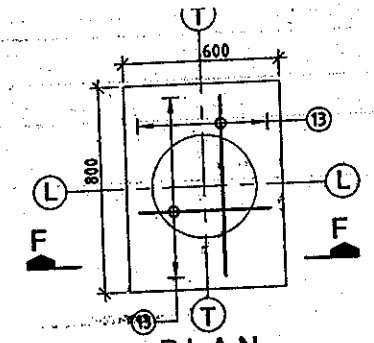


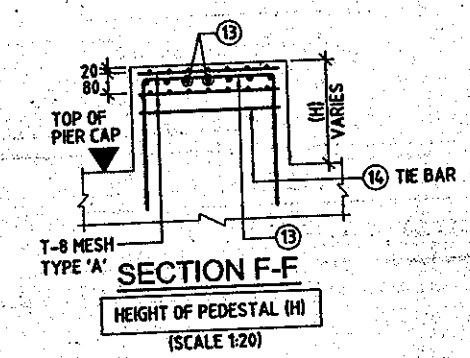
ELEVATION ALONG L-L AXIS
(SHOWING ABUTMENT DIMENSION)
(SCALE 1:75)



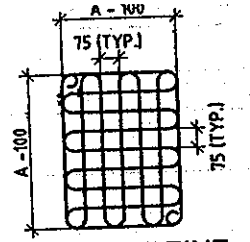
ELEVATION ALONG L-L AXIS
(SHOWING ABUTMENT REINFORCEMENT)
(SCALE 1:50)



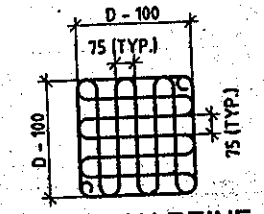
PLAN
(DETAILS OF PEDESTAL)
(SCALE 1:20)



SECTION F-F
HEIGHT OF PEDESTAL (H)
(SCALE 1:20)



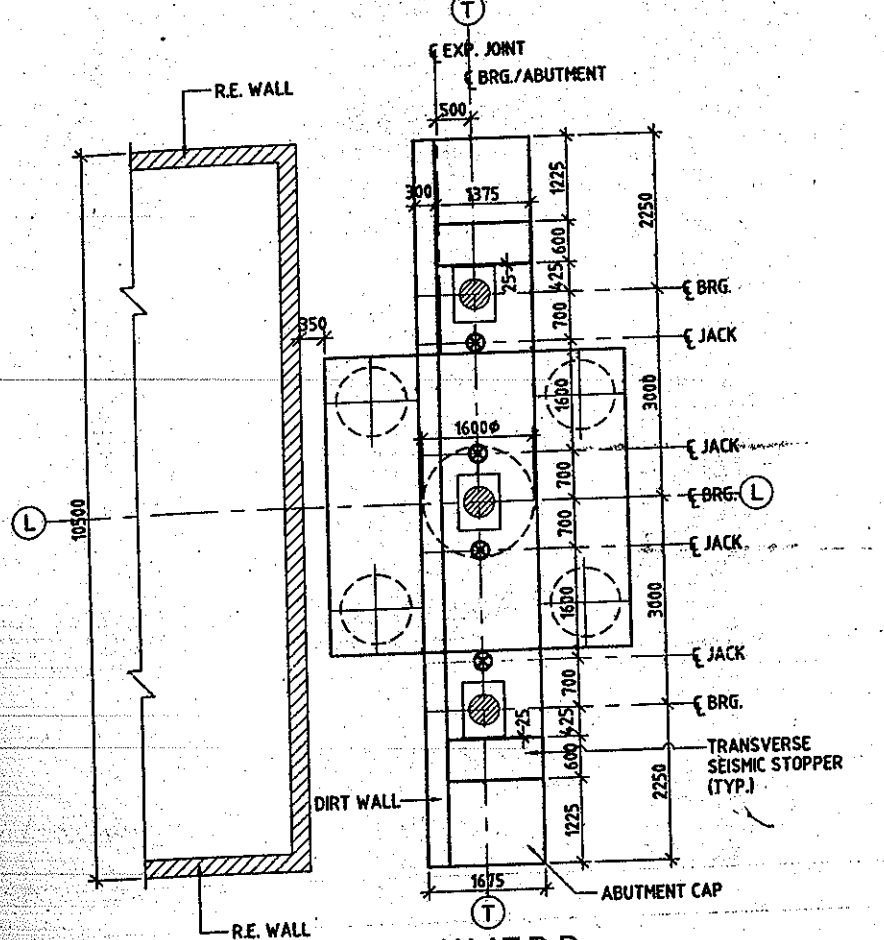
T-8 MESH REINF. TYPE - 'A'
(UNDER BEARING)
(SCALE 1:20)



