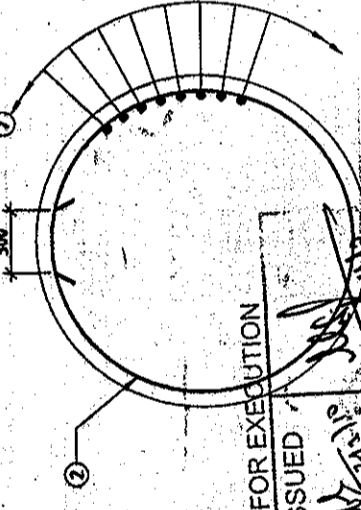
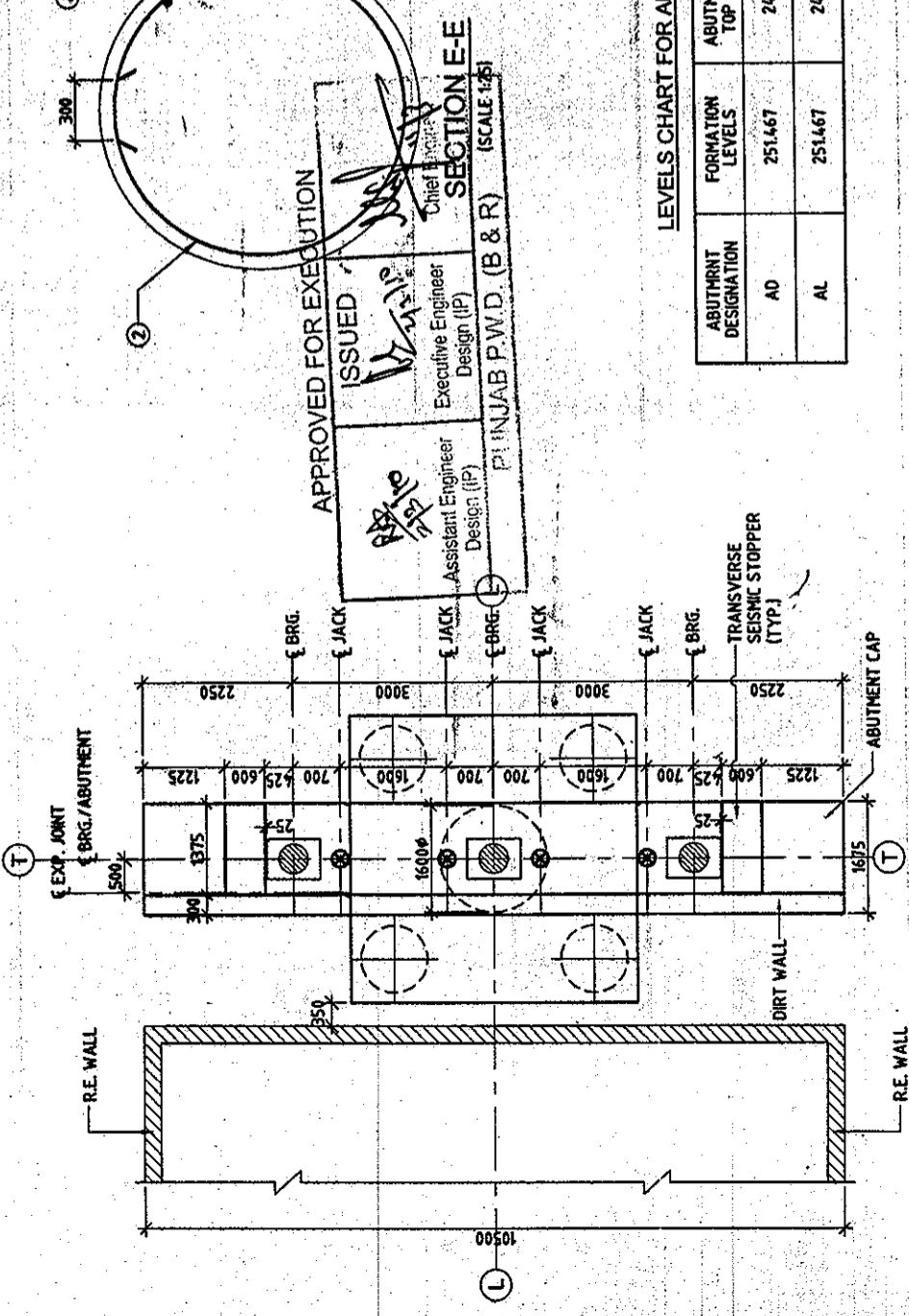
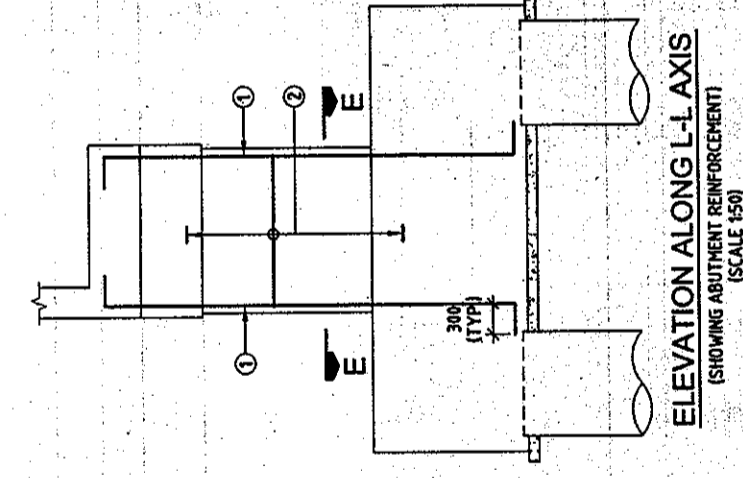
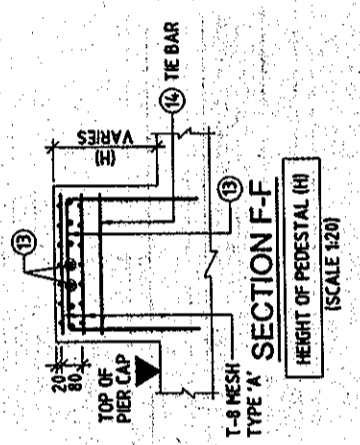
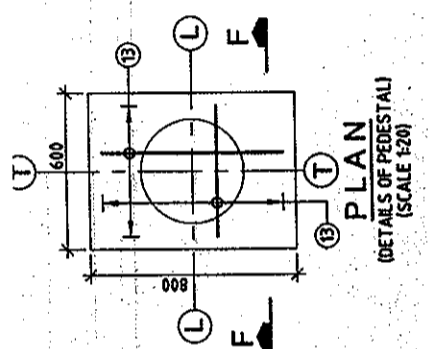
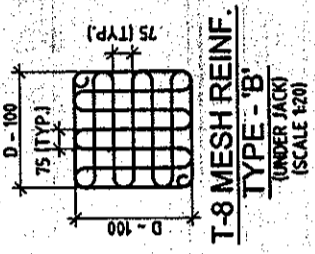
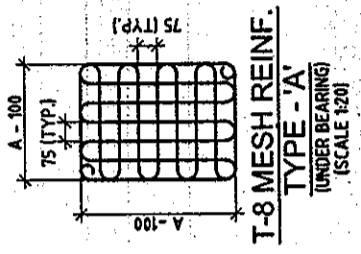
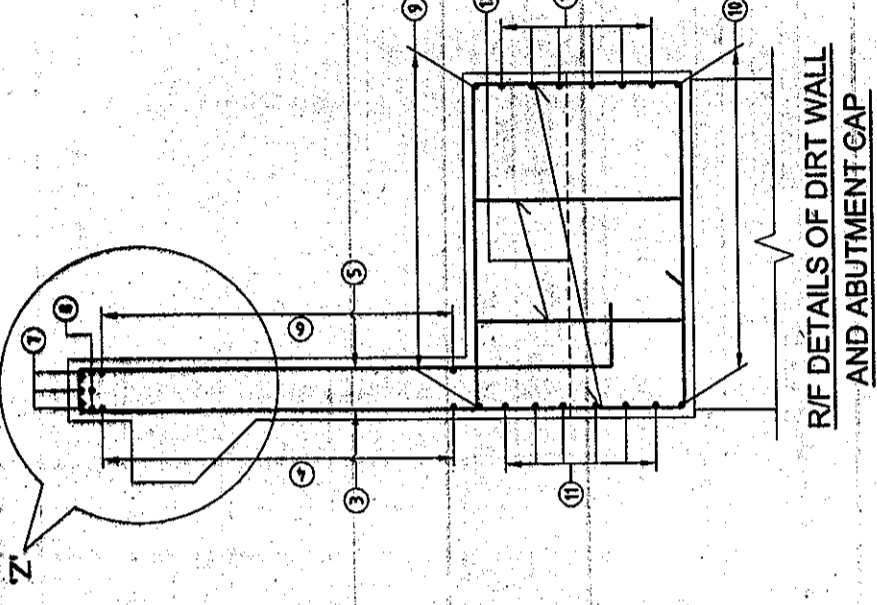


- ALL DIMENSIONS ARE IN mm AND LEVELS IN METRES, UNLESS OTHERWISE MENTIONED. ONLY WRITTEN DIMENSIONS ARE TO BE FOLLOWED. NO DIMENSION IS TO BE SCALED.
 - CONCRETE SHALL BE DESIGN MIX WITH A MINIMUM 28 DAYS CHARACTERISTIC STRENGTH 150mm CUBES AS FOLLOWS:-
 ABUTMENT -----M35
 ABUTMENT CAP -----M35
 CLEAR COVER TO OUTER MOST STEEL SHALL BE AS FOLLOWS.
 (i) FOR SUBSTRUCTURE ----- 50mm
 (ii) FOR FOUNDATION ----- 75mm
 (iii) FOR FOUNDATION ----- 75mm
 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.
 - IN ABUTMENT SHAFT T-10 OPEN LINKS (OR 5 LOOPS) WITH HOOK PLACED AROUND THE VERTICAL BARS ARE PLACED AT THE RATE OF 4 LINKS IN ONE SQUARE METER.
 - LL REPRESENTS LONGITUDINAL AXIS OF BRIDGE AND TT REPRESENTS TRANSVERSE AXIS OF BRIDGE.
 - A IS THE DIMENSIONS OF THE BEARINGS WHICH IS TO BE FURNISHED BY THE MANUFACTURER.
 - D = DIA OF JACK
- REFERENCE DRAWINGS:-**
- 1213/SMEC/LUDHIANA/21-100/G-01 (SHEET 1 OF 7 TO 7 OF 7)
 - 1213/SMEC/LUDHIANA/21-100/E-01 (SHEET 1 OF 2)