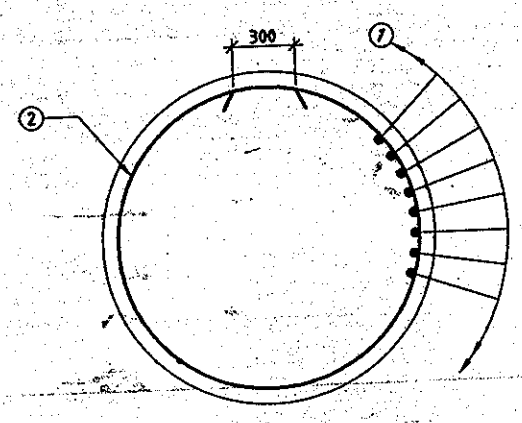
T-8 MESH REINF. TYPE - 'B'
(UNDER JACK)
(SCALE 1:20)

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 150mm CUBES AS FOLLOWS:-
   ABUTMENT ----------M35
   ABUTMENT CAP ----------M35
3. CLEAR COVER TO OUTER MOST STEEL SHALL BE AS FOLLOWS.
   (i) FOR SUBSTRUCTURE ------- 50mm
   (ii) FOR FOUNDATION --------- 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. IN ABUTMENT SHAFT T-10 OPEN LINKS (OR S LOOPS) WITH HOOK PLACED AROUND THE VERTICAL BARS ARE PLACED AT THE RATE OF 4 LINKS IN ONE SQUARE METER.
8. LL REPRESENTS LONGITUDINAL AXIS OF BRIDGE AND TT REPRESENTS TRANSVERSE AXIS OF BRIDGE.
9. A IS THE DIMENSIONS OF THE BEARINGS WHICH IS TO BE FURNISHED BY THE MANUFACTURER.
10. D = DIA OF JACK.

REFERENCE DRAWINGS:-
i) 1213/SMEC/LUDHIANA/22+005/G-01 (SHEET 1 OF 6 TO 6 OF 6)
ii) 1213/SMEC/LUDHIANA/22+005/E-01 (SHEET 1 OF 2)



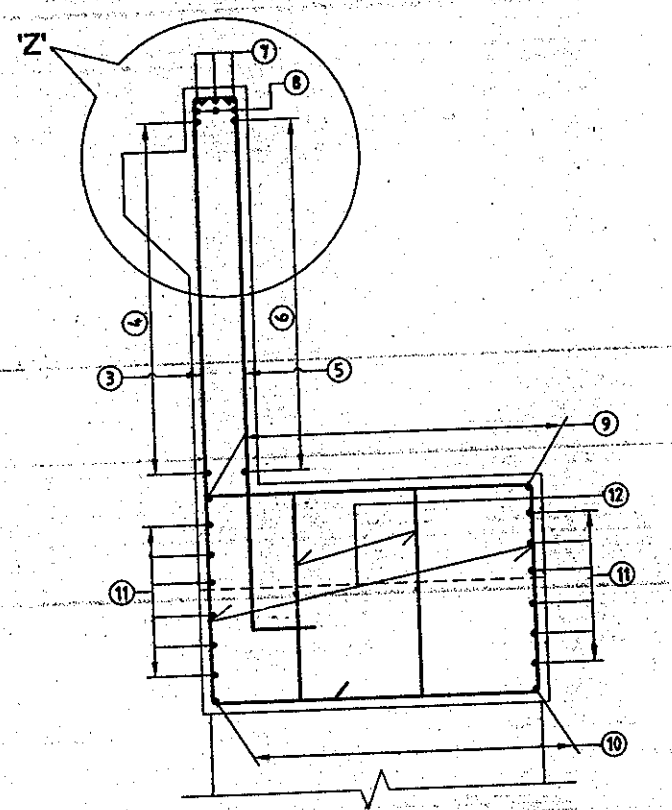
PLAN AT D-D
(SCALE 1:75)