LEVELS CHART FOR ABUTMENT

ABUTMENT DESIGNATION	FORMATION LEVELS	ABUTMENT TOP LEVELS	BED LEVELS
AD	251.467	249.052	246.728
AL	251.467	249.052	246.611



REINFORCEMENT DETAIL

BAR NO.	DIA (mm)	SPACING/MOS.	SHAPE
1	20	45 Nos.	J
2	12	125	O
3	16	150	L
4	12	150	L
5	16	150	L
6	12	150	L
7	16	3 Nos.	L
8	16	3 Nos.	L
9	32	21 Nos.	L
10	16	12 Nos.	L
11	16	12 Nos.	L
12	16	150	6 LEGGED
13	12	75	L
14	12	150	L

LEGENDS:
 --- BAR ON TOP FACE
 --- BAR ON BOTTOM FACE

PREPARATION OF DETAILED PROJECT REPORT FOR UPGRADEATION OF SOUTHERN BYE-PASS LUDHIANA

PROJECT TITLE: UPGRADEATION OF SOUTHERN BYE-PASS LUDHIANA

CLIENT: PUNJAB INFRASTRUCTURE DEVELOPMENT BOARD

CONSULTANT: SMEC (INDIA) PVT. LTD.

DESIGNER: VNM

CHECKED: VNM

APPROVED: S. SHARIR

DATE: 25/05/2009

REV: R0

SCALE: AS SHOWN

SHEET SIZE: A2

DRW: DPR

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

1213/SMEC/LUDHIANA/21-100/E-01