SECTION E-E
(SCALE 1:25)

LEVELS CHART FOR ABUTMENT

ABUTMRNT DESIGNATION	FORMATION LEVELS	ABUTMENT CAP TOP LEVELS	BED LEVELS
AD	250.997	248.582	246.662
AL	250.997	248.582	246.743



R/F DETAILS OF DIRT WALL AND ABUTMENT CAP
(SCALE 1:25)

REINFORCEMENT DETAIL:

BAR MKD.	DIA (mm)	SPACING/Nos.	SHAPE
1	20	45 Nos.	
2	12	125	
3	16	150	
4	12	150	
5	16	150	
6	12	150	
7	16	3 Nos.	
8	16	3 Nos.	
9	32	21 Nos.	
10	16	12 Nos.	
11	16	12 Nos.	
12	16	150	6LEGGED
13	12	75	
14	12	150	

APPROVED FOR EXECUTION
ISSUED
LEGENDS: BAR ON TOP FACE, BAR ON BOTTOM FACE
Assistant Engineer Design (IP) | Executive Engineer Design (IP) | Chief Engineer (IP)
PUNJAB P.W.D. (B & R)

CLIENT: PIDB — PUNJAB INFRASTRUCTURE DEVELOPMENT BOARD

CONSULTANT: SMEC INDIA — SMEC (India) Pvt. Ltd., DLF BUILDING No 8, C TOWER, 5th FLOOR, CYBER CITY, PHASE-II, GURGAON, HARYANA, INDIA -122 002, Tel : 0124-4380042, 4301100

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

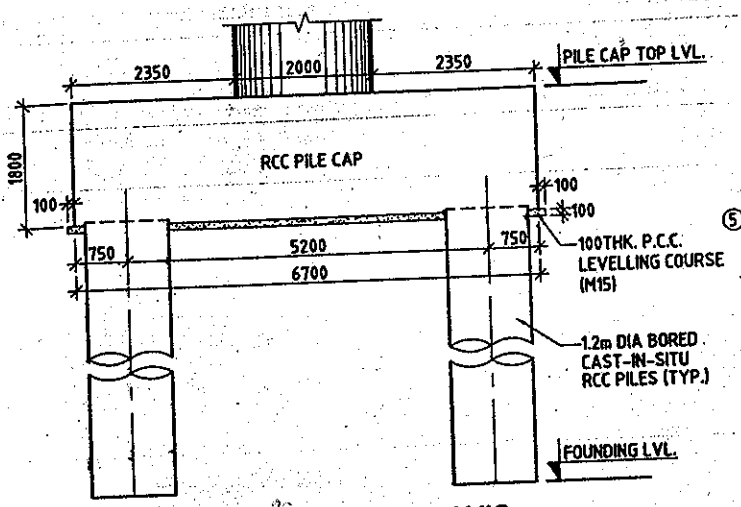
REV	DATE	DRAWN	DESIGN	CHECKED	APPROVED	DETAILS OF REVISION
R0	19/05/2009	MKS	VNM	VNM	S LAHIRI	FIRST ISSUE

SCALE: AS SHOWN
SHEET SIZE: A2

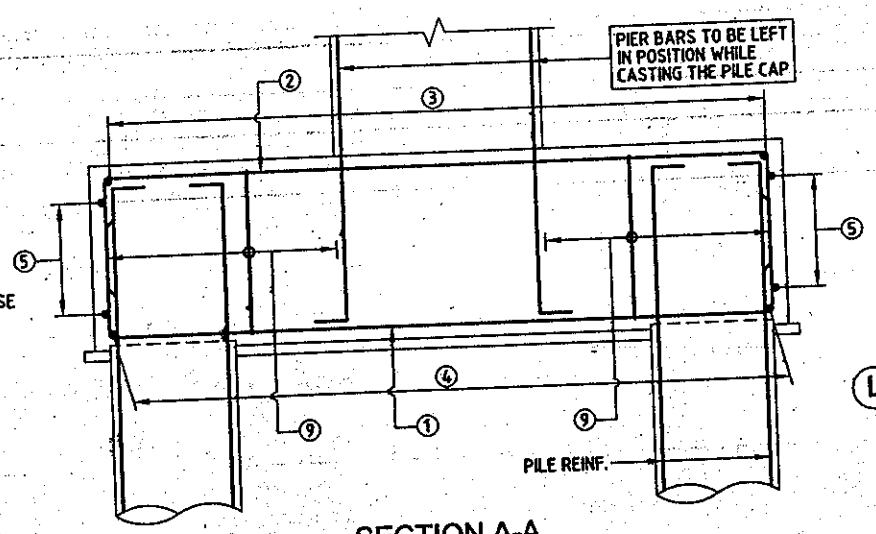
DETAILED PROJECT REPORT
DIMENSIONAL & REINFT. DETAILS OF PILE, PILE CAP, ABUTMENT SHAFT, ABUTMENT CAP & DIRT WALL.
(SHEET 2 OF 2)

DPR | DRW | 1213/SMEC/LUDHIANA/22+005/E-01 | R0

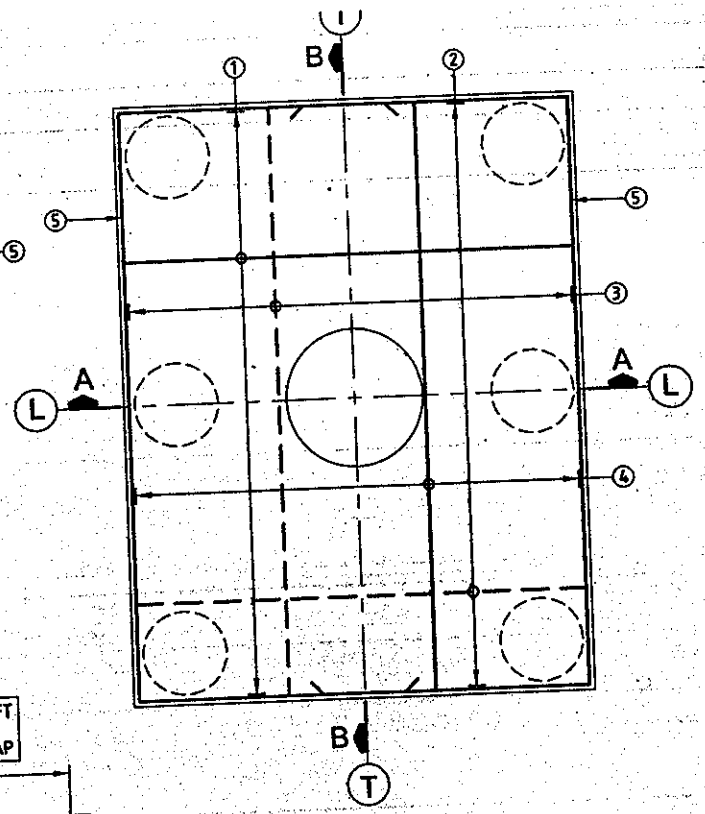
CAD File Ref: H:\Structure\1213\FINAL DPR\Revised Drawings R2 (Feb 10)\Bridge CH. 22+005\FLYOVER CH.22+005 E-01.dwg



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



SECTION A-A
(SCALE 1:50)



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

NOTES:

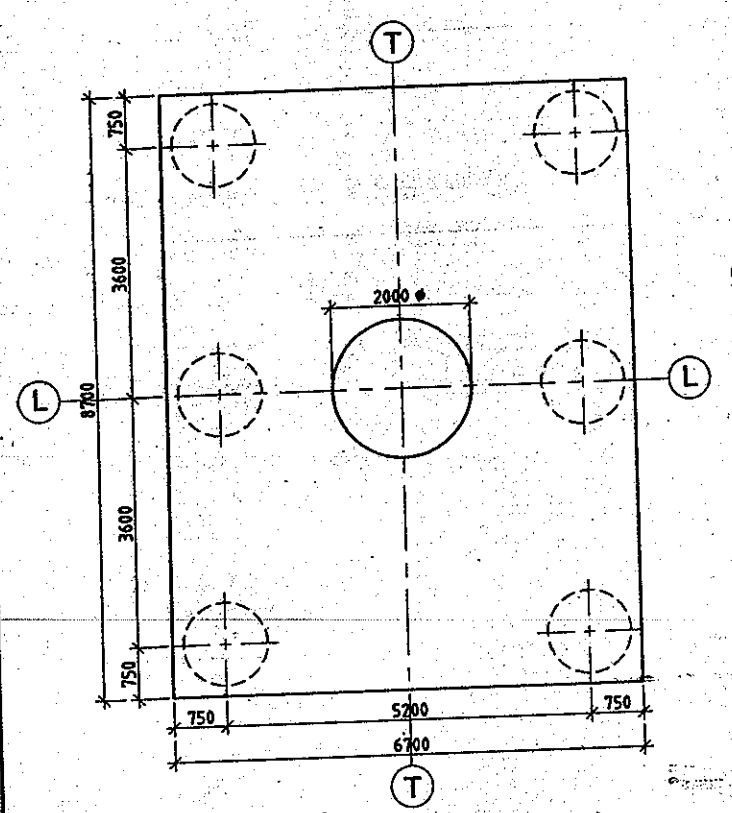
1. ALL DIMENSIONS ARE IN mm AND LEVELS IN METRES, UNLESS OTHERWISE MENTIONED. ONLY WRITTEN DIMENSIONS ARE TO BE FOLLOWED. NO DIMENSION IS TO BE SCALED.
2. CONCRETE SHALL BE DESIGN MIX WITH A MINIMUM 28 DAYS CHARACTERISTIC STRENGTH OF 35Mpa FOR BORED CAST-IN-SITU PILE AND PILE CAP.
3. CLEAR COVER TO SHALL 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. LL 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:-

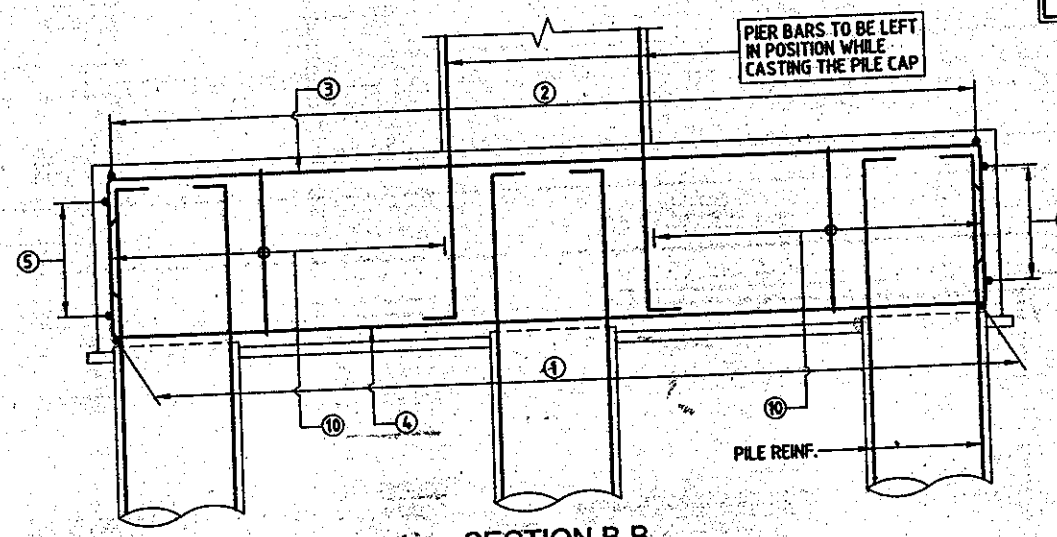
i) 1213/SMEC/LUDHIANA/22+005/G-01 (SHEET 1 OF 6 TO 6 OF 6)
ii) 1213/SMEC/LUDHIANA/22+005/E-02 (SHEET 2 OF 2)

REINFORCEMENT DETAIL

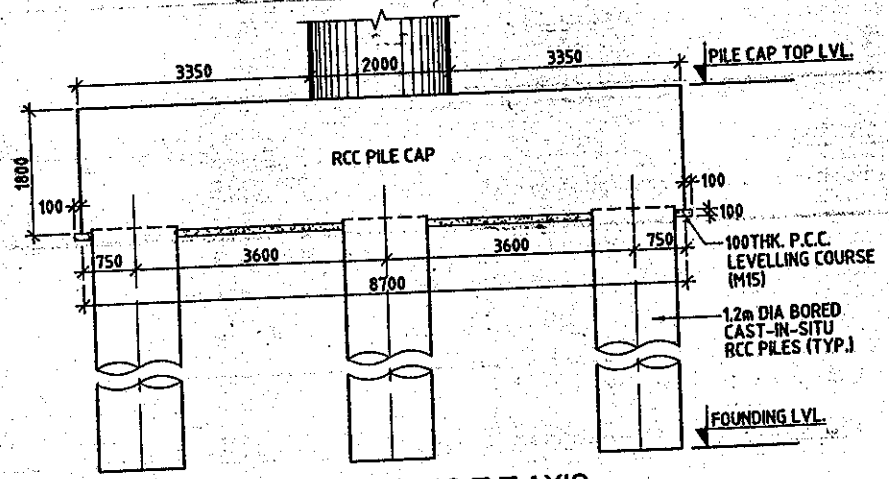
BAR MKD.	DIA (mm)	SPACING/Nos.	SHAPE
1	25	52 Nos.	
2	16	150	
3	16	150	
4	25	56 Nos.	
5	16	8 Nos.	
7	25	28 Nos.	
8	10	200	
8a	10	100	
9	16	150	7 LEGGED
10	16	150	6 LEGGED



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



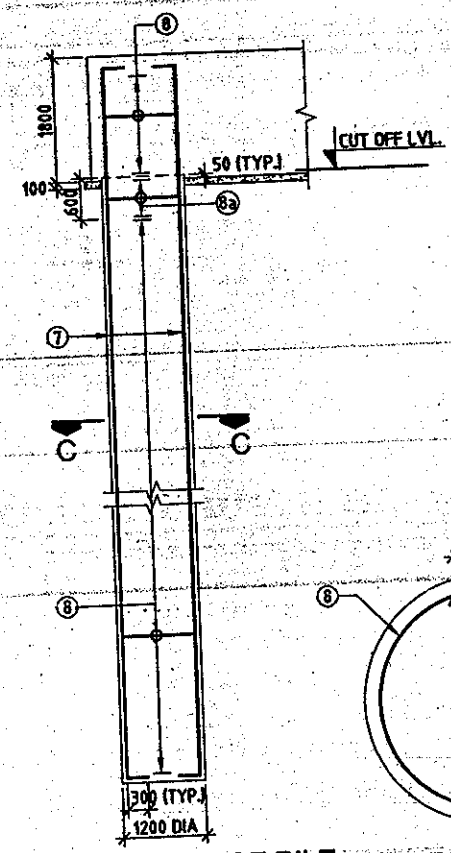
SECTION B-B
(SCALE 1:50)



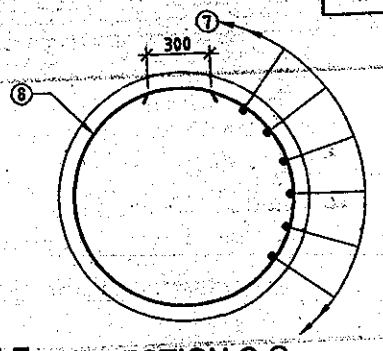
ELEVATION ALONG T-T AXIS
(SCALE 1:75)

LEVEL CHART FOR PILE CAP LAYOUT

PIER DESIGNATION	BED LEVEL	TOP OF PILE CAP LEVEL	CUT OFF LEVEL	FOUNDING LEVEL
P1	246.691	246.191	244.441	230.741



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



SECTION C-C
(SCALE 1:25)

LEGENDS:
BAR ON TOP FACE
BAR ON BOTTOM FACE

APPROVED FOR EXECUTION
ISSUED

Assistant Engineer Design (IP)	Executive Engineer Design (IP)	Chief Engineer (IP)

PUNJAB P.W.D. (B & R)

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, 4301100

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

REV	DATE	DRAWN	DESIGN	CHECKED	APPROVED	DETAILS OF REVISION
R1	28/08/2009	MKS	VNM	VNM	S LAHIRI	REVISED AS PER PB.PWD COMMENTS
R0	20/05/2009	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/22+005/E-02 | R1

CAD File Ref: H:\Structure\1213\FINAL DPR\Revised Drawings R2 (Feb 10)\Bridge CH. 22+005\FLYOVER CH.22+005 E-02.dwg

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